GENERAL INFORMATION

WELCOME

Hager Companies provides single-source solutions for the door hardware industry with a line of quality products that includes:

- Architectural Hinges
- Residential Hinges
- Roton Continuous Geared Hinges
- Stainless Steel Continuous Hinges
- Trim & Auxiliary
- Thresholds & Weatherstripping
- Sliding Door Hardware
- Locks
- Door Closers
- Exit Devices

Since 1849, Hager's focus has been innovative products, exceptional value, and incomparable customer service. Additionally, Hager offers complimentary comprehensive consulting services. Our services include design development assistance, budget preparation, door hardware specification writing, code compliance, submitted schedules review and approval, and technical project support.

We believe that by offering these value-added services, along with our premium quality, value-priced products, you'll see for yourself how Hager gives you "more for your door than any other brand."

So whatever you're looking for—from simple everyday needs to solutions for unconventional applications—you'll find it in our 2011 Catalog.

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Montgomery D/C

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Distribution Center

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A Cleaner, Greener Catalog

Our Paper	is FCS (Forest Stewardship Council) Certified, which means that it is sourced from responsibly managed forests. Our paper contains 10% post consumer waste.
Our Printer	uses sophisticated ink-mixing technology that reduces VOCs and reduces ink waste to less than one percent. They consistently recycle, reuse, and reduce both paper and ink consumption.
Our Inks	are soy-based, reducing harmful VOCs and preventing harmful chemicals from entering the wastewater system.
Our Company	is concerned about how our company and products affect the environment. As a result, we've taken steps to minimize our impact—and we're continually reviewing ways to do more. Throughout the production of this Catalog, we made every effort to recycle and use both sides of the paper.



GENERAL INFORMATION

TERMINOLOGY

Terminology used in this catalog complies with the following ANSI/BHMA standards:

- ANSI A156.1 Butts and Hinges
- ANSI A156.2 Bored and Presassembled Locks and latches
- ANSI A156.3 Exit Devices
- ANSI A156.4 Door Controls-Closers
- ANSI A156.5 Auxiliary Locks and Associated Products
- ANSI A156.6 Architectural Door Trim
- ANSI A156.7 Template Hinge Dimensions
- ANSI A156.8 Door Controls-Overhead Stops and Holders
- ANSI A156.12 Interconnected Locks
- ANSI A156.13 Mortise Locks and Latches
- ANSI A156.14 Sliding and Folding Door Hardware
- ANSI A156.15 Release Devices-Closer Holder, Electromagnetic and Electromechanical
- ANSI A156.16 Auxiliary Hardware
- ANSI A156.17 Self Closing Hinges and Pivots
- ANSI A156.18 Materials and Finishes
- ANSI A156.21 Thresholds
- ANSI A156.22 Door Gasketing Systems
- ANSI A156.25 Electrified Locking Devices
- ANSI A156.26 Continuous Hinges
- ANSI A156.28 Keying Systems

ANSI NUMBERING SYSTEM

Letter "A" denotes section "A" of ANSI Standard

First Numeral

The first numeral indicates general type of material used.

- 1 Cast, Forged or Extruded Brass or Bronze
- 2 Wrought Brass or Bronze
- 5 Stainless Steel, 300 Series
- 8 Wrought Steel, Forged Steel or Malleable Iron

Second Numeral

The second numeral identifies type of product.

- 1 Full Mortise Hinges
- 2 Half Mortise Hinges
- 3 Full Surface Hinges
- 4 Half Surface Hinges
- 5 Anchor, Pivot Reinforced or Thrust Pivot Unit and Hinge Sets
- 6 Olive Knuckle Hinges
- 7 Pivot Hinges
- 8 Rescue Hardware

Third Numeral

The third numeral identifies the function or the description of the item or both.

- 1 Anti-Friction Bearing
- 2 Anti-Friction Bearing Swing Clear
- 3 Plain Bearing
- 4 Through 0 Special Conditions

Fourth Numeral

The fourth numeral designates the grade classification of the item.

- 1 Grade 1 4BB Extra Heavy Weight 2,500,000 Cycles
- 2 Grade 2 2BB Standard Weight 1,500,000 Cycles
- 3 Grade 3 Plain Bearing 350,000 Cycles

Information taken from: ANSI A156.1 (Butts and Hinges)

CODES AND ILLUSTRATIONS

Units of Measure

- EACH Item in a box either with or without screws.
- PACK Items poly bagged (1 or more) per bag.
- PAIR Items (1 or more) pair per box.

SET - Items (1 or more) sets per box.

Illustrations

Pictures and illustrations shown in this catalog are for general product information only and are not meant to be used as templates. Contact Hager Companies Sales and Service for templates or installation instructions, or go to www.hagerco.com to download.

Packaging

The following codes have been established to provide clarification of packaging methods. The basic code letter(s) are shown in parenthesis in the unit column of each page. The letter designation refers to the standard Hager Pack.

Hager Companies reserves the right to change the packaging methods when deemed necessary and to increase or decrease quantities to make full case quantities on a specific item.

B =	Boxed
PB =	Poly Bag
BLK =	Bulk Pack
SET =	Set

APPROVAL

Hager Companies has been approved by the U.S. Corps of Engineers and by the Veterans Administration for use on all veterans hospitals and on other buildings that would come under their jurisdiction. Approved samples are on file at the National Bureau of Standards, Washington, D.C.





Yearly

1,825,000

1,460,000

1,095,000

456,250 182,500

36,500 36,500 29,200 18,250

10,950 7,300

DOOR MATERIALS AND FREQUENCY

	Door Thic	kness				Type of Building	Dailv
Door Material	1-3/8″ 1-3/4″ 2″ (35 mm) (45 mm) (51 mm		2″ (51 mm)	2-1/4″ (57 mm)	2-1/2″ (64 mm)	High Frequency	
Ash	4.5	5.3	6.0	6.8	7.5	Large Department Store Entrance	5,000
Birch	3.8	4.3	5.0	5.6	6.3	Large Office Building Entrance	4,000
Fir	3.0	3.5	4.0	4.5	5.0	Hospital Corrifor and	2,000
Mahogany	4.5	5.3	6.0	6.8	7.5	Surgical Doors	3,000
Oak	6.0	7.3	8.0	9.0	10.0	School Entrance	1,250
White Pine	3.0	3.5	4.0	4.0	5.0	Office Stairwell	500
Residential Hollow Core	1.7	2.5	-	-	-	Medium Frequency	
Institutional Hollow Core	-	3.2	-	-	-	Hospital Consultation Rooms	100
Staved Core	3.3	4.2	-	5.4	-	School Corridor	100
Particle Board Core	4.0	5.0	-	-	-	Office Building Corridor	80
Mineral Core	-	4.0	-	-	-	Storage Room	50
Acoustical COre	-	8.3	-	10.6	-	Low Frequency	
Fiberglass	-	3.8	-	-	-	Residential Entrance	30
Hollow Metal 18 gauge	4.3	4.6	-	-	-	Residential Interior	20
Hollow Metal 16 gauge	5.4	5.8	-	-	-		
Hollow Metal 15 gauge	6.2	6.5	-	-	-		
Hollow Metal 14 gauge	7.0	7.3	-	-	-		
Hollow Metal 13 gauge	8.3	8.7	-	-	-		
Hollow Metal 12 gauge	9.9	15.5	-	-	-		
Hollow Metal 11 gauge	11.2	11.6	-	-	-		
Hollow Metal 10 gauge	12.8	13.0	-	-	-		
1-3/4" Wood + 1/16" Lead	-	8.7	-	-	-		
1-3/4" Wood + 1/8" Lead	-	12.4	-	-	-		
1-3/4" Wood + 3/16" Lead	-	16.1	-	-	-		
1-3/4" Wood + 1/4" Lead	-	19.8	-	-	-		
1-3/4" Wood + 3/8" Lead	-	27.2	-	-	-		
1-3/4" Wood + 1/2" Lead	-	34.6	-	-	-		

Note: Frequency chart recommendations apply to all average weight doors. Heavy ball bearing hinges should be used for doors having a thickness of 2" (51 mm) or more over a width of 3'4" (1016 mm). Any doors on which a closing device is used should be equipped with bearing hinges, regardless of frequency of use.



GENERAL INFORMATION

TRADE ORGANIZATIONS



The American Hardware Manufacturers Association

The purpose of AHMA is to promote the sale of American made products through the Hardware Distribution system. Hager Companies is a member in good standing of the American Hardware Manufacturers Association, the owner of the AHMA registered trademark.

📕 member

βηωγ

Door and Hardware Institute Door and Hardware Institute The purpose of the institute is to represent the architectural openings industry as a major component of the construction industry. Hager recommends the service of a qualified A.H.C. for the preparation of hardware specification and schedules. Members of this society are gualified through years of experience and

rigid examination to handle the most complex

Builders Hardware Manufacturers Association

hardware situations.

The Builders Hardware Manufacturers Association is a national trade group of manufacturers whose products are classified (Standard Industrial Classification #34294) and most familiarly recognized as locks and builders hardware. Where applicable this catalog shows BHMA numbers in conjunction with Hager numbers. The purpose is to advance the interests of the Builders Hardware Industry in all lawful ways.



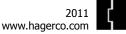
Association of Millwork Distributors

The Association of Millwork Distributors has continued to be recognized as the leader in the millwork wholesale distribution industry for almost half of a century. The Southern Sash and Door and Northern Sash and Door organizations, joined forces 42 years ago to become the National Sash and Door Jobbers Association (NSDJA). On the 40th Anniversary of NSDJA, the association changed its name to the Association of Millwork Distributors (AMD). This change signified that the leadership and membership of the association recognized the changes in the millwork industry.

AMD represents the millwork industry with over 1,000 distributor, manufacturer, and manufacturer's representative companies, nationally and internationally, that promote the best in products and services that the millwork industry has to offer.

AMD is a chief advocate, actively engaged in issues regarding standards, trends, and resources in the millwork distribution industry. AMD monitors Congressional activity and various regulatory agencies, continually seeking to promote industry benefits for AMD members.

AMD is committed to being an essential resource for its members, providing educational products, networking events, and pertinent industry information to help members stay updated on millwork industry trends and available opportunities.



GENERAL INFORMATION



Florida Building Codes



The following products have been approved for statewide acceptance by the Florida Building Commission pursuant to Rule 9B-72.090, F.A.C., for approval of products and systems for use on Exterior Swinging Door Assemblies, in compliance with the structural requirements of the 2007 Florida Building Code.

Verification of Florida Statewide acceptance can be found at www.floridabuilding.org under the Product Approval section.

Severe Windstorm Resistant Components for Swinging Door Assemblies - ANSI A250.13 - 2003 Standard

Certified Hardware	Assembly Configuration	Door Size	Door Stiffness Class	Design Load	Florida Certification Number (FL#)
3100 Series Grade 1 Deadbolt	Single - Out Swing	3-0 x 7-0	-	1150 lbf (100 psf)*	6118
STOD Selles Grade T Deadbolt	Single - Out Swing	4-0 x 8-0	-	1150 lbf (70 psf)*	0110
3200 Series Grade 2 Deadbolt	Single - Out Swing	3-0 x 7-0	-	1150 lbf (100 psf)*	6118
S200 Selles Glade 2 Deadbolt	Single - Out Swing	4-0 x 8-0	-	1150 lbf (70 psf)*	0110
3400 Series Grade 1 Lockset	Single - Out Swing	3-0 x 7-0	-	1150 lbf (100 psf)*	6118
5400 Selles Glade I Locksel	Single - Out Swing	4-0 x 8-0	-	1150 lbf (70 psf)*	0110
3500 Series Grade 2 Lockset	Single - Out Swing	3-0 x 7-0	-	860 lbf (80 psf)*	7683
5500 Selles Glade 2 Locksel	Single - Out Swing	4-0 x 8-0	-	860 lbf (50 psf)*	7005
3800 Series Grade 1 Mortise	Single - Out Swing	3-0 x 7-0	-	1150 lbf (100 psf)*	12932
Solo Selles Glade 1 Horuse	Single - Out Swing	4-0 x 8-0	-	1150 lbf (70 psf)*	12952
4500 Rim Exit Device	Single - Out Swing	4-0 x 8-0 max.	I	+/- 70 psf - 350 ft-lbs Impact	9481
4500 SVR Exit Device	Out Swing	8-0 x 8-0 pair max.	I	+/- 50 psf - 350 ft-lbs Impact	13178
4700 Rim Exit Device	Single - Out Swing	4-0 x 8-0 max.	I	+/- 40 psf - 350 ft-lbs Impact	8293
780-112 Roton Hinge	Single Swing	4-0 x 8-0 max.	I	1150 lbf (72 psf)* - 350 ft-lbs Impact	6118
780-111, 780-224, 780-226 Roton Hinge (SD & HD)	Single Swing	4-0 x 8-0 max.	I	1150 lbf (72 psf)* - 350 ft-lbs Impact	13776
BB1191 Hinge	Single - Out Swing	-	-	1780 lbf**	6118
1279, 1191, BB1279, BB1168, BB1199	Single - Out Swing	-	-	1780 lbf**	13776

* Load in parenthesis indicates the equivalent load in pounds per square foot based on indicated door size and door stiffness (if applicable). This load is based on the hardware item taking half of the force applied to the door assembly by the wind load and the hinges taking the other half.

** This load indicates the design load for a single butt hinge. Maximum wind load should be calculated based on door size, number of hinges used, and the other available door hardware on the door assembly.

Architectural Hinges



In the mid 1800s, Charles Hager had a successful business forging metal wheel rims and hinges for wagons headed west. As a smart businessman who valued quality and innovation, Charles soon became a pioneer in product development, designing a revolutionary hinge that became a prototype for more than 5,000 hinges to follow.

Today, the Hager name is synonymous with architectural hinges. In fact, we are the industry's premiere designer and manufacturer of architectural hinges, with a product line that offers one of the widest varieties of sizes, shapes, and finishes--all of which meet or exceed ANSI standards. With legendary quality, time-tested durability, and consistent superior performance, Hager is the one name, and one brand, you can count on to provide it all.



SELECTING A HINGE

Determine Type of Hinge

- What is the door material (wood, stainless steel, fiberglass, or hollow metal)?
- What is the frame material (wood, stainless steel, channel iron, or hollow metal)?

Hinges are manufactured in accordance with ANSI/BHMA A156.1. Self-closing hinges and pivots are in accordance with ANSI/BHMA A156.17 using three hinges per opening on a $3'0'' \times 7'0'' \times 1-3/4''$ (914 mm x 2134 mm x 44 mm) door.

Round corners are available in 1/4'' (6 mm) (standard) or 5/8'' (16 mm) radius.

Full Mortise

Both leaves are mortised, one leaf in the door and one leaf in the frame (wood door or hollow metal door with wood frame or hollow metal frame).

Example: BB1279, 4-1/2" x 4-1/2" (114 mm x 114 mm), US26D

Half Mortise

One leaf is mortised in the door and the other is surface applied to the frame (hollow metal door with channel iron frame).

Example: BB1109, 4-1/2" (114 mm), US26D

Full Surface

Both leaves are applied to the surface, one to the door and the other to the frame (metal core door or hollow metal door with channel iron frame). Example: BB2171, 5" (127 mm), USP

Half Surface

One leaf is mortised in the frame and the other is surface applied to the face of the door (wood door with wood frame or metal core door with hollow metal frame). Example: BB1163, 5" (152 mm), US26D

Select the Proper Weight and Bearing Structure

Because of the variety of door sizes and weights, hinges are placed into three groups:

<u>Heavy Weight - Ball Bearing</u> Example: BB1199, 5" x 5" (127 mm x 127 mm), US32D

<u>Standard Weight - Ball Bearing</u> Example: BB1279, 4-1/2" x 4-1/2" (114 mm x 114 mm), US26D

<u> Standard Weight - Plain Bearing</u>

Example: 1279, 4" x 4" (102 mm x 102 mm), US10

There are two factors that determine the weight and structure of the hinge: weight of the door and frequency of use. It is advisable to include the approximate weight of additional hardware that will be installed on the door.

Determine the Size of Hinge

The first thing to find is the height of the hinge. Follow the examples below. These are only examples. Job situations will offer many more variables.

Only on the full mortise hinges are there two dimensions, such as a $4-1/2'' \times 4-1/2''$ (114 x 114 mm). The first dimension indicates the height and the second dimension indicates the width when the hinge is in the open position.

Thickness of Door	Width of Door	Height of Hinge
1-3/8" (35 mm) Door	To 32" (813 mm)	3-1/2" (89 mm)
1-3/8" (35 mm) Door	32" to 36" (813 to 914 mm)	4″ (102 mm)
1-3/4" (45 mm) Door	To 36" (914 mm)	4-1/2" (114 mm)
1-3/4" (45 mm) Door	36" to 48" (914 to 1219 mm)	5″ (127 mm)
1-3/4" (45 mm) Door	Over 48" (1212 mm)	6″ (152 mm)
2", 2-1/4", 2-1/2" Door (51, 57 & 64 mm)	To 42" (1067 mm)	5″ (127 mm) Heavy Weight
2", 2-1/4", 2-1/2" Door (51, 57 & 64 mm)	Over 42" (1067 mm)	6" (152 mm) Heavy Weight

Height of Hinge

There are three dimensions to know in order to determine the minimum width of the hinge: door thickness, backset, and clearance required.

- When figuring the calculations for a wood door and wood frame, the door is flush with the casing or face of the frame. When figuring the calculations for a wood or metal door with a hollow metal frame, the door is inset approximately 1/8" (3.2 mm).
- 2. For doors up to 2-1/4'' (57 mm) thick, the hinge is set back 1/4'' (6.4 mm) from the back face of the door.
- 3. For doors over 2-1/4'' (57 mm) thick, the hinge is set back 3/8'' (9.5 mm) from the back face of the door.

Once these dimensions are known, the formula can then be applied. **Take the door thickness, subtract the backset, multiply by two, and add the clearance required.** If the hinge size is not standard, then go to the next larger hinge width. If the width of the hinge is greater than the height of the hinge [example: $4-1/2'' \times 6''$ (114 mm x 152 mm)] this is referred to as a wide throw hinge. This would apply only to full mortise hinges.



Doors up to 60" (1524 mm) in height shall be provided with two hinges and an additional hinge for each additional 30" (762 mm). Where spring hinges are used, at least two shall be provided.

Hinge Type

Full Mortise Hinge Height	Frequency of Use	Max Door Weight	Maximum Door Width	Туре
4-1/2" (114 mm)	Low	75	36" (914 mm)	1279
4-1/2" (114 mm)	Medium	150	36" (914 mm)	BB1279
4-1/2" (114 mm)	High	150	36" (914 mm)	BB1168
5″ (127 mm)	Low	100	36" (914 mm)	1279
5″ (127 mm)	Medium	175	36" (914 mm)	BB1279
5″ (127 mm)	High	175	36" (914 mm)	BB1168
6″ (152 mm)	Low	125	36" (914 mm)	1279
6″ (152 mm)	Medium	230	36" (914 mm)	BB1279
6″ (152 mm)	High	230	36" (914 mm)	BB1168

Minimum Cycle Requirements

Plain Bearing = 350,000

Standard Weight Ball Bearing = 1,500,000 Heavy Weight Ball Bearing = 2,500,000

Determine Type of Material Steel

This has great strength, but it is a corrosive material. If the atmosphere that steel is used in is not stable, steel will begin to rust. The best application for steel is in a controlled environment, such as inside a building where the temperature and humidity are controlled.

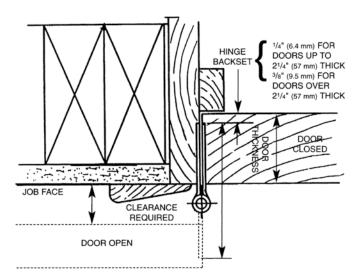
Stainless Steel

This also has great strength. It is rust resistant and can be polished to a satin or bright finish. For highly corrosive areas, 316 grade or clear coat over 304L may be recommended. Hager Companies standard grade stainless steel is 304L.

<u>Brass</u>

This material is noncorrosive, rust resistant, and very decorative. However, it has less strength than the steel or stainless steel material. Brass is often used where appearance is of great concern as it may be polished and plated in various finishes.

Both steel and stainless steel hinges may be used on listed fire rated or labeled door openings. Brass material may not be used on fire rated or labeled openings because of the low melting point.



Door Thickness	Standard Backset	Max. Clearance Provided	Width of Hinge
1-3/8″	1/4" (6.4 mm)	1-1/4" (32 mm)	3-1/2" (89 mm)
(35 mm)		1-3/4" (45 mm)	4" (102 mm)
1-3/4″ (45 mm)	1/4″ (6.4 mm)	1" (25 mm) 1-1/2" (38 mm) 2" (51 mm) 3" (76 mm)	4" (102 mm) 4-1/2" (114 mm) 5" (127 mm) 6" (152 mm)
2″ (51 mm)	1/4″ (6.4 mm)	1" (25 mm) 1-1/2" (38 mm) 2-1/2" (64 mm)	4-1/2" (114 mm) 5" (127 mm) 6" (152 mm)
2-1/4″	1/4" (6.4 mm)	1" (25 mm)	5" (127 mm)
(57 mm)		2" (51 mm)	6" (152 mm)
2-1/2"	3/8″ (9.5 mm)	3/4" (19 mm)	5" (127 mm)
(64 mm)		1-3/4" (45 mm)	6" (152 mm)

Minimum Width of Hinge

Determine the Number of Hinges

The next determination is the number of hinges per door leaf. A general rule of thumb: one hinge for every 30" (762 mm) of door height or fraction thereof.

Door Height	Number of Hinges
Up to 60" (1524 mm)	2 Hinges
Over 60" (1524 mm) and not over	
90″ (2286 mm)	3 Hinges
Over 90" (2286 mm) and not over	
120″ (3048 mm)	4 Hinges

For doors with a width greater than 37" (940 mm) to 48" (122 mm), an extra hinge could be used for additional strength. The extra hinge helps support the additional weight and tension applied to the frame created by the wider door width.





Determine Type of Finish

All steel and brass material hinges can be plated to match the available finishes that are listed in the American National Standards Institute, standard ANSI/BHMA A156.18 Materials and Finishes.

Special Rust-Resisting Finishes

When using steel base material hinges, special finishing processes can be provided that will afford additional protection to the product. A nickel undercoat may be applied prior to plating. Although this will give added protection and is considered rust-resistant, it is not to be considered rust-proof. If a true rust-resisting hinge is needed, consider using a nonferrous metal such as brass or stainless steel.

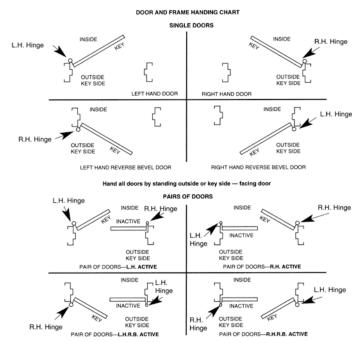
Note: Hager Companies only warrants US10B finish over brass base material. If steel base is necessary, Hager Companies recommends US10A lacquer finish.

Antimicrobial Protection

Hager Companies uses a powder coat process to apply the AgIONTM antimicrobial treated coating to guarantee durability and protection. Antimicrobial resistance on products is affected by moisture in the air. Silver ions interact with humidity and are released creating a cleaner surface. AgIONTM is not recommended over stainless steel.

Determine Handing

On some applications it will be necessary to order hinges that are handed. Most manufacturers use the suffix RH (right hand) and LH (left hand). Another general rule of thumb, most manufacturers make the half surface, half mortise and full surface hinges for right hand use. Conversion from right hand to left hand is very simple; take the pin out of the knuckle, remove the bottom plug, turn the hinge over, replace the plug



in the bottom and the pin in the top of the knuckle, and the handing is reversed.

- The hand of a hinge is determined from the outside of the door to which it is applied. This is usually the locked side.
- When standing outside, if the door opens away (into the area) to the right, it takes a right hand hinge (also referred to as RH). If it opens to the left, it takes a left hand hinge (also referred to as LH).
- When standing outside, if the door opens (out of the area) toward the right, it takes a left hand hinge (also referred to as right hand reverse bevel – RHRB). If it opens to the left, it takes a right hand hinge (also referred to as a left hand reverse bevel – LHRB).

ADDITIONAL CONSIDERATIONS Determine Pin and Tip Style

- The standard in the industry is the Flat Button Tip for 5-knuckle hinges.
- The flush/concealed tip is standard on 3-knuckle. If button tip is required, specify Exposed Tip (ET).
- Hospital Tips (HT) are used primarily for security areas in hospitals and in prisons. This tip prevents hanging any objects on the tip of the hinge. Hager provides all hospital tipped hinges with an NRP set screw in the center of the knuckle, two cross pins, stainless steel hinge pin, and an oil port for lubrication purposes. If the hinge is ball bearing, the components used for the bearing are made of stainless steel.
- Decorative tips such as Acorn, Ball, Steeple, and Urn are used in highly decorative areas of offices and residences.
- Fast Riveted Pins (FRP) are spun on both ends, making the pin permanent.







Tri-Con Flush Pin

Hospital Tip (HT)



(ET - 3 Knuckle)



Acorn Tip





Steeple Tip



Fast Riveted Pin (FRP)





Deer Dating (Hr)	Maximum Door Size Mini		Minimum Hir	nge Size	
Door Rating (Hr)	Width Height Height Thickness		Thickness	Type Hinge	
For 1-3/4" (44.5 mm) or thic	ker doors		·	·	
3, 1-1/2, 1, 3/4, 1/2, 1/3	4 (1.22)	10 (3.05)	4-1/2 (114.3)	0.180 (4.57)	Steel, mortise or surface
3, 1-1/2, 1, 3/4, 1/2, 1/3	4 (1.22)	8 (2.44)	4-1/2 (114.3)	0.134 (3.40)	Steel, mortise or surface
1-1/2, 3/4, 1/2, 1/3	3-1/16 (0.96)	8 (2.44)	6 (152.4)	0.225 (5.72)	Steel, olive knuckle or paumelle
3, 1-1/2, 1, 3/4, 1/2, 1/3	4 (1.22)	10 (3.05)	4 (101.6)	0.225 (5.72)	Steel pivots (including top, bottom, and intermediate)
1-1/2, 1, 3/4, 1/2, 1/3	3 (0.91)	5 (1.52)	4 (101.6)	0.130 (3.30)	Steel, mortise or surface
1-1/2, 1, 3/4, 1/2, 1/3	2 (0.61)	3 (0.91)	3 (76.2)	0.092 (2.34)	Steel, mortise or surface
3, 1-1/2, 1, 3/4, 1/2, 1/3	3 (0.91)	7 (2.13)	4-1/2 (114.3)	0.134 (3.40)	Steel, mortise or surface (labeled, self-clos- ing, spring type)
3, 1-1/2, 1, 3/4, 1/2, 1/3	3 (0.91)	7 (2.13)	4 (101.6)	0.105 (2.67)	Steel, mortise or surface (labeled, self-clos- ing, spring type)
For 1-3/8" (34.9 mm) doors					
3, 1-1/2, 3/4, 1/2, 1/3	3 (0.91)	7 (2.13)	3-1/2 (89.9) 0.123 (3.12) Steel, mortise or surface		
3, 1-1/2, 1, 3/4, 1/2, 1/3	2-2/3 (0.81)	7 (2.13)	3-1/2 (89.9)	0.105 (2.67)	Steel, mortise or surface (labeled, self-clos- ing, spring type)

Fire Rated Application

Source: Table 6.4.3.1, NFPA 80-2007. Re-printed with permission.

Underwriter's Laboratories does not specifically apply UL listings to hinges. Instead, their Builder's Product Directory refers to NFPA80 Standard for Fire Doors and Fire Windows 2007 Edition, Table 6.4.3.1 Builders Hardware Mortise, Surface, and Full Length Hinges, Pivots or Spring Hinges for Swinging Doors, listed above.

Notes:

- 1. All hinges or pivots, except spring hinges, shall be of the ball bearing type. Hinges or pivots employing other anti-friction bearing surfaces shall be permitted if they meet the requirements of ANSI A156.1, Standard for Butts and Hinges. Spring hinges shall be labeled and shall meet the requirements of ANSI A156.17, Standard for Self Closing Hinges and Pivots, Grade 1.
- 2. Hinges 4-1/2" (114 mm) high, 0.180" (4.57 mm) thick shall be permitted for use on wide and heavy doors or doors that are subjected to heavy use or unusual stress.
- 3. Some manufacturers can provide fire doors with hinges of lighter weight that are not of the ball bearing type where they are part of a listed assembly and meet the requirements of ANSI A156.1, Standard for Butts and Hinges, and have been tested to a minimum of 350,000 cycles.
- 4. Pivot sets made up of components that are smaller or of a lighter gauge than shown in this table shall be permitted to be used, provided they meet the requirements of ANSI A156.4, Door Controls (Closers) and are in accordance with the manufacturer's label service procedures.

Special Hinges Spring



NFPA 80 has restricted the use of architectural grade spring hinges to fire rated doors of a maximum size of $3'0'' \times 7'0''$ (914 mm x 2134 mm). Hager spring hinges have been tested and labeled for up to a $4'0'' \times 8'0''$ (1219 mm x 2438 mm) door when a minimum of three springs are used. Spring hinges must be used with ball bearing hinges. Do not use plain bearing hinges with spring hinges.



Special Hinges (Continued)

<u>Air Transfer Hinge (ATH)</u>



One other product that can be used for a power transfer hinge is an air or pneumatic transfer hinge. This is used to transfer as much as 120 pounds of air pressure through the hinge in order to operate an air modified lock or exit device. Pneumatic power may be used in explosion-proof areas or where electric power is not sufficient to perform the necessary job.

Raised Barrel

This option is used when the door is set back into the frame. The hinge knuckle is offset to allow it to clear the obstruction of the frame. There are three different types of applications:



On the Jamb Surface Mount (JSM)

application, the door is mortised to accommodate both hinge leaves; it is sometimes referred to as double mortised. The Jamb Surface Mount may be applied to either a square or beveled edged door.

Jamb Surface Mount



Raised Barrel Square

The Raised Barrel for Square Edged (RBS) and the Raised Barrel for Beveled Edged (RBB) door applications

are mortised into the frame and door as a standard full mortise hinge. Standard offset is 3/8" (10 mm). Depending on the depth of the frame, all three of these applications may restrict the degree of opening.

Raised Barrel Beveled

Swing Clear



This is used when the passage area must be the full width of the opening. Swing clear hinges are designed to swing the door completely clear of the opening when the door is opened 95°.

Detention

Investment cast full mortise hinges (IHTHB953 Series) are the standard $4-1/2'' \times 4-1/2''$ (114 mm x 114 mm) size with a mortise depth of 0.187'' (4.7 mm). These hinges can carry doors weighing up to 600 pounds.

Anchor



The anchor hinges are intended for use on heavy wood or hollow metal doors in high frequency applications such as hospitals, schools, and public use buildings. These hinges are especially designed for use on doors where additional hardware (door closers or holders) may cause excessive strain or abuse to the door, frame, and/or hinges.

Anchor plates may be attached to either the frame and/or door. Their screws are placed in shear to the screws from the normal hinge plate. With the screws in shear, this prevents the hinges from pulling loose on the door or the frame.

There are two variations of the reinforcing/anchor hinge: one has a single extension leaf which is mortised into the frame only; the second has two extension leaves. One leaf is mortised into the frame and the other leaf is mortised into the top edge of the door. It will be necessary to know if the doors are square edged or beveled edged.

Aluminum Entrance



A slip-in hinge, plain bearing or ball bearing, is used with aluminum doors and frames. These hinges are manufactured for low to average frequency and medium weight aluminum doors and frames.

 $1277 \mbox{ or } BB1277$ – Both leaves are drilled and tapped for insertion into a slot in the door and the frame.

1278 or BB1278 – One leaf has the standard template hole punch and countersinking and the other leaf is drilled and tapped for insertion into a slot in the door or frame.

Electric Hinges

The electric hinge provides an easy means to monitor the opening as well as transferring power from the frame into the door.

Electric hinge modifications can be either exposed on the surface of the hinge or concealed in the hinge. When concealed, the modifications are not visible and normally go undetected by personnel using the openings.

All of the Hager Companies electric hinges have been tested through UL in order that our products can be used on fire rated or labeled openings.





Electric Hinges (Continued)

Another important point to remember, an electrically modified hinge is for **low voltage power transfer only (48 volts or under)**. Higher voltages are not allowed because of the potential dangers. Also a consideration is the Amperage rating of the power transfer hinges. Hager hinges include amperage ratings of 3.5 AMPS/continuous duty and 16.0 AMPS/ intermittent duty (pulse).

Normally, modifications are made to full mortise hinges. For other applications, consult Hager Engineering for availability.

It is recommended that the **CENTER HINGE LOCATION** be used with all electrically modified hinges.

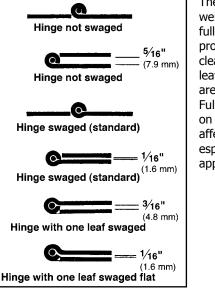
Hager Companies recommends the use of a mortar box or jamb box in order to protect the wire terminations on the inside of the frame. If this box is not used, the grout that may be poured into the frame will destroy the wiring and usually void the warranty on the product.





Swaging

Swaging is a slight offset of the hinge leaf at the barrel. This offset permits the leaves to come closer together when the door is in the closed position. If the hinge were to be left in the natural state after the knuckle was rolled, the hinge would be referred to as a "flatback". A flatback hinge has a gap between the leaves of approximately 5/16" (7.9 mm). This would allow heat and air-conditioning to escape, not to mention the unsightly gap between the door and frame.



The swaging on standard weight and heavy weight full mortise hinges provides 1/16" (1.6 mm) clearance between the leaves when the leaves are in the closed position. Full mortise hinges used on beveled doors will affect lockside clearance, especially for wide throw applications.

Security Features

Three additional features that are commonly used are: Non-Removable Pin (NRP), Safety Stud (SH), and Reverse Security Stud (RSS). **These features are intended as deterrents only.**

Non-Removable Pin



The **Non-Removable Pin (NRP)** has a small set screw in the body of the barrel. This set screw is tightened down against the pin. The pin has a groove in the position where the set screw makes contact, allowing the set screw to seat. The set screw is positioned so it cannot be reached unless the door is opened. If pin removal is necessary, the set screw is merely removed and the pin tapped from the bottom in the usual manner.

Safety Stud



The **Safety Stud (SH)** 3/16" (4.8 mm) projection is a feature that places a stud on one leaf and a locking hole on the other leaf. When the door is closed, the stud is anchored into the opposite leaf. Even if the hinge pin is removed, the door is secure because the leaves are locked together.

Reverse Security Stud



The Reverse Security Stud (RSS) 7/16"

(11.1 mm) projection is a feature that has a stud projecting from the back of both leaves into the reinforcing plate of both the frame and the door. It is intended to keep the hinge locked in place from abuse of battering or trying to shear the hinge and screws. This feature is primarily used in prisons and psychiatric areas.





BEARING OPTIONS

When using steel based hinges, special options are available such as stainless steel pins, stainless steel bearings and stainless steel raceways.

Ball Bearing (BB) - Ball bearings are engineered to throw the knuckle weight against specially hardened steel raceways, which ride on the bearing surfaces. The one-piece cup protects the bearings from moisture and dust. The cup supports no weight so it is not subjected to functional friction, pressure or wear. Lateral wear is minimized because the pin is held against thrust by the hardened steel top and bottom raceways. The bearing units are securely press-fit to the leaf knuckle to prevent loss when the hinge is disassembled.

Oilite Bearings (OB) - The oilite bearing is made of porous metal that has been press-formed and impregnated with oil. The slight pressure and heat generated when the door is operated causes the oil to come to the surface of the bearing causing the surface to be slick and smooth.

Anti-Friction Nylon Bearings (AB) - These are made of resilient engineering plastics that provide a self-lubricant and very strong bearing surface. The nylon acts as a cushion for the door yet it allows the door to flow smoothly on the surface of the nylon with an extremely low wear factor.

ARCHITECTURAL FINISH SYMBOLS Powder Coat Finishes

Hager	Description	Steel	Brass & Bronze	Stainless Steel	HEWI#
L1	Flat Black	693	693	N/A	N/A
L2	Dark Bronze	695	695	N/A	N/A
L3	Medium Bronze	694	694	N/A	N/A
LS	Luma Sheen [®] Aluminum Paint	689	689	N/A	N/A
13P	White	N/A	N/A	N/A	1
14P	Off White	N/A	N/A	N/A	5A
15P	Grey	N/A	N/A	N/A	5
33P	Yellow	N/A	N/A	N/A	14
34P	Red	N/A	N/A	N/A	33
35P	Green	N/A	N/A	N/A	6
36P	Blue	N/A	N/A	N/A	52
83P	Black	N/A	N/A	N/A	8
84P	Olive	N/A	N/A	N/A	62
85P	Brown	N/A	N/A	N/A	9
86P	Burgundy	N/A	N/A	N/A	30
87P	Dark Green	N/A	N/A	N/A	60
88P	Dark Blue	N/A	N/A	N/A	50

Note: Available only on architectural grade full mortise plain bearing hinges, full mortise ball bearing hinges, both standard and heavy weight, in both steel and brass material.

B.H.M.A. Symbol Base Material

Hager	Description	Steel	Brass & Bronze	300 Series Stainless Steel
2C	Plain Zinc Plate	603	N/A	N/A
H2H	Mechanical Galvanized; steel only	N/A	N/A	N/A
3	Bright Brass	632	605	N/A
3A	Bright Brass - Unlacquered	N/A	N/A	N/A
3SC*	Brass SecureCoat [®] Stainless Steel Lifetime Finish	N/A	N/A	N/A
4	Satin Brass	633	606	N/A
5	Satin Brass, Antique	638	609	N/A
9	Bright Bronze	637	611	N/A
9A	Bright Bronze, No Lacquer	N/A	N/A	N/A
10	Satin Bronze	639	612	N/A
10A	Antique Bronze, Lacquered	641	N/A	N/A
10B	Antique Bronze, Oiled	640	613	N/A
10D	Black Nickel, Oiled	N/A	N/A	N/A
14	Bright Nickel	645	618	N/A
14B	Black Nickel, Bright	N/A	N/A	N/A
15	Satin Nickel	646	619	N/A
15A	Antique Satin Nickel, Highlighted	647	620	N/A
17A	Black Nickel, Dull	648	621	N/A
26	Bright Chromium Plated	651	625	N/A
26D	Satin Chromium Plated	652	626	N/A
32	Stainless Steel Metal, Bright	N/A	N/A	629
32D	Stainless Steel Metal, Satin	N/A	N/A	630
Р	Prime Coat	600	600	N/A
PS	Plain Steel	N/A	N/A	N/A

*US3SC only available on AB800, AB850, and CB1191.

CARE AND MAINTENANCE

- Hinges must be free swinging without any binding. The use of shims to align hinges, if required, is satisfactory.
- Hinges should be well greased and checked on a regular basis for lubrication. We recommend that hinges used in commercial, high-frequency applications or those in extreme environmental conditions be lubricated annually to ensure quiet operation and long life.
- Standard hinges are best lubricated by removing the pin, applying a generous coating of lithium grease, and reinserting the pin by driving it completely down to the shoulder of the pin head.
- Hospital Tip (HT) hinges that have fixed hinge pins have an oil port on the knuckle for the purpose of lubrication.
- Water displacing sprays such as WD-40 are not recommended for hinge lubrication.
- To remove dirt, simply wipe with a soft damp cloth. Abrasive cleaners or lacquer thinner should not be used to clean the surface of hinges. To do so will void any warranty for the product.





HINGE SELECTOR - FULL MORTISE AND HALF MORTISE HINGES

	Full Mortise	Half Mortise
Hinge Description	Hollow Metal or Wood Door	Hollow Metal or Wood Door
	Hollow Metal or Wood Frame	Channel Iron Frame
Tri-Con Std. Wt. PB, Steel	700	
Tri-Con Std. Wt. PB, Brass/Stainless Steel	800	
Tri-Con Std. Wt. AB, Steel	AB700	AB701
Tri-Con Std. Wt. AB, Brass/Stainless Steel	AB800	AB801
Tri-Con Hvy. Wt. AB, Steel	AB750	AB751
Tri-Con Hvy. Wt. AB, Brass/Stainless Steel	AB850	AB851
Spring Hinge Std. Wt., Steel	1250	
Std. Wt., PB, Steel	1279	1129
Std. Wt., PB, Brass/Stainless Steel	1191	
2BB, Std. Wt., Steel	BB1279	BB1129
2BB, Std. Wt., Brass/Stainless Steel	BB1191	BB1109
4BB, Hvy Wt., Steel	BB1168	BB1138
4BB, Hvy Wt., Brass/Stainless Steel	BB1199	BB2098
3K/5K Anchor Hinge Steel, One Prong	AB7505/BB1160	
3K/5K Anchor Hinge Brass/Stainless Steel One Prong	AB8505/BB1190	
3K/5K Anchor Hinge Steel, Two Prong, Square Edge Door	AB7506/BB1162	
3K/5K Anchor Hinge Brass/Stainless Steel, Two Prong/Square Edge Door	AB8506/BB1192	
3K/5K Anchor Hinge Steel/Two Prong, Beveled Edge Door	AB7508/BB1166	
3K/5K Anchor Hinge Brass/Stainless Steel, Two Prong/Beveled Edge Door	AB8508/BB1196	
3K/5K Anchor Hinge Steel/One Long/One Short Prong/Square Edge Door	AB7507/BB1165	
3K/5K Anchor Hinge Brass/Stainless Steel/One Long/One Short Prong/Square Edge Door	AB8507/BB1195	
3K/5K Anchor Hinge Steel/One Long/One Short Prong/Beveled Edge Door	AB7509/BB1167	
3K/5K Anchor Hinge Brass/Stainless Steel/One Long/One Short Prong/Beveled Edge Door	AB8509/BB1197	
Bronze Pivot Hinge - Top	495	
Bronze Pivot Hinge - Intermediate	496	
Bronze Pivot Hinge - Bottom	497	
3K/5K Swing Clear/Std. Wt., BB Steel/Beveled Edge Door	AB7001/BB1260	BB1264
3K/5K Swing Clear/Std. Wt., BB Steel/Beveled Edge Door	AB7002/BB1261	BB1265
3K/5K Swing Clear/Hvy. Wt., BB Steel/Square Edge Door	AB7501/BB1262	AB7511
3K/5K Swing Clear/Hvy. Wt., BB Steel/ Beveled Edge Door	AB7502/BB1263	AB7512
3K/5K Swing Clear/Hvy. Wt., BB Steel		
3K/5K Std. Wt., PB, Wide Throw/Steel	700/1279	
3K/5K Std. Wt., PB, Wide Throw/Brass/Stainless Steel	800/1191	
3K/5K Std. Wt., AB, Wide Throw/Steel	AB700/BB1279	
3K/5K Std. Wt., AB, Wide Throw/Brass/Stainless Steel	AB800/BB1191	
3K/5K Hvy. Wt., AB, Wide Throw/Steel	AB750/BB1168	
3K/5K Hvy. Wt., AB, Wide Throw/Brass/Stainless Steel	AB850/BB1199	

For Hospital Tip, use prefix "HT" on above number. Hospital Tip hinges are available on all architectural hinges with the exception of anchor hinges. Note: When ordering round corner hinges, please specify a radius of either 1/4" (6.4 mm) or 5/8" (15.9 mm). If radius is not specified, 1/4" (6.4 mm) will be supplied. Note: For special requirements - In the event a particular hinge is not found to meet your requirements, please contact our Customer Service Department and provide Hager with the specific requirements. The Hager Technical Service Staff will prepare drawings for the appropriate application.



HINGE SELECTOR - FULL SURFACE AND HALF SURFACE HINGES

	Full Surface	Half Surface
Hinge Description	Composite or Tubular Steel Door	Composite or Wood Door
	Channel Iron Frame	Hollow Metal or Wood Frame
Tri-Con Std. Wt. PB, Steel		
Tri-Con Std. Wt. PB, Brass/Stainless Steel		
Tri-Con Std. Wt. AB, Steel	AB702	AB703
Tri-Con Std. Wt. AB, Brass/Stainless Steel	AB802	AB803
Tri-Con Hvy. Wt. AB, Steel	AB752	AB753
Tri-Con Hvy. Wt. AB, Brass/Stainless Steel	AB852	AB853
Spring Hinge Std. Wt., Steel		
Std. Wt., PB, Steel		1173
Std. Wt., PB, Brass/Stainless Steel		
2BB, Std. Wt., Steel	BB2171	BB1173
2BB, Std. Wt., Brass/Stainless Steel	BB2110	BB2112
4BB, Hvy Wt., Steel	BB2168/BB2169	BB1163
4BB, Hvy Wt., Brass/Stainless Steel	BB2108/BB2109	BB2113
3K/5K Anchor Hinge Steel, One Prong		
3K/5K Anchor Hinge Brass/Stainless Steel One Prong		
3K/5K Anchor Hinge Steel, Two Prong, Square Edge Door		
3K/5K Anchor Hinge Brass/Stainless Steel, Two Prong/Square Edge Door		
3K/5K Anchor Hinge Steel/Two Prong, Beveled Edge Door		
3K/5K Anchor Hinge Brass/Stainless Steel, Two Prong/Beveled Edge Door		
3K/5K Anchor Hinge Steel/One Long/One Short Prong/Square Edge Door		
3K/5K Anchor Hinge Brass/Stainless Steel/One Long/One Short Prong/Square Edge Door		
3K/5K Anchor Hinge Steel/One Long/One Short Prong/Beveled Edge Door		
3K/5K Anchor Hinge Brass/Stainless Steel/One Long/One Short Prong/Beveled Edge Door		
Bronze Pivot Hinge - Top		
Bronze Pivot Hinge - Intermediate		
Bronze Pivot Hinge - Bottom		
3K/5K Swing Clear/Std. Wt., BB Steel/Beveled Edge Door		
3K/5K Swing Clear/Std. Wt., BB Steel/Beveled Edge Door		
3K/5K Swing Clear/Hvy. Wt., BB Steel/Square Edge Door		
3K/5K Swing Clear/Hvy. Wt., BB Steel/ Beveled Edge Door		
3K/5K Swing Clear/Hvy. Wt., BB Steel	AB7523/BB1266	AB7534/BB1270
3K/5K Std. Wt., PB, Wide Throw/Steel		
3K/5K Std. Wt., PB, Wide Throw/Brass/Stainless Steel		
3K/5K Std. Wt., AB, Wide Throw/Steel		
3K/5K Std. Wt., AB, Wide Throw/Brass/Stainless Steel		
3K/5K Hvy. Wt., AB, Wide Throw/Steel		
3K/5K Hvy. Wt., AB, Wide Throw/Brass/Stainless Steel		

For Hospital Tip, use prefix "HT" on above number. Hospital Tip hinges are available on all architectural hinges with the exception of anchor hinges.

Note: When ordering round corner hinges, please specify a radius of either 1/4" (6.4 mm) or 5/8" (15.9 mm). If radius is not specified, 1/4" (6.4 mm) will be supplied. Note: For special requirements - In the event a particular hinge is not found to meet your requirements, please contact our Customer Service Department and provide Hager with the specific requirements. The Hager Technical Service Staff will prepare drawings for the appropriate application.



TWO KNUCKLE HINGES



920

Plain Bearing - Standard Weight Steel with steel pin (ANSI A8133)

AB920

Concealed Anti-Friction Bearing -Standard Weight Steel with steel pin (ANSI A8112)

AB923

Concealed Anti-Friction Bearing -Standard Weight Brass with stainless steel pin (ANSI A2112) or stainless steel with stainless steel pin (ANSI A5112)

- Handed
- With door closer use ball bearing hinge
- For use on medium weight doors or doors requiring medium frequency service

Hinge Size		Gauge of Hole	Hole	Iole Screw Size	
Inches	mm	Metal	Count	Machine	Wood
4-1/2 x 4	114 x 102	0.134	8	1/2 x 12-24	1-1/4 x 12
4-1/2 x 4-1/2	114 x 114	0.134	8	1/2 x 12-24	1-1/4 x 12



AB930

Concealed Anti-Friction Bearing -Heavy Weight Steel with steel pin (ANSI A8111)

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AB933 Concealed Anti-Friction Bearing -Heavy Weight

Brass with stainless steel pin (ANSI A2111) or stainless steel with stainless steel pin (ANSI A5111)

- Handed
- For use on heavy weight doors or doors requiring high frequency service

Hinge Size		Gauge of Hole	Hole	Hole Screw Size	
Inches	mm	Metal	Count	Machine	Wood
4-1/2 x 4	114 x 102	0.180	8	1/2 x 12-24	1-1/4 x 12
4-1/2 x 4-1/2	114 x 114	0.180	8	1/2 x 12-24	1-1/4 x 12

THREE KNUCKLE HINGES



C

700

Plain Bearing - Standard Weight Steel with steel pin (ANSI A8133)

800

Plain Bearing - Standard Weight Brass with stainless steel pin (ANSI A2133) or stainless steel with stainless steel pin (ANSI A5133)

- Non-rising removable pin with flush pin and plug
- With door closer use ball bearing hinge
- For use on medium weight doors or doors requiring low frequency service

AB700

Concealed Anti-Friction Bearing -Standard Weight Steel with steel pin (ANSI A8112)

AB800

Concealed Anti-Friction Bearing -Standard Weight

Brass with stainless steel pin (ANSI A2112) or stainless steel with stainless steel pin (ANSI A5112)

- Non-rising removable pin with flush pin and plug
- AB800 available with SecureCoat[®] Lifetime finish (US3SC)
- For use on medium weight doors or doors requiring medium frequency service

Hinge Size		Gauge of H	Hole	Screw Size	
Inches	mm	Metal	Metal Count		Wood
3-1/2 x 3-1/2	89 x 89	0.119	6	1/2 x 10-24	1 x 9
4 x 4	102 x 102	0.129	8	1/2 x 12-24	1-1/4 x 12
4-1/2 x 4	114 x 102	0.134	8	1/2 x 12-24	1-1/4 x 12
4-1/2 x 4-1/2	114 x 114	0.134	8	1/2 x 12-24	1-1/4 x 12
5 x 4	127 x 102	0.145	8	1/2 x 12-24	1-1/4 x 12
5 x 4-1/2	127 x 114	0.145	8	1/2 x 12-24	1-1/4 x 12
5 x 5	127 x 127	0.145	8	1/2 x 12-24	1-1/4 x 12





THREE KNUCKLE HINGES (CONTINUED)



WTAB700

Concealed Anti-Friction Bearing -Standard Weight - Wide Throw Steel with steel pin (ANSI A8112)

WTAB800

Concealed Anti-Friction Bearing -Standard Weight - Wide Throw Brass with stainless steel pin (ANSI A2112) or stainless steel with stainless steel pin (ANSI A5112)

- Wide throw
- Non-rising removable pin with flush pin and plug
- For use on medium weight doors or doors requiring medium frequency service



AB750

Concealed Anti-Friction Bearing -Heavy Weight Steel with steel pin (ANSI A8111)

AB850

Concealed Anti-Friction Bearing -Heavy Weight

Brass with stainless steel pin (ANSI A2111) or stainless steel with stainless steel pin (ANSI A5111)

- Non-rising removable pin with flush pin and plug
- AB850 available with SecureCoat[®] Lifetime finish (US3SC)
- For use on heavy weight doors or doors requiring high frequency service

Hinge Size		Gauge of Hole	Screw Size		
Inches	mm	Metal	Count	Machine	Wood
4-1/2 x 5	114 x 127	0.134	8	1/2 x 12-24	1-1/4 x 12
4-1/2 x 6	114 x 152	0.134	8	1/2 x 12-24	1-1/4 x 12
4-1/2 x 7	114 x 178	0.134	8	1/2 x 12-24	1-1/4 x 12
4-1/2 x 8	114 x 203	0.134	8	1/2 x 12-24	1-1/4 x 12
5 x 6	127 x 152	0.145	8	1/2 x 12-24	1-1/4 x 12
5 x 7	127 x 178	0.145	8	1/2 x 12-24	1-1/4 x 12
5 x 8	127 x 203	0.145	8	1/2 x 12-24	1-1/4 x 12

Hinge Size		Hole	e Screw Size	
mm	Metal	Count	Machine	Wood
114 x 114	0.180	8	1/2 x 12-24	1-1/4 x 12
127 x 114	0.190	8	1/2 x 12-24	1-1/4 x 12
127 x 127	0.190	8	1/2 x 12-24	1-1/4 x 12
152 x 114	0.203	10	1/2 x 1/4-20	1-1/2 x 14
152 x 127	0.203	10	1/2 x 1/4-20	1-1/2 x 14
152 x 152	0.203	10	1/2 x 1/4-20	1-1/2 x 14
	114 x 114 127 x 114 127 x 127 152 x 114 152 x 127	IIII O.180 114 x 114 0.180 127 x 114 0.190 127 x 127 0.190 152 x 114 0.203 152 x 127 0.203	mm Metal Count 114 x 114 0.180 8 127 x 114 0.190 8 127 x 127 0.190 8 152 x 114 0.203 10 152 x 127 0.203 10	Metal Count Machine 114 x 114 0.180 8 1/2 x 12-24 127 x 114 0.190 8 1/2 x 12-24 127 x 127 0.190 8 1/2 x 12-24 152 x 114 0.203 10 1/2 x 12-24 152 x 127 0.203 10 1/2 x 1/4-20





THREE KNUCKLE HINGES (CONTINUED)



WTAB750

Concealed Anti-Friction Bearing -Heavy Weight - Wide Throw Steel with steel pin (ANSI A8111)

WTAB850

Concealed Anti-Friction Bearing -Heavy Weight - Wide Throw Brass with stainless steel pin (ANSI A2111) or stainless steel with stainless steel pin (ANSI A5111)

- Wide throw
- Non-rising removable pin with flush pin and plug
- For use on heavy weight doors or doors requiring high frequency service

Hinge Size	Hinge Size		Hole	Screw Size		
Inches	mm	Metal	Count	Machine	Wood	
4-1/2 x 5	114 x 127	0.180	8	1/2 x 12-24	1-1/4 x 12	
4-1/2 x 6	114 x 152	0.180	8	1/2 x 12-24	1-1/4 x 12	
4-1/2 x 7	114 x 178	0.180	8	1/2 x 12-24	1-1/4 x 12	
4-1/2 x 8	114 x 203	0.180	8	1/2 x 12-24	1-1/4 x 12	
5 x 6	127 x 152	0.190	8	1/2 x 12-24	1-1/4 x 12	
5 x 7	127 x 178	0.190	8	1/2 x 12-24	1-1/4 x 12	
5 x 8	127 x 203	0.190	8	1/2 x 12-24	1-1/4 x 12	

FIVE KNUCKLE HINGES



1191

Plain Bearing - Standard Weight Brass with stainless steel pin (ANSI A2133) or stainless steel with stainless steel pin (ANSI A5133)

1279

Plain Bearing - Standard Weight Steel with steel pin (ANSI A8133)

- Non-rising removable pin with button tip and plug
- With door closer use ball bearing hinge
- 3-1/2" x 3-1/2" (89 mm x 89 mm) available with reverse hole pattern
- For use on medium weight doors or doors requiring low frequency service

Hinge Size		Gauge of Hole	Hole	Screw Size		
Inches	mm	Metal	Count	Machine	Wood	
2 x 2	51 x 51	0.083	4	-	3/4 x 8	
2-1/2 x 2-1/2	64 x 64	0.089	6	-	3/4 x 8	
3 x 3	76 x 76	0.097	6	-	1 x 9	
3-1/2 x 3-1/2	89 x 89	0.119	6	1/2 x 10-24	1 x 9	
4 x 4	102 x 102	0.129	8	1/2 x 12-24	1-1/4 x 12	
4-1/2 x 4	114 x 102	0.134	8	1/2 x 12-24	1-1/4 x 12	
4-1/2 x 4-1/2	114 x 114	0.134	8	1/2 x 12-24	1-1/4 x 12	
5 x 4	127 x 102	0.145	8	1/2 x 12-24	1-1/4 x 12	
5 x 4-1/2	127 x 114	0.145	8	1/2 x 12-24	1-1/4 x 12	
5 x 5	127 x 127	0.145	8	1/2 x 12-24	1-1/4 x 12	
6 x 4-1/2	152 x 114	0.160	10	1/2 x 1/4-20	1-1/2 x 14	
6 x 5	152 x 127	0.160	10	1/2 x 1/4-20	1-1/2 x 14	
6 x 6	152 x 152	0.160	10	1/2 x 1/4-20	1-1/2 x 14	



FIVE KNUCKLE HINGES (CONTINUED)



WT1191

Plain Bearing - Standard Weight -Wide Throw Brass with stainless steel pin (ANSI A2133) or stainless steel with stainless steel pin (ANSI A5133)

WT1279

Plain Bearing - Standard Weight -Wide Throw

Steel with steel pin (ANSI A8133)

- Wide throw
- Non-rising removable pin with button tip and plug
- With door closer use ball bearing hinge
- For use on medium weight doors or doors requiring low frequency service

Hinge Size		Gauge of	ge of Hole Screw Size		
Inches	mm	Metal	Count	Machine	Wood
3-1/2 x 5	89 x 127	0.119	6	1/2 x 10-24	1 x 9
3-1/2 x 6	89 x 152	0.119	6	1/2 x 10-24	1 x 9
4 x 5	102 x 127	0.129	8	1/2 x 12-24	1-1/4 x 12
4 x 6	102 x 152	0.129	8	1/2 x 12-24	1-1/4 x 12
4 x 7	102 x 178	0.129	8	1/2 x 12-24	1-1/4 x 12
4-1/2 x 5	114 x 127	0.134	8	1/2 x 12-24	1-1/4 x 12
4-1/2 x 6	114 x 152	0.134	8	1/2 x 12-24	1-1/4 x 12
4-1/2 x 7	114 x 178	0.134	8	1/2 x 12-24	1-1/4 x 12
4-1/2 x 8	114 x 203	0.134	8	1/2 x 12-24	1-1/4 x 12
5 x 6	127 x 152	0.145	8	1/2 x 12-24	1-1/4 x 12
5 x 7	127 x 178	0.145	8	1/2 x 12-24	1-1/4 x 12
5 x 8	127 x 203	0.145	8	1/2 x 12-24	1-1/4 x 12



CB1191

- **Concealed Bearing Standard Weight**
- Stainless steel with stainless steel pin (ANSI A5112)
- Non-rising removable pin with button tip and plug
- Only available with SecureCoat[®] Lifetime finish (US3SC)
- Specify machine screws

Hinge Size		Gauge of	Hole	Screw Size	
Inches	mm	Metal	Count	Machine	Wood
3-1/2 x 3-1/2	89 x 89	0.119	6	-	1 x 9
4 x 4	102 x 102	0.129	8	-	1-1/4 x 12
4-1/2 x 4	114 x 102	0.134	8	-	1-1/4 x 12
4-1/2 x 4-1/2	114 x 114	0.134	8	-	1-1/4 x 12
5 x 4	127 x 102	0.145	8	-	1-1/4 x 12
5 x 4-1/2	127 x 114	0.145	8	-	1-1/4 x 12
5 x 5	127 x 127	0.145	8	-	1-1/4 x 12
6 x 4-1/2	152 x 114	0.160	10	-	1-1/2 x 14
6 x 5	152 x 127	0.160	10	-	1-1/2 x 14
6 x 6	152 x 152	0.160	10	-	1-1/2 x 14



FIVE KNUCKLE HINGES (CONTINUED)



BB1191

Ball Bearing - Standard Weight

Brass with stainless steel pin (ANSI A2112) or stainless steel with stainless steel pin (ANSI A5112)



BB1279

Ball Bearing - Standard Weight Steel with steel pin (ANSI A8112)

- Two ball bearings
- Non-rising removable pin with button tip and plug
- 5" x 5" (127 mm x 127 mm) and 4-1/2" x 4-1/2" (114 mm x 114 mm) BB1279 available with two different leaf sizes
- 3-1/2" x 3-1/2" (89 x 89 mm) BB1279 available with reversible hole pattern
- For use on medium weight doors or doors requiring medium frequency service

Hinge Size		Gauge of Hole	Hole	Screw Size	
Inches	mm	Metal	Count	Machine	Wood
3-1/2 x 3-1/2	89 x 89	0.119	6	1/2 x 10-24	1 x 9
4 x 4	102 x 102	0.129	8	1/2 x 12-24	1-1/4 x 12
4-1/2 x 4	114 x 102	0.134	8	1/2 x 12-24	1-1/4 x 12
4-1/2 x 4-1/2	114 x 114	0.134	8	1/2 x 12-24	1-1/4 x 12
5 x 4	127 x 102	0.145	8	1/2 x 12-24	1-1/4 x 12
5 x 4-1/2	127 x 114	0.145	8	1/2 x 12-24	1-1/4 x 12
5 x 5	127 x 127	0.145	8	1/2 x 12-24	1-1/4 x 12
6 x 4-1/2	152 x 114	0.160	10	1/2 x 1/4-20	1-1/2 x 14
6 x 5	152 x 127	0.160	10	1/2 x 1/4-20	1-1/2 x 14
6 x 6	152 x 152	0.160	10	1/2 x 1/4-20	1-1/2 x 14



WTBB1191

Ball Bearing - Standard Weight -Wide Throw

Brass with stainless steel pin (ANSI A2112) or stainless steel with stainless steel pin (ANSI A5112)

WTBB1279

Ball Bearing - Standard Weight -Wide Throw

Steel with steel pin (ANSI A8112)

- Wide throw
- Two ball bearings
- Non-rising removable pin with button tip and plug
- For use on medium weight doors or doors requiring medium frequency service

Hinge Size	Hinge Size		Hole	Screw Size	
Inches	mm	Metal	Count	Machine	Wood
3-1/2 x 5	89 x 127	0.119	6	1/2 x 10-24	1 x 9
3-1/2 x 6	89 x 152	0.119	6	1/2 x 10-24	1 x 9
4 x 5	102 x 127	0.129	8	1/2 x 12-24	1-1/4 x 12
4 x 6	102 x 152	0.129	8	1/2 x 12-24	1-1/4 x 12
4 x 7	102 x 178	0.129	8	1/2 x 12-24	1-1/4 x 12
4-1/2 x 5	114 x 127	0.134	8	1/2 x 12-24	1-1/4 x 12
4-1/2 x 6	114 x 152	0.134	8	1/2 x 12-24	1-1/4 x 12
4-1/2 x 7	114 x 178	0.134	8	1/2 x 12-24	1-1/4 x 12
4-1/2 x 8	114 x 203	0.134	8	1/2 x 12-24	1-1/4 x 12
5 x 6	127 x 152	0.145	8	1/2 x 12-24	1-1/4 x 12
5 x 7	127 x 178	0.145	8	1/2 x 12-24	1-1/4 x 12
5 x 8	127 x 203	0.145	8	1/2 x 12-24	1-1/4 x 12





FIVE KNUCKLE HINGES (CONTINUED)



BB1168

Ball Bearing - Heavy Weight Steel with steel pin (ANSI A8111)

BB1199

Ball Bearing - Heavy Weight Brass with stainless steel pin (ANSI A2111) or stainless steel with stainless steel pin (ANSI A5111)

- Four ball bearings
- Non-rising removable pin with button tip and plug
- 5" x 5" (127 mm x 127 mm) and 4-1/2" x 4-1/2" (114 mm x 114 mm) BB1168 available with two different leaf sizes
- For use on heavy weight doors or doors requiring high frequency service



WTBB1168

Ball Bearing - Heavy Weight -Wide Throw Steel with steel pin (ANSI A8111)

WTBB1199

Ball Bearing - Heavy Weight -Wide Throw

Brass with stainless steel pin (ANSI A2111) or stainless steel with stainless steel pin (ANSI A5111)

- Wide throw
- Four ball bearings
- Non-rising removable pin with button tip and plug
- For use on heavy weight doors or doors requiring high frequency service

Hinge Size		Gauge of	Hole	Screw Size	
Inches	mm	Metal	Count	Machine	Wood
4-1/2 x 5	114 x 127	0.180	8	1/2 x 12-24	1-1/4 x 12
4-1/2 x 6	114 x 152	0.180	8	1/2 x 12-24	1-1/4 x 12
4-1/2 x 7	114 x 178	0.180	8	1/2 x 12-24	1-1/4 x 12
4-1/2 x 8	114 x 203	0.180	8	1/2 x 12-24	1-1/4 x 12
5 x 6	127 x 152	0.190	8	1/2 x 12-24	1-1/4 x 12
5 x 7	127 x 178	0.190	8	1/2 x 12-24	1-1/4 x 12
5 x 8	127 x 203	0.190	8	1/2 x 12-24	1-1/4 x 12

Hinge Size		Gauge of	Hole	Screw Size	
Inches	mm	Metal	Count	Machine	Wood
4-1/2 x 4	114 x 102	0.180	8	1/2 x 12-24	1-1/4 x 12
4-1/2 x 4-1/2	114 x 114	0.180	8	1/2 x 12-24	1-1/4 x 12
5 x 4	127 x 102	0.190	8	1/2 x 12-24	1-1/4 x 12
5 x 4-1/2	127 x 114	0.190	8	1/2 x 12-24	1-1/4 x 12
5 x 5	127 x 127	0.190	8	1/2 x 12-24	1-1/4 x 12
6 x 4-1/2	152 x 114	0.203	10	1/2 x 1/4-20	1-1/2 x 14
6 x 5	152 x 127	0.203	10	1/2 x 1/4-20	1-1/2 x 14
6 x 6	152 x 152	0.203	10	1/2 x 1/4-20	1-1/2 x 14
8 x 6	203 x 152	0.203	16	1/2 x 1/4-20	1-1/2 x 14
8 x 8	203 x 203	0.203	16	1/2 x 1/4-20	1-1/2 x 14



EXPOSED ELECTRIC MODIFICATIONS

The following exposed electric modifications are available on our architectural grade ball bearing and anti-friction bearing hinges. To order a hinge with exposed electric modification, please add the modification code to the product number (for example, BB1279 E2).



E2

Electric Contact

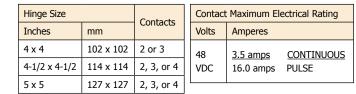
- Three or five knuckle
- Available on architectural grade ball bearing and anti-friction bearing
 Two contacts minimum required to
- Two contacts minimum required to transfer electrical current
- Design includes insulated copper contacts
- Furnished with non-removable pins





Electric Contact/Switch

- Three or five knuckle
- Available on architectural grade ball bearing and anti-friction bearing
- Single pole, double throw switch
- Design includes insulated copper contacts
- Furnished with non-removable pins



Hinge Size	Cont	
Inches	mm	Volts
4 x 4	102 x 102	48
4-1/2 x 4-1/2	114 x 114	VDC
5 x 5	127 x 127	Swit
		00000

	Contact Maximum Electrical Rating								
	Volts Amperes								
2	48 VDC	<u>3.5 amps</u> 16.0 amps	<u>Continuous</u> Pulse						
7	Switch	Switch Maximum Electrical Rating							
	24 VDC	24 VDC @ .250 amps							



E1S

Electric Switch

- Three or five knuckle
- Available on architectural grade ball bearing and anti-friction bearing
- Single pole, double throw switchFurnished with non-removable pins



Hinge Size		Switch Maximum Electrical Rating
Inches	mm	24 VDC @ .250 amps
4 x 4	102 x 102	
4-1/2 x 4-1/2	114 x 114	
5 x 5	127 x 127	



17



CONCEALED ELECTRIC MODIFICATIONS

The following concealed electric modifications are available on our architectural grade ball bearing and anti-friction bearing hinges. To order a hinge with concealed electric modification, please add the modification code to the product number (for example, BB1279 EMN).



EMN

- **Electric Monitor Only**
- Three or five knuckle
- Available on architectural grade ball bearing and anti-friction bearing
- Available in steel, brass, or stainless steel
- 28 gauge wire
- Standard size available 4" (102 mm) through 8" (203 mm)
- Hinge pins are not field removable - NRP variation is not available
- Monitoring capability only
- Concealed subminiature snap action, SPDT switch
- Adjustment feature for a wide range of switch sensitivity
- Preset switching circuit
- For open loop secure, closed loop secure or single pole double throw (SPDT)

Switch Maximum Electrical Rating
30 VDC @ .500 amps



Wire Maximum Electrical Rating

CONTINUOUS

PULSE

Amperes

3.5 amps

16.0 amps

ETW

Electric Through-Wire Only

- Available on architectural grade ball bearing and anti-friction bearing
- Available in steel, brass, or stainless steel
- 28 gauge wire • Standard size available 4" (102 mm) through 8" (203 mm)
- Hinge pins are not field removable - NRP variation is not available
- Low voltage electric current transfer capability only
- 4, 6, 8, 10, 12 continuous electrical conductors

C	6	
c	0	•
с	c	
0	C	



ETM

Electric Through-Wire with Monitoring

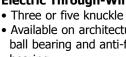
- Three or five knuckle
- Available on architectural grade ball bearing and anti-friction bearing
- Available in steel, brass, or stainless steel
- 28 gauge wire
- Standard size available 4" (102 mm) through 8" (203 mm)
- Hinge pins are not field removable - NRP variation is not available
- Both continuous electric conductors and monitoring capability
- Concealed monitor switch and 4, 6, 8, or 10 continuous electrical conductors
- Adjustment feature for a wide range of switch sensitivity
- For open loop secure, closed loop secure or single pole double throw (SPDT)

Contact Maximum Electrical Rating						
Volts	Amperes					
48 VDC	3.5 ampsCONTINUOUS16.0 ampsPULSE					
Switch Maximum Electrical Rating						
30 VDC	@ .500 amps					

Volts

48

VDC





CONCEALED AIR TRANSFER

The following hinges are available with a concealed air transfer (ATH) modification. They are available on architectural grade ball bearing and anti-friction bearing full mortise. Please note:

- ATH modification is for doors that require the transfer of compressed air.
- The hinges with ATH modification available use 5/32" (4 mm) plastic air tubing, have quick-connect fittings, and are capable of transferring 80-100 PSI through the air tubina.
- Steel or stainless steel hinges are acceptable for use on labeled or fire rated doors.
- Hinge pins are not field removable.
- NRP and safety stud are not available.



AB700

Standard Weight Steel

AB800 Standard Weight

Stainless steel, brass

AB750 Heavy Weight

Steel



AB850

Heavy Weight Stainless steel, brass

BB1191

Standard Weight Stainless steel, brass

BB1279

Standard Weight Steel

BB1168

Heavy Weight Steel

BB1199

Heavy Weight Stainless steel, brass

Hinge Size				
Inches	mm			
4-1/2 x 4	112 x 102			
4-1/2 x 4-1/2	114 x 114			
5 x 4	127 x 102			
5 x 4-1/2	127 x 114			
5 x 5	127 x 127			





Mortar Box

- Galvanized steel 0.040 (1 mm)
- Dimensions 9" (2.29 mm) length with tabs, 7" (1.78 mm) inside,
- 1-3/4" x 1-3/4" (45 mm x 45 mm) inside dimension
- Removable back for servicing
- Serves as mortar shield
- Top and bottom knockouts for standard conduit fittings
- Fits hinge reinforcements for 4-1/2" (114 mm) or 5" (127 mm) architectural grade hinges



SINGLE ACTING

The following single acting spring hinges are for automatic closing of door. They meet codes for hotels, motels, institutions, and commercial buildings. Please note:

- 1150 is not available in 3-1/2" x 3-1/2" (89 mm x 89 mm) and 4" x 4" (102 mm x 102 mm) sizes.
- 1250 is available with raised barrel for straight or beveled doors.
- 1250 approved for use on 4' 0" x 8' 0" (1219 mm x 2438 mm) doors.
- For maximum versatility, use all spring hinges or a combination of spring and ball bearing hinges. Do not use plain bearing hinges.
- Full spring tension may not be required on all hinges.
- Strong wind conditions, drafts, carpeting drag, twisted/ misaligned frames, or weatherstripping on doors may require additional spring hinges.



1150

Square Corner Stainless steel with stainless steel components (ANSI K51071F)

1250

Square Corner

Steel with Steel components (ANSI K81071F)

1251

1/4" Radius Steel with Steel components (ANSI K81071F)

1252

5/8" Radius Steel with Steel components (ANSI K81071F)

1255

Square Corner Set Steel with Steel components (ANSI K81071F) Two each 1250 and one each AB700

1256

Square Corner Set Steel with Steel components (ANSI K81071F) Two each 1250 and one each BB1279

Hinge Size		Gauge of	Hole	Screw Size	
Inches	mm	Metal	Count	Machine	Wood
3-1/2 x 3-1/2	89 x 89	0.134	6	1/2 x 10-24	1 x 9
4 x 4	102 x 102	0.134	8	1/2 x 12-24	1-1/4 x 12
4-1/2 x 4	114 x 102	0.134	8	1/2 x 12-24	1-1/4 x 12
4-1/2 x 4-1/2	114 x 114	0.134	8	1/2 x 12-24	1-1/4 x 12

Series	Size	Recommended Max Door Weight (Ibs)	Spring Hinge	Ball Bearing Hinge		
For use on 1-3/8" (35 mm) door						
1250	3-1/2 x 3-1/2	40	1	2		
1250	3-1/2 x 3-1/2	70	2	1		
1250	3-1/2 x -1/2	90	3	-		
For use o	For use on 1-3/4" (45 mm) door					
1250	4 x 4	60	1	2		
1250	4 x 4	85	2	1		
1250	4 x 4	110	3	-		
1150	4-1/2 x 4, 4-1/2 x 4-1/2	70	1	2		
1150	4-1/2 x 4, 4-1/2 x 4-1/2	115	2	1		
1150	4-1/2 x 4, 4-1/2 x 4-1/2	150	3	-		
1250	4-1/2 x 4, 4-1/2 x 4-1/2	70	1	2		
1250	4-1/2 x 4, 4-1/2 x 4-1/2	115	2	1		
1250	4-1/2 x 4, 4-1/2 x 4-1/2	150	3	-		
1255	4-1/2 x 4-1/2	115	2	1		
1256	4-1/2 x 4-1/2	115	2	1		





REVERSE ACTION - SINGLE ACTING

The following reverse action, single acting spring hinges are for automatic opening of door. They meet codes for hotels, motels, institutions, and commercial buildings. Please note:

- For maximum versatility, use all spring hinges or a combination of spring and ball bearing hinges. Do not use plain bearing hinges.
- Full spring tension may not be required on all hinges.
- Strong wind conditions, drafts, carpeting drag, twisted/ misaligned frames, or weatherstripping on doors may require additional spring hinges.



1257 Square Corner Steel (ANSI K81071)

1258 1/4" Radius Steel (ANSI K81071)

1259

5/8" Radius Steel (ANSI K81071)

Hinge Size		Gauge of	Hole	Screw Size	
Inches	mm	Metal	Count	Machine	Wood
3-1/2 x 3-1/2	89 x 89	0.134	6	1/2 x 10-24	1 x 9
4 x 4	102 x 102	0.134	8	1/2 x 12-24	1-1/4 x 12
4-1/2 x 4	114 x 102	0.134	8	1/2 x 12-24	1-1/4 x 12
4-1/2 x 4-1/2	114 x 114	0.134	8	1/2 x 12-24	1-1/4 x 12

Size	Recommended Max Door Weight (lbs)	Spring Hinge	Ball Bearing Hinge
For use on 1-3/8" (35 mm) door		
3-1/2 x 3-1/2	40	1	2
3-1/2 x 3-1/2	70	2	1
3-1/2 x 3-1/2	90	3	-
For use on 1-3/4" (45 mm) door		
4 x 4	60	1	2
4 x 4	85	2	1
4 x 4	110	3	-
4-1/2 x 4, 4-1/2 x 4-1/2	70	1	2
4-1/2 x 4, 4-1/2 x 4-1/2	115	2	1
4-1/2 x 4, 4-1/2 x 4-1/2	150	3	-

SWING CLEAR

The following swing clear spring hinge is for automatic closing of door. It provides the features of both a swing clear hinge and a spring hinge. It meets codes for hotels, motels, institutions, and commercial buildings. Please note:

- For maximum versatility, use all spring hinges or a combination of spring and ball bearing hinges. Do not use plain bearing hinges.
- Full spring tension may not be required on all hinges.
- Strong wind conditions, drafts, carpeting drag, twisted/ misaligned frames, or weatherstripping on doors may require additional spring hinges.



1267 Square Corner

Steel with steel components (ANSI K81071F)



Hinge Size		Gauge of Hole		Screw Size		
Inches	mm	Metal Cou	Count	Machine	Wood	
4-1/2 x 4-1/2	114 x 114	0.134	8	1/2 x 12-24	1-1/4 x 12	





FIVE KNUCKLE



EC1100 | EC1100NRP

Plain Bearing - Standard Weight Steel with steel pin (ANSI A8133)

EC1101

Plain Bearing - Standard Weight Stainless steel with stainless steel pin (ANSI A5133) or brass with stainless steel pin (ANSI A2133)

- Non-rising removable pin with button tip and plug
- With door closer use ball bearing hingeFor use on medium weight doors or
- doors requiring low frequency service
- EC1100NRP is the same as EC1100 but with a non-removable pin
- EC1101 fasteners are AMS x 1/2 WS
- For use on medium weight doors or doors requiring medium frequency service

Hinge Size		Gauge of	Hole	Screw Size	
Inches	mm	n Metal	Count	Machine	Wood
4-1/2 x 4	114 x 102	0.134	8	1/2 x 12-24	1-1/4 x 12
4-1/2 x 4-1/2	114 x 114	0.134	8	1/2 x 12-24	1-1/4 x 12



ECRC1100

Plain Bearing - Standard Weight

- Steel with steel pin (ANSI A8133)Non-rising removable pin with button tip
- With door closer use ball bearing hinge
- With door closer use ball bearing ninge
 Round corner with 1/4" (6 mm) radius standard
- For use on medium weight doors or doors requiring low frequency service

Hinge Size		Gauge of	Hole	Screw Size	
Inches	mm	Metal Count		Machine	Wood
4 x 4	102 x 102	0.129	8	1/2 x 12-24	1-1/4 x 12



ECBB1100 | ECBB1100NRP

Ball Bearing - Standard Weight Steel with steel pin (ANSI A8112)

ECBB1101 | ECBB1101NRP

Ball Bearing - Standard Weight Brass with stainless steel pin (ANSI A2112) or stainless steel with stainless steel pin (ANSI A5112)

- Two ball bearings
- Non-rising removable pin with button tip and plug
- ECBB1100NRP and ECBB1101NRP are the same as ECBB1100 and ECBB1101, but with a non-removable pin
- ECBB1101 and ECBB1101NRP only available in 4-1/2" x 4-1/2" (114 mm x 114 mm)
- ECBB1101 and ECBB1101NRP fasteners are AMS x 1/2 WS
- For use on medium weight doors or doors requiring medium frequency service

Hinge Size		Gauge of	Hole	Screw Size	
Inches	mm	Metal	Count	Machine	Wood
4-1/2 x 4	114 x 102	0.134	8	1/2 x 12-24	1-1/4 x 12
4-1/2 x 4-1/2	114 x 114	0.134	8	1/2 x 12-24	1-1/4 x 12



ECRCBB1100

- **Ball Bearing Standard Weight**
- Steel with steel pin (ANSI A8112)
- Two ball bearings
- Non-rising removable pin with button tip and plug
- Round corner with 1/4" (6 mm) radius standard
- For use on medium weight doors or doors requiring medium frequency service

Hinge Size		Gauge of Hole Screw Size			
Inches	mm	Metal	Count	Machine	Wood
4 x 4	102 x 102	0.129	8	1/2 x 12-24	1-1/4 x 12





FIVE KNUCKLE (CONTINUED)



ECBB1102 | ECBB1102NRP Ball Bearing - Heavy Weight

Steel with steel pin (ANSI A8111)

ECBB1103 | ECBB1103NRP

Ball Bearing - Heavy Weight Brass with stainless steel pin (ANSI A2111) or stainless steel with stainless steel pin (ANSI A5111)

- Four ball bearings
- Non-rising removable pin with flush pin and plug
- ECBB1102NRP and ECBB1103NRP are the same as ECBB1102 and ECBB1103, but with a non-removable pin
- For use on heavy weight doors or doors requiring high frequency service

Hinge Size		Gauge of	Hole	Screw Size	
Inches	mm	Metal	Count	Machine	Wood
4-1/2 x 4-1/2	114 x 114	0.180	8	1/2 x 12-24	1-1/4 x 12
5 x 4-1/2	127 x 114	0.190	8	1/2 x 12-24	1-1/4 x 12

SPRING HINGE

The following ECCO single acting spring hinge is for automatic closing of door. It meets codes for hotels, motels, institutions, and commercial buildings. Please note:

- For use on 1-3/4" (45 mm) doors.
- For maximum versatility, use all spring hinges or a combination of spring and ball bearing hinges. Do not use plain bearing hinges.
- Full spring tension may not be required on all hinges.
- Strong wind conditions, drafts, carpeting drag, twisted/misaligned frames, or weatherstripping on doors may require additional spring hinges.



EC1105 Square Corner

Steel (ANSI K81071F)



Hinge Size		Gauge of	Hole	Screw Size	
Inches	mm	Metal	Count	Machine	Wood
4-1/2 x 4	114 x 102	0.134	8	1/2 x 12-24	1-1/4 x 12
4-1/2 x 4-1/2	114 x 114	0.134	8	1/2 x 12-24	1-1/4 x 12

Size	Recommended Max Door Weight (lbs)	Spring Hinge	Ball Bearing Hinge
4-1/2 x 4, 4-1/2 x 4-1/2	70	1	2
4-1/2 x 4, 4-1/2 x 4-1/2	115	2	1
4-1/2 x 4, 4-1/2 x 4-1/2	150	3	-





THREE KNUCKLE HINGES



AB701

Concealed Anti-Friction Bearing -Standard Weight Steel with steel pin (ANSI A8212)

AB801

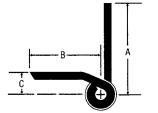
Concealed Anti-Friction Bearing -Standard Weight

Brass with stainless steel pin (ANSI A2212) or stainless steel with stainless steel pin (ANSI A5212)

- Non-rising removable pin with flush pin and plug
- Reversible
- For use on medium weight hollow metal doors with channel iron frames requiring medium frequency service

Hinge Siz	e	Gauge of	Hole	Machine Screw Size	
Inches	mm	Metal	Count	Door Leaf	Jamb Leaf
4-1/2	114	0.134	7	1/2 x 12-24 FH	1/2 x 12-24 OH
5	127	0.145	8	1/2 x 12-24 FH	1/2 x 12-24 OH

Hinge Size Door Leaf Width "A"		Jamb Leaf Width "B"		Jamb Leaf Offset "C"			
Inches	mm	Inches	mm	Inches	mm	Inches	mm
4-1/2	114	2	51	1-1/2	38	3/8	10
5	127	2	51	1-1/2	38	3/8	10





AB751

Concealed Anti-Friction Bearing -Heavy Weight Steel with steel pin (ANSI A8211)

AB851

Concealed Anti-Friction Bearing -Heavy Weight

Brass with stainless steel pin (ANSI A2211) or stainless steel with stainless steel pin (ANSI A5211)

- Non-rising removable pin with flush pin and plug
- Reversible
- For use on heavy weight hollow metal doors with channel iron frames requiring high frequency service

Hinge Siz	e	Gauge of	Hole	Machine Screw Size	
Inches	mm	Metal	Count	Door Leaf	Jamb Leaf
4-1/2	114	0.180	7	1/2 x 12-24 FH	1/2 x 12-24 OH
5	127	0.190	8	1/2 x 12-24 FH	1/2 x 12-24 OH
6+	152	0.203* 0.190*	9	1/2 x 1/4-20 FH	1/2 x 1/4-20 OH

Hinge Siz	e	Door Leaf Width "A"		Jamb Leaf Width "B"		Jamb Leaf Offset "C"	
Inches	mm	Inches	mm	Inches	mm	Inches	mm
4-1/2	114	2-1/16	53	1-1/2	38	7/16	11
5	127	2-1/16	53	1-1/2	38	7/16	11
6 x 1-3/4 ⁺	152	2-1/8	54	1-1/2	38	1/2	12.5

+ Door thickness must be specified.





FIVE KNUCKLE HINGES



1129

- Plain Bearing Standard Weight
- Steel with steel pin (ANSI A8233)
- Non-rising removable pin with button tip and plug
- Reversible
- Beveled surface leaf
- Not for use with door closer
- For use on medium weight hollow metal doors with channel iron frames requiring low frequency service

Hinge Siz	ze	Gauge of	Hole	Machine Screw Size			
Inches	mm	Metal	Count	Door Leaf	Jamb Leaf		
4-1/2	114	0.134	7	1/2 x 12-24 FH	1/2 x 12-24 OH		

Hinge Siz	e	Door Leaf Width "A"		Jamb Lea "B"	af Width	Jamb Leaf Offset "C"	
Inches	mm	Inches	mm	Inches	mm	Inches	mm
4-1/2	114	2	51	1-1/2	38	3/8	10



BB1109

Ball Bearing - Standard Weight

Brass with stainless steel pin (ANSI A2212) or stainless steel with stainless steel pin (ANSI A5212)

BB1129

Ball Bearing - Standard Weight Steel with steel pin (ANSI A8212)

- Two ball bearings
- Non-rising removable pin with button tip and plug
- Reversible
- Beveled surface leaf
- For use on medium weight hollow metal doors with channel iron frames requiring medium frequency service

Hinge Siz	ze	Gauge of	of Hole	Machine Screw Size		
Inches	mm	Metal	Count	Door Leaf	Jamb Leaf	
4-1/2	114	0.134	7	1/2 x 12-24 FH	1/2 x 12-24 OH	
5	127	0.145	8	1/2 x 12-24 FH	1/2 x 12-24 OH	

Hinge Siz	e	Door Leaf Width "A"		Jamb Leaf Width "B"		Jamb Leaf Offset "C"	
Inches	mm	Inches	mm	Inches	mm	Inches	mm
4-1/2	114	2	51	1-1/2	38	3/8	10
5	127	2	51	1-1/2	38	3/8	10





Ball Bearing - Heavy Weight Steel with steel pin (ANSI A8212)

BB2098

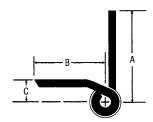
Ball Bearing - Heavy Weight Brass with stainless steel pin (ANSI A2211) or stainless steel with stainless steel pin (ANSI A5211)

- Four ball bearings
- Non-rising removable pin with button tip and plug
- Reversible
- Beveled surface leaf
- For use on heavy weight hollow metal doors with channel iron frames requiring high frequency service

Hinge Siz	ze	Gauge of	Hole	Machine Screw Size		
Inches	mm	Metal Count		Door Leaf	Jamb Leaf	
4-1/2	114	0.180	7	1/2 x 12-24 FH	1/2 x 12-24 OH	
5	127	0.190	8	1/2 x 12-24 FH	1/2 x 12-24 OH	
6+	152	0.203* 0.190*	9	1/2 x 1/4-20 FH	1/2 x 1/4-20 OH	

Hinge Siz	e	Door Leaf Width "A"		Jamb Leaf Width "B"		Jamb Leaf Offset "C"	
Inches	mm	Inches	mm	Inches	mm	Inches	mm
4-1/2	114	2-1/16	53	1-1/2	38	7/16	11
5	127	2-1/16	53	1-1/2	38	7/16	11
6 x 1-3/4 ⁺	152	2-1/8	54	1-1/2	38	1/2	12.5

+ Door thickness must be specified.





THREE KNUCKLE HINGES



AB702

Concealed Anti-Friction Bearing -Standard Weight Steel with steel pin (ANSI A8312)

AB802

Concealed Anti-Friction Bearing -Standard Weight

Brass with stainless steel pin (ANSI A2312) or stainless steel with stainless steel pin (ANSI A5312)

- Thru-bolts and grommets for wood door applications
- Non-rising removable pin with flush pin and plug
- Reversible
- Beveled surface leaves
- For use on medium weight tubular steel doors with channel iron frames requiring medium frequency service

Hinge Siz	e	Gauge of Hole		Machine Screw Size		
Inches	mm	Metal	Count	Door Leaf	Jamb Leaf	
4-1/2	114	0.134	6	2 x 1/4-20 OH	1/2 x 12-24 OH	
5	127	0.145	8	2 x 1/4-20 OH	1/2 x 12-24 OH	

Hinge S	ize	Door Leaf Width "A"		Jamb Leaf Width "B"		Jamb Leaf Offset "C"		Jamb Leaf Offset "D"	
Inches	mm	Inches	mm	Inches	mm	Inches	mm	Inches	mm
4-1/2	114	2-9/16	65	1-1/2	38	1/2	12.5	3/8	10
5	127	2-7/8	73	1-1/2	38	1/2	12.5	3/8	10





AB752

Concealed Anti-Friction Bearing -Heavy Weight Steel with steel pin (ANSI A8311)

AB852

Concealed Anti-Friction Bearing -Heavy Weight

Brass with stainless steel pin (ANSI A2311) or stainless steel with stainless steel pin (ANSI A5311)

- Thru-bolts and grommets for wood door applications
- Non-rising removable pin with flush pin and plug
- Reversible
- Beveled surface leaves
- For use on heavy weight hollow metal doors with channel iron frames requiring high frequency service

Hinge Siz	e	Gauge of Hole		Machine Screw Size			
Inches	mm	Metal	Count	Door Leaf	Jamb Leaf		
4-1/2	114	0.180	6	2 x 1/4-20 OH	1/2 x 12-24 OH		
5	127	0.190	8	2 x 1/4-20 OH	1/2 x 12-24 OH		
6+	152	0.203* 0.190*	9	2 x 1/4-20 OH	1/2 x 12-20 OH		

Hinge S	ize	Door Leaf Width "A"		Jamb Leaf Width "B"		Jamb Leaf Offset "C"		Jamb Leaf Offset "D"	
Inches	mm	Inches	mm	Inches	mm	Inches	mm	Inches	mm
4-1/2	114	2-9/16	65	1-1/2	38	9/16	14	7/16	11
5	127	2-7/8	73	1-1/2	38	9/16	14	7/16	11
6+	152	3-1/4	83	1-1/2	38	5/8	15	1/2	12.5

+ Door thickness must be specified.





FIVE KNUCKLE HINGES

0	0
0	-0
0	0
0	0

BB2108

Ball Bearing - Heavy Weight Brass with stainless steel pin (ANSI A2361) or stainless steel with stainless steel pin (ANSI A5361)

BB2168

Ball Bearing - Heavy Weight

Steel with steel pin (ANSI A8361)

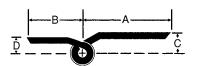
- Four ball bearings
- Thru-bolts and grommets for wood door applications
- Non-rising removable pin with button tip and plug
- Reversible
- Beveled surface leaves
- For use on tubular steel doors with channel iron frames requiring high frequency service

Hinge Siz	inge Size Gauge of		Hole	Machine Screw Size			
Inches	mm	Metal	Count	Door Leaf	Jamb Leaf		
4-1/2	114	0.180	8	2 x 1/4-20 OH	1/2 x 1/4-20 OH		
5	127	0.190	8	2 x 1/4-20 OH	1/2 x 1/4-20 OH		
6+	152	0.203* 0.190*	8	2 x 1/4-20 OH	1/2 x 1/4-20 OH		

Hinge Size		Door Lea Width "A		Jamb Le Width "E		Jamb Le Offset "(Jamb Le Offset "	
Inches	mm	Inches	mm	Inches	mm	Inches	mm	Inches	mm
4-1/2	114	2	51	1-1/2	38	9/16	14	7/16	11
5	127	2-5/16	59	1-1/2	38	9/16	14	7/16	11
6+	152	2-3/8	60	1-1/2	38	5/8	15	1/2	12.5

+ Door thickness must be specified.

* 0.203 for brass and steel. 0.190 for stainless steel.





BB2109 Ball Bearing - Heavy Weight

Brass with stainless steel pin (ANSI A2311) or stainless steel with stainless steel pin (ANSI A5311)

BB2169

Ball Bearing - Heavy Weight

Steel with steel pin (ANSI A8311)

- Four ball bearings
- Thru-bolts and grommets for wood door applications
- Non-rising removable pin with button tip and plug
- Reversible
- Beveled surface leaves
- For use on heavy hollow metal or wood composite doors with channel iron frames requiring high frequency service

Hinge Siz	Hinge Size		Hole	Machine Screw Size				
Inches	mm	Metal	Count	Door Leaf	Jamb Leaf			
4-1/2	114	0.180	6	2 x 1/4-20 OH	1/2 x 12-24 OH			
5	127	0.190	8	2 x 1/4-20 OH	1/2 x 12-24 OH			
6+	152	0.203* 0.190*	9	2 x 1/4-20 OH	1/2 x 12-24 OH			

Hinge Size		Door Lea Width "A		Jamb Le Width "E		Jamb Le Offset "		Jamb Le Offset "	
Inches	mm	Inches	mm	Inches	mm	Inches	mm	Inches	mm
4-1/2	114	2-9/16	65	1-1/2	38	9/16	14	7/16	11
5	127	2-7/8	73	1-1/2	38	9/16	14	7/16	11
6+	152	3-1/4	83	1-1/2	38	5/8	15	1/2	12.5

+ Door thickness must be specified.



FIVE KNUCKLE HINGES (CONTINUED)



BB2110

Ball Bearing - Standard Weight Brass with stainless steel pin (ANSI A2312) or stainless steel with stainless steel pin (ANSI A5312)

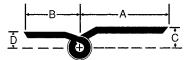
BB2171

Ball Bearing - Standard Weight Steel with steel pin (ANSI A8312)

- Two ball bearings
- Thru-bolts and grommets for wood door applications
- Non-rising removable pin with button tip and plug
- Reversible
- Beveled surface leaves
- For use on medium weight hollow metal or wood composite doors with channel iron frames requiring medium frequency service

Hinge Siz	Hinge Size		Hole	Machine Screw Size				
Inches	mm	Metal	Count	Door Leaf	Jamb Leaf			
4-1/2	114	0.134	6	2 x 1/4-20 OH	1/2 x 12-24 OH			
5	127	0.145	8	2 x 1/4-20 OH	1/2 x 12-24 OH			

Hinge S	linge Size Door Leaf Jamb Le Width "A" Width "E			Jamb Le Offset "(Jamb Leaf Offset "D"			
Inches	mm	Inches	mm	Inches	mm	Inches	mm	Inches	mm
4-1/2	114	2-9/16	65	1-1/2	38	1/2	12.5	3/8	10
5	127	2-7/8	73	1-1/2	38	1/2	12.5	3/8	10



WELDING HINGES

1850

No holes



Square corners
Fast riveted pin
Manufactured with no holes and can easily be welded onto gates, dumpsters, and industrial applications such as bins

Plain Bearing - Heavy Weight

• Flat surface with no swage

• Steel with steel pin

or warehouse doors

Hinge Size		Gauge of	Pin	Recommended Max	
Inches	mm	Metal	Diameter	Door Weight (lbs)	
4 x 4	102 x 102	0.179	0.312	150	
4-1/2 x 4-1/2	114 x 114	0.179 0.322		150	
5 x 5	127 x 127	0.179 0.322		175	
6 x 6	152 x 152	0.203 0.500		230	
Hinge Size	Hinge Size			Max Door Width	
Inches	mm	Door Thick	aness .	Max Door Width	
4 x 4	102 x 102	1-3/8″ (35 1-3/4″ (45	,	36″ (91 cm)	
4-1/2 x 4-1/2	114 x 114	1-3/4″ (45 2″ (51 mm		36″ (91 cm)	
5 x 5	127 x 127	1-3/4" (45 mm) to 2-1/2" (64 mm)		42" (107 cm)	
6 x 6	152 x 152	1-3/4" (45 mm) to 2-1/2" (64 mm)		48″ (122 cm)	

SPRING HINGES



1303

- Double Acting
- Steel (ANSI K81041)
- Adjustable

Product	Hinge Size		3 Hinges Max	3 Hinges Max		
PIOUUCL	Inches	mm	Door Weight	Door Width		
1303-3	3	76	35 lbs 2'-8"			
1303-4	4	102	75 lbs 3'			
1303-5	5	127	90 lbs	3′		
1303-6	6	152	100 lbs 3'			
Product	Min Door Thickness	Min Door Height	Wood Screw			
1303-3	3/4" - 1"	5'-0″	6 x (#6 x 3/4"	FPH WS)		
1303-4	7/8″ - 1-1/4″	6'-8″	8 x (#6 x 3/4" FPH WS)			
1303-5	1-1/8" - 1-1/2"	6'-8″	10 x (#8 x 1-1/4" FPH WS)			
1303-6	1-1/4" - 1-3/4"	7'-0″	10 x (#10 x 1-	1/4" FPH WS)		

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FULL SURFACE



THREE KNUCKLE HINGES



AB703

Concealed Anti-Friction Bearing -Standard Weight Steel with steel pin (ANSI A8412)

AB803

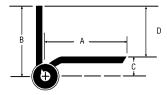
Concealed Anti-Friction Bearing -Standard Weight

Brass with stainless steel pin (ANSI A2412) or stainless steel with stainless steel pin (ANSI A5412)

- Thru-bolts and grommets for wood door applications
- Non-rising removable pin with flush pin and plug
- Reversible
- Beveled surface leaf
- For use on medium weight hollow metal or wood composite doors with hollow metal frames requiring medium frequency service

Hinge Siz	Hinge Size		Hole	Machine Screw Size				
Inches	mm	Metal	Count	Door Leaf	Jamb Leaf			
4-1/2	114	0.134	7	2 x 1/4-20 OH	1/2 x 12-24 FH			
5	127	0.145	8	2 x 1/4-20 OH	1/2 x 12-24 FH			

Hinge Size		Door Lea Width "A		Jamb Leaf Width "B"		Jamb Leaf Offset "C"		Application "D"	
Inches	mm	Inches	mm	Inches	mm	Inches	mm	Inches	mm
4-1/2	114	2-9/16	65	2	51	1/2	12.5	1-1/2	38
5	127	2-7/8	73	2	51	1/2	12.5	1-1/2	38





AB753

Concealed Anti-Friction Bearing -Heavy Weight Steel with steel pin (ANSI A8411)

AB853

Concealed Anti-Friction Bearing -Heavy Weight

Brass with stainless steel pin (ANSI A2411) or stainless steel with stainless steel pin (ANSI A5411)

- Thru-bolts and grommets for wood door applications
- Non-rising removable pin with flush pin and plug
- Reversible
- Beveled surface leaf
- For use on heavy weight hollow metal or wood composite doors with hollow metal frames requiring high frequency service

Hinge Size		Gauge of	Hole	Machine Screw Size				
Inches	mm	Metal	Count	Door Leaf	Jamb Leaf			
4-1/2	114	0.180	7	2 x 1/4-20 OH	1/2 x 12-24 FH			
5	127	0.190	8	2 x 1/4-20 OH	1/2 x 12-24 FH			
6+	152	0.203* 0.190*	10	2 x 1/4-20 OH	1/2 x 1/4-20 FH			

Hinge Size		Door Lea Width "A		Jamb Le Width "E		Jamb Le Offset "		Applicat "D"	ion
Inches	mm	Inches	mm	Inches	mm	Inches	mm	Inches	mm
4-1/2	114	2-9/16	65	2-1/16	52	9/16	14	1-1/2	38
5	127	2-7/8	73	2-1/16	52	9/16	14	1-1/2	38
				2-1/8	54			1-1/2	38
6+	152	3-1/4	83	or 2-1/2	or 64	5/8	16	or 1-7/8	or 48

+ Door thickness must be specified.





FIVE KNUCKLE HINGES



BB1163

Ball Bearing - Heavy Weight Steel with steel pin (ANSI A8411)

BB2113

Ball Bearing - Heavy Weight

Brass with stainless steel pin (ANSI A2411) or stainless steel with stainless steel pin (ANSI A5411)

- Four ball bearings
- Thru-bolts and grommets for wood door applications
- Non-rising removable pin with button tip and plug
- Reversible
- Beveled surface leaf
- For use on heavy weight hollow metal or wood composite doors with hollow metal frames requiring high frequency service

Hinge Size		Gauge of	Hole	Machine Screw Size				
Inches	mm	Metal	Count	Door Leaf	Jamb Leaf			
4-1/2	114	0.180	7	2 x 1/4-20 OH	1/2 x 12-24 FH			
5	127	0.190	8	2 x 1/4-20 OH	1/2 x 12-24 FH			
6+	152	0.203* 0.190*	10	2 x 1/4-20 OH	1/2 x 1/4-20 FH			

Hinge Size		Door Leaf Width "A"		Jamb Leaf Width "B"		Door Leaf Offset "C"		Application "D"	
Inches	mm	Inches	mm	Inches	mm	Inches	mm	Inches	mm
4-1/2	114	2-9/16	65	2-1/16	38	9/16	14	7/16	11
5	127	2-7/8	73	2-1/16	38	9/16	14	7/16	11
6+	152	3-1/4	83	2-1/8 or 2-1/2	54 or 64	5/8	16	1-1/2 or 1-7/8	38 or 48

+ Door thickness must be specified.

* 0.203 for brass and steel. 0.190 for stainless steel.



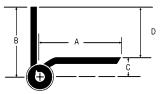
1173

- Plain Bearing Standard Weight
- Steel with steel pin (ANSI A8433)Thru-bolts and grommets for wood door
- applicationsNon-rising removable pin with button tip and plug
- Reversible
- Beveled surface leaf
- For use on regular weight hollow metal or wood composite doors with hollow metal frames requiring low frequency service

Hinge Size		Gauge of	Hole	Machine Screw Size			
Inches	mm	Metal	Count	Door Leaf	Jamb Leaf		
3-1/2*	89	0.119	6	1-3/4 x 10-24 OH	1/2 x 10-24 FH		
4*	102	0.129	7	2 x 1/4-20 OH	1/2 x 12-24 FH		
4-1/2	114	0.134	7	2 x 1/4-20 OH	1/2 x 12-24 FH		

Hinge Size		Door Leaf Width "A"		Jamb Leaf Width "B"		Jamb Leaf Offset "C"		Application "D"	
Inches	mm	Inches	mm	Inches	mm	Inches	mm	Inches	mm
3-1/2*	89	1-5/8	41	1-9/16	31	7/16	11.5	1-1/16	27
4*	102	2-5/16	59	1-13/16	46	1/2	13	1-5/16	33
4-1/2	114	2-9/16	65	2	51	1/2	12.5	1-1/2	38

* For 1-3/8" door









FIVE KNUCKLE HINGES (CONTINUED)



BB1173

Ball Bearing - Standard Weight Steel with steel pin (ANSI A8412)

BB2112

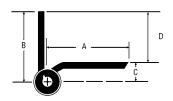
Ball Bearing - Standard Weight Brass with stainless steel pin (ANSI A2412) or stainless steel with stainless steel pin (ANSI A5412)

- Two ball bearings
- Thru-bolts and grommets for wood door applications
- Non-rising removable pin with button tip and plug
- Reversible
- Beveled surface leaf
- For use on regular weight hollow metal or wood composite doors with hollow metal frames requiring medium frequency service

Hinge Siz	e	Gauge of	Hole	Machine Screw Size		
Inches	mm	Metal	Count	Door Leaf	Jamb Leaf	
4*	102	0.129	7	2 x 1/4-20 OH	1/2 x 12-24 FH	
4-1/2	114	0.134	7	2 x 1/4-20 OH	1/2 x 12-24 FH	
5	127	0.145	8	2 x 1/4-20 OH	1/2 x 12-20 FH	

Hinge S	linge Size Door Leaf Width "A"		Jamb Leaf Width "B"		Door Leaf Offset "C"		Application "D"		
Inches	mm	Inches	mm	Inches	mm	Inches	mm	Inches	mm
4*	102	2-5/16	59	1-13/16	46	1/2	13	1-5/16	33
4-1/2	114	2-9/16	65	2	51	1/2	12.5	1-1/2	38
5	127	2-7/8	73	2	51	1/2	12.5	1-1/2	38

* For 1-3/8" door



SPRING HINGES



1253 Single Acting

- Steel (ANSI K81081F)
- Thru-bolts and grommets for wood door applications
- For maximum versatility use all spring hinges or a combination of spring and ball bearing hinges (do not use plain bearing hinges)
- Full spring tension may not be required on all hinges
- Strong wind conditions, drafts, carpeting drag, twisted/misaligned frames, or weatherstripping on doors may require additional spring hinges
- For automatic closing of door
- Meets codes for hotels, motels, institutions, and commercial buildings

Hinge Siz	ze	Gauge of	auge of Hole	Machine Screw Size		
Inches	mm	Metal	Count	Door Leaf	Jamb Leaf	
4-1/2	114	0.134	7	2 x 1/4-20 with grommet nuts	1/2 x 12-24	

Hinge S	ize	Door Leaf Width "A"		Jamb Leaf Width "B"		Door Leaf Offset "C"		Application "D"	
Inches	mm	Inches	mm	Inches	mm	Inches	mm	Inches	mm
4-1/2	114	2-9/16	65	2	52	1/2	14	1-1/2	38

Hinge Siz	e	Recommended Max Door Weight		Spring Hinge	Ball Bearing	Spring Hinge Location	
Inches	mm	lbs	kg	Tillige	Hinge	LUCALION	
4-1/2	114	70	32	1	2	Center	
4-1/2	114	115	52	2	1	Top or Bottom	
4-1/2	114	150	68	3	-	All	





FIVE KNUCKLE

The following hinges are for use on aluminum doors with aluminum frames. They are applied by inserting the hinge leaves through a slot in the door or frame. These hinges:

- Have a non-rising removable pin with button tip and plug.
- Are handed.
- Use ball bearings with door closer.



1277

Plain Bearing - Standard Weight Both Leaves Tapped Steel with steel pin [ANSI A8143, 5/16" (8 mm) Swage]



Plain Bearing - Standard Weight One Leaf Tapped Steel with steel pin [ANSI A8153, 3/16" (5 mm) Swage]

1577

Plain Bearing - Standard Weight Both Leaves Tapped

Brass with stainless steel pin [ANSI A2143, 5/16" (8 mm) Swage] or stainless steel with stainless steel pin [ANSI A5143, 5/16" (8 mm) Swage]

1578

Plain Bearing - Standard Weight One Leaf Tapped

Brass with stainless steel pin [ANSI A2153, 3/16" (5 mm) Swage] or stainless steel with stainless steel pin [ANSI A5143, 3/16" (5 mm) Swage]

Hinge Size		Gauge of	Hole	Screw Size		
Inches	mm	Metal	Count	Machine	Wood	
4-1/2 x 4	114 x 102	0.134	8	1/2 x 12-24	1-1/4 x 12	
4-1/2 x 4-1/2	114 x 114	0.134	8	1/2 x 12-24	1-1/4 x 12	



BB1277

Ball Bearing - Standard Weight Both Leaves Tapped Steel with steel pin [ANSI A8142, 5/16" (8 mm) Swage]

BB1278

Ball Bearing - Standard Weight One Leaf Tapped Steel with steel pin [ANSI A8152, 3/16" (5 mm) Swage]

BB1577

Ball Bearing - Standard Weight Both Leaves Tapped

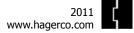
Brass with stainless steel pin [ANSI A2142, 5/16" (8 mm) Swage] or stainless steel with stainless steel pin [ANSI A5142, 5/16" (8 mm) Swage]

BB1578

Ball Bearing - Standard Weight One Leaf Tapped

Brass with stainless steel pin [ANSI A2152, 3/16" (5 mm) Swage] or stainless steel with stainless steel pin [ANSI A5142, 3/16" (5 mm) Swage]

Hinge Size		Gauge of	Hole	Screw Size		
Inches	mm	Metal	Count	Machine	Wood	
4-1/2 x 4	114 x 102	0.134	8	1/2 x 12-24	1-1/4 x 12	
4-1/2 x 4-1/2	114 x 114	0.134	8	1/2 x 12-24	1-1/4 x 12	



and plug



THREE KNUCKLE HINGES



AB7001 | AB7002

Full Mortise - Concealed Anti-Friction **Bearing - Standard Weight**

- Steel with steel pin (ANSI A8122)
- Non-rising removable pin with flush pin and plug
- Reversible
- When opened 90°, door projects 3/32" (2 mm) past stop of jamb
- For use in hospitals or other institutional type buildings
- AB7001 is for square edge doors and AB7002 is for beveled edge doors

Hinge Siz	e	Gauge of Hole		Screw Size		
Inches	mm	Metal	Count	Machine	Wood	
4-1/2	114	0.139	8	1/2 x 12-24 FH	1-1/4 x 12 FH	
5	127	0.139	8	1/2 x 12-24 FH	1-1/4 x 12 FH	



AB7501 | AB7502

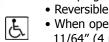
Full Mortise - Concealed Anti-Friction Bearing - Heavy Weight

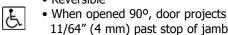
- Steel with steel pin (ANSI A8121)
- Non-rising removable pin with flush pin and plug
- Reversible
- When opened 90°, door projects 11/64" (4 mm) past stop of jamb
- For use in hospitals or other institutional type buildings
- AB7501 is for square edge doors and AB7502 is for beveled edge doors

Hinge Siz	e	Gauge of Hole		Screw Size		
Inches	mm	Metal	Count	Machine	Wood	
4-1/2	114	0.187	8	1/2 x 12-24 FH	1-1/4 x 12 FH	
5	127	0.187	8	1/2 x 12-24 FH	1-1/4 x 12 FH	









11/64" (4 mm) past stop of jamb • For use in hospitals or other institutional

Half Mortise - Concealed Anti-Friction

• Non-rising removable pin with flush pin

• Steel with steel pin (ANSI A8221)

type buildings AB7511 is for square edge doors and AB7512 is for beveled edge doors

Hinge Size		Gauge of	Hole	Screw Size		
Inches	mm	Metal	Count	Machine	Wood	
5	127	0.187	8	1/2 x 12-24 FH 1-1/4 x 12 FH	1/2 x 1/4-20 FH 1-1/2 x 14 FH	

AB7511 | AB7512

Bearing - Heavy Weight



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AB7523

Full Surface - Concealed Anti-Friction Bearing - Heavy Weight

- Steel with steel pin (ANSI A8321)
- Non-rising removable pin with flush pin and plug
- Reversible
- Beveled surface leaves
- When opened 90°, door projects 11/64" (4 mm) past stop of jamb
- For use in hospitals or other institutional type buildings

Hinge Siz	e	Gauge of	Hole	Screw Size	
Inches	mm	Metal	Count	Machine	Wood
5	127	0.187	9	2 x 1/4-20 FH	1/2 x 12-24 FH



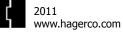
AB7534

Half Surface - Concealed Anti-Friction **Bearing - Heavy Weight**

- Steel with steel pin (ANSI A8421)
- Non-rising removable pin with flush pin and plug
- Reversible • Beveled surface leaf £
 - When opened 90°, door projects 11/64" (4 mm) past stop of jamb
 - For use in hospitals or other institutional type buildings

Hinge Siz	Gauge o		Hole	Screw Size		
Inches	mm	Metal	Count	Machine	Wood	
5	127	0.187	9	2 x 1/4-20 FH	1/2 x 12-24 FH	







FIVE KNUCKLE HINGES

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1260 Full Mortise - Plain Bearing -

Standard Weight

- Steel with steel pin (ANSI A8123)
 Non-rising removable pin with button tip and plug
- Reversible
- When opened 90°, door projects 9/64" (4 mm) past stop of jamb for 3-1/2" hinge and 3/16" (5 mm) past stop of jamb for 4" hinge
- For residential and commercial use
- For square edge doors

Hinge Size		Gauge of	Hole	Screw Size	
Inches	mm	Metal	Count	Machine	Wood
3-1/2	89	0.119	6	1/2 x 10-24 FH	1 x 9 FH
4	102	0.129	8	1/2 x 12-24 FH	1-1/4 x 12 FH



BB1260 | BB1261

Full Mortise - Ball Bearing -Standard Weight

- Steel with steel pin (ANSI A8122)
- Two ball bearings
- Non-rising removable pin with button tip and plug
- Reversible

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- When opened 90°, door projects 3/32" (2 mm) past stop of jamb
- For use in hospitals or other institutional type buildings
- BB1260 is for square edge doors and BB1261 is for beveled edge doors

Hinge Size		Gauge of	Hole	Screw Size	
Inches	mm	Metal	Count	Machine	Wood
4-1/2	114	0.134	8	1/2 x 12-24 FH	1-1/4 x 12 FH
5	127	0.145	8	1/2 x 12-24 FH	1-1/4 x 12 FH





BB1262 | BB1263 Full Mortise - Ball Bearing -

Heavy Weight • Steel with steel pin (ANSI A8121)

- Four ball bearings
- Non-rising removable pin with button tip and plug
- Reversible
- When opened 90°, door projects 11/64" (4 mm) past stop of jamb
- For use in hospitals or other institutional type buildings
- BB1262 is for square edge doors and BB1263 is for beveled edge doors

Hinge Size		Gauge of	Hole	Screw Size	
Inches	mm	Metal	Count	Machine	Wood
4-1/2	114	0.180	8	1/2 x 12-24 FH	1-1/4 x 12 FH
5	127	0.190	8	1/2 x 12-24 FH	1-1/4 x 12 FH







BB1360 | BB1361

Full Mortise - Ball Bearing -Standard Weight

- Stainless steel with stainless steel pin (ANSI A5122)
- Two ball bearings
- Non-rising removable pin with button tip and plug
- Reversible
- When opened 90°, door projects 3/32" (2 mm) past stop of jamb
- For use in hospitals or other institutional type buildings
- BB1360 is for square edge doors and BB1361 is for beveled edge doors

Hinge Siz	Hinge Size		Hole	Screw Size	
Inches	mm	Metal	Count	Machine	Wood
4-1/2	114	0.134	8	1/2 x 12-24 FH	1-1/4 x 12 FH
5	127	0.145	8	1/2 x 12-24 FH	1-1/4 x 12 FH





FIVE KNUCKLE HINGES (CONTINUED)





BB1362 | BB1363 Full Mortise - Ball Bearing -

Heavy Weight

- Stainless steel with stainless steel pin (ANSI A5121)
- Four ball bearings
- Non-rising removable pin with button tip and plug
- Reversible
- When opened 90°, door projects 11/64" (4 mm) past stop of jamb
- For use in hospitals or other institutional type buildings
- BB1362 is for square edge doors and BB1363 is for beveled edge doors

Hinge Size		Gauge of	Hole	Screw Size	
Inches	mm	Metal	Count	Machine	Wood
4-1/2	114	0.180	8	1/2 x 12-24 FH	1-1/4 x 12 FH
5	127	0.190	8	1/2 x 12-24 FH	1-1/4 x 12 FH



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BB1264 | BB1265

- Half Mortise Ball Bearing -**Heavy Weight**
- Steel with steel pin (ANSI A8221)
- Four ball bearings
- Non-rising removable pin with button tip and plug
- Reversible
- When opened 90°, door projects 11/64" (4 mm) past stop of jamb
- For use in hospitals or other institutional type buildings
- BB1264 is for square edge doors and BB1265 is for beveled edge doors

Hinge Size		Gauge of Hole		Door Leaf Screw Size	
Inches	mm	Metal	Count	Machine	Wood
5	127	0.187	8	1/2 x 12-24 FH	1-1/4 x 12 FH
			Jamb Leaf Screw	Size	
				Machine	Wood
				1/2 x 1/4-20 FH	1-1/4 x 12 FH





 Reversible • Beveled surface leaves

(ANSI A8321)

and plug

- When opened 90°, door projects
- 11/64" (4 mm) past stop of jamb
- For use in hospitals or other institutional type buildings

Hinge Size		Gauge of Hole		Screw Size	
Inches	mm	Metal	Count	Machine	Wood
5	127	0.187	9	2 x 1/4-20 FH	1/2 x 1/4-20 FH

BB1270

and plug

Heavy Weight

(ANSI A8421)

• Four ball bearings





- Reversible • Beveled surface leaf
- When opened 90°, door projects

Half Surface - Ball Bearing -

• Steel with stainless steel pin

- 11/64" (4 mm) past stop of jamb
- For use in hospitals or other institutional type buildings

• Non-rising removable pin with button tip

Hinge Size		Gauge of	Hole	Machine Screw Size	
Inches	mm	Metal	Count	Door Leaf	Jamb Leaf
5	127	0.187	9	2 x 1/4-20 FH	1/2 x 12-24 FH





THREE KNUCKLE HINGES



AB7505

Concealed Anti-Friction Bearing -Heavy Weight Steel with steel pin (ANSI A8511)

AB8505

Concealed Anti-Friction Bearing -Heavy Weight Brass with stainless steel pin

(ANSI A2511) or stainless steel with stainless steel pin (ANSI A5511)

- Non-removable pin standard with flush pin and plug
- Handed
- One anchor leaf (frame)
- Must be used with one pair of heavy weight, full mortise hinges
- (AB750 or AB850) sold separately
- For use on heavy weight doors receiving high frequency use

Hinge Size		Gauge of	Hole	Screw Size	
Inches	mm	Metal	Count	Machine	Wood
5 x 4-1/2	127 x 114	0.190	12	1/2 x 12-24	1-1/4 x 12



AB7506 | AB7508

Concealed Anti-Friction Bearing -Heavy Weight Steel with steel pin (ANSI A8511)

AB8506 | AB8508

Concealed Anti-Friction Bearing -Heavy Weight

Brass with stainless steel pin (ANSI A2511) or stainless steel with stainless steel pin (ANSI A5511)

- Non-removable pin standard with flush pin and plug
- Handed
- Two anchor leaves
- Must be used with one pair of heavy weight, full mortise hinges (AB750 or AB850) - sold separately
- For use on heavy weight doors receiving high frequency use
- AB7506 is for square edge doors and AB7508 is for beveled edge doors
- AB8506 is for square edge doors and AB8508 is for beveled edge doors

Hinge Size		Gauge of	Hole	Screw Size	
Inches	mm	Metal	Count	Machine	Wood
5 x 4-1/2	127 x 114	0.190	18	1/2 x 12-24	1-1/4 x 12



AB7507 | AB7509

Concealed Anti-Friction Bearing -Heavy Weight Steel with steel pin (ANSI A8511)

AB8507 | AB8509

Concealed Anti-Friction Bearing -Heavy Weight

Brass with stainless steel pin (ANSI A2511) or stainless steel with stainless steel pin (ANSI A5511)

- Non-removable pin standard with flush pin and plug
- Handed
- Two anchor leaves
- Must be used with one pair of heavy weight, full mortise hinges (AB750 or AB850) - sold separately
- For use on heavy weight doors receiving high frequency use and when concealed door closer is used
- AB7507 is for square edge doors and AB7509 is for beveled edge doors
- AB8507 is for square edge doors and AB8509 is for beveled edge doors

Hinge Size		Gauge of	Hole	Screw Size	
Inches	mm	Metal	Count	Machine	Wood
5 x 4-1/2	127 x 114	0.190	15	1/2 x 12-24	1-1/4 x 12

36



FIVE KNUCKLE HINGES



BB1160

Ball Bearing - Heavy Weight Steel with steel pin (ANSI A8511)

BB1190

Ball Bearing - Heavy Weight Brass with stainless steel pin (ANSI A2511) or stainless steel with stainless steel pin (ANSI A5511)

- Four ball bearings
- Non-removable pin standard with button tip and plug
- Handed
- One anchor leaf (frame)
- Must be used with one pair of heavy weight, full mortise hinges (BB1168 or BB1199) - sold separately
- For use on heavy weight doors receiving high frequency use

Hinge Size		Gauge of	Hole	Screw Size	
Inches	mm	Metal	Count	Machine	Wood
5 x 4-1/2	127 x 114	0.190	12	1/2 x 12-24	1-1/4 x 12



BB1162 | BB1166

Ball Bearing - Heavy Weight Steel with steel pin (ANSI A8511)

BB1192 | BB1196

Ball Bearing - Heavy Weight Brass with stainless steel pin (ANSI A2511) or stainless steel with stainless steel pin (ANSI A5511)

- Four ball bearings
- Non-removable pin standard with button tip and plug
- Handed
- Two anchor leaves
- Must be used with one pair of heavy weight, full mortise hinges (BB1168 or BB1199) - sold separately
- For use on heavy weight doors receiving high frequency use
- BB1162 is for square edge doors and BB1166 is for beveled edge doors
- BB1192 is for square edge doors and BB1196 is for beveled edge doors

Hinge Size		Gauge of Hole		Screw Size	
Inches	mm	Metal Count		Machine	Wood
5 x 4-1/2	127 x 114	0.190	18	1/2 x 12-24	1-1/4 x 12



BB1165 | BB1167

Ball Bearing - Heavy Weight Steel with steel pin (ANSI A8511)

BB1195 | BB1197

Ball Bearing - Heavy Weight Brass with stainless steel pin (ANSI A2511) or stainless steel with stainless steel pin (ANSI A5511)

- Four ball bearings
- Non-removable pin standard with button tip and plug
- Handed
- Two anchor leaves
- Must be used with one pair of heavy weight, full mortise hinges (BB1168 or BB1199) - sold separately
- For use on heavy weight doors receiving high frequency use and when concealed door closer is used
- BB1165 is for square edge doors and BB1167 is for beveled edge doors
- BB1195 is for square edge doors and BB1197 is for beveled edge doors

Hinge Size		Gauge of Hole		Screw Size		
Inches	mm	Metal Count	Machine	Wood		
5 x 4-1/2	127 x 114	0.190	15	1/2 x 12-24	1-1/4 x 12	

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REINFORCING



251 Full Surface

For 3-1/2" (89 mm) wide hinge Handed

252

Full Surface For 4" (102 mm) wide hinge Non-handed

253

Full Surface For 4-1/2" (114 mm) wide hinge Non-handed

254

Full Surface For 5" (127 mm) wide hinge Handed

Product	Butt Hinge Width		Projection*		Door Thickness	
	Inches	mm	Inches	mm	Inches	mm
251	3-1/2	89	5/8	16	1-3/8	35
252	4	102	1/2	12.5	1-3/4	45
253	4-1/2	114	3/4	19	1-3/4	45
254	5	127	1	25	1-3/4	45

*Projection from centerline of pivot to face of door.

Gauge of Metal	Screw Size		
	Machine	Wood	
0.187	3/4 x 1/4-20	1-1/4 x 14	

BALL AND THRUST BEARING - HEAVY WEIGHT



495 Top

Forged bronze (ANSI C07162)

496

Intermediate Forged bronze (ANSI C07321)

497

Bottom Forged bronze (ANSI C07131)

- 3/4" (19 mm) offset
- Two knuckle
- For doors up to and including 3'0" x 8'0" (912 mm x 2438 mm) weighing maximum of 350 pounds, apply all three pivots 495, 496, 497
- For doors over 3'6" (1067 mm) up to 4'0" (1219 mm) in width, add one additional intermediate pivot, 496
- For each additional 12" (305 mm) in door height over 8'0" (2438 mm) add one intermediate pivot, 496

Product	Hole Count	Screw Size		
Product		Machine	Wood	
495	8	5/8 x 1/4-20	1-1/2 x 14	
496	10	5/8 x 1/4-20	1-1/2 x 14	
497	8	5/8 x 1/4-20	1-1/2 x 14	



PIVOTS





SINGLE ACTING - STANDARD WEIGHT

500



Bottom

• ANSI A2793

Rack and Pinion

- Pivot opens door to 105° maximum
- Non-handed
- Concealed
- Adjustable alignment

Designed for:

- 1-3/4" (45 mm) thick door
- Maximum weight not over 80 pounds • Not to exceed 3' (914 mm) wide and
- 7' (2134 mm) high
- Frame not to have door stop at head and pivot jamb
- Consult engineering for doors other than 1-3/4" (44 mm)

Screw Size	
Machine	Wood
Upon request	1-1/4 x 12 FH*

*Plastic cinch anchors

SINGLE ACTING - HEAVY WEIGHT



Bottom

550 **Heavy Duty Rack and Pinion**

- ANSI A2792
- Pivot opens door to 105° maximum
- Non-handed
- Concealed
- Adjustable alignment

Designed for:

- 1-3/4" (45 mm) thick door
- Maximum weight not over 150 pounds
- Not to exceed 3' (914 mm) wide and 7' (2134 mm) high
- Frame not to have door stop at head and pivot jamb
- Consult engineering for doors other than 1-3/4" (44 mm)

Screw Size				
Machine	Wood			
Upon request	1-1/4 x 12 FH*			

*Plastic cinch anchors

SINGLE ACTING - EXTRA HEAVY WEIGHT 551

• ANSI A2792

Non-handed

Concealed

Designed for:



Bottom

• 1-3/4" (45 mm) thick door

• Adjustable alignment

Maximum weight not over 180 pounds

Extra Heavy Duty Rack and Pinion

Pivot opens door to 105° maximum

- Not to exceed 3' (914 mm) wide and 7' (2134 mm) high
- Frame not to have door stop at head and pivot jamb
- Consult engineering for doors other than 1-3/4" (44 mm)

Screw Size	
Machine	Wood
Upon request	1-1/4 x 12 FH*

*Plastic cinch anchors

HEAVY WEIGHT



615

For Frameless Openings ANSI A8782

- For use on doors up to 150 lbs and 1-3/8" - 1-3/4" (35 mm - 44 mm) thick
- Pivot opens door to 180° maximum
- Screw slots for horizontal or vertical adjustment











CAMTROL DOUBLE ACTING - HOSPITAL SET - RESCUE HARDWARE

The following pivots are for use on:

- Wood or metal doors up to 135 lbs
- Doors not over 3'6" x 7' (1067 mm x 2134 mm)
- Wood or metal frames

Mortise Application in Wood Floors

side

ANSI A5702



510 Head and Floor Pivots ANSI A5702 For use with square edge doors on hinge



Release

600 Head and Floor Pivots with Door Release (Set)

Surface Application in Masonry Floors



512

Head and Floor Pivots ANSI A5702 For use with square edge doors on hinge side

612



Head and Floor Pivots with Door Release (Set) ANSI 45702

ANSI A5702

Door Release

Release



610 Door Release ANSI A1882

Mortise Application in Masonry Floors



511 Head and Floor Pivots

ANSI A5702 For use with square edge doors on hinge side



611

Head and Floor Pivots with Door Release (Set) ANSI A5702

Release

	Item No	Anchor Housing			
	Item NO	Inches	mm		
	510 & 600	3-7/8 x 1-7/8 x 7/8	98 x 48 x 22		
	511 & 611	3-7/8 x 1-1/4 x 7/8	98 x 32 x 22		
	512 & 612	3-7/8 x 1-1/4 x 7/8	98 x 32 x 22		

Door Mount Brackets Screw Size		Head Cam Box Screw Size		Floor Cam Box Screw Size	
Machine	Wood	Machine Wood		Machine	Wood
1/2 x 12-24 FH	1-1/4 x 12 FH	1-1/4 x 12-24 FH	1-1/2 x 12-24 FH	-	1-1/2 x 12 FH

610								
Mortise Depth		Face Plate		Screw Size				
Inches	mm	Inches	mm	Machine	Wood			
1-13/16	46	1-1/2 x 4-1/2 x 3/16	38 x 114 x 5	1/2 x 12-24 FH	1-1/4 x 12 FH			



DOUBLE LIPPED STRIKE



Center Hung



452 **Center Hung Doors** Brass **ANSI A1882**

Center Hung Doors

1/8" (3.2 mm) Inset Hung

1/8" (3.2 mm) Inset Hung Doors Brass **ANSI A1882**

454

453

451

Brass

ANSI A1882

1/8" (3.2 mm) Inset Hung Doors Brass ANSI A1882

- To be used with Hager 600, 611, and 612 pivots and door release - this allows doors to be opened in both directions without damage to frame
- Standard latchbolt cutout is 1-1/4" x 11/16" (32 mm x 17 mm)
- Standard strike plates are optimized for cylindrical locks/latches mounted on 1-3/4" thick doors
- Mortise lock applications require special latch cutout location (consult specific manufactures for variations of cutout dimensions)
- For use with Camtrol double acting pivot

Product	Face Plate	Gauge of	Hole	Screw Size	
Product	Inches	mm	Metal	Count	Sciew Size
451	5-3/4 x 2-3/4	146 x 70	0.093	6	1/2 x 8-32 FH
452	6-3/4 x 2-3/4	171 x 70	0.093	6	1/2 x 8-32 FH
453	5-3/4 x 2-3/4	146 x 70	0.093	6	1/2 x 8-32 FH
454	6-3/4 x 2-3/4	171 x 70	0.093	6	1/2 x 8-32 FH

COMBINATION RESCUE DOOR STOP AND TWO WAY STRIKE PLATE



Center Huna

455 **Center Hung Doors** Brass

ANSI A1882

456



1/8" (3.2 mm)

Inset Hung

Center Hung Doors Brass **ANSI A1882**

457

1/8" (3.2 mm) Inset Hung Doors Brass ANSI A1882

458

1/8" (3.2 mm) Inset Hung Doors Brass ANSI A1882

- Handed
- To be used with Hager 510, 511, and 512 pivots
- Door release allows doors to be opened in both directions without damage to frame
- Standard latchbolt cutout is
- 1-1/4" x 11/16" (32 mm x 17 mm). • Standard strike plates are optimized for cylindrical locks/latches mounted on 1-3/4" thick doors
- Mortise lock applications require special latch cutout location (consult specific manufactures for variations of cutout dimensions)

Product	Face Plate	Gauge of	Hole	Screw Size	
	Inches	mm	Metal	Count	Sciew Size
455	5-3/4 x 2-3/4	146 x 70	0.093	6	1/2 x 8-32 FH
456	6-3/4 x 2-3/4	171 x 70	0.093	6	1/2 x 8-32 FH
457	5-3/4 x 2-3/4	146 x 70	0.093	6	1/2 x 8-32 FH
458	6-3/4 x 2-3/4	171 x 70	0.093	6	1/2 x 8-32 FH







THREE KNUCKLE HINGES



IHTHB953

Full Mortise - Concealed Bearings -Heavy Weight

- Stainless steel with stainless steel pin (ANSI A5111)
- Two concealed maintenance free bearings
- Investment cast
- Security torx screws
- Hospital tip and reverse security stud are standard
- Additional options include electric monitor (EMN), electric through wire (ETW), and electric through wire and monitor (ETM)
- For use on heavy weight doors ranging from 250-600 lbs

Hinge Size		Pin Diameter		Gauge	Hole	Machine
Inches	mm	Inches	mm	of Metal	Count	Screw Size
4-1/2 x 4-1/2	114 x 114	0.370	9	0.187	8	1/2 x 1/4-20 Torx



IHTAB750

Institutional Prison Hinge

Steel with stainless steel pin (ANSI A8111)

IHTAB850

Institutional Prison Hinge

Stainless steel with stainless steel pin (ANSI A5111)

- Concealed maintenance free bearings
- Welded hospital tips and plug
- Welded knuckles
- Additional options include security torx screws, electric monitor (EMN), electric through wire (ETW), electric through wire and monitor (ETM), reverse safety stud (RSS), and safety stud (SS)
- For use on heavy weight doors ranging from 200-300 lbs

Hinge Size		Pin Diam	Pin Diameter		Hole	Machine	
Inches	mm	Inches	mm	of Metal	Count	Screw Size	
4-1/2 x 4-1/2	114 x 114	0.322	8	0.187	8	1/2 x 12-24 FPHM	
5 x 4-1/2	127 x 114	0.322	8	0.190	8	1/2 x 12-24 FPHM	
5 x 5	127 x 127	0.322	8	0.190	8	1/2 x 12-24 FPHM	



990

Full Surface Heavy Weight Prison Utility Hinge

- Steel with steel pin (ANSI A8383)
- Plain bearing
- Welded pin
- Prime painted
- Torx button head bolt
- Two hinges support the weight of 150 lbs
- For use on small doors, access doors, and observation shutters

Hinge Size		Pin Diam	Pin Diameter		Hole	Machine Screw
Inches	mm	Inches	mm	of Metal	Count	Size
3 x 4	78 x 102	0.437	11	0.203	4	1 x #16-3/8 Torx



Full Surface Heavy Weight Prison Pass Through Hinge with Stop

- Steel with steel pin (ANSI A8383)
- Plain bearing

992

- Welded pin
- Prime painted
- Torx button head bolt
- Two hinges support the weight of 150 lbs
- For use on small doors, access doors, and observation shutters

Hinge Size		Pin Diam	Pin Diameter		Hole	Machine Screw
Inches	mm	Inches	mm	of Metal	Count	Size
3 x 4	78 x 102	0.437	11	0.203	4	1 x #16-3/8 Torx



305

Steel

• For metal frames

• Four (4) holes

Hinge Reinforcement Plate





100 Set Screw Set

- 1/8" x 10-32 set screws (quantity 300)
- 3/16" x 10-32 set screws (quantity 300)
- 3/32" hex key
- Hand tap "T" wrench
- 10-32 tap
- #21 drill bit
- This set converts removable pin hinges to non-removable pin (set screw in barrel) hinges as required



263 Sleeve Bolt

- Aluminum
- 9/16" (14 mm) head sex nut with 1/4" 20 internal thread
- Knurled shoulder prevents bolt from turning
- Drill a 3/8" (9.5 mm) hole and insert the sex bolt
- Available in US2C finish only (compatible with US26D, US28, or US32D)
- For use in securing push bars, exposed door closers and other fixtures to doors 1-3/4" (45 mm) thick or greater



265

Molly Jack Nut (8S JN)

- Aluminum
- For use with the Hager reinforcing pivot hinges (250 Series)
- Easily installed by drilling a 7/16" (11.1 mm) pilot hole and following the instructions provided with each product
- For use in properly anchoring various products to hollow metal frames 3/16" 3/8" (4.8 mm 9.5 mm) thick



Hinge Size		Width		Total Length	
Inches	mm	Inches	mm	Inches	mm
4-1/2	114	1.5	38	10	254
Offset		Gauge of Metal		Tapped for Screw	
0.074		0.154		12-24	



417 Back Plate

Steel

• For wood doors

• For full or half surface hinges

Length	Length			Gauge of
Inches	mm	Inches	mm	Metal
4-1/2	114	1-13/16	46	0.074
5	127	2-1/8	54	0.089
Number of H	Number of Holes		Machine Screw Size	
3		1/2 x 12-24		
4	4			



DECORATOR TIP KITS



1712 Ball Standard Weight

1713 Ball Heavy Weight



1716 Acorn Standard Weight

1717 Acorn Heavy Weight

1722

1723



.



1728 Urn Standard Weight

Steeple Heavy Weight

Steeple Standard Weight

1729 Urn Heavy Weight

- Standard weight hinge size 3-1/2" (89 mm), 4" (102 mm), 4-1/2" (114 mm), 5" (127 mm), 6" (152 mm)
- Heavy weight hinge size 4-1/2" (114 mm), 5" (127 mm)
- Solid brass with stainless steel pin
- Conversion tips and pins for architectural grade hinges



ACCESSORIES

Residential Hinges



Hager residential hinges enhance the design of any home, with finishes that range from bright brass and antique bronze to satin nickel and bright chrome. Homeowners also gain additional peace of mind with Hager features such as interlocking security stud protection, fast riveted pins with rivet heads that are formed on both ends to prevent removal of the hinge pin, and hinges with non-removable pin set screws.



Hager residential hinges are provided without lubrication. We recommend lubricating the hinges after installation. All residential hinges conform to the "Light Weight" requirements of ANSI A156.1.

Finishes (not all hinges are available in all finishes)

US & Hager	Description	Steel	Brass	Stainless Steel
1D	Black	631	N/A	N/A
2D	Brass Tone Dichromate	604	N/A	N/A
2CD	Brushed Zinc Plate	N/A	N/A	N/A
H2H	Mechanical Galvanized	N/A	N/A	N/A
3	Bright Brass	632	605	N/A
3LB	Light Brass	N/A	N/A	N/A
4	Satin Brass	633	606	N/A
10A	Antique Brass, Lacquered	641	614	N/A
10R	Matte Lacquered Antique Bronze	N/A	N/A	N/A
15	Satin Nickel	646	619	N/A
26	Bright Chromium Plated	651	625	N/A
26D	Satin Chromium Plated	652	626	N/A
32	Stainless Steel Metal, Bright	N/A	N/A	629
32D	Stainless Steel Metal, Satin	N/A	N/A	630
Р	Prime Coat	600	600	N/A
ABA/US5	Antique Brass	638	609	N/A
AN/US15A	Antique Nickel	647	620	N/A



FIVE KNUCKLE



1541

Plain Bearing

- Brass with brass pin (ANSI A2134) or stainless steel with stainless steel pin (ANSI A5134)
- Reversible
- Square corners
- Removable pin



RC1542

Plain Bearing

- Brass with brass pin (ANSI A2134) or stainless steel with stainless steel pin (ANSI A5134)
- Reversible
- Round corners 5/8" (16 mm) radius
- Removable pin



BB1541

- **Ball Bearing** • Stainless steel with stainless steel pin (ANSI A5114)
- Reversible
- Square corners
- Removable pin



RCBB1542

Ball Bearing

- Stainless steel with stainless steel pin (ANSI A5114)
- Reversible
- Round corners 5/8" (16 mm) radius
- Removable pin

Hinge Size		Gauge of	Hole	Pin	Screw Size
Inches	mm	Metal	Count	Diameter	(Wood)
3-1/2 x 3-1/2	89 x 89	0.085	6	0.234	3/4 x 9 FH
4 x 4	102 x 102	0.085	8	0.234	3/4 x 9 FH



RC1541

Plain Bearing

- Brass with brass pin (ANSI A2134) or stainless steel with stainless steel pin (ANSI A5134)
- Reversible
- Round corners 1/4" (6 mm) radius
- Removable pin



RCBB1541 Ball Bearing

- Stainless steel with stainless steel pin (ANSI A5114)
- Reversible
- Round corners 1/4" (6 mm) radius
- Removable pin

Hinge Size		Gauge of	Hole	Pin	Screw Size
Inches	mm	Metal	Count	Diameter	(Wood)
3-1/2 x 3-1/2	89 x 89	0.085	6	0.234	3/4 x 9 FH
4 x 4	102 x 102	0.085	8	0.234	3/4 x 9 FH



1543

Plain Bearing

- Brass with brass pin (ANSI A2134) or stainless steel with stainless steel pin (ANSI A5134)
- Assembled right hand
- Square by 5/8" (16 mm) radius
- Removable pin

BB1543

Ball Bearing

- Brass with brass pin (ANSI A2114) or stainless steel with stainless steel pin (ANSI A5114)
- Assembled right hand
- Square by 5/8" (16 mm) radius
- Removable pin

Hinge Size		Gauge of	Hole	Pin	Screw Size
Inches	mm	Metal	Count	Diameter	(Wood)
4 x 4	102 x 102	0.085	8	0.234	3/4 x 9 FH





FIVE KNUCKLE (CONTINUED)





Plain Bearing

- Steel with steel pin (ANSI A5134)
- Reversible

BB1741 Ball Bearing

 Reversible Square corners • Removable pin

- Square corners
- Removable pin



RC1748

- **Plain Bearing**
- Steel with steel pin (ANSI A8134)
- Reversible
- Round corners 1/4" (6 mm) radius
- Removable pin
- Template hole pattern

Hinge Size		Gauge of	Hole	Pin	Screw Size
Inches	mm	Metal	Count	Diameter	
3-1/2 x	89 x 89	0.085	6	0.234	1/2 x 10-24 (machine)
3-1/2	09 X 09				1 x 9 FH (wood)



RC1741 | 7741 Plain Bearing

• Steel with steel pin (ANSI A8134)

• Steel with steel pin (ANSI A8114)

- Reversible
- Round corners 1/4" (6 mm) radius
- Removable pin

RCBB1741

Ball Bearing

• Reversible

• Removable pin

• 7741 is RC1741 bulk unassembled

• Steel with steel pin (ANSI A8114)

• Round corners - 1/4" (6 mm) radius



RC1749 Plain Bearing

- Steel with steel pin (ANSI A8134)
- Reversible
- Round corners 1/4" (6 mm) radius
- Removable pin
- Template hole pattern

Hinge Size		Gauge of	Hole	Pin	Screw Size
Inches	mm	Metal	Count	Diameter	Sciew Size
4 x 4 102 x 102	402 402	0.085	8	0.234	1/2 x 12-24 (machine)
	102 x 102				1-1/4 x 12 (wood)

Hinge Size Inches mm		Gauge of Metal	Hole Count	Pin Diameter	Screw Size (Wood)	
3 x 3*	76 x 76*	0.085*	6*	0.234*	3/4 x 9 FH*	
3-1/2 x 3-1/2	89 x 89	0.085	6	0.234	3/4 x 9 FH	
4 x 4	102 x 102	0.085	8	0.234	3/4 x 9 FH	
*3 x 3 not available for BB1741 or RCBB1741.						



Plain Bearing

Security stud

Plain Bearing

• Security stud • Removable pin

Bulk assembled

• Assembled left hand

• Removable pin · Bulk assembled

• Assembled right hand

• Steel with steel pin (ANSI A8134)

• Square by 5/8" (16 mm) radius

1818

1819



FIVE KNUCKLE (CONTINUED)



1816 **Plain Bearing**

- Steel with steel pin (ANSI A8134)
- Assembled right hand
- Square by 5/8" (16 mm) radius
- Removable pin
- Bulk assembled

BB1816

Ball Bearing

Removable pin



1817 **Plain Bearing**

• Steel with steel pin (ANSI A8134)

• Steel with steel pin (ANSI A8114)

• Square by 5/8" (16 mm) radius

• Assembled left hand

• Assembled right hand

• Square by 5/8" (16 mm) radius

• Steel with steel pin (ANSI A8114)

• Square by 5/8" (16 mm) radius

- Removable pin
- · Bulk assembled

BB1817 Ball Bearing





1848

Plain Bearing • Steel with steel pin (ANSI A8134)

• Assembled left hand

• Reversible

• Removable pin

- Square by 5/8" (16 mm) radius
- Removable pin
- Unassembled 2 per box



8744 Plain Bearing

- Steel with steel pin (ANSI A8134)
- Square by 5/8" (16 mm) radius
- · Bulk unassembled

Hinge Size		Gauge of	Hole	Pin	Screw Size
Inches	mm	Metal	Count	Diameter	(Wood)
4 x 4	102 x 102	0.085	8	0.234	3/4 x 9 FH









Plain Bearing

• Steel with steel pin (ANSI A8134)

• Steel with steel pin (ANSI A8134)

• Square by 5/8" (16 mm) radius

- Square by 5/8" (16 mm) radius
- Safety stud
- Bulk unassembled

Hinge Size		Gauge of	Hole	Pin	Screw Size
Inches	mm	Metal	Count	Diameter	(Wood)
4 x 4	102 x 102	0.085	8	0.234	3/4 x 9 FH





FIVE KNUCKLE (CONTINUED)



RC1842 | RC1841 | 8741

- Plain BearingSteel with steel pin (ANSI A8134)
- Reversible
- Round corners 5/8" (16 mm) radius
- Removable pin
- RC1841 is RC1842 bulk assembled
- 8741 is RC1842 bulk unassembled



Hinge Size

mm

102 x 102

Inches

4 x 4

RC1847

Gauge of

Metal

0.085

- Plain Bearing
- Steel with steel pin (ANSI A8134)
- Reversible Square by 5/8" (16 mm) radius
- Riveted security pin
- Also available bulk assembled

Hole

8

Count

Pin

0.234

Diameter

Screw Size

3/4 x 9 FH

(Wood)

•	0
• 51	10
•	•
•	

RCBB1842

Ball Bearing

- Steel with steel pin (ANSI A8114)
- Reversible
- Round corners 5/8" (16 mm) radius
- Removable pin

Hinge Size		Gauge of	Hole	Pin	Screw Size
Inches	mm	Metal	Count	Diameter	(Wood)
3-1/2 x 3-1/2	89 x 89	0.085	6	0.234	3/4 x 9 FH
4 x 4	102 x 102	0.085	8	0.234	3/4 x 9 FH



SIX KNUCKLE

RC1641 | 8641 Plain Bearing

- Steel with steel pin (ANSI A8134)
- Reversible
- Round corners 5/8" (16 mm) radius
- Removable pin
- RC1641 is assembled, 8641 is bulk unassembled

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•	•

RC1843

Plain Bearing

- Steel with steel pin (ANSI A8134)
- Reversible
- Round corners 5/8" (16 mm) radius
- Removable pin
- Security stud

Hinge Size		Gauge of Hole	Pin	Screw Size	
Inches	mm	Metal	Count	Diameter	(Wood)
4 x 4	102 x 102	0.085	8	0.234	3/4 x 9 FH



RC1846 Plain Bearing

- Steel with steel pin (ANSI A8134)
- Reversible
- Round corners 5/8" (16 mm) radius
- Riveted security pin
- Also available bulk assembled
- Not recommended for exterior use

Hinge Size		Gauge of Hol	Hole	Pin	Screw Size
Inches	mm	Metal	Count	Diameter	(Wood)
4 x 4	102 x 102	0.085	8	0.234	3/4 x 9 FH

Hinge Size		Gauge of Hole		Pin	Screw Size
Inches	mm	Metal	Count	Diameter	(Wood)
3-1/2 x 3-1/2	89 x 89	0.085	6	0.234	3/4 x 9 FH
4 x 4	102 x 102	0.085	8	0.234	3/4 x 9 FH

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Steel (ANSI K81071F)

• Steel (ANSI K81071F)

Square corners

1750

1751



SPRING

Spring hinges are for automatic closing of doors. They are light weight for residential use. 1734 and 1744 are also for Timely Style frames.

Hinge Recommendation

Recommended Max	Spring	Butt	Spring Hinge Location
Door Weight (lbs)	Hinge	Hinge	
45	1	2	Center
70	2	1	Top/Btm or Ctr/Btm
90	3	-	All
45	1	2	Center
70	2	1	Top/Btm or Ctr/Btm
90	3	-	All



1734

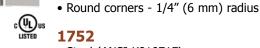
- Stainless steel (ANSI K51071F)
- Round corners 1/4" (6 mm) radius
- Template hole pattern

1744

- Steel (ANSI K81071F)
- Round corners 1/4" (6 mm) radius
- Template hole pattern

Hinge Size		Gauge of	Hole Count	Screw Size
Inches	mm	Metal		(Wood)
4 x 4	102 x 102	0.106	8	1 x 9 FH





- 1752
 - Steel (ANSI K81071F) • Round corners - 5/8" (16 mm) radius

1760

- Stainless steel (ANSI K51071F)
- Square corners

1761

- Stainless steel (ANSI K51071F)
- Round corners 1/4" (6 mm) radius

1762

- Stainless steel (ANSI K51071F)
- Round corners 5/8" (16 mm) radius

Hinge Size		Gauge of	Hole Count		
Inches	mm	Metal		Screw Size (Wood)	
3-1/2 x 3-1/2	89 x 89	0.106	6	3/4 x 9 FH	
4 x 4	102 x 102	0.106	8	1 x 9 FH	



1754

- Steel (ANSI K81071F)
- Square by 5/8" (16 mm) radius

1764

- Stainless steel (ANSI K51071F)
- Square by 5/8" (16 mm) radius



Hinge Size		Gauge of	Hole Count	Screw Size	
Inches	mm	Metal		(Wood)	
4 x 4	102 x 102	0.106	8	1 x 9 FH	





2

RESIDENTIAL HINGES

1710

Residential Ball Tip Kit

Materials:	Brass tips and stainless steel
	pin
Finishes:	US3, US4, US5/ABA, US10A,
	US10R, US15, US15A/AN,
	US26, US26D
Notes:	• Includes 2 ball tips and 1
	pin
	 For use with 3-1/2"

• For use with 3-1/2" (89 mm) or 4" (102 mm) hinges

1720

Residential Steeple Tip Kit

Materials:	Brass tips and stainless steel
	pin

Finishes:

US3, US4, US5/ABA, US10A, US10R, US15, US15A/AN, US26, US26D

Notes:

- Includes 2 steeple tips and 1 pin
- For use with 3-1/2" (89 mm) or 4" (102 mm) hinges



Roton Continuous Geared Hinges



You design and build structures that need to withstand the realities of daily use. Hager's engineers and product development team understand how building entrances and exits are used in the real world. That's why we design our Roton continuous geared hinges to provide superior performance you can rely on in high-traffic areas. Hager Roton hinges use unique geared hinges to minimize lateral wear on the hinge while evenly distributing door weight along the full length of the frame. Roton hinges are ideal for new construction and retrofit applications.



DOOR AND FRAME PREPARATION

All Roton continuous geared hinges are surface applied. Cutout design and spacing coordination is thereby eliminated in both new construction and restoration work. Reinforcement plates are not required in doors or frames except where the gauge is too thin for the fasteners in relation to the door weight or where abusive operation is anticipated.

Blank frames may be ordered with strike prep only or with a strike prep furnished on both sides to eliminate handing with any Roton model that will cover the frame rabbet. Doors should always be ordered without cutouts except for use in labeled openings in which the tested door assembly may have manufacturing restrictions. Continuous frame mortar guards are desirable for masonry walls to avoid screw fastener interference with the mortar. An effective mortar guard made from an ordinary 1" (25 mm) x 2" (51 mm) stud, fastened to the back side of the frame can also be used. Check with both the frame supplier and the contractor for the best method.

The main cause of door and frame breakdown is "kickback shock" transferred to conventional butt hinges or pivots. Roton bonds the door frame into a single, integrated unit, dissipating impact loads harmlessly.

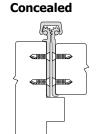
DOOR CLOSERS

Conventional surface or concealed sliding closers may be used with Roton. (Note: Pivot type floor closers with a fixed, conflicting pivot point may not be used.) Closers will last considerably longer, adjust to operating requirements more readily and show consistent settings due to the reduced operating forces of Roton hinging.

PROCESS FOR CHOOSING THE CORRECT ROTON MODEL

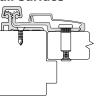
Determine	Select
Door and frame application (flush door and frame, inset door, door thickness, door height, etc.)	Roton model
Frequency of door cycling and weight of door	Light, standard, heavy or extra heavy duty, lead lined
Door and frame material	Fasteners
Door opening finish	Roton finish
Fire rating requirements, if needed	With stud or without stud

ROTON TYPES



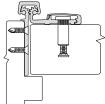


These models have leaves that are concealed between the rabbet of the frame and the hinge edge of the door. Models available include 500-048, 750-134, 750-138, 780-041, 780-041HD, 780-041LL, 780-110, 780-110HD, 780-111, 780-111HD, 780-111LL, 780-112, 780-112HD, 780-112LL, 780-224, 780-224HD, 780-224LL, 780-226, 780-226HD, 780-226LL, 1200-600XHD, 1200-650XHD



These models have the frame leaf mounted to the face of the frame. The door leaf is mounted to the face of the door with sex bolts (thru-bolts). Models available include 500-220, 780-057, 780-057HD, 780-157, 780-157HD, 780-210, 780-210HD, 780-257HD

Half Surface



These models have the frame leaf concealed between the rabbet of the frame and the edge of the door. The door leaf is mounted to the face of the door with sex bolts (thru-bolts) or screws. Models available include 500-200, 780-045, 780-045HD, 780-046, 780-046HD, 780-053, 780-053HD, 780-054, 780-054HD, 780-211HD, 780-300HD

Checking the Load

To assist in the selection of an appropriate Roton hinge series, divide the door weight including the weight of the hardware by the number of bearings in the Roton hinge under consideration, then use the following guideline, with a maximum 4'0'' wide door:

750 Series:	5-1/8" Centers	(Typical 7' door: 16 bearings)
780 Series:	5-1/8" Centers	(Typical 7' door: 16 bearings)
780 HD & LL:	2-9/16" Centers	(Typical 7' door: 32 bearings)

Frequency	Load
Low frequency interior doors	20 lbs per bearing
Low frequency, very heavy doors (lead lined x-ray doors, ballistics doors, high security doors) with double rows of fasteners	30 lbs per bearing
Medium frequency interior doors	15 lbs per bearing
Medium frequency exterior doors	10 lbs per bearing
High frequency exterior doors	7.5 lbs per bearing
Very high frequency doors	5 lbs per bearing





FIRE RATINGS - UNDERWRITERS LABORATORY FIRE RATING FILE #A14627



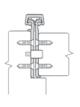
780 Series Roton continuous geared hinges with stainless steel studs are approved for use on 4'x10' metal or wood swing type doors. 780 Series Roton continuous geared hinges without stainless steel

studs are approved for use on 4'x8' single swing metal doors and 4'x10' single swing wood doors used without stainless steel studs limited to 20 minute fire rating without hose stream.

- Hollow metal, tin-clad, sheet-metal and steel covered composite type rated up to and including 3 hours
- Wood composite doors rated up to and including 1-1/2 hours
- Wood core doors rated up to 20 minutes without hose stream, non-studded
- 780 Series Roton Continuous Geared Hinges meet requirements for positive pressure UL10C, UL10B and UBC7-2 Part 1

FULLY CONCEALED WITH STUD

Fully Concealed



These models are concealed between the frame and the hinge edge of the door. Models available include 780-041, 780-041HD, 780-041LL, 780-110, 780-110HD, 780-111, 780-111HD, 780-111LL, 780-112, 780-112HD, 780-112LL, 780-224, 780-224HD, 780-224LL, 780-226, 780-226HD, 780-226LL, and 780-235HD.

HALF SURFACE WITH STUD

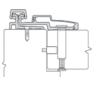
Half Surface



These models have the frame leaf concealed between the frame and the edge of the door. The door leaf is mounted to the door with thru-bolts or screws. Models available include 780-045, 780-045HD, 780-046, 780-046HD, 780-053, 780-053HD, 780-054, 780-054HD, and 780-211HD.

FULL SURFACE WITH STUD

Full Surface



These models have the frame leaf mounted to the face of the frame and the face of the door. The door leaf is mounted to the face of the door with thru-bolts. Models available include 780-057, 780-057HD, 780-157, 780-157HD, 780-210, 780-210HD, and 780-257HD.

ANSI STANDARDS

- 780 Series Roton continuous geared hinges are approved per ANSI A156.26 Grade 1 for 150 lb. doors
- 780 Series Roton heavy duty hinges are approved per ANSI A156.26 Grade 1 for 300 lb. doors
- 780-111, 780-112, 780-224, 780-226 standard duty and heavy duty Roton continuous geared hinges are Warnock-Hersey certified in accordance with ANSI A250.13 2003 Standard Severe Windstorm Resistant Components

UL10C Fire Rated Roton	Fully Concealed	Full Surface	Half Surface
20 Minute Fire Rated Wood Core Door x Fire Rated Hollow Metal Frame	UL — FF	UL — FF	UL — FF
20 Minute Fire Rated Metal Door x Fire Rated Hollow Metal Frame	UL — FF	UL — FF	UL — FF
30 Minute Fire Rated Wood Composite Door x Fire Rated Hol- low Metal Frame	UL — FF	UL — FF	UL — FF
30 Minute Fire Rated Metal Door x Fire Rated Hollow Metal Frame	UL — FF	UL — FF	UL — FF
45 Minute Fire Rated Wood Composite Door x Fire Rated Hol- low Metal Frame	UL — FF	UL — FF	UL — FF
45 Minute Fire Rated Metal Door x Fire Rated Hollow Metal Frame	UL — FF	UL — FF	UL — FF
60 Minute Fire Rated Wood Door x Hollow Metal Frame	UL — FF	UL — FF	UL — FF
60 Minute Fire Rated Metal Door x Hollow Metal Frame	UL — FF	UL — FF	UL — FF
90 Minute Fire Rated Wood Composite Door x Fire Rated Hol- low Metal Frame	UL — Stud	UL — Stud	UL — Stud
90 Minute Fire Rated Metal Door x Fire Rated Hollow Metal Frame	UL — FF	UL — FF	UL — FF
3 Hour Fire Rated Metal Door x Fire Rated Hollow Metal Frame	UL — Stud	UL — Stud	UL — Stud

NOTES:

1. Models for which studs are not required (UL-FF) are no extra charge.

2. Please specify if UL stamp is required. For example: 780-112LL 83" Clear U/L— FF 780-211HD 95" DB U/L— Stud

3. Four studs are required for UL stud hinges.





STANDARD LENGTHS

Roton hinge standard lengths are for 6'8'' doors - 79'', for 7' doors - 83'', for 7'2'' doors - 85'', for 8' doors - 95'' and for 10' doors - 119'', for convenience in application to nominal doors. This provides for threshold clearance, head clearance and door height allowances for carpeting. Other lengths may be ordered as non-standard items.

Roton hinges are always installed flush with the top edge of the door. Recommended 1/8'' (3 mm) for head clearance.

Where many net heights are likely to appear on the same job, group the sizes to 1/2" (13 mm) increments to be consistent in appearance. Generally, up to 1/2" (13 mm) of door heel exposure is acceptable, but all Roton hinges should be within 1" (25 mm) of the net door height.

FIELD MODIFICATIONS

While Roton hinges can be cut in the field, any product modifications may void all warranties. Should in-the-field modifications be required, cut only from the bottom of the hinge. Do not cut through bearings or screw holes. When cutting electric hinges it is extremely important to clamp both hinge leaves securely to prevent hinge "chatter" which can damage the hinge's internal wiring. Consult Hager Technical Service before proceeding.

TEMPLATE HINGES

Hager Companies has developed templated hole patterns for Roton hinge models in standard lengths. Drawings are available upon request by contacting Hager Companies Customer Service or accessing the Hager website at www.hagerco.com. Due to normal variances inherent in the manufacturing process, Roton custom length hinges are deemed by Hager to be nontemplated.

STANDARD FINISHES

Roton hinges are available in either satin etched, clear anodized aluminum (similar to US28), or dark bronze exterior anodized coating.

SPECIAL ANODIZING

Roton hinges are available in various colors, including black, and gold, as well as other anodized finishes with fasteners to match. Hager requires that final assembly be completed by Hager because of special non-removable metal coatings applied to all hinges during assembly. Users are cautioned against attempting to refinish any Roton product. All hinges ordered in special colors should be ordered at the same time to guarantee finish uniformity. Supply color chip for best match.

PAINTED HINGES

Hager can supply unfinished materials to selected finishers for special projects which require unusual colors or coatings, but will require that final assembly be completed by Hager. Because of special non-removable metal coatings applied to all hinges during assembly, users are cautioned against attempting to refinish any Roton product.

PAINTED COVER CHANNELS

Painted Roton cover channels in bone white are offered as a standard stock color option. This is only available on the standard Roton cover channel.

POLISHED COVER CHANNELS

Any Roton hinge may be ordered with a polished clear cover channel (similar to US26) to complement clear anodized hinge leaves or a polished gold cover channel (similar to US3) to complement satin gold anodized hinge leaves.

SPECIAL COVER CHANNELS

Special covers for rounded, fluted or decorative effects may be ordered. Not available for hinges with electrical modifications.

Decorative Back (DBCC) for 1/2" Insert

(Decorative insert not available through Hager)



Fluted Back (FLCC)



Rounded Back (RBCC)



Roton C	over Ch	annel C	Compati	bility
Hinge Model	Flat FBCC	Round RBCC	Fluted FLCC	Decorative DBCC
750-134	•	•	•	•
750-138	•	•	•	•
780-041	•	•		
780-045	•	•		
780-046	•	•		
780-053	•	•		
780-054	•	•		
780-057	•	•		
780-110	•	•	•	•
780-111	•	•	•	•
780-112	•	•	•	•
780-113	•	•	•	•
780-114	•	•		
780-155	•	•		
780-157	•			
780-208	•		•	•
780-210	•	•		
780-211	•	•		
780-213	•	•		
780-224	•	•	•	•
780-226	•	•	•	•
780-235	•	•	•	•
780-257	•			
780-259	•	•		
780-300	•			
1200-600	•			
1200-650	•			



EXTRA LONG HINGES

Hager Companies manufactures hinges over 119" (3023 mm) long as two separate lengths with a staggered joint for onsite connection. Hager will select hinge segment lengths from standard sizes for best economics in relation to quantity required. Handing specifications are required to position the cuts inconspicuously and to finish symmetrical pairs in double door applications.

BEARING AT TOP

This application allows for the bearing to be set at the very top of the cover channel. The cover channel is flush with the top of the geared hinge, preventing any obstructions or debris to be inserted in the top channel.

BEARING ON TOP

This application allows for the bearing to be set at the very top of the extended cover channel. The cover channel projects beyond the top edge of the hinge by the height of the bearing. This modification prevents any obstructions or debris from being inserted in the top of the channel.

HOSPITAL TIP

Concealed models only can be prepared with a cover channel tapered at 45° angle at the top of the hinge. These are ideal for use in hospitals and correctional facilities to help provide a clean and safe environment. Please consult the sales office for available models.

TAMPER RESISTANT HINGE

This application is intended for use in hospital psychiatric areas and places of high security. The hinge is prepared with a hospital tip (concealed models only) and every other bearing is supplied with a set screw to lock against the inside of the cover channel for additional security.

DUTCH DOOR HINGES

Hager Companies will prepare any of its hinge models for a dutch door application. The frame leaf is furnished as a continuous extrusion and the door leaf is cut to fit the dutch door heights specified. Upper and lower door leaves are prepped for extra screws. Handing, overall net door height, amount of clearance between the top and bottom doors, their individual heights and door and frame materials should be clearly specified.

SPECIAL HOLES

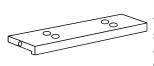
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Any hinge may be ordered with special hole locations for unusual frame or door conditions. Please provide specifications for each leaf.

BEARING REPLACEMENT KITS

Available in standard or heavy duty and in Clear Anodized or Dark Bronze Anodized finish for 780 and 1200 Series Roton.

MARKING JIGS



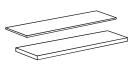
Marking jigs are available to locate the centers of the top end frame screws. These jigs must be ordered at the same time as the hinges to ensure fabrication accuracy.

CENTER PUNCHES



Self-Centering punches are available for #12 countersunk screws that are supplied. To make sure screw heads seat properly, accurate center punching is required.

SHIM STOCK



For clearance between the door and frame that may be excessive, a continuous shim is helpful (applied behind the frame leaf only). Anodized aluminum extrusions are supplied with no holes.

ITEM MARKING

Marking and special packaging for job-site identification.

REPLACEMENT MOLDINGS 780-210M

Replacement door leaf molding for 780-210, 780-210HD, 780-211, 780-211HD, 780-213, 780-213HD, 780-045, 780-045HD, 780-046, 780-046HD. Furnished with Allen head set screw and wrench. Shipped in standard lengths for trimming in the field.



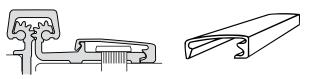
780-247M

Replacement frame leaf molding for 780-157, 780-157HD, 780-257, 780-257HD. Shipped in standard lengths for trimming in the field.



780-052M

Replacement door leaf molding for 780-053, 780-053HD, 780-054, 780-054HD, 780-155, 780-155HD, 780-057, 780-057HD, 780-157, 780-157HD, 780-257, 780-257HD, 780-259, 780-259HD. Furnished with Allen head screw and wrench. Shipped in standard lengths for trimming in the field.





5



FASTENERS

Hager Companies uses custom made, carefully engineered, and thoroughly tested fasteners exclusively. Each fastener is designed for ease of use as well as durability. Appropriate fasteners are furnished with each hinge, together with installation instructions for typical metal or wood doors and frames. The standard screw pack includes self-drilling screws. If wood screws are required, please specify on order and wood screws will be substituted.

FASTENERS FOR USE WITH HINGES IN THE 500 SERIES 8 - 18 X 3/4" Truss Phillips head screw

FASTENERS FOR USE WITH HINGES IN THE 750 AND 780 SERIES Metal Doors or Frames (Undercut Head Phillips

Countersunk Screws):

Two types of screws are available for metal doors and frames: the Drill Kwik[®] screw (with drill point tip) and the thread forming screw (no tapping necessary). The #12-24 x 11/16" self-drilling screw has a machine thread in the screw shank. The #12-24 x 13/32" thread-forming screw has a machine thread in the screw shank.

The standard screw pack contains #12-24 Drill Kwik[®] selfdrilling machine thread. This screw has a hardened steel drill point built into the end of the screw, allowing it to be installed without a pre-drilled hole if the metal thickness is no more than 1/8'' (3.2 mm). It forms its own threads as the screw is drilled into the door or frame. It is longer than most screws of the type because of the built-in drill point.

When installing the self-drilling screw, make certain that the installer is familiar with the proper use and torque settings of a screw gun. Proper center-punching is extremely important with self-drilling screws. If center-punching is omitted or incorrectly done, the screw will "walk" in the same way as a drill bit, resulting in cocked screw heads and improperly closing hinge leaves.

The optional self-threading screw is typically used on grout filled frames to prevent bowing of the frame. This screw has a short tapered section at the tip. A drilled pilot hole (range: 0.173'' to 0.185'') is required prior to tapping.

Either of these screws may be used for the attachment of Roton hinges to metal doors or frames, generally without reinforcement except in thin aluminum or with doors of very heavy weight or anticipated abuse. Both types require centerpunching to ensure that the screw sits properly in the hinge leaf. Self-centering countersinking center-punches are available.

In all cases, care should be taken to ensure that no drill chips build up behind the hinge. It is best to premark the holes and drill for self-threading screws with the hinge removed, or hold the hinge very tightly against the door or frame when using the self-drilling screws. Hinges normally requiring sex bolts will be furnished with suitable mounting holes. Blank leaves, special countersinking, or door fastening with pan-head screws are available upon request.

If special fasteners are required, customers must supply them except upon prior agreement. Please consult the factory for alternate fastener recommendations.

FASTENERS FOR USE WITH HINGES IN THE 1200 SERIES

1/4" - 20 x 1" Undercut Flat Phillips Head Screw

SEX BOLTS (THRU-BOLTS)

On all applicable surface-mounted hinges, sex bolt sets are furnished in the hardware package together with a transfer punch for accurate marking of the 3/8" (10 mm) drilled holes required. The 1/4"-20 bolt has a 3/8" (10 mm) shoulder under a 9/16" (14 mm) pan head so that it can be reversed for exterior in-swing doors or for additional security.

Roton sex bolts are intentionally designed to be shorter than the door thickness for proper clamping action with doors of slightly varying thickness and gauge in the 1" (25 mm) - 2-1/2" (63.5 mm) range. Unless otherwise requested, bolts suitable for the 1-3/8" (35 mm) - 1-3/4" (45 mm) range will be shipped. Shorter or longer bolts may be requested. Bolts that are outside the door thickness range of 1" (25 mm) - 2-1/2" (63.5 mm) must be provided by the installer.



DOOR AND FRAME DIMENSIONING **Half Surface Models**

780-045, 780-045HD, 780-046, 780-046HD, 780-053, 780-053HD, 780-054, 780-054HD, 780-155, 780-155HD, 780-211HD, 780-213, 780-213HD, 780-259, 780-259HD, 780-300HD (leaf thickness clearance not required for 780-300HD)

Designed primarily for work involving new doors and frames, one leaf concealed and one leaf surface mounted. They can also be used on retrofit work where a new door can be ordered to fit an existing frame if the existing door is made of wood and can be reduced in size to accommodate the 1/8" (3.2 mm) leaf thickness, or the frame is to be replaced and can be furnished with an oversized header.

Clearance required as follows:

Single Doors (Square and Beveled Edge)

A. Leaf thickness	1/8" (3.2 mm)
B. Additional allowance for frame irregularities	1/32" (0.8 mm)
C. Lockside clearance for single door	<u>1/8″ (3.2 mm)</u>
Total	9/32″ (7.2 mm)

Pairs of Doors (Square and Beveled Edge)

A. Leaf thickness

A. Leaf thickness	1/8" (3.2 mm)
B. Additional allowance for frame irregularities	1/32" (0.8 mm)
C. Edge to edge clearance (recommended)*	3/16" (4.8 mm)
D. Second allowance for frame irregularities	1/32" (0.8 mm)
E. Second leaf thickness	<u>1/8″ (3.2 mm)</u>
Total	1/2" (12.8 mm)

Full Surface Models

780-057, 780-057HD, 780-157, 780-157HD, 780-210, 780-210HD, 780-257HD

The above models are designed for retrofit applications and require no special dimensioning. Full surface models are designed to be mounted to the exposed surface of the door and frame. No additional clearance is required except for door and frame painting.

Clearance required as follows:

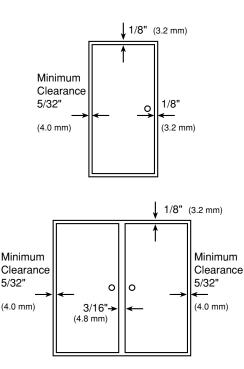
Single Doors (Square and Beveled Edge)

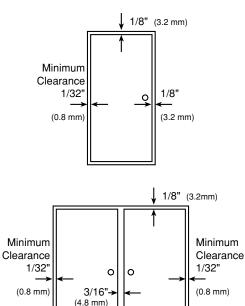
A. Additional allowance for frame irregularities	1/32" (0.8 mm)
B. Lockside clearance for single door	<u>1/8" (3.2 mm)</u>
Total	5/32" (4.0 mm)

Pairs of Doors (Square and Beveled Edge)

A. Additional allowance for frame irregularities	1/32" (0.8 mm)
B. Edge to edge clearance (recommended)*	3/16" (4.8 mm)
C. Second allowance for frame irregularities	<u>1/32" (0.8 mm)</u>
Total	1/4" (6.4 mm)

*For fire rated doors, please refer to door manufacturer's requirement for edge to edge clearance to maintain compliance with NFPA requirements.







5/16" (7.9 mm)

1/32" (0.8 mm)

1/8" (3.2 mm)

1/32" (0.8 mm)

1/2" (12.7 mm)

DOOR AND FRAME DIMENSIONING (CONTINUED) **Concealed Models**

750-134, 750-138, 780-110, 780-110HD, 780-111, 780-111HD, 780-111LL, 780-112, 780-112HD, 780-112LL, 780-224, 780-224HD, 780-224LL, 780-226, 780-226HD, 780-226LL, 780-235HD. The following are not recommended for doors with beveled edged applications - 780-041, 780-041HD and 780-041LL.

Designed primarily for work involving new doors and frames, these models have parallel, fully concealed leaves. They can also be used on retrofit work where a new door can be ordered to fit an existing frame if the existing door is made of wood and can be reduced in size to accommodate the 5/16" (7.9 mm) hinge thickness, or the frame is to be replaced and can be furnished with an oversized header.

Clearance required as follows:

Single Doors (Square Edged)

A.	Hinge	thickness
----	-------	-----------

A. Hinge thickness	5/16" (7.9 mm)
B. Additional allowance for frame irregularities	1/32" (0.8 mm)
C. Lockside clearance for single door	<u>1/8" (3.2 mm)</u>
Total	15/32" (11.9 mm)

Single Doors (Beveled Edged)

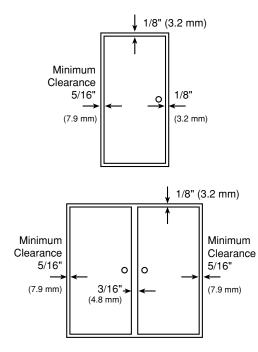
A. Hinge thickness

R	Additional	allowance	for	framo	irregularities
υ.	Auditional	anowance	101	name	inegularities

C. Lockside clearance for single door

D. Allowance for beveled edge

Total



Pairs of Doors (Square Edged)

A. Hinge thickness	5/16" (7.9 mm)
B. Additional allowance for frame irregularities	1/32" (0.8 mm)
C. Edge to edge clearance (recommended)*	3/16" (4.8 mm)
D. Second allowance for frame irregularities	1/32" (0.8 mm)
E. Second hinge thickness	<u>5/16″ (7.9 mm)</u>
Total	7/8″ (22.2 mm)

Pairs of Doors (Beveled Edged)

A. Hinge thickness	5/16" (7.9 mm)
B. Allowance for beveled edge	1/32" (0.8 mm)
C. Additional allowance for frame irregularities	1/32" (0.8 mm)
D. Edge to edge clearance (recommended)*	3/16" (4.8 mm)
E. Second allowance for frame irregularities	1/32" (0.8 mm)
F. Second allowance for beveled edge	1/32" (0.8 mm)
G. Second hinge thickness	<u>5/16″ (7.9 mm)</u>
Total	15/16" (23.8 mm)

Concealed Model Exceptions - 780-113, 780-113HD Single Doors (Square Edged)

A. Hinge thickness	13/16" (20.6 mm)
B. Additional allowance for frame irregularities	1/32" (0.8 mm)
C. Lockside clearance for single door	<u>1/8" (3.2 mm)</u>
Total	31/32" (24.6 mm)

Single Doors (Beveled Edged)

A. Hinge thickness	13/16" (20.6 mm)
B. Additional allowance for frame irregularities	1/32" (0.8 mm)
C. Lockside clearance for single door	1/8" (3.2 mm)
D. Allowance for beveled edge	<u>1/32″ (0.8 mm)</u>
Total	1″ (25.4 mm)

Pairs of Doors (Square Edged)

A. Hinge thickness	13/16" (20.6 mm)
B. Additional allowance for frame irregularities	1/32" (0.8 mm)
C. Edge to edge clearance (recommended)*	3/16" (4.8 mm)
D. Second allowance for frame irregularities	1/32" (0.8 mm)
E. Second hinge thickness	<u>13/16" (0.6 mm)</u>
Total	1-7/8" (47.6 mm)
Pairs of Doors (Beveled Edged)	

13/16" (20.6 mm) A. Hinge thickness 1/32" (0.8 mm) B. Allowance for beveled edge C. Additional allowance for frame irregularities 1/32" (0.8 mm) D. Edge to edge clearance (recommended)* 3/16" (4.8 mm) E. Second allowance for frame irregularities 1/32" (0.8 mm) F. Second allowance for beveled edge 1/32" (0.8 mm) G. Second hinge thickness 13/16" (20.6 mm) Total 1-15/16" (49.2 mm)

*For fire rated doors, please refer to door manufacturer's requirement for edge to edge clearance to maintain compliance with NFPA requirements.

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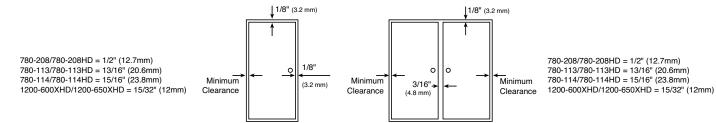
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Pair of Doors (Beveled Edged)



DOOR AND FRAME DIMENSIONING (CONTINUED) Concealed Model Exceptions - 780-114, 780-114HD Single Doors (Square Edged)

	A. Hinge thickness	15/32" (11.9 mm)
15/16" (23.8 mm)	B. Allowance for beveled edge	1/32" (0.8 mm)
1/32" (0.8 mm)	C. Additional allowance for frame irregularities	1/32" (0.8 mm)
<u>1/8" (3.2 mm)</u>	D. Edge to edge clearance (recommended)*	3/16" (4.8 mm)
1-3/32" (27.8 mm)	E. Second allowance for frame irregularities	1/32" (0.8 mm)
	F. Second allowance for beveled edge	1/32" (0.8 mm)
	G. Second hinge thickness	<u>15/32" (11.9 mm)</u>
15/16" (23.8 mm)	Total	1-1/4" (31.8 mm)
1/32" (0.8 mm)		
3/16" (4.8 mm)	780-208, 780-208HD	
1/32" (0.8 mm)	Single Doors (Square Edged)	
<u>15/16″ (23.8 mm)</u>	A. Hinge thickness	1/2" (2.7 mm)
2-1/8" (54.0 mm)	B. Additional allowance for frame irregularities	1/32" (0.8 mm)
	C. Lockside clearance for single door	<u>1/8" (3.2 mm)</u>
	Total	21/32" (16.7 mm)
15/32" (11.9 mm)	Single Doors (Beveled Edged)	
1/32" (0.8 mm)	A. Hinge thickness	1/2" (12.7 mm)
<u>1/8" (3.2 mm)</u>	B. Additional allowance for frame irregularities	1/32" (0.8 mm)
5/8" (15.9 mm)	C. Lockside clearance for single door	1/8" (3.2 mm)
	D. Allowance for beveled edge	<u>1/32" (0.8 mm)</u>
	Total	11/16" (17.5 mm)
15/32" (11.9 mm)		
1/32" (0.8 mm)	Pair of Doors (Square Edged)	
1/8" (3.2 mm)	A. Hinge thickness	1/2" (2.7 mm)
<u>1/32" (0.8 mm)</u>	B. Additional allowance for frame irregularities	1/32" (0.8 mm)
21/32" (16.7 mm)	C. Edge to edge clearance (recommended)*	3/16" (4.8 mm)
	D. Second allowance for frame irregularities	1/32" (0.8 mm)
	E. Second hinge thickness	<u>1/2" (12.7 mm)</u>
15/32" (11.9 mm)	Total	11/4" (31.8 mm)
1/32" (0.8 mm)		
3/16" (4.8 mm)	Pair of Doors (Beveled Edged)	
1/32" (0.8 mm)	A. Hinge thickness	1/2" (12.7 mm)
<u>15/32" (11.9 mm)</u>	B. Allowance for beveled edge	1/32" (0.8 mm)
1-3/16" (30.2 mm)	C. Additional allowance for frame irregularities	1/32" (0.8 mm)
	D. Edge to edge clearance (recommended)*	3/16" (4.8 mm)
	E. Second allowance for frame irregularities	1/32" (0.8 mm)
	F. Second allowance for beveled edge	1/32" (0.8 mm)
	G. Second hinge thickness	<u>1/2" (2.7 mm)</u>
	d. Second hinge thickness	$\frac{1}{2}$ $(2.7 11111)$
	1/32" (0.8 mm) 1/8" (3.2 mm) 1-3/32" (27.8 mm) 1/32" (0.8 mm) 3/16" (4.8 mm) 1/32" (0.8 mm) 1/32" (0.8 mm) 15/16" (23.8 mm) 2-1/8" (54.0 mm) 1/32" (0.8 mm) 1/8" (3.2 mm) 1/32" (0.8 mm) 1/32" (0.8 mm) 1/32" (0.8 mm) 1/32" (11.9 mm) 1/32" (11.9 mm) 1/32" (0.8 mm) 1/32" (0.8 mm) 3/16" (4.8 mm) 1/32" (0.8 mm) 1/32" (0.8 mm) 3/16" (4.8 mm) 1/32" (0.8 mm) 1/32" (0.8 mm) 3/16" (4.8 mm) 1/32" (0.8 mm) 1/32" (15/16" (23.8 mm)B. Allowance for beveled edge1/32" (0.8 mm)C. Additional allowance for frame irregularities1/8" (3.2 mm)D. Edge to edge clearance (recommended)*1-3/32" (27.8 mm)E. Second allowance for beveled edge G. Second hinge thickness15/16" (23.8 mm)Total1/32" (0.8 mm)Total3/16" (4.8 mm)780-208, 780-208HD15/16" (23.8 mm)Single Doors (Square Edged)1/32" (0.8 mm)A. Hinge thickness2-1/8" (54.0 mm)B. Additional allowance for frame irregularities C. Lockside clearance for single door Total15/32" (11.9 mm)Single Doors (Beveled Edged)1/32" (0.8 mm)A. Hinge thickness1/8" (3.2 mm)B. Additional allowance for frame irregularities C. Lockside clearance for single door D. Allowance for beveled edge Total15/32" (11.9 mm)Pair of Doors (Square Edged) A. Hinge thickness1/32" (0.8 mm)A. Hinge thickness1/32" (0.8 mm)B. Additional allowance for frame irregularities C. Edge to edge clearance (recommended)* D. Second allowance for frame irregularities E. Second hinge thickness15/32" (11.9 mm)Total1/32" (0.8 mm)A. Hinge thickness15/32" (11.9 mm)Total1/32" (0.8 mm)A. Hinge thickness1/32" (0.8 mm)A. Hinge thickness1/32" (0.8 mm)B. Additional allowance for frame irregularities E. Second hinge thickness15/32" (11.9 mm)Total1/32" (0.8 mm)A. Hinge thickness15/32" (11.9 mm)A. Hinge thickness1/32" (0.8 mm)B



*For fire rated doors, please refer to door manufacturer's requirement for edge to edge clearance to maintain compliance with NFPA requirements.





ELECTRIC HINGE MODIFICATIONS

Exposed Electric Contacts

- Transfers power to door in closed position
- Must have at least two contacts to transfer power
- Specify handing and the dimension from the top edge of the door to the centerline of the electric contact location
- Templates regarding location of contacts available upon request
- To order, use symbol "E" plus the number of contacts required as a suffix
- Example: 780-112HD 85" Clear E4

Exposed Electric Switches

- Miniature push button switch is incorporated in the hinge frame leaf to monitor position of the door
- Three 12" wire leads
- Each monitoring hinge only needs one E1S switch
- Specify handing and the dimension from the top edge of the door to the centerline of the electric switch location
- Templates regarding location of contact switch available upon request
- To order, use symbol "E1S" as a suffix
- Example: 780-112HD 85" Clear E1S

Concealed Electric Through-Wire

- Transfers power discreetly from building to door hardware
- Four, six, eight or ten wire continuous electric conductors
- Specify handing and the dimension from the top edge of the door to the centerline of electric through-wire location
- Templates regarding location of through-wires available upon request
- To order, use symbol "ETW" plus the number of wire leads, 12" per side required as a suffix
- Example: 780-112HD 85" Clear ETW 4

Removable Electric Through-Wire

- Transfers power discreetly from building to door hardware
- 4" removable 10 wire ETW module can easily be removed for adjustment or service
- Available on heavy duty models only
- Specify handing and the dimension from the top edge of the door to the centerline of electric monitoring location
- To order 4" removable module only, use component number 7-102-1860 Clear and 7-112-1870 Dark Bronze
- Templates regarding location of module available upon request
- To order, use symbol "RETW"
- Example: 780-112HD 85" Clear RETW

Concealed Electric Monitoring

- Miniature switch is incorporated into the frame leaf
- Three 12" wire leads
- Specify handing and the dimension from the top edge of the door to the centerline of electric monitoring location
- Templates regarding location of monitoring switch available upon request
- To order, use symbol "EMN", as a suffix
- Example: 780-224HD 119" Bronze EMN

Concealed Electric Through-Wire and Monitoring:

- This combines the continuous electric conductors and the miniature switch to provide both power transfer and monitoring
- Four, six, eight or ten continuous electric conductors
- Miniature switch is incorporated into the frame leaf
- Specify handing and the dimension from the top edge of the door to the centerline of each electric modification location
- Templates regarding location of monitoring switch, available upon request
- To order, use symbol "ETM" plus the number of wires required as a suffix
- Example: 780-224LL 85" Bronze ETM 4

Von Duprin EPT 2 or EPT 10 Electric Power Transfer Preparation

- Hinge leaf cutout to accommodate power transfer device
- Specify handing and the dimension from the top edge of the door to the centerline of the power transfer location

Special Electric Modifications and EPT locations may require additional charges if screw holes have to be moved. Contact Hager Companies Customer Service for charges. Please feel free to contact the Hager Companies technical team for further information pertaining to electric modifications.

Mortar Box - 430

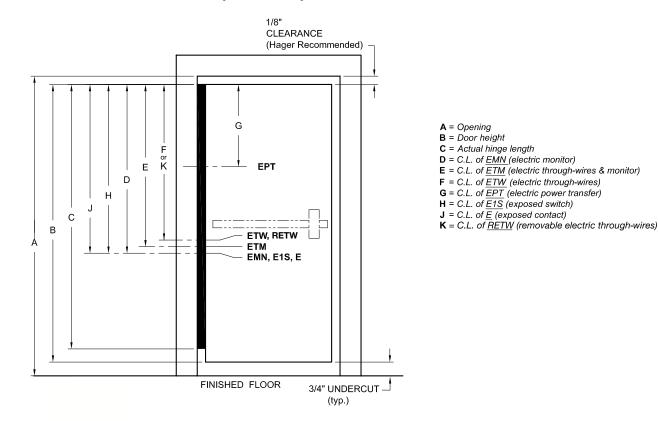


- Serves as a mortar shield
- Overall dimensions: 9" (229 mm) length with tabs, 7" (178 mm) inside, 1-3/4" x 1-3/4" (45 mm x 45 mm) inside dimension
- Galvanized steel 0.040" (1 mm)
- Top and bottom knockouts for standard conduit fittings



GENERAL INFORMATION





ELECTRICAL MODIFICATIONS (CONTINUED)

For ease of ordering, Hager Companies has established standard locations for power transfer cutouts. All standard location dimensions are referenced from the top edge of the door to the centerline of the power transfer cutout. Please specify handing.

	А	В	С	D	E	F	G	Н	J	К
79 SD	80″	79-1/8″	78-11/16″	42-12″	41-1/4″	40″	24-1/2″	42-1/2″	42-1/2″	-
79 HD	80″	79-1/8″	78-11/16″	42-1/2″	40-5/8″	38-3/4″	24-1/2″	42-1/2″	42-1/2″	41-7/8″
83 SD	84″	83-18″	83″	46-1/2″	44-5/8″	42-3/4″	28-7/16″	46-1/2″	46-1/2″	_
83 HD	84″	83-1/8″	83″	46-1/2″	45-1/4″	44″	28-7/16″	46-1/2″	46-1/2″	44-1/16″
85 SD	86″	85-1/8″	85″	48-1/2″	47-1/4″	46″	30-7/16″	48-1/2″	48-1/2″	_
85 HD	86″	85-1/8″	85″	48-1/2″	46-5/8″	44-3/4″	30-7/16″	48-1/2″	48-1/2″	45-1/16″
95 SD	96″	95-1/8″	95-1/16″	59-3/4″	57-7/8″	56″	40-1/2″	59-3/4″	59-3/4″	_
95 HD	96″	95-1/8″	95-1/16″	59-3/4″	57-7/8″	56″	40-1/2″	59-3/4″	59-3/4″	56-1/2″
119 SD	120″	119-1/8″	119″	83-3/4″	81-7/8″	80″	64-3/8″	83-3/4″	83-3/4″	_
119 HD	120″	119-1/8″	119″	83-3/4″	81-7/8″	80″	64-3/8″	83-3/4″	83-3/4″	80″

NOTE: Full surface hinges are not available with preps.

SD = Standard Duty







ELECTRICAL MODIFICATIONS (CONTINUED)

	Von Duprin EPT 2 or EPT 10 Power Transfer Preparation	Exposed Electric Contacts	Exposed Electric Switches	Concealed Electric Through-Wire	Concealed Electric Monitoring	Concealed Electric Through-Wire and Monitoring	Removable Electric Through-Wire
Part Number	EPT	Е	E1S	ETW	EMN	ETM	RETW
750-134							
750-138							
780-041							
780-041HD							
780-041LL							
780-045	•						
780-045HD	•						
780-046	•						
780-046HD	•						
780-053	•						
780-053HD	•						
780-054	•						
780-054HD	•						
780-110			•	•			
780-110HD	•		•	•			
780-111	•	•	•	•	•	•	
780-111HD	•	•	•	•	•	•	•
780-111LL	•	•	•	•	•	•	
780-112	•	•	•	•	•	•	
780-112HD	•	•	•	•	•	•	•
780-112LL	•	•	•	•	•	•	
780-155							
780-155HD							
780-211HD							
780-224	•	•	•	•	•	•	
780-224HD	•	•	•	•	•	•	•
780-224LL	•	•	•	•	•	•	
780-226	•	•	•	•	•	•	
780-226HD	•	•	•	•	•	•	•
780-226LL	•	•	•	•	•	•	
780-235HD		•	•	•	•		
1200-600	•			•			
1200-650	•			•			





500-048

Light Duty, Conceal Leaf Hinge Universal hinge used for a wide variety of applications including marine applications, wood cabinet construction, medical equipment, portable exhibits and displays, electronic cabinets, switchboxes, etc.

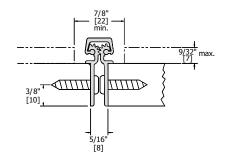
Material: Clearance:

Fasteners:

Length Options:

Special Features:

- Aluminum 6063-T6 -1/16" (1.5 mm) leaf thickness 5/16" (8 mm) #8-18 x 3/4" truss head Phillips tapping AB zinc plated steel. Painted to match. For sheet metal or wood applications. • Standard sizes include
- 24" (610 mm) 36" (914 mm) 48" (1219 mm) 72" (1829 mm)
- Custom lengths available
- Bearings spaced to distribute door weight evenly up to 50 lbs
- Can be used for vertical or horizontal applications
- Alignment ribs for easy installation and proper hinge location
- Optional nylon end plugs provide a seal for marine applications





500-200 Light Duty, Half Surface Hinge (Left hand shown)

Universal hinge used for a wide variety of applications including marine applications, wood cabinet construction, medical equipment, portable exhibits and displays, electronic cabinets, switchboxes, etc.

Material:

Clearance: Fasteners:

Length Options:

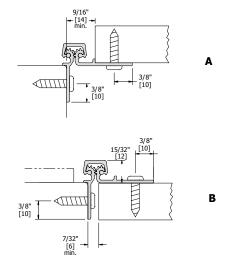
Special Features:

Aluminum 6063-T6 - 1/16" (1.5 mm) leaf
thickness
7/32" (5.6 mm) minimum
#8-18 x 3/4" truss head
Phillips tapping AB zinc
plated steel. Painted to
match. For sheet metal
or wood applications.
Shorter screws required
for openings past 90°
when applied as shown in
"A" (not provided).

- Standard sizes include 24" (610 mm) 36" (914 mm) 48" (1219 mm) 72" (1829 mm)
- Custom lengths available
- Bearings spaced to distribute door weight evenly up to 50 lbs
- Can be used for vertical or horizontal applications

500 SERIES - LIGHT DUTY

- Alignment ribs for easy installation and proper hinge location
- Optional nylon end plugs provide a seal for marine applications









500-220

Light Duty, Full Surface Hinge Universal hinge used for a wide variety of applications including marine applications, wood cabinet construction, medical equipment, portable exhibits and displays, electronic cabinets, switchboxes, etc.

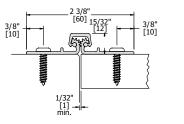
Material:
Clearance: Fasteners:

Length Options:

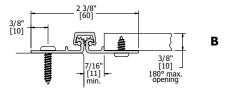
Special Features:

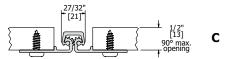
Aluminum 6063-T6 -1/16" (1.5 mm) nominal leaf thickness 1/32" (1 mm) minimum #8-18 x 3/4" truss head Phillips tapping AB zinc plated steel. Painted to match. For sheet metal or wood applications. Shorter screws required for 90° and 180° openings when applied as shown in "B" (not provided). Shorter screws required for openings past 90° when applied as shown in "C" (not provided). Standard sizes include

- 24" (610 mm) 36" (914 mm) 48" (1219 mm) 72" (1829 mm)
- Custom lengths available
- Allows either inset or outset applications for recessed or surface mounting
- Bearings spaced to distribute door weight evenly up to 50 lbs
- Can be used for vertical or horizontal applications
 Alignment ribs for easy
- Alignment ribs for easy installation and proper hinge location
- Optional nylon end plugs provide a seal for marine applications



A













750-134

Standard Duty, Concealed Leaf Hinge For medium frequency, 1-3/4" (44 mm) thick solid core wood interior doors up to 100 pounds.

Material: Clearance:

Fasteners:

Length Options:

Aluminum 6063-T6 5/16" (8 mm) hinge side plus standard lockside clearance Dril-Kwik[®] and wood screws Standard sizes include 79" (2007 mm) 83" (2108 mm) 85" (2159 mm) 95" (2413 mm) 119" (3023 mm) Custom lengths available

Door/Frame Reinforcement: Special Features:

- None required
- Door edge protection lip
- Offset joint to clear casing
- Frame leaf alignment rib for proper hinge location



750-138

Standard Duty, Concealed Leaf Hinge

For medium frequency, 1-3/8" (35 mm) thick solid core wood interior doors up to 100 pounds.

Material: Clearance:

Fasteners:

Door/Frame

Reinforcement:

Special Features:

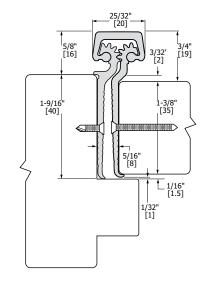
Length Options:

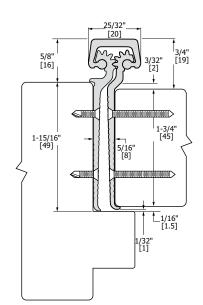
5/16" (8 mm) hinge side plus standard lockside clearance Dril-Kwik[®] and wood screws

Aluminum 6063-T6

- Standard sizes include 79" (2007 mm) 83" (2108 mm) 85" (2159 mm) 95" (2413 mm) 119" (3023 mm)
- Custom lengths available

- None required
- Door edge protection lip • Offset joint to clear
- casing • Frame leaf alignment rib for proper hinge location









780-041 | 780-041HD | 780-041LL Standard Duty, Heavy Duty, or Lead

Lined Concealed Leaf Hinge (Left Hand Shown) Standard duty for medium frequency doors. Heavy duty for high frequency doors. For wood or metal doors 1-3/4" (44 mm) thick.



Fasteners: LL Fasteners:

Door/Frame

Optional

Fire Rating:

Special Features:

Reinforcement:

Material:

Clearance:

Length Options:

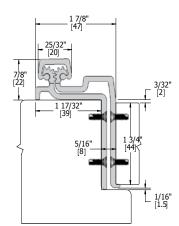
Aluminum 6063-T6 5/16" (8 mm) hinge side plus standard lockside clearance Dril-Kwik[®] screws 1/2 Dril-Kwik[®] screws, 1/2 wood screws • Standard sizes include 79" (2007 mm) 83" (2108 mm) 85" (2159 mm) 95" (2413 mm) 119" (3023 mm) • Custom lengths available

None required to 200 lbs, heavier weight use 16 gauge channel

Up to 3 hr. metal and 90 min. wood composite (with studs)

- Lead lined model for hospital x-ray room doors with double row of screws to straddle lead (specify "LL")
- Door edge protection lip
- Swing-clear action and ADA compliant for classroom or patient room doors
 Not recommended for
- doors with a beveled edge on the hinge side See additional fire rating details on page 3





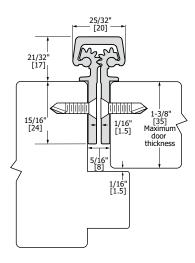


780-110 | 780-110HD

Standard Duty or Heavy Duty Concealed Leaf Hinge

Standard duty for medium frequency doors. Heavy duty for high frequency doors or heavy, medium frequency doors. For doors 1" (25 mm) to 1-3/8" (35 mm) thick.

,	
Material: Clearance:	Aluminum 6063-T6 5/16" (8 mm) hinge side plus standard lockside clearance
Fasteners: Length Options:	Dril-Kwik [®] screws • Standard sizes include 79" (2007 mm) 83" (2108 mm) 85" (2159 mm) 95" (2413 mm) 119" (3023 mm) • Custom lengths available
Door/Frame	
Reinforcement:	None required to 200 lbs, heavier weight use 16 gauge channel
Optional	5 5
Fire Rating:	Up to 3 hr. metal and 90 min. wood composite (with studs)
Special Features:	Frame and door leaf alignment ribs for proper hinge and door location
Notes:	See additional fire rating details on page 3





780 SERIES - CONCEALED LEAF





780-111* | 780-111HD* | 780-111LL Standard Duty, Heavy Duty, or Lead

Lined Concealed Leaf Hinge Standard duty for medium frequency doors. Heavy duty for high frequency doors or heavy, medium frequency doors.



Aluminum 6063-T6 5/16" (8 mm) hinge side plus standard lockside clearance Dril-Kwik[®] screws 1/2 Dril-Kwik^(R) screws, 1/2 wood screws Length Options: Standard sizes include 79" (2007 mm) 83" (2108 mm) 85" (2159 mm) 95" (2413 mm) 119" (3023 mm)

available

Door/Frame Reinforcement:

Optional Fire Rating:

Material:

Clearance:

Fasteners:

LL Fasteners:

Special Features:

 Custom lengths None required to 200 lbs,

heavier weight use 16 gauge channel

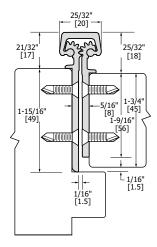
Up to 3 hr. metal and 90 min. wood composite (with studs)

- · Lead lined model for hospital x-ray room doors with double row of screws to straddle lead (Specify "LL″)
- Frame and door leaf alignment ribs for proper hinge and door location • 1/8" (3 mm) inset

See additional fire rating

details on page 3

Notes:







Fasteners: LL Fasteners:

Material:

Clearance:

Length Options:

780-112LL

5/16" (8 mm) hinge side plus standard lockside clearance Dril-Kwik[®] screws 1/2 Dril-Kwik[®] screws, 1/2 wood screws • Standard sizes include 79" (2007 mm) 83" (2108 mm) 85" (2159 mm) 95" (2413 mm) 119" (3023 mm) Custom lengths

available

"LL″)

Aluminum 6063-T6

Door/Frame Reinforcement: None required to 200 lbs,

780-112* | 780-112HD*

Lined Concealed Leaf Hinge

medium frequency doors.

Standard Duty, Heavy Duty, or Lead

Standard duty for medium frequency doors.

Heavy duty for high frequency doors or heavy,

Optional Fire Rating:

Special Features:

heavier weight use 16 gauge channel Up to 3 hr. metal and 90 min. wood composite (with studs) · Lead lined model for hospital x-ray room doors with double row of screws to

straddle lead (Specify

proper hinge and door

location hinge location

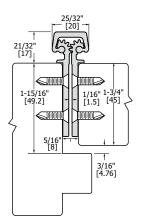
See additional fire rating

• Frame and door leaf

alignment ribs for

details on page 3

Notes:









780-113 | 780-113HD Standard Duty or Heavy Duty Concealed Leaf Hinge

(Left Hand Shown) Standard duty for medium frequency doors. Heavy duty for high frequency doors or heavy, medium frequency doors.

Material: Clearance:

Fasteners: Length Options: Aluminum 6063-T6 13/16" (21 mm) hinge side plus standard lockside clearance Dril-Kwik^{(®} screws • Standard sizes include 79" (2007 mm) 83" (2108 mm) 85" (2159 mm) 95" (2413 mm) 119" (3023 mm) • Custom lengths available

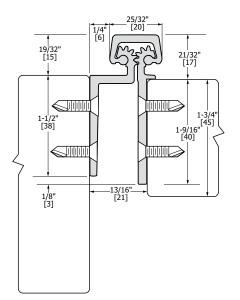
Door/Frame Reinforcement:

Special Features:

heavier weight use 16
gauge channel
"Safety Hinge" for early education centers, nursing homes, etc. (when used without

None required to 200 lbs,

- frame stop)Door leaf alignment rib for proper door location
- 1/16" (1.5 mm) inset





780-114 | 780-114HD

Standard Duty or Heavy Duty Concealed Leaf Hinge (Left Hand Shown)

Standard duty for medium frequency doors. Heavy duty for high frequency doors or heavy, medium frequency doors.

Material: Clearance:	
Fasteners: Length Options:	

Aluminum 6063-T6 15/16" (24 mm) hinge side plus standard lockside clearance Dril-Kwik[®] screws • Standard sizes include 79" (2007 mm) 83" (2108 mm) 85" (2159 mm) 95" (2413 mm) 119" (3023 mm)

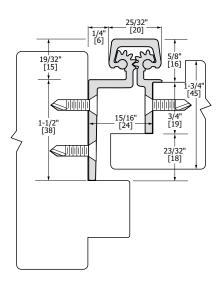
Custom lengths available

Door/Frame Reinforcement:

Special Features:

None required to 200 lbs, heavier weight use 16 gauge channel

- For deep inset or flushwith-frame (when using rabbeted frames) applications, center hung doors, heavy cabinets
- For square edged doors on hinge side









780-208 | 780-208HD Standard Duty or Heavy Duty Concealed

Leaf Hinge Standard duty for medium frequency doors. Heavy duty for high frequency doors or heavy, medium frequency doors.

Material: Clearance:

Fasteners: Length Options: Aluminum 6063-T6 1/2'' (13 mm) hinge side plus standard lockside clearance Dril-Kwik[®] screws Standard sizes include 79" (2007 mm) 83" (2108 mm) 85" (2159 mm) 95" (2413 mm) 119" (3023 mm) Custom lengths available None required to 200 lbs,

Door/Frame Reinforcement:

Special Features:

- heavier weight use 16 gauge channel For millwork, toilet stall doors, windows, and rabbeted bi-fold doors
- Frame and door leaf alignment ribs for proper hinge and door location







Fasteners: LL Fasteners:

Door/Frame

Optional

Notes:

Fire Rating:

Special Features:

Reinforcement:

Material:

Clearance:

780-224LL

(44 mm) thick.

(Left Hand Shown)

Length Options:

780-224* | 780-224HD*

Lined Concealed Leaf Hinge

Standard Duty, Heavy Duty, or Lead

Standard duty for medium frequency doors. Heavy duty for high frequency doors or heavy,

medium frequency doors. All for doors 1-3/4"

5/16" (8 mm) hinge side plus standard lockside clearance Dril-Kwik[®] screws 1/2 Dril-Kwik[®] screws, 1/2 wood screws

Aluminum 6063-T6

 Standard sizes include 79" (2007 mm) 83" (2108 mm) 85" (2159 mm) 95" (2413 mm)

119" (3023 mm)

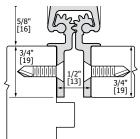
 Custom lengths available

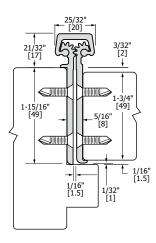
None required to 200 lbs, heavier weight use 16 gauge channel

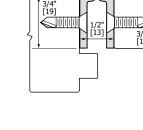
Up to 3 hr. metal and 90 min. wood composite (with studs)

- Lead lined model for hospital x-ray room doors with double row of screws to straddle lead (Specify "LL″)
- Door edge protection lip
- Frame leaf alignment rib for proper hinge and door location

• 3/32" (2 mm) inset See additional fire rating details on page 3









Aluminum 6063-T6 5/16" (8 mm) hinge side

plus standard lockside

clearance Dril-Kwik[®] screws 1/2 Dril-Kwik[®] screws,

1/2 wood screws • Standard sizes include

79" (2007 mm) 83" (2108 mm) 85" (2159 mm) 95" (2413 mm)

119" (3023 mm) Custom lengths available



780-226* | 780-226HD* | 780-226LL Standard Duty, Heavy Duty, or Lead

Lined Concealed Leaf Hinge Standard duty for medium frequency doors. Heavy duty for high frequency doors or heavy, medium frequency doors. All for doors

2" (51 mm) thick or greater.



Fasteners: LL Fasteners:

Material:

Clearance:

Length Options:

Door/Frame	
Reinforcemer	nt

Optional Fire Rating:

Notes:

Special Features:

orcement:	None required to 200 lbs, heavier weight use 16 gauge channel
nal	gauge channel

Up to 3 hr. metal and 90

- min. wood composite (with studs) • Lead lined model for hospital x-ray room doors with double row of screws to straddle lead (Specify "LL″)
- · Frame and door leaf alignment ribs for proper hinge and door location See additional fire rating details on page 3



780-235HD

Heavy Duty Concealed Leaf Hinge

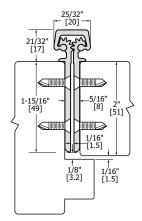
Heavy duty for high frequency doors or heavy, medium frequency doors.

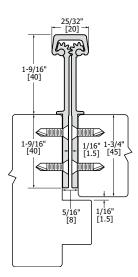
Material: Clearance:	Aluminum 6063-T6 5/16" (8 mm) hinge side plus allow an additional 1/32" to the standard lockside clearance
Fasteners: Length Options:	Dril-Kwik [®] screws • Standard sizes include 79" (2007 mm) 83" (2108 mm) 85" (2159 mm) 95" (2413 mm) 119" (3023 mm) • Custom lengths available
Door/Frame Reinforcement:	None required to 200 lbs,
Ontingal	heavier weight use 16 gauge channel
Optional	Up to 2 by motol and 00
Fire Rating:	Up to 3 hr. metal and 90 min. wood composite
Special Features:	 (with studs) Wide Throw for applications that require extra clearance for door or frame Frame and door leaf alignment ribs for proper hinge and door location

Notes:

• For square edged doors on hinge side See additional fire rating

details on page 3









780-057 | 780-057HD Standard Duty or Heavy Duty Full Surface Hinge

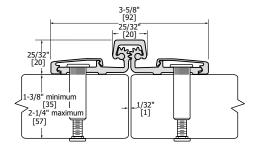
Standard duty for medium frequency doors. Heavy duty for high frequency doors or heavy, medium frequency doors.

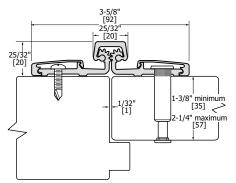
Material: Clearance:	Aluminum 6063-T6 1/32" (1 mm) minimum recommended between doors
Fasteners:	Dril-Kwik [®] screws and sex bolts
Length Options:	 Standard sizes include 79" (2007 mm) 83" (2108 mm) 85" (2159 mm) 95" (2413 mm) 119" (3023 mm) Custom lengths available
Door	
Reinforcement: Optional	None required
Fire Rating:	Up to 3 hr. metal and 90 min. wood composite (with studs)
Special Features:	 Bi-fold applications

red metal and od composite fold applications Security moldings See additional fire rating

details on page 3

Notes:







780-157 | 780-157HD Standard Duty or Heavy Duty Full

Surface Hinge (Left Hand Shown) Standard duty for medium frequency doors. Heavy duty for high frequency doors or heavy, medium frequency doors.

Material: Clearance:

Fasteners:

Door

Frame

Optional

Fire Rating:

Special Features:

Length Options:

Reinforcement:

Reinforcement:

recommended for hinge side plus standard lockside clearance Dril-Kwik[®] screws and sex bolts Standard sizes include 79" (2007 mm) 83" (2108 mm) 85" (2159 mm) 95" (2413 mm) 119" (3023 mm)

Aluminum 6063-T6

1/32" (1 mm) minimum

 Custom lengths available

None required

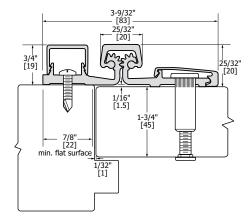
None required to 200 lbs, heavier weight use 16 gauge channel

Up to 3 hr. metal and 90 min. wood composite (with studs)

- For surface applications where frame face dimension is limited
- Security moldings

• 1/16" (1.5 mm) inset See additional fire rating details on page 3

Notes:







780-210 | 780-210HD Standard Duty or Heavy Duty Full

Surface Hinge (Left Hand Shown) Standard duty for medium frequency doors. Heavy duty for high frequency doors or heavy, medium frequency doors.

Material: Clearance:	Aluminum 6063-T6 1/32" (1 mm) minimum recommended for hinge side plus standard lockside clearance. 1-5/8" (41 mm) minimum frame face required plus 3/16" (5 mm) rotational clearance
Fasteners:	Dril-Kwik [®] screws and sex bolts
Length Options:	 Standard sizes include 79" (2007 mm) 83" (2108 mm) 85" (2159 mm) 95" (2413 mm) 119" (3023 mm) Custom lengths available
Door	available
Reinforcement: Frame	None required
Reinforcement:	None required to 200 lbs, heavier weight use 16 gauge channel
Optional Fire Rating:	Up to 3 hr. metal and 90 min. wood composite (with studs)
Special Features:	 Can be used with any door and frame material Security molding 1/32" (1 mm) inset
Notes:	See additional fire rating details on page 3



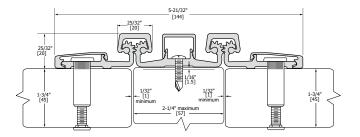
780-257HD

Heavy Duty Full Surface Hinge Heavy duty for high frequency doors or heavy, medium frequency doors.

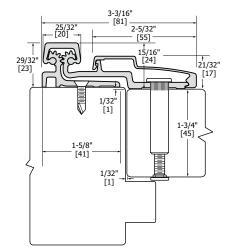
Material: Clearance:	Aluminum 6063-T6 1/32" (1 mm) minimum recommended between mullion and door plus standard lockside clearance. 7/8" (22 mm) to 21/4" (57 mm) mullion width.
Fasteners:	Dril-Kwik [®] screws and sex bolts
Length Options: Door	 Standard sizes include 79" (2007 mm) 83" (2108 mm) 85" (2159 mm) 95" (2413 mm) 119" (3023 mm) Custom lengths available
Reinforcement: Frame	None required
Reinforcement:	None required to 200 lbs, heavier weight use 16 gauge channel
Optional	3
Fire Rating:	Up to 3 hr. metal and 90 min. wood composite (with studs)
Special Features:	Double hinge for hanging two entrance

- doors from a fixed mullion
- Security moldings

• 1/16" (1.5 mm) inset See additional fire rating details on page 3



Notes:



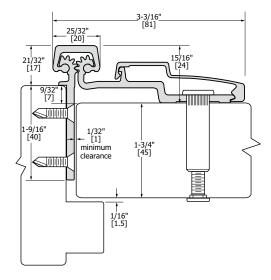




780-045 | 780-045HD Standard Duty or Heavy Duty Half Surface Hinge (Left Hand Shown)

Standard duty for medium frequency doors. Heavy duty for high frequency doors or heavy, medium frequency doors.

Material: Clearance:	Aluminum 6063-T6 5/32" (4 mm) minimum recommended hinge side plus standard lockside clearance
Fasteners:	Dril-Kwik [®] screws and sex bolts
Length Options:	 Standard sizes include 79" (2007 mm) 83" (2108 mm) 85" (2159 mm) 95" (2413 mm) 119" (3023 mm) Custom lengths available
Door	
Reinforcement: Frame	None required
Reinforcement:	None required to 200 lbs, heavier weight use 16 gauge channel
Optional Fire Rating:	Up to 3 hr. metal and 90 min. wood composite
Special Features:	(with studs)Frame leaf alignment rib for proper hinge locationSecurity molding
Notes:	• 9/32" (7 mm) inset See additional fire rating details on page 3





780-046 | 780-046HD Standard Duty or Heavy Duty Half

Surface Hinge (Left Hand Shown) Standard duty for medium frequency doors. Heavy duty for high frequency doors or heavy, medium frequency doors.

Material: Clearance:

Fasteners:

Door

Frame

Optional

Notes:

Fire Rating:

Special Features:

Length Options:

Reinforcement:

Reinforcement:

recommended hinge side plus standard lockside clearance Dril-Kwik[®] screws and sex bolts Standard sizes include 79" (2007 mm) 83" (2108 mm) 85" (2159 mm) 95" (2413 mm) 119" (3023 mm)

Aluminum 6063-T6

5/32" (4 mm) minimum

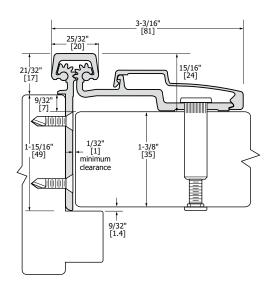
 Custom lengths available

None required

None required to 200 lbs, heavier weight use 16 gauge channel

Up to 3 hr. metal and 90 min. wood composite (with studs)

- Complete frame rabbet coverage for 1-3/4" (45 mm) frames, with 1-3/8" (35 mm) doors
- Frame leaf alignment rib for proper hinge location
- Security molding • 9/32" (7 mm) inset See additional fire rating details on page 3

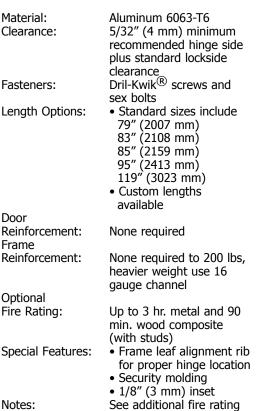






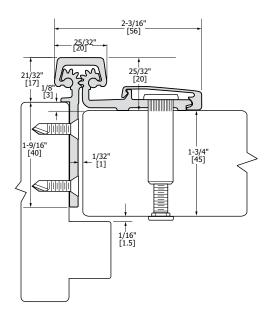
780-053 | 780-053HD Standard Duty or Heavy Duty Half

Surface Hinge (Left Hand Shown) Standard duty for medium frequency doors. Heavy duty for high frequency doors or heavy, medium frequency doors.



details on page 3

Notes:





780-054 | 780-054HD

Standard Duty or Heavy Duty Half Surface Hinge (Left Hand Shown)

Standard duty for medium frequency doors. Heavy duty for high frequency doors or heavy, medium frequency doors.

Material: Clearance:

Fasteners:

Door

Frame

Optional

Notes:

Fire Rating:

Special Features:

Length Options:

Reinforcement:

Reinforcement:

recommended hinge side plus standard lockside clearance Dril-Kwik[®] screws and sex bolts • Standard sizes include 79" (2007 mm) 83" (2108 mm) 85" (2159 mm) 95" (2413 mm) 119" (3023 mm) Custom lengths available None required

Aluminum 6063-T6

5/32" (4 mm) minimum

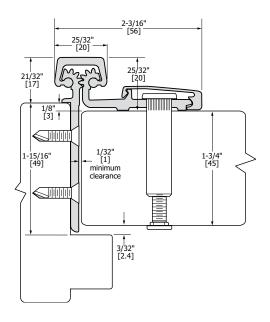
None required to 200 lbs, heavier weight use 16 gauge channel

Up to 3 hr. metal and 90 min. wood composite (with studs)

• Frame leaf alignment rib for proper hinge location Security molding

• 1/8" (3 mm) inset

See additional fire rating details on page 3







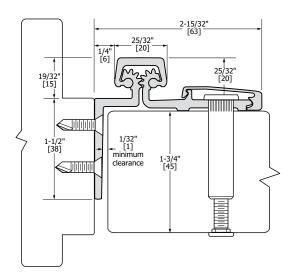


780-155 | 780-155HD Standard Duty or Heavy Duty Half Surface Hinge (Left Hand Shown)

Standard duty for medium frequency doors. Heavy duty for high frequency doors or heavy, medium frequency doors.

Material: Clearance:	Aluminum 6063-T6 5/32" (4 mm) minimum recommended hinge side plus standard lockside clearance
Fasteners:	Dril-Kwik [®] screws and
Length Options:	sex bolts • Standard sizes include 79" (2007 mm) 83" (2108 mm) 85" (2159 mm) 95" (2413 mm) 119" (3023 mm) • Custom lengths available
Door	
Reinforcement: Frame	None required
Reinforcement:	None required to 200 lbs, heavier weight use 16 gauge channel
Special Features:	• For center hung and double egress conversions

Security molding





780-211HD Heavy Duty Half Surface Hinge (Left Hand Shown)

Heavy duty for high frequency doors or heavy, medium frequency doors.

Material: Clearance:

Fasteners:

Door

Frame

Length Options:

Reinforcement:

Reinforcement:

Special Features:

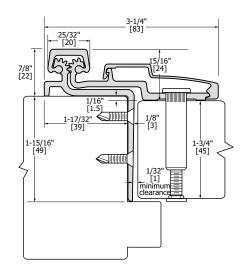
Fire Rating:

5/32" (4 mm) minimum recommended hinge side plus standard lockside clearance Dril-Kwik[®] screws and sex bolts
Standard sizes include 79" (2007 mm) 83" (2108 mm) 85" (2159 mm) 95" (2413 mm) 119" (3023 mm)
Custom lengths available

Aluminum 6063-T6

None required None required to 200 lbs, heavier weight use 16 gauge channel Up to 3 hr. metal and 90 min. wood composite

- (with studs)Frame leaf wrap-around reinforcement for damaged frames
- Security molding
- 1/16" (1.5 mm) inset



780 SERIES - HALF SURFACE



780-213 | 780-213HD Standard Duty or Heavy Duty Half Surface Hinge

(Left Hand Shown) Standard duty for medium frequency doors. Heavy duty for high frequency doors or heavy, medium frequency doors.

Clearance:

Material:

Fasteners: Length Options:

Aluminum 6063-T6 5/32" (4 mm) minimum recommended hinge side plus standard lockside clearance Dril-Kwik[®] screws and sex bolts Standard sizes include 79" (2007 mm) 83" (2108 mm) 85" (2159 mm) 95" (2413 mm) 119" (3023 mm) Custom lengths

Door **Reinforcement:** Frame Reinforcement:

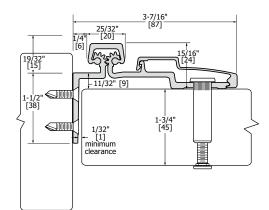
Special Features:

available

None required

None required to 200 lbs, heavier weight use 16 gauge channel • For center hung door where large edge radii

or finger guards require a long reach Security molding





780-259 | 780-259HD

Standard Duty or Heavy Duty Half Surface Hinge (Left Hand Shown) Standard duty for medium frequency doors. Heavy duty for high frequency doors or heavy, medium frequency doors.

Material: Clearance:

Fasteners:

Door

Frame

Length Options:

Reinforcement:

Reinforcement:

Special Features:

recommended hinge side plus standard lockside clearance Dril-Kwik[®] screws and sex bolts • Standard sizes include 79" (2007 mm) 83" (2108 mm) 85" (2159 mm) 95" (2413 mm) 119" (3023 mm) Custom lengths available

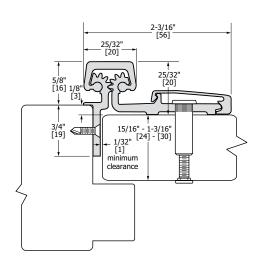
Aluminum 6063-T6

5/32" (4 mm) minimum

None required

None required to 200 lbs, heavier weight use 16 gauge channel

- Frame leaf alignment rib for proper hinge location
- For custom applications with thinner doors Security molding
- 1/8" (3 mm) inset









780-300HD

Heavy Duty Half Surface Hinge

(Left Hand Shown) Heavy duty for high frequency, center hung doors or heavy, medium frequency, center hung doors.

Material: Clearance:

Fasteners: Length Options: Aluminum 6063-T6 1/32" (1 mm) minimum recommended between door and frame Dril-Kwik[®] screws • Standard sizes include 79" (2007 mm) 83" (2108 mm) 85" (2159 mm) 95" (2413 mm) 119" (3023 mm) • Custom lengths available

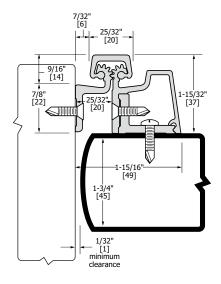
Reinforcement:

Door

None required to 200 lbs, heavier weight use 16 gauge channel

Special Features:

- For center hung door application
 3/4" (10 mm) minimu
- 3/4" (19 mm) minimum inset







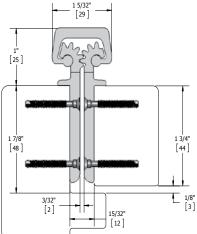


1200-600XHD

Extra Heavy Duty Concealed Leaf Hinge Strong enough to swing doors heavier than 600 lbs, wider than four feet, and taller than ten feet. Extra heavy duty for heavy, high frequency doors or extremely heavy, low frequency doors. For doors 1-3/4" (45 mm) to 2-3/8" (60 mm) thick.

Material: Clearance:	Aluminum 6063-T6 15/32" (12 mm) hinge side plus standard lockside clearance
Fasteners:	1/4"-20 Dril-Kwik [®] screws or optional 1/4-14
Length Options:	x 11/2" wood screws • Standard sizes include 83" (2108 mm) 95" (2413 mm) 119" (3023 mm) • Custom lengths available
Door	
Reinforcement:	None required to 200 lbs, use 16 gauge channel at higher weight
Frame	5 5
Reinforcement:	Frame reinforcement recommended for doors in excess of 200 lbs and 3 feet in width
Special Features:	Lead lined model for hospital x-ray room doors with double row of screws to straddle

 Frame and door leaf alignment ribs for proper hinge and door location



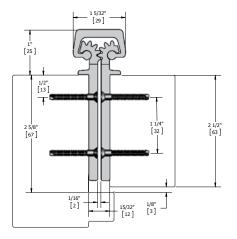


1200-650XHD

Extra Heavy Duty Concealed Leaf Hinge Strong enough to swing doors heavier than 600 lbs, wider than four feet, and taller than ten feet. Extra heavy duty for heavy, high frequency doors or extremely heavy, low frequency doors. For doors thicker than 2-3/8" (60 mm).

Material: Clearance:	Aluminum 6063-T6 15/32" (12 mm) hinge side plus standard lockside clearance
Fasteners:	1/4"-20 Dril-Kwik [®] screws or optional 1/4-14 x 11/2" wood screws
Length Options:	 Standard sizes include 83" (2108 mm) 95" (2413 mm) 119" (3023 mm) Custom lengths available
Door	
Reinforcement:	None required to 200 lbs, use 16 gauge channel at higher weight
Frame	5 5
Reinforcement:	Frame reinforcement recommended for doors in excess of 200 lbs and 3 feet in width
Special Features:	 Lead lined model for hospital x-ray room doors with double row of screws to straddle lead (Specify "LL")

 Frame and door leaf alignment ribs for proper hinge and door location







Stainless Steel Continuous Hinges



Hager heavy duty stainless steel continuous hinges offer proven reliability that can stand up to the daily rigors of high-traffic, high-impact areas. They're designed and engineered to evenly distribute door weight along the full length of the door, which eliminates localized stresses on the frame. Hager stainless steel continuous hinges also help eliminate stress on closers, automatic operators, and panic and locking hardware by helping doors to stay properly aligned.



CONTINUOUS BENEFITS

Security

Hager 790 Series stainless steel continuous hinges eliminate the gap between the door and frame, so doors cannot be pried open.

Energy Savings

Stainless steel continuous hinges provide a permanent weather barrier and reduce air infiltration by creating a seal from top to bottom of the door at the hinge stile.

Heavy Duty, High-Quality Construction

Hager stainless steel continuous hinges are 14 gauge type 304 stainless steel with lubricated nylon 6/6 bearings between each knuckle and stainless steel pin. They are corrosion resistant for swimming pool buildings, sewage and water treatment plants, and salt spray environments. They are ideal for hospitals and other institutions where doors and frames are subjected to severe abuse.

Improved Hardware Performance

Hager stainless steel continuous hinges allow doors to stay properly aligned, eliminating stress on closers, automatic operators, panic, and locking hardware.

Support Doors Up to 600 lbs.

All models are designed for long life and heavy duty performance.

Ideal for Retrofit

Hager 790 Series stainless steel continuous hinges use the exiting frame and cover the old butt hinge cut out locations.

Ease of Installation

Each hinge has symmetrical, non-handed hole patterns on standard sizes.

Fire Rated



Hager 790 Series stainless steel continuous hinges are stamped with an Underwriters Laboratories Inc. fire label. Refer to the individual catalog pages for UL listing information.

Certification

Hager 790 Series stainless steel continuous hinges are approved for ANSI A156.26 Grade 1 for 150-pound doors.

Privacy

Hager 790 Series stainless steel continuous hinges eliminate the gap or sightline at the hinge edge, offering privacy on hospital or toilet partition applications.

Door Edge Guards

Various models are supplied with a 14 gauge stainless steel channel that wraps the door edge and protects the door edges from damage by carts, beds, and equipment. Other models offer protection to the jamb with a wrap-around guard. Refer to individual catalog pages for additional information. Edge guards for the latch side edge of the door are available through our Trim and Auxiliary product line.

Standard Finish

Hager 790 Series stainless steel continuous hinges are brushed to a satin finish (US32D).

Recommended Lengths

Hager 790 Series stainless steel continuous hinges are always installed flush with the top edge of the door. Recommended head clearance is 1/8'' (3 mm). Order each hinge equal to the net door height. In the field, trimming should be done from the bottom of the hinge only.

Added Features

Moldings are supplied to cover exposed fastener heads on half-surface and full-surface models and are screwed in place. Models with hinge guards are supplied with adjustable screws allowing up to 1/4'' (9 mm) width adjustment for doors to be squared accurately and easily in new installations and retrofits.

DOOR AND FRAME PREPARATION

All 790 Series stainless steel continuous hinges are surface applied without cutouts. Cutout design and spacing coordination is thereby eliminated in both new construction and restoration work.

For models other than double edge guard models, reinforcement plates are not required in doors and frames except where the gauge is too thin or the material is too weak for the fasteners in relation to the door weight, or where abusive operation is anticipated. Consult Hager Companies Technical Service for more information.

For double edge guard models to be mounted to a hollow metal door, Hager strongly recommends a 1/8" (3 mm) thick reinforcement plate at the hinge side of the door for proper strength of the adjustable studs. The added material will allow proper thread engagement and extend the life of the opening.

Blank frames may be ordered with strike prep only or with a strike prep furnished on both sides with any model that will cover the frame rabbet. Doors should always be ordered without cutouts except for use in labeled openings in which the tested door assembly may have manufacturing restrictions. Continuous frame mortar guards are strongly recommended for masonry walls to avoid screw fastener interference with the mortar.



DOOR CLOSERS

Hager Companies stainless steel continuous hinges eliminate stress on closers, automatic operators, panic, and locking hardware. Conventional surface, concealed sliding closers and pivot-type floor closers may be used because doors stay properly aligned.

SPECIAL PRODUCTS

Custom Designs

For special designs and special applications, contact Hager Customer Service for more information.

While such orders become subject to the change and cancellation policy, hole positioning will be optimized to ensure that the appearance and operation of the products are maintained.

Custom Length Hinges

Hager manufactures hinges over 119" (2023 mm) as two separate lengths. Hager will select hinge segment lengths from standard sizes for best economics in relation to length required.

A special length should be specified from the net door height. To order, list the required hinge length dimension along with the "actual length" or "net door height."

Custom Hole Pattern

Any hole pattern or shape other than Hager's standard hole pattern. Contact Hager Customer Service for more information. Available on all models.

No-Hole (Blank) Hinges

Holes omitted for special applications (i.e. welded hinge) is available on all models. Contact Hager Customer Service for more information.

Special Finishes

Hager 790 Series stainless steel continuous hinges are available in custom color painted or powder coated finishes. Color samples are required for matching.

Dutch Door Hinges

The frame leaf is furnished as a continuous leaf and the door leaf is cut to fit the dutch door heights specified. Upper and lower door leaves are prepped for extra screws. Handing, overall net door height, amount of clearance between the top and bottom doors, their individual heights and door and frame materials should be clearly specified.

Non-Rising Pin

The pin is held securely in place and will not rise or fall from the knuckles during use. The top and bottom plugs are permanently secured to the hinge.

Raised Barrel

For applications where the door is set back in the frame, the knuckle is offset to allow the hinge to clear the frame.

Replacement Moldings

Brushed aluminum replacement moldings with molding clips and fasteners are available in stock lengths for trimming in the field. This option is available for 790-903, 790-904, 790-906, 790-909, 790-935.

Sheared Leaf

For narrow door thicknesses, leaf width can be trimmed. This option is available for 790-900, 790-903, 790-905, 790-909, 790-911, 790-915, 790-926, 790-935.

Wide Throw

The width of the hinge leaf can be extended in order to clear the trim or wall conditions.

Dust Free Bearings

Hager dust free bearings are made of long lasting, selflubricating material. The bearings provide clean and quiet hinge operation and prevent metal on metal wearing. They meet ANSI/BHMA Grade 1 requirements and support doors weighing up to 600 pounds.

Hospital Tips

Concealed models 790-900, 790-905, 790-907, and 790-915 can be prepared with a tapered 45° angle at the top of the hinge. These are ideal for use in hospitals and correctional facilities to help provide a clean and safe environment.

Quick Connect

Fast installation that eliminates field modifications. Wiring quick connect, modular wiring system with keyed, pre-wired, molded connects. Available for ETM, EMN, ETW, and RETW options.





FASTENERS

Hager 790 Series stainless steel continuous hinges are provided exclusively with carefully engineered and thoroughly tested fasteners. Each fastener is designed for ease of use as well as durability. Appropriate fasteners are furnished with each hinge, together with installation instructions for typical metal and wood doors hung on metal frames. The standard screw pack includes Dril-Kwik[®] self-drilling screws for metal doors and frames as well as wood screws for wood doors.

Special adjustment studs and screws are standard on all models with the double door edge protection lip. The special adjustment studs and screws allow correction of door fit problems up to 3/8" (9 mm). Sex bolts are optional and must be requested at time of order. If special fasteners are required, customers must supply them except upon prior agreement. Please consult Hager Technical Service for alternate fastener recommendations.

Optional Sex Bolts

On all applicable full-surface and half-surface mounted hinge models, sex bolts can be ordered. Sex bolts are intentionally designed shorter than the door thickness to ensure proper clamping action of 1-3/4'' (44 mm) doors of slightly varying thickness.

Security Fasteners

These fasteners improve building security and reduce hinge tampering. Security Torx are available in place of standard fasteners upon request.

Security Studs

These stainless steel security studs are mounted through the frame leaf into the door frame. Security studs are available in place of standard fasteners upon request.

FASTENER INSTALLATION

Fasteners for both metal and wood applications are supplied standard with each hinge. The Dril-Kwik[®] self-drilling screw is used in metal door and frame applications and has an undercut head and a machine thread on the screw shank. The type AB wood screw is supplied for wood door and frame applications.

The Dril-Kwik[®] self-drilling screw's drill point allows it to be placed without pre-drilled holes when installed in a hollow metal frame less than 1/8'' (3 mm) thick. It forms its own threads as it is drilled into the frame.

Mortar Guards, made of either styrofoam or wood, are recommended for new construction, eliminating the use of masonry bits. For existing grout-filled frames, pre-drilling is required before installation of the Dril-Kwik® self-drilling screws. Here, the screw acts as a machine screw since drilling has already taken place. Center-punching is recommended on both hollow metal and grout-filled frames to ensure that the screw seats properly in the hinge leaf. Stainless steel frames require pre-drilling.

In all cases, care should be taken to ensure that no drill chips build up behind the hinge. It is best to pre-mark the holes and pre-drill with the hinge removed or clamp the hinge very tightly against the door or frame when using the self-drilling screws.

When installing the self-drilling type screw, make certain that the installer is familiar with the proper use and torque settings of a screw gun. Proper center-punching is extremely important with self-drilling screws. If center-punching is omitted or incorrectly done, the screw will "walk" in the same way as a drill bit, resulting in cocked screw heads and improperly closing hinges.



DOOR AND FRAME DIMENSIONING Models 790-900, 790-911, 790-915

Designed primarily for work involving new doors and frames. Clearance required as follows:

Single Doors (Square and Beveled Edged)

A. Hinge thickness	7/32″	5.6 mm
B. Additional allowance for frame irregularities	1/32″	0.8 mm
C. Lockside clearance for single door	<u>1/8″</u>	<u>3.2 mm</u>
Total	3/8″	9.5 mm

Pairs of Doors (Square and Beveled Edged)

A. Hinge thickness	7/32″	5.6 mm
B. Additional allowance for frame irregularities	1/32″	0.8 mm
C. Clearance between doors (recommended)*	3/16″	4.8 mm
D. Second hinge thickness	7/32″	5.6 mm
E. Second allowance for frame irregularities	<u>1/32″</u>	0.8 mm
Total	11/16″	17.5 mm

- Notes: Some minimal clearance may be required for paint and/or weatherstripping.
 - For doors that are pre-beveled 1/8" (3.2 mm)-in-2" (51 mm) on the hinge edge, add 1/32" (0.8 mm) per door to the TOTAL clearance shown (Model 790-900 only). For Models 790-911 and 790-915, the hinge edge of the door should not be beveled.

Models 790-905, 790-926

Designed primarily for work involving new doors and frames. Clearance required as follows:

Single Doors (Square and Beveled Edged)

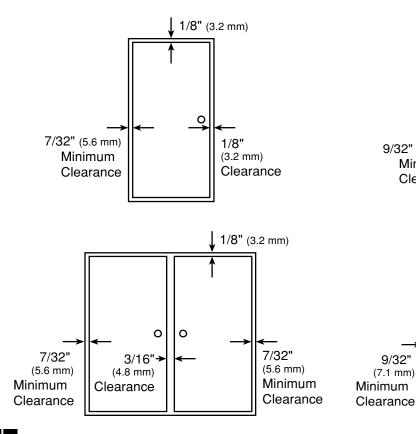
A. Hinge thickness	9/32″	7.1 mm
B. Additional allowance for frame irregularities	1/32″	0.8 mm
C. Lockside clearance for single door	<u>1/8″</u>	<u>3.2 mm</u>
Total	7/16″	11.1 mm

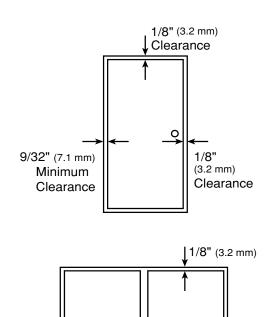
Pairs of Doors (Square and Beveled Edged)

A. Hinge thickness	9/32″	7.1 mm
B. Additional allowance for frame irregularities	1/32″	0.8 mm
C. Clearance between doors (recommended)*	3/16″	4.8 mm
D. Second hinge thickness	9/32″	7.1 mm
E. Second allowance for frame irregularities	<u>1/32″</u>	0.8 mm
Total	13/16″	20.6 mm

- Notes: Some minimal clearance may be required for paint and/or weatherstripping.
 - Not recommended for use on doors/panels that have a beveled edge on the hinge side.

*For fire rated doors, please refer to door manufacturer's requirement for edge to edge clearance to maintain compliance with NFPA requirements.





0 0

3/16"→

(4.8 mm)

Clearance

9/32"

(7.1 mm)

9/32" (7.1 mm) Minimum Clearance



1″

25.4mm

DOOR AND FRAME DIMENSIONING (CONTINUED)

Model 790-907

Designed primarily for work involving new doors and frames. Clearance required as follows:

Single Doors (Square Edged)

A. Hinge thickness	3/8″	9.5 mm
B. Additional allowance for frame irregularities	1/32″	0.8 mm
C. Lockside clearance for single door	1/8″	3.2 mm
Total	17/32″	13.5 mm

Pairs of Doors (Square Edged)

Α.	Hinge	thickness
----	-------	-----------

A. Hinge thickness	3/8″	9.5 mm
B. Additional allowance for frame irregularities	1/32″	0.8 mm
C. Clearance between doors (recommended)*	3/16″	4.8 mm
D. Second hinge thickness	3/8″	9.5 mm
E. Second allowance for frame irregularities	1/32"	0.8 mm

Total

- Notes: Some minimal clearance may be required for paint and/or weatherstripping.
 - This model is not recommended for use on doors/ panels that have a beveled edge on the hinge side.

Models 790-903, 790-904, 790-906, 790-909, 790-935

Designed primarily for work involving new doors and frames. Clearance required as follows:

Single Doors (Square and Beveled Edged)

A. Hinge thickness	1/8″	3.2 mm
B. Additional allowance for frame irregularities	1/32″	0.8 mm
C. Lockside clearance for single door	<u>1/8″</u>	<u>3.2 mm</u>
n Total	9/32″	7.2 mm

Pairs of Doors (Square and Beveled Edged)

A. Hinge thickness	1/8″	3.2 mm
B. Additional allowance for frame irregularities	1/32″	0.8 mm
C. Clearance between doors (recommended)*	3/16″	4.8 mm
D. Second hinge thickness	1/8″	3.2 mm
E. Second allowance for frame irregularities	<u>1/32″</u>	<u>0.8 mm</u>
Total	1/2″	12.7 mm

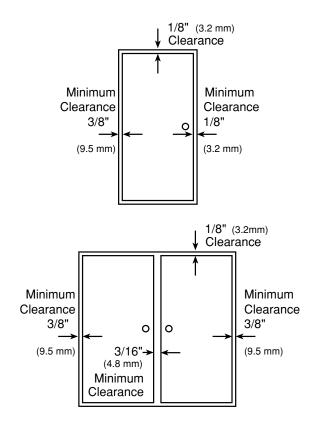
Notes for 790-904 only:

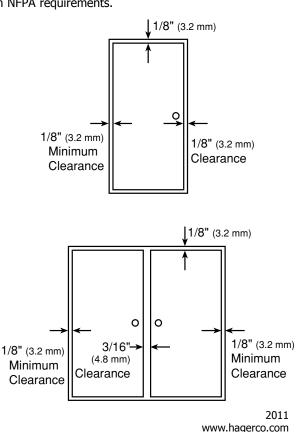
- Some minimal clearance may be required for paint and/or weatherstripping.
- For doors that are pre-beveled 1/8" (3.2 mm)-in-2" (51 mm) on the hinge edge, add 1/32" (0.8 mm) per door to the TOTAL clearance shown.

Notes for 790-906 only:

The hinge edge of the door should not be beveled.

*For fire rated doors, please refer to door manufacturer's requirement for edge to edge clearance to maintain compliance with NFPA requirements.







ELECTRIC MODIFICATIONS Von Duprin EPT2 or EPT10 Electric Power Transfer Preparation

- Hinge leaf cutout to accommodate power transfer device.
- Specify handing and dimension from top of hinge to centerline of power transfer cutout location. Please note the clearance from top of hinge to underside of header, typically 1/16" to 1/8" (1.6 mm to 3.2 mm).
- Modification available on models 790-900, 790-903, 790-904, and 790-915.

Exposed Electric Switches:

- Miniature push button switch is incorporated in the hinge frame leaf to monitor position of the door.
- Includes three 12" wire leads.
- To order, use symbol "E1S" as a suffix. Example: 790-900 85" US32D E1S
- Each monitoring hinge only needs one E1S switch.
- Specify handing and dimension from top of hinge to centerline of electric through-wire location. Please note the clearance from top of hinge to underside of header, typically 1/16" to 1/8" (1.6 mm to 3.2 mm).
- Templates regarding location of contact switch available upon request.
- Modification available on models 790-900 and 790-915.

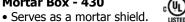
Concealed Electric Through-Wire:

- Transfers power discreetly from building to door hardware.
- Four, eight, or ten 24-gauge wires with 12" wire leads.
- To order, use symbol "ETW" plus the number of wires required, as a suffix.

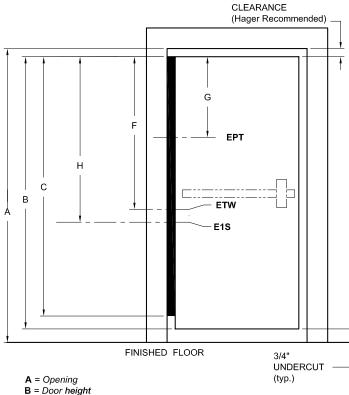
Example: 790-900 HD 85" US32D ETW - 4

- Specify handing and dimension from top of hinge to centerline of electric through-wire location. Please note the clearance from top of hinge to underside of header, typically 1/16" to 1/8" (1.6 mm to 3.2 mm).
- Modification available on 790-900 and 790-915.

Mortar Box - 430

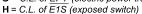


- Overall dimensions are 9" (229 mm) length with tabs, 7" (178 mm) (inside), 1-3/4" x 1-3/4" (45 mm x 45 mm) inside dimension.
- Galvanized steel 0.040" (1 mm).
- Top and bottom knockouts for standard conduit fittings.



1/8"

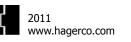
- **C** = Actual hinge length F = C.L. of <u>ETW</u> (electric through-wires)
- $\mathbf{G} = C.L. \text{ of } \overline{EPT}$ (electric power transfer)



* For ease of ordering, Hager has established standard locations for power transfer cutouts. All standard location dimensions are referenced from the top edge of the door to the centerline of the power transfer cutout. Please specify handing.

	А	В	С	F	G	Н
79″	80″	79-1/8″	79-3/16	41-1/2″	24-1/2″	41-1/2″
83″	84″	83-1/8″	83-1/8″	43-1/2″	28-7/16″	43-1/2″
85″	86″	85-1/8″	85-1/8″	45-1/2″	30-7/16″	45-1/2″
95″	96″	95-1/8″	95″	55-3/8″	40-1/2″	55-3/8″
119″	120″	119-1/8″	118-3/4″	79-1/8″	64-7/16″	79-1/8″









790-900 **Door of Any Material** For doors 1-3/4" (44 mm) thick and up to 600 pounds.



Material:	14 Ga. (0.075" = 1.9 mm) Type
	304 stainless steel
Finish:	US32D Satin
Clearance:	7/32" (5.6 mm) hinge side plus
	standard lockside clearance
Fasteners:	#10-24 x 5/8″ S/S Dril-Kwik [®]
	(metal frame/door);
	#10-16 x 1-1/4" S/S Type AB
	(wood door)
Length Options:	Standard and custom
Door/Frame Reinforcements:	None required to 200 lbs, heavier
	weight use 16 gauge channel
Fire Rating:	Up to 3 hour metal and 90 minute
-	wood composite
Special Features:	• 1/4" (6.3 mm) diameter stainless steel pin
	• Dual 6/6 nylon bearings between each
	2 dai 6, 6 milion 2 dannigo between eden



Fire Rating:

Special Features:

pounds.

790-905

Door of Any Material

Material:	14 Ga. (0.075" = 1.9 mm) Type
	304 stainless steel
Finish:	US32D Satin
Clearance:	9/32" (7.1 mm) minimum hinge side
	plus standard lockside clearance
Fasteners:	#10-24 x 5/8" S/S Dril-Kwik [®]
	(metal frame);
	#1/4-32 x 3/4" S/S machine screw
	(used with adjustment stud);
	#3/8-16 x 1-3/8" S/S adjustment
	stud (metal/wood door)
Length Options:	Standard and custom
Door/Frame Reinforcements:	 Wood – None required
	 Metal – Recommended 16 gauge

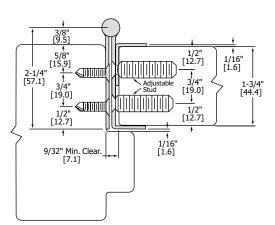
For doors 1-3/4" (44 mm) thick and up to 600

channel at heavier weight • For metal doors, a 1/8" (3.2 mm) thick reinforcement plate is recommended along the hinge edge for proper thread engagement of the adjustment studs

Up to 3 hour metal and 90 minute wood composite

- 1/4" (6.3 mm) diameter stainless steel pin
- Dual 6/6 nylon bearings between each knuckle
- Door edge protection lip (both faces of door)
- Not recommended for doors with a beveled edge on the hinge side
- 1/16" (1.6 mm) inset

Hinge Length (in)	79	83	85	95	119
Hinge Length (mm)	200.7	210.8	215.9	241.3	302.3
Door Screws	19	21	21	23	27
Jamb Screws	19	21	21	23	27





CONCEALED LEAF

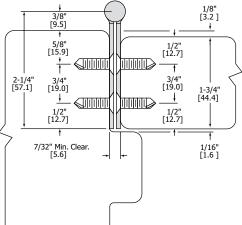
Hinge Length (in) 79 83 85 95 119 200.7 210.8 215.9 241.3 302.3 Hinge Length (mm) 21 23 27 Door Screws 19 21 Jamb Screws 19 21 21 23 27

knuckle

• May be used with beveled or

square edge doors

• 1/8" (3.2 mm) inset



790-911

pounds.





790-907

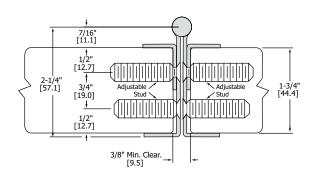
Flush Mount - Door of Any Material For doors 1-3/4" (44 mm) thick and up to 600 pounds.



Material:	14 Ga. (0.075" = 1.9 mm) Type 304
Finish .	stainless steel
Finish:	US32D Satin
Clearance:	3/8" (9.5 mm) minimum clearance between doors
Fasteners:	#10-32 x 3/4" S/S machine
	(used with adjustment stud);
	#3/8-16 x 1-3/8" S/S adjustment stud
	(metal/wood door)
Length Options:	Standard
Door Reinforcements:	 Wood – None required up to to 200 lbs
	• Metal – Recommended 16 gauge
	channel at heavier weight
	• For metal doors, a 1/8" (3.2 mm)
	thick reinforcement plate is
	recommended along the hinge edge
	for proper thread engagement of the
	adjustment studs
Frame Reinforcements:	• •
Fire Rating:	
	•
Special Features:	 1/4" (6.3 mm) diameter stainless steel pin
	 Dual 6/6 nylon bearings between each knuckle
	• Door edge protection lip (both faces
	Can be used for door to door
Frame Reinforcements: Fire Rating: Special Features:	 Dual 6/6 nylon bearings between each knuckle Door edge protection lip (both faces of door)

- Can be used for door to door mounting
- Not recommended for doors with a beveled edge on the hinge side

Hinge Length (in)	79	83	85	95	119
Hinge Length (mm)	200.7	210.8	215.9	241.3	302.3
Door Screws	19	21	21	23	27
Jamb Screws	19	21	21	23	27





Material:

Finish: Clearance:

Fasteners:

Length Options: Door/Frame Reinforcements:

Fire Rating:

Special Features:

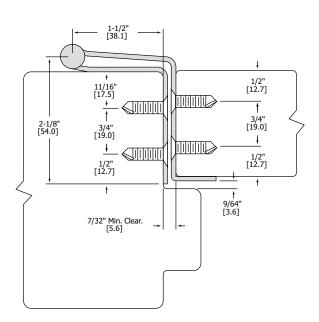
14 Ga. (0.075'' = 1.9 mm) Type 304 Stainless Steel US32D Satin 7/32'' (5.6 mm) hinge side plus standard lockside clearance #10-24 x 5/8'' S/S Dril-Kwik[®] (metal frame/door) #10-16 x 1-1/4'' S/S Type AB (wood door) Standard and custom None required to 200 lbs, heavier weight use 16 gauge channel Up to 3 hour metal and 90 minute wood composite

Swing Clear - Door of Any Material For doors 1-3/4" (44 mm) thick and up to 600

> 1/4" (6.3 mm) diameter stainless steel pin
> Dual 6/6 nylon bearings between

- Dual 0/0 hybrid bearings between each knuckle
 Wrap-around frame leaf design for
- Wrap-around frame leaf design for easy installation and protection
- Door edge protection lip (stop side only)
- Useful for ADA upgrade workNot for use on doors with a beveled
- edge on the hinge side

Hinge Length (in)	79	83	85	95	119
Hinge Length (mm)	200.7	210.8	215.9	241.3	302.3
Door Screws	19	21	21	23	27
Jamb Screws	19	21	21	23	27







Door of Any Material For doors 1-3/4" (44 mm) thick and up to 600 pounds.

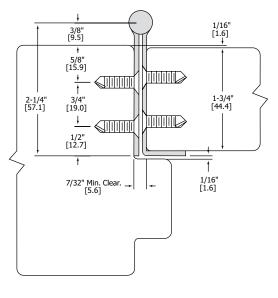
790-915



Material:	14 Ga. (0.075" = 1.9 mm) Type 304 stainless steel
Finish:	US32D Satin
Clearance:	7/32" (5.6 mm) plus standard
	lockside clearance
Fasteners:	#10-24 x 5/8″ S/S Dril-Kwik [®]
	(metal frame/door);
	#10-16 x 1-1/4" S/S Type AB
	(wood door)
Length Options:	Standard and custom
Door/Frame Reinforcements:	None required to 200 lbs, heavier
	weight use 16 gauge channel
Fire Rating:	Up to 3 hour metal and 90 minute
	wood composite
Special Features:	• 1/4" (6.3 mm) diameter stainless steel pin
	 Dual 6/6 nylon bearings between each knuckle

- Door edge protection lip (stop side only)
- Not recommended for doors with a beveled edge on the hinge side
- 1/16" (1.6 mm) inset
- Door edge protection lip (stop side only)

Hinge Length (in)	79	83	85	95	119
Hinge Length (mm)	200.7	210.8	215.9	241.3	302.3
Door Screws	19	21	21	23	27
Jamb Screws	19	21	21	23	27





Special Features:

790-926

Swing Clear - Door of Any Material For doors 1-3/4" (44 mm) thick and up to 600 pounds.

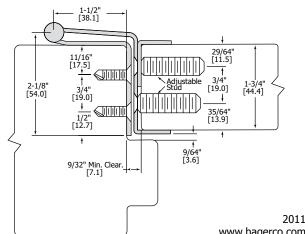


14 Ga. (0.075" = 1.9 mm) Type 304 stainless steel
US32D Satin
9/32" (7.1 mm) minimum hinge side
plus standard lockside clearance
#10-24 x 5/8" S/S Dril-Kwik [®]
(metal frame);
#10-32 x 3/4" S/S machine
(used with adjustment stud);
#3/8-16 x 1-3/8" S/S adjustment stud
(metal/wood door)
Standard and custom
 None required to 200 lbs, heavier
weight use 16 gauge channel
• For metal doors, a 1-1/8" (3.2 mm)
thick reinforcement plate is strongly
recommended along the hinge edge
for proper thread engagement of the
adjustment studs
Up to 3 hour metal and 90 minute

wood composite

- 1/4" (6.3 mm) diameter stainless steel pin
- Dual 6/6 nylon bearings between each knuckle
- · Wrap-around frame leaf design for easy installation and protection
- Door edge protection lip (both faces of door)
- Useful for ADA upgrade work
- Not recommended for doors with a beveled edge on hinge side

Hinge Length (in)	79	83	85	95	119
Hinge Length (mm)	200.7	210.8	215.9	241.3	302.3
Door Screws	19	21	21	23	27
Jamb Screws	19	21	21	23	27



10



790-935

pounds.

Swing Clear - Door of Any Material

For doors 1-3/4" (44 mm) thick and up to 600





pounds. cULSTED US

790-903

Door of Any Material

Material:	
Finish:	

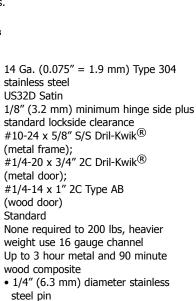
Clearance:

Fasteners:

Length Options: Door/Frame Reinforcement:

Fire Rating:

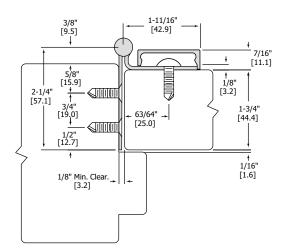
Special Features:



For doors 1-3/4" (44 mm) thick and up to 600

- Dual 6/6 nylon bearings between each knuckle
- Security molding
- 1/8" (3.2 mm) inset

Hinge Length (in)	79	83	85	95	119
Hinge Length (mm)	200.7	210.8	215.9	241.3	302.3
Door Screws	13	14	14	15	18
Jamb Screws	19	21	21	23	27





Material:

Finish: Clearance:

Fasteners:

Length Options: Door/Frame Reinforcement:

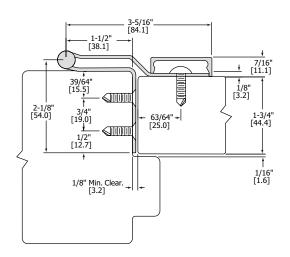
Fire Rating:

Special Features:

14 Ga. (0.075" = 1.9 mm) Type 304 stainless steel US32D Satin 1/8" (3.2 mm) minimum hinge side plus standard lockside clearance #10-24 x 5/8" S/S Dril-Kwik® (metal frame); #1/4-20 x 3/4" 2C Dril-Kwik[®] (metal door); #1/4-14 x 1" 2C Type AB (wood door) Standard None required to 200 lbs, heavier weight use 16 gauge channel Up to 3 hour metal and 90 minute wood composite

- 1/4" (6.3 mm) diameter stainless steel pin
- Dual 6/6 nylon bearings between each knuckle
- Wrap-around frame leaf design for easy installation and protection
- Useful for ADA upgrade workSecurity molding
- 1/8" (3.2 mm) inset

Hinge Length (in)	79	83	85	95	119
Hinge Length (mm)	200.7	210.8	215.9	241.3	302.3
Door Screws	13	14	14	15	18
Jamb Screws	19	21	21	23	27







Material:

Finish: Clearance:

Fasteners:

Length Options: Door/Frame Reinforcement:

Fire Rating:

Special Features:

Door of Any Material For doors 1-3/4" (44 mm) thick and up to 600 14 Ga. (0.075" = 1.9 mm) Type 304 stainless steel

790-904

US32D Satin

(metal door);

(metal frame);

(wood door)

wood composite

each knuckle

• 1/8" (3.2 mm) inset

83

21

14

210.8

steel pin

79

19

13

200.7

Standard

1/8" (3.2 mm) hinge side plus

#10-24 x 5/8" S/S Dril-Kwik®

#1/4-20 x 3/4" 2C Dril-Kwik®

#10-16 x 1-1/4" S/S Type AB

weight use 16 gauge channel

None required to 200 lbs, heavier

Up to 3 hour metal and 90 minute

• 1/4" (6.3 mm) diameter stainless

• Dual 6/6 nylon bearings between

Not recommended for doors with a

85

21

14

215.9

95

23

15

241.3

119

27

18

302.3

beveled edge on the hinge side

standard lockside clearance

pounds.

շախյո



Material:

Finish: Clearance:

Fasteners:

790-906 **Door of Any Material**

For doors 1-3/4" (44 mm) thick and up to 600 pounds.



14 Ga. (0.075" = 1.9 mm) Type 304 stainless steel US32D Satin 1/8" (3.2 mm) minimum hinge side plus standard lockside clearance #10-24 x 5/8" S/S Dril-Kwik® (metal door); #1/4-20 x 3/4" 2C Dril-Kwik[®] (metal door); #1/4-14 x 1" 2C Type AB (wood frame) Standard None required to 200 lbs, heavier weight use 16 gauge channel

wood composite

Special Features:

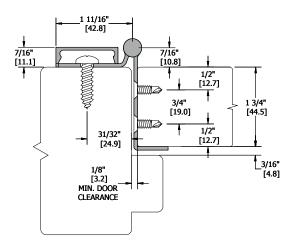
Length Options:

Fire Rating:

Door/Frame Reinforcement:

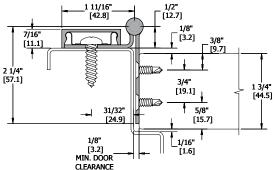
- Up to 3 hour metal and 90 minute
- 1/4" (6.3 mm) diameter stainless steel pin
- Dual 6/6 nylon bearings between each knuckle
- Security molding
- Door edge protection lip (stop side only)
- Not recommended for doors with a beveled edge on the hinge side

Hinge Length (in)	79	83	85	95	119
Hinge Length (mm)	200.7	210.8	215.9	241.3	302.3
Door Screws	19	21	21	23	27
Jamb Screws	13	14	14	15	18



Hinge Length (in)

Hinge Length (mm)



HALF MORTISE





790-909

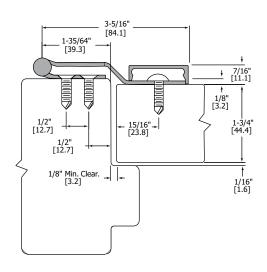
Swing Clear - Door of Any Material For doors 1-3/4" (44 mm) thick and up to 600 pounds.



Material:	14 Ga. (0.075" = 1.9 mm) Type 304
	stainless steel
Finish:	US32D Satin
Clearance:	1/8" (0.8 mm) minimum recommended
	hinge side plus standard lockside
	clearance
Fasteners:	#10-24 x 5/8″ S/S Dril-Kwik [®]
	(metal frame);
	#1/4-20 x 3/4" 2C Dril-Kwik [®]
	(metal door);
	#1/4-14 x 1" 2C Type AB
	(wood door)
Length Options:	Standard
Door Reinforcement:	None required to 200 lbs, heavier weight
	use 16 gauge channel
Fire Rating:	Up to 3 hour metal and 90 minute
The Rading.	•
0 · · · - ·	wood composite
Special Features:	 1/4" (6.3 mm) diameter stainless
	steel pin
	 Dual 6/6 nylon bearings between
	each knuckle
	Useful for ADA upgrade work
	Security molding

- For beveled or square edge doors
- 1/8" (3.2 mm) inset

Hinge Length (in)	79	83	85	95	119
Hinge Length (mm)	200.7	210.8	215.9	241.3	302.3
Door Screws	13	14	14	15	18
Jamb Screws	19	21	21	23	27



Trim & Auxiliary



At Hager Companies, we know all about the importance of adding the right finishing touches to your building projects. That's why we're proud to offer more than 200 different trim and auxiliary door hardware products in a variety of designs, sizes, and finishes that not only look great, but also provide long-lasting wear in any application. Whatever you need, from pulls to push plates, protection plates to door edgings, wall and floor stops to flush bolts, coordinators, signage, and much more--Hager trim and auxiliary products give you great looks and proven durability.



MANUFACTURING OPTIONS

Hager Companies can deliver custom door pulls made to your specifications, or choose from our collection of pull designs. Hager's comprehensive selection of door pull hardware includes standard push/pull bars or multiple push bar combinations with center-to-centers made to order.

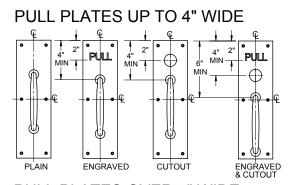
PUSH/PULL PLATE DETAILS

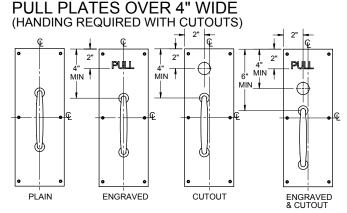
Standard Grip Positions

Pulls are centered vertically or lowered when necessary to meet minimum top spacing requirement. Be certain the pull selected will fit on specified plate under these conditions.

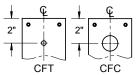
Special Pull Positions

Where pairs of doors are involved and active leaf pull plate is lettered or has a cutout, order pull plate for inactive leaf Grip To Align (WOC). This will ensure horizontal alignment of pull on both plates. Always furnish complete details when ordering non-standard pull positions.





Cut Outs



Standard cutout sizes: Cut for Cylinder (CFC) - 1 1/4'' (32 mm) diameter; Cut for Thumbturn (CFT) - 3/8'' (10 mm) diameter.

All plates may be ordered with cutout option by adding the appropriate suffix (i.e., 30S-CFC).

Standard cutouts are positioned 2" (51 mm) from top of plate where this option has been ordered. Cutouts are centered

on plates up to 4" (102 mm) wide or 2" (51 mm) from edge of plates over 4" (102 mm) wide. The latter are "handed" with cutouts. Furnish hand of door when ordering. Provide complete details for all non-standard cutouts.

Flush Back Mounting



Pull plates using #3, 4, or 10 pull types can be furnished with a flush back (no projections). Specify code FB, (i.e., 33E-FB). Note: Use thru-bolts supplied with mountings for best security.

Back-To-Back Mounting

Many pulls may be ordered back-to-back (BTB) and availability will be noted on each particular product page (refer to product page). Specify the correct part number and center-to-center unless already specified.

Handicap Option

Pulls that must meet the 2-1/2'' (64 mm) clearance for ADA requirements are available. Must specify part number with prefix "H" (i.e., H2E). Please refer to each individual part number for availability.

Engraving

Typical engraved lettering is in Helvetica style and colored black. On push or pull plates, standard position is horizontal on a line 2'' (51 mm) from top of plate.





PUSH

CONCEALED CONE WITH BOLT

BACK-TO-BACK MOUNTING

AND SET SCREW

PULL



Fasteners

Illustrated below are various types of fasteners that can be furnished by Hager Companies. Please specify type of fastening desired. All types of fastening cannot be used with all items of hardware. If specified method is not possible, we reserve the right to furnish whatever type we feel is best suited for the installation. When used with tempered glass doors, specify thickness of glass and hole diameter.



Sex bolt and machine screws (various sizes)



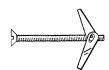
Lead anchor (used with floor stops in masonry applications)



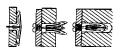
Plastic anchor and full threaded screw (used in drywall or masonry applications)



Lag screw and shield



Toggle bolt (ideal for drywall applications)



Plastic toggle anchor (used with wall stops in drywall applications)

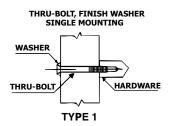


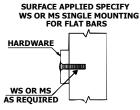
Thru-bolt and finish washer (flat or oval head; size as required)

Spanner head machine screws (various sizes furnished at extra charge)

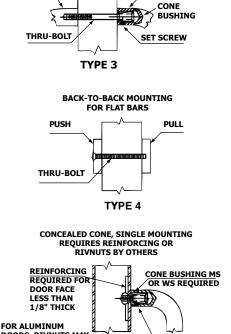


Security torx head machine screws (various sizes furnished at extra charge)





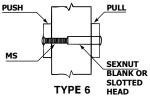




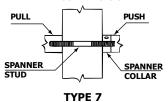
DOORS, RIVNUTS MAY



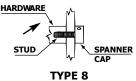
SET SCREW



CONCEALED SPANNER, COLLAR & STUD BACK-TO-BACK MOUNTING SETS WITH ROUND BASES ONLY









METAL FINISH SYMBOLS

US & Hager	Description	Base Material	BHMA Symbol
2C	Zinc Plated Steel	Steel	603
3	Bright Brass	Brass	605
4	Satin Brass	Brass	606
5	Satin Brass, Oxidized	Brass/Bronze	609
9	Bright Bronze	Brass/Bronze	611
10	Satin Bronze	Brass/Bronze	612
10B	Antique Bronze, Oiled	Brass/Bronze	613
10R	Matte Lacquer Antique Bronze	Brass/Bronze	-
15	Satin Nickel	Brass/Bronze	619
15A	Satin Nickel Oxidized	Brass/Bronze	620
19	Flat Black Coated	Brass	622
26	Bright Chromium Plated	Brass/Bronze	625
26D	Satin Chromium Plated	Brass/Bronze	626
28	Satin Anodized Aluminum	Aluminum	628
32	Stainless Steel Metal, Bright	300 Series	629
32D	Stainless Steel Metal, Satin	300 Series	630
L2	Duro	-	-
PC	Clear Plastic	-	-
РК	Plastic Laminate - Black	-	-
СО	Plastic Laminate - Chocolate	-	-
PG	Plastic Laminate - Grey	-	-
S1	Sprayed Aluminum	Cast Iron	-
S2	Sprayed Brass	Cast Iron	-
S3	Sprayed Bronze	Cast Iron	-

Note: For any finish not listed in this catalog, or explained above, availability on request.

ANTIMICROBIAL PROTECTION

Hager Companies' full line of US32D stainless steel door pulls, push bars, push plates, and pull plates are available with AgION antimicrobial protection.

Hager uses a powder coat process to apply the antimicrobial treated coating to guarantee durability and protection. Antimicrobial resistance on products is affected by moisture in the air. Silver ions interact with humidity and are released creating a cleaner surface. The suppression of bacteria, mold and fungi is as easy as adding antimicrobial treated coating to your Hager products.

Antimicrobial Vital Stats

- US32D stainless steel
- EPA registered
- NSF approved
- FDA listed for food contact
- Designate your product with: MV3 for Trim & Auxiliary





CTC Length	1E	1G	1J	1L
Inches	6	8	10	12
Millimeters	152	203	254	305

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		Inches	6	8	10	12
Certification:	Meets ANSI A156.6 for J401 Pulls	Millimeters	152	203	254	305
Base:	1/2" x 1" (13 mm x 25 mm)	minimeters	152	205	ZJT	505
Projection:	2″ (51 mm)					
Clearance:	1-1/2" (38 mm)					
Door Thickness:	1-3/4" (45 mm) - Standard					
Materials:	Aluminum, brass, bronze, stainless steel					
Finishes:	US3, US4, US10, US10B, US26, US26D, US28, US32, US32D					
Fasteners:	Two (2) 1/4-20 thru-bolts with finish wash	ers				
Handicap:	2-1/2" (64 mm) clearance available on spe	cial orders - add p	orefix "	H″ to n	umber	
	(i.e., H1E)					
Options:	• May be combined with a plate to make a	a pull plate				
•	Other centers on special order					
Notes:	• For sizes or finishes not listed in this cata	aloa, contact Hage	er Custo	omer S	ervice f	or

 For sizes or finishes not listed in this catalog, contact Hager Customer Service for availability

CTC Length

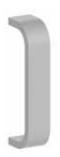
3E

3G

33

3L

• Not suitable for BTB mounting



1

2		CTC Length	2E	2G	23	2L	
Rectangular Wrought Door Pull		Inches	6	8	10	12	
Certification:	Meets ANSI A156.6 for J401 Pulls	Millimeters	152	203	254	305	
Base:	3/8" x 1-1/4" (10 mm x 32 mm)						
Projection:	2″ (51 mm)						
Clearance:	1-5/8" (41 mm)						
Door Thickness:	1-3/4" (45 mm) - Standard						
Materials:	Aluminum, brass, bronze, stainless steel						
Finishes:	US3, US4, US10, US10B, US26, US26D, US	528, US32, US32D					
Fasteners:	Two (2) 1/4-20 thru-bolts with finish wash	washers					
Handicap:	2-1/2" (64 mm) clearance available on spe	cial orders - add	prefix "	H" to r	number		
	(i.e., H2E)						
Options:	 May be combined with a plate to make a 	a pull plate					
	 Other centers on special order 						
Notes:	 For sizes or finishes not listed in this cat availability 	alog, contact Hage	er Custo	omer S	ervice	for	
	 Not suitable for BTB mounting 						



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-	Round Wrought Door Pull		6	8	10	12
Certification:	Meets ANSI A156.6 for J401 Pulls	Milling atoms	152	202	254	205
Base Diameter:	3/4" (19 mm)	Millimeters	152	203	254	305
Projection:	2-1/4" (57 mm)					
Clearance:	1-1/2" (38 mm)					
Door Thickness:	1-3/4" (45 mm) - Standard					
Materials:	Aluminum, brass, bronze, stainless steel					
Finishes:	US3, US4, US10, US10B, US26, US26D, US28, US32, US32D					
Fasteners:	Two (2) 1/4-20 thru-bolts with finish was	hers				
Handicap:	2-1/2" (64 mm) clearance available on sp	ecial orders - add	prefix "	H" to r	umber	
	(i.e., H3E)					
Notes:	 For sizes or finishes not listed in this ca availability 	talog, contact Hage	er Custo	omer S	ervice	for
	 May be combined with a plate to make 	a pull plate				
	Other centers on special order					

Other centers on special order

• If ordered with tempered glass, specify glass thickness and hole size

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CTC Length	4G	4H	4J	4L
Inches	8	9	10	12
Millimeters	203	229	254	305

Round Wrought Door Pull		Inches	8	9	10	12
Certification:	Meets ANSI A156.6 for J401 Pulls		-	-		
Base Diameter:	1″ (25 mm)	Millimeters	203	229	254	305
Projection:	2-3/4" (70 mm)					
Clearance:	1-3/4" (45 mm)					
Door Thickness:	1-3/4" (45 mm) - Standard					
Materials:	Aluminum, brass, bronze, stainless steel					
Finishes:	US3, US4, US10, US10B, US26, US26D, US	528, US32, US32D				
Fasteners:	Two (2) 1/4-20 thru-bolts with finish wash	ers				
Handicap:	2-1/2" (64 mm) clearance available on spe	cial orders. Add p	refix "H	l" to ni	umber	
	(i.e., H4E)					
Notes:	 For sizes or finishes not listed in this cata availability 	alog, contact Hage	er Custo	omer S	ervice	for

• May be combined with a plate to make a pull plate

- Other centers on special order
- If ordered with tempered glass, specify glass thickness and hole size

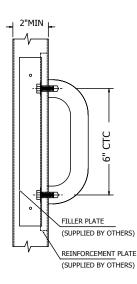
P4E Security Pull

Certification: Base: Projection: Clearance: CTC Length: Material: Finish: Fasteners:

Notes:

Meets ANSI A156.6 for J401 Pulls 1" (25 mm) diameter 2-1/4" (57 mm) 1-1/4" (32 mm) 6" (152 mm) Stainless Steel US32D Two (2) 3/8-16 x 1-1/4" "NYLOC" hex head cap screws • For metal doors

• Requires reinforcing plate with an access plate and Torx screws for door edge





T4E

Security Pull Certification: Base: Projection: Clearance: Door Thickness:

CTC Length:

Material:

Fasteners:

Finish:

Meets ANSI A156.6 for J401 Pulls 1" (25 mm) diameter 2-1/4" (57 mm) 1-1/4" (32 mm) 1-3/4" (45 mm) - Standard 6" (152 mm) Stainless Steel US32D Two (2) 1/4-20 x 2-1/4" Security Torx thru-bolts





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5N Cast Pull Certification:

Base:

O/A Height:

Projection:

Clearance: CTC Length:

Materials:

Finishes:

Options:

Notes:

Fasteners:

Door Thickness:

5D

Certification: Base Diameter:

Projection:

Clearance: CTC Length: Door Thickness:

Materials:

Fasteners:

Handicap:

Notes:

Finishes:

Round Wrought Door Pull

Meets ANSI A156.6 for J401 Pulls 6-1/8" (156 mm) 5/8" x 1-3/16" (16 mm x 30 mm) 2" (51 mm) 1-1/2" (38 mm) 5-1/2" (140 mm) 1-3/4" (45 mm) - Standard Aluminum, brass, bronze, stainless steel US3, US4, US10, US10B, US26, US26D, US28, US32D Two (2) 1/4-20 thru-bolts with finish washers May be combined with a plate to make a pull plate Not suitable for BTB mounting

Meets ANSI A156.6 for J401 Pulls

Aluminum, brass, bronze, stainless steel

Two (2) 1/4-20 thru-bolts with finish washers

• May be combined with a plate to make a pull plate

US3, US4, US10, US10B, US26, US26D, US28, US32, US32D

2-1/2" (64 mm) clearance available on special orders. Add prefix "H" to number

• If ordered with tempered glass, specify glass thickness and hole size

For sizes or finishes not listed in this catalog, contact Hager Customer Service for

1-3/4" (45 mm) - Standard

Not suitable for BTB mounting

5/8" (16 mm)

(i.e., H5D)

availabilitv

2-1/8" (54 mm) 1-1/2" (38 mm) 5-1/2" (140 mm)



6N

Cast Pull Certification: O/A Height: Base Diameter: Projection: Clearance: CTC Length: Door Thickness: Materials: Finishes: Fasteners: Options: Notes:

Meets ANSI A156.6 for J401 Pulls 6-1/2" (165 mm) 1" (25 mm) 1-7/8" (48 mm) 1-3/8" (35 mm) 5-1/2" (140 mm) 1-3/4" (45 mm) - Standard Aluminum, brass, bronze, stainless steel US3, US4, US10, US10B, US26, US26D, US28, US32D Two (2) 1/4-20 thru-bolts with finish washers May be combined with a plate to make a pull plate Not suitable for BTB mounting







5

7N Cast Pull

Cast Pull Certification: O/A Height: Base Diameter: Projection: Clearance: CTC Length: Door Thickness: Materials: Finishes: Fasteners: Options: Notes:

Meets ANSI A156.6 for J401 Pulls 7-1/2" (190 mm) 2" (51 mm) 1-7/8" (48 mm) 1-3/8" (35 mm) 5-1/2" (140 mm) 1-3/4" (45 mm) - Standard Aluminum, brass, bronze US3, US4, US10, US10B, US26, US26D, US28 Two (2) 1/4-20 thru-bolts with finish washers May be combined with a plate to make a pull plate Not suitable for BTB mounting

8N Cast Pull

Certification: O/A Height: Base Diameter: Projection: Clearance: CTC Length: Materials: Finishes: Fasteners: Notes: Meets ANSI A156.6 for J401 Pulls 7-1/2" (190 mm) 2" (51 mm) 1-7/8" (48 mm) 1-3/8" (35 mm) 5-1/2" (140 mm) Aluminum, brass, bronze US3, US4, US10, US10B, US26, US26D, US28 Six (6) #8 x 1" OPHWS Not suitable for BTB mounting

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P8N Cast Pull

Certification: O/A Height: Base: Projection: Clearance: CTC Length: Materials: Finishes: Fasteners: Options: Notes:

Meets ANSI A156.6 for J401 Pulls 8 - 3/4" (222 mm) 1-1/2" x 1-5/8" (38 mm x 41 mm) 2-1/4" (57 mm) 1-9/16" (40 mm) 7-3/4" (197 mm) Brass US4, US26D Two (2) 3/8-16 x 3/4" FPHMS Security Torx screws available Not suitable for BTB mounting



DULLS



9		CTC Length	9E	9G	93	9L
Oval Wrought Do	oor Pull	Inches	6	8	10	12
Certification:	Meets ANSI A156.6 for J401 Pulls		-	-		
Base:	1/2" x 3/4" (13 mm x 19 mm)	Millimeters	152	203	254	305
Projection:	2″ (51 mm)					
Clearance:	1-1/2" (38 mm)					
Door Thickness:	1-3/4" (45 mm) - Standard					
Materials:	Brass, bronze, stainless steel					
Finishes:	US3, US4, US10, US10B, US26, US26D,	US32, US32D				
Fasteners:	Two (2) 1/4-20 thru-bolts with finish wa	shers				
Handicap:	2-1/2" (64 mm) clearance available on s	pecial orders. Add	orefix "H	Η" to nι	umber	
	(i.e., H9E)					
Options:	May be combined with a plate to make	e a pull plate				
•	Other centers on special order					
Notes:	 For sizes or finishes not listed in this c availability 	atalog, contact Hag	er Cust	omer S	ervice	for

• Not suitable for BTB mounting

10		CTC Length	10L	10Q
Round Pull		Inches	12	18
Certification:	Meets ANSI A156.6 for J401 Pulls	Millimeters	305	457
Base Diameter:	1-1/4″ (32 mm)	Minimeters	303	437
Projection:	3″ (76 mm)			
Clearance:	1-3/4" (45 mm)			
Door Thickness:	1-3/4" (45 mm) - Standard			
Materials:	Aluminum, brass, bronze, stainless steel			
Finishes:	US3, US4, US10, US10B, US26, US26D, US28, US32, US	532D		
Fasteners:	Two (2) 5/16-18 thru-bolts with finish washers			
Handicap:	2-1/2" (64 mm) clearance available on special orders. A (i.e., H10L)	dd prefix "H" to n	umber	
Options:	• May be combined with a plate to make a pull plate			
	Other centers on special order	a and hala aina		
	• If ordered with tempered glass, specify glass thickness			
Notes:	For sizes or finishes not listed in this catalog, contact H availability	ager Customer Se	rvice fo	r



11		CTC Length	11E	11G	11J	11L
Round Offset Pull	Marke ANCI A1EC C Cou 1400 Dalla	Inches	6	8	10	12
Certification: Base Diameter:	Meets ANSI A156.6 for J402 Pulls	Millimeters	152	203	254	305
Projection:	3/4″ (19 mm) 2-1/2″ (64 mm)		1			
Offset:	2-1/2" (64 mm); 90° Standard					
Clearance:	1-3/4" (45 mm)					
Door Thickness:	1-3/4" (45 mm) - Standard					
Materials:	Aluminum, brass, bronze, stainless steel					
Finishes:	US3, US4, US10, US10B, US26, US26D, US28, US32, US32D					
Fasteners:	Two (2) 5/16-18 thru-bolts with finish washers					
Handicap:	2-1/2" (64 mm) clearance available on spe	ecial orders. Add p	orefix "	H″ to n	number	í.e.,
	H11E)					
Options:	• For 45° offset, add prefix "X" to number					
	• Other centers available on special orders					
Notoo	 If ordered with tempered glass, specify glass thickness and hole size For sizes or finishes not listed in this catalog, contact Hager Customer Service for 					
Notes:	availability	og, contact Hager	Custon	ner Ser	vice to	ſ
	avalubility					

10					
12		CTC Length	12G	12J	12L
Round Offset Pull		Inches	8	10	12
Certification: Base Diameter:	Meets ANSI A156.6 for J402 Pulls 1" (25 mm)	Millimeters	203	254	305
Projection:	2-3/4″ (70 mm)				
Offset:	3" (76 mm); 90° Standard				
Clearance:	1-3/4" (45 mm)				
Door Thickness:	1-3/4" (45 mm) - Standard				
Materials:	Aluminum, brass, bronze, stainless steel				
Finishes:	US3, US4, US10, US10B, US26, US26D, US28, US32, US32D				
Fasteners:	Two (2) 5/16-18 thru-bolts with finish washers	- ,			
Handicap:	2-1/2" (64 mm) clearance available on special or	lers. Add prefix "	H″ to n	umber	(i.e.,
	H12G)				•
Options:	• For 45° offset, add prefix "X" to number (i.e., X	12G)			
	 Other centers available on special orders 				
	• If ordered with tempered glass, specify glass the	ickness and hole s	size		
Notes:	For sizes or finishes not listed in this catalog, con	tact Hager Custon	ner Ser	vice for	r
	availability				

13 **Round Wrought Door Push/Pull Set** Meets ANSI A156.6 for J401 Pulls Certification: 3/4" (19 mm) Base Diameter: 2-1/4" (57 mm) Projection: 1-1/2" (38 mm) Clearance: Door Thickness: 1-3/4" (45 mm) - Standard

CTC Length	13E	13G	13J	13L
Inches	6	8	10	12
Millimeters	152	203	254	305

US3, US4, US10, US10B, US26, US26D, US28, US32, US32D)
 Type 7 mounting - Standard 	

• Consists of two (2) pulls back to back

Aluminum, brass, bronze, stainless steel

• For sizes or finishes not listed in this catalog, contact Hager Customer Service for availability



14

Materials:

Finishes: Notes:

Round Wrought Door Push/Pull Set Certification: Base Diameter: Projection: Clearance: Door Thickness: Materials: Finishes: Notes:

Meets ANSI A156.6 for J401 Pulls 1" (25 mm) 2-3/4" (70 mm) 1-3/4" (45 mm) 1-3/4" (45 mm) - Standard Aluminum, brass, bronze, stainless steel US3, US4, US10, US10B, US26, US26D, US28, US32, US32D • Type 7 mounting - Standard • Consists of two (2) pulls back to back

CTC Length	14G	14H	14J	14L
Inches	8	9	10	12
Millimeters	203	229	254	305

- For sizes or finishes not listed in this catalog, contact Hager Customer Service for availability

CTC Length

20L

12

305

20Q

18

457



8

19N Cast Pull

Certification: O/A Height: Base Diameter: Clearance: Projection: CTC Length: Materials: Finishes: Fasteners: Notes: Meets ANSI A156.6 for J401 Pulls 9" (229 mm) 1-1/2" (38 mm) 1-11/16" (43 mm) 3-1/8" (79 mm) 6-3/16" (132 mm) Brass US3, US10, US10B, US26, US26D Four (4) #8 x 1" OPH Tapping Screw Suitable for BTB mounting with sex nuts by special quotation



20

Round Push/Pull SetCertification:MBase Diameter:1Projection:3Clearance:1Door Thickness:1Materials:EFinishes:UNotes:•

et	Inches
Meets ANSI A156.6 for J401 Pulls	
1-1/4″ (32 mm)	Millimeters
3″ (76 mm)	
1-3/4" (45 mm)	
1-3/4" (45 mm) - Standard	
Brass, bronze, stainless steel	
US3, US4, US10, US10B, US26, US26D, US28, US32, US	32D
• Type 7 mounting - Standard	

- Consists of two (2) pulls back to back
- For sizes or finishes not listed in this catalog, contact Hager Customer Service for availability



20N Cast Pull

Certification:

O/A Height:

Clearance: Projection:

CTC Length:

Material:

Finishes:

21

Fasteners:

Door Thickness:

Base Diameter:

Meets ANSI A156.6 for J401 Pulls 9" (229 mm) 1-1/2" (38 mm) 1-11/16" (43 mm) 3-1/8" (79 mm) 5-7/32" (132.5 mm) 1-3/4" - Standard Brass US3, US10, US10B, US26, US26D Two (2) 1/4 - #20 x 2-3/16" Undercut FPHMS with finish washers



Round Offset Push/Pull Set Certification: Meets ANSI A156.6 for J402 Pulls

Certification: Base Diameter: Projection: Clearance: Offset: Door Thickness: Materials: Finishes: Notes:

CTC Length	21E	21G	21J	21L
Inches	6	8	10	12
Millimeters	152	203	254	305

3/4″ (19 mm)	Millimeters	1
2-1/2" (64 mm)		
1-3/4″ (45 mm)		
2-1/2" (64); 90° - Standard		
1-3/4" (45 mm) - Standard		
Aluminum, brass, bronze, stainless steel		
US3, US4, US10, US10B, US26, US26D, US	28, US32, US32D	
 Type 7 mounting - Standard 		

- Consists of two (2) pulls back to back
- Available with 45 degree offset
- For sizes or finishes not listed in this catalog, contact Hager Customer Service for availability



Round Offset Push/Pull Set

Certification: Base Diameter: Projection: Clearance: Door Thickness: Offset: Materials: Finishes: Notes:

22

Meets ANSI A156.6 for J402 Pulls 1" (25 mm) 2-3/4" (70 mm) 1-3/4" (45 mm) 1-3/4" (45 mm) - Standard 3" (76 mm); 90° standard Aluminum, brass, bronze, stainless steel US3, US4, US10, US10B, US26, US26D, US28, US32, US32D • Type 7 mounting - Standard

- Consists of two (2) pulls back to back
- Available with 45 degree offset
- For sizes or finishes not listed in this catalog, contact Hager Customer Service for availability

23Q

Round Offset Pull	
Certification:	Meets ANSI A156.6 for J402 Offset Pulls
Base Diameter:	1-1/4″ (32 mm)
Projection:	3″ (76 mm)
Clearance:	1-3/4″ (45 mm)
Offset:	3-3/4" (96 mm); 90° Standard
Door Thickness:	1-3/4" (45 mm) - Standard
CTC Length:	18″ (457 mm)
Materials:	Aluminum, brass, bronze, stainless steel
Finishes:	US3, US4, US10, US10B, US26, US26D, US28, US32, US32D
Fasteners:	5/16-18 thru bolts with finish washers
Handicap:	2-1/2" (64 mm) clearance available on special orders. Add prefix "H" to number
	(i.e., H23Q)
Options:	For 45° offset, substitute "X" for first digit (i.e., X23Q)
Notes:	 If ordered with tempered glass, specify glass thickness and hole size
	• For sizes or finishes not listed in this catalog, contact Hager Customer Service for availability

24Q

Round Offset Push/Pull Set

Certification: Base Diameter: Projection: Clearance: Offset: Door Thickness: CTC Length: Materials: Finishes: Notes: Meets ANSI A156.6 for J402 Offset Pulls
1-1/4" (32 mm)
3" (76 mm)
1-3/4" (45 mm)
3-3/4" (95 mm); 90° standard
1-3/4" (45 mm) - Standard
18" (457 mm)
Aluminum, brass, bronze, stainless steel
US3, US4, US10, US10B, US26, US26D, US28, US32, US32D
Type 7 mounting - Standard
Consists of two (2) pulls back to back
Available with 45 degree offset
For sizes or finishes not listed in this catalog, contact Hager Customer Service for availability

CTC Length	22G	22J	22L
Inches	8	10	12
Millimeters	203	254	305





910P | 910B

Offset Mounting Vertical Pull

Pull Diameter:	1-1/4" (32 mm)
O/A Length:	36″ (914 mm), 72″ (1829 mm)
CTC Lengths:	20″ (508 mm), 56″ (1422 mm)
Clearance:	2″ (51 mm)
Projection:	3-1/4" (82 mm)
Materials:	Aluminum, brass, bronze, stainless steel
Finishes:	US3, US4, US10, US10B, US15A, US26, US26D, US28, US32D
Fasteners:	Two (2) 3/8-16 FPHMS with finish washers
Notes:	 910B is same as 910P with fasteners for BTB mounting
	 For sizes or finishes not listed in this catalog, contact Hager Customer Service for availability

915P | 915B

Straight Mounting Vertical Pull

Schuight Ploanting	
Pull Diameter:	1-1/4" (32 mm)
O/A Length:	36″ (914 mm), 72″ (1829 mm)
CTC Lengths:	20" (508 mm), 56" (1422 mm)
Clearance:	2″ (51 mm)
Projection:	3-1/4″ (82 mm)
Materials:	Aluminum, brass, bronze, stainless steel
Finishes:	US3, US4, US10, US10B, US15A, US26, US26D, US28, US32D
Fasteners:	Two (2) 3/8-16 FPHMS w/ finish washers
Notes:	 915B is same as 915P with fasteners for BTB mounting
	• For sizes or finishes not listed in this catalog, contact Hager Customer Service for availability
	Pull Diameter: O/A Length: CTC Lengths: Clearance: Projection: Materials: Finishes: Fasteners:

920P | 920B C-Shaped

C-Shaped Pull	
Base Diameter:	1″ (25 mm)
Clearance:	1-3/4″ (45 mm)
Projection:	2-1/4" (57 mm)
CTC Length:	8-1/2" (217 mm)
Materials:	Aluminum, brass, bronze, stainless steel
Finishes:	US3, US4, US10, US10B, US15A, US26, US26D, US28, US32D
Fasteners:	Two (2) 3/8-16 FPHMS with finish washers
Notes:	 920B is pair of 920P with fasteners for BTB mounting
	 For sizes or finishes not listed in this catalog, contact Hager Customer Service for availability



921P | 921B **C-Shaped Pull**

Clearance: Projection: CTC Length: Materials: Finishes: Fasteners: Notes:

1-1/2" (38 mm)
2-1/8" (54 mm)
17-1/2" (446 mm)
Brass, bronze, stainless steel
US3, US4, US10, US10B, US15A, US26, US26D, US32D
Two (2) 3/8-16 FPHMS with finish washers
 921B is pair of 921P with fasteners for BTB mounting
• For sizes or finishes not listed in this catalog, contact Hager Customer Service for
availability



PULLS



922P | 922B

Pull Diameter: Projection: CTC Lengths: Clearance: Materials: Finishes: Fasteners: Notes:

C-Shaped Pull - Continuous 1" (25 mm) 2-1/2" (64 mm) 10" (254 mm), 12" (305 mm) 1-1/2" (38 mm) Aluminum, brass, bronze, stainless steel US3, US4, US10, US10B, US15A, US26, US26D, US32D Two (2) 3/8-16 FPHMS with finish washers • 922B is pair of 922P with fasteners for BTB mounting • For sizes or finishes not listed in this catalog, contact Hager Customer Service for

923P | 923B



C-Shaped Pull - Flanged Pull Diameter: Projection: CTC Lengths: Clearance: Base Diameter: Materials: Finishes: Fasteners: Notes:

1" (25 mm) 2-3/4" (70 mm) 10" (254 mm), 12" (305 mm) 1-3/4" (44 mm) 3/4" (19 mm) Aluminum, brass, bronze, stainless steel US3, US4, US10, US10B, US15A, US26, US26D, US32D Two (2) 3/8-16 FPHMS with finish washers • 923B is pair of 923P with fasteners for BTB mounting • For sizes or finishes not listed in this catalog, contact Hager Customer Service for

availability

availability



924P | 924B **C-Shaped Pull**

Projection: CTC Length: Clearance: Materials: Finishes: Fasteners: Notes:

2-1/2" (64 mm)
14" (356 mm)
1-1/2" (38 mm)
Brass, bronze, stainless steel
US3, US4, US10, US10B, US15A, US26, US26D, US32D
Two (2) 3/8-16 FPHMS with finish washers
 924B is pair of 924P with fasteners for BTB mounting
 For sizes or finishes not listed in this catalog, contact Hager Customer Service for availability



925P | 925B

C-Shaped Pull Pull Diameter: CTC Lengths: Materials: Finishes: Fasteners: Notes:

1-1/4" (32 mm) 6-1/2" (165 mm), 8-1/2" (217 mm), 12-1/2" (318 mm) Aluminum, brass, bronze, stainless steel US3, US4, US10B, US15A, US26, US26D, US32D Two (2) 3/8-16 FPHMS with finish washers • 925B is pair of 925P with fasteners for BTB mounting • For sizes or finishes not listed in this catalog, contact Hager Customer Service for

availability







926P | 926B **Curved Pull**

Curvea Pull	
Base Diameter:	1-1/4" (32 mm)
Projection:	3″ (76 mm)
Clearance:	1-13/16" (46 mm)
Pull Diameter:	1-3/16" (30 mm)
CTC Length:	12″ (305 mm)
Materials:	Brass, bronze
Finishes:	US3, US4, US10, US10B
Fasteners:	Two (2) 3/8-16 FPHMS with finish washers
Notes:	 926B is pair of 926P with fasteners for BTB mounting
	• For sizes or finishes not listed in this catalog, contact Hager Customer Service for
	availability



930P | 930B 90º Pull

JU 1 U	
Projection:	3" (76 mm)
CTC Lengths:	14-5/32" - 16-31/32" (360 mm - 431 mm)
Materials:	Aluminum, brass, bronze, stainless steel
Finishes:	US3, US4, US10B, US15A, US26, US26D, US28, US32D
Fasteners:	Two (2) 3/8-16 FPHMS with finish washers
Notes:	 930B is pair of 930P with fasteners for BTB mounting
	 For sizes or finishes not listed in this catalog, contact Hager Customer Service for availability



932P | 932B

S-Shaped Pull Projection: Clearance: Pull Diameter: Fasteners: CTC Length: Materials: Finishes: Fasteners: Notes:

3" (76 mm) 2" (51 mm) 1" (25 mm) Two (2) 3/8-16 FPHMS w/ finish washers 30" (762 mm) Aluminum, brass, bronze, stainless steel US3, US4, US10B, US15A, US26, US26D, US28, US32D Two (2) 3/8-16 FPHMS with finish washers • 932B is pair of 932P with fasteners for BTB mounting

- Specify handing when ordering
- For sizes or finishes not listed in this catalog, contact Hager Customer Service for availability





933P | 933B

Projection:

Clearance:

CTC Length:

Materials: Finishes:

Fasteners:

Projection:

Clearance:

Materials:

Finishes:

Notes:

Fasteners:

Notes:

Colonial Style Pull 2-3/16" (56 mm) 1-3/16" (30 mm) Pull Diameter: 1" (25 mm) 15/16" (24 mm) 6" (152 mm) Base Diameter: Aluminum, brass, bronze, stainless steel US3, US4, US10B, US26 Two (2) 3/8-16 FPHMS with finish washers 933B is pair of 933P with fasteners for BTB mounting



934P | 934B **Offset Pull**

3" (76 mm) 1-5/8" (41 mm) Pull Diameter: 1" (25 mm) 3/4" (19 mm) Base Diameter: 12" (305 mm), 16" (406 mm), 18" (457 mm) CTC Lengths: Aluminum, brass, bronze, stainless steel US3, US4, US10B, US15A, US26, US26D, US28, US32D Two (2) 3/8-16 FPHMS with finish washers 934B is pair of 934P with fasteners for BTB mounting

960P | 960B Square Tip Pull

O/A Height: Base Diameter: Pull Diameter: Clearance: Projection: CTC Length: Materials: Finishes: Fasteners: Notes:

16" (406 mm) 1-1/4" (32 mm) 1" (25 mm) 1-3/4" (45 mm) 3-1/4" (83 mm) 12" (305 mm) Brass, bronze US3, US4, US10B, US15A, US26, US26D Two (2) 3/8-16 FPHMS w/ finish washers • 960B is pair of 960P with fasteners for BTB mounting • For sizes or finishes not listed in this catalog, contact Hager Customer Service for availability

DULLS







961P | 961B

- **Steeple Tip Pull** O/A Height: Base Diameter: Pull Diameter: Clearance: Projection: CTC Length: Materials: Finishes: Fasteners: Notes:
- 16-5/16" (414 mm) 2" (51 mm) 1" (25 mm) 1-3/4" (45 mm) 3" (76 mm) 12" (305 mm) Brass, bronze US3, US4, US10B, US15A, US26, US26D Two (2) 3/8-16 FPHMS with finish washers • 961B is pair of 961P with fasteners for BTB mounting • For sizes or finishes not listed in this catalog, contact Hager Customer Service for availability

962P **Acorn Tip Pull**

O/A Height Base Diameter: Pull Diameter: Projection: Clearance: CTC Length:

Materials: Finishes: Fasteners: Notes:

16-5/16" (414 mm)
2″ (51 mm)
1″ (25 mm)
3″ (76 mm)
1-7/8" (48 mm)
12" (305 mm)
Brass, bronze
US3, US4, US10B, US15A, US26, US26D
Two (2) 3/8-16 FPHMS with finish washers
For sizes or finishes not listed in this catalog, contact Hager Customer Service for availability



963P

Acorn Pull - Offset	
O/A Height:	16-5/16" (414 mm)
Pull Diameter:	1″ (25 mm)
Projection:	2-3/4" (70 mm)
CTC Lengths:	12" (304 mm), 16" (406 mm), 18" (457 mm), 24" (610 mm), 30" (762 mm)
Materials:	Cast brass, bronze
Finishes:	US3, US4, US10B, US15A, US26, US26D
Fasteners:	Two (2) 3/8-16 FPHMS with finish washers
Notes:	For sizes or finishes not listed in this catalog, contact Hager Customer Service for
	availability



967P **Curved Pull**

Materials:

Finishes:

Notes:

20-1/2" (520 mm) 3-9/16" (90 mm) 5-9/16" (141 mm) O/A Height: Clearance: Projection: CTC Length: 16" (406 mm) Brass, bronze US3, US4, US10B, US15A, US26, US26D Two (2) 3/8-16 FPHMS with finish washers Fasteners: For sizes or finishes not listed in this catalog, contact Hager Customer Service for availability



970P

Custom Push/Pull Set

Base Diameter:	1″ (25 mm)
Pull Projection:	3″ (76 mm)
Pull Clearance:	2″ (51 mm)
CTC Length:	13-1/4" (337 mm)
Push Projection:	2-3/4″ (70 mm)
Push Clearance:	1-3/4″ (45 mm)
CTC Length:	34" (864 mm) or to suit door dimension
Materials:	Brass, bronze, stainless steel
Finishes:	US3, US4, US10, US10B, US15A, US26, US26D, US32D
Fasteners:	Type 3 mounting, concealed cone with bolt and set screw
Notes:	 Pull or push bar can be ordered separately by quotation only
	• Push bar radius can be custom made so the radius points in the
	downward direction
	• For sizes or finishes not listed in this catalog, contact Hager

• For sizes or finishes not listed in this catalog, contact Hager Customer Service for availability



974P | 974B

Door Pull Projection: CTC Length:

Materials: Finishes: Fasteners: Notes: 2-1/2" (64 mm)

12" (304 mm), 18" (457 mm), 24" (610 mm), 30" (762 mm), 36" (914 mm), 48" (1219 mm) Brass, bronze, stainless steel US3, US4, US10B, US26, US26D, US32D Two (2) 3/8-16 FPHMS with finish washers

- 974B is pair of 974P with fasteners for BTB mounting
- For sizes or finishes not listed in this catalog, contact Hager Customer Service for availability

975P | 975B

Vertical Pull Projection: O/A Length: CTC Length: Pull Diameter: Materials: Finishes: Fasteners: Notes:

1-3/4" (44 mm) 36" (914 mm), 72" (1829 mm) 20" (508 mm), 56" (1422 mm) 1" (25 mm) Brass, bronze, stainless steel US3, US4, US10, US10B, US15A, US26, US26D, US32D Two (2) 3/8-16 FPHMS with finish washers • 975B is pair of 975P with fasteners for BTB mounting • For sizes or finishes not listed in this catalog, contact Hager

Customer Service for availability





18





976P | 976B

Do	oor Pull - Offset	
0/	/A Height:	29-1/2" (750 mm)
Ba	ase Diameter:	1-1/4" (32 mm)
Pu	Ill Diameter:	1-1/4" (32 mm)
Pr	ojection:	5-3/8" (137 mm)
Cle	earance:	4-1/8" (105 mm)
Of	ffset:	1-3/4" (45 mm)
CT	FC Length:	19-13/16" (503 mm)
Ma	aterials:	Stainless steel
Fir	nish:	US32, US32D
Fa	steners:	Two (2) 3/8-16 FPHMS with finish washers
No	otes:	 976B is pair of 976P with fasteners for BTB mounting
		 For sizes or finishes not listed in this catalog, contact Hager Customer Service for availability

980P | 980B

Segment Shape - Straight		
CTC Length:	9" (229 mm), 12" (305 mm), 18" (457 mm), 24" (610 mm)	
Materials:	Brass, bronze, stainless steel	
Finishes:	US3, US4, US10B, US15A, US26, US26D, US32D	
Fasteners:	Two (2) 3/8-16 FPHMS with finish washers	
Notes:	 980B is pair of 980P with fasteners for BTB mounting 	
	• For sizes or finishes not listed in this catalog, contact Hager Customer Service for availability	

Segment	Shape -	Offset

981P 981 Segment Shape	
Projection:	2-3/8" (60 mm)
CTC Length:	9" (229 mm), 12" (305 mm), 18" (457 mm), 24" (610 mm)
Materials:	Brass, bronze, stainless steel
Finishes:	US3, US4, US10B, US15A, US26, US26D, US32D
Fasteners:	Two (2) 3/8-16 FPHMS with finish washers
Notes:	 981B is pair of 981P with fasteners for BTB mounting
	 For sizes or finishes not listed in this catalog, contact Hager Customer Service for availability

982P | 982B Straight Pull

Schuight Full	
Base Diameter:	1-5/16″ (33 mm)
Projection:	3-1/8″ (79 mm)
Clearance:	1-13/16″ (46 mm)
CTC Length:	20″ (508 mm)
Materials:	Brass, bronze, stainless steel
Finishes:	US3, US4, US10B, US15A, US26, US26D, US32D
Fasteners:	Two (2) 3/8-16 FPHMS with finish washers
Notes:	 982B is pair of 982P with fasteners for BTB mounting
	 For sizes or finishes not listed in this catalog, contact Hager Customer Service for availability

PULLS



983P | 983B

Curved Pull O/A Height: Base Diameter: Projection: Clearance: CTC Length: Materials: Finishes: Fasteners: Notes:

21-1/4" (540 mm) 1-1/4" (32 mm) 3-1/8" (79 mm) 1-7/8" (48 mm) 20" (508 mm) Brass, bronze, stainless steel US3, US4, US10B, US15A, US26, US26D, US32D Two (2) 3/8-16 FPHMS with finish washers • 983B is pair of 983P with fasteners for BTB mounting • Specify handing when ordering

• For sizes or finishes not listed in this catalog, contact Hager Customer Service for availability

984P | 984B

Curved Pull	
Clearance:	1-7/8″ (47 mm)
Projection:	3" (76 mm)
CTC Lengths:	12" (305 mm), 20" (508 mm)
Materials:	Brass, bronze, stainless steel
Finishes:	US3, US4, US10B, US15A, US26, US32, US32D
Fasteners:	Two (2) 3/8-16 FPHMS with finish washers
Notes:	 984B is pair of 984P with fasteners for BTB mounting
	• For sizes or finishes not listed in this catalog, contact Hager Customer Service for
	availability

985P | 985B **Curved Pull**

O/A Height: Projection: Clearance: CTC Length: Materials: Finishes: Fasteners: Notes:

14″ (356 mm)
3″ (76 mm)
1-9/16" (40 mm)
12″ (305 mm)
Brass, bronze, stainless steel
US3, US4, US10B, US15A, US26, US26D, US32D
Two (2) 3/8-16 FPHMS with finish washers
 985B is pair of 985P with fasteners for BTB mounting
• For sizes or finishes not listed in this catalog, contact Hager Customer Service for
availability

986P | 986B

Curved Pull	
O/A Height:	22″ (559 mm)
Pull Diameter:	1-1/4" (32 mm)
Base Diameter:	2″ (51 mm)
Projection:	3-7/8″ (99 mm)
Clearance:	2-5/8″ (67 mm)
CTC Length:	20" (508 mm)
Materials:	Brass, bronze, stainless steel
Finishes:	US3, US4, US10B, US15A, US26, US26D, US32
Fasteners:	Two (2) 3/8-16 FPHMS with finish washers
Notes:	 986B is pair of 986P with fasteners for BTB mounting
	 For sizes or finishes not listed in this catalog, contact Hager Customer Service for availability

2011

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DULLS









987P | 987B

Double Curved Pull

Double Curved Pull	
Base Diameter:	1-1/4″ (32 mm)
Clearance:	2″ (51 mm)
Projection:	3″ (76 mm)
CTC Length:	20" (508 mm)
Materials:	Brass, bronze, stainless steel
Finishes:	US3, US4, US10B, US15A, US26, US26D, US32D
Fasteners:	Two (2) 3/8-16 FPHMS with finish washers
Notes:	• 987B is pair of 987P with fasteners for BTB mounting
	• For sizes or finishes not listed in this catalog, contact I

 For sizes or finishes not listed in this catalog, contact Hager Customer Service for availability

988P | 988B

Offset Curved Pull Projection: CTC Length: Materials: Finishes: Fasteners: Notes:

3" (76 mm) 24" (610 mm) Brass, bronze, stainless steel US3, US26, US32D Two (2) 3/8-16 FPHMS with finish washers • 988B is pair of 988P with fasteners for BTB mounting • For sizes or finishes not listed in this catalog, contact Hager Customer Service for availability

990P | 990B 18º Pull

Pull Diameter: Projection: Clearance: CTC Length: Materials: Finishes: Fasteners: Notes:

1" (25 mm) 2-3/4" (70 mm) 1-3/4" (45 mm) 24" (610 mm) Brass, bronze, stainless steel US3, US4, US10B, US15A, US26, US26D, US32D Two (2) 3/8-16 FPHMS with finish washers • 990B is pair of 990P with fasteners for BTB mounting • Specify handing when ordering • For sizes or finishes not listed in this catalog, contact Hager Cur

• For sizes or finishes not listed in this catalog, contact Hager Customer Service for availability







15C Flush Cup Pull

Certification: Description: Face: Projection: Opening: Cup Clearance: Materials: Finishes: Fasteners:

Meets ANSI A156.6 for J403 Pulls Cup welded to face plate 3-1/2" x 5" (89 mm x 127 mm) 1/8" (3.2 mm) 1-3/4" x 3-1/16" (44 mm x 78 mm) 3/4" (19 mm) Stainless steel US32D Four (4) #6 x 5/8" OPHWS



15N

Flush Cup Pull Certification: Face: Projection: Opening: Cup Clearance: Materials: Finishes: Fasteners:

Meets ANSI A156.6 for J403 Pulls 3-1/2" x 5" (89 mm x 127 mm) 1/8" (3.2 mm) 1-3/4" x 3-1/16" (44 mm x 78 mm) 3/4" (19 mm) Aluminum, brass, bronze, stainless steel US3, US4, US10, US10B, US26, US26D, US28, US32D Four (4) #6 x 5/8" OPHWS



15P

Flush Cup Pull Certification: Description: Face: Projection: Opening: Cup Clearance: Materials: Finishes: Fasteners: Notes:

Meets ANSI A156.6 for J403 Pulls Cup welded to face plate and welded studs for security torx thru-bolt mounting 3-1/2" x 5" (89 mm x 127 mm) 1/8" (3.2 mm) 1-3/4" x 3-1/16" (44 mm x 78 mm) 3/4" (19 mm) Stainless steel US32D Two (2) 6-32 x 1-1/2" FPHMS (Security Torx) For use on 1-3/4" (44 mm) doors



15S Flush Cup Pull

Certification: Description: Face: Projection: Opening: Cup Clearance: Materials: Finishes: Fasteners: Notes:

Meets ANSI A156.6 for J403 Pulls Concealed mounting by screws within the recessed cup (similar to 16N or 17N) 3-1/2" x 5" (89 mm x 127 mm) 1/8" (3.2 mm) 1-3/4" x 3-1/16" (44 mm x 78 mm) 3/4" (19 mm) Aluminum, brass, bronze, stainless steel US3, US4, US10, US10B, US26, US26D, US28, US32D Two (2) #6 x 5/8" PPHWS Fasteners concealed in cup







16N Flush Cup Pull

Certification: Face: Projection: Opening: Cup Clearance: Fasteners: Materials: Finishes: Notes:

Meets ANSI A156.6 for J403 Pulls 1-15/16" x 3" (49 mm x 76 mm) 1/16" (1.5 mm) 27/32" x 2-3/8" (22 mm x 60 mm) 5/8" (16 mm) Two (2) #8 x 3/4" OPHWS Brass US3, US4, US10, US10B, US26, US26D Fasteners concealed in cup

16R **Finger Pull Plate**

Face: Projection:

Opening: Cup Clearance:

Fasteners:

Materials:

Finishes:

Certification:

Meets ANSI A156.6 for combination J301 Pull Plate and J403 Pulls 4" x 16" (102 mm x 406 mm) .050" (1.3 mm) 1-3/4" x 3-1/16" (44 x 78 mm) 13/16" (21 mm) Ten (10) #6 x 5/8" OPHWS Aluminum, brass, bronze, stainless steel US3, US4, US10, US10B, US26, US26D, US28, US32, US32D



Certification: Face: Projection: Opening: Cup Clearance: Materials: Finishes: Fasteners: Notes:

Meets ANSI A156.6 for J403 Pulls 2-1/2" x 3-31/32" (64 mm x 101 mm) 3/32" (2.4 mm) 1-11/32" x 3-13/32" (34 mm x 87 mm) 5/8" (16 mm) Brass US3, US4, US10, US10B, US26, US26D Two (2) #8 x 13/16" OPHWS Fasteners concealed in cup



25B **Security Flush Pull Set**

Certification: Face: Opening: Projection: Cup Clearance: Door Thickness: Materials: Finishes: Fasteners: Notes:

Meets ANSI A156.6 for J403 Pulls 3-1/2" x 5" (89 mm x 127 mm) 1-3/4" x 3-1/16" (45 mm x 78 mm) 1/8" (3 mm) 3/4" (19 mm) 1-3/4" (45 mm) - Standard Stainless steel US32D Two (2) 6-32 x 1-1/2" FPHMS (Security Torx) Security pull thru-bolted to a 15P pull



17N **Flush Cup Pull**





25C Flush Pull Set

Certification: Face: Opening: Projection: Cup Clearance: Door Thickness: Fasteners: Materials: Finishes: Notes:

Meets ANSI A156.6 for J403 Pulls 3-1/2" x 5" (89 mm x 127 mm) 1-3/4" x 3-1/16" (45 mm x 78 mm) 1/8" (3 mm) 3/4" (19 mm) 1-3/4" (45 mm) - Standard Two (2) 6-32 OPHMS sex nuts and bolts Stainless steel US32D Consists of two (2) 15C pulls mounted BTB



25N Flush Pull Set

Certification: Face: Opening: Projection: Cup clearance: Door Thickness: Fasteners: Materials: Finishes: Notes:

Meets ANSI A156.6 for J403 Pulls 3-1/2" x 5" (89 mm x 127 mm) 1-3/4" x 3-1/16" (45 mm x 78 mm) 1/8" (3 mm) 3/4" (19 mm) 1-3/4" (45 mm) - Standard Two (2) 6-32 OPHMS sex nuts and bolts Aluminum, brass, bronze, stainless steel US3, US4, US10, US10B, US26, US26D, US28, US32D Consists of two (2) 15N pulls mounted BTB

25P

26N

Projection:

Opening: Cup Clearance:

Fasteners:

Materials:

Finishes:

Notes:

Security Finger Push/Pull Plate Set

Certification: Face: Projection: Opening: Cup Clearance: Fasteners: Materials: Finishes: Notes:

Meets ANSI A156.6 for combination J301 Push Plate and J403 Flush Pull 4" x 16" (102 mm x 406 mm) 1/8" (3.2 mm) 1-3/4" x 3-1/16" (44 mm x 78 mm) 13/16" (21 mm) Six (6) 8-32 x 3/4" FPHMS (Security Torx) with sex nuts and bolts Stainless Steel US32D Consists of a 15 pull cup welded to a 100T push plate (Mounted in BTB fashion)



Security Finger Pull Certification: Face:

Meets ANSI A156.6 for J403 Pulls 4" x 5" (102 mm x 127 mm) 1/8" (3.2 mm) 1-5/8" x 3" (41 mm x 76 mm) 13/16" (21 mm) Four (4) 1/4-20 x 3/4" Undercut FPHMS (Security Torx) Brass, stainless steel US4, US26D, US32D Cup welded to face





2011

24





27N Flush Cup Pull

Certification: Face: Projection: Opening: Cup Clearance: Materials: Finishes: Fasteners: Notes: Meets ANSI A156.6 for J403 Pulls 5" x 5" (127 mm x 127 mm) 3/8" (9.5 mm) 3" x 3-1/2" (76 mm x 89 mm) 7/8" (22 mm) Stainless steel US32D Four (4) 10-24 FPHMS (Security Torx) sex nuts and bolts • ADA Compliant • Not available for BTB mounting

C L

27P Flush Cup Pull

Certification: Face: Projection: Opening: Cup Clearance: Materials: Finishes: Fasteners: Notes:

Meets ANSI A156.6 for J403 Pulls 5" x 5" (127 mm x 127 mm) 3/8" (9.5 mm) 3" x 3-1/2" (76 mm x 89 mm) 7/8" (22 mm) Stainless steel US32D Four (4) 1/4-20 x 3/4" Undercut FPHMS (Security Torx) • ADA Compliant • Not available for BTB mounting







30, 40, 50 Series **Pull Plate** Gauge: Certification:

0.050" (1.3 mm) Meets ANSI A156.6 for J405 Pull Plate



80, 90, 100 Series

0.125" (3.2 mm) Meets ANSI A156.6 for J407 Pull Plate



Finishes:

Notes:

A30, A40, A50 Series Pull Plate

Gauge: Certification:

0.062" (1.6 mm) Meets ANSI A156.6 for J405 Pull Plate

Materials:	Aluminum, brass,
Standard Sizes:	3″ x 12″ (76 mm :
	6″ x 16″ (152 mm
Fasteners:	Six (6) #6 x 5/8 0

bronze, stainless steel x 305 mm), 3-1/2" x 15" (89 mm x 381 mm), 4" x 16" (102 mm x 406 mm), n x 406 mm)*, 8" x 16" (203 mm x 406 mm)* - *(size not available for 50 and A50 Series) Six (6) #6 x 5/8 OPH tapping screws US3, US4, US10, US10B, US26, US26D, US28, US32, US32D For sizes or finishes not listed in this catalog, contact Hager Customer Service for availability

Pull Plate Chart 30, 40, 50 Series A30, A40, A50 Series 80, 90, 100 Series Radius Rounded Radius Rounded Radius Rounded Square Square Square Pull Corner Corner Corner Corner Corner Corner Corner Bevel Corner Pull Plate Part Number 1E 31E 41E 51E A31E A41E A51E 81E 91E 101E 91G 1G 41G A31G A41G 101G 31G 51G A51G 81G 1J 31J 41J 51J A31J A41J A51J 81J 91J 101J 41L A31L A41L 101L 1L 31L 51L A51L 81L 91L 2E 42E A32E A42E 82E 92E 102E 32E 52E A52E 2G 32G 42G 52G A32G A42G A52G 82G 92G 102G 2J 32J 42J 52J A32J A42J A52J 82J 92J 102J 2L 42L A32L A42L 82L 102L 32L 52L A52L 92L 3E 33E 43E 53E A33E A43E A53E 83E 93E 103E 3G 33G 43G 53G A33G A43G A53G 83G 93G 103G 3J 43J A33J A43J 83J 93J 103J 33J 53J A53J 3L 33L 43L 53L A33L A43L A53L 83L 93L 103L 4G 34G 44G 54G A34G A44G A54G 84G 94G 104G 4J 44J A34J A44J 84J 104J 34J 54J A54J 94J 4L 34L 44L 54L A34L A44L A54L 84L 94L 104L 5D 35D 45D 55D A35D A45D A55D 85D 95D 105D 5N 35N 45N 55N A35N A45N A55N 85N 95N 105N 36N 46N 56N A36N A46N 86N 96N 106N 6N A56N 9E 39E 49E 59E A39E A49E A59E 89E 99E 109E A39G 109G 9G 39G 49G 59G A49G A59G 89G 99G 9J 39J 49J A39J A49J 89J 109J 59J A59J 99J 9L 39L 49L 59L A39L A49L A59L 89L 99L 109L







313L Antivandal Pull with Latchquard

Antivandal Pull with Latchguard			
Meets ANSI A156.6 for J401 Pull and ANSI A156.6 for J407 Pull Plate			
7-13/32" x 11" (188 mm x 280 mm)			
11" (280 mm)			
1-7/8″ (48 mm)			
1-5/8" (41 mm)			
1-3/4" – 2" (45 mm - 51 mm)			
11 GA Stainless Steel			
US32D			
1/4-20 FPHMS with finish washers - Standard			
 Cylinder cutout available [1-1/4" (32 mm) diameter standard for exit device use and 1-1/2" (38 mm) diameter standard for mortise lock use] Plastisol grip available 			
 For use with most mortise locks on in-swinging and out-swinging doors 			
 For use with many exit devices (thru bolts directly to device) 			
Cylinders must be ordered separately			
• When mounting pull to a Hager exit device, cylinder collar (2-649-0137) must			
be purchased to ensure proper installation (see instructions for more detail)			
• When mounting null to a Hager exit device, a 7/16" (11 mm) tall cylinder collar			

 When mounting pull to a Hager exit device, a 7/16" (11 mm) tall cylinder collar must be purchased when using a 1-1/4" - 1-3/8" (32 mm - 35 mm) long rim cylinder (see instructions for more detail)



313S

3133	
Antivandal Pull	
Certification:	Meets ANSI A156.6 for J401 Pull and ANSI A156.6 for J407 Pull Plate
Size:	6-11/32" x 11" (161 mm x 280 mm)
Height:	11″ (280 mm)
Projection:	1-7/8" (48 mm)
Clearance:	1-5/8" (41 mm)
Door Thickness:	1-3/4" – 2" (45 mm - 51 mm)
Materials:	11 GA Stainless Steel
Finishes:	US32D
Fasteners:	1/4-20 FPHMS with finish washers - Standard
Options:	 Cylinder cutout available [1-1/4" (32 mm) diameter standard for exit device use and 1-1/2" (38 mm) diameter standard for mortise lock use] Plastisol grip available
Notes:	 For use with most mortise locks on in-swinging and out-swinging doors For use with many exit devices (thru bolts directly to device) Cylinders must be ordered separately

- must be ordered separately • When mounting pull to a Hager exit device, cylinder collar (2-649-0137) must be purchased to ensure proper installation (see instructions for more detail)
- When mounting pull to a Hager exit device, a 7/16" (11 mm) tall cylinder collar must be purchased when using a 1-1/4'' - 1-3/8'' (32 mm - 35 mm) long rim cylinder (see instructions for more detail)

30S | A30S

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Square Corner - Beveled Push Plate						
Certification: Meets ANSI A156.6 for J301 Push Plate						
Gauge: • 30S - 0.050" (1.3 mm)						
• A30S - 0.062" (1.6 mm)						
Materials:	Aluminum, brass, bronze, stainless steel					
Finishes:	US3, US4, US10, US10B, US26, US26D, US28, US32, US32D					
Fasteners: Six (6) #6 x 5/8" OPH tapping screws						
Options:	May be ordered cut for cylinder (CFC) or engraved "PUSH"					
Notes:	For sizes or finishes not listed in this catalog, contact Hager Customer Service for					
	availability					

Available in Sizes						
	Inches	3 x 12	3-1/2 x 15	4 x 16	6 x 16	8 x 16
	Millimeters	76 x 305	89 x 38	102 x 406	152 x 406	203 x 406

40R | A40R

Radius Corner - No	on-Beveled Push Plate
Certification:	Meets ANSI A156.6 for J301 Push Plate
Gauge:	• 40R - 0.050" (1.3 mm)
	• A40R - 0.062" (1.6 mm)
Materials:	Aluminum, brass, bronze, stainless steel
Finishes:	US3, US4, US10, US10B, US26, US26D, US28, US32, US32D
Fasteners:	Six (6) #6 x 5/8" OPH tapping screws
Options:	May be ordered cut for cylinder (CFC) or engraved "PUSH"
Notes:	For sizes or finishes not listed in this catalog, contact Hager Customer Service for
	availability
Available in Sizes	

Available in Sizes					
Inches	3 x 12	3-1/2 x 15	4 x 16	6 x 16	8 x 16
Millimeters	76 x 305	89 x 38	102 x 406	152 x 406	203 x 406



50T A50T Round Corner - N	Ion-Beveled Push Plate
Certification:	Meets ANSI A156.6 for J301 Push Plate
Gauge:	• 50T - 0.050" (1.3 mm)
	• A50T - 0.062" (1.6 mm)
Materials:	Aluminum, brass, bronze, stainless steel
Finishes:	US3, US4, US10, US10B, US26, US26D, US28, US32, US32D
Fasteners:	Six (6) #6 x 5/8" OPH tapping screws
Options:	May be ordered cut for cylinder (CFC) or engraved "PUSH"
Notes:	For sizes or finishes not listed in this catalog, contact Hager Customer Service for availability

Available in Sizes			
Inches	3 x 12	3-1/2 x 15	4 x 16
Millimeters	76 x 305	89 x 38	102 x 406







60S Square Corner - Beveled Push Plate Certification: Meets ANSI A156.6 for J304 Push Plate Gauge: 0.125" (3.2 mm) Plastic laminate Materials: PG - Grey, PK - Black, CO - Brown Six (6) #6 x 5/8" OPH tapping screws Finishes: Fasteners: May be ordered cut for cylinder (CFC) or engraved "PUSH" Options: For sizes or finishes not listed in this catalog, contact Hager Customer Service for Notes: availability

Available in Size	S				
Inches	3 x 12	3-1/2 x 15	4 x 16	6 x 16	8 x 16
Millimeters	76 x 305	89 x 38	102 x 406	152 x 406	203 x 406



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Square Corner - Be	eveled Push Plate
Certification:	Meets ANSI A156.6 for J304 Push Plate
Gauge:	0.125″ (3.2 mm)
Materials:	Clear plastic laminate
Finishes:	PC - Clear
Fasteners:	Six (6) #6 x 5/8" OPH tapping screws
Options:	May be ordered cut for cylinder (CFC) or engraved "PUSH"
Notes:	For sizes or finishes not listed in this catalog, contact Hager Customer Service for availability

Available in Size	S				
Inches	3 x 12	3-1/2 x 15	4 x 16	6 x 16	8 x 16
Millimeters	76 x 305	89 x 38	102 x 406	152 x 406	203 x 406



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Square Corner - Beveled Push Plate

Square corner	
Certification:	Meets ANSI A156.6 for J304 Push Plate
Gauge:	0.125″ (3.2 mm)
Materials:	Aluminum, brass, bronze, stainless steel
Finishes:	US3, US4, US10, US10B, US26, US26D, US28, US32, US32D
Fasteners:	Six (6) #6 x 5/8" OPH tapping screws
Options:	May be ordered cut for cylinder (CFC) or engraved "PUSH"
Notes:	For sizes or finishes not listed in this catalog, contact Hager Customer Service for availability

Available in Sizes					
Inches	3 x 12	3-1/2 x 15	4 x 16	6 x 16	8 x 16
Millimeters	76 x 305	89 x 38	102 x 406	152 x 406	203 x 406



90R

Radius Corner - Non-Beveled Push Plate

- Noli-Develeu Pusii Plate
Meets ANSI A156.6 for J304 Push Plate
0.125″ (3.2 mm)
Aluminum, brass, bronze, stainless steel
US3, US4, US10, US10B, US26, US26D, US28, US32, US32D
Six (6) #6 x 5/8" OPH tapping screws
May be ordered cut for cylinder (CFC) or engraved "PUSH"
For sizes or finishes not listed in this catalog, contact Hager Customer Service for availability

Available in Sizes					
Inches	3 x 12	3-1/2 x 15	4 x 16	6 x 16	8 x 16
Millimeters	76 x 305	89 x 38	102 x 406	152 x 406	203 x 406

100T

Square Corner - Rounded Bevel Top and Bottom Push Plate		
Certification:	Meets ANSI A156.6 for J304 Push Plate	
Gauge:	0.125″ (3.2 mm)	
Materials:	Aluminum, brass, bronze, stainless steel	
Finishes:	US3, US4, US10, US10B, US26, US26D, US28, US32, US32D	
Fasteners:	Six (6) #6 x 5/8" OPH tapping screws	
Options:	May be ordered cut for cylinder (CFC) or engraved "PUSH"	
Notes:	For sizes or finishes not listed in this catalog, contact Hager Customer Service for availability	

Available in Size	Available in Sizes					
Inches	3 x 12	3-1/2 x 15	4 x 16	6 x 16	8 x 16	
Millimeters	76 x 305	89 x 38	102 x 406	152 x 406	203 x 406	

110S

Half Circle Push Plate

Certification:	Meets ANSI A156.6 for J301 Push Plate
Plate:	8″ x 16″ (203 mm x 406 mm)
Gauge:	0.050″ (1.3 mm)
Materials:	Aluminum, brass, bronze, stainless steel
Finishes:	US3, US4, US10, US10B, US26, US26D, US28, US32, US32D
Fasteners:	Six (6) #6 x 5/8" OPH tapping screws
Options:	May be ordered cut for cylinder (CFC) or engraved "PUSH"
Notes:	For sizes or finishes not listed in this catalog, contact Hager Customer Service for availability







120L

Pull Plate with Lip - Non-Beveled

Certification:	Meets ANSI A156.6 for J303 Plate
Plate:	3-1/2" x 16" (89 mm x 406 mm)
Lip Projection:	1-1/8″ (29 mm)
Gauge:	0.125″ (3.2 mm)
Materials:	Aluminum, brass, bronze, stainless steel
Finishes:	US3, US4, US10, US10B, US26, US26D, US28, US32, US32D
Fasteners:	Six (6) #6 x 5/8" OPH tapping screws
Options:	 Other sizes available, please specify
	 May be ordered cut for cylinder (CFC) or engraved
Notes:	For sizes or finishes not listed in this catalog, contact Hager Customer Service for availability

121L Cylir

Cylinder Pull - Bev	Cylinder Pull - Beveled		
Plate:	2″ x 3-3/4″ (51 mm x 95 mm)		
Lip Projection:	1-1/8″ (29 mm)		
Cylinder Cutout:	1-1/4" (32 mm) diameter		
Gauge:	0.125″ (3.2 mm)		
Materials:	Aluminum, brass, bronze, stainless steel		
Finishes:	US3, US4, US10, US10B, US26, US26D, US28, US32, US32D		
Fasteners:	Attached by lock cylinder		
Notes:	 1/4"-20 x 3/8" stud installed on reverse side to eliminate twisting 		
	 For sizes or finishes not listed in this catalog, contact Hager Customer Service for availability 		

122L

Security Pull/Push Plate Set - Beveled Certifi Push

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Certification:	Meets ANSI A156.6 for combination J304 Push Plate and J303 Flush Pull
Push Plate:	4" x 16" (102 mm x 406 mm)
Pull Plate:	4" x 9-1/4" (102 mm x 235 mm)
Lip Projection:	2-1/8" (54 mm)
Gauge:	0.125″ (3.2 mm)
Fasteners:	Four (4) 8-32 FPHMS (Security Torx) sex nuts and bolts
	Two (2) 8-32 x 1/2" FPHMS (Security Torx)
Materials:	Stainless steel
Finishes:	US32D
Notes:	For sizes or finishes not listed in this catalog, contact Hager Customer Service for availability





125S Bent Push Bar

Projection:

Base Plate:

Materials: Finishes:

Fasteners:

Options:

Meets ANSI A156.6 for J501 Push Bar 3/8" x 1-1/4" (10 mm x 32 mm) 2-1/8" (54 mm) 1" x 3" (25 mm x 76 mm) Aluminum, brass, bronze, stainless steel US3, US4, US10, US10B, US28, US32, US32D Two (2) #8 FPH tapping screws and one (1) 1/4 - 20 OPHMS May be ordered with thru-bolts in place of surface screws



126S Push Bar

Certification: Bar Size: Projection: Base Plate: Materials: Finishes:

Meets ANSI A156.6 for J501 Push Bar 3/8" x 1-1/4" (10 mm x 32 mm) 2-1/8" (54 mm) 1" x 3" (25 mm x 76 mm) Aluminum, brass, bronze, stainless steel US3, US4, US10, US10B, US28, US32, US32D Four (4) #8 FPH tapping screws May be ordered with thru-bolts in place of surface screws



127S

Fasteners:

Options:

Push Bar Certification: Bar Size: Projection: Base Plate: Materials: Finishes:

Fasteners:

Options:

Meets ANSI A156.6 for J501 Push Bar 3/8" x 1-1/4" (10 mm x 32 mm) 3/4" (19 mm) 1-1/4" x 1-1/4" (32 mm x 32 mm) Aluminum, brass, bronze, stainless steel US3, US4, US10, US10B, US28, US32, US32D Two (2) 1/4-20 FPHMS May be ordered with thru bolts in place of surface screws



128P Wide Push Bar

Certification: Bar Size: Projection: Base Plate: Fasteners: Materials: Finishes:

Meets ANSI A156.6 for J501 Push Bar 3/8" x 3" (10 mm x 76 mm) 2-1/8" (54 mm) 1-1/2" x 4-1/2" (38 mm x 114 mm) Eight (8) FPH tapping screws Aluminum, brass, bronze, stainless steel US3, US4, US10, US10B, US26, US26D, US28, US32, US32D

All push bar units are made to order. Specify CTC lengths, fastening method unless standard, and type of door (WO, HM, AL, etc.).









128S

Wide Push Bar

Certification: Bar Size: Projection: Base Plate: Door Thickness: Fasteners: Materials: Finishes: Notes: Meets ANSI A156.6 for J501 Push Bar 3/8" x 3" (10 mm x 76 mm) 2" (51 mm) 1-1/2" x 4-1/2" (38 mm x 114 mm) 1-3/4" (45 mm) - Standard Two (2) 1/4 - 20 thru bolts with finish washers Aluminum, brass, bronze, stainless steel US3, US4, US10, US10B, US26, US26D, US28, US32, US32D 128S is same as 128P, but without base plates



129P Wide Push Bar

Certification: Bar Size: Projection: Base Plate: Materials: Finishes: Fasteners: Options:

Meets ANSI A156.6 for J501 Push Bar 3/8" x 3" (10 mm x 76 mm) 3/4" (19 mm) 1" x 3" (25 mm x 76 mm) Aluminum, brass, bronze, stainless steel US3, US4, US10, US10B, US28, US32, US32D Two (2) 1/4-20 FPHMS • May be ordered with thru bolts in place of surface screws • #14 Flat head wood screws available on special order



130S

Round Push Bar

Certification:Meets ANSI A156.6 for J501 Push BarBar Stock:1" (25 mm)Projection:2-1/2" (64 mm)Door Thickness:1-3/4" (45 mm) - StandardMaterials:Aluminum, brass, bronze, stainless steelFinishes:US3, US4, US10, US10B, US28, US32, US32DFasteners:Two (2) 1/4-20 thru-bolts with finish washersOptions:May be ordered with Type 5 concealed mountings at extra charge



131S

Round Push Bar

Certification: Bar Stock: Projection: Base Diameter: Door Thickness: Fasteners: Materials: Finishes: Options: Meets ANSI A156.6 for J501 Push Bar 1" (25 mm) 2-5/8" (67 mm) 2" (51 mm) 1-3/4" (45 mm) - Standard Two (2) 1/4-20 thru-bolts with finish washers Aluminum, brass, bronze, stainless steel US3, US4, US10, US10B, US28, US32, US32D May be ordered with Type 5 concealed mountings at extra charge PUSH BARS





133S

Round Push Bar

Certification: Bar Stock: Projection: Door Thickness: Materials: Finishes: Fasteners: Meets ANSI A156.6 for J501 Push Bar 3/4" (19 mm) 2-1/4" (57 mm) 1-3/4" (45 mm) - Standard Aluminum, brass, bronze, stainless steel US3, US4, US10, US10B, US28, US32, US32D Two (2) 1/4 - 20 thru-bolts with finish washers



134S Round Push Bar

Certification: Meets ANSI A156.6 for J501 Push Bar Bar Stock: 3/4" (19 mm) Projection: 2-3/8" (60 mm) Base Diameter: 1-1/4" (32 mm) Door Thickness: 1-3/4" (45 mm) - Standard Two (2) 1/4 - 20 thru-bolts with finish washers Fasteners: Materials: Aluminum, brass, bronze, stainless steel US3, US4, US10, US10B, US28, US32, US32D Finishes: Options: May be ordered with Type 5 concealed mountings at extra charge



136S

Round Push Bar

Certification: Meets ANSI A156.6 for J501 Push Bar Bar Stock: 1-1/4" (32 mm) 3" (76 mm) Projection: Door Thickness: 1-3/4" (45 mm) - Standard Materials: Aluminum, brass, bronze, stainless steel US3, US4, US10, US10B, US28, US32, US32D Finishes: Two (2) 5/16 - 18 thru-bolts with finish washers Fasteners May be ordered with Type 5 concealed mountings at extra charge Options:



Round Push Bar

137S

Certification: Bar Stock: Projection: Base Diameter: Door Thickness: Fasteners: Materials: Finishes: Options: Meets ANSI A156.6 for J501 Push Bar 1-1/4" (32 mm) 3-1/8" (79 mm) 2" (51 mm) 1-3/4" (45 mm) - Standard Two (2) 5/16 - 18 thru-bolts with finish washers Aluminum, brass, bronze, stainless steel US3, US4, US10, US10B, US28, US32, US32D May be ordered with Type 5 concealed mountings at extra charge

All push bar units are made to order. Specify CTC lengths, fastening method unless standard, and type of door (WO, HM, AL, etc.).









138P

Round Push/Pull Set

Certification: Bar Stock: Projection: Materials: Finishes: Fasteners: Meets ANSI A156.6 for J504 Bar Sets 1" (25 mm) 2-1/2" (64 mm) Aluminum, brass, bronze, stainless steel US3, US4, US10, US10B, US28, US32, US32D Two (2) 1/4-20 Type 3 concealed cone



139P

Round Push/Pull Set

Certification: Bar Stock: Projection: Materials: Finishes: Fasteners: Meets ANSI A156.6 for J504 Bar Sets 3/4" (19 mm) 2-1/4" (60 mm) Aluminum, brass, bronze, stainless steel US3, US4, US10, US10B, US28, US32, US32D Two (2) 1/4-20 Type 3 concealed cone



140P

Round Push/Pull Set

Certification: Bar Stock: Projection: Materials: Finishes: Fasteners: Meets ANSI A156.6 for J504 Bar Sets 1-1/4" (32 mm) 3" (76 mm) Aluminum, brass, bronze, stainless steel US3, US4, US10, US10B, US28, US32, US32D Two (2) 5/16-18 Type 3 concealed cone



150D | 150V | 150B

Round Push/Pull Set*Certification:NBar Stock:SProjection:SPull CTC:SMaterials:AFinishes:N

Meets ANSI A156.6 for J504 Bar Sets 3/4" (19 mm) 2-1/4" (57 mm) 8" (203 mm) Aluminum, brass, bronze, stainless steel US3, US4, US10, US10B, US28, US32, US32D

*

D = **Standard Fastening** - One (1) Type 7 spanner collar connection between push bar and pull plus two (2) Type 1 connections for other ends of push bar and pull.

V = Fully Concealed Fastening - One (1) Type 7 spanner collar connection between push bar and pull plus two (2) Type 5 connections for ends of push bar and pull.

B = **Tempered Glass Fastening** - One (1) Type 7 spanner collar connection between push bar and pull plus two (2) Type 8 connections for ends of push bar and pull plus gaskets that separate metal parts from glass.





151D | 151V | 151B **Round Pus**

Round Push/Pull Set*		
Certification:	Meets ANSI A156.6 for J504 Bar Sets	
Bar Stock:	3/4″ (19 mm)	
Projection:	2-1/4″ (57 mm)	
Pull CTC:	10" (254 mm)	
Materials:	Aluminum, brass, bronze, stainless steel	
Finishes:	US3, US4, US10, US10B, US28, US32, US32D	



152D | 152V | 152B **Round P**

Round Push/Pull Set*		
Certification:	Meets ANSI A156.6 for J504 Bar Sets	
Bar Stock:	3/4" (19 mm)	
Projection:	2-1/4" (57 mm)	
Pull CTC:	12″ (305 mm)	
Materials:	Aluminum, brass, bronze, stainless steel	
Finishes:	US3, US4, US10, US10B, US28, US32, US32D	



153D | 153V | 153B

Round Push/Pull Set*

	-
Certification:	Meets ANSI A156.6 for J504 Bar Sets
Bar Stock:	1″ (25 mm)
Projection:	2-1/2″ (64 mm)
Pull CTC:	10" (254 mm)
Materials:	Aluminum, brass, bronze, stainless steel
Finishes:	US3, US4, US10, US10B, US28, US32, US32D

154D | 154V | 154B

Round Push/Pull Set*		
Certification:	Meets ANSI A156.6 for J504 Bar Sets	
Bar Stock:	1″ (25 mm)	
Projection:	2-1/2" (64 mm)	
Pull CTC:	12″ (305 mm)	
Materials:	Aluminum, brass, bronze, stainless steel	
Finishes:	US3, US4, US10, US10B, US28, US32, US32D	

D = Standard Fastening - One (1) Type 7 spanner collar connection between push bar and pull plus two (2) Type 1 connections for other ends of push bar and pull.

V = Fully Concealed Fastening - One (1) Type 7 spanner collar connection between push bar and pull plus two (2) Type 5 connections for ends of push bar and pull.

B = Tempered Glass Fastening - One (1) Type 7 spanner collar connection between push bar and pull plus two (2) Type 8 connections for ends of push bar and pull plus gaskets that separate metal parts from glass.

All push bar units are made to order. Specify CTC lengths, fastening method unless standard, and type of door (WO, HM, AL, etc.).



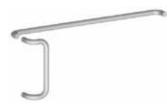




155D | 155V | 155B

Round Push/Pull Set* Certification: Bar Stock: Projection: Pull CTC: Materials: Finishes:

Meets ANSI A156.6 for J504 Bar Sets 1" (25 mm) 2-1/2" (64 mm) 18" (457 mm) Aluminum, brass, bronze, stainless steel US3, US4, US10, US10B, US28, US32, US32D



156D | 156V | 156B

Round Push/Pull Set*

Meets ANSI A156.6 for J505 Bar Sets Certification: Bar Stock: 3/4" (19 mm) diameter Projection: 2-1/2" (64 mm) 8" (203 mm) Pull CTC: Offset: 2-1/2" (64 mm), 90° Standard Materials: Aluminum, brass, bronze, stainless steel Finishes: US3, US4, US10, US10B, US28, US32, US32D Options: For 45° offset pull, add prefix "X" (i.e., X156D) to number Non-reversible; specify handing



157D | 157V | 157B

Round Pu Certificatio

Notes:

Round Push/Pull Set*		
Certification:	Meets ANSI A156.6 for J505 Bar Sets	
Bar Stock:	3/4" (19 mm) diameter	
Projection:	2-1/2" (64 mm)	
Pull CTC:	10″ (254 mm)	
Offset:	2-1/2" (64 mm), 90° Standard	
Materials:	Aluminum, brass, bronze, stainless steel	
Finishes:	US3, US4, US10, US10B, US28, US32, US32D	
Options:	For 45° offset pull, add prefix "X" (i.e., X157D) to number	
Notes:	Non-reversible; specify handing	



158D | 158V | 158B

Round Push/Pull Set*

Certification:	Meets ANSI A156.6 for J505 Bar Sets			
Bar Stock:	3/4" (19 mm) diameter			
Projection:	2-1/2" (64 mm)			
Pull CTC:	12″ (305 mm)			
Offset:	2-1/2" (64 mm), 90° Standard			
Materials:	Aluminum, brass, bronze, stainless steel			
Finishes:	US3, US4, US10, US10B, US28, US32, US32D			
Options:	For 45° offset pull, add prefix "X" (i.e., X158D) to number			
Notes:	Non-reversible; specify handing			

D = Standard Fastening - One (1) Type 7 spanner collar connection between push bar and pull plus two (2) Type 1 connections for other ends of push bar and pull.

V = Fully Concealed Fastening - One (1) Type 7 spanner collar connection between push bar and pull plus two (2) Type 5 connections for ends of push bar and pull.

B = Tempered Glass Fastening - One (1) Type 7 spanner collar connection between push bar and pull plus two (2) Type 8 connections for ends of push bar and pull plus gaskets that separate metal parts from glass.

All push bar units are made to order. Specify CTC lengths, fastening method unless standard, and type of door (WO, HM, AL, etc.).





Round Push/Pull Set*

Certification:	Meets ANSI A156.6 for J505 Bar Sets			
Bar Stock:	1″ (25 mm)			
Projection:	2-1/2″ (76 mm)			
Pull CTC:	10" (254 mm)			
Offset:	3" (76 mm), 90° Standard			
Materials:	Aluminum, brass, bronze, stainless steel			
Finishes:	US3, US4, US10, US10B, US28, US32, US32D			
Options:	For 45° offset pull, add prefix "X" to number (i.e., X159D)			
Notes:	Non-reversible; specify handing			

160D | 160V | 160B

Round Push/Pull Set*

Certification:	Meets ANSI A156.6 for J505 Bar Sets
Bar Stock:	1" (25 mm)
Projection:	2-1/2″ (76 mm)
Pull CTC:	12″ (305 mm)
Offset:	3" (76 mm), 90° Standard
Materials:	Aluminum, brass, bronze, stainless steel
Finishes:	US3, US4, US10, US10B, US28, US32, US32D
Options:	For 45° offset pull, add prefix "X" to number (i.e., X160D)
Notes:	Non-reversible; specify handing

161D | 161V | 161B

Round Push/Pull Set*

Certification:	Meets ANSI A156.6 for J505 Bar Sets		
Bar Stock:	1″ (25 mm)		
Projection:	2-1/2" (76 mm)		
Pull CTC:	18″ (457 mm)		
Offset:	3" (76 mm), 90° Standard		
Materials:	Aluminum, brass, bronze, stainless steel		
Finishes:	US3, US4, US10, US10B, US28, US32, US32D		
Options:	For 45° offset pull, add prefix "X" to number (i.e., X161D)		
Notes:	Non-reversible; specify handing		



164D | 164V | 164B

Round Push/Pull Set*

Certification:	Meets ANSI A156.6 for J504 Bar Sets			
Bar Stock:	1-1/4" (32 mm)			
Projection:	3″ (76 mm)			
Pull CTC:	12" (305 mm)			
Materials:	Aluminum, brass, bronze, stainless steel			
Finishes:	US3, US4, US10, US10B, US28, US32, US32D			

D = Standard Fastening - One (1) Type 7 spanner collar connection between push bar and pull plus two (2) Type 1 connections for other ends of push bar and pull.

V = Fully Concealed Fastening - One (1) Type 7 spanner collar connection between push bar and pull plus two (2) Type 5 connections for ends of push bar and pull.

B = Tempered Glass Fastening - One (1) Type 7 spanner collar connection between push bar and pull plus two (2) Type 8 connections for ends of push bar and pull plus gaskets that separate metal parts from glass.

All push bar units are made to order. Specify CTC lengths, fastening method unless standard, and type of door (WO, HM, AL, etc.).

*





165D | 165V | 165B

Round Push/Pull Set* Certification: Bar Stock: Projection: Pull CTC: Materials: Finishes:

Meets ANSI A156.6 for J504 Bar Sets 1-1/4" (32 mm) 3" (76 mm) 18" (457 mm) Aluminum, brass, bronze, stainless steel US3, US4, US10, US10B, US28, US32, US32D



167D | 167V | 167B

Round Push/Pull Set*

Certification: Bar Stock: Projection: Pull CTC: Offset: Materials: Finishes: Notes: Meets ANSI A156.6 for J505 Bar Sets 1-1/4" (32 mm) 3" (76 mm) 18" (457 mm) 3-3/4" (96 mm), 90° Standard Aluminum, brass, bronze, stainless steel US3, US4, US10, US10B, US28, US32, US32D Non-reversible; specify handing



170D

Push/Pull Set

Certification: Bar Stock: Projection of Pull Bar: Projection of Push Bar: Base: Horizontal Spacing CTC: Materials: Finishes: Notes: Meets ANSI A156.6 for J502 Bar Sets 3/8" x 1-1/4" (10 mm x 32 mm) 2-1/2" (64 mm) 3/4" (19 mm) 1-1/4" x 1-1/4" (32 x 32 mm) 8" (203 mm) Aluminum, brass, bronze, stainless steel US3, US4, US10, US10B, US28, US32, US32D • Bars are mounted BTB with 1/4"-20 thru bolt type 4 mounting

• Non-reversible; specify handing

*

D = **Standard Fastening** - One (1) Type 7 spanner collar connection between push bar and pull plus two (2) Type 1 connections for other ends of push bar and pull.

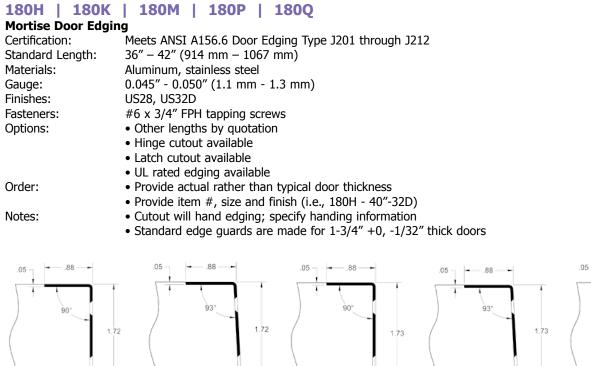
V = Fully Concealed Fastening - One (1) Type 7 spanner collar connection between push bar and pull plus two (2) Type 5 connections for ends of push bar and pull.

B = **Tempered Glass Fastening** - One (1) Type 7 spanner collar connection between push bar and pull plus two (2) Type 8 connections for ends of push bar and pull plus gaskets that separate metal parts from glass.

All push bar units are made to order. Specify CTC lengths, fastening method unless standard, and type of door (WO, HM, AL, etc.).



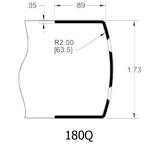




180M

181M

180P

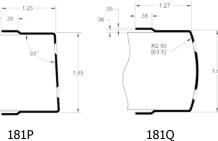


181H | 181K | 181M | 181P | 181Q

180K

Overlap Door Edgi	ing					
Certification:	ertification: Meets ANSI A156.6 Door Edging Type J201 through J212					
Standard Length:	36″ – 42″ (914 mm – 1067 mm)					
Materials:	Aluminum, stainless steel					
Gauge:	0.045" - 0.050" (1.1 mm - 1.3 mm)					
Finishes:	US28, US32D					
Fasteners:	#6 x 3/4" FPH tapping screws					
Options:	 Other lengths by quotation 					
	 Hinge cutout available 					
	Latch cutout available					
	UL rated edging available					
Order:	Provide actual rather than typical door thickness					
.	• Provide item #, size and finish (i.e., 181H - 40"-32D)					
Notes:	Cutout will hand edging; specify handing information					
	• Standard edge guards are made for 1-3/4" +0, -1/32" thick doors					
1.25						
.06	.06 .06 .06 .06 .06					
90°	90°					
/						

181K



181H

180H



2011

www.hagerco.com

.05

182Q

R2.50 [63.5]

182H | 182K | 182M | 182P | 182Q

Non-Mortise Door	Edaina			
Certification:	Meets ANSI A156.6 Door Edging Type J201 through J212			
Standard Length: $36'' - 42'' (914 \text{ mm} - 1067 \text{ mm})$				
Materials:	Aluminum, stainless steel			
Gauge:	0.045" - 0.050" (1.1 mm - 1.3	(mm)		
Finishes:	US28, US32D	, , , , , , , , , , , , , , , , , , , ,		
Fasteners:				
	#6 x 3/4" FPH tapping screws)		
Options:	Other lengths by quotation			
	Hinge cutout available			
	Latch cutout available			
Ordon	UL rated edging available	miant door thickness		
Order:	Provide actual rather than ty			
Notoo	 Provide item #, size and finite 			
Notes:	Cutout will hand edging; spe		"thick do are	
	 Standard edge guards are m 	lade 101 1-3/4 +0, -1/32		
.0588	.0588	.0588	.0588	
90°	93°	90.	93°	
	1.77	1.85	1.85	
	L// (
) 1	
	•	, i i i i i i i i i i i i i i i i i i i		
182H	182K	182M	182P	
1	185G			

Corner Guard	
Certification:	Meets ANSI A156.6 for J210
Size:	3" x 3" x 40" (76 mm x 76 mm x 1016 mm)
Gauge:	0.050″ (1.3 mm)
Materials:	Aluminum, stainless steel
Finishes:	US28, US32D
Fasteners:	#6 x 3/4" FPH Tapping screws
Options:	Mounting with double-stick tape instead of screws
Notes:	• 90° bend standard
	 Other lengths by quotation
	 #6 x 1" screws available upon request

1.85



Door Protection Plates

The metal door protection plates below meet ANSI A156.6 for J101 Metal Armor Plate, J102 Metal Kickplate, and J103 Metal Mop Plate. The plastic door protection plates below meet ANSI A156.6 for J105 Plastic Armor Plate, J106 Plastic Kickplate, and J107 Plastic Mop Plate. Options for all plates include countersunk holes, UL armor plate stamped, self-adhesive tape, spanner head screws, torx head screws, round corners, wrap around side and bottom return, and 0.125" (3.2 mm) material. All plates below are supplied standard with #6 x 5/8" truss head screws (unless specified otherwise). They are available in mop plate, kick plate, stretcher plate, and armor plate sizes.

Mop Plate:	Protects the bottom of the pull side of doors subject to cleaning and mopping procedures.
Kick Plate: Stretcher Plate:	Protects the bottom of the push side of doors subject to scuffing from foot traffic. Protects doors in specific areas where constant contact is made by stretchers, service carts, or other equipment.
Armor Plate:	Protects lower half of doors from abuse by carts, trucks, and rough usage.

NFPA Note (Applies to 190S, 193S, 194S, 198S, and 225S)

NFPA 80 Standards - 6.4.5 Protection Plates 6.4.5.1 - Factory installed protection plates shall be installed in accordance with the listing of the door. 6.4.5.2 - Field installed protection plates shall be labeled and installed in accordance with their listing. 6.4.5.3 - Labeling shall not be required where the top of the protection plate is not more than 16" (406 mm) above the bottom of the door.

2235

1905

1905		2235	
Gauge:	0.050″ (1.3 mm)	Gauge:	0.062" (1.6 mm)
Materials:	Aluminum, brass, bronze, stainless steel	Materials:	Aluminum, brass, bronze, stainless steel
Finishes:	US3, US4, US10, US10B, US28, US32,	Finishes:	US3, US4, US10, US10B, US28, US32,
T IIIISTICS.	US32D	r moneo.	US32D
Bevel:	None	Bevel:	3 edges
		bever.	5 euges
Options:	UL Listed for US32 and US32D*	2240	
1000		224S	
193S		Gauge:	0.062" (1.6 mm)
Gauge:	0.050" (1.3 mm)	Materials:	Aluminum, brass, bronze, stainless steel
Materials:	Aluminum, brass, bronze, stainless steel	Finishes:	US3, US4, US10, US10B, US28, US32,
Finishes:	US3, US4, US10, US10B, US28, US32,		US32D
	US32D	Bevel:	4 edges
Bevel:	3 edges		
Options:	UL Listed for US32 and US32D*	204S	
optionsi		Gauge:	0.125″ (3.2 mm)
194S		Materials:	
	0.050// (1.2.mm)		Clear plastic
Gauge:	0.050" (1.3 mm)	Bevel:	4 edges
Materials:	Aluminum, brass, bronze, stainless steel	21.40	
Finishes:	US3, US4, US10, US10B, US28, US32,	214S	
	US32D	Gauge:	0.125" (3.2 mm)
Bevel:	4 edges	Materials:	Plastic laminate
Options:	UL Listed for US32 and US32D*	Bevel:	4 edges
		Colors:	Black, Brown, Grey
198S		Notes:	Other colors are available and will be
Gauge:	0.038″ (0.8 mm)		subject to minimum order quantities;
Materials:	Stainless steel		priced on application
Finishes:	US32D		
Options:	UL Listed*	225S	
Options.	OL LISIEU		0.060″ (1.9 mm)
199B		Gauge:	(1.9)
		Materials:	Kydex [®]
Gauge:	0.038″ (0.8 mm)	Colors:	CBO - Calcutta Black, KGO - Beige,
Materials:	Aluminum		KHO - Chocolate
Finishes:	Bright gold anodized	Notes:	Other colors are available and will be
Fasteners:	#6 x 5/8" TPH Tapping Screws		subject to minimum order quantities;
			priced on application
220S		Options:	UL Listed*
Gauge:	0.062" (1.6 mm)		

Materials: Aluminum, brass, bronze, stainless steel Finishes: US3, US4, US10, US10B, US28, US32, US32D Bevel: None

*Must specify UL stamp.







230W **Convex Wall Stop**

Certification: Diameter:

Projection:

Materials:

Finishes: Fasteners:

Notes:

Meets ANSI A156.16 for L02101 2-15/32" (63 mm) 1-3/32" (28 mm) Cast brass, bronze with grey rubber bumper US3, US4, US10, US10B, US15, US15A, US19, US26, US26D One (1) $\#10 \times 1-1/2''$ PPHWS with plastic and toggle anchor. Concealed tamper proof mounting • Easy installation by inserting screwdriver through small hole in bumper • Specify 230T for machine screw and toggle nut screwpack (10 pk)



232W | **BL232W**

Convex Wall Stop			
Certification:	Meets ANSI A156.16 for L02101		
Diameter:	2-7/16" (62 mm)		
Projection:	1″ (25 mm)		
Materials:	Wrought brass, bronze, stainless steel with grey rubber bumper		
Finishes: US3, US4, US5, US9, US10, US10B, US15, US15A, US19, US26, US26D, US32, US32D			
Fasteners:	One (1) $\#10 \times 1-1/2''$ PPHWS with plastic and toggle anchor		
Notes:	Concealed tamper proof mounting		
	 Easy installation by inserting screwdriver through small hole in bumper 		
	 Specify 230T for machine screw and toggle nut screwpack (10 pk) 		
	• BL232W is 232W case quantity 50		



234W

Concave Wall Stop Certification: Meets ANSI A156.16 for L02251 2-15/32" (63 mm) Diameter: Projection: 1-3/32" (28 mm) Materials: Cast brass, bronze with grey rubber bumper Finishes: US3, US4, US10, US10B, US15, US15A, US19, US26, US26D One (1) #10 x 1-1/2" PPHWS w/ plastic and toggle anchor Fasteners: Notes: • Easy installation by inserting screwdriver through small hole in rubber bumper Concealed tamper proof mounting • Concave rubber bumper prevents damage to locksets with projecting buttons

• Specify 230T for machine screw and toggle nut screwpack (10 pk)



236W | BL236W

Concave Wall Stop Meets ANSI A156.16 for L02251 Certification: Diameter: 2-7/16" (75 mm) Projection: 1" (25 mm) Materials: Wrought brass, bronze, stainless steel with grey rubber bumper Finishes: US3, US4, US5, US9, US10, US10B, US15, US15A, US19, US26, US26D, US32, US32D Fasteners: One (1) #10 x 1-1/2" PPHWS w/ plastic and toggle anchor • Easy installation by inserting screwdriver through small hole in rubber bumper Concealed tamper proof mounting

- Concave rubber bumper prevents damage to locksets with projecting buttons
- Specify 230T for machine screw and toggle nut screwpack (10 Pk)
- BL236W is 236W case guantity 50



Notes:



250W Convex Wall Stop

Diameter:

Projection:

Materials:

Finishes:

Fasteners: Notes: 1" (25 mm) 9/16" (14 mm) Brass US3, US4, US10, US10B, US15, US15A, US19, US26, US26D One (1) #6 x 3/4" screw with plastic anchor and one (1) 0.052 diameter nail • Concealed mounting screw prevents vandalism • For use on drywall

Compact design



251W Concave Wall Stop

Diameter:

Projection: Materials:

Finish:

Notes:

1-7/8" (48 mm)
25/32" (20 mm)
Adhesive backed rubber bumper
Grey only
Concave bumper prevents damage to locksets with projecting buttons
For areas where concealed mounting is not required

• Adhesive backing for use on clean smooth flat surfaces only



254S Wall Stop & H

Wall Stop & HolderCertification:Meets ANSI A156.16Base Diameter:2-11/32'' (60 mm)Base Projection:3-1/2'' (89 mm)Engaged Projection:5-19/32'' (142 mm)Keeper: $1'' \times 2''$ (25 mm x 5)Fasteners:Five (5) #10 x 1'' FfMaterials:Cast brass with blacFinishes:US3, US4, US10, USNotes:• For use on drywal

Meets ANSI A156.16 for L01341 2-11/32" (60 mm) 3-1/2" (89 mm) 5-19/32" (142 mm) 1" x 2" (25 mm x 51 mm) Five (5) #10 x 1" FPHWS, and three (3) plastic anchors Cast brass with black rubber bumper US3, US4, US10, US10B, US15, US26, US26D • For use on drywall

- Manual holder ideal for interior and exterior applications
- Unit functions as a stop, but can serve as a "Hold Open" when hook is manually engaged
- Ideal for use with locksets with a projection of 3-5/16" (84 mm) or less



254W

Wall	Stop	&	Ho	lder
------	------	---	----	------

wall Stop & notuer	
Certification:	Meets ANSI A156.16 for L01351
Base Diameter:	2-11/32" (60 mm)
Base Projection:	3-1/2" (89 mm)
Engaged Projection:	5-19/32" (142 mm)
Keeper:	1" x 2" (25 mm x 51 mm)
Fasteners:	Three (3) $\#10 \times 1''$ FPH tapping screw, one (1) plastic anchor,
	one (1) 5/16-18 x 2-1/2" threaded stud, and one (1) 5/16-18 lead anchor
Materials:	Cast brass with black rubber bumper
Finishes:	US3, US4, US10, US10B, US15, US26, US26D
Notes:	For use on concrete walls
	 Manual holder ideal for interior and exterior applications
	• Unit functions as a stop, but can serve as a "Hold Open" when hook is manually engaged
	• Ideal for use with locksets with a projection of 3-5/16" (84 mm) or less

Ideal for use with locksets with a projection of 3-5/16" (84 mm) or less







255S Wall Stop

Certification: Base Diameter: Projection: Fasteners: Materials: Finishes: Notes: Meets ANSI A156.16 for L02011 2-11/32" (60 mm) 3-11/16" (94 mm) Three (3) #10 x 1" OPHWS and three (3) plastic anchors Cast brass with black rubber bumper US3, US4, US10, US10B, US15, US26, US26D • For use on drywall • Ideal for interior and exterior applications • Heavy duty - for use in high traffic areas

• Ideal for use with locksets with a projection of 3" (76 mm) or less



255W Wall Stop

Certification: Base Diameter: Projection: Fasteners:

Materials: Finishes: Notes: Meets ANSI A156.16 for L02021 2-11/32" (60 mm) 3-11/16" (94 mm) One (1) #10 x 1" OPHWS, one (1) plastic anchor, one (1) 5/16-18 lead anchor, one (1) 5/16-18 x 2-1/2" threaded stud, one (1) 5/16-18 x 2-1/2" combo threaded stud Cast brass with black rubber bumper US3, US4, US10, US10B, US15, US26, US26D • For use on concrete walls • Ideal for interior and exterior applications • Heavy duty - for use in high traffic areas

• Ideal for use with locksets with a projection of 3" (76 mm) or less



256S Manual Wall Stop & Holder

Manual Wall Stop o	x holder
Certification:	Meets ANSI A156.16 for L01341
Base Diameter:	2-1/4" (57 mm)
Base Projection:	3-3/4″ (95 mm)
Engaged Projection:	5-11/16" (145 mm)
Keeper:	25/32" x 1-1/2" (20 mm x 38 mm)
Materials:	Cast brass with black rubber bumper
Finishes:	US3, US10, US10B, US15, US26, US26D
Fasteners:	Three (3) $\#10 \ge 1''$ OPHWS and three (3) plastic anchors
Notes:	For use on drywall
	 Ideal for interior and exterior applications
	 Heavy duty - for use in high traffic areas

- Unit functions as a stop, but can serve as a "Hold Open" when hook is manually engaged
- Ideal for use with locksets with a projection of 3" (76 mm) or less





256W

Manual Wall Stop	& Holder
Certification:	Meets ANSI A156.16 for L01351
Base Diameter:	2-1/4" (57 mm)
Base Projection:	3-3/4" (95 mm)
Engaged Projection:	5-11/16" (145 mm)
Keeper:	25/32" x 1-1/2" (20 mm x 38 mm)
Materials:	Cast brass with black rubber bumper
Finishes:	US3, US10, US10B, US15, US26, US26D
Fasteners:	One (1) #10 x 1" OPHWS, one (1) plastic anchor, one (1) 5/16-18 lead anchor,
	one (1) 5/16-18 x 2-1/2" threaded stud, and one (1) 5/16-18 x 2-1/2" combo threaded
	stud
Notes:	• For use on concrete walls
	 Ideal for interior and exterior applications

- Heavy duty for use in high traffic areas
- Unit functions as a stop, but can serve as a "Hold Open" when hook is manually engaged
- Ideal for use with locksets with a projection of 3" (76 mm) or less



260W

Angled Wall Stop Certification: Meets ANSI A156.16 for L02201 Projection: 3-21/32" (93 mm) Cast brass with black rubber bumper Materials: Finishes: US26D 2-3/16" wide x 2-15/16" tall (56 mm x 75 mm) Base: Three (3) #14 x 1-1/2" FPHWS, three (3) 1/4-20 x 3/4" FPHMS, three (3) plastic Fasteners: anchors, and three (3) 1/4-20 lead anchors • For use with drywall or concrete walls Notes: • Sloping design resists vandalism

• Ideal for use with locksets with a projection of 3" (76 mm) or less



324W

Notes:

Light Duty Wall Bumper Certification: Meets ANSI A156.16 for L0203 Base Diameter: 1-1/4" (32 mm) 3-1/4" (83 mm) Projection: Tip Diameter: 5/8" (16 mm) Materials: Cast brass, bronze with white rubber tip Finishes: US3, US4, US5, US10, US10B, US15, US15A, US19, US26, US26D #10 x 7/8" wood thread Fastener: • Replaceable rubber tip available

• Hex shape near the tip allows usage of a wrench for easier installation





46





326W Automatic Wall Stop & Holder

Automatic wall Stop &	Holder
Certification:	Meets ANSI A156.16 for L0129
Holder Base:	2-13/32" x 2-25/32" (61 mm x 71 mm)
Holder Projection:	2-5/16" (59 mm)
Engaged Projection:	3-5/8″ (92 mm)
Strike Base:	1" x 2-1/16" (25 mm x 52 mm)
Strike Projection:	2″ (51 mm)
Keeper:	1" x 2" (25 mm x 51 mm)
Materials:	Cast brass
Finishes:	US3, US10, US10B, US26, US26D
Fasteners:	Five (5) #10 x 1" OPHWS, three (3) 10-24 x 1-1/4" FPHMS, and three (3) plastic
	anchors
Notes:	 For use with wood or metal doors
	Holder is mounted on the door
	Dellay is service leaded to each an abuiltan beauty duby while we address on a sund

- Roller is spring loaded to seat on strike heavy duty rubber pad dampens sound and shock
- Ideal for use with locksets with a projection of 3" (76 mm) or less



327W

Automatic Wall Stop & Holder Certificatio

Meets ANSI A156.16 for L11291
3-1/16" x 3-1/2" (78 mm x 89 mm)
1-15/16" (49 mm)
3-1/2" (89 mm)
2-3/8" (60 mm)
3-1/16" (78 mm)
Cast brass
US3, US4, US10, US10B, US26, US26D
Three (3) #14 x 1-1/2" FPHWS, three (3) 1/4-20 x 3/4" FPHMS, four (4) 12-24 x
1" TPHMS, four (4) #12 x 1" TPHWS, and three (3) 1/4-20 lead anchors
 For use with wood or metal doors
 For use with drywall or concrete walls
 Roller is spring loaded to seat on strike - heavy duty rubber pad dampens sound and shock

- Strike is adjustable 45° left or right
- Holder has vertical adjustment once mounted on the door
- Ideal for use with locksets with a projection of 3" (76 mm) or less
- For doors up to 500 lbs



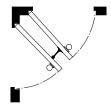


271W

Roller Bumper Certification: Base Diameter: Projection: Materials: Finishes: Fasteners: Notes:

Meets ANSI A156.16 for L02191 2" (51 mm) 4-1/2" (114 mm) Cast brass with grey rubber roller US3, US10, US10B, US26, US26D Three (3) #10 x 1" FPHWS and three (3) plastic anchors • For use when two doors swing into each other at right angles (back to back)

• Prevents damage to the door and door hardware



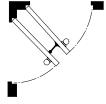


272W

Roller Bumper Certification: Base: Projection: Materials: Finishes: Fasteners: Notes:

Meets ANSI A156.16 for L02191 2" (51 mm) diameter 6-1/4" (159 mm) Cast brass with grey rubber roller US3, US10, US10B, US26, US26D Three (3) #10 x 1" FPHWS, and three (3) plastic anchors • For use when two doors swing into each other at right angles (back to back)

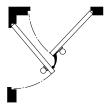
• Prevents damage to the door and door hardware



273W

Curved Roller Bumper

Certification: Projection: Materials: Finishes: Fasteners: Notes: Meets ANSI A156.16 for L12211 2-21/32" (67 mm) Cast brass with grey rubber roller US3, US4, US10, US10B, US26, US26D Three (3) #10 x 1" FPHWS and three (3) plastic anchors • Used when two doors swing into each other at odd angles • Prevents damage to the door and door hardware









241F | BL241F

Dome Stop - Low Certification: Meets ANSI A156.16 for L02141 Base Diameter: 1-11/16" (43 mm) Base Thickness: 1/8" (3.2 mm) 1″ (25 mm) Overall Height: Materials: Cast brass with grey rubber bumper US3, US4, US5, US9, US10, US10B, US15, US15A, US19, US26, US26D Fasteners: One (1) #14 x 1-1/2" FPHWS, one (1) 1/4-20 x 3/4" FPHMS, one (1) 1/4-20 lead anchor, and one (1) plastic anchor • To be used independently or in conjunction with 246B • For use when no threshold is used (door not undercut) • For use with wood or concrete floors

BL241F is 241F case quantity 50



242F

Finishes:

Notes:

Dome Stop - Universal

Donne Stop Onnve	
Certification:	Meets ANSI A156.16 for L0216
Base Diameter:	1-11/16" (43 mm)
Base Thickness:	7/32″ (5.5 mm)
Overall Height:	1-5/8 (41 mm)
Materials:	Brass with grey rubber bumper
Finishes:	US3, US4, US10B, US15, US26, US26D
Fasteners:	One (1) #14 x 1-1/2" FPHWS, one (1) 1/4-20 x 3/4" FPHMS, one (1) 1/4-20 lead
	anchor, and one (1) plastic anchor
Notes:	For use with wood or concrete floors



BL243F 243F | Dome S

Dome Stop - High	
Certification:	Meets ANSI A156.16 for L02161
Base Diameter:	1-11/16″ (43 mm)
Base Thickness:	7/16″ (11 mm)
Overall Height:	1-9/32" (33 mm)
Materials:	Cast brass with grey rubber bumper
Finishes:	US3, US4, US5, US9, US10, US10B, US15, US15A, US19, US26, US26D
Fasteners:	One (1) #14 x 1-1/2" FPHWS, one (1) 1/4-20 x 1-1/4" FPHMS, one (1) 1/4-20 lead
	anchor, and one (1) plastic anchor
Notes:	 For use with thresholds or undercut doors
	 For use with wood or concrete floors

BL243F is 243F case quantity 50



244F

Cast Floor Stop Base: Base Thickness: Overall Height: Materials: Finishes: Fasteners:

Notes:

1-3/4" x 4" (45 mm x 102 mm) 5/32" (4 mm) 1" (25 mm) Cast brass with grey rubber bumper US3, US4, US10, US10B, US26, US26D Two (2) #14 x 1-1/2" FPHWS, two (2) 1/4-20 x 3/4" FPHMS, two (2) 1/4-20 lead anchor, and two (2) plastic anchor • Heavy duty - for use in high traffic areas • For use when no thresholds are used (door not undercut) • For use with wood or concrete floors



245F **Cast Floor Stop**

Base:

Materials:

Finishes:

Notes:

Fasteners:

1-3/4" x 4" (45 mm x 102 mm) Base Thickness: 1/2" (13 mm) Overall Height: 1-5/16" (33 mm) Cast brass with grey rubber bumper US3, US4, US10, US10B, US26, US26D Two (2) #14 x 1-1/2" FPHWS, two (2) 1/4-20 x 1-1/4" FPHMS, two (2) 1/4-20 lead anchor, and two (2) plastic anchor • Heavy duty - for use in high traffic areas

- For use with thresholds and undercut doors
- For use on wood or concrete floors

246B

Diameter:

Fasteners:

Materials:

Finishes:

Notes:

Dome Stop Riser Plate 1-3/4" (45 mm) Base Thickness: 3/8" (10 mm) One (1) 1/4-20 x 1" FPHMS Cast brass US3, US4, US10, US10B, US15, US15A, US19, US26, US26D For use with 241F on carpeted floors or floors with thresholds



248F

Modern Style Universal Stop

Base Diameter: Height: Materials: Finishes: Fasteners:

1-7/16" (37 mm) 1-1/2" (38 mm) Brass with black rubber bumper US26D One (1) #12 x 1-1/4" FPHWS, one (1) plastic anchor, one (1) 1/4-20 x 1" FPHMS, and one (1) 1/4-20 lead anchor



249F

Materials:

Stop face:

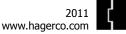
Fasteners:

Notes:

Base:

L-Shaped Floor Stop

1" x 2-1/2" x 7/32" thick (25 mm x 64 mm x 6 mm) Base Thickness: 1/4" (6 mm) 2-5/8" (67 mm) Overall Height: Steel Resilient black rubber Two (2) #14 x 1-1/2" FPHWS and two (2) plastic anchors 1-1/2" (38 mm) max door to floor clearance







252F Floor Stop Certification:

Base: Overall Height: Materials: Finishes: Fasteners:

Notes:

- Meets ANSI A156.16 for L02131 $1-9/16'' \ge 2-1/2''$ (40 mm x 64 mm) 2-11/16'' (68 mm) Cast brass with black rubber bumper US3, US10, US10B, US15, US15A, US19, US26, US26D One (1) #14 x 1-1/2'' FPHWS, one (1) $1/4-20 \ge 3/4''$ FPHMS, one (1) 5/16-18 lead anchor, one (1) 1/4-20 lead anchor, one (1) plastic anchor, one (1) $5/16-18 \ge 2-1/2''$ threaded stud, and one (1) $5/16-18 \ge 2-1/2''$ combo threaded stud • Heavy duty - for use in high traffic areas • For use on wood or concrete floors
- 2" (51 mm) max door to floor clearance



257F Floor Stop

гюог эсор	
Certifications:	Meets ANSI A156.16 for L02131
Base:	1-9/16" x 2-15/32" (40 mm x 63 mm)
Overall Height:	2″ (51 mm)
Materials:	Cast brass with black rubber bumper
Finishes:	US3, US10, US10B, US15, US15A, US19, US26, US26D
Fasteners:	One (1) #14 x 1-1/2" FPHWS, one (1) 1/4-20 x 3/4" FPHMS, one (1) 5/16-18 lead
	anchor, one (1) 1/4-20 lead anchors, one (1) plastic anchor, one (1) 5/16-18 x 2-1/2"
	threaded stud, and one (1) 5/16-18 x 2-1/2" combo threaded stud
Notes:	 1-3/8" (35 mm) max door to floor clearance
	 Heavy duty - for use in high traffic areas
	For use on wood or concrete floors



258F Floor Stop and Hold

Floor Stop and Holder	
Certifications:	Meets ANSI A156.16 for L01371
Base:	1-9/16" x 2-15/32" (40 mm x 63 mm)
Height:	3″ (76 mm)
Keeper:	1″ x 2″ (25 mm x 51 mm)
Materials:	Cast brass with black rubber bumper
Finishes:	US3, US10, US10B, US15, US26, US26D
Fasteners:	Two (2) #10 x 1" FPHWS, one (1) 1/4-20 x 3/4" FPHMS, one (1) 5/16-18 lead anchor,
	one (1) 1/4-20 lead anchors, and one (1) 5/16-18 x 2-1/2" threaded stud
Notes:	 1-3/8" (35 mm) max door to floor clearance
	 Heavy duty - for use in high traffic areas

- For use on concrete floors
- Manual holder ideal for interior and exterior applications
- Unit functions as a stop, but can serve as a "Hold Open" when hook is manually engaged

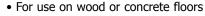






259F Tri Base Floor Stop

Base:	2-1/2" wide x 1-9/16" deep (64 mm x 40 mm)
Overall Height:	1-11/16" (43 mm)
Material:	Cast brass with grey rubber bumper
Finishes:	US3, US4, US10, US10B, US26, US26D
Fasteners:	Three (3) #10 x 1-1/4" FPHWS, three (3) plastic anchors, three (3) 10-32 x 3/4"
	FPHMS, and three (3) 10-32 lead anchor
Notes:	 1/2" (13 mm) max door to floor clearance
	 Heavy duty - for use in high traffic areas





259H

Tri Base Floor Stop - Tall

	• • • • •
Base:	2-1/2" wide x 1-9/16" deep (64 mm x 40 mm)
Overall Height:	2-1/4" (57 mm)
Materials:	Cast brass with grey rubber bumper
Finishes:	US3, US4, US10, US10B, US26, US26D
Fasteners:	Three (3) #10 x 1-1/4" FPHWS, three (3) plastic anchor, three (3) 10-32 x 3/4"
	FPHMS, and three (3) 10-32 lead anchors
Notes:	 1" (25 mm) max door to floor clearance
	 Heavy duty - for use in high traffic areas
	 For use on wood or concrete floors



267F Cast Floor Stop

Cast Floor Stop	
Certifications:	Meets ANSI A156.16 for L02131
Base Diameter:	2-1/4″ (57 mm)
Overall Height:	3-1/8″ (80 mm)
Materials:	Cast brass with black rubber bumper
Finishes:	US3, US10, US10B, US15, US15A, US19, US26, US26D
Fasteners:	One (1) #10 x 1" OPHWS, one (1) plastic anchor, one (1) 5/16-18 lead anchor,
	one (1) 5/16-18 x 2-1/2" threaded stud, and one (1) 5/16-18 x 2-1/2" combo threaded
	stud
Notes:	 2-3/8" (60 mm) max door to floor clearance
	Heavy duty - for use in high traffic areas

For use on concrete floors



267S Cast Floor Stop

Certifications: Base Diameter: Overall Height: Materials: Finishes: Fasteners: Notes:

Meets ANSI A156.16 for L02121 2-1/4" (57 mm) 3-1/8" (80 mm) Cast brass with black rubber bumper US3, US10, US10B, US15, US15A, US19, US26, US26D Three (3) #10 x 1" OPHWS and three (3) plastic anchors • 2-3/8" (60 mm) max door to floor clearance Heavy duty - for use in high traffic areasFor use on wood floors



FLOOR STOPS & HOLDERS





268F Cast Floor Stop and Holder

Cast Floor Stop and	l Holder
Certifications:	Meets ANSI A156.16 for L01371
Base Diameter:	2-1/4" (57 mm)
Height:	3-19/32″ (91 mm)
Keeper:	25/32" x 1-1/2" (20 mm x 38 mm)
Materials:	Cast brass with black rubber bumper
Finishes:	US3, US10, US10B, US15, US15A, US19, US26, US26D
Fasteners:	Three (3) #10 x 1" OPHWS, one (1) plastic anchor, one (1) 5/16-18 lead anchor,
	and one (1) 5/16-18 x 2-1/2" threaded stud
Notes:	 2-1/2" (64 mm) max door to floor clearance
	 Heavy duty - for use in high traffic areas

- For use on concrete floors
- Manual holder ideal for interior and exterior applications
- Unit functions as a stop, but can serve as a "Hold Open" when hook is manually engaged



268S

Cast Floor Stop and Holder		
Certifications:	Meets ANSI A156.16 for L01361	
Base Diameter:	2-1/4″ (57 mm)	
Height:	3-19/32" (91 mm)	
Keeper:	25/32" x 1-1/2" (20 mm x 38 mm)	
Materials:	Cast brass with black rubber bumper	
Finishes:	US3, US10, US10B, US15, US15A, US19, US26, US26D	
Fasteners:	Five (5) $\#10 \times 1''$ OPHWS and three (3) plastic anchors	
Notes:	 2-1/2" (64 mm) max door to floor clearance 	
	 Heavy duty - for use in high traffic areas 	
	 For use on wood floors 	

- Manual holder ideal for interior and exterior applications
- Unit functions as a stop, but can serve as a "Hold Open" when hook is manually engaged

269F

Heavy Duty Floor Stop

Certifications: Exceeds the criteria set forth for a 300-pound impact test (Report #91-04-01646) 2" (51 mm) 1-1/2" (38 mm) 5/8 - 11 x 2-1/2" thread Bumper Diameter: Bumper Height: Steel Bolt: Black rubber (fire-resistant) Materials: Notes: • Designed for high vandalism areas • Ideal for prisons where floor stops are required

· Grouted in concrete to eliminate exposed screws



269T

Heavy Duty Floor Stop Certifications:

Bumper Diameter: Bumper Height: Steel Bolt: Materials: Notes:

Exceeds the criteria set forth for a 300-pound impact test (Report #91-04-01646) 2″ (51 mm) 3-1/2" (89 mm) 5/8 – 11 x 2-1/2" thread Black rubber (fire-resistant) • Designed for high vandalism areas • Ideal for prisons where floor stops are required

• Grouted in concrete to eliminate exposed screws

326F

Automatic Floor Stop and Holder

	Certifications:	Meets ANSI A156.16 for L01301
	Holder Projection:	1-15/16" (49 mm)
	Holder Base:	3-1/16" x 3-1/2" (78 mm x 89 mm)
5	Floor Strike:	2" x 4-3/32" (51 mm x 104 mm)
	Strike Height:	1-1/4" (32 mm)
	Max Door to Floor Clearance:	1/2" (13 mm) or less
	Materials:	Brass
	Finishes:	US3, US10, US10B, US26, US26D
	Fasteners:	Three (3) #14 x 1-1/2" FPHWS, three (3) 1/4-20 x 3/4" FPHMS,
		three (3) 1/4-20 lead anchors, four (4) 12-24 x 1" TPHMS, and
		four (4) #12 x 1" TPHWS
	Notes:	• For use on wood or metal doors and wood or concrete floors
		• Ideal for heavy traffic situations that require frequent hold open
		Firm pull releases holding mechanism
		Holder has vertical adjustment once mounted on the door

Holder has vertical adjustment once mounted on the door



327F

Automatic Floor Stop and Holder		
Certifications:	Meets ANSI A156.16 for L01301	
Holder Projection:	1-15/16" (49 mm)	
Holder Base:	3-1/16" x 3-1/2" (78 mm x 89 mm)	
Floor Strike:	2-3/16" x 4-1/8" (56 mm x 105 mm)	
Strike Height:	1-3/4″ (44 mm)	
Max Door to Floor Clearance:	9/16" to 1-1/16" (14 mm to 27 mm)	
Materials:	Brass	
Finishes:	US3, US10, US10B, US26, US26D	
Fasteners:	Three (3) #14 x 1-1/2" FPHWS, three (3) 1/4-20 x 3/4" FPHMS,	
	three (3) 1/4-20 lead anchors, four (4) 12-24 x 1" TPHMS, and	
	four (4) #12 x 1" TPHWS	
Notes:	 For use on wood or metal doors and wood or concrete floors 	
	• Ideal for heavy traffic situations that require frequent hold open	
	 Firm pull releases holding mechanism 	

• Holder has vertical adjustment once mounted on the door





328F

Automatic Floor Stop and Holder

Certifications: Holder Projection:	Meets ANSI A156.16 for L01301 1-15/16" (49 mm)
Holder Base:	3-1/16" x 3-1/2" (78 mm x 89 mm)
Floor Strike:	2-3/16" x 4-1/8" (56 mm x 105 mm)
Strike Height:	2-1/4″ (57 mm)
Max Door to Floor Clearance:	1-1/8" to 1-9/16" (29 mm to 40 mm)
Materials:	Brass
Finishes:	US3, US10, US10B, US26, US26D
Fasteners:	Three (3) #14 x 1-1/2" FPHWS, three (3) 1/4-20 x 3/4" FPHMS,
	three (3) 1/4-20 lead anchors, four (4) 12-24 x 1" TPHMS,
	and four (4) #12 x 1" TPHWS
Notes:	• For use on wood or metal doors and wood or concrete floors
	• Ideal for heavy traffic situations that require frequent hold open
	 Firm pull releases holding mechanism
	 Holder has vertical adjustment once mounted on the door



329F

Automatic Floor Stop and Holder

Certifications:	Meets ANSI A156.16 for L01301
Holder Projection:	1-15/16″ (49 mm)
Holder Base:	3-1/16" x 3-1/2" (78 mm x 89 mm)
Floor Strike:	2-3/16" x 4-1/8" (56 mm x 105 mm)
Strike Height:	2-3/4″ (70 mm)
Max Door to Floor Clearance:	1-5/8" to 2-1/16" (41 mm to 52 mm)
Materials:	Brass
Finishes:	US3, US10, US10B, US26, US26D
Fasteners:	Three (3) #14 x 1-1/2" FPHWS, three (3) 1/4-20 x 3/4" FPHMS,
	three (3) 1/4-20 lead anchors, four (4) 12-24 x 1" TPHMS,
	and four (4) #12 x 1" TPHWS
Notes:	 For use on wood or metal doors and wood or concrete floors
	• Ideal for heavy traffic situations that require frequent hold open
	 Firm pull releases holding mechanism

- Firm pull releases holding mechanism
- Holder has vertical adjustment once mounted on the door





270C Kick Down Door Holder

Kick Down Door Holder

Certifications:	Meets ANSI A156.16 for L71382
Base:	1-7/16" x 2-1/8" (37 mm x 54 mm)
Arm:	3-13/16″ (97 mm)
Materials:	Cast iron with rubber tip
Finishes:	S1 - Sprayed Aluminum, S2 - Sprayed Brass, S3 - Sprayed Bronze
Fasteners:	Four (4) #6 x 3/4" OPH tapping screws
Notes:	 Provides simple hold and release with a touch of the foot
	 2-1/4" (57 mm) max door to floor clearance

Meets ANSI A156.16 for L01381

Cast brass with rubber tip

Three (3) #6 x 3/4" OPHWS

1-19/32" x 1-25/32" (41 mm x 45 mm) 3-1/2" (89 mm)

US3, US10, US10B, US15, US15A, US19, US26, US26D

• 2-1/4" (57 mm) max door to floor clearance

• Provides simple hold and release with a touch of the foot



270R

270D

Base: Arm:

Materials:

Finishes:

Notes:

Fasteners:

Certifications:

Replacement Rubber Tip		
Materials:	Rubber	
Notes:	For use with 270D and 271DSold in packs of 10	



271D

Kick Down Door Holder		
Certifications:	Meets ANSI A156.16 for L01381	
Base:	1-19/32" x 1-25/32" (41 mm x 45 mm)	
Arm:	4-7/16" (87 mm)	
Materials:	Cast brass with rubber tip	
Finishes:	US3, US10, US10B, US26, US26D	
Fasteners:	Three (3) #6 x 3/4" OPHWS	
Notes:	• Provides simple hold and release with a touch of the foot	
	 3-1/4" (83 mm) max door to floor clearance 	









Certifications: Overall Projection: Overall Width: Bar: Length:

Throw: Materials: Finishes: Fasteners:

Notes:

Meets ANSI A156.16 for L04161 1-3/8" (35 mm) 2-1/32" (52 mm) 3/4" x 1/4" (19 mm x 6 mm) thick 275D - 8" (203 mm) 276D - 12" (305 mm) 1" (25 mm) Steel US3, US10, US10B, US26D Eight (8) #10 x 1-1/4" FPHWS and eight (8) 10-24 x 1" undercut FPHMS • Mortise bottom strike and universal top strike included

- Strong tension springs prevent creep
- \bullet UL listed for use on inactive leaf of a pair of 3-HR labeled fire doors



278D

Surface Bolt Bolt Length: Bolt Width: Bolt Throw: Base Width: Knob Diameter: Projection: Materials: Finishes: Fasteners: Notes:

6" (152 mm) 7/16" (11 mm) 31/32" (25 mm) 19/32" (15 mm) 1/2" (13 mm) 3/4" (19 mm) Brass US3, US10B, US26D Four (4) #5 x 5/8" FPHWS • Mortise and universal strikes included

- Concealed screw design enhances appearance and security
- Permanent stop prevents bolt disengagement from track



279D

Surface Bolt

Length: 4" (102 mm) Width: 1-11/16" (43 mm) 3/8" (10 mm) Throw: Half Round Bolt Size: 5/8" (16 mm) Projection: 1-1/4" (32 mm) Knob Diameter: 29/32" (23 mm) Materials: Brass Finishes: US3, US10, US10B, US26D Fasteners: Twelve (12) #6 x 3/4" FPHWS Mortise and universal strikes included Notes:





280X

Dust Proof Strike Certifications: Face Plate: Barrel Diameter: Barrel Depth: Plunger Diameter: Materials: Finishes: Fasteners: Notes:

Meets ANSI A156.16 for L04021 1-7/16" x 2-29/32" x 1/8" depth (37 mm x 74 mm x 3 mm) 1" (25 mm) 2-3/16" (56 mm) 3/4" (19 mm) Brass US3, US4, US9, US10, US10B, US15, US15A, US19, US26, US26D Two (2) #8 x 1" FPHWS, two (2) plastic anchors, and spanner wrench • Packed unassembled with plate, strike, fasteners, and spanner wrench • May be used with carpet or threshold application by omitting face plate • Designed for use with the bottom bolt of a flushbolt set

 Spring loaded plunger returns to floor or threshold level anytime flushbolt is retracted, eliminating the need to clean out the bottom strike

281D

Slide Flush Bolt

Certifications: Faceplate: Bolt Diameter: Bolt Throw: Bolt Backset: Strike: Materials: Finishes: Fasteners: Notes: Meets ANSI A156.16 for L04201 3/4" x 6" (19 mm x 153 mm) 1/2" (13 mm) 1" (25 mm) 7/16" (11 mm) 7/8" x 1-3/4" (22 mm x 45 mm) Brass, bronze faceplate with steel components US3, US4, US5, US10, US10B, US15, US15A, US19, US26, US26D Four (4) #6 x 3/4" FPHWS Double action spring design provides automatic holding of bolt in projected or retracted position



282D

Manual Flush Bolt Certifications:

- Face Plate: Bolt Head: Bolt Throw: Standard Rod Length: Bolt Backset: Mortise Strike: Materials: Finishes: Fasteners: Notes:
- Fits ANSI A115 door and frame prep
 Meets ANSI A156.16 for L14251
 1" x 6-3/4" (25 mm x 172 mm)
 1/2" (13 mm) square
 3/4" (19 mm)
 12" (305 mm) (center of face to corner of door)
 3/4" (19 mm)
 15/16" x 2-1/4" (24 mm x 57 mm)
 Brass faceplate with steel components
 US3, US4, US5, US9, US10, US10B, US15, US15A, US19, US26, US26D
 Eight (8) #8 x 3/4" combo screws; eight (8) #8 x 1-1/2" combo screws
 For use on hollow metal/fire rated doors
 Non-handed
 Bolt head rods are adjustable
- Sold in increments of two.
- 3-Hr fire rating for metal doors up to 4 feet wide by 10 feet tall.
- 282S strike plate bag and 282P bolt head available
- Specify 282R for optional rod length of 18" (457 mm), 25" (635 mm), or 30" (762 mm) (bolt head not included)

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Manual Flush Certifications: Face Plate: Bolt Head: Bolt Throw: Bolt Backset: Mortise Strike: Materials: Finishes: Fasteners: Notes: Meets ANSI A156.16 for L14261 $1'' \times 6-25/32''$ (25 mm x 172 mm) 1/2'' (13 mm) square 3/4'' (19 mm) 3/4'' (19 mm) $15/16'' \times 2-1/4''$ (24 mm x 57 mm) Brass faceplate with steel components US3, US4, US5, US9, US10, US10B, US15, US15A, US19, US26, US26D Eight (8) #8 x 3/4'' combo screws and eight (8) #8 x 1-1/2'' combo screws • For use on wood composite/ fire rated doors • Non-handed • Bolt head rods are adjustable

• 1-1/2 hour fire rating for wood doors up to 4 feet wide by 10 feet tall



291D

Face Plate: Bolt Head: Bolt Throw: Bolt Backset: Mortise Strike: Materials: Finishes: Fasteners:

Automatic Flush Bolt Set for Wood Covered Composite Doors Certifications: B. C. D. and E Label

B, C, D, and E Label
ANSI A156.3 Type #25
1" x 8-1/2" (25 mm x 216 mm)
1/2" (13 mm) square
3/4" (19 mm)
3/4" (19 mm)
15/16" x 2-1/4" (24 mm x 57 mm)
Stainless steel and brass with steel components
US3, US4, US10, US10B, US15, US32, US32D
Six (6) $#8 \times 1''$ combo screws, three (3) $#10 \times 1''$ SMS, and two (2) plastic anchors
 Thermal lock automatically locks inactive door under high fire/heat conditions 280X dust proof strikes are recommended for use with these sets Used in pairs at top and bottom of inactive door

Notes:

- Fully automatic bolts retract when active door is opened; bolts extend when active door is closed
- Non-handed
- Bolt head rods are adjustable
- 1-1/2 hour fire rating for wood doors up to 4 feet wide by 9 feet tall



292D

Certifications:

Face Plate:

Bolt Head:

Bolt Throw: Bolt Backset:

Materials:

Finishes:

Notes:

Fasteners:

Mortise Strike:

Automatic Flush Bolt Set for Metal Doors

- A, B, C, D, and E Label ANSI A156.3 Type #25 1" x 6-3/4" (27 mm x 172 mm) 1/2" (13 mm) square 3/4" (19 mm) 3/4" (19 mm) 15/16" x 2-1/4" (24 mm x 57 mm) Stainless steel and brass with steel components US3, US4, US10, US10B, US15, US32, US32D Ten (10) #8 x 1" combo screws • Thermal lock automatically locks inactive door under high fire/heat conditions 280X dust proof strikes are recommended for use with these sets
- Used in pairs at top and bottom of inactive door
- Fully automatic bolts retract when active door is opened; bolts extend when active door is closed
- Non-handed
- Bolt head rods are adjustable
- 3-hour fire rating for metal doors up to 4 feet wide by 9 feet tall



293D

Certifications:

Face Plate:

Bolt Head:

T- Strike:

Materials:

Finishes:

Notes:

Fasteners:

Bolt Throw:

Bolt Backset:

Self Latching Flush Bolt Set for Inactive Metal Doors

- A, B, C, D, and E Label ANSI A156.3 Type #27 1" x 6-3/4" (25 mm x 172 mm) 1/2" (13 mm) square 3/4" (19 mm) 3/4" (19 mm) 1-1/8" x 2-3/4" (28 mm x 70 mm) Stainless steel and brass with steel components US3, US4, US10, US10B, US15, US32, US32D Eight (8) #8 x 1" combo screws • Thermal lock automatically locks inactive door under high fire/heat conditions • 280X dust proof strikes are recommended for use with these sets
- Consists of one 292S and one 293S for two point latching
- Inactive door remains latched until the active door is opened, releasing the automatic bottom bolt - Top bolt can be manually released by pressing plunger - Inactive door will relatch automatically when closed
- Non-handed
- Bolt head rods are adjustable
- 3-hour fire rating for metal doors up to 4 feet wide by 9 feet tall









Self Latching Flush Bolt Set for Inactive Wood Covered Composite Doors Certifications:

Face Plate: Bolt Head: Bolt Throw: Bolt Backset: T- Strike: Materials: Finishes: Fasteners: Notes:

B, C, D, and E Label ANSI A156.3 Type #27 1" x 8-1/2" (25 mm x 216 mm) 1/2" (13 mm) diameter 3/4" (19 mm) 3/4" (19 mm) 1-1/8" x 2-3/4" (28 mm x 70 mm) Stainless steel and brass with steel components US3, US4, US10, US10B, US15, US32, US32D Four (4) #8 x 1" combo screws, three (3) #10 x 1" SMS, and two (2) plastic anchors • Thermal lock automatically locks inactive door under high fire/heat conditions 280X dust proof strikes are recommended for use with these sets • May be used on doors 4 ft. wide and 9 ft. high · Consists of one 292S and one 293S for two point latching

- Inactive door remains latched until the active door is opened, releasing the automatic bottom bolt - Top bolt can be manually released - Inactive door will relatch automatically when closed
- Non-handed
- Bolt head rods are adjustable
- 1-1/2 hour fire rating for wood doors up to 4 feet wide by 9 feet tall

295M

Automatic Flush Bolt Set with Fire Bolt for Metal Doors

Certifications:	ANSI/BHMA 156.3 Type #25
Face Plate:	1" x 6-3/4" (25 mm x 172 mm)
Bolt Head:	1/2" (13 mm) diameter
Bolt Throw:	3/4" (19 mm)
Bolt Backset:	3/4″ (19 mm)
Mortise Strike:	15/16" x 2-1/4" (24 mm x 57 mm)
Materials:	Stainless steel and brass with steel components
Finishes:	US3, US4, US10, US10B, US15, US32, US32D
Fasteners:	Ten (10) #8 x 1" combo screws
Notes:	 Fire bolt is activated at 230° Fahrenheit projecting into active door
	locking leaves together - This combination eliminates the bottom flushbolt
	and eliminates floor preparation
	• Fully automatic – Bolt retracts when active door is opened - Bolt extends

- when active door is closed
- Non-handed
- Bolt head rods are adjustable
- 3-hour fire rating for metal doors up to 4 feet wide by 9 feet tall



295W

Automatic Flush Bolt Set with Fire Bolt for Wood Doors

Certifications: Face Plate: Bolt Head: Bolt Throw: Bolt Backset: Mortise Strike: Materials: Finishes: Fasteners: Notes:

ANSI/BHMA 156.3 Type #25 1" x 8-1/2" (25 mm x 216 mm) 1/2" (13 mm) diameter 3/4" (19 mm) 3/4" (19 mm) 15/16" x 2-1/4" (24 mm x 57 mm) Stainless steel and brass with steel components US3, US4, US10, US10B, US15, US32, US32D Six (6) #8 x 1" combo screws, three (3) #10 x 1" SMS, and two (2) plastic anchors • Fire bolt is activated at 230° Fahrenheit projecting into active door locking leaves

- together This combination eliminates the bottom flushbolt and eliminates floor preparation
- Fully automatic Bolt retracts when active door is opened Bolt extends when active door is closed
- Non-handed
- Bolt head rods are adjustable
- 20-min fire rating for wood doors up to 4 feet wide by 9 feet tall



296W

Automatic Flush Bolt Set for Wood Doors

Certifications: Face Plate: Bolt Head: Bolt Throw: Bolt Backset: Materials: Finishes: Fasteners:



ANSI/BHMA 156.3 Type #25 1-1/8" x 2-1/4" (29 mm x 57 mm) 1/2" (13 mm) diameter 3/4" (19 mm) 1-1/2" (39 mm) Stainless steel and brass with steel components US3, US4, US10, US10B, US15, US32, US32D Four (4) #8 x 1" SMS, two (2)#8 x 3/4" combo screws, two (2) plastic anchors

- Non-handed
- ADA compliant
- Ideal for wood veneer doors
- Only two (2) 1-1/8" diameter holes needed for easier door preparation
- Opening active door retracts top and bottom bolts
- Smaller profile adds stability to the door
- 1-1/2 hour fire rating for doors up to 4 feet wide by 9 feet tall





297C

Carry Bar Certifications: Projection: Base: Materials: Finishes: Fasteners: Notes:

ANSI/BHMA A156.3 Type #27 25/32" (20 mm) 1-3/4" x 2-1/4" (45 mm x 57 mm) Brass and stainless steel USP, US3, US10, US10B, US15, US32, US32D Two (2) 12-24 x 3/4" PPHMS w/ sex nuts

- Used when it is possible for the inactive door to be opened before the active door
- For use on pairs of doors with astragals
- For use in conjunction with a 297D or 298D coordinator
- Prevents damage to the doors and other hardware
- Carry bar is not required when the inactive door is equipped with flush bolts
- Non-handed



297D

Coordinating Device

Certifications: Base: Materials: Finishes: Maximum Astragal Overlap: Stop Height: Fasteners:

Notes:

ANSI/BHMA A156.3 Type #21A 1-3/4" x 2-1/4" (45 mm x 57 mm) Steel Black Prime Coat 1" (25 mm) 5/8" (16 mm) Seven (7) 12-24 x 1-1/4" TPHMS and four (4) #8 x 1" FPH combo screws

- For use with overall frame widths 60" (1524 mm), 72" (1829 mm), or 96" (2438 mm), consult Hager customer service if overall frame width is different than our stock sizes
- Coordinating device is 52" (1321 mm) long for all stock sizes 60" (1524 mm), 72" (1829 mm), or 96" (2438 mm)
- Filler bar is cut to length in field to match customers overall frame width
- Non-handed
- Designed for use on pairs of doors when one door needs to close before the other
- Active door lever, located nearest to the active stop, holds the active door open until the trigger mechanism is released by the closing of the inactive leaf
- Coordinator may not span the entire length of stop, 297F filler bar may be needed to fill up the extra space
- Compatible with flushbolts
- Optional mounting brackets 297M and 297N may be used when mounting other stop applied hardware
- For use with active door widths 30" (762 mm) 48" (1219 mm)
- If active and inactive doors are unequal in length, consult Hager customer service for proper sizing

	ACTIVE DOOR	INACTIVE DOOR	
	COORDINATOR	FILLER BAR	<u>*////</u>
-			-







297F Filler Bar Stop Height:

Length:

5/8" (16 mm) 18-5/8" (473 mm) (for jamb opening widths 52" – 72"); 42-5/8" (1082 mm) (for jamb opening widths 73" – 96") For use with 297D coordinator



- Lite

297M Mounting Brackets

ounding Dradit
Jamb Depth:
Stop Height:
Finishes:
Fasteners:
Notes:

4-3/4" (121 mm) 5/8" (16 mm) Black prime coat Four (4) 12-24 x 2" FPHMS and four (4) 1/4-20 x 1/2" FPHMS • For use with 297D coordinator

- For soffit width 7/8" 2-1/4" (22 mm 57 mm)
- Allows stop mounted hardware to be properly installed without damaging the coordinator, such as a parallel arm closer or a non-fire rated surface vertical rod strike

damaging the coordinator, such as a parallel arm closer or a non-



297N Mounting Bra

Mounting Brackets	
Jamb Depth:	4-1/4" (108 mm)
Stop Height:	5/8″ (16 mm)
Finishes:	Black prime coat
Fasteners:	Four (4) 12-24 x 2" FPHMS and four (4) 1/4-20 x 1/2" FPHMS
Notes:	For use with 297D coordinator
	 For soffit width greater than 2-1/4" (57 mm)
	• Allows stop mounted hardware to be properly installed without

fire rated surface vertical rod strike



298D

Gravity Coordinator

Gravity coordin	
Certifications:	ANSI A156.3 Type #21B
Base:	5-1/2" x 1-1/8" (140 mm x 29 mm)
Projection:	7″ (178 mm)
Materials:	Brass with rubber roller and nylon cam roller
Finishes:	US3, US10, US10B, US26D
Fasteners:	Two (2) #12 x 1" OPHWS, two (2) #6 x 3/4" FPHWS, two (2) #8 x
	3/4" TPHWS, and one (1) #6 x 3/4" FPHWS
Notes:	Non-handed
	• Do not use 298D coordinator in conjunction with flushbolts. Use

- 297D when using flushbolts • Gravity arm and door bracket are adjustable on the job for ease of
- Gravity arm and door bracket are adjustable on the job for ease of installation
- For use on pairs of doors with astragal on active door up to 4' (1219 mm) wide or with astragal on inactive door up to 3'-4" (1016 mm) wide or with astragal on both doors up to 2'-10" (864 mm) wide
- Minimum 3" (76 mm) header required
- Maximum astragal overlap 7/8" (22 mm)

FLUSH BOLTS & COORDINATING DEVICES



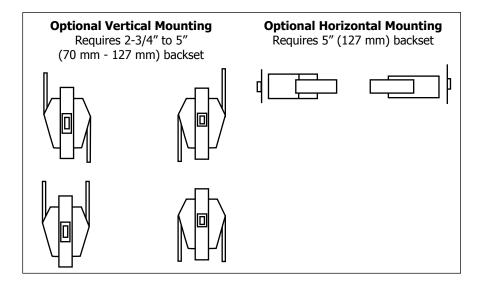


311H | 311L Push/Pull Latch Certifications:

Push & Pull levers: Escutcheons: Projection: Bolt Throw: Bolt Diameter: Backset:

Strike (TEE) - standard: Strike (ASA) - standard: Door thickness: Materials: Finishes: Notes: ANSI A156.2 Closest Equivalent (Bored Latch - Series 4000 - Grade 2) 1-15/16" x 4-1/2" (49 mm x 114 mm) 3-1/16" x 5" (78 mm x 127 mm) 2-5/8" (67 mm) 1/2" (13 mm) 3/4" (19 mm) • 2-3/4" (70 mm) - Standard • 5" (127 mm) - Optional 1-1/8" x 2-3/4" (29 mm x 70 mm) 1-1/4" x 4-7/8" (32 mm x 124 mm) 1-3/4" (45 mm) Zinc and stainless steel US26, US26D, US32, US32D • Non-handed

- Engraving is optional
- 311L is same as 311H but for use on lead lined doors





318D

Roller Latch with Tee Strike

Certifications: Roller Faceplate: Strike: Strike Gauge: Materials: Finishes: Fasteners:

Notes:

Meets ANSI A156.16 for E09091 1" x 3-3/8" (25 mm x 86 mm) 1-1/8" x 2-3/4" (29 mm x 70 mm) 0.063" (1.5 mm) Brass US3, US4, US10, US10B, US15, US15A, US19, US26, US26D Two (2) #10 x 1-1/2" FPHWS, two (2) #8 x 1" FPHWS, and two (2 8-32 x 3/4" FPHMS • Adjustable spring tension with nylon roller

- Projection of roller is easily adjusted using screws on faceplate
- Max projection of the roller is 3/8" (9.5 mm) allowing for variance in door and frame clearance



318S Roller Latch with Stop

Certifications: Roller Faceplate: Strike: Strike Gauge: Materials: Finishes: Fasteners: Notes:

Meets ANSI A156.16 for E0911 1-7/16" wide x 4-7/16" high x 11/16" angle (37 mm x 111 mm x 18 mm) 1-1/8" x 2-1/4" (29 mm x 57 mm) 0.063" (1.5 mm) Brass US3, US4, US10, US10B, US15, US26, US26D Two (2) #10 x 1-1/2" FPHWS and two (2) 8-32 x 3/4" FPHMS • Adjustable spring tension with nylon roller • Projection of roller is easily adjusted using screws on faceplate

• Max projection of the roller is 3/8" (9.5 mm) allowing for variance in door and frame clearance

320R

Roller Catch with Tee Strike Certifications: Roller Faceplate: Strike: Materials: Finishes: Fasteners: Notes:

Meets ANSI A156.16 for E0910 1-1/8" x 2-1/4" (29 mm x 57 mm) 1-1/4" x 2-3/4" x 1/16" thick (32 mm x 70 mm x 1.5 mm) Brass US3, US4, US10, US10B, US15, US26, US26D Four (4) #8 x 1" FPHWS • Adjustable spring tension with nylon roller • Projection of roller is adjusted by turning knurled knob on back of the latch

- Max projection of the roller is 7/16" (11 mm) allowing for variance in door and frame clearance
- For use with wood door and frame



321R

Adjustable Ball Catch with Strike

Roller Faceplate: Strike: Strike Gauge: Materials: Finishes: Fasteners: Notes:

1" x 2-1/8" (25 mm x 54 mm) 1-1/2" x 2-1/8" (38 mm x 54 mm) 0.050" (1.3 mm) Brass with steel ball US3, US4, US10, US10B, US15, US15A, US19, US26D Four (4) #6 FPHWS · Adjustable threaded barrel compensates for various door clearances • Adjustable spring tension

• For use with wood door and frame



340D

Materials: Finishes:

Fasteners:

Notes:

Size:

Latch Protection Plate 3" x 11" (76 mm x 279 mm) 12GA steel, stainless steel US2C, US32D Two (2) 5/16-18 x 1-1/2" carriage bolts with sex nuts • For use with 1-3/4" (45 mm) doors Non-handed • Frame pin prevents prying of door

- For use with most mortise locks
- For use with cylindrical locksets with a 3-3/4" (95 mm) backset or greater



341D

Latch Protection Plate with Lock Cut Out

Size: Materials: Finishes: Fasteners: Notes:

3" x 11" (76 mm x 279 mm) 12GA steel, stainless steel US2C, US32D Two (2) 5/16-18 x 1-1/2" carriage bolts with sex nuts • For use with 1-3/4" (45 mm) doors Non-handed • Frame pin prevents prying of door

• For use with cylindrical locksets with a 2-3/4" (70 mm) backset

345D

Latch Protection Plate

Size: Materials: Finishes: Fasteners: Notes:

1-5/8" x 10" (41 mm x 254 mm) 12GA steel, stainless steel US2C, US32D Two (2) 5/16-18 x 1-1/2" carriage bolts with sex nuts • For use with 1-3/4" (45 mm) doors • Non-handed

• For use with cylindrical locksets



1442

Strike:

Certifications:

Strike Gauge:

Materials:

Finishes:

Fasteners:

Roller Faceplate:

Roller Latch with Full Lip Strike Meets ANSI A156.16 for E09091 1" x 3-3/8" (25 mm x 86 mm) 1-11/16" x 2-1/4" (43 mm x 57 mm) 5/32" (4 mm) Brass US3, US4, US10, US10B, US15, US15A, US19, US26, US26D Two (2) #10 x 1-1/2" FPHWS, two (2) #8 x 1" FPHWS, and two (2) 8-32 x 3/4" **FPHMS** • Adjustable spring tension with nylon roller

Notes:

- Projection of roller is easily adjusted using screws on faceplate
- Max projection of the roller is 3/8" (9.5 mm) allowing for variance in door and frame clearance



1443

Roller Latch with ASA Strike

51	Certifications:	Meets ANSI A156.16 for E09101
	Roller Faceplate:	1" x 3-3/8" (25 mm x 86 mm)
	Strike:	1-1/4" x 4-7/8" (32 mm x 124 mm)
	Strike Gauge:	0.090″ (2.3 mm)
	Materials:	Brass
	Finishes:	US3, US4, US10, US10B, US15, US15A, US19, US26, US26D
	Fasteners:	Two (2) #10 x 1-1/2" FPHWS, two (2) #12 x 3/4" FPHWS, and two (2) 12-24 x 1/2"
		FPHMS
	Notes:	 Adjustable spring tension with nylon roller
		 Projection of roller is easily adjusted using screws on faceplate

• Max projection of the roller is 3/8" (9.5 mm) allowing for variance in door and frame clearance





901P

Diameter: Projection: Materials: Finishes: Fasteners: Notes:

Coat Hook - Short Single 1" (25 mm) 1-1/4" (32 mm) Brass, bronze US3, US26D #14 x 1-1/4" wood thread Concealed mounting



937P Coat Hook

Projections:

• 3-3/4" (95 mm) top hook • 2-1/2" (63 mm) bottom hook Brass, bronze US3, US26D



902P **Coat Hook - Long Single**

Diameter: Projection: Materials: Finishes: Fasteners: Notes:

1" (25 mm) 2-1/2" (63 mm) Brass, bronze US3, US26D #14 x 1-1/4" wood thread Concealed mounting

thread



940P

Materials:

Finishes:

Coat Hook - Double Overall Height: Top Projection: Bottom Projection: Material Thickness: Fasteners:

4-11/16" (119 mm) 3-15/16" (100 mm) 2-1/8" (54 mm) 1/4" (6 mm) Two (2) #10 x 1" FPHWS

903P

Coat Hook - Long Double Diameter: Projection: Materials: Finishes: Fasteners: Notes:

1" (25 mm) 2-1/2" (63 mm) Brass, bronze US3, US26D #14 x 1-1/4" wood



941P

Fasteners:

Coat Hook - Single Overall Height: Projection:

Material Thickness:

2-5/16" (59 mm) 2-1/8" (54 mm) 1/4" (6 mm) Two (2) #10 x 1" FPHWS

936P

Coat Hook Single Angled Base Diameter:

Hook Diameter: Projection: Materials: Finishes: Notes:

1-15/16" (49 mm) 11/16" (17 mm) 3-5/16" (84 mm) Brass, bronze US3, US26D Concealed mounting

Concealed mounting







945P

Overall Height: Projection: Materials: Finishes: Fasteners:

Double Coat Hook - Surface Mounting 5-1/2" (140 mm) 3-5/16" (84 mm) Brass, bronze US3, US26D Four (4) #10 x 1" FPHWS w/ anchors

5-1/2" (140 mm)

Brass, bronze

US3, US26D Two (2) #10 x 1"

3-11/16" (94 mm)

FPHWS w/ anchors

Concealed mounting



952P

Coat Hook - Single O/A Height: Projection: Materials: Finishes: Notes:

2-13/16" (71 mm) 2-7/32" (56 mm) Brass, bronze US3, US26D Concealed mounting



946P

Double Coat Hook -Concealed Mounting Overall Height: Projection: Materials:

Finishes: Fasteners:

Notes:

951P

Coat Hook - Double

O/A Height: Projection: Materials: Finishes: Notes:

5-3/4" (146 mm) 2-3/4" (70 mm) Brass, bronze US3, US26D Concealed mounting



956P **Double Coat Hook - Angled** Overall Height: Projection: Materials: Finishes: Notes:

5-11/16" (144 mm) 3-23/32" (95 mm) Brass, bronze US3, US26D Concealed mounting

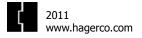


957P **Coat Hook**

Projection: Base Diameter: Materials: Finishes: Fasteners:

Notes:

1-3/4" (45 mm) 3/4" (19 mm) Brass, bronze US3, US26D #10 x 1" wood thread Concealed mounting







Edge Pull for Sliding Doors

Certification: Size: Lever Extension: Materials: Finishes: Fasteners:

22N

Meets ANSI A156.14 for D2801 31/32" x 4-1/4" x 3/8" thick (25 mm x 108 mm x 9.5 mm) 2-19/32" (66 mm) Brass US3, US26D Two (2) #6 x 3/4" FPHWS



330D **Pocket Door Latch** Certification:

Size:

Materials:

Finishes: Fasteners:

Meets ANSI A156.14 for D0821 2-3/4" x 2-1/2" (70 mm x 64 mm) Extension of Finger Piece: 1-3/8" (35 mm) Brass US3, US5, US10B, US15A, US19, US26, US26D Two (2) #6 x 5/8" OPHWS For use with 1-3/8" - 1-3/4" (35 mm - 45 mm) door



330L

Notes:

Pocket Door Privacy Latch

Certifications: Meets ANSI A156.14 for D0831 Size: 2-3/4" x 2-1/2" (70 mm x 64 mm) Extension of Finger Piece: 1-3/8" (35 mm) Strike Size: 1" x 2-1/4" (25 mm x 57 mm) Materials: Brass US3, US5, US10B, US15, US15A, US19, US26, US26D Finishes: Fasteners: Two (2) #6 x 5/8" OPHWS and two (2) #6 x 3/4" FPHWS Notes: For use with 1-3/8" (35 mm) door



330M

Pocket Door Privacy Latch Certifications: Meets ANSI A156.14 for D0831 Size: 2-3/4" x 2-1/2" (70 mm x 64 mm) Extension of Finger Piece: 1-3/8" (35 mm) 1" x 2-1/4" (25 mm x 57 mm) Strike Size: Materials: Brass US3, US5, US10B, US15, US15A, US19, US26, US26D Finishes: Fasteners: Two (2) #6 x 5/8" OPHWS and two (2) #6 x 3/4" FPHWS Notes: For use with 1-3/4" (45 mm) door



2610

Flush Cup Finger Pull

Overall Diameter: Finger Pull Diameter: Pull Clearance: Projection: Materials: Finishes: Notes:

31/32" (24.5 mm) 3/4" (19 mm) 5/16" (8 mm) 1/32" (.8 mm) Solid brass US3, US4, US5, US10A, US15, US15A, US26, US26D, ABA · For use on bi-fold, by-pass or pocket applications

· Built-in prong design eliminates the need for screws or brads





2620 Flush Cup Pull

Flush Cup Pull	
Overall Diameter:	2-1/16" (52 mm)
Finger Pull Diameter:	1-11/16" (43 mm)
Pull Clearance:	11/32" (8.7 mm)
Projection:	5/64″ (2 mm)
Materials:	Solid brass
Finishes:	US3, US4, US5, US10A, US15, US15A, US26, US26D, ABA
Notes:	 For use on bi-fold, by-pass or pocket applications
	• Built-in prong design eliminates the need for screws or brads



2630 **Flush Cup Pull**

riusii Cup Fuii	
Overall Diameter:	2-7/16″ (62 mm)
Finger Pull Diameter:	2-1/16″ (52 mm)
Pull Clearance:	11/32" (8.7 mm)
Projection:	3/32″ (2.4 mm)
Materials:	Solid brass
Finishes:	US3, US4, US5, US10A, US15, US15A, US26, US26D, ABA
Notes:	• For use on bi-fold, by-pass or pocket applications
	• Built-in prong design eliminates the need for screws or brads



2640

Oblong Flush Pull	
Size:	1-5/16" x 2-3/4" (33 mm x 70 mm)
Cup Clearance:	5/16" (8 mm)
Materials:	Solid brass
Finishes:	US3, US4, US5, US10A, US15, US15A, US26, US26D, ABA
Fasteners:	Two (2) #6 x 5/8" OPHWS
Notes:	For use on bi-fold, by-pass or pocket applications



9558 Wood Knob

9566 Knob

Diameter:

Projection: Materials:

Finishes:

Notes:

Fasteners:

Diameter: Materials: Notes:

1-1/2" (38 mm) Solid wood • For use on bi-fold applications • Will accept paint or stain



1-1/4" (32 mm) 1″ (25 mm) Die Cast Zinc US3, US4, US5, US10A, US10B, US15, US15A, US26, US26D One (1) 8-32 x 1-3/4" PPHMS and one (1) 8-32 x 2" PPHMS For use on bi-fold applications on doors 3/4" (19 mm) to 1-3/8" (35 mm) thick







9567 Rose

Base Diameter: Projection: Materials: Finishes: Fasteners: Notes:

1-3/4" (45 mm) 15/32" (12 mm) Die cast zinc US3, US4, US5, US10A, US10B, US15, US15A, US26, US26D One (1) 8-32 x 1-3/4" PPHMS and one (1) 8-32 x 2" PPHMS • For use on bi-fold applications on doors 3/4" (19 mm) to 1-3/8" (35 mm) thick • For use with 9566 knob



9865 Flush Cup Pull

Pull Clearance:

Projection: Materials:

Notes:

Overall Diameter: 1-31/32" (50 mm) Finger Pull Diameter: 1-19/32" (40 mm) 11/32" (8.7 mm) 5/64" (2 mm) Tan color ABS plastic • For use on bi-fold, by-pass or pocket applications • Built-in prong design eliminates the need for screws or brads

9882

Pocket Door Edge Pull

Face Plate Size:	3/4" x 3 - 7/8" (19 mm x 98 mm)	
Finger Pull Extends	s: 3/4" (19 mm)	
Materials:	Solid brass	
Finishes:	US3, US4, US10, US10B, US26, US26D	
Fasteners:	Two (2) #6 x 5/8" FPHWS	
Notes:	 Ideal for narrow and standard door thicknesses 	
	 Automatic spring return 	

9884

Pocket Door Edge Pull

. oonot boon auge .	
Faceplate:	21/32" x 3-1/2" (16.5 mm x 89 mm)
Finger Pull Extends:	1-1/16" (27 mm)
Materials:	Die cast zinc
Finishes:	US3
Fasteners:	Two (2) #6 x 5/8" FPHWS
Notes:	Ideal for narrow and standard door thicknesses







336A

Size: Thickness: Materials:

Door Edge Filler Plate - 161 Prep 1-1/8" x 2-1/4" (29 mm x 57 mm) 0.125" (3.2 mm) Primed steel



336B

Size:

Door Edge Filler Plate - 86 Prep 1-1/4" x 8" (32 mm x 203 mm) 0.180" (4.5 mm) Thickness: Primed steel Materials:



336C **Door Face Filler Plate - Deadbolt** 1-3/4" (45 mm) Size: diameter 0.055" (1.4 mm) Thickness: Primed steel Materials:



Size: Thickness: Materials:

15/16" x 2-1/4" (24 mm x 57 mm) 0.083" (2.1 mm) Primed steel



336D Door Face Filler Plate - 161 Prep Size: 2-5/8" (67 mm) diameter

Thickness: 0.055" (1.4 mm) Primed steel



336E

Materials:

Size: Thickness: Materials:

Door Edge Filler Plate - Square 1-3/4" x 4-1/2" (45 mm x 114 mm) 0.134" (3.4 mm) Primed steel



336F

Door Edge Filler Plate - Bevel		
Size:	1-1/2" x 4-1/2"	
	(38 mm x 114 mm)	
Thickness:	0.134" (3.4 mm)	
Materials:	Primed steel	
Notes:	For handed doors	



336G

Door Edge Filler Plate - Square Size:

Thickness: Materials:

1-3/4" x 5" (38 mm x 127 mm) 0.134" (3.4 mm) Primed steel



336H **Door Edge Filler Plate - Beveled** Size: 1-1/2" x 5"

(38 mm x 127 mm) Thickness: 0.134" (3.4 mm) Primed steel Materials: For handed doors

Flush Bolt Strike Filler Plate - Frame

FILLER PLATES



336K

Notes:

336J

Flush Bolt Filler Plate - Door Size: Thickness: Materials:

1" x 6-3/4" (25 mm x 172 mm) 0.134" (3.4 mm) Primed steel



336L

Hinge Filler Plate - Frame Size:

Thickness: Materials:

1-5/8" x 4-1/2" (41 mm x 114 mm) 0.134" (3.4 mm) Primed steel

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336M **Hinge Filler Plate - Frame** Size:

Thickness: Materials:

336N

Size:

Edge Prep

Thickness:

Materials:

1-5/8" x 5" (41 mm x 127 mm) 0.134" (3.4 mm) Primed steel

Latch Adapter Filler Plate - 86 to 161

1-1/4" x 8"

(32 mm x 203 mm)

0.238" (6 mm)

Primed steel



337A **Template Hinge Shim**

Size: Thickness: Materials:

1-7/16" x 4-1/2" (37 mm x 114 mm) 0.028" (0.7 mm) Primed steel

337B **Template Hinge Shim** Size: Thickness: Materials:

337C

1-7/16" x 4-1/2" (37 mm x 114 mm) 0.065" (1.7 mm) Primed steel



336P

Size: Thickness: Materials:

Deadlock Strike Filler Plate - Frame 1-1/8" x 2-3/4" (29 mm x 70 mm) 0.083" (2.1 mm) Primed steel

1-1/4" x 4-7/8"

0.093" (2.4 mm)

Primed steel

(32 mm x 124 mm)



Size: Thickness: Materials:

Template Hinge Shim 1-7/16" x 5" (37 mm x 127 mm) 0.028" (0.7 mm) Primed steel

ASA Strike Filler Plate - Frame Size: Thickness: Materials:

3360

336R

Cylindrical Lock Strike Filler Plate -Frame Size: 1-1/8" x 2-3/4"

Thickness: Materials:

(29 mm x 70 mm) 0.083" (2.1 mm) Primed steel



337D

Template Hinge Shim Size:

Thickness: Materials:

1-7/16" x 5" (37 mm x 127 mm) 0.065" (1.7 mm) Primed steel







PUSH

PULL

350H 350L Engraved Plastic Sign - Push (350H) and Pull (350L)			
Certifications:	Meets ANSI A156.16 L03201		
Materials:	0.125" (3.2 mm) thick plastic		
Lettering:	3/4" (19 mm) Helvetica		
Size:	2" x 4" (51 mm x 102 mm)		
Fasteners:	Double sided pressure sensitive tape or screws (specify)		
Colors:	 Brown (W1) with white lettering 		
	 Black (W2) with white lettering 		
	 Blue (W3) with white lettering 		
	 Silver (B1) with black lettering 		
	 Gold (B2) with black lettering 		
Notes:	Signs are individually packed in a poly bag		

MEN

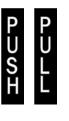
WOME

	350M 350W	
	Engraved Plastic S	ign - Men (350M) and Women (350W)
	Certifications:	Meets ANSI A156.16 L03201
	Materials:	0.125" (3.2 mm) thick plastic
N	Lettering:	3/4" (19 mm) Helvetica
	Size:	2" x 5" (51 mm x 127 mm)
	Fasteners:	Double sided pressure sensitive tape or screws (specify)
	Colors:	 Brown (W1) with white lettering
		 Black (W2) with white lettering
		 Blue (W3) with white lettering
		 Silver (B1) with black lettering
		 Gold (B2) with black lettering
	Notes:	Signs are individually packed in a poly bag

635

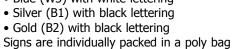
350R Engrav

Engraved Plastic Sign - Number		
Certifications:	Meets ANSI A156.16 L03201	
Materials:	0.125" (3.2 mm) thick plastic	
Lettering:	3/4" (19 mm) Helvetica	
Size:	2" x 4" (51 mm x 102 mm)	
Fasteners:	Double sided pressure sensitive tape or screws (specify)	
Colors:	 Brown (W1) with white lettering 	
	 Black (W2) with white lettering 	
	 Blue (W3) with white lettering 	
	 Silver (B1) with black lettering 	
Notes:	Signs are individually packed in a poly bag	



| 351L 351H

Engraved Plastic Sign - Push (351H) and Pull (351L)		
Certifications:	Meets ANSI A156.16 L03201	
Materials:	0.125" (3.2 mm) thick plastic	
Lettering:	3/4" (19 mm) Helvetica	
Size:	1" x 4-1/2" (25 mm x 114 mm)	
Fasteners:	Double sided pressure sensitive tape or screws (specify)	
Colors:	 Brown (W1) with white lettering 	
	 Black (W2) with white lettering 	
	 Blue (W3) with white lettering 	
	 Silver (B1) with black lettering 	
	 Gold (B2) with black lettering 	
	- · · · · · · · · · · · · · · · · · · ·	



SIGNAGE







352M | 352W

	Engraved Plastic Sign - Men (352M) and Women (352W)	
	Certifications:	Meets ANSI A156.16 L03201
ı	Materials:	0.125" (3.2 mm) thick plastic
1	Lettering:	3/4" (19 mm) Helvetica
	Size:	352M - 2-1/2" x 6" (64 mm x 152 mm)
		352W - 2-1/2" x 7" (64 mm x 178 mm)
	Fasteners:	Double sided pressure sensitive tape or screws (specify)
	Colors:	 Brown (W1) with white lettering
		 Black (W2) with white lettering
		 Blue (W3) with white lettering
		 Silver (B1) with black lettering
		 Gold (B2) with black lettering
	Notes:	Signs are individually packed in a poly bag

Restr

Rest

room	Engraved Plastic Si	ign - Restroom(s)
	Certifications:	Meets ANSI A156.16 L03201
	Materials:	0.125" (3.2 mm) thick plastic
ooms	Lettering:	3/4" (19 mm) Helvetica
	Size:	2" x 6" (51 mm x 127 mm)
	Fasteners:	Double sided pressure sensitive tape or screws (specify)
	Colors:	Black (W2) with white lettering
		Blue (W3) with white lettering
	Notes:	Signs are individually packed in a poly bag

360M | 360W

354A | 354B

MEN WOMEN

Engraved Metal Sign - Men (360M) and Women (360W)

Certifications: Meets ANSI A156.16 L03201 Materials: 0.050" (1.3 mm) thick metal 3/4" (19 mm) Helvetica black filled Lettering: 2" x 6" (51 mm x 152 mm) Double sided pressure sensitive tape or screws (specify) Fasteners: US3, US28, US32D Signs are individually packed in a poly bag



PULL

361H | 361L

Engraved Metal Sign - Push (361H) and Pull (361L) Certifications:

Materials: Lettering: Size: Fasteners: Finishes: Notes:

Size:

Finishes:

Notes:

Meets ANSI A156.16 L03201 0.050" (1.3 mm) thick metal 3/4" (19 mm) Helvetica black filled 2" x 4" (51 mm x 102 mm) Double sided pressure sensitive tape or screws (specify) US3, US10B, US28, US32D Signs are individually packed in a poly bag



76





362H | 362L

Engraved Metal Sign - Push (362H) and Pull (362L) Cerl

Certifications:	Meets ANSI A156.16 L03201
Materials:	0.050" (1.3 mm) thick metal
Lettering:	3/4" (19 mm) Helvetica black filled
Size:	1" x 4-1/2" (25 mm x 114 mm)
Fasteners:	Double sided pressure sensitive tape or screws (specify)
Finishes:	US3, US10B, US28, US32D
Notes:	Signs are individually packed in a poly bag



364L

Plastic International Handicap Symbol Sign

Certifications:	Meets ANSI A156.16 L03201
Materials:	0.125" (3.2 mm) thick plastic 1/32" (0.8 mm) raised HANDICAP symbol
Size:	6" x 6" (152 mm x 152 mm)
Fasteners:	Double sided pressure sensitive tape standard or screws (specify)
Colors:	 Brown (W4) with raised white symbol
	 Black (W2) with raised white symbol
	 Blue (W3) with raised white symbol
Notes:	Signs are individually packed in a poly bag



364M | 364S

Plastic International Handicap Symbol Sign Cert

Certifications:	Meets ANSI A156.16 L03201
Materials:	0.0625" (1.6 mm) thick plastic raised HANDICAP symbol
Size:	364M - 4" x 4" (102 mm x 102 mm)
	364S - 3″ x 3″ (76 mm x 76 mm)
Fasteners:	Double sided pressure sensitive tape standard or screws (specify)
Colors:	Blue (W3) with raised white symbol
Notes:	Signs are individually packed in a poly bag



364N

Engraved International No Smoking Symbol Sign

Certifications:	Meets ANSI A156.16 L03201
Materials:	0.125" (3.2 mm) thick plastic
Size:	6" x 6" (152 mm x 152 mm)
Fasteners:	Pressure sensitive tape standard or screws (specify)
Colors:	Red (W4) with raised white symbol
Notes:	Signs are individually packed in a poly bag



WOMEN

365M | 365W ADA T

ADA Tactile Sign - Men (365M) and Women (365W)		
Certifications:	Meets ANSI A156.16 L03201	
Materials:	0.125" (3.2 mm) thick plastic	
Size:	6″ x 8″ (152 mm x 203 mm)	
Fasteners:	Double sided pressure sensitive tape	
Colors:	 Brown (W1) with raised white symbol 	
	 Black (W2) with raised white symbol 	
	Blue (W3) with raised white symbol	
Notes:	 Signs are individually packed in a poly bag 	
	• Grade 2 Braille Translation conforming to section 4.30 requirements	

SIGNAGE





325

366R ADA Tactile Sign - Room Number

ADA Tactile Sign	
Certifications:	Meets ANSI A156.16 L03201
Materials:	0.125" (3.2 mm) thick plastic
Size:	2-1/2″ x 5″ (64 mm x 127 mm)
Fasteners:	Double sided pressure sensitive tape
Colors:	 Brown (W1) with raised white lettering
	 Black (W2) with raised white lettering
	 Blue (W3) with raised white lettering
Notes:	 Signs are individually packed in a poly bag
	• Grade 2 Braille Translation conforming to section 4.30 requirements



366S

ADA Tactile Sign - Stairs		
Certifications:	Meets ANSI A156.16 L03201	
Materials:	0.125" (3.2 mm) thick plastic	
Size:	6" x 8" (152 mm x 203 mm)	
Fasteners:	Double sided pressure sensitive tape	
Colors:	 Brown (1) with white symbol and lettering 	
	 Black (2) with white symbol and lettering 	
	 Blue (3) with white symbol and lettering 	
Notes:	 Signs are individually packed in a poly bag 	
	Grade 2 Braille Translation conforming to section 4.30 requirements	

368E

ADA Tactile Sign - Exit

ADA Tucche orgi	EAR
Certifications:	Meets ANSI A156.16 L03201
Materials:	0.125" (3.2 mm) thick plastic
Size:	6" x 8" (152 mm x 203 mm)
Fasteners:	Double sided pressure sensitive tape
Colors:	 Brown (1) with white symbol and lettering
	 Black (2) with white symbol and lettering
	 Blue (3) with white symbol and lettering
Notes:	 Signs are individually packed in a poly bag
	• Grade 2 Braille Translation conforming to section 4.30 requirements



WOMEI

368M | 368W

ADA Tactile Sign	- Men (365M) and Women (365W) with Handicap
Certifications:	Meets ANSI A156.16 L03201
Materials:	0.125" (3.2 mm) thick plastic
Size:	6" x 8" (152 mm x 203 mm)
Fasteners:	Double sided pressure sensitive tape
Colors:	 Brown (1) with white symbol and lettering
	 Black (2) with white symbol and lettering
	 Blue (3) with white symbol and lettering
Notes:	 Signs are individually packed in a poly bag
	• Grade 2 Braille Translation conforming to section 4.30 requirements

SIGNAGE









368U **c**:,

ADA Tactile Sign - Unisex		
Meets ANSI A156.16 L03201		
0.125" (3.2 mm) thick plastic		
8" x 8" (203 mm x 203 mm)		
Double sided pressure sensitive tape		
 Brown (1) with white symbol and lettering 		
 Black (2) with white symbol and lettering 		
Blue (3) with white symbol and lettering		
 Signs are individually packed in a poly bag 		
• Grade 2 Braille Translation conforming to section 4.30 requirements		



CCES

369L | 369R

JUJE JUJK		
ADA Tactile Sign - Access Left (369L) and Access Right (369R)		
Certifications:	Meets ANSI A156.16 L03201	
Materials:	0.125" (3.2 mm) thick plastic	
Size:	6" x 8" (152 mm x 203 mm)	
Fasteners:	Double sided pressure sensitive tape	
Colors:	 Brown (1) with white symbol and lettering 	
	 Black (2) with white symbol and lettering 	
	 Blue (3) with white symbol and lettering 	
Notes:	 Signs are individually packed in a poly bag 	
	• Grade 2 Braille Translation conforming to section 4.30 requirements	



370M | 370U | 370W

ADA Tactile Sign - Restroom, Men, and Women		
Certifications:	Meets ANSI A156.16 L03201	
Materials:	9/16" (14.3 mm) plastic	
Size:	• 370U - 12" (305 mm) diameter	
	 370W - 12" (305 mm) diameter 	
	• 370M - 10-1/2" (267 mm) side	
Fasteners:	Double sided pressure sensitive tape	
Color:	Blue (3) with white raised symbol and lettering	
Notes:	 Signs are individually packed in a poly bag 	
	• Grade 2 Braille Translation conforming to section 4.30 requirements	







Door Guard Protection Plate

1-1/8" x 1" x 1/2" (28.5 mm x 25 mm x 12.5 mm) Materials: Brass Finishes: US3, US4, US10, US10B, US15, US26, US26D • Used when additional protective plate is required for frame application Notes: • Mounted with double-sided tape

To be used with the 274D



274C Shim for Door Guard

Size: Thickness: Materials: Notes:

274B

Size:

1-1/8" x 1-1/16" (29 mm x 27 mm) 3/32" (2.3 mm) Black rubber To be used with the 274D



274D Door G

Door Guard	
Certifications:	Meets ANSI A156.16 for L13041
Arm Length:	4-1/2" (114 mm)
Materials:	Brass
Finishes:	US3, US4, US10, US10B, US15, US26, US26D
Fasteners:	Three (3) #6 x 1-1/2" OPHWS, three (3) #6 x 3/4" OPHWS, and three (3) 6-32 x 3/4" FPHMS
Notes:	 Permits door to be slightly opened to allow viewing
	 Hinged bar allows the door guard to be positioned 180 degrees away from the door

- Notes:
- when not in use
- Includes door guard protective plate 274B



300D Chain Door Check

Lengths:

Base Plate:

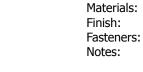
Certifications:

Meets ANSI A156.16 for L02231 25-1/2" (648 mm) recommended for use with 36" (914 mm) wide door • 30-1/2" (775 mm) recommended for use with 42" (1067 mm) wide door 1-1/2" x 1-1/2" (38 mm x 38 mm) Cast brass base with welded steel chain US26D Ten (10) #8 x 1" FPHSMS • Tear resistant grey vinyl cover

- Can be ordered through door mounting with grommet nut sets at extra charge
- 440 pound load strength
- Designed for full size exterior doors



MISCELLANEOUS











301D

Heavy Duty Hinge Pin Stop

Certifications: Materials: Finishes: Notes: Meets ANSI A156.16 for L02223 Wrought steel with rubber bumpers US3, US26D

- \bullet Works with 1/4" (6 mm) and 5/16" (8 mm) hinge pins
- For use where standard door stops are not desirable
- Positive slip proof design
- Adjustable from 70 degrees to 100 degrees
- Must purchase an NRP hinge for use with this pin stop



303W

Handrail Bracket Certifications: Base Diameter: Base to Center of Rail: Materials: Finishes: Fasteners:

Meets ANSI A156.16 for L03061 3-5/32" (80 mm) 2-3/4" (70 mm) Brass US3, US4, US10, US10B, US15A, US19, US26, US26D Three (3) #10 x 1-1/4" FPHWS, three (3) plastic anchors, three (3) 10-24 x 13/16" FPHMS, and three (3) 10-24 lead anchors



305D Wire Pull

Certifications: Diameter of Rod: Projection: CTC Lengths: Materials: Finishes: Fasteners:

Meets ANSI A156.9 for B02011 5/16" (7.9 mm) 1-9/32" (32.5 mm) 3" (76 mm), 3-1/2" (89 mm), 4" (102 mm) Brass US3, US4, US10, US10B, US26, US26D Two (2) 8-32 x 1" TPHMS

307D

Door Silencer Certifications: Diameter: Projection: Materials: Notes:

Meets ANSI A156.16 for L03011 1/2" (13 mm) 1/8" (3 mm) Rubber • For use with metal frames

• Proper installation eliminates door rattle and provides constant tension for door latches or locks



308D

Door Silencer Certifications: Projection: Base: Length: Materials: Notes:

Meets ANSI A156.16 for L0302 9/64" (3.5 mm) 3/8" x 3/4" (9.5 mm x 19 mm) 3/4" (19 mm) Rubber • For use with wood frames

- Eliminates door rattle when door is latched
- Proper installation eliminates door rattle and provides constant tension for door latches or locks



310C

Conversion Kit Filler Plate: Strike: Materials: Finishes: Notes:

1-1-8" x 3-3/8" (29 mm x 86 mm) 1-11/16" x 2-1/4" (43 mm x 57 mm) Brass US10B, US26D • Packed with filler plate, strike and fasteners

• Change door from Roller Latch to Push/Pull Latch



322V

Size: Materials:

Finishes:

Notes:

Fasteners:

Wrought Door Knocker with Viewer Certifications: Meets ANSI A156.16 for L03161 2-3/16" x 3-1/4" (56 mm x 83 mm) Brass US3, US4, US10, US26D Three (3) #6 x 3/4" TPHSMS Requires 1/2" (13 mm) hole for viewer



1755

160° Door Viewer Certifications: Materials: Finishes: Notes:

Meets ANSI A156.16 for L03222 Brass US3, US4, US5, US10A, US15, US15A, US26, US26D • For doors up to 2-1/8" (54 mm) thick, adjustable • Requires 1/2" (13 mm) hole for viewer

- Tamper resistant
- 90 minute fire rated
- One way viewer



1756 200° Door Viewer

Certifications: Materials: Finishes: Notes:

Meets ANSI A156.16 for L03221 Brass US3, US4, US5, US10A, US15, US15A, US26, US26D • For doors up to 2-1/8" (54 mm) thick, adjustable • Requires 9/16" (14 mm) hole for viewer

- Tamper resistant
- 90 minute fire rated
- One way viewer







208 Kick Down Door Stop

1-5/8" x 1-7/8" (41 mm x 48 mm) 3-7/8" (98 mm) Aluminum alloy US3, US4, US5, US10A, US15A, US15, US26, US26D, ABA Three (3) #6 x 3/4" FPHWS • Polybag (1 each) with screws • Provides simple hold and release with a touch of the foot • 3" (76 mm) max door to floor clearance



209 Floor Door Stop

Base Diameter:

Tip Diameter:

Height:

Materials:

Finishes:

Notes:

Fasteners:

Base: Arm:

Materials:

Finishes: Fasteners:

Notes:

1-1/4" (32 mm) 1-3/32" (28 mm) 19/32" (15 mm) Zinc alloy US3, US4, US5, US10A, US15A, US15, US26, US26D, ABA One (1) #8 x 2" FPHWS • Non-marking white tip • 3/8" (9.5 mm) max door to floor clearance



BL6209

Floor Door StopHeight:1-3Base Diameter:13,Tip Diameter:1/2Materials:ZinFinishes:USFasteners:#8Notes:• M

1-3/8" (35 mm) 13/16" (21 mm) 1/2" (13 mm) Zinc alloy US3, US4, US5, US10A, US15A, US15, US26, US26D, ABA #8 x 11/32" thread • Non-marking white tip

- 150 per case
- 1/2" (13 mm) max door to floor clearance
- Hex shape near the base allows usage of a wrench for easier installation



210 Rigid Door Stop

Projection: Tip Diameter: Base Diameter: Materials: Finishes: Fasteners: Notes: 3" (76 mm) 11/16" (17.5 mm) 1" (25 mm) Zinc alloy US3, US4, US5, US10A, US10R, US15A, US15, US26, US26D, ABA #8 x 5/8" thread Bumper made of rubber





211 **Flexible Door Stop**

Projection: 3-1/8" (79 mm) Tip Diameter: 9/16" (14 mm) Base Diameter: 1" (25 mm) Materials: Zinc alloy base US3, US4, US5, US10A, US10R, US15A, US15, US26, US26D, ABA One (1) #8 x 3/4" PPHWS Fasteners: • Bumper made of rubber • Flexible spring



BL6211

Finishes:

Notes:

Flexible Door Stop	
Projection:	3″ (76 mm)
Tip Diameter:	7/16″ (11 mm)
Base Diameter:	3/4" (19 mm)
Materials:	Zinc alloy base
Finishes:	US3, US4, US5, US10A, US10R, US15A, US15, US26, US26D, ABA
Fastener:	#8 x 11/32" thread
Notes:	Bumper made of rubber
	Flexible spring



212 Hinge Pin Door Bumper

100	Thinge Fill Doo	
~	Materials:	Zinc alloy base
	Finishes:	US3, US4, US5, US10A, US10R, US15A, US15, US26, US26D, ABA
	Notes:	 Non-marking white plastic tip
		 For use with residential hinges
		 For use where standard door stops are not desirable
		For use with narrow trim

• Adjustable from 80 degrees to 120 degrees



BL6212

Hinge Pin Door Bumper Zinc alloy base US3, US4, US5, US10A, US10R, US15A, US15, US26, US26D, ABA • Non-marking white plastic tip

- For use with residential hinges
- For use where standard door stops are not desirable
- For use with narrow trim
- Adjustable from 80 degrees to 120 degrees



1412

Materials:

Finishes:

Notes:

Door Guard Arm Length: Materials: Finishes: Fasteners: Notes:

4" (102 mm) Zinc alloy base US3, US4, US5, US10A, US15A, US15, US26, US26D, ABA Seven (7) #6 x 3/4" FPHWS • Provides extra security from inside door • Limits door opening when latch is thrown • Polybag (1 each) with screws



4

1413 Flush Bolt

Faceplate: Strike: Bolt Diameter: Bolt Throw: Bolt Backset: Materials: Finishes: Fasteners: Notes:

3/4" x 6" (19 mm x 181 mm) 7/8" x 1-3/4" (22 mm x 45 mm) 1/2" (13 mm) 15/16" (24 mm) 7/16" (11 mm) Brass faceplate with steel components US3, US4, US5, 10A, 10R, US15A, US15, US26, US26D, ABA, AN Four (4) #6 x 3/4" FPHWS • Polybag (1 each) with strikeplate and screws • Square corners

1414 Flush Bolt

Faceplate: Strike: Bolt Diameter: Bolt Throw: Bolt Backset: Materials:

Finishes: Fasteners: Notes:

3/4" x 6" (19 mm x 181 mm)
7/8" x 1-3/4" (22 mm x 45 mm)
1/2" (12.7 mm)
15/16″ (24 mm)
7/16″ (11 mm)
Brass faceplate with steel components
US3, US4, US5, 10A, 10R, US15A, US15, US26, US26D, ABA, AN
Four (4) #6 x 3/4" FPHWS
 Polybag (1 each) with strikeplate and screws
Rounded corners



1415

Strike Plate Size: Finishes: Fasteners: Notes:

 $7/8" \times 1-3/4"$ (22 mm x 45 mm) US3, US10A, US15A, US15, US26D Two (2) #6 x 3/4" FPHWS • For use with 1413 and 1414 Flush Bolts • Packed (1 each) with Polybag and screws

Packed (1 each) with Polybag and

1416 Single Route Flush Bolt

Faceplate: Strike: Bolt Diameter: Bolt Throw: Bolt Backset: Materials: Finishes: Fasteners: Notes:

3/4" x 7-1/8" (19 mm x 181 mm) 21/32" x 1-1/2" (17 mm x 38 mm) 5/16" (8 mm) 7/8" (22 mm) 3/8" (9.5 mm) Brass faceplate with steel components US3, US4, US5, US10A, US10R, US15A, US15, US26, US26D, ABA Two (2) #8 x 1-1/2" FPHWS and two (2) #6 x 3/4" FPHWS • Polybag (1 each) with strikeplate and screws • Rounded corners

• Single route for quick and simple door prep

1418

Flush Bolt with Extension Rod

Faceplate: Strike: Bolt Diameter: Bolt Throw: Bolt Backset: Extension Rod Length: Materials: Finishes: Fasteners: Notes:

23/32" x 7-3/8" (18 mm x 187 mm) 5/8" x 1-1/2" (16 mm x 38 mm) 5/16" (8 mm) 3/4" (19 mm) 3/8" (9.5 mm) 16" (406 mm) Brass faceplate with steel components US3, US4, US5, US10A, US10R, US15A, US15, US26, US26D, ABA Two (2) #8 x 1-1/2" FPHWS and two (2) #6 x 3/4" FPHWS • Polybag (1 each) with strikeplate and screws • Rounded corners Single route for quick and simple door prep

1419

Flush Bolt with Extension Rod

Faceplate: Strike: Bolt Diameter: Bolt throw: Bolt Backset: Materials: Fasteners: Finishes: Notes:

3/4" x 7-1/8" (19 mm x 181 mm) 5/8" x 1-1/2" (16 mm x 38 mm) 5/16" (8 mm) 3/4" (19 mm) 5/16" (8 mm) Brass faceplate with steel components Two (2) #8 x 1-1/2" FPHWS and two (2) #6 x 3/4" FPHWS US3, US4, US10A, US10R, US15, US26, US26D, ABA, AN Single route for quick and simple door prep

1439 | BL6439

Catch: Strike: Materials: Fasteners: Notes:

Magnetic Catch - Light Weight

1-1/16" x 2" (27 mm x 51 mm) 7/8" x 1" (22 mm x 25 mm) Tan plastic case Two (2) #6 x 1/2" TPHWS and one (1) #4 x 1/2" FPHWS • Polybag (1 each) with screws • Double sided magnet, self-aligning, 6 lb. pull

- Self aligning magnet insures maximum pull
- BL6439 is Builder's Pack Polybag (1 each) with screws

1445 **Roller Latch**

Hole Diameter: Hole Depth: Materials: Finishes: Fasteners: Notes:

13/16" (21 mm) 1-1/8" (29 mm) Zinc allov base US3, US4, US5, US10A, US10R, US15A, US15, US26, US26D, ABA Two (2) #4 x 3/4" FPHWS • Polybag (1 each) with screws

- Designed for use on cabinets and lightweight doors
- Not intended for heavy weight applications





1446 **Light Weight Ball Catch**

Light Weight ban (
Faceplate:	1" x 2-1/4" (25 mm x 57 mm)
Strike:	1-3/8" x 2-1/4" (35 mm x 57 mm)
Hole Diameter:	1″ (25 mm)
Hole Depth:	1-1/4" (32 mm)
Materials:	Zinc
Finishes:	US3,US4, US5, US10A, US10R, US15A, US15, US26, US26D
Fasteners:	Four (4) #6 FPHWS
Notes:	Designed for use on cabinets and light weight doors
	Net intended for begins weight anglighting

- Not intended for heavy weight applications
- Ball adjusts in and out for various door and frame clearances
- Polybag (1 each) with steel screws



1447 **Light Weight**

Light Weight Bal	ight Weight Ball Catch						
Strike:	1-3/8" x 2-1/4" (35 mm x 57 mm)						
Faceplate:	1" (25 mm) diameter						
Hole Diameter:	15/16" (24 mm)						
Hole Depth:	1-1/4″ (32 mm)						
Materials:	Zinc						
Finishes:	US3, US4, US5, US10A, US10R, US15A US15, US26, US26D						
Fasteners:	Two (2) #6 FPHWS						
Notes:	 Designed for use on cabinets and light weight doors 						
	 Not intended for heavy weight applications 						
	 Ball adjusts in and out for various door and frame clearances 						
	 Polybag (1 each) with steel screws 						

Polybag (1 each) with steel screws



1448

Strike Plate 1-3/8" x 2-1/4" (35 mm x 57 mm) Size: US3, US4, US5, US10A, US10R, US15A, US15, US26, US26D, ABA Finishes: Two (2) #6 FPHWS Fasteners: Notes: For use with 1446 and 1447 ball catches



1449 **Drive In Ball Catch**

Brive In Bull Cutch	
Faceplate:	1" (25 mm) diameter
Hole Diameter:	15/16" (24 mm)
Hole Depth:	1-1/4" (32 mm)
Materials:	Zinc
Finishes:	US4
Packaging:	100 per box
Notes:	• Ball catch designed for use on cabinets and light weight doors
	Not intended for heavyweight applications
	- Dell adjusts in and out for verious door and frame depresses

• Ball adjusts in and out for various door and frame clearances





BL6793

Pole Sockets Outside Diameter: Materials: Notes:

2-7/16" (62 mm)

Steel

- For poles up to 1-3/8" (35 mm) diameter
- Flange design prevents accidental knock out of pole
- Polybag (2 each) with screws



Pole Sockets

Materials:

Notes:

Outside Diameter: 2-3/16" (56 mm) Plastic • For poles up to 1-3/8" (35 mm) diameter • Polybag (2 each) with screws



1795

Closet Rod Pole Diameter: Materials: Finishes: Notes:

1" (25 mm) Steel with bright zinc finish White enamel • Quick mount end • High strength lock seam tubing

• Polybag (1 each) with screws

1797

Shelf Bracket Materials: Finishes: Fasteners:

Notes:

Steel ANSI B04051 White Enamel Two (2) #8 x 3/4" PPH tapping screws and two (2) #10 x 1-1/2" PPH tapping screws

• For shelf and rod support

- Double welded heavy gauge steel construction embossed for added strength
- Holds 1-3/8" (35 mm) diameter rod
- Supports 12" (305 mm) shelf
- Bulk with screws







1798 Shelf Bracket

Materials: Finishes: Notes: Steel ANSI B04051 White Enamel • For shelf and rod support

- Heavy gauge steel construction embossed for added strength
- Holds 1-3/8" (35 mm) diameter rod
- Supports 12" (305 mm) shelf
- Bulk with screws



1799

Shelf Bracket - Adjustable

Materials: Finishes: Fasteners: Notes: Steel ANSI B04051
White Enamel
Two (2) #8 x 3/4" PPH tapping screws and two (2) #10 x 1-1/2"
PPH tapping screws
Adjustable shelf and rod support
Heavy gauge steel construction embossed for added strength
Holds 1-3/8" (35 mm) diameter rod

- Supports 12" (305 mm) shelf
- 3/4" (19 mm) adjustability
- Bulk with screws

\triangleright

1801 Shelf Bracket Materials:

Materials: Finishes: Fasteners:

Notes:

Steel ANSI B04051 White enamel Two (2) #8 x 3/4" PPH tapping screws and two (2) #10 x 1-1/2" PPH tapping screws • Less rod support

- Heavy gauge steel construction embossed for added strength
- Supports 12" (305 mm) shelf
- Bulk with screws



6601

Handrail Bracket

Projection: Base to Center of Rail: Materials: Finishes: Fasteners: Notes: 3-1/4" (82.5 mm) 2-3/4" (70 mm) Cast aluminum US3, US4, US5, US10A, US10R, US15, US15A, US26, US26D, ABA Three (3) #8 x 1-1/2" OPHWS and two (2) #8 x 3/4" OPHWS Polybag (1 each) with wood screws and rail bracket





BL6610

Coat and Hat Hook Upper Projection: Lower Projection: Material: Finishes: Fasteners: Notes:

2-13/16" (71 mm) 1-5/16" (33 mm) Cast steel US3, US4, US5, US10A, US15A, US15, US26, US26D, ABA Two (2) #6 x 3/4" FPHWS • Polybag (1 each) with screws • Builder's pack



Trim & Auxiliary



At Hager Companies, we know all about the importance of adding the right finishing touches to your building projects. That's why we're proud to offer more than 200 different trim and auxiliary door hardware products in a variety of designs, sizes, and finishes that not only look great, but also provide long-lasting wear in any application. Whatever you need, from pulls to push plates, protection plates to door edgings, wall and floor stops to flush bolts, coordinators, signage, and much more--Hager trim and auxiliary products give you great looks and proven durability.



MANUFACTURING OPTIONS

Hager Companies can deliver custom door pulls made to your specifications, or choose from our collection of pull designs. Hager's comprehensive selection of door pull hardware includes standard push/pull bars or multiple push bar combinations with center-to-centers made to order.

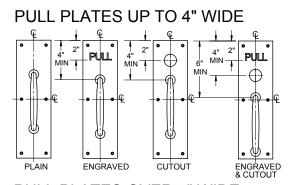
PUSH/PULL PLATE DETAILS

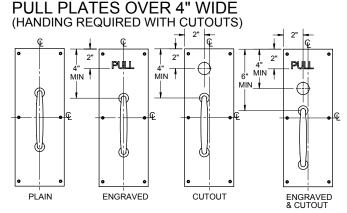
Standard Grip Positions

Pulls are centered vertically or lowered when necessary to meet minimum top spacing requirement. Be certain the pull selected will fit on specified plate under these conditions.

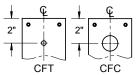
Special Pull Positions

Where pairs of doors are involved and active leaf pull plate is lettered or has a cutout, order pull plate for inactive leaf Grip To Align (WOC). This will ensure horizontal alignment of pull on both plates. Always furnish complete details when ordering non-standard pull positions.





Cut Outs



Standard cutout sizes: Cut for Cylinder (CFC) - 1 1/4'' (32 mm) diameter; Cut for Thumbturn (CFT) - 3/8'' (10 mm) diameter.

All plates may be ordered with cutout option by adding the appropriate suffix (i.e., 30S-CFC).

Standard cutouts are positioned 2" (51 mm) from top of plate where this option has been ordered. Cutouts are centered

on plates up to 4" (102 mm) wide or 2" (51 mm) from edge of plates over 4" (102 mm) wide. The latter are "handed" with cutouts. Furnish hand of door when ordering. Provide complete details for all non-standard cutouts.

Flush Back Mounting



Pull plates using #3, 4, or 10 pull types can be furnished with a flush back (no projections). Specify code FB, (i.e., 33E-FB). Note: Use thru-bolts supplied with mountings for best security.

Back-To-Back Mounting

Many pulls may be ordered back-to-back (BTB) and availability will be noted on each particular product page (refer to product page). Specify the correct part number and center-to-center unless already specified.

Handicap Option

Pulls that must meet the 2-1/2'' (64 mm) clearance for ADA requirements are available. Must specify part number with prefix "H" (i.e., H2E). Please refer to each individual part number for availability.

Engraving

Typical engraved lettering is in Helvetica style and colored black. On push or pull plates, standard position is horizontal on a line 2'' (51 mm) from top of plate.





PUSH

CONCEALED CONE WITH BOLT

BACK-TO-BACK MOUNTING

AND SET SCREW

PULL



Fasteners

Illustrated below are various types of fasteners that can be furnished by Hager Companies. Please specify type of fastening desired. All types of fastening cannot be used with all items of hardware. If specified method is not possible, we reserve the right to furnish whatever type we feel is best suited for the installation. When used with tempered glass doors, specify thickness of glass and hole diameter.



Sex bolt and machine screws (various sizes)



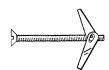
Lead anchor (used with floor stops in masonry applications)



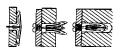
Plastic anchor and full threaded screw (used in drywall or masonry applications)



Lag screw and shield



Toggle bolt (ideal for drywall applications)



Plastic toggle anchor (used with wall stops in drywall applications)

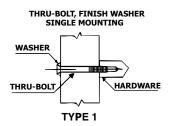


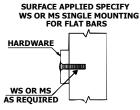
Thru-bolt and finish washer (flat or oval head; size as required)

Spanner head machine screws (various sizes furnished at extra charge)

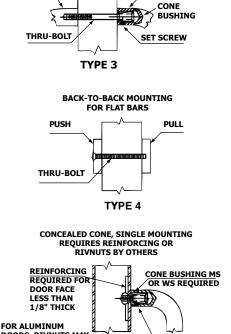


Security torx head machine screws (various sizes furnished at extra charge)





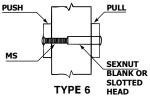




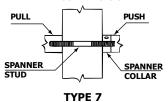
DOORS, RIVNUTS MAY



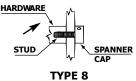
SET SCREW



CONCEALED SPANNER, COLLAR & STUD BACK-TO-BACK MOUNTING SETS WITH ROUND BASES ONLY









METAL FINISH SYMBOLS

US & Hager	Description	Base Material	BHMA Symbol
2C	Zinc Plated Steel	Steel	603
3	Bright Brass	Brass	605
4	Satin Brass	Brass	606
5	Satin Brass, Oxidized	Brass/Bronze	609
9	Bright Bronze	Brass/Bronze	611
10	Satin Bronze	Brass/Bronze	612
10B	Antique Bronze, Oiled	Brass/Bronze	613
10R	Matte Lacquer Antique Bronze	Brass/Bronze	-
15	Satin Nickel	Brass/Bronze	619
15A	Satin Nickel Oxidized	Brass/Bronze	620
19	Flat Black Coated	Brass	622
26	Bright Chromium Plated	Brass/Bronze	625
26D	Satin Chromium Plated	Brass/Bronze	626
28	Satin Anodized Aluminum	Aluminum	628
32	Stainless Steel Metal, Bright	300 Series	629
32D	Stainless Steel Metal, Satin	300 Series	630
L2	Duro	-	-
PC	Clear Plastic	-	-
РК	Plastic Laminate - Black	-	-
СО	Plastic Laminate - Chocolate	-	-
PG	Plastic Laminate - Grey	-	-
S1	Sprayed Aluminum	Cast Iron	-
S2	Sprayed Brass	Cast Iron	-
S3	Sprayed Bronze	Cast Iron	-

Note: For any finish not listed in this catalog, or explained above, availability on request.

ANTIMICROBIAL PROTECTION

Hager Companies' full line of US32D stainless steel door pulls, push bars, push plates, and pull plates are available with AgION antimicrobial protection.

Hager uses a powder coat process to apply the antimicrobial treated coating to guarantee durability and protection. Antimicrobial resistance on products is affected by moisture in the air. Silver ions interact with humidity and are released creating a cleaner surface. The suppression of bacteria, mold and fungi is as easy as adding antimicrobial treated coating to your Hager products.

Antimicrobial Vital Stats

- US32D stainless steel
- EPA registered
- NSF approved
- FDA listed for food contact
- Designate your product with: MV3 for Trim & Auxiliary





CTC Length	1E	1G	1J	1L
Inches	6	8	10	12
Millimeters	152	203	254	305

		5				í.
	nd Wrought Door Pull	Inches	6	8	10	12
Certification:	Meets ANSI A156.6 for J401 Pulls	Millimeters	152	203	254	305
Base:	1/2" x 1" (13 mm x 25 mm)	minimeters	152	205	ZJT	505
Projection:	2″ (51 mm)					
Clearance:	1-1/2" (38 mm)					
Door Thickness:	Door Thickness: 1-3/4" (45 mm) - Standard					
Materials: Aluminum, brass, bronze, stainless steel						
Finishes: US3, US4, US10, US10B, US26, US26D, US28, US32, US32D						
Fasteners:	Two (2) 1/4-20 thru-bolts with finish wash	ers				
Handicap:	2-1/2" (64 mm) clearance available on spe	cial orders - add p	orefix "	H″ to n	umber	
	(i.e., H1E)					
Options:	• May be combined with a plate to make a	a pull plate				
•	Other centers on special order					
Notes:	• For sizes or finishes not listed in this cata	aloa, contact Hage	er Custo	omer S	ervice f	or

 For sizes or finishes not listed in this catalog, contact Hager Customer Service for availability

CTC Length

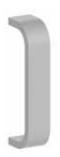
3E

3G

33

3L

• Not suitable for BTB mounting



1

-						
2		CTC Length	2E	2G	23	2L
Rectangular Wrou	-	Inches	6	8	10	12
Certification:	Meets ANSI A156.6 for J401 Pulls	Millimeters	152	203	254	305
Base:	3/8" x 1-1/4" (10 mm x 32 mm)					
Projection:	2″ (51 mm)					
Clearance:	1-5/8" (41 mm)					
Door Thickness:	1-3/4" (45 mm) - Standard					
Materials:						
Finishes: US3, US4, US10, US10B, US26, US26D, US28, US32, US32D						
Fasteners:	vashers					
Handicap:	2-1/2" (64 mm) clearance available on spe	cial orders - add	prefix "	H" to r	number	
	(i.e., H2E)					
Options:	 May be combined with a plate to make a 	a pull plate				
	 Other centers on special order 					
Notes:	 For sizes or finishes not listed in this cat availability Not evitable for PTP mounting 	alog, contact Hage	er Custo	omer S	ervice	for
	 Not suitable for BTB mounting 					



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Round Wrought		Inches	6	8	10	12
Certification:	Meets ANSI A156.6 for J401 Pulls	Milling atoms	152	202	254	205
Base Diameter:	3/4" (19 mm)	Millimeters	152	203	254	305
Projection:	2-1/4" (57 mm)					
Clearance:	1-1/2" (38 mm)					
Door Thickness:	1-3/4" (45 mm) - Standard					
Materials:	Aluminum, brass, bronze, stainless steel					
Finishes:	US3, US4, US10, US10B, US26, US26D, U	JS28, US32, US32D				
Fasteners:	Two (2) 1/4-20 thru-bolts with finish was	hers				
Handicap:	2-1/2" (64 mm) clearance available on sp	ecial orders - add	prefix "	H" to r	umber	
	(i.e., H3E)					
Notes:	 For sizes or finishes not listed in this ca availability 	talog, contact Hage	er Custo	omer S	ervice	for
	 May be combined with a plate to make 	a pull plate				
	Other centers on special order					

Other centers on special order

• If ordered with tempered glass, specify glass thickness and hole size

3

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4 R

CTC Length	4G	4H	4J	4L
Inches	8	9	10	12
Millimeters	203	229	254	305

Round Wrought Door Pull		Inches	8	9	10	12
Certification:	Meets ANSI A156.6 for J401 Pulls		-	-		
Base Diameter:	1″ (25 mm)	Millimeters	203	229	254	305
Projection:	2-3/4" (70 mm)					
Clearance:	1-3/4" (45 mm)					
Door Thickness:	1-3/4" (45 mm) - Standard					
Materials:	Aluminum, brass, bronze, stainless steel					
Finishes:	US3, US4, US10, US10B, US26, US26D, US28, US32, US32D					
Fasteners:	Two (2) 1/4-20 thru-bolts with finish washers					
Handicap:	2-1/2" (64 mm) clearance available on spe	cial orders. Add p	refix "⊦	l" to nu	umber	
	(i.e., H4E)					
Notes:	 For sizes or finishes not listed in this cata availability 	alog, contact Hage	er Custo	omer S	ervice	for

• May be combined with a plate to make a pull plate

- Other centers on special order
- If ordered with tempered glass, specify glass thickness and hole size

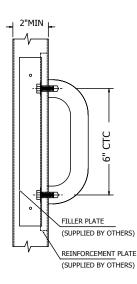
P4E Security Pull

Certification: Base: Projection: Clearance: CTC Length: Material: Finish: Fasteners:

Notes:

Meets ANSI A156.6 for J401 Pulls 1" (25 mm) diameter 2-1/4" (57 mm) 1-1/4" (32 mm) 6" (152 mm) Stainless Steel US32D Two (2) 3/8-16 x 1-1/4" "NYLOC" hex head cap screws • For metal doors

• Requires reinforcing plate with an access plate and Torx screws for door edge





T4E

Security Pull Certification: Base: Projection: Clearance: Door Thickness:

CTC Length:

Material:

Fasteners:

Finish:

Meets ANSI A156.6 for J401 Pulls 1" (25 mm) diameter 2-1/4" (57 mm) 1-1/4" (32 mm) 1-3/4" (45 mm) - Standard 6" (152 mm) Stainless Steel US32D Two (2) 1/4-20 x 2-1/4" Security Torx thru-bolts





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5N Cast Pull Certification:

Base:

O/A Height:

Projection:

Clearance: CTC Length:

Materials:

Finishes:

Options:

Notes:

Fasteners:

Door Thickness:

5D

Certification: Base Diameter:

Projection:

Clearance: CTC Length: Door Thickness:

Materials:

Fasteners:

Handicap:

Notes:

Finishes:

Round Wrought Door Pull

Meets ANSI A156.6 for J401 Pulls 6-1/8" (156 mm) 5/8" x 1-3/16" (16 mm x 30 mm) 2" (51 mm) 1-1/2" (38 mm) 5-1/2" (140 mm) 1-3/4" (45 mm) - Standard Aluminum, brass, bronze, stainless steel US3, US4, US10, US10B, US26, US26D, US28, US32D Two (2) 1/4-20 thru-bolts with finish washers May be combined with a plate to make a pull plate Not suitable for BTB mounting

Meets ANSI A156.6 for J401 Pulls

Aluminum, brass, bronze, stainless steel

Two (2) 1/4-20 thru-bolts with finish washers

• May be combined with a plate to make a pull plate

US3, US4, US10, US10B, US26, US26D, US28, US32, US32D

2-1/2" (64 mm) clearance available on special orders. Add prefix "H" to number

• If ordered with tempered glass, specify glass thickness and hole size

For sizes or finishes not listed in this catalog, contact Hager Customer Service for

1-3/4" (45 mm) - Standard

Not suitable for BTB mounting

5/8" (16 mm)

(i.e., H5D)

availabilitv

2-1/8" (54 mm) 1-1/2" (38 mm) 5-1/2" (140 mm)



6N

Cast Pull Certification: O/A Height: Base Diameter: Projection: Clearance: CTC Length: Door Thickness: Materials: Finishes: Fasteners: Options: Notes:

Meets ANSI A156.6 for J401 Pulls 6-1/2" (165 mm) 1" (25 mm) 1-7/8" (48 mm) 1-3/8" (35 mm) 5-1/2" (140 mm) 1-3/4" (45 mm) - Standard Aluminum, brass, bronze, stainless steel US3, US4, US10, US10B, US26, US26D, US28, US32D Two (2) 1/4-20 thru-bolts with finish washers May be combined with a plate to make a pull plate Not suitable for BTB mounting







5

7N Cast Pull

Cast Pull Certification: O/A Height: Base Diameter: Projection: Clearance: CTC Length: Door Thickness: Materials: Finishes: Fasteners: Options: Notes:

Meets ANSI A156.6 for J401 Pulls 7-1/2" (190 mm) 2" (51 mm) 1-7/8" (48 mm) 1-3/8" (35 mm) 5-1/2" (140 mm) 1-3/4" (45 mm) - Standard Aluminum, brass, bronze US3, US4, US10, US10B, US26, US26D, US28 Two (2) 1/4-20 thru-bolts with finish washers May be combined with a plate to make a pull plate Not suitable for BTB mounting

8N Cast Pull

Certification: O/A Height: Base Diameter: Projection: Clearance: CTC Length: Materials: Finishes: Fasteners: Notes: Meets ANSI A156.6 for J401 Pulls 7-1/2" (190 mm) 2" (51 mm) 1-7/8" (48 mm) 1-3/8" (35 mm) 5-1/2" (140 mm) Aluminum, brass, bronze US3, US4, US10, US10B, US26, US26D, US28 Six (6) #8 x 1" OPHWS Not suitable for BTB mounting

0

P8N Cast Pull

Certification: O/A Height: Base: Projection: Clearance: CTC Length: Materials: Finishes: Fasteners: Options: Notes:

Meets ANSI A156.6 for J401 Pulls 8 - 3/4" (222 mm) 1-1/2" x 1-5/8" (38 mm x 41 mm) 2-1/4" (57 mm) 1-9/16" (40 mm) 7-3/4" (197 mm) Brass US4, US26D Two (2) 3/8-16 x 3/4" FPHMS Security Torx screws available Not suitable for BTB mounting



DULLS



9		CTC Length	9E	9G	93	9L
Oval Wrought Do	oor Pull	Inches	6	8	10	12
Certification:	Meets ANSI A156.6 for J401 Pulls		-	-		
Base:	1/2" x 3/4" (13 mm x 19 mm)	Millimeters	152	203	254	305
Projection:	2" (51 mm)					
Clearance:	1-1/2" (38 mm)					
Door Thickness:	1-3/4" (45 mm) - Standard					
Materials:	Brass, bronze, stainless steel					
Finishes:	US3, US4, US10, US10B, US26, US26D,	US32, US32D				
Fasteners:	Two (2) 1/4-20 thru-bolts with finish wa	shers				
Handicap:	2-1/2" (64 mm) clearance available on s	pecial orders. Add	orefix "H	Η" to nι	umber	
	(i.e., H9E)					
Options:	May be combined with a plate to make	e a pull plate				
•	Other centers on special order					
Notes:	 For sizes or finishes not listed in this c availability 	atalog, contact Hag	er Cust	omer S	ervice	for

• Not suitable for BTB mounting

10		CTC Length	10L	10Q
Round Pull		Inches	12	18
Certification:	Meets ANSI A156.6 for J401 Pulls	Millimeters	305	457
Base Diameter:	1-1/4″ (32 mm)	Minimeters	303	437
Projection:	3″ (76 mm)			
Clearance:	1-3/4" (45 mm)			
Door Thickness:	1-3/4" (45 mm) - Standard			
Materials:	Aluminum, brass, bronze, stainless steel			
Finishes:	US3, US4, US10, US10B, US26, US26D, US28, US32, US	532D		
Fasteners:	Two (2) 5/16-18 thru-bolts with finish washers			
Handicap:	2-1/2" (64 mm) clearance available on special orders. A (i.e., H10L)	dd prefix "H" to n	umber	
Options:	• May be combined with a plate to make a pull plate			
	Other centers on special order	a and hala sina		
	• If ordered with tempered glass, specify glass thickness			
Notes:	For sizes or finishes not listed in this catalog, contact H availability	ager Customer Se	rvice fo	r



11		CTC Length	11E	11G	11J	11L
Round Offset Pull	Marke ANCI A1EC C Cou 1400 Dalla	Inches	6	8	10	12
Certification: Base Diameter:	Meets ANSI A156.6 for J402 Pulls	Millimeters	152	203	254	305
Projection:	3/4″ (19 mm) 2-1/2″ (64 mm)		1			
Offset:	2-1/2" (64 mm); 90° Standard					
Clearance:	1-3/4" (45 mm)					
Door Thickness:	1-3/4" (45 mm) - Standard					
Materials:	Aluminum, brass, bronze, stainless steel					
Finishes:	US3, US4, US10, US10B, US26, US26D, US	528, US32, US32D				
Fasteners:	Two (2) 5/16-18 thru-bolts with finish was	hers				
Handicap:	2-1/2" (64 mm) clearance available on spe	ecial orders. Add p	orefix "	H″ to n	number	(i.e.,
	H11E)					
Options:	• For 45° offset, add prefix "X" to number					
	• Other centers available on special orders					
Notoo	• If ordered with tempered glass, specify	-			uica fa	
Notes:	For sizes or finishes not listed in this catale availability	og, contact Hager	Custon	ner Ser	vice to	ſ
	avalubility					

10					
12		CTC Length	12G	12J	12L
Round Offset Pull		Inches	8	10	12
Certification: Base Diameter:	Meets ANSI A156.6 for J402 Pulls 1" (25 mm)	Millimeters	203	254	305
Projection:	2-3/4″ (70 mm)				
Offset:	3" (76 mm); 90° Standard				
Clearance:	1-3/4" (45 mm)				
Door Thickness:	1-3/4" (45 mm) - Standard				
Materials:	Aluminum, brass, bronze, stainless steel				
Finishes:	US3, US4, US10, US10B, US26, US26D, US28, US	32, US32D			
Fasteners:	Two (2) 5/16-18 thru-bolts with finish washers	- ,			
Handicap:					(i.e.,
·	H12G)				•
Options:	• For 45° offset, add prefix "X" to number (i.e., X	12G)			
Other centers available on special orders					
	• If ordered with tempered glass, specify glass the	ickness and hole s	size		
Notes:	For sizes or finishes not listed in this catalog, con	tact Hager Custon	ner Ser	vice for	r
	availability				

13 **Round Wrought Door Push/Pull Set** Meets ANSI A156.6 for J401 Pulls Certification: 3/4" (19 mm) Base Diameter: 2-1/4" (57 mm) Projection: 1-1/2" (38 mm) Clearance: Door Thickness: 1-3/4" (45 mm) - Standard

CTC Length	13E	13G	13J	13L
Inches	6	8	10	12
Millimeters	152	203	254	305

US3, US4, US10, US10B, US26, US26D, US28, US32, US32D)
 Type 7 mounting - Standard 	

• Consists of two (2) pulls back to back

Aluminum, brass, bronze, stainless steel

• For sizes or finishes not listed in this catalog, contact Hager Customer Service for availability



14

Materials:

Finishes: Notes:

Round Wrought Door Push/Pull Set Certification: Base Diameter: Projection: Clearance: Door Thickness: Materials: Finishes: Notes:

Meets ANSI A156.6 for J401 Pulls 1" (25 mm) 2-3/4" (70 mm) 1-3/4" (45 mm) 1-3/4" (45 mm) - Standard Aluminum, brass, bronze, stainless steel US3, US4, US10, US10B, US26, US26D, US28, US32, US32D • Type 7 mounting - Standard • Consists of two (2) pulls back to back

CTC Length	14G	14H	14J	14L
Inches	8	9	10	12
Millimeters	203	229	254	305

- For sizes or finishes not listed in this catalog, contact Hager Customer Service for availability

CTC Length

20L

12

305

20Q

18

457



8

19N Cast Pull

Certification: O/A Height: Base Diameter: Clearance: Projection: CTC Length: Materials: Finishes: Fasteners: Notes: Meets ANSI A156.6 for J401 Pulls 9" (229 mm) 1-1/2" (38 mm) 1-11/16" (43 mm) 3-1/8" (79 mm) 6-3/16" (132 mm) Brass US3, US10, US10B, US26, US26D Four (4) #8 x 1" OPH Tapping Screw Suitable for BTB mounting with sex nuts by special quotation



20

Round Push/Pull SetCertification:MBase Diameter:1Projection:3Clearance:1Door Thickness:1Materials:EFinishes:UNotes:•

et	Inches
Meets ANSI A156.6 for J401 Pulls	
1-1/4″ (32 mm)	Millimeters
3″ (76 mm)	
1-3/4" (45 mm)	
1-3/4" (45 mm) - Standard	
Brass, bronze, stainless steel	
US3, US4, US10, US10B, US26, US26D, US28, US32, US	32D
• Type 7 mounting - Standard	

- Consists of two (2) pulls back to back
- For sizes or finishes not listed in this catalog, contact Hager Customer Service for availability



20N Cast Pull

Certification:

O/A Height:

Clearance: Projection:

CTC Length:

Material:

Finishes:

21

Fasteners:

Door Thickness:

Base Diameter:

Meets ANSI A156.6 for J401 Pulls 9" (229 mm) 1-1/2" (38 mm) 1-11/16" (43 mm) 3-1/8" (79 mm) 5-7/32" (132.5 mm) 1-3/4" - Standard Brass US3, US10, US10B, US26, US26D Two (2) 1/4 - #20 x 2-3/16" Undercut FPHMS with finish washers



Round Offset Push/Pull Set Certification: Meets ANSI A156.6 for J402 Pulls

Certification: Base Diameter: Projection: Clearance: Offset: Door Thickness: Materials: Finishes: Notes:

CTC Length	21E	21G	21J	21L
Inches	6	8	10	12
Millimeters	152	203	254	305

3/4″ (19 mm)	Millimeters	1
2-1/2" (64 mm)		
1-3/4″ (45 mm)		
2-1/2" (64); 90° - Standard		
1-3/4" (45 mm) - Standard		
Aluminum, brass, bronze, stainless steel		
US3, US4, US10, US10B, US26, US26D, US	28, US32, US32D	
 Type 7 mounting - Standard 		

- Consists of two (2) pulls back to back
- Available with 45 degree offset
- For sizes or finishes not listed in this catalog, contact Hager Customer Service for availability



Round Offset Push/Pull Set

Certification: Base Diameter: Projection: Clearance: Door Thickness: Offset: Materials: Finishes: Notes:

22

Meets ANSI A156.6 for J402 Pulls 1" (25 mm) 2-3/4" (70 mm) 1-3/4" (45 mm) 1-3/4" (45 mm) - Standard 3" (76 mm); 90° standard Aluminum, brass, bronze, stainless steel US3, US4, US10, US10B, US26, US26D, US28, US32, US32D • Type 7 mounting - Standard

- Consists of two (2) pulls back to back
- Available with 45 degree offset
- For sizes or finishes not listed in this catalog, contact Hager Customer Service for availability

23Q

Round Offset Pull	
Certification:	Meets ANSI A156.6 for J402 Offset Pulls
Base Diameter:	1-1/4″ (32 mm)
Projection:	3″ (76 mm)
Clearance:	1-3/4″ (45 mm)
Offset:	3-3/4" (96 mm); 90° Standard
Door Thickness:	1-3/4" (45 mm) - Standard
CTC Length:	18″ (457 mm)
Materials:	Aluminum, brass, bronze, stainless steel
Finishes:	US3, US4, US10, US10B, US26, US26D, US28, US32, US32D
Fasteners:	5/16-18 thru bolts with finish washers
Handicap:	2-1/2" (64 mm) clearance available on special orders. Add prefix "H" to number
	(i.e., H23Q)
Options:	For 45° offset, substitute "X" for first digit (i.e., X23Q)
Notes:	 If ordered with tempered glass, specify glass thickness and hole size
	• For sizes or finishes not listed in this catalog, contact Hager Customer Service for availability

24Q

Round Offset Push/Pull Set

Certification: Base Diameter: Projection: Clearance: Offset: Door Thickness: CTC Length: Materials: Finishes: Notes: Meets ANSI A156.6 for J402 Offset Pulls
1-1/4" (32 mm)
3" (76 mm)
1-3/4" (45 mm)
3-3/4" (95 mm); 90° standard
1-3/4" (45 mm) - Standard
18" (457 mm)
Aluminum, brass, bronze, stainless steel
US3, US4, US10, US10B, US26, US26D, US28, US32, US32D
Type 7 mounting - Standard
Consists of two (2) pulls back to back
Available with 45 degree offset
For sizes or finishes not listed in this catalog, contact Hager Customer Service for availability

CTC Length	22G	22J	22L
Inches	8	10	12
Millimeters	203	254	305





910P | 910B

Offset Mounting Vertical Pull

5	
Pull Diameter:	1-1/4" (32 mm)
O/A Length:	36″ (914 mm), 72″ (1829 mm)
CTC Lengths:	20″ (508 mm), 56″ (1422 mm)
Clearance:	2″ (51 mm)
Projection:	3-1/4" (82 mm)
Materials:	Aluminum, brass, bronze, stainless steel
Finishes:	US3, US4, US10, US10B, US15A, US26, US26D, US28, US32D
Fasteners:	Two (2) 3/8-16 FPHMS with finish washers
Notes:	 910B is same as 910P with fasteners for BTB mounting
	 For sizes or finishes not listed in this catalog, contact Hager Customer Service for availability

915P | 915B

Straight Mounting Vertical Pull

Schuight Ploanting	
Pull Diameter:	1-1/4" (32 mm)
O/A Length:	36″ (914 mm), 72″ (1829 mm)
CTC Lengths:	20" (508 mm), 56" (1422 mm)
Clearance:	2″ (51 mm)
Projection:	3-1/4″ (82 mm)
Materials:	Aluminum, brass, bronze, stainless steel
Finishes:	US3, US4, US10, US10B, US15A, US26, US26D, US28, US32D
Fasteners:	Two (2) 3/8-16 FPHMS w/ finish washers
Notes:	 915B is same as 915P with fasteners for BTB mounting
	• For sizes or finishes not listed in this catalog, contact Hager Customer Service for availability
	Pull Diameter: O/A Length: CTC Lengths: Clearance: Projection: Materials: Finishes: Fasteners:

920P | 920B C-Shaped

C-Shaped Pull	
Base Diameter:	1″ (25 mm)
Clearance:	1-3/4″ (45 mm)
Projection:	2-1/4" (57 mm)
CTC Length:	8-1/2" (217 mm)
Materials:	Aluminum, brass, bronze, stainless steel
Finishes:	US3, US4, US10, US10B, US15A, US26, US26D, US28, US32D
Fasteners:	Two (2) 3/8-16 FPHMS with finish washers
Notes:	 920B is pair of 920P with fasteners for BTB mounting
	 For sizes or finishes not listed in this catalog, contact Hager Customer Service for availability



921P | 921B **C-Shaped Pull**

Clearance: Projection: CTC Length: Materials: Finishes: Fasteners: Notes:

1-1/2" (38 mm)
2-1/8" (54 mm)
17-1/2" (446 mm)
Brass, bronze, stainless steel
US3, US4, US10, US10B, US15A, US26, US26D, US32D
Two (2) 3/8-16 FPHMS with finish washers
 921B is pair of 921P with fasteners for BTB mounting
• For sizes or finishes not listed in this catalog, contact Hager Customer Service for
availability



PULLS



922P | 922B

Pull Diameter: Projection: CTC Lengths: Clearance: Materials: Finishes: Fasteners: Notes:

C-Shaped Pull - Continuous 1" (25 mm) 2-1/2" (64 mm) 10" (254 mm), 12" (305 mm) 1-1/2" (38 mm) Aluminum, brass, bronze, stainless steel US3, US4, US10, US10B, US15A, US26, US26D, US32D Two (2) 3/8-16 FPHMS with finish washers • 922B is pair of 922P with fasteners for BTB mounting • For sizes or finishes not listed in this catalog, contact Hager Customer Service for

923P | 923B



C-Shaped Pull - Flanged Pull Diameter: Projection: CTC Lengths: Clearance: Base Diameter: Materials: Finishes: Fasteners: Notes:

1" (25 mm) 2-3/4" (70 mm) 10" (254 mm), 12" (305 mm) 1-3/4" (44 mm) 3/4" (19 mm) Aluminum, brass, bronze, stainless steel US3, US4, US10, US10B, US15A, US26, US26D, US32D Two (2) 3/8-16 FPHMS with finish washers • 923B is pair of 923P with fasteners for BTB mounting • For sizes or finishes not listed in this catalog, contact Hager Customer Service for

availability

availability



924P | 924B **C-Shaped Pull**

Projection: CTC Length: Clearance: Materials: Finishes: Fasteners: Notes:

2-1/2" (64 mm)
14" (356 mm)
1-1/2" (38 mm)
Brass, bronze, stainless steel
US3, US4, US10, US10B, US15A, US26, US26D, US32D
Two (2) 3/8-16 FPHMS with finish washers
 924B is pair of 924P with fasteners for BTB mounting
 For sizes or finishes not listed in this catalog, contact Hager Customer Service for availability



925P | 925B

C-Shaped Pull Pull Diameter: CTC Lengths: Materials: Finishes: Fasteners: Notes:

1-1/4" (32 mm) 6-1/2" (165 mm), 8-1/2" (217 mm), 12-1/2" (318 mm) Aluminum, brass, bronze, stainless steel US3, US4, US10B, US15A, US26, US26D, US32D Two (2) 3/8-16 FPHMS with finish washers • 925B is pair of 925P with fasteners for BTB mounting • For sizes or finishes not listed in this catalog, contact Hager Customer Service for

availability







926P | 926B **Curved Pull**

Curvea Pull	
Base Diameter:	1-1/4" (32 mm)
Projection:	3″ (76 mm)
Clearance:	1-13/16" (46 mm)
Pull Diameter:	1-3/16" (30 mm)
CTC Length:	12″ (305 mm)
Materials:	Brass, bronze
Finishes:	US3, US4, US10, US10B
Fasteners:	Two (2) 3/8-16 FPHMS with finish washers
Notes:	 926B is pair of 926P with fasteners for BTB mounting
	• For sizes or finishes not listed in this catalog, contact Hager Customer Service for
	availability



930P | 930B 90º Pull

JU 1 U	
Projection:	3" (76 mm)
CTC Lengths:	14-5/32" - 16-31/32" (360 mm - 431 mm)
Materials:	Aluminum, brass, bronze, stainless steel
Finishes:	US3, US4, US10B, US15A, US26, US26D, US28, US32D
Fasteners:	Two (2) 3/8-16 FPHMS with finish washers
Notes:	 930B is pair of 930P with fasteners for BTB mounting
	 For sizes or finishes not listed in this catalog, contact Hager Customer Service for availability



932P | 932B

S-Shaped Pull Projection: Clearance: Pull Diameter: Fasteners: CTC Length: Materials: Finishes: Fasteners: Notes:

3" (76 mm) 2" (51 mm) 1" (25 mm) Two (2) 3/8-16 FPHMS w/ finish washers 30" (762 mm) Aluminum, brass, bronze, stainless steel US3, US4, US10B, US15A, US26, US26D, US28, US32D Two (2) 3/8-16 FPHMS with finish washers • 932B is pair of 932P with fasteners for BTB mounting

- Specify handing when ordering
- For sizes or finishes not listed in this catalog, contact Hager Customer Service for availability





933P | 933B

Projection:

Clearance:

CTC Length:

Materials: Finishes:

Fasteners:

Projection:

Clearance:

Materials:

Finishes:

Notes:

Fasteners:

Notes:

Colonial Style Pull 2-3/16" (56 mm) 1-3/16" (30 mm) Pull Diameter: 1" (25 mm) 15/16" (24 mm) 6" (152 mm) Base Diameter: Aluminum, brass, bronze, stainless steel US3, US4, US10B, US26 Two (2) 3/8-16 FPHMS with finish washers 933B is pair of 933P with fasteners for BTB mounting



934P | 934B **Offset Pull**

3" (76 mm) 1-5/8" (41 mm) Pull Diameter: 1" (25 mm) 3/4" (19 mm) Base Diameter: 12" (305 mm), 16" (406 mm), 18" (457 mm) CTC Lengths: Aluminum, brass, bronze, stainless steel US3, US4, US10B, US15A, US26, US26D, US28, US32D Two (2) 3/8-16 FPHMS with finish washers 934B is pair of 934P with fasteners for BTB mounting

960P | 960B Square Tip Pull

O/A Height: Base Diameter: Pull Diameter: Clearance: Projection: CTC Length: Materials: Finishes: Fasteners: Notes:

16" (406 mm) 1-1/4" (32 mm) 1" (25 mm) 1-3/4" (45 mm) 3-1/4" (83 mm) 12" (305 mm) Brass, bronze US3, US4, US10B, US15A, US26, US26D Two (2) 3/8-16 FPHMS w/ finish washers • 960B is pair of 960P with fasteners for BTB mounting • For sizes or finishes not listed in this catalog, contact Hager Customer Service for availability

DULLS







961P | 961B

- **Steeple Tip Pull** O/A Height: Base Diameter: Pull Diameter: Clearance: Projection: CTC Length: Materials: Finishes: Fasteners: Notes:
- 16-5/16" (414 mm) 2" (51 mm) 1" (25 mm) 1-3/4" (45 mm) 3" (76 mm) 12" (305 mm) Brass, bronze US3, US4, US10B, US15A, US26, US26D Two (2) 3/8-16 FPHMS with finish washers • 961B is pair of 961P with fasteners for BTB mounting • For sizes or finishes not listed in this catalog, contact Hager Customer Service for availability

962P **Acorn Tip Pull**

O/A Height Base Diameter: Pull Diameter: Projection: Clearance: CTC Length:

Materials: Finishes: Fasteners: Notes:

16-5/16" (414 mm)
2″ (51 mm)
1″ (25 mm)
3″ (76 mm)
1-7/8" (48 mm)
12" (305 mm)
Brass, bronze
US3, US4, US10B, US15A, US26, US26D
Two (2) 3/8-16 FPHMS with finish washers
For sizes or finishes not listed in this catalog, contact Hager Customer Service for availability



963P

Acorn Pull - Offset	
O/A Height:	16-5/16" (414 mm)
Pull Diameter:	1″ (25 mm)
Projection:	2-3/4" (70 mm)
CTC Lengths:	12" (304 mm), 16" (406 mm), 18" (457 mm), 24" (610 mm), 30" (762 mm)
Materials:	Cast brass, bronze
Finishes:	US3, US4, US10B, US15A, US26, US26D
Fasteners:	Two (2) 3/8-16 FPHMS with finish washers
Notes:	For sizes or finishes not listed in this catalog, contact Hager Customer Service for
	availability



967P **Curved Pull**

Materials:

Finishes:

Notes:

20-1/2" (520 mm) 3-9/16" (90 mm) 5-9/16" (141 mm) O/A Height: Clearance: Projection: CTC Length: 16" (406 mm) Brass, bronze US3, US4, US10B, US15A, US26, US26D Two (2) 3/8-16 FPHMS with finish washers Fasteners: For sizes or finishes not listed in this catalog, contact Hager Customer Service for availability



970P

Custom Push/Pull Set

Base Diameter:	1″ (25 mm)
Pull Projection:	3″ (76 mm)
Pull Clearance:	2″ (51 mm)
CTC Length:	13-1/4" (337 mm)
Push Projection:	2-3/4″ (70 mm)
Push Clearance:	1-3/4″ (45 mm)
CTC Length:	34" (864 mm) or to suit door dimension
Materials:	Brass, bronze, stainless steel
Finishes:	US3, US4, US10, US10B, US15A, US26, US26D, US32D
Fasteners:	Type 3 mounting, concealed cone with bolt and set screw
Notes:	 Pull or push bar can be ordered separately by quotation only
	• Push bar radius can be custom made so the radius points in the
	downward direction
	• For sizes or finishes not listed in this catalog, contact Hager

• For sizes or finishes not listed in this catalog, contact Hager Customer Service for availability



974P | 974B

Door Pull Projection: CTC Length:

Materials: Finishes: Fasteners: Notes: 2-1/2" (64 mm)

12" (304 mm), 18" (457 mm), 24" (610 mm), 30" (762 mm), 36" (914 mm), 48" (1219 mm) Brass, bronze, stainless steel US3, US4, US10B, US26, US26D, US32D Two (2) 3/8-16 FPHMS with finish washers

- 974B is pair of 974P with fasteners for BTB mounting
- For sizes or finishes not listed in this catalog, contact Hager Customer Service for availability

975P | 975B

Vertical Pull Projection: O/A Length: CTC Length: Pull Diameter: Materials: Finishes: Fasteners: Notes:

1-3/4" (44 mm) 36" (914 mm), 72" (1829 mm) 20" (508 mm), 56" (1422 mm) 1" (25 mm) Brass, bronze, stainless steel US3, US4, US10, US10B, US15A, US26, US26D, US32D Two (2) 3/8-16 FPHMS with finish washers • 975B is pair of 975P with fasteners for BTB mounting • For sizes or finishes not listed in this catalog, contact Hager

Customer Service for availability





18





976P | 976B

Door Pull - Offset	
O/A Height:	29-1/2″ (750 mm)
Base Diameter:	1-1/4″ (32 mm)
Pull Diameter:	1-1/4" (32 mm)
Projection:	5-3/8" (137 mm)
Clearance:	4-1/8" (105 mm)
Offset:	1-3/4″ (45 mm)
CTC Length:	19-13/16″ (503 mm)
Materials:	Stainless steel
Finish:	US32, US32D
Fasteners:	Two (2) 3/8-16 FPHMS with finish washers
Notes:	 976B is pair of 976P with fasteners for BTB mounting
	• For sizes or finishes not listed in this catalog, contact Hager Customer Service for availability

980P | 980B

Segment Shape - Straight		
CTC Length:	9" (229 mm), 12" (305 mm), 18" (457 mm), 24" (610 mm)	
Materials:	Brass, bronze, stainless steel	
Finishes:	US3, US4, US10B, US15A, US26, US26D, US32D	
Fasteners:Two (2) 3/8-16 FPHMS with finish washersNotes:• 980B is pair of 980P with fasteners for BTB mounting		

Segment	Shape -	Offset

981P 981B Segment Shape - Offset		
Projection:	2-3/8" (60 mm)	
CTC Length:	9" (229 mm), 12" (305 mm), 18" (457 mm), 24" (610 mm)	
Materials:	Brass, bronze, stainless steel	
Finishes:	US3, US4, US10B, US15A, US26, US26D, US32D	
Fasteners:	Two (2) 3/8-16 FPHMS with finish washers	
Notes:	 981B is pair of 981P with fasteners for BTB mounting 	
	 For sizes or finishes not listed in this catalog, contact Hager Customer Service for availability 	

982P | 982B Straight Pull

Schuight Full	
Base Diameter:	1-5/16″ (33 mm)
Projection:	3-1/8″ (79 mm)
Clearance:	1-13/16″ (46 mm)
CTC Length:	20″ (508 mm)
Materials:	Brass, bronze, stainless steel
Finishes:	US3, US4, US10B, US15A, US26, US26D, US32D
Fasteners:	Two (2) 3/8-16 FPHMS with finish washers
Notes:	 982B is pair of 982P with fasteners for BTB mounting
	 For sizes or finishes not listed in this catalog, contact Hager Customer Service for availability

PULLS



983P | 983B

Curved Pull O/A Height: Base Diameter: Projection: Clearance: CTC Length: Materials: Finishes: Fasteners: Notes:

21-1/4" (540 mm) 1-1/4" (32 mm) 3-1/8" (79 mm) 1-7/8" (48 mm) 20" (508 mm) Brass, bronze, stainless steel US3, US4, US10B, US15A, US26, US26D, US32D Two (2) 3/8-16 FPHMS with finish washers • 983B is pair of 983P with fasteners for BTB mounting • Specify handing when ordering

• For sizes or finishes not listed in this catalog, contact Hager Customer Service for availability

984P | 984B

Curved Pull	
Clearance:	1-7/8″ (47 mm)
Projection:	3″ (76 mm)
CTC Lengths:	12" (305 mm), 20" (508 mm)
Materials:	Brass, bronze, stainless steel
Finishes:	US3, US4, US10B, US15A, US26, US32, US32D
Fasteners:	Two (2) 3/8-16 FPHMS with finish washers
Notes:	 984B is pair of 984P with fasteners for BTB mounting
	• For sizes or finishes not listed in this catalog, contact Hager Customer Service for
	availability

985P | 985B **Curved Pull**

O/A Height: Projection: Clearance: CTC Length: Materials: Finishes: Fasteners: Notes:

14″ (356 mm)
3" (76 mm)
1-9/16" (40 mm)
12" (305 mm)
Brass, bronze, stainless steel
US3, US4, US10B, US15A, US26, US26D, US32D
Two (2) 3/8-16 FPHMS with finish washers
 985B is pair of 985P with fasteners for BTB mounting
• For sizes or finishes not listed in this catalog, contact Hager Customer Service for
availability

986P | 986B

Curved Pull	
O/A Height:	22″ (559 mm)
Pull Diameter:	1-1/4" (32 mm)
Base Diameter:	2″ (51 mm)
Projection:	3-7/8″ (99 mm)
Clearance:	2-5/8″ (67 mm)
CTC Length:	20" (508 mm)
Materials:	Brass, bronze, stainless steel
Finishes:	US3, US4, US10B, US15A, US26, US26D, US32
Fasteners:	Two (2) 3/8-16 FPHMS with finish washers
Notes:	 986B is pair of 986P with fasteners for BTB mounting
	 For sizes or finishes not listed in this catalog, contact Hager Customer Service for availability

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DULLS









987P | 987B

Double Curved Pull

Double Curved Pull	
Base Diameter:	1-1/4″ (32 mm)
Clearance:	2″ (51 mm)
Projection:	3″ (76 mm)
CTC Length:	20" (508 mm)
Materials:	Brass, bronze, stainless steel
Finishes:	US3, US4, US10B, US15A, US26, US26D, US32D
Fasteners:	Two (2) 3/8-16 FPHMS with finish washers
Notes:	• 987B is pair of 987P with fasteners for BTB mounting
	• For sizes or finishes not listed in this catalog, contact I

 For sizes or finishes not listed in this catalog, contact Hager Customer Service for availability

988P | 988B

Offset Curved Pull Projection: CTC Length: Materials: Finishes: Fasteners: Notes:

3" (76 mm) 24" (610 mm) Brass, bronze, stainless steel US3, US26, US32D Two (2) 3/8-16 FPHMS with finish washers • 988B is pair of 988P with fasteners for BTB mounting • For sizes or finishes not listed in this catalog, contact Hager Customer Service for availability

990P | 990B 18º Pull

Pull Diameter: Projection: Clearance: CTC Length: Materials: Finishes: Fasteners: Notes:

1" (25 mm) 2-3/4" (70 mm) 1-3/4" (45 mm) 24" (610 mm) Brass, bronze, stainless steel US3, US4, US10B, US15A, US26, US26D, US32D Two (2) 3/8-16 FPHMS with finish washers • 990B is pair of 990P with fasteners for BTB mounting • Specify handing when ordering • For sizes or finishes not listed in this catalog, contact Hager Cur

• For sizes or finishes not listed in this catalog, contact Hager Customer Service for availability







15C Flush Cup Pull

Certification: Description: Face: Projection: Opening: Cup Clearance: Materials: Finishes: Fasteners:

Meets ANSI A156.6 for J403 Pulls Cup welded to face plate 3-1/2" x 5" (89 mm x 127 mm) 1/8" (3.2 mm) 1-3/4" x 3-1/16" (44 mm x 78 mm) 3/4" (19 mm) Stainless steel US32D Four (4) #6 x 5/8" OPHWS



15N

Flush Cup Pull Certification: Face: Projection: Opening: Cup Clearance: Materials: Finishes: Fasteners:

Meets ANSI A156.6 for J403 Pulls 3-1/2" x 5" (89 mm x 127 mm) 1/8" (3.2 mm) 1-3/4" x 3-1/16" (44 mm x 78 mm) 3/4" (19 mm) Aluminum, brass, bronze, stainless steel US3, US4, US10, US10B, US26, US26D, US28, US32D Four (4) #6 x 5/8" OPHWS



15P

Flush Cup Pull Certification: Description: Face: Projection: Opening: Cup Clearance: Materials: Finishes: Fasteners: Notes:

Meets ANSI A156.6 for J403 Pulls Cup welded to face plate and welded studs for security torx thru-bolt mounting 3-1/2" x 5" (89 mm x 127 mm) 1/8" (3.2 mm) 1-3/4" x 3-1/16" (44 mm x 78 mm) 3/4" (19 mm) Stainless steel US32D Two (2) 6-32 x 1-1/2" FPHMS (Security Torx) For use on 1-3/4" (44 mm) doors



15S Flush Cup Pull

Certification: Description: Face: Projection: Opening: Cup Clearance: Materials: Finishes: Fasteners: Notes:

Meets ANSI A156.6 for J403 Pulls Concealed mounting by screws within the recessed cup (similar to 16N or 17N) 3-1/2" x 5" (89 mm x 127 mm) 1/8" (3.2 mm) 1-3/4" x 3-1/16" (44 mm x 78 mm) 3/4" (19 mm) Aluminum, brass, bronze, stainless steel US3, US4, US10, US10B, US26, US26D, US28, US32D Two (2) #6 x 5/8" PPHWS Fasteners concealed in cup







16N Flush Cup Pull

Certification: Face: Projection: Opening: Cup Clearance: Fasteners: Materials: Finishes: Notes:

Meets ANSI A156.6 for J403 Pulls 1-15/16" x 3" (49 mm x 76 mm) 1/16" (1.5 mm) 27/32" x 2-3/8" (22 mm x 60 mm) 5/8" (16 mm) Two (2) #8 x 3/4" OPHWS Brass US3, US4, US10, US10B, US26, US26D Fasteners concealed in cup

16R **Finger Pull Plate**

Face: Projection:

Opening: Cup Clearance:

Fasteners:

Materials:

Finishes:

Certification:

Meets ANSI A156.6 for combination J301 Pull Plate and J403 Pulls 4" x 16" (102 mm x 406 mm) .050" (1.3 mm) 1-3/4" x 3-1/16" (44 x 78 mm) 13/16" (21 mm) Ten (10) #6 x 5/8" OPHWS Aluminum, brass, bronze, stainless steel US3, US4, US10, US10B, US26, US26D, US28, US32, US32D



Certification: Face: Projection: Opening: Cup Clearance: Materials: Finishes: Fasteners: Notes:

Meets ANSI A156.6 for J403 Pulls 2-1/2" x 3-31/32" (64 mm x 101 mm) 3/32" (2.4 mm) 1-11/32" x 3-13/32" (34 mm x 87 mm) 5/8" (16 mm) Brass US3, US4, US10, US10B, US26, US26D Two (2) #8 x 13/16" OPHWS Fasteners concealed in cup



25B Security Flush Pull Set

Certification: Face: Opening: Projection: Cup Clearance: Door Thickness: Materials: Finishes: Fasteners: Notes:

Meets ANSI A156.6 for J403 Pulls 3-1/2" x 5" (89 mm x 127 mm) 1-3/4" x 3-1/16" (45 mm x 78 mm) 1/8" (3 mm) 3/4" (19 mm) 1-3/4" (45 mm) - Standard Stainless steel US32D Two (2) 6-32 x 1-1/2" FPHMS (Security Torx) Security pull thru-bolted to a 15P pull



17N **Flush Cup Pull**





25C Flush Pull Set

Certification: Face: Opening: Projection: Cup Clearance: Door Thickness: Fasteners: Materials: Finishes: Notes:

Meets ANSI A156.6 for J403 Pulls 3-1/2" x 5" (89 mm x 127 mm) 1-3/4" x 3-1/16" (45 mm x 78 mm) 1/8" (3 mm) 3/4" (19 mm) 1-3/4" (45 mm) - Standard Two (2) 6-32 OPHMS sex nuts and bolts Stainless steel US32D Consists of two (2) 15C pulls mounted BTB



25N Flush Pull Set

Certification: Face: Opening: Projection: Cup clearance: Door Thickness: Fasteners: Materials: Finishes: Notes:

Meets ANSI A156.6 for J403 Pulls 3-1/2" x 5" (89 mm x 127 mm) 1-3/4" x 3-1/16" (45 mm x 78 mm) 1/8" (3 mm) 3/4" (19 mm) 1-3/4" (45 mm) - Standard Two (2) 6-32 OPHMS sex nuts and bolts Aluminum, brass, bronze, stainless steel US3, US4, US10, US10B, US26, US26D, US28, US32D Consists of two (2) 15N pulls mounted BTB

25P

26N

Projection:

Opening: Cup Clearance:

Fasteners:

Materials:

Finishes:

Notes:

Security Finger Push/Pull Plate Set

Certification: Face: Projection: Opening: Cup Clearance: Fasteners: Materials: Finishes: Notes:

Meets ANSI A156.6 for combination J301 Push Plate and J403 Flush Pull 4" x 16" (102 mm x 406 mm) 1/8" (3.2 mm) 1-3/4" x 3-1/16" (44 mm x 78 mm) 13/16" (21 mm) Six (6) 8-32 x 3/4" FPHMS (Security Torx) with sex nuts and bolts Stainless Steel US32D Consists of a 15 pull cup welded to a 100T push plate (Mounted in BTB fashion)



Security Finger Pull Certification: Face:

Meets ANSI A156.6 for J403 Pulls 4" x 5" (102 mm x 127 mm) 1/8" (3.2 mm) 1-5/8" x 3" (41 mm x 76 mm) 13/16" (21 mm) Four (4) 1/4-20 x 3/4" Undercut FPHMS (Security Torx) Brass, stainless steel US4, US26D, US32D Cup welded to face





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27N Flush Cup Pull

Certification: Face: Projection: Opening: Cup Clearance: Materials: Finishes: Fasteners: Notes: Meets ANSI A156.6 for J403 Pulls 5" x 5" (127 mm x 127 mm) 3/8" (9.5 mm) 3" x 3-1/2" (76 mm x 89 mm) 7/8" (22 mm) Stainless steel US32D Four (4) 10-24 FPHMS (Security Torx) sex nuts and bolts • ADA Compliant • Not available for BTB mounting

C L

27P Flush Cup Pull

Certification: Face: Projection: Opening: Cup Clearance: Materials: Finishes: Fasteners: Notes:

Meets ANSI A156.6 for J403 Pulls 5" x 5" (127 mm x 127 mm) 3/8" (9.5 mm) 3" x 3-1/2" (76 mm x 89 mm) 7/8" (22 mm) Stainless steel US32D Four (4) 1/4-20 x 3/4" Undercut FPHMS (Security Torx) • ADA Compliant • Not available for BTB mounting







30, 40, 50 Series **Pull Plate** Gauge: Certification:

0.050" (1.3 mm) Meets ANSI A156.6 for J405 Pull Plate



80, 90, 100 Series

0.125" (3.2 mm) Meets ANSI A156.6 for J407 Pull Plate



Finishes:

Notes:

A30, A40, A50 Series Pull Plate

Gauge: Certification:

0.062" (1.6 mm) Meets ANSI A156.6 for J405 Pull Plate

Materials:	Aluminum, brass,
Standard Sizes:	3″ x 12″ (76 mm :
	6″ x 16″ (152 mm
Fasteners:	Six (6) #6 x 5/8 0

bronze, stainless steel x 305 mm), 3-1/2" x 15" (89 mm x 381 mm), 4" x 16" (102 mm x 406 mm), n x 406 mm)*, 8" x 16" (203 mm x 406 mm)* - *(size not available for 50 and A50 Series) Six (6) #6 x 5/8 OPH tapping screws US3, US4, US10, US10B, US26, US26D, US28, US32, US32D For sizes or finishes not listed in this catalog, contact Hager Customer Service for availability

Pull Plate Chart 30, 40, 50 Series A30, A40, A50 Series 80, 90, 100 Series Radius Rounded Radius Rounded Radius Rounded Square Square Square Pull Corner Corner Corner Corner Corner Corner Corner Bevel Corner Pull Plate Part Number 1E 31E 41E 51E A31E A41E A51E 81E 91E 101E 91G 1G 41G A31G A41G 101G 31G 51G A51G 81G 1J 31J 41J 51J A31J A41J A51J 81J 91J 101J 41L A31L A41L 101L 1L 31L 51L A51L 81L 91L 2E 42E A32E A42E 82E 92E 102E 32E 52E A52E 2G 32G 42G 52G A32G A42G A52G 82G 92G 102G 2J 32J 42J 52J A32J A42J A52J 82J 92J 102J 2L 42L A32L A42L 82L 102L 32L 52L A52L 92L 3E 33E 43E 53E A33E A43E A53E 83E 93E 103E 3G 33G 43G 53G A33G A43G A53G 83G 93G 103G 3J 43J A33J A43J 83J 93J 103J 33J 53J A53J 3L 33L 43L 53L A33L A43L A53L 83L 93L 103L 4G 34G 44G 54G A34G A44G A54G 84G 94G 104G 4J 44J A34J A44J 84J 104J 34J 54J A54J 94J 4L 34L 44L 54L A34L A44L A54L 84L 94L 104L 5D 35D 45D 55D A35D A45D A55D 85D 95D 105D 5N 35N 45N 55N A35N A45N A55N 85N 95N 105N 36N 46N 56N A36N A46N 86N 96N 106N 6N A56N 9E 39E 49E 59E A39E A49E A59E 89E 99E 109E A39G 109G 9G 39G 49G 59G A49G A59G 89G 99G 9J 39J 49J A39J A49J 89J 109J 59J A59J 99J 9L 39L 49L 59L A39L A49L A59L 89L 99L 109L







313L Antivandal Pull with Latchquard

th Latchguard
Meets ANSI A156.6 for J401 Pull and ANSI A156.6 for J407 Pull Plate
7-13/32" x 11" (188 mm x 280 mm)
11" (280 mm)
1-7/8″ (48 mm)
1-5/8" (41 mm)
1-3/4" – 2" (45 mm - 51 mm)
11 GA Stainless Steel
US32D
1/4-20 FPHMS with finish washers - Standard
 Cylinder cutout available [1-1/4" (32 mm) diameter standard for exit device use and 1-1/2" (38 mm) diameter standard for mortise lock use] Plastisol grip available
 For use with most mortise locks on in-swinging and out-swinging doors
 For use with many exit devices (thru bolts directly to device)
Cylinders must be ordered separately
• When mounting pull to a Hager exit device, cylinder collar (2-649-0137) must
be purchased to ensure proper installation (see instructions for more detail)
• When mounting null to a Hager exit device, a 7/16" (11 mm) tall cylinder collar

 When mounting pull to a Hager exit device, a 7/16" (11 mm) tall cylinder collar must be purchased when using a 1-1/4" - 1-3/8" (32 mm - 35 mm) long rim cylinder (see instructions for more detail)



313S

3133	
Antivandal Pull	
Certification:	Meets ANSI A156.6 for J401 Pull and ANSI A156.6 for J407 Pull Plate
Size:	6-11/32" x 11" (161 mm x 280 mm)
Height:	11″ (280 mm)
Projection:	1-7/8" (48 mm)
Clearance:	1-5/8" (41 mm)
Door Thickness:	1-3/4" – 2" (45 mm - 51 mm)
Materials:	11 GA Stainless Steel
Finishes:	US32D
Fasteners:	1/4-20 FPHMS with finish washers - Standard
Options:	 Cylinder cutout available [1-1/4" (32 mm) diameter standard for exit device use and 1-1/2" (38 mm) diameter standard for mortise lock use] Plastisol grip available
Notes:	 For use with most mortise locks on in-swinging and out-swinging doors For use with many exit devices (thru bolts directly to device) Cylinders must be ordered separately

- must be ordered separately • When mounting pull to a Hager exit device, cylinder collar (2-649-0137) must be purchased to ensure proper installation (see instructions for more detail)
- When mounting pull to a Hager exit device, a 7/16" (11 mm) tall cylinder collar must be purchased when using a 1-1/4'' - 1-3/8'' (32 mm - 35 mm) long rim cylinder (see instructions for more detail)

30S | A30S

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Square Corner - I	Beveled Push Plate
Certification:	Meets ANSI A156.6 for J301 Push Plate
Gauge:	• 30S - 0.050" (1.3 mm)
	• A30S - 0.062" (1.6 mm)
Materials:	Aluminum, brass, bronze, stainless steel
Finishes:	US3, US4, US10, US10B, US26, US26D, US28, US32, US32D
Fasteners:	Six (6) #6 x 5/8" OPH tapping screws
Options:	May be ordered cut for cylinder (CFC) or engraved "PUSH"
Notes:	For sizes or finishes not listed in this catalog, contact Hager Customer Service for
	availability

Available in Sizes						
Inches	3 x 12	3-1/2 x 15	4 x 16	6 x 16	8 x 16	
Millimeters	76 x 305	89 x 38	102 x 406	152 x 406	203 x 406	

40R | A40R

Radius Corner - No	on-Beveled Push Plate			
Certification:	Meets ANSI A156.6 for J301 Push Plate			
Gauge:	• 40R - 0.050" (1.3 mm)			
	• A40R - 0.062" (1.6 mm)			
Materials:	Aluminum, brass, bronze, stainless steel			
Finishes:	US3, US4, US10, US10B, US26, US26D, US28, US32, US32D			
Fasteners:	Six (6) #6 x 5/8" OPH tapping screws			
Options:	Deptions: May be ordered cut for cylinder (CFC) or engraved "PUSH"			
Notes:	For sizes or finishes not listed in this catalog, contact Hager Customer Service for			
	availability			
Available in Sizes				

Available in Sizes						
Inches	3 x 12	3-1/2 x 15	4 x 16	6 x 16	8 x 16	
Millimeters	76 x 305	89 x 38	102 x 406	152 x 406	203 x 406	



50T A50T Round Corner - N	Ion-Beveled Push Plate
Certification:	Meets ANSI A156.6 for J301 Push Plate
Gauge:	• 50T - 0.050" (1.3 mm)
	• A50T - 0.062" (1.6 mm)
Materials:	Aluminum, brass, bronze, stainless steel
Finishes:	US3, US4, US10, US10B, US26, US26D, US28, US32, US32D
Fasteners:	Six (6) #6 x 5/8" OPH tapping screws
Options:	May be ordered cut for cylinder (CFC) or engraved "PUSH"
Notes:	For sizes or finishes not listed in this catalog, contact Hager Customer Service for availability

Available in Size	S		
Inches	3 x 12	3-1/2 x 15	4 x 16
Millimeters	76 x 305	89 x 38	102 x 406







60S Square Corner - Beveled Push Plate Certification: Meets ANSI A156.6 for J304 Push Plate Gauge: 0.125" (3.2 mm) Plastic laminate Materials: PG - Grey, PK - Black, CO - Brown Six (6) #6 x 5/8" OPH tapping screws Finishes: Fasteners: May be ordered cut for cylinder (CFC) or engraved "PUSH" Options: For sizes or finishes not listed in this catalog, contact Hager Customer Service for Notes: availability

Available in Sizes						
Inches	3 x 12	3-1/2 x 15	4 x 16	6 x 16	8 x 16	
Millimeters	76 x 305	89 x 38	102 x 406	152 x 406	203 x 406	



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Square Corner - Beveled Push Plate					
Certification:	Meets ANSI A156.6 for J304 Push Plate				
Gauge:	0.125″ (3.2 mm)				
Materials:	Clear plastic laminate				
Finishes:	PC - Clear				
Fasteners:	Six (6) #6 x 5/8" OPH tapping screws				
Options:	May be ordered cut for cylinder (CFC) or engraved "PUSH"				
Notes:	For sizes or finishes not listed in this catalog, contact Hager Customer Service for availability				

Available in Sizes					
Inches	3 x 12	3-1/2 x 15	4 x 16	6 x 16	8 x 16
Millimeters	76 x 305	89 x 38	102 x 406	152 x 406	203 x 406



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Square Corner - Beveled Push Plate

Square corner	
Certification:	Meets ANSI A156.6 for J304 Push Plate
Gauge:	0.125″ (3.2 mm)
Materials:	Aluminum, brass, bronze, stainless steel
Finishes:	US3, US4, US10, US10B, US26, US26D, US28, US32, US32D
Fasteners:	Six (6) #6 x 5/8" OPH tapping screws
Options:	May be ordered cut for cylinder (CFC) or engraved "PUSH"
Notes:	For sizes or finishes not listed in this catalog, contact Hager Customer Service for availability

Available in Sizes					
Inches	3 x 12	3-1/2 x 15	4 x 16	6 x 16	8 x 16
Millimeters	76 x 305	89 x 38	102 x 406	152 x 406	203 x 406



90R

Radius Corner - Non-Beveled Push Plate

- Noli-Develeu Pusii Plate
Meets ANSI A156.6 for J304 Push Plate
0.125″ (3.2 mm)
Aluminum, brass, bronze, stainless steel
US3, US4, US10, US10B, US26, US26D, US28, US32, US32D
Six (6) #6 x 5/8" OPH tapping screws
May be ordered cut for cylinder (CFC) or engraved "PUSH"
For sizes or finishes not listed in this catalog, contact Hager Customer Service for availability

Available in Sizes					
Inches	3 x 12	3-1/2 x 15	4 x 16	6 x 16	8 x 16
Millimeters	76 x 305	89 x 38	102 x 406	152 x 406	203 x 406

100T

Square Corner - Rounded Bevel Top and Bottom Push Plate				
Certification:	Meets ANSI A156.6 for J304 Push Plate			
Gauge:	0.125″ (3.2 mm)			
Materials:	Aluminum, brass, bronze, stainless steel			
Finishes:	US3, US4, US10, US10B, US26, US26D, US28, US32, US32D			
Fasteners:	Six (6) #6 x 5/8" OPH tapping screws			
Options:	May be ordered cut for cylinder (CFC) or engraved "PUSH"			
Notes:	For sizes or finishes not listed in this catalog, contact Hager Customer Service for availability			

Available in Size	Available in Sizes				
Inches	3 x 12	3-1/2 x 15	4 x 16	6 x 16	8 x 16
Millimeters	76 x 305	89 x 38	102 x 406	152 x 406	203 x 406

110S

Half Circle Push Plate

Certification:	Meets ANSI A156.6 for J301 Push Plate
Plate:	8″ x 16″ (203 mm x 406 mm)
Gauge:	0.050″ (1.3 mm)
Materials:	Aluminum, brass, bronze, stainless steel
Finishes:	US3, US4, US10, US10B, US26, US26D, US28, US32, US32D
Fasteners:	Six (6) #6 x 5/8" OPH tapping screws
Options:	May be ordered cut for cylinder (CFC) or engraved "PUSH"
Notes:	For sizes or finishes not listed in this catalog, contact Hager Customer Service for availability







120L

Pull Plate with Lip - Non-Beveled

Certification:	Meets ANSI A156.6 for J303 Plate
Plate:	3-1/2" x 16" (89 mm x 406 mm)
Lip Projection:	1-1/8″ (29 mm)
Gauge:	0.125″ (3.2 mm)
Materials:	Aluminum, brass, bronze, stainless steel
Finishes:	US3, US4, US10, US10B, US26, US26D, US28, US32, US32D
Fasteners:	Six (6) #6 x 5/8" OPH tapping screws
Options:	 Other sizes available, please specify
	 May be ordered cut for cylinder (CFC) or engraved
Notes:	For sizes or finishes not listed in this catalog, contact Hager Customer Service for availability

121L Cylir

Cylinder Pull - Bev	Cylinder Pull - Beveled		
Plate:	2″ x 3-3/4″ (51 mm x 95 mm)		
Lip Projection:	1-1/8″ (29 mm)		
Cylinder Cutout:	1-1/4" (32 mm) diameter		
Gauge:	0.125″ (3.2 mm)		
Materials:	Aluminum, brass, bronze, stainless steel		
Finishes:	US3, US4, US10, US10B, US26, US26D, US28, US32, US32D		
Fasteners:	Attached by lock cylinder		
Notes:	 1/4"-20 x 3/8" stud installed on reverse side to eliminate twisting 		
	 For sizes or finishes not listed in this catalog, contact Hager Customer Service for availability 		

122L

Security Pull/Push Plate Set - Beveled Certifi Push

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Certification:	Meets ANSI A156.6 for combination J304 Push Plate and J303 Flush Pull
Push Plate:	4" x 16" (102 mm x 406 mm)
Pull Plate:	4" x 9-1/4" (102 mm x 235 mm)
Lip Projection:	2-1/8" (54 mm)
Gauge:	0.125″ (3.2 mm)
Fasteners:	Four (4) 8-32 FPHMS (Security Torx) sex nuts and bolts
	Two (2) 8-32 x 1/2" FPHMS (Security Torx)
Materials:	Stainless steel
Finishes:	US32D
Notes:	For sizes or finishes not listed in this catalog, contact Hager Customer Service for availability





125S Bent Push Bar

Projection:

Base Plate:

Materials: Finishes:

Fasteners:

Options:

Meets ANSI A156.6 for J501 Push Bar 3/8" x 1-1/4" (10 mm x 32 mm) 2-1/8" (54 mm) 1" x 3" (25 mm x 76 mm) Aluminum, brass, bronze, stainless steel US3, US4, US10, US10B, US28, US32, US32D Two (2) #8 FPH tapping screws and one (1) 1/4 - 20 OPHMS May be ordered with thru-bolts in place of surface screws



126S Push Bar

Certification: Bar Size: Projection: Base Plate: Materials: Finishes:

Meets ANSI A156.6 for J501 Push Bar 3/8" x 1-1/4" (10 mm x 32 mm) 2-1/8" (54 mm) 1" x 3" (25 mm x 76 mm) Aluminum, brass, bronze, stainless steel US3, US4, US10, US10B, US28, US32, US32D Four (4) #8 FPH tapping screws May be ordered with thru-bolts in place of surface screws



127S

Fasteners:

Options:

Push Bar Certification: Bar Size: Projection: Base Plate: Materials: Finishes:

Fasteners:

Options:

Meets ANSI A156.6 for J501 Push Bar 3/8" x 1-1/4" (10 mm x 32 mm) 3/4" (19 mm) 1-1/4" x 1-1/4" (32 mm x 32 mm) Aluminum, brass, bronze, stainless steel US3, US4, US10, US10B, US28, US32, US32D Two (2) 1/4-20 FPHMS May be ordered with thru bolts in place of surface screws



128P Wide Push Bar

Certification: Bar Size: Projection: Base Plate: Fasteners: Materials: Finishes:

Meets ANSI A156.6 for J501 Push Bar 3/8" x 3" (10 mm x 76 mm) 2-1/8" (54 mm) 1-1/2" x 4-1/2" (38 mm x 114 mm) Eight (8) FPH tapping screws Aluminum, brass, bronze, stainless steel US3, US4, US10, US10B, US26, US26D, US28, US32, US32D

All push bar units are made to order. Specify CTC lengths, fastening method unless standard, and type of door (WO, HM, AL, etc.).









128S

Wide Push Bar

Certification: Bar Size: Projection: Base Plate: Door Thickness: Fasteners: Materials: Finishes: Notes: Meets ANSI A156.6 for J501 Push Bar 3/8" x 3" (10 mm x 76 mm) 2" (51 mm) 1-1/2" x 4-1/2" (38 mm x 114 mm) 1-3/4" (45 mm) - Standard Two (2) 1/4 - 20 thru bolts with finish washers Aluminum, brass, bronze, stainless steel US3, US4, US10, US10B, US26, US26D, US28, US32, US32D 128S is same as 128P, but without base plates



129P Wide Push Bar

Certification: Bar Size: Projection: Base Plate: Materials: Finishes: Fasteners: Options:

Meets ANSI A156.6 for J501 Push Bar 3/8" x 3" (10 mm x 76 mm) 3/4" (19 mm) 1" x 3" (25 mm x 76 mm) Aluminum, brass, bronze, stainless steel US3, US4, US10, US10B, US28, US32, US32D Two (2) 1/4-20 FPHMS • May be ordered with thru bolts in place of surface screws • #14 Flat head wood screws available on special order



130S

Round Push Bar

Certification:Meets ANSI A156.6 for J501 Push BarBar Stock:1" (25 mm)Projection:2-1/2" (64 mm)Door Thickness:1-3/4" (45 mm) - StandardMaterials:Aluminum, brass, bronze, stainless steelFinishes:US3, US4, US10, US10B, US28, US32, US32DFasteners:Two (2) 1/4-20 thru-bolts with finish washersOptions:May be ordered with Type 5 concealed mountings at extra charge



131S

Round Push Bar

Certification: Bar Stock: Projection: Base Diameter: Door Thickness: Fasteners: Materials: Finishes: Options: Meets ANSI A156.6 for J501 Push Bar 1" (25 mm) 2-5/8" (67 mm) 2" (51 mm) 1-3/4" (45 mm) - Standard Two (2) 1/4-20 thru-bolts with finish washers Aluminum, brass, bronze, stainless steel US3, US4, US10, US10B, US28, US32, US32D May be ordered with Type 5 concealed mountings at extra charge PUSH BARS





133S

Round Push Bar

Certification: Bar Stock: Projection: Door Thickness: Materials: Finishes: Fasteners: Meets ANSI A156.6 for J501 Push Bar 3/4" (19 mm) 2-1/4" (57 mm) 1-3/4" (45 mm) - Standard Aluminum, brass, bronze, stainless steel US3, US4, US10, US10B, US28, US32, US32D Two (2) 1/4 - 20 thru-bolts with finish washers



134S Round Push Bar

Certification: Meets ANSI A156.6 for J501 Push Bar Bar Stock: 3/4" (19 mm) Projection: 2-3/8" (60 mm) Base Diameter: 1-1/4" (32 mm) Door Thickness: 1-3/4" (45 mm) - Standard Two (2) 1/4 - 20 thru-bolts with finish washers Fasteners: Materials: Aluminum, brass, bronze, stainless steel US3, US4, US10, US10B, US28, US32, US32D Finishes: Options: May be ordered with Type 5 concealed mountings at extra charge



136S

Round Push Bar

Certification: Meets ANSI A156.6 for J501 Push Bar Bar Stock: 1-1/4" (32 mm) 3" (76 mm) Projection: Door Thickness: 1-3/4" (45 mm) - Standard Materials: Aluminum, brass, bronze, stainless steel US3, US4, US10, US10B, US28, US32, US32D Finishes: Two (2) 5/16 - 18 thru-bolts with finish washers Fasteners May be ordered with Type 5 concealed mountings at extra charge Options:



Round Push Bar

137S

Certification: Bar Stock: Projection: Base Diameter: Door Thickness: Fasteners: Materials: Finishes: Options: Meets ANSI A156.6 for J501 Push Bar 1-1/4" (32 mm) 3-1/8" (79 mm) 2" (51 mm) 1-3/4" (45 mm) - Standard Two (2) 5/16 - 18 thru-bolts with finish washers Aluminum, brass, bronze, stainless steel US3, US4, US10, US10B, US28, US32, US32D May be ordered with Type 5 concealed mountings at extra charge

All push bar units are made to order. Specify CTC lengths, fastening method unless standard, and type of door (WO, HM, AL, etc.).









138P

Round Push/Pull Set

Certification: Bar Stock: Projection: Materials: Finishes: Fasteners: Meets ANSI A156.6 for J504 Bar Sets 1" (25 mm) 2-1/2" (64 mm) Aluminum, brass, bronze, stainless steel US3, US4, US10, US10B, US28, US32, US32D Two (2) 1/4-20 Type 3 concealed cone



139P

Round Push/Pull Set

Certification: Bar Stock: Projection: Materials: Finishes: Fasteners: Meets ANSI A156.6 for J504 Bar Sets 3/4" (19 mm) 2-1/4" (60 mm) Aluminum, brass, bronze, stainless steel US3, US4, US10, US10B, US28, US32, US32D Two (2) 1/4-20 Type 3 concealed cone



140P

Round Push/Pull Set

Certification: Bar Stock: Projection: Materials: Finishes: Fasteners: Meets ANSI A156.6 for J504 Bar Sets 1-1/4" (32 mm) 3" (76 mm) Aluminum, brass, bronze, stainless steel US3, US4, US10, US10B, US28, US32, US32D Two (2) 5/16-18 Type 3 concealed cone



150D | 150V | 150B

Round Push/Pull Set*Certification:NBar Stock:SProjection:SPull CTC:SMaterials:AFinishes:N

Meets ANSI A156.6 for J504 Bar Sets 3/4" (19 mm) 2-1/4" (57 mm) 8" (203 mm) Aluminum, brass, bronze, stainless steel US3, US4, US10, US10B, US28, US32, US32D

*

D = **Standard Fastening** - One (1) Type 7 spanner collar connection between push bar and pull plus two (2) Type 1 connections for other ends of push bar and pull.

V = Fully Concealed Fastening - One (1) Type 7 spanner collar connection between push bar and pull plus two (2) Type 5 connections for ends of push bar and pull.

B = **Tempered Glass Fastening** - One (1) Type 7 spanner collar connection between push bar and pull plus two (2) Type 8 connections for ends of push bar and pull plus gaskets that separate metal parts from glass.





151D | 151V | 151B **Round Pus**

Round Push/Pull Set*			
Certification:	Meets ANSI A156.6 for J504 Bar Sets		
Bar Stock:	3/4″ (19 mm)		
Projection:	2-1/4″ (57 mm)		
Pull CTC:	10" (254 mm)		
Materials:	Aluminum, brass, bronze, stainless steel		
Finishes:	US3, US4, US10, US10B, US28, US32, US32D		



152D | 152V | 152B **Round P**

Round Push/Pull Set*			
Certification: Meets ANSI A156.6 for J504 Bar Sets			
Bar Stock:	3/4" (19 mm)		
Projection:	2-1/4" (57 mm)		
Pull CTC:	12″ (305 mm)		
Materials:	Aluminum, brass, bronze, stainless steel		
Finishes:	US3, US4, US10, US10B, US28, US32, US32D		



153D | 153V | 153B

Round Push/Pull Set*

	-	
Certification:	Meets ANSI A156.6 for J504 Bar Sets	
Bar Stock: 1" (25 mm)		
Projection:	2-1/2″ (64 mm)	
Pull CTC:	10" (254 mm)	
Materials:	Aluminum, brass, bronze, stainless steel	
Finishes:	US3, US4, US10, US10B, US28, US32, US32D	

154D | 154V | 154B

Round Push/Pull Set*			
Certification:	Meets ANSI A156.6 for J504 Bar Sets		
Bar Stock:	1″ (25 mm)		
Projection:	2-1/2" (64 mm)		
Pull CTC:	12″ (305 mm)		
Materials:	Aluminum, brass, bronze, stainless steel		
Finishes:	US3, US4, US10, US10B, US28, US32, US32D		

D = Standard Fastening - One (1) Type 7 spanner collar connection between push bar and pull plus two (2) Type 1 connections for other ends of push bar and pull.

V = Fully Concealed Fastening - One (1) Type 7 spanner collar connection between push bar and pull plus two (2) Type 5 connections for ends of push bar and pull.

B = Tempered Glass Fastening - One (1) Type 7 spanner collar connection between push bar and pull plus two (2) Type 8 connections for ends of push bar and pull plus gaskets that separate metal parts from glass.

All push bar units are made to order. Specify CTC lengths, fastening method unless standard, and type of door (WO, HM, AL, etc.).



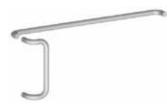




155D | 155V | 155B

Round Push/Pull Set* Certification: Bar Stock: Projection: Pull CTC: Materials: Finishes:

Meets ANSI A156.6 for J504 Bar Sets 1" (25 mm) 2-1/2" (64 mm) 18" (457 mm) Aluminum, brass, bronze, stainless steel US3, US4, US10, US10B, US28, US32, US32D



156D | 156V | 156B

Round Push/Pull Set*

Meets ANSI A156.6 for J505 Bar Sets Certification: Bar Stock: 3/4" (19 mm) diameter Projection: 2-1/2" (64 mm) 8" (203 mm) Pull CTC: Offset: 2-1/2" (64 mm), 90° Standard Materials: Aluminum, brass, bronze, stainless steel Finishes: US3, US4, US10, US10B, US28, US32, US32D Options: For 45° offset pull, add prefix "X" (i.e., X156D) to number Non-reversible; specify handing



157D | 157V | 157B

Round Pu Certificatio

Notes:

Round Push/Pull Set*		
Certification:	Meets ANSI A156.6 for J505 Bar Sets	
Bar Stock:	3/4" (19 mm) diameter	
Projection:	2-1/2" (64 mm)	
Pull CTC:	10″ (254 mm)	
Offset:	2-1/2" (64 mm), 90° Standard	
Materials:	Aluminum, brass, bronze, stainless steel	
Finishes:	US3, US4, US10, US10B, US28, US32, US32D	
Options:	For 45° offset pull, add prefix "X" (i.e., X157D) to number	
Notes:	Non-reversible; specify handing	



158D | 158V | 158B

Round Push/Pull Set*

Kounu rush/run s	
Certification:	Meets ANSI A156.6 for J505 Bar Sets
Bar Stock:	3/4" (19 mm) diameter
Projection:	2-1/2" (64 mm)
Pull CTC:	12″ (305 mm)
Offset:	2-1/2" (64 mm), 90° Standard
Materials:	Aluminum, brass, bronze, stainless steel
Finishes:	US3, US4, US10, US10B, US28, US32, US32D
Options:	For 45° offset pull, add prefix "X" (i.e., X158D) to number
Notes:	Non-reversible; specify handing

D = Standard Fastening - One (1) Type 7 spanner collar connection between push bar and pull plus two (2) Type 1 connections for other ends of push bar and pull.

V = Fully Concealed Fastening - One (1) Type 7 spanner collar connection between push bar and pull plus two (2) Type 5 connections for ends of push bar and pull.

B = Tempered Glass Fastening - One (1) Type 7 spanner collar connection between push bar and pull plus two (2) Type 8 connections for ends of push bar and pull plus gaskets that separate metal parts from glass.

All push bar units are made to order. Specify CTC lengths, fastening method unless standard, and type of door (WO, HM, AL, etc.).





Round Push/Pull Set*

Certification:	Meets ANSI A156.6 for J505 Bar Sets	
Bar Stock:	1″ (25 mm)	
Projection:	2-1/2″ (76 mm)	
Pull CTC:	10" (254 mm)	
Offset:	3" (76 mm), 90° Standard	
Materials:	Aluminum, brass, bronze, stainless steel	
Finishes:	US3, US4, US10, US10B, US28, US32, US32D	
Options:	For 45° offset pull, add prefix "X" to number (i.e., X159D)	
Notes:	Non-reversible; specify handing	

160D | 160V | 160B

Round Push/Pull Set*

Certification:	Meets ANSI A156.6 for J505 Bar Sets
Bar Stock:	1" (25 mm)
Projection:	2-1/2″ (76 mm)
Pull CTC:	12″ (305 mm)
Offset:	3" (76 mm), 90° Standard
Materials:	Aluminum, brass, bronze, stainless steel
Finishes:	US3, US4, US10, US10B, US28, US32, US32D
Options:	For 45° offset pull, add prefix "X" to number (i.e., X160D)
Notes:	Non-reversible; specify handing

161D | 161V | 161B

Round Push/Pull Set*

Certification:	Meets ANSI A156.6 for J505 Bar Sets	
Bar Stock:	1″ (25 mm)	
Projection:	2-1/2" (76 mm)	
Pull CTC:	18" (457 mm)	
Offset:	3" (76 mm), 90° Standard	
Materials:	Aluminum, brass, bronze, stainless steel	
Finishes:	US3, US4, US10, US10B, US28, US32, US32D	
Options:	For 45° offset pull, add prefix "X" to number (i.e., X161D)	
Notes:	Non-reversible; specify handing	



164D | 164V | 164B

Round Push/Pull Set*

Certification:	Meets ANSI A156.6 for J504 Bar Sets		
Bar Stock:	1-1/4" (32 mm)		
Projection:	3″ (76 mm)		
Pull CTC:	12" (305 mm)		
Materials:	Aluminum, brass, bronze, stainless steel		
Finishes:	US3, US4, US10, US10B, US28, US32, US32D		

D = Standard Fastening - One (1) Type 7 spanner collar connection between push bar and pull plus two (2) Type 1 connections for other ends of push bar and pull.

V = Fully Concealed Fastening - One (1) Type 7 spanner collar connection between push bar and pull plus two (2) Type 5 connections for ends of push bar and pull.

B = Tempered Glass Fastening - One (1) Type 7 spanner collar connection between push bar and pull plus two (2) Type 8 connections for ends of push bar and pull plus gaskets that separate metal parts from glass.

All push bar units are made to order. Specify CTC lengths, fastening method unless standard, and type of door (WO, HM, AL, etc.).

*





165D | 165V | 165B

Round Push/Pull Set* Certification: Bar Stock: Projection: Pull CTC: Materials: Finishes:

Meets ANSI A156.6 for J504 Bar Sets 1-1/4" (32 mm) 3" (76 mm) 18" (457 mm) Aluminum, brass, bronze, stainless steel US3, US4, US10, US10B, US28, US32, US32D



167D | 167V | 167B

Round Push/Pull Set*

Certification: Bar Stock: Projection: Pull CTC: Offset: Materials: Finishes: Notes: Meets ANSI A156.6 for J505 Bar Sets 1-1/4" (32 mm) 3" (76 mm) 18" (457 mm) 3-3/4" (96 mm), 90° Standard Aluminum, brass, bronze, stainless steel US3, US4, US10, US10B, US28, US32, US32D Non-reversible; specify handing



170D

Push/Pull Set

Certification: Bar Stock: Projection of Pull Bar: Projection of Push Bar: Base: Horizontal Spacing CTC: Materials: Finishes: Notes: Meets ANSI A156.6 for J502 Bar Sets 3/8" x 1-1/4" (10 mm x 32 mm) 2-1/2" (64 mm) 3/4" (19 mm) 1-1/4" x 1-1/4" (32 x 32 mm) 8" (203 mm) Aluminum, brass, bronze, stainless steel US3, US4, US10, US10B, US28, US32, US32D • Bars are mounted BTB with 1/4"-20 thru bolt type 4 mounting

• Non-reversible; specify handing

*

D = **Standard Fastening** - One (1) Type 7 spanner collar connection between push bar and pull plus two (2) Type 1 connections for other ends of push bar and pull.

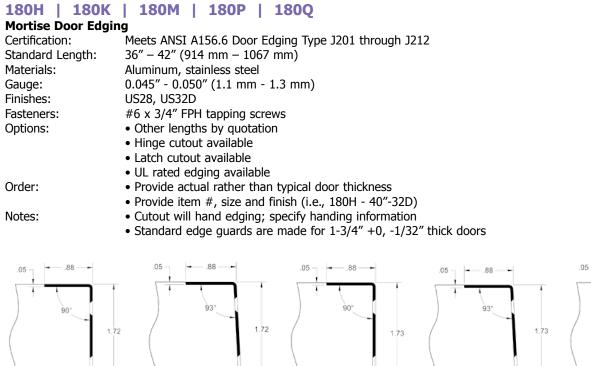
V = Fully Concealed Fastening - One (1) Type 7 spanner collar connection between push bar and pull plus two (2) Type 5 connections for ends of push bar and pull.

B = **Tempered Glass Fastening** - One (1) Type 7 spanner collar connection between push bar and pull plus two (2) Type 8 connections for ends of push bar and pull plus gaskets that separate metal parts from glass.

All push bar units are made to order. Specify CTC lengths, fastening method unless standard, and type of door (WO, HM, AL, etc.).



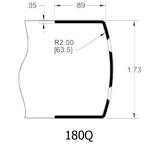




180M

181M

180P

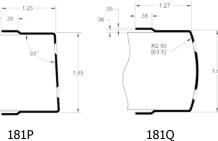


181H | 181K | 181M | 181P | 181Q

180K

Overlap Door Edgi	ing
Certification:	Meets ANSI A156.6 Door Edging Type J201 through J212
Standard Length:	36″ – 42″ (914 mm – 1067 mm)
Materials:	Aluminum, stainless steel
Gauge:	0.045" - 0.050" (1.1 mm - 1.3 mm)
Finishes:	US28, US32D
Fasteners:	#6 x 3/4" FPH tapping screws
Options:	 Other lengths by quotation
	 Hinge cutout available
	Latch cutout available
	UL rated edging available
Order:	Provide actual rather than typical door thickness
.	• Provide item #, size and finish (i.e., 181H - 40"-32D)
Notes:	Cutout will hand edging; specify handing information
	• Standard edge guards are made for 1-3/4" +0, -1/32" thick doors
1.25	
.06	.06 .06 .06 .06 .06
90°	90°
/	

181K



181H

180H



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182Q

R2.50 [63.5]

182H | 182K | 182M | 182P | 182Q

Non-Mortise Door	Edaina		
Certification:	Meets ANSI A156.6 Door Edgi	ing Type 1201 through 12	12
Standard Length:	36" – 42" (914 mm – 1067 m		12
Materials:	Aluminum, stainless steel		
Gauge:	0.045" - 0.050" (1.1 mm - 1.3	(mm)	
Finishes:	US28, US32D	, , , , , , , , , , , , , , , , , , , ,	
Fasteners:			
	#6 x 3/4" FPH tapping screws)	
Options:	Other lengths by quotation		
	Hinge cutout available		
	Latch cutout available		
Ordon	UL rated edging available	miant door thickness	
Order:	Provide actual rather than ty		
Nataa	 Provide item #, size and finite 		
Notes:	Cutout will hand edging; spe		"thick do are
	 Standard edge guards are m 	lade 101 1-3/4 +0, -1/32	
.0588	.0588	.0588	.0588
90°	93°	90.	93°
	1.77	1.85	1.85
	L// (
) 1
	•	, i i i i i i i i i i i i i i i i i i i	
182H	182K	182M	182P
1	185G		

Corner Guard	
Certification:	Meets ANSI A156.6 for J210
Size:	3" x 3" x 40" (76 mm x 76 mm x 1016 mm)
Gauge:	0.050″ (1.3 mm)
Materials:	Aluminum, stainless steel
Finishes:	US28, US32D
Fasteners:	#6 x 3/4" FPH Tapping screws
Options:	Mounting with double-stick tape instead of screws
Notes:	 90° bend standard
	 Other lengths by quotation
	 #6 x 1" screws available upon request

1.85



Door Protection Plates

The metal door protection plates below meet ANSI A156.6 for J101 Metal Armor Plate, J102 Metal Kickplate, and J103 Metal Mop Plate. The plastic door protection plates below meet ANSI A156.6 for J105 Plastic Armor Plate, J106 Plastic Kickplate, and J107 Plastic Mop Plate. Options for all plates include countersunk holes, UL armor plate stamped, self-adhesive tape, spanner head screws, torx head screws, round corners, wrap around side and bottom return, and 0.125" (3.2 mm) material. All plates below are supplied standard with #6 x 5/8" truss head screws (unless specified otherwise). They are available in mop plate, kick plate, stretcher plate, and armor plate sizes.

Mop Plate:	Protects the bottom of the pull side of doors subject to cleaning and mopping procedures.
Kick Plate: Stretcher Plate:	Protects the bottom of the push side of doors subject to scuffing from foot traffic. Protects doors in specific areas where constant contact is made by stretchers, service carts, or other equipment.
Armor Plate:	Protects lower half of doors from abuse by carts, trucks, and rough usage.

NFPA Note (Applies to 190S, 193S, 194S, 198S, and 225S)

NFPA 80 Standards - 6.4.5 Protection Plates 6.4.5.1 - Factory installed protection plates shall be installed in accordance with the listing of the door. 6.4.5.2 - Field installed protection plates shall be labeled and installed in accordance with their listing. 6.4.5.3 - Labeling shall not be required where the top of the protection plate is not more than 16" (406 mm) above the bottom of the door.

2235

1905

1905		2235	
Gauge:	0.050″ (1.3 mm)	Gauge:	0.062" (1.6 mm)
Materials:	Aluminum, brass, bronze, stainless steel	Materials:	Aluminum, brass, bronze, stainless steel
Finishes:	US3, US4, US10, US10B, US28, US32,	Finishes:	US3, US4, US10, US10B, US28, US32,
T IIIISTICS.	US32D	r moneo.	US32D
Bevel:	None	Bevel:	3 edges
		bever.	5 euges
Options:	UL Listed for US32 and US32D*	2240	
1000		224S	
193S		Gauge:	0.062" (1.6 mm)
Gauge:	0.050" (1.3 mm)	Materials:	Aluminum, brass, bronze, stainless steel
Materials:	Aluminum, brass, bronze, stainless steel	Finishes:	US3, US4, US10, US10B, US28, US32,
Finishes:	US3, US4, US10, US10B, US28, US32,		US32D
	US32D	Bevel:	4 edges
Bevel:	3 edges		
Options:	UL Listed for US32 and US32D*	204S	
optionsi		Gauge:	0.125″ (3.2 mm)
194S		Materials:	
	0.050// (1.2.mm)		Clear plastic
Gauge:	0.050" (1.3 mm)	Bevel:	4 edges
Materials:	Aluminum, brass, bronze, stainless steel	21.40	
Finishes:	US3, US4, US10, US10B, US28, US32,	214S	
	US32D	Gauge:	0.125" (3.2 mm)
Bevel:	4 edges	Materials:	Plastic laminate
Options:	UL Listed for US32 and US32D*	Bevel:	4 edges
		Colors:	Black, Brown, Grey
198S		Notes:	Other colors are available and will be
Gauge:	0.038″ (0.8 mm)		subject to minimum order quantities;
Materials:	Stainless steel		priced on application
Finishes:	US32D		
Options:	UL Listed*	225S	
Options.	OL LISIEU		0.060″ (1.9 mm)
199B		Gauge:	(1.9)
		Materials:	Kydex [®]
Gauge:	0.038″ (0.8 mm)	Colors:	CBO - Calcutta Black, KGO - Beige,
Materials:	Aluminum		KHO - Chocolate
Finishes:	Bright gold anodized	Notes:	Other colors are available and will be
Fasteners:	#6 x 5/8" TPH Tapping Screws		subject to minimum order quantities;
			priced on application
220S		Options:	UL Listed*
Gauge:	0.062" (1.6 mm)		

Materials: Aluminum, brass, bronze, stainless steel Finishes: US3, US4, US10, US10B, US28, US32, US32D Bevel: None

*Must specify UL stamp.







230W **Convex Wall Stop**

Certification: Diameter:

Projection:

Materials:

Finishes: Fasteners:

Notes:

Meets ANSI A156.16 for L02101 2-15/32" (63 mm) 1-3/32" (28 mm) Cast brass, bronze with grey rubber bumper US3, US4, US10, US10B, US15, US15A, US19, US26, US26D One (1) $\#10 \times 1-1/2''$ PPHWS with plastic and toggle anchor. Concealed tamper proof mounting • Easy installation by inserting screwdriver through small hole in bumper • Specify 230T for machine screw and toggle nut screwpack (10 pk)



232W | **BL232W**

Convex Wall Stop	
Certification:	Meets ANSI A156.16 for L02101
Diameter:	2-7/16" (62 mm)
Projection:	1″ (25 mm)
Materials:	Wrought brass, bronze, stainless steel with grey rubber bumper
Finishes:	US3, US4, US5, US9, US10, US10B, US15, US15A, US19, US26, US26D, US32, US32D
Fasteners:	One (1) $\#10 \times 1-1/2''$ PPHWS with plastic and toggle anchor
Notes:	Concealed tamper proof mounting
	 Easy installation by inserting screwdriver through small hole in bumper
	 Specify 230T for machine screw and toggle nut screwpack (10 pk)
	• BL232W is 232W case quantity 50



234W

Concave Wall Stop Certification: Meets ANSI A156.16 for L02251 2-15/32" (63 mm) Diameter: Projection: 1-3/32" (28 mm) Materials: Cast brass, bronze with grey rubber bumper Finishes: US3, US4, US10, US10B, US15, US15A, US19, US26, US26D One (1) #10 x 1-1/2" PPHWS w/ plastic and toggle anchor Fasteners: Notes: • Easy installation by inserting screwdriver through small hole in rubber bumper Concealed tamper proof mounting • Concave rubber bumper prevents damage to locksets with projecting buttons

• Specify 230T for machine screw and toggle nut screwpack (10 pk)



236W | BL236W

Concave Wall Stop Meets ANSI A156.16 for L02251 Certification: Diameter: 2-7/16" (75 mm) Projection: 1" (25 mm) Materials: Wrought brass, bronze, stainless steel with grey rubber bumper Finishes: US3, US4, US5, US9, US10, US10B, US15, US15A, US19, US26, US26D, US32, US32D Fasteners: One (1) #10 x 1-1/2" PPHWS w/ plastic and toggle anchor • Easy installation by inserting screwdriver through small hole in rubber bumper Concealed tamper proof mounting

- Concave rubber bumper prevents damage to locksets with projecting buttons
- Specify 230T for machine screw and toggle nut screwpack (10 Pk)
- BL236W is 236W case quantity 50



Notes:



250W Convex Wall Stop

Diameter:

Projection:

Materials:

Finishes:

Fasteners: Notes: 1" (25 mm) 9/16" (14 mm) Brass US3, US4, US10, US10B, US15, US15A, US19, US26, US26D One (1) #6 x 3/4" screw with plastic anchor and one (1) 0.052 diameter nail • Concealed mounting screw prevents vandalism • For use on drywall

Compact design



251W Concave Wall Stop

Diameter:

Projection: Materials:

Finish:

Notes:

1-7/8" (48 mm)
25/32" (20 mm)
Adhesive backed rubber bumper
Grey only
Concave bumper prevents damage to locksets with projecting buttons
For areas where concealed mounting is not required

Adhesive backing for use on clean smooth flat surfaces only



254S Wall Stop & H

Wall Stop & HolderCertification:Meets ANSI A156.16Base Diameter:2-11/32'' (60 mm)Base Projection:3-1/2'' (89 mm)Engaged Projection:5-19/32'' (142 mm)Keeper: $1'' \times 2''$ (25 mm x 5)Fasteners:Five (5) #10 x 1'' FfMaterials:Cast brass with blacFinishes:US3, US4, US10, USNotes:• For use on drywal

Meets ANSI A156.16 for L01341 2-11/32" (60 mm) 3-1/2" (89 mm) 5-19/32" (142 mm) 1" x 2" (25 mm x 51 mm) Five (5) #10 x 1" FPHWS, and three (3) plastic anchors Cast brass with black rubber bumper US3, US4, US10, US10B, US15, US26, US26D • For use on drywall

- Manual holder ideal for interior and exterior applications
- Unit functions as a stop, but can serve as a "Hold Open" when hook is manually engaged
- Ideal for use with locksets with a projection of 3-5/16" (84 mm) or less



254W

Wall	Stop	&	Ho	lder
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wall Stop & notuer	
Certification:	Meets ANSI A156.16 for L01351
Base Diameter:	2-11/32" (60 mm)
Base Projection:	3-1/2" (89 mm)
Engaged Projection:	5-19/32" (142 mm)
Keeper:	1" x 2" (25 mm x 51 mm)
Fasteners:	Three (3) $\#10 \times 1''$ FPH tapping screw, one (1) plastic anchor,
	one (1) 5/16-18 x 2-1/2" threaded stud, and one (1) 5/16-18 lead anchor
Materials:	Cast brass with black rubber bumper
Finishes:	US3, US4, US10, US10B, US15, US26, US26D
Notes:	For use on concrete walls
	 Manual holder ideal for interior and exterior applications
	• Unit functions as a stop, but can serve as a "Hold Open" when hook is manually engaged
	• Ideal for use with locksets with a projection of 3-5/16" (84 mm) or less

Ideal for use with locksets with a projection of 3-5/16" (84 mm) or less







255S Wall Stop

Certification: Base Diameter: Projection: Fasteners: Materials: Finishes: Notes: Meets ANSI A156.16 for L02011 2-11/32" (60 mm) 3-11/16" (94 mm) Three (3) #10 x 1" OPHWS and three (3) plastic anchors Cast brass with black rubber bumper US3, US4, US10, US10B, US15, US26, US26D • For use on drywall • Ideal for interior and exterior applications • Heavy duty - for use in high traffic areas

• Ideal for use with locksets with a projection of 3" (76 mm) or less



255W Wall Stop

Certification: Base Diameter: Projection: Fasteners:

Materials: Finishes: Notes: Meets ANSI A156.16 for L02021 2-11/32" (60 mm) 3-11/16" (94 mm) One (1) #10 x 1" OPHWS, one (1) plastic anchor, one (1) 5/16-18 lead anchor, one (1) 5/16-18 x 2-1/2" threaded stud, one (1) 5/16-18 x 2-1/2" combo threaded stud Cast brass with black rubber bumper US3, US4, US10, US10B, US15, US26, US26D • For use on concrete walls • Ideal for interior and exterior applications • Heavy duty - for use in high traffic areas

• Ideal for use with locksets with a projection of 3" (76 mm) or less



256S Manual Wall Stop & Holder

Manual Wan Stop & Holder		
Certification:	Meets ANSI A156.16 for L01341	
Base Diameter:	2-1/4" (57 mm)	
Base Projection:	3-3/4″ (95 mm)	
Engaged Projection:	5-11/16" (145 mm)	
Keeper:	25/32" x 1-1/2" (20 mm x 38 mm)	
Materials:	Cast brass with black rubber bumper	
Finishes:	US3, US10, US10B, US15, US26, US26D	
Fasteners:	Three (3) $\#10 \ge 1''$ OPHWS and three (3) plastic anchors	
Notes:	For use on drywall	
	 Ideal for interior and exterior applications 	
	 Heavy duty - for use in high traffic areas 	

- Unit functions as a stop, but can serve as a "Hold Open" when hook is manually engaged
- Ideal for use with locksets with a projection of 3" (76 mm) or less





256W

Manual Wall Stop & Holder		
Certification:	Meets ANSI A156.16 for L01351	
Base Diameter:	2-1/4" (57 mm)	
Base Projection:	3-3/4" (95 mm)	
Engaged Projection:	5-11/16" (145 mm)	
Keeper:	25/32" x 1-1/2" (20 mm x 38 mm)	
Materials:	Cast brass with black rubber bumper	
Finishes:	US3, US10, US10B, US15, US26, US26D	
Fasteners:	One (1) #10 x 1" OPHWS, one (1) plastic anchor, one (1) 5/16-18 lead anchor,	
	one (1) 5/16-18 x 2-1/2" threaded stud, and one (1) 5/16-18 x 2-1/2" combo threaded	
	stud	
Notes:	• For use on concrete walls	
	 Ideal for interior and exterior applications 	

- Heavy duty for use in high traffic areas
- Unit functions as a stop, but can serve as a "Hold Open" when hook is manually engaged
- Ideal for use with locksets with a projection of 3" (76 mm) or less



260W

Angled Wall Stop Certification: Meets ANSI A156.16 for L02201 Projection: 3-21/32" (93 mm) Cast brass with black rubber bumper Materials: Finishes: US26D 2-3/16" wide x 2-15/16" tall (56 mm x 75 mm) Base: Three (3) #14 x 1-1/2" FPHWS, three (3) 1/4-20 x 3/4" FPHMS, three (3) plastic Fasteners: anchors, and three (3) 1/4-20 lead anchors • For use with drywall or concrete walls Notes: • Sloping design resists vandalism

• Ideal for use with locksets with a projection of 3" (76 mm) or less



324W

Notes:

Light Duty Wall Bumper Certification: Meets ANSI A156.16 for L0203 Base Diameter: 1-1/4" (32 mm) 3-1/4" (83 mm) Projection: Tip Diameter: 5/8" (16 mm) Materials: Cast brass, bronze with white rubber tip Finishes: US3, US4, US5, US10, US10B, US15, US15A, US19, US26, US26D #10 x 7/8" wood thread Fastener: • Replaceable rubber tip available

• Hex shape near the tip allows usage of a wrench for easier installation





46





326W Automatic Wall Stop & Holder

Automatic wall Stop &	Holder
Certification:	Meets ANSI A156.16 for L0129
Holder Base:	2-13/32" x 2-25/32" (61 mm x 71 mm)
Holder Projection:	2-5/16" (59 mm)
Engaged Projection:	3-5/8″ (92 mm)
Strike Base:	1" x 2-1/16" (25 mm x 52 mm)
Strike Projection:	2″ (51 mm)
Keeper:	1" x 2" (25 mm x 51 mm)
Materials:	Cast brass
Finishes:	US3, US10, US10B, US26, US26D
Fasteners:	Five (5) #10 x 1" OPHWS, three (3) 10-24 x 1-1/4" FPHMS, and three (3) plastic
	anchors
Notes:	 For use with wood or metal doors
	Holder is mounted on the door
	Dellay is service leaded to each an abuiltan beauty duby while we address on a sund

- Roller is spring loaded to seat on strike heavy duty rubber pad dampens sound and shock
- Ideal for use with locksets with a projection of 3" (76 mm) or less



327W

Automatic Wall Stop & Holder Certificatio

Meets ANSI A156.16 for L11291
3-1/16" x 3-1/2" (78 mm x 89 mm)
1-15/16" (49 mm)
3-1/2" (89 mm)
2-3/8" (60 mm)
3-1/16" (78 mm)
Cast brass
US3, US4, US10, US10B, US26, US26D
Three (3) #14 x 1-1/2" FPHWS, three (3) 1/4-20 x 3/4" FPHMS, four (4) 12-24 x
1" TPHMS, four (4) #12 x 1" TPHWS, and three (3) 1/4-20 lead anchors
 For use with wood or metal doors
 For use with drywall or concrete walls
 Roller is spring loaded to seat on strike - heavy duty rubber pad dampens sound and shock

- Strike is adjustable 45° left or right
- Holder has vertical adjustment once mounted on the door
- Ideal for use with locksets with a projection of 3" (76 mm) or less
- For doors up to 500 lbs



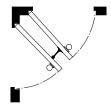


271W

Roller Bumper Certification: Base Diameter: Projection: Materials: Finishes: Fasteners: Notes:

Meets ANSI A156.16 for L02191 2" (51 mm) 4-1/2" (114 mm) Cast brass with grey rubber roller US3, US10, US10B, US26, US26D Three (3) #10 x 1" FPHWS and three (3) plastic anchors • For use when two doors swing into each other at right angles (back to back)

• Prevents damage to the door and door hardware



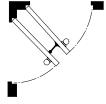


272W

Roller Bumper Certification: Base: Projection: Materials: Finishes: Fasteners: Notes:

Meets ANSI A156.16 for L02191 2" (51 mm) diameter 6-1/4" (159 mm) Cast brass with grey rubber roller US3, US10, US10B, US26, US26D Three (3) #10 x 1" FPHWS, and three (3) plastic anchors • For use when two doors swing into each other at right angles (back to back)

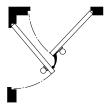
• Prevents damage to the door and door hardware



273W

Curved Roller Bumper

Certification: Projection: Materials: Finishes: Fasteners: Notes: Meets ANSI A156.16 for L12211 2-21/32" (67 mm) Cast brass with grey rubber roller US3, US4, US10, US10B, US26, US26D Three (3) #10 x 1" FPHWS and three (3) plastic anchors • Used when two doors swing into each other at odd angles • Prevents damage to the door and door hardware









241F | BL241F

Dome Stop - Low Certification: Meets ANSI A156.16 for L02141 Base Diameter: 1-11/16" (43 mm) Base Thickness: 1/8" (3.2 mm) 1″ (25 mm) Overall Height: Materials: Cast brass with grey rubber bumper US3, US4, US5, US9, US10, US10B, US15, US15A, US19, US26, US26D Fasteners: One (1) #14 x 1-1/2" FPHWS, one (1) 1/4-20 x 3/4" FPHMS, one (1) 1/4-20 lead anchor, and one (1) plastic anchor • To be used independently or in conjunction with 246B • For use when no threshold is used (door not undercut) • For use with wood or concrete floors

BL241F is 241F case quantity 50



242F

Finishes:

Notes:

Dome Stop - Universal

Donne Stop Onnve	
Certification:	Meets ANSI A156.16 for L0216
Base Diameter:	1-11/16" (43 mm)
Base Thickness:	7/32″ (5.5 mm)
Overall Height:	1-5/8 (41 mm)
Materials:	Brass with grey rubber bumper
Finishes:	US3, US4, US10B, US15, US26, US26D
Fasteners:	One (1) #14 x 1-1/2" FPHWS, one (1) 1/4-20 x 3/4" FPHMS, one (1) 1/4-20 lead
	anchor, and one (1) plastic anchor
Notes:	For use with wood or concrete floors



BL243F 243F | Dome S

Dome Stop - High	
Certification:	Meets ANSI A156.16 for L02161
Base Diameter:	1-11/16″ (43 mm)
Base Thickness:	7/16″ (11 mm)
Overall Height:	1-9/32" (33 mm)
Materials:	Cast brass with grey rubber bumper
Finishes:	US3, US4, US5, US9, US10, US10B, US15, US15A, US19, US26, US26D
Fasteners:	One (1) #14 x 1-1/2" FPHWS, one (1) 1/4-20 x 1-1/4" FPHMS, one (1) 1/4-20 lead
	anchor, and one (1) plastic anchor
Notes:	 For use with thresholds or undercut doors
	 For use with wood or concrete floors

BL243F is 243F case quantity 50



244F

Cast Floor Stop Base: Base Thickness: Overall Height: Materials: Finishes: Fasteners:

Notes:

1-3/4" x 4" (45 mm x 102 mm) 5/32" (4 mm) 1" (25 mm) Cast brass with grey rubber bumper US3, US4, US10, US10B, US26, US26D Two (2) #14 x 1-1/2" FPHWS, two (2) 1/4-20 x 3/4" FPHMS, two (2) 1/4-20 lead anchor, and two (2) plastic anchor • Heavy duty - for use in high traffic areas • For use when no thresholds are used (door not undercut) • For use with wood or concrete floors



245F **Cast Floor Stop**

Base:

Materials:

Finishes:

Notes:

Fasteners:

1-3/4" x 4" (45 mm x 102 mm) Base Thickness: 1/2" (13 mm) Overall Height: 1-5/16" (33 mm) Cast brass with grey rubber bumper US3, US4, US10, US10B, US26, US26D Two (2) #14 x 1-1/2" FPHWS, two (2) 1/4-20 x 1-1/4" FPHMS, two (2) 1/4-20 lead anchor, and two (2) plastic anchor • Heavy duty - for use in high traffic areas

- For use with thresholds and undercut doors
- For use on wood or concrete floors

246B

Diameter:

Materials:

Finishes:

Notes:

Dome Stop Riser Plate 1-3/4" (45 mm) Base Thickness: 3/8" (10 mm) Fasteners: One (1) 1/4-20 x 1" FPHMS Cast brass US3, US4, US10, US10B, US15, US15A, US19, US26, US26D For use with 241F on undercut doors, doors with thresholds, and carpeted flooring



248F

Modern Style Universal Stop

Base Diameter: Height: Materials: Finishes: Fasteners:

1-7/16" (37 mm) 1-1/2" (38 mm) Brass with black rubber bumper US26D One (1) #12 x 1-1/4" FPHWS, one (1) plastic anchor, one (1) 1/4-20 x 1" FPHMS, and one (1) 1/4-20 lead anchor



249F

Materials:

Stop face:

Fasteners:

Notes:

Base:

L-Shaped Floor Stop

1" x 2-1/2" x 7/32" thick (25 mm x 64 mm x 6 mm) Base Thickness: 1/4" (6 mm) 2-5/8" (67 mm) Overall Height: Steel Resilient black rubber Two (2) #14 x 1-1/2" FPHWS and two (2) plastic anchors 1-1/2" (38 mm) max door to floor clearance







252F Floor Stop Certification:

Base: Overall Height: Materials: Finishes: Fasteners:

Notes:

- Meets ANSI A156.16 for L02131 $1-9/16'' \ge 2-1/2''$ (40 mm x 64 mm) 2-11/16'' (68 mm) Cast brass with black rubber bumper US3, US10, US10B, US15, US15A, US19, US26, US26D One (1) #14 x 1-1/2'' FPHWS, one (1) $1/4-20 \ge 3/4''$ FPHMS, one (1) 5/16-18 lead anchor, one (1) 1/4-20 lead anchor, one (1) plastic anchor, one (1) $5/16-18 \ge 2-1/2''$ threaded stud, and one (1) $5/16-18 \ge 2-1/2''$ combo threaded stud • Heavy duty - for use in high traffic areas • For use on wood or concrete floors
- 2" (51 mm) max door to floor clearance



257F Floor Stop

гюог эсор	
Certifications:	Meets ANSI A156.16 for L02131
Base:	1-9/16" x 2-15/32" (40 mm x 63 mm)
Overall Height:	2″ (51 mm)
Materials:	Cast brass with black rubber bumper
Finishes:	US3, US10, US10B, US15, US15A, US19, US26, US26D
Fasteners:	One (1) #14 x 1-1/2" FPHWS, one (1) 1/4-20 x 3/4" FPHMS, one (1) 5/16-18 lead
	anchor, one (1) 1/4-20 lead anchors, one (1) plastic anchor, one (1) 5/16-18 x 2-1/2"
	threaded stud, and one (1) 5/16-18 x 2-1/2" combo threaded stud
Notes:	 1-3/8" (35 mm) max door to floor clearance
	 Heavy duty - for use in high traffic areas
	For use on wood or concrete floors



258F Floor Stop and Hold

Floor Stop and Holder		
Certifications:	Meets ANSI A156.16 for L01371	
Base:	1-9/16" x 2-15/32" (40 mm x 63 mm)	
Height:	3″ (76 mm)	
Keeper:	1″ x 2″ (25 mm x 51 mm)	
Materials:	Cast brass with black rubber bumper	
Finishes:	US3, US10, US10B, US15, US26, US26D	
Fasteners:	Two (2) #10 x 1" FPHWS, one (1) 1/4-20 x 3/4" FPHMS, one (1) 5/16-18 lead anchor,	
	one (1) 1/4-20 lead anchors, and one (1) 5/16-18 x 2-1/2" threaded stud	
Notes:	 1-3/8" (35 mm) max door to floor clearance 	
	 Heavy duty - for use in high traffic areas 	

- For use on concrete floors
- Manual holder ideal for interior and exterior applications
- Unit functions as a stop, but can serve as a "Hold Open" when hook is manually engaged

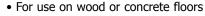






259F Tri Base Floor Stop

Base:	2-1/2" wide x 1-9/16" deep (64 mm x 40 mm)
Overall Height:	1-11/16" (43 mm)
Material:	Cast brass with grey rubber bumper
Finishes:	US3, US4, US10, US10B, US26, US26D
Fasteners:	Three (3) #10 x 1-1/4" FPHWS, three (3) plastic anchors, three (3) 10-32 x 3/4"
	FPHMS, and three (3) 10-32 lead anchor
Notes:	 1/2" (13 mm) max door to floor clearance
	 Heavy duty - for use in high traffic areas





259H

Tri Base Floor Stop - Tall

	• • • • •
Base:	2-1/2" wide x 1-9/16" deep (64 mm x 40 mm)
Overall Height:	2-1/4" (57 mm)
Materials:	Cast brass with grey rubber bumper
Finishes:	US3, US4, US10, US10B, US26, US26D
Fasteners:	Three (3) #10 x 1-1/4" FPHWS, three (3) plastic anchor, three (3) 10-32 x 3/4"
	FPHMS, and three (3) 10-32 lead anchors
Notes:	 1" (25 mm) max door to floor clearance
	 Heavy duty - for use in high traffic areas
	 For use on wood or concrete floors



267F Cast Floor Stop

Cast Floor Stop	
Certifications:	Meets ANSI A156.16 for L02131
Base Diameter:	2-1/4″ (57 mm)
Overall Height:	3-1/8″ (80 mm)
Materials:	Cast brass with black rubber bumper
Finishes:	US3, US10, US10B, US15, US15A, US19, US26, US26D
Fasteners:	One (1) #10 x 1" OPHWS, one (1) plastic anchor, one (1) 5/16-18 lead anchor,
	one (1) 5/16-18 x 2-1/2" threaded stud, and one (1) 5/16-18 x 2-1/2" combo threaded
	stud
Notes:	 2-3/8" (60 mm) max door to floor clearance
	Heavy duty - for use in high traffic areas

For use on concrete floors



267S Cast Floor Stop

Certifications: Base Diameter: Overall Height: Materials: Finishes: Fasteners: Notes:

Meets ANSI A156.16 for L02121 2-1/4" (57 mm) 3-1/8" (80 mm) Cast brass with black rubber bumper US3, US10, US10B, US15, US15A, US19, US26, US26D Three (3) #10 x 1" OPHWS and three (3) plastic anchors • 2-3/8" (60 mm) max door to floor clearance Heavy duty - for use in high traffic areasFor use on wood floors



FLOOR STOPS & HOLDERS





268F Cast Floor Stop and Holder

Cast Floor Stop and Holder		
Certifications:	Meets ANSI A156.16 for L01371	
Base Diameter:	2-1/4" (57 mm)	
Height:	3-19/32″ (91 mm)	
Keeper:	25/32" x 1-1/2" (20 mm x 38 mm)	
Materials:	Cast brass with black rubber bumper	
Finishes:	US3, US10, US10B, US15, US15A, US19, US26, US26D	
Fasteners:	Three (3) #10 x 1" OPHWS, one (1) plastic anchor, one (1) 5/16-18 lead anchor,	
	and one (1) 5/16-18 x 2-1/2" threaded stud	
Notes:	 2-1/2" (64 mm) max door to floor clearance 	
	 Heavy duty - for use in high traffic areas 	

- For use on concrete floors
- Manual holder ideal for interior and exterior applications
- Unit functions as a stop, but can serve as a "Hold Open" when hook is manually engaged



268S

Cast Floor Stop and Holder		
Certifications:	Meets ANSI A156.16 for L01361	
Base Diameter:	2-1/4" (57 mm)	
Height:	3-19/32" (91 mm)	
Keeper:	25/32" x 1-1/2" (20 mm x 38 mm)	
Materials:	Cast brass with black rubber bumper	
Finishes:	US3, US10, US10B, US15, US15A, US19, US26, US26D	
Fasteners:	Five (5) $\#10 \times 1''$ OPHWS and three (3) plastic anchors	
Notes:	 2-1/2" (64 mm) max door to floor clearance 	
	 Heavy duty - for use in high traffic areas 	
	 For use on wood floors 	

- Manual holder ideal for interior and exterior applications
- Unit functions as a stop, but can serve as a "Hold Open" when hook is manually engaged

269F

Heavy Duty Floor Stop

Certifications: Exceeds the criteria set forth for a 300-pound impact test (Report #91-04-01646) 2" (51 mm) 1-1/2" (38 mm) 5/8 - 11 x 2-1/2" thread Bumper Diameter: Bumper Height: Steel Bolt: Black rubber (fire-resistant) Materials: Notes: • Designed for high vandalism areas • Ideal for prisons where floor stops are required

· Grouted in concrete to eliminate exposed screws



269T

Heavy Duty Floor Stop Certifications:

Bumper Diameter: Bumper Height: Steel Bolt: Materials: Notes:

Exceeds the criteria set forth for a 300-pound impact test (Report #91-04-01646) 2″ (51 mm) 3-1/2" (89 mm) 5/8 – 11 x 2-1/2" thread Black rubber (fire-resistant) • Designed for high vandalism areas • Ideal for prisons where floor stops are required

• Grouted in concrete to eliminate exposed screws

326F

Automatic Floor Stop and Holder

	Certifications:	Meets ANSI A156.16 for L01301
	Holder Projection:	1-15/16" (49 mm)
	Holder Base:	3-1/16" x 3-1/2" (78 mm x 89 mm)
5	Floor Strike:	2" x 4-3/32" (51 mm x 104 mm)
	Strike Height:	1-1/4" (32 mm)
	Max Door to Floor Clearance:	1/2" (13 mm) or less
	Materials:	Brass
	Finishes:	US3, US10, US10B, US26, US26D
	Fasteners:	Three (3) #14 x 1-1/2" FPHWS, three (3) 1/4-20 x 3/4" FPHMS,
		three (3) 1/4-20 lead anchors, four (4) 12-24 x 1" TPHMS, and
		four (4) #12 x 1" TPHWS
	Notes:	• For use on wood or metal doors and wood or concrete floors
		• Ideal for heavy traffic situations that require frequent hold open
		Firm pull releases holding mechanism
		Holder has vertical adjustment once mounted on the door

Holder has vertical adjustment once mounted on the door



327F

Automatic Floor Stop and Holder		
Certifications:	Meets ANSI A156.16 for L01301	
Holder Projection:	1-15/16" (49 mm)	
Holder Base:	3-1/16" x 3-1/2" (78 mm x 89 mm)	
Floor Strike:	2-3/16" x 4-1/8" (56 mm x 105 mm)	
Strike Height:	1-3/4″ (44 mm)	
Max Door to Floor Clearance:	9/16" to 1-1/16" (14 mm to 27 mm)	
Materials:	Brass	
Finishes:	US3, US10, US10B, US26, US26D	
Fasteners:	Three (3) #14 x 1-1/2" FPHWS, three (3) 1/4-20 x 3/4" FPHMS,	
	three (3) 1/4-20 lead anchors, four (4) 12-24 x 1" TPHMS, and	
	four (4) #12 x 1" TPHWS	
Notes:	 For use on wood or metal doors and wood or concrete floors 	
	• Ideal for heavy traffic situations that require frequent hold open	
	 Firm pull releases holding mechanism 	

• Holder has vertical adjustment once mounted on the door





328F

Automatic Floor Stop and Holder

Certifications: Holder Projection:	Meets ANSI A156.16 for L01301 1-15/16" (49 mm)
Holder Base:	3-1/16" x 3-1/2" (78 mm x 89 mm)
Floor Strike:	2-3/16" x 4-1/8" (56 mm x 105 mm)
Strike Height:	2-1/4″ (57 mm)
Max Door to Floor Clearance:	1-1/8" to 1-9/16" (29 mm to 40 mm)
Materials:	Brass
Finishes:	US3, US10, US10B, US26, US26D
Fasteners:	Three (3) #14 x 1-1/2" FPHWS, three (3) 1/4-20 x 3/4" FPHMS,
	three (3) 1/4-20 lead anchors, four (4) 12-24 x 1" TPHMS,
	and four (4) #12 x 1" TPHWS
Notes:	• For use on wood or metal doors and wood or concrete floors
	• Ideal for heavy traffic situations that require frequent hold open
	 Firm pull releases holding mechanism
	 Holder has vertical adjustment once mounted on the door



329F

Automatic Floor Stop and Holder

Certifications:	Meets ANSI A156.16 for L01301
Holder Projection:	1-15/16″ (49 mm)
Holder Base:	3-1/16" x 3-1/2" (78 mm x 89 mm)
Floor Strike:	2-3/16" x 4-1/8" (56 mm x 105 mm)
Strike Height:	2-3/4″ (70 mm)
Max Door to Floor Clearance:	1-5/8" to 2-1/16" (41 mm to 52 mm)
Materials:	Brass
Finishes:	US3, US10, US10B, US26, US26D
Fasteners:	Three (3) #14 x 1-1/2" FPHWS, three (3) 1/4-20 x 3/4" FPHMS,
	three (3) 1/4-20 lead anchors, four (4) 12-24 x 1" TPHMS,
	and four (4) #12 x 1" TPHWS
Notes:	 For use on wood or metal doors and wood or concrete floors
	• Ideal for heavy traffic situations that require frequent hold open
	 Firm pull releases holding mechanism

- Firm pull releases holding mechanism
- Holder has vertical adjustment once mounted on the door





270C Kick Down Door Holder

Kick Down Door Holder

Certifications:	Meets ANSI A156.16 for L71382
Base:	1-7/16" x 2-1/8" (37 mm x 54 mm)
Arm:	3-13/16″ (97 mm)
Materials:	Cast iron with rubber tip
Finishes:	S1 - Sprayed Aluminum, S2 - Sprayed Brass, S3 - Sprayed Bronze
Fasteners:	Four (4) #6 x 3/4" OPH tapping screws
Notes:	 Provides simple hold and release with a touch of the foot
	 2-1/4" (57 mm) max door to floor clearance

Meets ANSI A156.16 for L01381

Cast brass with rubber tip

Three (3) #6 x 3/4" OPHWS

1-19/32" x 1-25/32" (41 mm x 45 mm) 3-1/2" (89 mm)

US3, US10, US10B, US15, US15A, US19, US26, US26D

• 2-1/4" (57 mm) max door to floor clearance

• Provides simple hold and release with a touch of the foot



270R

270D

Base: Arm:

Materials:

Finishes:

Notes:

Fasteners:

Certifications:

Replacement Rubber Tip	
Materials:	Rubber
Notes:	For use with 270D and 271DSold in packs of 10



271D

Kick Down Door Holder		
Certifications:	Meets ANSI A156.16 for L01381	
Base:	1-19/32" x 1-25/32" (41 mm x 45 mm)	
Arm:	4-7/16" (87 mm)	
Materials:	Cast brass with rubber tip	
Finishes:	US3, US10, US10B, US26, US26D	
Fasteners:	Three (3) #6 x 3/4" OPHWS	
Notes:	• Provides simple hold and release with a touch of the foot	
	 3-1/4" (83 mm) max door to floor clearance 	









Certifications: Overall Projection: Overall Width: Bar: Length:

Throw: Materials: Finishes: Fasteners:

Notes:

Meets ANSI A156.16 for L04161 1-3/8" (35 mm) 2-1/32" (52 mm) 3/4" x 1/4" (19 mm x 6 mm) thick 275D - 8" (203 mm) 276D - 12" (305 mm) 1" (25 mm) Steel US3, US10, US10B, US26D Eight (8) #10 x 1-1/4" FPHWS and eight (8) 10-24 x 1" undercut FPHMS • Mortise bottom strike and universal top strike included

- Strong tension springs prevent creep
- \bullet UL listed for use on inactive leaf of a pair of 3-HR labeled fire doors



278D

Surface Bolt Bolt Length: Bolt Width: Bolt Throw: Base Width: Knob Diameter: Projection: Materials: Finishes: Fasteners: Notes:

6" (152 mm) 7/16" (11 mm) 31/32" (25 mm) 19/32" (15 mm) 1/2" (13 mm) 3/4" (19 mm) Brass US3, US10B, US26D Four (4) #5 x 5/8" FPHWS • Mortise and universal strikes included

- Concealed screw design enhances appearance and security
- Permanent stop prevents bolt disengagement from track



279D

Surface Bolt

Length: 4" (102 mm) Width: 1-11/16" (43 mm) 3/8" (10 mm) Throw: Half Round Bolt Size: 5/8" (16 mm) Projection: 1-1/4" (32 mm) Knob Diameter: 29/32" (23 mm) Materials: Brass Finishes: US3, US10, US10B, US26D Fasteners: Twelve (12) #6 x 3/4" FPHWS Mortise and universal strikes included Notes:





280X

Dust Proof Strike Certifications: Face Plate: Barrel Diameter: Barrel Depth: Plunger Diameter: Materials: Finishes: Fasteners: Notes:

Meets ANSI A156.16 for L04021 1-7/16" x 2-29/32" x 1/8" depth (37 mm x 74 mm x 3 mm) 1" (25 mm) 2-3/16" (56 mm) 3/4" (19 mm) Brass US3, US4, US9, US10, US10B, US15, US15A, US19, US26, US26D Two (2) #8 x 1" FPHWS, two (2) plastic anchors, and spanner wrench • Packed unassembled with plate, strike, fasteners, and spanner wrench • May be used with carpet or threshold application by omitting face plate • Designed for use with the bottom bolt of a flushbolt set

 Spring loaded plunger returns to floor or threshold level anytime flushbolt is retracted, eliminating the need to clean out the bottom strike

281D

Slide Flush Bolt

Certifications: Faceplate: Bolt Diameter: Bolt Throw: Bolt Backset: Strike: Materials: Finishes: Fasteners: Notes: Meets ANSI A156.16 for L04201 3/4" x 6" (19 mm x 153 mm) 1/2" (13 mm) 1" (25 mm) 7/16" (11 mm) 7/8" x 1-3/4" (22 mm x 45 mm) Brass, bronze faceplate with steel components US3, US4, US5, US10, US10B, US15, US15A, US19, US26, US26D Four (4) #6 x 3/4" FPHWS Double action spring design provides automatic holding of bolt in projected or retracted position



282D

Manual Flush Bolt Certifications:

- Face Plate: Bolt Head: Bolt Throw: Standard Rod Length: Bolt Backset: Mortise Strike: Materials: Finishes: Fasteners: Notes:
- Fits ANSI A115 door and frame prep
 Meets ANSI A156.16 for L14251
 1" x 6-3/4" (25 mm x 172 mm)
 1/2" (13 mm) square
 3/4" (19 mm)
 12" (305 mm) (center of face to corner of door)
 3/4" (19 mm)
 15/16" x 2-1/4" (24 mm x 57 mm)
 Brass faceplate with steel components
 US3, US4, US5, US9, US10, US10B, US15, US15A, US19, US26, US26D
 Eight (8) #8 x 3/4" combo screws; eight (8) #8 x 1-1/2" combo screws
 For use on hollow metal/fire rated doors
 Non-handed
 Bolt head rods are adjustable
- Sold in increments of two.
- 3-Hr fire rating for metal doors up to 4 feet wide by 10 feet tall.
- 282S strike plate bag and 282P bolt head available
- Specify 282R for optional rod length of 18" (457 mm), 25" (635 mm), or 30" (762 mm) (bolt head not included)

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Manual Flush Certifications: Face Plate: Bolt Head: Bolt Throw: Bolt Backset: Mortise Strike: Materials: Finishes: Fasteners: Notes: Meets ANSI A156.16 for L14261 $1'' \times 6-25/32''$ (25 mm x 172 mm) 1/2'' (13 mm) square 3/4'' (19 mm) 3/4'' (19 mm) $15/16'' \times 2-1/4''$ (24 mm x 57 mm) Brass faceplate with steel components US3, US4, US5, US9, US10, US10B, US15, US15A, US19, US26, US26D Eight (8) #8 x 3/4'' combo screws and eight (8) #8 x 1-1/2'' combo screws • For use on wood composite/ fire rated doors • Non-handed • Bolt head rods are adjustable

• 1-1/2 hour fire rating for wood doors up to 4 feet wide by 10 feet tall



291D

Face Plate: Bolt Head: Bolt Throw: Bolt Backset: Mortise Strike: Materials: Finishes: Fasteners:

Automatic Flush Bolt Set for Wood Covered Composite Doors Certifications: B. C. D. and E Label

B, C, D, and E Label
ANSI A156.3 Type #25
1" x 8-1/2" (25 mm x 216 mm)
1/2" (13 mm) square
3/4" (19 mm)
3/4" (19 mm)
15/16" x 2-1/4" (24 mm x 57 mm)
Stainless steel and brass with steel components
US3, US4, US10, US10B, US15, US32, US32D
Six (6) $#8 \times 1''$ combo screws, three (3) $#10 \times 1''$ SMS, and two (2) plastic anchors
 Thermal lock automatically locks inactive door under high fire/heat conditions 280X dust proof strikes are recommended for use with these sets Used in pairs at top and bottom of inactive door

Notes:

- Fully automatic bolts retract when active door is opened; bolts extend when active door is closed
- Non-handed
- Bolt head rods are adjustable
- 1-1/2 hour fire rating for wood doors up to 4 feet wide by 9 feet tall



292D

Certifications:

Face Plate:

Bolt Head:

Bolt Throw: Bolt Backset:

Materials:

Finishes:

Notes:

Fasteners:

Mortise Strike:

Automatic Flush Bolt Set for Metal Doors

- A, B, C, D, and E Label ANSI A156.3 Type #25 1" x 6-3/4" (27 mm x 172 mm) 1/2" (13 mm) square 3/4" (19 mm) 3/4" (19 mm) 15/16" x 2-1/4" (24 mm x 57 mm) Stainless steel and brass with steel components US3, US4, US10, US10B, US15, US32, US32D Ten (10) #8 x 1" combo screws • Thermal lock automatically locks inactive door under high fire/heat conditions 280X dust proof strikes are recommended for use with these sets
- Used in pairs at top and bottom of inactive door
- Fully automatic bolts retract when active door is opened; bolts extend when active door is closed
- Non-handed
- Bolt head rods are adjustable
- 3-hour fire rating for metal doors up to 4 feet wide by 9 feet tall



293D

Certifications:

Face Plate:

Bolt Head:

T- Strike:

Materials:

Finishes:

Notes:

Fasteners:

Bolt Throw:

Bolt Backset:

Self Latching Flush Bolt Set for Inactive Metal Doors

- A, B, C, D, and E Label ANSI A156.3 Type #27 1" x 6-3/4" (25 mm x 172 mm) 1/2" (13 mm) square 3/4" (19 mm) 3/4" (19 mm) 1-1/8" x 2-3/4" (28 mm x 70 mm) Stainless steel and brass with steel components US3, US4, US10, US10B, US15, US32, US32D Eight (8) #8 x 1" combo screws • Thermal lock automatically locks inactive door under high fire/heat conditions • 280X dust proof strikes are recommended for use with these sets
- Consists of one 292S and one 293S for two point latching
- Inactive door remains latched until the active door is opened, releasing the automatic bottom bolt - Top bolt can be manually released by pressing plunger - Inactive door will relatch automatically when closed
- Non-handed
- Bolt head rods are adjustable
- 3-hour fire rating for metal doors up to 4 feet wide by 9 feet tall









Self Latching Flush Bolt Set for Inactive Wood Covered Composite Doors Certifications:

Face Plate: Bolt Head: Bolt Throw: Bolt Backset: T- Strike: Materials: Finishes: Fasteners: Notes:

B, C, D, and E Label ANSI A156.3 Type #27 1" x 8-1/2" (25 mm x 216 mm) 1/2" (13 mm) diameter 3/4" (19 mm) 3/4" (19 mm) 1-1/8" x 2-3/4" (28 mm x 70 mm) Stainless steel and brass with steel components US3, US4, US10, US10B, US15, US32, US32D Four (4) #8 x 1" combo screws, three (3) #10 x 1" SMS, and two (2) plastic anchors • Thermal lock automatically locks inactive door under high fire/heat conditions 280X dust proof strikes are recommended for use with these sets • May be used on doors 4 ft. wide and 9 ft. high · Consists of one 292S and one 293S for two point latching

- Inactive door remains latched until the active door is opened, releasing the automatic bottom bolt - Top bolt can be manually released - Inactive door will relatch automatically when closed
- Non-handed
- Bolt head rods are adjustable
- 1-1/2 hour fire rating for wood doors up to 4 feet wide by 9 feet tall

295M

Automatic Flush Bolt Set with Fire Bolt for Metal Doors

Certifications:	ANSI/BHMA 156.3 Type #25
Face Plate:	1" x 6-3/4" (25 mm x 172 mm)
Bolt Head:	1/2" (13 mm) diameter
Bolt Throw:	3/4" (19 mm)
Bolt Backset:	3/4″ (19 mm)
Mortise Strike:	15/16" x 2-1/4" (24 mm x 57 mm)
Materials:	Stainless steel and brass with steel components
Finishes:	US3, US4, US10, US10B, US15, US32, US32D
Fasteners:	Ten (10) #8 x 1" combo screws
Notes:	 Fire bolt is activated at 230° Fahrenheit projecting into active door
	locking leaves together - This combination eliminates the bottom flushbolt
	and eliminates floor preparation
	• Fully automatic – Bolt retracts when active door is opened - Bolt extends

- when active door is closed
- Non-handed
- Bolt head rods are adjustable
- 3-hour fire rating for metal doors up to 4 feet wide by 9 feet tall



295W

Automatic Flush Bolt Set with Fire Bolt for Wood Doors

Certifications: Face Plate: Bolt Head: Bolt Throw: Bolt Backset: Mortise Strike: Materials: Finishes: Fasteners: Notes:

ANSI/BHMA 156.3 Type #25 1" x 8-1/2" (25 mm x 216 mm) 1/2" (13 mm) diameter 3/4" (19 mm) 3/4" (19 mm) 15/16" x 2-1/4" (24 mm x 57 mm) Stainless steel and brass with steel components US3, US4, US10, US10B, US15, US32, US32D Six (6) #8 x 1" combo screws, three (3) #10 x 1" SMS, and two (2) plastic anchors • Fire bolt is activated at 230° Fahrenheit projecting into active door locking leaves

- together This combination eliminates the bottom flushbolt and eliminates floor preparation
- Fully automatic Bolt retracts when active door is opened Bolt extends when active door is closed
- Non-handed
- Bolt head rods are adjustable
- 20-min fire rating for wood doors up to 4 feet wide by 9 feet tall



296W

Automatic Flush Bolt Set for Wood Doors

Certifications: Face Plate: Bolt Head: Bolt Throw: Bolt Backset: Materials: Finishes: Fasteners:



ANSI/BHMA 156.3 Type #25 1-1/8" x 2-1/4" (29 mm x 57 mm) 1/2" (13 mm) diameter 3/4" (19 mm) 1-1/2" (39 mm) Stainless steel and brass with steel components US3, US4, US10, US10B, US15, US32, US32D Four (4) #8 x 1" SMS, two (2)#8 x 3/4" combo screws, two (2) plastic anchors

- Non-handed
- ADA compliant
- Ideal for wood veneer doors
- Only two (2) 1-1/8" diameter holes needed for easier door preparation
- Opening active door retracts top and bottom bolts
- Smaller profile adds stability to the door
- 1-1/2 hour fire rating for doors up to 4 feet wide by 9 feet tall





297C

Carry Bar Certifications: Projection: Base: Materials: Finishes: Fasteners: Notes:

ANSI/BHMA A156.3 Type #27 25/32" (20 mm) 1-3/4" x 2-1/4" (45 mm x 57 mm) Brass and stainless steel USP, US3, US10, US10B, US15, US32, US32D Two (2) 12-24 x 3/4" PPHMS w/ sex nuts

- Used when it is possible for the inactive door to be opened before the active door
- For use on pairs of doors with astragals
- For use in conjunction with a 297D or 298D coordinator
- Prevents damage to the doors and other hardware
- Carry bar is not required when the inactive door is equipped with flush bolts
- Non-handed



297D

Coordinating Device

Certifications: Base: Materials: Finishes: Maximum Astragal Overlap: Stop Height: Fasteners:

Notes:

ANSI/BHMA A156.3 Type #21A 1-3/4" x 2-1/4" (45 mm x 57 mm) Steel Black Prime Coat 1" (25 mm) 5/8" (16 mm) Seven (7) 12-24 x 1-1/4" TPHMS and four (4) #8 x 1" FPH combo screws

- For use with overall frame widths 60" (1524 mm), 72" (1829 mm), or 96" (2438 mm), consult Hager customer service if overall frame width is different than our stock sizes
- Coordinating device is 52" (1321 mm) long for all stock sizes 60" (1524 mm), 72" (1829 mm), or 96" (2438 mm)
- Filler bar is cut to length in field to match customers overall frame width
- Non-handed
- Designed for use on pairs of doors when one door needs to close before the other
- Active door lever, located nearest to the active stop, holds the active door open until the trigger mechanism is released by the closing of the inactive leaf
- Coordinator may not span the entire length of stop, 297F filler bar may be needed to fill up the extra space
- Compatible with flushbolts
- Optional mounting brackets 297M and 297N may be used when mounting other stop applied hardware
- For use with active door widths 30" (762 mm) 48" (1219 mm)
- If active and inactive doors are unequal in length, consult Hager customer service for proper sizing

	ACTIVE DOOR	INACTIVE DOOR	
	COORDINATOR	FILLER BAR	<u>*////</u>
-			-







297F Filler Bar Stop Height:

Length:

5/8" (16 mm) 18-5/8" (473 mm) (for jamb opening widths 52" – 72"); 42-5/8" (1082 mm) (for jamb opening widths 73" – 96") For use with 297D coordinator



- Lite

297M Mounting Brackets

ounding Dradit
Jamb Depth:
Stop Height:
Finishes:
Fasteners:
Notes:

4-3/4" (121 mm) 5/8" (16 mm) Black prime coat Four (4) 12-24 x 2" FPHMS and four (4) 1/4-20 x 1/2" FPHMS • For use with 297D coordinator

- For soffit width 7/8" 2-1/4" (22 mm 57 mm)
- Allows stop mounted hardware to be properly installed without damaging the coordinator, such as a parallel arm closer or a non-fire rated surface vertical rod strike

damaging the coordinator, such as a parallel arm closer or a non-



297N Mounting Bra

Mounting Brackets	
Jamb Depth:	4-1/4" (108 mm)
Stop Height:	5/8″ (16 mm)
Finishes:	Black prime coat
Fasteners:	Four (4) 12-24 x 2" FPHMS and four (4) 1/4-20 x 1/2" FPHMS
Notes:	For use with 297D coordinator
	 For soffit width greater than 2-1/4" (57 mm)
	• Allows stop mounted hardware to be properly installed without

fire rated surface vertical rod strike



298D

Gravity Coordinator

Gravity coordin	
Certifications:	ANSI A156.3 Type #21B
Base:	5-1/2" x 1-1/8" (140 mm x 29 mm)
Projection:	7″ (178 mm)
Materials:	Brass with rubber roller and nylon cam roller
Finishes:	US3, US10, US10B, US26D
Fasteners:	Two (2) #12 x 1" OPHWS, two (2) #6 x 3/4" FPHWS, two (2) #8 x
	3/4" TPHWS, and one (1) #6 x 3/4" FPHWS
Notes:	Non-handed
	• Do not use 298D coordinator in conjunction with flushbolts. Use

- 297D when using flushbolts • Gravity arm and door bracket are adjustable on the job for ease of
- Gravity arm and door bracket are adjustable on the job for ease of installation
- For use on pairs of doors with astragal on active door up to 4' (1219 mm) wide or with astragal on inactive door up to 3'-4" (1016 mm) wide or with astragal on both doors up to 2'-10" (864 mm) wide
- Minimum 3" (76 mm) header required
- Maximum astragal overlap 7/8" (22 mm)

FLUSH BOLTS & COORDINATING DEVICES



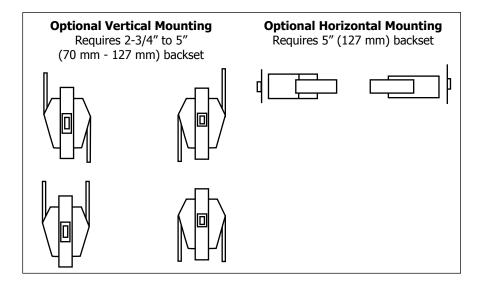


311H | 311L Push/Pull Latch Certifications:

Push & Pull levers: Escutcheons: Projection: Bolt Throw: Bolt Diameter: Backset:

Strike (TEE) - standard: Strike (ASA) - standard: Door thickness: Materials: Finishes: Notes: ANSI A156.2 Closest Equivalent (Bored Latch - Series 4000 - Grade 2) 1-15/16" x 4-1/2" (49 mm x 114 mm) 3-1/16" x 5" (78 mm x 127 mm) 2-5/8" (67 mm) 1/2" (13 mm) 3/4" (19 mm) • 2-3/4" (70 mm) - Standard • 5" (127 mm) - Optional 1-1/8" x 2-3/4" (29 mm x 70 mm) 1-1/4" x 4-7/8" (32 mm x 124 mm) 1-3/4" (45 mm) Zinc and stainless steel US26, US26D, US32, US32D • Non-handed

- Engraving is optional
- 311L is same as 311H but for use on lead lined doors





318D

Roller Latch with Tee Strike

Certifications: Roller Faceplate: Strike: Strike Gauge: Materials: Finishes: Fasteners:

Notes:

Meets ANSI A156.16 for E09091 1" x 3-3/8" (25 mm x 86 mm) 1-1/8" x 2-3/4" (29 mm x 70 mm) 0.063" (1.5 mm) Brass US3, US4, US10, US10B, US15, US15A, US19, US26, US26D Two (2) #10 x 1-1/2" FPHWS, two (2) #8 x 1" FPHWS, and two (2 8-32 x 3/4" FPHMS • Adjustable spring tension with nylon roller

- Projection of roller is easily adjusted using screws on faceplate
- Max projection of the roller is 3/8" (9.5 mm) allowing for variance in door and frame clearance



318S Roller Latch with Stop

Certifications: Roller Faceplate: Strike: Strike Gauge: Materials: Finishes: Fasteners: Notes:

Meets ANSI A156.16 for E0911 1-7/16" wide x 4-7/16" high x 11/16" angle (37 mm x 111 mm x 18 mm) 1-1/8" x 2-1/4" (29 mm x 57 mm) 0.063" (1.5 mm) Brass US3, US4, US10, US10B, US15, US26, US26D Two (2) #10 x 1-1/2" FPHWS and two (2) 8-32 x 3/4" FPHMS • Adjustable spring tension with nylon roller • Projection of roller is easily adjusted using screws on faceplate

• Max projection of the roller is 3/8" (9.5 mm) allowing for variance in door and frame clearance

320R

Roller Catch with Tee Strike Certifications: Roller Faceplate: Strike: Materials: Finishes: Fasteners: Notes:

Meets ANSI A156.16 for E0910 1-1/8" x 2-1/4" (29 mm x 57 mm) 1-1/4" x 2-3/4" x 1/16" thick (32 mm x 70 mm x 1.5 mm) Brass US3, US4, US10, US10B, US15, US26, US26D Four (4) #8 x 1" FPHWS • Adjustable spring tension with nylon roller • Projection of roller is adjusted by turning knurled knob on back of the latch

- Max projection of the roller is 7/16" (11 mm) allowing for variance in door and frame clearance
- For use with wood door and frame



321R

Adjustable Ball Catch with Strike

Roller Faceplate: Strike: Strike Gauge: Materials: Finishes: Fasteners: Notes:

1" x 2-1/8" (25 mm x 54 mm) 1-1/2" x 2-1/8" (38 mm x 54 mm) 0.050" (1.3 mm) Brass with steel ball US3, US4, US10, US10B, US15, US15A, US19, US26D Four (4) #6 FPHWS · Adjustable threaded barrel compensates for various door clearances • Adjustable spring tension

• For use with wood door and frame



340D

Materials: Finishes:

Fasteners:

Notes:

Size:

Latch Protection Plate 3" x 11" (76 mm x 279 mm) 12GA steel, stainless steel US2C, US32D Two (2) 5/16-18 x 1-1/2" carriage bolts with sex nuts • For use with 1-3/4" (45 mm) doors Non-handed • Frame pin prevents prying of door

- For use with most mortise locks
- For use with cylindrical locksets with a 3-3/4" (95 mm) backset or greater



341D

Latch Protection Plate with Lock Cut Out

Size: Materials: Finishes: Fasteners: Notes:

3" x 11" (76 mm x 279 mm) 12GA steel, stainless steel US2C, US32D Two (2) 5/16-18 x 1-1/2" carriage bolts with sex nuts • For use with 1-3/4" (45 mm) doors Non-handed • Frame pin prevents prying of door

• For use with cylindrical locksets with a 2-3/4" (70 mm) backset

345D

Latch Protection Plate

Size: Materials: Finishes: Fasteners: Notes:

1-5/8" x 10" (41 mm x 254 mm) 12GA steel, stainless steel US2C, US32D Two (2) 5/16-18 x 1-1/2" carriage bolts with sex nuts • For use with 1-3/4" (45 mm) doors • Non-handed

• For use with cylindrical locksets



1442

Strike:

Certifications:

Strike Gauge:

Materials:

Finishes:

Fasteners:

Roller Faceplate:

Roller Latch with Full Lip Strike Meets ANSI A156.16 for E09091 1" x 3-3/8" (25 mm x 86 mm) 1-11/16" x 2-1/4" (43 mm x 57 mm) 5/32" (4 mm) Brass US3, US4, US10, US10B, US15, US15A, US19, US26, US26D Two (2) #10 x 1-1/2" FPHWS, two (2) #8 x 1" FPHWS, and two (2) 8-32 x 3/4" **FPHMS** • Adjustable spring tension with nylon roller

Notes:

- Projection of roller is easily adjusted using screws on faceplate
- Max projection of the roller is 3/8" (9.5 mm) allowing for variance in door and frame clearance



1443

Roller Latch with ASA Strike

51	Certifications:	Meets ANSI A156.16 for E09101
	Roller Faceplate:	1" x 3-3/8" (25 mm x 86 mm)
	Strike:	1-1/4" x 4-7/8" (32 mm x 124 mm)
	Strike Gauge:	0.090″ (2.3 mm)
	Materials:	Brass
	Finishes:	US3, US4, US10, US10B, US15, US15A, US19, US26, US26D
	Fasteners:	Two (2) #10 x 1-1/2" FPHWS, two (2) #12 x 3/4" FPHWS, and two (2) 12-24 x 1/2"
		FPHMS
	Notes:	 Adjustable spring tension with nylon roller
		 Projection of roller is easily adjusted using screws on faceplate

• Max projection of the roller is 3/8" (9.5 mm) allowing for variance in door and frame clearance





901P

Diameter: Projection: Materials: Finishes: Fasteners: Notes:

Coat Hook - Short Single 1" (25 mm) 1-1/4" (32 mm) Brass, bronze US3, US26D #14 x 1-1/4" wood thread Concealed mounting



937P Coat Hook

Projections:

• 3-3/4" (95 mm) top hook • 2-1/2" (63 mm) bottom hook Brass, bronze US3, US26D



902P **Coat Hook - Long Single**

Diameter: Projection: Materials: Finishes: Fasteners: Notes:

1" (25 mm) 2-1/2" (63 mm) Brass, bronze US3, US26D #14 x 1-1/4" wood thread Concealed mounting

thread



940P

Materials:

Finishes:

Coat Hook - Double Overall Height: Top Projection: Bottom Projection: Material Thickness: Fasteners:

4-11/16" (119 mm) 3-15/16" (100 mm) 2-1/8" (54 mm) 1/4" (6 mm) Two (2) #10 x 1" FPHWS

903P

Coat Hook - Long Double Diameter: Projection: Materials: Finishes: Fasteners: Notes:

1" (25 mm) 2-1/2" (63 mm) Brass, bronze US3, US26D #14 x 1-1/4" wood



941P

Fasteners:

Coat Hook - Single Overall Height: Projection:

Material Thickness:

2-5/16" (59 mm) 2-1/8" (54 mm) 1/4" (6 mm) Two (2) #10 x 1" FPHWS

936P

Coat Hook Single Angled Base Diameter:

Hook Diameter: Projection: Materials: Finishes: Notes:

1-15/16" (49 mm) 11/16" (17 mm) 3-5/16" (84 mm) Brass, bronze US3, US26D Concealed mounting

Concealed mounting







945P

Overall Height: Projection: Materials: Finishes: Fasteners:

Double Coat Hook - Surface Mounting 5-1/2" (140 mm) 3-5/16" (84 mm) Brass, bronze US3, US26D Four (4) #10 x 1" FPHWS w/ anchors

5-1/2" (140 mm)

Brass, bronze

US3, US26D Two (2) #10 x 1"

3-11/16" (94 mm)

FPHWS w/ anchors

Concealed mounting



952P

Coat Hook - Single O/A Height: Projection: Materials: Finishes: Notes:

2-13/16" (71 mm) 2-7/32" (56 mm) Brass, bronze US3, US26D Concealed mounting



946P

Double Coat Hook -Concealed Mounting Overall Height: Projection: Materials:

Finishes: Fasteners:

Notes:

951P

Coat Hook - Double

O/A Height: Projection: Materials: Finishes: Notes:

5-3/4" (146 mm) 2-3/4" (70 mm) Brass, bronze US3, US26D Concealed mounting



956P **Double Coat Hook - Angled** Overall Height: Projection: Materials: Finishes: Notes:

5-11/16" (144 mm) 3-23/32" (95 mm) Brass, bronze US3, US26D Concealed mounting

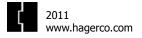


957P **Coat Hook**

Projection: Base Diameter: Materials: Finishes: Fasteners:

Notes:

1-3/4" (45 mm) 3/4" (19 mm) Brass, bronze US3, US26D #10 x 1" wood thread Concealed mounting







Edge Pull for Sliding Doors

Certification: Size: Lever Extension: Materials: Finishes: Fasteners:

22N

Meets ANSI A156.14 for D2801 31/32" x 4-1/4" x 3/8" thick (25 mm x 108 mm x 9.5 mm) 2-19/32" (66 mm) Brass US3, US26D Two (2) #6 x 3/4" FPHWS



330D **Pocket Door Latch** Certification:

Size:

Materials:

Finishes: Fasteners:

Meets ANSI A156.14 for D0821 2-3/4" x 2-1/2" (70 mm x 64 mm) Extension of Finger Piece: 1-3/8" (35 mm) Brass US3, US5, US10B, US15A, US19, US26, US26D Two (2) #6 x 5/8" OPHWS For use with 1-3/8" - 1-3/4" (35 mm - 45 mm) door



330L

Notes:

Pocket Door Privacy Latch

Certifications: Meets ANSI A156.14 for D0831 Size: 2-3/4" x 2-1/2" (70 mm x 64 mm) Extension of Finger Piece: 1-3/8" (35 mm) Strike Size: 1" x 2-1/4" (25 mm x 57 mm) Materials: Brass US3, US5, US10B, US15, US15A, US19, US26, US26D Finishes: Fasteners: Two (2) #6 x 5/8" OPHWS and two (2) #6 x 3/4" FPHWS Notes: For use with 1-3/8" (35 mm) door



330M

Pocket Door Privacy Latch Certifications: Meets ANSI A156.14 for D0831 Size: 2-3/4" x 2-1/2" (70 mm x 64 mm) Extension of Finger Piece: 1-3/8" (35 mm) 1" x 2-1/4" (25 mm x 57 mm) Strike Size: Materials: Brass US3, US5, US10B, US15, US15A, US19, US26, US26D Finishes: Fasteners: Two (2) #6 x 5/8" OPHWS and two (2) #6 x 3/4" FPHWS Notes: For use with 1-3/4" (45 mm) door



2610

Flush Cup Finger Pull

Overall Diameter: Finger Pull Diameter: Pull Clearance: Projection: Materials: Finishes: Notes:

31/32" (24.5 mm) 3/4" (19 mm) 5/16" (8 mm) 1/32" (.8 mm) Solid brass US3, US4, US5, US10A, US15, US15A, US26, US26D, ABA · For use on bi-fold, by-pass or pocket applications

· Built-in prong design eliminates the need for screws or brads





2620 Flush Cup Pull

Flush Cup Pull	
Overall Diameter:	2-1/16" (52 mm)
Finger Pull Diameter:	1-11/16" (43 mm)
Pull Clearance:	11/32" (8.7 mm)
Projection:	5/64″ (2 mm)
Materials:	Solid brass
Finishes:	US3, US4, US5, US10A, US15, US15A, US26, US26D, ABA
Notes:	 For use on bi-fold, by-pass or pocket applications
	• Built-in prong design eliminates the need for screws or brads



2630 **Flush Cup Pull**

riusii Cup Fuii	
Overall Diameter:	2-7/16″ (62 mm)
Finger Pull Diameter:	2-1/16″ (52 mm)
Pull Clearance:	11/32" (8.7 mm)
Projection:	3/32″ (2.4 mm)
Materials:	Solid brass
Finishes:	US3, US4, US5, US10A, US15, US15A, US26, US26D, ABA
Notes:	• For use on bi-fold, by-pass or pocket applications
	• Built-in prong design eliminates the need for screws or brads



2640

Oblong Flush Pull	
Size:	1-5/16" x 2-3/4" (33 mm x 70 mm)
Cup Clearance:	5/16" (8 mm)
Materials:	Solid brass
Finishes:	US3, US4, US5, US10A, US15, US15A, US26, US26D, ABA
Fasteners:	Two (2) #6 x 5/8" OPHWS
Notes:	For use on bi-fold, by-pass or pocket applications



9558 Wood Knob

9566 Knob

Diameter:

Projection: Materials:

Finishes:

Notes:

Fasteners:

Diameter: Materials: Notes:

1-1/2" (38 mm) Solid wood • For use on bi-fold applications • Will accept paint or stain



1-1/4" (32 mm) 1″ (25 mm) Die Cast Zinc US3, US4, US5, US10A, US10B, US15, US15A, US26, US26D One (1) 8-32 x 1-3/4" PPHMS and one (1) 8-32 x 2" PPHMS For use on bi-fold applications on doors 3/4" (19 mm) to 1-3/8" (35 mm) thick







9567 Rose

Base Diameter: Projection: Materials: Finishes: Fasteners: Notes:

1-3/4" (45 mm) 15/32" (12 mm) Die cast zinc US3, US4, US5, US10A, US10B, US15, US15A, US26, US26D One (1) 8-32 x 1-3/4" PPHMS and one (1) 8-32 x 2" PPHMS • For use on bi-fold applications on doors 3/4" (19 mm) to 1-3/8" (35 mm) thick • For use with 9566 knob



9865 Flush Cup Pull

Pull Clearance:

Projection: Materials:

Notes:

Overall Diameter: 1-31/32" (50 mm) Finger Pull Diameter: 1-19/32" (40 mm) 11/32" (8.7 mm) 5/64" (2 mm) Tan color ABS plastic • For use on bi-fold, by-pass or pocket applications • Built-in prong design eliminates the need for screws or brads

9882

Pocket Door Edge Pull

i ochet booi Euge i un		
Face Plate Size:	3/4" x 3 - 7/8" (19 mm x 98 mm)	
Finger Pull Extends	s: 3/4" (19 mm)	
Materials:	Solid brass	
Finishes:	US3, US4, US10, US10B, US26, US26D	
Fasteners:	Two (2) #6 x 5/8" FPHWS	
Notes:	 Ideal for narrow and standard door thicknesses 	
	 Automatic spring return 	

9884

Pocket Door Edge Pull

. oonot boon Luge .	
Faceplate:	21/32" x 3-1/2" (16.5 mm x 89 mm)
Finger Pull Extends:	1-1/16" (27 mm)
Materials:	Die cast zinc
Finishes:	US3
Fasteners:	Two (2) #6 x 5/8" FPHWS
Notes:	Ideal for narrow and standard door thicknesses







336A

Size: Thickness: Materials:

Door Edge Filler Plate - 161 Prep 1-1/8" x 2-1/4" (29 mm x 57 mm) 0.125" (3.2 mm) Primed steel



336B

Size:

Door Edge Filler Plate - 86 Prep 1-1/4" x 8" (32 mm x 203 mm) 0.180" (4.5 mm) Thickness: Primed steel Materials:



336C **Door Face Filler Plate - Deadbolt** 1-3/4" (45 mm) Size: diameter 0.055" (1.4 mm) Thickness: Primed steel Materials:



Size: Thickness: Materials:

15/16" x 2-1/4" (24 mm x 57 mm) 0.083" (2.1 mm) Primed steel



336D Door Face Filler Plate - 161 Prep Size: 2-5/8" (67 mm) diameter

Thickness: 0.055" (1.4 mm) Primed steel



336E

Materials:

Size: Thickness: Materials:

Door Edge Filler Plate - Square 1-3/4" x 4-1/2" (45 mm x 114 mm) 0.134" (3.4 mm) Primed steel



336F

Door Edge Fille	r Plate - Bevel
Size:	1-1/2" x 4-1/2"
	(38 mm x 114 mm)
Thickness:	0.134" (3.4 mm)
Materials:	Primed steel
Notes:	For handed doors



336G

Door Edge Filler Plate - Square Size:

Thickness: Materials:

1-3/4" x 5" (38 mm x 127 mm) 0.134" (3.4 mm) Primed steel



336H **Door Edge Filler Plate - Beveled** Size: 1-1/2" x 5"

(38 mm x 127 mm) Thickness: 0.134" (3.4 mm) Primed steel Materials: For handed doors

Flush Bolt Strike Filler Plate - Frame

FILLER PLATES



336K

Notes:

336J

Flush Bolt Filler Plate - Door Size: Thickness: Materials:

1" x 6-3/4" (25 mm x 172 mm) 0.134" (3.4 mm) Primed steel



336L

Hinge Filler Plate - Frame Size:

Thickness: Materials:

1-5/8" x 4-1/2" (41 mm x 114 mm) 0.134" (3.4 mm) Primed steel

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336M **Hinge Filler Plate - Frame** Size:

Thickness: Materials:

336N

Size:

Edge Prep

Thickness:

Materials:

1-5/8" x 5" (41 mm x 127 mm) 0.134" (3.4 mm) Primed steel

Latch Adapter Filler Plate - 86 to 161

1-1/4" x 8"

(32 mm x 203 mm)

0.238" (6 mm)

Primed steel



337A **Template Hinge Shim**

Size: Thickness: Materials:

1-7/16" x 4-1/2" (37 mm x 114 mm) 0.028" (0.7 mm) Primed steel

337B **Template Hinge Shim** Size: Thickness: Materials:

337C

1-7/16" x 4-1/2" (37 mm x 114 mm) 0.065" (1.7 mm) Primed steel



336P

Size: Thickness: Materials:

Deadlock Strike Filler Plate - Frame 1-1/8" x 2-3/4" (29 mm x 70 mm) 0.083" (2.1 mm) Primed steel

1-1/4" x 4-7/8"

0.093" (2.4 mm)

Primed steel

(32 mm x 124 mm)



Size: Thickness: Materials:

Template Hinge Shim 1-7/16" x 5" (37 mm x 127 mm) 0.028" (0.7 mm) Primed steel

ASA Strike Filler Plate - Frame Size: Thickness: Materials:

3360

336R

Cylindrical Lock Strike Filler Plate -Frame Size: 1-1/8" x 2-3/4"

Thickness: Materials:

(29 mm x 70 mm) 0.083" (2.1 mm) Primed steel



337D

Template Hinge Shim Size:

Thickness: Materials:

1-7/16" x 5" (37 mm x 127 mm) 0.065" (1.7 mm) Primed steel







PUSH

PULL

350H 350L Engraved Plastic S	ign - Push (350H) and Pull (350L)
Certifications:	Meets ANSI A156.16 L03201
Materials:	0.125" (3.2 mm) thick plastic
Lettering:	3/4" (19 mm) Helvetica
Size:	2" x 4" (51 mm x 102 mm)
Fasteners:	Double sided pressure sensitive tape or screws (specify)
Colors:	 Brown (W1) with white lettering
	 Black (W2) with white lettering
	 Blue (W3) with white lettering
	 Silver (B1) with black lettering
	 Gold (B2) with black lettering
Notes:	Signs are individually packed in a poly bag

MEN

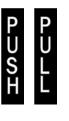
WOME

	350M 350W	
	Engraved Plastic S	ign - Men (350M) and Women (350W)
	Certifications:	Meets ANSI A156.16 L03201
	Materials:	0.125" (3.2 mm) thick plastic
N	Lettering:	3/4" (19 mm) Helvetica
	Size:	2" x 5" (51 mm x 127 mm)
	Fasteners:	Double sided pressure sensitive tape or screws (specify)
	Colors:	 Brown (W1) with white lettering
		 Black (W2) with white lettering
		 Blue (W3) with white lettering
		 Silver (B1) with black lettering
		 Gold (B2) with black lettering
	Notes:	Signs are individually packed in a poly bag

635

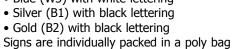
350R Engrav

Engraved Plastic Sign - Number		
Certifications:	Meets ANSI A156.16 L03201	
Materials:	0.125" (3.2 mm) thick plastic	
Lettering:	3/4" (19 mm) Helvetica	
Size:	2" x 4" (51 mm x 102 mm)	
Fasteners:	Double sided pressure sensitive tape or screws (specify)	
Colors:	 Brown (W1) with white lettering 	
	 Black (W2) with white lettering 	
	 Blue (W3) with white lettering 	
	 Silver (B1) with black lettering 	
Notes:	Signs are individually packed in a poly bag	



| 351L 351H

Engraved Plastic Sign - Push (351H) and Pull (351L)		
Certifications:	Meets ANSI A156.16 L03201	
Materials:	0.125" (3.2 mm) thick plastic	
Lettering:	3/4" (19 mm) Helvetica	
Size:	1" x 4-1/2" (25 mm x 114 mm)	
Fasteners:	Double sided pressure sensitive tape or screws (specify)	
Colors:	 Brown (W1) with white lettering 	
	 Black (W2) with white lettering 	
	 Blue (W3) with white lettering 	
	 Silver (B1) with black lettering 	
	 Gold (B2) with black lettering 	
	- · · · · · · · · · · · · · · · · · · ·	



SIGNAGE







352M | 352W

	Engraved Plastic Sign - Men (352M) and Women (352W)	
	Certifications:	Meets ANSI A156.16 L03201
1	Materials:	0.125" (3.2 mm) thick plastic
	Lettering:	3/4" (19 mm) Helvetica
	Size:	352M - 2-1/2" x 6" (64 mm x 152 mm)
		352W - 2-1/2" x 7" (64 mm x 178 mm)
	Fasteners:	Double sided pressure sensitive tape or screws (specify)
	Colors:	 Brown (W1) with white lettering
		 Black (W2) with white lettering
		 Blue (W3) with white lettering
		 Silver (B1) with black lettering
		 Gold (B2) with black lettering
	Notes:	Signs are individually packed in a poly bag

Restr

Rest

room	Engraved Plastic Sign - Restroom(s)	
	Certifications:	Meets ANSI A156.16 L03201
	Materials:	0.125" (3.2 mm) thick plastic
ooms	Lettering:	3/4" (19 mm) Helvetica
	Size:	2" x 6" (51 mm x 127 mm)
	Fasteners:	Double sided pressure sensitive tape or screws (specify)
	Colors:	Black (W2) with white lettering
		Blue (W3) with white lettering
	Notes:	Signs are individually packed in a poly bag

360M | 360W

354A | 354B

MEN WOMEN

Engraved Metal Sign - Men (360M) and Women (360W)

Certifications: Meets ANSI A156.16 L03201 Materials: 0.050" (1.3 mm) thick metal 3/4" (19 mm) Helvetica black filled Lettering: 2" x 6" (51 mm x 152 mm) Double sided pressure sensitive tape or screws (specify) Fasteners: US3, US28, US32D Signs are individually packed in a poly bag



PULL

361H | 361L

Engraved Metal Sign - Push (361H) and Pull (361L) Certifications:

Materials: Lettering: Size: Fasteners: Finishes: Notes:

Size:

Finishes:

Notes:

Meets ANSI A156.16 L03201 0.050" (1.3 mm) thick metal 3/4" (19 mm) Helvetica black filled 2" x 4" (51 mm x 102 mm) Double sided pressure sensitive tape or screws (specify) US3, US10B, US28, US32D Signs are individually packed in a poly bag



76





362H | 362L

Engraved Metal Sign - Push (362H) and Pull (362L) Cerl

Certifications:	Meets ANSI A156.16 L03201
Materials:	0.050" (1.3 mm) thick metal
Lettering:	3/4" (19 mm) Helvetica black filled
Size:	1" x 4-1/2" (25 mm x 114 mm)
Fasteners:	Double sided pressure sensitive tape or screws (specify)
Finishes:	US3, US10B, US28, US32D
Notes:	Signs are individually packed in a poly bag



364L

Plastic International Handicap Symbol Sign

Certifications:	Meets ANSI A156.16 L03201
Materials:	0.125" (3.2 mm) thick plastic 1/32" (0.8 mm) raised HANDICAP symbol
Size:	6" x 6" (152 mm x 152 mm)
Fasteners:	Double sided pressure sensitive tape standard or screws (specify)
Colors:	 Brown (W4) with raised white symbol
	 Black (W2) with raised white symbol
	 Blue (W3) with raised white symbol
Notes:	Signs are individually packed in a poly bag



364M | 364S

Plastic International Handicap Symbol Sign Cert

Certifications:	Meets ANSI A156.16 L03201
Materials:	0.0625" (1.6 mm) thick plastic raised HANDICAP symbol
Size:	364M - 4" x 4" (102 mm x 102 mm)
	364S - 3″ x 3″ (76 mm x 76 mm)
Fasteners:	Double sided pressure sensitive tape standard or screws (specify)
Colors:	Blue (W3) with raised white symbol
Notes:	Signs are individually packed in a poly bag



364N

Engraved International No Smoking Symbol Sign

Certifications:	Meets ANSI A156.16 L03201
Materials:	0.125" (3.2 mm) thick plastic
Size:	6" x 6" (152 mm x 152 mm)
Fasteners:	Pressure sensitive tape standard or screws (specify)
Colors:	Red (W4) with raised white symbol
Notes:	Signs are individually packed in a poly bag



WOMEN

365M | 365W ADA T

ADA Tactile Sign - Men (365M) and Women (365W)		
Certifications:	Meets ANSI A156.16 L03201	
Materials:	0.125" (3.2 mm) thick plastic	
Size:	6″ x 8″ (152 mm x 203 mm)	
Fasteners:	Double sided pressure sensitive tape	
Colors:	 Brown (W1) with raised white symbol 	
	 Black (W2) with raised white symbol 	
	Blue (W3) with raised white symbol	
Notes:	 Signs are individually packed in a poly bag 	
	• Grade 2 Braille Translation conforming to section 4.30 requirements	

SIGNAGE





325

366R ADA Tactile Sign - Room Number

ADA Tactile Sign	
Certifications:	Meets ANSI A156.16 L03201
Materials:	0.125" (3.2 mm) thick plastic
Size:	2-1/2″ x 5″ (64 mm x 127 mm)
Fasteners:	Double sided pressure sensitive tape
Colors:	 Brown (W1) with raised white lettering
	 Black (W2) with raised white lettering
	 Blue (W3) with raised white lettering
Notes:	 Signs are individually packed in a poly bag
	• Grade 2 Braille Translation conforming to section 4.30 requirements



366S

ADA Tactile Sign - Stairs		
Certifications:	Meets ANSI A156.16 L03201	
Materials:	0.125" (3.2 mm) thick plastic	
Size:	6" x 8" (152 mm x 203 mm)	
Fasteners:	Double sided pressure sensitive tape	
Colors:	 Brown (1) with white symbol and lettering 	
	 Black (2) with white symbol and lettering 	
	 Blue (3) with white symbol and lettering 	
Notes:	 Signs are individually packed in a poly bag 	
	Grade 2 Braille Translation conforming to section 4.30 requirements	

368E

ADA Tactile Sign - Exit

ADA Tucche orgi	EAR
Certifications:	Meets ANSI A156.16 L03201
Materials:	0.125" (3.2 mm) thick plastic
Size:	6" x 8" (152 mm x 203 mm)
Fasteners:	Double sided pressure sensitive tape
Colors:	 Brown (1) with white symbol and lettering
	 Black (2) with white symbol and lettering
	 Blue (3) with white symbol and lettering
Notes:	 Signs are individually packed in a poly bag
	• Grade 2 Braille Translation conforming to section 4.30 requirements



WOMEI

368M | 368W

ADA Tactile Sign - Men (365M) and Women (365W) with Handicap			
Certifications:	Meets ANSI A156.16 L03201		
Materials:	0.125" (3.2 mm) thick plastic		
Size:	6" x 8" (152 mm x 203 mm)		
Fasteners:	Double sided pressure sensitive tape		
Colors:	 Brown (1) with white symbol and lettering 		
	 Black (2) with white symbol and lettering 		
	 Blue (3) with white symbol and lettering 		
Notes:	 Signs are individually packed in a poly bag 		
	• Grade 2 Braille Translation conforming to section 4.30 requirements		

SIGNAGE









368U

ADA Tactile Sign - Unisex				
Certifications:	Meets ANSI A156.16 L03201			
Materials:	0.125" (3.2 mm) thick plastic			
Size:	8" x 8" (203 mm x 203 mm)			
Fasteners:	Double sided pressure sensitive tape			
Colors:	 Brown (1) with white symbol and lettering 			
	 Black (2) with white symbol and lettering 			
	 Blue (3) with white symbol and lettering 			
Notes:	 Signs are individually packed in a poly bag 			
	• Grade 2 Braille Translation conforming to section 4.30 requirements			



CCES

2001	1.1.1.1	2	•	D	
369L		36	9	ĸ	

ADA Tactile Sign - Access Left (369L) and Access Right (369R)			
Certifications:	Meets ANSI A156.16 L03201		
Materials:	0.125" (3.2 mm) thick plastic		
Size:	6″ x 8″ (152 mm x 203 mm)		
Fasteners:	Double sided pressure sensitive tape		
Colors:	 Brown (1) with white symbol and lettering 		
	 Black (2) with white symbol and lettering 		
	 Blue (3) with white symbol and lettering 		
Notes:	 Signs are individually packed in a poly bag 		
	• Grade 2 Braille Translation conforming to section 4.30 requirements		



370M 370U ADA Tactile Sign	I 370W - Restroom, Men, and Women
Certifications:	Meets ANSI A156.16 L03201
Materials:	9/16″ (14.3 mm) plastic
Size:	 370U - 12" (305 mm) diameter
	• 370W - 12" (305 mm) diameter
	• 370M - 10-1/2" (267 mm) side
Fasteners:	Double sided pressure sensitive tape
Color:	Blue (3) with white raised symbol and lettering
Notes:	 Signs are individually packed in a poly bag
	 Grade 2 Braille Translation conforming to section 4.30 requirements







Door Guard Protection Plate

1-1/8" x 1" x 1/2" (28.5 mm x 25 mm x 12.5 mm) Materials: Brass Finishes: US3, US4, US10, US10B, US15, US26, US26D • Used when additional protective plate is required for frame application Notes: • Mounted with double-sided tape

To be used with the 274D



274C Shim for Door Guard

Size: Thickness: Materials: Notes:

274B

Size:

1-1/8" x 1-1/16" (29 mm x 27 mm) 3/32" (2.3 mm) Black rubber To be used with the 274D



274D Door G

Door Guard	
Certifications:	Meets ANSI A156.16 for L13041
Arm Length:	4-1/2" (114 mm)
Materials:	Brass
Finishes:	US3, US4, US10, US10B, US15, US26, US26D
Fasteners:	Three (3) #6 x 1-1/2" OPHWS, three (3) #6 x 3/4" OPHWS, and three (3) 6-32 x 3/4" FPHMS
Notes:	 Permits door to be slightly opened to allow viewing
	 Hinged bar allows the door guard to be positioned 180 degrees away from the door

- Notes:
- when not in use
- Includes door guard protective plate 274B



300D Chain Door Check

Lengths:

Base Plate:

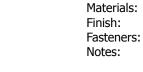
Certifications:

Meets ANSI A156.16 for L02231 25-1/2" (648 mm) recommended for use with 36" (914 mm) wide door • 30-1/2" (775 mm) recommended for use with 42" (1067 mm) wide door 1-1/2" x 1-1/2" (38 mm x 38 mm) Cast brass base with welded steel chain US26D Ten (10) #8 x 1" FPHSMS • Tear resistant grey vinyl cover

- Can be ordered through door mounting with grommet nut sets at extra charge
- 440 pound load strength
- Designed for full size exterior doors



MISCELLANEOUS











301D

Heavy Duty Hinge Pin Stop

Certifications: Materials: Finishes: Notes: Meets ANSI A156.16 for L02223 Wrought steel with rubber bumpers US3, US26D

- \bullet Works with 1/4" (6 mm) and 5/16" (8 mm) hinge pins
- For use where standard door stops are not desirable
- Positive slip proof design
- Adjustable from 70 degrees to 100 degrees
- Must purchase an NRP hinge for use with this pin stop



303W

Handrail Bracket Certifications: Base Diameter: Base to Center of Rail: Materials: Finishes: Fasteners:

Meets ANSI A156.16 for L03061 3-5/32" (80 mm) 2-3/4" (70 mm) Brass US3, US4, US10, US10B, US15A, US19, US26, US26D Three (3) #10 x 1-1/4" FPHWS, three (3) plastic anchors, three (3) 10-24 x 13/16" FPHMS, and three (3) 10-24 lead anchors



305D Wire Pull

Certifications: Diameter of Rod: Projection: CTC Lengths: Materials: Finishes: Fasteners:

Meets ANSI A156.9 for B02011 5/16" (7.9 mm) 1-9/32" (32.5 mm) 3" (76 mm), 3-1/2" (89 mm), 4" (102 mm) Brass US3, US4, US10, US10B, US26, US26D Two (2) 8-32 x 1" TPHMS

307D

Door Silencer Certifications: Diameter: Projection: Materials: Notes:

Meets ANSI A156.16 for L03011 1/2" (13 mm) 1/8" (3 mm) Rubber • For use with metal frames

• Proper installation eliminates door rattle and provides constant tension for door latches or locks



308D

Door Silencer Certifications: Projection: Base: Length: Materials: Notes:

Meets ANSI A156.16 for L0302 9/64" (3.5 mm) 3/8" x 3/4" (9.5 mm x 19 mm) 3/4" (19 mm) Rubber • For use with wood frames

- Eliminates door rattle when door is latched
- Proper installation eliminates door rattle and provides constant tension for door latches or locks



310C

Conversion Kit Filler Plate: Strike: Materials: Finishes: Notes:

1-1-8" x 3-3/8" (29 mm x 86 mm) 1-11/16" x 2-1/4" (43 mm x 57 mm) Brass US10B, US26D • Packed with filler plate, strike and fasteners

• Change door from Roller Latch to Push/Pull Latch



322V

Size: Materials:

Finishes:

Notes:

Fasteners:

Wrought Door Knocker with Viewer Certifications: Meets ANSI A156.16 for L03161 2-3/16" x 3-1/4" (56 mm x 83 mm) Brass US3, US4, US10, US26D Three (3) #6 x 3/4" TPHSMS Requires 1/2" (13 mm) hole for viewer



1755

160° Door Viewer Certifications: Materials: Finishes: Notes:

Meets ANSI A156.16 for L03222 Brass US3, US4, US5, US10A, US15, US15A, US26, US26D • For doors up to 2-1/8" (54 mm) thick, adjustable • Requires 1/2" (13 mm) hole for viewer

- Tamper resistant
- 90 minute fire rated
- One way viewer



1756 200° Door Viewer

Certifications: Materials: Finishes: Notes:

Meets ANSI A156.16 for L03221 Brass US3, US4, US5, US10A, US15, US15A, US26, US26D • For doors up to 2-1/8" (54 mm) thick, adjustable • Requires 9/16" (14 mm) hole for viewer

- Tamper resistant
- 90 minute fire rated
- One way viewer







208 Kick Down Door Stop

1-5/8" x 1-7/8" (41 mm x 48 mm) 3-7/8" (98 mm) Aluminum alloy US3, US4, US5, US10A, US15A, US15, US26, US26D, ABA Three (3) #6 x 3/4" FPHWS • Polybag (1 each) with screws • Provides simple hold and release with a touch of the foot • 3" (76 mm) max door to floor clearance



209 Floor Door Stop

Base Diameter:

Tip Diameter:

Height:

Materials:

Finishes:

Notes:

Fasteners:

Base: Arm:

Materials:

Finishes: Fasteners:

Notes:

1-1/4" (32 mm) 1-3/32" (28 mm) 19/32" (15 mm) Zinc alloy US3, US4, US5, US10A, US15A, US15, US26, US26D, ABA One (1) #8 x 2" FPHWS • Non-marking white tip • 3/8" (9.5 mm) max door to floor clearance



BL6209

Floor Door StopHeight:1-3Base Diameter:13,Tip Diameter:1/2Materials:ZinFinishes:USFasteners:#8Notes:• M

1-3/8" (35 mm) 13/16" (21 mm) 1/2" (13 mm) Zinc alloy US3, US4, US5, US10A, US15A, US15, US26, US26D, ABA #8 x 11/32" thread • Non-marking white tip

- 150 per case
- 1/2" (13 mm) max door to floor clearance
- Hex shape near the base allows usage of a wrench for easier installation



210 Rigid Door Stop

Projection: Tip Diameter: Base Diameter: Materials: Finishes: Fasteners: Notes: 3" (76 mm) 11/16" (17.5 mm) 1" (25 mm) Zinc alloy US3, US4, US5, US10A, US10R, US15A, US15, US26, US26D, ABA #8 x 5/8" thread Bumper made of rubber





211 **Flexible Door Stop**

Projection: 3-1/8" (79 mm) Tip Diameter: 9/16" (14 mm) Base Diameter: 1" (25 mm) Materials: Zinc alloy base US3, US4, US5, US10A, US10R, US15A, US15, US26, US26D, ABA One (1) #8 x 3/4" PPHWS Fasteners: • Bumper made of rubber • Flexible spring



BL6211

Finishes:

Notes:

Flexible Door Stop	
Projection:	3″ (76 mm)
Tip Diameter:	7/16″ (11 mm)
Base Diameter:	3/4" (19 mm)
Materials:	Zinc alloy base
Finishes:	US3, US4, US5, US10A, US10R, US15A, US15, US26, US26D, ABA
Fastener:	#8 x 11/32" thread
Notes:	Bumper made of rubber
	Flexible spring



212 Hinge Pin Door Bumper

100					
~	Materials:	Zinc alloy base			
	Finishes:	US3, US4, US5, US10A, US10R, US15A, US15, US26, US26D, ABA			
	Notes:	 Non-marking white plastic tip 			
		 For use with residential hinges 			
		 For use where standard door stops are not desirable 			
		For use with narrow trim			

• Adjustable from 80 degrees to 120 degrees



BL6212

Hinge Pin Door Bumper Zinc alloy base US3, US4, US5, US10A, US10R, US15A, US15, US26, US26D, ABA • Non-marking white plastic tip

- For use with residential hinges
- For use where standard door stops are not desirable
- For use with narrow trim
- Adjustable from 80 degrees to 120 degrees



1412

Materials:

Finishes:

Notes:

Door Guard Arm Length: Materials: Finishes: Fasteners: Notes:

4" (102 mm) Zinc alloy base US3, US4, US5, US10A, US15A, US15, US26, US26D, ABA Seven (7) #6 x 3/4" FPHWS • Provides extra security from inside door • Limits door opening when latch is thrown • Polybag (1 each) with screws



4

1413 Flush Bolt

Faceplate: Strike: Bolt Diameter: Bolt Throw: Bolt Backset: Materials: Finishes: Fasteners: Notes:

3/4" x 6" (19 mm x 181 mm) 7/8" x 1-3/4" (22 mm x 45 mm) 1/2" (13 mm) 15/16" (24 mm) 7/16" (11 mm) Brass faceplate with steel components US3, US4, US5, 10A, 10R, US15A, US15, US26, US26D, ABA, AN Four (4) #6 x 3/4" FPHWS • Polybag (1 each) with strikeplate and screws • Square corners

1414 Flush Bolt

Faceplate: Strike: Bolt Diameter: Bolt Throw: Bolt Backset: Materials:

Finishes: Fasteners: Notes:

3/4" x 6" (19 mm x 181 mm)
7/8" x 1-3/4" (22 mm x 45 mm)
1/2" (12.7 mm)
15/16″ (24 mm)
7/16″ (11 mm)
Brass faceplate with steel components
US3, US4, US5, 10A, 10R, US15A, US15, US26, US26D, ABA, AN
Four (4) #6 x 3/4" FPHWS
 Polybag (1 each) with strikeplate and screws
Rounded corners



1415

Strike Plate Size: Finishes: Fasteners: Notes:

 $7/8" \times 1-3/4"$ (22 mm x 45 mm) US3, US10A, US15A, US15, US26D Two (2) #6 x 3/4" FPHWS • For use with 1413 and 1414 Flush Bolts • Packed (1 each) with Polybag and screws

Packed (1 each) with Polybag and

- - - -

1416 Single Route Flush Bolt

Faceplate: Strike: Bolt Diameter: Bolt Throw: Bolt Backset: Materials: Finishes: Fasteners: Notes:

3/4" x 7-1/8" (19 mm x 181 mm) 21/32" x 1-1/2" (17 mm x 38 mm) 5/16" (8 mm) 7/8" (22 mm) 3/8" (9.5 mm) Brass faceplate with steel components US3, US4, US5, US10A, US10R, US15A, US15, US26, US26D, ABA Two (2) #8 x 1-1/2" FPHWS and two (2) #6 x 3/4" FPHWS • Polybag (1 each) with strikeplate and screws • Rounded corners

• Single route for quick and simple door prep

1418

Flush Bolt with Extension Rod

Faceplate: Strike: Bolt Diameter: Bolt Throw: Bolt Backset: Extension Rod Length: Materials: Finishes: Fasteners: Notes:

23/32" x 7-3/8" (18 mm x 187 mm) 5/8" x 1-1/2" (16 mm x 38 mm) 5/16" (8 mm) 3/4" (19 mm) 3/8" (9.5 mm) 16" (406 mm) Brass faceplate with steel components US3, US4, US5, US10A, US10R, US15A, US15, US26, US26D, ABA Two (2) #8 x 1-1/2" FPHWS and two (2) #6 x 3/4" FPHWS • Polybag (1 each) with strikeplate and screws • Rounded corners Single route for quick and simple door prep

1419

Flush Bolt with Extension Rod

Faceplate: Strike: Bolt Diameter: Bolt throw: Bolt Backset: Materials: Fasteners: Finishes: Notes:

3/4" x 7-1/8" (19 mm x 181 mm) 5/8" x 1-1/2" (16 mm x 38 mm) 5/16" (8 mm) 3/4" (19 mm) 5/16" (8 mm) Brass faceplate with steel components Two (2) #8 x 1-1/2" FPHWS and two (2) #6 x 3/4" FPHWS US3, US4, US10A, US10R, US15, US26, US26D, ABA, AN Single route for quick and simple door prep

1439 | BL6439

Catch: Strike: Materials: Fasteners: Notes:

Magnetic Catch - Light Weight

1-1/16" x 2" (27 mm x 51 mm) 7/8" x 1" (22 mm x 25 mm) Tan plastic case Two (2) #6 x 1/2" TPHWS and one (1) #4 x 1/2" FPHWS • Polybag (1 each) with screws • Double sided magnet, self-aligning, 6 lb. pull

- Self aligning magnet insures maximum pull
- BL6439 is Builder's Pack Polybag (1 each) with screws

1445 **Roller Latch**

Hole Diameter: Hole Depth: Materials: Finishes: Fasteners: Notes:

13/16" (21 mm) 1-1/8" (29 mm) Zinc allov base US3, US4, US5, US10A, US10R, US15A, US15, US26, US26D, ABA Two (2) #4 x 3/4" FPHWS • Polybag (1 each) with screws

- Designed for use on cabinets and lightweight doors
- Not intended for heavy weight applications





1446 **Light Weight Ball Catch**

Faceplate:	1" x 2-1/4" (25 mm x 57 mm)	
Strike:	1-3/8" x 2-1/4" (35 mm x 57 mm)	
Hole Diameter:	1″ (25 mm)	
Hole Depth:	1-1/4" (32 mm)	
Materials:	Zinc	
Finishes:	US3,US4, US5, US10A, US10R, US15A, US15, US26, US26D	
Fasteners:	Four (4) #6 FPHWS	
Notes:	Designed for use on cabinets and light weight doors	
	Net intended for begins weight anglighting	

- Not intended for heavy weight applications
- Ball adjusts in and out for various door and frame clearances
- Polybag (1 each) with steel screws



1447 **Light Weight**

Light Weight Ball Catch			
Strike:	1-3/8" x 2-1/4" (35 mm x 57 mm)		
Faceplate:	1" (25 mm) diameter		
Hole Diameter:	15/16" (24 mm)		
Hole Depth:	1-1/4″ (32 mm)		
Materials:	Zinc		
Finishes:	US3, US4, US5, US10A, US10R, US15A US15, US26, US26D		
Fasteners:	Two (2) #6 FPHWS		
Notes:	 Designed for use on cabinets and light weight doors 		
	 Not intended for heavy weight applications 		
	 Ball adjusts in and out for various door and frame clearances 		
	 Polybag (1 each) with steel screws 		

Polybag (1 each) with steel screws



1448

Strike Plate 1-3/8" x 2-1/4" (35 mm x 57 mm) Size: US3, US4, US5, US10A, US10R, US15A, US15, US26, US26D, ABA Finishes: Two (2) #6 FPHWS Fasteners: Notes: For use with 1446 and 1447 ball catches



1449 **Drive In Ball Catch**

Brive In Bull Guten	
Faceplate:	1" (25 mm) diameter
Hole Diameter:	15/16" (24 mm)
Hole Depth:	1-1/4" (32 mm)
Materials:	Zinc
Finishes:	US4
Packaging:	100 per box
Notes:	• Ball catch designed for use on cabinets and light weight doors
	Not intended for heavyweight applications
	- Dell adjusts in and out for verious door and frame depresses

• Ball adjusts in and out for various door and frame clearances





BL6793

Pole Sockets Outside Diameter: Materials: Notes:

2-7/16" (62 mm)

Steel

- For poles up to 1-3/8" (35 mm) diameter
- Flange design prevents accidental knock out of pole
- Polybag (2 each) with screws



Pole Sockets

Materials:

Notes:

Outside Diameter: 2-3/16" (56 mm) Plastic • For poles up to 1-3/8" (35 mm) diameter • Polybag (2 each) with screws



1795

Closet Rod Pole Diameter: Materials: Finishes: Notes:

1" (25 mm) Steel with bright zinc finish White enamel • Quick mount end • High strength lock seam tubing

• Polybag (1 each) with screws

1797

Shelf Bracket Materials: Finishes: Fasteners:

Notes:

Steel ANSI B04051 White Enamel Two (2) #8 x 3/4" PPH tapping screws and two (2) #10 x 1-1/2" PPH tapping screws

• For shelf and rod support

- Double welded heavy gauge steel construction embossed for added strength
- Holds 1-3/8" (35 mm) diameter rod
- Supports 12" (305 mm) shelf
- Bulk with screws







1798 Shelf Bracket

Materials: Finishes: Notes: Steel ANSI B04051 White Enamel • For shelf and rod support

- Heavy gauge steel construction embossed for added strength
- Holds 1-3/8" (35 mm) diameter rod
- Supports 12" (305 mm) shelf
- Bulk with screws



1799

Shelf Bracket - Adjustable

Materials: Finishes: Fasteners: Notes: Steel ANSI B04051
White Enamel
Two (2) #8 x 3/4" PPH tapping screws and two (2) #10 x 1-1/2"
PPH tapping screws
Adjustable shelf and rod support
Heavy gauge steel construction embossed for added strength
Holds 1-3/8" (35 mm) diameter rod

- Supports 12" (305 mm) shelf
- 3/4" (19 mm) adjustability
- Bulk with screws

\triangleright

1801 Shelf Bracket Materials:

Materials: Finishes: Fasteners:

Notes:

Steel ANSI B04051 White enamel Two (2) #8 x 3/4" PPH tapping screws and two (2) #10 x 1-1/2" PPH tapping screws • Less rod support

- Heavy gauge steel construction embossed for added strength
- Supports 12" (305 mm) shelf
- Bulk with screws



6601

Handrail Bracket

Projection: Base to Center of Rail: Materials: Finishes: Fasteners: Notes: 3-1/4" (82.5 mm) 2-3/4" (70 mm) Cast aluminum US3, US4, US5, US10A, US10R, US15, US15A, US26, US26D, ABA Three (3) #8 x 1-1/2" OPHWS and two (2) #8 x 3/4" OPHWS Polybag (1 each) with wood screws and rail bracket





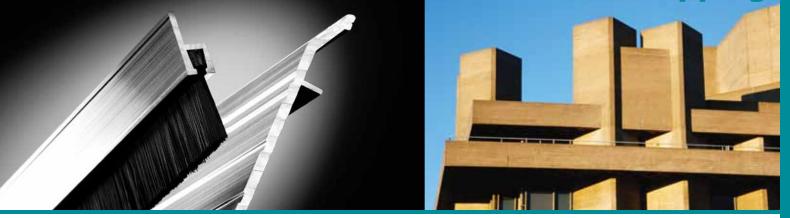
BL6610

Coat and Hat Hook Upper Projection: Lower Projection: Material: Finishes: Fasteners: Notes:

2-13/16" (71 mm) 1-5/16" (33 mm) Cast steel US3, US4, US5, US10A, US15A, US15, US26, US26D, ABA Two (2) #6 x 3/4" FPHWS • Polybag (1 each) with screws • Builder's pack



Thresholds & Weatherstripping



Hager Companies offers a complete line of thresholds and weatherstripping products for virtually any type of door application. What's more, each meets or exceeds ANSI-grade quality, durability, and performance levels. For enhanced levels of safety and security, we also offer intumescent products for positive pressure solutions, including edge sealing and smoke control systems. All of which make Hager threshold, weatherstripping, and door bottom products an excellent choice for standard or custom applications in schools, hospitals, office buildings, and more.



PRODUCT PRESENTATION

Dimensions on bronze and stainless steel extrusions may differ slightly than those detailed. Questions regarding any dimensions should be directed to Hager Companies.

Drawings or illustrations used in the catalog are subject to change without notice. Questions on any dimensions should be obtained by contacting Hager Companies Customer Service.

FABRICATION OPTIONS

- Bevel One Edge of Threshold
- Rip One Edge Width of Threshold
- L-Notch Both Ends of Threshold
- U-Notch Both Ends of Threshold
- Miter Single One End of Threshold
- Miter Single Both Ends of Threshold
- Miter Double One End of Threshold
- Miter Double Both Ends of Threshold
- Tack Weld One Line of Threshold
- Pan for Water Return of Threshold
- Sure Step Anti-Skid Abrasive Finish A rugged, durable coating that can be applied to all Hager Companies' metal thresholds. Ideal for thresholds being used in wet, oily or corrosive environments.

MATERIALS & FINISHES

Metals

All aluminum extrusions are of alloy 6063-T5. All bronze extrusions are of alloy CDA385 brass specified as Architectural Bronze in the industry.

For stock finishes, refer to the code listed below each individual item throughout the catalog. Please inquire for the availability on nonstock finishes.

- MIL-mill finish aluminumMIB-mill finish bronzeCAL-cast aluminumGYP-primed steel greyDBA-dark bronze anodized aluminumSCA-Hager Sure Step on aluminumgLD-gold anodized aluminumCLR-clear anodized aluminumLBA-light bronze anodized aluminumSCB-Hager Sure Step on bronzeWHP-white paint on aluminumUSP-Prime coat
 - Notes: Threshold profiles shown refer to aluminum material only, dimensions may vary for mill finish bronze thresholds.

Gaskets

Gasketing is available in a wide variety of materials. Vinyl is an economical choice and remains flexible down to -40° F (-40° C). EPDM gasketing is supplied both as a solid (dense) and as a closed cell sponge with a tough outer skin. It remains flexible down to -50° F (-49° C). Silicone gasketing provides the best resistance to cold by remaining flexible down to -70° F (-57° C). Gasketing codes are listed below.

- **B** nylon brush
- N neoprene, solid EPDM, closed cell sponge EPDM, TPE
- S silicone
- V vinyl
- **W** pile (Thread may be removed to allow expansion)
- F vinyl with fins

ORDERING INFORMATION

When ordering, please specify by product number, length, quantity, finish and fasteners required. Thresholds and weatherstripping are fabricated in standard sizes with 1/2" (12.7 mm) extra on thresholds 50" (1270 mm) and under. Thresholds over 50" (1270 mm) are supplied with 1" (25 mm) extra length for fitting. Exact lengths are available upon request.

All lengths over 12 feet (3.66 m) must be purchased and are billed at 15 feet (4.57 m). All thresholds must be purchased and are billed at 4" (101.6 mm) increments except abrasive cast aluminum thresholds & auto door bottoms. Weatherstripping must be purchased and is billed at 4" (101.6 mm) increments, 42" (1066 mm) and 86" (2184 mm) sizes excluded.

Example:	<u>891S V 36 x 84 MI</u>		
<u>Item #</u>	Gasketing	Size	<u>Finish</u>
515S	W-pile	36″ (914 mm)	MIL - mill finish aluminum
599S	V-vinyl	48″ (1219 mm)	DBA - dark bronze anodized aluminum
750S	S-silicone	36″ (914 mm)	32D - matte stainless steel
870S	N-neoprene	36" x 84" (914 mm x 2133 mm)	MIB - mill finish bronze
882S	B-nylon Brush	48" x 96" (1219 mm x 2438 mm)	CLR - clear anodized aluminum





FASTENERS Standard

All products are furnished with appropriate fasteners as listed, except where noted. Most thresholds are furnished with mounting holes and #10 x $1-1/2^{"}$ flat head sheet metal screws. Most weatherstripping products are furnished with slotted holes and #6 x 5/8" pan head sheet metal screws. Brass screws are furnished with bronze products.

Optional

Thresholds

#10 wood screws and plastic anchors

#10 wood screws and lead anchors

#10 machine screws and lead anchors

 $1/4\mathchar`-20$ machine screws and lead anchors

#10 stainless steel wood screws

#10 stainless steel wood screws and plastic anchors

#10 stainless steel wood screws and lead anchors

1/4-20 stainless steel machine screws and lead anchors

- 1/4-20 x 2" flat head sleeve anchor
- #10 x 1-1/4" stainless steel flat torx wood screws

 $#10-24 \times 1-1/2''$ stainless steel flat torx machine screw with leach anchor

 $\#10\mathchar`-24\ x\ 1\mathchar`-1/2"$ stainless steel spanner head wood screw with lead anchor

Cast-on anchors (cast products only) Tap-con type (1/4" x 1-3/4")

Weatherstripping

#6 x 5/8" pan-head stainless steel screws
#6 x 5/8" self-tapping (TEK) screws
#6 x 5/8" pan-head security torx sheet metal screws
#6 x 5/8" stainless steel self-tapping (TEK) screws
1/4 - 20 x 1-1/4" sex bolts
Two-way self-adhesive tape

GENERAL INSTALLATION INSTRUCTIONS PRESS-ON PRODUCTS:

- Installation should take place after construction has been completed, and final cleaning has taken place
- The frame should be cleaned; isopropyl alcohol is recommended
- Not recommended for unsealed or porous applications
- Do not store these products in extreme heat/cold or for prolonged periods of time

CERTIFICATIONS

Handicap Accessibility



Products denoted by this symbol are designed for applications where handicap accessibility is specified. These products are no greater than 1/2" (12.7 mm) in height and have no more than 1/4"

(6.3 mm) vertical rise or with slope proportions no greater than 1:2 slope. Offset floor conditions greater than 1/2'' (12.7 mm) require a 1:12 slope.

Air Infiltration



Products denoted by this symbol have been tested with air/smoke infiltration, all within the 0.500 cfm/ ft. maximum allowable leakage at a pressure of a 25 mph wind (1.56 psf). The tests were conducted in accordance with ASTM test procedures and meet ASTM: E283-91.

Sound Tested



Products denoted by this symbol have been sound tested and received the appropriate STC rating. The tests were conducted in accordance with ASTM test procedures and meet ASTM: E90-90 & ASTM: E413-87.

STC Rating Static Door	STC Rating Operable Door	Perimeter Seal	Automatic Door Bot- tom	Threshold
44	40	726	743S	520S
41	39	726 (2)	743S	520S

BHMA Certified



BHMA Certification Program was developed as a means for producers of builders hardware

to indicate compliance with American National Standards sponsored by BHMA. Participating manufacturers certify compliance with the standards based on a continuing program of passing the prescribed tests.

Underwriter's Laboratories



Products denoted by this symbol are classified and labeled by Underwriter's Laboratories, Inc.® as gasket material for use on listed steel frames and/ or classified swinging type fire doors of the hollow

metal or steel covered composite type rated up to 3 hours, or wood core fire doors rated up to 1-1/2 hours. Test results show these products do not adversely affect the fire resistance of the door or frame according to its UL rating. All products are regularly checked under a labeling and listing service. The clearance between the door and the frame and between the meeting edges of doors swinging in pairs shall be $1/8'' \pm 1/16''$ (3.18 mm ± 1.59 mm) for steel doors and shall not exceed 1/8'' (3.2 mm) for wood doors.

Notes: Ratings on some items may vary and are noted on the individual products. Classifications may be viewed at www. ul.com/database.





POSITIVE PRESSURE UBC 7-2 (1997) PART I



UBC 7-2 (1997) tells you the product has been positive pressure tested to the new standard. Part I of this symbol designates the fire test. Since this symbol is used to designate the positive pressure

fire test and does not differentiate between categories "G" and "J", additional information is needed. Products intended for use as edge sealing systems need to be labeled as such or list category "G" in their literature. Without this information, the product is category "J"; fire tested to the new standard of positive pressure.

Fire Test - Category G

Gaskets that are Edge-Sealing Systems. Category "G" - Edge-Sealing Systems are for use with fire doors requiring an edge seal to meet positive pressure code requirements. These systems are surface-applied to either the perimeter of the door frame or meeting edges of door pairs. Category "G" gaskets are usually intumescent material; this material will swell many times its original size during a fire and help contain the spread of fire by sealing the edges of the door. A category "G" gasket can be used as a smoke control gasket if it passes the UBC 7-2 (1997) Part II test for smoke.

Fire Test - Category J

Products that are positive pressure tested to determine that they do not contribute to flaming during a fire; they do not provide an edge-sealing system. Examples are gaskets used for sound, draft control or automatic door bottoms. A category "J" gasket can be used as a smoke control gasket only if it passes the UBC 7-2 (1997) Part II test for smoke control.

POSITIVE PRESSURE UBC 7-2 (1997) PART II



UBC 7-2 (1997) tells you the product has been positive pressure tested to the new standard. Part II of this symbol designates the test for smoke. Gaskets passing the smoke test receive a category

"H" rating. This symbol includes the Part I designation since all smoke control gaskets are positive pressure fire tested. Should the gasket pass the Part I fire test with a category "G" rating it would be a combination edge-sealing system and smoke seal gasket. If the gasket passes Part I with a category "J" rating, it is simply a smoke seal, that has passed the new positive pressure fire test to prove that it does not contribute to flaming during a fire.

Smoke and Draft Control Test - Category H



Assigned to gaskets that pass UBC 7-2 (1997) Part II. This is a separate second test that does not involve fire. All gaskets being tested for smoke must initially be fire tested under the requirements of UBC 7-2

(1997) Part I and receive a category "G" or "J" rating before being smoke tested. UBC 7-2 (1997) Part II tests the gasket for its ability to control smoke at an elevated temperature (400°F) (204°C). Smoke seals are used on the frames of doors that have an "S" on their fire-rating label to complete the installation instructions and satisfy the code requirements for a Smoke Control Door.

SOLUTIONS FOR FIRE SAFETY

Hager Companies is committed to life safety by providing sealing systems to contain fire and prevent the spread of smoke.

Gaps needed between a door and its frame for everyday operation create an area of vulnerability for the passage of flames and smoke during a fire. The rapid expansion of gases generated by a fire in a closed room creates an area of positive pressure that forces flames and smoke through these gaps. Hager Companies' Edge Sealing Systems and Smoke Seals create a barrier and aid in securing these areas during a fire.

Hager seals and gaskets stop the spread of fire and smoke. Benefits of Hager Companies' products include:

- Hager Companies' products have extensive approvals and listings from both ITS/Warnock Hersey and Underwriters Laboratories
- Choice of bulb seals or batwing smoke systems for smoke control doors requiring the addition of a smoke seal to validate their "S" label
- Option of co-extruded combination fire and smoke seals offer a superior alternative to separate application of a bulb seal and intumescent edge seal
- Cost-effective, easy retrofit installation solution for positive pressure code compliance
- Unique coordinated designs provide protection against fire and smoke
- Comprehensive range of sizes including customized requirements to suit all applications

In 1997, the International Council for Building Officials (ICBO) approved a change to the Uniform Building Code (UBC) regarding fire-testing methods.

This code change requires fire doors to be fire tested under positive pressure instead of neutral pressure. The main difference between tests performed under positive pressure and neutral pressure is the location of the neutral plane and the introduction of positive pressure as part of the test. Under the new code, everything above 40" (1016 mm) is subject to testing under positive pressure conditions.

The change in the test method has led to a generation of gaskets that incorporate intumescent material to address the demands of positive pressure. Along with these new products are new terminology and new code requirements.





Below are some key phrases that indicate positive pressure requirements:

- UBC 7-2 (1997) UBC Fire Test
- IBC 2003 (and later) International Building Code
- UL 10-C Positive Pressure Fire Test
- ASTME-2074-00 Fire Test of Door Assemblies
- Shall meet positive pressure requirements
- Intumescent seals imply positive pressure

Over 35 states have adopted the new positive pressure requirements. The www.iccsafe.org web site of the International Code Council (ICC) has a map of code adoption by state. This site is frequently updated and by clicking on a state, you can see what states have adopted the new positive pressure requirements. The www.iccsafe.org site also provides information on all other building codes and where available, lists enforcement at the local level.

Basic Requirements for an Opening to be Classified as Fire Rated

The wall, frame, and door all have to be fire rated. This is selfexplanatory, as it would not make much sense to put a labeled door in a non-rated wall just as you cannot put a non-labeled door in a rated wall and call the opening fire rated. The purpose of a fire rated opening is to retard fire for a specific length of time. All components of the opening have to be rated. When an opening is also required to be "S" (smoke) labeled then additional gasketing items will be required to comply with the code.

Every swinging fire door must have a listed and labeled selflatching device to engage the strike to be fire rated. Push and pull plates cannot be used on a fire rated door. The door has to latch into the frame when closed so it stays closed. The latch prevents the door from opening during a fire if something falls against it. This means you must use at least a passage lock set on the door. Deadbolts cannot be used in place of a latching device because they are not self-latching.

Steel ball bearings and steel based hinges must be used on fire rated doors. Brass, bronze and other base materials cannot be used, unless tested as an assembly. Continuous hinges are allowed as tested. Plain bearing hinges cannot be used. Bearing hinges minimize wear from everyday operation and help prevent door sag. During a fire, the door needs to operate smoothly so closers and latching devices work properly. Some manufacturers may provide doors with non-bearing type hinges only when they are part of the listed assembly.

The door must be self-closing to be fire rated. A properly sized, listed and labeled closing device is part of basic fire door hardware requirements. If the door is left open during a fire, then that opening cannot retard the fire as it was meant to do; the door needs to close after somebody passes through it. This is usually done by a door closer or, in some cases, spring hinges.

Fire rated and listed louvers can be installed on fire doors but they have to be a fusible link type. This means that once the heat from the fire reaches a certain temperature (usually $105^{\circ}F$) (41° C), the fusible link will melt which causes the louver blades to close. This will help prevent the spread of fire. The maximum size for these louvers is 24" x 24" (610 x 610 mm). There is no glass allowed in a fire rated door if it has a louver and no louvers at all can be installed in a 3-hour rated door.

Basic fire door frames do not have hourly ratings. The exception being frames specially labeled for less than 3 hours. Frames bearing a recognized fire label may support a 3-hour, 1-1/2-hour, 3/4-hour or a 1/3-hour door. Frames used in masonry walls can be used with a maximum 3-hour fire door. While frames in drywall are intended for use with fire doors rated up to 1-1/2-hour, some manufacturers have tested for a 3-hour frame in drywall. Verify with your manufacturer for individual listing.

Remember, these are basic requirements. Codes differ from area to area and are enforced by the Authority Having Jurisdiction (AHJ)





The purpose of a fire rated opening is to retard fire for a specific period of time.

The hourly designation indicates the duration for the fire test exposure and is known as the fire protection rating.

A label: 3-hour rating (for a 4-hour wall): These doors are used for openings in walls separating buildings that are joined together. They are metal doors and glass is allowed as tested. "A" label doors might not require additional seals applied to the frame, check with your individual manufacturer's procedure. Typically, a hollow metal door needs no added seals. Metal and some composite doors expand when heated. The door itself effectively seals the opening and often does not require the addition of an edge sealing system for the fire label. However, this door would still need a smoke gasket if it were functioning as a smoke control door.

B label: 1-1/2-hour rating (for a 2-hour wall): These doors are usually used for stairwell doors but are sometimes used at all the rated walls in a building (i.e., mechanical or electrical rooms). One-hundred square inches of exposed glass per door leaf is allowed. These are mostly wood composite and hollow metal doors. A "B" label 1-hour rating (1-hour wall) exists for use in buildings less than four stories tall; this rating currently only applies to wood doors. "B" label fire doors require the addition of an edge-sealing system (category "G" gasket) to the frame to comply with the new positive pressure test method. Some wood doors do not require the additional category "G" gasket; check with your manufacturer for availability.

C label: 3/4-hour rating (for a 1-hour wall): These doors are used for openings from a corridor into another room in the same building. 1,296 square inches of exposed glass is allowed per vision light. These are mostly wood composite doors. "C" label fire doors require the addition of an edge-sealing system (category "G" gasket) to the frame to comply with the new positive pressure test method. Some wood doors do not require the additional category "G" gasket, check with your manufacturer for availability.

D label: 1-1/2-hour rating (for a 2-hour wall): These are hollow metal doors used in exterior walls subject to severe fire exposure from outside the building. One-hundred square inches of exposed glass per door leaf is allowed. Check with your manufacturer's listing for the addition of a category "G" gasket to meet positive pressure requirements.

E label: 3/4-hour rating (for a 1-hour wall): These are hollow metal doors used in exterior walls subject to moderate to light fire exposure from the outside of the building. 1,296 square inches of exposed glass is allowed per vision light. Check with your manufacturers listing for the addition of a category "G" gasket to meet positive pressure requirements.

1/3-hour door: 20-minute rating (for a 1-hour wall): These doors do not have a letter designation for their rating and can be a wood or particle core door. 1,296 square inches of exposed glass is allowed per vision light. They are tested with or without hose stream. Doors tested without hose stream are specially labeled: "Twenty Minute-Rating Without Hose Stream". These doors are used on condo/apartment entrances, offices of a 1-hour rated corridor wall and other applications where smoke and draft control is the primary concern.

S Label: The letter "S" is the designation on a door's fire label indicating it can be used as a Smoke Control Door. Door manufacturers are allowed to put an "S" on a fire label when the door opening has passed the air infiltration test. The door opening does not become approved for a Smoke and Draft Control unit until an approved category "H" gasket system has been installed on the frame. The federal government, many owners and some states require at least some openings to be labeled for smoke as well as fire. This is not limited to 20-minutes but includes all fire labeled doors that are rated 20-minutes and above. The addition of an approved category "H" smoke control gasket completes the installation instructions necessary to validate the labeled door to become a Smoke Control Door.

All of the labels listed above have the capability of being both fire and smoke barrier openings, however, not all openings require smoke labels under UBC 7-2 (1997). Openings requiring smoke labels are detailed either by the fire authority having jurisdiction, local code, NFPA 101 or NFPA 5000.



New and existing fire doors are classifed/labeled by one of the following designation systems:

Hourly rating designation 🛛 🐇 Alphabetical letter designation

A combination of both

Common Applications for Hager Positive Pressure Edge Sealing & Smoke Seal Systems

Wall Rating	Door and Frame Rating	Door Application and Use	Door Types		Fire Doors Edge Sealing System	Smoke Doors "S" Label Smoke Seal	Fire & Smoke Doors Combination Seal
4 Hr.	3 Hour (A Label) 180 Minute	Openings in fire walls and walls that divide a single building into fire areas	Hollow Metal Hollow Metal	Pairs Singles	—	721, 726, 736 721, 726, 736	—
2 Hr.	1 ^{1/2} Hour (B Label) 90 minute	Openings to stairwells and elevator shafts; vertical communication or egress through a building, including 2-hr. rated partitions providing horizontal fire separations	Wood Composite Hollow Metal Wood Composite Hollow Metal	Pairs Pairs Singles Singles	724, 729 — 724, 729 —	721, 726, 736 721, 726, 736 721, 726, 736 721, 726, 736 721, 726, 736	719, 720, 722, 734 719, 720, 722, 734
2 Hr.	1 ¹ /2 Hour (D Label) 90 minute	Opening where there is a chance of severe fire exposure from the exterior of the building	Hollow Metal Hollow Metal	Pairs Singles		721, 726, 736 721, 726, 736	
1 Hr.	*1 Hour (B Label) 60 Minutes	Doors that divide occupancies in a building (building less than 4 stories tall)	Wood Wood	Pairs Singles	724, 729 724, 729	721, 726, 736 721, 726, 736	719, 720, 722, 734 719, 720, 722, 734
*Currently rating only applies to wood doors.							
1 Hr.	^{3/4} Hour (E Label) 45 Minute	Opening in an exterior wall with the potential to be exposed to moderate to light fire from the outside of the building	Hollow Metal Hollow Metal	Pairs Singles	—	721, 726, 736 721, 726, 736	
1 Hr.	^{3/4} Hour (C Label) 45 Minute	Openings in walls or partitions between rooms and corridors	Wood Composite Wood Composite	Pairs Singles	724, 729 724, 729	721, 726, 736 721, 726, 736	719, 720, 722, 734 719, 720, 722, 734
1 Hr.	*1/3 Hour 20 Minute	Openings in corridors where smoke and draft control is required *Does not have letter designation	Wood/Particle Core Wood/Particle Core		724, 729 724, 729	721, 726, 736 721, 726, 736	719, 720, 722, 734 719, 720, 722, 734

*All of the labels listed above have the capability of being both fire and smoke barrier openings. However, not all openings require a smoke label under UBC 7-2 (1997). Openings requiring smoke labels are detailed either by the fire authority having jurisdiction, local code, NFPA 101 or NFPA 5000.



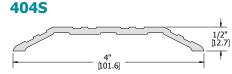
SADDLE THRESHOLDS

To effectively seal out the elements, use in conjunction with a door bottom, sweep, shoe, or bumper strip.

Fasteners: #10 x 1-1/2" sheet metal screws, other screw types and anchors available upon request Options: Available with Sure Step Non-Slip Abrasive Coating Notes: • MIL finish thresholds are supplied with zinc plated screws • Brass thresholds are supplied with brass screws • Color anodized thresholds are supplied with screws plated to match • Stainless steel thresholds are supplied with stainless steel screws **401S** 5/16' [7.9] 2 1/2" [63.5] Finishes: MIL, DBA, GLD, MIB Certifications: CUBUS TED USC 1997 LISTED PART 1 BHMA MIB threshold will have a Notes: flat surface 402S 1/2" [12.7] 3" [76.2] MIL, DBA, GLD Finishes: Certifications: c(UL)us 403S 1/4" [6.4] 4" [101.6]

Finishes: Certifications:

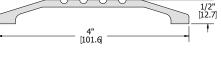
MIL,	DBA,	GLD, I	MIB,	US32D
Ŀ	CULUSTED US	UBC 7.2 1997 PART 1	CER	



Finishes: Certifications:



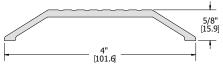




Finishes: Certifications:

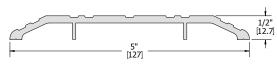


411S



Finishes: Certifications: MIL, DBA, GLD, MIB

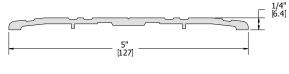
412S



Finishes: Certifications:

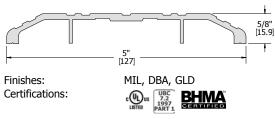


413S



Finishes: Certifications: MIL, DBA, GLD, MIB, US32D

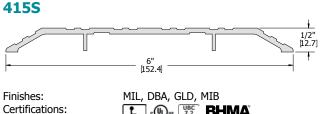
414S



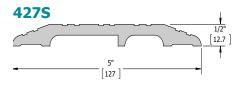
2011 www.hagerco.com



SADDLE THRESHOLDS (CONTINUED)



BHMA CULUS UBC 1997



Finishes: Fasteners: Certifications:



428S 1/4" [6.4] ____8"__. [203.2]

Finishes: Certifications:



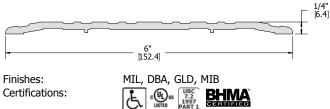
THRESHOLDS

417S

416S

Finishes:

Certifications:



____7" [177.8]

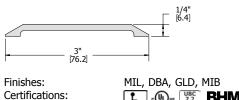
Ł

MIL, DBA, GLD, MIB

CUBUS USC 122 LISTED US 1997 PART 1

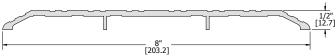
BHMA

418S



BHMA շՄիր

426S



Finishes: Certifications:

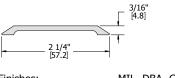


430S

1/2" [12.7]

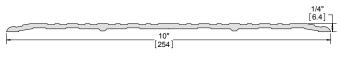
1/4" [6.4] _ 7" [177.8] Finishes: MIL, DBA, GLD Certifications: ։(Այստ Bhma

436S



Finishes: Certifications: MIL, DBA, GLD Ŀ,

448S

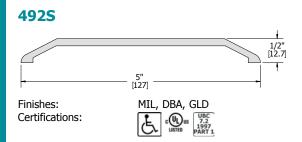


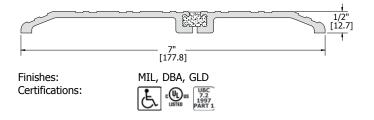
Finishes: Certifications:





SADDLE THRESHOLDS (CONTINUED)





424S

423S

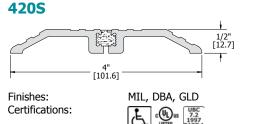
THERMAL BARRIER SADDLE THRESHOLDS

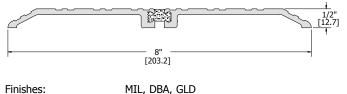
High strength thermal barrier is permanently bonded in place to block the transfer of heat or cold. To provide a seal, use in conjunction with a door bottom, sweep, shoe or bumper strip.

Fasteners:	
Options:	

Notes:

- #10 x 1-1/2" sheet metal screws, other screw types and anchors available upon requestAvailable with Sure Step non-slip abrasive coatingMIL finish thresholds are supplied with zinc plated
 - screwsBrass thresholds are supplied with brass screws
 - Color anodized thresholds are supplied with screws plated to match

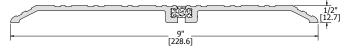




Certifications:



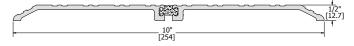
451S



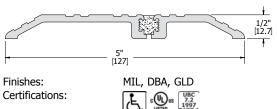
Finishes: Certifications:



452S



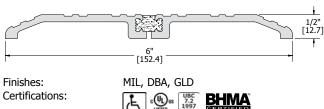
421S



Finishes: Certifications:











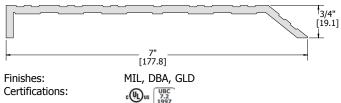
HALF SADDLE THRESHOLDS

Fasteners:	
Options:	

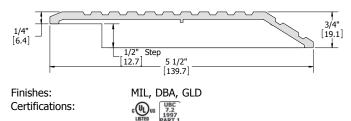
Notes:

- #10 x 1-1/2" sheet metal screws, other screw types and anchors available upon request
- Available with Sure Step non-slip abrasive coating • MIL finish thresholds are supplied with zinc
- plated screws • Brass thresholds are supplied with brass screws
- Color anodized thresholds are supplied with
- screws plated to match

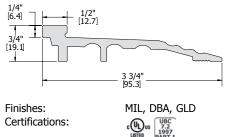
406S



407S

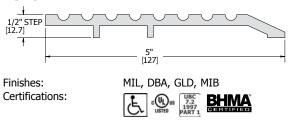


429S

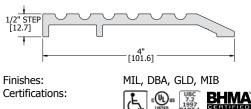




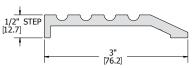
2011



432S



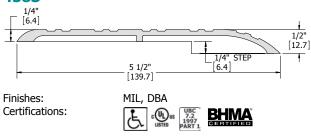
433S



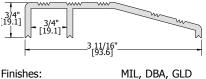




438S



500S



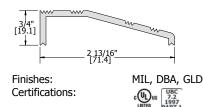
Certifications:





HALF SADDLE THRESHOLDS (CONTINUED)

501S



ELEVATOR AND BUMPER STRIPS

Use in conjunction with a threshold Fasteners: #10 - 24 x 5/8" Flat head self-tapping screws to attach bumper strip directly to an existing threshold

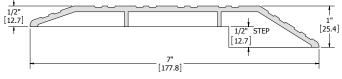
480S



Finishes:

MIL, DBA, MIB

572S



Finishes: Certifications:

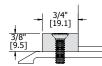




Finishes: Insert: Certifications:

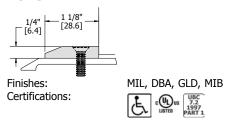
MIL, DBA, GLD V, N, S, W

483S



Finishes: Certifications: MIL, DBA, GLD

484S



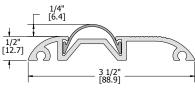




RESIDENTIAL THRESHOLDS

All thresholds appearing in this column are available with Sure Step Non-Slip Abrasive Coating

400S



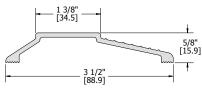
Finishes: Insert: Certifications:



Notes:

Vinyl gasket eliminates the need for door shoe or sweeps

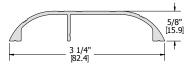
408S



Finishes: Certifications:



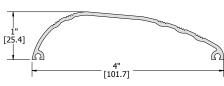
409S



Finishes: Certifications:



419S



Finishes: Certifications:

2011

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CARPET THRESHOLDS

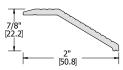
Fasteners: Options:

Notes:

#10 x 1-1/2" sheet metal screws, other screw types and anchors available upon request

- Available with Sure Step non-slip abrasive coating • MIL finish thresholds are supplied with zinc plated screws
- Brass thresholds are supplied with brass screws
- Color anodized thresholds are supplied with screws plated to match

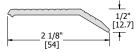
503S



Finishes: Certifications:



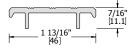
504S



Finishes: Certifications:



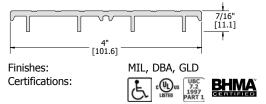
505S



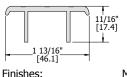
Finishes: Certifications:



506S



508S



Certifications:



BUMPER THRESHOLDS

For use with outswinging doors to seal out the elements Fasteners:

#10 x 1-1/2" sheet metal screws, other screw types and anchors available upon request

Options: Notes:

- Available with Sure Step non-slip abrasive coating • MIL finish thresholds are supplied with zinc
- plated screws Brass thresholds are supplied with brass screws
- Color anodized thresholds are supplied with
- screws plated to match

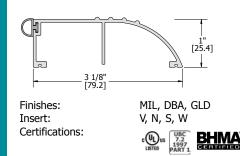
434S



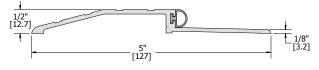
Finishes: Insert: Certifications: MIL, DBA, GLD V, N, S, W :(UL)us

435S

THRESHOLDS



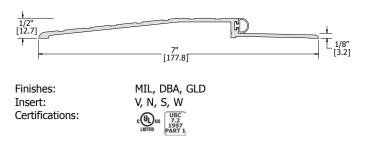
477S



Finishes: Insert: Certifications:



478S



ADA RAMP THRESHOLDS

Ramp threshold that provides a 1:12 slope to meet the requirements of the Americans With Disabilities Act

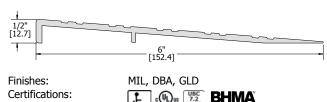
Fasteners: Options:

Order:

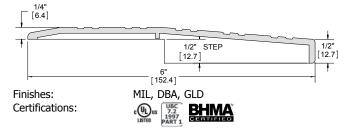
To create a ramp that is a combination of the 442S and 443S, order 444S #10 x 1-1/2" Flat head sheet metal screws

- Notes:
- Available with Sure Step non-slip abrasive coating
- MIL finish thresholds are supplied with zinc plated screws
- Brass thresholds are supplied with brass screws
- Color anodized thresholds are supplied with screws plated to match

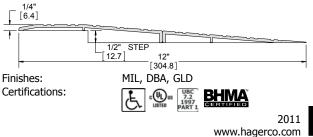
442S



443S



444S



14



FLOOR PLATE ASSEMBLY THRESHOLDS

Floor Plate components for modular threshold system. Used primarily for extra wide door frames or to cover expansion joints or floor joists Fasteners: Plates and plate supports are furnished without

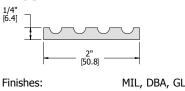
Options

holes and fasteners unless specified • Available with Sure Step non-slip abrasive coating

Notes:

- Beveled Edges are available
- Plates may be used fluted or smooth side up

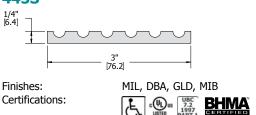
440S



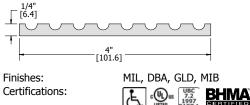
Certifications:

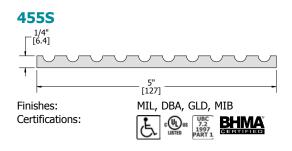
MIL, DBA, GLD, MIB c(UL)us BHMA Æ 7.2

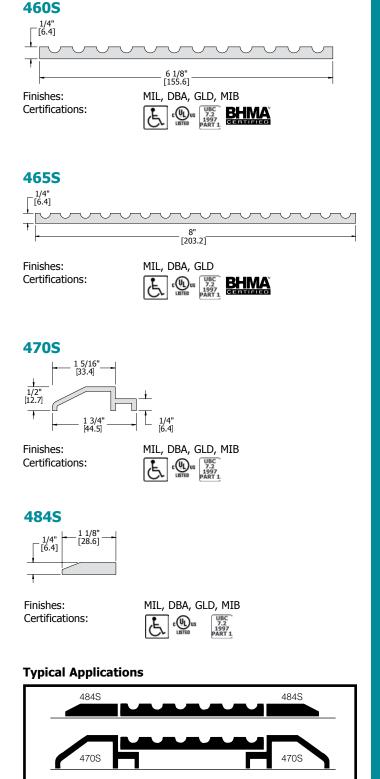
445S



450S







484S

4705

1/2" Step

(12.7mm)



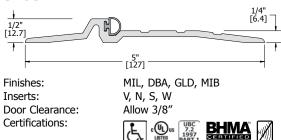
PANIC THRESHOLDS

Use in conjunction with surface applied vertical rod exit device Fasteners: #10 x 1-1/2" flat head sheet metal screws, other screw types and anchors available upon request

Options: Notes:

- Available with Sure Step non-slip abrasive coating • MIL finish thresholds are supplied with zinc
- plated screws • Brass thresholds are supplied with brass screws • Color anodized thresholds are supplied with
- screws plated to match

520S

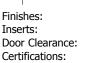


c 🖳 us



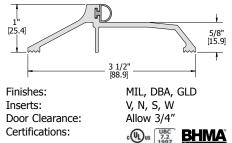
3/4" [19.1]

552S



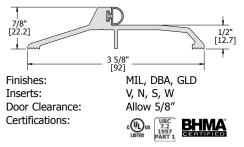
5" [127] MIL, DBA, GLD, MIB V, N, S, W Allow 1/2" շ(Ա)ստ BHMA

560S

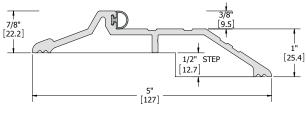


h

565S

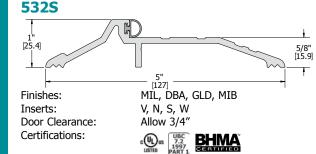




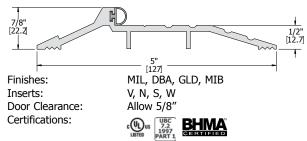


Finishes: Inserts: Door Clearance: Certifications:

MIL, DBA, GLD, MIB V, N, S, W Allow 5/8" ;(UL)

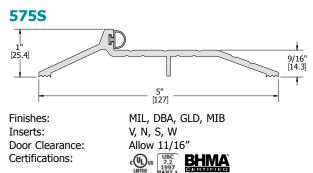


541S

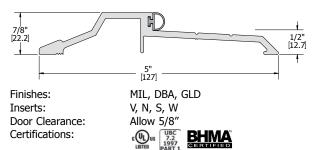




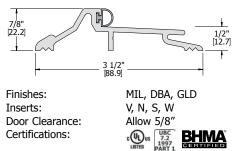
PANIC THRESHOLDS (CONTINUED)



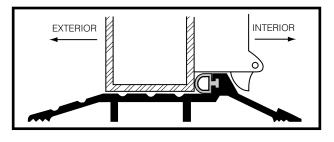
580S



599S



Typical Applications



THERMAL BARRIER PANIC THRESHOLDS

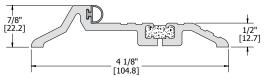
Threshold for latching panic devices that have a thermal barrier permanently bonded in place to effectively block the transfer of heat or cold. Use in conjunction with surface applied vertical rod exit device. Fasteners: $#10 \times 1-1/2''$ Flat head sheet metal screws, other

...

Options: Notes: $#10 \times 1-1/2''$ Flat head sheet metal screws, other screw types and anchors available upon request Available with Sure Step non-slip abrasive coating

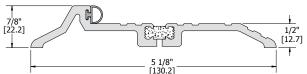
- MIL finish thresholds are supplied with zinc plated screws
- Brass thresholds are supplied with brass screws
- Color anodized thresholds are supplied with screws plated to match

515S

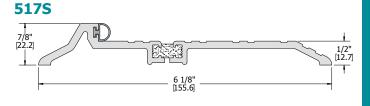


Finishes: Inserts: Certifications: MIL, DBA, GLD V, N, S, W CUD us 7.2 1997 PART 1.

516S



Finishes: Inserts: Certifications: MIL, DBA, GLD V, N, S, W CUS US USC USTED US USC 1997 PART 1



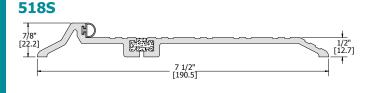
Finishes: Inserts: Certifications:

MIL, DBA, GLD V, N, S, W





THERMAL BARRIER PANIC THRESHOLDS (CONTINUED)



Finishes: Inserts: Certifications: MIL, DBA, GLD V, N, S, W շ(Ա)ս։

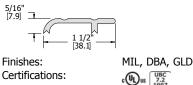
INTERLOCKING THRESHOLDS

Threshold interlocks with hook on the bottom of the door for a superior seal against wind and rain Fasteners:

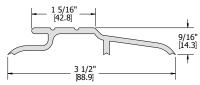
Options: Notes:

- #10 x 1-1/2" Flat head sheet metal screws, other screw types and anchors available upon request Available with Sure Step non-slip abrasive coating
- MIL finish thresholds are supplied with zinc plated screws
- Brass thresholds are supplied with brass screws
- Color anodized thresholds are supplied with screws plated to match
- Thresholds are supplied with the 701S J-Hook

600S



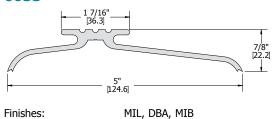
602S



Finishes: Certifications: MIL, DBA, MIB



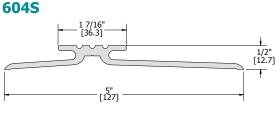
Certifications:





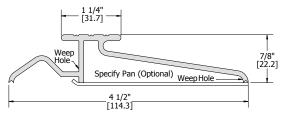


INTERLOCKING THRESHOLDS (CONTINUED)

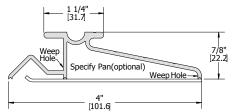


Finishes: Certifications: MIL, DBA, MIB

608S



612S



Finishes: Certifications: MIL, DBA, GLD (612S only), MIB

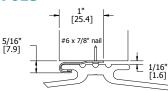
Notes:

 Water return feature designed to catch water and return it to the outside through weep holes

• Optional pan keeps water from coming in contact with the floor Specify "with pan" when ordering

Order:

701S



Finishes: Fasteners: Certifications: MIL, MIB #6 x 7/8" nail

Notes:

J-Hook interlocks with threshold to seal against wind and rain

ABRASIVE CAST ALUMINUM THRESHOLDS

A heavy duty aluminum threshold with silicon carbide granules integrally cast into the surface. Ideal for high traffic areas where maximum durability is required. The abrasive, skid resistant surface works well under wet, dry or oily conditions. Fasteners: $#14 \times 1-1/2$ " Flat head zinc plated sheet metal

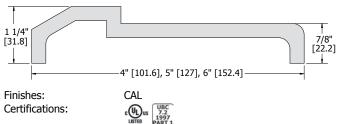
screws with lead anchor

Options: Notes:

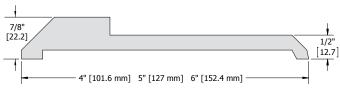
Cast-on anchors available upon request

- Furnished with countersunk holes
- Cut with a reinforced abrasive plain surface disk, 1/8" thick, either aluminum oxide or silicon carbide
- Maximum length available is 8 feet, not available for floor closers
- Available in 4", 5" and 6" widths

620S



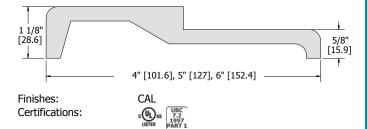
621S



Finishes: Certifications:



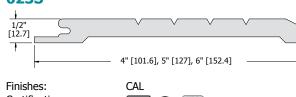
622S





ABRASIVE CAST ALUMINUM THRESHOLDS (CONTINUED)





Certifications:

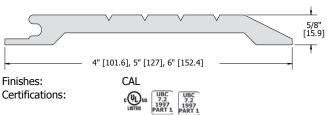


4" [101.6], 5" [127], 6" [152.4]

CUBC LISTED US UBC 7.2 1997 PART 1

CAL

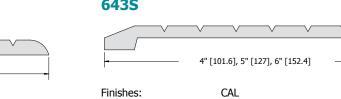




CUBC LISTED US UBC 1997 PART 1



Certifications:

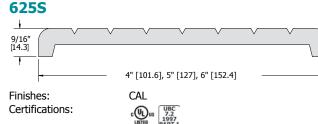


Finishes: Certifications:

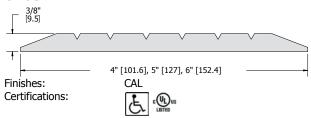
624S

5/16" [7.9]

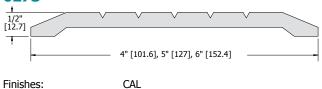
THRESHOLDS



626S







Certifications:



_____ 1/2" [12.7] ł



NOSINGS

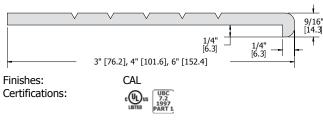
A heavy duty safety nosing with silicon carbide granules integrally cast into the surface. Designed for new construction of poured concrete, Terrazzo or Steel Pan cement filled stairs. Prevents breaking and chipping of stair edge. Fasteners:

Options:

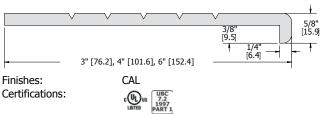
Notes:

- #14 x 1-1/2" flat head zinc plated sheet metal screws with lead anchor
- Cast-on anchors available upon request
- Furnished with countersunk holes
- Cross hatch surface
- Cut with a reinforced abrasive disk, 1/8" thick, either aluminum oxide or silicon carbide
- Maximum length available is 8', except 6" widths which are 7' maximum
- Available in 3", 4", and 6" widths

64**0**S



641S



COVER PLATE ASSEMBLY THRESHOLDS

Used with floor closers either center or offset hung, single/double door application Fasteners: #10 x 1-1/2" flat head sheet metal screws, other screw types and anchors available upon request

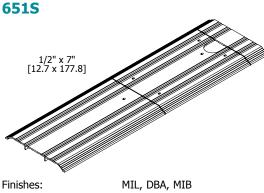
Options: Order:

Notes:

Specify closer manufacturer, offset, closer model number, thickness of door, width of door opening and handing • MIL finish thresholds are supplied with zinc

Available with Sure Step non-slip abrasive coating

- plated screws
- Brass thresholds are supplied with brass screws
- Color anodized thresholds are supplied with screws plated to match



Certifications:

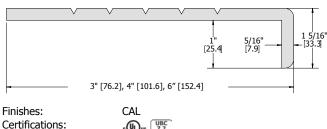


• Without mitered ends

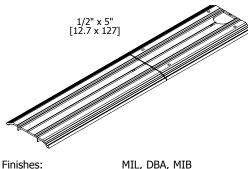
652S

Notes:









Certifications:

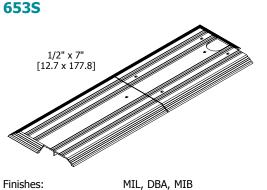
Notes:



• Without mitered ends



COVER PLATE ASSEMBLY THRESHOLDS (CONTINUED)



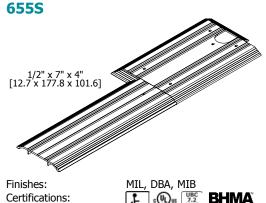


654S

Finishes: Certifications: Notes:

THRESHOLDS

MIL, DBA, MI	B
Center hun	g
 With mitered 	ed ends



Notes:

MIL, DBA, MIB
Offset hung
 With mitered ends

COVER PLATES

Cover Plates are used primarily to cover expansion joints and for situations requiring extra width or strength. Manufactured from solid cold rolled aluminum for extra durability.

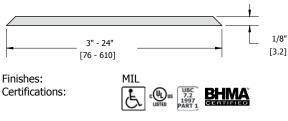
Fasteners: Furnished without holes and fasteners unless specified

Notes:

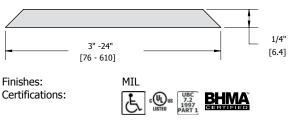
Available to 96" in length

• Furnished with both edges beveled

676S



677S



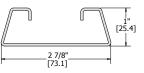
THRESHOLD ANCHORS

Threshold Anchors provide a fully adjustable anchor for concrete installation. Special locking nut assemblies can be positioned to accommodate various mounting hole spacings. Order: Specify 1/4"-20 mounting holes for any thresh

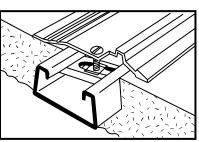
Fasteners:

Specify 1/4"-20 mounting holes for any threshold intended for use with the 619S 1/4"-20 Flat head screws and locking nut assembly per foot of anchor

619S



Finishes:



MIL

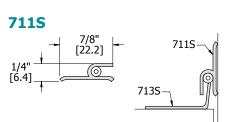




INTERLOCKING/OVERHEAD DRIP GUARDS

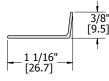
#6 x 5/8" pan head sheet metal screws

Fasteners:



Finishes: Insert: Certifications: MIL, DBA, GLD V CULUSTEB USC 1997 PART 1

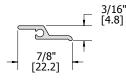
713S

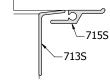


Finishes: Certifications:



715S

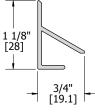


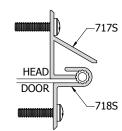


Finishes: Certifications:



717S

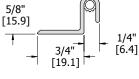




Finishes: Certifications:

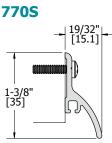






Finishes: Inserts: Certifications:

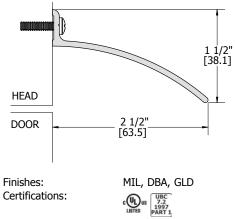








810S



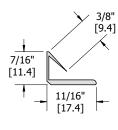


PRESS-ON WEATHERSTRIPPING

Combination Edge-Sealing System with Smoke Control

Field applied edge-sealing system gaskets with integrated smoke fin. Add to the frame of a B, C or 1/3 hour labeled fire door to comply with positive pressure requirements of UBC 7-2 1997 Part I. Also qualifies as smoke control gasketing (UBC 7-2 1997 Part II) necessary to complete installation instructions and validate the "S" label on a smoke control door.

719



Category: Certifications:

720

Finishes:

Notes:

1/16"

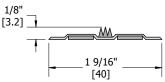
[1.6]

1/4" [6.4]



- Not recommended for door frames with 1/2" stop or less
- Recommend 3/16" backset door side hinge
- Intumescent material
- Will not degrade from carbon dioxide and ozone









Intumescent material

Notes:

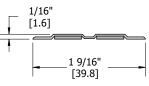
• Will not degrade from carbon dioxide and ozone

Edge-Sealing Systems

Field applied edge-sealing system gaskets. Add to the frame of a B, C or 1/3-hour labeled fire doors to comply with the new positive pressure requirements of UBC 7-2 1997 Part I.

724

Finishes:



G

G

Charcoal, Brown, Grey, Tan, White

Category: Certifications:



Notes:

- Intumescent material
- Will not degrade from carbon dioxide and ozone

Finishes: Category: Certifications:

Notes:

722

1/2" [12.7]

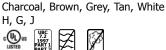
Finishes:

Category:

Notes:

Certifications:

r12.71



• Thin design for doors and frames with tight tolerances

Intumescent material

Charcoal, Brown,

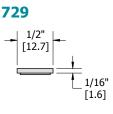
7.2 1997 PART 1 PART 2

Tan, White

H, G, J

c(UL)us

• Will not degrade from carbon dioxide and ozone



Finishes:

- Category: Certifications:
- Notes:
- Intumescent material

Charcoal, Brown, Grey, Tan, White

- Will not degrade from carbon dioxide and ozone
- 2011 www.hagerco.com



backset - door side hinge

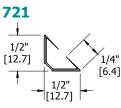
• Requires 1/8" clearance. Recommend 3/16"



PRESS-ON WEATHERSTRIPPING (CONTINUED)

Smoke Seal Systems

Add to the frame of a smoke rated opening to comply with the requirements of UBC 7-2 1997 Part II, NFPA 105 and UL1784. The addition of a smoke seal is necessary to complete installation instructions and validate the "S" label of a smoke control door.



Charcoal, Brown, Grey, Tan, White

Charcoal, Brown, White

UBC 7.2 1997 PART PART

Silicone material

Charcoal, White

7.2 1997 PART 1 PART 2

Silicone material

Charcoal, White

Silicone material

Н, Ј

շաՅու

H, J

Н, Ј

Finishes: Category: Certifications:



Notes:





Finishes: Category: Certifications:

Notes:





Finishes: Category: Certifications:

Notes:



[8.1] 1/2" [12.7]

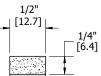
Finishes: Category: Certifications:

Notes:

5/16"

Draft Control Gaskets





Finishes: Category: Certifications:



Sponge neoprene material



Notes:



Finishes: Category: Certifications:



c 🖳 us UBC 7.2 1997

Notes:

Thermoplastic Elastomer (TPE) material

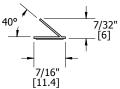


BHMA

(***)

📻 <u>Bhma</u>

(==)



Finishes: Category: Certifications:

Notes:



7.2 1997 PART 1

Thermoplastic Elastomer (TPE) material





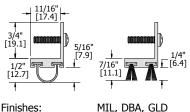
DOOR BOTTOMS

Provides a seal against weather. For best results, use in conjunction with a threshold.

Fasteners: Notes:

- #6 x 5/8" Pan head sheet metal screws • Lengths up to 48" are supplied 1/2" over their stated size to allow for fitting
- Lengths over 48" are supplied 1" over size
- "Cut to exact length" may be specified
- Constructed of strong extruded 6063-T5 aluminum

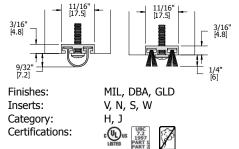
751S



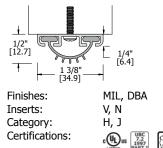
Finishes: Inserts: Category: Certifications:

'	DBA, S, W	GLE
Н, Ј		
CULUSTED US	UBC 7.2 1997 PART 1 PART 2	Þ

772S

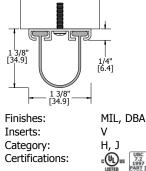


774S

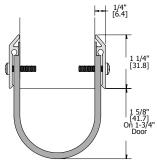




775S





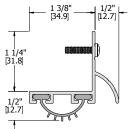


Finishes: Inserts: Category: Certifications:

CLR, DBA, GLD H, J c(U)us

Ν

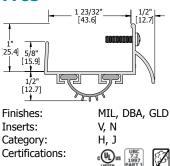
777S

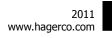


Finishes: Inserts: Category: Certifications:

MIL, DBA, GLD V, N H, J 7.2 1997 PART 1 PART 2

778S

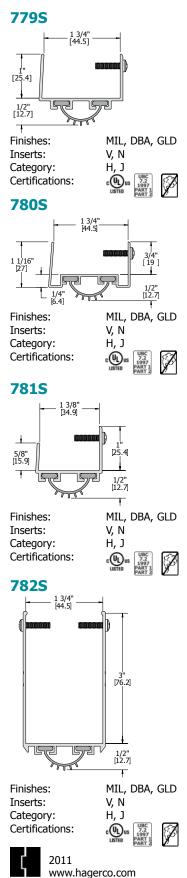




783S



DOOR BOTTOMS (CONTINUED)



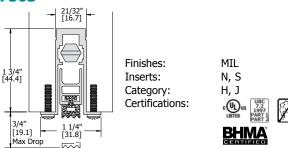
1 3/4' [44.5] 1 3/32 [27.6] b 3/8" [9.5] 5/16' [8.1] MIL, DBA, GLD Finishes: v Inserts: Category: J Certifications: ւա 787S 1/2" 1 5/8" [41.3] 1 1/8" [28.6] Finishes: MIL Inserts: Ν Category: H, J Certifications: c (ՍL) us **789S** 1 3/4" [44.5] [25.4] 1 1/4 [12.7] -1/2" 5/16 [7.9] MIL, DBA, GLD Finishes: Inserts: W Category: H, J Certifications: ։ (Սիս AUTOMATIC DOOR BOTTOMS

Provides an outstanding seal against drafts, light, smoke and sound. For best results, use in conjunction with a threshold. When door fully closes, the gasket extends downward to provide a seal. Gasket retracts when door is opened. Fasteners: • $#8 \times 1-1/4''$ pan head sheet metal screws furnished with

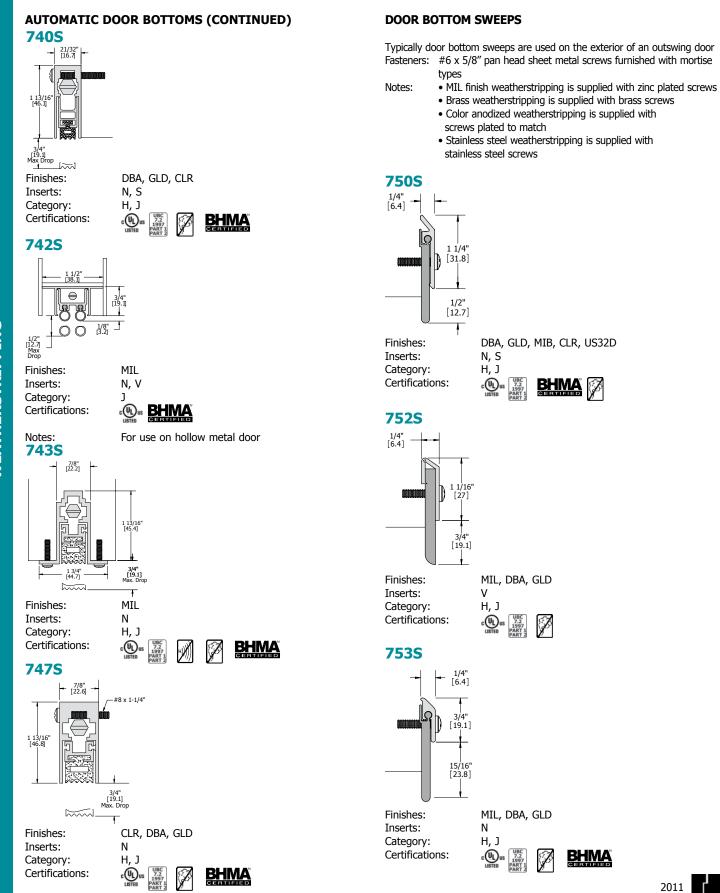
- #8 x 1-1/4" pan head sheet metal screws furnished with surface mount types
- \bullet #6 x 5/8" Pan head sheet metal screws furnished with mortise types and surface mount types
- Furnished exact length as stated. May be trimmed for fitting (2" maximum).
- Furnished with end cover and strike plates.

730S

Notes:







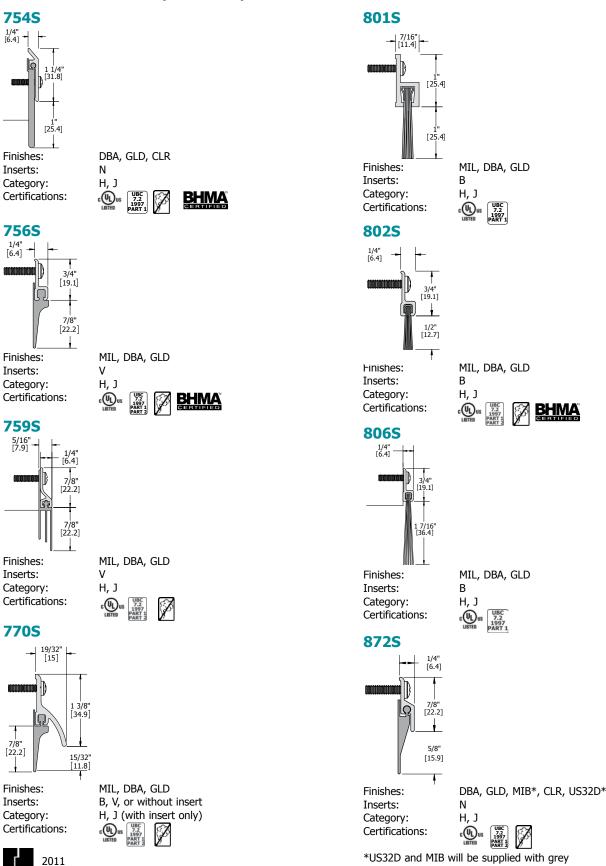
www.hagerco.com

Neoprene as opposed to the standard black



DOOR BOTTOMS SWEEPS (CONTINUED)

www.hagerco.com



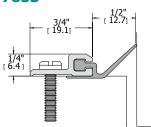


JAMB WEATHERSTRIPPING

Fasteners: Notes:

- #6 x 5/8" Pan head sheet metal screws
- MIL finish weatherstripping is supplied with zinc plated screws
- Brass weatherstripping is supplied with brass screws
- · Color anodized weatherstripping is supplied with screws plated to match
- Stainless steel weatherstripping is supplied with stainless steel screws

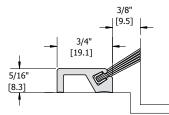




Finishes: Inserts: Category: Certifications:



800S



Finishes: Inserts: Category: Certifications:

MIL, D	BA, (GLD	
В			
Н, Ј			
CULUSTED	UBC 7.2 1997 PART 1 PART 2	Þ	

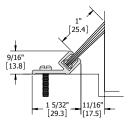




Finishes: Inserts: Category: Certifications:

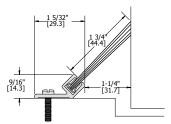


803S



Finishes: MIL, DBA, GLD Inserts: В Category: H, J Certifications: UBC 7.2 1997 PART 1 շանութ

808S



Finishes: Inserts: В Category: H, J Certifications: c 🖳 us

MIL, DBA, GLD

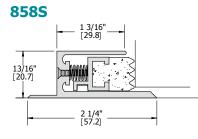




WEATHERSTRIPPING



JAMB WEATHERSTRIPPING (CONTINUED)



Finishes: Inserts: Category: Certifications:

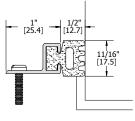
Notes:

859S



• Use with stopless frames only • Spring adjustable

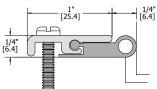
861S



Finishes: Inserts: Category: Certifications:



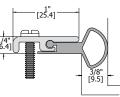




Finishes: Inserts: Category: Certifications:

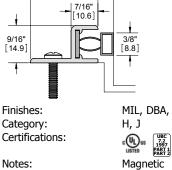
DBA, GLD, CLR Ν H, J BHMA 7.2 1997 PART 1 PART 2

863S



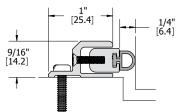
Finishes: Inserts: Category: Certifications: DBA, GLD, CLR Ν H, J c UL us

1 1/16" [26.8]



MIL, DBA, GLD Z Magnetic

860S



Finishes: Inserts: Category: Certifications:

Notes:

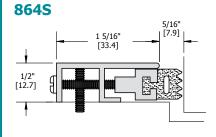


Adjustable





JAMB WEATHERSTRIPPING (CONTINUED)

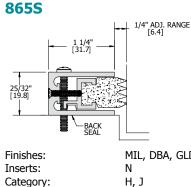


Finishes: Inserts: Category: Certifications:



Notes:





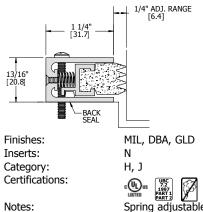


Notes:

Certifications:

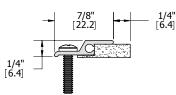








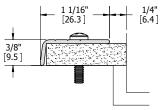
870S



Finishes: Inserts: Category: Certifications: Notes:

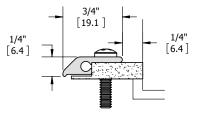


871S



Finishes: Inserts: Category: Certifications: MIL, DBA, GLD Ν H, J UBC 7.2 1997 PART 1 PART 2 Þ

873S



Finishes: Inserts: Category: Certifications: MIL, DBA, GLD Ν Н, Ј c Uus BHMA 7.2 1997 PART 1 PART 2

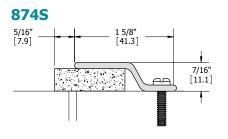


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WEATHERSTRIPPING



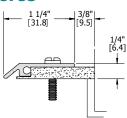
JAMB WEATHERSTRIPPING (CONTINUED)



Finishes: Inserts: Category: Certifications:



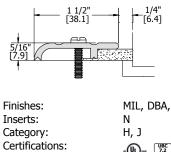




Finishes: Inserts: Category: Certifications:

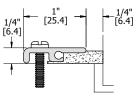


877S





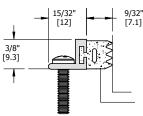
878S



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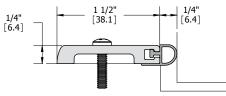


880S



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881S



Finishes: Inserts: Category: Certifications:

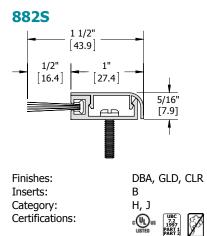
MIL, DBA, GLD V, N, S, W H, J UBC 7.2 1997 PART 1 PART 2

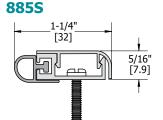
Notes:

Hardware compatible. Testing showed product to withstand 600 lbs per square inch of force



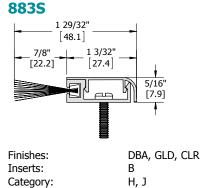
JAMB WEATHERSTRIPPING (CONTINUED)





Finishes: Inserts: Category: Certifications:

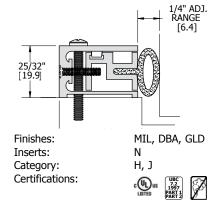
BHMA



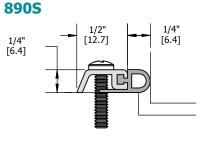
Certifications:

WEATHERSTRIPPING





Notes:



Finishes: Inserts: Category: Certifications:

MIL, DBA, GLD V, N, S H, J UBC 7.2 1997 PART 1 PART 2 BHMA



Adjustable

887S



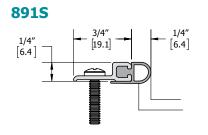
884S 1-7/8" [48] 7/8" 1" [22.2] [25.4] ŧ. দি 5/16" [7.9] Finishes: DBA, GLD, CLR Inserts: V Category: Н, Ј Certifications:







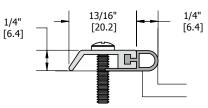
JAMB WEATHERSTRIPPING (CONTINUED)



Finishes: Inserts: Category: Certifications: MIL, DBA, GLD V, N, S, F H, J CUS 1997 1997

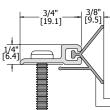
BHMA

896S



Finishes: Inserts: Category: Certifications: MIL, DBA, GLD V, N, S H, J W

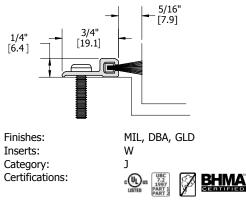




Finishes:	
Inserts:	
Category:	
Certifications:	

MIL,	DBA,	GLD
Ν		
H, J		
CUL USTED	UBC 7.2 1997 PART 1 PART 2	Þ

893S





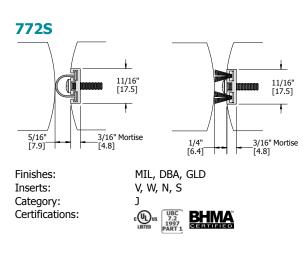


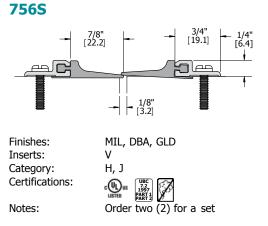
ASTRAGALS/MEETING STILES

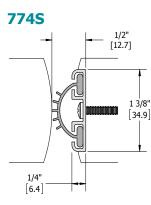
Fire labeled Astragals & Meeting Stiles should only be mounted on pairs of doors with a gap that meets NFPA 80 2-3.1.7 (1/8" +- 1/16" for steel doors and not exceeding 1/8" for wood doors)

Fasteners: Notes:

- $#6 \times 5/8''$ Pan head sheet metal screws • MIL finish weatherstripping is supplied with zinc plated screws
- Brass weatherstripping is supplied with brass screws
- Color anodized weatherstripping is supplied with screws plated to match
- Stainless steel weatherstripping is supplied with stainless steel screws

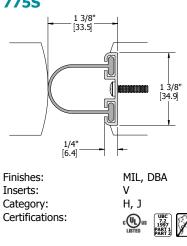




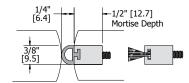




775S







Finishes: Inserts: Category: Certifications:

Notes:

771S



MIL, DBA

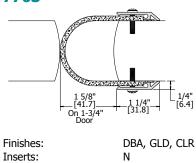
Order two (2) for a set

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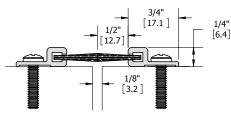
ASTRAGALS/MEETING STILES (CONTINUED)





Category: Certifications: H, J cULus LISTED UBC 7.2 1997 PART 1 PART 2 Þ

802S



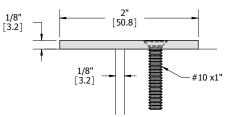
Finishes: Inserts: Category: Certifications:



Notes:

Order two (2) for a set

835S



Finishes: Category: Certifications:

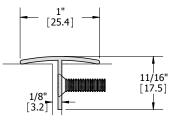
Notes:



BHMA 1997 PART 1

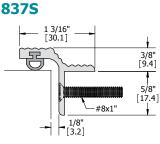
• Maximum length = 10 feet • Available with thrubolts

836S



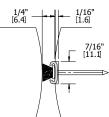
Finishes: Category: Certifications:





Finishes: Inserts: Category: Certifications: MIL, DBA, GLD W, V, N, S H, J UBC 7.2 1997 PART 1 PART 2 BHMA Þ

838S

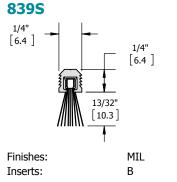


Finishes: Inserts: Category: Certifications:





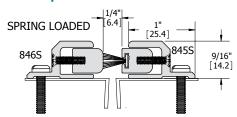
ASTRAGALS/MEETING STILES (CONTINUED)



Category: Certifications:



845S | 846S



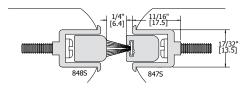
Finishes: Inserts: Category: Certifications: Notes:



Adjustable

• Order two (2) for a set

847S | 848S



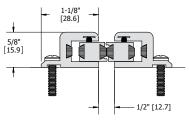
Finishes: Inserts: Category: Certifications: MIL, DBA, GLD W 1

Notes:

ւա 1997 PART 1 • Adjustable

- Spring loaded • Mortise depth = 21/32''

849S



Finishes: Notes:

MIL, DBA, GLD

- Magnetic
- 96" maximum door height • Designed for use on 80" to 96" doors
- only
- Sets shorter than 80" may not work properly



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WEATHERSTRIPPING

0 0 0 O 0 0 0.138" [3.5] man

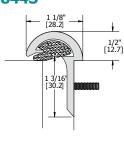
MIL, DBA, GLD W 96" maximum door height



Finishes: Inserts:

Notes:

840S



Finishes: Inserts: Category: Certifications:

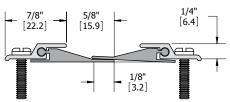
MIL, DBA Ν

38



ASTRAGALS/MEETING STILES (CONTINUED)





 Finishes:
 DBA, GLD, MIB, CLR, US32D

 Inserts:
 N

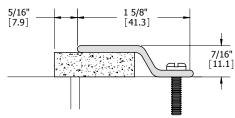
 Category:
 H, J

 Certifications:
 Certifications:

Notes:

• Order two (2) for a set

874S

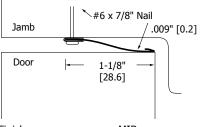


Finishes: Inserts: Category: Certifications: MIL, DBA, GLD, US32D N H, J

SPRING BRONZE

Constructed of high tempered 0.009" gauge bronze to provide a permanent spring. Hemmed edges. Fasteners: #6 x 7/8" Nail, #4 wafer head drive nails available for metal door frames

820S



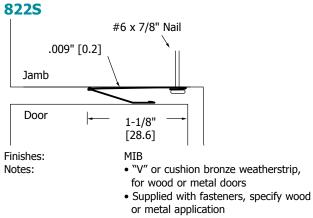
Finishes: Notes:

- MIB • Spring bronze weatherstrip, for wood and wood casement windows
- Supplied with nails; nails should be 1-1/2" on center





SPRING BRONZE (CONTINUED)



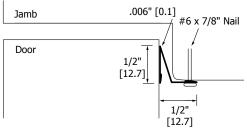
• Fasteners should be 3" on center

823S #6 x 7/8" Nail .006" [0.1] Jamb Door - 5/8" [15.9]





824S



Finishes:

MIB

WEATHERSTRIPPING

Sliding Door Hardware



Hager Companies offers a full line of high quality, durable sliding door hardware that is the perfect choice for any by-pass, bi-fold, or pocket door application your project requires. With Hager sliding door hardware, you can choose from hundreds of fully tested products, including jump proof box tracks, self-aligning wheel systems, and complete sets and accessories to meet any need. Just as beneficial, every Hager sliding door hardware product is designed and manufactured to meet or exceed ANSI standards.



DOOR SELECTION CHART

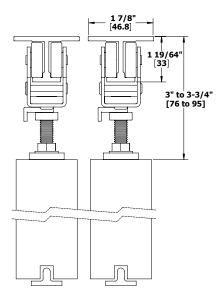
Maximum Door Weight Per Door	Series	Page Number	Packaged Sets	Track	Parts Bag	Description
By-Pass						
60#	9810	18-20	9514	9810	9814	Aluminum track
60#	9820	21-24	9614	9820	9540	Aluminum track, 1-3/4" fascia
60#	9840	25-28	9844	9840	9540	Steel track
100#	9602	10-13	N/A	9602	9575	Aluminum double box track
125#	9602	10-13	9675	9602	9679	Aluminum double box track
125#	9603	14-17	9673	9603	9679	Aluminum double box track with fascia
150#	9602	10-13	9676	9602	9680	Aluminum double box track
150#	9603	14-17	9674	9603	9680	Aluminum double box track with fascia
150#	9600	6-9	9611	9821	9892	Aluminum double box track
175#	9110	3-5	9110	9101	9109	Aluminum heavy duty I-beam track
250#	9875	29-31	9875	9801	9827 hanger	Aluminum box track
250#	9885	32-35	9885	9803	9827 hanger	Aluminum double box track with 3-1/2" fascia
250#	9600	6-9	9612	9821	9893	Aluminum double box track
275#	9130	3-5	9130	9101	9129	Aluminum heavy duty I-beam track
Bi-Fold					·	
50#	9570	36-38	9570	9601/9599	9569	Aluminum or steel box track
125#	9800	39-41	9860	9821	9894	Aluminum box track
125#	9890	42-45	9890	9801	9827 & 9828	Aluminum box track
Pocket	-1		1	1		
125#	9601	49-51	9678	9601	9632	Aluminum box track
150#	9601	49-51	N/A	9601	9633	Aluminum box track
175#	9110	3-5	9110	9101	9109	Aluminum heavy duty I-beam track
250#	9801	52-54	9878	9801	9742	Aluminum heavy duty box track
250#	9901	55-57	9901	9821	9895	Aluminum heavy duty box track
275#	9130	46-48	9130	9101	9129	Aluminum heavy duty I-beam track
Universal Pock	et Door Fram	e Kits	<u> </u>	-		
125#	9631	58	9631-80	9599	N/A	Pocket door kit for 3'0" wide 6'8" high door
125#	9636	58	9636-80	9599	N/A	Pocket door kit for 3'0" wide 6'8" high door
150#	9630	58	9630-84	9599	N/A	Pocket door kit for 3'0" wide 7'0" high door
150#	9629	58	9629-96	9599	N/A	Pocket door kit for 3'0" wide 8'0" high door
150#	9628	58	9628-108	9599	N/A	Pocket door kit for 3'0" wide 9'0" high door
250#	9850	59-62	9850-96	9801	N/A	Pocket door kit for 4'0" wide 8'0" high door
250#	9850	59-62	9850-102	9801	N/A	Pocket door kit for 4'0" wide 8'6" high door

Note: Sheet metal screws provided for wood or metal applications.

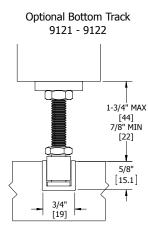
GENERAL INFORMATION

SLIDING DOOR





Interchanges with Grant 1210/1230 Series



Installation note: Clearance between door bottom and top of 9122 track must be 7/8" (22 mm) minimum to 1-3/4" (44 mm) maximum.

9110 Series and 9130 Series

Heavy Duty Aluminum I-Beam Track and Hardware Conforms to ANSI A156.14/Type: D8731

- BY-PASS
- For doors 1" 1-3/4" (25 mm 45 mm) thick
- 9110 Series for doors weighing up to 175 lbs (79.5 kg) per door
- 9130 Series for doors weighing up to 275 lbs (124.7 kg) per door
- Track is extruded aluminum jump-proof style with "I" shaped rails
- Hangers have 1" (25 mm) diameter wheels with steel ball bearings
- Order two sets per opening per by pass

Part Number	Description			
9110 Series Set Includes one (1) 9101 track and one (1) 9109 parts bag For doors up to 175 lbs (79.5 kg) per door				
9110-60	5' (1524 mm) By-Pass Set - For one 2'6" (762 mm) door			
9110-72	6' (1839 mm) By-Pass Set - For one 3'0" (914 mm) door			
9110-84	7' (2134 mm) By-Pass Set - For one 3'6" (1067 mm) door			
9110-96	8' (2438 mm) By-Pass Set - For one 4'0" (1219 mm) door			
9110-120	10' (3048 mm) By-Pass Set - For one 5'0" (1529 mm) door			
9110-144	12' (3658 mm) By-Pass Set - For one 6'0" (1829 mm) door			
9130 Series Set Includes one (1) 9101 track and one (1) 9129 parts bag For doors up to 275 lbs (125 kg)				
9130-60	5' (1524 mm) By-Pass Set - For one 2'6" (762 mm) door			
9130-72	6' (1839 mm) By-Pass Set - For one 3'0" (914 mm) door			
9130-84	7' (2134 mm) By-Pass Set - For one 3'6" (1067 mm) door			
9130-96	8' (2438 mm) By-Pass Set - For one 4'0" (1219 mm) door			
9130-120	10' (3048 mm) By-Pass Set - For one 5'0" (1529 mm) door			
9130-132	11' (3353 mm) By-Pass Set - For one 5'6" (1676 mm) door			
9130-144	12' (3658 mm) By-Pass Set - For one 6'0" (1829 mm) door			

TRACKS - Two sets required for by-pass opening - 0.125" (3 mm) thick aluminum

Part Number	Description
Tracks for use with	9110 Series and 9130 Series
9101-72	72" (1829 mm) Aluminum I-Beam Track
9101-84	84" (2134 mm) Aluminum I-Beam Track
9101-96	96" (2438 mm) Aluminum I-Beam Track
9101-120	120" (3048 mm) Aluminum I-Beam Track
9101-144	144" (3658 mm) Aluminum I-Beam Track
9101-192	192" (4877 mm) Aluminum I-Beam Track



SLIDING DOOR

9110 SERIES AND 9130 SERIES TRACK



9101

Aluminum I-Beam Track Materials: Extruded aluminum 0.125" (3 mm) Gauge: Lengths: 72" (1829 mm) to 192" (4877 mm) Mounting holes are pre-Notes: punched for ease of installation





9109

Parts Bag Includes two (2) 9102 2-wheel hangers and one (1) 9115 floor guide



9129 Parts Bag

Includes two (2) 9105 4-wheel hangers and one (1) 9115 floor guide



9110 SERIES AND 9130 SERIES COMPONENTS

Wheels:

Hanger:

Bolt:

Notes:

9102 2-Wheel Hanger

Materials: Zinc plated steel Nylon with steel ball bearings 1-13/16" x 2" x 1-1/8" (46 mm x 51 mm x 29 mm) 3/8" x 2-5/16" (10 mm x 59 mm) (Bolt not same as 9105) 1" x 3-1/2" x 3/16" Top Plate: (25 mm x 89 mm x 5 mm) Use with 9101 track, with doors weighing up to 175 lbs (79 kg)

9105 4-Wheel Hanger

Materials:	Zinc plated steel
Wheels:	Nylon with steel ball
	bearings
Hanger:	4" x 2" x 1-3/4"
	(102 mm x 51 x 45 mm)
Bolt:	3/8" x 2-5/16"
	(10 mm x 59 mm)
Top Plate:	1" x 3-1/2" x 3/16"
	(25.4 mm x 89 mm x 5 mm)
Notes:	 Use with 9101 track, with
	doors weighing up to 275

lbs (125 kg) • Four wheel hanger is selfaligning to allow consistent contact with track



Fixed Bottom Door Guide

9111

Materials:	Zinc plated steel with
	bronze roller
Guide:	2″ x 3/4″ x 3/32″
	(51 mm x 19 mm x 2 mm)
Roller:	17/32" x 1/2"
	(13.5 mm x 13 mm)
Notes:	 Door mortising is not

required • Use with 9122 guide channel







9110 SERIES AND 9130 SERIES COMPONENTS (CONTINUED)



9112

Stop Materials: Stop:

Notes:

9113 Stop Materials:

Stop:

Notes:

Zinc plated steel and rubber 1-5/8" x 1-1/2" x 5/8" x 7/8" (41 mm x 38 mm x 16 mm x 22 mm) Use with 9102 hanger

Zinc plated steel and rubber

1-3/4" (41 mm x 38 mm x

1-5/8" x 1-1/2" x 5/8" x

Use with 9105 hanger

16 mm x 45 mm)



9122

Bottom Track Materials: Gauge: Lengths:

Channel: Notes:

9909

Posts:

Gauge:

Guide:

Extruded aluminum 0.093 (2 mm) 48" (1219 mm) 192" (4877 mm) 5/8" x 3/4" (16 mm x 19 mm) • Screws not provided

· Mortised into floor or surface mounted

Adjustable Guide Materials:

Notes:

Steel with bright zinc Molded Celcon/Nylon 0.060" (2 mm) 4-7/8" x 1-5/8" x 1-3/16" (124 mm x 41 mm x 30 mm) For doors 3/4" to 1-3/4" (19 mm to 44 mm) thick with steel base, celcon, and nylon posts



9114

Materials: Guide: Lengths:

Notes:

- Door bottom prep requires 1/4" (6 mm) wide kerf
- Pre-punched for use with flat head screws



9115 **Bottom Door Guide**

Materials: Die cast zinc aluminum alloy Guide: 7/8" x 3/4" x 3" (22 mm x 19 mm x 76 mm) Door bottom prep requires Notes: 1/4" (6 mm) wide kerf and 9/16" (14 mm) depth



9121

Bottom Door Guide Materials: Zinc plated steel with bronze roller 1" x 3-1/2" x 3/16" Guide: (25 mm x 89 mm x 5 mm) 2-1/2" x 5/16" (64 x 8 mm) Post: Notes: Use with 9122 guide channel

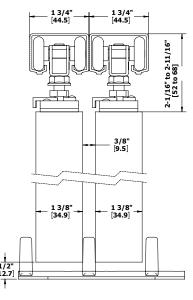


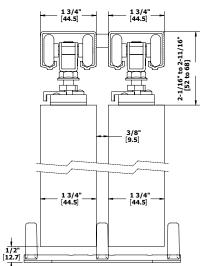
Bottom Guide Rail

Aluminum 7/8" x 1/2" (22 mm x 13 mm) 72" (1829 mm) 96" (2438 mm) 144" (3658 mm)

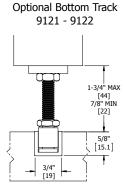
- and 9/16" (14 mm) depth







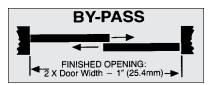
Interchanges with Stanley 125/250 Series and Johnson 100 Series



Installation note: Clearance between door bottom and top of 9122 track must be 7/8" (22 mm) minimum to 1-3/4" (44 mm) maximum.

9611 Series and 9612 Series

Heavy Duty Aluminum Box Track and Hardware Conforms to ANSI A156.14 Type: D8731, D8751



- For doors 1-3/8" 1-3/4" (35 mm 45 mm) thick (top figure)
- For doors 1-3/4" (45 mm) thick with tracks spaced 3/8" (10 mm) apart using 9573 (bottom figure)
- 9611 Series for doors weighing up to 150 lbs (68 kg) per door
- 9612 Series for doors weighing up to 250 lbs (113 kg) per door
- · Quick release hangers allow easy door hanging and removal
- Hangers have 1" (25 mm) diameter wheels
- Universal extruded aluminum track interchanges with Stanley and Johnson hangers and track

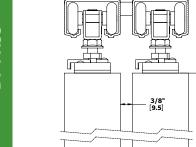
Part Number	Description		
9611 Series Set Includes two (2) 9821 tracks and one (1) 9892 parts bag For doors up to 150 lbs (68 kg)			
9611-60	By-Pass Set - For two 30" (762 mm) doors		
9611-72	By-Pass Set - For two 36" (914 mm) doors		
9611-96	By-Pass Set - For two 48" (1219 mm) doors		
	9612 Series Set Includes two (2) 9821 tracks and one (1) 9893 parts bag For doors up to 250 lbs (113 kg)		
9612-60	By-Pass Set - For two 30" (762 mm) doors		
9612-72	By-Pass Set - For two 36" (914 mm) doors		
9612-96	By-Pass Set - For two 48" (1219 mm) doors		

TRACKS - Two pieces required for by-pass - 0.06" (1.5 mm) thick aluminum

Part Number	vescription	
9821-59	" (1499 mm) Aluminum Box Track	
9821-71	71" (1803 mm) Aluminum Box Track	
9821-96	96" (2438 mm) Aluminum Box Track	
9821-144	144" (3658 mm) Aluminum Box Track	

FASCIA - 2-3/4" (70 mm) high with 5/8" (16 mm) lip

Part Number	Description
9709-72	72" (1829 mm) Aluminum Fascia
9709-96	96" (2438 mm) Aluminum Fascia







9611 SERIES AND 9612 SERIES TRACK



9821 Aluminum Box Track Materials:

Gauge:

Track:

Notes:

Extruded aluminum 0.06" (2 mm) 1-5/8" x 1-1/16" (41 mm x 27 mm) 59" (1499 mm) to 144" Lengths: (3658 mm) • Jump proof twin channel design

9611 SERIES AND 9612 SERIES FASCIA



9709 **Aluminum Fascia**

Materials: Gauge: Lip: Fascia: Lengths:

- Extruded aluminum 0.062" (1.6 mm) 5/8" (16 mm) 2-3/4" (70 mm) • 48" (1219 mm)
 - 60" (1524 mm)
- 72" (1829 mm)
- 96" (2438 mm)
- Notes:
- Grooved fascia for painting • Pre-punched holes for easy installation

9611 SERIES AND 9612 SERIES PARTS BAGS



9892

Parts Bag

Includes four (4) 9824 4-wheel hangers with quick release top mount plate, one (1) 9909 guide, and one (1) 9573 spacer kit



9893 Parts Bag

Includes four (4) 9825 4-wheel ball bearing hangers with quick release top mount plate, one (1) 9909 guide, and one (1) 9573 spacer kit



9611 SERIES AND 9612 SERIES COMPONENTS

2610 **Flush Cup Finger Pull**

Overall Diameter: Finger Pull Diameter: 3/4" (19 mm) Depth: Projection: Materials: Finishes:

31/32" (25 mm) 5/16" (8 mm) 1/32" (.8 mm) Solid brass US3, US4, US5, US10A, US15, US15A, US26, US26D, ABA • Built-in prong design eliminates the need for screws or brads

Notes:

2630 Flush Cup Pull **Overall Diameter:** Depth:

2-7/16" (62 mm) Finger Pull Diameter: 2-1/16" (52 mm) 11/32" (9 mm) 3/32" (2 mm) Solid brass US3, US4, US5, US10A, US15, US15A, US26, US26D, ABA • Built-in prong design eliminates the need for screws or brads

Notes:

Projection:

Materials:

Finishes:



9121

Bottom Door Guide Zinc plated steel with Materials: bronze roller Guide: 1" x 3-1/2" x 3/16" (25 mm x 89 mm x 5 mm) Post: 2-1/2" x 5/16" (64 mm x 8 mm) Use with 9122 guide channel Notes:



9611 SERIES AND 9612 SERIES COMPONENTS (CONTINUED)



9122 Bottom Track

Materials: Gauge: Lengths:

- Extruded aluminum 0.093 (2.4 mm) • 48" (1219 mm)
- Channel: Notes:
- 192" (4877 mm) 5/8" x 3/4" (16 mm x 19 mm)
- - Screws not provided • Mortised into floor or surface mounted



9815 **Bumper Stop**

Materials: Size:

Notes:

9824

- Zinc plated steel and rubber Rubber bumper - 1-1/4" (32 mm) x 1/2" (13 mm)
 - Fits all Hager track styles except 9101
 - Screws onto track
 - Included in bi-fold sets 9570 and 9890



9351 Guide

Notes:

9353

Notes:

Materials:

Materials: Guide:

High density polyethylene 4-9/16" x 1" x 11-3/16" (116 mm x 25 mm x 46 mm) One piece fixed guide for 1-3/8" (35 mm) doors

High density polyethylene

Adjustable guide from 3/4"

(19 mm) to 1-3/8" (35 mm)



4-Wheel Hanger with Quick Release Top Mount Plate Materials: Zinc plated steel Wheels: Self aligning to allow

Wheel: Notes:

track 1" (25 mm) diameter

consistent contact with

- Pre-lubricated Celcon wheels
- For doors up to 150 lbs (68ka)
- For use with 9821 track
- Quick release feature allows easy door hanging and removal



Materials: Rise: Notes:

9573

Notes:

Materials:

Steel with bright zinc finish 3/4" (19 mm) For mounting 9351 and 9353 floor guides over carpeting



9825

4-Wheel Ball Bearing Hanger with **Quick Release Top Mount Plate**

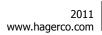
Materials: Wheels:

Wheel:

Notes:

- Zinc plated steel Self aligning to allow consistent contact with track with steel ball bearings 1" (25 mm) diameter
- Pre-lubricated Celcon wheels
- For doors up to 250 lbs (113 kg)
- For use with 9821 track
- Quick release feature allows easy door hanging and removal





BY-PASS



Adjustable Door Guide

3/4" (19 mm) Riser

Celcon Plastic Spacer Kit

Celcon plastic

doors

Includes screws

• Properly spaces two single

tracks for 1-3/4" (44 mm)



8



9611 SERIES AND 9612 SERIES COMPONENTS (CONTINUED)



9865

Flush Cup Pull

Depth: Projection: Materials:

Overall Diameter: 1-31/32" (50 mm) Finger Pull Diameter: 1-19/32" (41 mm) 11/32" (9 mm) 5/64" (2 mm) Tan color ABS plastic • Built-in prong design eliminates the need for screws or brads



9880 **Door Stop**

Notes:

Materials: Gauge: Stop:

Notes:

- Zinc plated steel and rubber 0.090" (2.3 mm) 1-1/4" x 1-1/4" x 7/8" (32 mm x 32 mm x 22 mm) • For doors up to 175 lbs (79.4 kg)
 - Keeps rear door pull exposed
- Mounts on door
- Not included in sets



9909 Adjustable Guide

Steel with bright zinc finish Materials:

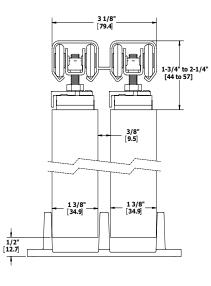
Gauge: Guide: Notes:

Posts:

Molded Celcon/Nylon 0.060" (1.5 mm) 4-7/8" x 1-5/8" x 1-3/16" (124 mm x 41 mm x 30 mm) For doors 3/4" to 1-3/4" (19 mm to 44 mm) thick and up to 275 lbs (125 kg)







Interchanges with Stanley 1755, 40-3664, 40-3855/BP150; Johnson 134F/138F; Grant 7000 Series, Cox 15-220 Series; and Lawrence 581 track, HD520hardware.

9675 Series and 9676 Series

Heavy Duty Aluminum Double Box Track and Hardware Conforms to ANSI A156.14 Type: D8731, D8741, D8751



- For doors 1-3/8" 1-3/4" (35 mm 44 mm) thick
- Up to 100 lbs (45 kg) with 9572 hangers
- 9675 for up to 125 lbs (57 kg) per door
- 9676 for up to 150 lbs (68 kg) per door
- Track is extruded aluminum jump-proof style with "V" shaped rails
- Hangers have four (4) 7/8" (22 mm) diameter wheels

Part Number	Description		
	9675 Series Set Includes one (1) 9602 track and one (1) 9679 parts bag For doors up to 125 lbs (57 kg)		
9675-48	By-Pass Set - For two 24" (610 mm) doors		
9675-60	By-Pass Set - For two 30" (762 mm) doors		
9675-72	By-Pass Set - For two 36" (914 mm) doors		
9675-96	By-Pass Set - For two 48" (1219 mm) doors		
9676 Series Set Includes one (1) 9602 track and one (1) 9680 parts bag For doors up to 150 lbs (68 kg)			
9676-48	By-Pass Set - For two 24" (610 mm) door		
9676-60	By-Pass Set - For two 30" (762 mm) door		
9676-72	By-Pass Set - For two 36" (914 mm) door		
9676-96	By-Pass Set - For two 48" (1219 mm) door		

TRACKS - 0.050" (1.3 mm) thick aluminum

Part Number	Description		
Tracks for use with	h 9675 Series and 9676 Series		
9602-46	46" (1168 mm) Aluminum Double Box Track		
9602-58	58" (1473 mm) Aluminum Double Box Track		
9602-70	70" (1778 mm) Aluminum Double Box Track		
9602-94	94" (2388 mm) Aluminum Double Box Track		
9602-118	118" (2997 mm) Aluminum Double Box Track		
9602-142	142" (3607 mm) Aluminum Double Box Track		

FASCIA - 2-3/4" (70 mm) high with 5/8" (16 mm) lip

Part Number	Description	
9709-48	48" (1219 mm) Aluminum Fascia	
9709-60	60" (1524 mm) Aluminum Fascia	
9709-72	72" (1829 mm) Aluminum Fascia	
9709-96	96" (2438 mm) Aluminum Fascia	









9675 SERIES AND 9676 SERIES TRACK



9602 Heavy Duty Aluminum Double Box Track Materials: Extruded aluminum 0.050" (1.3 mm) Gauge: Track: 1-1/16" x 3-1/8" (27 mm x 79 mm)

(3607 mm)

46" (1168 mm) to 142"

channel design

• Jump proof double twin

Lengths:

Notes:

9675 SERIES AND 9676 SERIES FASCIA



9709 **Aluminum Fascia**

Materials: Extruded aluminum 0.062" (1.6 mm) 5/8" (16 mm) 2-3/4" (70 mm) 72" (1829 mm) and Lengths: 96" (2438 mm) • Grooved fascia for painting • Pre-punched holes for easy installation

9675 SERIES AND 9676 SERIES PARTS BAGS

Notes:



9575 Parts Bag

For 100 lb (45 kg) doors - Includes four (4) 9572 hangers, one (1) 9909 guide



9679 Parts Bag

For 125 lb (57 kg) doors - Includes four (4) 9605 hangers, four (4) 9609 plates, and one (1) 9909 guide



9680

Parts Bag For 150 lb (68 kg) doors - Includes four (4) 9606 ball bearing hangers and one (1) 9909 quide



9675 SERIES AND 9676 SERIES COMPONENTS

2610 **Flush Cup Finger Pull**

Overall Diameter: Finger Pull Diameter: 3/4" (19 mm) Depth: Projection: Materials: Finishes:

31/32" (24.5 mm) 5/16" (8 mm) 1/32" (.8 mm) Solid brass US3, US4, US5, US10A, US15, US15A, US26, US26D, ABA • Built-in prong

Notes:

design eliminates the need for screws or brads



2630 **Flush Cup Pull**

Overall Diameter: Finger Pull Diameter: 2-1/16" (52 mm) Depth: Projection: Materials: Finishes:

2-7/16" (62 mm) 11/32" (9 mm) 3/32" (2 mm) Solid brass US3, US4, US5, US10A, US15, US15A, US26, US26D, ABA • Built-in prong design eliminates the need for screws or brads

BY-PASS

Notes:

Notes:



High density polyethylene 4-9/16" x 1" x 11-3/16" (116 mm x 25 mm x 46 mm) One piece fixed guide for 1-3/8" (35 mm) doors



9675 SERIES AND 9676 SERIES COMPONENTS (CONTINUED)



9353

Adjustable Door Guide High density polyethylene Materials: Notes: Adjustable guide from 3/4" (19 mm) to 1-3/8" (35 mm)



9354 3/4" (19 mm) Riser

Materials: Steel with bright zinc finish 3/4" (19 mm) For mounting 9351 and Notes: 9353 floor quides over carpeting



9572

Rise:

4-Wheel Hanger and Door Bracket

Materials: Wheel: Notes:

Steel with bright zinc finish 7/8" (22 mm) diameter

- Wheels are self aligning to allow consistent contact with track
- Pre-lubricated Celcon wheels
- Includes wrench
- For use on doors weighing up to 100 lbs (45 kg) each
- For use with 9599, 9601, 9602, and 9603 track



9605

Wheel:

Notes:

4-Wheel Hanger Materials:

- Steel with brass-tone dichromate finish 7/8" (22 mm) diameter
- Wheels are self aligning to allow consistent contact with track
- Pre-lubricated Celcon wheels mounted on steel ball bearing shafts
- Can be used on pivot set
- For doors up to 125 lbs (57 kg)
- Use in conjunction with 9601, 9602, or 9603 track



9606 4-Wheel Ball Bearing Hanger

Materials:

Steel with brass-tone dichromate finish

Wheel: Notes:

- 7/8" (22 mm) diameter • Wheels are self aligning to allow consistent contact with track
- Pre-lubricated Celcon wheels mounted on steel ball bearing shafts
- For doors up to 150 lbs (68 kg)
- Used in conjunction with 9607, 9608 or 9609 top door plate and 9599, 9601, 9602, or 9603 track





9675 SERIES AND 9676 SERIES COMPONENTS (CONTINUED)



9815

Bumper Stop Materials: Zinc plated steel and rubber

- Notes:
- Fits all Hager track styles except 9101
 - Screws onto track
 - Included in bi-fold sets 9570 and 9890

1-31/32" (50 mm)

11/32" (9 mm)

5/64" (2 mm)

Tan color ABS plastic

• Built-in prong design eliminates

the need for screws or brads



9865

Flush Cup Pull

Overall Diameter: Finger Pull Diameter: 1-19/32" (41 mm) Depth: Projection: Materials:

Notes:

9880 **Door Stop**

Gauge: Stop:

Materials: Zinc plated steel and rubber 0.090" (2.3 mm) 1-1/4" x 1-1/4" x 7/8" (32 mm x 32 mm x 22 mm)

Notes:

- For doors up to 175 lbs (79 kg)
- Keeps rear door pull exposed
- Mounts on door
- Not included in sets



9909 Adjustable Guide

Posts:

Gauge:

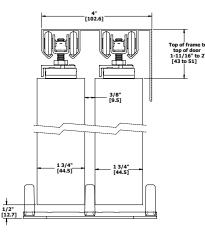
Guide:

Notes:

Materials: Steel with bright zinc Molded Celcon/Nylon 0.060" (1.5 mm) 4-7/8" x 1-5/8" x 1-3/16" (124 mm x 41 mm x 30 mm) For doors 3/4" to 1-3/4" (19 mm to 44 mm) thick and up to 275 lbs (125 kg)







Interchanges with Stanley S1700F Series/BP150F; Johnson 134F/138F; and Lawrence F581 track, HDF520 Series sets.

9673 Series and 9674 Series

Heavy Duty Aluminum Track with 2-5/8" (66 mm) Fascia and Hardware Conforms to ANSI A156.14 Type: D8751, D8752



- For doors 1-3/8" 1-3/4" (35 mm 44 mm) thick
- Up to 100 lbs (45 kg) with 9572 hangers
- 9673 for up to 125 lbs (57 kg) per door
- 9674 for up to 150 lbs (68 kg) per door
- Track is extruded aluminum jump-proof style with "V" shaped rails and intregal 2-5/8" (66 mm) fascia
- Hangers have four (4) 7/8" (22 mm) diameter wheels

Part Number	Description		
9673 Series Set Includes one (1) 9603 track and one (1) 9679 parts bag For doors up to 125 lbs (57 kg)			
9673-48	By-Pass Set - For two 24" (610 mm) doors		
9673-60	By-Pass Set - For two 30" (762 mm) doors		
9673-72	By-Pass Set - For two 36" (914 mm) doors		
9673-96	By-Pass Set - For two 48" (1219 mm) doors		
9674 Series Set Includes one (1) 9603 track and one (1) 9680 parts bag For doors up to 150 lbs (68 kg) and For doors up to 250 lbs (113 kg)			
9674-48	By-Pass Set - For two 24" (610 mm) door		
9674-60	By-Pass Set - For two 30" (762 mm) door		
9674-72	By-Pass Set - For two 36" (914 mm) door		
9674-96	By-Pass Set - For two 48" (1219 mm) door		

TRACKS - 0.050" (1.3 mm) thick aluminum

Part Number	Description		
Tracks for use wit	h 9673 Series and 9674 Series		
9603-48	48" (1219 mm) Aluminum Double Box Track		
9603-60	60" (1524 mm) Aluminum Box Track		
9603-72	72" (1829 mm) Aluminum Box Track		
9603-96	96" (2438 mm) Aluminum Box Track		
9603-120	120" (3048 mm) Aluminum Double Box Track		
9603-144	144" (3658 mm) Aluminum Double Box Track		



BY-PASS



Flush Cup Finger Pull

Finger Pull Diameter: 3/4" (19 mm)

Overall Diameter:

9673 SERIES AND 9674 SERIES COMPONENTS

2610

Depth:

Projection:

Materials:

Finishes:

Notes:



31/32" (25 mm)

5/16" (8 mm) 1/32" (.8 mm)

US3, US4, US5, US10A, US15,

US15A, US26, US26D, ABA

• Built-in prong

the need for screws or brads

design eliminates

Solid brass

9673 SERIES AND 9674 SERIES TRACK



9603

Heavy Duty Aluminum Double Box Track Materials: Extruded aluminum

0.050" (1.3 mm) 1-1/16" x 4" (27 mm x 102 mm) Lengths: 48" (1219 mm) to 144" (3658 mm)

Notes:

Gauge:

Track:

- Grooved fascia for painting
- Jump proof double twin channel design
- One piece track with built-in grooved fascia

9673 SERIES AND 9674 SERIES PARTS BAGS



9575 Parts Bag

For 100 lb (45 kg) doors - Includes four (4) 9572 hangers, one (1) 9909 guide



9679 Parts Bag

For 125 lb (57 kg) doors - Includes four (4) 9605 hangers, four (4) 9609 plates, and one (1) 9909 guide



9680 Parts Bag

For 150 lb (68 kg) doors - Includes four (4) 9606 ball bearing hangers, four (4) 9609 plates, and one (1) 9909 guide



9351 Guide Materials: Guide:

Notes:

High density polyethylene 4-9/16" x 1" x 11-3/16" (116 mm x 25 mm x 46 mm) One piece fixed guide for 1-3/8" (35 mm) doors



9353 Adjustable Door Guide

Materials: Notes:

High density polyethylene Adjustable guide from 3/4" -1-3/8" (19 mm - 35 mm)



2630 **Flush Cup Pull**

Overall Diameter: Finger Pull Diameter: 2-1/16" (52 mm) Depth: Projection: Materials: Finishes:

Notes:

2-7/16" (62 mm) 11/32" (9 mm) 3/32" (2 mm) Solid brass US3, US4, US5, US10A, US15, US15A, US26, US26D, ABA • Built-in prong

BY-PASS

design eliminates the need for screws or brads

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2011

9673 SERIES AND 9674 SERIES COMPONENTS (CONTINUED)



9354

3/4" (19 mm) Riser Fits 9351 and 9353 Steel with bright zinc finish Materials: 3/4" (19 mm) Rise: For mounting 9351 and 9353 Notes: floor guides over carpeting



9606

4-Wheel Ball Bearing Hanger

For 150 lb (68 kg) doors Steel with brass-tone Materials: dichromate finish

Wheel: Notes:

- 7/8" (22 mm) diameter • Wheels are self aligning to
- allow consistent contact with track
- Pre-lubricated Celcon wheels mounted on steel ball bearing shafts
- For doors up to 150 lbs (68 kg)
- Used in conjunction with 9607, 9608 or 9609 top door plate and 9599, 9601 or 9602 track



9572

4-Wheel Hanger and Door Bracket

For 100 lb (45 kg) doors Materials: Steel with brass-tone dichromate finish

- Wheel: Notes:
- 7/8" (22 mm) diameter • Wheels are self aligning to allow consistent contact
- with track • Pre-lubricated Celcon
- wheels • Includes wrench
- For use on doors weighing
- up to 100 lbs (45 kg) each • For use with 9599, 9601,
- 9602, and 9603 track



9605

Notes:

4-Wheel Hanger For 125 lb (57 kg) doors

Materials: Steel with brass-tone dichromate finish Wheel:

- 7/8" (22 mm) diameter
 - Wheels are self aligning to allow consistent contact with track
 - Pre-lubricated Celcon wheels
 - For doors up to 125 lbs (57 kg)
 - Use in conjunction with 9601 or 9602 track





9673 SERIES AND 9674 SERIES COMPONENTS (CONTINUED)



9815

Bumper Stop Materials: Zinc plated steel and rubber

Notes:

- Fits all Hager track styles except 9101
 - Screws onto track
 - Included in bi-fold
 - sets 9570 and 9890



9865

Flush Cup Pull

Overall Diameter: Depth: Projection: Materials:

Notes:

1-31/32" (50 mm) Finger Pull Diameter: 1-19/32" (41 mm) 11/32" (9 mm) 5/64" (2 mm) Tan color ABS plastic • Built-in prong design eliminates the need for screws or brads



9880

Door Stop Materials:

Gauge: Stop:

Notes:

- Zinc plated steel and rubber 0.090" (2.3 mm) 1-1/4" x 1-1/4" x 7/8" (32 mm x 32 mm x 22 mm) • For doors up to 175 lbs (79.4 kg)
- Keeps rear door pull exposed
- Mounts on door
- Not included in sets



9909

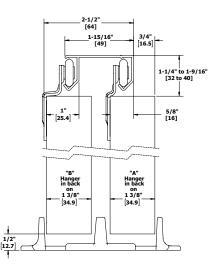
Adjustable Guide Materials: Posts: Gauge: Guide:

Notes:

Steel with bright zinc finish Molded Celcon/Nylon 0.060" (1.5 mm) 4-7/8" x 1-5/8" x 1-3/16" (124 mm x 41 mm x 30 mm) For doors 3/4" to 1-3/4" (19 mm to 44 mm) thick and up to 275 lbs (125 kg)







Interchanges with Stanley 40-3230, 40-3240, 40-3260, BP60/BP75-02 and Cox 12-200 Series.

9514 Series and 9583 Series

Aluminum Track and Hardware Conforms to ANSI A156.14 Type: D8742



- For doors 3/4" 1-3/8" (19 mm 35 mm) thick
- Up to 60 lbs (27 kg) per door with single wheel hangers 9400 or 9401
- Up to 75 lbs (34 kg) per door with twin wheel hangers 9202 or 9203
- Track is extruded aluminum jump-proof style with "V" shaped rails
- Hangers have 7/8" (22 mm) diameter wheels

Part Number	Description		
•	9514 Series Set (for two doors) Includes one (1) 9810 track and one (1) 9814 parts bag		
9514-48	By-Pass Set - For two 24" (610 mm) doors		
9514-60	By-Pass Set - For two 30" (762 mm) doors		
9514-72	By-Pass Set - For two 36" (914 mm) doors		
9514-96	By-Pass Set - For two 48" (1219 mm) doors		
9583 Series Set (for three doors) Includes one (1) 9810 track, two (2) 9400 hangers, four (4) 9401 hangers, two (2) 9353 guides, and three (3) 2610 pulls			
9583-96	By-Pass Set - For three 32" (813 mm) doors		

TRACKS - 0.050" (1.3 mm) thick aluminum

Part Number	Description		
Tracks for use with	n 9514 Series and 9583 Series		
9810-46	46-3/8" (1178 mm) Aluminum Box Track		
9810-58	58-3/8" (1483 mm) Aluminum Box Track		
9810-70	70-3/8" (1788 mm) Aluminum Box Track		
9810-93	93-3/8" (2371 mm) Aluminum Box Track		
9810-120	120" (3048 mm) Aluminum Box Track		
9810-144	144" (3658 mm) Aluminum Box Track		

Hanger Selection Chart			
Door Thickness	3/4" (19 mm)	1" - 1-1/8" (25 - 29 mm)	1-3/8" (35 mm)
Front Hanger	В	В	A
Rear Hanger	A	В	В

Use this chart to select the correct hanger offset combination for your application.







9514 SERIES AND 9583 SERIES TRACK



9810 Aluminum Track

Materials: Extruded aluminum 0.050" (1.3 mm) 1" x 2" (25 mm x 51 mm) Lengths: 48" (1219 mm) to 144" (3658 mm)

Notes:

Gauge

Track:

- For doors up to 75 lbs
 - (34 kg)
 - One piece track





9814 Parts Bag

Includes two (2) 9400 hangers, two (2) 9401 hangers, two (2) 2610-US3 pulls, and one (1) 9353 guide

9514 SERIES AND 9583 SERIES COMPONENTS



2610 **Flush Cup Finger Pull**

Overall Diameter: Depth: Projection: Materials: Finishes:

Notes:

31/32" (25 mm) Finger Pull Diameter: 3/4" (19 mm) 5/16" (8 mm) 1/32" (.8 mm) Solid brass US3, US4, US5, US10A, US15, US15A, US26, US26D, ABA • Built-in prong design eliminates the need for screws or brads



2630

Flush Cup Pull Overall Diameter: Finger Pull Diameter: 2-1/16" (52 mm) Depth: Projection: Materials: Finishes:

2-7/16" (62 mm) 11/32" (9 mm) 3/32" (2 mm) Solid brass US3, US4, US5, US10A, US15, US15A, US26, US26D, ABA • Built-in prong design eliminates the need for

screws or brads

Notes:

9200* | 9201**

Materials: Gauge: Wheel:

Notes:

Single Wheel Hanger Zinc plated steel with molded Celcon wheels 0.075" (2 mm)

- 7/8" (22 mm) diameter For use on doors weighing up to 60 lbs. (27 kg)
- For use with 9810, 9820, and 9840 track
- Side mounted with slot adjust offset
- Hanger is stamped "A" or "B" for easy identification
- * 9200 is A offset of 3/8" (9.5 mm)
- ** 9201 is B offset of 11/16"
- (17.5 mm)

9202* | 9203**

2-Wheel Hanger Materials:

Gauge: Wheel: Notes:

molded Celcon wheels 0.075" (2 mm) 7/8" (22 mm) diameter

Zinc plated steel with

- For use on doors weighing up to 60 lbs. (27 kg)
- For use with 9810, 9820, and 9840 track
- Side mounted with slot adjust offset
- Hanger is stamped "A" or "B" for easy identification
- * 9202 is B offset of 11/16" (17.5 mm)
- ** 9203 is A offset of 3/8" (9.5 mm)





9514 SERIES AND 9583 SERIES COMPONENTS (CONTINUED)



9351 Guide

Materials: Guide: Notes:

High density polyethylene 4-9/16" x 1" x 11-3/16" (116 mm x 25 mm x 46 mm) One piece fixed guide for 1-3/8" (35 mm) doors

High density polyethylene Adjustable guide from 3/4"

(19 mm) to 1-3/8" (35 mm)



9865

Flush Cup Pull Overall Diameter: Finger Pull Diameter: 1-19/32" (41 mm) Depth: Projection: Materials:

1-31/32" (50 mm) 11/32" (9 mm) 5/64" (2 mm) Tan color ABS plastic Built-in prong design eliminates the need for screws or brads

Notes:

9880

Door Stop Materials:

Gauge:

Stop:

Notes:

Zinc plated steel and rubber 0.090" (2.3 mm) 1-1/4" x 1-1/4" x 7/8" (32 mm x 32 mm x 22 mm) • For doors up to 175 lbs (79.4 kg) • Keeps rear door pull

- exposed
- Mounts on door
- Not included in sets



Posts:

Gauge:

Guide:

Notes:

Adjustable Guide

Steel with bright zinc Molded Celcon/Nylon 0.060" (1.5 mm) 4-7/8" x 1-5/8" x 1-3/16" (124 mm x 41 mm x 30 mm) For doors 3/4" to 1-3/4" (19 mm to 44 mm) thick and up to 275 lbs (124.7 kg)



9354

9353

Notes:

Materials:

Materials: Rise: Notes:

3/4" (19 mm) Riser

Adjustable Door Guide

Steel with bright zinc finish 3/4" (19 mm) For mounting 9351 and 9353 floor guides over carpeting

9400* | 9401** Micro Adjust Hanger

Materials:

Gauge: Wheel: Notes:

- Zinc plated steel with molded Celcon wheels
- 0.075" (2 mm) 7/8" (22 mm) diameter
- Side mounted with precise
 - cam adjustment • For use on doors weighting up to 60 lbs. (27 kg)
 - For use with 9810, 9820, and 9840 track
 - Hanger is stamped "A" or "B" for easy identification
 - * 9400 is A offset of 3/8" (9.5 mm)
 - ** 9401 is B offset of 11/16" (17.5 mm)

9815 **Bumper Stop**

Notes:

Materials: Zinc plated steel and rubber

- Fits all Hager track styles except 9101
 - Screws onto track
 - Included in bi-fold sets 9570 and 9890





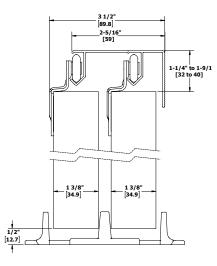
BY-PASS





2011





Interchanges with Stanley 8139 track, BP75-06, 8400 Series sets, 40-3340 and Cox 12-400 Series.

9614 Series and 9683 Series

Aluminum Track with 1-3/4" (44 mm) Fascia and Hardware Conforms to ANSI A156.14 Type: D8742



- For doors 1-3/8" (35 mm) thick
- Uses all B offset hangers
- Up to 60 lbs (27 kg) per door with single wheel 9201 or 9401 hangers
- Up to 75 lbs (34 kg) per door with twin wheel 9202 hangers
- Track is extruded aluminum jump-proof style with integral 1-3/4" (44 mm) fascia
- Hangers have one or two side mounted 7/8" (22 mm) diameter wheels

Part Number	Description		
•	9614 Series Set (for two doors) Includes one (1) 9820 track and one (1) 9540 parts bag		
9614-48	By-Pass Set - For two 24" (610 mm) doors		
9614-60	By-Pass Set - For two 30" (762 mm) doors		
9614-72	By-Pass Set - For two 36" (914 mm) doors		
9683 Series Set (for three doors) Includes one (1) 9820 track and one (1) 9540 parts bag			
9683-96	By-Pass Set - For three 32" (813 mm) doors		

TRACKS - 0.050" (1.3 mm) thick aluminum

Part Number	Description
Tracks for use with	n 9614 Series and 9683 Series
9820-48	48" (1178 mm) Aluminum Double Box Track
9820-60	60" (1483 mm) Aluminum Box Track
9820-72	72" (1788 mm) Aluminum Box Track
9820-96	96" (2371 mm) Aluminum Box Track
9820-120	120" (3048 mm) Aluminum Double Box Track
9820-144	144" (3658 mm) Aluminum Double Box Track



9614 SERIES AND 9683 SERIES TRACK



9820

Aluminum Track with 1-3/4" (44 mm) Fascia

Materials: Gauge: Track: Lengths:

Extruded aluminum 0.050" (1.3 mm) 1-3/4" x 3" (44 mm x 76 mm) 48" (1219 mm) to 144" (3658 mm)

Notes:

- For doors up to 75 lbs (34 kg) • For use on 1-3/8"
- (35 mm) doors only • For use with 7/8"
- (22 mm) diameter hanger wheels
- One piece track with built-in smooth fascia

9614 SERIES AND 9683 SERIES PARTS BAGS



BY-PASS

9540 Parts Bag

Includes four (4) 9401 hangers, two (2) 2610-US3 pulls, and one (1) 9351 guide



9544 Parts Bag

Includes four (4) 9202 hangers, two (2) 2630-US3 pulls, and one (1) 9351 guide



9841

Parts Bag Includes four (4) 9401 hangers, two (2) 9865 pulls, and one (1) 9351 guide



9842

Parts Bag Includes four (4) 9401 hangers, two (2) 2630-US3 pulls, and one (1) 9351 guide



9843 Parts Bag

Includes four (4) 9202 hangers, two (2) 9865 pulls, and one (1) 9351 guide

9614 SERIES AND 9683 SERIES COMPONENTS

2610

Flush Cup Finger Pull

Overall Diameter: Depth: Projection: Materials: Finishes:

31/32" (25 mm) Finger Pull Diameter: 3/4" (19 mm) 5/16" (8 mm) 1/32" (.8 mm) Solid brass US3, US4, US5, US10A, US15, US15A, US26, US26D, ABA • Built-in prong design eliminates the need for screws or brads.

Notes:

2630

Finishes:

Notes:

Flush Cup Pull Overall Diameter: Finger Pull Diameter: 2-1/16" (52 mm) Depth: Projection: Materials:

2-7/16" (62 mm) 11/32" (9 mm) 3/32" (2 mm) Solid brass US3, US4, US5, US10A, US15, US15A, US26, US26D, ABA • Built-in prong design eliminates the need for screws or brads.







9614 SERIES AND 9683 SERIES COMPONENTS (CONTINUED)



9201

Gauge:

Wheel:

Notes:

Single Wheel Hanger Materials:

Zinc plated steel with molded Celcon wheels 0.075" (2 mm)

- 7/8" (22 mm) diameter
- For use on doors weighing up to 60 lbs (27 kg)
 - For use with 9810, 9820, and 9840 track
 - Side mounted with slot adjust offset
 - 9201 is B offset of 11/16" (17.5 mm)



9354

3/4" (19 mm) Riser Materials: Rise: Notes:

Steel with bright zinc finish 3/4" (19 mm) For mounting 9351 and 9353 floor guides over carpeting



9401

Micro Adjust Hanger Materials:

Gauge: Wheel: Notes:

- Zinc plated steel with molded Celcon wheels 0.075" (2 mm) 7/8" (22 mm) diameter
- Side mounted with precise cam adjustment
- For use on doors weighting up to 60 lbs (27 kg)
- For use with 9810, 9820, and 9840 track

9202

Materials: Gauge: Wheel: Notes:

2-Wheel Hanger Zinc plated steel with

molded Celcon wheels 0.075" (2 mm) 7/8" (22 mm) diameter

- For use on doors weighing up to 60 lbs (27 kg)
- For use with 9810, 9820, and 9840 track
- Side mounted with slot adjust offset
- 9202 is B offset of 11/16" (17.5 mm)





9351 Guide

Materials: Guide:

Notes:

Notes:

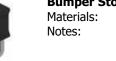
High density polyethylene 4-9/16" x 1" x 11-3/16" (116 mm x 25 mm x 46 mm) One piece fixed guide for 1-3/8" (35 mm) doors



9353

Adjustable Door Guide Materials:

High density polyethylene Adjustable guide from 3/4" (19 mm) to 1-3/8" (35 mm)



9815

Bumper Stop

Zinc plated steel and rubber • Fits all Hager track styles except 9101

- Screws onto track
- Included in bi-fold sets 9570 and 9890

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9614 SERIES AND 9683 SERIES COMPONENTS (CONTINUED)



9865

Flush Cup Pull Depth: Projection: Materials:

Notes:

Overall Diameter: 1-31/32" (50 mm) Finger Pull Diameter: 1-19/32" (41 mm) 11/32" (9 mm) 5/64" (2 mm) Tan color ABS plastic • Built-in prong design eliminates the need for screws or brads

9880

Door Stop	
Materials:	Zinc plated steel and
	rubber
Gauge:	0.090" (2.3 mm)
Stop:	1-1/4" x 1-1/4" x 7/8"
	(32 mm x 32 mm x 22 mm)
Notes:	• For doors up to 175 lbs
	(79.4 kg)
	Keens rear door null

 Keeps rear door pull exposed

- Mounts on door
- Not included in sets

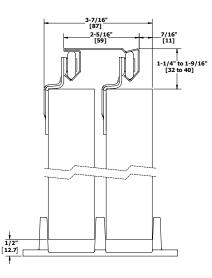
9909

Adjustable Guide Materials: Steel with bright zinc Molded Celcon/Nylon Posts: 0.060" (1.5 mm) 4-7/8" x 1-5/8" x 1-3/16" Gauge: Guide: (124 mm x 41 mm x 30 mm) Notes: For doors 3/4" to 1-3/4" (19 to 44 mm) thick and up to 275 lbs (125 kg)









Interchanges with Stanley 8603 track and 8800 Series, BP75-01 and Cox 12-300 Series.

9844 Series and 9845 Series Galvanized Steel Track and Hardware Conforms to ANSI A156.14 Type: D8742



- For doors 1-1/8" (29 mm) and 1-3/8" (35 mm) thick, use 9844 packaged set
- Optional for doors 1-1/8" (29 mm) and 1-3/4" (44 mm) thick, use 9840 track and refer to side mount selection chart for combinations of hangers
- Up to 60 lbs (27 kg) per door with single wheel 9401 hangers
- Up to 75 lbs (34 kg) per door with twin wheel 9202 hangers
- Track is zinc finishes steel jump-proof style
- Hangers have one or two side mounted 7/8" (22 mm) diameter wheels

Part Number	Description
9844 Series Set (for two doors) Includes one (1) 9840 track and one (1) 9540 parts bag	
9844-48	By-Pass Set - For two 24" (610 mm) doors
9844-60	By-Pass Set - For two 30" (762 mm) doors
9844-72	By-Pass Set - For two 36" (914 mm) doors
9844-96	By-Pass Set - For two 48" (1219 mm) doors
9845 Series Set (for three doors) Includes one (1) 9840 track and one (1) 9540 parts bag	
9845-96	By-Pass Set - For three 32" (813 mm) doors

TRACKS - 0.03" (0.8 mm) thick 23 gauge galvanized steel

Part Number	Description
Tracks for use with	n 9844 Series and 9845 Series
9840-46	46-1/2" (1181 mm) Galvanized Steel Track
9840-58	58-1/2" (1486 mm) Galvanized Steel Track
9840-70	70-1/2" (1791 mm) Galvanized Steel Track
9840-81	81-1/2" (2070 mm) Galvanized Steel Track
9840-93	93-1/2" (2371 mm) Galvanized Steel Track
9840-120	120" (3048 mm) Galvanized Steel Track
9840-144	144" (3658 mm) Galvanized Steel Track

Side Mount Plate Selection Chart			
Door Thickness	1-1/8" (29 mm)	1-3/8" (35 mm)	1-3/4" (44 mm)
Front Hanger	A or B	В	A
Rear Hanger	Same as front	В	В
Door Gap	11/16″	9/16″	3/8″

Use this chart to select the correct hanger offset combination for your application.





9844 SERIES AND 9845 SERIES TRACK



9840 Galvanized Steel Track

Materials: Gauge: Track: Lengths:

Galvanized steel 0.030" (.8 mm) 1" x 2-1/4" (25 mm x 57 mm) 48" (1219 mm) to 144" (3658 mm)

- Notes:
- For doors up to 75 lbs (34 kg) • For use on 1-3/8" (35 mm)
- doors and 1-3/4" (44 mm) doors
- For use with 7/8" (22 mm) diameter hanger wheels

9844 SERIES AND 9845 SERIES PARTS BAGS



9540 Parts Bag

Includes four (4) 9401 hangers, two (2) 2610-US3 pulls, and one (1) 9351 guide



9544

Parts Bag Includes four (4) 9202 hangers, two (2) 2630-US3 pulls, and one (1) 9351 guide



9814 Parts Bag

Includes two (2) 9400 hangers, two (2) 9401 hangers, two (2) 2610-US3 pulls, and one (1) 9353 guide



9841 Parts Bag

Includes four (4) 9401 hangers, two (2) 9865 pulls, and one (1) 9351 guide



9842

Parts Bag Includes four (4) 9401 hangers, two (2) 2630-US3 pulls, and one (1) 9351 guide



9843 Parts Bag

Includes four (4) 9202 hangers, two (2) 9865 pulls, and one (1) 9351 guide

9844 SERIES AND 9845 SERIES COMPONENTS



2610 **Flush Cup Finger Pull**

Overall Diameter: 31/32" (25 mm) Finger Pull Diameter: 3/4" (19 mm) 5/16" (8 mm) Projection: 1/32" (.8 mm) Materials: Solid brass Finishes: US3, US4, US5, US10A, US15, US15A, US26, US26D, ABA Built-in prong design eliminates

Notes:

Depth:

2630

Flush Cup Pull Overall Diameter: Finger Pull Diameter: 2-1/16" (52 mm) Depth: Projection: Materials: Finishes:

2-7/16" (62 mm) 11/32" (9 mm) 3/32" (2 mm) Solid brass US3, US4, US5, US10A, US15, US15A, US26, US26D, ABA • Built-in prong design eliminates the need for screws or brads

the need for

screws or brads

Notes:





9844 SERIES AND 9845 SERIES COMPONENTS (CONTINUED)



9201

Notes:

Single Wheel Hanger

Zinc plated steel with Materials: molded Celcon wheels 0.075" (2 mm) Gauge: Wheel:

- 7/8" (22 mm) diameter
 - For use on doors weighing up to 60 lbs (27 kg)
 - For use with 9810, 9820, and 9840 track Side mounted with slot
 - adjust offset • 9201 is B offset of 11/16" (18 mm)
 - Hanger is stamped "A" or "B" for easy identification

Zinc plated steel with

0.075" (2 mm)

molded Celcon wheels

7/8" (22 mm) diameter

up to 60 lbs (27 kg) • For use with 9810, 9820,

• Side mounted with slot

• 9202 is B offset of 11/16"

• Hanger is stamped "A" or

"B" for easy identification

and 9840 track

adjust offset

(18 mm)

• For use on doors weighing



9202

Two Wheel Hanger Materials:

Gauge: Wheel: Notes:



9354

3/4" (19 mm) Riser Materials: Rise: Notes:

Steel with bright zinc finish 3/4" (19 mm) For mounting 9351 and 9353 floor quides over carpeting



9401

Micro Adjust Hanger Materials:

Gauge: Wheel: Notes:

9815

Zinc plated steel with molded Celcon wheels

0.075" (2 mm) 7/8" (22 mm) diameter

- Side mounted with precise cam adjustment
- For use on doors weighting up to 60 lbs (27 kg)
- For use with 9810, 9820, and 9840 track
- 9401 is B offset of 11/16" (18 mm)
- Hanger is stamped "B" for easy identification

Bumper Stop

Materials: Zinc plated steel and rubber Notes:

- Fits all Hager track styles except 9101
- Screws onto track
- Included in bi-fold sets 9570 and 9890



9351

Guide Materials: Guide:

Notes:

Notes:

High density polyethylene 4-9/16" x 1" x 11-3/16" (116 mm x 25 mm x 46 mm) One piece fixed guide for 1-3/8" (35 mm) doors

9353

Adjustable Door Guide Materials:

High density polyethylene Adjustable guide from 3/4" (19 mm) to 1-3/8" (35 mm)





9844 SERIES AND 9845 SERIES COMPONENTS (CONTINUED)



9865 **Flush Cup Pull**

Flush Cup Pull	
Overall Diameter:	1-31/32" (50 mm)
Finger Pull Diameter:	1-19/32" (41 mm)
Depth:	11/32" (9 mm)
Projection:	5/64" (2 mm)
Materials:	Tan color ABS
	plastic
Notes:	 Built-in prong
	design eliminates
	the need for
	screws or brads



9880 **Door Stop**

Materials: Gauge: Stop:

Notes:

- Zinc plated steel and rubber 0.090" (2.3 mm) 1-1/4" x 1-1/4" x 7/8" (32 mm x 32 mm x 22 mm) • For doors up to 175 lbs (79 kg) Keeps rear door pull
- exposed
- Mounts on door
- Not included in sets

9909

Adjustable Guide Materials: Steel with bright zinc Posts: Molded Celcon/Nylon Gauge: 0.060" (1.5 mm) Guide: 4-7/8" x 1-5/8" x 1-3/16" (124 mm x 41 mm x 30 mm) Notes: For doors 3/4" to 1-3/4" (19 to 44 mm) thick and

up to 275 lbs (125 kg)

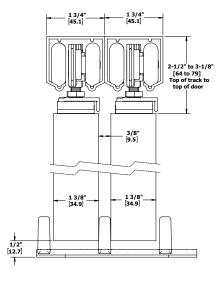


BY-PASS









1 3/4 [45.1]

3/8" [9.5]

> 1 3/4" [44.5]

2-1/2" to 3-[64 to 79]

1 3/4" [45.1]

9875 Series

Heavy Duty Aluminum Box Track and Hardware Conforms to ANSI A156.14 Type: D8731, D8751



- For doors 1-3/8" 1-3/4" (35 mm 44 mm) thick (see top figure)
- For doors 1-3/4" (44 mm) thick, tracks are spaced 3/8" (10 mm) apart using 9574 (see bottom figure)
- Up to 250 lbs (113 kg) per panel
- Track is extruded aluminum jump-proof style with "V" shaped rails
- Hangers have four (4) 1-1/4" (32 mm) diameter wheels

Part Number Description

9875 Series Set - Packaged set for doors up to 1-3/4" (44 mm) thick Includes two (2) 9801 tracks, four (4) 9827 hangers, one (1) 9574 spacer, and one (1) 9909 guide 9875-48 By-Pass Set - 4' (1219 mm) opening for two doors

9875-48	By-Pass Set - 4' (1219 mm) opening for two doors
9875-60	By-Pass Set - 5' (1524 mm) opening for two doors
9875-72	By-Pass Set - 6' (1829) opening for two doors
9875-96	By-Pass Set - 8' (2438 mm) opening for two doors

TRACKS - 0.075" (1.9 mm) thick aluminum

Part Number	Description	
Tracks for use with 9875 Series		
9801-72	72" (1829 mm) Aluminum Box Track	
9801-96	96" (2438 mm) Aluminum Box Track	
9801-120	120" (3048 mm) Aluminum Box Track	
9801-144	144" (3658 mm) Aluminum Box Track	
9801-192	192" (4877 mm) Aluminum Box Track	

Interchanges with Stanley 57/58.

1 3/4" [44.5]

1/2" [12.7]

FASCIA - 2-3/4" (70 mm) high with 5/8" (16 mm) lip

Part Number	Description
9809-72	72" (1829 mm) 3-7/8" (98 mm) Aluminum Fascia
9809-96	96" (2438 mm) 3-7/8" (98 mm) Aluminum Fascia





9875 SERIES TRACK



9801

Material Gauge: Track:

Heavy Duty Aluminum Box Track

Lengths:

Notes:

- Extruded aluminum 0.075" (1.9 mm) 1-5/8" x 1-3/4" (41 mm x 44 mm) 72" (1829 mm) to 192" (4877 mm) • For doors up to 250 lbs
- (113 kg) • Jump proof twin channel design



2630

Flush Cup Pull Overall Diameter: Finger Pull Diameter: 2-1/16" (52 mm) Depth: Projection: Materials: Finishes:

2-7/16" (62 mm) 11/32" (9 mm) 3/32" (2 mm) Solid brass US3, US4, US5, US10A, US15, US15A, US26,

Notes:

US26D, ABA • Built-in prong design eliminates the need for screws or brads



9875 SERIES FASCIA

9809

Materials: Gauge: Lip: Fascia: Lengths:

Notes:

Aluminum Fascia Extruded aluminum 0.072" (1.8 mm) 1-3/4" (44 mm) 3-7/8" (98 mm) 72" (1829 mm) and 96" (2438 mm) lengths Grooved fascia for painting • Pre-punched holes for easy installation





2610

Flush Cup Finger Pull Overall Diameter: 31/32" (25 mm) Finger Pull Diameter: 3/4" (19 mm) Depth: 5/16" (8 mm) Projection: 1/32" (.8 mm) Materials: Solid brass Finishes: US3, US4, US5, US10A, US15, US15A, US26, US26D, ABA Notes:

• Built-in prong design eliminates the need for screws or brads



```
9351
Guide
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Notes:

Materials: Guide:

4-9/16" x 1" x 11-3/16" (116 mm x 25 mm x 46 mm) One piece fixed guide for 1-3/8" (35 mm) doors

High density polyethylene

9353 Materials: Notes:

Adjustable Door Guide

High density polyethylene Adjustable guide from 3/4" (19 mm) to 1-3/8" (35 mm)



Rise:

Notes:

Notes:

Steel with bright zinc finish 3/4" (19 mm) For mounting 9351 and 9353 floor guides over carpeting



9574 Track Spacer Kit Materials:

Celcon plastic • Includes screws

- Properly spaces two single tracks for 1-3/4" (44 mm) doors
- For use with 9801 track







9875 SERIES COMPONENTS (CONTINUED)



9815 **Bumper Stop**

Materials: Zinc plated steel and rubber

- Notes:
- Fits all Hager track styles except 9101
 - Screws onto track • Included in bi-fold sets
 - 9570 and 9890



9909 Adjustable Guide

Materials: Posts: Gauge: Guide:

Notes:

Steel with bright zinc Molded Celcon/Nylon 0.060" (1.5 mm) 4-7/8" x 1-5/8" x 1-3/16" (124 mm x 41 mm x 30 mm) For doors 3/4" to 1-3/4" (19 to 44 mm) thick and up to 275 lbs (125 kg)



9827

4-Wheel Ball Bearing Hanger Zinc plated steel Materials:

Wheels: Wheel: Notes:

- Self aligning to allow consistent contact with track 1-1/4" (32 mm) diameter
- For doors up to 250 lbs (113 kg)
- Pre-lubricated Celcon wheels on steel shafts with steel ball bearings
- Ball bearing axles
- For use with 9801 Track



9865

Flush Cup Pull

Overall Diameter: Depth: Projection: Materials:

Notes:

1-31/32" (50 mm) Finger Pull Diameter: 1-19/32" (41 mm) 11/32" (9 mm) 5/64" (2 mm) Tan color ABS plastic Built-in prong design eliminates the need for screws or brads



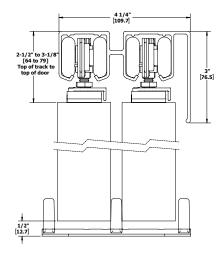
9880 **Door Stop**

Materials: Gauge: Stop:

Notes:

- Zinc plated steel and rubber 0.090" (2.3 mm) 1-1/4" x 1-1/4" x 7/8" (32 mm x 32 mm x 22 mm) • For doors up to 175 lbs
 - (79.4 kg) • Keeps rear door pull
 - exposed
 - Mounts on door
 - Not included in sets





9885 Series and 9886 Series

Heavy Duty Aluminum Double Box Track with 3-1/2" (89 mm) Fascia and Hardware Conforms to ANSI A156.14 Type: D8731, D8751



- For doors 1-3/8" 1-3/4" (35 mm 44 mm) thick
- Up to 250 lbs (113 kg) per door
- \bullet Track is extruded aluminum jump-proof style with ``V'' shaped rails and integral 3-1/2'' (88 mm) fascia
- Hangers have four (4) 1-1/4" (32 mm) diameter wheels
- Smooth finish fascia

Part Number	Description
9885 Series Set Includes one (1) 9 bumper stop	803 track, four (4) 9827 hangers, one (1) 9909 guide, and one (1) 9815
9885-48	By-Pass Set - 4' (1219 mm) opening for two doors
9885-60	By-Pass Set - 5' (1524 mm) opening for two doors
9885-72	By-Pass Set - 6' (1829 mm) opening for two doors
9885-96	By-Pass Set - 8' (2438 mm) opening for two doors
9886 Series Set Includes eight (8) 9827 hangers, and one (1) 9815 bumper stop	
9886-96	By-Pass Set - 8' (2438 mm) opening for four doors

TRACKS - 0.075" (1.9 mm) thick aluminum

Part Number	Description
Tracks for use with	n 9885 Series and 9886 Series
9803-48	4' (1219 mm) Aluminum Double Box Track with 3-1/2" (89 mm) Built-In Fascia
9803-60	5' (1524 mm) Aluminum Double Box Track with 3-1/2" (89 mm) Built-In Fascia
9803-72	6' (1829 mm) Aluminum Double Box Track with 3-1/2" (89 mm) Built-In Fascia
9803-96	8' (2438 mm) Aluminum Double Box Track with 3-1/2" (89 mm) Built-In Fascia
9803-120	10' (3048 mm) Aluminum Double Box Track with 3-1/2" (89 mm) Built-In Fascia
9803-144	12' (3658 mm) Aluminum Double Box Track with 3-1/2" (89 mm) Built-In Fascia

BY-PASS





9885 SERIES AND 9886 SERIES TRACK



9803

Heavy Duty Aluminum Double Box Track with 3-1/2" (89 mm) Fascia Materials: Extruded aluminum 0.075" (1.9 mm) Gauge: Track: 3-1/2" x 4-1/2" (89 mm x 114 mm) Lengths: 48" (1219 mm) to 144" (3658 mm)

Notes:

- For doors up to 250 lbs (113 kg)
- Jump proof twin channel design
- · One piece track with builtin smooth fascia

31/32" (25 mm)

Solid brass

US3, US4, US5,

US10A, US15,

US15A, US26,

• Built-in prong

the need for

design eliminates

screws or brads

US26D, ABA

9885 SERIES AND 9886 SERIES COMPONENTS



2610

Flush Cup Finger Pull Overall Diameter:
 Finger Pull Diameter:
 3/4" (19 mm)

 Depth:
 5/16" (8 mm)

 Projection:
 1/32" (.8 mm)
 Materials: Finishes:

Notes:



2630

Flush Cup Pull Overall Diameter: Projection: Materials: Finishes:

Notes:





9351 Guide

Guide: Notes:

Materials:

Materials:

Notes:

High density polyethylene 4-9/16" x 1" x 11-3/16" (116 mm x 25 mm x 46 mm) One piece fixed guide for 1-3/8" (35 mm) doors



9353 Adjustable Door Guide

High density polyethylene Adjustable guide from 3/4" (19 mm) to 1-3/8" (35 mm)

3/4" (19 mm) Riser Materials: Rise: Notes:

9354

Steel with bright zinc finish 3/4" (19 mm) For mounting 9351 and 9353 floor guides over carpeting

BY-PASS

9815 Bumper Stop Materials:

Notes:

Wheel:

Notes:

- Zinc plated steel and rubber
 - Fits all Hager track styles except 9101
 - Screws onto track
 - Included in bi-fold sets 9570 and 9890
- 9827 4-Wheel Ball Bearing Hanger Materials: Zinc plated steel Wheels:

Self aligning to allow consistent contact with track 1-1/4" (32 mm) diameter

- For doors up to 250 lbs (113 kg)
- Pre-lubricated Celcon wheels on steel shafts with steel ball bearings
- Ball bearing axles
- For use with 9801 track

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9885 SERIES AND 9886 SERIES COMPONENTS (CONTINUED)



9865

Flush Cup Pull Overall Diameter: Depth:

Projection: Materials:

Notes:

1-31/32" (50 mm) Finger Pull Diameter: 1-19/32" (41 mm) 11/32" (9 mm) 5/64" (2 mm) Tan color ABS plastic • Built-in prong design eliminates the need for screws or brads



9880 **Door Stop**

Materials: Gauge: Stop:

Notes:

- Zinc plated steel and rubber 0.090" (2.3 mm) 1-1/4" x 1-1/4" x 7/8" (32 mm x 32 mm x 22 mm) • For doors up to 175 lbs (79 kg) Keeps rear door pull
- exposed
- Mounts on door
- Not included in sets

9909

Adjustable Guide Mate

Guiuc
Steel with bright zinc
Molded Celcon/Nylon
0.060" (1.5 mm)
4-7/8" x 1-5/8" x 1-3/16"
(124 mm x 41 mm x 30 mm)
For doors 3/4" to 1-3/4"
(19 mm to 44 mm) thick and
up to 275 lbs (125 kg)







BY-PASS ADDITIONAL COMPONENTS



9268

By-Pass Door Keyed Lock

Materials: Die cut zamac Notes: • For doors 3/4

- For doors 3/4" (19 mm) to 1-3/4" (44 mm) thick
- Lock cylinder fits in one 1" (25 mm) hole
- Available keyed alike



9601 Aluminum Box Track

Extruded aluminum 0.050" (1.3 mm) 1-1/16" x 1-3/8" (27 mm x 35 mm) 35" (889 mm) to 144" (2657 mm)

Notes:

Lengths:

Materials:

Gauge:

Track:

- Refer to series pages for weight capacities
- Jump proof twin channel design



9900

Reversible Side Mount Bracket

Materials: S Posts: I Gauge: Guide:

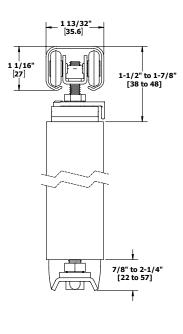
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Notes:

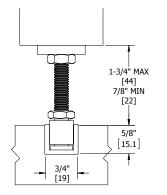
Steel with bright zinc Molded Celcon/Nylon 0.060" (1.5 mm) 4-7/8" x 1-5/8" x 1-3/16" (124 mm x 41 mm x 30 mm) For 3/4" to 1-3/4" (19 mm to 44 mm) doors • Mounts at ends of track and every foot • Can be used with 9606, 9801, and 9821 track







Optional Bottom Track 9121 - 9122



Installation note: Clearance between door bottom and top of 9122 track must be 7/8" (22 mm) minimum to 1-3/4" (44 mm) maximum.

9570 Series

Standard Duty Steel or Aluminum Box Track and Hardware Conforms to ANSI A156.14 Type: D8621, D8642, D8652, D8662



- For doors 1" 1-3/4" (25 mm 44 mm) thick
- Up to 50 lbs (57 kg) per panel bi-fold
- Up to 30 lbs (34 kg) per panel multi-fold
- Track is extruded aluminum jump-proof style with "I" beam track
- Hangers have four 7/8" (22 mm) diameter wheels
- Top and bottom pivots are heavy duty with solid brass bottom socket assembly for smooth, long lasting operation
- Note: Loose pin full mortise hinges 1741/1279 are recommended and not included in 9571 parts bag (3 required for 9162, 6 required for 9164)

Part Number	Description	
9570 Series Set - For two doors Includes one (1) 9601 track and one (1) 9571 parts bag		
9570-36	Bi-Fold Set - 3' (914 mm) opening for two 18" (457 mm) doors	
9570 Series Set - For four doors Includes one (1) 9601 track and two (2) 9571 parts bag		
9570-48	Bi-Fold Set - 4' (1219 mm) opening for four 12" (305 mm) doors	
9570-60	Bi-Fold Set - 5' (1524 mm) opening for four 15" (381 mm) doors	
9570-72	Bi-Fold Set - 6' (1829 mm) opening for four 18" (457 mm) doors	
9570-96	Bi-Fold Set - 8' (2438 mm) opening for four 24" (610 mm) doors	

TRACKS - 0.050" (1.3 mm) thick aluminum

Part Number	Description	
Tracks for use with 9570 Series		
9601-35	35" (889 mm) Aluminum Box Track	
9601-47	47" (1194 mm) Aluminum Box Track	
9601-59	59" (1499 mm) Aluminum Box Track	
9601-63	63" (1600 mm) Aluminum Box Track	
9601-71	71" (1803 mm) Aluminum Box Track	
9601-96	96" (2438 mm) Aluminum Box Track	
9601-120	120" (3048 mm) Aluminum Box Track	
9601-144	144" (3658 mm) Aluminum Box Track	



BI-FOLD





9570 SERIES TRACK



9601 Aluminum Box Track

Lengths:

Notes:

Materials: Gauge: Track:

Extruded aluminum 0.050" (1.3 mm) 1-1/16" x 1-3/8" (27 mm x 35 mm) 35" (889 mm) to 144" (2657 mm) • Refer to series pages

for weight capacities • Jump proof twin channel design



9122 **Bottom Guide Channel**

Materials: Gauge: Lengths:

Channel:

Notes:

9220

Hinge:

Notes:

9558

Materials:

Hole Locations:

Bi-Fold Door Hinge

Extruded aluminum 0.093 (2.4 mm) 48" (1219 mm) to 192" (4877 mm) 5/8" x 3/4" (16 mm x 19 mm)

- Screws not provided
- Mortised into floor or
- surface mounted

Steel with bright zinc

1/2" (13 mm) from

to center of barrel Non-mortise and easy

to install

3" x 1" (76 mm x 25 mm)

the center lines of holes

finish

hole

9570 SERIES PARTS BAGS

9569 Parts Bag

Includes one (1) 9572 hanger, one (1) 9618 pivot set, one (1) 9559 aligner, one (1) 9558 knob, one (1) 9815 bumper stop, and three (3) 9220 hinges



9571 Parts Bag

Includes one (1) 9572 hanger, one (1) 9618 pivot set, one (1) 9559 aligner, one (1) 9558 knob, and one (1) 9815 bumper stop





9121

Adjustable Bottom Door Guide Materials: Zinc plated steel with bronze roller 1" x 3-1/2" x 3/16" Guide: (25 mm x 89 mm x 5 mm) Post: 2-1/2" x 5/16" (64 mm x 8 mm) Use with 9122 guide channel Notes:



Wood Knob Diameter: Materials: Notes:

9559 Aligner Materials:

Notes:

Solid wood • Will accept paint or

1-1/2" (38 mm)

stain

Steel with brass-tone dichromate finish

- Keeps lead doors aligned when closed
- Use one on each lead door





9570 SERIES COMPONENTS (COMPONENTS)



9572

Four Wheel Hanger

- Materials: Wheel: Notes:
- : Steel with brass-tone dichromate finish 7/8" (22 mm) diameter
 - Wheels are self aligning to allow consistent contact with track
 - Pre-lubricated Celcon
 wheels
 - Includes wrench
 - For use on doors weighing up to 100 lbs (45 kg) each
 - For use with 9601, 9602, and 9603 track



9618 Pivot Set

Notes:

Materials: Zinc plated steel

- For doors up to 50 lbs. (23 kg)
- Thumb wheel vertical adjustment
- Top and bottom pivots require 3/8" (10 mm) diameter holes
- For use with 9601

9815

Bumper Stop

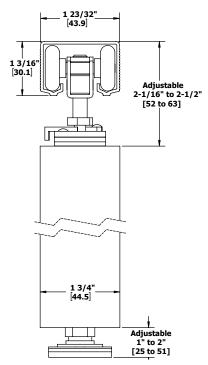
Materials: Notes:

- Zinc plated steel and rubber • Fits all Hager track styles except 9101
- Screws onto track
 Included in bi-fold sets 9570 and 9890

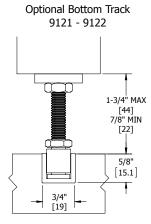
BI-FOLD







Interchanges with Stanley 125/250 Series and Johnson 100 Series.



Installation note: Clearance between door bottom and top of 9122 track must be 7/8" (22 mm) minimum to 1-3/4" (44 mm) maximum.

9860 Series and 9861 Series

Heavy Duty Aluminum Box Track and Hardware Conforms to ANSI A156.14 Type: D8621, D8641, D8651, D8661



- For doors 1-3/8" 1-3/4" (35 mm 44 mm) thick
- Up to 125 lbs (57 kg) per panel bi-fold
- Up to 75 lbs (34 kg) per panel multi-fold
- Quick release hangers allow easy door hanging and removal
- Universal extruded aluminum track interchanges with Stanley & Johnson track and hangers
- Hangers have 1" (25 mm) diameter wheels

Part Number	Description	
9860 Series Set - For two doors Includes one (1) 9821 track, one (1) 9894 parts bag, and three (3) 1741 3.5" x 3.5" US2D hinges		
9860-30	Bi-Fold Set - 30" (762 mm) opening for two doors	
9860-36	Bi-Fold Set - 36" (914 mm) opening for two doors	
9860-48	Bi-Fold Set - 48" (1219 mm) opening for two doors	
9861 Series Set - For four doors Includes one (1) 9821 track, two (2) 9894 parts bags, and six (6) 1741 3.5" x 3.5" US2D hinges		
9861-48	Bi-Fold Set - 48" (1219 mm) opening for four doors	
9861-60	Bi-Fold Set - 60" (1524 mm) opening for four doors	
9861-72	Bi-Fold Set - 72" (1829 mm) opening for four doors	
9861-96	Bi-Fold Set - 96" (2438 mm) opening for four doors	

TRACKS - 0.06" (1.5 mm) thick aluminum

Part Number	Description	
Tracks for use with 9800 Series		
9821-59	59" (1499 mm) Heavy Duty Aluminum Box Track	
9821-71	71" (1803 mm) Heavy Duty Aluminum Box Track	
9821-96	96" (2438 mm) Heavy Duty Aluminum Box Track	
9821-144	144" (3658 mm) Heavy Duty Aluminum Box Track	



9860 SERIES AND 9861 SERIES TRACK



9821

Aluminum Box Track

Materials: Gauge: Track: Lengths:

Notes:

Extruded aluminum 0.06" (1.55 mm) 1-5/8" x 1-1/16" (41 x 27 mm) 59" (1499 mm) to 144" (3658 mm) • For doors up to 250 lbs (113 kg) • Jump proof twin channel design



9122 **Bottom Guide Channel**

Materials: Gauge: Lengths:

Channel:

Notes:

Extruded aluminum 0.093 (2.4 mm) 48" (1219 mm) to 192" (4877 mm) 5/8" x 3/4" (16 mm x 19 mm) • Screws not provided • Mortised into floor or surface mounted

9860 SERIES AND 9861 SERIES PARTS BAGS



9894

Parts Bag Includes one (1) 9825 4-wheel ball bearing hanger with quick release top mount plate and one (1) 9828 bi-fold pivot set with one (1) 9815 bumper stop

9860 SERIES AND 9861 SERIES COMPONENTS



1741

Full Mortise, Five Knuckle, Plain **Bearing Hinge**

- Steel with steel pin (ANSI A5134)
- Reversible
- Square corners
- Removable pin
- 3.5" x 3.5"
- US2D



9121 Adjustable Bottom Door Guide

Materials: Zinc plated steel with bronze roller Guide: 1" x 3-1/2" x 3/16" (25 mm x 89 mm x 5 mm) Post: 2-1/2" x 5/16" (64 mm x 8 mm) Use with 9122 guide channel Notes:

9220 **Bi-Fold Door Hinge**

Materials: Steel with bright zinc finish 3" x 1" (76 mm x 25 mm) Hinge: hole Hole Locations: 1/2" (13 mm) from the center lines of holes to center of barrel • Non-mortise and easy

to install

Notes:

9558 Wood Knob Diameter: Materials: Notes:

1-1/2" (38 mm) Solid wood • Will accept paint or stain

9559 Aligner Materials:

Notes:

Steel with brass-tone dichromate finish

- Keeps lead doors aligned when closed
- Use one on each lead door



40



9860 SERIES AND 9861 SERIES COMPONENTS (CONTINUED)



9815

Bumper Stop

- Materials: Zinc plated steel and rubber
- Notes: • Fits all Hager track styles
 - except 9101
 - Screws onto track
 - Included in bi-fold sets 9570 and 9890



9825

Four Wheel Ball Bearing Quick **Release Hanger**

Materials: Wheels:

Self aligning to allow consistent contact with track

Wheel: Notes:

- 1" (25 mm) diameter • For doors up to 125 lbs. (57 kg) for bi-fold applications
- Pre-lubricated Celcon wheels
- For use with 9821 track
- Quick release feature allows easy door hanging and removal

9828

Bi-Fold Pivot Set

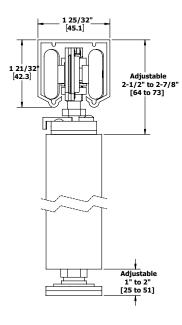
Materials: Notes:

- Zinc plated steel • For doors up to 125 lbs.
 - (57 kg) • Track pivot bearing mounts up inside track - no track
 - cutting required
 - Bottom pivot socket has ball bearing raceway
 - Top and bottom pivots require 1/2" (13 mm) diameter and 1-3/4" (44 mm) deep holes
 - For use with 9801 and 9821 track

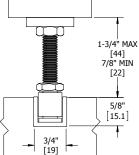








Optional Bottom Track 9121 - 9122



Installation note: Clearance between door bottom and top of 9122 track must be 7/8" (22 mm) minimum to 1-3/4" (44 mm) maximum.

9890 Series and 9891 Series

Heavy Duty Aluminum Box Track and Hardware Conforms to ANSI A156.14 Type: D8621, D8641, D8651, D8661



- For doors 1-1/8" 1-3/4" (29 mm 44 mm) thick
- Quick release hanger allows easy door hanging and removal
 - Up to 125 lbs (57 kg) per panel bi-fold
 - Up to 75 lbs (34 kg) per panel multi-fold
 - Track is extruded aluminum jump-proof style with "V" shaped rails
 - Hangers have four 1-1/4" (32 mm) diameter wheels
 - Top and bottom pivots are heavy duty with ball bearing bottom socket assembly for smooth, long lasting operation
 - Note: 9890 Series requires 1741 loose pin hinges included

Part Number	Description
9890 Series Set - F Includes one (1) 9 3.5" US2D hinges	For two doors 801 track, one (1) 9827 hanger, one (1) 9828 pivot, and three (3) 1741 $3.5'' ext{ x}$
9890-30	Bi-Fold Set - 30" (762 mm) opening for two doors
9890-36	Bi-Fold Set - 36" (914 mm) opening for two doors
9890-48	Bi-Fold Set - 48" (1219 mm) opening for two doors
9891 Series Set - For four doors Includes one (1) 9801 track, one (1) 9827 hanger, one (1) 9828 pivot, and six (6) 1741 3.5" x 3.5" US2D hinges	
9891-48	Bi-Fold Set - 48" (1219 mm) opening for four doors
9891-60	Bi-Fold Set - 60" (1524 mm) opening for four doors
9891-72	Bi-Fold Set - 72" (1829 mm) opening for four doors
9891-96	Bi-Fold Set - 96" (2438 mm) opening for four doors

TRACKS - 0.075" (1.9 mm) thick aluminum

Part Number	Description
Tracks for use with 9890 Series and 9891 Series	
9801-72	72" (1829 mm) Aluminum Box Track
9801-96	96" (2438 mm) Aluminum Box Track
9801-120	120" (3048 mm) Aluminum Box Track
9801-144	144" (3658 mm) Aluminum Box Track
9801-192	192" (4877 mm) Aluminum Box Track



1-1/4" (32 mm)

US3, US4, US5, US10A,

One (1) 8-32 x 1-3/4"

For use on doors 3/4"

US10B, US15, US15A, US26,

PPHMS and one (1) 8-32 x

(19 mm) to 1-3/8" (35 mm)

1" (25 mm)

US26D

2" PPHMS

thick

Die cast zinc

9566

Diameter:

Projection:

Materials:

Finishes:

Fasteners:

Notes:

9567

Knob



9890 SERIES AND 9891 SERIES TRACK

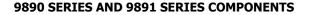


9801 **Heavy Duty Aluminum Box Track**

Materials: Extruded aluminum Gauge: 0.075" (1.9 mm) Track: Lengths:

Notes:

- 1-5/8" x 1-3/4" (41 mm x 44 mm) 72" (1829 mm) to 192" (4877 mm) • For doors up to 250 lbs
- (113 kg) • Jump proof twin channel design





1741

Full Mortise, Five Knuckle, Plain **Bearing Hinge**

- Steel with steel pin (ANSI A5134)
- Reversible
- Square corners
- Removable pin
- 3-1/2" x 3-1/2" (89 mm x 89 mm)
- US2D



9121

Adjustable Bottom Door Guide Materials: Zinc plated steel with bronze roller Guide: 1" x 3-1/2" x 3/16" (25 mm x 89 mm x 5 mm) 2-1/2" x 5/16" Post: (64 mm x 8 mm) Notes: Use with 9122 guide channel



9558 Wood Knob Diameter: Materials: Notes:

1-1/2" (38 mm) Solid wood • Will accept paint or stain



9122 **Bottom Guide Channel**

Materials: Gauge: Lengths:

Channel: Notes:

Extruded aluminum 0.093 (2.4 mm) 48" (1219 mm) to 192" (4877 mm) 5/8" x 3/4" (16 mm x 19 mm) • Screws not provided • Mortised into floor or

surface mounted



9559 Aligner Materials:

Notes:

Steel with brass-tone dichromate finish

- Keeps lead doors aligned when closed
- Use one on each lead door



Rose Rose Diameter: Base Diameter: Projection: Materials: Finishes:

Fasteners:

Notes:

3/4" (19 mm) 1-3/4" (45 mm) 15/32" (12 mm) Die cast zinc US3, US4, US5, US10A, US10B, US15, US15A, US26, US26D One (1) 8-32 x 1-3/4" PPHMS and one (1) 8-32 x 2" PPHMS For use doors 3/4" (19 mm) to 1-3/8" (35 mm) thick

BI-FOLD

9890 SERIES AND 9891 SERIES COMPONENTS (CONTINUED)



9815

Notes:

Bumper Stop

- Materials: Zinc plated steel and rubber
 - Fits all Hager track styles except 9101
 - Included in bi-fold sets
 - 9570 and 9890



9827

Four Wheel Ball Bearing Quick **Release Hanger** Zinc plated steel

Materials: Wheels:

Wheel:

Notes:

- Self aligning to allow consistent contact with track 1-1/4" (32 mm) diameter
- For doors up to 125 lbs (57 kg)
 - Pre-lubricated Celcon wheels
 - Ball bearing axles
 - For doors up to 250 lbs (113 kg) for by-pass and pocket applications
 - For use with 9801 track
- Quick release feature allows easy door hanging and removal

9828

Notes:

Bi-Fold Pivot Set

Materials: Zinc plated steel

- For doors up to 125 lbs (57 kg)
 - Track pivot bearing mounts up inside track - no track cutting required
 - Bottom pivot socket has ball bearing raceway
 - Top and bottom pivots require 1/2" (13 mm) diameter and 1-3/4" (44 mm) deep holes
 - For use with 9801 and 9821 track

Screws onto track







BI-FOLD ADDITIONAL COMPONENTS



9111 **Fixed Bottom Door Guide**

Materials: Zinc plated steel with bronze roller Guide: 2" x 3/4" x 3/32" (51 mm x 19 mm x 2 mm) 1-7/32" x 1/2" Roller:

Notes:

- (14 mm x 13 mm) • Door mortising is not required
- Use with 9122 guide channel

Zinc plated steel 1" x 3-1/2" x 1-7/16"

clamp assembly

(25 mm x 89 mm x 37 mm)

Inserts into 9155 top pivot



9169 **Top Pivot Assembly**

Materials: Top Pivot:

Notes:



9264

Keyed Lock Materials:

- Steel • Lock cylinder fits 1" (25 mm) hole
- Available keyed alike



9900

Posts: Gauge:

Guide:

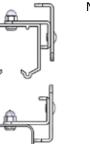
Notes:

Reversible Side Mount Bracket

Steel with bright zinc Materials: Molded Celcon/Nylon 0.060" (1.5 mm) 4-7/8" x 1-5/8" x 1-3/16" (124 mm x 41 mm x 30 mm) For 3/4" to 1-3/4" (19 mm to 44 mm) doors • Mounts at ends of track

Notes:

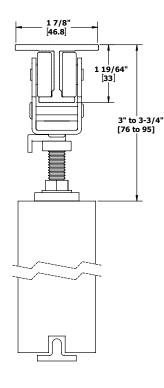
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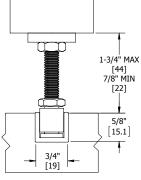
and every foot







Optional Bottom Track 9121 - 9122



Installation note: Clearance between door bottom and top of 9122 track must be 7/8" (22 mm) minimum to 1-3/4" (44 mm) maximum.

9110 Series and 9130 Series

Extra Heavy Duty Aluminum I-Beam Track and Hardware Conforms to ANSI A156.14 Type: D8681, D8711



- For doors 1" 1-3/4" (25 mm 44 mm) thick
- 9110 Series for doors weighing up to 175 lbs (80 kg) per door
- 9130 Series for doors weighing up to 275 lbs (125 kg) per door
- Track is extruded aluminum jump-proof style with "I" beam track
- Hangers have 1" (25 mm) diameter wheels

Part Number	Description
9110 Series Set Includes one (1) 9	101 track and one (1) 9109 parts bag
9110-60	Pocket Door Set - 5' (1524 mm) for 2'6" (762 mm) door
9110-72	Pocket Door Set - 6' (1829 mm) for 3'0" (914 mm) door
9110-84	Pocket Door Set - 7' (2134 mm) for 3'6" (1067 mm) door
9110-96	Pocket Door Set - 8' (2438 mm) for 4'0" (1219 mm) door
9110-120	Pocket Door Set - 10' (3048 mm) for 5'0" (1524 mm) door
9110-144	Pocket Door Set - 12' (3658 mm) for 6'0" (1829 mm) door
9130 Series Set Includes one (1) 9	101 track and one (1) 9129 parts bag
9130-60	Pocket Door Set - 5' (1524 mm) for 2'6" (762 mm) door
9130-72	Pocket Door Set - 6' (1829 mm) for 3'0" (914 mm) door
9130-84	Pocket Door Set - 7' (2134 mm) for 3'6" (1067 mm) door
9130-96	Pocket Door Set - 8' (2438 mm) for 4'0" (1219 mm) door
9130-120	Pocket Door Set - 10' (3048 mm) for 5'0" (1524 mm) door
9130-132	Pocket Door Set - 11' (3353 mm) for 5'6" (1676 mm) door
9130-144	Pocket Door Set - 12' (3658 mm) for 6'0" (1829 mm) door

TRACKS - 0.075" (1.9 mm) thick aluminum

Part Number	Description
Tracks for use with 9110 and 9130 Series	
9101-72	72" (1829 mm) Aluminum I-Beam Track
9101-84	84" (2134 mm) Aluminum I-Beam Track
9101-96	96" (2438 mm) Aluminum I-Beam Track
9101-120	120" (3048 mm) Aluminum I-Beam Track
9101-144	144" (3658 mm) Aluminum I-Beam Track
9101-192	192" (4877 mm) Aluminum I-Beam Track

POCKET





9110 SERIES AND 9130 SERIES TRACK



Materials: Gauge: Lengths: Notes:

9110 SERIES AND 9130 SERIES PARTS BAGS

Parts Bag

9109

9101

Extruded aluminum 0.125" (3 mm) 72" (1829 mm) to 192" (4877 mm) Mounting holes are prepunched for ease of installation

Aluminum I-Beam Track



9105 4 Wheel Hanger

Bolt:

Materials: Zinc plated steel Wheels: Nylon with steel ball bearings 4" x 2" x 1-3/4" Hanger: (102 mm x 51 mm x 45 mm) 3/8" x 2-5/16" (10 mm x 59 mm) Top Plate: 1" x 3-1/2" x 3/16" (25 mm x 89 mm x 5 mm) Notes: • Use with 9101 track, with doors weighing up to 275

lbs (125 kg) • Four wheel hanger is self-

aligning to allow consistent contact with track



9129

Parts Bag Includes two (2) 9105 2-wheel hangers and one (1) 9115 floor guide

Includes two (2) 9102 2-wheel hangers

and one (1) 9115 floor guide

9110 SERIES AND 9130 SERIES COMPONENTS



9102 2 Wheel Hanger

	ligei
Materials:	Zinc plated steel
Wheels:	Nylon with Steel Ball
	Bearings
Hanger:	1-3/16" x 2" x 1-1/8"
	(46 mm x 51 mm x 29 mm)
Bolt:	3/8″ x 2-5/16″
	(10 mm x 59 mm)
	(Bolt not same as 9105)
Top Plate:	1" x 3-1/2" x 3/16"
	(25 mm x 89 mm x 5 mm)
Notes:	Use with 9101 track, with
	doors weighing up to 175
	lbs. (79 kg)



9111 **Fixed Bottom Door Guide**

Materials: Zinc plated steel with

Guide: Roller: bronze roller 2" x 3/4" x 3/32" (51 mm x 19 mm x 2.4 mm) 1-7/32" x 1/2" (14 mm x 13 mm)

Notes:

- Door mortising is not required • Use with 9122 guide channel
- 9112 Stop Materials: Stop:

Aluminum and rubber 1-5/8" x 1-1/2" x 5/8" x 7/8" (41 mm x 38 mm x 16 mm x 22 mm) Use with 9102 hanger

Notes:

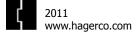


Notes:

Zinc plated steel and rubber 1-5/8" x 1-1/2" x 5/8" x 1-3/4" (41 mm x 38 mm x 16 mm x 45 mm) Use with 9105 hanger



POCKET



9110 SERIES AND 9130 SERIES COMPONENTS (CONTINUED)



9114 **Bottom Guide Rail**

Materials: Aluminum

7/8" x 1/2" (22 mm x 13 mm) Lengths: 72" (1829 mm) 96" (2438 mm) 144" (3658 mm)

Notes:

Guide:

- Door bottom prep requires 1/4" (6 mm) wide kerf and 9/16" (14 mm) depth • Pre-punched for use with #6 x 7/8" FPHMS

9115 Bottom Door Guide

Bottom Do	or Guide
Materials:	Die cast zinc aluminum
	alloy
Guide:	7/8″ x 3/4″ x 3″
	(22 mm x 19 mm x 76 mm)
Notes:	Door bottom prep requires
	1/4" (6 mm) wide kerf and
	9/16" (14 mm) depth

9884

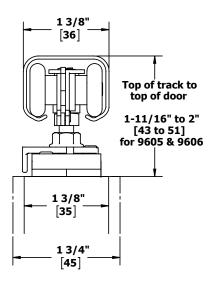
Pocket Door Edge Pull

Finger Pull Extends:	1-1/16" (27mm)
Faceplate:	21/32" x 3-1/2"
	(17 mm x 89 mm)
Materials:	Die cast zinc
Finishes:	US3
Fasteners:	Two (2) #6 x 5/8"
	FPHWS
Notes:	 Ideal for narrow
	and standard
	door thicknesses



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9678 Series

Heavy Duty Aluminum Box Track and Hardware Conforms to ANSI A156.14 Type: D8681, D8711

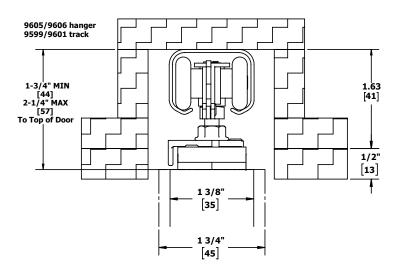


- For doors 1-1/8" 1-3/4" (29 mm 44 mm) thick
- Up to 125 lbs (57 kg) per door with 9605 hangers
- Up to 150 lbs (68 kg) per door with 9606 hangers
- \bullet Track is extruded aluminum jump-proof style with ``V'' shaped rails
- Hangers have four 7/8" (22 mm) diameter wheels for 9605 and wheels mounted on ball bearing shafts for 9606

Part Number	Description
9678 Series Set Includes one (1) 9	601 track and one (1) 9632 parts bag
9678-72	Pocket Door Set - 6' (1829 mm) for 3'0" (914 mm) door
9678-96	Pocket Door Set - 8' (2438 mm) for 4'0" (1219 mm) door

TRACKS - 0.05" (1.3 mm) thick aluminum

Part Number	Description
Tracks for use with	n 9678 Series
9601-35	35" (889 mm) Aluminum Box Track
9601-47	47" (1194 mm) Aluminum Box Track
9601-55	55" (1397 mm) Aluminum Box Track
9601-59	59" (1499 mm) Aluminum Box Track
9601-63	63" (1600 mm) Aluminum Box Track
9601-71	71" (1803 mm) Aluminum Box Track
9601-96	96" (2438 mm) Aluminum Box Track
9601-120	120" (3048 mm) Aluminum Box Track
9601-144	144" (3658 mm) Aluminum Box Track





9678 SERIES TRACK



9601

Aluminum Box Track Materials: Gauge: Track: Lengths:

- Notes:
- Extruded aluminum 0.050" (1.3 mm) 1-1/16" x 1-3/8" (27 mm x 35 mm) 35" (889 mm) to 144" (3657 mm) Refer to series pages for weight capacities
- Jump proof twin channel design





9632

Includes two (2) 9605 hangers, two (2) 9883 guides, and one (1) 9881 bumper



330M Pocket Door Privacy Latch

Pocket Door Privacy Latch

2-3/4" x 2-1/2" (70 mm x 64 mm)

1-3/8" (35 mm)

1" x 2-1/4" (25 mm x

US3, US5, US10B,

Two (2) #6 x 5/8"

For use with 1-3/8"

US26, US26D

US15, US15A, US19,

OPHWS; (2) #6 x 3/4"

extension

57 mm)

Brass

FPHWS

door

Certifications:

Strike Size:

Materials:

Finishes:

Fasteners:

330L

Size:

Finger Piece:

Strike Size:

Materials:

Finishes:

Fasteners:

Notes:

Size:

Meets ANSI A156.14 for D0831 2-3/4" x 2-1/2" (70 mm x 64 mm) **Finger Piece:** 1-3/8" (35 mm) extension 1" x 2-1/4" (25 mm x 57 mm) Brass US3, US5, US10B, US15, US15A, US19, US26, US26D Two (2) #6 x 5/8" OPHWS; (2) #6 x 3/4" FPHWS For use with 1-3/4" door

Notes:

2630

Flush Cup Pull Overall Diameter: 2-7/16" (62 mm) 2-1/16" (52 mm) Finger Pull: diameter 11/32" (9 mm) Projection: 3/32" (2 mm) Materials: Solid brass Finishes: US3, US4, US5, US10A, US15, US15A, US26, US26D, ABA • Built-in prong design eliminates the need for

Notes:

Depth:



screws or brads



Parts Bag



POCKET

9633

Parts Bag Includes two (2) 9606 hangers, two (2) 9883 guides, and one (1) 9881 bumper

9678 SERIES COMPONENTS



330D **Pocket Door Latch**

Size:

Finishes:

Notes:

Certification: Meets ANSI A156.14 for D0821.1 2-3/4" x 2-1/2" (70 mm x 64 mm) 1-3/8" (35 mm) Finger Piece: extension Materials: Brass US3, US5, US10B, US15, US15A, US19, US26, US26D Two (2) #6 x 5/8" Fasteners: OPHWS; (2) #6 x 3/4" **FPHWS** For use with 1-3/8" to 1-3/4" (35 mm to 45 mm) door



50



9678 SERIES COMPONENTS (CONTINUED)



9605 4-Wheel Hanger

Materials:

- Wheel: Notes:
- Steel with brass-tone dichromate finish 7/8" (22 mm) diameter
 - For doors up to 125 lbs (57 kg)
 - Wheels are self aligning to allow consistent contact with track
 - Pre-lubricated Celcon wheels mounted on steel ball bearing shafts
 - Can be used on pivot set
 - Use in conjunction with
 - 9601 or 9602 track



9606

Materials: Wheel: Notes:

- 4-Wheel Ball Bearing Hanger Steel with brass-tone
 - dichromate finish 7/8" (22 mm) diameter • For doors up to 150 lbs
 - (68 kg) • Wheels are self aligning to
 - allow consistent contact with track
 - Pre-lubricated Celcon wheels mounted on steel ball bearing shafts
 - Used in conjunction with 9607, 9608 or 9609 top door plate and 9599, 9601 or 9602 track



9815

Notes:

Bumper Stop Materials:

- Zinc plated steel and rubber • Fits all Hager track styles
 - except 9101
 - Screws onto track
 - Included in bi-fold sets 9570 and 9890



9881 **Bumper** Materials:

Stop: Notes: Rubber 1/2" diameter x 3/8" deep (13 mm x 10 mm) With screws



9883

Two Piece Pocket Door Guide Materials: Guide:

Notes:

9884

Polyethylene 1-3/16" x 3/4" x 1-1/8" (21 mm x 19 mm x 29 mm)

- Two pieces per door required
- Screws to jamb to guide door and prevent rubbing





Pocket Door Edge Pull

Finger Pull Extends: 1-1/16" (27 mm) Faceplate:

Materials: Finishes: Fasteners: 21/32" x 3-1/2" (17 mm x 89 mm) Die cast zinc US3 Two (2) #6 x 5/8" **FPHWS**

Ideal for narrow

thicknesses.

and standard door

POCKET

Notes:



9889

Non-Adjustable Floor Guide Materials:

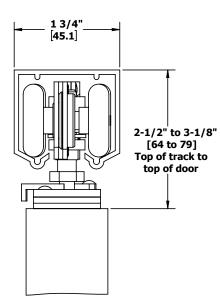
Guide: Notes:

Polyethylene 2-3/8" x 2-1/2" x 7/8" (60 mm x 64 mm x 22 mm) For 1-3/8" (35 mm) doors

51







9878 Series

Extra Heavy Duty Aluminum Box Track and Hardware **Conforms to ANSI A156.14** Type: D8681, D8711



- For doors 1-3/8" 1-3/4" (35 mm 44 mm) thick
 Up to 250 lbs (113 kg) per door
- Track is extruded aluminum jump-proof style with "V" shaped rails
- Hangers have four 1-1/4" (32 mm) diameter wheels

Part Number	Description
9878 Series Set Includes one (1) 9	801 track and one (1) 9742 parts bag
9878-72	Pocket Door Set - 6' (1829 mm) for 3'0" (914 mm) door
9878-96	Pocket Door Set - 8' (2438 mm) for 4'0" (1219 mm) door

TRACKS - 0.075" (1.9 mm) thick aluminum

Part Number	Description
Tracks for use with 9878 Series	
9801-72	72" (1829 mm) Aluminum Box Track
9801-96	96" (2438 mm) Aluminum Box Track
9801-120	120" (3048 mm) Aluminum Box Track
9801-144	144" (3658 mm) Aluminum Box Track
9801-192	192" (4877 mm) Aluminum Box Track

Interchanges with Stanley 57/58.



9878 SERIES TRACK



9801

Extra Heavy Duty Box Track Materials: Extruded aluminum 0.075" (1.9 mm) Gauge: 1-5/8 "x 1-3/4" (41 mm x 44 mm) Lengths: (4877 mm)

Notes:

Track:

- 72" (1829 mm) to 192" • For doors up to 250 lbs (113 kg)
- Jump proof twin channel design



330L

Pocket Door Privacy Latch Cizo 2-3/4" x 2-1/2"

5128.
Finger Piece:
Strike Size:

Materials: Finishes:

Fasteners:

Notes:

	- / /
	(70 mm x 64 mm)
:	1-3/8" (35 mm)
	extension
	1" x 2-1/4" (25 mm x
	57 mm)
	Brass
	US3, US5, US10B,
	US15, US15A, US19,
	US26, US26D
	Two (2) #6 x 5/8"
	OPHWS; (2) #6 x 3/4"
	FPHWS
	For use with 1-3/8"
	door
	0001

9742



Parts Bag

Includes two (2) 9827 hangers, two (2) 9883 guides, and one (1) 9881 bumper



9878 SERIES PARTS BAGS



330D

Pocket Door Latch

Certification:	Meets ANSI A156.14 for
	D0821.1
Size:	2-3/4" x 2-1/2"
	(70 mm x 64 mm)
Finger Piece:	1-3/8" (35 mm)
	extension
Materials:	Brass
Finishes:	US3, US5, US10B,
	US15, US15A, US19,
	US26, US26D
Fasteners:	Two (2) #6 x 5/8"
	OPHWS; (2) #6 x 3/4"
	FPHWS
Notes:	For use with 1-3/8" to
	1-3/4" (35 mm to
	45 mm) door



330M **Pocket Door Privacy Latch**

Size:

Certifications:

Finger Piece:

Strike Size:

Materials: Finishes:

Fasteners:

Notes:

Depth:

Finishes:

Notes:

extension 1" x 2-1/4" (25 mm x 57 mm) Brass US3, US5, US10B, US15, US15A, US19, US26, US26D Two (2) #6 x 5/8" OPHWS; (2) #6 x 3/4" FPHWS For use with 1-3/4" door

Meets ANSI A156.14 for

POCKET

D0831

2-3/4" x 2-1/2" (70 mm x 64 mm)

1-3/8" (35 mm)

2630 Flush Cup Pull

Overall Diameter: 2-7/16" (62 mm) Finger Pull: 2-1/16" (52 mm) diameter 11/32" (9 mm) 3/32" (2 mm) Projection: Solid brass Materials: US3, US4, US5, US10A, US15, US15A, US26, US26D, ABA • Built-in prong design eliminates the need for screws or brads





9878 SERIES COMPONENTS (CONTINUED)

Notes:

9827

Materials:

Wheels:

Wheel:

Notes:



9815 **Bumper Stop**

Materials:

- Zinc plated steel and rubber
 - Fits all Hager track styles except 9101
 - Screws onto track

Four Wheel Ball Bearing Hanger

(34 kg)

Zinc plated steel

Self aligning to allow

consistent contact with track

wheels on steel shafts with

1-1/4" (32 mm) diameter

• For doors up to 75 lbs

Pre-lubricated Celcon

steel ball bearings Ball bearing axles • For use with 9801 track

• Included in bi-fold sets 9570 and 9890



9884

Pocket Door Edge Pull

Faceplate: Materials: Finishes: Fasteners:

Finger Pull Extends: 1-1/16" (27mm) 21/32" x 3-1/2" (17 mm x 89 mm) Die cast zinc US3 Two (2) #6 x 5/8" **FPHWS** • Ideal for narrow and standard door thicknesses

Notes:

9889

Non-Adjustable Floor Guide

Materials: Polyethylene 2-3/8" x 2-1/2" x 7/8" (60 mm x 64 mm x 22 mm) For 1-3/8" (35 mm) doors

Notes:

Guide:



9881 Bumper

Materials: Stop: Notes:

Rubber 1/2" diameter x 3/8" deep (13 mm x 10 mm) With screws



9883

Guide:

Notes:

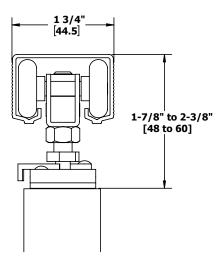
Two Piece Pocket Door Guide Materials: Polyethylene

1-3/16" x 3/4" x 1-1/8" (21 mm x 19 mm x 29 mm) • Two pieces per door

- required
- Screws to jamb to guide door and prevent rubbing







Interchanges with Stanley 125/250 Series and Johnson 100 Series.

9901 Series

Extra Heavy Duty Aluminum Box Track and Hardware Conforms to ANSI A156.14 Type: D8681



- For doors 1-3/8" 1-3/4" (35 mm 44 mm) thick
- Up to 250 lbs (113 kg) per door
- Quick release hangers allow easy door hanging and removal
- Hangers interchange with Stanley & Johnson track and hangers
- Universal extruded aluminum track interchanges with Stanley & Johnson track and hangers
- Hangers have 1" (25 mm) diameter ball bearing wheels

Part Number	Description
9901 Series Set Includes one (1) 9	821 track and one (1) 9895 parts bag
9901-72	Pocket Door Set - 6' (1829 mm) for 3'0" (914 mm) door
9901-96	Pocket Door Set - 8' (2438 mm) for 4'0" (1219 mm) door

TRACKS - 0.06" (1.5 mm) thick aluminum

Part Number	Description
Tracks for use with	n 9901 Series
9821-59	59" (1499 mm) Aluminum Box Track
9821-71	71" (1803 mm) Aluminum Box Track
9821-96	96" (2438 mm) Aluminum Box Track
9821-144	144" (3658 mm) Aluminum Box Track

POCKET





9901 SERIES TRACK



9821

Materials: Gauge: Track:

Aluminum Box Track

- Extruded aluminum 0.06" (1.55 mm) 1-5/8" x 1-1/16" (41 mm x 27 mm) 59" (1499 mm) to 144" Lengths: (3658 mm) Notes: • For doors up to 250 lbs (113 kg)
 - Jump proof twin channel design

9901 SERIES PARTS BAGS



9895 Parts Bag

Includes two (2) 9825 4-wheel ball bearing hangers with quick release top plate, two (2) 9883 guides, and one (1) 9881 bumper

9901 SERIES COMPONENTS



330D Pocket Door Latch

Size:

Materials:

Fasteners:

Notes:

Finishes:

Certification: Meets ANSI A156.14 for D0821.1 2-3/4" x 2-1/2" (70 mm x 64 mm) Finger Piece: 1-3/8" (35 mm) extension Brass US3, US5, US10B, US15, US15A, US19, US26, US26D Two (2) #6 x 5/8" OPHWS; (2) #6 x 3/4" **FPHWS** For use with 1-3/8" to 1-3/4" (35 mm to 45 mm) door



330L

Pocket Door Privacy Latch Size:

Finger Piece: Strike Size:

Materials: Finishes:

Fasteners:

2-3/4" x 2-1/2" (70 mm x 64 mm) 1-3/8" (35 mm) extension 1" x 2-1/4" (25 mm x 57 mm) Brass US3, US5, US10B, US15, US15A, US19, US26, US26D Two (2) #6 x 5/8" OPHWS; (2) #6 x 3/4" **FPHWS** For use with 1-3/8" door

Notes:

330M

Pocket Door Privacy Latch

Certifications: Size:

Finger Piece:

Strike Size:

Materials: Finishes:

Fasteners:

D0831 2-3/4" x 2-1/2" (70 mm x 64 mm) 1-3/8" (35 mm) extension 1" x 2-1/4" (25 mm x 57 mm) Brass US3, US5, US10B, US15, US15A, US19, US26, US26D Two (2) #6 x 5/8" OPHWS; (2) #6 x 3/4" **FPHWS** For use with 1-3/4" door

Meets ANSI A156.14 for

Notes:

2630

Flush Cup Pull Overall Diameter: 2-7/16" (62 mm) Finger Pull: 2-1/16" (52 mm) diameter 11/32" (9 mm) Depth: 3/32" (2 mm) Projection: Materials: Solid brass Finishes: US3, US4, US5, US10A, US15, US15A, US26, US26D, ABA • Built-in prong design

Notes:

eliminates the need for screws or brads.







9901 SERIES COMPONENTS (CONTINUED)



9559 Aligner

Notes:

Materials: Steel with brass-tone dichromate finish

- Keeps lead doors aligned when closed
- Use one on each lead door



9883

Guide:

Notes:

Two Piece Pocket Door Guide Materials:

- Polyethylene 1-3/16" x 3/4" x 1-1/8" (21 mm x 19 mm x 29 mm)
 - Two pieces per door required
 - Screws to jamb to guide door and prevent rubbing



9825

Wheels:

Wheel:

Notes:

4 Wheel Ball Bearing Hanger with **Quick Release Top Mount Plate** Zinc plated steel Materials:

Self aligning to allow consistent contact with track 1" (25 mm) diameter

- Pre-lubricated Celcon wheels
 - For doors up to 250 lbs (113 kg)
 - For use with 9821 track
 - Quick release feature allows easy door hanging and removal



9884 Pocket Door Edge Pull

Finger Pull Extends: 1-1/16" (27mm) Faceplate:

Materials: Finishes: Fasteners:

Notes:

21/32" x 3-1/2" (17 mm x 89 mm) Die cast zinc US3 Two (2) #6 x 5/8" **FPHWS**

• Ideal for narrow and standard door thicknesses.

9815

Bumper Stop Zinc plated steel and rubber

- Materials: Notes:
- Fits all Hager track styles except 9101
 - Screws onto track
 - Included in bi-fold sets 9570 and 9890



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9881

Bumper Materials: Stop:

Notes:

Rubber 1/2" diameter x 3/8" deep (13 mm x 10 mm) With screws



9889 **Non-Adjustable Floor Guide**

Polyethylene Materials: Guide:

Notes:

2-3/8" x 2-1/2" x 7/8" (60 mm x 64 mm x 22 mm) For 1-3/8" (35 mm) doors



9628 | 9629 | 9630 | 9631 Heavy Duty Pocket Door Kit Conform to ANSI A156.14 Type: D8671, D8701



- Jump proof track and rollers
- 9601 aluminum box track
- Pre-assembled header assembly goes up quickly
- Easy door installation and removal for painting and repair
- Real wood split studs, size 3/4" x 1-5/8" (19 mm x 26 mm) length relative to height, steel encased for rigidity and to prevent fastener penetration into the pocket
- Track header unit attaches to rough framing at both ends split studs nail or screw to track header no connections to rough header
- 2 pair of split studs with wood inserts
- See chart below for appropriate kit

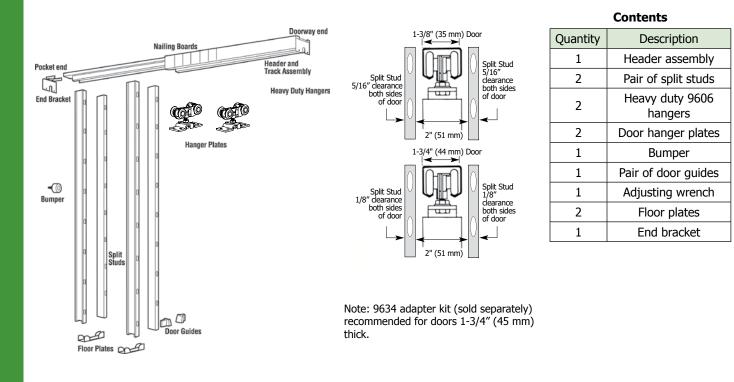
Part #	Max Door Weight	Door Thickness*	Door Width	Door Height	Hanger Bearings
9628	150 lbs (68 kg)	1-3/8" - 1-3/4" (35 mm - 44 mm)	3′0″ (914 mm)	9′0″ (2743 mm)	Steel Ball
9629	150 lbs (68 kg)	1-3/8" - 1-3/4" (35 mm - 44 mm)	3′0″ (914 mm)	8′0″ (2438 mm)	Steel Ball
9630	150 lbs (68 kg)	1-3/8" - 1-3/4" (35 mm - 44 mm)	3′0″ (914 mm)	7′0″ (2134 mm)	Steel Ball
9631	150 lbs (68 kg)	1-3/8" - 1-3/4" (35 mm - 44 mm)	3′0″ (914 mm)	6′8″ (2032 mm)	Steel Ball

* 9634 adapter kit is recommended for 1-3/4" (45 mm) doors (sold separately).

Installation Note: For bi-parting doors, use Hager double pocket door kit 9639 (sold separately).



Joins two pocket door frames to make one large doorway. Rough opening width changes to door width multiplied by four.



Pocket



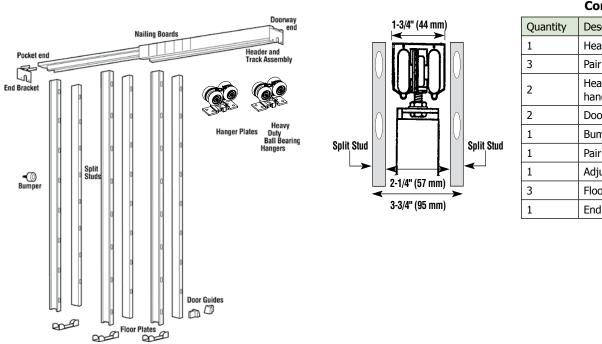
9850 Heavy Duty Pocket Door Kit Conform to ANSI A156.14 Type: D8671, D8701

- For doors 1-3/8" 1-3/4" (35 mm 44 mm) thick, up to 4'0" (1219 mm) wide and 8'0" (2438 mm) or 8'6" (2591 mm) high, weighing up to 250 lbs (112 kg)
- Jump proof track and rollers
- 9801 heavy duty aluminum box track
- Pre-assembled header assembly goes up quickly
- Easy door installation and removal for painting and repair
- Real wood split studs, size 3/4" x 1-5/8" (19 mm x 26 mm) length relative to height, steel encased for rigidity and to prevent fastener penetration into the pocket
- Track header unit attaches to rough framing at both ends split studs nail or screw to track header no connections to rough header
- 3 pair of split studs with wood inserts

Part #	Max Door Weight	Door Thickness*	Door Width	Door Height	Hanger Bearings
9850	250 lbs (57 kg)	1-3/8" - 1-3/4" (35 mm - 44 mm)	4′0″ (1219 mm)	8′0″ (2438 mm)	Steel Ball

Installation Note: For bi-parting doors, use Hager double pocket door kit 9639 (sold separately).

Joins two pocket door frames to make one large doorway. Rough opening width changes to door width multiplied by four.



Contents

Quantity	Description
	Header assembly
	Pair of split studs
	Heavy duty 9827 hangers
	Door hanger plates
	Bumper
	Pair of door guides
	Adjusting wrench
	Floor plates
	End bracket



POCKET DOOR KIT COMPONENTS



330D Pocke

Pocket Door La	tch
Certification:	Meets ANSI A156.14 for
	D0821.1
Size:	2-3/4" x 2-1/2"
	(70 mm x 64 mm)
Finger Piece:	1-3/8" (35 mm)
	extension
Materials:	Brass
Finishes:	US3, US5, US10B,
	US15, US15A, US19,
	US26, US26D
Fasteners:	Two (2) #6 x 5/8"
	OPHWS; (2) #6 x 3/4"
	FPHWS
Notes:	For use with 1-3/8" to
	1-3/4" (35 mm to
	45 mm) door



330M

Pocket Door Privacy Latch

POCKET DOOR PR	ivacy Latch
Certifications:	Meets ANSI A156.14 for
	D0831
Size:	2-3/4" x 2-1/2"
	(70 mm x 64 mm)
Finger Piece:	1-3/8" (35 mm)
	extension
Strike Size:	1″ x 2-1/4″ (25 mm x
	57 mm)
Materials:	Brass
Finishes:	US3, US5, US10B,
	US15, US15A, US19,
	US26, US26D
Fasteners:	Two (2) #6 x 5/8"
	OPHWS; (2) #6 x 3/4"
	FPHWS
Notes:	For use with 1-3/4"
	door



POCKET

330L

Pocket Door Pr	ivacy Latch
Size:	2-3/4" x 2-1/2"
	(70 mm x 64 mm)
Finger Piece:	1-3/8" (35 mm)
-	extension
Strike Size:	1" x 2-1/4" (25 mm x
	57 mm)
Materials:	Brass
Finishes:	US3, US5, US10B,
	US15, US15A, US19,
	US26, US26D
Fasteners:	Two (2) #6 x 5/8"
	OPHWS; (2) #6 x 3/4"
	FPHWS
Notes:	For use with 1-3/8"
	door



2610

Flush Cup Finger Pull

Overall Diameter: 31/32" (25 mm) Finger Pull: 3/4" (19 mm) diameter 5/16" (8 mm) Projection: 1/32" (.8 mm) Solid brass US3, US4, US5, US10A, US15, US15A, US26, US26D, ABA • Built-in prong design eliminates the need

for screws or brads.

Notes:

Depth:

Materials:

Finishes:

2630 Flush Cup Pull



Overall Diameter: 2-7/16" (62 mm) Finger Pull: 2-1/16" (52 mm) diameter 11/32" (9 mm) 3/32" (2 mm) Depth: Projection: Solid brass Materials: US3, US4, US5, US10A, Finishes: US15, US15A, US26, US26D, ABA • Built-in prong design Notes: eliminates the need for



screws or brads.



POCKET DOOR KIT COMPONENTS (CONTINUED)



9605 4-Wheel Hanger

Wheel: Notes:

- Materials: Steel with brass-tone dichromate finish 7/8" (22 mm) diameter
 - For doors up to 125 lbs (57 kg)
 - Wheels are self aligning to allow consistent contact with track
 - Pre-lubricated Celcon wheels mounted on steel ball bearing shafts
 - Can be used on pivot set
 - Use in conjunction with 9601 or 9602 track

• Used to attach door to

• Used in conjunction with

9572, 9605, 9606, 9704

and 9816 hanger

1/8" (3 mm)

hanger



9634

Pocket Door Adapter Kit Materials:

Clearance:

Notes:

shims 1/8" (3 mm) on each side of a 1-3/4" (44 mm) door • Used with 1-3/4" (44 mm)

Galvanized steel and wood

- doors by allowing additional clearance between door and jamb
 - Includes wider floor plates and shims for spacing split studs for an additional 3/16" (4.8 mm) on each side of a 1-3/4" (44 mm) door



9609 **Top Door Plate**

Materials: Gauge: Size:

Notes:

Zinc plated steel 1-3/8" x 21-3/16" (35 mm x 72 mm)



9639 **Double Pocket Door Adapter Kit**

Zinc plated steel and rubber Materials: bumper stops

- Notes: • Joins two frames in the middle of the doorway
- POCKET
- For joining 9629, 9630, 9631 or 9850 pocket door kits
- Fits both KD and Built Up frames
- Lag bolt for attaching to rough header
- Bumpers included to stop doors in center of doorway



9632

Parts Bag Includes:

- Two (2) 9605 hangers
- Two (2) 9883 guides
- One (1) 9881 bumper



9827

Four Wheel Ball Bearing Hanger Materials: Wheels:

Wheel: Notes:

- Zinc plated steel Self aligning to allow consistent contact with track 1-1/4" (32 mm) diameter
- For doors up to 75 lbs (34 kg)
- Pre-lubricated Celcon wheels on steel shafts with steel ball bearings
- Ball bearing axles
- For use with 9801 track





- 9633 Parts Bag Includes:
 - Two (2) 9606 hangers
 - Two (2) 9883 guides
 - One (1) 9881 bumper





POCKET DOOR KIT COMPONENTS (CONTINUED)



9865

Flush Cup Pull Overall Diameter: Finger Pull Diameter: 1-19/32" (41 mm) Depth: Projection: Materials:

Notes:

1-31/32" (50 mm) 11/32" (9 mm) 5/64" (2 mm) Tan color ABS plastic • Built-in prong design eliminates the need for screws or brads



9889

Non-Adjustable Floor Guide Materials: Polyethylene Guide: 2-3/8" x 2-1/2" x 7/8" (60 mm x 64 mm x 22 mm) For 1-3/8" (35 mm) doors Notes:



9881 Bumper

Materials: Stop: Notes:



9883

Guide:

Two Piece Pocket Door Guide Materials: Polyethylene

Rubber

1-3/16" x 3/4" x 1-1/8" (21 mm x 19 mm x 29 mm)

1/2" diameter x 3/8" deep

(13 mm x 10 mm) With screws

Notes:

- Two pieces per door required
- Screws to jamb to guide door and prevent rubbing

9884

Pocket Door Edge Pull F

Finger Pull Extends:	1-1/16" (27mm)
Faceplate:	21/32" x 3-1/2"
-	(17 mm x 89 mm)
Materials:	Die cast zinc
Finishes:	US3
Fasteners:	Two (2) #6 x 5/8"
	FPHWS
Notes:	 Ideal for narrow
	and standard door
	thicknesses.







POCKET DOOR ADDITIONAL COMPONENTS



9262

Pocket Door Keyed Lock

Materials: Steel Notes:

- For doors 1-3/8" (35 mm) to 1-3/4" (44 mm) thick
- Lock cylinder fits in one 1" (25 mm) hole
- Available keyed alike



9824

4 Wheel Hanger with Quick Release Top Mount Plate

> Self aligning to allow track

Wheel: Notes:

- 1" (25 mm) diameter
- (68 kg)
- wheels
- allows easy door hanging and removal



9900

Reversible Side Mount Bracket

Materials: Posts: Gauge: Guide:

Size:

Notes:

Steel with bright zinc Molded Celcon/Nylon 0.060" (1.5 mm) 4-7/8" x 1-5/8" x 1-3/16" (124 mm x 41 mm x 30 mm) For 3/4" to 1-3/4" (19 mm to 44 mm) doors

- Mounts at ends of track
- and every foot • Use with 9601, 9801, and 9821 track



Wheels:

Materials: Zinc plated steel

- consistent contact with
- For doors up to 150 lbs
- Pre-lubricated Celcon
- For use with 9821 track
- Quick release feature



9877

Door Guide

Materials: Plastic Notes:

- For doors 1-3/8" (35 mm) to 1-3/4" (44 mm) thick
- Two pieces required per door



Locks

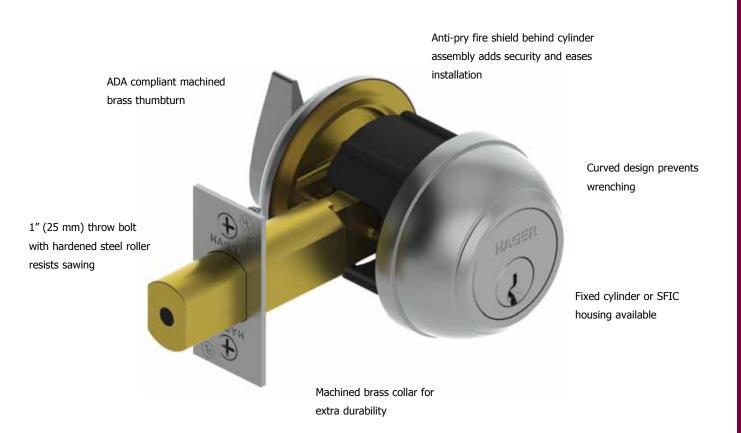


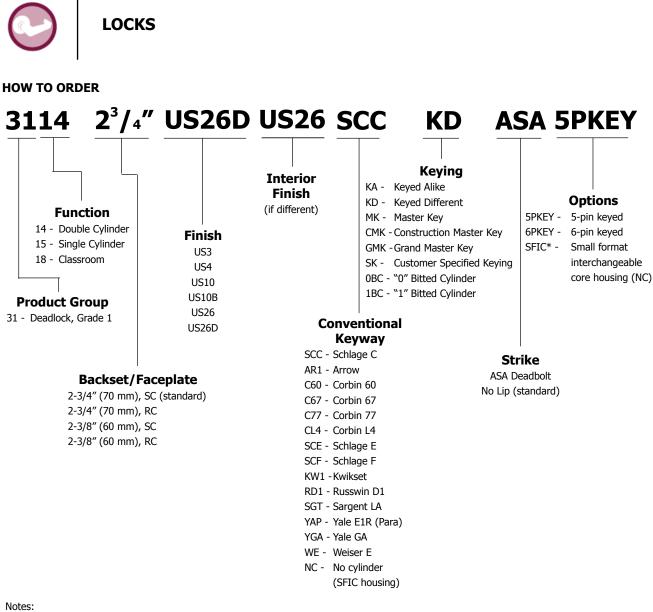
Hager Companies offers a wide range of Grade 1 and Grade 2 products to meet almost any application and specification requirements. Hager locks are manufactured to the highest quality standards and extensively tested to ANSI standards and BHMA certification requirements. In addition, all locks comply with ADA requirements outlined in ANSI A117.1 and are UL Listed up to 3 hours for "A" label doors.

3100 Series



Hager 3100 Series Grade 1 deadlock is designed and engineered to withstand the most abusive environments. It is the perfect complement to Hager 3400 Series lockset for extra protection against break-in and is backed by a lifetime warranty.





1. If master-keyed, include master key instruction sheet with order (available on page 69 or online).

2. For additional keying information, please refer to cylinder, core, and keying section of catalog.

* Small format interchangeable core sold separately. Available in Best Keyways only, A Standard. Ordering example: 3114 2-3/4" US26D NC SFIC

3100 SERIES FUNCTION CHART

	Function	Function No.	Function Description	ANSI No.
•[])•	Double Cylinder	14	Deadbolt thrown or retracted by key from either side. Bolt automatically deadlocks when fully thrown.	E2141
₀┫┚Ϸ	Cylinder x Thumbturn	15	Deadbolt thrown or retracted by key from outside or by inside turn unit. Bolt automatically deadlocks when fully thrown.	E2151
•(0)	Classroom	18	Deadbolt thrown or retracted by key outside. Inside turn unit will retract bolt only. Bolt automatically deadlocks when fully thrown.	E2171



3100 Series

Grade 1 Deadlock Auxiliary and primary locking

- Lifetime warranty
- Non-handed
- Conventional cylinder or Small Format Interchangeable Core housing available

Standard Door Prep:	• Cylinder Hole: 2-1/8" (54 mm) Diameter (Cross Bore)
Certifications:	 Latch Hole: 1" (25 mm) Diameter (Edge Bore) BHMA Certified ANSI A156.5 Grade 1
Certifications.	ANSI A250.13 Severe Windstorm Resistant Component
	• UL/cUL Listed for all functions up to 3 hours for "A" label single doors
	 UL10C/UBC 7-2 (1997) Positive Pressure Rated UL10B Neutral Pressure Rated
	• ADA - Thumbturn
Exposed Trim: Mechanism:	Wrought brass or bronze Steel, zinc dichromate plating
Keys:	Two operating keys supplied per lock
Cylinders/Cores:	 Brass - Keyed Different - C Keyway Drilled 6-pin, Keyed 5-pin - Standard
	• Other keying options, including keyed 6-pin, available from the factory
	Small Format Interchangeable Core housing available STIC upper binated on combinated house Core 7 air cold concertainty
Door Thickness:	 SFIC uncombinated or combinated, brass 6- or 7-pin sold separately 1-3/4" - 2" (45 mm - 51 mm) - Standard
	• 2-1/4" (57 mm) available for conventional cylinder - Must specify
Backset:	 2-3/4" (70 mm) - Standard 2-3/8" (60 mm) - Optional
Latchbolt:	• 1" (25 mm) Throw - Brass with concealed hardened steel roller to prevent sawing or cutting
Strikes:	 1-1/8" x 2-1/4" (29 mm x 57 mm) Square Corner Faceplate 3930 Square Corner, 1-1/8" x 2-3/4" (29 mm x 70 mm) with dustbox - Standard
	3929 ASA Deadbolt Strike - Optional
Functions: Finishes:	14 Double Cylinder, 15 Cylinder x Thumbturn, 18 Classroom US3, US4, US10, US10B, US26, US26D
Options:	• Split finish
	Additional deadbolts and strikes available
	1 9/32"
1 1/16"	3/8" 5/8" Ø 2 1/2"
[27]	$\begin{bmatrix} 10 \end{bmatrix} \qquad $

3100 SERIES LATCHBOLTS



3940

2-3/4" (70 mm) Backset Latchbolt -Standard

- Square and round corner available
 1-1/8" x 2-1/4" (29 mm x 57 mm)
- faceplate

3941

2-3/8" (60 mm) Backset Latchbolt -Optional

- Square and round corner available
- 1" x 2-1/4" (25 mm x 57 mm) faceplate

3100 SERIES STRIKES



3929 ASA Deadbolt Strike - Optional 1-1/4" x 4-7/8" (32 mm x 124 mm)



3930 Strike Plate - Standard

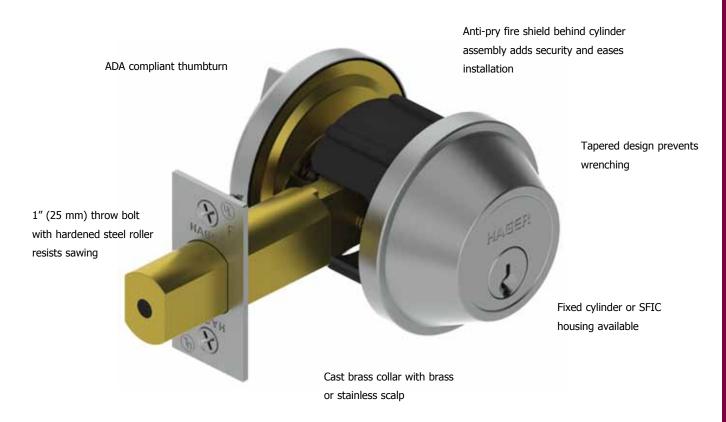
- 1-1/8" x 2-3/4" (29 mm x 70 mm)
- Dust box included



3200 Series

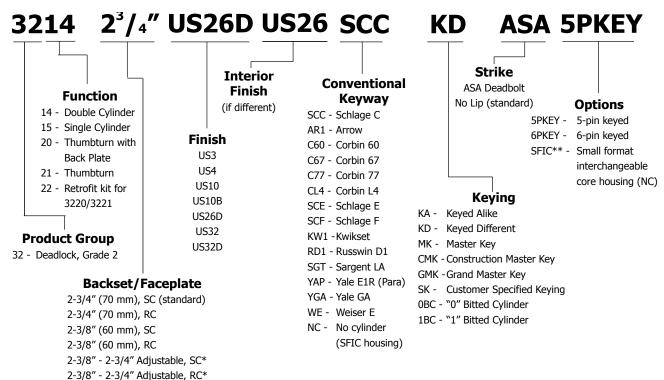


Hager 3200 Series Grade 2 deadlock provides a perfect combination of value and performance and is the ideal choice of lock for typical commercial applications. Our 3200 Series is an economical alternative to Grade 1 when Grade 1 is not required. It is a perfect complement to our 3500 Series for extra protection against break-in and is backed by a lifetime warranty.





HOW TO ORDER



Notes:

3200 SERIES - DEADLOCK

1. If master-keyed, include master key instruction sheet with order (available on page 69 or online). 2.

For additional keying information, please refer to cylinder, core, and keying section of catalog.

* Adjustable backset deadbolts supplied with 3220, 3221, and 3222.

** Small format interchangeable core sold separately. Available in Best Keyways only, A Standard.

Ordering example: 3214 2-3/4" US26D NC SFIC

3200 SERIES FUNCTION CHART

	Function	Function No.	Function Description	ANSI No.	
•(0)•	Double Cylinder	14	Deadbolt thrown or retracted by key from either side. Bolt automatically deadlocks when fully thrown.	E2142	
•[0)	Cylinder x Thumbturn	15	Deadbolt thrown or retracted by key from outside or by inside turn unit. Bolt automatically deadlocks when fully thrown.	E2152	
	Thumbturn w/ Blank Plate 20 (no cylinder)		Plate 20 Deadboilt thrown or retracted by turn unit only. Outside blank		E21112
	Thumbturn Only (no cylinder)	21	Deadbolt thrown or retracted by turn unit only. No outside trim. Bolt automatically deadlocks when fully thrown.	E2192	

Note: 3222 available for retrofit applications, converting a 3221 into a 3220.



3200 Series

Grade 2 Deadlock Auxiliary and primary locking

- Lifetime warranty
- Non-handed
- Conventional cylinder or Small Format Interchangeable Core housing available

Standard Door Prep:	• Cylinder Hole: 2-1/8" (54 mm) Diameter (Cross Bore)
Certifications:	 Latch Hole: 1" (25 mm) Diameter (Edge Bore) BHMA Certified ANSI A156.5 Grade 2
	ANSI A250.13 Severe Windstorm Resistant Component
	 UL/cUL Listed for all functions up to 3 hours for "A" label single doors UL10C/UBC 7-2 (1997) Positive Pressure Rated
	UL10B Neutral Pressure Rated
Exposed Trim:	ADA Thumbturn Wrought Brass, Bronze or Stainless Steel
Mechanism:	Steel, zinc dichromate plating
Keys: Cylinders/Cores:	Two operating keys supplied per lock • Brass - Keyed Different - C Keyway
	• Drilled 6-pin, keyed 5-pin - Standard
	 Other keying options, including keyed 6-pin, available from the factory Small Format Interchangeable Core housing available
	 SFIC uncombinated or combinated, brass 6- or 7-pin sold separately
Door Thickness:	 1-3/4" (45 mm) only - 3214 SFIC 1-3/8" - 1-3/4" (35 mm - 45 mm) - Standard
	• 2" - 2-1/4" (51 mm - 57 mm) available for conventional cylinder - Must specify
Backset:	 2-3/4" (70 mm) - Standard 2-3/8" (60 mm) - Optional
	• 2-3/8" - 2-3/4" adjustable backset supplied with 3220 and 3221 (not available on 3214 or 3215)
Latchbolt:	 1" (25 mm) Throw - Brass with concealed hardened steel roller to prevent sawing or cutting 1-1/8" x 2-1/4" (29 mm x 57 mm) Square Corner Faceplate
Strikes:	• 3930 Square Corner, 1-1/8" x 2-3/4" (29 mm x 70 mm) with dustbox - Standard
Functions:	 3929 ASA Deadbolt Strike - Optional 14 Double Cylinder, 15 Cylinder x Thumbturn, 20 Thumbturn w/ Blank Plate, 21 Thumbturn Only
Finishes:	US3, US4, US10, US10B, US26D, US32, US32D
Notes: Options:	3222 retrofit kit available for use with 3220/3221Split finish
·	Additional deadbolts and strikes available
1.2/20	[25] 11/32" 19/32"
→ ^{1 3/32"} [27] →	$\begin{bmatrix} 1732 \\ 9 \end{bmatrix} \xrightarrow{4} \begin{bmatrix} 1932 \\ 15 \end{bmatrix} \qquad \phi 2 9/16"$
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3200 SERIES LATCHBOLTS



3940

2-3/4" (70 mm) Backset Latchbolt -Standard

Square and round corner available
1-1/8" x 2-1/4" (29 mm x 57 mm) faceplate

3941

2-3/8" (60 mm) Backset Latchbolt -Optional

- Square and round corner available
- 1" x 2-1/4" (25 mm x 57 mm) faceplate

3200 SERIES STRIKES



3929 ASA Deadbolt Strike - Optional

1-1/4" x 4-7/8" (32 mm x 124 mm)



3930

Strike Plate - Standard

- 1-1/8" x 2-3/4" (29 mm x 70 mm)
- Dust box included



3942

2-3/8" (60 mm) - 2-3/4" (70 mm) Adjustable Backset Latchbolt -Standard for 3220 and 3221

- Square and round corner available
- 1-1/8" x 2-1/4" (29 mm x 57 mm) faceplate Standard
- faceplate Standard • 1" x 2-1/4" (25 mm x 57 mm) faceplate - Standard



3400 Series



Hager 3400 Series Grade 1 lock is designed and engineered to withstand the most abusive environments. We've categorized it 'extra heavy duty' and you can rest assured that it has been tested against heavy use, impact, strength, resistance, and abuse. We're so confident in our 3400 Series lock, it's backed by a lifetime warranty. The exceptional quality of our 3400 Series lock has made it incredibly successful in application after application across the country and around the globe.

Inside and outside rose liners contain independent high strength torsion springs that allow the levers to move bi-directionally without lever sag.

ADA compliant lever designs-all non handed and easily field reversible

7/8" (22 mm) diameter stainless steel bolt with 1/2" (13 mm) throw

All keyed functions include our clutching feature that allows the lever to freely rotate up or down while remaining locked Fixed cylinder or SFIC housing available



HOW TO ORDER

453 2 ³ /4	″ US26D	US26 W	IN SCC KI	D ASA TW
Function 10 - Passage, Closet Latch/Single Locking 17 - Single Dummy Trim 40 - Privacy, Bedroom, Bath Lock 50 - Office 53 - Entry/Double Locking 70 - Classroom Lock 73 - Corridor 80 - Storeroom Lock		Interior Finish (if different)	Conventional Keyway SCC - Schlage C AR1 - Arrow C60 - Corbin 60 C67 - Corbin 67 C77 - Corbin 77 CL4 - Corbin L4 SCE - Schlage E SCF - Schlage F KW1 - Kwikset RD1 - Russwin D1 SGT - Sargent LA YAP - Yale E1R (Para)	Strike ASA (standard) Full RC Full TEE TW - Tactile Warning LL - Leadlined IND - 3495 Indicator EL24 - Fail Safe 24 Volt EL12 - Fail Safe 12 Volt EU24 - Fail Safe 12 Volt EU24 - Fail Secure 24 Volt EU12 - Fail Secure 12 Volt
95 - Intruder Classroom Backset/Faceplate 2-3/4" (70 mm), SC (standard)			YGA - Yale GA WE - Weiser E NC - No cylinder (SFIC)	with Request to ELRX12 - Fail Safe 12 Volt with Request to EURX24 - Fail Secure 24 V
2-3/4" (70 mm), 2-3/8" (60 mm), 2-3/8" (60 mm), Product Group	, SC	APL - Apollo Kr ARC - Archer Lu AUG - August L WTN - Withnell	nob ever .ever	with Request to EURX12 - Fail Secure 12 V with Request to 5PKEY - 5-pin keyed 6PKEY - 6-pin keyed SFIC* - Small format
- Cylindrical, Grade 1			KA - Keyed Alike KD - Keyed Diffe MK - Master Key CMK - Constructio (C Keyway GMK - Grand Mas	e core housing lev erent on Master Key only)

SK - Customer Specified Keying 0BC - "0" Bitted Cylinder 1BC - "1" Bitted Cylinder

Notes: If master-keyed, include master key instruction sheet with order (available on page 69 or online).

1. 2. For additional keying information, please refer to cylinder, core, and keying section of catalog.

* Small format interchangeable core sold separately. Available in Best Keyways only, A Standard. Ordering example: 3453 2-3/4" US26D WTN NC ASA SFIC



3400 SERIES - CYLINDRICAL



3400 SERIES FUNCTION CHART

3400 SERIES FI	UNCTION CHART			
	Function	Function No.	Function Description	ANSI No.
Non-Keyed				
	Passage	10	Latchbolt operated by lever from either side at all times.	F75
Ĺ	Dummy	17	Pull one side, no mechanical operation.	-
	Privacy	40	Latchbolt operated by lever from either side. Outside lever is locked by push button and unlocked by emergency release outside, operating inside lever or closing door.	F76A
Keyed				
	Office	50	Push-button locking. Push-button locks outside lever until unlocked with key or by rotating inside lever.	F82
, Ĺą₀þ ,	Entry	53	Deadlocking latchbolt by lever either side, except when turn button locks outside lever. Pushing turn button in locks outside lever, requiring use of key outside to unlock. (Lever handle is freewheeling in locked position.) Turning inside lever unlocks outside lever. Pushing in and turning button locks outside lever, requiring key at all times. Turning inside lever does not unlock outside lever until button is manually turned to unlocked position. Inside lever always free.	F109
لمويهك.	Classroom	70	Deadlocking latchbolt operated by lever from either side except when outside lever is locked from outside by key. When outside lever is locked, latchbolt is operated by inside lever.	F84
	Corridor	73	Deadlocking latchbolt operated by lever from either side except when outside lever is locked by key in outside lever or by push button or other locking device on inside. Key in outside lever locks or unlocks outside lever. Operating inside lever releases push button or other locking device placed in a locked position. Closing door releases push button or other inside locking device. Inside lever always operates latchbolt.	F90
	Storeroom	80	Deadlocking latchbolt operated by key in outside lever, or by operating inside lever. Outside lever is always locked. Inside lever is always unlocked.	F86
	Intruder Classroom*	95	Deadlocking latchbolt operated by lever from either side. Key either inside or outside locks or unlocks outside lever. Inside lever always operates latchbolt.	F110

*Intruder Classroom is available with an indicator. Specify IND on order.

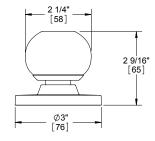




3400 SERIES LEVER OPTIONS

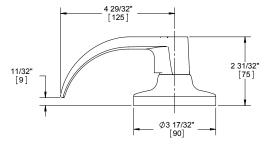
APOLLO KNOB







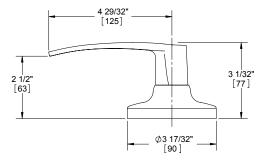




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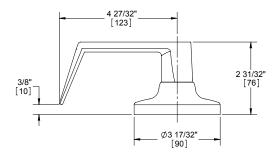
AUGUST LEVER





WITHNELL LEVER







Optional tactile warning available on all lever styles (only outside lever will be dimpled unless otherwise specified).





3400 Series

Grade 1 Cylindrical Extra heavy duty commercial, industrial, institutional

- Lifetime warranty
- No exposed mounting screws
- Non-handed
- Conventional cylinder or Small Format Interchangeable Core housing available

Standard Door Prep:	• 2-1/8" (54 mm) diameter (cross bore)
Certifications:	 Latch hole: 1" (25 mm) diameter (edge bore) BHMA Certified ANSI A156.2 Series 4000 Grade 1 ADA Compliant ANSI A117.1 Accessibility Code (levers only) ANSI A250.13 Severe Windstorm Resistant Component UL/cUL Listed for all functions up to 3 hours for "A" label doors UL10C/UBC 7-2 (1997) Positive Pressure Rated UL10B Neutral Pressure Rated
Exposed Trim:	 Knobs: Wrought brass or stainless steel Levers: Cast zinc Rose: Wrought brass or stainless steel
Rose Diameter: Lock Chassis:	 3-17/32" (90 mm) levers; 3" (76 mm) knobs Heavy gauge steel, zinc dichromated for corrosion resistance Free wheeling (levers only) Thru-bolt mounting (levers only)
Keys:	Two operating keys supplied per lock
Cylinders/Cores:	• Brass 6-pin, keyed different - C Keyway
	• Drilled 6-pin, Keyed 5-pin - Standard
	 Other keying options, including keyed 6-pin, available from factory
	Small Format Interchangeable Core housing available
	SFIC uncombinated or combinated, brass 6- or 7-pin sold separately
Door Thickness:	• Knobs: 1-3/8" - 1-3/4" (35 mm - 45 mm)
	• Levers: 1-3/8" - 2" (35 mm - 51 mm)
Backset:	• 2-3/4" (70 mm) - Standard
	• 2-3/8" (60 mm) - Optional
	• 3-3/4" (94 mm) - Optional
	• 5" (128 mm) - Optional
Latchbolt:	• 1/2" (13 mm) throw, stainless steel
	• 1-1/8" x 2-1/4" (29 mm x 57 mm) faceplate
	Square corner faceplates standard, round corner available
	• Deadlocking latchbolt prevents manipulation when door is closed; keyed functions only
Chrilton	• 3/4" (18 mm) latch available
Strike:	3935 ASA 1-1/4" x 4-7/8" (32 mm x 124 mm) strike - Standard
Functions:	10 Passage, 17 Dummy, 40 Privacy, 50 Office, 53 Entry, 70 Classroom, 73 Corridor (levers only),
Finishes:	80 Storeroom, 95 Intruder Classroom (levers only) • US3, US4, US10, US10B, US26, US26D (levers only)
FILISHES.	• US3, US32D (knobs only)
Lever Options:	Apollo knob; Archer, August, Withnell levers
Options:	Lead lined (levers only)
optionol	• Tactile Warning (levers only)
	• Split finish
	Additional latchbolts and strikes available
	• Intruder Classroom indicator available, specify IND (inside rose will have three indicator points for a guide
	reference for locking the door)

	LOCKS
	3400 Series - Electrified Grade 1 Cylindrical Extra heavy duty commercial, industrial, institutional • Lifetime warranty on mechanical locking components • One-year warranty on electric components
Function: Applications:	 80 - Storeroom Provides remote locking and unlocking ideal for door control where added security is necessary Stairtower doors Office doors Classrooms Elevator lobby doors Computer rooms Hospital equipment rooms Pharmaceutical storage rooms
Features:	 Deadlocking latch Key override allows latchbolt to be momentarily retracted with the key even though electrically locked. Note that locks that are electrically unlocked may not be locked via the key cylinder. Inside lever always allows egress Interface with life-safety systems Continuous-duty solenoids
Voltage:	 12V AC/DC; current250 AMP 24V AC/DC; current150 AMP Specify 12V or 24V when ordering

Function	Function No.	Function Description
Storeroom - Fail Safe	3480EL	Outside lever continuously locked electrically. Unlocked by key outside, by breaking electric current, or by power failure. Auxiliary latch deadlocks latchbolt when door is closed. Inside always free for immediate egress.
Storeroom - Fail Secure	3480EU	Outside lever continuously locked until unlocked by key or electric current. Auxiliary latch deadlocks latchbolt when door is closed. Inside always free for immediate egress.
Storeroom - Request to Exit	3480RX	Monitors inside lever rotation. Incorporates into alarm systems or in conjunction with an electromagnet.
Storeroom - Fail Safe w/ Request to Exit	3480ELRX	Outside lever continuously locked electrically. Unlocked by key outside, by breaking electric current, or by power failure. Auxiliary latch deadlocks latchbolt when door is closed. Inside always free for immediate egress. Ability to tie into an alarm system.
Storeroom - Fail Secure w/ Request to Exit	3480EURX	Outside lever continuously locked until unlocked by key or electric current. Auxiliary latch deadlocks latchbolt when door is closed. Inside always free for immediate egress. Ability to tie into an alarm system.



3400 Series - Power Supplies

Hager 2903 and 2904 power supplies are designed to power locking devices. Their features include:

- UL Listed
- Filtered/regulated 24 VDC
- 2 AMP load capacity
- Overload protection
- Over voltage protection
- Short circuit protection
- Surge suppression on Fail Safe and Fail Secure outputs
- Automatically accepts 120 VAC or 240 VAC inputs

2903

This power supply includes:

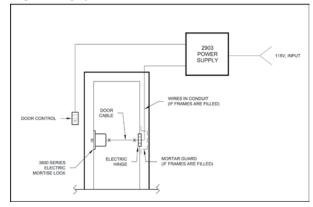
- Interface relay to isolate the locking device current from the control switch
- Auxiliary 24 VDC constant voltage for powering stand alone devices such as keypads, motion detectors, status indicators, etc.

2904

This power supply includes:

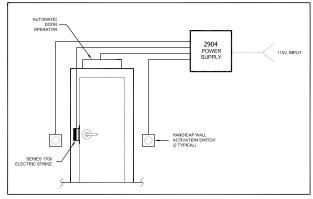
- Separate inputs for activation switch on entry and exit sides of the opening
- Relay contact output to automatic door operator (N.O. or N.C. contacts)
- Built-in time delay between activation of electrified locking device and automatic door operator
- Input of optional emergency release switch when urgent unlocking of the door is required
- Auxiliary 24VDC constant voltage output
- Separate 24VDC outputs for Fail Safe and Fail Secure electrified locking devices

Hager Locking System









2904

Product	Description
2903	Provides power for Fail Safe or Fail Secure locking devices and interference with building alarm controls, card reader, keypads, and other door controls.
2904	Provides power and control for openings with an electrified locking device and automatic door operator.





3400 SERIES LATCHBOLTS

Spring Latches



3943

2-3/4" (70 mm) Backset Passage Spring Latch - Standard • Square and round corner available • 1-1/8" x 2-1/4" (29 mm x 57 mm)

 1-1/8" x 2-1/4" (29 mm x 57 mm) faceplate

3945

2-3/8″ (60 mm) Backset Passage Spring Latch

- Square and round corner available
- 1-1/8" x 2-1/4" (29 mm x 57 mm) faceplate



3964

2-3/4" (70 mm) Backset

Privacy Spring Latch - Standard

- Square and round corner available
- 1-1/8" x 2-1/4" (29 mm x 57 mm) faceplate

3966

3932

Dead Latch

faceplate

2-3/8" (60 mm) Backset Privacy Spring Latch

2-3/4" (70 mm) Backset

• For use on fire rated pairs of doors

• 1-1/8" x 2-1/4" (29 mm x 57 mm)

• 3/4" (18 mm) throw

Square corner only

- Square and round corner available
- 1-1/8" x 2-1/4" (29 mm x 57 mm) faceplate



3944

2-3/4″ (70 mm) Backset Dead Latch - Standard

- Square and round corner available
- For use with all keyed functions other than corridor
- 1-1/8" x 2-1/4" (29 mm x 57 mm) faceplate

3946

2-3/8" (60 mm) Backset Dead Latch

- Square and round corner available
- For use with all keyed functions other than corridor
- 1-1/8" x 2-1/4" (29 mm x 57 mm) faceplate

3992

2-3/8" (60 mm) Backset Dead Latch - Corridor Function Only

- Square and round corner available
- 1-1/8" x 2-1/4" (29 mm x 57 mm) faceplate

3993

2-3/4" (70 mm) Backset Dead Latch - Corridor Function Only

- Square and round corner available
- 1-1/8" x 2-1/4" (29 mm x 57 mm) faceplate

Backset Extension Links



3916 3-3/4" (95 mm) Backset Extension Link

Must use with 2-3/8" (60 mm) backset latch

3936

5" (127 mm) Backset Extension Link Must use with 2-3/4" (70 mm) backset latch



3400 SERIES - CYLINDRICAL

Dead Latches







3400 SERIES STRIKES



3933

T-Strike with Plastic Dust Box

- 1-1/8" x 2-3/4" (29 mm x 70 mm)
- Dust box included

3400 SERIES ACCESSORIES



3911 Thru-Bolt Jig For lever set only

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3934

Full Lip Strike 1-5/8" x 2-1/4" (41 mm x 57 mm)



3935 Standard ASA Strike Plate 1-1/4" x 4-7/8" (32 mm x 124 mm)



3958

Full Lip Strike with Round Corner

- 1-5/8" x 2-1/4" (41 mm x 57 mm)
- 1/4" (6 mm) radius



3500 Series



Hager 3500 Series Grade 2 lock provides a perfect combination of value and performance and is the ideal choice of lock for typical commercial applications. It is an economical alternative to Grade 1 when Grade 1 is not required. Our 3500 Series lock offers superior dependability and is backed by a lifetime warranty.

Inside and outside rose liners contain independent high strength torsion springs that allow the levers to move bi-directionally without lever sag.

ADA compliant lever designs-all non handed and easily field reversible

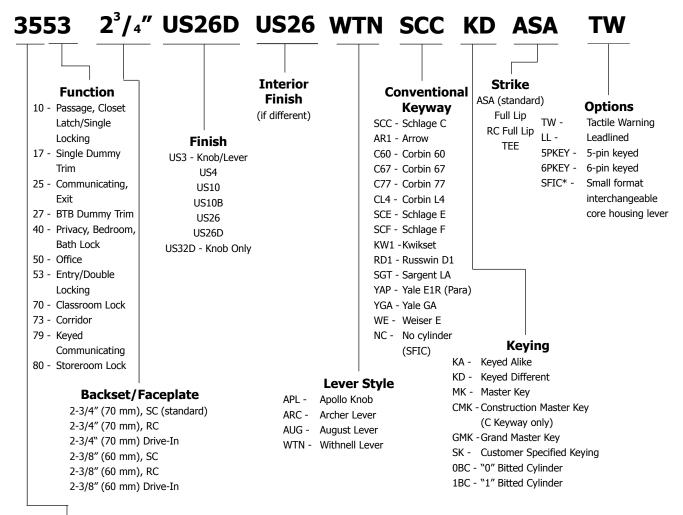


3/4" (18 mm) diameter stainless steel bolt with 1/2" (13 mm) throw

All keyed functions include our clutching feature that allows the lever to freely rotate up or down while remaining locked



HOW TO ORDER



Product Group

35 - Cylindrical, Grade 2

Notes:

1. If master-keyed, include master key instruction sheet with order (available on page 69 or online).

2. For additional keying information, please refer to cylinder, core, and keying section of catalog.

* Small format interchangeable core sold separately. Available in Best Keyways only, A Standard. Ordering example: 3553 2-3/4" US26D WTN NC ASA SFIC





3500 SERIES FUNCTION CHART

	Function	Function No.	Function Description	ANSI No.
Non-Keyed	1	1	1	T
	Passage	10	Latchbolt operated by lever from either side at all times.	F75
Ĺ	Dummy	17	Pull one side, no mechanical operation.	-
	Exit	25	Blank plate outside (13/16" [31 mm] projection). Inside lever always unlocked.	F111
	BTB Dummy	27	Pull both sides. No mechanical operation.	-
	Privacy	40	Latchbolt operated by lever from either side. Outside lever is locked by push button and unlocked by emergency release outside, operating inside lever or closing door.	F76A
Keyed		1		1
	Office	50	Push-button locking. Push-button locks outside lever until unlocked with key or by rotating inside lever.	F82
• L	Entry	53	Deadlocking latchbolt by lever either side, except when turn button locks outside lever. Pushing turn button in locks outside lever, requiring use of key outside to unlock. (Lever handle is freewheeling in locked position.) Turning inside lever unlocks outside lever. Pushing in and turning button locks outside lever, requiring key at all times. Turning inside lever does not unlock outside lever until button is manually turned to unlocked position. Inside lever always free.	F109
	Classroom	70	Deadlocking latchbolt operated by lever from either side except when outside lever is locked from outside by key. When outside lever is locked, latchbolt is operated by inside lever.	F84



3500 SERIES FUNCTION CHART (CONTINUED)

	Function	Function No.	Function Description	ANSI No.		
Keyed (continued)	Keyed (continued)					
,⊑┫╗┣┙•	Corridor	73	Deadlocking latchbolt operated by lever from either side except when outside lever is locked by key in outside lever or by push button or other locking device on inside. Key in outside lever locks or unlocks outside lever. Operating inside lever releases push button or other locking device placed in a locked position. Closing door releases push button or other inside locking device. Inside lever always operates latchbolt.	F90		
	Keyed Communicating	79	Deadlocking latchbolt by inside lever except when locked by key. Non-removable blank plate outside (13/16" [31 mm] projection).	F113		
	Storeroom	80	Deadlocking latchbolt operated by key in outside lever, or by operating inside lever. Outside lever is always locked. Inside lever is always unlocked.	F86		



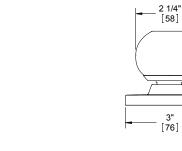
2 1/2" [63.5]









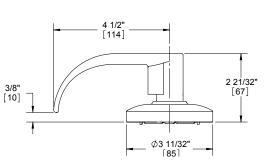






ARCHER LEVER



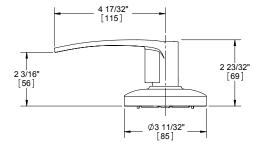


3" [76]

AUGUST LEVER

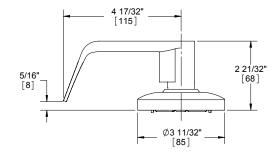
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WITHNELL LEVER







Optional tactile warning available on all lever styles (only outside lever will be dimpled unless otherwise specified).



	DCKS
	3500 Series Grade 2 Cylindrical Standard duty commercial • Lifetime warranty • No exposed mounting screws • Non-handed • Conventional cylinder or Small Format Interchangeable Core housing available
Standard Door Prep:	• 2-1/8" (54 mm) Diameter (Cross Bore)
Certifications:	 Latch Hole: 1" (25 mm) Diameter (Edge Bore) BHMA Certified ANSI A156.2 Series 4000 Grade 2 ADA Compliant ANSI A117.1 Accessibility Code (Levers Only) ANSI A250.13 Severe Windstorm Resistant Component UL/cUL Listed for all functions up to 3 hours "A" label single doors UL10C/UBC 7-2 (1997) Positive Pressure Rated UL10B Neutral Pressure Rated
Exposed Trim:	 Knobs: Wrought Brass or Stainless Steel Levers: Cast zinc Rose: Wrought brass or stainless steel
Rose Diameter: Lock Chassis:	 3-11/32" (85 mm) levers; 3" (76 mm) knobs Heavy gauge steel, zinc dichromated for corrosion resistance Free wheeling (levers only) Removable thru-bolts
Notes:	Failure to install thru-bolts and removable screw posts voids BHMA certification, UL Rating and Warranty
Keys: Cylinders/Cores:	 Two operating keys supplied per lock Brass - Keyed Different - C Keyway Drilled 6-pin, Keyed 5-pin - Standard Other keying options, including keyed 6-pin, available from the factory Small Format Interchangeable Core housing available SFIC uncombinated or combinated, brass 6- or 7-pin sold separately
Door Thickness:	• Knobs: 1-3/8" - 1-3/4" (35 mm - 45 mm) • Levers: 1-3/8" - 2" (35 mm - 51 mm)
Backset:	 2-3/4" (70 mm) - Standard 2-3/8" (60 mm) - Optional 3-3/4" (94 mm) - Optional 5" (128 mm) - Optional
Latchbolt:	 1/2" (13 mm) Throw - Stainless Steel 1-1/8" x 2-1/4" (29 mm x 57 mm) Faceplate for 2-3/4" (70 mm) backset 1" x 2-1/4" (25 mm x 57 mm) Faceplate for 2-3/8" (60 mm) backset Deadlocking latchbolt prevents manipulation when door is closed; keyed functions only Square corner faceplate standard, round corner available
Strike: Functions:	3935 ASA 1-1/4" x 4-7/8" (32 mm x 124 mm) strike - Standard 10 Passage, 17 Dummy, 25 Exit Only, 27 BTB Dummy (Levers only), 40 Privacy, 50 Office, 53 Entry, 70
Finishes:	 Classroom, 73 Corridor (Levers Only), 79 Keyed Communicating, 80 Storeroom US3, US4, US10, US10B, US26, US26D (Levers Only) US3, US32D (Knobs Only)
Lever Options: Options:	Apollo knob; Archer, August, Withnell levers • Lead Lined (Levers Only) • Tactile Warning (Levers Only) • Split Finish
Notes:	 Additional latchbolts and strikes available Blank plate projection is 13/16" (21 mm) for Functions 25 and 79

3500 SERIES - CYLINDRICAL



3500 SERIES LATCHBOLTS

Spring Latches



3947 2-3/4" (70 mm

2-3/4" (70 mm) Backset Passage Spring Latch

Square and round corner available
1-1/8" x 2-1/4" (29 mm x 57 mm) faceplate

3949

2-3/8" (60 mm) Backset Passage Spring Latch

- Square and round corner available
- 1" x 2-1/4" (25 mm x 57 mm) faceplate



3994

2-3/8" (60 mm) Backset Dead Latch - Corridor Function Only

- Square and round corner available
 1-1/8" x 2-1/4" (29 mm x 57 mm)
- faceplate

3995

2-3/4" (70 mm) Backset

Dead Latch - Corridor Function Only

- Square and round corner available
- 1" x 2-1/4" (25 mm x 57 mm) faceplate

Optional Drive-In Spring Latches



3922



3925

2-3/8" (60 mm) Backset Passage Spring Latch



3923 2-3/4" (70 mm) Backset Privacy Spring Latch

Privacy Spring Latch

2-3/8″ (60 mm) Backset Privacy Spring Latch

Optional Drive-In Dead Latches



3924

2-3/4" (70 mm) Backset Dead Latch For use with all keyed functions other than corridor

3927

2-3/8" (60 mm) Backset Dead Latch For use with all keyed functions other than corridor



3996

2-3/8" (60 mm) Backset Dead Latch - Corridor Function Only

3997

2-3/4" (70 mm) Backset Dead Latch - Corridor Function Only



3965 2-3/4" (70 mm) Backset Privacy Spring Latch

- Square and round corner available
- 1-1/8" x 2-1/4" (29 mm x 57 mm) faceplate

3967

2-3/8" (60 mm) Backset Privacy Spring Latch

- Square and round corner available
- 1" x 2-1/4" (25 mm x 57 mm) faceplate

Dead Latches



3948 2-3/4" (70 i

2-3/4" (70 mm) Backset Dead Latch

- Square and round corner available
- 1-1/8" x 2-1/4" (29 mm x 57 mm) faceplate
- For use with all keyed functions other than corridor

3950

2-3/8" (60 mm) Backset Dead Latch

- Square and round corner available
- 1" x 2-1/4" (25 mm x 57 mm) faceplate
- For use with all keyed functions other than corridor





3500 SERIES LATCHBOLTS (CONTINUED)

Backset Extension Links



3917 3-3/4" (95 mm) Backset Extension Link For use with 2-3/8" (60 mm) backset latch

3500 SERIES STRIKES



3933

- T-Strike with Plastic Dust Box
- 1-1/8" x 2-3/4" (29 mm x 70 mm)
- Dust box included



3934 Full Lip Strike 1-5/8" x 2-1/4" (41 mm x 57 mm)



3937 5" (127 mm) Backset Extension Link For use with 2-3/4" (70 mm) backset latch



3935 Standard ASA Strike Plate 1-1/4" x 4-7/8" (32 mm x 124 mm)



3958

Full Lip Strike with Round Corner

• 1-5/8" x 2-1/4" (41 mm x 57 mm)

1/4" (6 mm) radius

3500 SERIES ACCESSORIES



3959 Faceplate Adapter Converts 1" (25 mm) to 1-1/8" (28 mm) width



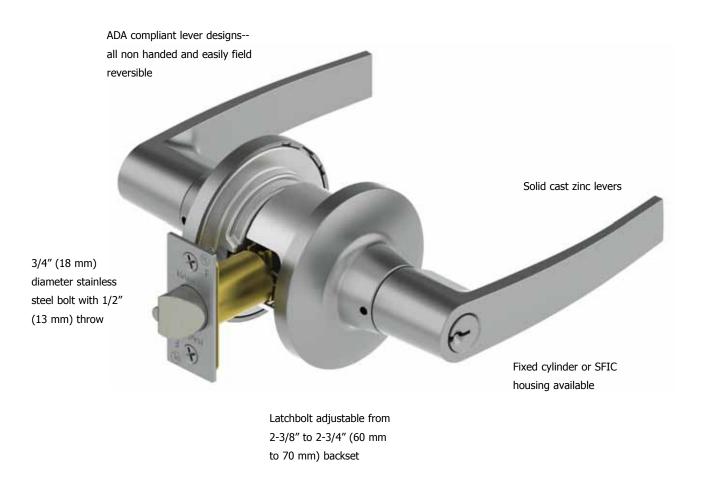
3912 Thru-Bolt Jig For 3500 Series lever set only



3600 Series

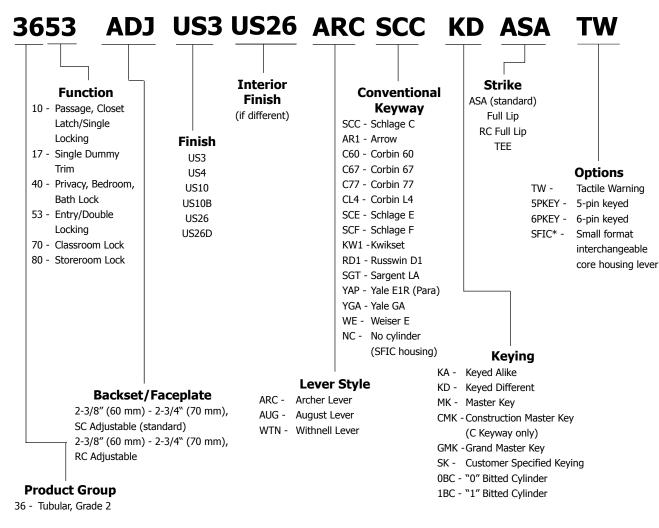


Hager 3600 Series Grade 2 tubular lockset provides the necessary security and dependability of a commercial lock with a more residential look. It is well suited for medium duty commercial or heavy duty residential applications such as multi-family housing. It is a great fit for narrow stile doors because of the smaller profile.





HOW TO ORDER



Notes:

If master-keyed, include master key instruction sheet with order (available on page 69 or online).
 For additional keying information, please refer to cylinder, core, and keying section of catalog.

* Small format interchangeable core sold separately. Available in Best Keyways only, A Standard. Ordering example: 3653 ADJ 2-3/8" to 2-3/4" US26D WTN NC ASA SFIC





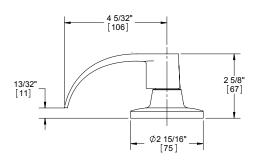
3600 SERIES FUNCTION CHART

	Function	Function No.	Function Description	ANSI No.
Non-Keyed		_		
	Passage	10	Latchbolt operated by lever from either side at all times.	F75
Ĺ	Dummy	17	Pull one side, no mechanical operation.	-
	Privacy	40	Latchbolt operated by lever from either side. Outside lever is locked by push button and unlocked by emergency release outside or operating inside lever.	F76B
Keyed				
	Entry	53	Deadlocking latchbolt operated by lever from either side except when outside lever is locked by locking device on inside. When outside lever is locked, operating key in outside lever unlocks locking device. Locking device shall automatically release when inside lever is operated or be in the unlocked position before inside lever is operated.	F82B
	Classroom	70	Deadlocking latchbolt operated by lever from either side except when outside lever is locked from outside by key. When outside lever is locked, latchbolt is operated by inside lever.	F84
	Storeroom	80	Deadlocking latchbolt operated by key in outside lever, or by operating inside lever. Outside lever is always locked. Inside lever always unlocked.	F86

3600 SERIES LEVER OPTIONS

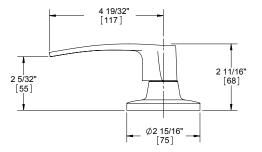
ARCHER LEVER





AUGUST LEVER

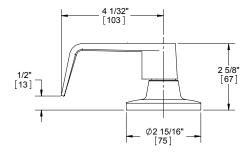




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WITHNELL LEVER







Optional tactile warning available on all lever styles (only outside lever will be dimpled unless otherwise specified).







3600 Series

Grade 2 Tubular Heavy Duty Residential - Medium Duty Commercial

- Five-year warrantyNo exposed mounting screws
- Non-handed
- Conventional cylinder or Small Format Interchangeable Core housing available

Standard Door Prep: Certifications:	 2-1/8" (54 mm) Diameter (Cross Bore) Latch Hole: 1" (25 mm) Diameter (Edge Bore) BHMA Certified ANSI A156.2 Series 4000 Grade 2 ADA Compliant ANSI A117.1 Accessibility Code UL/cUL Listed for all functions up to 3 hours for "A" label single doors UL10C/UBC 7-2 (1997) Positive Pressure Rated UL10B Neutral Pressure Rated
Exposed Trim:	Levers: Cast Zinc Rose: Wrought brass
Rose Diameter:	2-15/16" (75 mm)
Lock Chassis:	Heavy gauge steel, zinc dichromated
Keys:	Two operating keys supplied per lock
Cylinders/Cores:	• Brass - Keyed Different - C Keyway
	• Drilled 6-pin, keyed 5-pin - Standard
	• Other keying options, including keyed 6-pin, available from the factory
	Small Format Interchangeable Core housing available
5 1 .1	• SFIC uncombinated or combinated, brass 6- or 7-pin sold separately
Door Thickness:	1-3/8'' - 1-3/4'' (35 mm - 45 mm)
Backset:	• Adjustable 2-3/8" - 2-3/4" (60 mm - 70 mm)
Latchbolt:	 Preset at factory for 2-3/8" (60 mm) 1/2" (13 mm) Throw - Stainless Steel
Lateridoit.	• 1" x 2-1/4" (25 mm x 57 mm) Faceplate
	 Deadlocking latchbolt prevents manipulation when door is closed; keyed functions only Square corner faceplate standard, round corner available
Strike:	3935 ASA $1-1/4'' \ge 4-7/8''$ (32 mm ≥ 124 mm) strike - Standard
Functions:	10 Passage, 17 Dummy, 40 Privacy, 53 Entry, 70 Classroom, 80 Storeroom
Finishes:	US3, US4, US10, US10B, US26, US26D
Lever Options:	Archer, August, Withnell levers
Options:	Tactile Warning
	• Split finish



3600 SERIES LATCHBOLTS

Adjustable Backset Spring Latches



3951

2-3/8" (60 mm) - 2-3/4" (70 mm) Adjustable Backset Spring Latch - Standard

Square corner

- 1" x 2-1/4" (25 mm x 57 mm) faceplate
- For use with Passage/Privacy functions



3953 2-3/8" (60 mm) - 2-3/4" (70 mm) Adjustable Backset Spring Latch

- Round corner
- 1" x 2-1/4" (25 mm x 57 mm) faceplate
- For use with Passage/Privacy functions

5" Backset Spring Latches



3939 5" (127 mm) Backset

- Spring LatchSquare and round corner available
- $1'' \ge 1/4''$ (25 mm ≥ 57 mm) faceplate
- For use with Passage/Privacy functions

Adjustable Backset Dead Latches



3952

2-3/8" (60 mm) - 2-3/4" (70 mm) Adjustable Backset Dead Latch - Standard

- Square corner
- 1" x 2-1/4" (25 mm x 57 mm) faceplate
- For use with all keyed functions



3954 2-3/8" (60 mm) - 2-3/4" (70 mm) Adjustable Backset

Dead Latch

- Round corner
- 1" x 2-1/4" (25 mm x 57 mm) faceplate
- For use with all keyed functions

5" Backset Dead Latches



3938 5" (127 mm) Backset Dead Latch

- Square and round corner available
- 1" x 2-1/4" (25 mm x 57 mm) faceplate
- For use with all keyed functions

Optional Drive-In Latchbolts



3914

3915

2-3/8" (60 mm) - 2-3/4" (70 mm) Adjustable Backset Spring Latch For use with Passage/Privacy functions



2-3/8" (60 mm) - 2-3/4" (70 mm) Adjustable Backset Dead Latch For use with all keyed functions

3600 SERIES STRIKES



3933 T-Strike with Plastic Dust Box

- 1-1/8" x 2-3/4" (29 mm x 70 mm)
- Dust box included



3934 Full Lip Strike 1-5/8" x 2-1/4" (41 mm x 57 mm)



3935 ASA Strike - Standard 1-1/4" x 4-7/8" (32 mm x 124 mm)



3958 Full Lip Strike with Round Corner

- 1-5/8" x 2-1/4" (41 mm x 57 mm)
- 1/4" radius



3959

Faceplate Adapter

- Converts 1" (25 mm) to 1-1/8" (28 mm) width
- Supplied standard with 3600 Series

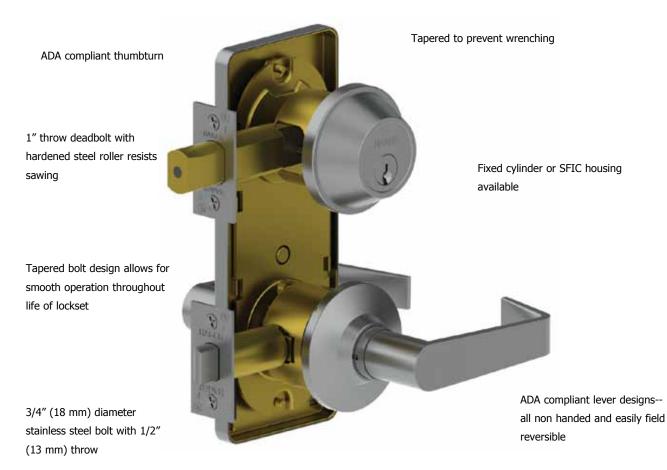


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3700 Series

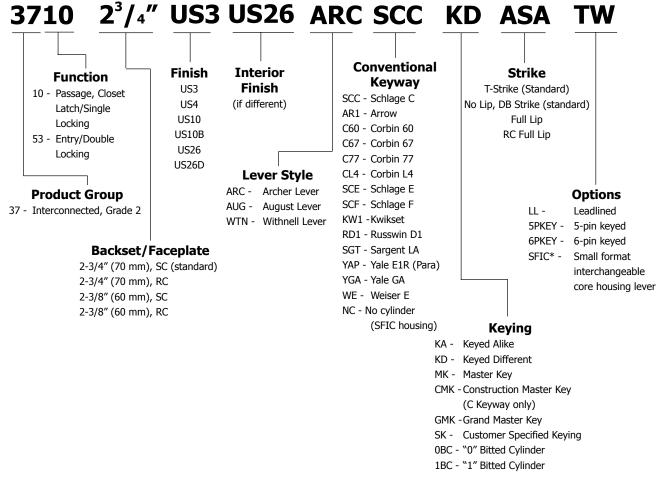


Hager 3700 Series Grade 2 interconnected lock is a perfect match for residential or commercial applications such as apartment buildings and assisted living facilities. These versatile locks provide a single action for retracting the latchbolt and deadbolt simultaneously for panic-free egress. They are supplied with an optional exterior escutcheon plate standard and are backed by a lifetime warranty.





HOW TO ORDER



Notes:

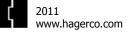
1. If master-keyed, include master key instruction sheet with order (available on page 69 or online). 2.

For additional keying information, please refer to cylinder, core, and keying section of catalog.

* Small format interchangeable core sold separately. Available in Best Keyways only, A Standard. Ordering example: 3753 2-3/4" US26D WTN NC TEE SFIC

3700 SERIES FUNCTION CHART

	Function	Function No.	Function Description	ANSI No.
Interconnected	_			
	Interconnected Single Locking Entry	10	Latchbolt operated by lever from either side. Rotating turn from inside or key from outside extends deadbolt to locked position. Both deadbolt and latchbolt are retracted to unlocked position by operating inside lever.	F95
	Interconnected Double Locking Entry	53	Deadlocking latchbolt is operated by lever from either side except when outside lever is made inoperable by locking device inside. When outside lever is locked, deadlocking latchbolt is operated by key outside. Inside locking device is manually operated to unlock outside lever. Rotating turn from inside or key from outside extends deadbolt to locked position. Operating inside lever retracts both deadbolt and latchbolt. Closing door shall not release locking device inside.	F97



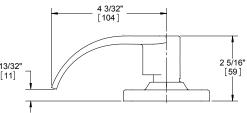
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INSIDE ESCUTCHEON

3700 SERIES LEVER OPTIONS

ARCHER LEVER







13/32" [11]

13/32" [10]

3 5/16" [84]

OPTIONAL OUTSIDE ESCUTCHEON

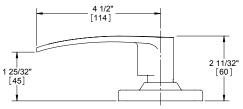
3/8" [10]

7 15/16" [202]

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WITHNELL LEVER

3 1/16" [78]

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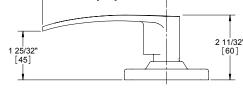


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7 15/16" [202]







3 15/16" [100]

1/8" [3]

2 5/16" [59]



LOCKS



3700 Series

Grade 2 Interconnected Heavy duty residential - medium duty commercial

- Lifetime warrantyCylindrical chassis
- No exposed mounting screws
- Non-handed
- Conventional cylinder or Small Format Interchangeable Core housings available

Standard Door Prep:	• 4" (102 mm) center of deadbolt to center of lock chassis
	 2-1/8" (54 mm) Diameter (Cross Bore) Latch Hole: 1" (25 mm) Diameter (Edge Bore)
Certifications:	BHMA Certified ANSI A156.12 Grade 2
	ADA Compliant ANSI A117.1 Accessibility Code
	• UL/cUL Listed for all functions up to 3 hours for "A" label single doors
	UL10C/UBC 7-2 (1997) Positive Pressure Rated
	UL10B Neutral Pressure Rated
Exposed Trim:	Wrought Brass or Bronze, cast zinc lever
Lock Chassis:	Heavy gauge steel, zinc dichromated
D D I	Thru-bolt mounting
Rose Diameter:	2-1/2" (63 mm)
Outside Escutcheon:	3-5/16" x 7-15/16" x 3/8" (84 mm x 202 mm x 10 mm)
Inside Escutcheon:	3-1/16" x 7-15/16" x 1/8" (78 mm x 202 mm x 3 mm) Two operating keys supplied per lock
Keys: Cylinders/Cores:	• Brass - Keyed Different - C Keyway
Cylinders/Cores.	• Drilled 6-pin, keyed 5-pin - Standard
	• Other keying options, including keyed 6-pin, available from the factory
	Small Format Interchangeable Core housing available
	• SFIC uncombinated or combinated, brass 6- or 7-pin sold separately
Door Thickness:	• 1-3/8" - 1-3/4" (35 mm - 45 mm) - Standard
	• 2" (52 mm) Doors - Optional
Backsets:	• 2-3/4" (70 mm) - Standard
	• 2-3/8″ (60 mm) - Optional
Latchbolt:	• 1/2" (13 mm) Throw - Stainless Steel
	• 1-1/8" x 2-1/4" (29 mm x 57 mm) Faceplate for 2-3/4" (70 mm) backset
	• 1" x 2-1/4" (25 mm x 57 mm) Faceplate for 2-3/8" (60 mm) backset
	 Deadlocking latchbolt prevents manipulation when door is closed; keyed functions only Square corner faceplate standard, round corner available
Deadbolt:	 Square corner raceptate standard, round corner available 1" (25 mm) Throw - brass with concealed steel roller to prevent sawing or cutting
Deauboit.	• $1-1/8'' \ge 2-1/4''$ (29 mm x 57 mm) faceplate for $2-3/4''$ (70 mm) bracket
	• $1'' \ge 1/4'' (25 \text{ mm x 57 mm})$ faceplate for 2-3/8'' (60 mm) faceplate
Strikes:	• 3933 Square Corner T-Strike with Plastic Dust Box, 1-1/8" x 2-3/4" (29 mm x 70 mm) Standard
	• 3930 Square Corner Strike Plate with Dust Box, 1-1/8" x 2-3/4" (29 mm x 70 mm) - Standard
Functions:	• 10 Single Locking Entry
	53 Double Locking Entry
Finishes:	US3, US4, US10, US10B, US26, US26D
Lever Options:	Archer, August, Withnell levers
Options:	• Split finish
	• Split lever design



3700 SERIES LATCHBOLTS

Spring Latches



3947 2-3/4" (70 mm) Backset **Passage Spring Latch**

• Square and round corner available • 1-1/8" x 2-1/4" (29 mm x 57 mm) faceplate



3949 2-3/8" (60 mm) Backset **Passage Spring Latch**

- Square and round corner available
- 1" x 2-1/4" (25 mm x 57 mm) faceplate

Dead Latches



3948 2-3/4" (70 mm) Backset **Dead Latch - Standard**

- Square and round corner available
- 1-1/8" x 2-1/4" (29 mm x 57 mm) faceplate



3958

3959

Faceplate Adapter

(28 mm) width

Converts 1" (25 mm) to 1-1/8"

3934

Full Lip Strike

Round Corner Full Lip Strike

1-5/8" x 2-1/4" (41 mm x 57 mm)

• 1-5/8" x 2-1/4" (41 mm x 57 mm) • 1/4" (6 mm) radius



3950 2-3/8" (60 mm) Backset **Dead Latch**

- Square and round corner available
- 1" x 2-1/4" (25 mm x 57 mm) faceplate

3700 SERIES DEADBOLTS



3920

2-3/4" (70 mm) Backset

- **Tapered Deadbolt Standard** • Square and round corner available
- 1-1/8" x 2-1/4" (29 mm x 57 mm) faceplate



3921 2-3/8" (60 mm) Backset **Tapered Deadbolt**

- Square and round corner available
- 1" x 2-1/4" (25 mm x 57 mm) faceplate



3700 SERIES STRIKES

3930



Strike Plate 1-1/8" x 2-3/4" (29 mm x 70 mm)





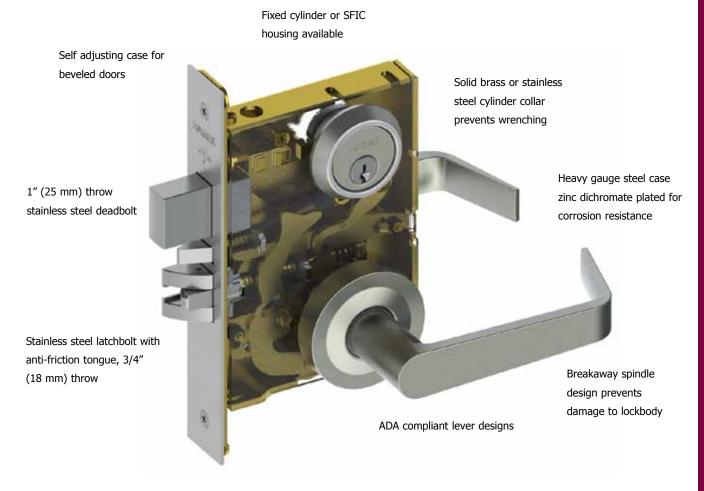
3933 **T-Strike with Plastic Dust Box** 1-1/8" x 2-3/4" (29 mm x 70 mm)

39

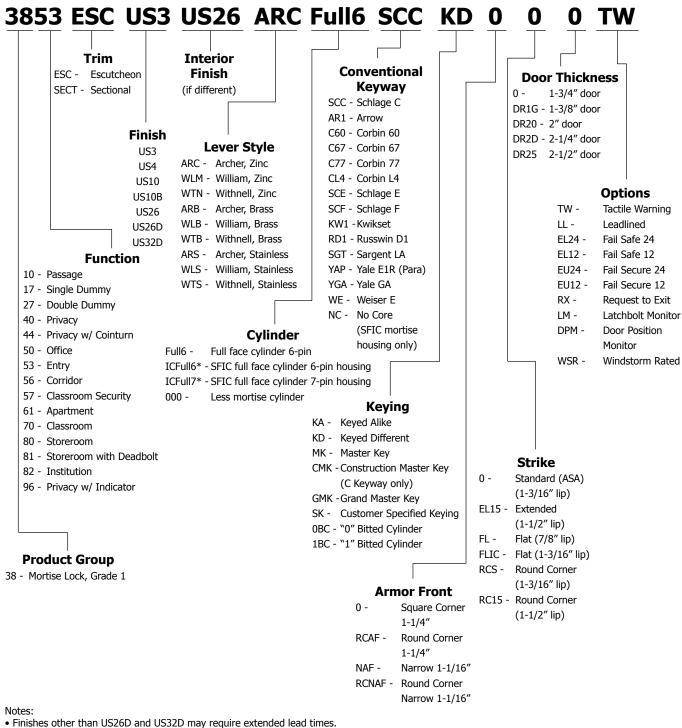
3800 Series



Hager 3800 Series mortise lock provides maximum security and durability for the harshest environments. With field reversible handing, ease of installation, and both escutcheon and sectional models available, our 3800 Series lock provides great flexibility. What's more, it is ANSI certified Grade 1 Operational and Security and is backed by a lifetime warranty.



ESCUTCHEON AND SECTIONAL MORTISE LOCKS HOW TO ORDER

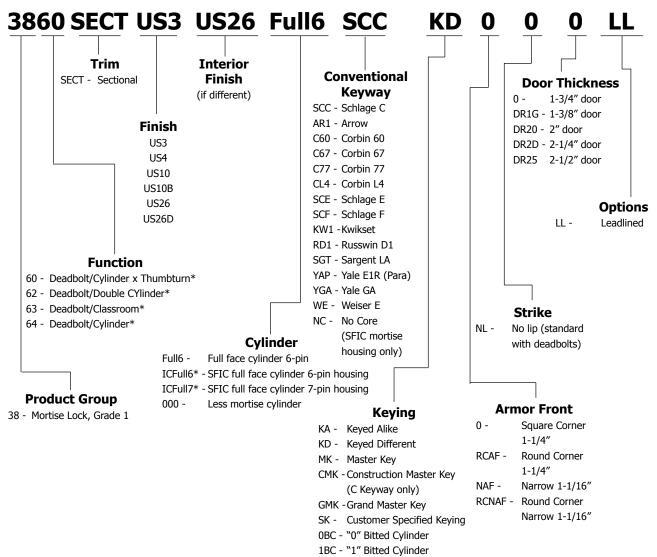


• If master-keyed, include master key instruction sheet with order (available on page 69 or online).

• For additional keying information, refer to cylinder, core, and keying section of catalog.

* Small format interchangeable core sold separately. Available in Best Keyways only, A Standard. Ordering example 3850 SECT 26D WTN ICFULL6 NC

MORTISE DEADLOCKS HOW TO ORDER



Notes:

• Finishes other than US26D and US32D may require extended lead times.

• If master-keyed, include master key instruction sheet with order (available on page 69 or online).

• For additional keying information, refer to cylinder, core, and keying section of catalog.

* Small format interchangeable core sold separately. Available in Best Keyways only, A Standard. Ordering example 3680 SECT 26D ICFULL6 NC



43

3800 SERIES - MORTISE



3800 SERIES ESCUTCHEON AND SECTIONAL LOCKS FUNCTION CHART

	Function	Function No.	Function Description	ANSI No.
Keyed Without D	eadbolt			
4	Office	50	Latchbolt retracted by lever from either side unless outside is made inoperative by key outside or by turning inside thumbturn. When outside is locked, latchbolt is retracted by lever inside. Outside lever remains locked until thumbturn is returned to vertical or unlocked by key. Auxiliary latch deadlocks latchbolt when door is closed.	F04
4	Apartment Entrance	61	Latchbolt retracted by lever from either side unless outside is locked by key from inside. When locked, latchbolt retracted by key outside or lever inside. Auxiliary latch deadlocks when door is closed.	F09
4 2	Classroom	70	Latchbolt retracted by lever from either side unless outside is locked by key. Unlocked from outside by key. Inside lever always free for immediate exit. Auxiliary latch deadlocks latchbolt when door is closed.	F05
4	Storeroom	80	Latchbolt retracted by key outside or by lever inside. Outside lever always inoperative. Inside lever always free for immediate exit. Auxiliary latch deadlocks latchbolt when door is closed.	F07
42	Institution	82	Latchbolt retracted by key from either side. Lever on both sides always inoperative. Auxiliary latch deadlocks latchbolt when door is closed.	F30
Keyed With Dead	lbolt			
4 þ	Entry	53	Latchbolt retracted by lever from either side unless outside is locked by 20° rotation of thumbturn. Deadbolt thrown or retracted by 90° rotation of thumbturn. When locked, key outside or lever inside retracts deadbolt and latchbolt simultaneously. Outside lever remains locked until thumbturn is restored to vertical position. Throwing deadbolt automatically locks outside lever. Auxiliary latch deadlocks latchbolt when door is closed	F20
4	Corridor	56	Latchbolt retracted by lever from either side. Deadbolt thrown or retracted by key outside or thumbturn side. Throwing deadbolt locks outside lever. Turning inside lever simultaneously retracts deadbolt and latchbolt and unlocks the outside lever.	F13
4	Classroom Security	57	Latchbolt retracted by lever from either side. Deadbolt thrown or retracted by key from either side. Throwing deadbolt locks outside lever. Turning inside lever simultaneously retracts deadbolt and latchbolt and unlocks outside lever.	F33
áþ	Storeroom w/ Deadbolt	81	Latchbolt retracted by key outside or by lever inside. Outside lever always fixed. Deadbolt thrown or retracted by key outside or thumbturn inside. Turning inside lever simultaneously retracts deadbolt and latchbolt. Auxiliary latch deadlocks latchbolt when door is closed.	-



3800 SERIES ESCUTCHEON AND SECTIONAL LOCKS FUNCTION CHART (CONTINUED)

	Function	Function No.	Function Description	ANSI No.
Non-Keyed Withou	ıt Deadbolt		-	
دريه	Passage	10	Latchbolt retracted by lever from either side at all times.	F01
4	Privacy	40	Latchbolt retracted by lever from either side unless outside is locked by inside thumbturn. Turning inside lever or closing door unlocks outside lever. To unlock from outside, remove emergency button, insert emergency turn (furnished) in access hole and rotate.	F22
4	Privacy with Cointurn	44	Latchbolt retracted by lever from either side unless outside is locked by inside thumbturn or outside cointurn. Operating inside lever, closing door, rotating inside thumbturn, or rotating outside cointurn unlocks outside lever.	-
	Privacy with Indicator	96	Latchbolt retracted by lever from either side. Turning inside thumbturn locks outside lever and displays "Occupied." Operating inside lever, closing door, rotating inside thumbturn. To unlock from outside, remove emergency button, insert emergency turn (furnished) in access hole and rotate.	-
Non-Keyed Dumm	Non-Keyed Dummy			
4	Single Dummy	17	Lever on one side fixed by mounting bar.	-
4 P	Double Dummy	27	Lever on both sides fixed by mounting bar.	-

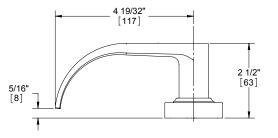
3800 SERIES DEADLOCKS FUNCTION CHART

	Function	Function No.	Function Description	ANSI No.
₽	Cylinder x Thumbturn	60	Deadbolt thrown or retracted by key outside or thumbturn inside.	F17
41 14 	Double Cylinder	62	Deadbolt operated by key from either side.	F16
	Classroom	63	Deadbolt thrown or retracted by key from outside. Inside thumbturn cylinder retracts deadbolt but cannot project it.	F29
۲.	Cylinder	64	Deadbolt thrown or retracted by key from one side. No trim on opposite side.	F18

3800 SERIES ESCUTCHEON LEVER OPTIONS

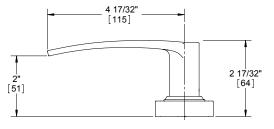
ARCHER LEVER





AUGUST LEVER



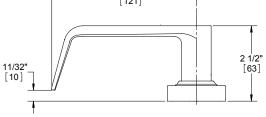


WILLIAM LEVER



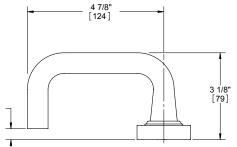
WITHNELL LEVER

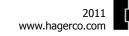






Optional tactile warning available on all lever styles (only outside lever will be dimpled unless otherwise specified).



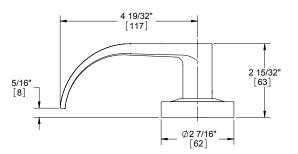




3800 SERIES SECTIONAL LEVER OPTIONS

ARCHER LEVER





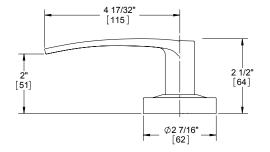
AUGUST LEVER

F

F

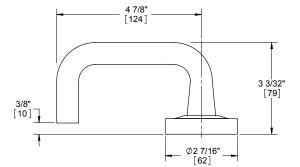
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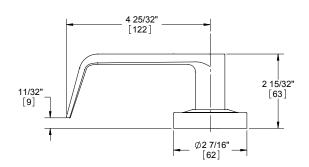
WILLIAM LEVER





WITHNELL LEVER







Optional tactile warning available on all lever styles (only outside lever will be dimpled unless otherwise specified).



3800 Series

Grade 1 Mortise (Escutcheon) Heavy duty commercial, industrial, institutional

- Lifetime warranty
- Concealed thru-bolts
- Field reversible
- Standard mortise cylinder or Small Format Interchangeable Core housing available
 BHMA Certified Grade 1 Security with standard mortise cylinder

Standard Door Prep:	 3-5/8" (92 mm) Center of cylinder to spindle 2-7/16" (62 mm) Center of thumbturn to spindle
Certifications:	 BHMA Certified ANSI A156.13 Grade 1 Series 1000 Operational and Security ADA Compliant ANSI A117.1 Accessibility Code UL/cUL Listed for all functions up to 3 hours for "A" label doors UL10C/UBC 7-2 (1997) Positive Pressure Rated UL10B Neutral Pressure Rated A250.13 Severe Windstorm Resistant (must specify)
Exposed Trim:	 Cast Zinc - Standard Forged Brass, Cast Stainless Steel - Optional
Lock Case:	4-5/16" x 6" x 1" (110 mm x 152 mm x 25 mm)
Armor Front:	 1-1/4" x 8" x 7/32" (32 mm x 203 mm x 5 mm) - Standard 1-1/16" x 8" x 7/32" (27 mm x 203 mm x 5 mm) - Optional
Escutcheon:	1-15/16" x 8" (50 mm x 203 mm)
Keys:	Two operating keys supplied per lock
Cylinders/Cores:	• Brass - Keyed Different - C Keyway
	Drilled 6-pin, keyed 5-pin - Standard
	Other keying options, including keyed 6-pin, available from factory
	Small Format Interchangeable Core housing available
	 SFIC uncombinated or combinated, brass 6- or 7-pin sold separately
	 Schlage "L" Cam - Standard
Door Thickness:	• 1-3/8" - 2-1/2" (35 mm - 64 mm) - Steel Door
	• 1-3/4" - 2-1/2" (45 mm - 64 mm) - Wood Door
	 Must specify door thickness if greater than 1-3/4" (45 mm)
	 Privacy functions have a maximum door thickness of 2" (51 mm)
Backset:	2-3/4" (70 mm) Only
Latchbolt:	3/4" (19 mm) Throw with anti-friction tongue, all Stainless Steel
Deadbolt:	1" (25 mm) Throw - Stainless Steel
Strike:	3985 1-1/4" x 4-7/8" (32 mm x 124 mm), 1-3/16" (30 mm) Lip - Standard
Fasteners:	Thru-bolted trim concealed under escutcheon
Functions:	10 Passage, 17 Dummy, 27 Double Dummy, 40 Privacy, 44 Privacy with Cointurn, 50 Office, 53 Entry, 56 Corridor, 57 Classroom Security, 61 Apartment, 70 Classroom, 80 Storeroom, 81 Storeroom with Deadbolt, 82 Institution, 96 Privacy with Indicator
Finishes:	 US3, US4, US10, US10B, US26, US26D, US32D (for a true US32D, specify stainless steel levers) US3, US4, US10, US10B and US26 subject to extended lead time
Lever Options:	Archer, August, William, Withnell levers
Options:	Tactile Warning
·	Lead lining
	• Split finish
Notes:	Self-adjusting case for beveled doors
	Stopworks are incorporated in thumbturn
	 Breakable spindles prevent the lock from unlocking or being damaged
	Non-handed, stainless steel, deadlocking bar

48





3800 Series

Grade 1 Mortise (Sectional) Heavy duty commercial, industrial, institutional

- Lifetime warranty
- Concealed thru-bolts
- Field reversible
- Standard mortise cylinder or Small Format Interchangeable Core housing available
- BHMA Certified Grade 1 Security with standard mortise cylinder

Standard Door Prep:	• 3-5/8" (92 mm) Center of cylinder to spindle
	• 2-7/16" (62 mm) Center of thumbturn to spindle
Certifications:	 BHMA Certified ANSI A156.13 Series 1000 Grade 1 Operational and Security
	ADA Compliant ANSI A117.1 Accessibility Code
	 UL/cUL Listed for all functions up to 3 hours for "A" label doors
	UL10C/UBC 7-2 (1997) Positive Pressure Rated
	UL10B Neutral Pressure Rated
	 A250.13 Severe Windstorm Resistant (must specify)
Exposed Trim:	Cast Zinc - Standard
	 Forged Brass, Cast Stainless Steel - Optional
Lock Case:	4-5/16" x 6" x 1" (110 mm x 152 mm x 25 mm)
Armor Front:	• 1-1/4" x 8" x 7/32" (32 mm x 203 mm x 5 mm) - Standard
	• 1-1/16" x 8" x 7/32" (27 mm x 203 mm x 5 mm) - Optional
Rose Diameter:	2-7/16″ (62 mm)
Keys:	Two operating keys supplied per lock
Cylinders/Cores:	• Brass - Keyed Different - C Keyway
	• Drilled 6-pin, keyed 5-pin - Standard
	 Other keying options, including keyed 6-pin, available from factory
	 Small Format Interchangeable Core housing available
	 SFIC uncombinated or combinated, brass 6- or 7-pin sold separately
	• Schlage "L" Cam - Standard
Door Thickness:	• 1-3/8" - 2-1/2" (35 mm - 64 mm) - Steel Door
	• 1-3/4" - 2-1/2" (45 mm - 64 mm) - Wood Door
	 Must specify door thickness if greater than 1-3/4" (45 mm)
	 Privacy functions have a maximum door thickness of 2" (51 mm)
Backset:	2-3/4″ (70 mm) Only
Latchbolt:	3/4" (19 mm) Throw with anti-friction tongue, all Stainless Steel
Deadbolt:	1" (25 mm) Throw - Stainless Steel
Strike:	3985 1-1/4" x 4-7/8" (32 mm x 124 mm), 1-3/16" (30 mm) Lip - Standard
Fasteners:	Thru-bolted trim concealed under rose
Functions:	10 Passage, 17 Dummy, 27 Double Dummy, 40 Privacy, 44 Privacy with Cointurn, 50 Office, 53 Entry, 56
	Corridor, 57 Classroom Security, 70 Classroom, 80 Storeroom, 81 Storeroom with Deadbolt, 82 Institution,
	96 Privacy with Indicator
Lever Options:	Archer, August, William, Withnell levers
Options:	Tactile Warning
·	Lead lining
	• Split finish
Finishes:	• US3, US4, US10, US10B, US26, US26D, US32D (for a true US32D, specify stainless steel levers)
	US3, US4, US10, US10B and US26 subject to extended lead time
Notes:	Self-adjusting case for beveled doors
	Stopworks are incorporated in thumbturn
	 Breakable spindles prevent the lock from unlocking or being damaged
	Non-handed, Stainless Steel, deadlocking bar

3800 SERIES - MORTISE



3800 Series - Electrified

Grade 1 Mortise Extra heavy duty commercial, industrial, institutional

- Lifetime warranty on mechanical locking components
- One-year warranty on electric components

Voltage:

Function:	• 80 - Storeroom
Annlingtioner	• 82 - Institutional
Applications:	Provides remote locking and unlocking ideal for door control where added security is necessary
	Stairtower doors
	Office doors
	Classrooms
	Elevator lobby doors
	Computer rooms
	Hospital equipment rooms
	Pharmaceutical storage rooms
Features:	Deadlocking latch
	• Key override allows latchbolt to be momentarily retracted with the key even though electrically locked. Note that locks that are electrically unlocked may not be locked via the key cylinder.

- Interface with life-safety systems
- Continuous-duty solenoids
- 12V AC/DC; current .612 AMP
 - 24V AC/DC; current .330 AMP
 - Specify 12V or 24V when ordering

Function	Function No.	Function Description
Storeroom - Fail Safe	3880EL	Outside lever continuously locked electrically. Unlocked by key outside, by breaking electric current, or by power failure. Auxiliary latch deadlocks latchbolt when door is closed. Inside always free for immediate egress.
Storeroom - Fail Secure	3880EU	Outside lever continuously locked until unlocked by key or electric current. Auxiliary latch deadlocks latchbolt when door is closed. Inside always free for immediate egress.
Institution - Fail Safe	3882EL	Both levers continuously locked electrically. Unlocked by key from either side, by breaking electrical current, or by power failure. Auxiliary latch deadlocks latchbolt when door is closed.
Institution - Fail Secure	3882EU	Both levers continuously locked until unlocked by key from either side or by supplying electrical current. Auxiliary latch deadlocks latchbolt when door is closed.
Request to Exit	RX	Monitors inside lever rotation. Incorporates into alarm systems or in conjunction with an electromagnet. Available on 3880, 3882, or in combination with 3880EL/3880EU or 3882EL/3882EU.
Latchbolt Monitor	LM	A single switch (SPDT) mounted inside lockset monitors the full extension of the latchbolt. Available on 3880, 3882, or in combination with 3880EL/3880EU or 3882EL/3882EU.
Door Position Monitor	DPM	A single switch (SPDT Reed Magnetic Switch) mounted inside lockset monitors whether the door is fully closed. Available on 3880, 3882, or in combination with 3880EL/3880EU or 3882EL/3882EU.



3800 Series - Power Supplies

Hager 2903 and 2904 power supplies are designed to power locking devices. Their features include:

- UL Listed
- Filtered/regulated 24 VDC
- 2 AMP load capacity
- Overload protection
- Over voltage protection
- Short circuit protection
- Surge suppression on Fail Safe and Fail Secure outputs
- Automatically accepts 120 VAC or 240 VAC inputs

2903

This power supply includes:

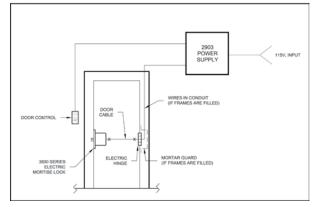
- Interface relay to isolate the locking device current from the control switch
- Auxiliary 24 VDC constant voltage for powering stand alone devices such as keypads, motion detectors, status indicators, etc.

2904

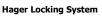
This power supply includes:

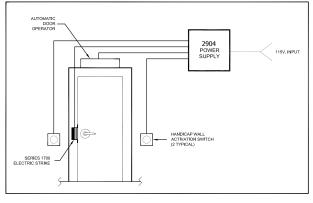
- Separate inputs for activation switch on entry and exit sides of the opening
- Relay contact output to automatic door operator (N.O. or N.C. contacts)
- Built-in time delay between activation of electrified locking device and automatic door operator
- Input of optional emergency release switch when urgent unlocking of the door is required
- Auxiliary 24VDC constant voltage output
- Separate 24VDC outputs for Fail Safe and Fail Secure electrified locking devices

Hager Locking System









2904

Product	Description
2903	Provides power for Fail Safe or Fail Secure locking devices and interference with building alarm controls, card reader, keypads, and other door controls.
2904	Provides power and control for openings with an electrified locking device and automatic door operator.





3800 SERIES STRIKES



3985 Standard Lip Strike

3986

Square corner

- 1-1/4" x 4-7/8" x 1-3/16"
- (32 mm x 124 mm x 30 mm)



3902

3800 SERIES MORTISE CYLINDERS

Mortise Cylinder

- If cylinder is ordered separately from the mortise lock, please specify Schlage "L" Cam
- Conventional cylinder or Small Format Interchangeable Core housing available
- SFIC core sold separately
- For more cylinder information, please refer to cylinder, core, and keying section.

3800 SERIES CYLINDER COLLARS

3918

Tapered Cylinder Collar For use with sectional mortise lock, standard 1-1/8" cylinder, 1-3/4" door



3987 Standard Lip Strike

Round corner

Extended Lip Strike

• 1-1/4" x 4-7/8" x 1-1/2" (32 mm x 124 mm x 38 mm)

• Round corner

Extended Lip Strike

• 1-1/4" x 4-7/8" x 1-1/2" (32 mm x 124 mm x 38 mm)

• Square corner

• 1-1/4" x 4-7/8" x 1-3/16" (32 mm x 124 mm x 30 mm)



3928 Flat Cylinder Collar

For use with special cylinders and door thicknesses



3989

3988

Flat Lip Strike

- Square corner
- 1-1/4" x 4-7/8" x 7/8" (32 mm x 124 mm x 22 mm)



3990

Extended Flat Lip Strike

- Square corner
- 1-1/4" x 4-7/8" x 1-3/16" (32 mm x 124 mm x 30 mm)

3800 SERIES - MORTISE



3800 SERIES - MORTISE

· · · · ·	 Non-handed Standard mortise cylinder or Small Format Interchangeable Core housing available BHMA Certified Grade 1 Security with standard mortise cylinder
Certifications:	 BHMA Certified ANSI A156.13 Grade 1 Series 1000 Operational and Security ADA Compliant ANSI A117.1 Accessibility Code UL/cUL Listed for all functions up to 3 hours for "A" label doors UL10C/UBC 7-2 (1997) Positive Pressure Rated UL10B Neutral Pressure Rated
Exposed Trim:	Forged Brass, Cast Stainless Steel - Optional
Lock Case:	4-5/16" x 6" x 1" (110 mm x 152 mm x 25 mm)
Armor Front:	 1-1/4" x 8" x 7/32" (32 mm x 203 mm x 5 mm) - Standard
	 1-1/16" x 8" x 7/32" (27 mm x 203 mm x 5 mm) - Optional
Keys:	Two operating keys supplied per lock
Cylinders/Cores:	• Brass - Keyed Different - C Keyway
	Drilled 6-pin, keyed 5-pin - Standard Other loging antique including loging or site subliches from factors
	 Other keying options, including keyed 6-pin, available from factory Small Format Interchangeable Core housing available
	Shall Format Interchangeable Core housing available SFIC uncombinated or combinated, brass 6- or 7-pin sold separately
	Schlage "L" Cam - Standard
Door Thickness:	• 1-3/8" - 2-1/2" (35 mm - 64 mm) - Steel Door
	• 1-3/4" - 2-1/2" (45 mm - 64 mm) - Wood Door
	• Must specify door thickness if greater than 1-3/4" (45 mm)
Backset:	2-3/4" (70 mm) Only
Deadbolt:	1" (25 mm) Throw - Stainless Steel
Strike:	3991 1-1/4" x 4-7/8" (32 mm x 124 mm) No Lip - Standard
Functions:	60 Cylinder x Thumbturn, 62 Double Cylinder, 63 Classroom, 64 Cylinder,
Options:	Lead lining
Finishes:	• US3, US4, US10, US10B, US26, US26D, US32D
Notoci	US3, US4, US10, US10B, US26, and US32D subject to extended lead time Solf adjusting case for baseled deere
Notes:	Self-adjusting case for beveled doors

Heavy duty commercial, industrial, institutional

3800 SERIES DEADLOCKS STRIKES

3991

No Lip Strike

• Square corner

• 1-1/4" x 4-7/8" (32 mm x 124 mm)



3800 Series Grade 1 Mortise Deadlock

Lifetime warrantyConcealed thru-bolts

3800 SERIES MORTISE CYLINDERS

3902

- Mortise Cylinder
 If cylinder is ordered separately from the mortise lock, please specify Schlage "L" Cam
- Conventional cylinder or Small Format Interchangeable Core housing available
- SFIC core sold separately
- For more cylinder information, please refer to cylinder, core and keying section.

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2500 Series



Hager 2500 Series Grade 2 lock is a perfect combination of value and performance and is the ideal choice of lock for typical commercial applications. The inherent value of this lock and the product offering make our 2500 Series lock a perfect choice for a stocking program. As an economical alternative to other Grade 2 cylindrical locks, it offers both dependability and affordability.

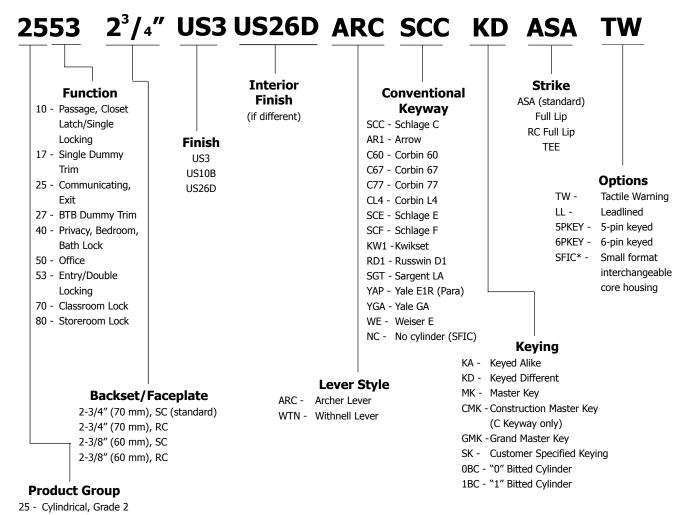


(13 mm) throw

Fixed cylinder or SFIC housing available



HOW TO ORDER



Notes:

If master-keyed, include master key instruction sheet with order (available on page 69 or online).
 For additional keying information, please refer to cylinder, core, and keying section of catalog.

* Small format interchangeable core sold separately. Available in Best Keyways only, A Standard. Ordering example: 2553 2-3/4" US26D WTN NC ASA SFIC



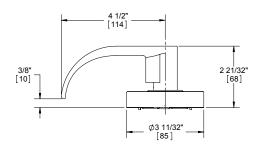
2500 SERIES FUNCTION CHART

			LOCKS	
2500 SERIES F	FUNCTION CHART	Function No.	Function Description	ANSI No.
	Passage	10	Latchbolt operated by lever from either side at all times.	F75
Ĺ	Dummy	17	Pull one side, no mechanical operation.	-
	Exit	25	Blank plate outside (13/16" [31 mm] projection). Inside lever always unlocked.	F111
	BTB Dummy	27	Pull both sides. No mechanical operation.	-
	Privacy	40	Latchbolt operated by lever from either side. Outside lever is locked by push button and unlocked by emergency release outside, operating inside lever or closing door.	F76A
Keyed				
•40)	Office	50	Push-button locking. Push-button locks outside lever until unlocked with key or by rotating inside lever.	F82
∙⊏ <mark>⊲</mark> ∎₽,	Entry	53	Deadlocking latchbolt is operated by lever from either side except when outside lever is made inoperable by locking device inside. When outside lever is locked, deadlocking latchbolt is operated by key outside. Inside locking device is manually operated to unlock outside lever. Rotating turn from inside or key from outside extends deadbolt to locked position. Operating inside lever retracts both deadbolt and latchbolt. Closing door shall not release locking device inside.	F109
	Classroom	70	Deadlocking latchbolt operated by lever from either side except when outside lever is locked from outside by key. When outside lever is locked, latchbolt is operated by inside lever.	F84
⊷⊣ ⊒ ₽ ₽₀	Storeroom	80	Deadlocking latchbolt operated by key in outside lever, or by operating inside lever. Outside lever is always locked. Inside lever is always unlocked.	F86

2500 SERIES LEVER OPTIONS

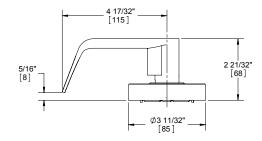
ARCHER LEVER





WITHNELL LEVER







Optional tactile warning available on all lever styles (only outside lever will be dimpled unless otherwise specified).







2500 Series

Grade 2 Cylindrical Standard duty commercial

- One-year warrantyNo exposed mounting screws
- Non-handed
- Standard cylinder or Small Format Interchangeable Core housing available

Applications:	Standard duty commercial
	• Standard door prep - 2-1/8" (54 mm) diameter (cross bore)
o	Latch hole - 1" (25.4 mm) diameter (edge bore)
Certifications:	BHMA Certified ANSI A156.2, Series 4000, Grade 2
	ADA Compliant ANSI A117.1 Accessibility Code
	• UL/cUL Listed for all functions up to 3 hours "A" label single doors
	UL 10C/UBC 7-2 (1997) Positive Pressure Related
	UL 10B Neutral Pressure Rated
Warranty:	One-year
Exposed Trim:	 Wrought brass, bronze, and stainless steel
	 Lever is zinc based, plated to match BHMA symbols
Rose Diameter:	3-11/32" (85 mm)
Lock Chassis:	 Heavy gauge steel, zinc dichromated for corrosion resistance
	Removable thru-bolts
	 Failure to install thru-bolts and removable screw posts voids BHMA certification, UL rating, and warranty
Keys:	Two operating keys supplied per lock
Cylinders/Cores:	 Brass, keyed different, C keyway
	Drilled 6-pin, keyed 5-pin
	 Other keying options, including keyed 6-pin, available from the factory
	 Small Format Interchangeable Core housing available
	 SFIC uncombinated or combinated, brass 6- or 7-pin sold separately
Door Thickness:	1-3/8" - 2" (35 mm - 51 mm)
Backset:	• 2-3/4" (70 mm) standard
	• 2-3/8" (60 mm) optional
Latchbolt:	• 1/2" (13 mm) throw, stainless steel
	• 1-1/8" x 2-1/4" (29 mm x 57 mm) faceplate for 2-3/4" (70 mm) backset
	• 1" x 2-1/4" (25 mm x 57 mm) faceplate for 2-3/8" backset
	 Deadlocking latchbolt prevents manipulation when door is closed; keyed functions only
Strike:	• 3935 ASA 1-1/4" x 4-7/8" (32 mm x 124 mm) strike standard
	Optional strikes available
Functions:	10 Passage, 17 Dummy, 25 Exit Only, 27 Back-to-Back Dummy, 40 Privacy, 50 Office, 53 Entry, 70 Classroom,
	80 Storeroom
Finishes:	US3, US10B, US26D
Lever Options:	Archer, Withnell levers
Options:	Lead lined
•	Tactile Warning
Notes:	Blank plate projection is 13/16" (21 mm) for function 25



2500 SERIES LATCHBOLTS

Spring Latches



3947 2-3/4" (70 mm) Backset Passage Spring Latch

• Square and round corner available • 1-1/8" x 2-1/4" (29 mm x 57 mm) faceplate

3949

2-3/8" (60 mm) Backset **Passage Spring Latch**

- Square and round corner available
- 1" x 2-1/4" (25 mm x 57 mm) faceplate

Optional Drive-In Spring Latches



3922 2-3/4" (70 mm) Backset Passage Spring Latch

3925 2-3/8" (60 mm) Backset **Passage Spring Latch**



3923 2-3/4" (70 mm) Backset **Privacy Spring Latch**

3926 2-3/8" (60 mm) Backset **Privacy Spring Latch**

Optional Drive-In Dead Latches

3924 2-3/4" (70 mm) Backset Dead Latch

3927 2-3/8" (60 mm) Backset Dead Latch

Backset Extension Links



3917 3-3/4" (95 mm) Backset **Extension Link** For use with 2-3/8" (60 mm) backset latch



3937

5" (127 mm) Backset **Extension Link** For use with 2-3/4" (70 mm) backset latch



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3965 2-3/4" (70 mm) Backset

Privacy Spring Latch

- Square and round corner available
- 1-1/8" x 2-1/4" (29 mm x 57 mm) faceplate

3967

2-3/8" (60 mm) Backset Privacy Spring Latch

- Square and round corner available
- 1" x 2-1/4" (25 mm x 57 mm) faceplate

Dead Latches



3948 2-3/4" (70 mm) Backset

Dead Latch

- Square and round corner available
- 1-1/8" x 2-1/4" (29 mm x 57 mm) faceplate

3950

2-3/8" (60 mm) Backset **Dead Latch**

- Square and round corner available • 1" x 2-1/4" (25 mm x 57 mm) faceplate

2500 SERIES STRIKES



3933 T-Strike with Plastic Dust Box 1-1/8" x 2-3/4" (29 mm x 70 mm)

2500 SERIES ACCESSORIES



3911 Thrubolt Jig



3934 Full Lip Strike 1-5/8" x 2-1/4" (41 mm x 57 mm)



3935 ASA Strike Plate - Standard 1-1/4" x 4-7/8" (32 mm x 124 mm)



3958

Full Lip Strike with Round Corner

- 1-5/8" x 2-1/4" (41 mm x 57 mm)
- 1/4" (6 mm) radius

•

3959 Faceplate Adapter

Converts 1" (25 mm) to 1-1/8" (28 mm) width



Cylinder, Core, and Keying

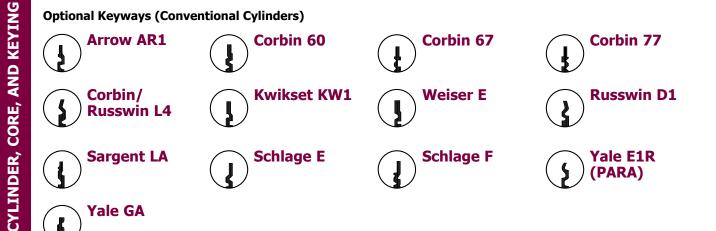


CONVENTIONAL/FIXED CYLINDERS

Keying Options

Keyed function locks are supplied standard with Schlage 'C' keyway cylinder, drilled 6-pin, keyed 5-pin and will be keyed different with two operating keys unless otherwise specified.

- Keyed Alike, 0 Bitted, 1 Bitted
- Master Keyed, Grand Master Keyed [must specify quantity of Master keys where applicable, 3961 (5-pin) or 3962 (6-pin)]
- Construction Master Keyed (C keyway only)
- Keyed to Specific or Existing Number
- Submit master keying form; pages 72-73 or online
- Extra Cut Keys (3961 Cut 5-pin, 3962 Cut 6-pin)
- Key Markings: 1AA, 2AA etc. (per key)
- Key Markings other than Key Set (per key)
- Cylinder markings
- Bitting Lists are available, ordered separately from Master Keyed order, specify 3998



Keys



3955 Key Blank 5-pin, C keyway



3956 Key Blank 6-pin, C keyway



3961 Cut Key 5-pin, keyed to specific or existing number



3962 Cut Key 6-pin, keyed to specific or existing number



Pack of 10 tailpieces for use with 3473L,



CONVENTIONAL/FIXED CYLINDERS (CONTINUED)

Cylinders



3960

Fixed Cylinder Kit Includes two operating keys Specify keyway, tailpiece, and how keyed Note: Cylinder instructions and ordering guide available online

Tailpieces



2-639-7000 Tailpiece 1

Pack of 10 tailpieces for use with 3453L, 3450L, 3480L, 2580L



2-639-7001

Tailpiece 2 Pack of 10 tailpieces for use with 3470L, 3495L (Exterior Lever)



2-639-7002 Tailpiece 3

Pack of 10 tailpieces for use with 3453K, 3480K, 3550L, 3553L, 3553K, 3579L, 3580L, 3580K, 3753L, 2550L, 2553L



2-639-7003

Tailpiece 4 Pack of 10 tailpieces for use with 3470K, 3570K



2-639-7005

Tailpiece 6Pack of 10 tailpieces for use with 3114DBand 3214DB exterior cylinders



2-639-7006

Tailpiece 7 Pack of 10 tailpieces for use with 3114DB and 3214DB interior cylinders



2-639-7007 Tailpiece 8

Pack of 10 tailpieces for use with 3115DB, 3118DB, 3215DB, 3710DB, 3753DB



2-639-7008 Tailpiece 9

Pack of 10 tailpieces for use with 3653L, 3670L, 3680L







(Interior Lever) **2-639-7192**

2-639-7087 Tailpiece Z

3570L, 3573L

Tailpiece X

2-639-7094

Tailpiece K Pack of 10 tailpieces for use with 4700 key-in-lever trim (KE, KN)

Pack of 10 tailpieces for use with 3495L



2-639-7322 Tailpiece V

Pack of 10 tailpieces for use with 2570L

Rim Cylinders



3901 Rim Cylinder

- Conventional cylinder supplied drilled 6-pin, keyed 5-pin standard
- Furnished with trim ring, mounting plate, and break off screws
- Long tail piece included (shipped loose in box)
- Supplied with two operating keys



3903 Rim Dummy Cylinder

Rim Cylinder Accessories



2-639-7045 Standard Breakoff Tailpiece 1-3/4" (45 mm)



2-639-7058 Long Breakoff Tailpiece 2-3/8" (60 mm)



CONVENTIONAL/FIXED CYLINDERS (CONTINUED)

Rim Cylinder Accessories (Continued)



2-300-0118 Extra Long Breakoff Screws

2-3/8" (60 mm)



2-649-0137 Retaining Cup Can be used with 45PN, 47PN, and 47RN



Mortise Cylinder Cams

3972 Adams Right Cam Radius .560 (14 mm)

Standard Cloverleaf

Radius .741" (19 mm)

Radius .755" (19 mm)

Radius .722" (18 mm)

3971

3973

3974

Marks Cam

Yale Cam

Mortise Cylinders



3902 Mortise Cylinder

3904

Mortise Dummy

1-1/8" (29 mm) length

- Conventional cylinder supplied drilled 6-pin, keyed 5-pin standard
- 3975 standard cam attached and 3972 Adams Rite cam shipped loose in the box
- Thread size is 1.150" x 32 UNS
- Cylinder face diameter is 1.360"
- Supplied with two operating keys
- 1-1/8" (29 mm) standard length, 1-1/4" (31 mm) available
- Must specify length, cam, keyway, and keying instructions



3975 Standard Cam Radius .723" (18 mm) For use with Hager exit devices and trim



3976 Schlage L Cam Radius .637" (16 mm) For use with Hager mortise locks (all functions)



3905 Mortise ADA Turn Knob 1-1/8" (29 mm) length



3977 Sargent/Yale Cam Radius .733" (18.6 mm)



3978 Corbin/Russwin/Best Cloverleaf Radius .725" (18.5 mm)





SMALL FORMAT INTERCHANGEABLE CORE

Keying Options

Cores are furnished keyed different unless otherwise specified. Other keying options include:

- Keyed Alike
- Construction Cores
- Master keyed, Grand Master Keyed (Must specify quantity of master keys, control keys, or additional change keys, 3984.)
- Keyed to specific or existing number
- Key Markings: 1AA, 2AA etc. (per key) VKC
- Key markings other than key set
- Core markings
- Bitting Lists are available, ordered separately from Master Keyed order, specify 3998
- * Construction master keyed not available.

Keyways (Best) - A, B, C, D, E, F, G, H, J, K, L, M, Q SFIC Cores



3981-C

Combinated Core 6-Pin Includes two change keys Finishes include US4 or US26D

3981-U

Uncombinated Core 6-Pin Includes two key blanks Finishes include US4 or US26D

SFIC Keys



3983 SFIC Key Blank

Best Keyways, used with 6-pin and 7-pin cores



3984 SFIC Cut Key Best Keyways, used with 6-pin and 7-pin cores



3982-C

Combinated Core 7-Pin Includes two change keys Finishes include US4 or US26D

3982-U

Uncombinated Core 7-Pin Includes two key blanks Finishes include US4 or US26D

SFIC Construction Cores

Construction Small Format Interchangeable Cores are available in blue or red and are keyed alike. Will receive full credit, less shipping, of original cost upon return of construction cores with keys.



3981-Blue or 3981-Red

Construction Core Combinated, 6-pin Includes two operating keys

3982-Blue or 3982-Red

Construction Core Combinated, 7-pin Includes two operating keys

SFIC Construction Core Keys



2-639-7168 3984 Control Key (BA IC 6 Blue)

2-639-7169 3984 Control Key (BA IC 7 Blue)

2-639-7170 3984 Control Key (BA IC 7 Red)

2-639-7171 3984 Control Key (BA IC 6 Red)

Note: Two (2) each will be shipped unless otherwise specified.

SMALL FORMAT INTERCHANGEABLE CORE (CONTINUED)

SFIC Tailpieces



2-639-7060

Pack of 10 tailpieces for use with 2500/3500 Series SFIC lever (6-pin/7-pin combo)



2-639-7061 Pack of 10 tailpieces for use with 3400/3500 Series SFIC knob (6-pin/7-pin combo)



Pack of 10 tailpieces for use with 3753 Interconnected Lock SFIC lever (6-pin/7-pin combo)



2-639-7091

Pack of 10 tailpieces for use with 3114/3214 SFIC deadbolt (6-pin/7-pin combo)



2-639-7095

Pack of 10 tailpieces for use with 3115/3118/3215 and 3710/3753 SFIC deadbolt (6-pin/7-pin combo)

SFIC Rim Cylinder Housing



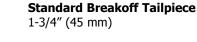
3901 Rim Cylinder

- Furnished with trim ring, mounting plate, and break off screws
- Long tail piece standard
- Small Format Interchangeable Core housing supplied less core.
 Specify 6- or 7-pin.

SFIC Rim Cylinder Accessories









2-639-7058 Long Breakoff Tailpiece 2-3/8" (60 mm)



2-300-0118 Extra Long Breakoff Screws 2-3/8" (60 mm)



2-649-0137 Retaining Cup Can be used with 45PN, 47PN, and 47RN

Mortise Cylinder Housing



3902

- Mortise Cylinder
 2-639-7082 standard cam; 2-639-7083 shipped loose in the box
- Thread size is 1.150" x 32 UNS. Cylinder face diameter is 1.360"
- Small Format Interchangeable Core housing supplied less core
- Must specify length and cam, 6-pin 1-1/4", 7-pin 1-3/8"

Mortise Cylinder SFIC Cams



2-639-7082 Standard Yale Cam



2-639-7083 Adams Right Cam



2-639-7084 Standard Cloverleaf Cam



2-639-7085 Schlage "L" Cam For use with Hager mortise locks (all functions)



2-639-7086 Sargent/Yale Cam



HOW TO ORDER KEY SYSTEMS

2 LEVEL SYSTEMS Simple Master Key System

The master key symbol consists of TWO letters, such as **AA**. The change key numbers are added to the master key letters. The numbers come **FIRST: 1AA**, **2AA**, **3AA**, etc.

When locks are required which are not operated by the master key or other change keys in the system, they are referred to as "single keyed" and given symbols **SKD1**, **SKD2**, etc.

When all higher levels of master keys are to be disallowed, suffix (**NMK**) to the symbol of the key which is to operate. This means "not master keyed." Cylinder **1AA(NMK)** is operated by **1AA** only. The AA master is blocked from operation.

3 LEVEL SYSTEMS Grand Master Key System

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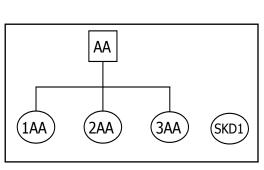
The grand master is assigned any ONE letter, such as **A**. The master keys under this grand are assigned *two* letters, the first of which must be the same as the grand: **AA**, **AB**, **AC**, etc. are all masters under grand **A**. Masters **BA**, **BB**, **BC**, etc. are all under grand **B**. Caution: Do not use the letters **I** or **O** because of possible confusion with the numerals **1** and **0**, respectively. Change key numbers come after the letters.

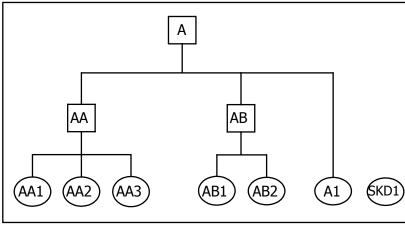
For master keys beyond **AZ**, insert a numeral between the letters to designate which pass through the alphabet they represent. **A2A** through **A2Z** represents the second pass of masters under grand **A. A3A** through **A3Z** would be the third. Change keys under these masters have the numbers suffixed in the usual way: **A2A1, A2A50,** etc.

If the cylinder is to be operated by its change key and nothing lower than the single lettered GMK, the change number is added to the GMK symbol. This is illustrated by the example **A1** in the schematic shown.

When locks are required which are not operated by ANY master keys or other change keys in the system, they are referred to as "single keyed" and given symbols **SKD1**, **SKD2**, etc.

When all higher levels of master keys are to be disallowed, suffix **(NMK)** to the symbol of the key which is to operate. This means "not master keyed" and can be applied to any level in the system. Cylinder **AA1(NMK)** is operated by **AA1** only. The **AA** master and **A** grand are blocked from operation. Cylinder **AA(NMK)** would be operated by the **AA** master only. Grand **A** does not operate.









HOW TO ORDER KEY SYSTEMS (CONTINUED)

4 LEVEL SYSTEMS Great Grand Master Key System

The great grand master key is assigned the symbol **GGM**. The rest of the symbols are the same as those in 3-level systems: The GMKs are assigned single letters, e.g., **A**, **B**, **C**, **D**, etc. Caution: Never use **X** for a grand master key due to the confusion which will result with cross keying symbols presented on the next page.

Masters under each GMK are assigned two letters, the first of which is the same as its respective grand master key. Change key numbers come after the letters. Changes under the grand (**A1**,

GGM А В BB AA AB (AA1 AA2 AA3 AB1 AB2 A1 (BA2 (BB1 (BB2 B1 GGM1 (SKD1

B1, etc.) and masters beyond AZ are handled exactly as in the 3-level system already described.

Changes directly under a grand are also handled as illustrated in the 3-level system. For changes directly under the **GGM** with no intermediate level masters, the change number is added directly to **GGM** as shown by the example **GGM1** in the schematic.

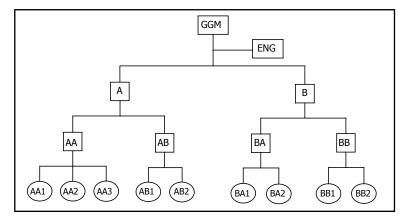
When locks are required which are not operated by ANY master keys or other change keys in the system, they are referred to as "single keyed" and given symbols **SKD1**, **SKD2**, etc.

When all higher levels of master keys are to be disallowed, suffix **(NMK)** to the symbol of the key which is to operate. This means "not master keyed" and can be applied to any level in the system. Cylinder **AA1(NMK)** is operated by **AA1** only. The **AA** master, **A** grand and **GGM** are all blocked from operation. Cylinder **AA(NMK)** is operated by the **AA** master only. Grand **A** and the **GGM** do not operate. Cylinder **A(NMK)** would be operated by the **A** grand only, without the **GGM**.

SELECTIVE MASTER KEYS

It is often useful in large keying systems to issue a high level master key to maintenance personnel which allows access across all master and grand master key boundaries of a keying system. A selective master key is usually very close to the system's top master key, both physically and through its realm of access. Nevertheless, it must be blocked from operating in many areas.

To designate that a lock be operated by a selective master key, suffix the symbol in parentheses to the standard symbol. Example: **AA1 (ENG)**. This must be added every time the selective key is to operate and left off whenever the selective key is NOT to operate. For instance, you may lay out a system in which key **AA1** is to operate two different offices. Inside one of them



is an electrical cabinet which must be accessible to maintenance personnel carrying the **ENG** key. That lock must be specified as **AA1(ENG)** while the lock for the other office must be specified as **AA1**. Change keys directly under the selective key, such as **ENG1**, are operated by all higher level keys, such as **GGM**.

Like cross keying, a selective master key is a convenience feature which decreases the security of the cylinders it operates and limits the expansion and flexibility of the overall keying system. Each selective master key typically eliminates 20 - 25% of the capacity of the system where it is used, so it should only be specified when absolutely required. It is recommended that no more than one system-wide selective master key be used within the same system.



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CROSS KEYING

Convenience May Reduce Cylinder Security and Hinder System Expansion

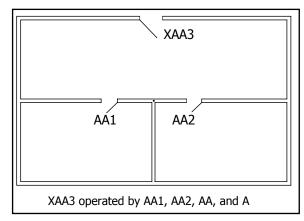
Whenever two or more different keys such as **AA1 and AA2** are both required to operate the same cylinder, the cylinder's security is reduced. This is called cross keying. When the cross keying occurs under all the same higher level keys, such as **AA1 and AA2**, it is known as controlled cross keying. When it combines keys under different higher level keys, such as **AA1** and **AB1**, it is known as uncontrolled cross keying.

In addition to reducing the security of the cylinder, cross keying usually imposes limits on the flexibility and expansion of the overall keying system. This is especially true of uncontrolled cross keying. For these reasons, it is strongly recommended to allow personnel to carry more than one key. Cross keying should be discouraged whenever possible. However, when cross keying is required, it is specified as follows, and should be summarized at the beginning of each order. It cannot normally be added later. Each cross keyed set should also be limited to keys which are all under the same higher level master keys.

Case #1

Cylinder requires its own change key. The illustration depicts part of a small medical building where two doctors share a common receptionist. The receptionist gets the **AA3** key. Each doctor carries a key which operates only one office, but is also cross keyed into the entrance from the corridor.

Determine the symbol of the change key (example: **AA3**). Then prefix the letter **X** (example: **XAA3**). Then list all keys which are to operate in an "operated by..." phrase. Example: "**XAA3** operated by **AA1**, **AA2**, **AA** and **A**". Note that **X** is a cylinder specification only. The keys for cylinder **XAA3** are designated **AA3**.



Case #2

Cylinder does NOT require its own change key. This illustration depicts a section of a floor in a dormitory. Each student's bedroom key operates the hall door lock. There is no need to construct a key which operates only the hall door.

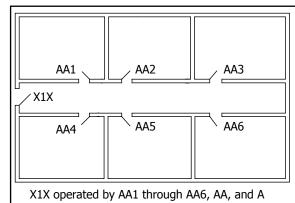
In this case, place an **X** at both the beginning and end of the symbol and a number between them. Example: **XIX**, **X2X**, etc. Again, always include the "operated by . . . " phrase with a complete listing of key symbols to operate.

Note: Hager will not do uncontrolled cross-keying due to reduced security and expansion capabilities.

KEYED ALIKE

Use keyed alike groups to conserve key combinations. Study blueprints or building structures to identify areas where more than one door leads into the same space, and where several different areas are used by the same personnel. These areas should be keyed alike (use the same key symbol). This conserves combinations for future use as well as reduces the need to issue master keys.





Hager order number:		Ship to:
Account number:		
Customer:		
Customer PO number:		
Job name:		
Location:		
1. <u>System</u>		Requested ship date:
O New O Existing		
If existing, please attach bitting sheet and complete follow	ing field:	4. Key stamping (visual key control)
Original Hager order number:		 Key set symbol
		O Door number
2. <u>System type</u>		O Bitting number
 Conventional keyed 5-pin (standard) 		 Do not duplicate (standard with interchangeable core)
 Conventional keyed 6-pin 		○ Other
O Small Format Interchangeable core keyed 6-pin		Please note that visual key control is recommended, otherwise, keys will be
O Small Format Interchangeable core keyed 7-pin		tagged with temporary identification.
3. System level and key quantity		5. Packing
Level	Quantity	 Pack keys with lock
○ GGGMK		 Pack keys separate from lock
O GGMK		Marking instructions (labels, packaging, etc.):
○ GMK		
O MK		
O Construction MK (Lost Ball) (for conventional only)		
⊖ Other		
Change keys	Quantity	Special shipping instructions:
O Per core/cylinder		
 Per key symbol 		
 Per cylinder/core per KA/KD 		
Special function	Quantity	
○ Control		
O Maintenance		6. <u>3998 bitting list</u> - no charge if specified with original order
O Housekeeping		○ Yes ○ No
O Mechanical		Ship to:
○ Engineering		
⊖ Janitorial		
○ SKD		
○ Other		



8. Contact

Name	
Title:	
Phone:	
Fax:	
Email:	
Signature:	
Is a signature required for	or future keying? O Yes O No

Please note that this document will become part of the permanent keying files for this project. If the requirements for this master keying form change, it is the responsibility of the end user/owner to notify their local factory representative or Hager Companies.

9. Additional information

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Note: If forms are not completely filled out, it will delay shipment of order.



Total quanti	ty		Product	Stock number	Finish
Quantity	Door #	Keyset	Hardware set	Operated by	Remarks



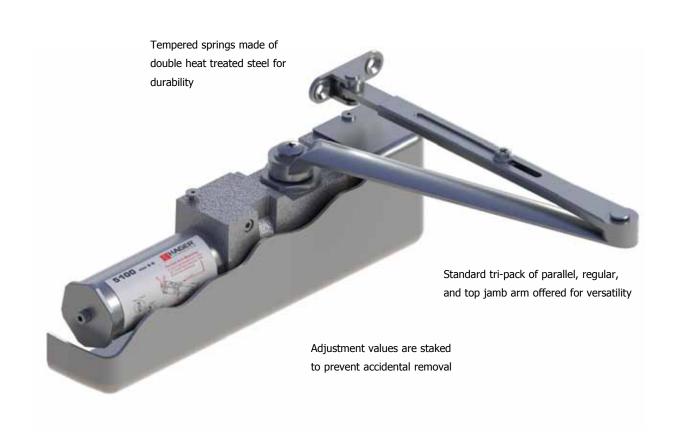
Door Closers

Hager door closers offer architects, contractors, and building owners a superior product with proven reliability. In fact, our 5100, 5200, and 5300 Series Grade 1 models are the only closers in the industry that are both BHMA certified and backed by a lifetime warranty. That makes them a no-risk choice for virtually any building type.

With Hager, you get a door closer that's packaged with everything needed for quick installation, regardless of the application. Hager door closers are tri-packed for mounting three ways: parallel arm, regular arm, and top jamb. They are non-handed, packaged with a parallel arm bracket and thru-bolts at no extra charge, and adjustable for various door sizes.



Hager 5100 Series Grade 1 door closer is constructed of cast iron, which makes it ideal for heavy duty, high use and abusive environments. Hager door closers are the only closers in the industry that are both BHMA certified and backed by a lifetime warranty.





DOOR CLOSERS

Hager Companies offers a variety of surface door closers to meet a wide range of applications and uses. Heavy duty, Grade 1 door closers are ideal for schools, hospitals, and other high-use environments.

Surface door closers are easy to install, with only a few holes for the body and the arm, requiring a minimum amount of preparation of the door and frame.

There are a number of factors to consider when choosing how to mount your closer. These factors can be influenced by aesthetics, environment, or application. The main things to consider when defining how to mount a surface door closer include:

- Architectural appearance
- Accessibility to the closer arm
- Space limitations of the frame above the door
- Space limitations on the top rail of the door
- Closer position on the door

There are three basic methods of mounting surface door closers to the door and frame: regular arm, parallel arm, and top jamb mounts. All Hager door closers are supplied standard with a tri-pack for mounting any of the three types of applications. The package includes regular, parallel, and top iamb arm mounts.

REGULAR ARM

The regular arm application is used when there is ample room on the top rail of the door and you are not concerned about the arm extending out away from the door. The closer body is mounted on the hinge side of the top rail of the door. The forearm is then mounted to the frame face by a mounting shoe. The arm projects at approximately a 90° angle away from the door. The regular arm mount will make the closer more power-efficient than the parallel arm or top jamb mount.

PARALLEL ARM

The depth of the top rail is an important consideration when using this application. The closer body is mounted on the top rail of the door opposite the hinge side of the door. The forearm is mounted by a parallel arm bracket to the underside of the frame. The arm is parallel to the door, which makes it less likely to be damaged and aids in the overall aesthetics. The power efficiency of the closer may be reduced by the mounting applications.

TOP JAMB

This is the preferred method of mounting a closer if you are faced with a narrow rail on a door. The closer body is mounted to the frame face above the door, opposite the door hinge side. The forearm is then mounted to the top rail of the door. The top jamb mount is more power-efficient than the parallel arm application.

DOOR CLOSER SIZING CHART

Exterior (and Vestibule) Door Width

Minimum Door Width (24")

-	-		• ·		8″ 9 mm)
Regular Arm & Top Jamb	Size 3	Size 4	Size 5	Size 6	
Parallel Arm	Size 3	Size 4	Size 5	-	

Interior Door Width											
	Minimum Door Width (24")										
	24″	30″	34″	38	3″	4	8″	5	4″	6	0″
	(610 mm)	(762 mm)	(865 mm)	(965	mm)	(1219	9 mm)	(1372	2 mm)	(1524	ł mm)
n & Ton 1a	mh Size	- 1 Size	- 2 Siz		Siz	<u>- 4</u>	Size	5	Size	6	

Regular Arm & Top Jamb	Size 1	Size 2	Size 3	Size 4	Size 5	Size 6
Parallel Arm	Size 1	Size 2	Size 3	Size 4	Size 5	-







DOOR HANDING

Hager Companies' surface door closers are all non-handed, meaning they can be placed on a door so that they will operate a left-opening or a right-opening door. Some of the accessories that can be ordered with these closers are handed and the hand of the door should be specified when ordering a closer with these components.

CLOSER SIZING

The American National Standards Institute (ANSI) has set the standard for sizing and has ensured that each manufacturer's closers are tested to the same standards. The door closer sizing chart on page 4 shows the closer size required to fit your door size and application.

MEETING ADA REQUIREMENTS

Doors and doorways that are non-labeled and part of an accessible route shall comply with Section 404 of the ANSI 117.1 standard.

Door closers shall be adjusted so that from the open position of 90°, the time required to move the door to an open position of 12° shall be 5 seconds minimum.

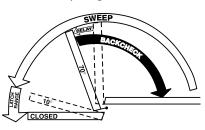
The maximum force for pushing open or pulling open an interior hinged door (other than a fire door) is five pounds.

FIRE DOORS

Fire doors shall have the minimum opening force allowable by the appropriate administrative authority.

CLOSER ADJUSTMENT

All Hager Companies' door closers are equipped with key control valves that allow for easy adjustments while decreasing the chances for tampering.



SWEEP AND LATCHING SPEEDS

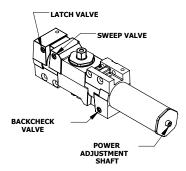
Two separate valves control the closing speed of the door. The sweep speed controls the speed of the door from full opening to within approximately 2° to 10° of the closed position. The latching speed valve controls the speed of the door from approximately 2° to 10° to full closing.

BACKCHECK

Backcheck starts at approximately 70° door opening and slows the door as it opens. This feature is not to be used as a positive stop. An auxiliary stop must be used.

DELAYED ACTION

The delayed action feature is available for all 5100 Series applications. The closing time between 90° and 70° shall be a minimum of 20 seconds, but is adjustable to be even slower.



ADJUSTABLE SPRING FEATURE

The 5100 Series closer offers an adjustable spring feature for sizing. Spring power of the closer can be increased or decreased by turning the power adjustment shaft clockwise.

USE OF DOOR STOPS

It is important to use an auxiliary door stop in order to protect the wall, trim, door, and closer. A stop should be used even when a closer with backcheck is used.

HOW TO SELECT THE PROPER CLOSER

1. Size and Weight of Door

5100 Series closers are non-sized so that closing force can be adjusted in the field to accommodate various door sizes, weights, and applications.

- Interior Application Where possible, the standard regular arm application should be used as it is the most efficient in terms of power and control.
- 3. Exterior Application

Exterior doors require greater closing forces because of draft and wind conditions. Therefore, where possible, use an extra heavy duty arm for these applications.

4. Degree of Opening

The closer should permit the door to open far enough to allow for easy traffic flow. The selection of the proper arm and position on the door are very important.

5. Function

Closers can be equipped with special arms that can serve many functions such as hold open, positive stop, or hold open stop when necessary.

6. Abusive Environment

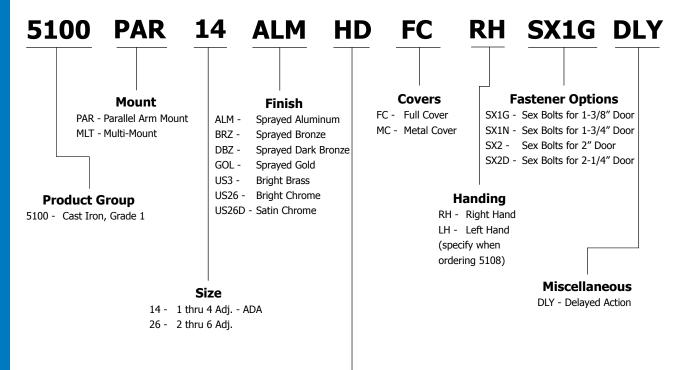
Closers can be equipped with extra heavy duty arms that can withstand vandalism and extreme use.





DOOR CLOSERS

HOW TO ORDER



Arm Options

HD -	Extra Heavy Duty Arm
HO -	Hold Open Arm
HDHO -	Extra Heavy Duty Hold Open Arm
LA -	Long Arm
HDHOS -	Extra Heavy Duty Hold Open Stop Arm
HDHOCS -	Extra Heavy Duty Hold Open Cushion Stop Arm
HDS -	Extra Heavy Duty Stop Arm
HDCS -	Extra Heavy Duty Cushion Stop Arm





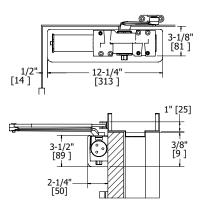


5100 SERIES APPLICATIONS

Regular Arm Mount (Pull Side)

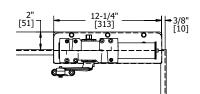
Opening:	Templating allows up to 120°
Hold Open:	Hold Open points from 90° up to 120°
	with Hold Open arm
Frame Face:	1-1/4" (32 mm) minimum
Ceiling Clearance:	1-1/4" (32 mm) minimum
Top Rail:	 Less than 3-3/4" (95 mm) requires
	drop plate, 5109
	 Drop plate requires 2" (51 mm)
	minimum

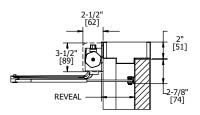
Top Rail Clearance: 4" (102 mm) from the top of door



Top Jamb Mount (Push Side)

Opening:	Templating allows up to 120°
Hold Open:	Hold Open points 85° up to 120° with
	Hold Open arm
Frame Face:	Less than 3-1/2" (89 mm) requires
	drop plate, 5115
Ceiling Clearance:	Drop plate requires 4" (102 mm)
	minimum
Top Rail:	Requires 1-3/8" (35 mm) minimum
Top Rail Clearance:	1-1/2" (38 mm) from the top of the
	door





Parallel Arm Mount (Push Side)

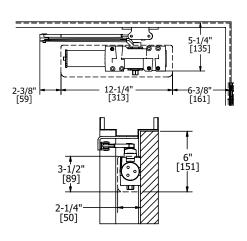
Opening: Hold Open: Templating allows up to 180° Hold Open points from 90° up to 180° with Hold Open arm

Top Rail:

with Hold Open armStandard hollow metal 5/8" frame stop

- Less than 5-1/2" (140 mm) from the stop requires drop plate, 5110
- Drop plate requires 2" (51 mm) minimum from the stop

Top Rail Clearance: 6-1/4" (159 mm) from the top of door





	DOOR CLOSERS
	5100 Series Grade 1 Heavy Duty Surface Door Closer Ideal for schools, hospitals, and other high-use environments
	 Lifetime warranty Standard package contains 5101 closer body, 5102 closer cover, 5103 main arm assembly, 5104 standard screw pack, 5909 parallel arm bracket, and 5940 SNB screw pack for 1-3/4" (44 mm) doors
Certifications:	 BHMA Certified ANSI A156.4, adjustable sizes 2 to 6 - Standard ADA Compliant ANSI A117.1 Accessibility Code only for adjustable sizes 1 to 4 - Optional UL/CUL Listed for up to 3 hours UL10C Positive Pressure Rated UL10B Neutral Pressure Rated
Materials:	Cast iron
Cover:	• Full plastic cover - Standard
	Plated metal cover - Optional
Springs:	One piece seamless steel spring tube
	Double heat treated steel, tempered springs
Valves:	 Adjustable latching and sweep speed valves
	Adjustable backcheck valve - Standard
	Delayed action valve - Optional State deadead
Handing:	Staked valves - Standard Non-handed
Arms & Brackets:	Tri-Pack: Regular, Parallel Arm, Top Jamb Mount - Standard
Door Thickness:	• 1-3/4" (44 mm) - Standard
	• 1-3/8" - 2-1/4" (36 mm - 57 mm) thick door - Optional
Fasteners:	 Self-reaming, self-tapping wood and machine screws
	Sex nuts and bolts
Finishes:	ALM, BRZ, DBZ, GOL, US3, US26, US26D
Notoci	Rust inhibiting primer - Standard Full rack and ninion exerction
Notes:	 Full rack and pinion operation Precision machined, heat treated steel piston
	Triple heat treated steel spindle
	p





DOOR CLOSERS



5100 SERIES ARMS



5103 Main Arm

- Non-handed
- Forged steel
- Mounts regular, parallel arm, or top jamb mount



5125

5954

Stop Arm

cushion

Forged steelPlunger Hold Open

Extra Heavy Duty Stop Arm

- Non-handed parallel arm
- Forged steel
- Auxiliary stop in soffit shoe

• Non-handed parallel arm

• Auxiliary stop in soffit shoe

• Hold Open function



5106

Extra Heavy Duty Arm

• Non-handed parallel arm





5107

- Hold Open Arm
- Non-handed
- Forged steel
- Mounts pull side or top jamb with shallow reveal
- Friction Hold Open
- For use with 5909 bracket for parallel arm mount



5955

Extra Heavy Duty Cushion Stop Arm

Extra Heavy Duty Hold Open Cushion

• Contains 5961 arm and 5950 spring

- Contains 5125 arm and 5950 spring cushion
- Non-handed parallel arm
- Forged steel
- Auxiliary stop in soffit shoe

5961

Extra Heavy Duty Hold Open Stop Arm

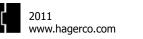
- Non-handed parallel arm
- Forged steel
- Plunger Hold Open
- Hold Open function
- Auxiliary stop in soffit shoe



5108

Extra Heavy Duty Hold Open

- Handed parallel arm (specify handing when ordering)
- Forged steel
- Provides Hold Open function
- Adjustable at the shoe
- Friction hold open
- Not for use on fire rated doors





DOOR CLOSERS

5100 SERIES ACCESSORIES



5101

- Closer Body Only
- Full rack and pinion operation
 Precision machined heat treated steel piston
- Triple heat treated steel spindle



5102 Plastic Cover

- High impact non-corrosive full cover
- Cover projects 2-1/4" (57 mm) from door face
- Secured by two machine screws



5109

Drop Plate – Regular Arm Mount

- Required for hinge side mount when top rail is less than 3-3/4" (95 mm)
- Plate requires 2" (51 mm) minimum top rail



5110

Drop Plate – Parallel Arm Mount

- Required for parallel arm mount when top rail is less than 5-1/2" (140 mm), measured from the stop to the reveal
- Plate requires 2-1/2" (6 mm) minimum top rail



5111

Extra Heavy Duty Parallel Arm Support Bracket

- For use with stop arms when reveal is less than 3-1/16" (78 mm)
- Provides anchor for fifth screw



5112

Long Rod and Shoe

- Non-handed
- Cast steel
- Use for top jamb application
- Use for door reveals greater than 3" (76 mm) and up to 5" (127 mm)



5113

Blade Stop Spacer

• Required to lower parallel arm shoe to clear 1/2" (13 mm) blade stop for aluminum frames



5114

Drop Plate - Low Clearance

- For use when ceiling clearance prevents normal top jamb mounting
- For use when overhead door holder prevents normal top jamb mounting

5115

Drop Plate - Top Jamb Mount

- Required for top jamb when frame face is less than 3-1/2" (89 mm)
- Plate requires 1-3/4" (44 mm) minimum frame face
- For use with plastic cover

5909

Parallel Arm Bracket

- Supplied standard
- Supplied with standard hold open closer
- Can be used to convert regular or top jamb arm to parallel arm application

5935

Extra Clearance Parallel Arm Bracket

- Allows for up to 2" (51 mm) of clearance to mount additional hardware such as overhead door stops and holders
- Provides needed clearance not achieved with standard soffit plate

5950

Spring Cushion

- Non-handed
- Mounts to soffit shoe of 5125, 5961, 5906, and 5907 arms
- For use with extra heavy duty Hold Open and stop arms for abusive applications





5100 SERIES ACCESSORIES (CONTINUED)





Metal Cover

- Cast zinc
 Cover projects 2-1/4" (56 mm) from door face
- Secured by two machine screws

5100 SERIES SCREW PACKS



5104

- Screw Pack Standard
- Self-drilling wood screws
- Self-drilling machine screws



5940

SNB Screw Pack - Standard

- Sex nuts and bolts for 1-3/4" (44 mm) doors
- Machine screws
- For use with 5100 Series closer only

5941

SNB Screw Pack - Optional

- Sex nuts and bolts for 1-3/8" (35 mm) doors
- Machine screws
- For use with 5100 Series closer only



5942

SNB Screw Pack - Optional

- Sex nuts and bolts for 2" (51 mm) doors
- Machine screws
- For use with 5100 Series closer only



5943

SNB Screw Pack - Optional

- Sex nuts and bolts for 2-1/4" (56 mm) doors
- Machine screws
- For use with 5100 Series closer only



TOUCH UP PAINT

2-659-0093

Door Closer Touch-Up Paint -Aluminum (ALM)

• Apply to existing closer covers, arm brackets, and fasteners



2-659-0094

Door Closer Touch-Up Paint -Bronze (BRZ)

• Apply to existing closer covers, arm brackets, and fasteners



2-659-0095

Door Closer Touch-Up Paint -Dark Bronze (DBZ)

• Apply to existing closer covers, arm brackets, and fasteners

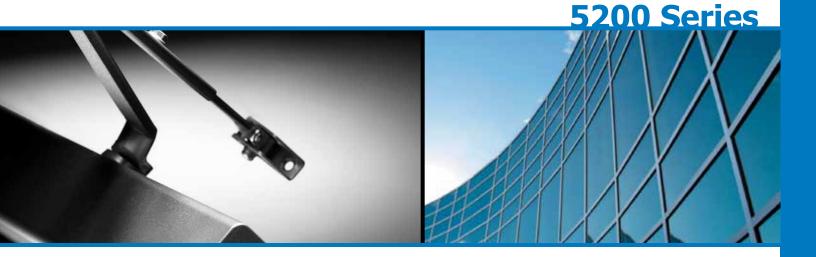


2-659-0096

Door Closer Touch-Up Paint -Gold (GOL)

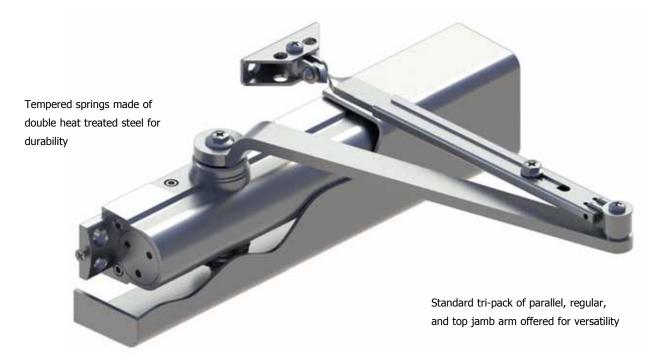
• Apply to existing closer covers, arm brackets, and fasteners





Hager 5200 Series Grade 1 door closer is ideal for schools, hospitals, and other high abuse and high traffic environments. It is constructed of an aluminum alloy and provides smooth door control. The 5200 Series door closer is easy to install and maintain-keeping your building safe and secure.

Slim line design provides a smaller footprint





Hager Companies offers a variety of surface door closers to meet a wide range of applications and uses. Heavy duty, Grade 1 door closers are ideal for schools, hospitals, and other high abuse and high traffic environments.

Surface door closers are easy to install, with only a few holes for the body and the arm, requiring a minimum amount of preparation of the door and frame. Not only are surface mounted door closers easier to install, they offer advantages with regard to adjustments that may need to be made because of variations in usage or environmental conditions.

There are a number of factors to consider when choosing how to mount your closer. These factors can be influenced by aesthetics, environment, or application. The main things to consider when defining how to mount a surface door closer include:

- Architectural appearance
- Accessibility to the closer arm
- Space limitations of the frame above the door
- Space limitations on the top rail of the door
- Closer position

There are three basic methods of mounting surface door closers to the door and frame: regular arm, parallel arm, and top jamb mounts. All Hager Companies' door closers are supplied standard with a tri-pack for mounting any of the three types of applications.

REGULAR ARM

The regular arm application is used when there is ample room on the top rail of the door and you are not concerned about the arm extending out away from the door. The closer body is mounted on the hinge side of the top rail of the door. The forearm is then mounted to the frame face by a mounting shoe. The arm projects at approximately a 90° angle away from the door. The regular arm mount will make the closer more power-efficient than the parallel arm or top jamb mount.

PARALLEL ARM

The depth of the top rail is an important consideration when using this application. The closer body is mounted on the top rail of the door opposite the hinge side of the door. The forearm is mounted by a parallel arm bracket to the underside of the frame. The arm is parallel to the door, which makes it less likely to be damaged and aids in the overall aesthetics. This mounting application will, however, reduce the powerefficiency of the closer.

ТОР ЈАМВ

This is the preferred method of mounting a closer if you are faced with a narrow rail on a door. The closer body is mounted to the frame face above the door, opposite the door hinge side. The forearm is then mounted to the top rail of the door. The top jamb mount is more power-efficient than the parallel arm application.

DOOR CLOSER SIZING CHART

Exterior (and Vestibule) Door Width

Minimum Door Width (24")

			• •		
2	4″ 3	0″ 3	6″ 4	2″ 4	8″
(610	mm) (762	mm) (914	mm) (1067	'mm) (1219) mm)
Regular Arm & Top Jamb	Size 3	Size 4	Size 5	Size 6	
Parallel Arm	Size 3	Size 4	Size 5	-]

Interior Door Width Minimum Door Width (24") 24" 30" 34″ 38″ 48" 54" 60" (865 mm) (965 mm) (1219 mm) (1372 mm) (610 mm) (762 mm) (1524 mm) Regular Arm & Top Jamb Size 1 Size 2 Size 3 Size 4 Size 5 Size 6 Parallel Arm Size 1 Size 2 Size 3 Size 4 Size 5





DOOR HANDING

Hager Companies' surface door closers are all non-handed, meaning they can be placed on a door so that they will operate a left-opening or a right-opening door. Some of the accessories that can be ordered with these closers are handed and the hand of the door should be specified when ordering a closer with these components.

CLOSER SIZING

The American National Standards Institute (ANSI) has set the standard for sizing and has ensured that each manufacturer's closers are tested on the same basis. The chart on the previous page shows the closer size required to fit your door size and application.

MEETING ADA REQUIREMENTS

Doors and doorways that are non-labeled and part of an accessible route shall comply with Section 404 of the ANSI 117.1 standard.

Door closers shall be adjusted so that from the open position of 90°, the time required to move the door to an open position of 12° shall be 5 seconds minimum.

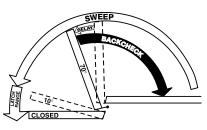
The maximum force for pushing open or pulling open an interior hinged door (other than a fire door) is five pounds.

FIRE DOORS

Fire doors shall have the minimum opening force allowable by the appropriate administrative authority.

CLOSER ADJUSTMENT

All Hager Companies' door closers are equipped with key control valves that allow for easy adjustments while decreasing the chances for tampering.



SWEEP AND LATCHING SPEEDS

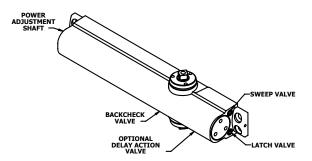
Two separate valves control the closing speed of the door. The sweep speed controls the speed of the door from full opening to within approximately 10° to 2° of the closed position. The latching speed valve controls the speed of the door from approximately 10° to 2° to full closing.

BACKCHECK

Backcheck starts at approximately 70° door opening and slows the door as it opens. This feature is not to be used as a positive stop. An auxiliary stop must be used.

DELAYED ACTION

The delayed action feature is available for all 5200 Series applications. The closing time between 90° and 70° shall be a minimum of 20 seconds, but is adjustable to be even slower.



ADJUSTABLE SPRING FEATURE

The 5200 Series closer offers an adjustable spring feature for sizing. Spring power of the closer can be increased or decreased by turning the power adjustment shaft clockwise.

USE OF DOOR STOPS

It is important to use an auxiliary door stop in order to protect the wall, trim, door, and closer. A stop should be used even when a holder arm or closer with backcheck is used.

HOW TO SELECT THE PROPER CLOSER

1. Size and Weight of Door

5200 Series closers are non-sized so that closing force can be adjusted in the field to accommodate various door sizes, weights, and applications.

2. Interior Application

Where possible, the standard regular arm application should be used as it is the most efficient in terms of power and control.

3. Exterior Application

Exterior doors require greater closing forces because of draft and wind conditions. Therefore, where possible, use an extra heavy duty arm for these applications.

4. Degree of Opening

The closer should permit the door to open far enough to allow for easy traffic flow. The selection of the proper arm and position on the door are very important.

5. Function

Closers can be equipped with special arms that can serve many functions such as hold open, positive stop, or hold open stop when necessary.

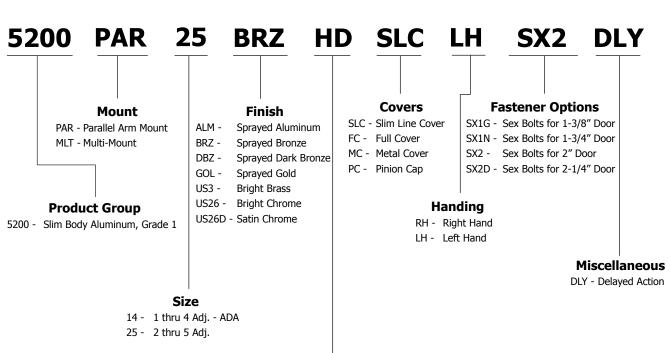
6. Abusive Environment

Closers can be equipped with extra heavy duty arms that can withstand vandalism and extreme use.





HOW TO ORDER



Arm Options

HD -	Extra Heavy Duty Arm
HO -	Hold Open Arm
HDHO -	Extra Heavy Duty Hold Open Arm
LA -	Long Arm
HDHOS -	Extra Heavy Duty Hold Open Stop Arm
HDHOCS -	Extra Heavy Duty Hold Open Cushion Stop Arm
HDS -	Extra Heavy Duty Stop Arm
HDCS -	Extra Heavy Duty Cushion Stop Arm



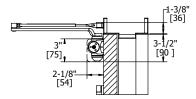


5200 SERIES APPLICATIONS

Regular Arm Mount (Pull Side)

Opening:	Templating allows up to 180°
Hold Open:	Hold Open points 90° up to 180° with
	Hold Open arm
Frame Face:	1-3/8" (35 mm)
Ceiling Clearance:	 1-3/4" (45 mm) minimum
	 1-5/8" (41 mm) minimum for Hold
	Open arm
Top Rail:	 2-1/2" (64 mm) minimum without
	drop plate
	• 1-5/8" (38 mm) minimum with drop
	plate, 5918
Top Rail Clearance:	3-1/2" (89 mm) minimum

1	F	
2-3/8"_ [60] 7" [179]		Full Cover 13-1/8" [333]

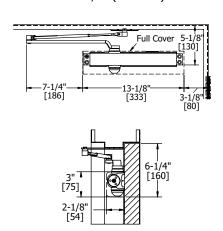


Parallel Arm Mount (Push Side)

Opening:	Templating allows up to 180°
Hold Open:	Hold Open points 90° up to 180° with
	Hold Open
Top Rail:	 Standard hollow metal 5/8" frame

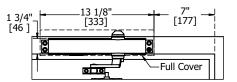
stop • 5-3/8" (137 mm) minimum 6-1/4" (159 mm) minimum

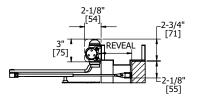
Top Rail Clearance:



Top Jamb Mount (Top Jamb Mount (Pull Side)						
Opening:	Templating allows up to 180°						
Hold Open:	Hold Open points 90° up to 180° with						
	Hold Open						
Frame Face:	 1-7/8" (48 mm) minimum 						
	• 1-1/8" (29 mm) minimum with drop						
	plate, 5918						
Ceiling Clearance:	 2-3/4" (70 mm) minimum 						
• 1-5/8" (41 mm) minimum with d							
	plate, 5918						
Top Rail:	2" (51 mm) minimum						
Top Rail Clearance:	 2-1/4" (57 mm) minimum 						
	 2-1/2" (64 mm) minimum for hold- 						
	open						
	• 3-3/8" (86 mm) minimum with drop						

plate, 5918 • 3-5/8" (92 mm) minimum for Hold Open with drop plate







D	DOR CLOSERS
	5200 Series Grade 1 Heavy Duty Surface Door Closer Ideal for schools, hospitals, and other high-use environments
Ŀ	 Lifetime warranty Standard package contains 5201 closer body, 5202 closer cover, 5203 main arm assembly, 5204 standard screw pack, 5900 parallel arm bracket, and 5902 SNB screw pack for 1-3/4" (44 mm) door
Certifications:	 BHMA Certified ANSI A156.4, adjustable sizes 2 to 5 - Standard ADA Compliant ANSI A117.1 Accessibility Code only for adjustable sizes 1 to 4 - Optional UL/cUL Listed for up to 3 hours UL10C Positive Pressure Rated UL10B Neutral Pressure Rated
Materials: Cover:	Aluminum alloy • Full plastic cover - Standard • Full size plated metal cover - Optional • Slim line plastic cover - Optional
Springs: Valves:	Double heat treated steel, tempered springs • Adjustable latching and sweep speed valves • Adjustable backcheck valve - Standard • Delayed action valve - Optional • Staked valves - Standard
Handing: Arms & Brackets: Door Thickness:	Non-handed • Tri-Pack: Regular, Parallel Arm, and Top Jamb Mount - Standard • 15% power adjustment in standard arm for regular and top jamb mount • 1-3/4" (44 mm)
Fasteners:	 1-3/8" - 2-1/4" (36 mm - 57 mm) - Optional Self-reaming, self-tapping wood and machine screws Sex nuts and bolts
Finishes:	• ALM, BRZ, DBZ, GOL, US3, US26, US26D • Rust inhibiting primer - Standard
Notes:	 Full rack and pinion operation Precision machined, heat treated steel piston Triple heat treated steel spindle

5200 SERIES



5200 SERIES ARMS



5203

- Main Arm
- Non-handed
- Forged steel
- Mounts regular, parallel arm, or top jamb mount



5207

Hold Open Arm

- Non-handed
- Forged steel
- Mounts pull side or top jamb with shallow reveal
- Friction Hold Open
- For use with 5914 bracket for parallel arm mount



5906

Extra Heavy Duty Hold Open Stop Arm

- Non-handed parallel arm
- Forged steel
- Hold Open function
- Auxiliary stop in soffit shoe
- Plunger Hold Open

5907 **Extra Heavy Duty Stop Arm**

- Non-handed parallel arm
- Forged steel
- Auxiliary stop in soffit shoe



5911

- Extra Heavy Duty Arm
- Non-handed parallel arm
- Forged steel



5912

Extra Heavy Duty Hold Open

- Handed parallel arm (specify handing when ordering)
- Forged steel
- Provides Hold Open function
- Adjustable at the shoe
- Friction Hold Open

5956

Extra Heavy Duty Hold Open Cushion Stop Arm

- Contains 5906 arm and 5950 spring cushion arm
- Non-handed parallel arm
- Forged steel
- Plunger Hold Open
- Hold Open function
- Auxiliary stop in soffit shoe

5957

Extra Heavy Duty Cushion Stop Arm

- Contains 5907 arm and 5950 spring cushion
- Non-handed parallel arm
- Forged steel
- Auxiliary stop in soffit shoe





5200 SERIES ACCESSORIES





- **Closer Body Only**
- Full rack and pinion operation • Precision machined, heat treated steel pistons
- Triple heat treated steel spindle



5202 **Full Plastic Cover**

- High impact non-corrosive full cover
- Cover projects 2-3/16" (56 mm) from door face
- Secured by 2 machine screws



5918

Drop Plate – Top Jamb, Narrow Top Rail

- For use with slim line cover
- For use when a narrow top rail prevents mounting directly to door surface
- For use when low ceiling clearance prevents normal top jamb mounting

5919

Pinion Cap

- High-impact, non-corrosive
- Fits over the pinion and extends 9/16" (14 mm)
- For use with slim line cover

5920

Slim Line Plastic Cover

- High-impact non-corrosive
- Cover projects 2-3/16" (56 mm) from the door face
- Secured by 2 machine screws
- Available in plastic only

5921

Drop Plate – Narrow Top Rail

- For use with a full cover
- For use when a narrow top rail prevents mounting directly to door surface

5922

Drop Plate - Top Jamb, Parallel Arm

- For use with parallel arm mount and no cover or slim line cover
- For use when low ceiling clearance prevents normal top jamb mounting; with full cover
- For use when an overhead door holder prevents normal top jamb mounting





5900 Parallel Arm Bracket

- Supplied standard with multimount closers

Long Rod and Shoe Non-handed

• Use for top jamb application

• Use for reveals greater than 4"

(102 mm) and up to 8" (203 mm)

 Can be used to convert regular or top jamb arms to parallel arm application





5913

Blade Stop Spacer

• Required to lower parallel arm shoe to clear 1/2" (13 mm) blade stop for aluminum frames



5914

Hold Open Parallel Arm Bracket

- Supplied with all standard hold open closers
- Can be used to convert regular arm or top jamb arm hold open arms to parallel arm

5200 SERIES











5908

Cast steel



5200 SERIES ACCESSORIES (CONTINUED)





Drop Plate - Parallel Arm

- For use with a full cover
- For use with a parallel arm when narrow top rail prevents mounting directly to the door surface



5932

Metal Cover

- Cast zinc
 Cover projects 2-1/4" (57 mm) from door face
- Secured by two machine screws
- Not offered as slim line



5936

Extra Clearance Parallel Arm Bracket

- Allows for up to 2" (51 mm) of clearance to mount additional hardware such as overhead door stops and holders
- Provides needed clearance not achieved with a standard soffit plate



5950

- Spring CushionNon-handed
- Mounts to soffit shoe of 5125, 5961, 5906, 5907
- For use with extra heavy duty hold open and stop arms for abusive applications





5204

Screw Pack - Standard

- Self-drilling wood screws
- Self-drilling machine screws



5902

SNB Screw Pack - Standard

- Sex nuts and bolts for 1-3/4" (44 mm) doors
- Machine screws
- For use with 5200, 5300, 5400 Series closers only

5903

SNB Screw Pack - Optional

- Sex nuts and bolts for 1-3/8" (35 mm) doors
- Machine screws
- For use with 5200, 5300, 5400 Series closers only

5904

SNB Screw Pack - Optional

- Sex nuts and bolts for 2" (51 mm) doors
- Machine screws
- For use with 5200, 5300, 5400 Series closers only



SNB Screw Pack - Optional

- Sex nuts and bolts for 2-1/4" (56 mm) doors
- Machine screws
- For use with 5200, 5300, 5400 Series closers only





TOUCH UP PAINT



2-659-0093

Door Closer Touch-Up Paint -Aluminum (ALM) • Apply to existing closer covers, arm

brackets, and fasteners



2-659-0094

Door Closer Touch-Up Paint -Bronze (BRZ) • Apply to existing closer covers, arm

brackets, and fasteners



2-659-0095

Door Closer Touch-Up Paint -Dark Bronze (DBZ)
Apply to existing closer covers, arm brackets, and fasteners



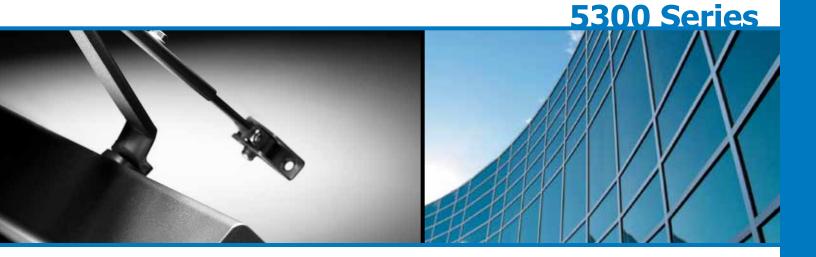
2-659-0096

Door Closer Touch-Up Paint -Gold (GOL)

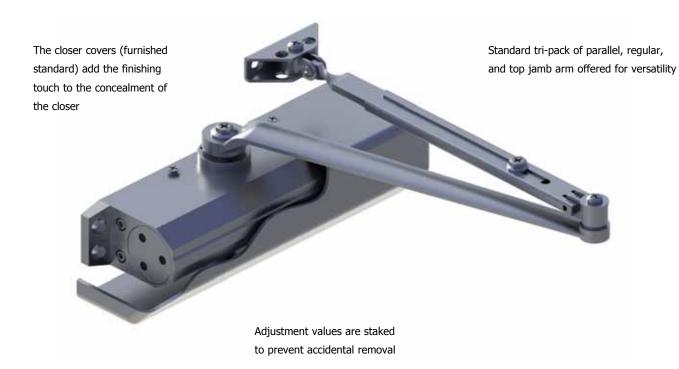
• Apply to existing closer covers, arm brackets, and fasteners







Hager 5300 Series Grade 1 door closer is ideal for schools, hospitals, and other high abuse and high traffic environments. It is constructed of an aluminum alloy and provides smooth door control. The 5300 Series door closer is easy to install and maintain-keeping your building safe and secure.





Hager Companies offers a variety of surface door closers to meet a wide range of applications and uses. Heavy duty, Grade 1 door closers are ideal for schools, hospitals, and other high-use environments.

Surface door closers are easy to install, with only a few holes for the body and the arm, requiring a minimum amount of preparation of the door and frame. Not only are surface mounted door closers easier to install, they offer advantages with regard to adjustments that may need to be made because of variations in usage or environmental conditions.

There are a number of factors to consider when choosing how to mount your closer. These factors can be influenced by aesthetics, environment, or application. The main things to consider when defining how to mount a surface door closer include:

- Architectural appearance
- Accessibility to the closer arm
- Space limitations of the frame above the door
- Space limitations on the top rail of the door
- Closer position

There are three basic methods of mounting surface door closers to the door and frame: regular arm, parallel arm, and top jamb mounts. All Hager Companies' door closers are supplied standard with a tri-pack for mounting any of the three types of applications.

REGULAR ARM

The regular arm application is used when there is ample room on the top rail of the door and you are not concerned about the arm extending out away from the door. The closer body is mounted on the hinge side of the top rail of the door. The forearm is then mounted to the frame face by a mounting shoe. The arm projects at approximately a 90° angle away from the door. The regular arm mount will make the closer more power-efficient than the parallel arm or top jamb mount.

PARALLEL ARM

The depth of the top rail is an important consideration when using this application. The closer body is mounted on the top rail of the door opposite the hinge side of the door. The forearm is mounted by a parallel arm bracket to the underside of the frame. The arm is parallel to the door, which makes it less likely to be damaged and aids in the overall aesthetics. This mounting application will, however, reduce the powerefficiency of the closer.

ТОР ЈАМВ

This is the preferred method of mounting a closer if you are faced with a narrow rail on a door. The closer body is mounted to the frame face above the door, opposite the door hinge side. The forearm is then mounted to the top rail of the door. The top jamb mount is more power-efficient than the parallel arm application.

DOOR CLOSER SIZING CHART

Exterior (and Vestibule) Door Width

Minimum Door Width (24")

24	ł″ 3	0″	36″ ·	42″ 4	8″
(610	mm) (762	. mm) (914	4 mm) (106	57 mm) (1219	9 mm)
Regular Arm & Top Jamb	Size 3	Size 4	Size 5	Size 6	
Parallel Arm	Size 3	Size 4	Size 5	-]

Interior Door Width Minimum Door Width (24") 24" 30" 34" 38" 48" 54" 60" (1219 mm) (610 mm) (762 mm) (865 mm) (965 mm) (1372 mm) (1524 mm) Size 6 Size 1 Size 2 Size 3 Size 4 Size 5 Regular Arm & Top Jamb Parallel Arm Size 1 Size 2 Size 3 Size 4 Size 5 _







DOOR HANDING

Hager Companies' surface door closers are all non-handed, meaning they can be placed on a door so that they will operate a left-opening or a right-opening door. Some of the accessories that can be ordered with these closers are handed and the hand of the door should be specified when ordering a closer with these components.

CLOSER SIZING

The American National Standards Institute (ANSI) has set the standard for sizing and has ensured that each manufacturer's closers are tested on the same basis. The chart on the previous page shows the closer size required to fit your door size and application.

MEETING ADA REQUIREMENTS

Doors and doorways that are non-labeled and part of an accessible route shall comply with Section 404 of the ANSI 117.1 standard.

Door closers shall be adjusted so that from the open position of 90°, the time required to move the door to an open position of 12° shall be 5 seconds minimum.

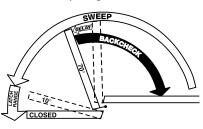
The maximum force for pushing open or pulling open an interior hinged door (other than a fire door) is five pounds.

FIRE DOORS

Fire doors shall have the minimum opening force allowable by the appropriate administrative authority.

CLOSER ADJUSTMENT

All Hager Companies' door closers are equipped with key control valves that allow for easy adjustments while decreasing the chances for tampering.



SWEEP AND LATCHING SPEEDS

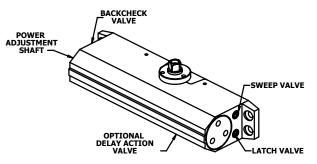
Two separate valves control the closing speed of the door. The sweep speed controls the speed of the door from full opening to within approximately 10° to 2° of the closed position. The latching speed valve controls the speed of the door from approximately 10° to 2° to full closing.

BACKCHECK

Backcheck starts at approximately 70° door opening and slows the door as it opens. This feature is not to be used as a positive stop. An auxiliary stop must be used.

DELAYED ACTION

The delayed action feature is available for all 5300 Series applications. The closing time between 90° and 70° shall be a minimum of 20 seconds, but is adjustable to be even slower.



ADJUSTABLE SPRING FEATURE

The 5300 Series closer offers an adjustable spring feature for sizing. Spring power of the closer can be increased or decreased by turning the power adjustment shaft clockwise.

USE OF DOOR STOPS

It is important to use an auxiliary door stop in order to protect the wall, trim, door, and closer. A stop should be used even when a holder arm or closer with backcheck is used.

HOW TO SELECT THE PROPER CLOSER

1. Size and Weight of Door

5300 Series closers are non-sized so that closing force can be adjusted in the field to accommodate various door sizes, weights, and applications.

2. Interior Application

Where possible, the standard regular arm application should be used as it is the most efficient in terms of power and control.

3. Exterior Application

Exterior doors require greater closing forces because of draft and wind conditions. Therefore, where possible, use an extra heavy duty arm for these applications.

4. Degree of Opening

The closer should permit the door to open far enough to allow for easy traffic flow. The selection of the proper arm and position on the door are very important.

5. Function

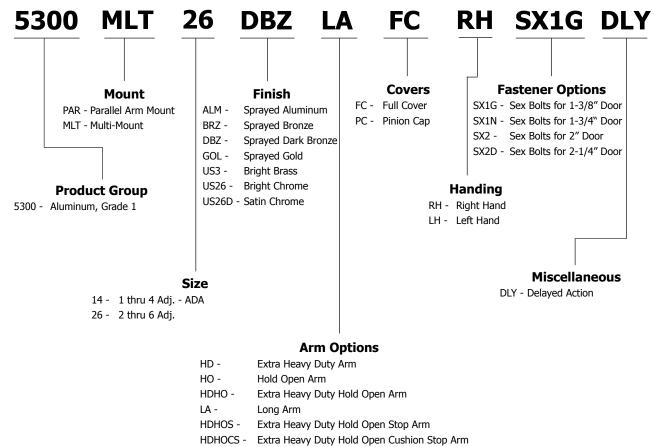
Closers can be equipped with special arms that can serve many functions such as hold open, positive stop, or hold open stop when necessary.

6. Abusive Environment

Closers can be equipped with extra heavy duty arms that can withstand vandalism and extreme use.



HOW TO ORDER



- HDS Extra Heavy Duty Stop Arm
- HDCS Extra Heavy Duty Cushion Stop Arm





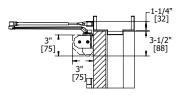


5300 SERIES APPLICATIONS

Regular Arm Mount (Pull Side)

Opening:	Templating allows up to 180°
Hold Open:	Hold Open points 90° up to 180°
	with Hold Open arm
Frame Face:	1-3/8" (35 mm) minimum
Ceiling Clearance:	 1-5/8" (41 mm) minimum
	 1-5/8" (41 mm) minimum for
	Hold Open arm
Top Rail:	2-1/2" (64 mm) minimum with drop
	plate, 5915
Top Rail Clearance:	4-1/4" (108 mm) minimum from the
	top of the door

2-3/8' [60] 10" 5 - 5/8[254] [144] ů.



Parallel Arm Mount (Push Side)

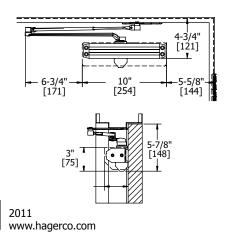
Opening: Hold Open:

Top Rail:

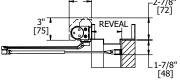
- Templating allows up to 180° Hold Open points 90° up to 180° with Hold Open
- Standard hollow metal 5/8" frame stop
- 4-3/4" (121 mm) minimum
- 4" (102 mm) minimum with Hold Open
- 3-1/8" (79 mm) minimum with plate
- 2-1/8" (54 mm) minimum with Hold Open and plate

Top Rail Clearance:

5-3/4" (146 mm) minimum from the top of the door



Top Jamb Mount (Push Side)					
Opening:	Templating allows up to 180°				
Hold Open:	Hold Open points 90° up to 180°				
	with Hold Open				
Frame Face:	1-3/4" (45 mm) minimum				
Ceiling Clearance:	 2-3/4" (70 mm) minimum 				
	 1-3/4" (44 mm) minimum with drop plate, 5918 				
Top Rail:	1-7/8" (48 mm) minimum				
Top Rail Clearance:	• 2-1/8" (54 mm) minimum				
	 2-3/4" (70 mm) minimum with drop 				
	plate, 5917				
	 2-1/4" (57 mm) minimum for 				
	Hold Open with drop plate, 5917				
	• 3-5/8" (92 mm) minimum with drop				
	plate, 5915				
 	<u>10"</u> 5-1/2"				
	3" [75]				



27

		DOOR CLOSERS
	2	 5300 Series Grade 1 Heavy Duty Surface Door Closer Ideal for schools, hospitals, and other high-use environments Lifetime warranty Standard package contains 5301 closer body, 5302 closer cover, 5303 main arm assembly, 5304 standard screw pack, 5900 parallel arm bracket, and 5902 SNB screw pack for 1-3/4" (44 mm) door
	Certifications:	 BHMA Certified ANSI A156.4, adjustable sizes 2 to 6 - Standard ADA Compliant ANSI A117.1 Accessibility Code only for adjustable sizes 1 to 4 - Optional UL/cUL Listed for up to 3 hours UL10C Positive Pressure Rated UL10B Neutral Pressure Rated
	Materials:	Aluminum alloy
	Cover: Springs:	Full plastic cover and pinion cap Double heat treated steel, tempered springs
	Valves:	Adjustable latching and sweep speed valves
	Valvest	Adjustable backcheck valve - Standard
		Delayed action valve - Optional
		Staked valves - Standard
S	Handing:	Non-handed
H	Arms & Brackets:	 Tri-Pack: Regular, Parallel Arm, and Top Jamb Mount - Standard 15% power adjustment in standard arm for regular and top jamb mount
5300 SERIES	Door Thickness:	• 1-3/4" (44 mm)
S		• 1-3/8" - 2-1/4" (36 mm - 57 mm) Optional
000	Fasteners:	Self-reaming, self-tapping wood and machine screws
23	Fisiahaa	Sex nuts and bolts
	Finishes:	 ALM, BRZ, DBZ, GOL Rust inhibiting primer - Standard
	Notes:	• Full rack and pinion operation
		Precision machined, heat treated steel piston
		Triple heat treated steel spindle





5300 SERIES ARMS



5303

- Main Arm • Non-handed
- Forged steel
- Mounts regular, top jamb, or parallel arm mount
- For use with 5900 bracket for parallel arm mount



5307

- Hold Open Arm Assembly
- Non-handed
- Forged steel
- Mounts pull side or top jamb with shallow reveal
- Friction Hold Open
- For use with 5914 bracket for parallel arm mount



5906 Extra Hea

Extra Heavy Duty Hold Open Stop Arm

- Non-handed parallel arm
- Forged steel
- Hold Open function
- Auxiliary stop in soffit shoe
- Plunger Hold Open



5907

Extra Heavy Duty Stop Arm

- Non-handed parallel arm
- For use in abusive environments
- Auxiliary stop in soffit shoe



5911

Extra Heavy Duty Arm Assembly

- Non-handed parallel arm
- Forged steel
- For use in abusive environments



5912

Extra Heavy Duty Hold Open Arm Assembly

- Handed parallel arm (specify handing when ordering)
- Forged steel
- Provides Hold Open function
- Adjustable at the shoe
- Friction Hold Open

5956

Extra Heavy Duty Hold Open Cushion Stop Arm

- Contains 5906 arm and 5950 spring cushion arm
- Non-handed parallel arm
- Forged steel
- Plunger Hold Open
- Hold Open function
- Auxiliary stop in soffit shoe



5957

Extra Heavy Duty Cushion Stop Arm

- Contains 5907 arm and 5950 spring cushion
- Non-handed parallel arm
- Forged steel
- Auxiliary stop in soffit shoe





5300 SERIES ACCESSORIES



5301

- **Closer Body Only**
- Full rack and pinion operation • Precision machined, heat treated steel pistons
- Triple heat treated steel spindle



5302

Full Plastic Cover

- High impact non-corrosive full cover -Standard
- Cover projects 2-3/16" (56 mm) from door face
- Secured by 2 machine screws
- Available in plastic only



5900

Parallel Arm Bracket

- Supplied standard with multimount closers
- Can be used to convert regular or top jamb arms to parallel arm application



5913

Blade Stop Spacer

• Required to lower parallel arm shoe to clear 1/2" (13 mm) blade stop for aluminum frames



Extra Clearance Parallel Arm Bracket

- Allows for up to 2" (13 mm) of clearance to mount additional hardware such as overhead door stops and holders
- Provides needed clearance not achieved with a standard soffit plate

5950

- **Spring Cushion**
- Non-handed
- Mounts to soffit shoe of 5125, 5961, 5906, 5907
- For use with extra heavy duty hold open and stop arms for abusive applications

5300 SERIES



5901 Pinion Cap

Supplied standard

- High-impact, non-corrosive
- Fits over the pinion and extends 1" (25 mm)



5908

Long Rod and Shoe

- Non-handed
- Cast steel
- Use for top jamb application
- Use for reveals greater than 4" (102 mm) and up to 8" (203 mm)





5300 SERIES ACCESSORIES (CONTINUED)



5914

Hold Open Parallel Arm Bracket

- Supplied with all standard Hold Open closers
- Used to convert 5307 Hold Open arms to parallel arm



5915

Drop Plate – Narrow Rail Overhead Holder

- For use when an overhead door holder prevents normal top jamb mounting
- For use when a narrow rail prevents the closer from being mounted directly to the door
- For use with parallel arm and no cover
- For use when low ceiling clearance prevents normal top jamb mounting
- Includes screw pack



5916

Drop Plate – Narrow Rail Parallel Arm

- For use when a narrow rail prevents the closer from being mounted directly to the door
- For use with parallel arm and full plastic cover
- Includes screw pack



5917

Drop Plate – Top Jamb, Low Clearance

- For use when ceiling clearance is between 1-3/4" (44 mm) and 2-5/8" (67 mm)
- For use when an overhead door holder prevents normal top jamb mounting
- For use with no cover

5300 SERIES SCREW PACKS



5304

Screw Pack - Standard

- Self-drilling wood screws
- Self-drilling machine screws



5902

SNB Screw Pack - Standard

- Sex nuts and bolts for 1-3/4" (44 mm) doors
- Machine screws
- For use with 5200, 5300, 5400 Series closers only

5903

SNB Screw Pack - Optional • Sex puts and bolts for 1-3/8" (35)

- Sex nuts and bolts for 1-3/8" (35 mm) doors
- Machine screws
- For use with 5200, 5300, 5400 Series closers only

5904

- SNB Screw Pack Optional
- Sex nuts and bolts for 2" (51 mm) doors
- Machine screws
- For use with 5200, 5300, 5400 Series closers only



5905

SNB Screw Pack - Optional

- Sex nuts and bolts for 2-1/4" (56 mm) doors
- Machine screws
- For use with 5200, 5300, 5400 Series closers only



TOUCH UP PAINT



2-659-0093

Door Closer Touch-Up Paint -Aluminum (ALM) • Apply to existing closer covers, arm

brackets, and fasteners



2-659-0094

Door Closer Touch-Up Paint -Bronze (BRZ) • Apply to existing closer covers, arm

brackets, and fasteners



2-659-0095

Door Closer Touch-Up Paint -Dark Bronze (DBZ)
Apply to existing closer covers, arm brackets, and fasteners

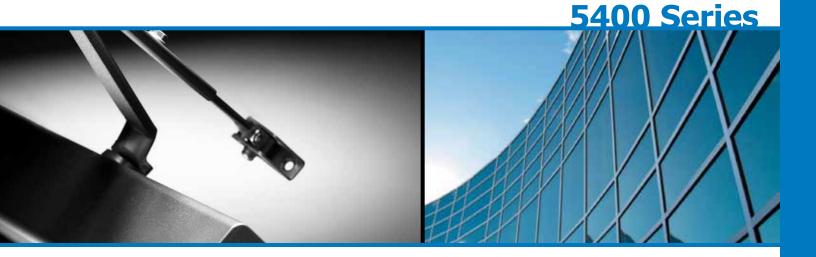


2-659-0096

Door Closer Touch-Up Paint -Gold (GOL)

• Apply to existing closer covers, arm brackets, and fasteners





Hager 5400 Series Grade 2 door closer is ideal for light duty, commercial applications such as store fronts, churches, and hotels. It is constructed of an aluminum alloy and has been tested for strength and abuse. The 5400 Series door closer is ideal for low frequency openings and has a five-year warranty.



Adjustment values are staked to prevent accidental removal



Hager Companies offers a variety of surface door closers to meet a wide range of applications and uses. Standard duty Grade 2 door closers are ideal for less abusive commercial applications such as office buildings and store fronts.

Surface door closers are easy to install, with only a few holes for the body and the arm, requiring a minimum amount of preparation of the door and frame. Not only are surface mounted door closers easier to install, they offer advantages with regard to adjustments that may need to be made because of variations in usage or environmental conditions.

There are a number of factors to consider when choosing how to mount your closer. These factors can be influenced by aesthetics, environment, or application. The main things to consider when defining how to mount a surface door closer include:

- Architectural appearance
- Accessibility to the closer arm
- Space limitations of the frame above the door
- Space limitations on the top rail of the door
- Closer position

There are three basic methods of mounting surface door closers to the door and frame: regular arm, parallel arm, and top jamb mounts. All Hager Companies' door closers are supplied standard with a tri-pack for mounting any of the three types of applications.

REGULAR ARM

The regular arm application is used when there is ample room on the top rail of the door and you are not concerned about the arm extending out away from the door. The closer body is mounted on the hinge side of the top rail of the door. The forearm is then mounted to the frame face by a mounting shoe. The arm projects at approximately a 90° angle away from the door. The regular arm mount will make the closer more power-efficient than the parallel arm or top jamb mount.

PARALLEL ARM

The depth of the top rail is an important consideration when using this application. The closer body is mounted on the top rail of the door opposite the hinge side of the door. The forearm is mounted by a parallel arm bracket to the underside of the frame. The arm is parallel to the door, which makes it less likely to be damaged and aids in the overall aesthetics. This mounting application will, however, reduce the powerefficiency of the closer.

ТОР ЈАМВ

This is the preferred method of mounting a closer if you are faced with a narrow rail on a door. The closer body is mounted to the frame face above the door, opposite the door hinge side. The forearm is then mounted to the top rail of the door. The top jamb mount is more power-efficient than the parallel arm application.

DOOR CLOSER SIZING CHART

Exterior (and Vestibule) Door Width

Minimum Door Width (24")

24 (610			36″ 1 mm)	42 (1067	-	8″ 9 mm)
Regular Arm & Top Jamb	Size 3	Size 4	Size 5		-	
Parallel Arm	Size 3	Size 4	Size 5		-]

	Interior Door Width						
		r.	1inimum Do	or Width (2	4″)		
24 (610				8″ 4 mm) (121			50″ 4 mm)
Regular Arm & Top Jamb	-	Size 2	Size 3	Size 4	Size 5	Size 6	
Parallel Arm	-	Size 2	Size 3	Size 4	Size 5	-]

5400 SERIES





DOOR HANDLING

Hager Companies' surface door closers are all non-handed, meaning they can be placed on a door so that they will operate a left-opening or a right-opening door. Some of the accessories that can be ordered with these closers are handed and the hand of the door should be specified when ordering a closer with these components.

CLOSER SIZING

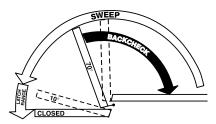
The American National Standards Institute (ANSI) has set the standard for sizing and has ensured that each manufacturer's closers are tested on the same basis. The chart on the previous page shows the closer size required to fit your door size and application.

FIRE DOORS

Fire doors shall have the minimum opening force allowable by the appropriate administrative authority.

CLOSER ADJUSTMENT

All Hager Companies' door closers are equipped with key control valves that allow for easy adjustments while decreasing the chances for tampering.



SWEEP AND LATCHING SPEEDS

Two separate valves control the closing speed of the door. The sweep speed controls the speed of the door from full opening to within approximately 10° to 2° of the closed position. The latching speed valve controls the speed of the door from approximately 10° to 2° to full closing.

BACKCHECK: OPTIONAL FOR 5400 SERIES

Backcheck starts at approximately 70° door opening and slows the door as it opens. This feature is not to be used as a positive stop. An auxiliary stop must be used.

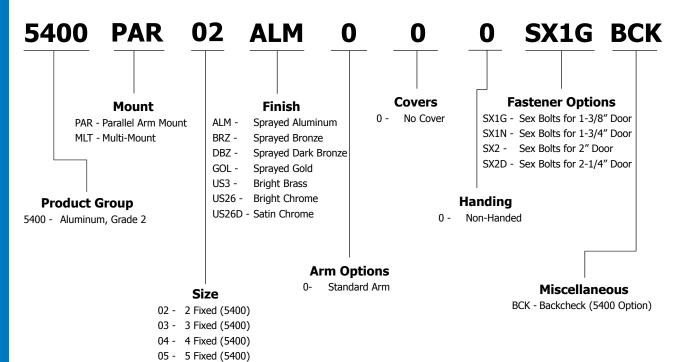
USE OF DOOR STOPS

It is important to use an auxiliary door stop in order to protect the wall, trim, door, and closer. A stop should be used even when a holder arm or closer with backcheck is used.





HOW TO ORDER



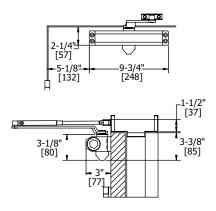




5400 SERIES APPLICATIONS

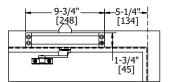
Regular Arm Mount

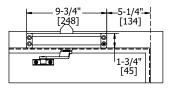
Regulal Allin Hould	
Opening:	Templating allows up to 180°
Frame Face:	1-1/2" (38 mm) minimum
Ceiling Clearance:	1-3/4" (44 mm) minimum
Top Rail:	2-1/4" (57 mm) minimum
Top Rail Clearance:	3-1/2" (89 mm) minimum



Top Jamb Mount

Templating allows up to 180°
1-3/4" (45 mm) minimum
2-3/4" (70 mm) minimum
1-7/8" (48 mm) minimum
2-1/8" (54 mm) minimum

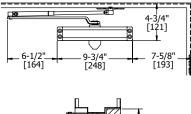


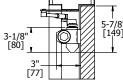


Parallel Arm Mount

Opening:	Templating allows up to 180°
Top Rail:	 5/8" (16 mm) frame stop
	 4-3/4" (121 mm) minimum

Top Rail Clearance: 5-3/4" (146 mm) minimum







cالله BHMA



5400 Series

Grade 2 Standard Duty Surface Door Closer Ideal for light duty commercial applications

- Five-year warranty
- Standard package contains 5401 closer body, 5901 pinion cap, 5403 main arm assembly, 5404 standard screw pack, 5900 parallel arm bracket, and 5902 SNB screw pack for 1-3/4" (44 mm) door

Certifications:	 BHMA Certified ANSI A156.4, Sizes 2, 3, 4, 5 - Must specify UL/cUL Listed for up to 3 hours UL10C Positive Pressure Rated UL10B Neutral Pressure Rated
Materials:	Aluminum alloy
Cover:	Pinion cap
Springs:	Double heat treated steel, tempered springs
Valves:	 Adjustable latching and sweep speed valves
	 Adjustable backcheck valve - Optional
	 Staked valves - Standard
Handing:	Non-handed
Arms & Brackets:	 Tri-Pack: Regular, Parallel, and Top Jamb Arm Mount - Standard 15% power adjustment in standard arm for regular and top jamb mount
Door Thickness:	• 1-3/4" (44 mm) - Standard
	• 1-3/8" - 2-1/4" (36 mm - 57 mm) - Optional
Fasteners:	 Self-reaming, self-tapping wood and machine screws
	Sex nuts and bolts
Finishes:	• ALM, BRZ, DBZ, GOL
	 Rust inhibiting primer - Standard
Notes:	 Precision machined, heat treated steel piston
	Triple heat treated steel spindle





5400 SERIES ARMS





- Non-handed
- Punched steel
- Mounts regular, parallel arm, or top jam mount
- For use with 5900 bracket for parallel arm mount

5400 SERIES ACCESSORIES





5900

5901

Pinion Cap

(25 mm)

• Supplied standard

• High-impact, non-corrosive

• Fits over the pinion and extends 1"

5401

Parallel Arm Bracket

• Full rack and pinion operation

• Triple heat treated steel spindle

Closer Body Only

- Supplied standard with multimount closers
- Can be used to convert regular or top jamb arms to parallel arm application



5400 SERIES SCREW PACKS

5404

- Screw Pack Standard
- Self-drilling wood screws
- Self-drilling machine screws





SNB Screw Pack - Standard

- Sex nuts and bolts for 1-3/4" (44 mm) doors
- Machine screws
- For use with 5200, 5300, 5400 Series closers only

5903

SNB Screw Pack - Optional

- Sex nuts and bolts for 1-3/8" (35 mm) doors
- Machine screws
- For use with 5200, 5300, 5400 Series closers only

5904

SNB Screw Pack - Optional

- Sex nuts and bolts for 2" (51 mm) doors
- Machine screws
- For use with 5200, 5300, 5400 Series closers only

5905

SNB Screw Pack - Optional

- Sex nuts and bolts for 2-1/4" (56 mm) doors
- Machine screws
- For use with 5200, 5300, 5400 Series closers only







5913

Blade Stop Spacer

 Required to lower parallel arm shoe to clear 1/2" (13 mm) blade stop for aluminum frames





TOUCH UP PAINT



2-659-0093

Door Closer Touch-Up Paint -Aluminum (ALM) • Apply to existing closer covers, arm

brackets, and fasteners



2-659-0094

Door Closer Touch-Up Paint -Bronze (BRZ) • Apply to existing closer covers, arm

brackets, and fasteners



2-659-0095

Door Closer Touch-Up Paint -Dark Bronze (DBZ)
Apply to existing closer covers, arm brackets, and fasteners



2-659-0096

Door Closer Touch-Up Paint -Gold (GOL)

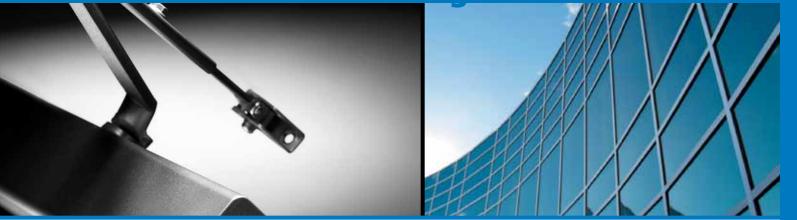
• Apply to existing closer covers, arm brackets, and fasteners



5400 SERIES



Electromagnetic Door Holders



Hager electromagnetic door holders are designed for virtually any remote door release application and are ideal for holding doors open until released by a remote or switching device. They are primarily used to hold fire and smoke barrier doors open.

Dual voltage inputs for ease of installation

High holding force to keep the door secure





Very low current draw for energy efficiency



ELECTROMAGNETIC DOOR HOLDERS

Performance Data

MODEL	VOLTAGE	DC/mA	AC/mA	TERMINALS	LB.	KG.
1224	12V	40	38	C&L	30	13.6
1224	24V	40	36	C&H	30	13.6
24120	24V	20	19	C&L	40	18.1
	120V		20	C&H	35	15.8
24220	24V	20	19	C&L	20	9.0
24220	220V		15	C&H	22	9.8

MODEL	VOLTAGE	DC/mA	AC/mA	TERMINALS	LB.	KG.
1224	24V	85	81	C&L	75	34.0
24120	120V		100	C&L	110	49.8
*High Holding Force/Special Applications:						

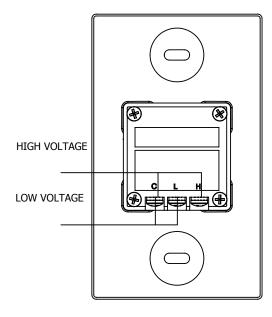
*High Holding Force/Special Applications:

To obtain the performance values in the above table, apply high listed voltage to low voltage terminals (C&L).

NOTE: This configuration can only be applied to models 1224 and 24120.

DUAL VOLTAGE (REAR VIEW SHOWN)

EXTENSION ROD/ADJUSTABLE EXTENSION ROD



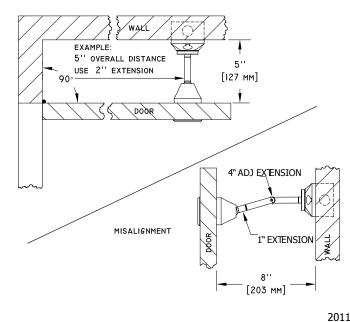
To calculate extension rod length needed, use the formula below based on style holder being used. Flush mount: Measure distance from door to wall when held at desired opening.

Recessed mount: Measure distance from door to wall when held at desired opening. Subtract 2-3/8" (60 mm) to obtain extension rod length needed.

Subtract 3" (76 mm) to obtain extension rod length needed.

Surface mount: Measure distance from door to wall when held at desired opening. Subtract 4-5/8" (117 mm) to obtain extension rod length needed.

See example below using flush mount.



HOW TO ORDER ELECTROMAGNETIC DOOR HOLDERS

Product Group

380

380 - Electromagnetic Door Holder

Mount F - Flush

- G Floor, Single Door
- H Floor, Double Door
- R Recessed
- S Surface

Ε

HOW TO ORDER ACCESSORIES



381 - Accessory

2011

Size (Extension Rods)

 $5 = \frac{1}{2}''$ 1 = 1'' $15 = 1 - \frac{1}{2}''$ 2 = 2" 3 = 3" 4 = 4"

120024

Voltage

120024 -12/24V

240120 -24/120V

240220 -24/220V

Specifier

- A Adjustable Extension Rod
- B Surface Back Box
- C Catch Disc
- D Drilling Fixture
- E Extension Rod
- H Mounting Hardware
- S Catch Plate Assembly
- W Extension Wrenches



Finish

300 - Plated Brass LS - Powder Chrome L2 - Powder Dark Bronze

Finish

LS

- 300 Plated Brass
- LS Powder Chrome
- L2 -Powder Dark Bronze





380 Series

Grade 1

Heavy Duty Commercial, Institutional Electromagnetic Door Holder Ideal for hospitals, hotels, schools, and other commercial buildings

- One-year warranty
- Designed for use with self-closing fire and smoke barrier doors
- Low current draw
- Fail safe: when electrical current is interrupted, doors release to close automatically

Certifications:

- UL/ULC listed
- ۷ Н

ELECTROMAGNETIC DOOR HOLDERS

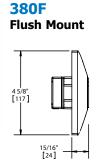
certifications	
	• Meets ANSI 156.15 for C00011
	California State Fire Marshall listed (CSFM)
	City of New York MEA approved
	Factory Mutual
Materials:	Zinc alloy
Voltages:	Standard dual voltage AC or DC inputs of 12&24V, 24&120V, 24&220V models
Holding Force:	Typical holding force of 25-40 pounds; performance value can be increased to 110 pounds on special applications
Mount:	Single or double coil floor, surface, flush, and recessed mount
Total Projection:	• Recessed mount: 2-11/32" (60 mm)
	• Flush mount: 3-1/16" (78 mm)
	• Surface mount: 4-5/8" (117 mm)
	• Floor mount (single door): 5" (127 mm)
	• Floor mount (double door): 9-5/8" (244 mm)
Fasteners:	Hardware package, mounting bracket
Finishes:	US3, LS, L2
1 11 1151 165.	

- Optional aluminum extension and misalignment rods available
- Drill fixture available
- Replacement catch disc and catch plate assemblies available
- Adhesive template included



380 SERIES HOLDERS

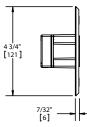








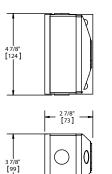
380R Recessed Mount





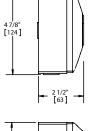


380G Floor Mount (Single Door)





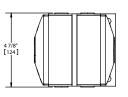
380S Surface Mount

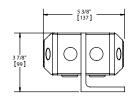






380H Floor Mount (Double Door)









380 SERIES ACCESSORIES



381A

Adjustable Extension Rod Available extension lengths 1-1/2" (38 mm), 2" (51 mm), 4" (102 mm)



381B

Surface Back Box 2-25/32" x 4-7/8" x 1-1/2" (71 mm x 124 mm x 38 mm) Supplied with 380G, 380H, 380S



381E

Extension Rod Available extension lengths 1/2" (13 mm), 1" (25 mm), 1-1/2" (38 mm), 2" (51 mm), 3" (76 mm), 4" (102 mm)



381H

Mounting Hardware Package Includes screws, nuts, concrete anchors, and drill bit



381C Catch Disc Replacement for the 381S catch plate assembly



381S Catch Plate Assembly

Swivel design allows catch disc to move in all directions to assist with slight misalignment issues



381D Drilling Fixture Attach to the door for quick and accurate hole locations



381W

Extension Wrenches Used to tighten extension rods to catch plate assembly



Overhead Door Holders and Stops



Hager overhead door holders and stops are utilized to control and protect door assemblies. By providing a high quality product with an adjustable arm to simplify installation, Hager Companies continues to be a door hardware industry leader.





Hager Companies offers a variety of door hardware products to accommodate virtually all door openings. Overhead door holders and stops are designed to meet the requirements of many door applications. Hager overhead door holders and stops are compatible with a variety of door closers and are ideal for meeting the demands of high traffic areas.

Overhead door holders and stops are mounted at the top of the door, which eliminates tripping hazards and vandalism that are typical of floor or wall mounted stops. These products absorb the abusive shock with a heavy duty spring along with evenly distributing the load and impact along the track of the unit.

It is recommended to utilize overhead door stops and holders on doors furnished with door closers, as closers are not intended to stop the door and should not be expected to perform the functions of a door stop.

ADJUSTABLE ARMS

For inventory and installation simplification of overhead door holders and stops, Hager has developed an adjustable arm to combine door ranges into only two sizes.

METHODS OF INSTALLATION

Concealed Mounted

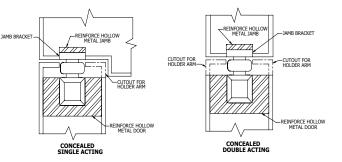
The installation of concealed overhead door holders and stops requires that the jamb bracket be mortised flush with the bottom of the jamb. The arm and channel must be mortised into the door so the arm is flush with the top of the door. Concealing the overhead door holders and stops in the top of the door creates a more attractive architectural look.

Single Acting Door

A cutout made for the arm on the stop side of the single acting door.

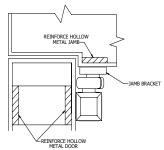
Double Acting Door

Double acting doors require a cutout for the arm on both sides of the door.



Surface Mounted

Surface mounted overhead door holder and stop installation requires the jamb bracket be surface mounted on the stop of the frame. The channel is also surface mounted on the face of the door. Hollow metal doors and jambs must be reinforced to provide necessary strength for the holder specified.







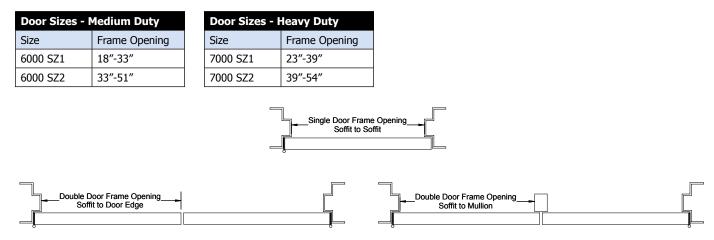


DOOR AND FRAME REINFORCEMENTS

Hollow metal frames must be properly reinforced with 3/16" (5 mm) thick plates/channels that are at least 12" (305 mm) long. Hollow metal doors must be properly reinforced with 3/16" (5 mm) plates that are at least 2-1/2" (64 mm) wide over the length of the device. Templates and installation instructions are available online at www.hagerco.com.

HAGER'S DEFINITION OF "FRAME OPENING"

The "frame opening" is defined as the actual width of the frame, from soffit to soffit, not the width of the door.



SELECTING DEGREE OF HOLD OPEN OR STOP

Overhead door holders and stops are designed to function effectively from 85° to 110°. The recommended minimum degree of hold open would be set at 95° to put the door lever, pull, and panic hardware beyond the flow of traffic.

When selecting the degree of hold open for doors opening against a wall or back to back, there is approximately 5° to 7° of spring engagement beyond the hold open or initial stop point, this is the dead stop.

For dead stop templating, the degree of opening should be set 5° to 7° less than the point of required dead stop to accommodate the full compression of the shock absorber.

HOW TO ORDER









FUNCTIONS

16 - Stop Only

	<u>Heavy Duty</u>	<u>Medium Duty</u>
Concealed Mounted:	ANSI CO1541	ANSI C01542
Surface Mounted:	ANSI CO2541	ANSI C02542

The stop only function provides a reliable method of door control. A shock absorbing spring stops the door. It is UL Listed for fire rated components.

UL Classification

The **stop-only** models are classified by Underwriters Laboratories (UL) as Miscellaneous Fire Door Accessories. This classification applies to the use on either hollow metal fire doors or wood fire doors of any rating. The accessories have been investigated to determine that when properly installed with accordance to the manufacturer's instructions, they do not adversely affect the fire rating of the fire door or fire door frames.

17 - Hold Open

	<u>Heavy Duty</u>	<u>Medium Duty</u>
Concealed Mounted:	ANSI CO1511	ANSI C01512
Surface Mounted:	ANSI CO2511	ANSI C02512

The hold open function provides a selective hold open function with easy to adjust tension. It may be turned on or off and includes the stop only function. It is not for use on fire rated openings.

15 - Friction

	<u>Heavy Duty</u>	<u>Medium Duty</u>
Concealed Mounted:	ANSI CO4531	ANSI C04532
Surface Mounted:	ANSI CO5531	ANSI C05532

The multi-point friction hold open function mechanism is adjustable for resistance to door movement. It is not for use on fire rated openings.





6000 Series

Grade 2 Medium Duty Overhead Door Holder and Stop For use on exterior and interior doors Ideal for office buildings and other medium duty commercial applications

- Adjustable arm to combine door ranges into two sizes
- Five-year warranty
- Standard screw pack

Certifications:	BHMA Certified ANSI A156.8 - 2005
	• UL/cUL Listed for up to 3 hours (stop only)
	• UL10C Positive Pressure Rated (stop only)
	• UL10B Neutral Pressure Rated (stop only)
Mounting Style:	• Concealed (CON)
	• Surface (SRF)
Doors:	Single acting doors for concealed and surface mounted
	 Double acting doors for concealed mounted only
Door Thickness:	• 1-3/4" (44 mm) thick door - Standard
	• 1- 3/8"- 2-1/4" (36 mm -57 mm) thick door - Optional
Functions:	• Stop Only (16)
	Hold Open (17)
	• Friction (15)
Handing:	Non-handed
Openings:	Degree of opening is fully adjustable and can be adapted to changing needs between 85° to 110°
Materials:	• Steel
	Stainless steel
Finishes:	US26D, US10B, US3 (for steel)
	US32D (for stainless steel)
Fasteners:	Standard screw packet included for wood or metal door and frame applications
Notes:	Adjustable arms provide easy installation
	Slide track design
	Adjustable in the field
	Heavy shock absorber spring provides 5° to 7° compression before deadstop
	Special templating upon request

Door Sizes	
Size	Frame Opening
6000 SZ1	18″-33″
6000 SZ2	33″-51″





6000 SERIES ACCESSORIES



2-659-0101 | 2-659-0102 | 2-659-0103

Surface Mounted End Cap and Spring **Replacement Kit**

- Includes channel end caps and replacement spring
- 2-659-0101 is US26D, 2-659-0102 is US10B, 2-659-0103 is US3



2-659-0104

Concealed Mounted End Cap and Spring Replacement Kit Includes channel end caps and

replacement spring



6000 SERIES SCREWPACKS

2-659-0098 | 2-659-0099 | 2-659-0100

Screwpack - Standard

- Includes machine screws, wood screws, sex nuts and bolts for 1-3/4" (44 mm) thick doors, arm set screws, and Allen wrench
- 2-659-0098 is US26D, 2-659-0099 is US10B, 2-659-0100 is US3

2-659-0107 | 2-659-0108 | 2-659-0109

SNB Screwpack - Optional

- Includes machine screws and sex nuts and bolts for 1-3/8" (35 mm) thick doors
- For use with surface mounted overhead door holders and stops
- 2-659-0107 is US26D, 2-659-0108 is US10B, 2-659-0109 is US3

2-659-0105 Hold Open Replacement Kit Hold Open assembly





2-659-0110 | 2-659-0111 | 2-659-0112

SNB Screwpack - Optional

- Includes machine screws and sex nuts and bolts for 2" (51 mm) thick doors
- For use with surface mounted overhead door holders and stops
- 2-659-0110 is US26D, 2-659-0111 is US10B, 2-659-0112 is US3



2-659-0113 | 2-659-0114 | 2-659-0115

SNB Screwpack - Optional

- Includes machine screws and sex nuts and bolts for 2-1/4" (57 mm) thick doors
- For use with surface mounted overhead door holders and stops
- 2-659-0113 is US26D, 2-659-0114 is US10B, 2-659-0115 is US3







7000 Series

Grade 1 Heavy Duty Overhead Door Holder and Stop For use on exterior and interior doors Ideal for hospitals, schools, and other high traffic environments

- Adjustable arm to combine door ranges into two sizes
- Five-year warranty
- Standard screw pack

	• Stanuaru Screw pack
Certifications:	 BHMA Certified ANSI A156.8 - 2005 UL/cUL Listed for up to 3 hours (stop only) UL10C Positive Pressure Rated (stop only) UL10B Neutral Pressure Rated (stop only)
Mounting Style:	Concealed (CON) Surface (SRF)
Doors:	 Single acting doors for concealed and surface mounted Double acting doors for concealed mounted only
Door Thickness:	 1-3/4" (44 mm) thick door - Standard 1- 3/8"- 2-1/4" (36 mm -57 mm) thick door - Optional
Functions:	 Stop Only (16) Hold Open (17) Friction (15)
Handing:	Non-handed
Openings:	Degree of opening is fully adjustable and can be adapted to changing needs between 85° to 110°
Materials:	Steel Stainless steel
Finishes:	 US26D, US10B, US3 (for steel) US32D (for stainless steel)
Fasteners:	Standard screw packet included for wood or metal door and frame applications
Notes:	 Adjustable arms provide easy installation Slide track design Adjustable in the field Heavy shock absorber spring provides 5° to 7° compression before deadstop Special templating upon request

Door Sizes	
Size	Frame Opening
7000 SZ1	23"-39"
7000 SZ2	39"-54"





7000 SERIES ACCESSORIES



2-659-0119 | 2-659-0120 | 2-659-0121

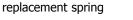
Surface Mounted End Cap and Spring **Replacement Kit**

- Includes channel end caps and replacement spring
- 2-659-0119 is US26D, 2-659-0120 is US10B, 2-659-0121 is US3



2-659-0122

Concealed Mounted End Cap and Spring Replacement Kit • Includes channel end caps and





2-659-0123 Hold Open Replacement Kit

Hold Open assembly



7000 SERIES SCREWPACKS

2-659-0116 | 2-659-0117 | 2-659-0118

Screwpack - Standard

- Includes machine screws, wood screws, sex nuts and bolts for 1-3/4" (44 mm) thick doors, arm adjustment screws, and Allen wrench
- 2-659-0116 is US26D, 2-659-0117 is US10B, 2-659-0118 is US3

2-659-0125 | 2-659-0126 | 2-659-0127

SNB Screwpack - Optional

- Includes machine screws and sex nuts and bolts for 1-3/8" (35 mm) thick doors
- For use with surface mounted overhead door holders and stops
- 2-659-0125 is US26D, 2-659-0126 is US10B, 2-659-0127 is US3

2-659-0128 | 2-659-0129 | 2-659-0130

SNB Screwpack - Optional

- Includes machine screws and sex nuts and bolts for 2" (51 mm) thick doors
- For use with surface mounted overhead door holders and stops
- 2-659-0128 is US26D, 2-659-0129 is US10B, 2-659-0130 is US3



2-659-0131 | 2-659-0132 | 2-659-0133

SNB Screwpack - Optional

- Includes machine screws and sex nuts and bolts for 2-1/4" (57 mm) thick doors
- For use with surface mounted overhead door holders and stops
- 2-659-0131 is US26D, 2-659-0132 is US10B, 2-659-0133 is US3





Exit Devices



Every model in Hager's line of exit devices is designed and engineered to assure you and your customers years and years of superior performance. Hager exit devices use fewer moving parts and are constructed with high-quality features--like die cast caps on our lifetime warranty 4500 Series, and die cast head covers on all our models. All Hager exit devices meet UL specifications for panic devices and are fire rated for up to three hours.

You'll also find that Hager exit devices were designed with ease of installation in mind. We package our exit devices for convenience and versatility, with thru-bolts included for every model, slotted strikes, non-handed designs, plus escutcheon trim available in four functions (dummy, blank, entry and night latch).

4500 Series



Hager 4500 Series Grade 1 exit device is designed and engineered for superior performance--using fewer moving parts and constructed with die cast caps and head covers. Our 4500 Series exit device is BHMA certified, UL listed for up to three hours, meets UL specifications for panic hardware, is severe windstorm resistant approved, and is backed by a lifetime warranty.



3/4" (18 mm) dead latching, stainless steel,



GENERAL INFORMATION

Hager 4500 Series Grade 1 exit device meets Life Safety codes and Fire Safety requirements providing a perfect fit for use in commercial office buildings, medical and educational facilities, as well as hospitality structures.

The 4500 Series is BHMA-Certified to the requirements of ANSI 156.3 for Grade 1 exit devices and is UL 305 Panic Listed and UL and cUL Listed for up to 3 hour rated fire doors for both rim and surface vertical rod.

These devices have also met the requirements of ANSI A250.13 to be listed as a Severe Windstorm Component. The 4500 Series exit device offers a lifetime warranty to provide peace of mind from the distributors to the building owner.

Installation Made Easy

For the convenience of our customers, Hager Companies has introduced some new features to the exit device market.

- Thru-bolts are included with every model. Wood and machine screws are also provided standard in every package.
- Slotted strikes speed up installation, allowing the installer to make easy adjustments to align the latch to the strike.
- Non-handed device offers added versatility and means less inventory.
- Escutcheon trim, with the locking mechanism built inside, reduces door preparation by requiring fewer holes in the door.

Shim Kits

Shim kits are available for devices on doors with glass bead kits or other interfacing moldings. Each kit contains two 1/8" (3.2 mm) shims and the appropriate longer fasteners.

Cylinder Dogging

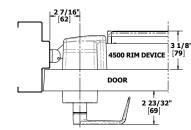
Cylinder dogging is available to replace the standard hex key dogging on panic exit devices. Specify CD on order or purchase 4926 for retrofit applications. Unit requires 1-1/8" mortise cylinder (part number 3902) with standard cam.

Sizing

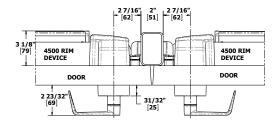
The exit device is cut for 36" (914 mm) and 48" (1219 mm) wide doors. For other door widths, cut exit device to appropriate length. Recommended overall length of exit device is equal to the door width minus four inches. The surface vertical rod devices are supplied for an 84" (2134 mm) opening standard, but can be ordered for a 96" (2438 mm) opening. Extension rods are available to accommodate openings taller than 96" (2438 mm) and up to 120" (3048 mm).

Applications

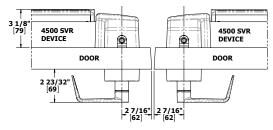


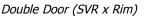


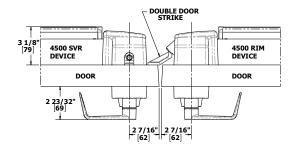
Double Door with Mullion



Double Door (2 SVR Devices)



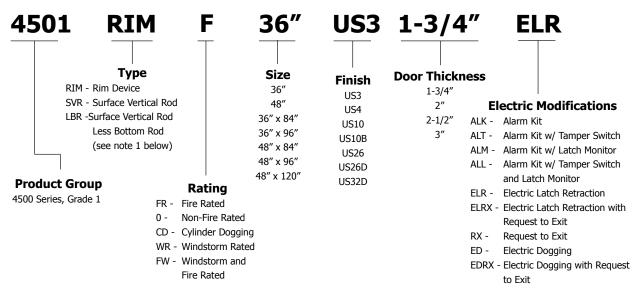




Trim Functions	Part Number	Function Description	ANSI Number
Blank Escutcheon	45BE	Always operable (Passage)	14
Cylinder Escutcheon	45CE	Key locks or unlocks lever	08
Dummy	45DT 45PD	Pull when device is dogged down	02
Night Latch	45NL 45PN	Key retracts latchbolt	03



HOW TO ORDER



Notes:

1. Fire Rated LBR devices must be ordered in pairs of vertical rod devices and with a spring loaded fire latch to ensure the device's fire rating.

4501 LBR Fire 36" x 84" EO PLUS 4501 LBR Fire 36" x 84" EO with bolt

OR

4501 LBR Fire 36" x 84" EO PLUS an approved automatic or constant latching flush bolt

HOW TO ORDER - TRIM (MUST BE ORDERED SEPARATELY)

45 C	Ε	Α	RC	US3	1-3/4″	EL24
Product Group		l eve	r Style	Finish	Door Thickness	Options
45 - 4500 Series, Grade 1		ARC -	Archer	US3	1-3/4"	EL24 - Fail Safe, 24 Volt
		AUG -	August	US4	2″	EL12 - Fail Safe, 12 Volt
Trim/F	unction		Withnell	US10	2-1/2″	EU24 - Fail Secure, 24
CE - Cylinder Escutch				US10B	3″	Volt
Function 08, ke	y locks/unic	ocks lever		US26	5	EU12 - Fail Secure, 12
BE - Blank Escutched	on			US26D		Volt
Function 14, alv	vays operat	ole		US32D*		TW - Tactile Warning
NL - Night Latch						
Function 03, ke	y retracts la	itchbolt				
DT - Dummy Trim						
Function 02, pu	ll when dog	iged down				
PD - Pull Plate Dumn	ny Trim					
Function 02, pu	ll when dog	iged down				
PN - Pull Plate Night	Latch					
Function 03, ke	y retracts la	tchbolt				
ET - Electrified Trim						

Notes:

1. Mortise cylinder 3902 is required for use with cylinder escutcheon and is sold separately.

2. Rim cylinder with long tailpiece 3901 is required for use with night latch trim and is sold separately.

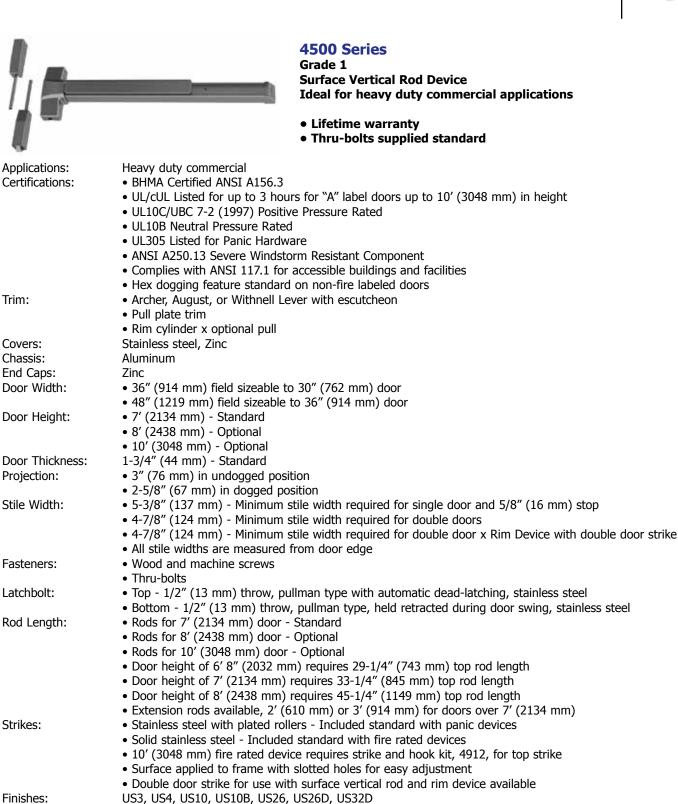
3. For more cylinder information, please refer to general information in the Locks section of the catalog.

4. If using shim kit, specify total door thickness including shims.

*US32D only available for pull plate trim (45PD, 45PN), not available in standard escutcheon trims (45BE, 45CE, 45DT, 45NL).

	EXIT DEVICES
-	4500 Series Grade 1 Rim Device Ideal for heavy duty commercial applications • Lifetime warranty • Thru-bolts supplied standard
Applications: Certifications:	 Heavy duty commercial BHMA Certified ANSI A156.3 UL/cUL Listed for up to 3 hours for "A" label doors UL10C/UBC 7-2 (1997) Positive Pressure Rated UL10B Neutral Pressure Rated UL305 Listed for panic hardware ANSI A250.13 Severe Windstorm Resistant Component (requires use of windstorm reinforcing bracket, 2-649-0154, on Rim device) Complies with ANSI 117.1 for accessible buildings and facilities Hex dogging feature standard on non-fire labeled doors
Trim:	 Archer, August, or Withnell Lever with escutcheon Pull plate trim Rim cylinder x optional pull
Covers:	Stainless steel, zinc
Chassis: End Caps:	Aluminum Zinc
Door Width:	• 36" (914 mm) field sizeable to 30" (762 mm) door
	• 48" (1219 mm) field sizeable to 36" (914 mm) door
Door Thickness: Projection:	1-3/4" (44 mm) - Standard • 3" (76 mm) in undogged position
Trojection.	• 2-5/8" (67 mm) in dogged position
Stile Width:	 5-3/8" (137 mm) - Minimum stile width required for single door and 5/8" (16 mm) stop 4-7/8" (124 mm) - Minimum stile width required for double door x surface vertical rod with double door strike 5-3/4" (146 mm) - Minimum stile width required for double doors with 2" (51 mm) mullion All stile widths are measured from door edge
Fasteners:	Wood and machine screws
Latchbolt:	 Thru-bolts 3/4" (19 mm) throw, pullman type with automatic dead-latching, stainless steel
Strikes:	 Stainless steel with plated rollers - Included standard with panic devices Solid stainless steel - Included standard with fire rated devices Surface applied to frame with slotted holes for easy adjustment Double door strike for use with surface vertical rod and rim device available
Finishes:	 US3, US4, US10, US10B, US26, US26D, US32D
Notes:	 Cylinder dogging available on non-fire rated devices, specify CD 3902 1-1/8" (29 mm) mortise cylinder sold separately Recommended to be used on appropriately reinforced doors

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Finishes: Notes:

Trim:

- Cylinder dogging available on non-fire rated devices, specify CD
 - 3902 1-1/8" (29 mm) mortise cylinder sold separately
 - Recommended to be used on appropriately reinforced doors



\bigcirc	EXIT DEVICES
	4500 Series Grade 1 Surface Vertical Rod Device Less Bottom Rod Ideal for heavy duty commercial applications • Lifetime warranty • Thru-bolts supplied standard
Applications: Certifications:	Heavy duty commercial • BHMA Certified ANSI A156.3 • UL/cUL Listed for up to 3 hours for "A" label doors • UL10C/UBC 7-2 (1997) Positive Pressure Rated • UL10B Neutral Pressure Rated • UL305 Listed for panic hardware • Complies with ANSI 117.1 for accessible buildings and facilities • Hex dogging feature standard on non-fire labeled doors
Trim:	 Archer, August, or Withnell Lever with escutcheon Pull plate trim Rim cylinder x optional pull
Covers:	Stainless steel, Zinc
Chassis:	Aluminum
End Caps:	Zinc
Door Width:	• 36" (914 mm) field sizeable to 30" (762 mm) door
Bool Widdin	• 48" (1219 mm) field sizeable to 36" (914 mm) door
Door Height:	 7' (2134 mm) - Standard 8' (2438 mm) - Optional 10' (3048 mm) - Optional (panic device only)
Door Thickness:	1-3/4" (44 mm) - Standard
Projection:	• 3" (76 mm) in undogged position
rojectorii	• 2-5/8" (67 mm) in dogged position
Stile Width:	• 5-3/8" (137 mm) - Minimum stile width required for single door and 5/8" (16 mm) stop
Stile Width.	• 4-7/8" (124 mm) - Minimum stile width required for double doors
	• 4-7/8" (124 mm) - Minimum stile width required for double door x Rim device with double door strike
	• All stile widths are measured from door edge
Fasteners:	Wood and machine screws
i usteriers:	Thru-bolts
Latchbolt:	Top - $1/2''$ (13 mm) throw, pullman type with automatic dead-latching, stainless steel
Rod Length:	• Rods for 7' (2134 mm) door - Standard
	• Rods for 8' (2438 mm) door - Optional
	• Door height of 6' 8" (2032 mm) requires 29-1/4" (743 mm) top rod length
	• Door height of 7' (2134 mm) requires 33-1/4" (845 mm) top rod length
	• Door height of 8' (2438 m) requires 45-1/4" (1149 mm) top rod length
	• Extension rods available, 2' (610 mm) or 3' (914 mm) for doors over 7' (2134 mm)
Strikes:	Stainless steel with plated rollers - Included standard for panic devices
	 Solid stainless steel - Included standard with fire rated devices
	Surface applied to frame with slotted holes for easy adjustment
	Double door strike for use with surface vertical rod and rim device available
Finishes:	US3, US4, US10, US10B, US26, US26D, US32D
Notes:	Cylinder Dogging available on non-fire rated devices, specify CD
	• 3902 1-1/8" (29 mm) mortise cylinder sold separately
	Recommended to be used on appropriately reinforced doors
	Hole plug for head cover included standard
	• Fire rated LBR devices must be ordered in pairs of vertical rod devices and with a spring loaded fire
	latch, 2-649-0166, to ensure the device's fire rating





4500 Series - Electric Exit Devices

Rim and Surface Vertical Rod Devices and Trim Heavy duty commercial

- Lifetime warranty on exit body only
- One-year warranty on electric components
- Thru-bolts supplied standard

Certifications:

• BHMA Certified ANSI A156.3 Grade 1

- UL/cUL Listed for up to three hours for "A" label doors
- UL10C/UBC 7-2 (1997) Positive Pressure Rated
- UL10B Neutral Pressure Rated
- UL305 Listed for panic hardware
- ANSI A250.13 Severe Windstorm Resistant Component (requires the use of windstorm reinforcement bracket, 2-649-0154, on Rim device)
- 36" (914 mm) for electric latch retraction and electric dogging 1-3/4" (45 mm) standard

Minimum Door Width: Door Thickness:

Function	Function Number	Function Description
Electric Latch Retraction	ELR*	Provides a remote means of locking or unlocking exit devices.
Electric Latch Retraction with Request to Exit	ELRX*	Provides a remote means of locking or unlocking exit devices along with a switch for tying into an alarm system, magnetic locks, or a console.
Electric Dogging	ED*	Provides continuous latch retraction and dogging simultaneously.
Electric Dogging with Request to Exit	EDRX*	Provides continuous latch retraction and dogging simultaneously along with a switch for tying into an alarm system, magnetic locks, or a console.
Request to Exit	RX	Used to shunt an alarm, activate an alarm, provide release of magnetic locks, or signal a control console.
Alarm Kit	ALK*	Battery operated alarm to discourage unauthorized use of an opening while maintaining a means of egress.
Electric Trim - Fail Safe	EL	Lever continuously locked electrically. Unlocked by key outside, by switch, or by a power failure. Push bar side always free for immediate egress.
Electric Trim - Fail Secure	EU	Lever continuously locked until unlocked electrically or by key. Push bar side always free for immediate egress.

* Not available with mechanical dogging.

Notes: 1. Fail Safe (EL) and Fail Secure (EU) available in 12 and 24 volt, must specify. 2. Latch monitor and tamper switch available with ALK

Product	Description
2901	For use with 4500 Series electric latch retraction
2902	For use with 4500 Series electric latch retraction in a day/night mode of operation
2903	Provides power for Fail Safe or Fail Secure locking devices and interference with building alarm controls,, card reader, keypads, and other door controls
2904	Provides power and control for openings with an electrified locking device and automatic door operator

Note: Must use Hager 2901 or 2902 to power electric latch retraction.



4500 SERIES ESCUTCHEON TRIM



45BE

Blank Escutcheon Function: 14 - Always operable (passage) Levers: Archer, August, Withnell

Projection: 2-13/16" (71 mm) for Archer; 2-7/8" (73 mm) for August; 2-11/16" (68 mm) for Withnell Escutcheon: 2-7/8" x 10-3/4" (73 mm x 273 mm) Finishes: US3, US4, US10, US10B, US26, US26D



45CE

Cylinder Escutcheon 08 - Key locks or unlocks lever Function: Levers: Archer, August, Withnell (clutching lever) Projection: 2-13/16" (71 mm) for Archer; 2-7/8" (73 mm) for August; 2-11/16" (68 mm) for Withnell Escutcheon: 2-7/8" x 10-3/4" (73 mm x 273 mm) US3, US4, US10, US10B, US26, US26D Finishes: Cylinder: Mortise cylinder, 3902, sold separately



45DT

Dummy Trim Function: 02 - Pull when device is dogged down Levers: Archer, August, Withnell 2-13/16" (71 mm) for Archer; 2-7/8" (73 mm) for August; 2-11/16" (68 mm) for Withnell Projection: Escutcheon: 2-7/8" x 10-3/4" (73 mm x 273 mm) US3, US4, US10, US10B, US26, US26D Finishes:



45NL Night Latch

Levers:

Function: 03 - Key retracts latchbolt Archer, August, Withnell (rigid lever) 2-13/16" (71 mm) for Archer; 2-7/8" (73 mm) for August; 2-11/16" (68 mm) for Withnell Projection: 2-7/8" x 10-3/4" (73 mm x 273 mm) Escutcheon: US3, US4, US10, US10B, US26, US26D Finishes: Cylinder: Rim cylinder, 3901, with long tailpiece sold separately



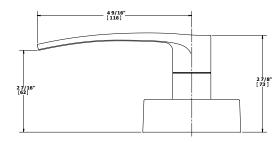




4500 SERIES ESCUTCHEON TRIM - LEVER OPTIONS ARCHER LEVER



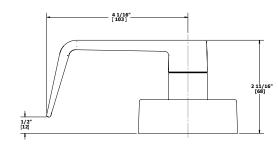
47/16° [113] 215/16° 215/16° 215/16°



WITHNELL LEVER

AUGUST LEVER





4500 SERIES PULL PLATE TRIM



45PD Dummy Trim

Function: Projection: Escutcheon Plate: Pull CTC: Finishes:

02 - Pull when device is dogged down 1-3/4" (44 mm) 3" x 14" (76 mm x 356 mm) 5-1/2" (140 mm) US3, US4, US10, US10B, US26, US26D, US32D



45PN

Night Latch Function: Projection: Escutcheon Plate: Pull CTC: Finishes:

03 - Key retracts latchbolt 1-3/4" (44 mm) 3" x 14" (76 mm x 356 mm) 5-1/2" (140 mm) US3, US4, US10, US10B, US26, US26D, US32D





4500 SERIES STRIKES



4915

Threshold Strike Optional strike for use with surface vertical rod exit device and saddle threshold Finishes: US32D



4923

Top Strike Included standard with 4500 Series Surface Vertical Rod exit device Finishes: US32D



4920

Strike Included standard with 4500 Series Rim exit device Finishes: US32D



4923F

Fire Rated Top Strike Included standard with 4500 Series Surface Vertical Rod exit device Finishes: US32D



4920F

Fire Rated Strike Included standard with 4500 Series Rim exit device Finishes: US32D



4924

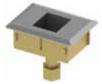
Bottom Strike Included standard with 4500 Series Surface Vertical Rod exit device Finishes: US32D



4921 **Double Door Strike**

Optional strike to be used with 4500 Series Surface Vertical Rod and Rim exit device Finishes:

US3, US4, US10, US10B, US26, US32D



4924F

Fire Rated Bottom Strike

Included standard with 4500 Series Surface Vertical Rod exit device Finishes: US32D







4500 SERIES ACCESSORIES



4926 Finishes:

Notes:

4927

Rod exit device

Description:

Finishes:

Packaging:

Bottom Latch Assembly

For use with 4500 Series Surface Vertical

US32D

Cylinder Dogging Conversion Kit US3, US4, US10, US10B, US26, US26D, US32D Packaging: One (1) each dogging plate, cylinder collar, cash box nut • Mortise cylinder, 3902, sold separately

• Specify 36" (914 mm) or 48" (1219 mm)

1/2" (13 mm) throw,

retracted during door

swing, stainless steel

US10B, US26, US26D,

pullman type, held

US3, US4, US10,

One (1) bottom latch with cover and appropriate fasteners

4929

Finishes:

Top Rod Replacement Kit

For use with 4500 Series Surface Vertical Rod exit device

Packaging:

US3, US4, US10, US10B, US26, US26D, US32D One (1) each 45-1/4" (1149 mm) rod, rod guide, rod connector, and appropriate fasteners

4930R Shim Kits

To be used with 4500 Series Rim exit devices where a glass bead kit would interfere with exit device Finishes:

Packaging:

US3, US4, US10, US10B, US26, US26D, US32D Two (2) each 1/8" (3 mm) shims and appropriate fasteners

4928

Finishes:

Packaging:

Top Latch Assembly

For use with 4500 Series Surface Vertical Rod exit device Description: 1/2" (13 mm) throw,

> pullman type, held retracted during door swing, stainless steel US3, US4, US10, US10B, US26, US26D, US32D One (1) top latch with cover and appropriate fasteners



4930S Shim Kits

To be used with 4500 Series Surface Vertical Rod exit devices where a glass bead kit would interfere with exit device Finishes:

Packaging:

US3, US4, US10, US10B, US26, US26D, US32D Two (2) each 1/8" (3 mm) shims and appropriate fasteners







4500 SERIES ACCESSORIES (CONTINUED)



4932R Head Cover

For use with 4500 Series Rim exit device Finishes: US3, US4, US10, US10B, US26, US26D, US32D Packaging: One (1) head cover and four (4) each M4 x 6mm MS

4937 36" Extension Rod Kit

For use with 4500 Series Surface Vertical Rod exit device Finishes: US3, US4, US10,

Packaging:

Notes:

US10B, US26, US26D, US32D One (1) each 36" (914 mm) extension rod, rod connector, rod guide, plus wood and machine screws Threaded on both ends; if cuts are required, cut the standard rod on non-threaded end

4932S

Head Cover For use with 4500 Series Surface Vertical Rod exit device Finishes: US3, US4, US10, US10B, US26, US26D, US32D Packaging: One (1) head cover and four (4) each M4 x 6mm MS

4936

24" Extension Rod Kit

For use with 4500 Series Surface Vertical Rod exit device Finishes: US3, US4, US10, US10B, US26, US26D, US32D One (1) each 24" Packaging: (610 mm) extension rod, rod connector, rod quide, plus wood and machine screws Threaded on both ends; Notes: if cuts are required, cut the standard rod on non-threaded end



2-649-0166 Fire Bolt Kit

For use with fire rated 4500 Series Surface Vertical Rod less bottom rod device Faceplate: 1-25/32" x 1"

Bolt Diameter: Bolt Length: Materials: Packaging: (45 mm x 25 mm) 7/16" (11 mm) 1-1/2" (38 mm) Stainless steel One (1) each fire bolt, plastic plug, head cover plug, and appropriate fasteners Required with a fire rated pair of LBR devices to ensure rating

Notes:



2-649-0154 Windstorm Reinforcement Kit

rating

Finishes: Notes: N/A Must use with 4500 Series Rim device to ensure ANSI A250.13 Severe Windstorm

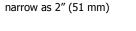


4600 Series

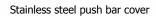


Hager 4600 Series Grade 1 Rim device is designed and engineered for superior performance on narrow stile doors in heavy duty commercial applications. The 4600 Series design compliments aluminum and glass construction and provides excellent durability for a range of applications. The 4600 Series is BHMA certified, UL Listed for up to three hour rated fire doors, meets UL specifications for panic hardware, and is backed by a lifetime warranty.

Extruded aluminum construction



Compatible with stiles as



3/4" (18 mm) dead latching, stainless steel, Pullman type latchbolt

Fasteners include wood and machine screws, along with thru-bolts



GENERAL INFORMATION

Hager 4600 Series Grade 1 exit device meets Life Safety codes and Fire Safety requirements providing a perfect fit for use in commercial office buildings, medical and educational facilities, as well as hospitality structures.

The 4600 Series Rim device is BHMA-Certified to the requirements of ANSI 156.3 for Grade 1 exit devices and is UL 305 Panic Listed and UL and cUL Listed for up to 3 hour rated fire doors.

Installation Made Easy

For the convenience of our customers, Hager Companies has introduced some new features to the exit device market.

- Thru-bolts are included with every model. Wood and machine screws are also provided standard in every package.
- Slotted strikes speed up installation, allowing the installer to make easy adjustments to align the latch to the strike.
- Non-handed device offers added versatility and means less inventory.
- Escutcheon trim, with the locking mechanism built inside, reduces door preparation by requiring fewer holes in the door.

Shim Kits

Shim kits are available for devices on doors with glass bead kits or other interfacing moldings. Each kit contains two 1/8'' (3.2 mm) shims and the appropriate longer fasteners.

Cylinder Dogging

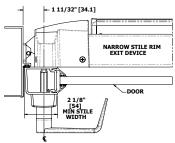
Cylinder dogging is available to replace the standard hex key dogging on panic exit devices. Specify CD on order or purchase 4926 for retrofit applications. Unit requires 1-1/8" (29 mm) mortise cylinder (part number 3902) with standard cam.

Sizing

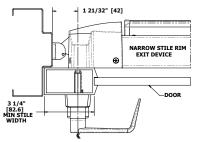
The exit device is cut for 36" (914 mm) and 48" (1219 mm) wide doors. For other door widths, cut exit device to appropriate length. Recommended overall length of exit device is equal to the door width minus four inches.

Applications

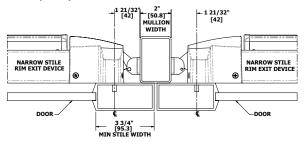
Single Door Panic Exit Hardware - Blade Stop Strike (4950) and Frame



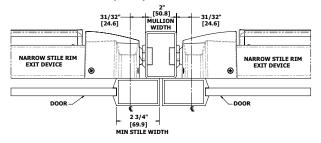
Single or Double Door with Panic Exit Hardware - Standard Strike (4920) and Frame



Single or Double Door with Panic Exit Hardware - Standard Strike (4920) and Mullion



Single or Double Door with Panic Exit Hardware - Semi-Flush Mount Strike (4952) and Mullion



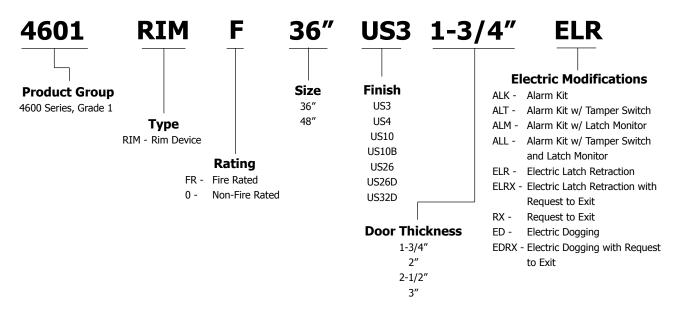
Trim Functions	Part Number	Function Description	ANSI Number
Blank Escutcheon	46BE	Always operable (Passage)	14
Cylinder Escutcheon	46CE	Key locks or unlocks lever	08
Dummy	46DT	Pull when device is dogged down	02
Night Latch	46NL	Key retracts latchbolt	03



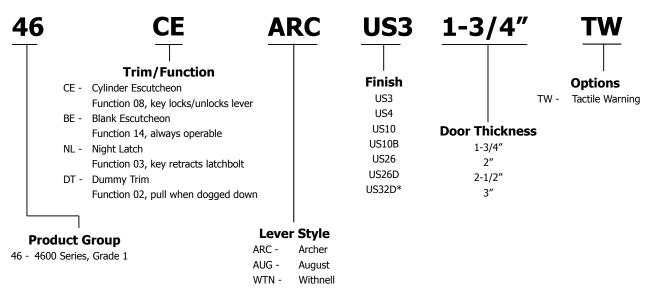




HOW TO ORDER



HOW TO ORDER - TRIM (MUST BE ORDERED SEPARATELY)



Notes:

- 1. Mortise cylinder 3902 with 3976 L cam is required for use with cylinder escutcheon and is sold separately.
- 2. Rim cylinder with long tailpiece 3901 is required for use with night latch trim and is sold separately.
- 3. For more cylinder information, please refer to general information in the Locks section of the catalog.
- 4. If using shim kit, specify total door thickness including shims.

*US32D available for device only. Not available in standard escutcheon trims (46BE, 46CE, 46DT, 46NL).

	EXIT DEVICES
	Grade 1 Narrow Stile Rim Device Ideal for heavy duty commercial applications
	 Lifetime warranty Thru-bolts supplied standard
Applications: Certifications:	 Heavy duty commercial BHMA Certified ANSI A156.3 UL/cUL Listed for up to 3 hours for "A" label doors UL10C/UBC 7-2 (1997) Positive Pressure Rated UL10B Neutral Pressure Rated UL305 Listed for panic hardware Hex dogging feature standard on non-fire labeled doors
Trim:	Archer, August, or Withnell Lever with escutcheon
Covers: Chassis:	Stainless steel, zinc Aluminum
End Caps:	Zinc
Door Width:	 36" (914 mm) field sizeable to 30" (762 mm) door 48" (1219 mm) field sizeable to 36" (914 mm) door
Door Thickness:	1-3/4" (44 mm) - Standard
Projection:	 3" (76 mm) in undogged position 2-5/8" (67 mm) in dogged position
Stile Width:	• 2-1/8" (54 mm) - Minimum stile width required for 1/2" (13 mm) blade stop frame and 4950 blade stop
	strike • 3-1/4" (83 mm) - Minimum stile width required for single door, 5/8" (16 mm) stop and 4920 standard
	 strike 3-3/4" (95 mm) - Minimum stile width required for double door x mullion x 4920 strike 2-3/4" (70 mm) - Minimum stile width required for double doors with 2" (51 mm) mullion and 4952 semi-flush mount strike
Fasteners:	 All stile widths are measured from door edge Wood and machine screws
i usteriers:	• Thru-bolts
Latchbolt:	3/4" (18 mm) throw, pullman type with automatic dead-latching, stainless steel
Strikes:	 Blade stop (4950) - Standard with panic device Fire rated strike (4920F) - Standard with fire rated device
	Standard strike (4920) - Optional
	• Single rabbit strike (4951) - Optional
Finishes:	• Semi-flush mount strike (4952) - Optional US3, US4, US10, US10B, US26, US26D, US32D
Notes:	Cylinder dogging available on non-fire rated devices, specify CD
	 3902 1-1/8" (29 mm) mortise cylinder with 3976 L cam sold separately
	 Recommended to be used on appropriately reinforced doors

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4600 Series - Electric Exit Devices

Rim Devices and Trim Heavy duty commercial

- Lifetime warranty on exit body only
- One-year warranty on electric components
- Thru-bolts supplied standard

Certifications:

• BHMA Certified ANSI A156.3 Grade 1

- UL/cUL Listed for up to three hours for "A" label doors
- UL10C/UBC 7-2 (1997) Positive Pressure Rated
- UL10B Neutral Pressure Rated
- UL305 Listed for panic hardware

Minimum Door Width: Door Thickness: 36" (914 mm) for electric latch retraction and electric dogging 1-3/4" (45 mm) standard

Function	Function Number	Function Description
Electric Latch Retraction	ELR*	Provides a remote means of locking or unlocking exit devices.
Electric Latch Retraction with Request to Exit	ELRX*	Provides a remote means of locking or unlocking exit devices along with a switch for tying into an alarm system, magnetic locks, or a console.
Electric Dogging	ED*	Provides continuous latch retraction and dogging simultaneously.
Electric Dogging with Request to Exit	EDRX*	Provides continuous latch retraction and dogging simultaneously along with a switch for tying into an alarm system, magnetic locks, or a console.
Request to Exit	RX*	Used to shunt an alarm, activate an alarm, provide release of magnetic locks, or signal a control console.
Alarm Kit	ALK*	Battery operated alarm to discourage unauthorized use of an opening while maintaining a means of egress.

* Not available with mechanical dogging.

Note: Latch monitor and tamper switch available with ALK.

Product	Description
2901	For use with 4600 Series electric latch retraction
2902	For use with 4600 Series electric latch retraction in a day/night mode of operation
2903	Provides power for Fail Safe or Fail Secure locking devices and interference with building alarm controls, card reader, keypads, and other door controls
2904	Provides power and control for openings with an electrified locking device and automatic door operator

Note: Must use Hager 2901 or 2902 to power electric latch retraction.





4600 SERIES ESCUTCHEON TRIM



46BE

Blank EscutcheonFunction:14 - Always operable (passage)Levers:Archer, August, WithnellProjection:2-5/8" (67 mm) for Archer; 2-21/32" (67 mm) for August; 2-15/32" (63 mm) for WithnellEscutcheon:1-11/16" x 7-7/8" (43 mm x 200 mm)Finishes:US3, US4, US10, US10B, US26, US26D



46CE

Cylinder EscutcheonFunction:08 - Key locks or unlocks leverLevers:Archer, August, Withnell (clutching lever)Projection:2-5/8" (67 mm) for Archer; 2-21/32" (67 mm) for August; 2-15/32" (63 mm) for WithnellEscutcheon:1-11/16" x 7-7/8" (43 mm x 200 mm)Finishes:US3, US4, US10, US10B, US26, US26DCylinder:Mortise cylinder, 3902 with 3976 L cam, sold separately



46DT

Dummy TrimFunction:02 - Pull when device is dogged downLevers:Archer, August, WithnellProjection:2-5/8" (67 mm) for Archer; 2-21/32" (67 mm) for August; 2-15/32" (63 mm) for WithnellEscutcheon:1-11/16" x 7-7/8" (43 mm x 200 mm)Finishes:US3, US4, US10, US10B, US26, US26D



46NL Night Latch

Function: Levers: Projection: Escutcheon: Finishes: Cylinder: 03 - Key retracts latchbolt Archer, August, Withnell (rigid lever) 2-5/8" (67 mm) for Archer; 2-21/32" (67 mm) for August; 2-15/32" (63 mm) for Withnell 1-11/16" x 7-7/8" (43 mm x 200 mm) US3, US4, US10, US10B, US26, US26D Rim cylinder, 3901, with long tailpiece sold separately



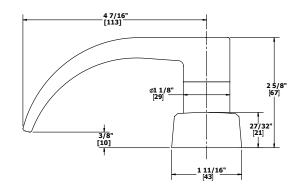




4600 SERIES ESCUTCHEON TRIM - LEVER OPTIONS

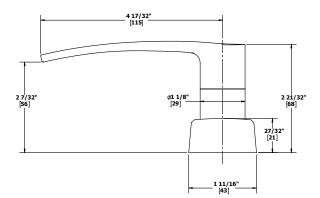
ARCHER LEVER





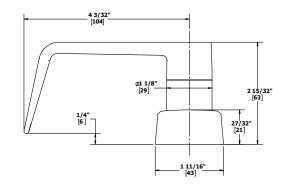
AUGUST LEVER





WITHNELL LEVER







4600 SERIES STRIKES



4920

Strike Optional strike to be used with 4600 Series Rim exit device Finishes: US32D Notes: For standard surface mounted applications



4920F

Fire Rated Strike Included standard with 4600 Series Fire Rated Rim exit device Finishes: US32D Notes: For standard surface mounted applications



4950

Blade Stop Strike Included standard with 4600 Series Rim exit device US32D Finishes:



4960R Shim Kit

To be used with 4600 Series Rim exit device where a glass bead kit would interfere with exit device Finishes: US3, US4, US10,

Packaging:

US10B, US26, US26D, US32D Two (2) each 1/8" (3 mm) shims and appropriate fasteners

3902, sold separately

• Specify 36" (914 mm)

or 48" (1219 mm)



4951 **Single Rabbit Strike**

Optional strike to be used with 4600 Series Rim exit device Finishes: US32D



4965

Head Cover For use with 4600 Series Rim exit device Finishes: US3, US4, US10, US10B, US26, US26D, US32D One (1) head cover and Packaging: four (4) each M4 x 6mm MS



4952 Semi-Flush Mount Strike

Optional strike to be used with 4600 Series Rim exit device Finishes: US32D

4600 SERIES

4600 SERIES ACCESSORIES

Cylinder Dogging Conversion Kit Finishes: US3, US4, US10,

US10B, US26, US26D, US32D Packaging: One (1) each dogging plate, cylinder collar, cash box nut Mortise cylinder,

Notes:

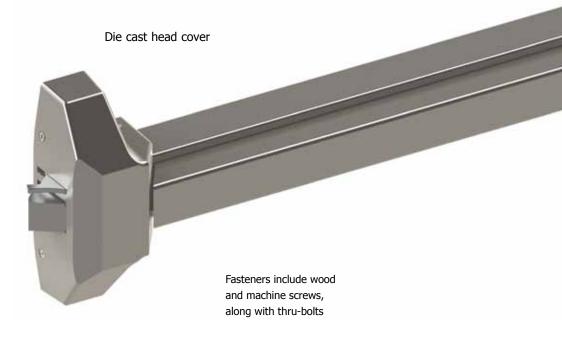
4925



4700 Series



Hager 4700 Series exit device is ideal for standard duty commercial applications. It is UL listed for up to 3 hours (Rim) or 1-1/2 hours (SVR) fire doors, meets UL specifications for panic hardware, and is Severe Windstorm Resistant approved (Rim device only). It is constructed with die cast head covers and is packaged for convenience and versatility with thru-bolts included.



3/4" (18 mm) dead latching, stainless steel, Pullman type latchbolt



GENERAL INFORMATION

Hager's 4700 Series exit devices meet Life Safety codes and Fire Safety requirements providing a perfect fit for use in light commercial and standard duty applications. The 4700 Series is UL305 Panic Listed and UL and cUL listed for up to 3 hour rated fire doors for the Rim device and 1-1/2 hours for the Surface Vertical Rod device. The 4700 Series Rim device also meets the requirements of ANSI A250.13 to be listed as a Severe Windstorm Resistant Component. The 4700 Series has a five-year warranty for devices and trims.

Installation Made Easy

For the convenience of our customers, Hager Companies has introduced some new features to the exit device market.

- Thru-bolts are included with every model. Wood and machine screws are also provided standard in every package.
- Slotted strikes speed up installation, allowing the installer to make easy adjustments to align the latch to the strike.
- Escutcheon trim, with the locking mechanism built inside, reduces door preparation by requiring fewer holes in the door.

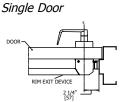
Shim Kits

Shim kits are available for devices on doors with glass bead kits or other interfacing moldings. Each kit contains two 1/8'' (3.2 mm) shims and the appropriate longer fasteners.

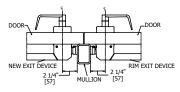
Sizing

The exit device is cut for 36" (914 mm) and 48" (1219 mm) wide doors. For other door widths, cut exit device to appropriate length. Recommended overall length of exit device is equal to the door width minus four inches. The surface vertical rod devices are supplied for an 84" (2134 mm) opening standard, but can be ordered for a 96" (2438 mm) opening. Extension rods are available to accommodate openings taller than 96" (2438 mm) up to 120" (3048 mm).

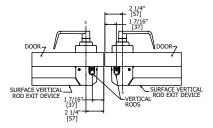
Applications



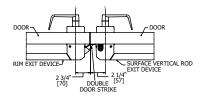
Double Door with Mullion



Double Door (2 SVR Devices)



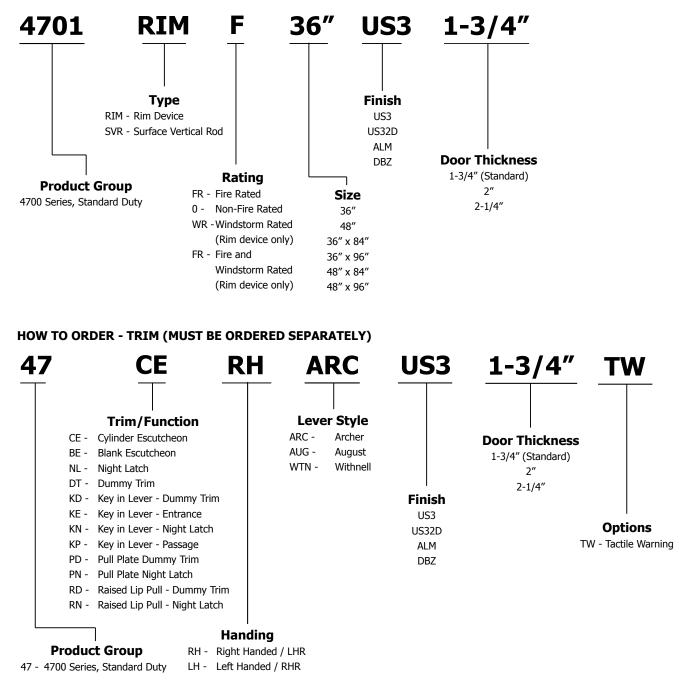
Double Door (SVR x Rim)



Trim Functions	Part Number	Function Description	ANSI Number
Blank Escutcheon	47BE 47KP	Always operable (Passage)	14
Cylinder Escutcheon	47CE 47KE	Key locks or unlocks lever	08
Dummy	47DT 47KD 47RD	Pull when device is dogged down (specify handing when ordering)	02
Night Latch	47NL 47KN 47PN 47RN	Key retracts latchbolt (specify handing when ordering)	03



HOW TO ORDER



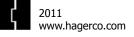
Notes:

- 1. Handing is required for the 4700 Series trim.
- 2. Mortise cylinder 3902 is required for use with cylinder escutcheon and is sold separately.
- 3. For more cylinder information, please refer to General Information in the lock section of the catalog.
- 4. If using shim kit, specify total door thickness including shims.

\bigcirc	EXIT DEVICES
	4700 Series Standard Duty Rim Device Ideal for light commercial and standard duty applications • Five-year warranty • Thru-bolts supplied standard
Applications:	Light commercial
Certifications:	 Standard duty commercial UL305 Listed for panic hardware UL/CUL Listed for up to 3 hours for "A" label fire doors UL10C/UBC 7-2 (1997) Positive Pressure Rated UL10B Neutral Pressure Rated ANSI A250.13 Severe Windstorm Resistant Component (Rim device only)
Trim:	 Complies with ANSI 117.1 for accessible buildings and facilities Hex dogging feature standard on non-fire rated panic doors Archer, August, or Withnell lever with escutcheon Archer, August, Withnell lever with key-in-lever trim Raised lip pull Pull plate trim Rim cylinder x optional pull
Covers:	Casted brass, bronze, stainless steel, zinc
Chassis:	Painted steel, plated steel, stainless steel
End Caps: Door Width:	Painted steel, plated steel, stainless steel • 36" (914 mm) field sizeable to 30" (762 mm) door • 48" (1219 mm) field sizeable to 36" (914 mm) door
Door Thickness:	1-3/4" (44 mm) - Standard
Projection:	 2-7/16" (62 mm) in undogged position 1-3/16" (30 mm) in dogged position
Stile Width:	 4-1/2" (114 mm) - Minimum stile width required for single door and 5/8" (16 mm) stop 4-1/2" (114 mm) - Minimum stile width required for double door x surface vertical rod device with double door strike 5" (127 mm) - Minimum stile width required for double doors with 2" (51 mm) mullion All stile widths are measured from door edge
Fasteners:	Wood and machine screws Thru-bolts
Latchbolt:	3/4" (19 mm) throw, pullman type with automatic dead-latching, stainless steel
Strikes:	Stainless steel with roller - Included standard with panic and fire rated devices Surface applied to frame with slotted heles for easy adjustment
	 Surface applied to frame with slotted holes for easy adjustment Optional double door strike for use with surface vertical rod and rim devices
Finishes:	US3, ALM, DBZ, US32D
Notes:	Cylinders sold separatelyRecommended to be used on appropriately reinforced doors



-	4700 Series Standard Duty Surface Vertical Rod Device Ideal for light commercial and standard duty applications • Five-year warranty • Thru-bolts supplied standard
Applications:	Light commercial
Applications.	Standard duty commercial
Certifications:	UL305 Listed for panic hardware
	 UL/cUL Listed for up to 1/2" hours for "A" label fire doors UL10C/UBC 7-2 (1997) Positive Pressure Rated
	UL10B Neutral Pressure Rated
	 Complies with ANSI 117.1 for accessible buildings and facilities
Trime	Hex dogging feature standard on non-fire rated panic doors
Trim:	 Archer, August, or Withnell lever with escutcheon Archer, August, Withnell lever in key-in-lever trim
	Raised lip pull
	Pull plate trim
	Rim cylinder x optional pull
Covers: Chassis:	Casted brass, bronze, stainless steel, zinc Painted steel, plated steel, stainless steel
End Caps:	Painted steel, plated steel, stainless steel
Door Width:	• 36" (914 mm) field sizeable to 30" (762 mm) door
	• 48" (1219 mm) field sizeable to 36" (914 mm) door
Door Height:	• 7' (2134 mm) - Standard
	 8' (2438 mm) - Optional 10' (3048 mm) - Optional (with use of extension rods) - Panic only
Door Thickness:	1-3/4" (44 mm) - Standard
Projection:	• 2-7/16" (62 mm) in undogged position
	• 1-3/16" (30 mm) in dogged position
Stile Width:	• 4-1/2" (114 mm) - Minimum stile width required for single door and 5/8" (16 mm) stop
	 4" (102 mm) - Minimum stile width required for double doors 4-1/2" (114 mm) - Minimum stile width required for double door x Rim device with double door strike
	All stile widths are measured from door edge
Fasteners:	Wood and machine screws
	• Thru-bolts
Latchbolt:	• Top - 3/8" (9 mm) throw, with automatic dead-latching, stainless steel
Rod Length:	 Bottom - 3/8" (9 mm) throw, held retracted during door swing, stainless steel Rods for 7' (2134 mm) door - Standard
Rou Length	• Rods for 8' (2438 mm) door - Optional
	 Door height of 6' 8" (2032 mm) requires 31-1/4" (794 mm) top rod length
	• Door height of 7' (2134 mm) requires 35-1/4" (895 mm) top rod length
	• Door height of 8' (2438 mm) requires 47-1/4" (1200 mm) top rod length
Strikes:	 Extension rods available, 2' (610 mm) or 3' (914 mm) for doors over 7' (2134 mm). Stainless steel with plated roller - Included Standard
Strikest	Surface applied to frame with slotted holes for easy adjustment
	 Optional double door strike for use with surface vertical rod and rim devices
	Optional threshold strike for use with saddle threshold
Finishes:	US3, ALM, DBZ, US32D • Recommended to be used on appropriately reinforced doors
Notes:	Recommended to be used on appropriately reinforced doors





4700 SERIES ESCUTCHEON TRIM



47BE Blank Escutcheon

Function: 14 - Always operable (Passage) Levers: Archer, August, Withnell Projection: 2-7/8" (73 mm) for Archer; 2-7/8" (73 mm) for August; 2-3/4" (70 mm) for Withnell Escutcheon: 2-5/8" x 8" (67 mm x 203 mm) Finishes: ALM, DBZ, US3, US32D Handing: Specify when ordering



47CE Cylinder Escutcheon

Function: 08 - Key locks or unlocks lever Archer, August, Withnell Projection: 2-7/8" (73 mm) for Archer; 2-7/8" (73 mm) for August; 2-3/4" (70 mm) for Withnell 2-5/8" x 8" (67 mm x 203 mm) Escutcheon: ALM, DBZ, US3, US32D Finishes: Cylinder: Requires the use of a mortise cylinder, 3902, sold separately Handing: Specify when ordering



47DT Dummy Trim

Function:

Projection:

Finishes:

Handing:

Levers:

l evers:

02 - Pull when device is dogged down Archer, August, Withnell 2-7/8" (73 mm) for Archer; 2-7/8" (73 mm) for August; 2-3/4" (70 mm) for Withnell Escutcheon: 2-5/8" x 8" (67 mm x 203 mm) ALM, DBZ, US3, US32D Specify when ordering



47NL Night Latch

Levers:

Function: 03 - Key retracts latchbolt Archer, August, Withnell Projection: 2-7/8" (73 mm) for Archer; 2-7/8" (73 mm) for August; 2-3/4" (70 mm) for Withnell 2-5/8" x 8" (67 mm x 203 mm) Escutcheon: Finishes: ALM, DBZ, US3, US32D Cylinder: Requires the use of a mortise cylinder, 3902, sold separately Handing: Specify when ordering



4700 SERIES

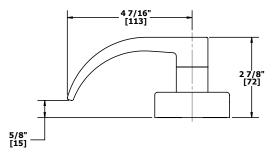




4700 SERIES ESCUTCHEON TRIM - LEVER OPTIONS

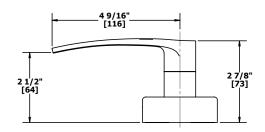
ARCHER LEVER





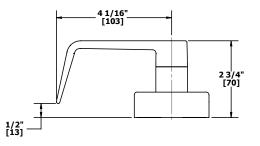
AUGUST LEVER





WITHNELL LEVER









4700 SERIES KEY-IN-LEVER TRIM



47KD

Key in Lever Dummy Trim

Function:02 - Entrance by trim when actuating bar is locked downLevers:Archer, August, WithnellProjection:3-1/16" (78 mm) for Archer; 3-1/8" (81 mm) for August; 3-1/16" (78 mm) for WithnellRose Diameter:3-3/8" (86 mm)Finishes:ALM, DBZ, US3, US32D



47KE

Key in Lever EntranceFunction:08 - Entrance by lever; key locks or unlocks leverProjection:3-1/16" (78 mm) for Archer; 3-1/8" (81 mm) for August; 3-1/16" (78 mm) for WithnellRose Diameter:3-3/8" (86 mm)Finishes:ALM, DBZ, US3, US32DCylinder:• Standard core, C keyway - Standard
• Small Format Interchangeable Core housing available, cylinder sold separately, 3981Keys:Two (2) brass keys per lock



4700 SERIES

47KN

Key in L	ever Nig	ht Latch
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Function:	03 - Entrance by trim when latch bolt is released by key; key is removable when
	locked
Levers:	Archer, August, Withnell
Projection:	3-1/16" (78 mm) for Archer; 3-1/8" (81 mm) for August; 3-1/16" (78 mm) for Withnell
,	
Rose Diameter:	3-3/8″ (86 mm)
Finishes:	ALM, DBZ, US3, US32D
Cylinder:	Standard core, C keyway - Standard
0,	
	• Small Format Interchangeable Core housing available, cylinder sold separately, 3981
Keys:	Two (2) brass keys per lock



47KP

Key in Lever Passage

Function:14 - Entrance by trim when latch bolt is released by lever; always active, no cylinderLevers:Archer, August, WithnellProjection:3-1/16" (78 mm) for Archer; 3-1/8" (81 mm) for August; 3-1/16" (78 mm) for WithnellRose Diameter:3-3/8" (86 mm)Finishes:ALM, DBZ, US3, US32D



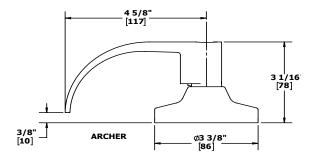




4700 SERIES KEY-IN-LEVER TRIM - LEVER OPTIONS





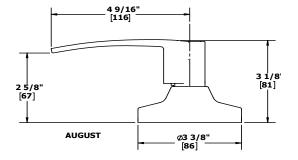


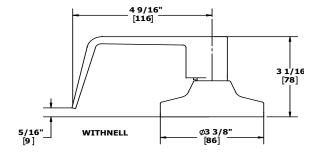
AUGUST LEVER



WITHNELL LEVER









4700 SERIES PULL PLATE TRIM



47PD

Dummy Trim Function: Projection: Escutcheon: Pull CTC: Finishes:

02 - Pull when device is dogged down 1-3/4" (44.5 mm) 3" x 11" (76 mm x 279 mm) 5-1/2" (140 mm) ALM, DBZ, US3, US32D



47PN Night Latch Function:

Projection:

Finishes:

Cylinder:

Notes:

Escutcheon: Pull CTC:

03 - Key retracts latchbolt 1-3/4" (44.5 mm) 3" x 11" (76 mm x 279 mm) 5-1/2" (140 mm) ALM, DBZ, US3, US32D Requires the use of a rim cylinder, 3901, sold separately Supplied with retaining cup for use with 161 door prep

4700 SERIES RAISED LIP TRIM



47RD

Raised Lip Pull Dummy Function: Size: Projection: Finishes:

02 - Pull when device is dogged down 3" x 7-3/4" (76 mm x 197 mm) 1" (25 mm) ALM, DBZ, US3, US32D



47RN Raised Lip Pull Night Latch

Size:

Function: 03 - Key retracts latchbolt 3" x 7-3/4" (76 mm x 197 mm) 1" (25 mm) Projection: ALM, DBZ, US3, US32D Finishes: Requires the use of a Rim cylinder, 3901, sold separately Cylinder: Must purchase retaining cup, 2-649-0137, separate for 161 door prep Notes:

4700 SERIES



4700 SERIES STRIKES



4910

Strike Included standard with 4700 Series Rim exit device Finishes: US32D



4700 SERIES ACCESSORIES

4917

4918

exit device Finishes:

Packaging:

Top Latch Assembly

Bottom Latch Assembly

For use with 4700 Surface Vertical Rod exit device Finishes: US3, ALM, DBZ, US32D Packaging: One (1) bottom latch with cover and appropriate fasteners

For use with 4700 Surface Vertical Rod

US3, ALM, DBZ, US32D One (1) top latch with cover

and appropriate fasteners



4911

Double Door Strike Optional strike for use with 4700 Series Surface Vertical Rod and Rim exit device Finishes: US32D



4913 Top Strike

Included standard with 4700 Series Surface Vertical Rod exit device Finishes: US32D Note: Can be used for both panic and fire rated surface vertical rod

devices



4919

Top Rod Replacement Kit

For use with 4700 Surface Vertical Rod exit device Finishes: US3, ALM, DBZ, US32D Packaging: One (1) each 47-1/4" (1200 mm) rod, rod guide, rod connector assembly, and appropriate fasteners



4914

Bottom Strike Included standard with 4700 Series Surface Vertical Rod exit device Finishes: US32D



4915 Threshold Strike

Optional strike for use with surface vertical rod exit device and saddle threshold Finishes: US32D



4931R Shim Kit

To be used with 4700 Rim exit devices where a glass bead kit or molding would interfere with exit device Finishes: US3, ALM, DBZ, US32D Packaging: Two (2) each 1/8" (3 mm) shims and appropriate

shims and appropriate fasteners



4700 SERIES ACCESSORIES (CONTINUED)

4931S Shim Kits

To be used with 4700 Series Surface Vertical Rod exit devices where a glass bead kit or molding would interfere with exit device Finishes: US3, ALM, DBZ, US32D

fasteners

Two (2) each 1/8" (3 mm)

shims and appropriate

Packaging:



4933R

Head Cover For use with 4700 Series Rim exit device US3, ALM, DBZ, US32D Finishes: One (1) head cover with Packaging: four (4) each M4 x 6 mm MS

4933S Head Cover

For use with 4700 Series Surface Vertical Rod exit device Finishes: US3, ALM, DBZ, US32D One (1) head cover with Packaging: four (4) each M4 x 6 mm MS



4934

Non-Fire Rated Dogging Plate

For use with 4700 Series exit devices Finishes: US3, ALM, DBZ, US32D One (1) each dogging plate Packaging: and hex key



4934F

Fire Rated Dogging Plate

For use with 4700 Series exit devices Finishes: US3, ALM, DBZ, US32D

4936

24" Extension Rod Kit

For use with 4700 Series Surface Vertical Rod exit device Finishes: US3, ALM, DBZ, US32D One (1) each Packaging: 24" (610 mm) extension rod, rod connector, rod guide, plus wood and machine screws Threaded on both ends; if Notes: cuts are required, cut the standard top rod on nonthreaded end.

4937

36" Extension Rod Kit

For use with 4700 Series Surface Vertical Rod exit device

US3, ALM, DBZ, US32D Finishes: One (1) each 36" (914 mm) Packaging: extension rod, rod connector, rod guide, plus wood and machine screws Threaded on both ends; if cuts are required, cut the standard top rod on non-

threaded end.

Notes:

4700 SERIES



4900 Series



Hager 4900 Series offers both a keyed removable mullion and a non-keyed removable mullion. Both are designed for use on double door openings with rim devices--providing increased security and tighter closure, while providing easy adaptation for full width access. Our 4900 Series consists of a mullion, top and bottom brackets, and screw pack. It is UL listed for 3 hours on fire rated pairs of doors up to 8 feet by 8 feet.



Latching head allows mullion to be removed in seconds; mullion can be locked into place without use of key

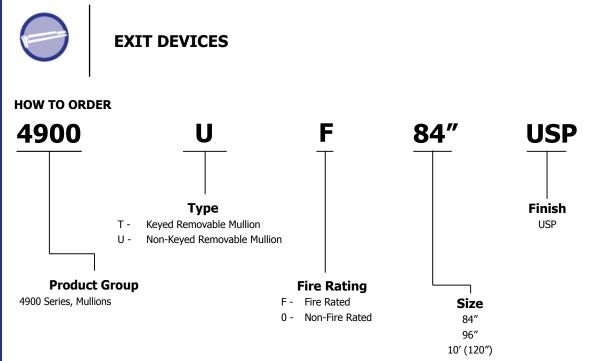
Utilizes standard rim cylinder

2" x 3", 11 gauge steel tube with primecoat

1/2" (13 mm) and

supplied standard

5/8" (16 mm) shims



Notes:

- Keyed removable mullion requires cylinder, 3901, sold separately. Fire rated strike and hook kits sold separately (4912 for use with 4500 Series fire rated exit device and mullion or 4916 for 1. 2. use with 4700 Series fire rated exit device and mullion). Stabilizer kit, 4953, sold separately.
- 3.









4900KR

Keyed Removable Mullion

- One-year warrantyKey removable
- Shim kits supplied standard

Applications: Certifications:	For use with 4500 Series and 4700 Series Rim exit devices on non-fire and fire rated pairs of doors UL/cUL/Warnock Hersey listed for fire rated pairs of doors up to 8' (2438 mm) X 8' (2438 mm)
Mullion:	2" x 3" (51 mm x 76 mm) – 11 gauge steel tube
Cylinders:	 Solid brass 6-pin rim cylinders, 3901, sold separately
	 Standard core, C keyway - Standard
	 Small Format Interchangeable Core sold separately
Top Fitting:	Dead latch on fire rated device
	 Latching head allows the mullion to be removed in seconds
	 Mullion can be locked in place without the use of a key
Fasteners:	• Four (4) 8 - 32 x 3/4" (19 mm) FPHMS
	• Four (4) 5/16" - 18 x 5/8" (16 mm) FPHMS
	• Two (2) 5/16" - 18 x 1-1/2" (38 mm) FPHMS
	• Two (2) 3/8" Wedge anchors
Shims:	 1/2" (13 mm) and 5/8" (16 mm) shims included (top)
	• 1/8" (4 mm) shims included (bottom)
Strikes:	 Non-fire rated mullions use standard Rim strike supplied with exit device
	• Fire rated strike and hook kit, 4912 (4500 Series) or 4916 (4700 Series), must be purchased separately
Finishes:	USP – grey primer only

4900T

9	4900T Non-Fire Rated Mullion Set		4900TF Fire-Rated Mullion Set		
	Certification:	Non-fire rated		Certification:	UL fire rated
	Dimensions:	84″ (2134 mm), 96″ (2438 mm),		Dimensions:	84″ (2134 mm), 96″ (2438 mm)
	Material:	120" (3048 mm) 11 gauge steel tube		Material:	11 gauge steel tube



4900KR CYLINDERS



3901 **Rim Cylinder**

Fixed cylinder standard and Small Format Interchangeable Core both sold separately. For more cylinder information, please refer to the lock section in this catalog.





4902 **Top/Bottom Bracket Set**

Certification: Function: Materials: Fasteners:



Cylinder:

Steel Two (2) each MS #5/16 -18 x 1-1/2" FHP stainless; four (4) each MS #8-32 x 3/4" 100 degree FHP; four (4) each MS #5/16-18 x 5/8" FHP stainless zinc plated Rim cylinder, 3901, sold separately

Non-fire rated

Keyed Removable



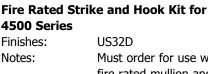
4907 **Mullion Tube**

Certification:

Dimensions:

Finishes: Materials: Fire-rated up to 96" (2438 mm) 84" (2134 mm), 96" (2438 mm), 120" (3048 mm) USP grey primer Steel

4912



Must order for use with fire rated mullion and fire rated Rim devices to ensure fire rating

4916

Fire Rated Strike and Hook Kit for 4700 Series

Finishes: Notes:

Finishes:

Notes:

US32D • Must order for use

- with fire rated mullion and fire rated Rim devices to ensure fire rating
- For use with 4900NKR mullion only



4902F

Cylinder:

Fire-Rated Top/Bottom Bracket Set Certification: Function: Materials: Fasteners:

Fire rated Keyed removable Steel Two (2) each MS #5/16 - 18 x 1-1/2" FHP stainless; four (4) each MS #10 x 1" Type A FHP undercut stainless; four (4) each MS 10 - 24 x 5/8" FHP undercut stainless; four (4) each MS #5/16 - 18 x 5/8" FHP stainless zinc plated Rim cylinder, 3901, sold separately



4953 **Mullion Stabilizer Kit**

US32D

For use with mullion and exit devices for added security











4900NKR

4900U

Certification:

Dimensions:

Material:

Non-Fire Rated Mullion Set

Non-fire rated

84" (2134 mm),

96" (2438 mm), 120" (3048 mm)

11 gauge steel tube

Non-Keyed Removable Mullion

- One-year warranty
- Shim kits supplied standard

Applications: Certifications: Mullion: Fasteners:	For use with 4500 Series and 4700 Series Rim exit devices on non-fire and fire rated pairs of doors UL/CUL Listed for fire rated pairs of doors up to 8' (2438 mm) X 8' (2438 mm) 2" (51 mm) x 3" (76 mm) – 11 gauge steel tube • Four (4) each $5/16" - 18 \times 5/8"$ FHPMS (top bracket) • Two (2) each $5/16" - 18 \times 1-1/2"$ FHPMS (top bracket) • Four (4) each $5/16" - 18 \times 1-1/2"$ FHMS (bottom bracket)* • Four (4) each $5/16" - 18$ masonry anchors ($5/8"$ diameter x $7/8"$ long) (bottom bracket)** • Two (2) each $1/4" - 20 \times 1-1/4"$ FHPMS (top fitting) • Two (2) each $1/4" - 20$ thru bolts (top fitting) • Two (2) #10 - 24 \times 3/8" FHPMS (top fitting) • One (1) $1/4 - 20 \times 3/16"$ set screw (top fitting) * Fire rated device - $5/16" - 18$ masonry anchors ($1/2"$ diameter x $1-1/2"$ long)
Shims:	 Two (2) each 1/2" (13 mm) and 5/8" (16 mm) shims included (top) Two (2) 1/16" (1.6 mm) shims included (bottom)
Strikes:	 Non-fire rated mullions use standard Rim strike supplied with exit device Fire rated strike and hook kit, 4912 (4500 Series), or 4916 (4700 Series), must be purchased separately
Finishes: Notes:	USP – grey primer only Mullion easily removed by loosening top and bottom screws

4900UF

Fire-Rated Mullion Set

UL fire rated*				
84″ (2134 mm),				
96″ (2438 mm),				
11 gauge stainless steel tube				



4900NKR ACCESSORIES



4904

Certification: Function: Materials:

Top/Bottom Bracket Set Non-fire rated Non-keyed removable

Steel



4912

Notes:

Fire Rated Strike and Hook Kit for 4500 Series Finishes: US32D

Must order for use with fire rated mullion and fire rated Rim devices to ensure fire rating

4904F

Certification: Function: Materials:

Fire-Rated Top/Bottom Bracket Set Fire-rated Non-keyed removable Steel



4916

Fire Rated Strike and Hook Kit for 4700 Series Finishes: Notes:

US32D Must order for use with fire rated mullion and fire rated Rim devices to ensure fire rating



4905

Mullion Tube Certification: Dimensions:

Finishes: Materials: Notes:

- Fire-rated • 84" (2134 mm)
- 96" (2438 mm)
- 120" (3048 mm) USP grey primer Steel

120" (3048 mm) not fire rated



4953 **Mullion Stabilizer Kit**

Finishes: Notes:

US32D For use with mullion and exit devices for added security





2010 Condensed Catalog





INDUSTRY-LEADING SERVICE

The Hager products on the following pages are known and used the world over because of their legendary quality and practical value. But for 160 years, Hager has also led the industry in service, both before and after the sale, that other manufacturers simply can't match.

Today, Hager has opened the door to providing new levels of customer service by providing complimentary Architectural Hardware Consulting (AHC) services, including complete specification writing services. By using Hager's in-house team of experts to write your specifications, you can save your firm time and money, leaving your staff free for more profitable pursuits.

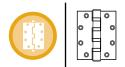
What's more, with Hager, you're guaranteed a truly objective spec every time. We won't just list the products we manufacture, we'll look at hardware that fits both the design and construction requirements of your project. That's the type of truly competitive comparison that can amount to significant savings in the overall cost of your project's door hardware.

Hager's experience and expertise also make us a complete resource you can trust when you need new ideas, answers to questions, recommendations on meeting your budget, or simply an objective opinion. We want to be the door hardware partner you count on throughout the entire lifecycle of your project--which is why we're proud to offer a complete range of complimentary consulting services that include:

- Door hardware specification writing
- Design development
- Budget preparation
- Code compliance
- Submitted schedules review and approval
- Technical project support







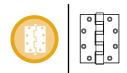


LEGENDARY QUALITY

In the mid 1800s, Charles Hager had a successful business forging metal wheel rims and hinges for wagons headed west. As a smart businessman who valued quality and innovation, Charles soon became a pioneer in product development, designing a revolutionary hinge that became a prototype for more than 5,000 hinges to follow.

Today, the Hager name is synonymous with architectural hinges. In fact, we are the industry's premiere designer and manufacturer of architectural hinges, with a product line that offers one of the widest varieties of sizes, shapes, and finishes--all of which meet or exceed ANSI standards. With legendary quality, time-tested durability, and consistent superior performance, Hager is the one name, and one brand, you can count on to provide it all.





ARCHITECTURAL HINGES

Full Mortise Standard Weight

- Low/medium frequency
- Use with hollow metal or wood doors
- * Also available in wide throw



Plain Bearing Steel





Two Knuckle

AB800* Concealed Anti-Friction Bearing Brass or Stainless Steel



Ball Bearing Steel









AB930 Concealed Anti-Friction Bearing Steel



AB750* Concealed Anti-Friction Bearing Steel



BB1168* Four Ball Bearing Steel



AB920 Concealed Anti-Friction Bearing Steel



800 Plain Bearing Brass or Stainless Steel







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BB1191* Ball Bearing Brass or Stainless Steel



Concealed Anti-Friction Bearing Brass or Stainless Steel



AB850* Concealed Anti-Friction Bearing Brass or Stainless Steel



BB1199* Four Ball Bearing Brass or Stainless Steel



AB923 Concealed Anti-Friction Bearing Brass or Stainless Steel



AB700* Concealed Anti-Friction Bearing Steel



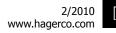
1191* Plain Bearing Brass or Stainless Steel

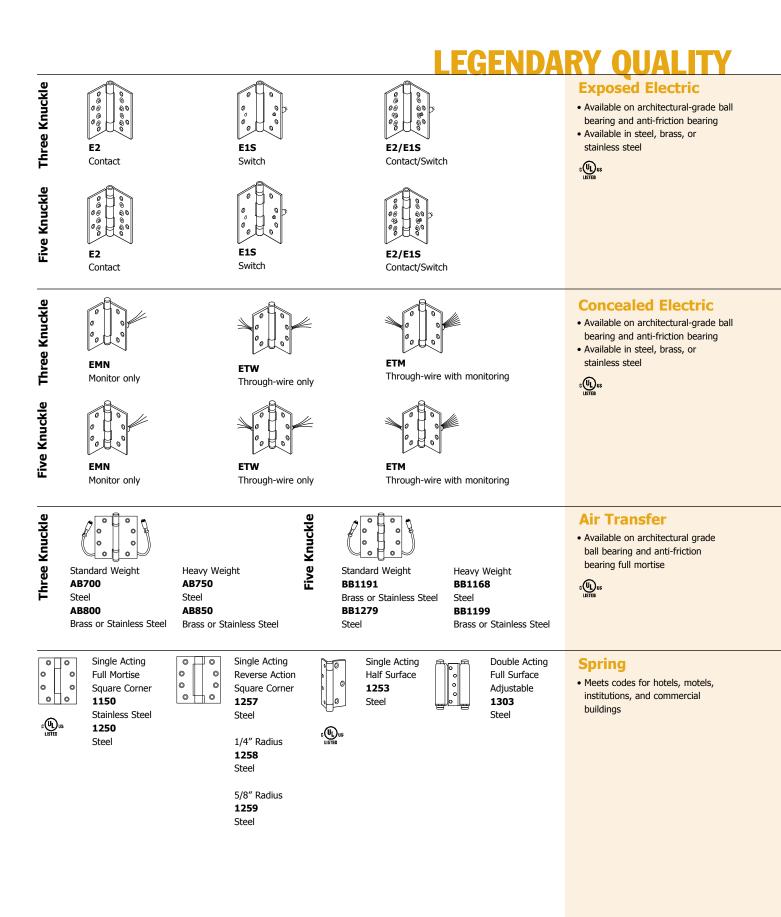


CB1191 Concealed Bearing Secure Coat® Lifetime Brass

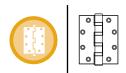
Full Mortise Heavy Weight

- High frequency
- · Use with hollow metal or wood doors
- * Also available in wide throw

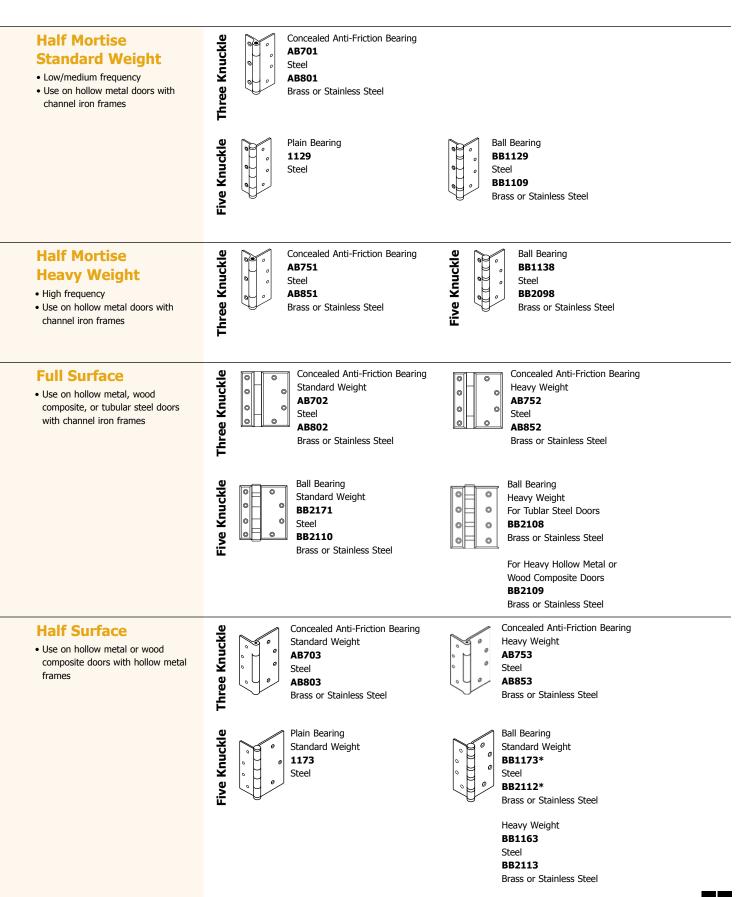








ARCHITECTURAL HINGES



*Two ball bearings



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С

С

Full Mortise

Steel

Standard Weight

AB7001/AB7002

Plain Bearing Standard Weight

Both Leaves Tapped 1277 Steel 1577

Brass or Stainless Steel

One Leaf Tapped 1278 Steel 1578 Brass or Stainless Steel

Concealed Anti-Friction Bearing



Ball Bearing Standard Weight

Both Leaves Tapped BB1277 Steel BB1577 Brass or Stainless Steel

One Leaf Tapped BB1278 Steel BB1578 Brass or Stainless Steel

Full Mortise Concealed Anti-Friction Bearing Heavy Weight AB7501/AB7502

Steel



Full Surface Concealed Anti-Friction Bearing Heavy Weight AB7523 Steel



- Use in hospitals or other institutional type buildings
- Swings doors completely clear of the opening when door is opened 95°

Aluminum Entrance

• Use on aluminum doors with

aluminum frames



NDARY



Half Mortise Concealed Anti-Friction Bearing Heavy Weight AB7511/AB7512 Steel



Three Knuckle



Full Mortise Plain Bearing Standard Weight For Square Edge Doors 1260 Steel



Full Mortise Four Ball Bearing Heavy Weight BB1262/BB1263 Steel BB1362/BB1363 Stainless Steel



Half Surface Four Ball Bearings Heavy Weight BB1270 Steel



Full Mortise Two Ball Bearing Standard Weight BB1260/BB1261 Steel

BB1360/BB1361 Stainless Steel



Half Mortise Four Ball Bearing Heavy Weight

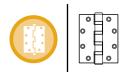
For Square Edge Doors BB1264 Steel

For Beveled Edge Doors BB1265 Steel

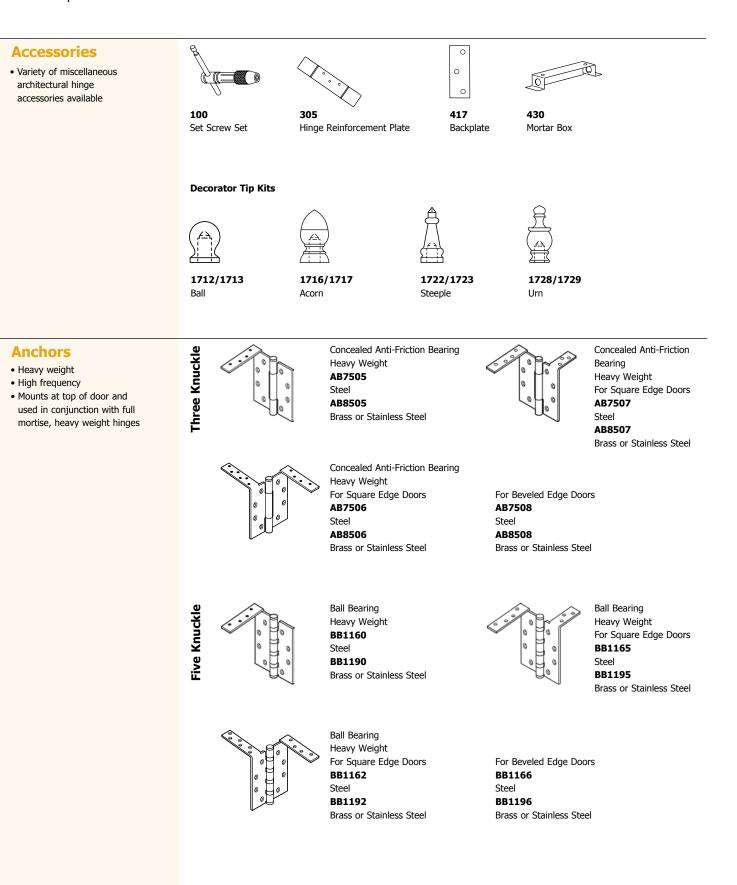
Full Surface Four Ball Bearings Heavy Weight BB1266 Steel

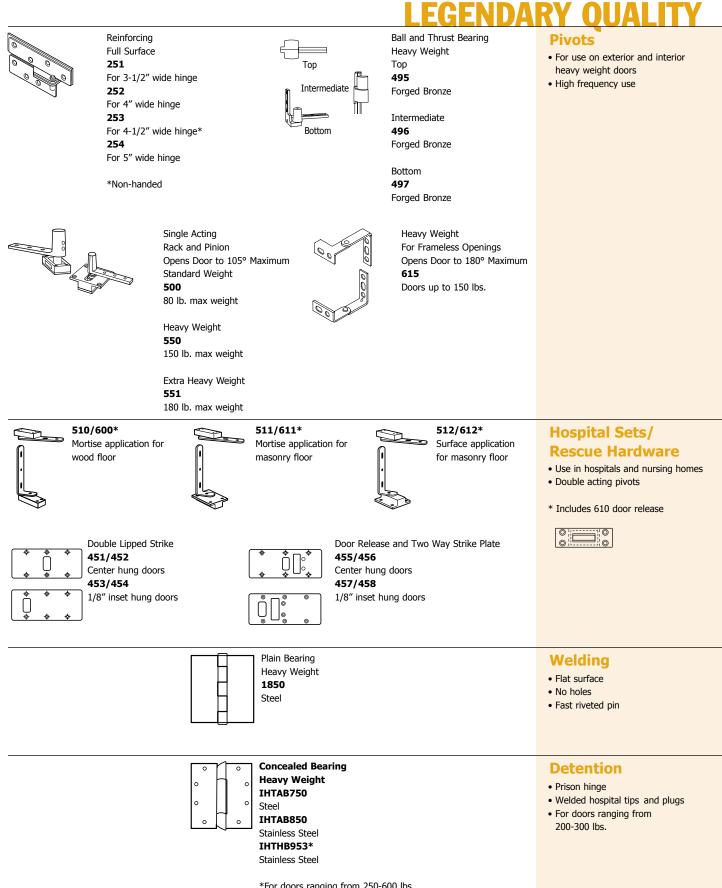
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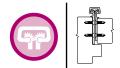


ARCHITECTURAL HINGES





*For doors ranging from 250-600 lbs.



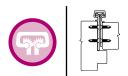


INNOVATIVE ENGINEERING

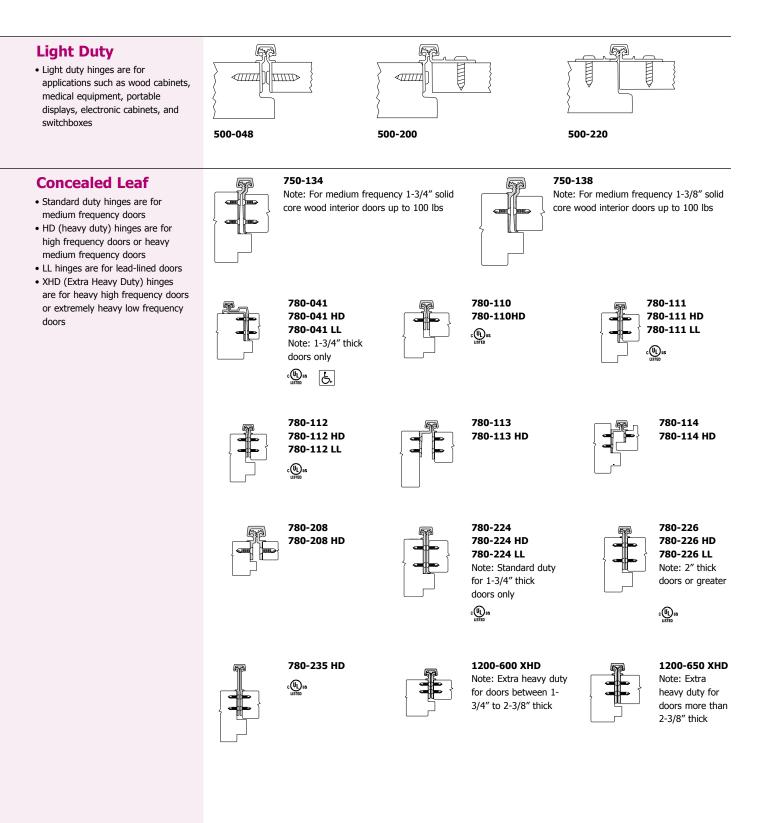
You design and build structures that need to withstand the realities of daily use. The engineers and product development experts at Hager understand how building entrances and exits are used in the real world. That's why we design our roton continuous geared hinges to provide superior performance you can rely on in hightraffic areas.

Our roton continuous geared hinges use a unique rotating joint — not a pin — to minimize lateral wear on the hinge while evenly distributing door weight along the full length of the frame. Roton continuous hinges are ideal for new construction or retrofit applications.

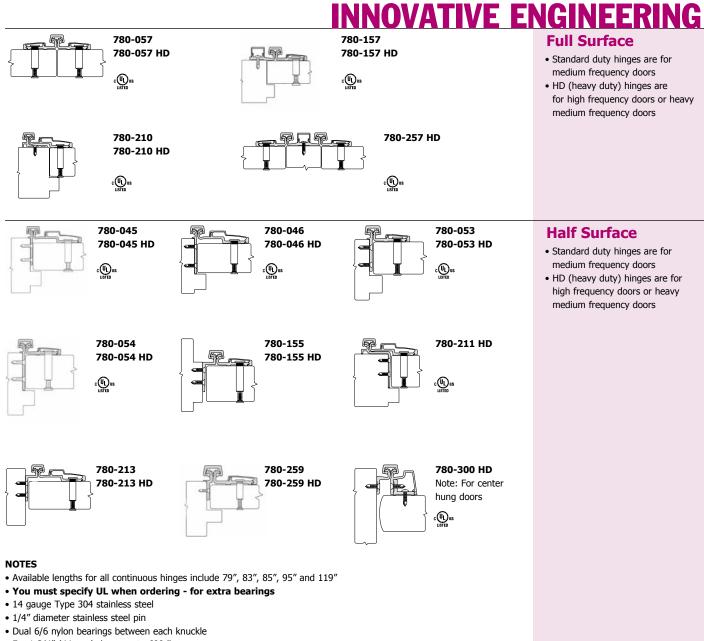




ROTON CONTINUOUS GEARED HINGES



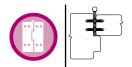




- For 1-3/4" (44 mm) doors up to 600 lbs.
- Concealed Electric Through Wire (ETW), Electric Power Transfer (EPT) and Exposed Electric Switches (E1S) are available on Concealed Stainless Steel Continuous Hinges
- Exposed Contacts (E), Exposed Electric Switches (E1S), Concealed Electric Through Wire (ETW), Concealed Electric Monitoring (EMN), Concealed Electric Through Wire and Monitoring (ETM), Electric Power Transfer (EPT), and Removable Electric Through Wire (RETW) are available on Roton Continuous Geared Hinges

Available on all Continuous Hinges:

- Dutch Door
- Hospital Tips
- Custom Hole Patterns and Hinge Lengths
- Special Finishes

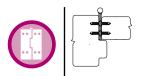




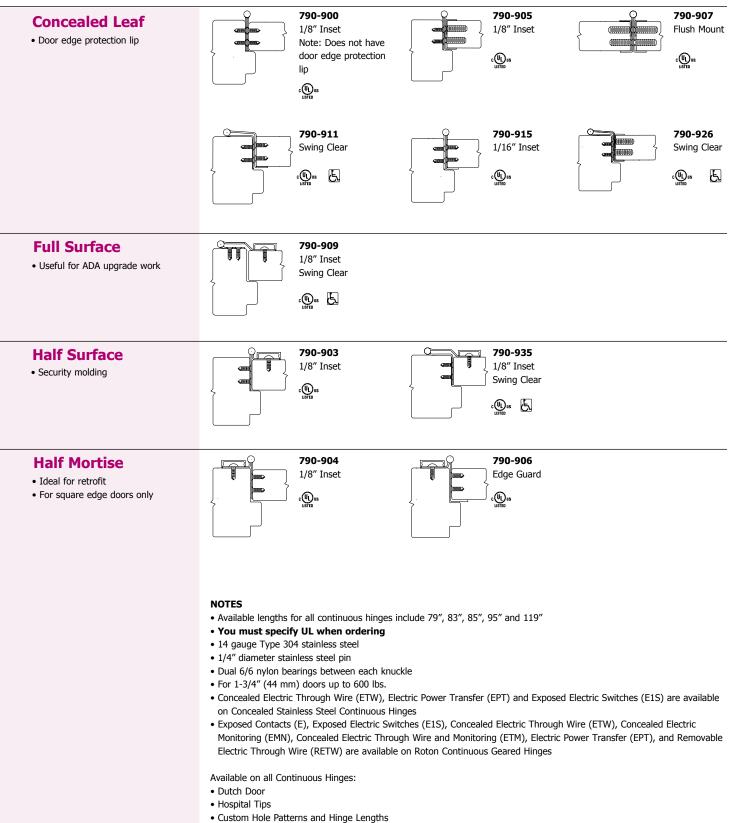
SECURE STABILITY

Hager's heavy duty stainless steel continuous hinges offer proven reliability that can stand up to the daily rigors of high-traffic, high-impact areas. They're designed and engineered to evenly distribute door weight along the full length of the door, which eliminates localized stresses on the frame. Our stainless steel continuous hinges also help eliminate stress on closers, automatic operators, and panic and locking hardware by helping doors to stay properly aligned.





STAINLESS STEEL CONTINUOUS GEARED HINGES



Special Finishes



SECURE STABILITY

Electric Modifications

Exposed Electric Switches:

- Miniature push button switch is incorporated in the hinge frame leaf to monitor position of the door.
- Includes three 12" wire leads.
- To order, use symbol "E1S" as a suffix (Example: 790-• 900 85" US32D E1S).
- Each monitoring hinge only needs one E1S switch.
- Specify handing and dimension from top of hinge to centerline of electric through-wire location. Please note the clearance from top of hinge to underside of header, typically 1/16" to 1/8" (1.6 mm to 3.2 mm).
- Templates regarding location of contact switch available • upon request.

Concealed Electric Through-Wire:

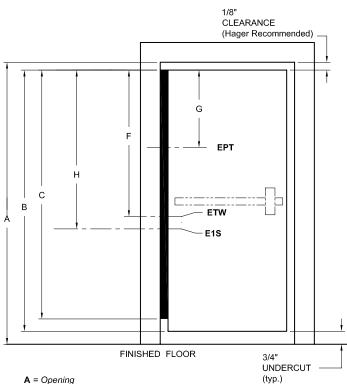
- Transfers power discreetly from building to door hardware.
- Includes four or eight 24 gauge 12" wire leads.
- Includes ten 26 gauge 12" wire leads.
- To order, use symbol "ETW" plus the number of wires • required, as a suffix (Example: 790-900 HD 85" US32D ETW - 4).
- Specify handing and dimension from top of hinge to centerline of electric through-wire location. Please note the clearance from top of hinge to underside of header, typically 1/16" to 1/8" (1.6mm to 3.2 mm).
- Available on the following models: 790-900 & 790-915 •

Von Duprin EPT2 or EPT10 Electric Power Transfer Preparation

- Hinge leaf cutout to accommodate power transfer device.
- Specify handing and dimension from top of hinge to centerline of power transfer cutout location. Please note the clearance from top of hinge to underside of header, typically 1/16" to 1/8" (1.6 mm to 3.2 mm).
- Modification available on models 790-900, 790-903, 790-• 904, and 790-915.

Mortar Box - 430

- Serves as a mortar shield.
- Overall dimensions are 9" (229 mm) length with tabs, 7" (178 mm) (inside), 1-3/4" x 1-3/4" (45 mm x 45 mm) inside dimension
- Galvanized steel 0.040" (1 mm)
- Top and bottom knockouts for standard conduit fittings.



- A = Opening
- B = Door height
- C = Actual hinge length F = C.L. of ETW (electric through-wires)
- G = C.L. of EPT (electric power transfer)
- H = C.L. of $\overline{E1S}$ (exposed switch)

Г						
		79″	83″	85″	95″	119″
	Α	80″	84″	86″	96″	120″
	В	79-1/8″	83-1/8″	85-1/8″	95-1/8″	119-1/8″
	С	79-3/16″	83-1/8″	85-1/8″	95″	118-3/4″
	F	41-1/2″	43-1/2″	45-1/2″	55-3/8″	79-1/8″
	G	24-1/2″	28-7/16″	30-7/16″	40-1/2″	64-7/16″
	н	41-1/2″	43-1/2″	45-1/2″	55-3/8″	79-1/8″



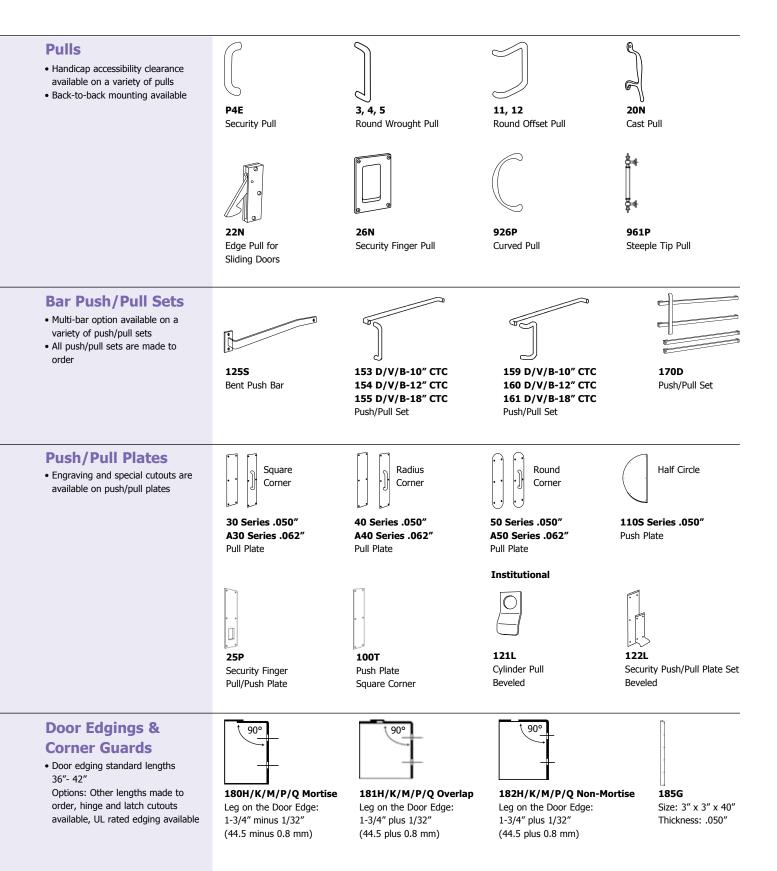
EXTRAORDINARY VARIETY

At Hager, we know all about the importance of adding the right finishing touches to your building projects. That's why we're proud to offer more than 200 different trim and auxiliary door hardware products in a variety of designs, sizes, and finishes that not only look great, but also provide long-lasting wear in any application.

Whatever you need, from pulls to push plates, protection plates to door edgings, wall and floor stops to flush bolts, coordinators, signage, and much more--Hager's trim and auxiliary products give you great looks and proven durability. That makes Hager trim and auxiliary products the perfect choice for any commercial or institutional building project.











Mop Plate Kick Plate

190S, 193, 194S Gauge .050" 198S Gauge .038" 220S, 223S, 224S Gauge .062"



Wall

Floor

230W Convex Wall Stop



236W Concave Wall Stop



951P

303W

Handrail Bracket

Coat Hook

244F Cast Floor Stop







204S Plastic Gauge .125" 214S Laminate Gauge .125"

225S Kydex Gauge .060"

Stretcher Plate

Armor Plate





269T Heavy Duty Floor Stop



- Door protection plates available with beveling or counter sunk holes
- * 190S Series protection plates available UL rated

Stops and Holders

• Wall and floor stops available in both manual and automatic





957P Coat Hook



301D Heavy Duty Hinge Pin Stop

-

1755 160° Door Viewer



307D Door Silencer for Metal Frames



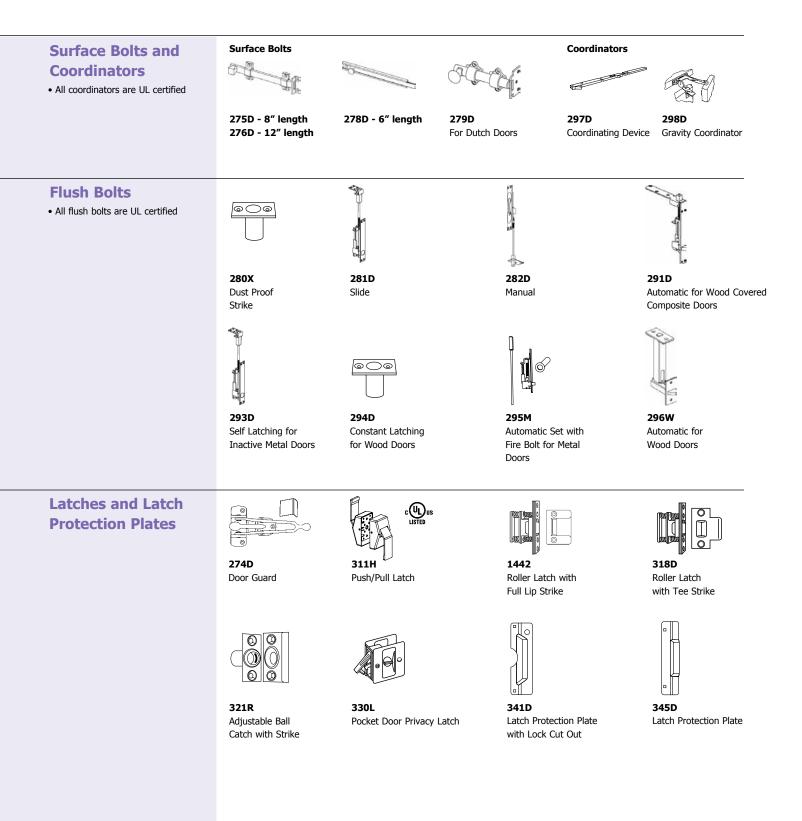
300D Chain Door Check

Accessories

• Variety of miscellaneous auxiliary door hardware available







EXTRAORDINARY VARIET

ADA Tactile Sign



366S

Includes Grade 2 braille translation conforming to section 4.30 requirements Size: 6" x 8" (152 mm x 203 mm) Thickness: .125" (3.2 mm) Material: Plastic

Engraved Plastic Sign



Size: 2" x 4" (51 mm x 102 mm) Thickness: .125" (3.2 mm) Material: Plastic



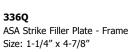
350M



Size: 2" x 5" (51 mm x 127 mm) Thickness: .125" (3.2 mm) Material: Plastic



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Hinge Filler Plate - Frame Size: 1-5/8" x 4-1/2" (41 mm x 114 mm)



Size: 1-1/4" x 8"

(32 mm x 203 mm)

Size: 1-1/8" x 2-1/4"

(29 mm x 57 mm)

Door Edge Filler Plate - 86 Prep

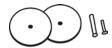
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Door Edge Filler Plate - 161 Prep

336B

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336A

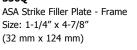


336D Door Face Filler Plate - 161 Prep Size: 2-5/8" (67 mm)

337A Template Hinge Shim Size: 1-7/16" x 4-1/2" (37 mm x 114 mm)

Filler Plates and Shims

• Several size configurations available to meet most applications









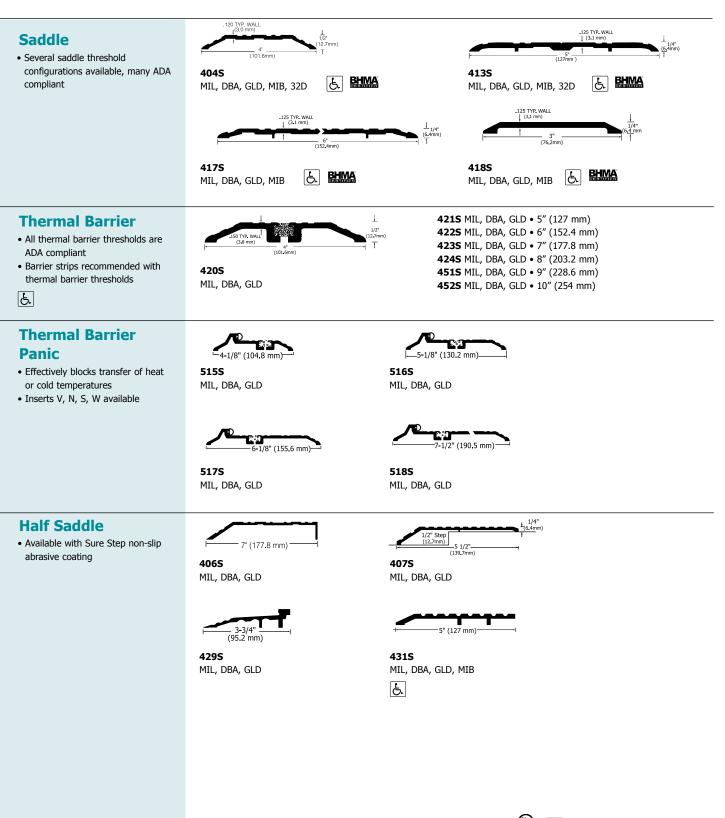
DESIGN AND DURABILITY

A building has doorways, of course, to let people come in and go out. For those things you'd rather not let in or out of your doors--such as insects, water, smoke, heat, or cold, count on Hager thresholds and weatherstripping to do the job, day-in and day-out.

Hager offers a complete line of thresholds and weatherstripping products for virtually any type of door application. What's more, each meets or exceeds ANSI-grade quality, durability, and performance levels. For enhanced levels of safety and security, we also offer intumescent products for positive pressure solutions, including edge sealing and smoke control systems. All of which make Hager threshold, weatherstripping, and door bottom products an excellent choice for standard or custom applications in schools, hospitals, office buildings, and more.





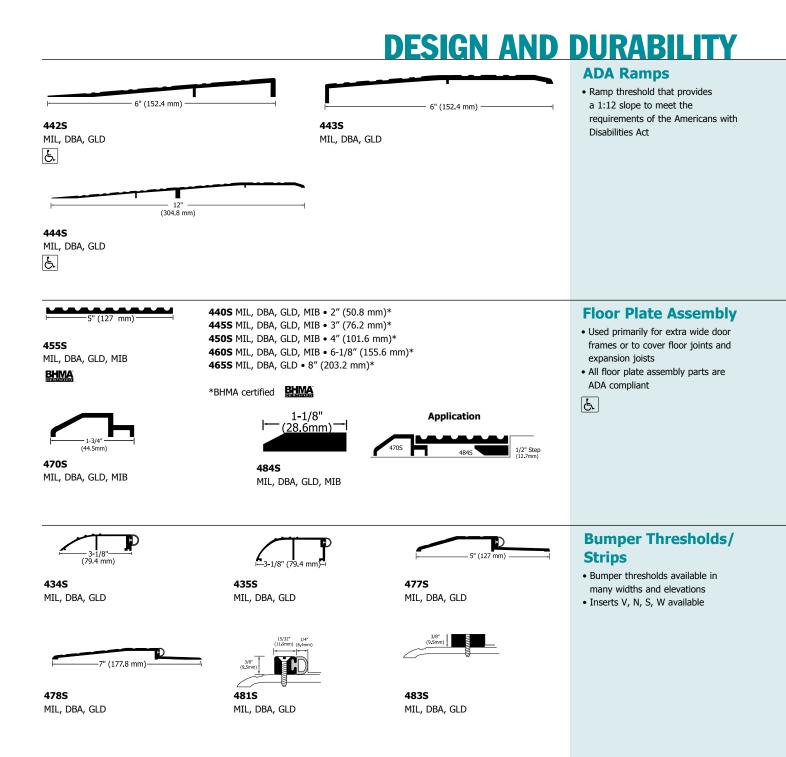


All thresholds have been independently tested and meet the requirements set forth by the listen and the set of the set of

Finish Codes:

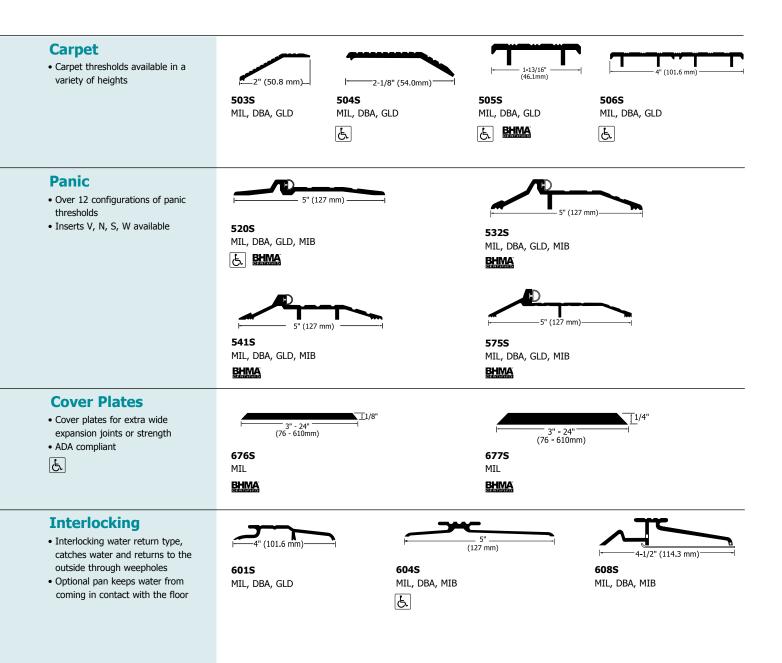
MIL-Mill Finish Aluminum • DBA-Dark Bronze Anodized • GLD-Gold Anodized • MIB-Mill Finish Brass (Bronze) • 32D-Matte Stainless Steel



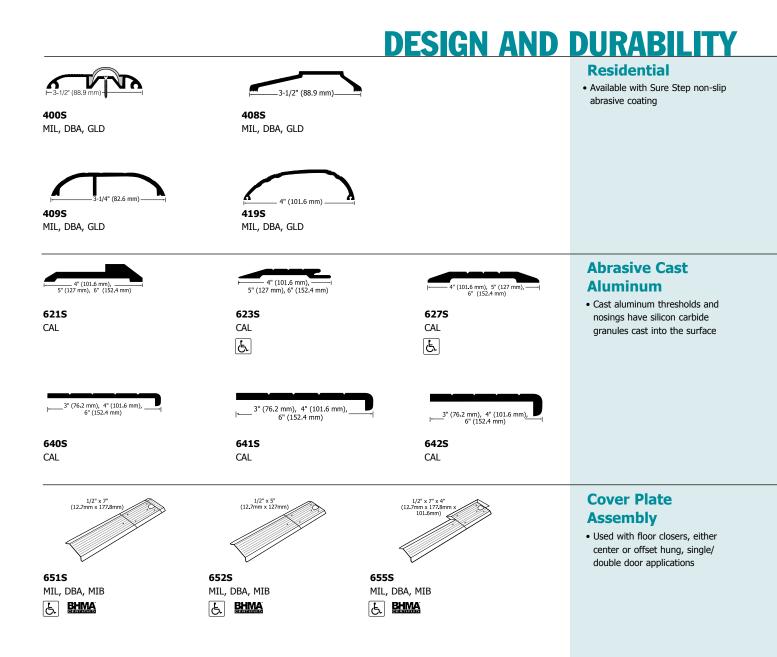


Finish Codes: MIL-Mill Finish Aluminum • DBA-Dark Bronze Anodized • GLD-Gold Anodized • MIB-Mill Finish Brass (Bronze) • 32D-Matte Stainless Steel

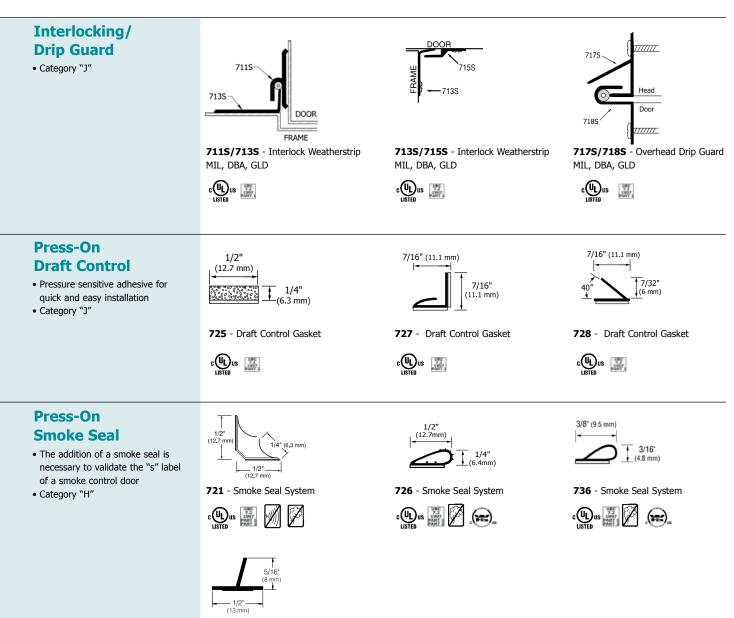








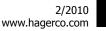


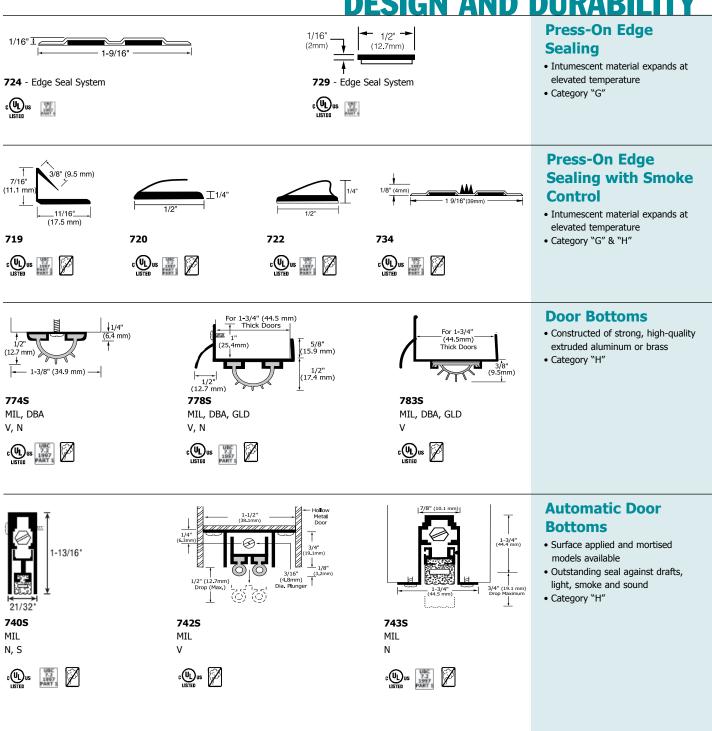


737 - Smoke Seal System



Insert Codes: V-Vinyl • N-Neoprene, EDPM, or TPE • S-Silicone Finish Codes: MIL-Mill Finish Aluminum • DBA-Dark Bronze Anodized • GLD-Gold Anodized • MIB-Mill Finish Brass (Bronze) • CAL-Cast Aluminum





DESIGN AND DURABILITY

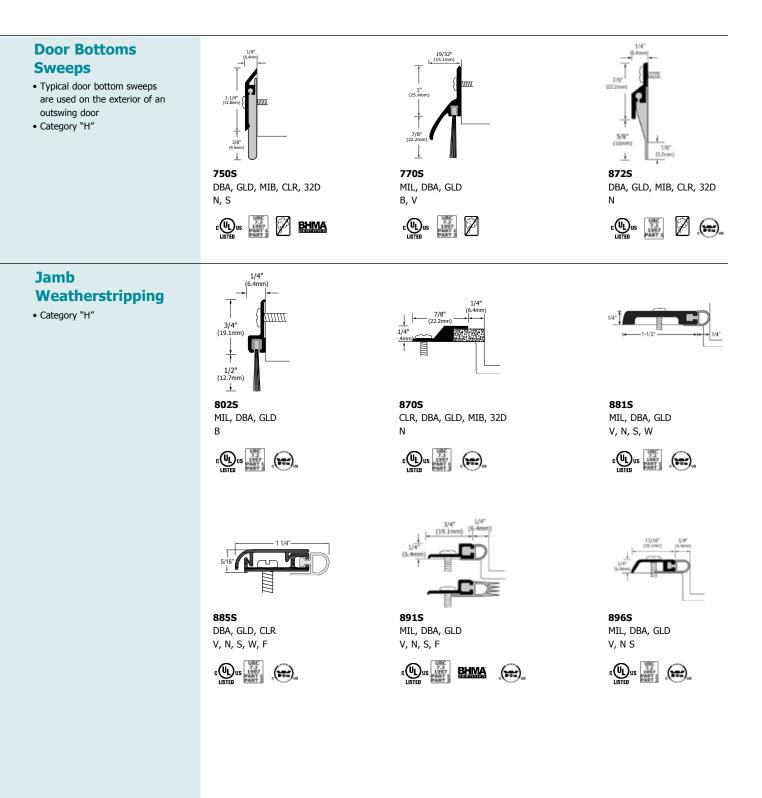
Insert Codes:

V-Vinyl • N-Neoprene, EDPM, or TPE • S-Silicone Finish Codes:

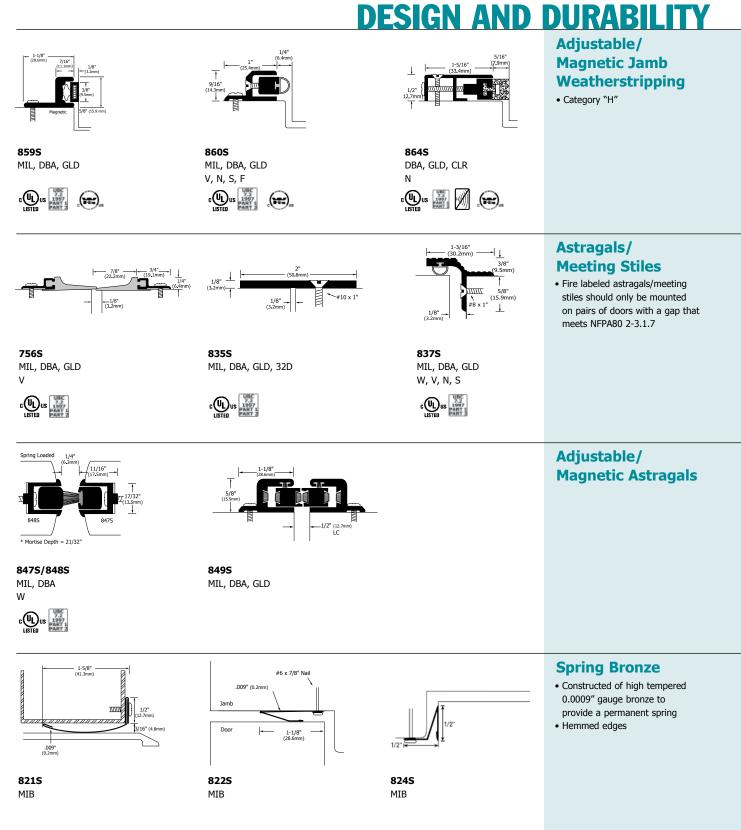
MIL-Mill Finish Aluminum • DBA-Dark Bronze Anodized • GLD-Gold Anodized • MIB-Mill Finish Brass (Bronze) • CAL-Cast Aluminum







Insert Codes: V-Vinyl • N-Neoprene, EDPM, or TPE • S-Silicone • W-Pile • F-Vinyl with Fins • B-Nylon Brush Finish Codes: MIL-Mill Finish Aluminum • DBA-Dark Bronze Anodized • GLD-Gold Anodized • MIB-Mill Finish Brass (Bronze) • 32D-Matte



Insert Codes:

V-Vinyl • N-Neoprene, EDPM, or TPE • S-Silicone • W-Pile • F-Vinyl with Fins • B-Nylon Brush Finish Codes:

MIL-Mill Finish Aluminum • DBA-Dark Bronze Anodized • GLD-Gold Anodized • MIB-Mill Finish Brass (Bronze) • 32D-Matte

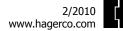




PROVEN FUNCTIONALITY

Hager's full line of high quality, durable sliding door hardware is the perfect choice for any by-pass, bi-fold, or pocket door application your project requires.

With Hager sliding door hardware, you can choose from hundreds of fully tested products, including jumpproof box tracks, self-aligning wheel systems, and complete sets and accessories to meet any need. Just as beneficial, every Hager sliding door hardware product is designed and manufactured to meet or exceed ANSI standards.







SLIDING DOOR HARDWARE

By-Pass

- Fascia available on select series
- Aluminum and steel track available on select series
- Quick release hangers Jump proof style track



9110 / 9130 Series Heavy Duty Aluminum

I-Beam Track & Hardware For doors 1"(25 mm) to 1-3/4" (44 mm) thick

Note: Use two tracks per by-pass door



9602 Series Heavy Duty Aluminum Double Box Track & Hardware For doors 3/4" (19 mm) to 1-3/4"

(44 mm) thick



9603 Series Heavy Duty Aluminum Double Box Track with 2-5/8" (66 mm) Fascia & Hardware For doors 3/4" (19 mm) to 1-3/4" (44 mm) thick

9600 Series

Heavy Duty Aluminum

Box Track & Hardware

For doors 1-3/8" (35 mm) thick and up

Note: Use two tracks per by-pass door



9702 Series Heavy Duty Aluminum Double I-Beam Track & Hardware For doors 3/4" (19 mm) to 1-3/4" (44 mm) thick



9810 Series Aluminum Track & Hardware For doors 3/4" (19 mm) to 1-3/8" (35 mm) thick



9820 Series Aluminum Track with 1-3/4" (44 mm) Fascia & Hardware For doors 1-3/8" (35 mm) thick



9830 Series Aluminum Track with 3" (76 mm) Fascia For doors 1-3/8" (35 mm) thick



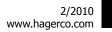
9840 Series Galvanized Steel Track & Hardware For doors 1-1/8" (29 mm) to 1-3/8" (35 mm) thick



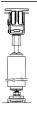
9875 Series Heavy Duty Aluminum Box Track & Hardware For doors 1-3/8" (35 mm) thick and up



9885 Series Heavy Duty Aluminum Double Box Track with 3-1/2" (89 mm) Fascia & Hardware For doors 1-3/8" (35 mm) to 1-3/4" (44 mm) thick



PROVEN FUNCTIONAL



9100 Series **Heavy Duty Aluminum I-Beam Track & Hardware** For doors 1" (25 mm) to 1-3/4" (44 mm) thick



9570 Series

Medium Duty Steel or Aluminum Box Track & Hardware For doors 1" (25 mm) to 1-3/4" (44 mm) thick

Bi-Fold

- For bi-fold or multi-fold applications
- Quick release hangers
- Jump proof style track



9800 Series **Heavy Duty Aluminum Box Track & Hardware** For doors 1-3/8" (35 mm) to 1-3/4"

(44 mm) thick



9890 Series **Heavy Duty Aluminum Box Track & Hardware** For doors 1-1/8" (29 mm) to 1-3/4" (44 mm) thick



9110 Series Extra Heavy Duty Aluminum I-Beam Track & Hardware For doors 1" (25 mm) to 1-3/4" (44 mm) thick



9601 Series **Heavy Duty Aluminum** Box Track & Hardware For doors 1-1/8" (29 mm) to 1-3/4" (44 mm) thick

Pocket

- Sold as sets
- Replacement parts available
- Jump proof style track



9701 Series **Heavy Duty Aluminum**

I-Beam Track & Hardware For doors 1-1/8" (2 mm) thick and up



9901 Series

Extra Heavy Duty Aluminum Box Track & Hardware For doors 1-3/8" (35 mm) to 1-3/4" (44 mm) thick



9801 Series **Extra Heavy Duty Aluminum Box Track & Hardware** For doors 1-3/8" (35 mm) thick and up

2/2010 www.hagerco.com



SLIDING DOOR HARDWARE

Pocket Door Kits

- Jump proof track and rollers
- Pre-assembled header
- Real wood split studs

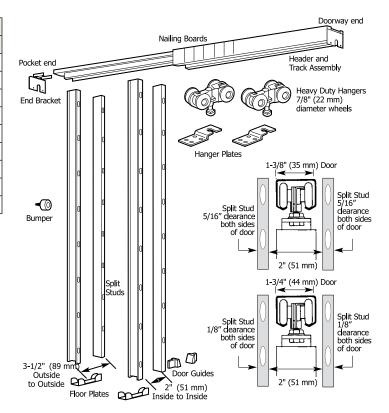


9628, 9629, 9630, 9631, 9850 Heavy Duty Pocket Door Kit For doors 1-3/8" (35 mm) to 1-3/4" (44 mm) thick

Model	Max. Weigh	t Door	Door	Door	Hanger
	Per Door	Thickness*	Width	Height	Bearings
9631	125 lbs	1-3/8″ – 1-3/4″	3′0″	6′8″	Molded
	(57 kg)	(35-45 mm)	(914 mm)	(2032 mm)	Celcon
9630	150 lbs	1-3/8" – 1-3/4"	3′0″	7′0″	Steel
	(68 kg)	(35-45 mm)	(914 mm)	(2134 mm)	Ball
9629	150 lbs	1-3/8" – 1-3/4"	3′0″	8′0″	Steel
	(68 kg)	(35-45 mm)	(914 mm)	(2438 mm)	Ball
9628	150 lbs	1-3/8" – 1-3/4"	3′0″	9′0″	Steel
	(68 kg)	(35-45 mm)	(914 mm)	(2743 mm)	Ball
9850	250 lbs (57 kg)	1-3/8" – 1-3/4" (35-45 mm)		8′0″/8′6″ 2438 mm)/(2591 r	Steel nm) Ball

* 9634 Adapter Kit recommended for 1-3/4" doors.

Kit Contains					
Quantity	Description				
1	Header Assembly				
2	Pair of Split Studs				
2	Heavy Duty Hangers				
2	Door Hanger Plates				
1	Bumper				
1	Pair of Door Guides				
1	Adjusting Wrench				
2	Floor Plates				
1	End Bracket				



PROVEN FUNCTIONALITY

Sliding Door Selection Chart All Hager sliding door series conform to ANSI A156.14

Max. Weight Per Door	Series	Packaged Sets	Track	Parts Bag	Description
BY-PASS		L			
60#	9810	9514	9810	9814	Aluminum track
60#	9820	9614	9820	9540	Aluminum track, 1-3/4" fascia
60#	9830	N/A	9830	9540	Aluminum track, 3" fascia
60#	9840	9844	9840	9540	Steel track
100#	9602	N/A	9602	9575	Aluminum double box track
125#	9602	9675	9602	9679	Aluminum double box track
125#	9603	9673	9603	9680	Aluminum double box track with fascia
125#	9702	9775	9702	9777	Aluminum double box I-beam track
150#	9602	9676	9602	9680	Aluminum double box track
150#	9603	9674	9603	9680	Aluminum double box track with fascia
150#	9600	9611	9821	9692	Aluminum box track
175#	9110/9130	9110	9101	9109	Aluminum heavy duty I-beam track
250#	9875	9875	9801	9816 hanger	Aluminum box track
250#	9885	9885	9803	9816 hanger	Aluminum double box track with 3-1/2" fascia
250#	9600	9612	9821	9893	Aluminum double box track
275#	9110/9130	9130	9101	9129	Aluminum heavy duty I-beam track
BI-FOLD			1		
50#	9570	9570	9601/9599	9569	Aluminum or steel box track
125#	9100	9162/9164	9101	9160	Aluminum I-beam track
125#	9890	9890	9801	9827 & 9828	Aluminum box track
125#	9800	9860	9821	9894	Aluminum box track
POCKET	·	·			
125#	9601	9678	9601	9632	Aluminum box track
125#	9701	9778	9701	9779	Aluminum I-beam track
150#	9601	N/A	9601	9633	Aluminum box track
175#	9110/9130	9110	9101	9109	Aluminum heavy duty I-beam track
250#	9801	9878	9801	9742	Aluminum heavy duty box track
250#	9903	9901	9821	9895	Aluminum heavy duty box track
275#	9110/9130	9130	9101	9129	Aluminum heavy duty I-beam track
UNIVERSAL	POCKET DOOR FI	RAME KITS			
125#	9631	9631-80	9599/9601	N/A	Pocket door kit for 3'0" wide 6'8" high door
150#	9630	9630-84	9599/9601	N/A	Pocket door kit for 3'0" wide 7'0" high door
150#	9629	9629-96	9599/9601	N/A	Pocket door kit for 3'0" wide 8'0" high door
150#	9628	9628-108	9599/9601	N/A	Pocket door kit for 3'0" wide 9'0" high door
250#	9850	9850-96	9801	N/A	Pocket door kit for 4'0" wide 8'0" high door
250#	9850	9850-102	9801	N/A	Pocket door kit for 4'0" wide 8'6" high door

Note: Sheet metal screws provided for wood or metal applications.

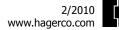




EXCEPTIONAL QUALITY

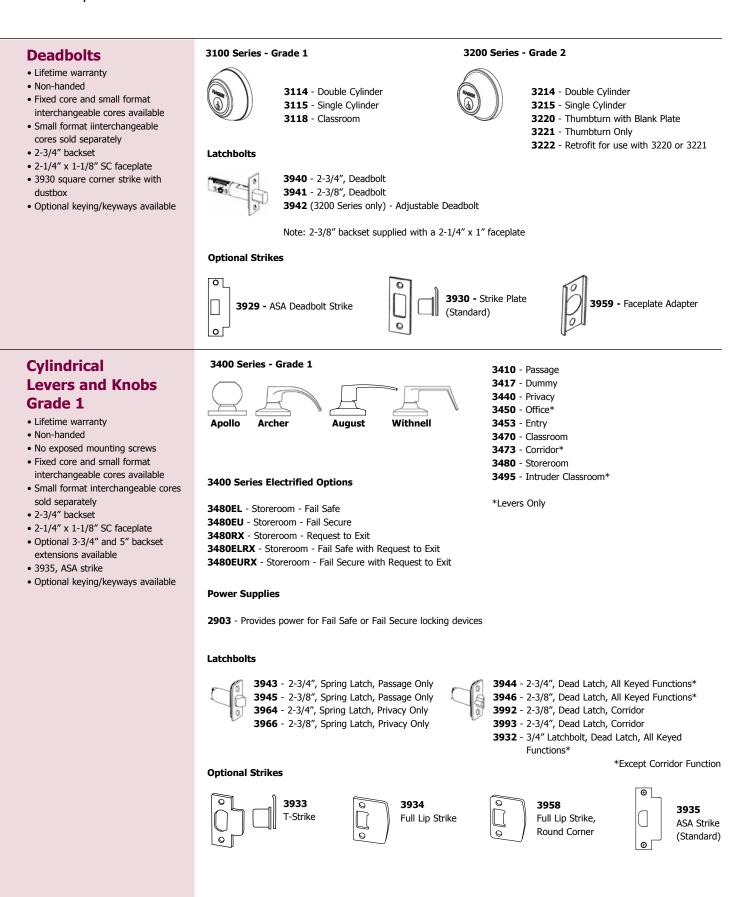
Hager locks provide exceptional quality--which is why they have proven to be so popular with our customers and so successful in application after application across the country and around the world.

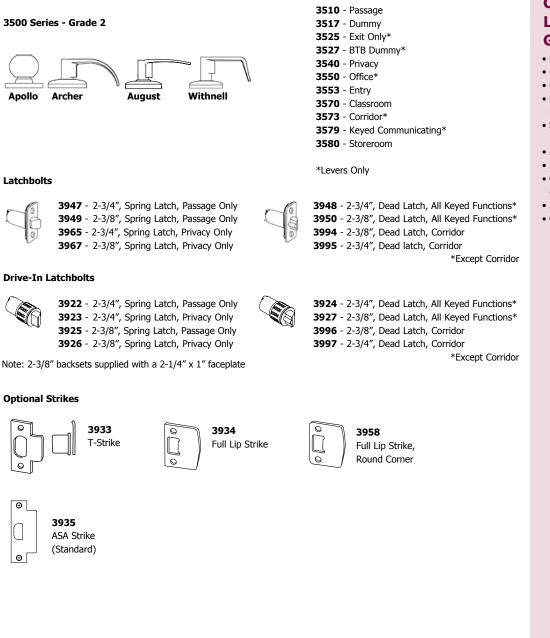
Available in Commercial Grades 1 and 2, Hager deadbolts, knobs, and levers are perfectly suited for all types of new construction and replacement use. What's more, they're BHMA certified and backed by exclusive lifetime warranties. With Hager locks, you can use your preferred keying system, choose from a variety of finishes, and choose from a wide variety of available parts and accessories (like latchbolts, cylinders, strikes, keys, faceplate adapters, thru-bolt jigs, and more). We've even been told by installers in the field that Hager locksets are the easiest locks they've ever installed!











EXCEPTIONAL QUALITY ge Cylindrical hy Levers and Knobs Dnly* Grade 2

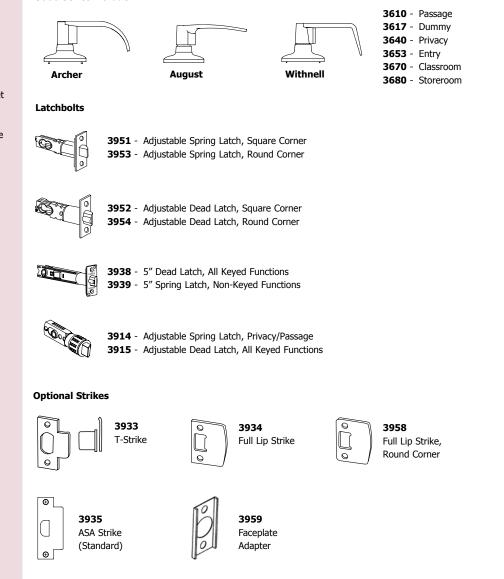
- Lifetime warranty
- Non-handed
- No exposed mounting screws
- Fixed core and small format
- interchangeable cores available
- Small format interchangeable cores sold separately
- 2-3/4" backset
- 2-1/4" x 1-1/8" SC faceplate
- Optional 3-3/4" and 5" backset extensions available
- 3935, ASA strike
- Optional keying/keyways available

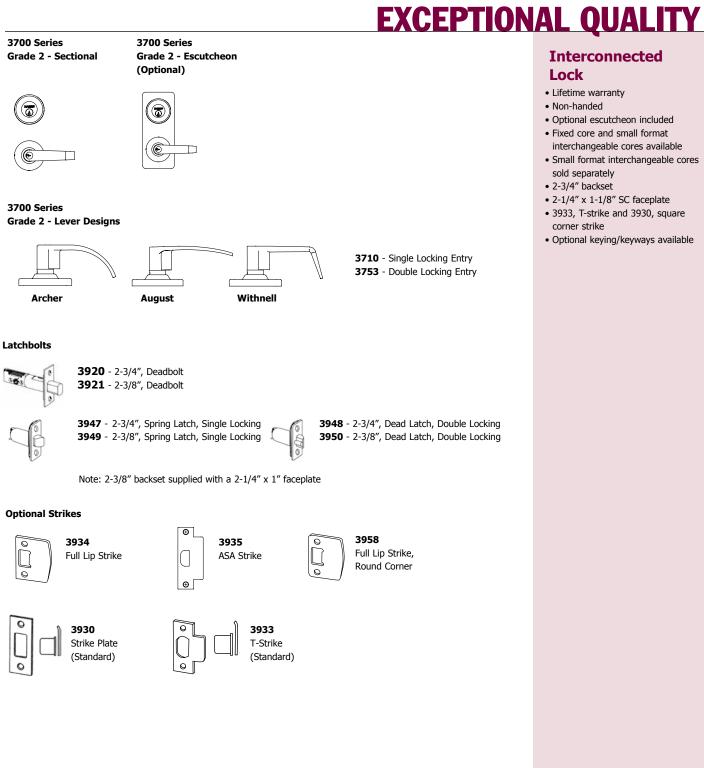


Tubular Levers

- Non-handed
- No exposed mounting screws
- Fixed core and small format interchangeable cores available
- Small format interchangeable cores sold separately
- 2-3/8" 2-3/4" adjustable backset
- 2-1/4" x 1" SC faceplate
- 3935, ASA strike
- Optional keying/keyways available

3600 Series - Grade 2





Interconnected Lock

- Lifetime warranty
- Non-handed
- Optional escutcheon included
- Fixed core and small format interchangeable cores available
- Small format interchangeable cores sold separately
- 2-3/4" backset
- 2-1/4" x 1-1/8" SC faceplate
- 3933, T-strike and 3930, square corner strike
- Optional keying/keyways available





Mortise Lock Deadbolt

- Lifetime warranty
- Field reversible
- BHMA Certified Grade 1 Operational and Security with standard cylinder
- Fixed core and small format interchangeable cores available • Small format interchangeable cores
- sold separately • Requires mortise cylinder with
- Schlage "L" cam
- 2-3/4" backset
- 3991, ASA no lip strike
- Optional keying/keyways available

Mortise Lock

- Lifetime warranty
- Field reversible
- Concealed thru-bolts
- BHMA Certified Grade 1 Operational and Security with standard cylinder
- Additional faceplates and strikes available
- Fixed core and small format interchangeable cores available
- Small format interchangeable cores sold separately
- Requires mortise cylinder with Schlage 'L' cam
- 2-3/4" backset
- 3985, ASA strike
- Optional keying/keyways available

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3800 Series Grade 1 - Deadbolt

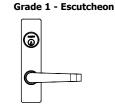




3860 - Cylinder x Thumbturn 3862 - Double Cylinder 3863 - Classroom 3864 - Cylinder







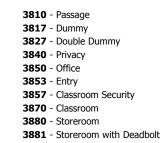
3800 Series











3800 Series Electrified Options

3880EL - Storeroom - Fail Safe 3880EU - Storeroom - Fail Secure 3880RX - Storeroom - Request to Exit 3880ELRX - Storeroom - Fail Safe with Request to Exit 3880EURX - Storeroom - Fail Secure with Request to Exit

Power Supplies

August

2903 - Provides power for Fail Safe or Fail Secure locking devices

Optional Strikes











3989

Flat Lip





3985 Standard Lip

3986 Extended Lip

3987 Round Corner Standard Lip

3988 Round Corner Extended Lip

3990 Extended Flat Lip

3991 No Lip

2/2010 www.hagerco.com



EXCEPTIONAL QUALITY Cylinders and Keys

Fixed Core • Fixed core cylinder - Drilled 6-pin, keyed 5-pin



Rim Cylinder



3902 Mortise Cylinder



3904 Mortise Dummy



3905 Mortise ADA Turn Knob



Fixed Core 3960

Standard core cylinder kit

Please refer to our website for information on tailpieces and their corresponding Note: function.

Fixed Core Keys









3955 Key Blank 5-Pin

3956 Key Blank 6-Pin

3961 Cut Key



6-Pin





Small Format Interchangeable Core 3981-U Uncombinated 6-pin

3982-U Uncombinated 7-pin

3981-C Combinated 6-pin 3982-C Combinated 7-pin

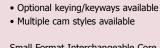
Small Format Interchangeable Core Keys



6- or 7-pin



3984 Cut Key 6- or 7-pin



• C Keyway standard

• 5-pin and 6-pin keys available

Small Format Interchangeable Core • Small format interchangeable cores sold separately

- Small format interchangeable core keys available
- 6- or 7-pin keys available - Best "A" Keyway standard
- Optional keying/keyways available
- Multiple cam styles available







EXTREME RELIABILITY

Hager door closers offer architects, contractors, and building owners a superior product with proven reliability. In fact, our 5100, 5200, and 5300 Series Grade 1 models are the only closers in the industry that are both BHMA certified and backed by a lifetime warranty. That makes them a no-risk choice for virtually any building type.

With Hager, you get a door closer that's packaged with everything needed for quick installation, regardless of the application. Hager door closers are tri-packed for mounting three ways: regular arm, top jamb, and parallel arm. They are non-handed, packaged with a parallel arm bracket and thru-bolts at no extra charge, and adjustable for various door sizes.





5100 Series

- Grade 1 Surface Door Closer
- Heavy duty cast iron
- Tri-pack (regular, top jamb, and parallel arm mount) standard
- Lifetime warranty
- BHMA Certified ANSI A156.4
 Non-handed



5100 Series Arms

- Standard hold open arm
- Heavy duty arms available as stop, hold open, and cushion stop
- Forged steel extra heavy duty arms
- Non-handed arms unless specified



5100 Series Surface Door Closer



5106 Extra Heavy Duty Arm



5107 Standard Hold Open Arm



5955 Extra Heavy Duty Cushion Stop Arm



5108 Extra Heavy Duty Hold Open Arm (Handed)



5961 Extra Heavy Duty Hold Open Stop Arm

Main Arm Assembly

5103

5125 Extra Heavy Duty Stop Arm



5954 Extra Heavy Duty Hold Open Cushion Stop Arm



5111 Extra Heavy Duty Parallel Arm Bracket



5112 Long Rod and Shoe



- Spring cushion kit
- Plastic and metal covers available
- Drop plates include mounting screws
- Parallel arm bracket
- Self-reaming, self-tapping wood and machine screws
- Sex nuts and bolts



Closer Body Only

5101

5909 Parallel Arm Bracket



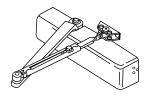
5102 Full Plastic Cover



5950 Spring Cushion Kit Fits 5125, 5961, 5906, and 5907



5962 Metal Cover



5200 Series Surface Door Closer



5906 Extra Heavy Duty Hold Open Stop Arm



5907 Extra Heavy Duty Stop Arm



Main Arm Assembly

5203

5911 Extra Heavy Duty Arm



Standard Hold Open Arm

5207

5912 Extra Heavy Duty Hold Open Arm (Handed)

5202

5919

Pinion Cap

Full Plastic Cover



5956 Extra Heavy Duty Hold Open Cushion Stop Arm

5900

5920

Parallel Arm Bracket



5957 Extra Heavy Duty Cushion Stop Arm



5908 Long Rod and Shoe



Slim Line Plastic Cover

5932 Metal Cover



- Grade 1 Surface Door Closer
- Heavy duty aluminum alloy
- Tri-pack (regular, top jamb, and parallel arm mount) standard
- Lifetime warranty
- BHMA Certified ANSI A156.4 Non-handed



EXTREME RELIABILITY

5200 Series Arms

• Standard hold open arm

5200 Series Accessories • Spring cushion kit

Parallel arm bracket

screws

• Metal covers and full and slim line plastic covers available

• Drop plates include mounting

• Self-reaming, self-tapping wood and machine screws • Sex nuts and bolts

- Heavy duty arms available as stop, hold open, and cushion stop
- Forged steel extra heavy duty arms

• Non-handed arms unless specified



5201 Closer Body Only



5914 Hold Open Parallel Arm Bracket



5950 Spring Cushion Kit Fits 5125, 5961, 5906, and 5907





5300 Series

- Grade 1 Surface Door Closer
- Heavy duty aluminum alloyTri-pack (regular, top jamb, and
- parallel arm mount) standard
 Lifetime warranty
- BHMA Certified ANSI A156.4
- Non-handed

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5303

5911

Arm

Extra Heavy Duty

Main Arm Assembly

5300 Series Surface Door Closer

5300 Series

Arms

- Standard hold open arm
- Heavy duty arms available as stop, hold open, and cushion stop
- Forged steel extra heavy duty arms
- Non-handed arms unless specified



5307 Standard Hold Open Arm Assembly



5912 Extra Heavy Duty Hold Open Arm (Handed)



5906 Extra Heavy Duty Hold Open Stop Arm



5956 Extra Heavy Duty Hold Open Cushion Stop Arm



5907 Extra Heavy Duty Stop Arm



5957 Extra Heavy Duty Cushion Stop Arm

5300 Series Accessories

- Spring cushion kit
- Plastic and metal covers available
- Drop plates include mounting screws
- Parallel arm bracket
- Self-reaming, self-tapping wood and machine screws
- Sex nuts and bolts



5301 Closer Body Only



5908 Long Rod and Shoe



5302 Full Plastic Cover



5914 Hold Open Parallel Arm Bracket



5900 Parallel Arm Bracket



5950 Spring Cushion Kit Fits 5125, 5961, 5906, and 5907



5901 Pinion Cap



- Grade 2 Surface Door Closer
- Standard duty

• Tri-pack (regular, top jamb, and parallel arm mount) standard

- One-year warranty
- BHMA Certified ANSI A156.4
- Non-handed

5400 Series **Arms**

- Main arm assembly mounts regular, top jamb or parallel arm applications
- Non-handed

5400 Series

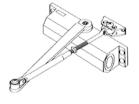
Accessories

- Parallel arm bracket
- Pinion cap • Self-reaming, self-tapping wood
- and machine screws
- Sex nuts and bolts

Closer Sizing

ANSI Standard Closing Charts

5400 Series Surface Door Closer





5403 Main Arm Assembly



5900 Parallel Arm Bracket



5901 Pinion Cap

Exterior (and Vestibule) Door Width									
Minimum Door Width (24")									
24″	3	30″		42	2″	48″			
(610 m	m) (762	mm)	(914 mm)	(1067	mm)	(1219 mm)			
	Size 3	Size 4		Size 5	Size 6				
Regular Arm & Top Jamb	(0)	(4cw)		(8cw)	(12cw)				
Parallel Arm	Size 3	Size 4		Size 5	-				
Parallel Alli	(4cw)	(8cw)		(12cw)					

Interior Door Width

Minimum Door Width (24")

24 (610 -	-		4″ 5 mm) (9	38″ 65 mm)	-	8″) mm)	54 (1372	-	-	60″ 4 mm)
Regular Arm & Top Jamb	Size 1 (8ccw)	Size 2 (4ccw)	Size 3 (0)	_	e 4 cw)	Size (8cw		Size (12cv	-	
Parallel Arm	Size 1 (4ccw)	Size 2 (0)	Size 3 (4cw)	-	e 4 cw)	Size (12cv		-		

CW = Clockwise CCW = Counterclockwise







SUPERIOR PERFORMANCE

Every model in Hager's line of exit devices is designed and engineered to assure you and your customers of years and years of superior performance. Hager exit devices use fewer moving parts and are constructed with high-quality features--like die cast caps on our lifetime warranty 4500 Series, and die cast head covers on all our models. All Hager exit devices meet UL specifications for panic devices and are fire rated for up to three hours.

You'll also find that Hager exit devices were designed with ease of installation in mind. We package our exit devices for convenience and versatility, with thru-bolts included for every model, slotted strikes, non-handed designs, plus escutcheon trim available in four functions (dummy, blank, entry and night latch).





4500 Series Grade 1

- · Heavy duty commercial
- BHMA Certified ANSI A156.3
- UL-cUL listed for up to 3 hours for "A" label doors
- UL 305 listed for panic hardware ANSI A250.13 severe windstorm
- resistant component (Rim and SVR)

4500 Series Trim

• Archer, August and Withnell available on any trim function

• Blank Escutcheon, Cylinder

lock section of catalog

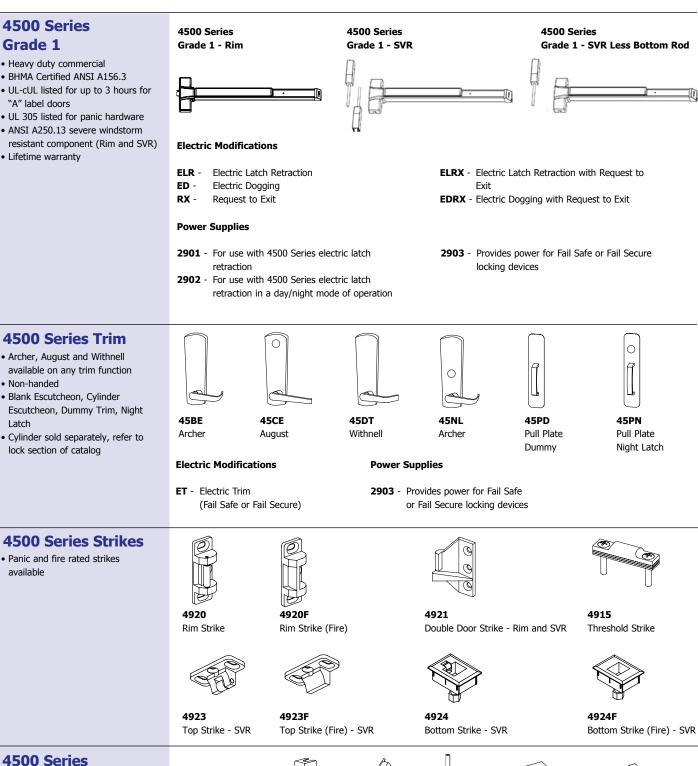
• Panic and fire rated strikes

Non-handed

Latch

available





4500 Series Accessories

- Cylinder dogging available
- Cylinder sold separately, refer to lock section of catalog

4926

Cylinder Dogging

Plate Conversion Kit

4927 Bottom Latch Assembly

4928

Top Latch

Assembly





4929

Top Rod

Replacement Kit





Head Cover - Rim

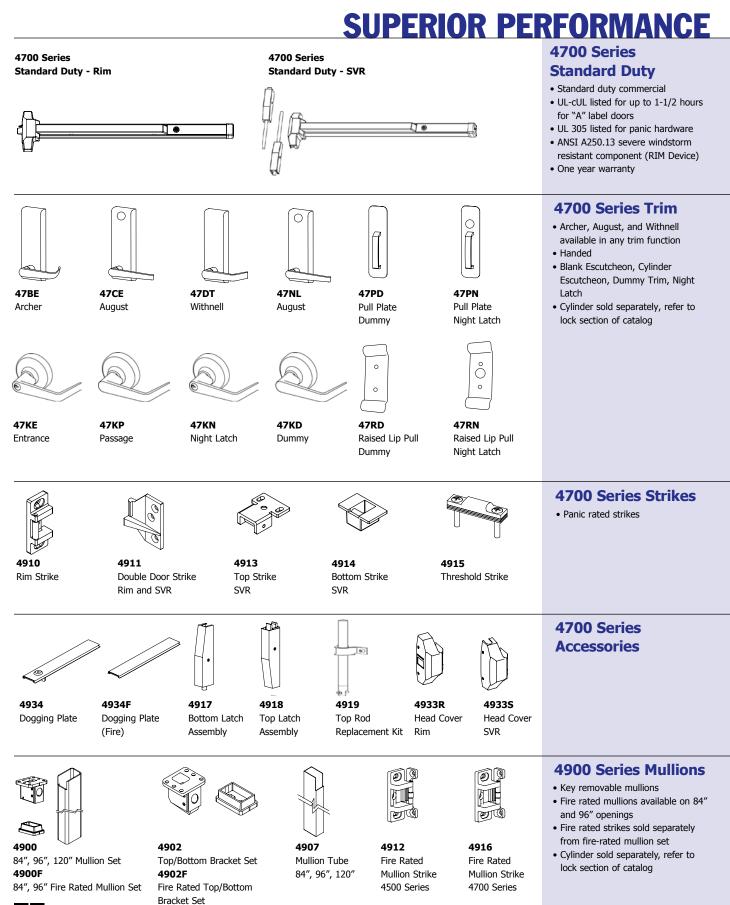
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4932S Head Cover - SVR

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58



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59



More for your door than any other brand.™

Hager: Opening a new door to environmental responsibility

To help minimize Hager's environmental impact, this brochure was printed on paper containing FSC 10% post-consumer waste fiber made with certified renewable energy, which resulted in a savings of:

- 15 trees
- 5,455 gallons of wastewater
- 10,000,000 BTUs of energy
- 1,664 pounds net greenhouse gases
- 903 pounds of solid waste





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