



**Oldcastle** BuildingEnvelope™

***STANDARD DOOR and FRAME***  
***INSTALLATION AND GLAZING MANUAL***

*Note: Installation and Glazing Manuals are product specific. **FOR REVIEW ONLY!***





# DOOR SIZE WARRANTY GUIDELINES

The following is our standard warranty guidelines and recommendations for door sizes.

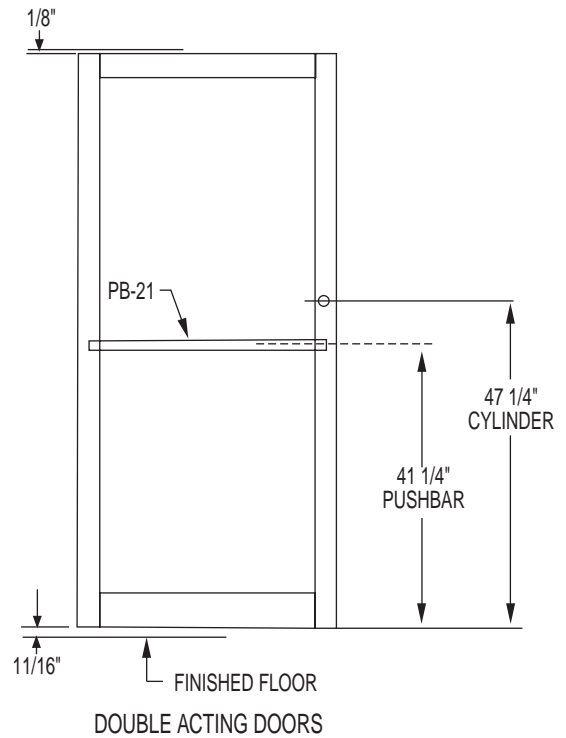
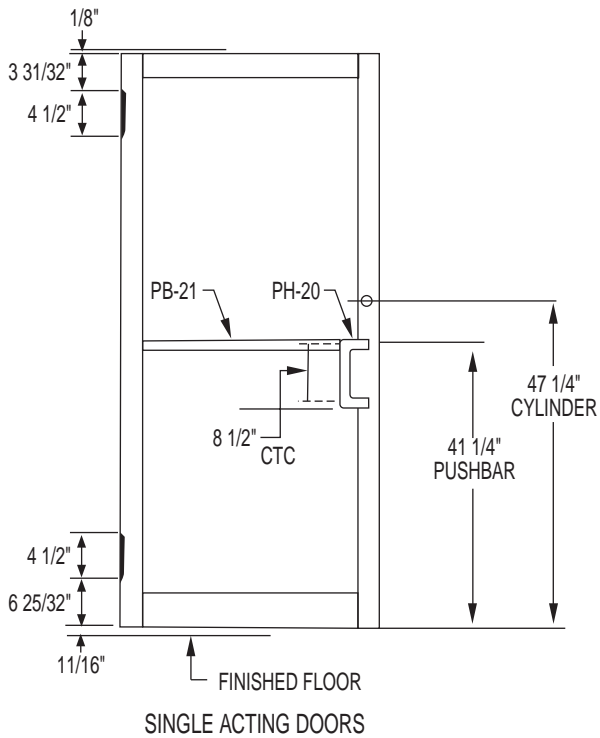
Doors with no muntins or muntins at least as large as D-11 (1 7/8"):	<u>Size Up To &amp; Including</u>
• Standard and Rugged Narrow Stile	4'0" x 8'6"
• Standard and Rugged Medium Stile	4'0" x 9'0"
• Standard and Rugged Wide Stile	4'0" x 10'0"
Doors with at least one D-135 (1/2") muntin:	
• Standard and Rugged Narrow Stile	3'0" x 7'6"
• Standard and Rugged Medium Stile	3'0" x 8'0"
• Standard and Rugged Wide Stile	3'0" x 8'0"
Auto Showroom Doors:	
• All types	5'0" x 8'0"
Any ASD leaf 5'0" x 8'0" or larger requires a caster on the leading edge.	
• Doors over 5'0" wide require butts or gear hinges. (No pivots)	

## NOTE:

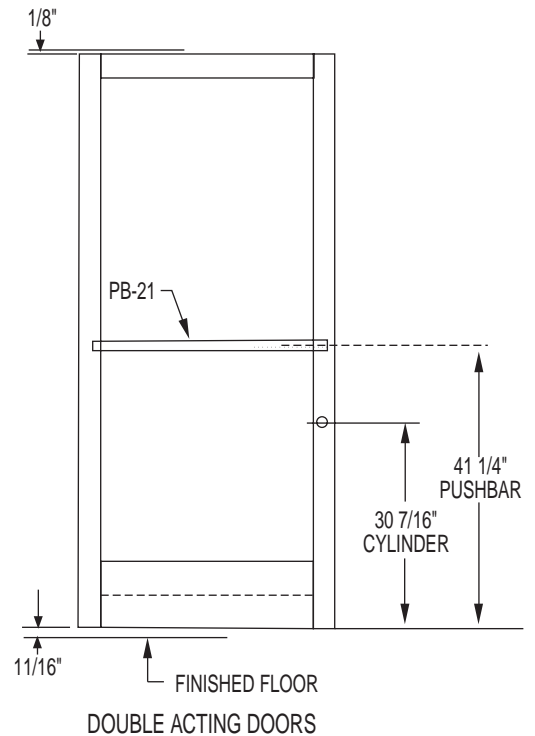
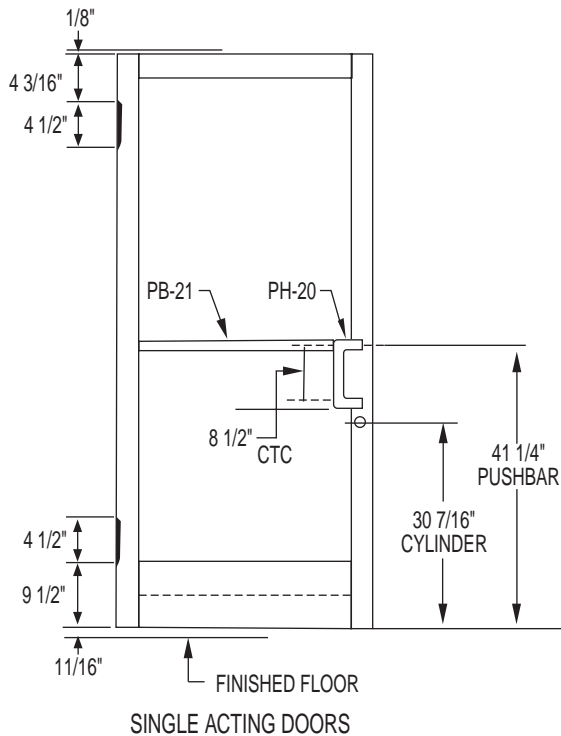
- All doors over 7'0" tall require a minimum of 1 1/2 pair of hinges or a continuous gear hinge. Ratio for intermediate hinges is one (1) for every 30" above 7'0".
- Doors utilizing special top and/or bottom rail assemblies, please contact Terrell.
- Doors over these sizes and requiring a warranty, please contact Terrell.

# STANDARD HARDWARE LOCATIONS

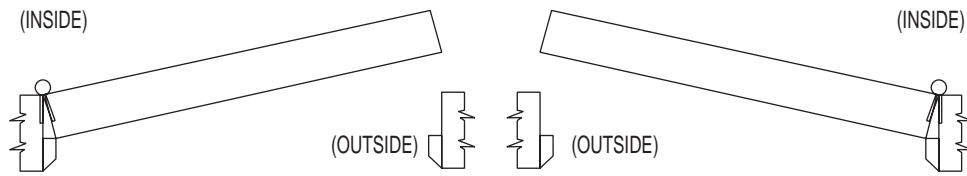
## CENTRAL & EASTERN REGION HARDWARE LOCATIONS



## WESTERN REGION HARDWARE LOCATIONS

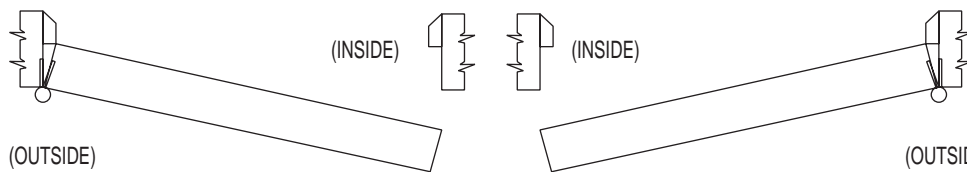


# DOOR HANDING



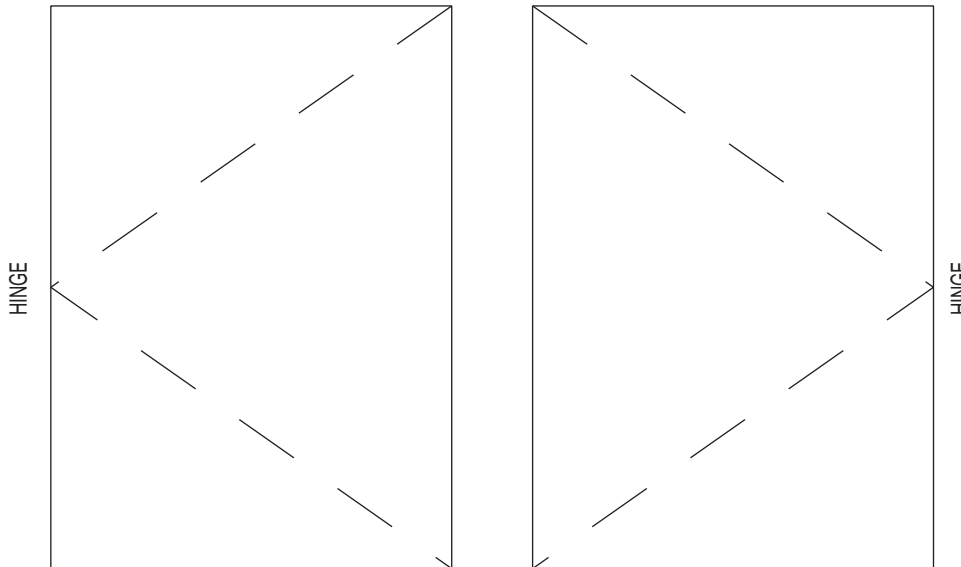
FOR HARDWARE: LEFT HAND, REGULAR (LH)  
**Oldcastle BuildingEnvelope™**  
 HINGED LEFT, SWING IN (HLSI)  
 SIMPLIFIED: LEFT HAND

FOR HARDWARE: RIGHT HAND, REGULAR (RH)  
**Oldcastle BuildingEnvelope™**  
 HINGED RIGHT, SWING IN (HRSI)  
 SIMPLIFIED: RIGHT HAND



FOR HARDWARE: LEFT HAND, REVERSE BEVEL (LHR)  
**Oldcastle BuildingEnvelope™**  
 HINGED LEFT, SWING OUT (HLSO)  
 SIMPLIFIED: RIGHT HAND

FOR HARDWARE: RIGHT HAND, REVERSE BEVEL (RHR)  
**Oldcastle BuildingEnvelope™**  
 HINGED RIGHT, SWING OUT (HRSO)  
 SIMPLIFIED: LEFT HAND



ELEVATIONS FROM EXTERIOR OF DOORS, SHOWING SWING.  
 ARROWS POINT TO HINGE SIDE.

## DHI definition of hardware (door) handing:

The HAND of doors is determined from the outside of the door. The outside of a cupboard, bookcase, etc., is the room side. The outside of entrance doors is the weather side.

If standing outside of a door (facing the door), the butts are on your right, it is a LEFT HAND DOOR; if on the left it is a RIGHT HAND DOOR. If the door opens FROM you (is pushed open) it is a REGULAR BEVEL; if it opens TOWARD you (is pulled open) it is a REVERSE BEVEL door.

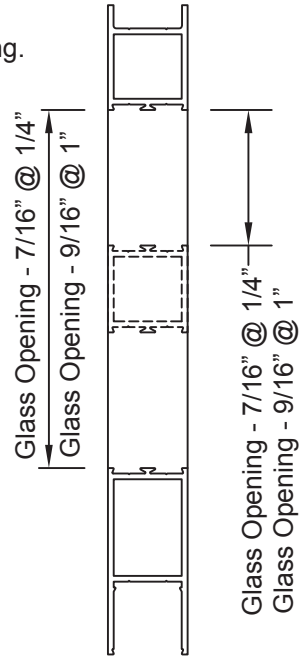
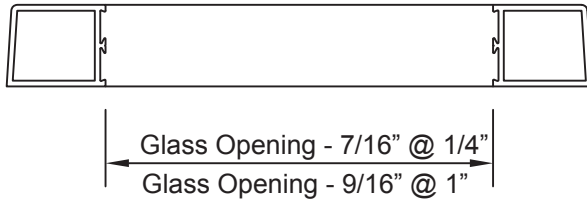
# GLASS SIZING

Door lites are calculated as follows:

Standard doors with no muntins should be calculated using the formulas and standard sizes shown in the Oldcastle BuildingEnvelope™ price catalog.

Non-standard doors are calculated as follows:

Metal to Metal (glass opening) minus 7/16" for 1/4" glazing or 9/16" for 1" glazing. Doors with muntins will be calculated using openings between muntins and rails/stiles as shown.



Transom Lites are calculated as follows:

FG-1000 / FG-2000 framing:

Horizontally:

D.L.O. + 5/8"

Vertically:

Without concealed closure:

D.L.O. + 5/8"

With concealed closure:

DLO (frame = horiz to horiz) - 1 1/8" (sash) + 5/8"

FG-3000 framing:

Horizontally:

D.L.O. (frame) - 1 1/2" (sash) + 7/8" (glass bite)

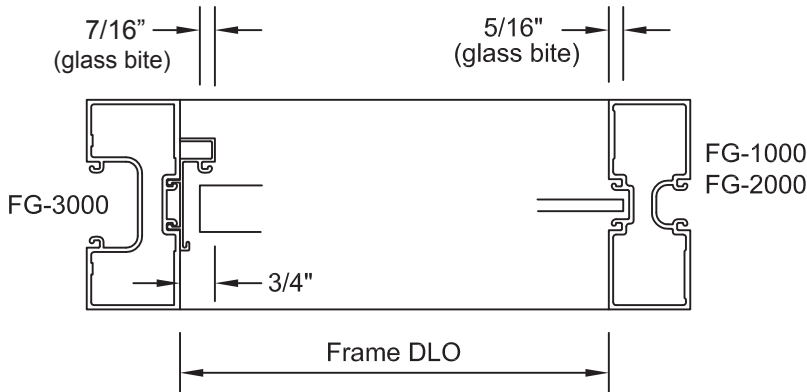
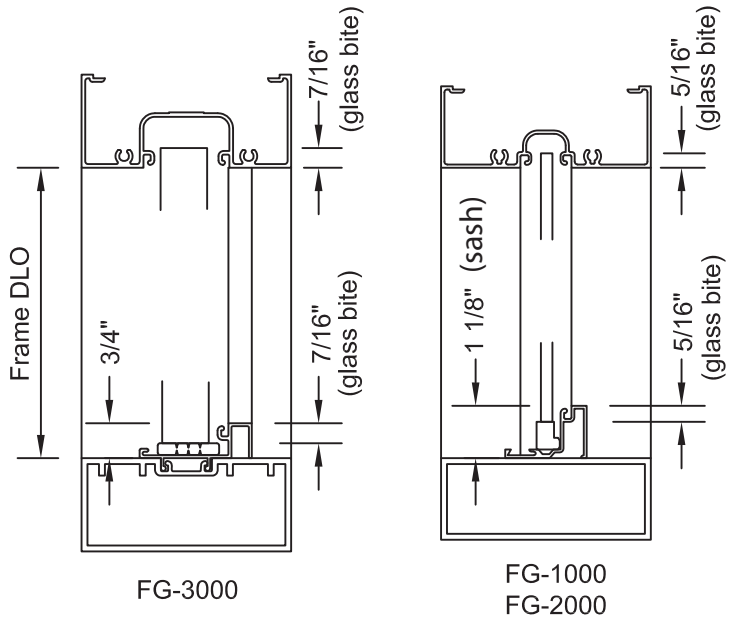
Vertically:

Without concealed closure:

D.L.O. + 7/8"

With concealed closure:

DLO (frame = horiz to horiz) - 3/4" (sash) + 7/8" (glass bite)



FG-1000 / FG-2000 use sash S-52 / S-53  
 FG-3000 use sash FG-3157 / FG-3158









# INSTALLATION OF STANDARD DOOR FRAME

1. Door frame shall be completely assembled, including threshold; with all joints neatly aligned and tight. Be sure all hardware is attached that must be installed prior to frame installation. If flat filler pieces used (recommended), snap them in place.
2. Door frame shall be installed square and plumb (See Figure 1 and 2, below).
3. Level the door frame at the threshold at the high point in the slab. It is preferable to not have a high point in the slab. The door frame is designed to have the jambs run down to the slab.
4. Frame must be securely anchored in place. Solidly shim at all anchor points so as not to bow or distort framing.
5. Mark the concrete through the countersunk holes in threshold.
6. Use masonry bit to drill holes to receive inserts (included).
7. Anchor the threshold to the slab using flat head screws (included).
8. Install door stops (at transom frames).

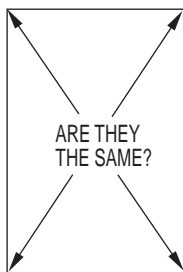


Figure 1

Measure diagonals to check if square.

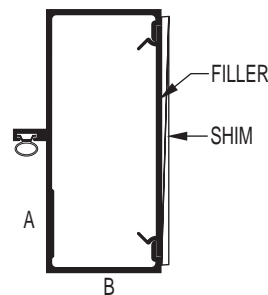
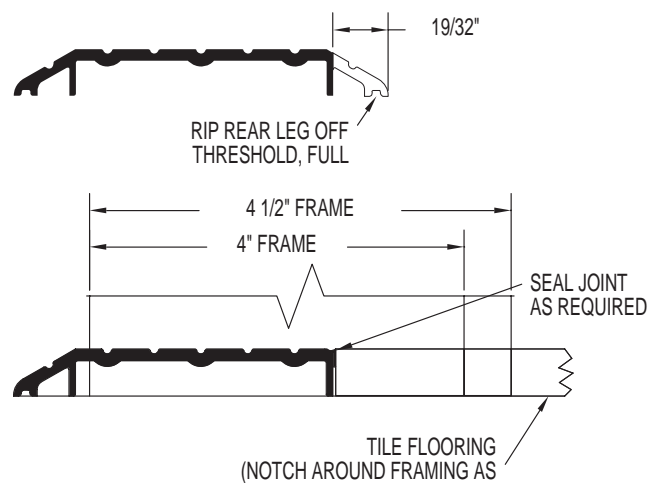


Figure 2

Use 4' level to check if plumb at points A and B.

9. You are now ready to install the door. Proceed to pg. 15 if pre-glazing the door, or pg.17-24 to install door.



# INSTALLATION INSTRUCTIONS FOR HIGH-PERFORMANCE THRESHOLD

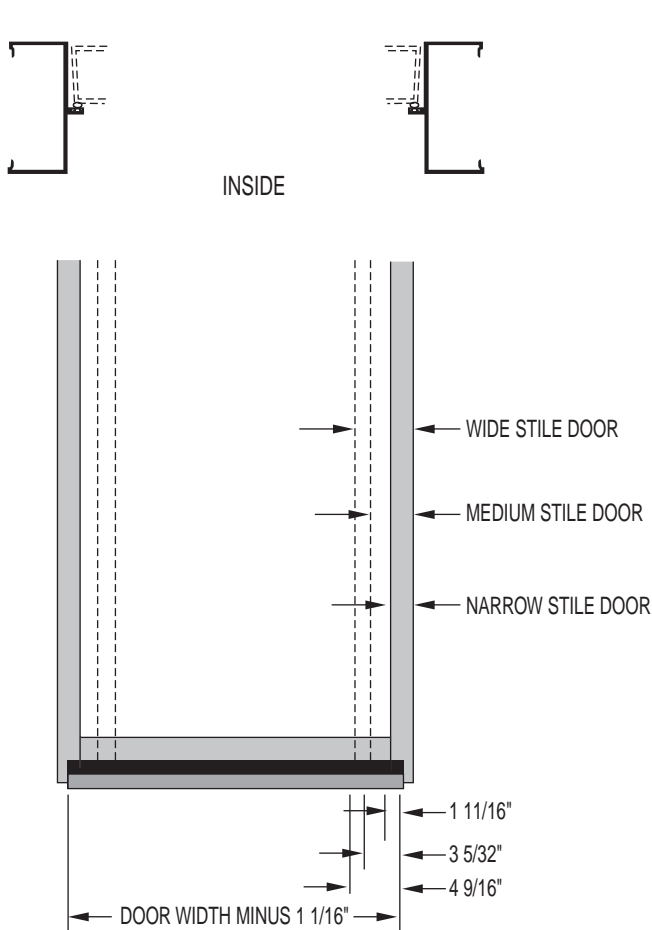


Figure 1

SINGLE  
BUTT HINGE OR  
OFFSET PIVOT  
DOORS

1. Cut the D-118 weather-strip to Door Width minus 1 1/16" see (fig. 1).
2. Placing the D-118 1-1/16" up from the bottom of the door rail (fig. 2), center it by overlapping the stiles equal distances (fig. 1). Using the D-118 as a template, mark the door for the attachment holes. Drill the door for #8 x 1/2" FHSMS, attach the D-118 to the door and insert the D-120 silicone strip. Crimp ends.
3. On both frame jambs drill two #29 (.136" dia.) holes in frame for #FS-256 screws and attach clips to frame (fig 2). Drill one #2 (.211" dia.) hole 1/2" in from each end of the threshold as shown in (fig. 2) and countersink for #12 FHSMS #FS-42. Attach threshold to clips.
4. Seal threshold to frame and surrounding conditions.

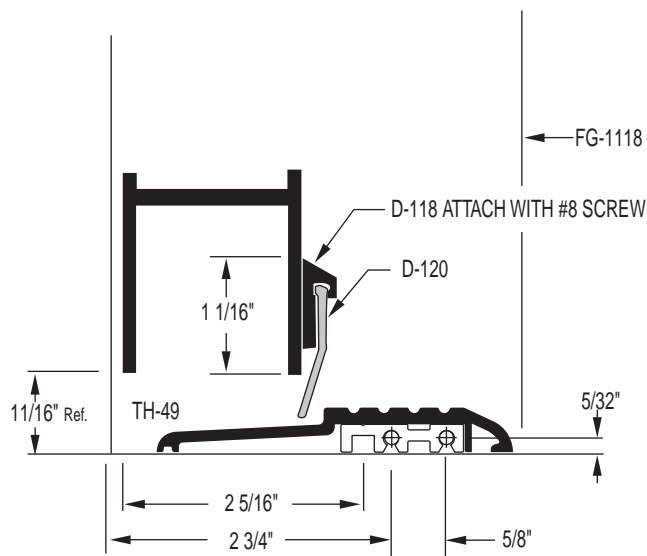
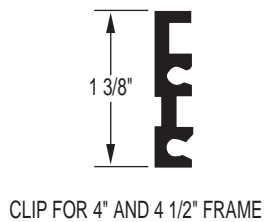
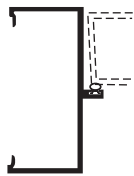
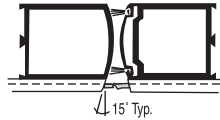


Figure 2

# INSTALLATION INSTRUCTIONS FOR HIGH-PERFORMANCE THRESHOLD



INSIDE



PAIR OF DOORS  
BUTT HINGE OR  
OFFSET PIVOT

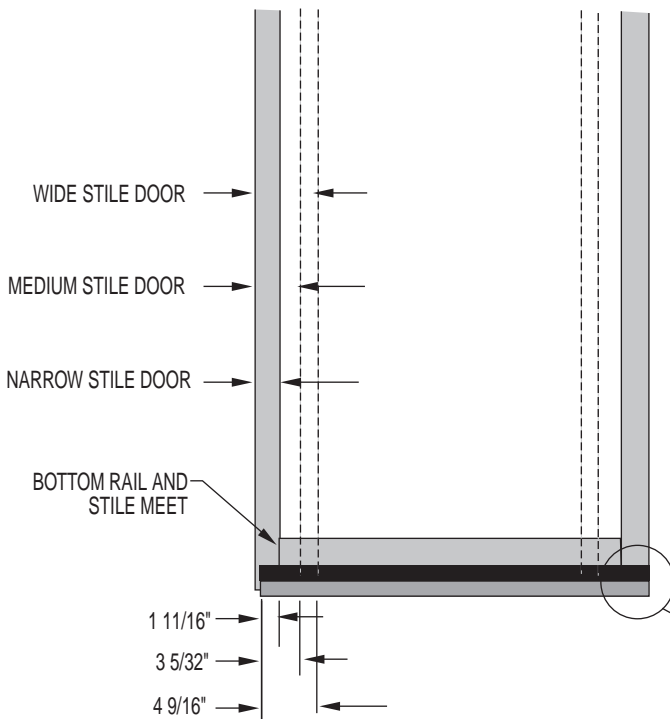


Figure 3

1. Determine door type, mark placement as shown in (fig. 3). Place weather-strip on door and mark for 15 degrees cut as shown in (fig. 4). Cut weather strip.
2. Place weather strip on door 1-1/16" up and mark attachment holes using weather strip as template. Drill for #8 x 1/2" FHSMS and attach weather strip.
3. Install silicone strip allowing over lap as shown in (fig. 4) and crimp pivot end.
4. On both frame jambs drill two #29 (.136" dia.) holes in frame for #FS-256 screws and attach clips to frame (fig 5). Drill one #2 (.211" dia.) hole 1/2" in from each end of the threshold as shown in (fig. 2) and countersink for #12 FHSMS #FS-42. Attach threshold to clips.
5. For doors with concealed rod panics drill holes in threshold as shown in (fig. 6). Be sure to drill into condition below to allow rod to engage into threshold as shown in (fig. 5). Attach #3315 stop.
6. Seal threshold to frame and surrounding conditions.

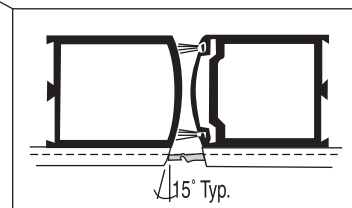


Figure 4

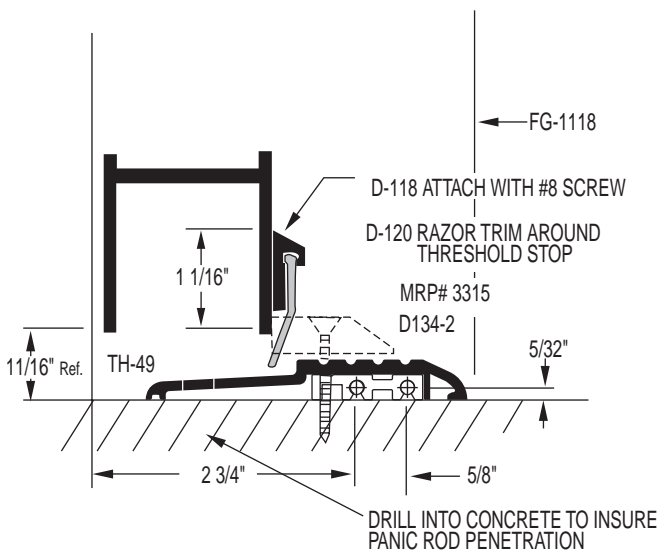


Figure 5

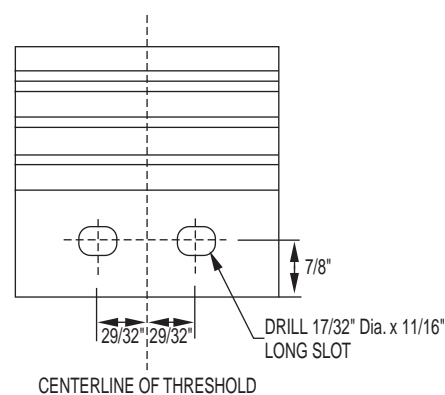
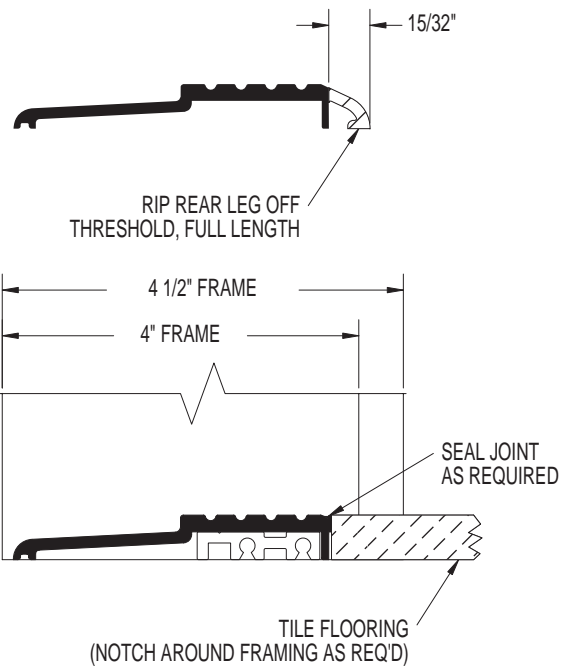


Figure 6

# THRESHOLD MODIFICATION

## THRESHOLD MODIFICATION FOR TILE FLOORING

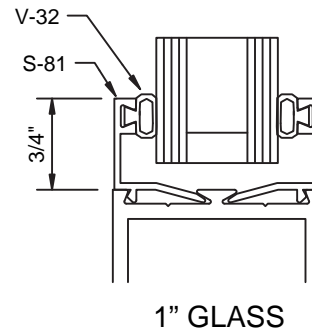
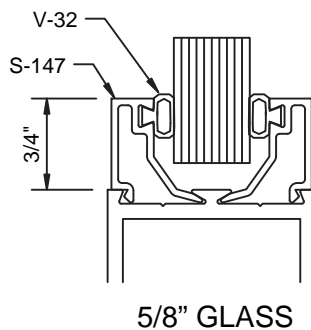
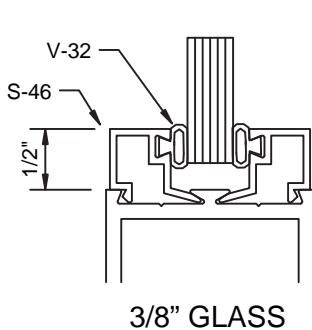
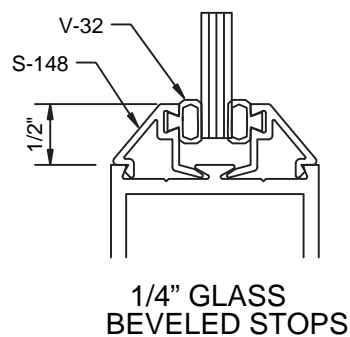
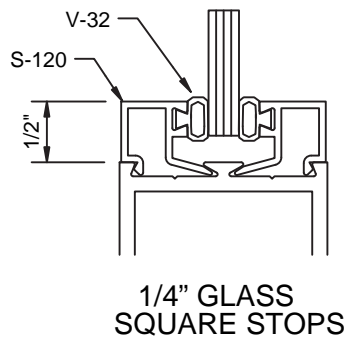
1. Rip  $15/32$ " off rear leg of threshold, full length of part.
2. Follow standard installation instructions for high performance threshold.
3. Butt flooring to rear of threshold, sealing joint as required. NOTE: Notching of flooring around framing members may be required.

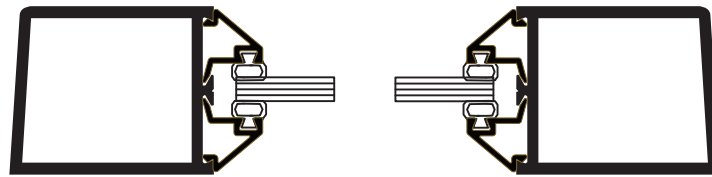
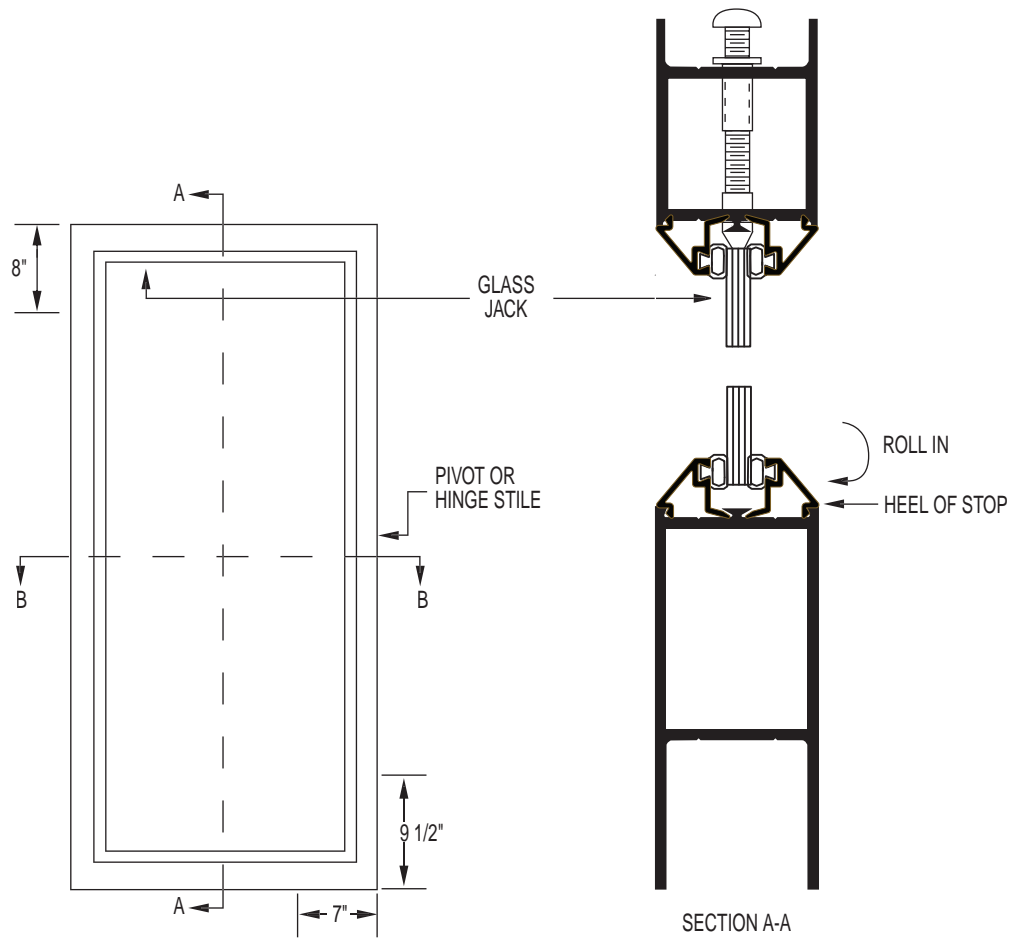


# GLAZING THE DOOR

Glass setting blocks are installed, in their proper locations, in the factory. Glazing prior to installation is possible (step 1). If the decision is made to glaze after the door is installed, skip step 1.

1. Lay door flat across two sawhorses (easiest); or, on protected floor (careful not to damage finish on door).
  2. If glazing door after it is installed, lock door to prevent swinging.
  3. Trim E.P.D.M. glazing gasket flush with ends of glass stops.
  4. Remove glass stops on the side of door that is closest to you.
  5. Turn glass jack in the top rail counter-clockwise until it is in retracted position flush with extrusion.
  6. Be sure that the stops that remain are securely in place.
  7. Place glass on the stops and against the setting blocks. If you are glazing the door in the installed position, it is important to push glass firmly against the glass stops.
  8. Adjust for gaps at the stiles.
  9. Once the glass is in the correct position, screw down the glass jack to top of glass.
  10. Install the glass stops — verticals first at  $1/4"$ . Horizontals first at all other glass thickness. (See details below).
- Note: Top stops are notched to clear glass jack. Be sure to hook the stop into the dovetails on the rails and stiles, then snap in place. A mallet may be used to drive stops in place.





NOTE: SETTING BLOCK LOCATIONS MAY VARY BY +/- 1"

































