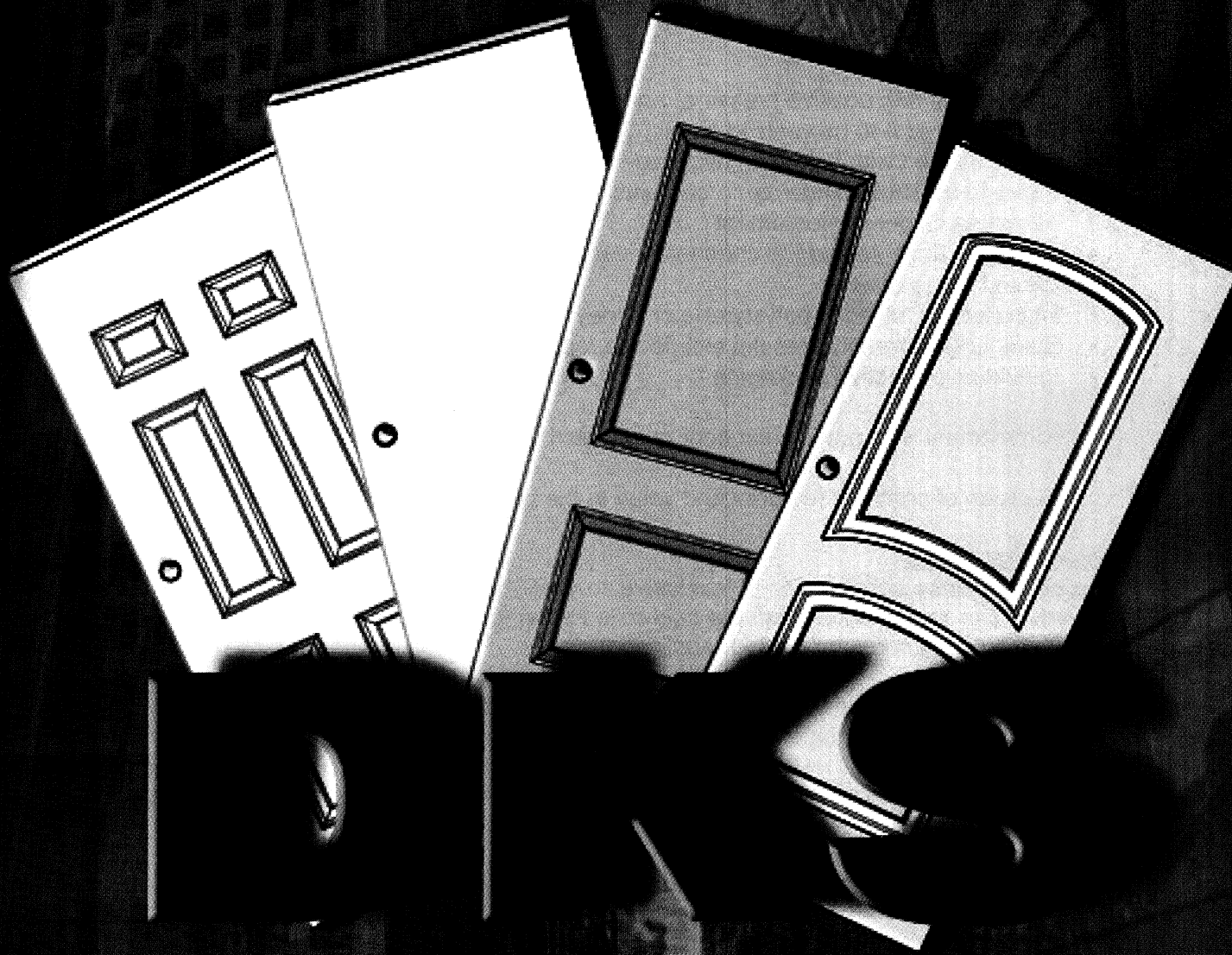


COMMERCIAL STEEL DOORS & FRAMES



Introduction

DKS Steel Door and Frame Systems, Inc. constantly strive to meet the demands of the steel door and frame industry by providing premium products to the customer.

Superior quality, a strong service commitment, and value are DKS watch words. Standard features built into each door and frame reflect constant attention to detail and performance. DKS steel doors standard features include:

- 16, 18, 20 gauge flush and 6 panel doors
- Seamless door edge
- Reversible
- 3 hour WHI fire, positive pressure, and **(S)** smoke label
- Cold rolled or A40 galvanized steel
- Prime painted with baked on two stage epoxy resin
- 7 gauge universal hinge reinforcements
- 12 gauge closer reinforcement
- 16 gauge flush sealed top channel / inverted bottom channel
- Closed hinge cavity
- High density full body polystyrene or honeycomb core
- Blank edge door includes rim exit device reinforcement
- Individual protective packaging

DKS's commitment is to provide superior quality and service, at competitive pricing to our customers.

The DKS vision of premium features and value to the customer is here.

Hollow Metal Doors

Precision seamless construction is exclusive to DKS, producing doors that meet or exceed all industry standards. Our line of doors features cold-rolled steel, primed for interior applications and galvanized A40 steel with insulating cores for exterior applications.

All standard doors bear the WHI 3 hour listing mark, including **Positive Pressure** and **(S)** smoke labels, combined.

Decorator doors are available in six-panel and two-panel, with insulating polystyrene cores.

Welded or Knock Down Steel Frames

DKS manufactures steel frames in standard sizes. These frames have the toughest tolerances in the industry. DKS steel frames are available in 16 and 18 gauge for 1¾" doors. All standard frames are manufactured from cold-rolled or galvanized A40 steel.

DKS fire labeled steel frames carry the 3 hour Warnock Hersey label for masonry and 90 minutes for drywall frames.

The New Expandable Width Masonry and Drywall Frames for odd-fit wall widths and retrofit situations.

DKS Steel Door & Frame Systems, Inc.

DKS Nomenclature

Door Series

1000	= 18 Ga. Polystyrene
1113	= 18 Ga. 1 3/8" Honeycomb doors
1200	= 20 Ga. Polystyrene
1300	= 18 Ga. Steel Stiffened
1400	= 16 Ga. Steel Stiffened
1500	= Polystyrene replacement
1600	= 16 Ga. Polystyrene
1700	= 18 Ga. & 20 Ga. Polystyrene 6 Panel
1800	= 18 Ga. Polystyrene
1900	= 18 Ga. Polystyrene 2 Panel
2000	= 18 Ga. Honeycomb / pair active / inactive
6000	= 18 Ga. Double Egress
9000	= 18 Ga. 250° Temperature rise

**Polyurethane core available upon request.
Consult factory.*

Steel

20	= Cold Rolled
20G	= A40 Galv.
18	= Cold Rolled
18G	= A40 Galv.
16	= Cold Rolled
16G	= A40 Galv.

Door Style

F	= Flush
F2P	= Flush 2 Panel
F6P	= Flush 6 Panel

Prep

C	= Fed.161 Cylindrical
MB	= Fed.86 Mortise Edge (Blank panel both sides)
T	= Security lever
B	= Blank edge no reinforcement
BR	= Blank edge with reinforcement

Hinge Preparation

4 1/2" x 4 1/2"

Strike Preparation

MS	= 4 7/8" Universal
CS	= 2 3/4" Cylindrical
B	= Blank
BR	= Blank with rim exit device reinforcement

Closer Reinforcement

CRS = Closer reinforcement standard

Frame Series

3000	=16 Ga. Double Egress
4000	=16 Ga. Masonry Frame/Expandable
4500	=16 Ga. Pair Frame
5000	=16 Ga. Drywall Frames/Expandable
7000	=16 Ga. Blank Stick
7500	=16 Ga. Fabrication Components
7800	=16 Ga. Fabrication Components

Steel

18	= Cold Rolled
18G	= A40 Galv.
16	= Cold Rolled
16G	= A40 Galv.

Components

H	= Head
HJ	= Hinge Jamb
SJ	= Strike Jamb
BJ	= Blank Jamb
BSJ	= Blank Strike Jamb
BHJ	= Blank Hinge Jamb

Strike

4.875 = ASA (Universal)

Closer

CR	= Standard Arm
PR	= Parallel Arm

Handing

RH	= Right Hand
LH	= Left Hand

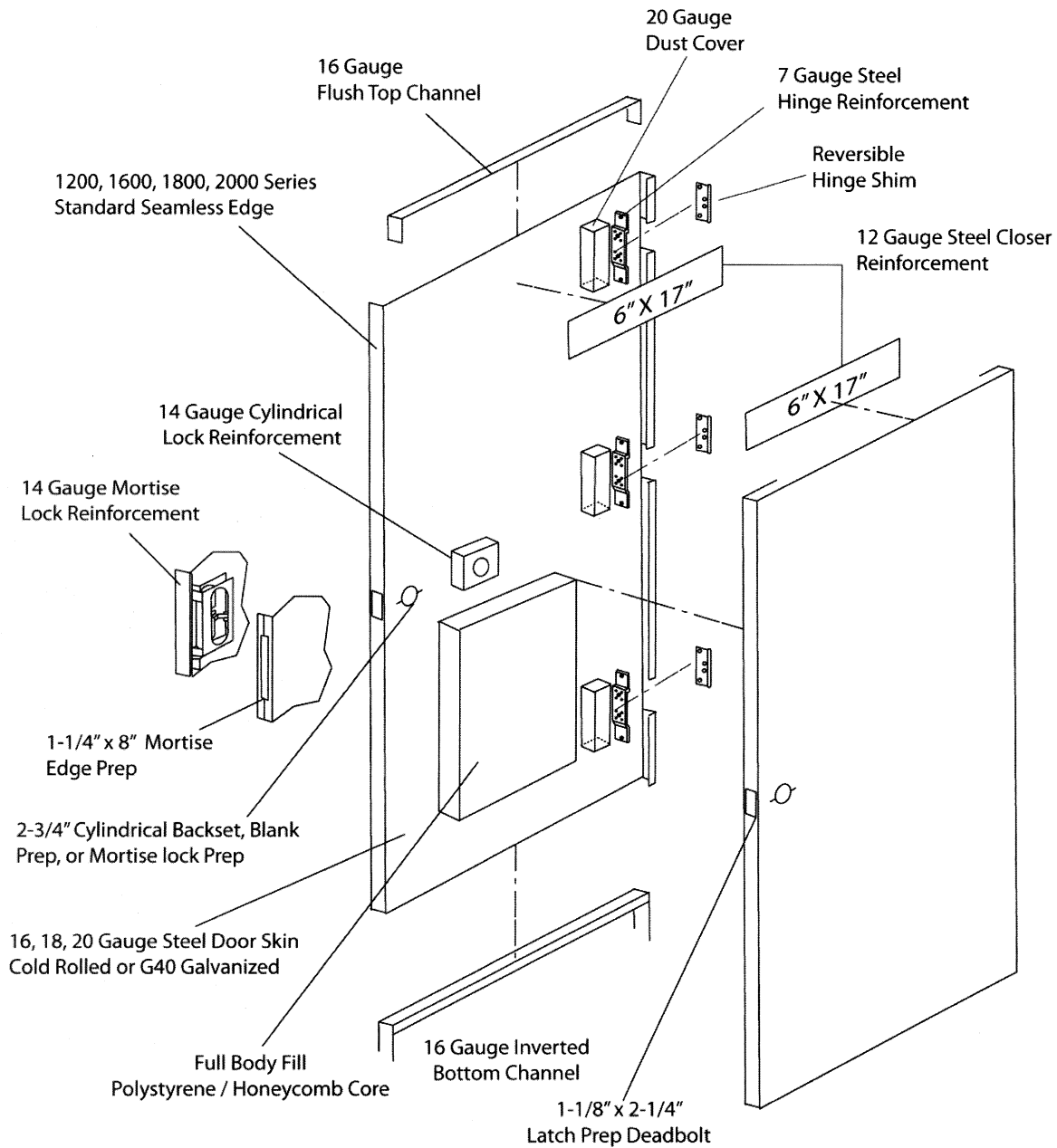
Anchors

WS	= Wood Stud
SS	= Steel Stud
MA	= Masonry Wire

*** Special Note: All measurements are in feet and inches**

DKS Commercial Door Construction

1200, 1600, 1800 and 2000 Series



Warnock Hersey



3 Hour Fire
Positive Pressure

S Smoke



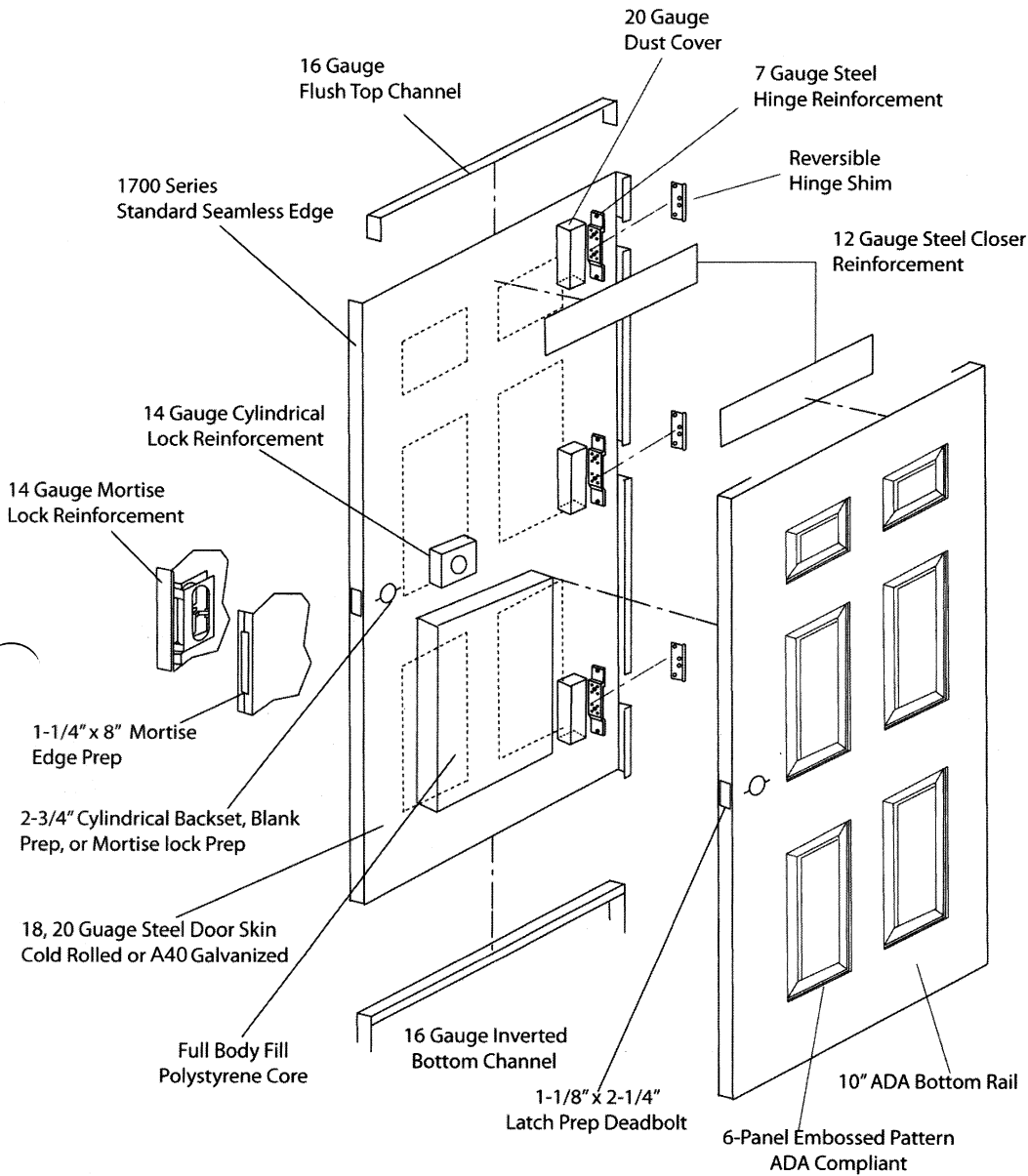
NAAMM

National Association of
Architectural Metal Manufacturers

DKS 1700 Series 6-Panel Door / 1900 Series 2-Panel Door

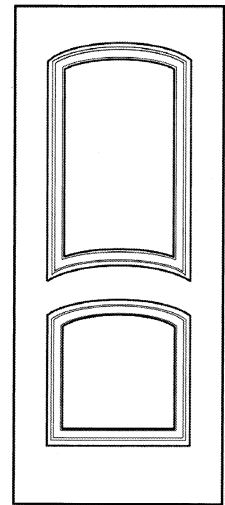
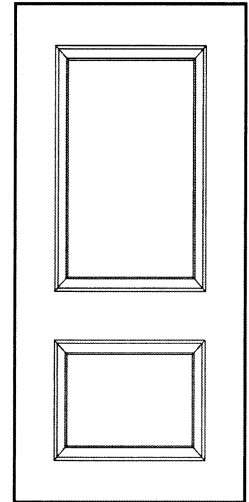
1700 Series 6-Panel Door

Sound Rated
18 Ga, STC 28
20 Ga, STC 27



1900 Series 2-Panel Door

Sound Rated, 18 Ga, STC 28



Warnock Hersey



NAAMM

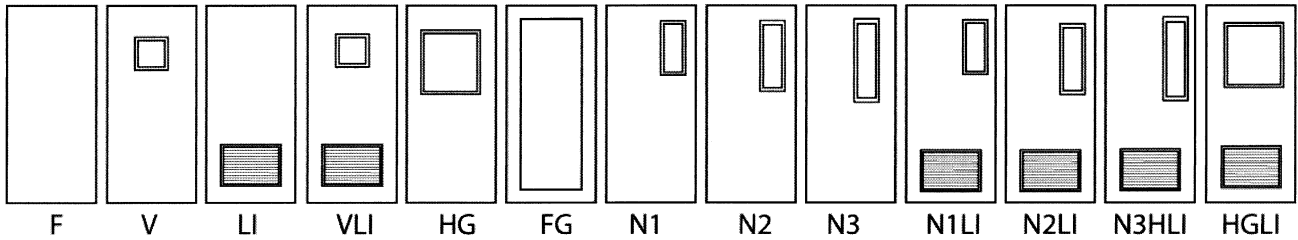
National Association of
Architectural Metal Manufacturers

DKS Door Specifications

Series	Type	Gauge	Core	CR/GALV	Edge	Handing	Thickness	Label	Max Size
1000	Flush	16, 18, 20	Polystyrene	CR/GALV	Corner Seam	Reversible	1 3/4"	3hr/PP/S	8'0 x 8'0
1100	Flush	16, 18, 20	Polystyrene or Honeycomb	CR/GALV	Lock Seam	Reversible or Handed	1 3/4"	3hr/PP/S	8'0 x 8'0
1200	Flush	20	Polystyrene	CR/GALV	Seamless	Reversible	1 3/4"	3hr/PP/S	8'0 x 8'0
1300	Stiffened	18	Mineral Wool Fill	GALV	Seamless	Handed	1 3/4"	3hr/PP/S	8'0 x 8'0
1400	Stiffened	16	Mineral Wool Fill	GALV	Seamless	Handed	1 3/4"	3hr/PP/S	8'0 x 8'0
1500	Retrofit Replacement	18	Polystyrene	CR	Corner Seam	Reversible	1 3/4"	N/A	
1600	Flush	16	Polystyrene	GALV	Seamless	Reversible	1 3/4"	3hr/PP/S	8'0 x 8'0
1700	6-Panel	18, 20	Polystyrene	CR/GALV	Seamless	Reversible	1 3/4"	3hr/PP/S	8'0 x 8'0
1800	Flush	18	Polystyrene	CR/GALV	Seamless	Reversible	1 3/4"	3hr/PP/S	8'0 x 8'0
1900	2-Panel	18	Polystyrene	CR/GALV	Seamless	Reversible	1 3/4"	3hr/PP/S	6'0 x 7'0
2000	Flush	18	Honeycomb	CR/GALV	Seamless	Reversible	1 3/4"	3hr/PP/S	8'0 x 8'0
6000	Flush	18	Double Egress Honeycomb	CR/GALV	Seamless	Reversible	1 3/4"	3hr/PP/S	8'0 x 8'0
9000	Temp. Rise 250 Degrees	18	Mineral core	CR/GALV	Seamless	Reversible	1 3/4"	3hr/PP/S	8'0 x 8'0

CR: Cold Rolled, PP: Positive Pressure, GALV: Galvanized, S: Smoke

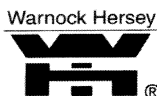
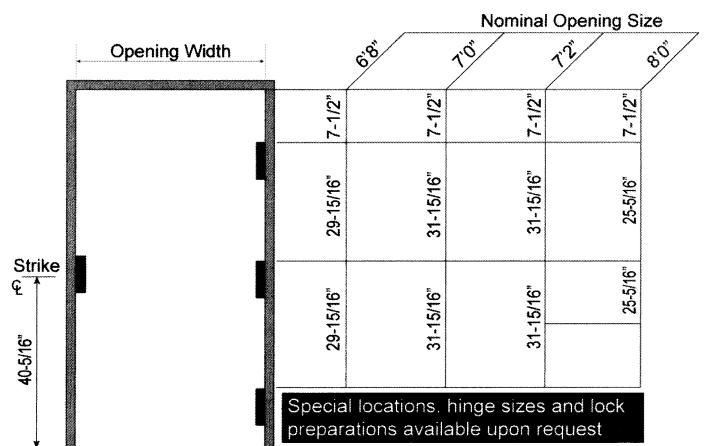
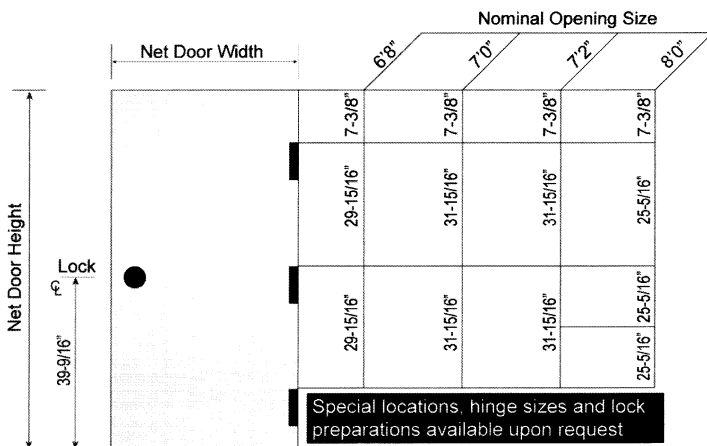
Standard Door Types



DOORS

Standard Hardware Locations 4-1/2" Hinge

FRAMES

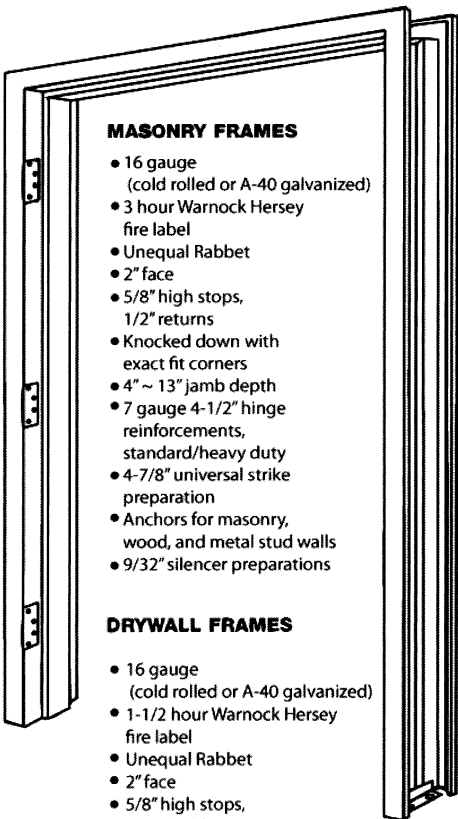


Welded or Knock Down Steel Frames

DKS Manufactures Steel Frames in standard sizes. These frames have the tightest tolerances in the industry. DKS steel frames are available in 16 gauge for 1-3/4" doors.

All standard frames are manufactured from cold rolled or galvanized A-40 steel.

DKS Fire labeled steel frames are approved by Warnock-Hersey (WH).



KNOCK DOWN CORNER
Exact fit corners provide for quick, easy, and accurate assembly.

HINGE REINFORCEMENT
7 gauge standard/heavy duty hinge reinforcement.

WOOD STUD ANCHOR

STEEL STUD ANCHOR

WIRE MASONRY

MASONRY FRAMES

- 16 gauge (cold rolled or A-40 galvanized)
- 3 hour Warnock Hersey fire label
- Unequal Rabbet
- 2" face
- 5/8" high stops, 1/2" returns
- Knocked down with exact fit corners
- 4" ~ 13" jamb depth
- 7 gauge 4-1/2" hinge reinforcements, standard/heavy duty
- 4-7/8" universal strike preparation
- Anchors for masonry, wood, and metal stud walls
- 9/32" silencer preparations

DRYWALL FRAMES

- 16 gauge (cold rolled or A-40 galvanized)
- 1-1/2 hour Warnock Hersey fire label
- Unequal Rabbet
- 2" face
- 5/8" high stops, 1/2" double returns
- Knocked down with exact fit corners
- 5-7/8", 6-1/4", 6-3/4", 7-1/4", 7-3/4", 8-1/4", 8-3/4" jamb depth
- Screw adjusting compressor anchors
- 7 gauge 4-1/2" hinge reinforcements, standard/heavy duty
- 4-7/8" universal strike preparation
- 9/32" silencer preparations

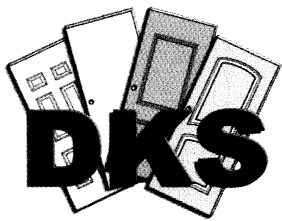
Also available in 18 gauge (Cold rolled and A-40 galvanized)

WELDED CORNER
Welded corners are tight fitting to provide a smooth seamless appearance.

STRIKE REINFORCEMENT
14 gauge strike reinforcements and mortar boxes are designed for accurate and universal function.

FLOOR ANCHOR
18 gauge floor anchors standard in all masonry frames.





Steel Door & Frame Systems, Inc.

EXPANDABLE MASONRY AND DRYWALL FRAMES

The DKS "EXP" adjustable frame is a three piece system designed to adjust to multiple depth wall conditions. Slide rails placed inside the frame throat allow the frame to accommodate all jamb depths from 5 5/8" to 8 3/4" using a single frame.

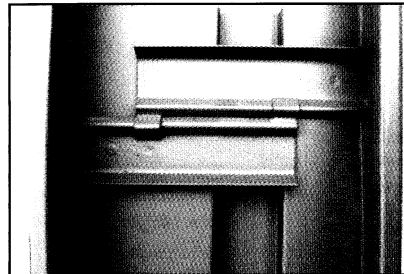
The frame material used in manufacturing is A-40 galvanized 16 gauge. Prime Painted with two part epoxy baked on at the factory.

Three 7 gauge 4.5 x 4.5 hinge reinforcements for 6'8" and 7'0" heights. Four 7 gauge hinge reinforcements for 8'0" height frames. All locations are DKS Standard. All hinge reinforcements are prepared to accept standard weight or heavy weight template hinges. The ASA strike reinforcement is 12 gauge material drilled and tapped to accept 12-24 screws.

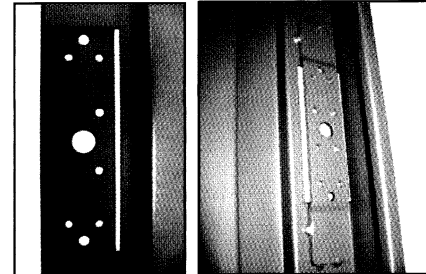
The frame is prepared for silencer application.

The frame carries the 90 minute WHI mark as standard.

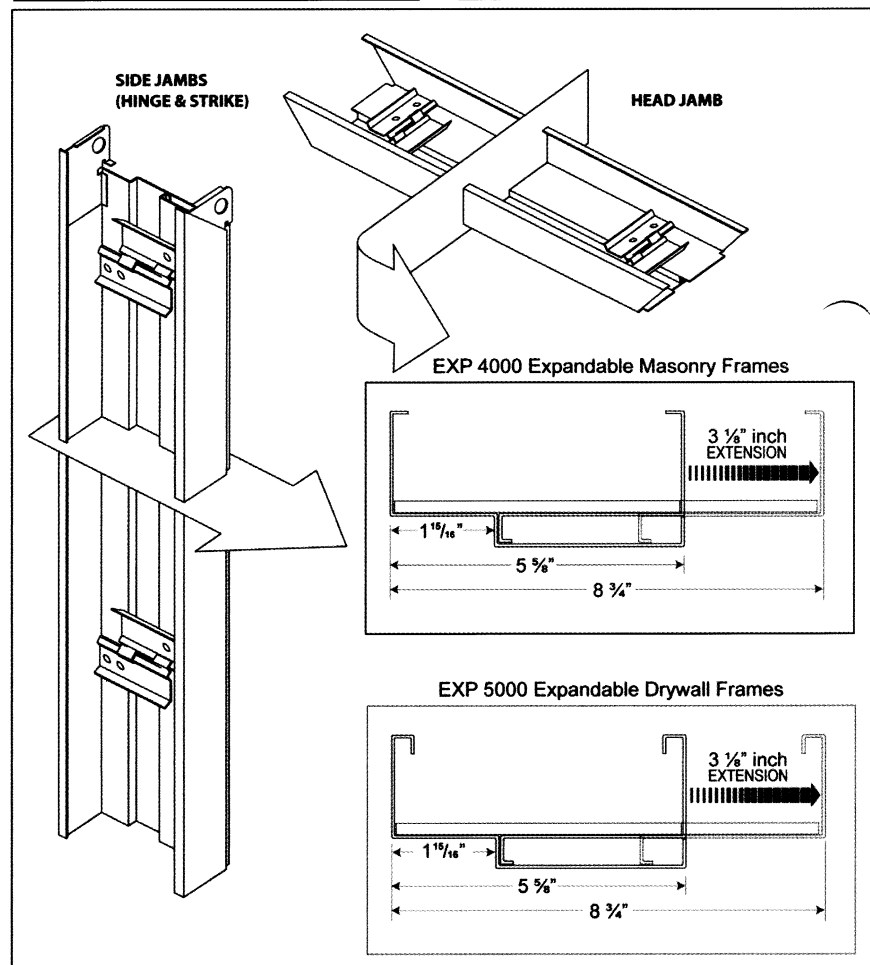
The EXP Frame is available in both DKS 4000 Series Masonry and 5000 Series Drywall configurations.



SLIDE RAILS



HINGE REINFORCEMENTS



DKS Steel Door & Frame Systems, Inc.

2142 Tubeway Avenue
Commerce, CA 90040

Tel: (323) 888-7763

Fax: (323) 888-0063

Website: www.dksdoors.com

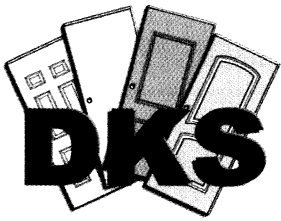
Email: sales@dksdoors.com



National Association of
Architectural metal Manufacturers

Warnock Hersey





Steel Door & Frame Systems, Inc.

DOOR & FRAME ACCESSORIES

MULTI-PURPOSE ADJUSTABLE ANCHOR (MPAA-10)	HEAVY DUTY ADJUSTABLE DRYWALL ANCHOR (HDADWA)
DOOR SILENCER (DSM21)	REVERSIBLE FLUSH BOLT STRIKE W/ BACKING PLATE (FLUSHSTRK-2)
DEAD LOCK REINFORCEMENT PLATE (DBCONV-2)	CLOSER REINFORCEMENT (CRO1)
DOOR FRAME DRIP CAP (CR44640)	

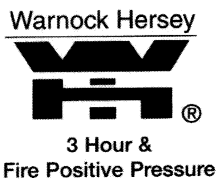
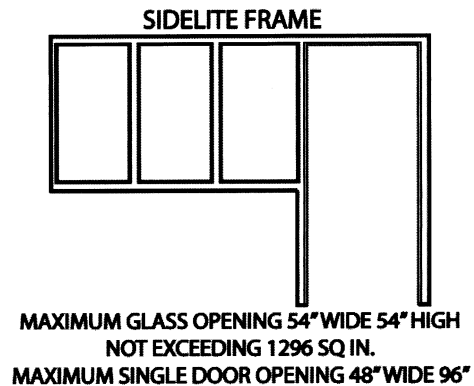
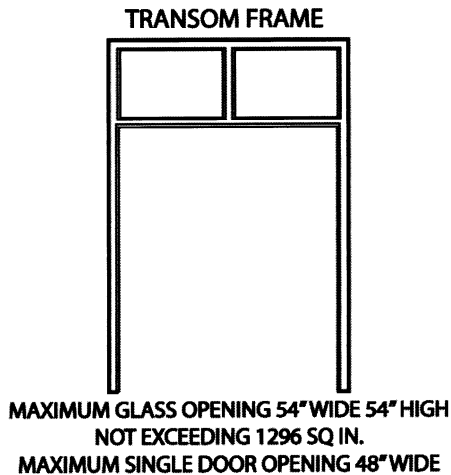
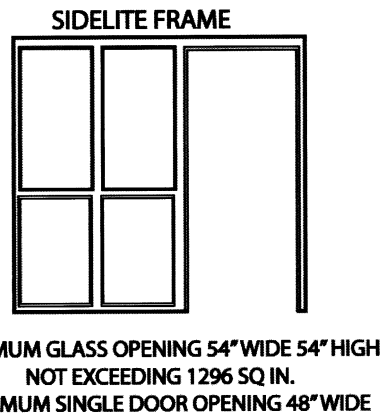
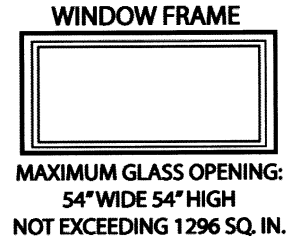
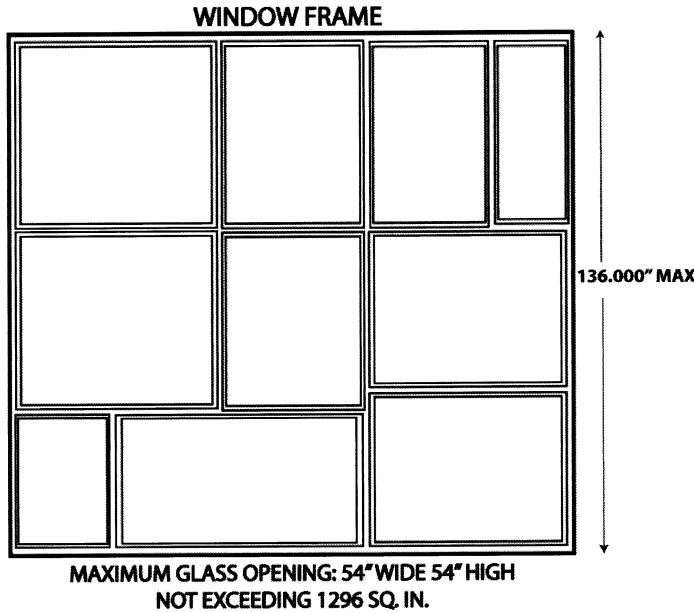
CHECK OUR NEW CATALOGUE FOR A COMPLETE LISTING OF DOOR AND FRAME ACCESSORY ITEMS

7500 Series Architectural Stick Components

Sidelite, Transom, and Window Frames

Fabrication Components

TYPE
Hinge Jamb 10'0" 6'8" & 7'0" locations
Strike Jamb 10'0" 6'8" & 7'0" locations
Hinge Mullion 10'0" 6'8" & 7'0" locations
Strike Mullion 10'0" 6'8" & 7'0" locations
Blank Mullion 10'0"
Blank Stick Material 10'0"

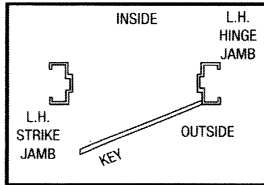


Door and Frame Handing Chart

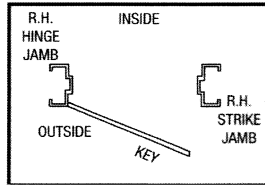
SINGLE SWING DOORS

When door swings towards you and hinges are on right side of the door – **Door is R.H.R. / Frame is L.H.**

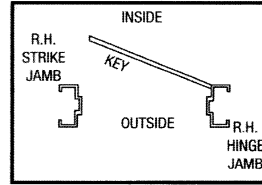
When door swings inside and hinges are on right side of the door – **Door is R.H. / Frame is R.H.**



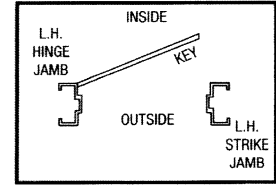
Right Hand Reverse Door (Swing Out) Left Hand Frame



Left Hand Reverse Door (Swing Out) Right Hand Frame



Right Hand Door (Swing In) Right Hand Frame

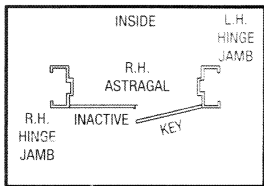


Left Hand Door (Swing In) Left Hand Frame

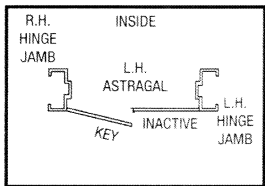
DOUBLE DOORS

When door leaf swing towards you and hinges are on the right side of active leaf – **Door is R.H.R Active / Frame is L.H. Active**

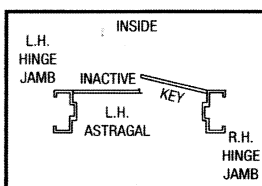
When door leaf swing inside and hinges are on the right side of active leaf – **Door is R.H. Active / Frames is R.H. Active**



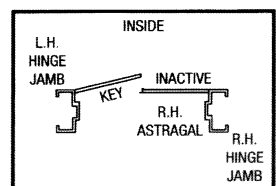
OUTSIDE
Pair of Doors – R.H.R. Active (Swing Out)
Double Door Frame L.H. Active



OUTSIDE
Pair of Doors – L.H.R. Active (Swing Out)
Double Door Frame R.H. Active



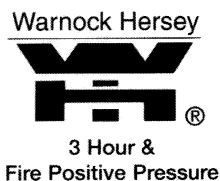
OUTSIDE
Pair of Doors – R.H. Active (Swing In)
Double Door Frame R.H. Active



OUTSIDE
Pair of Doors – L.H. Active (Swing In)
Double Door Frame L.H. Active

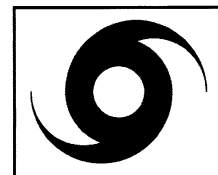
Warehouse Locations

California	Texas	Pennsylvania
<p>DKS Steel Door & Frame Systems Inc. 2142 S. Tubeway Avenue Commerce, CA 90040 Tel: (323) 888-7763 Fax: (323) 888-0063 Website: www.dksdoors.com Email: sales@dksdoors.com</p>	<p>DKS Texas Warehouse 1018 Avenue M Grand Prairie, TX 75050 Tel: (972) 660-3000 Fax: (972) 660-3001 Email: brianshuck@theshuckgroup.com</p>	<p>DKS Pennsylvania Warehouse 176 Westbrook Drive Honey Brook, PA 19344 Tel: (610) 273-7070 Fax: (610) 273-9053 Website: www.tabindustries.com</p>



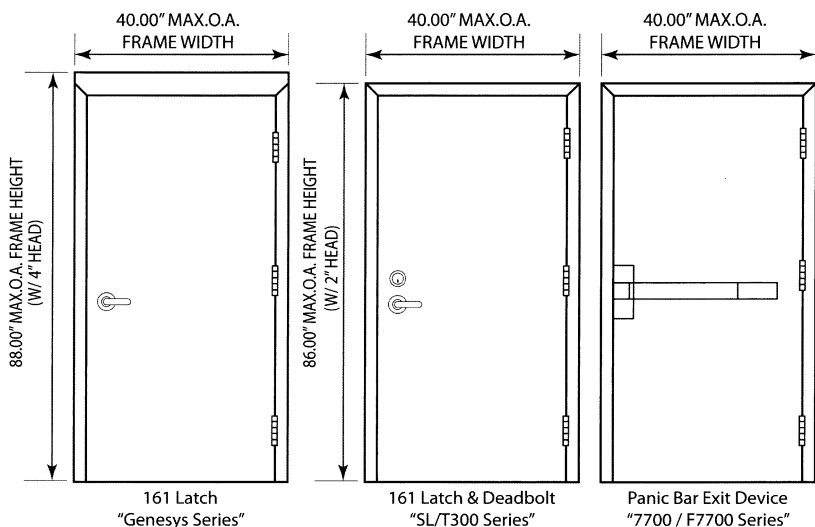
TERMS and CONDITIONS

1. All published prices of DKS materials are shown as list price subject to discount for DKS approved vendors. All taxes by any governmental agency are in addition to the sale price of the material and are the responsibility of the approved purchasing vendor. All prices are subject to change without notice. Prices given are F.O.B. DKS warehouse at Commerce, California, and does not include freight or special handling services.
2. All orders are subject to availability and may be cancelled by the ordering party within 36 working hours following notification of receipt. All orders are considered individual transactions and must be accompanied by a valid purchase order issued by the customer. A minimum \$75.00 charge will be applied for any changes made to an existing order.
3. Loss or damage of material conveyed to the customer by use of public cartage or carrier is the responsibility of the consignee (customer). Materials must be inspected by the consignee upon delivery and any damage found **MUST BE NOTED** on the Bill of Lading/Proof of Delivery RECEIPT. Filing or notification of freight claims against public conveyance is the obligation of the customer.
4. Return of Merchandise: Claims for shortages and/or incorrectly filled orders must be filed with DKS Steel Door & Frame Systems, Inc. within 10 days of receipt of material. Price adjustments must also be made in writing to DKS within 30 days from receipt of invoice. No returned goods will be accepted without written approval from DKS. Credit will be based upon written authorization by DKS. Such returns must be prominently marked with the return goods authorization number and shipped prepaid. Returns, if approved, are subject to a minimum restocking charge of 20% for unopened stock product and must be received in new material condition. Non stock materials and special orders are not returnable. Under no circumstances will DKS accept liability for incidental or consequential damages. Charge-backs will not be allowed. No cash refund given, exchange or replacement only.
5. Credit terms for all materials invoiced to the customer are 1% discount – 15 days, net 30 days, without hold back or retainage.
6. DKS Material Warranty: DKS doors and frames shall be warranted by manufacturer for a period of one year for all cold rolled prime painted products. Galvanized prime painted products shall be warranted for a period of 10 years. For either product, the warranty begins from date of first delivery from the manufacturer. The warranty is based upon the product being used with the application of hardware for which it was designed and that standard industry recommendations for installation, maintenance, and use are followed; including but not limited to, painting, adjustment, and normal use. This warranty is limited to the replacement or repair at the option of the manufacturer.
7. **AUTHORITY OF TERMS AND CONDITIONS:** The terms mentioned herein are the only terms DKS will honor, and any exceptions must be approved and confirmed by an officer of DKS Steel Door & Frame Systems, Inc. Terms and Conditions of buyer's purchase orders will not be honored unless an agreement is reached in writing beforehand. DKS has the right to refuse credit to anyone, or has the right to refuse to fulfill any orders. No representations, arrangements or agreements not appearing on the order shall be binding upon DKS.



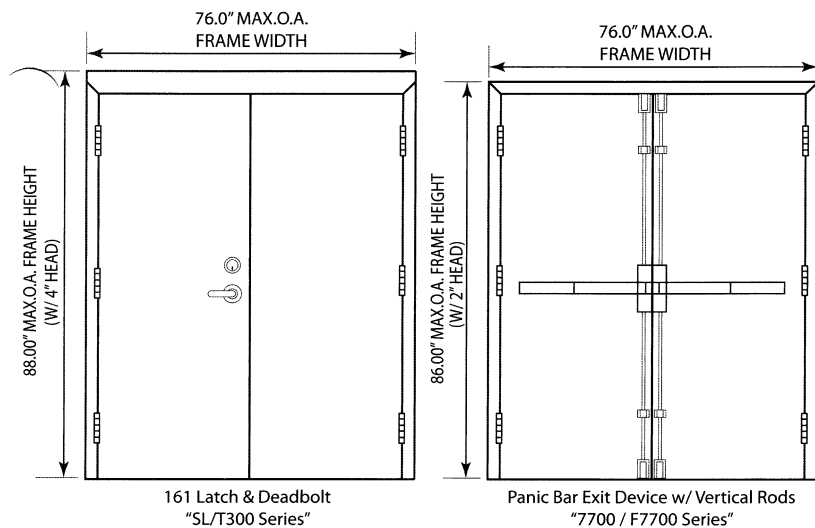
**DKS 1800 SERIES
HURRICANE TESTED
FLORIDA APPROVED FL-13624**

COMMERCIAL STEEL SINGLE DOOR INSWING / OUTSWING "IMPACT"



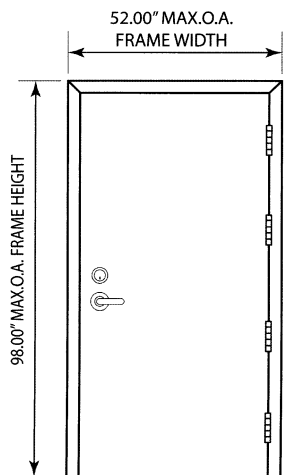
MAX FRAME DIMENSIONS	LOCK TYPE	DESIGN PRESSURE (PSF)			
		INSWING		OUTSWING	
		POSITIVE	NEGATIVE	POSITIVE	NEGATIVE
40.00" x 88.00"	161 LATCH & DEADBLOT "SL/T300 Series"	+55.0	-55.0	+55.0	-55.0
40.00" x 88.00"	161 LATCH "Genesys Series"	+70.0	-70.0	+70.0	-70.0
40.00" x 88.00"	PANIC BAR EXIT DEVICE "7700 / F7700 Series"	N/A	N/A	+70.0	-70.0

COMMERCIAL STEEL DOUBLE DOOR INSWING / OUTSWING "IMPACT"

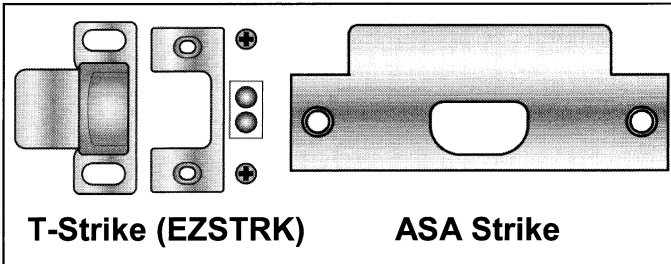
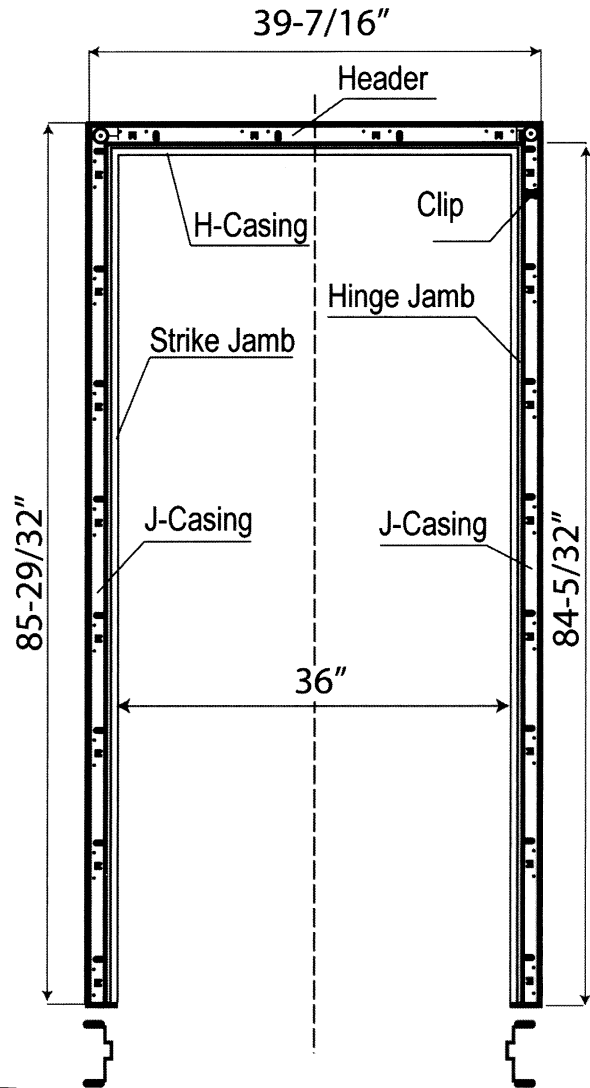
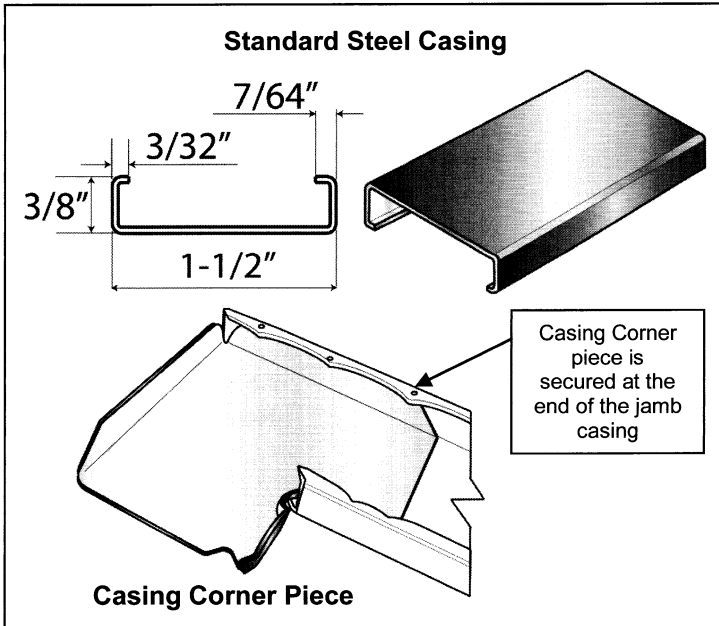


MAX FRAME DIMENSIONS	LOCK TYPE	DESIGN PRESSURE (PSF)			
		INSWING		OUTSWING	
		POSITIVE	NEGATIVE	POSITIVE	NEGATIVE
76.00" x 88.00"	161 LATCH & DEADBLOT "SL/T300 Series"	+55.0	-55.0	+55.0	-55.0
76.00" x 88.00"	PANIC BAR EXIT DEVICE w/ VERTICAL RODS "7700 / F7700 Series"	N/A	N/A	+70.0	-70.0

COMMERCIAL STEEL DOOR OUTSWING "IMPACT"



OVERALL FRAME DIMENSIONS	LOCK TYPE	DESIGN PRESSURE (OUTSWING ONLY)	
		POSITIVE	NEGATIVE
52.00" x 98.00"	161 LATCH (CAL-ROYAL)	+80.0	-80.0

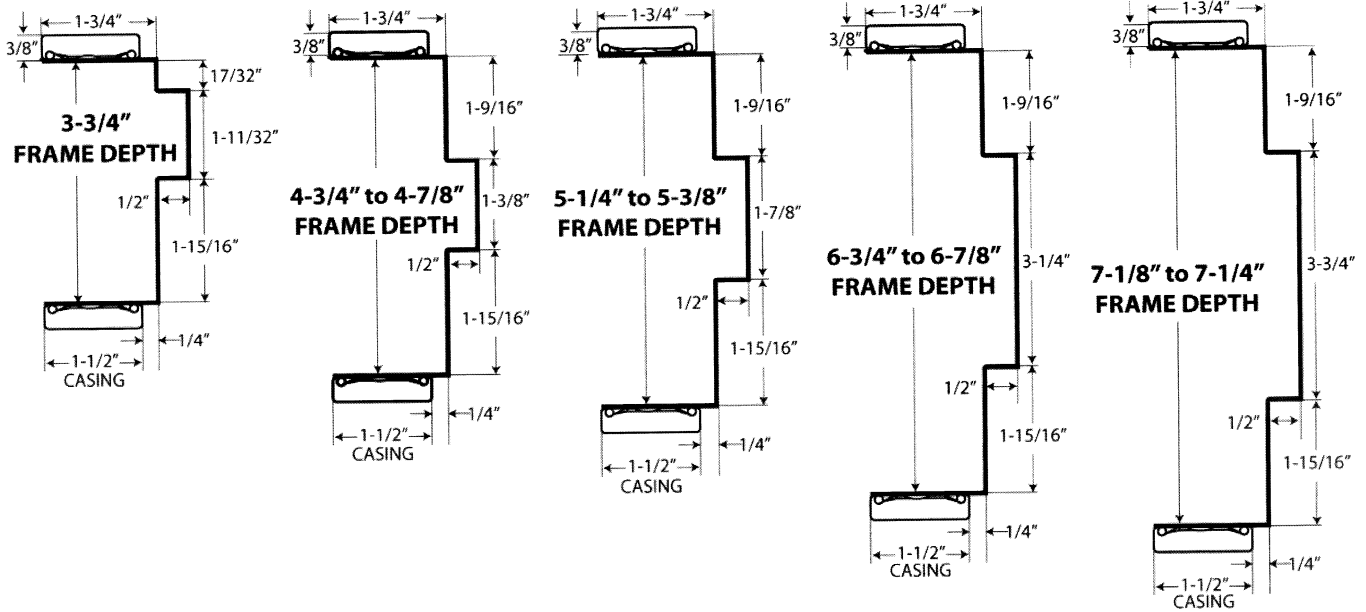


- ◆◆◆ ACCESSORIES ◆◆◆**
- Adjustable T-Strike allows full 1/4" adjustment, for a snug and secure fit.
 - Optional ASA Strike Preparation.
 - Reinforcement Brackets available for door guards, door closers and other hardware applications. (see page 13)

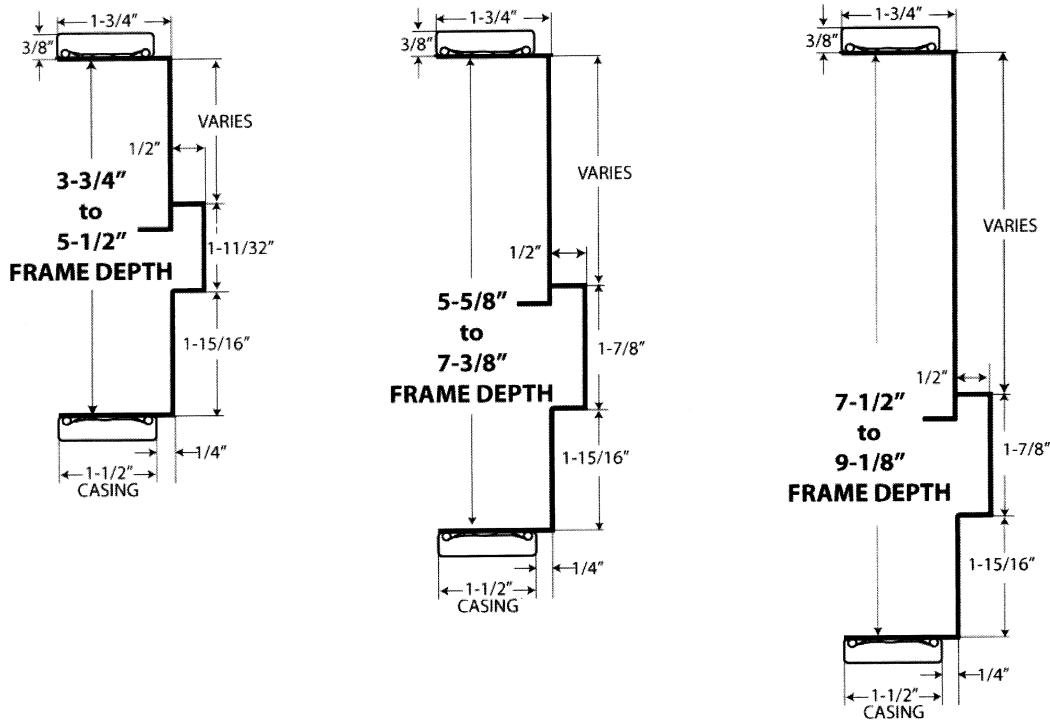
COLOR: Other colors available with factory lead time

FRAME TYPE	RATING	MAXIMUM OPENING SIZE		WALL SIZE	
		WIDTH	HEIGHT	MIN	MAX
Single Swing Frames	90 MIN. "B" Label	4'0"	8'0"	3-3/8"	13"
Pair Frames	90 MIN. "B" Label	8'0"	8'0"	3-3/8"	13"

FRAME PROFILE FOR 1-3/4" DOORS

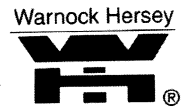


ADJUSTABLE FRAME PROFILE FOR 1-3/4" DOORS

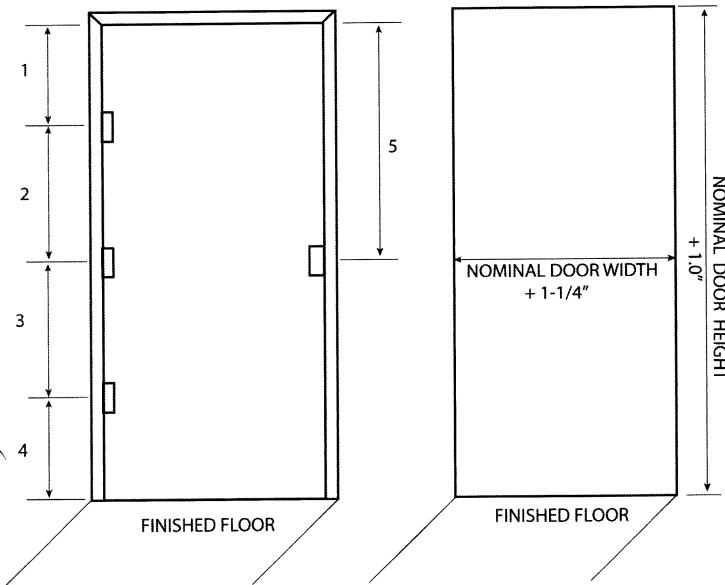


E-Z Frame

PRE-FINISHED STEEL DOOR FRAMES



HEIGHT	1	2	3	3	4	5
4.5 X 4.5 HINGE AND STRIKE LOCATIONS						
6'8"	10-19/32"	29-1/2"			10-19/32"	40-3/32"
7'0"		31-1/2"				44-3/32"
8'0"		37-1/2"	37-1/2"			56-3/32"
4 X 4, 1/4" RADIUS HINGE AND STRIKE LOCATIONS						
6'8"	10-11/32"	29-3/4"			10-11/32"	40-3/32"
7'0"		31-3/4"				44-3/32"
8'0"		37-3/4"	37-3/4"			56-3/32"

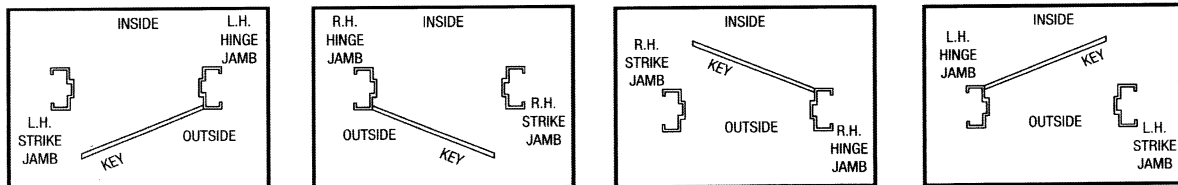


TESTING INFORMATION		
TEST	STANDARDS	REPORT
Fire Resistance	NFPA 252(99) Standard Methods of Fire Test of Door Assemblies, UL 10C(01) Positive Fir Test of Door Assemblies, UBC 7-2(97) Fire Test Standard for Single Swing Doors & CAN4 S104 (85) Fire Test of Door Assemblies CANADA	TEST REPORT 3122865-01

Warehouse Locations

California	Texas	Pennsylvania
DKS Steel Door & Frame Systems Inc. 2142 Tubeway Avenue Commerce, CA 90040 Tel: (323) 888-7763 Fax: (323) 888-0063 Website: www.dksdoors.com Email: sales@dksdoors.com	DKS Texas Warehouse 1018 Avenue M Grand Prairie, TX 75050 Tel: (972) 660-3000 Fax: (972) 660-3001 Email: brianshuck@theshuckgroup.com	DKS Pennsylvania Warehouse 176 Westbrook Drive Honey Brook, PA 19344 Tel: (610) 273-7070 Fax: (610) 273-9053 Website: www.tabindustries.com

DOOR HANDING CHART



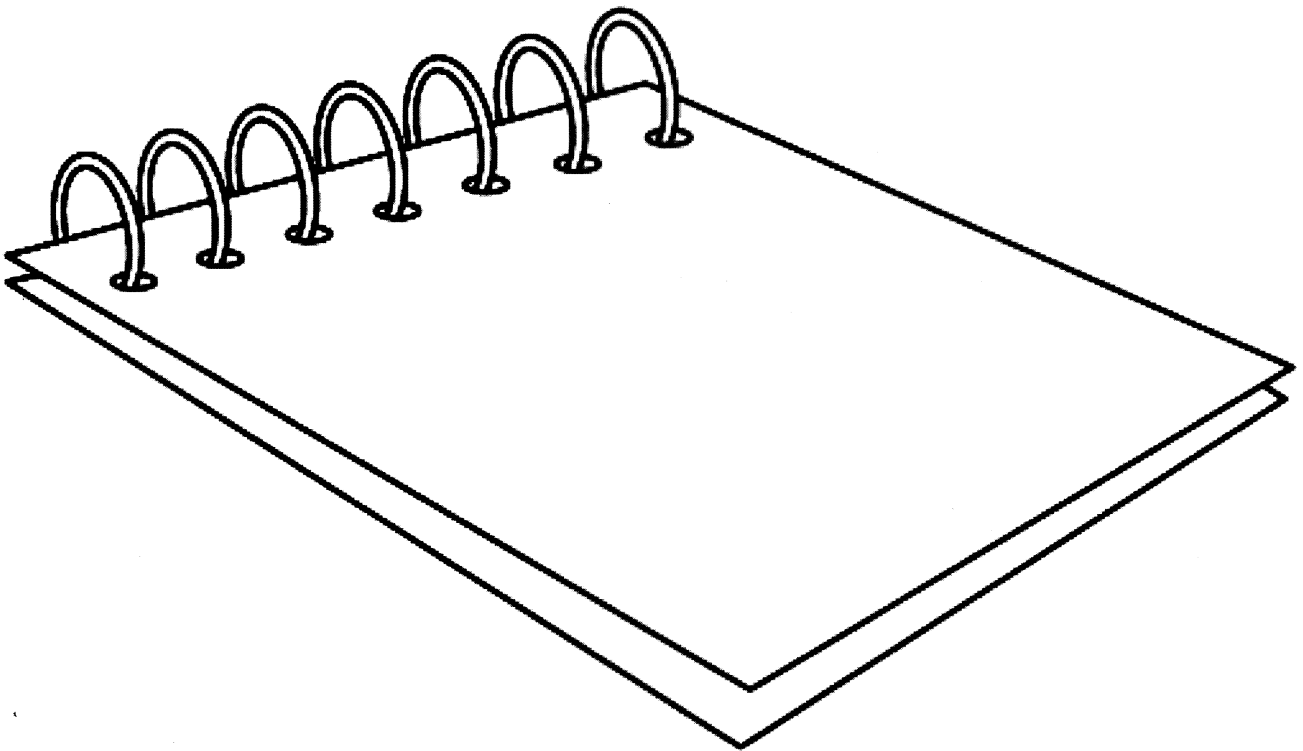
When door swings towards you and hinges are on right side of the door – Door is R.H.R. / Frame is L.H.
 When door swings inside and hinges are on right side of the door – Door is R.H. / Frame is R.H.

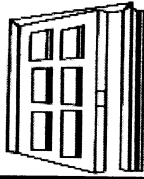
E-Z Frame Installation Instructions

1. Open cartons carefully and inspect the product. Lay out materials in the order of installation.
2. Verify the rough opening size to ensure accurate installation. Using the nominal door size, the opening width needs to be plus 1¼ inches in width and plus 1 inch in height.
3. Use screws in lieu of nails to facilitate any necessary adjustment. Before fastening the frame to the opening, check the wall thickness and reinforcements for accuracy.
 - Maximum door size for a single door is 4'0" x 8'0".
 - Maximum size for a pair of door is 8'0" x 8'0".
4. Determine the handing of the door and slide the head over the wall, centering the head in the opening.
5. Place top of the jamb sides (hinge side and strike side) over the wall below the head and slide the jamb sides into the sleeve opening and vertically align in the unit in preparation for fastening.
6. Ensure opening accuracy by squaring all corners to 90 degrees and adjust the jamb sides for equal horizontal clearance from top to bottom. If the door to be placed in the opening is available, use the door as a template with the frame.
7. Fasten the door to the opening. Begin with the hinge side first using recommended screws for either wood stud or steel stud applications. Next, level the header with the hinge jambs and fasten from the hinge to strike side. Fasten strike jamb after ensuring the proper clearance of the opening has been maintained.
8. Attach casings by sliding mitered corners together to create a 45 degree miter then press casings carefully over each fastening clip. If the casing needs vertical adjustment to tighten the miter use a screw driver as a lever and carefully apply upward pressure to the casing from the bottom.
9. Product description, certification, and testing information for this product is available from:
 - INTERTEK (WARNOCK HERSEY) TESTING SERVICES NA, INC. Report #3122865-01 AND ADHERES TO NFPA 252 (99) STANDARD METHODS OF FIRE TESTS OF DOOR ASSEMBLIES, UL 10C (01), POSITIVE PRESSURE FIRE TESTS OF DOOR ASSEMBLIES, UBC 7-2 (97) FIRE TEST STANDARD.
 - ARCHITECTURAL CODE 8100, FIRE RESISTANCE 90 MINUTES, POSITIVE PRESSURE, UL CRITERIA 10C (2001), CERTIFICATION BY INTERTEK, LISTING SECTION DOOR FRAMES LISTING.
 - INTERTEK LISTING REPORT# 16998, ISSUED APRIL 18, 2008. 10:19AM.

DKS

APPENDIX





DKS
Steel Door & Frame System, Inc.

2142 Tubeway Avenue
Commerce, California 90040
Tel: (323) 888-7763
Fax: (323) 888-0063

DKS Customers
Interested Parties
State and Local Authorities

Subject: DKS Steel Door and Frames Systems, Inc., ITS / Warnock Hersey Procedural Specification, Certification, and Inspection.

All DKS products are built to specification under Intertek / Warnock Hersey procedural report and manufacturing standard No. 3053378 and as amended November 29, 2004 and June 30, 2006. Materials comply to UL 10 (b) and (c), UBC 7-2 (1997) Part 1, NFPA 252, CAN/ULC S104, and ASTM E2074-00.

DKS product meets or exceeds all SDI standards and is a member in good standing of HMMA (Hollow Metal Manufacturers Association) Division of NAAMM (National Association of Architectural Metal Manufacturers).

DKS products are certified by the WHI mark including: Positive pressure (S) Smoke, and 20 minute to 3 hour fire ratings up to a maximum size of 8'0 X 8'0 in pair applications @ 3 hours with polystyrene or honeycomb cores. Available gauges are 16, 18, and 20 gauge cold rolled or A40 hot dipped galvanized materials. The complete list of products and shop services are available from our Commerce, California Warehouse and Distribution facility.

Attached is our "Door Installation" usage guide for all category type "A" doors.

Thank You,

DKS Steel Door and Frame Products, Inc.
2142 Tubeway Avenue
Commerce, California 90040-1614

DKS STEEL DOORS CATEGORY A

INTERTEK TESTING SERVICES LISTING REPORT NO. 3053378

DKS STEEL DOOR AND FRAME SYSTEMS, INC.

DOOR INSTALLATION INSTRUCTIONS

Doors described in this procedure meet the requirements for both positive and neutral pressure fire tests, ULI10 (c), UBC 7-2 (1997) PART 1, NFPA 252, ASTM E0274-00.

This includes the DKS Series 6000, 9000, 1000, 1100, 1200, 1300, 1400, 1600, 1700, 1800, 1900 and 2000 Series doors as published. These doors are category "A" doors (no additional edge sealing system is required).

This category includes doors which do not require the use of special frames (category C) or add on edge seal systems (category G) to meet positive pressure fire test requirements.

All assemblies are identified by a label or marking bearing the wording "Listed Product", a time interval temperature rise (if applicable), a serial number, and the Warnock Hersey certification mark.

Complete statements of positive pressure, smoke and draft control, temperature rise, fire exit hardware application and manufacturing are available in detail in Intertek Testing/Warnock Hersey report no. 3053378.

DKS Steel Door and Frames Systems, Inc.
2142 Tubeway Avenue
Commerce, California 90040-1614
Ph: 323-888-7763

Warnock Hersey



Issued November 29, 2004. Amended additions March 7, 2006

DKS Steel Door & Frame Systems, Inc.



PRODUCT DESCRIPTION

Product Covered:

DKS 1/3 - 3 Hour Steel-Stiffened Steel Fire Doors PP Model 1300

Product Description:

CATEGORY A DOORS-NO ADDITIONAL EDGE-SEALING REQUIRED

Hollow Metal (12, 14, 16, 18, 20 gauge) Vertical Stiffened, Swinging Flush Design Fire Door for installation singly or pairs, including double egress in 1/3 Hour to 3 Hour locations. For use in listed (3-sided) 16 gauge welded steel frames meeting ANSI-A155.1/UL-63 or as per manufacturer's listings.

Limitations

Mortise or Cylindrical Latches with up to 5" Backset/Surface or Concealed Vertical Rod, including Top Rod Only/Rim Fire Exit Hardware/Viewers/Surface Mounted Closers/Concealed Closer Arms/Surface Bolts/Surface Mounted Protection Plates/Viewer/Louver/Surface Mounted or Mortised Door Bottoms/Vision Light Kit – Maximum 1296 sq.in. for 20/45 minute (or maximum tested by manufacture of glass) maximum tested by manufacture of glass for 60 minute to 3 hour. Astragal for Pairs and Double Egress Pairs is optional. Temperature Rise greater than 650°F @ 30 minutes.

Configuration	Maximum Size*
Single	4'0" wide x 10'0" high
Pairs	8'0" wide x 10'0" high
Double Egress	8'0" wide x 10'0" high

*See manufacturer's installation instructions for additional information on Smoke and Draft Control, size restrictions and limitations.

These doors are eligible for use in any "Category C – Standard" frame. These doors may also be installed in frames listed in "Category C – Proprietary" in accordance with the frame manufacturer's individual listing.

All doors listed in Category A are eligible to bear the **(S)** (for Smoke & Draft Control assemblies) if a listed "Category H – Smoke & Draft Control Gasket" has been applied to the assembly. Please refer to Category H for individual gasket manufacturer's listings.

All doors in this category are identified by a label or marking bearing the wording, "Listed Fire Door", a time interval, a temperature rise rating, a serial number and the Warnock Hersey Certification Mark and "UBC-7-2-97/UL 10C".

<u>Attribute</u>	<u>Value</u>
Architecture Code	08100 Metal Doors and Frames
Architecture Subcode	08110 Metal Doors
Authorized by Office	Middleton Regional Certification Center
Certification Services	Certification
Client Number	31931
Criteria	UL 10(c) (1998)
Criteria	UBC 7-2 (1997)
Criteria	NFPA 252 (1999)
Criteria	CAN 4-S104 (1985)
Fire Resistance	60 Min PP Category A Door
Fire Resistance	3 Hour PP Category A Door
Fire Resistance	90 Min PP Category A Door
Fire Resistance	45 Min PP Category A Door
Fire Resistance	20 Min w/Hose Positive Pressure
Intertek Evaluation Center	Middleton, WI 53562
Listed or Inspected	LISTED
Program	WHI Certification
Report Number	3079045

MANUFACTURING INFORMATION

APPLICATION

Category A doors constructed as described in this procedure meet the requirements for both positive and neutral pressure fire tests, UBC 7-2 (1997), UL 10C (1998), NFPA 252 (1999), ASTM E2074 (2000), and CAN S104 (1985) including the hose stream.

Doors labeled for positive pressure applications must include installation instructions to be furnished by the door labeler. Unless otherwise noted in the door's installation instructions all intumescent materials and smoke/draft control gasketing used in the assembly are to be installed per their respective manufacturer's instructions.

These non-temperature rise doors have been fire tested at positive pressure in accordance with UBC 7-2 (1997). Unexposed temperature rise is greater than 6500 in 30 minutes.

SIZE

TYPE	Max Width	Max Height	Max Thickness
Single Swing	4'0"	10'0"	1 ¾"
Standard Pair	8'0" (4'0" Per Leaf)	10'0"	1 ¾"
Double Egress	8'0" (4'0" per Leaf)	10'0"	1 ¾"

FACES

- 20 gauge (0.032"), 18 gauge (0.042") 16 gauge (0.053")
- 14 gauge (0.067") and 12 gauge (0.093")

CORE

- Fiberglass insulation 1.5 lb. cu/ft, 1 5/8" thick, filling cavities, except those necessary for concealed hardware.

STIFFENERS

- 22 gauge vertical hat or half hat shaped stiffeners, full-length of the door, not exceeding 6" O.C. 7½" maximum from either hinge or latch edge. Spot welded 2 ¼" in. from each end and then approximately 4" O.C. full length.
- Stiffeners may be shortened to accommodate closer reinforcement and mortise hardware.

TOP AND BOTTOM CHANNELS

16 gauge (0.053") full depth and width of door spot welded to door faces approximately 4" O.C.

Additional channels may be placed in the top and bottom channels for moisture barrier. May be caulked with silicone.

HINGE REINFORCEMENT

10" long x 1¼" wide x 7 gauge. Spot or tack welded.

LOCK REINFORCEMENTS

Standard

Lock: 2 reinforcements positioned to accommodate lock assembly 2 ½" in length X 1 ⅛" in width X 12 gauge spot or tack welded.

Alternate

Lock: Reinforcement positioned to accommodate lock assembly. 14 gauge extruded to 12 gauge spot or tack welded.

STRIKE REINFORCEMENTS

Standard

2 reinforcements positioned to accommodate strike 2 ½" in length X 1 ⅛" in width X 12 gauge spot or tack welded.

Alternate

Reinforcement positioned to accommodate lock assembly. 14 gauge extruded to 12 gauge stop or tack welded.

CLOSER REINFORCEMENTS

Reinforcement positioned to accommodate closer. Minimum 14 gauge X 4" X 16" minimum.

FLUSH BOLT REINFORCEMENTS

Standard

2 reinforcements positioned to accommodate flush bolt assembly. 2 ½" in length X 1 ⅛" in width X 12 gauge spot or tack welded.

Alternate

Reinforcement positioned to accommodate flush bolt assembly. 14 gauge extruded to 12 gauge spot or tack welded.

HARDWARE

Latches

All latching devices used must be listed for use in positive pressure tested steel faced doors.

Cylindrical locks with a maximum 5" backset.

Mortise latches.

Rim and Concealed or Surface mounted vertical rod fire exit devices.

NOTE:

All doors provided with reinforcements for fire exit hardware must have a second label attached stating "Fire Door to be Equipped with Fire Exit Hardware".

MINIMUM LATCH BOLT THROW

Single Swing Door

42" wide X 86" high or less, minimum ½ bolt throw.

Doors exceeding 42" wide X 86" high, minimum ¾" latch throw.

Pairs

All doors swinging in pairs or double egress pairs, minimum ¾" latch throw.

Note

All door labels must identify the minimum latch bolt throw.

HINGES

Only listed fire rated mortised, surface applied or continuous hinges can be used, similar to Cal-Royal, McKinney, Dorma or Rixon.

BOLTS

Only listed fire rated mortised or surface applied bolts can be used.

CLOSERS

Only listed fire rated surface applied or mortised closers may be used.

OTHER HARDWARE

Any other listed fire rated hardware that has been tested and approved for hollow metal doors may be mounted into these doors.

ASTRAGALS

An astragal is not required on pairs of doors or double egress pairs up to and including 3 hour fire doors. Astragals can be applied or integral.

VISION LIGHT KIT

Factory installed Glass Molding.

Any listed fire rated vision light kits that are positive pressure tested and labeled such as Anemostat or Air Louvers may be used.

MAXIMUM CLEAR VIEW GLASS SIZE

20 minute and 45 minute ratings – 54" x 54" not exceeding 1296 square inches or maximum tested by glass manufacturer.

1 ½ hour – 100 square inches maximum

Minimum stiles and top rail is 6" and minimum bottom rail is 10" at 20 minutes, 45 minutes, 1 and 1 ½ hour rating.

The light cut-out shall be reinforced around the perimeter with minimum 18 gauge steel channels.

Multiple openings are allowed when the sum of the areas do not exceed the tested area.

LOUVERS

Only listed fire rated louvers with fusible links shall be used. Maximum size allowed is 24" x 24" in lower ½ of door.

The louver cut-out shall be reinforced around the perimeter with minimum 18 gauge steel channels.

VIEWERS

Listed viewers with maximum bore diameter of 1" or less allowed.

AUTOMATIC DOOR BOTTOMS

Listed surface or mortise automatic door bottoms allowed.

PROTECTIVE PLATES

Maximum 16 ga. steel armored plates may be added to the door. The maximum size is 36" wide and 46" high.

INSTALLATION INSTRUCTIONS

Installation instructions shall be packaged with each door shipped or may be included in the submittal process.

CERTIFICATION LABEL

Fire-rated Door, the Warnock Hersey () certification label may be applied within the top 1/3 of hinge edge. The certification label shall be applied with rivet screw-type or mylar label.

Exception: When a continuous type hinge is applied to the door, the WH certification label shall be attached to the top of the Door.

REQUIRED ITEMS:

- Warnock Hersey Certification Mark () with Country Identifiers
- The word "LISTED"
- The product category "FIRE-RATED DOOR"
- Fire Protection Rating
- Temperature Rise exceed 650 in 30 minutes
- Serial Number
- Control Number or Listee's Name
- The words "DO NOT REMOVE OR COVER THIS LABEL"
- The words "SEE INSTALLATION INSTRUCTIONS"

OTHER ITEMS:

- POSITIVE PRESSURE statement:

If the door is to be labeled for positive pressure, the following is required.

Required: The words "MEETS UBC 7-2-97 / UL 10C" or "MEETS UBC7-2-97" or "MEETS UL 10C"

Identify: "CAT. A" or "CAT. B"

Optional: "POSITIVE PRESSURE"

- SMOKE AND DRAFT CONTROL statement:

Required: The label shall provide the required positive pressure statements (see positive pressure requirements above).

The S mark: The words "SMOKE AND DRAFT CONTROL RATING REQUIRE A LISTED GASKET."

Optional: The words "SMOKE LEAKAGE < 3 cfm/ft² per UL 1784"

PRODUCT DESCRIPTION



Product Covered:

DKS Series 1000, 1100, 1200, 1600, 1700, 1800, 1900 3-Hour Polystyrene Core Steel Fire Door

Product Description:

FIRE DOORS – POSITIVE PRESSURE CATEGORY A NO ADDITIONAL EDGE-SEALING SYSTEM REQUIRED

PRODUCT COVERED

Series 1000, 1100, 1200, 1600, 1700, 1800, 1900 Fire Door

PRODUCT DESCRIPTION

Foam Filled Steel Fire Doors for installation Singly or in Pairs in 3 hour positive pressure assemblies, with temperature rise greater than 650°F at 30 minutes.

Limitations

Maximum Sizes

Single Swing

45 mm (1.75 inches) Minimum Thickness
1208 mm (48 inches) Maximum Width
2416 mm (96 inches) Maximum Height

Pairs

45 mm (1.75 inches) Minimum Thickness
2416 mm (96 inches) (each leaf: 1208 mm (48 inches)) Maximum Width
2416 mm (96 inches) Maximum Height

Vision Panels maximum 1296 sq. inches for 20 and 45 minute locations; 100 sq inches for 60 and 90 Minute locations. Glazing kit for light kits requires use of minimum 18 ga. Steel channel reinforcement attached to both faces around the vision panel cutout.

Evaluated to the following...

This category includes doors evaluated without an edge-sealing system between the door and the frame. It also includes doors evaluated with a sealing system incorporated (concealed or visible) into the edge of the door by the licensed manufacturer or machining distributor.

Meeting edges of pairs may require an astragal or an edge-sealing system. Please refer to individual door listings.

These doors are eligible for use in any "Category C – Standard" frame. These doors may also be installed in frames listed in "Category C – Proprietary" in accordance with the frame manufacturer's individual listing.

All doors listed in Category A are eligible to bear the **(S)** (for Smoke & Draft Control assemblies) if a listed "Category H – Smoke & Draft Control Gasket" has been applied to the assembly. Please refer to Category H for individual gasket manufacturer's listings.

All doors in this category are identified by a label or marking bearing the wording, "Listed Fire Door", a time interval, a temperature rise rating, a serial number and the Warnock Hersey Certification Mark and "UBC-7-2-97/UL 10C".

<u>Attribute</u>	<u>Value</u>
Architecture Code	08100 Metal Doors and Frames
Fire Resistance	3 Hour Neutral Pressure
Fire Resistance	3 Hour PP Category A Door
Swing	Single Swing
Swing	Standard Pairs
Listed or Inspected	LISTED
Report Number	3053378 & 3071125
Criteria	ASTM E152-81a
Criteria	UL 10(c) (1998)
Criteria	UBC 7-2 (1997)
Criteria	UBC 7-2 (1994)
Criteria	UL 10(b) (1997)
Criteria	ASTM E2074 (2000)
Criteria	NFPA 252 (2003)
Criteria	CAN / ULC S104 1980 R1985
Temperature Rise	@ 30 Min > 650°F
Intertek Services	Certification

MANUFACTURING INFORMATION

APPLICATION

Doors constructed as described in this procedure meet the requirements for both positive and neutral pressure fire tests, UL 10(c) (1988), UL 10(b) (1997), UBC 7-2 (1997) Part 1, UBC 7-2 (1994), NFPA 252 (2003), ASTM E2074 (2000), ASTM E152-81a, and CAN/ULC-S104 1980 R1985.

These doors are Category "A" doors (no additional edge sealing system is required).

Doors labeled for positive pressure applications must include installation instructions to be furnished by the door labeler. Unless otherwise noted in the door's installation instructions all intumescent materials and smoke/draft control gasketing used in the assembly are to be installed per their respective manufacturer's instructions.

SIZE LIMITATIONS

Single Swing	48" wide by 96" high
Pair	96" wide by 96" high
Minimum Thickness	1 3/4" ± 1/16"

COMPONENTS

CORE(S)

Polystyrene foam core with a density of 13.3 kg/m³ (0.83 pounds per cubic foot) (See diagrams)

Material: 1.0 pcf nominal density of EPS foam slab

Polystyrene Foam Core	Working Temp. (Flammability) = -20°C to 60°C
	Soundproof = 35 db
	Density = 17.7 kgs/m ³
	Compressive Strength = 67.8 kpa min
	Tensile Strength = 122.7 kpa min
	Voids (visual) = none
Fusion = Styrene Bead Structure	
Honeycomb Core	Thickness = 43mm ± 0.5mm
	Cell Diameter = 18mm
	Weight = 180 g/m ²
	Compressive Strength = 4.5 kgs/cm ²
	Proportion = 28 kgs/m ³
	Moisture Content = £10%
ISO Foam Core	Isocyanate
	Solid Content = >75%
	PH value = 4-7
	Viscosity = 1000-10,000 MPAS
	Gumming Quantity = 200-400 g/m ³
	Working Temperature = -30°C to 200°C
	Adhesive Strength = 3 MPA

SKINS

- Faces form door edges (stiles)
- Face edge bent with a leg of 22.5mm + 0mm / -0.5mm (0.886 in. + 0 in. / -0.020 in.) with a 14mm (0.55 in.) return

Material: Mild steel, or galvanized mild steel

Gauge: 1200 Series – 20 gauge
 1600 Series – 16 gauge
 1800 Series – 18 gauge

Seams:

- Option 1: Tack Welded – 22mm (1 in.) on center, seam in center of door edge
- Option 2: Lap Seam Construction – Seam at edge of door, tack welded
 100mm (4 in.) on center
- Option 3: Lock Seam Construction – Tack welded lock seam on each side at
 100mm (4 in.) on center

END CHANNEL (FOAM CORE)

- Top: 16 gauge, inverted, spot welded to skins, no holes
- Bottom: 16 gauge with 0.71 in. vent holes every 6 inches along length

END CHANNEL (HONEYCOMB CORE)

- 1.5 mm (16 gauge – 0.060 in.) thick galvanized steel
- C-Shaped with 20 mm (0.785 in.) legs by 42 mm (1.654 in.) web by full width of door
- Spot welded to faces 13 mm (0.50 in.) from ends and 50 mm (2.00 in) on center

LIGHT CLOSURE CHANNEL

- Refer to Drawing

HINGE REINFORCEMENTS

- 4 mm (8 gauge – 0.164 in.) thick galvanized steel by 205 mm (8.00 in.) long by 32 mm (1.25 in.) wide
- Attached to face edges with a two spot-welds on each end (one on each tab)

CLOSER REINFORCEMENTS

- 3 mm (12 gauge – 0.108 in.) thick by 200 mm (8 in.) wide by 380 mm (15 in.) long galvanized steel
- Two (2) plates – with one plate spot welded to each face

LATCH REINFORCEMENTS

- 2 mm (14 gauge – 0.075 in.) galvanized steel spot welded to faces
- Reinforcements located per hardware requirements

ASTRAGAL

- 20 gauge (1mm) door edge with 19mm (3/4 in.) astragal projection

ADHESIVES

- 3M Fastbond 30-NE/30H-NF
- 3M Fastbond 49
- 3M Scotch-Grip High Performance Contact
- Adhesive 1357; 1357 Neutral, 1357-L

PRIMER PAINT (required for non-galvanized skins)

Viscosity = > 100 MPAS
Fineness = £ 20mm
Solid Content = ³ 40%
Air Dry Time: Surface Dry = £ 10 Minutes
Air Dry Time: Core Dry = £ 50 Minutes
Impact Strength = 50 kgs/cm
Water Soluble

CONSTRUCTION DETAILS

1. Faces are cut to length and width
2. Edges are formed on both faces of door
3. Reinforcements for hinges, latches, and closers are welded to faces
4. Foam Core adhered to faces with isocyanite adhesive (formula shown in drawing 1)
5. Top face is slid into place on bottom face
6. Ends welded to faces
7. Faces welded together with welds 50 mm (2.00 inches) on center
8. All welds ground and finished smooth
9. Door painted
10. Label applied