



310 Flint Drive
Mt. Sterling, KY 40353
www.blackmountaindoor.com

Steel Doors, Frames and Hardware to fill every opening requirement.

Project: _____

Architect: _____

Contractor: _____

Date: ____ / ____ / ____

Distributor: _____

Revisions: ____ / ____ / ____

Hardware: _____

Wood Doors: _____

General Notes & Information

BLACK MOUNTAIN DOOR - DOORS FRAMES & HARDWARE

- 1) Material will be fabricated in accordance with these drawings only after receipt of architect approval and approved hardware schedule with all necessary hardware templates.
- 2) Doors and frames will be reinforced for surface mounted hardware. Gages of reinforcements will meet or exceed the gages as recommended by The Steel Door Institute. Drilling and tapping for surface applied hardware will be done by others. Doors and frames will be reinforced and prepared for mortise hardware with holes drilled and tapped at factory except trim mounting holes. All anchor hinges, concealed holders and closers and floor type pivots will be mortised and reinforced for. However drilling and tapping, and notching of face of door to establish hand must be done in the field.
- 3) All doors and frames will be chemically cleaned, phosphatized and given one coat of baked on shop primer.
- 4) Refer to detail sheets for jamb and floor anchors, jamb profiles and frame elevations.
- 5) Furnishing and installation of all glass and builders hardware to be by others unless otherwise specified.
- 6) Strike jambs prepared for and furnished with three rubber silencers for field installation. Double headers are prepared for two rubber silencers.
- 7) All frames in masonry walls to be filled with grout where practical. Note: It is recommended that frames be backcoated in the field by general contractor with bituminous water resistant paint when saline materials or additives are used in the mortar to accelerate the setting of the mortar.
- 8) Columns on schedule sheets referring to hardware are for distributor future use only and may be determined after receipt of approved hardware schedule.
- 9) Hardware locations detailed on these drawings are to this manufacturer's standard locations and are for the standard types of hardware. Prior approval and acceptance for preparation of non-standard hardware and at non-standard locations must be secured from this manufacturer before fabrication is started.
- 10) It shall be the responsibility of the installer to verify that the marked item (door and/or frame components) is accurate and correct for the opening in which it is intended as specified on the architectural drawings and/or information provided to Black Mountain Door at the time of manufacture. **INSTALLATION CONSTITUTES ACCEPTANCE.** Black Mountain Door shall not be held liable for a frame and/or door that has been improperly installed.

GENERAL SYMBOLS AND ABBREVIATIONS NOT SHOWN ELSEWHERE

ABO = Aluminum by Others
 BJ = Blank Jamb
 BL = Borrow Lite
 CL = Closer Reinforcement
 DA = Double Acting

DL = Dead Lock
 UNIT = Unit Lock
 FB = ANSI Flush Bolt
 SL = Sidelite
 TL = Transom Lite

TP = Transom Panel
 G = A40 Galvanized Steel
 A = A60 Galvanized Steel
 C = Cold Rolled Steel

DISCLAIMER: ALL DETAILS AND INFORMATION CONTAINED IN THESE SHOP DRAWINGS ARE ACCURATE AT THE TIME OF PRINTING. HOWEVER, BLACK MOUNTAIN DOOR RESERVES THE RIGHT TO MAKE CHANGES TO ALL ITS PRODUCTS AND MANUFACTURING PROCEDURES.

REFER TO SDI-117 FOR STANDARD MANUFACTURING TOLERANCES AVAILABLE AT www.steeldoor.org.
 ADDITIONAL INFORMATION REGARDING BLACK MOUNTAIN DOOR IS AVAILABLE AT www.blackmountaindoor.com.



SD-31 2012



THERMAL PROPERTIES

CORE, DOOR AND ASSEMBLIES

POLYSTYRENE "SUPER CORE"

1# DENSITY POLYSTYRENE

SERVICEABLE TEMPERATURE
-67° TO +165° F

"K" FACTOR @ 70° MEAN TEMPERATURE= .157
BTU-IN./SQ. FT. - HR. - F°

STILL AIR APPARENT U AND (R) FACTORS FOR
GAGES AND 1 5/8" CORE THICKNESS

20 GAGE - 0.24 (4.16)

18 GAGE - 0.25 (4.00)

16 GAGE - 0.35 (2.86)*

14 GAGE - 0.35 (2.86)*

* FOR 16 AND 14 GAGE DOORS, THE DEFAULT
VALUE OF 0.35 IS USED AS PUBLISHED IN THE
1998 IECC.

NOTE THAT THE ABOVE FACTORS ARE
TYPICAL REPRESENTATIONS OF THE CORE
AND RESPECTIVE GAGES AND THAT
VARIATIONS OCCUR BASED UPON WALL
CONDITIONS, INSTALLATION, CLIMATE AND
FRAMING MATERIALS USED IN EACH
PARTICULAR OPENING. ADDITIONALLY, THESE
VALUES APPLY ONLY TO 3 SIDED
ASSEMBLIES.

SOUND SHIELD DOORS (51LE, 53LE)

SOUND SHIELD DOORS (51LE, 53LE) ARE NOT
GENERALLY USED IN THERMALLY RATED
CONDITIONS. EXTERIOR APPLICATIONS FOR
THIS DOOR TYPE ARE LIMITED, THEREFORE
THERMAL PROPERTIES ARE NOT PUBLISHED
HERE.

POLYURETHANE CORE

2.0 PCF DENSITY POLYURETHANE

SERVICEABLE TEMPERATURE
-250° TO +300°F

APPARENT U AND (R) FACTORS FOR 1 5/8" THICK
CORE ONLY= 0.083 (12.044)

STILL AIR APPARENT U AND (R) FACTORS FOR
GAGES AND 1 5/8" CORE THICKNESS

16 GAGE - 0.080 (12.491)

14 GAGE - 0.080 (12.491)

07WE STEEL STIFFENED DOORS

HAT SHAPED STEEL STIFFENERS WITH
INORGANIC NON-COMBUSTIBLE BATT TYPE
MATERIAL CORE BETWEEN

INSULATION IS STANDARD 0.6# DENSITY
FIBERGLASS.

SERVICEABLE TEMPERATURE
IN EXCESS OF +500°F

APPARENT U AND (R) FACTORS FOR 1 5/8"
STANDARD INSULATION OCCURING BETWEEN
STIFFENERS= 0.16 (6.025)

OTHER DENSITIES INCLUDING UP TO 8.0#
DENSITIES ARE OPTIONALLY AVAILABLE.

300 SERIES DOORS

300 SERIES DOORS HAVE AN OPTION OF
INSULATION IN THE STILE AND RAIL PERIMETER
OF 0.6# DENSITY. INSULATION PROPERTIES ARE
SIMILAR TO 500/700 SERIES DOORS.

SD-3 2012

DOORS:

SERIES 07WE STEEL STIFFENED SEAMLESS DOORS: 1-3/4"
shall be fabricated from two sheets of 18, 16, or 14 ga. steel (ASTM A568, ASTM A1008, ASTM A1011) or galvanized steel. No visible seams shall occur on door faces or edges.

Door edges shall be continuously welded, filled and ground. Doors shall be internally reinforced with pairs of 22 ga. hat shaped steel stiffeners back to back, welded a maximum of 5" O.C. to door faces and spaced a maximum of 6" apart. Top and bottom of doors shall be 16 ga. channels spotwelded to door faces. Top and bottom caps shall be inverted unless otherwise specified. Spaces between stiffeners shall be insulated with Owens Corning R-24 thermal fiberglass insulation.

Lock reinforcing shall be a minimum of 14 ga. for series 86 or 161 locks. Surface hardware reinforcing shall be 14 ga. Closer reinforcing shall be 12 ga. on both faces of doors. Hinge mortises shall be reinforced with 7 ga., 1-1/4" x 10" steel plates securely welded to edges and tapped for template hinges.

SERIES 15LE-17LE SUPERCORE DOORS, FULL FLUSH OR SEAMLESS:
1 3/4" shall be fabricated from two sheets 20, 18, 16, or 14 ga. steel (ASTM A568, ASTM A1008, ASTM A1011) with no visible seams on either face (15LE) or no visible seams on face or vertical edge (17LE)-(Specify requirements). The doors are joined at the edge with a continuous laser welded seam (laser edge) .

Tops and bottoms of door shall be 18 ga. galv. channels, tops shall be flush, bottom shall have inverted channel to allow field adjustment if necessary at a later date.

Sound and heat retardation shall be assured by thermosetting adhesive bonding a nominal one pound density Supercore precured rigid polystyrene foam core to the panels.

Hinge mortises shall be reinforced with 10 ga. steel plates, welded in place and tapped for 1-1/2 pair 4-1/2" x 4-1/2" template hinges (2 pairs - 7'-7" and above). Mortises shall extend the full width of hinge stiles and filler plates shall be provided to permit installation of hinges for right- or left-hand swing as required.

When specified, 14 ga. push-pull and rim or concealed exit device reinforcing shall be furnished. Doors and reinforcing must be drilled and tapped in the field.

SERIES 25LE-27LE GALVANIZED STEEL SUPER CORE DOORS -
OPTION TO 15LE-17LE SERIES: Door Panels of 20, 18 and 16 ga. shall be manufactured of hot dip galvanized material in the coating class conforming to ASTM designation A653 & A924. The material shall be treated in the mill to ensure prime paint adhesion.

SERIES 35LE-37LE TEMPERATURE RISE FIRE DOORS 1-3/4" -
OPTION TO 15LE-17LE SERIES: Door Panels of 18-16 ga. shall be bonded to a mineral board core when doors are required to meet codes with temperature rise limitations.

Contractor Shall furnish and install steel doors / frames as manufactured by Black Mountain Door International in all openings except as otherwise provided in specifications.

**Black Mountain Door reserves the right to make changes in either price, designs or specifications and to make improvements to its products without prior notice and without incurring any obligation to incorporate such changes in products previously manufactured.*

SERIES 45LE-47LE HONEYCOMB CORE DOORS 1-3/4" -
OPTION TO 15LE-17LE SERIES: Door Panels of 20, 18 or 16 ga. shall be bonded to a honeycomb impregnated material with 1" cells. Positive pressure/fire rating available.

SERIES 83LE-85LE-87LE-89LE POLYURETHANE CORE DOORS 1-3/4" -
OPTION TO 15LE-17LE SERIES: Door Panels of 20, 18 or 16 ga. cold rolled steel shall be bonded to a polyurethane material (85LE). Seamless edges (87LE) are optional. A-40 galvanized (83LE) steel is optional. Galvanized, seamless edges (89LE) are optional. Fire rating not available.

SERIES 300 STILE AND RAIL DOOR 1-3/4": Shall be of rigid stile-and-rail construction. Stiles and rails shall be of 16 ga. galvanized steel, face welded and ground smooth at the corners. Panels shall be of flat 18 ga. galvanized steel, and be securely bonded by a thermosetting adhesive to Black Mountain Door's Supercore, a nominal 1 lb. density, odorless, rigid foam that is resistant to fungus, bacteria, moisture, mildew and rot.

SERIES 61LE-63LE EMBOSSED DOORS 1-3/4" - OPTION TO 15LE-17LE SERIES:
Doors shall be fabricated with two sheets of 18 or 16 ga. steel embossed in 6 panel configuration manufactured of galvanized material in the coating class conforming to ASTM designation A924. 8 panel fabricated with two sheets of 18 ga. galvanized steel.

TRANSOM PANELS (SERIES 55LE-56LE): Shall have face sheets of 18 ga. steel (16 ga. optional) reinforced with a foam core bonded to the faces with thermosetting adhesive. When specified, horizontal 12 ga. flat strip astragal shall be factory installed on the transom panel.

HARDWARE PREPARATIONS: Doors shall be mortised, reinforced, drilled and tapped to receive specified mortise hardware and reinforced only for specified surface hardware. Drilling and tapping for surface hardware shall be done in the field. Hinge reinforcing shall be 10 ga. for 1-3/4"doors (7 ga. optional on 16 and 18 ga. 15LE Series type doors) Reinforcings for other surface and mortise hardware shall be 14 ga. Other hardware options such as pivot or anchor hinges, concealed holders or closers, are reinforced according to hardware template information. Drilling and tapping of these preparations shall be done in the field.

HARDWARE LOCATIONS: Unless otherwise specified, the location of locks, hinges, latches, push-pull plates and bars, exit devices, handle sets, closer reinforcing, roller latches, and arm pulls shall conform to the recommendations of the Door and Hardware Institute and SDI-100 / ANSI A250.4 and A250.8.

LABELED DOORS: Where noted or required, provide doors with Underwriters Laboratories, Inc. (UL) or Warnock Hersey Inc. (WHI) labels with appropriate fire resistance and temperature rise ratings for the class of opening indicated. Construction details and hardware applications of the certifying authority shall take precedence over project details or specifications.

LOUVERS: Shall be factory installed insert type with vision-proof inverted 'Y' baffles ('Z' option in 700 series). Louver blades and frames are to be 18 ga. welded steel construction.

GLAZING: Glass lite doors are furnished with formed (20 GA. C.R.) steel glazing strips of the screw-in type to permit selection of secure side in the field. Muntin bar for multi-lite glazing are of the field applied type. Glazing arrangements accommodate 1/4" (6.4mm) thick glass, supplied by others unless otherwise specified.

PRIME PAINTED DOOR: All exposed surfaces shall be cleaned, treated with a Bonderite chemical and given one baked-on shop coat of rust inhibitive gray synthetic primer (A250.10).

PREPAINTED DOORS: Doors shall be chemically cleaned and treated with a Bonderite chemical. Doors shall be given a heavy coat of electrostatically-applied finish paint, baked on. The finish paint shall be a durable formulation, providing good resistance to both mar and abrasion tests. Weather and chemical resistance shall be a property of the finish. (Not available for Series 300 or 07WE)

STORAGE: All doors shall be protected at the corners to prevent damage or marring of the finish. Doors shall be stored in an upright position separated by 1/4" wood strips under cover on the building site on wood sills or on floors in a manner that will prevent rust and damage. Avoid creating a humidity chamber by using a plastic or canvas shelter and not venting the area covered. In accordance with Job Site Storage ANSI A250.08 / HMMA 840.

FRAMES

FRAMES: Shall be fabricated from 16 or 14 ga. steel (ASTM A568, ASTM A1008 ASTM A 1011) for 1-3/4" doors and borrowed lites. Frames shall be designed with integral stop and trim.

SERIES 400 FRAMES: Shall be equipped with one welded-in floor anchor in each jamb. Three steel lock-in or welded-in anchors (maximum of 24" O.C.) shall also be provided for each jamb. Anchors shall be of the proper type for the particular construction involved (i.e., wood stud, masonry, concrete or steel stud.) Knocked down frames shall have self-aligning tabs and slots for locked corners and shall be reinforced with 18 ga. reinforcements. OPTION: Frame corners shall be mitered and continuously arc welded and ground smooth on frame faces.

SERIES 2600 SLIP-ON DRYWALL FRAMES: Shall be designed for installation after the wall is erected. Hinge and strike jambs shall be supplied with steel anchors which are to be screw-adjusted after the frame is installed and shall be equipped with welded-in sill anchors.

SERIES 800 FRAMES: Shall be designed to be adaptable to existing stud wall construction regardless of thickness. Headers to be equipped at each miterjoint with 18 ga. reinforcing. Headers and jambs shall have mating tabs and slots for alignment of the assembly. All corners shall present neat mitered joints. OPTION: Frame corners shall be mitered and continuously arc welded and ground smooth on frame faces.

HARDWARE PREPARATION: Frames shall be mortised, reinforced, drilled and tapped to receive specified mortise hardware and reinforced only for specified surface hardware. Drilling and tapping for surface hardware shall be done in the field. Plaster guards shall be installed on all applicable hardware cutouts in the 400 Series frames. Strike jambs shall be prepared for three rubber silencers. Hardware reinforcing shall comply with ANSI A250.4, ANSI 250.8 (SDI-100) and ANSI A250.6.

HARDWARE LOCATIONS: Unless otherwise specified, the location of strikes, hinges, closer reinforcements, and roller latches shall conform to the recommendations of the Door and Hardware Institute and ANSI A250.4, ANSI 250.8 (SDI-100).

Contractor Shall furnish and install steel doors / frames as manufactured by Black Mountain Door in all openings except as otherwise provided for in specifications.

**Black Mountain Door reserves the right to make changes in either price, designs or specifications and to make improvements to its products without prior notice and without incurring any obligation to incorporate such changes in products previously manufactured.*

LABELED FRAMES: When noted or required, provide frames, windows and/or transoms and sidelites with Underwriters' Inc. (UL) or Warnock Hersey Inc. (WHI) labels for the class of opening indicated. Construction details and hardware application requirements of the certifying authority shall take precedence over project details or specifications.

GALVANIZED OPTION: Frame members shall be manufactured of hot dipped 16 or 14 ga. galvanized materials in the coating class conforming to ASTM Designation A924. The materials shall be treated in the mill to ensure superior prime paint adhesion.

PRIME PAINTED FRAMES: All exposed surfaces shall be cleaned, treated with Bonderite chemical and given one baked-on shop coat of gray rust inhibitive synthetic primer. In accordance with ANSI A250.10

PREPAINTED FRAMES: Frames shall be chemically cleaned and treated with a Bonderite chemical, plus a heavy coat of electrostatically-applied finish paint baked on (per ANSI A250.3). The finish paint shall be a durable formulation, providing good resistance to both mar and abrasion tests. Weather and chemical resistance shall be a property of the finish.

STORAGE: Frames shall be stored in an upright position under cover on the building site on wood sills or floors in a manner that will prevent rust and damage. Avoid creating a humidity chamber by using a plastic or canvas shelter and not venting the area covered. In accordance with ANSI A250.8 or HMMA 840.

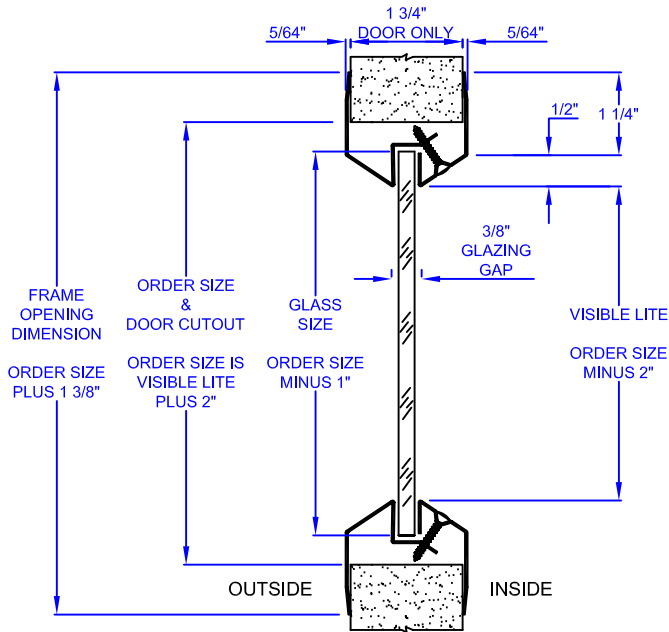
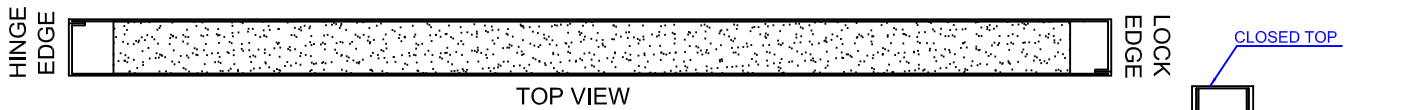
INSTALLATION OF FRAMES: Steel frames shall be installed by the General Contractor, Installation shall be plumb, straight and true; rigidly secured in place and properly braced. The frame installer shall be responsible for the squareness of the frame in place. Spreaders on welded frames to be removed prior to installation. Installation shall comply with ANSI A250.11 / SDI 122 / HMMA 840. Installation of units constitutes acceptance of said opening by installer/contractor.

SD-5 2012

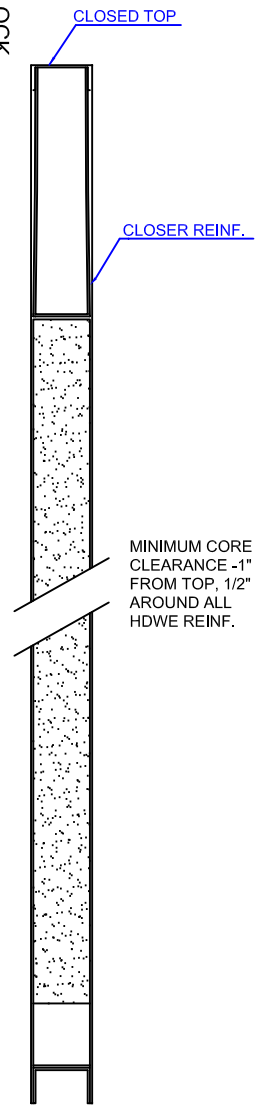
15LE & 17LE Series

POLYSTYRENE CORE DOORS

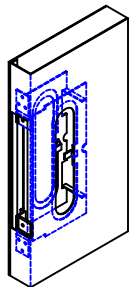
1 3/4" Doors



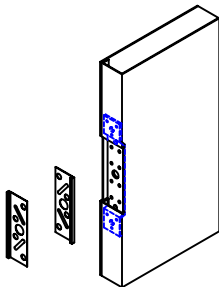
TYPICAL GLAZING PREPARATIONS



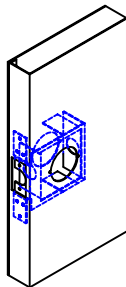
TYPICAL SECTION



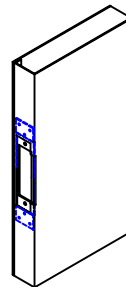
ANSI/BHMA A156.115 "Y" (MORTISE)



NON-HANDED HINGE

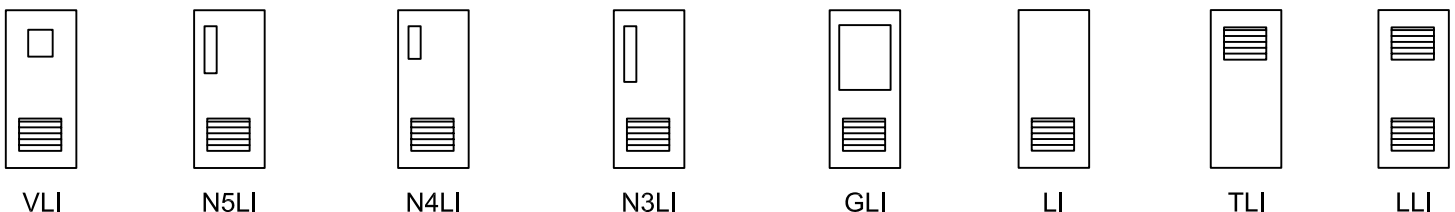
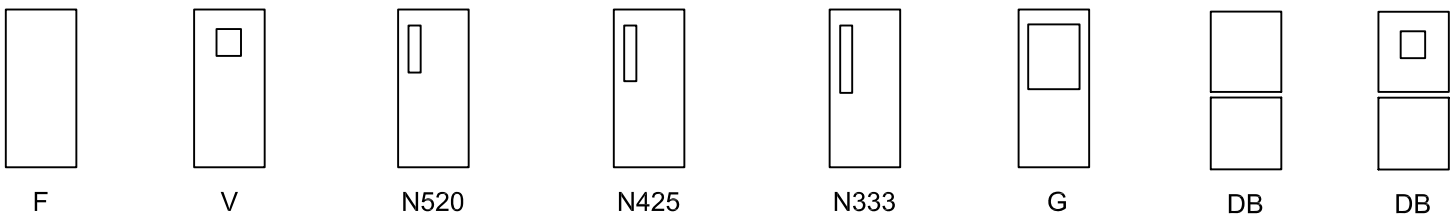


ANSI/BHMA A156.115 "D" (CYLINDRICAL)



ANSI/BHMA A156.115 "U" (UNIVERSAL STRIKE)

TYPICAL HARDWARE PREPARATIONS

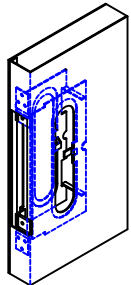
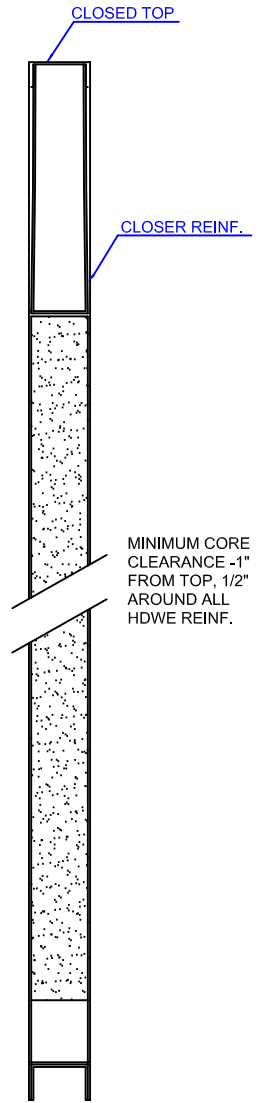
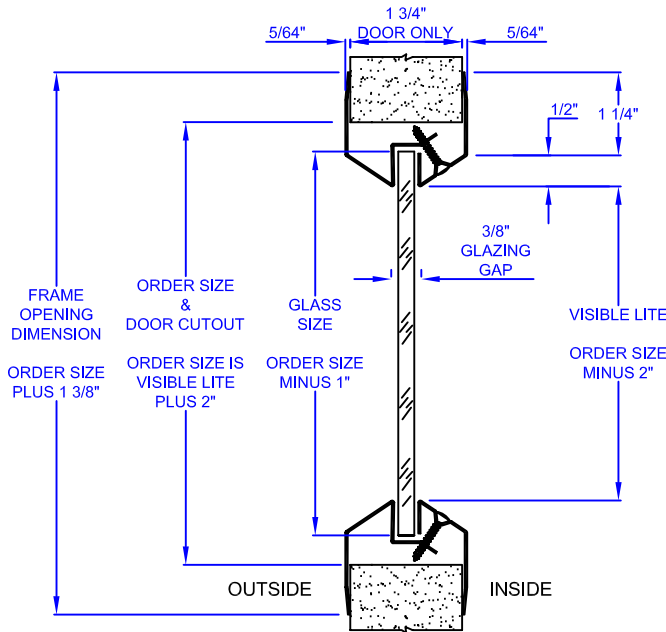
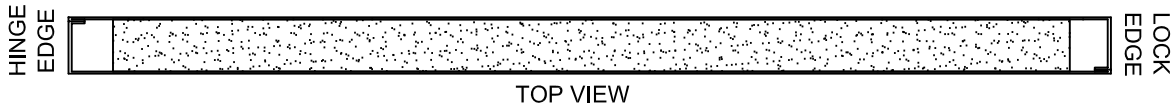


SD-6 2012

25LE & 27LE Series

GALVANIZED POLYSTYRENE CORE DOORS

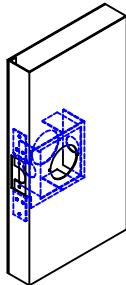
1 3/4" Doors



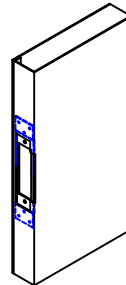
ANSI/BHMA A156.115 "Y" (MORTISE)



NON-HANDED HINGE

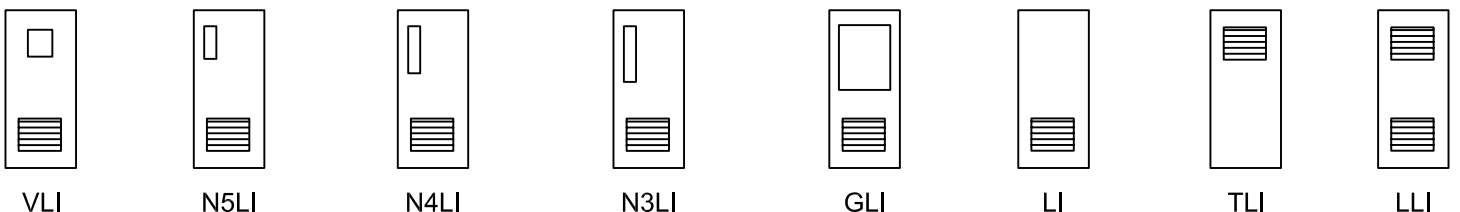
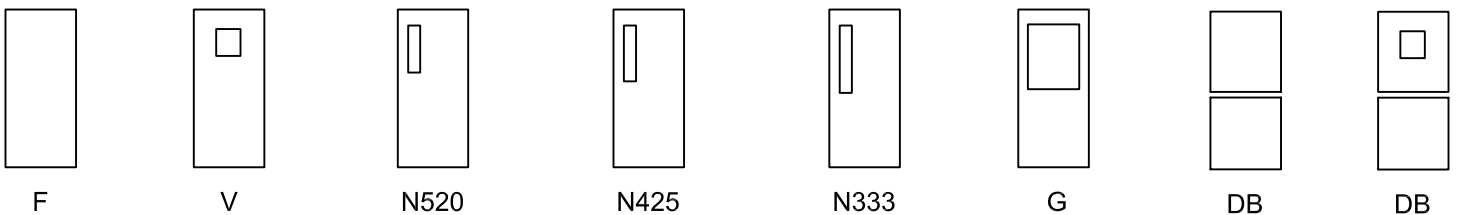


ANSI/BHMA A156.115 "D" (CYLINDRICAL)



ANSI/BHMA A156.115 "U" (UNIVERSAL STRIKE)

TYPICAL HARDWARE PREPARATIONS

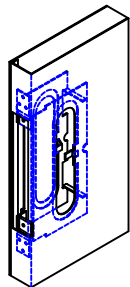
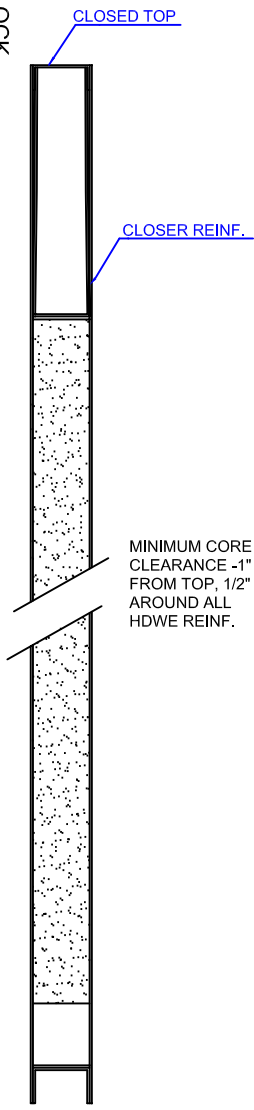
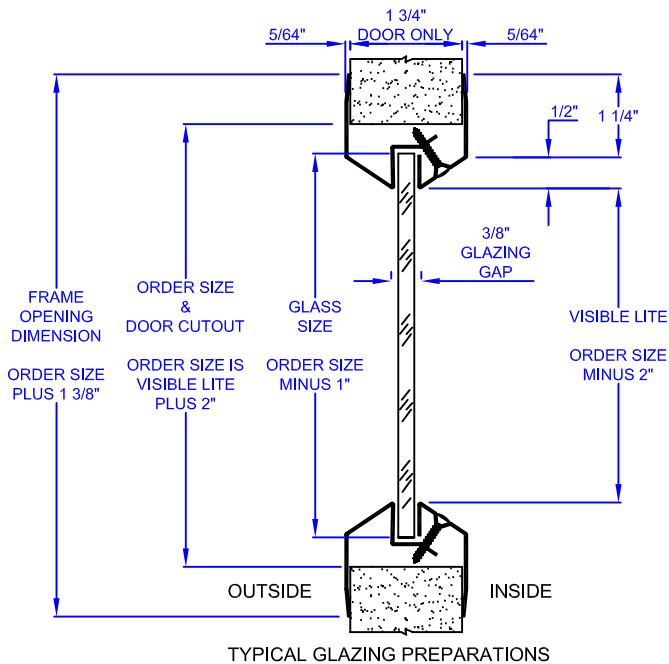
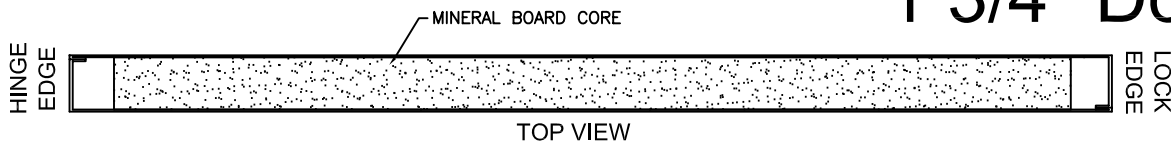


SD-7 2012

35LE & 37LE Series

TEMPERATURE RISE DOORS (250° TEMP RISE)

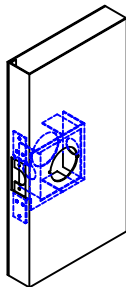
1 3/4" Doors



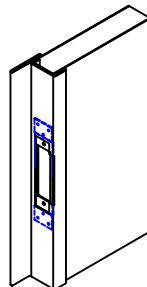
ANSI/BHMA A156.115 "Y" (MORTISE)



NON-HANDED HINGE



ANSI/BHMA A156.115 "D" (CYLINDRICAL)



ANSI/BHMA A156.115 "U" (UNIVERSAL STRIKE)

3 HOUR LABEL STYLES

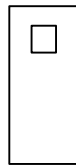


F

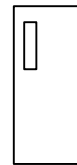
1 1/2 HOUR LABEL STYLES



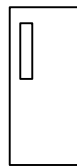
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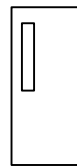
V



N520



N425



N333

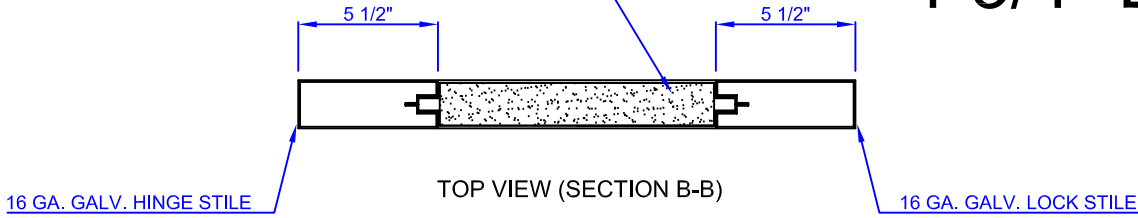
SD-8 2012

300 Series

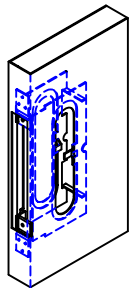
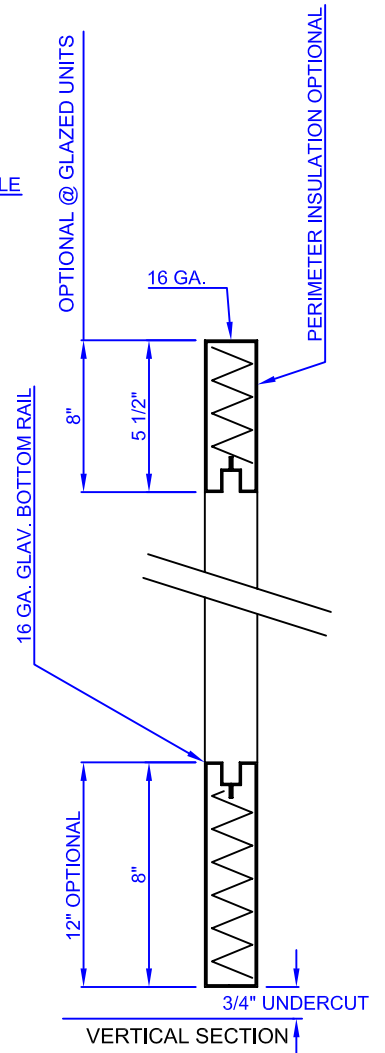
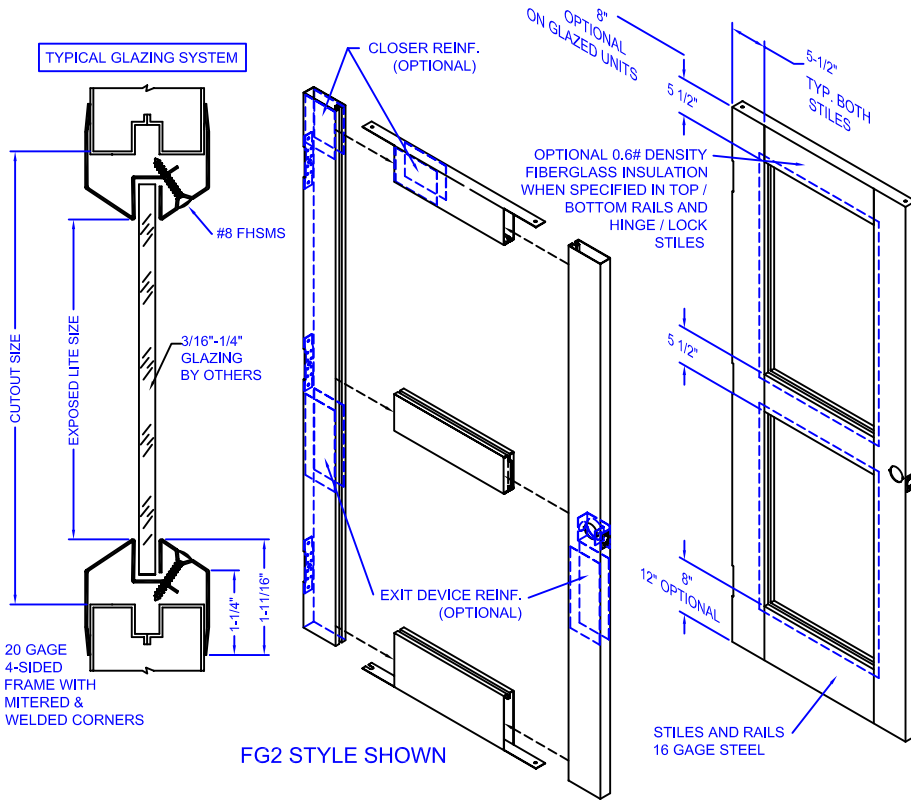
STILE AND RAIL COMMERCIAL DOORS

1 3/4" Doors

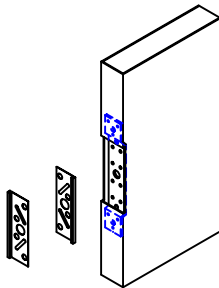
POLYSTYRENE INSULATED @ "F" DOORS



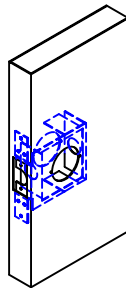
(RAILS & STILES ARE GALVANIZED)



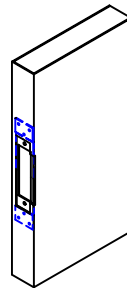
ANSI/BHMA A156.115 "Y" (MORTISE)



NON-HANDED HINGE

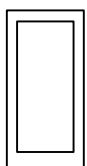
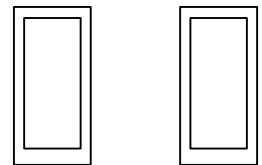


ANSI/BHMA A156.115 "D" (CYLINDRICAL)

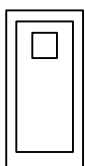


ANSI/BHMA A156.115 "U" (UNIVERSAL STRIKE)

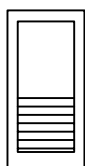
TYPICAL HARDWARE PREPARATIONS



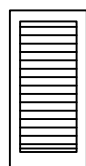
F



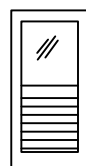
V



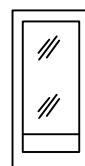
HLI



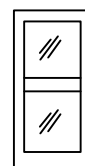
FLI



GHLI



FGH



FG2



FG3



FG

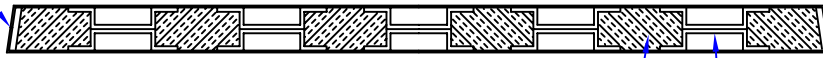
SD-9 2012

07WE Series

WELDED EDGE STEEL STIFFENED DOORS

1 3/4" Doors

SEAM IS CONTINUOUSLY WELDED
EDGES BEVELED 1/8" IN 2"



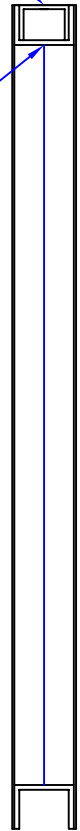
TOP VIEW (SECTION B-B)

0.6# DENSITY INSULATION BETWEEN STIFFENERS

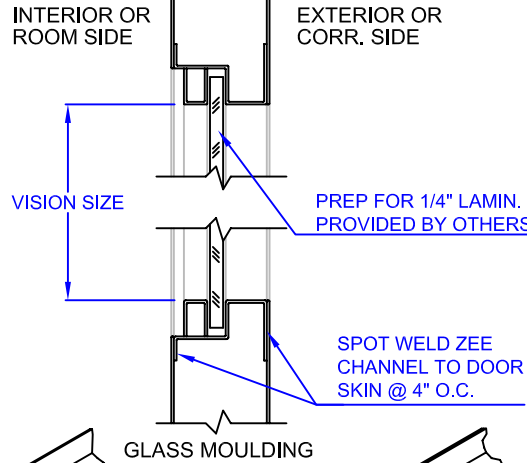
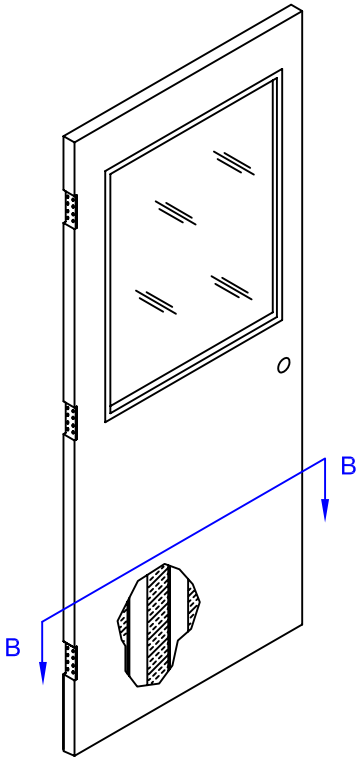
22 GA. STIFFENERS
6" MAX APART

OPTIONAL TOP CAP

16 GA. CHANNEL



VERTICAL SECTION



INTERIOR OR
ROOM SIDE

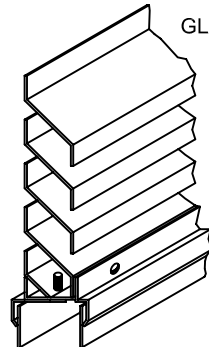
EXTERIOR OR
CORR. SIDE

VISION SIZE

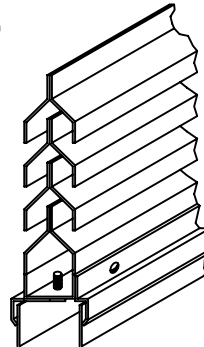
PREP FOR 1/4" LAMIN.
PROVIDED BY OTHERS

SPOT WELD ZEE
CHANNEL TO DOOR
SKIN @ 4" O.C.

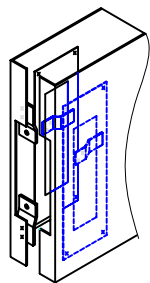
GLASS MOULDING



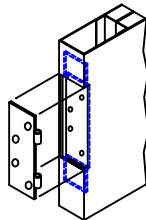
"Z" BLADE LOUVER



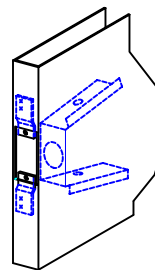
"Y" BLADE LOUVER



ANSI/BHMA A156.115
"Y" (MORTISE)

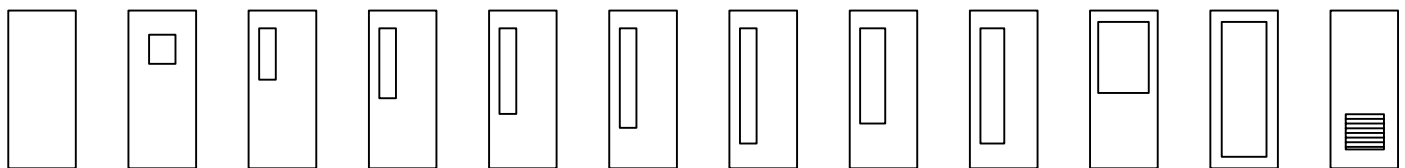
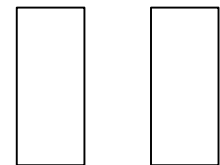


HANDED HINGE
PREPARATION



ANSI/BHMA A156.115
"D" (CYLINDRICAL)

TYPICAL HARDWARE PREPARATIONS

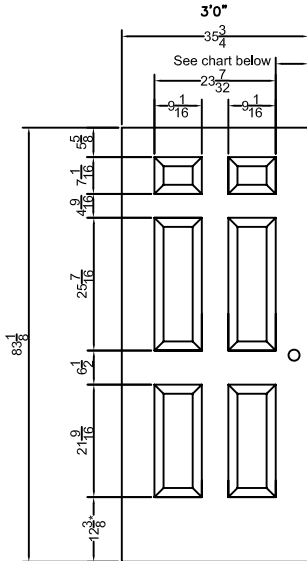
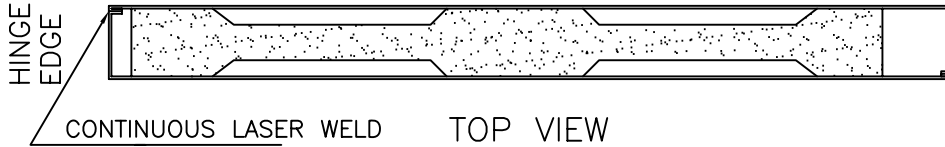


SD-11 2012

61LE & 63LE Series

DECORATIVE EMBOSSED PANEL DOORS

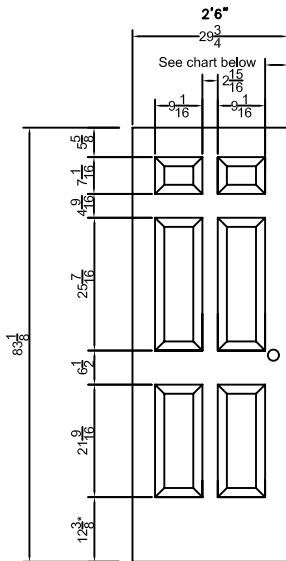
1 3/4" Doors



Standard embossed P6 dimensions

Available Width

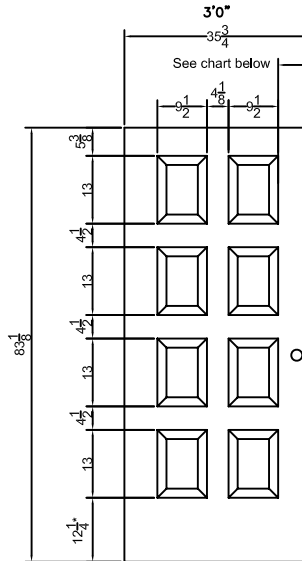
Width	Lock edge to embossment
2'10"	5 1/4"
3'0"	6 1/4"
3'4"	8 1/4"
3'6"	9 1/4"



Narrow Center Stile ** for 2'6" and 2'8" doors

Available Width

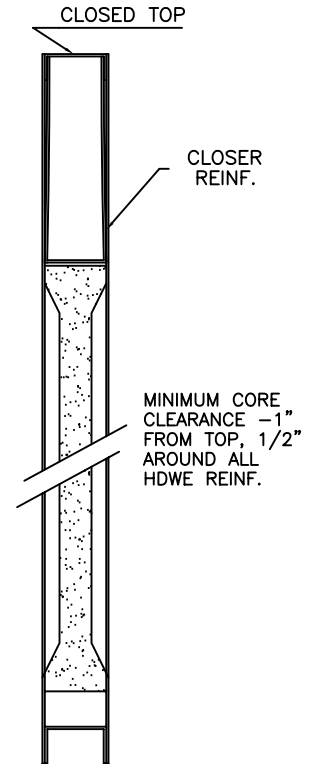
Width	Lock edge to embossment
2'6"	4 5/16"
2'8"	5 5/16"



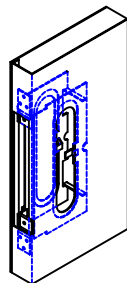
Standard embossed 8P dimensions

Available sizes

Width	Lock edge to embossment
2'6"	4 5/16"
2'10"	5 5/16"
3'0"	6 5/16"

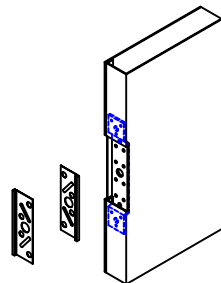


* ONLY 7'-0" DOORS MEET HANDICAP CODES.
 **NARROW CENTER RAIL USED FOR ANY DOOR UNDER 2'10" NOMINAL

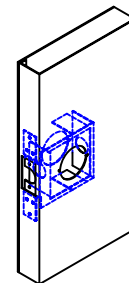


ANSI/BHMA A156.115 "Y" (MORTISE)

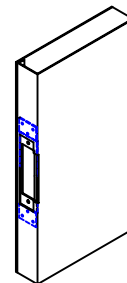
**NOT RECOMMENDED FOR 2'-8" DOORS



NON-HANDED HINGE



ANSI/BHMA A156.115 "D" (CYLINDRICAL)



ANSI/BHMA A156.115 "U" (UNIVERSAL STRIKE)

P6 - 6 PANEL STYLE

Available in 16, 18, 20 Gauge

16 & 18 Gauge Construction

Min Width 2'6"
 Max Width 3'6" (3'8" if 18G)
 Min Height 6'8"
 Max Height 7'0"

20 Gauge Construction

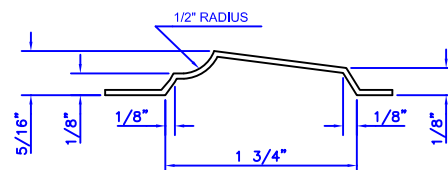
Min Width 2'8"
 Max Width 3'0"
 Min Height 6'8"
 Max Height 7'0"

P8 - 8 PANEL STYLE

Available in 18 Gauge Only

18 Gauge Construction

Min Width 2'8"
 Max Width 3'0"
 Min Height 6'8"
 Max Height 7'0"



EMBOSS SECTION

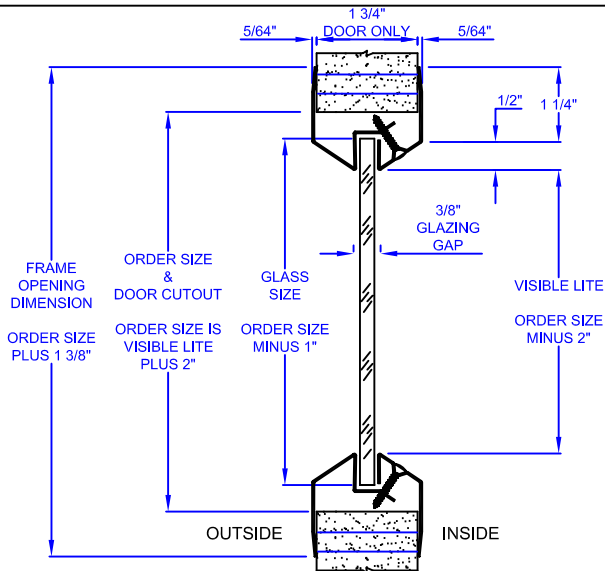
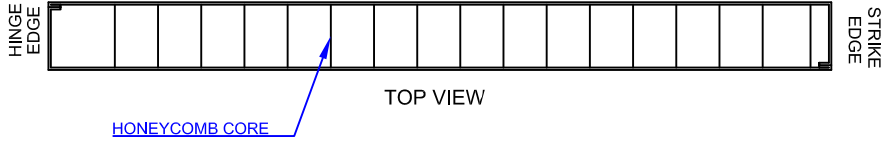


SD-12 2012

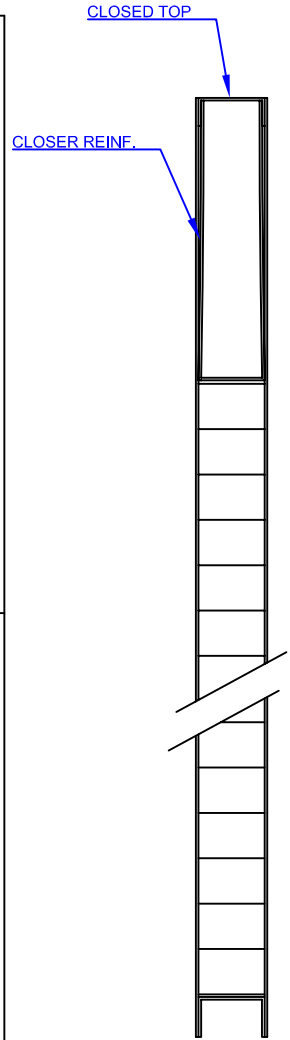
45LE & 47LE Series

HONEYCOMB CORE DOORS

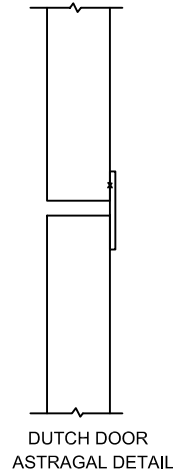
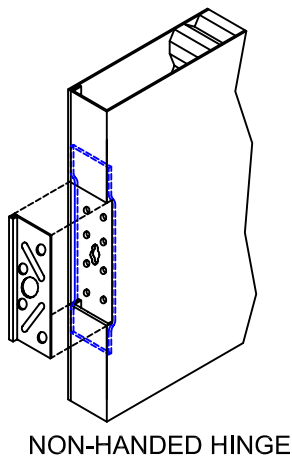
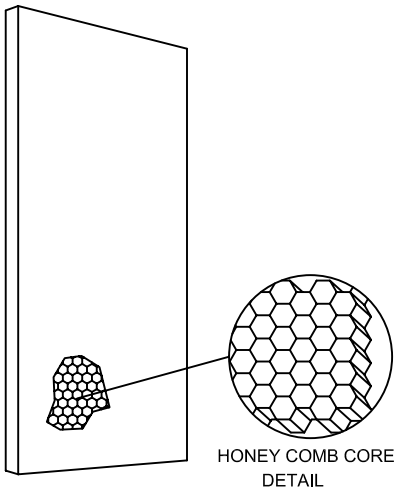
1 3/4" Doors



TYPICAL GLAZING PREPARATIONS



TYPICAL SECTION

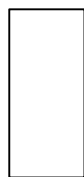


3 HR. LABEL STYLES

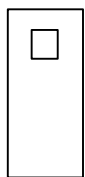


F

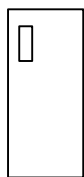
1 1/2 HR. LABEL STYLES



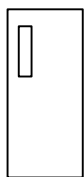
F



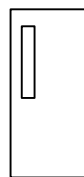
V



N520



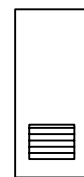
N425



N333

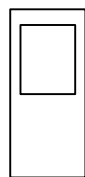


DUTCH DOOR
4072 MAX



LI

3/4 HR. LABEL STYLES



G

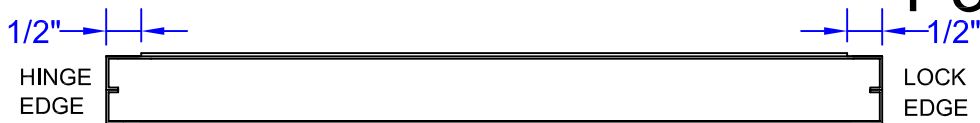


SD-13 2012

1538 & 1544 Series

BULLET RESISTING DOORS

1 3/4" Doors



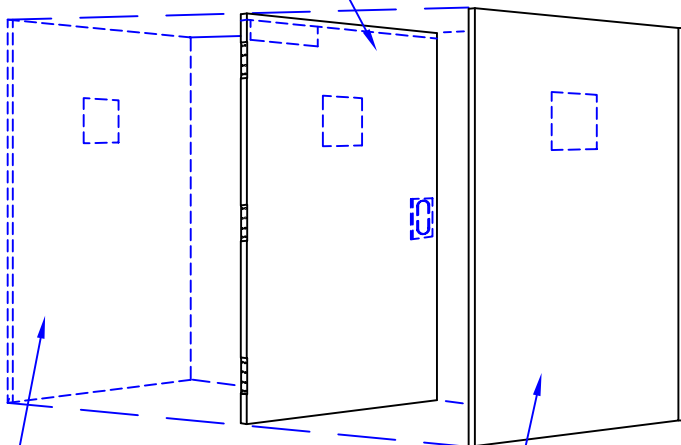
TOP VIEW SECTION B-B

NOTE: DOOR, FRAME, 5" HD HINGES, AND LOCKSET MUST BE SOLD AS A PACKAGE. CLOSERS NEED NOT BE INCLUDED.

THESE DOORS ARE AVAILABLE IN FLUSH AND (V) VISION LIGHT STYLES. ALL VISION LIGHT DOORS WILL BE FURNISHED WITH STEEL MEMBERS DESIGNED TO ACCOMMODATE 1 1/4" THICK LEXGARD® LIGHTS.

1/4" - 1" MAX.

STANDARD 16 GA. 15LE SERIES CORE DOOR



14 GA. SECURITY PANEL
NOTE: OMIT INSIDE PANEL ON 1538 SERIES DOOR

14 GA. SECURITY PANEL

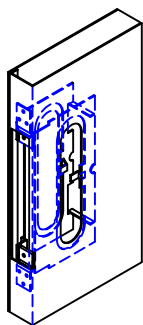


POLYSTYRENE CORE

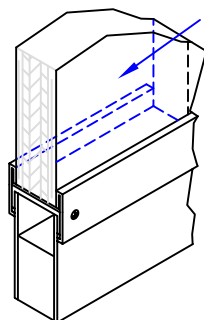
TYPICAL SECTION

1544 SERIES - UL 752 LEVEL 3 (SHOWN)

1538 SERIES - UL 752 LEVEL 1 (AS NOTED, SECURITY PANEL EXTERIOR ONLY)

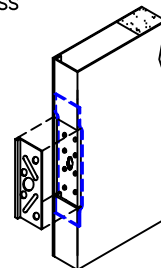


ANSI/BHMA A156.115
"Y" (MORTISE)

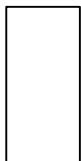


GLAZING DETAIL

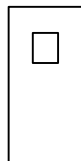
BULLET RESISTING GLASS



NON-HANDED HINGE



F



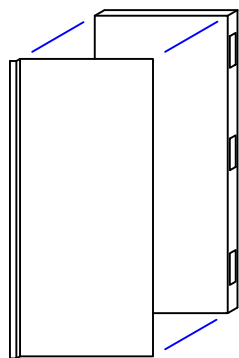
V

SD-14 2012

51LE & 53LE Series

SOUND SHIELD ACCOUSTICAL DOORS

1 3/4" Doors

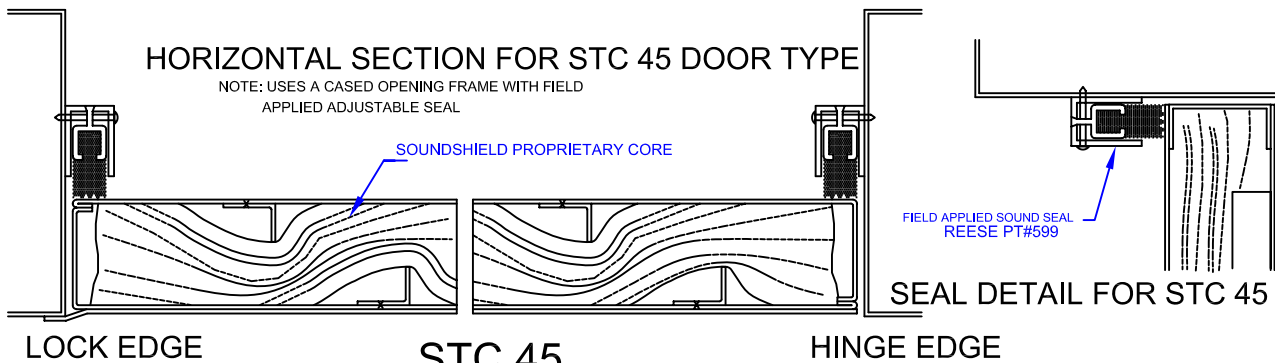


STC 45

FLUSH DOOR 16 GA. ONLY
W/ 14 GA. SECURITY PANEL

HORIZONTAL SECTION FOR STC 45 DOOR TYPE

NOTE: USES A CASED OPENING FRAME WITH FIELD APPLIED ADJUSTABLE SEAL



LOCK EDGE

STC 45

HINGE EDGE

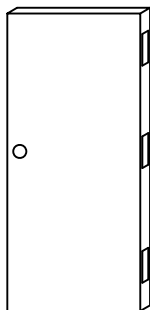
SEAL DETAIL FOR STC 45

SOUND SHIELD PROPRIETARY CORE

FIELD APPLIED SOUND SEAL
REESE PT#599

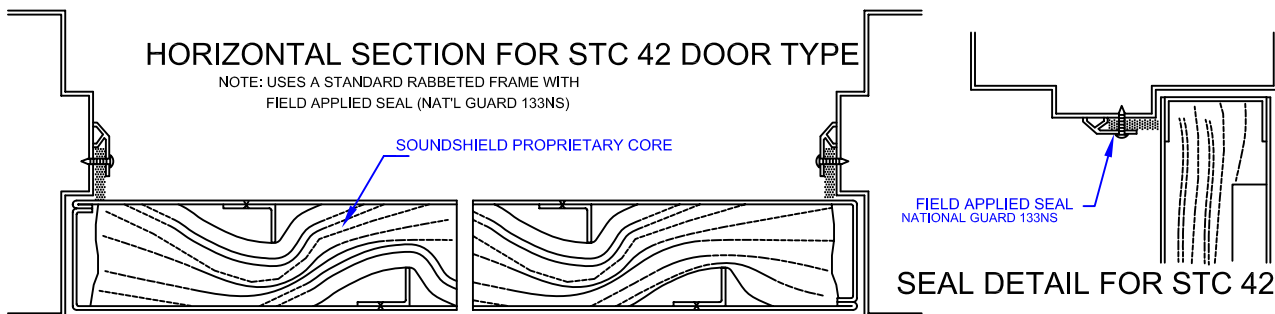
HORIZONTAL SECTION FOR STC 42 DOOR TYPE

NOTE: USES A STANDARD RABBETED FRAME WITH FIELD APPLIED SEAL (NAT'L GUARD 133NS)



STC 42

FLUSH DOOR 16 GA. ONLY

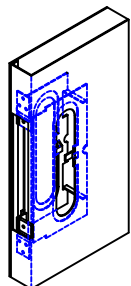


STC 42

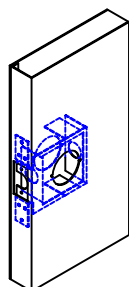
SEAL DETAIL FOR STC 42

SOUND SHIELD PROPRIETARY CORE

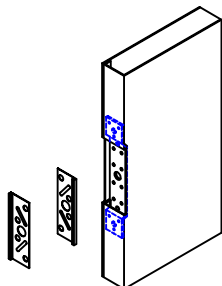
FIELD APPLIED SEAL
NATIONAL GUARD 133NS



ANSI/BHMA A156.115
"Y" (MORTISE)

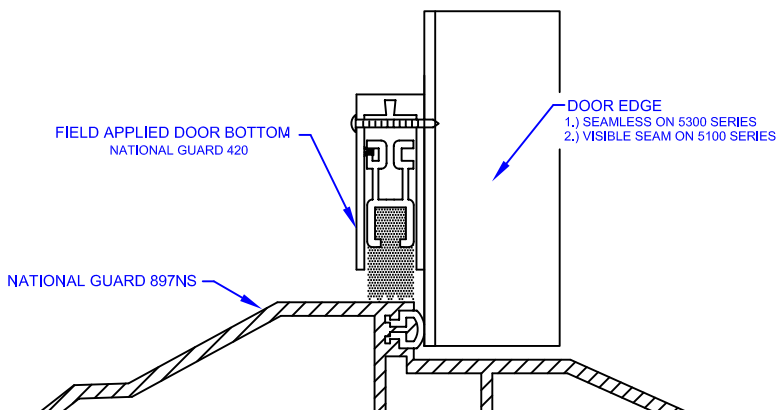


ANSI/BHMA A156.115
"D" (CYLINDRICAL)



NON-HANDED HINGE

TYPICAL HARDWARE PREPARATIONS



FIELD APPLIED DOOR BOTTOM
NATIONAL GUARD 420

NATIONAL GUARD 897NS

DOOR EDGE

1.) SEAMLESS ON 5300 SERIES
2.) VISIBLE SEAM ON 5100 SERIES

THRESHOLD AND BOTTOM SEAL DETAIL

NOTE: USES ACOUSTICAL THRESHOLD WITH FIELD APPLIED ADJUSTABLE SEAL ON DOOR.

TYPICAL ON BOTH STC 42 & STC 45

DOORS, FRAMES AND GASKETING MUST BE PURCHASED AS COMPLETE PACKAGES

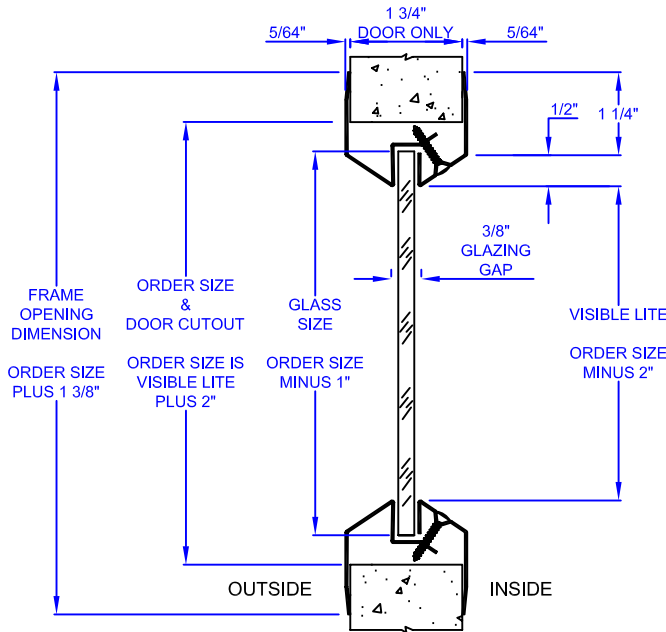
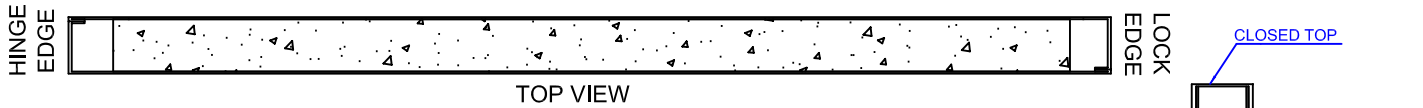


SD-15 2012

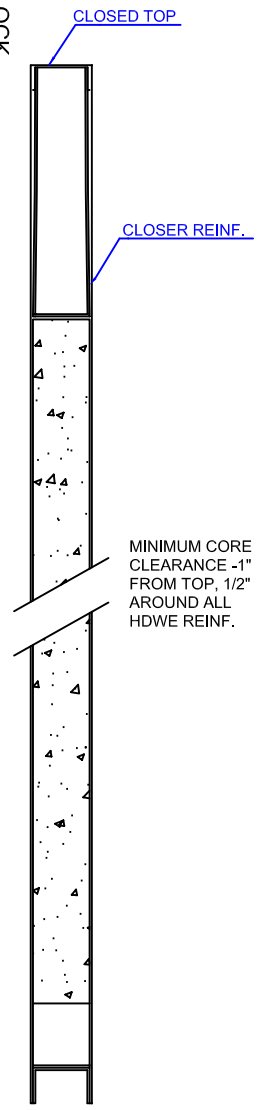
85LE & 87LE / 83LE & 89LE Series

POLYURETHANE CORE DOORS / GALVANIZED POLYURETHANE CORE DOORS

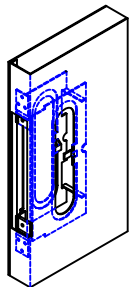
1 3/4" Doors



TYPICAL GLAZING PREPARATIONS



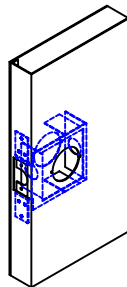
TYPICAL SECTION



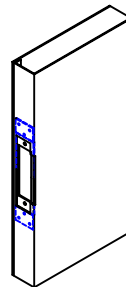
ANSI/BHMA A156.115 "Y" (MORTISE)



NON-HANDED HINGE

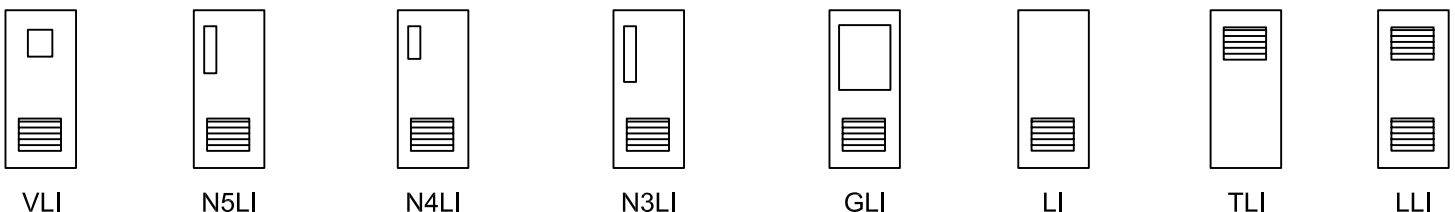
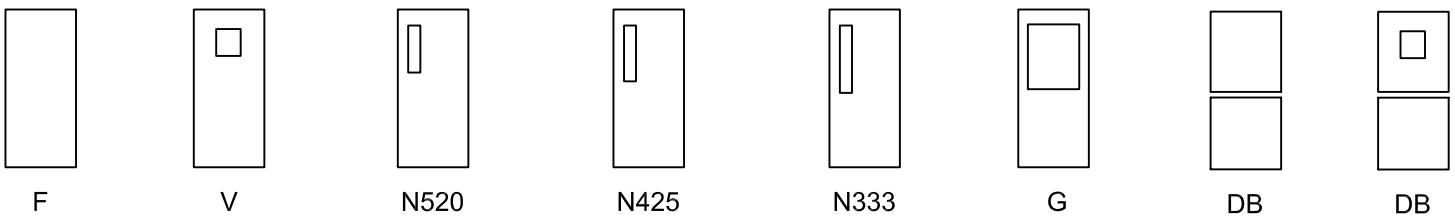


ANSI/BHMA A156.115 "D" (CYLINDRICAL)



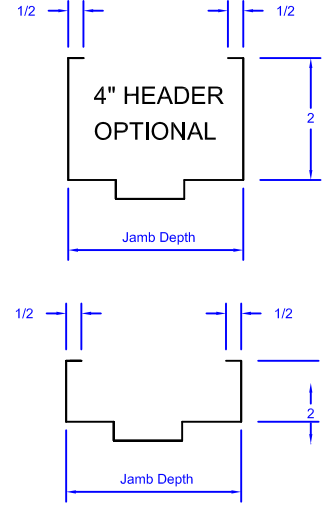
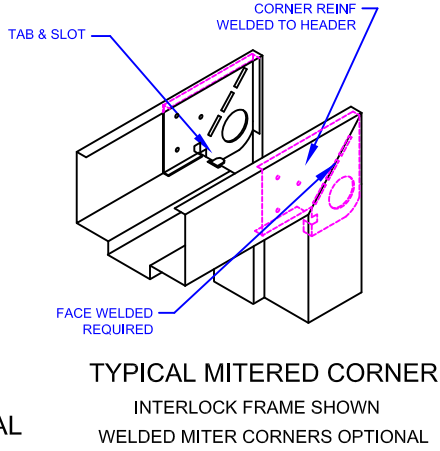
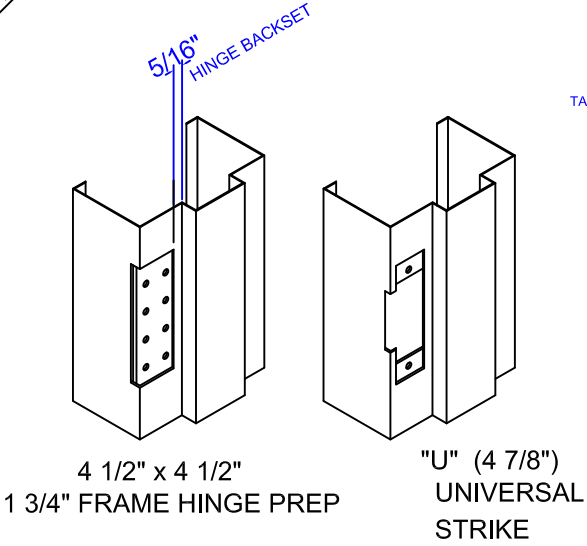
ANSI/BHMA A156.115 "U" (UNIVERSAL STRIKE)

TYPICAL HARDWARE PREPARATIONS



FEMA Door & Frame

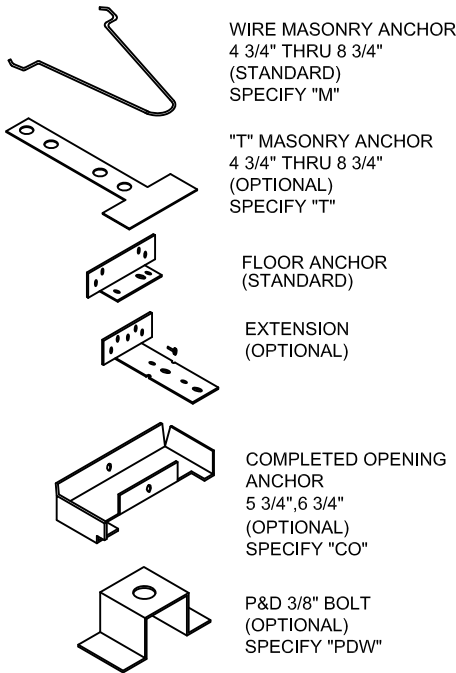
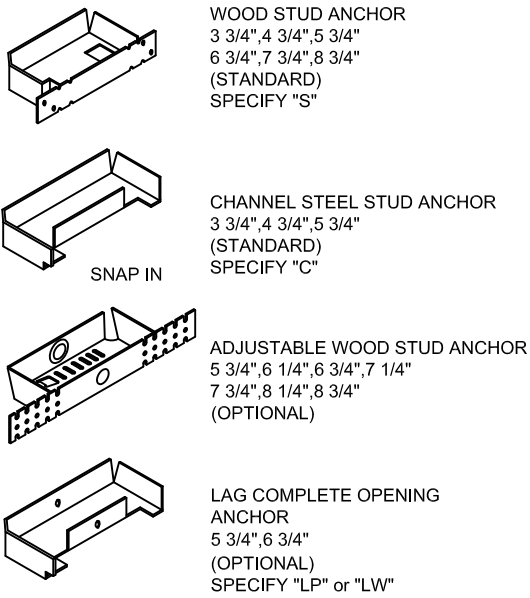
17LE & 27LE SERIES DOORS & 400 SERIES FRAMES



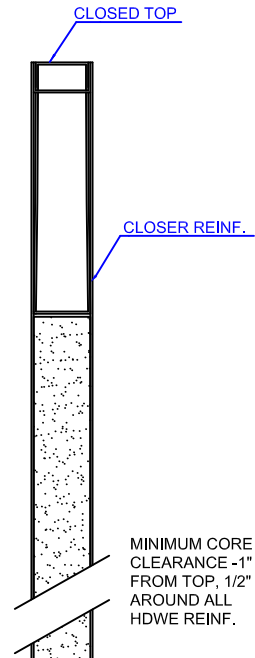
FRAME PREPARATIONS

FRAME PROFILES

Note: 7/16" RETURNS ARE STANDARD WITH 5 3/4" DEPTH - For Jamb Depths See Schedule



TYPICAL SECTION



ANCHORS

APPROVED TEST STANDARDS CERTIFIED BY INTERTEK

- FEMA 361
- FEMA 320
- ICC 500

APPROVED SIZES

- 4'0" X 9'0" SINGLES
- 8'0" X 9'0" PAIRS

APPROVED HARDWARE

- SECURITECH 4340-SS320
- SECURITECH 5000
- SECURITECH 7000
- SECURITECH 8000

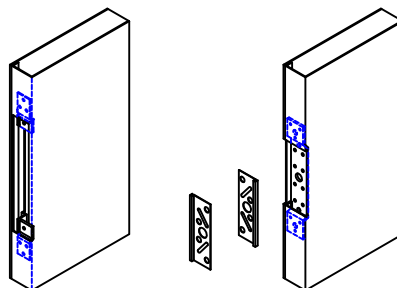
17LE & 27LE (1 3/4") DOORS

- 16 GAGE

400 SERIES FRAMES

- 14 GAGE

DOOR PREPS



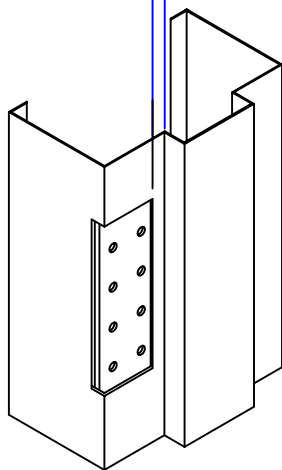
ANSI/BHMA A156.115 "Y" (MORTISE)

NON-HANDED HINGE

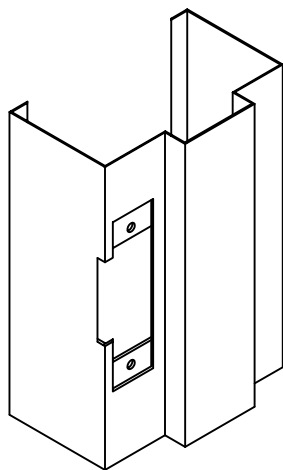
400 Series

MASONRY FRAMES

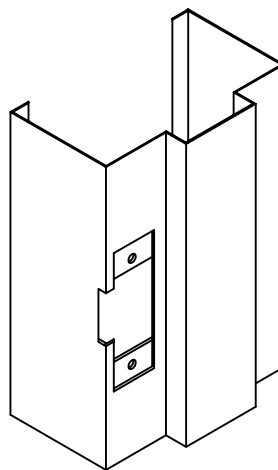
1 3/4" Frames



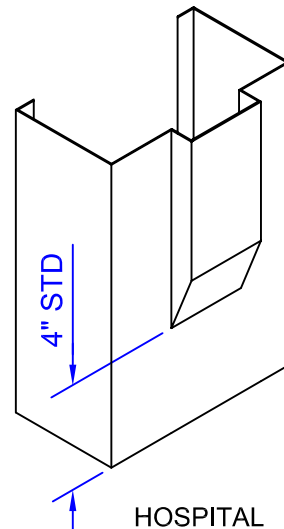
4 1/2" x 4 1/2"
1 3/4" FRAME HINGE PREP



"U" (4 7/8")
UNIVERSAL
STRIKE

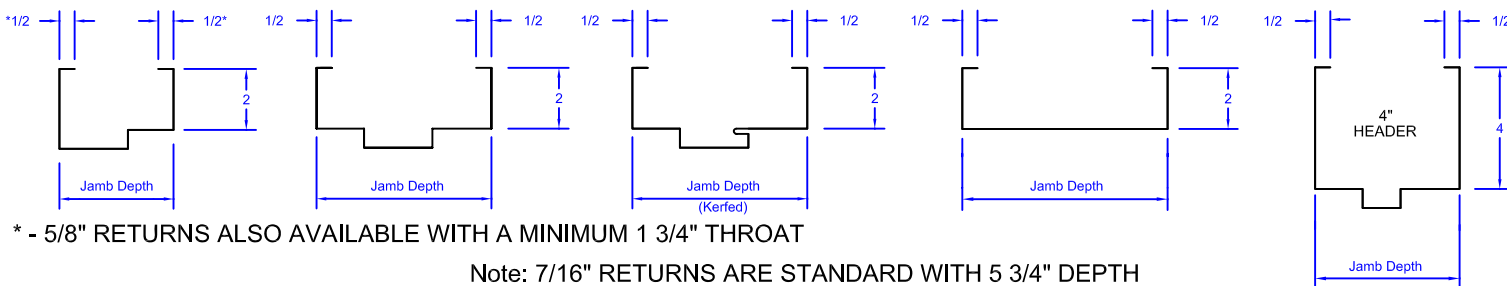


"D" (2 3/4")
CYLINDRICAL
STRIKE



HOSPITAL
STOP
(6" or 9" OPTIONAL)

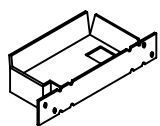
FRAME PREPARATIONS



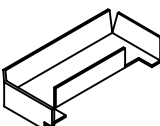
* - 5/8" RETURNS ALSO AVAILABLE WITH A MINIMUM 1 3/4" THROAT

Note: 7/16" RETURNS ARE STANDARD WITH 5 3/4" DEPTH
For Jamb Depths See Schedule

FRAME PROFILES

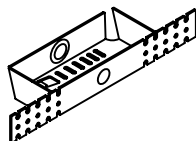


WOOD STUD ANCHOR
3 3/4", 4 3/4", 5 3/4"
6 3/4", 7 3/4", 8 3/4"
(STANDARD)
SPECIFY "S"

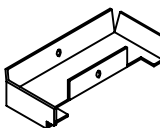


SNAP IN

CHANNEL STEEL STUD ANCHOR
3 3/4", 4 3/4", 5 3/4"
(STANDARD)
SPECIFY "C"



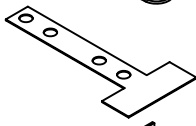
ADJUSTABLE WOOD STUD ANCHOR
5 3/4", 6 1/4", 6 3/4", 7 1/4"
7 3/4", 8 1/4", 8 3/4"
(OPTIONAL)



LAG COMPLETE OPENING
ANCHOR
5 3/4", 6 3/4"
(OPTIONAL)
SPECIFY "LP" or "LW"



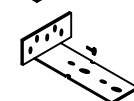
WIRE MASONRY ANCHOR
4 3/4" THRU 8 3/4"
(STANDARD)
SPECIFY "M"



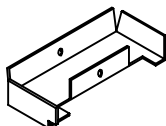
"T" MASONRY ANCHOR
4 3/4" THRU 8 3/4"
(OPTIONAL)
SPECIFY "T"



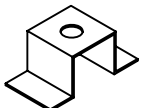
FLOOR ANCHOR
(STANDARD)



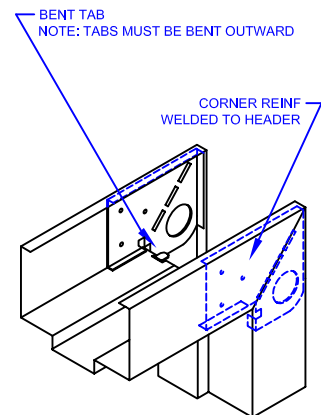
EXTENSION
(OPTIONAL)



COMPLETED OPENING
ANCHOR
5 3/4", 6 3/4"
(OPTIONAL)
SPECIFY "CO"



P&D 3/8" BOLT
(OPTIONAL)
SPECIFY "PDW"



TYPICAL MITERED CORNER

INTERLOCK FRAME SHOWN
WELDED MITER CORNERS OPTIONAL

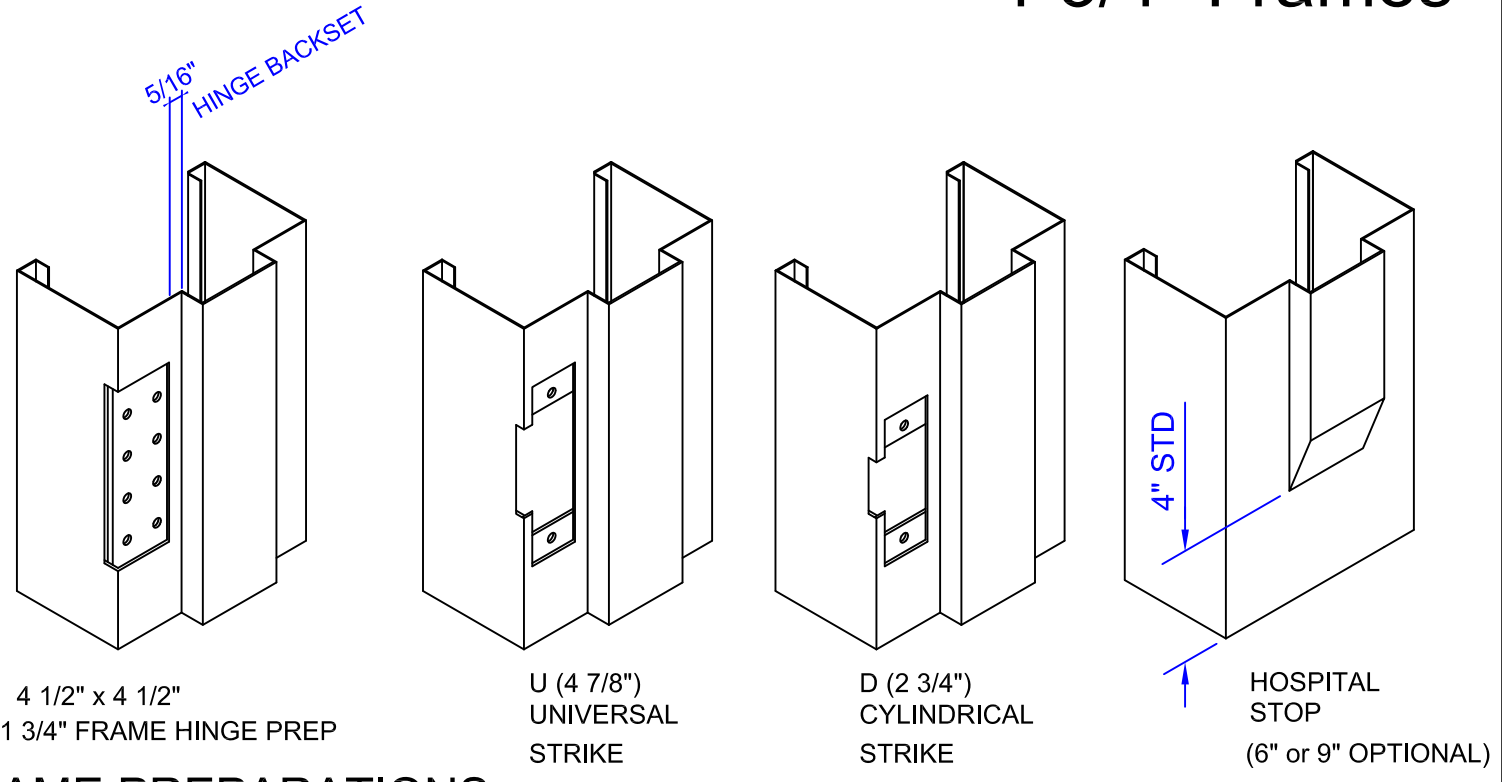
ANCHORS

SD-18 2012

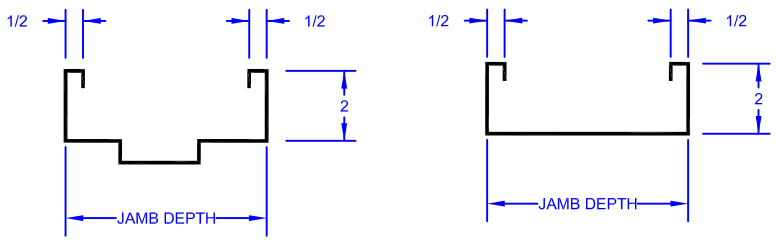
2600 Series

DRYWALL (SLIP-ON) FRAMES

1 3/4" Frames



FRAME PREPARATIONS

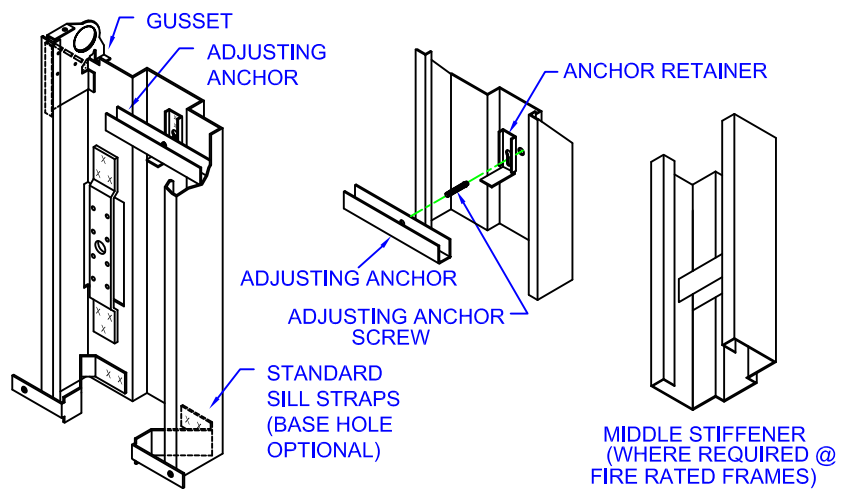


STANDARD 1 3/4" FRAME
NOTE: SOFFIT SIZE INCREASES WITH FRAME DEPTH.

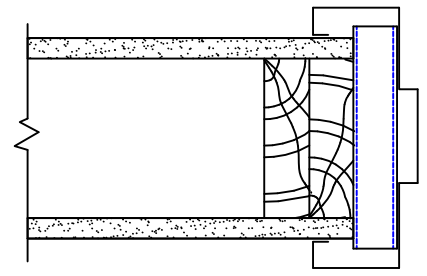
TRIMMED OPENING FRAME

FRAME PROFILES

For Jamb Depths See Schedule



ANCHORS



TYPICAL USAGE

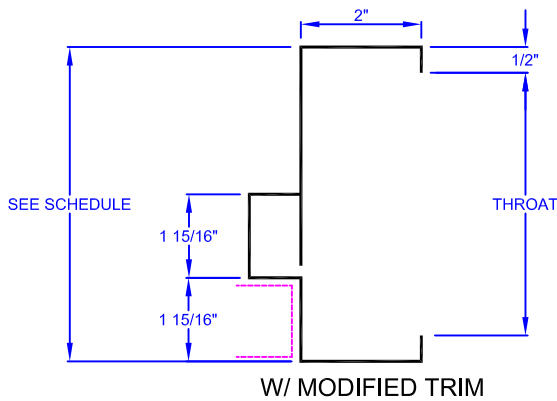
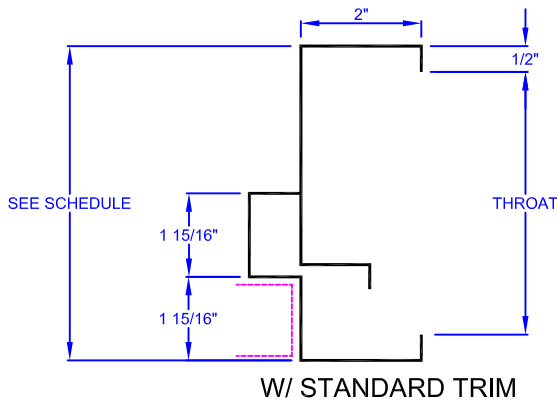
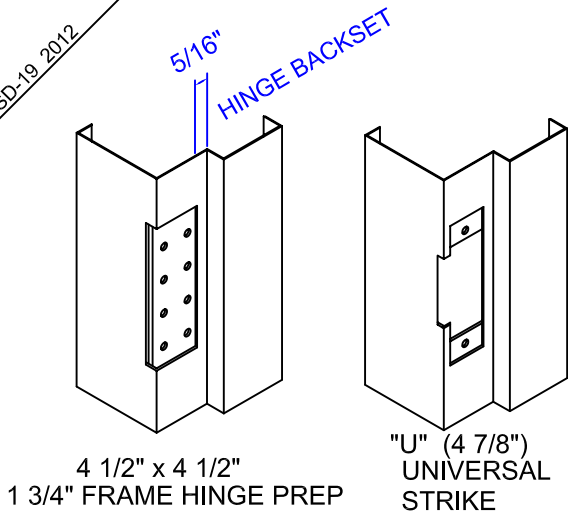
WOOD STUD APPLICATION SHOWN
ALSO APPLICABLE WITH:
LAMINATED DRYWALL
STEEL STUD WITH 1 & 2 PLY DRYWALL
NAILABLE STUD
AND PRECAST CONCRETE.

SD-19 2012

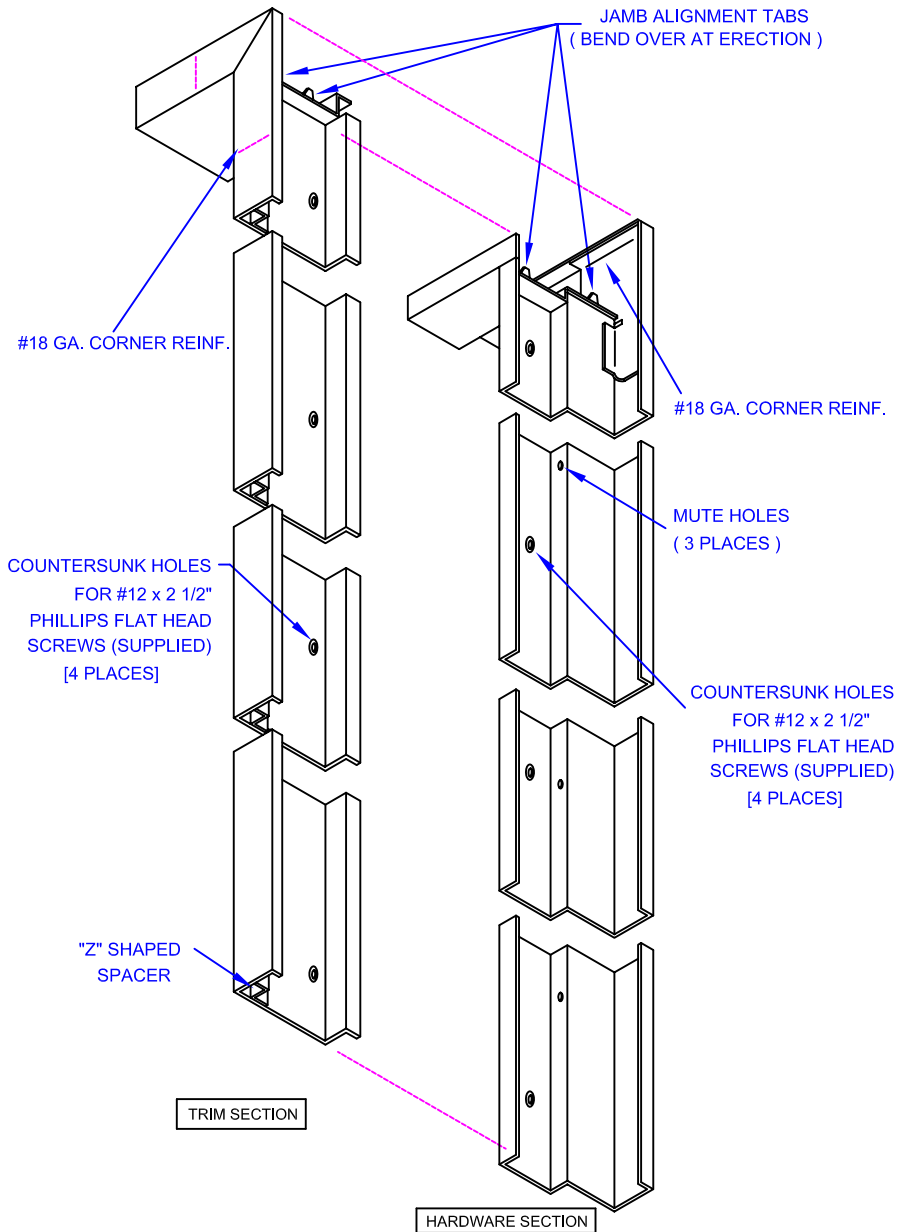
800 Series

ADJUSTABLE FRAMES

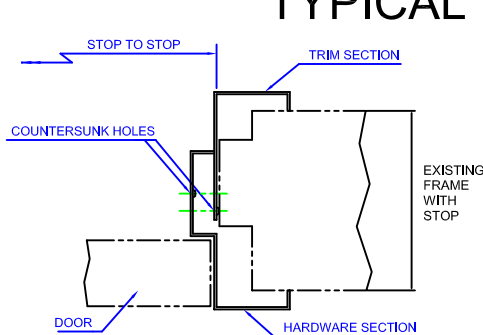
1 3/4" Frames



FOR WALLS
2 7/16" TO 9 7/16" THICK

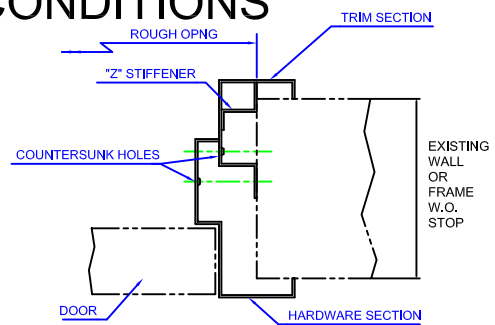


TYPICAL WALL CONDITIONS



FOR FRAMES WITH STOPS

NEW FRAME SIZE
EXISTING STOP TO STOP WIDTH MINUS 1/2"
EXISTING STOP TO FLOOR HT. MINUS 1/4"



FOR FRAMES WITHOUT STOPS

NEW FRAME SIZE
EXISTING ROUGH OPNG WIDTH MINUS 2 1/8"
EXISTING ROUGH OPNG HEIGHT MINUS 1 1/8"

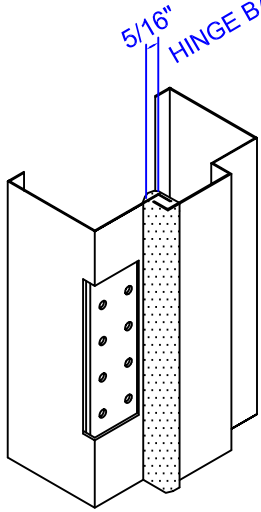
SD-20 2012

3000 Series

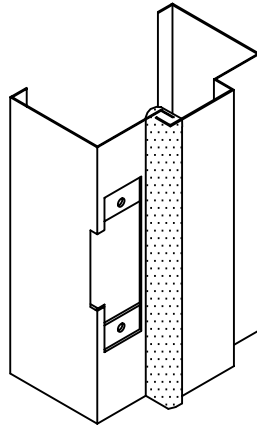
THERMAL BREAK FRAME

1 3/4" Frames

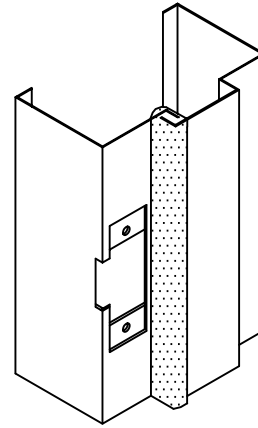
FRAME PREPARATIONS



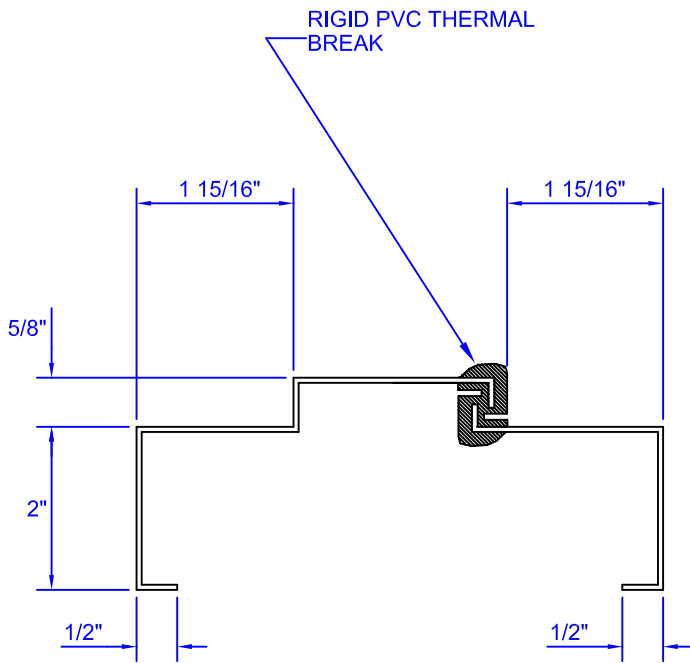
4 1/2" HINGE
1 3/4" FRAME HINGE PREP



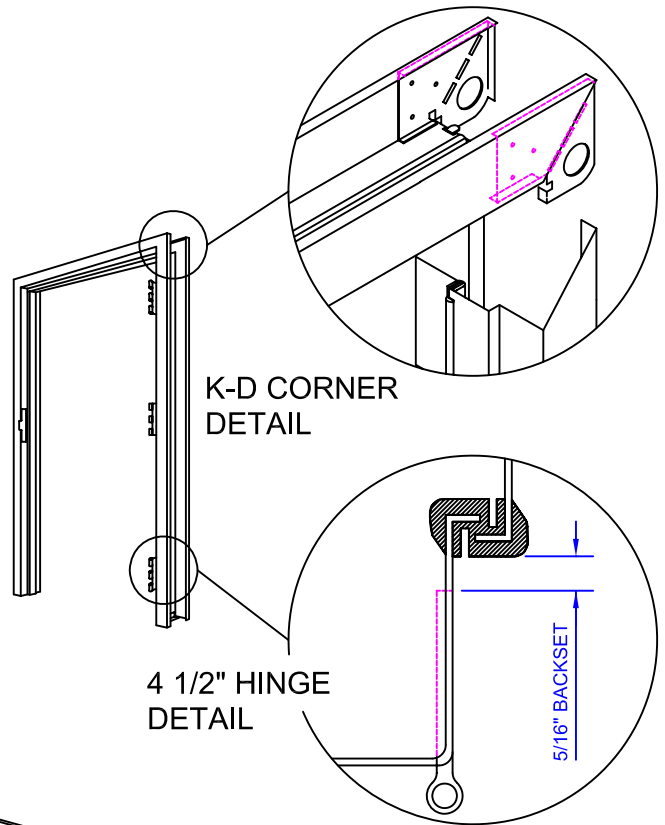
"U" (4 7/8")
UNIVERSAL
STRIKE



"D" (2 3/4")
CYLINDRICAL
STRIKE

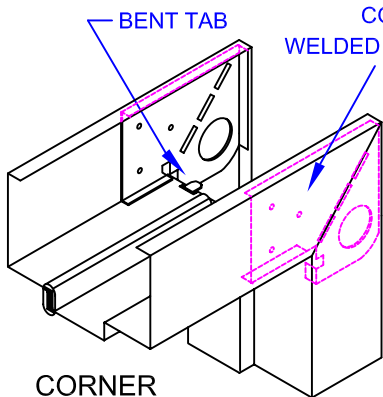


FRAME DETAIL

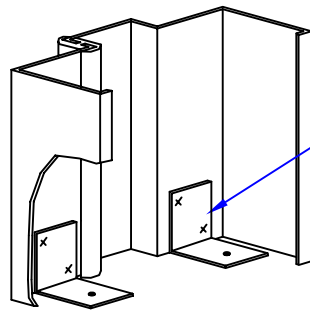


K-D CORNER
DETAIL

4 1/2" HINGE
DETAIL



CORNER
DETAIL



FLOOR ANCHOR
DETAIL

3000 Series available as knock-down only. Welding by others.

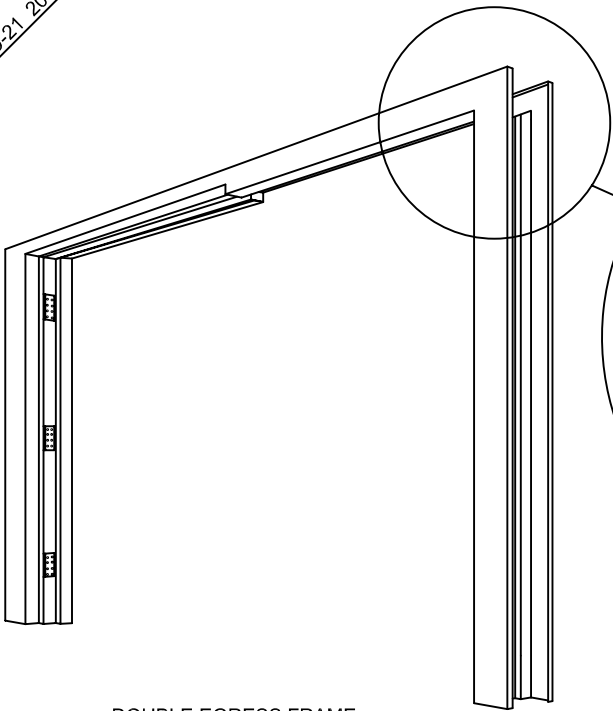
SPOTWELD AS SHOWN

SD-21 2012

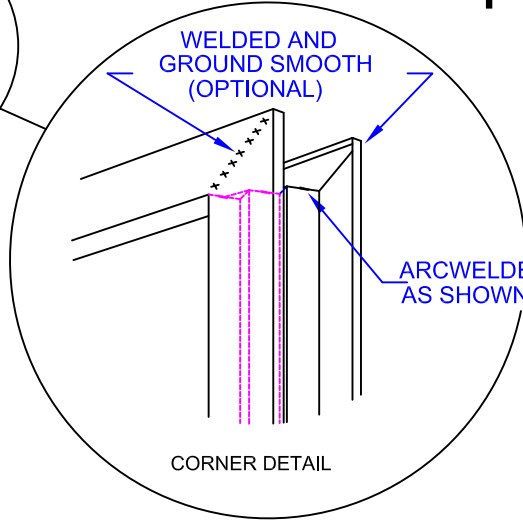
4400 Series

DOUBLE EGRESS FRAMES

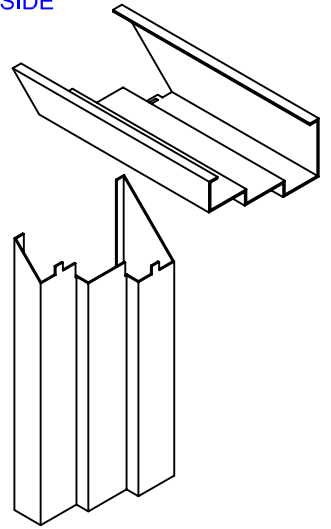
1 3/4" Frames



DOUBLE EGRESS FRAME

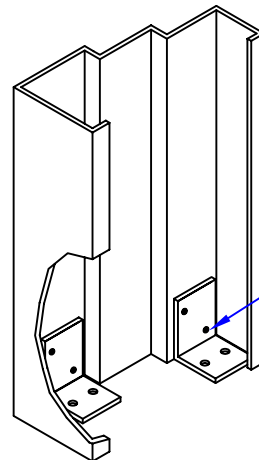
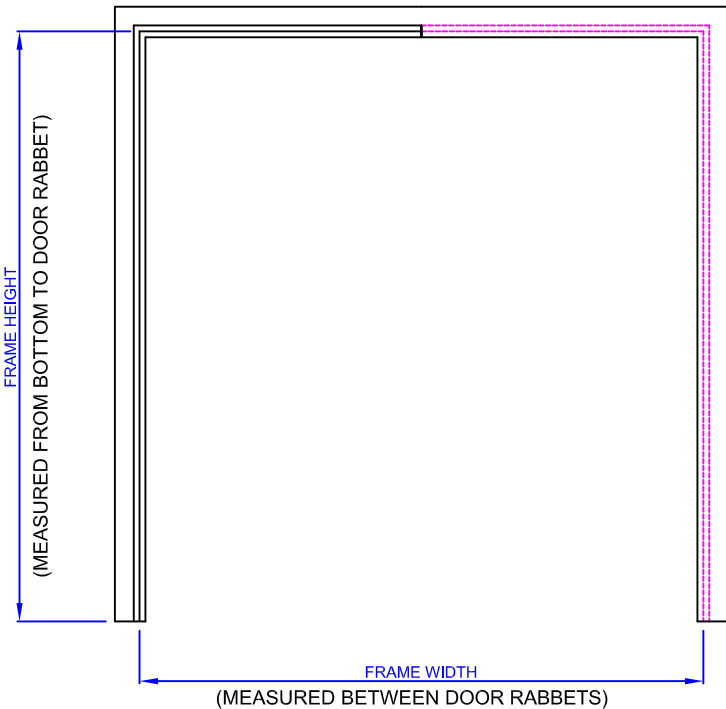
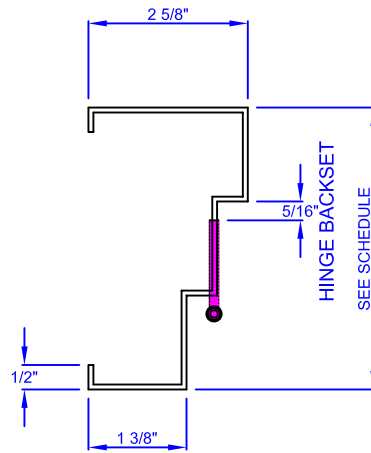
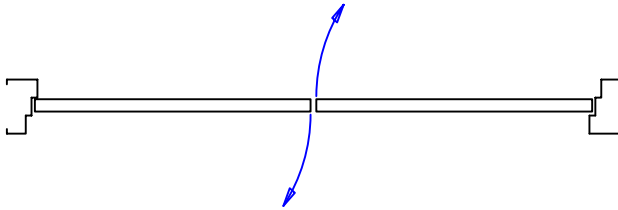


CORNER DETAIL



K-D CORNER DETAIL

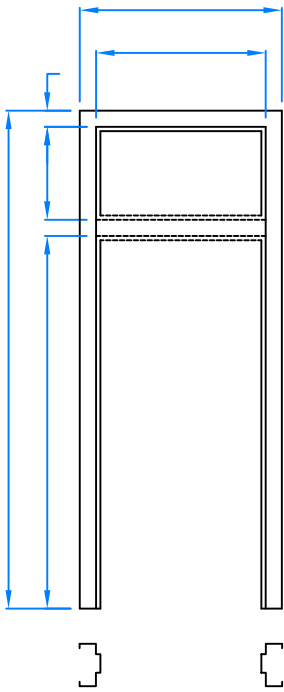
FRAMES PROVIDED RIGHT HAND EXCEPT AS NOTED



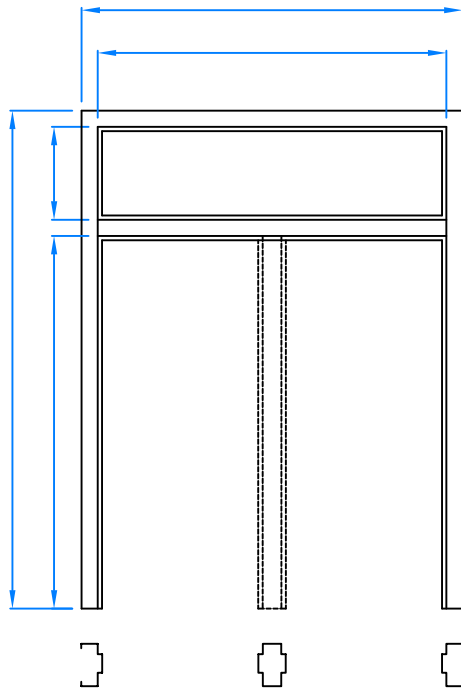
FLOOR ANCHOR DETAIL

Frame Elevations

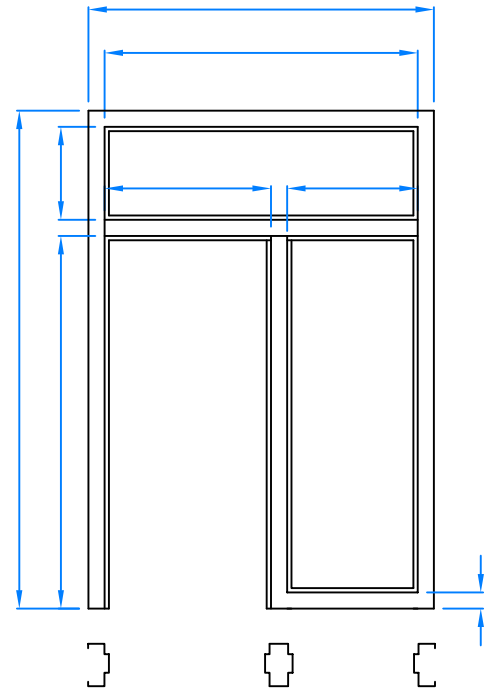
BLACK MOUNTAIN DOOR



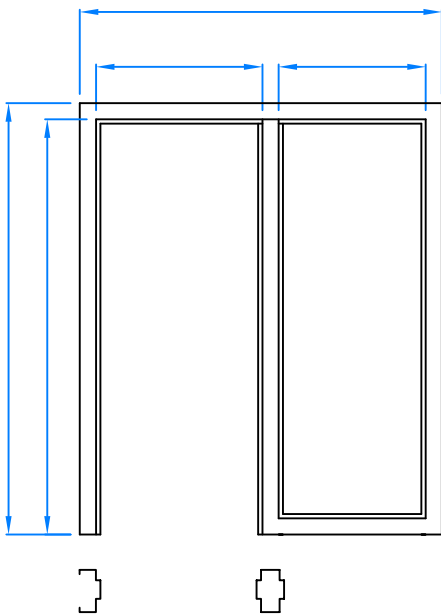
ELEVATION _____



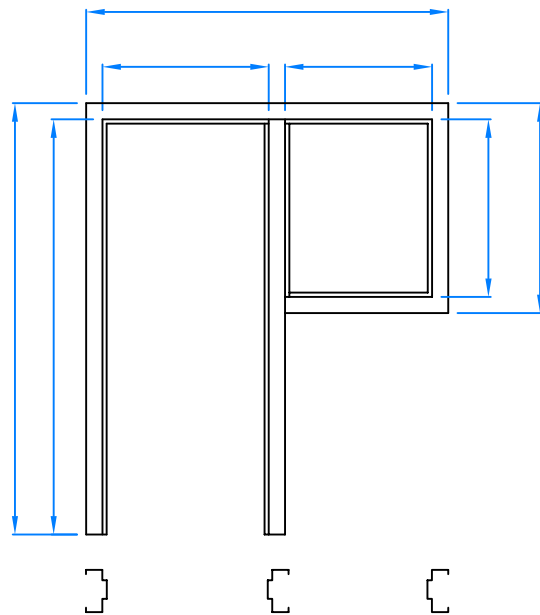
ELEVATION _____



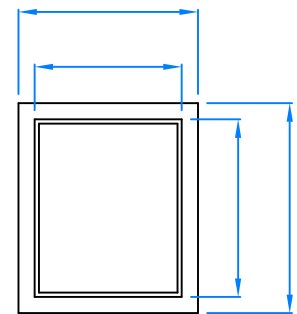
ELEVATION _____



ELEVATION _____



ELEVATION _____

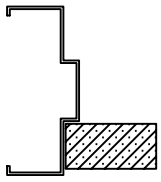


ELEVATION _____

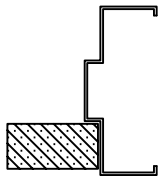
NOTE: INDICATE "DOOR SWING"
 REQUIRED AND SPECIFY GLASS
 SIDE AND GAP ON
 PLAN VIEW.

See Frame Sections for corresponding details.

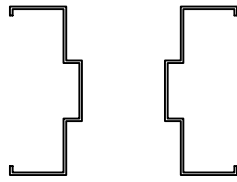
Frame Sections



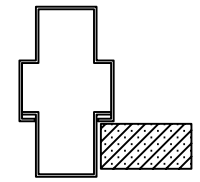
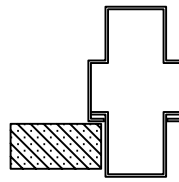
1



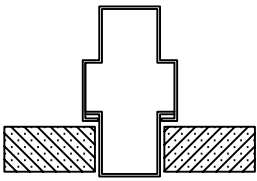
2



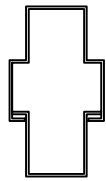
3



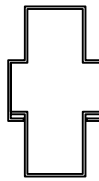
4



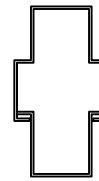
5



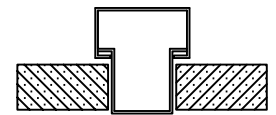
6



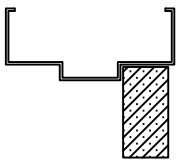
7



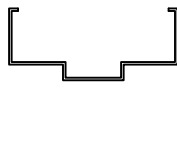
8



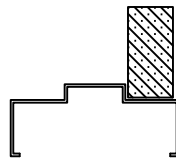
9



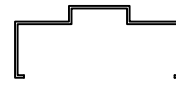
10



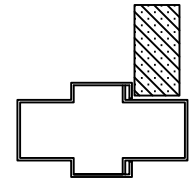
11



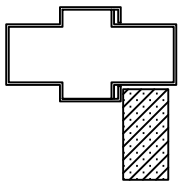
12



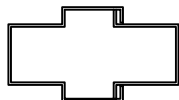
13



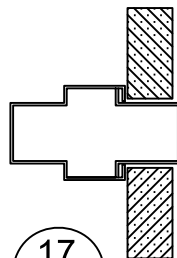
14



15



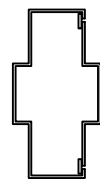
16



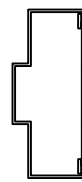
17



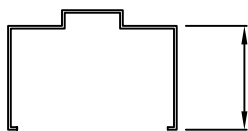
18



19

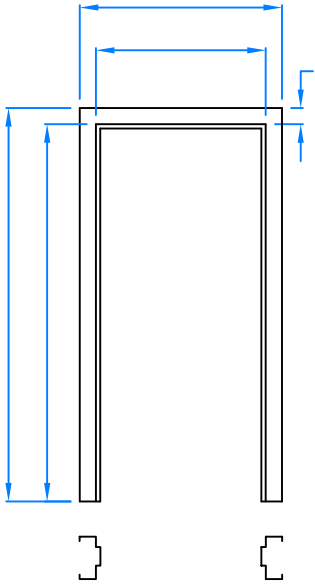


20

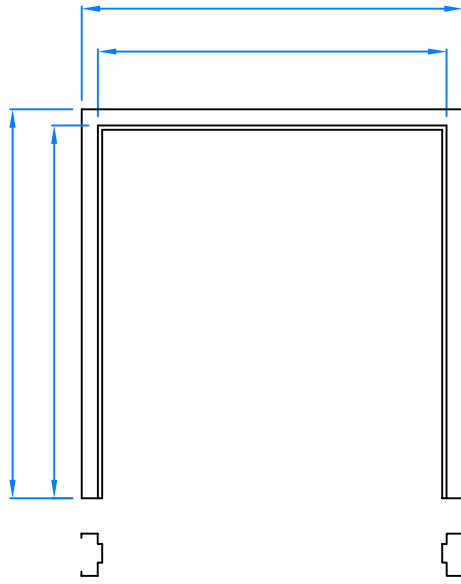


21

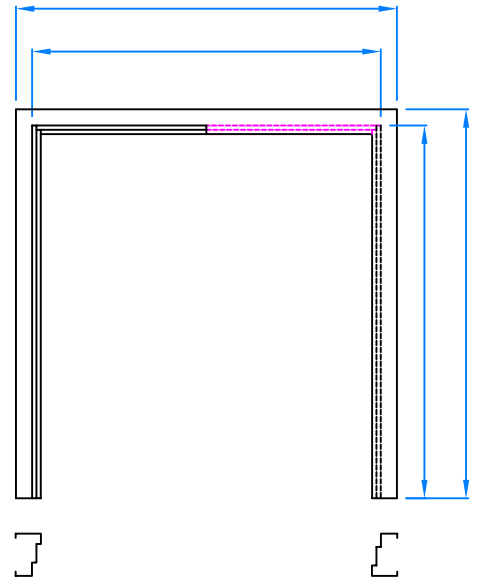
Frame Elevations



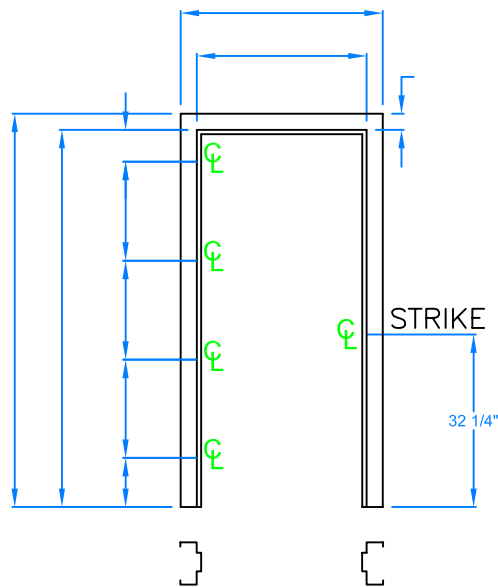
ELEVATION ____
SINGLE FRAME



ELEVATION ____
DOUBLE FRAME

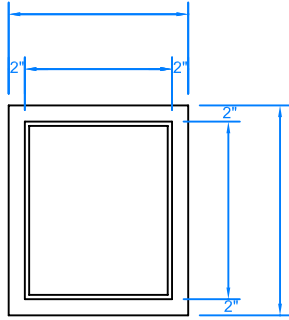


ELEVATION ____
DOUBLE EGRESS FRAME

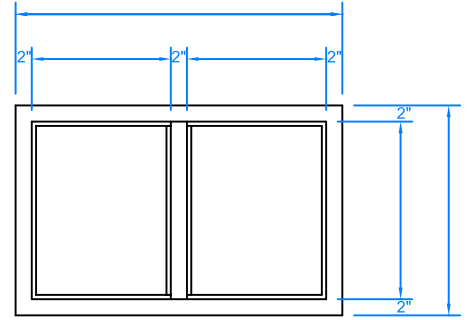


ELEVATION ____
DUTCH DOOR FRAME

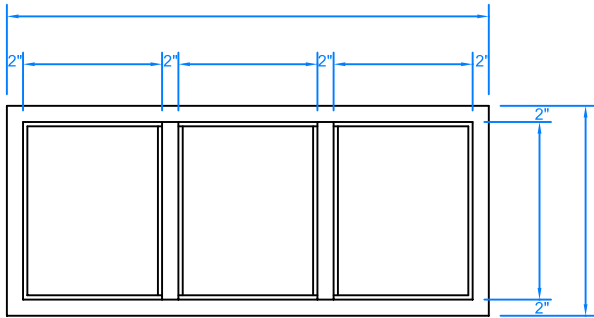
BORROWED LITE ELEVATIONS



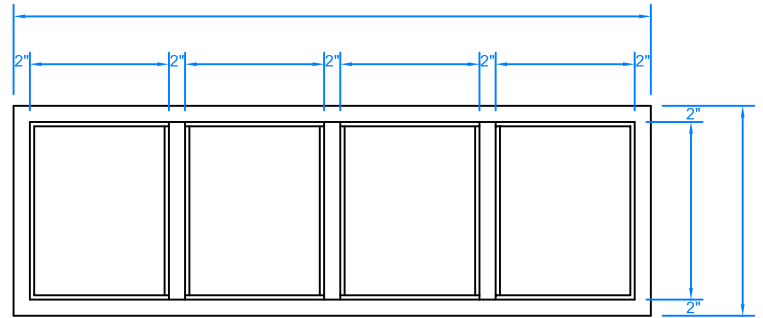
ELEVATION ____
8 W.S. ANCHORS



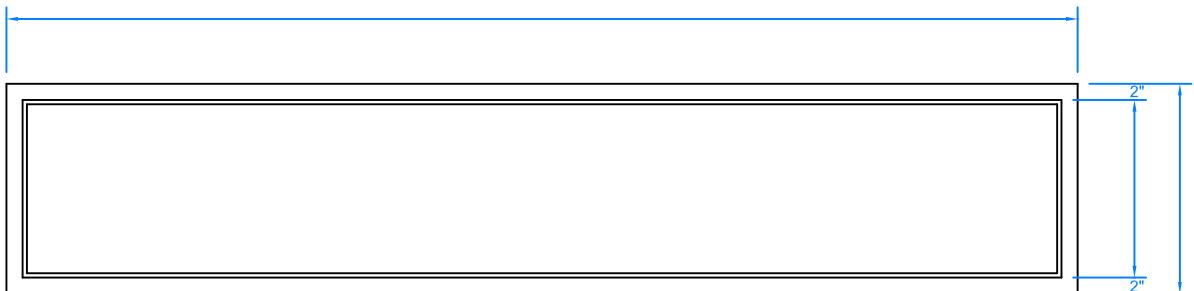
ELEVATION ____
8 W.S. ANCHORS



ELEVATION ____
10 W.S. ANCHORS

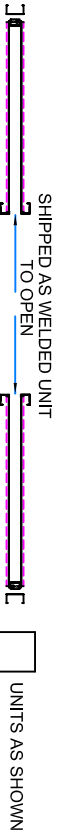


ELEVATION ____
12 W.S. ANCHORS



ELEVATION ____
10 W.S. ANCHORS





**INTERIOR APPLICATION
WELDED FRAMES**

DOUBLE OPENING POCKET FRAME

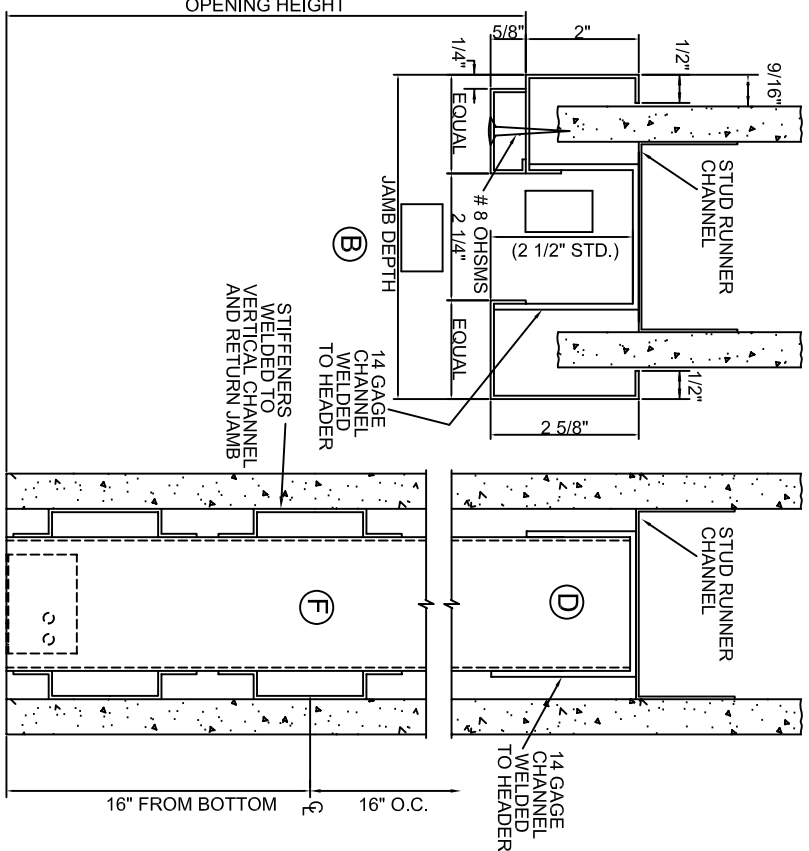
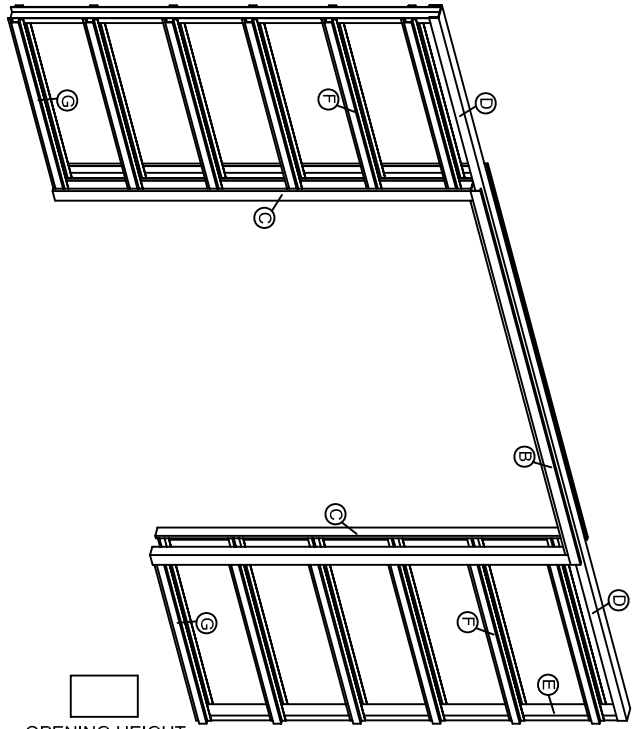
**DOUBLE OPENING POCKET
FRAMES:**

Frames shall be fabricated from 16 and 14 ga. c.r. steel (ASTM A366) for 1 3/4" doors as illustrated in accompanying details. Frames shall be equipped with one welded-in floor angle in each jamb.

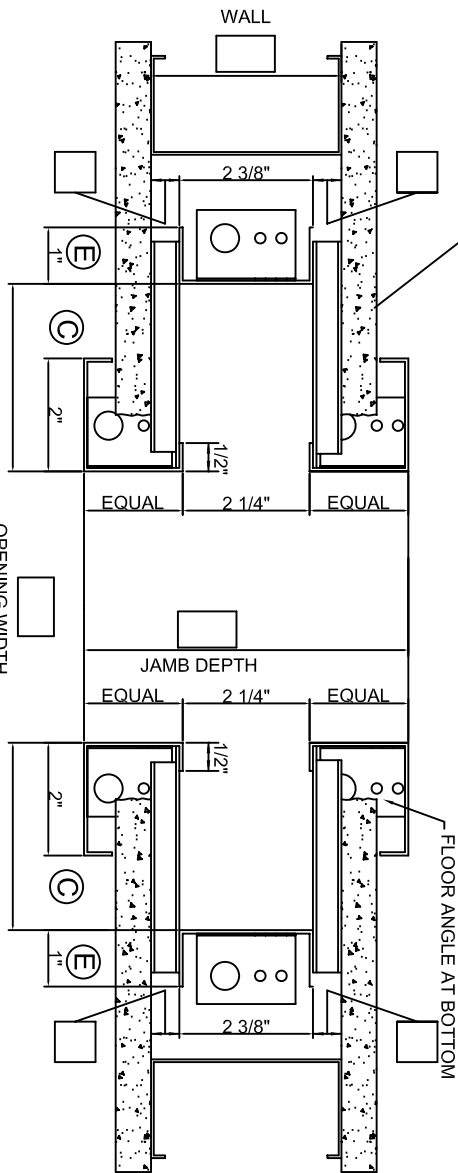
Frame members optionally shall be manufactured of hot dipped 16 and 14 ga. galvanized materials in the coating class conforming to ASTM designation A924. The material shall be treated in the mill to ensure superior prime paint adhesion.

All exposed surfaces shall be cleaned, treated with Bondrite chemical and given one baked on shop coat of EPA compliant gray synthetic primer.

Contractor shall furnish and install steel frames as manufactured by Black Mountain Door in all openings except as otherwise provided for in specifications.



FILL IN PARTITION THICKNESS

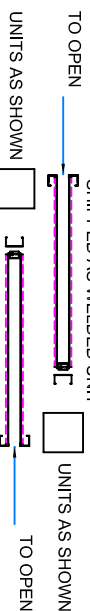


NOTE:
ALL DIMENSIONS INDICATED BY A [] MUST BE FILLED IN.

ELEV. _____

PAGE _____ OF _____

NOTES:



INTERIOR APPLICATION

WELDED FRAMES

SINGLE OPENING POCKET FRAME

SINGLE OPENING POCKET

FRAMES:

Frames shall be fabricated from 16 and 14 ga. c.r. steel (ASTM A366) for 1 3/4" doors as illustrated in accompanying details. Frames shall be equipped with one welded-in floor angle in each jamb.

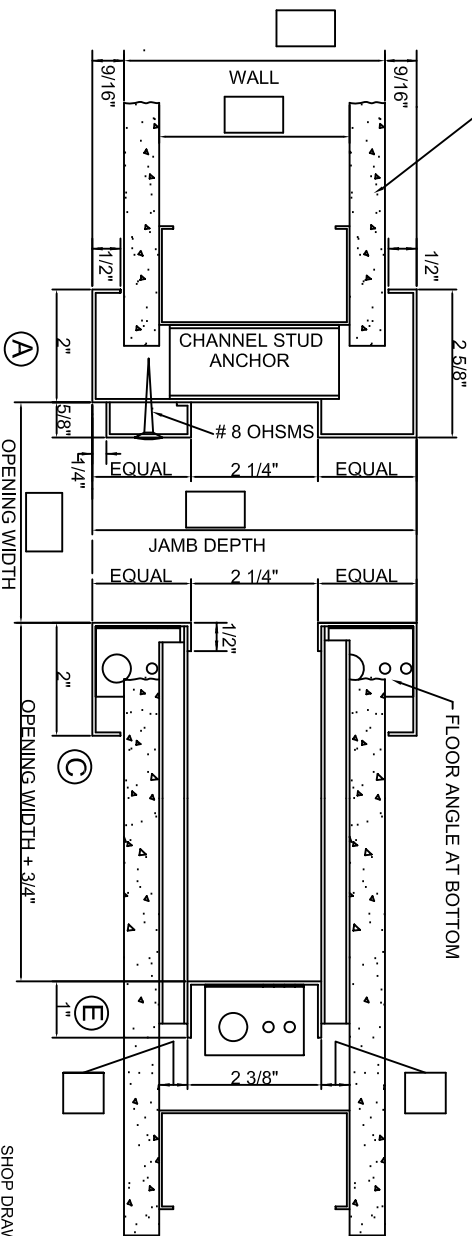
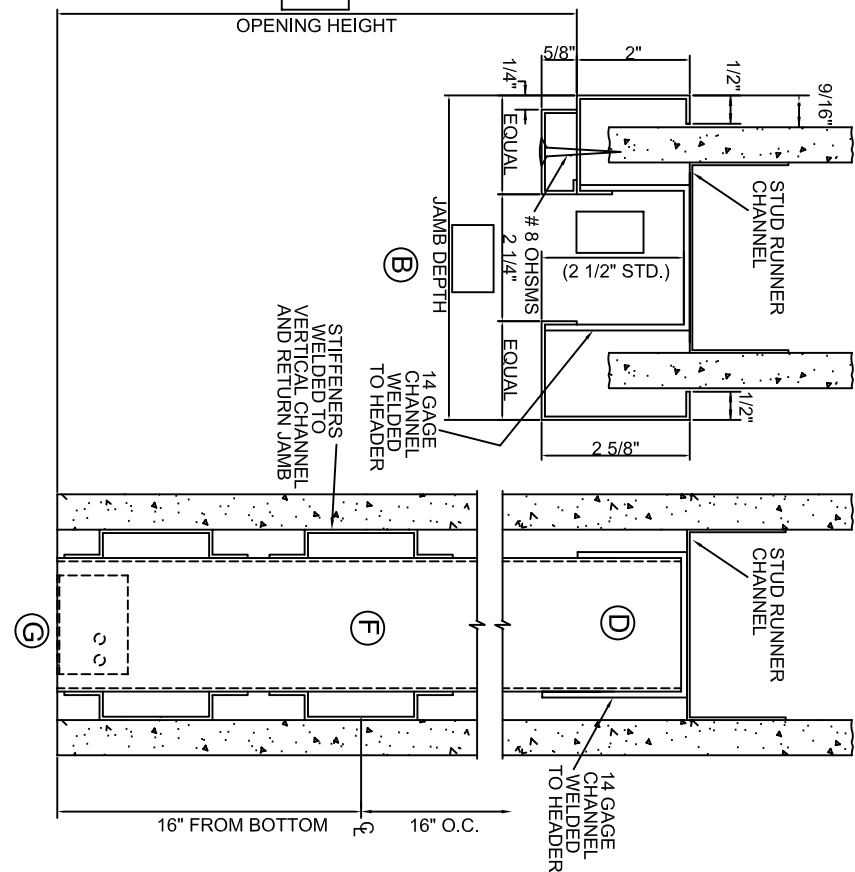
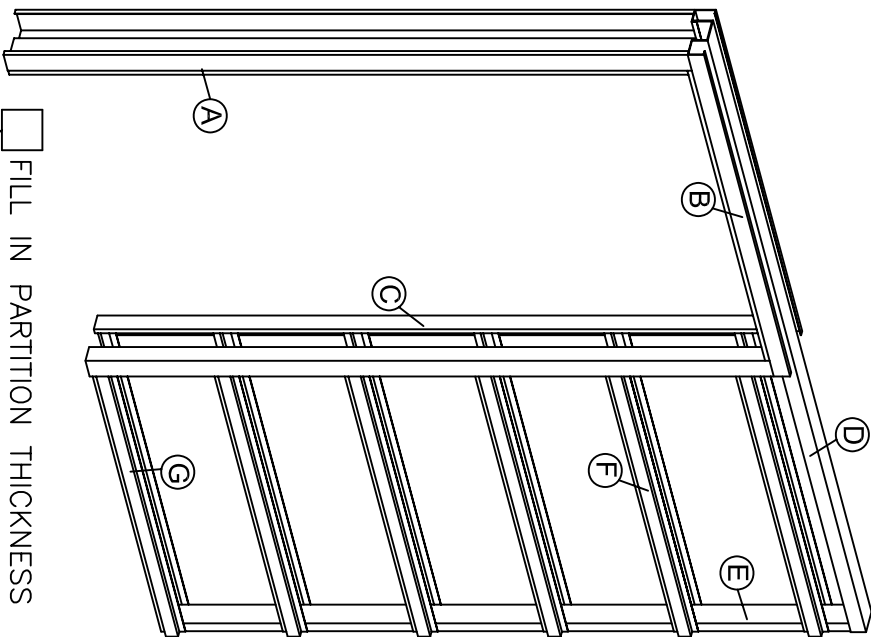
Frame members optionally shall be manufactured of hot dipped 16 and 14 ga. galvanized materials in the coating class conforming to ASTM designation A924. The material shall be treated in the mill to ensure superior prime paint adhesion.


Anchors shall be the channel type, applied to the non-pocket side of the unit.

All exposed surfaces shall be cleaned, treated with Bondrite chemical and given one baked on shop coat of EPA compliant gray synthetic primer.

Contractor shall furnish and install steel frames as manufactured by Black Mountain Door in all openings except as otherwise provided for in specifications.

NOTES:



NOTE:
ALL DIMENSIONS INDICATED BY A  MUST BE FILLED IN.

ELEV. _____

PAGE _____
OF _____

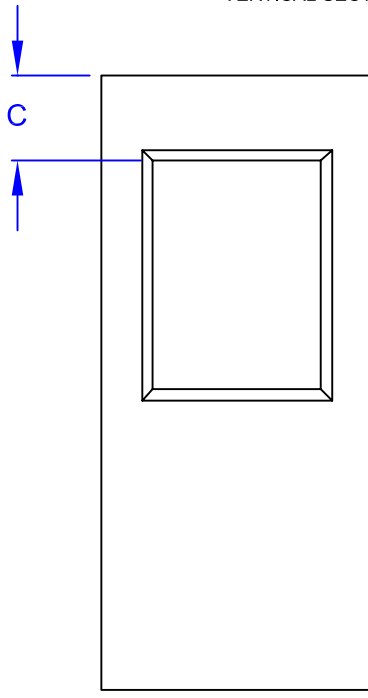
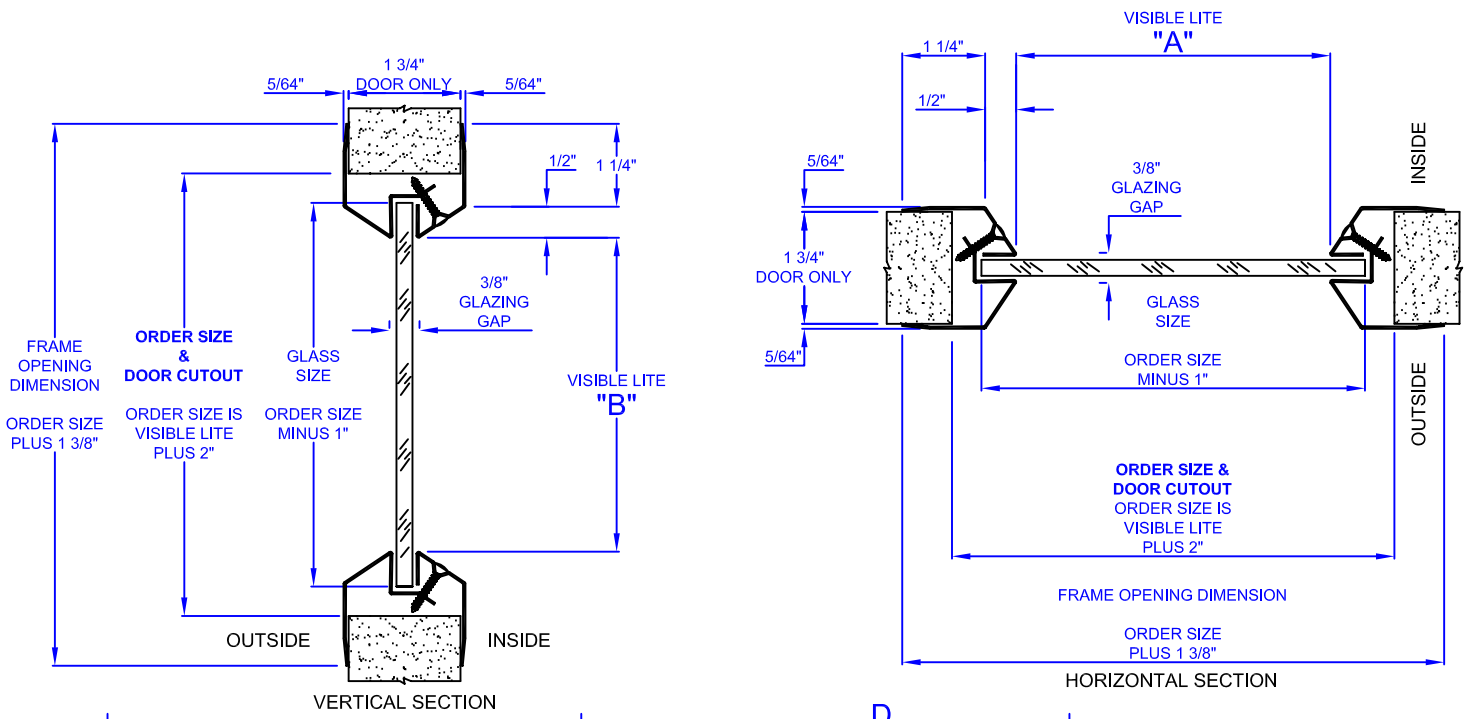
SD-22 2012

Special Glass Size

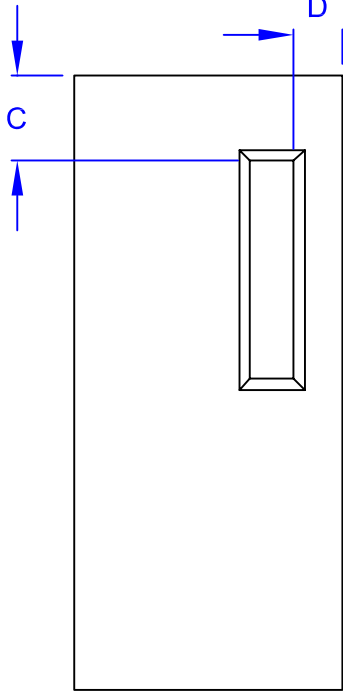
EXPOSED LITE SIZE

Doors

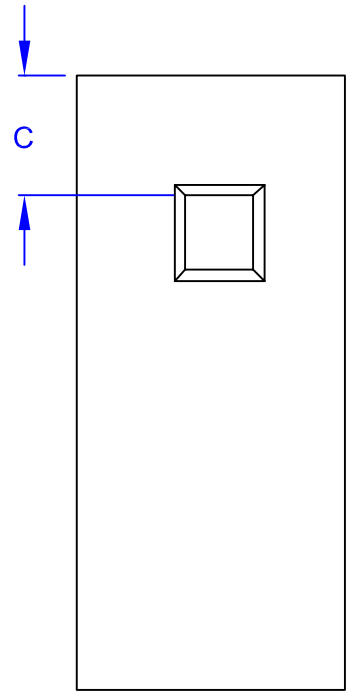
TYPICAL GLAZING



SPG



SPN



SPV

DIMENSIONS SHOWN ARE TO CLEAR VIEWING AREA (GLASS).

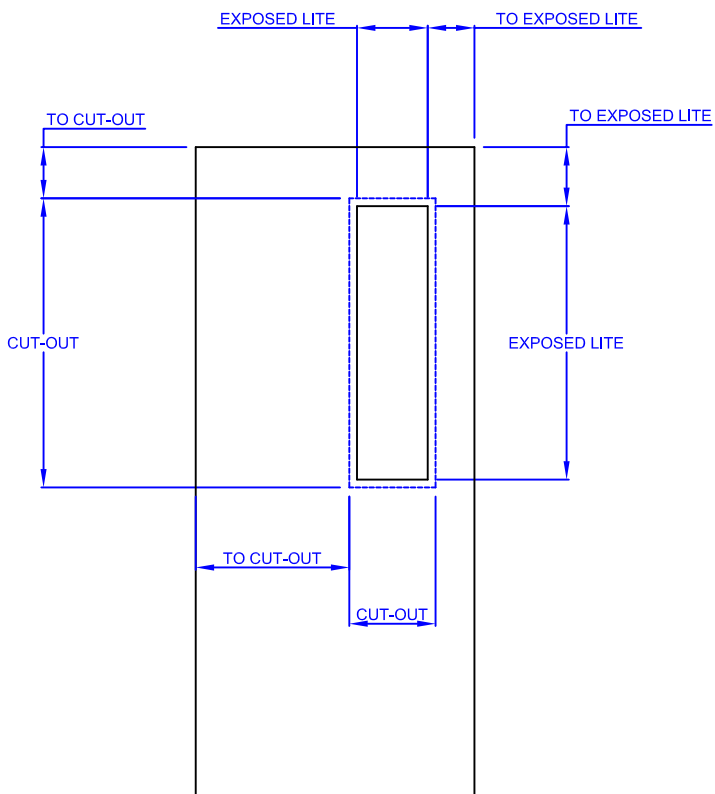
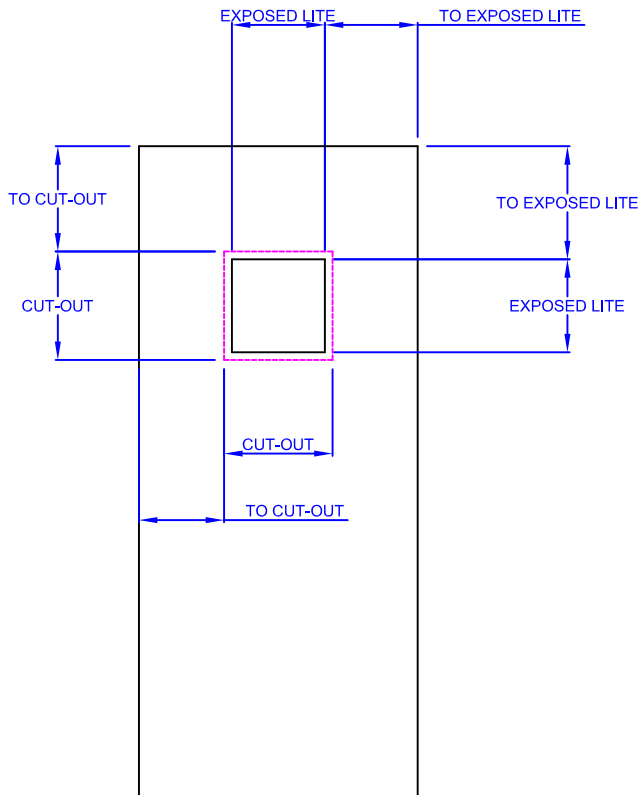
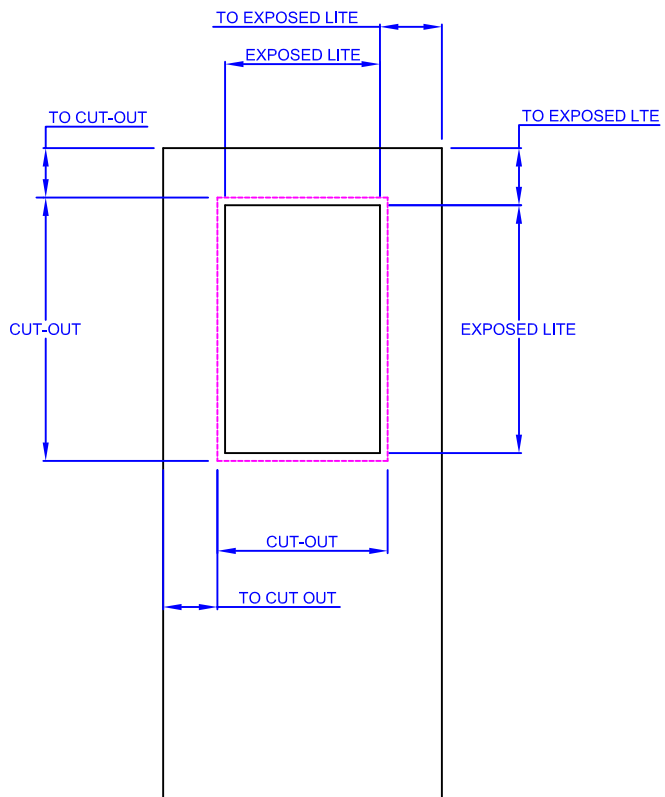
	A	B	C	D
SPECIAL HALF GLASS (SPG)			Top Rail	Lock Stile
SPECIAL NARROW LITE (SPN)				
SPECIAL VISION LITE (SPV)				



GLASS LITES

ALL DOOR SERIES

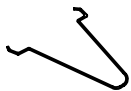
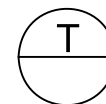
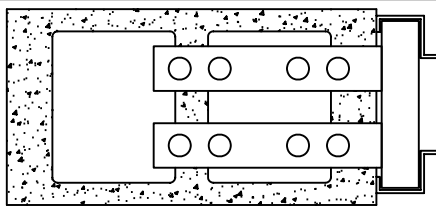
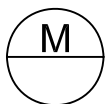
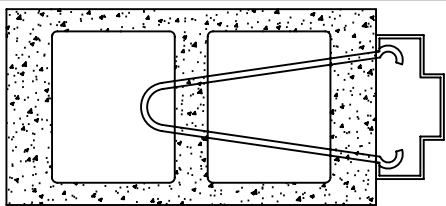
SPECIAL MOULDING & LOCATION SHEET



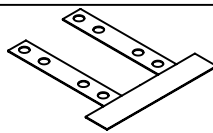
Anchors/Wall Conditions

BLACK MOUNTAIN DOOR www.blackmountaindoor.com

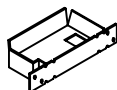
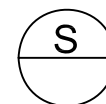
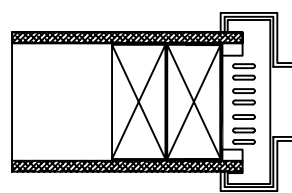
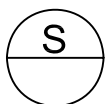
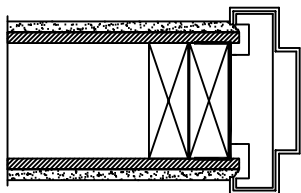
ALL ANCHORS "SNAP IN" UNLESS OTHERWISE NOTED



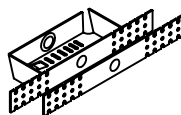
WIRE MASONRY ANCHOR
3" THRU 8 3/4"
(STANDARD)
SPECIFY "M"



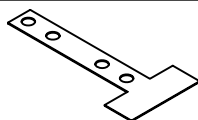
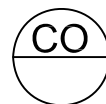
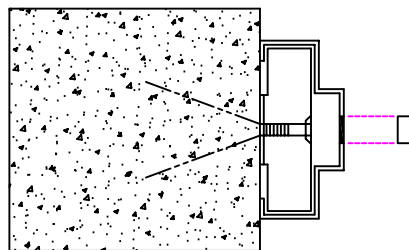
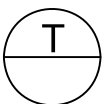
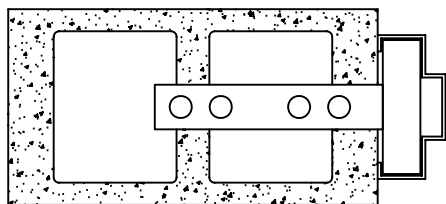
MASONRY ANCHOR
9 1/2" AND OVER
(OPTIONAL)
SPECIFY "T"



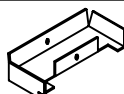
WOOD STUD ANCHOR
3 3/4", 4 3/4", 5 3/4", 6 1/4"
6 3/4", 7 3/4", 8 1/4", 8 3/4"
(STANDARD)
SPECIFY "S"



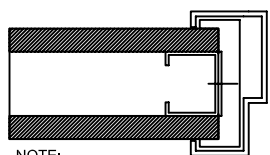
ADJUSTABLE WOOD STUD ANCHOR
5 3/4", 6 1/4", 6 3/4", 7 1/4"
7 3/4", 8 1/4", 8 3/4"
(OPTIONAL)



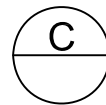
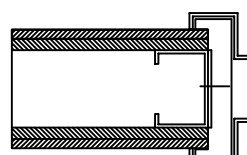
MASONRY ANCHOR
UNDER 9 1/2"
(OPTIONAL)
SPECIFY "T"



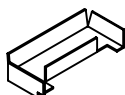
COMPLETED OPENING
ANCHOR
5 3/4", 6 3/4" (7 3/4", 8 3/4" WELD IN)
SPECIFY "CO"/"COW" (weld in)



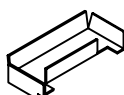
NOTE:
FINISHED WALL SHOWN



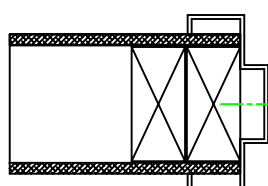
NOTE:
FINISHED WALL SHOWN



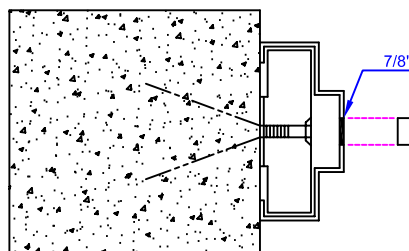
CHANNEL TYPE ANCHOR
3 3/4", 4 3/4", 5 3/4"
(STANDARD)
SPECIFY "CW"



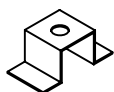
CHANNEL STEEL STUD ANCHOR
3 3/4", 4 3/4", 5 3/4"
(STANDARD)
SPECIFY "C" OR "CW"
ALL OTHER DEPTHS WELD IN



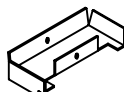
NOTE:
FINISHED WALL SHOWN



LAG COMPLETED OPENING ANCHOR
5 3/4", 6 3/4" (7 3/4", 8 3/4" WELD IN)
(OPTION)
SPECIFY "LP"/"LWS" (weld in)



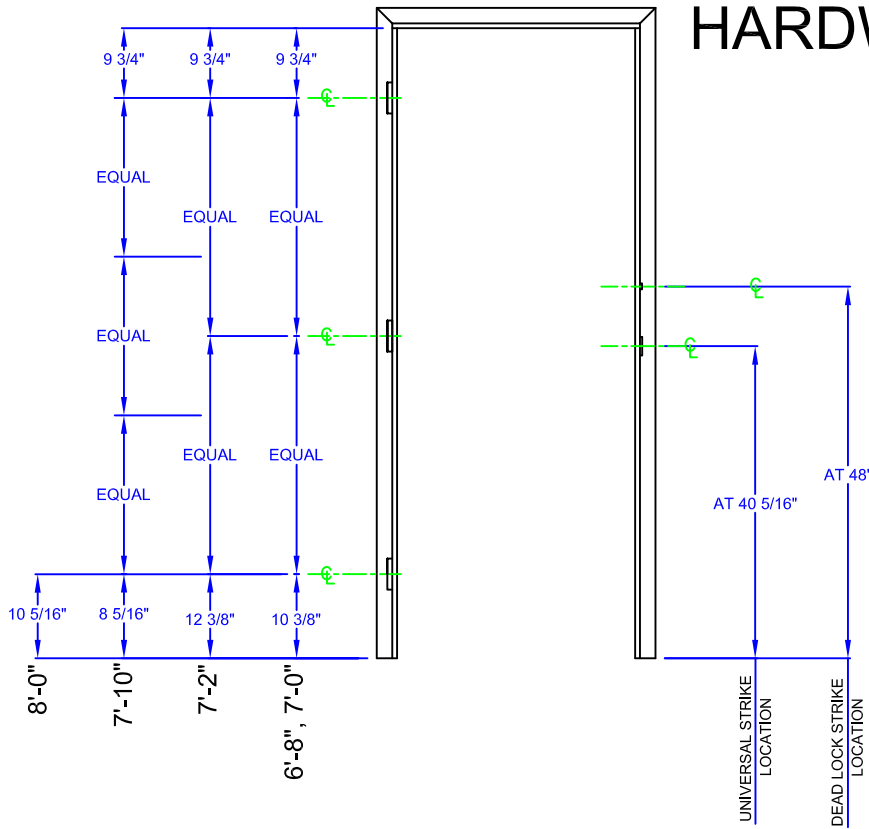
PUNCH & DRAW FOR 3/8" BOLT/ #12 WOOD SCREW
ALL JAMB DEPTHS
(OPTION)
SPECIFY "PD12" (Wood screws), "PDW" (3/8" bolt)



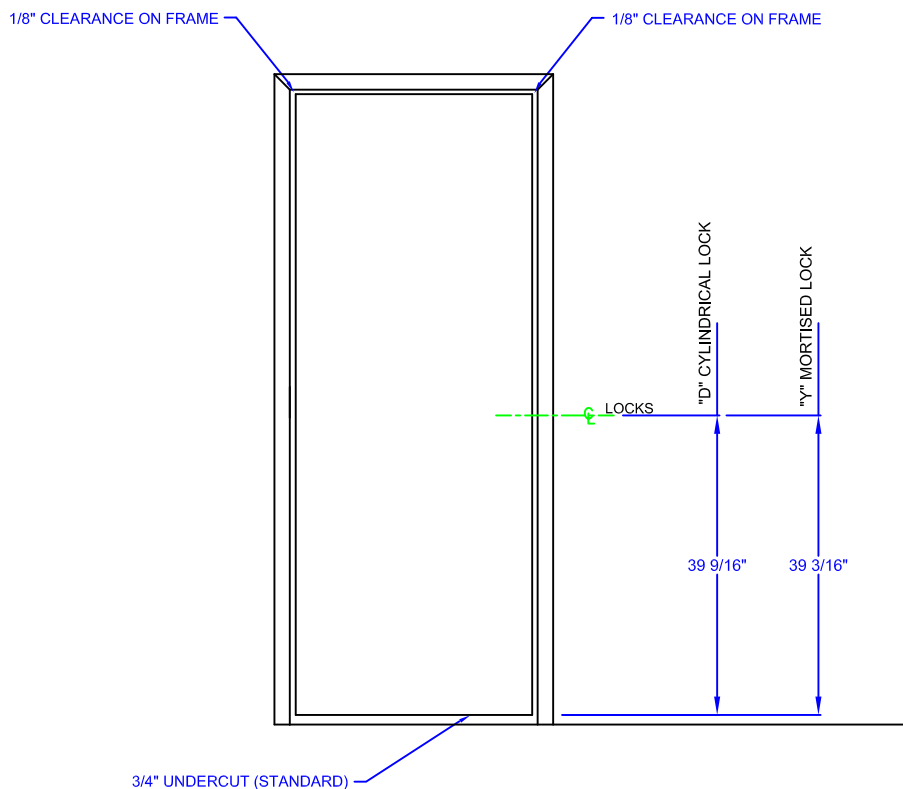
FRAME & DOOR

ALL SERIES

HARDWARE LOCATION SHEET



HARDWARE LOCATIONS ARE SHOWN FOR STANDARD SIZES.
 CONSULT WITH MANUFACTURER FOR NON-STANDARD DIMENSIONS
 NOT FOR USE BY OTHER TRADES FOR MACHINING PURPOSES.



DESIGN CLEARANCES