

# Thermal-Block™ Thermal Entrances

## Installation Instructions

# TUBELITE®

**DEPENDABLE**

LEADERS IN ECO-EFFICIENT STOREFRONT,  
CURTAINWALL AND ENTRANCE SYSTEMS

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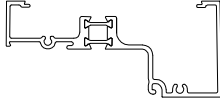
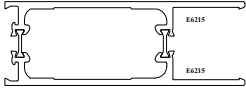

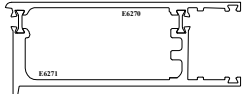
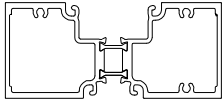
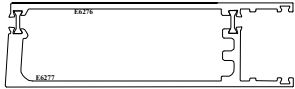
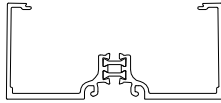
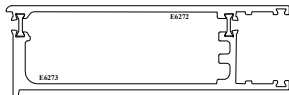

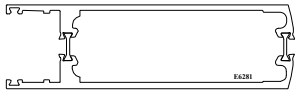
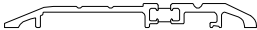
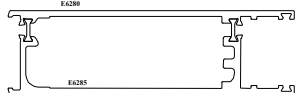

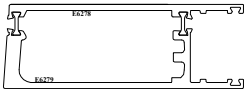

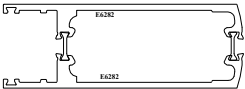
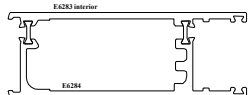
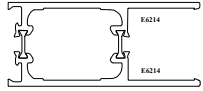
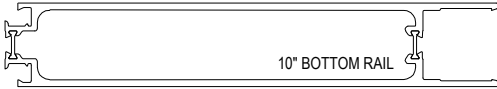
## INSTALLATION NOTES

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
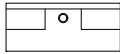




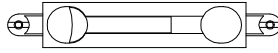






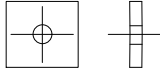






- Allow 1/4" shim and sealant space at sides and top of door frame.
- Door opening must be plumb, square, level and true.
- Aluminum to be placed in direct contact with uncured masonry or incompatible materials should be isolated with a heavy coat of zinc chromate or bituminous paint.
- System to structure fasteners are not supplied by Tubelite. Due to the varying perimeter conditions and performance requirements perimeter anchors fasteners are not specified in these instructions or by Tubelite. Fasteners called out on shop drawings are to indicate minimum sizes for design loading.
- Install backer rod between frame and building opening then seal.
- Tubelite recommends snap in backs for added support and stability.
- Sealants must be compatible with all materials with which they have contact, including other sealant surfaces. Consult with sealant manufacturer.
- Ensure that the threshold is supported the entire length of threshold, if not shim as required.
- Protect erected frame. Cement, plaster, terrazzo, other alkaline solutions and acid based materials used to clean masonry are harmful to the finish. Final cleaning of exposed aluminum surfaces should be done in accordance with AAMA 609.1 for anodized aluminum and 610.1 for painted aluminum.
- Due to the diversity in state/provincial local and federal laws and codes that govern the design and application of architectural products it is the responsibility of the individual architect owner and installer to assure that products selected for use on projects comply with all applicable building codes and laws. Tubelite exercises no control over the use or application of its products, glazing materials and operating hardware and assumes no responsibility thereof.
- Check our website, [www.tubeliteinc.com](http://www.tubeliteinc.com), for the latest installation manual update prior to commencing work.

# PARTS LIST

6-1/2" framing is available as an alternative to the 4-1/2" framing shown below.

DESCRIPTION:	PART NO.	DESCRIPTION:	PART NO.
	A625454	 OPEN BACK TRANSOM HEADER	A624344
	A621515	 GLASS STOP FOR TRANSOM HEADER	E14104
	A627071	 TYPICAL HEADER/SIDELITE	A624142
	A627677	 TYPICAL OPEN BACK JAMB	A624040
	A627273	 TYPICAL DOOR STOP	E6220
	A628181	 THRESHOLD	TA2550
	A628085	 TRANSOM GLASS STOP	E6221
	A627879	 THERMAL FILLER	T6251
	A628282		
	A628384		
	A621414		
 10" BOTTOM RAIL	A621010		

## ACCESSORIES

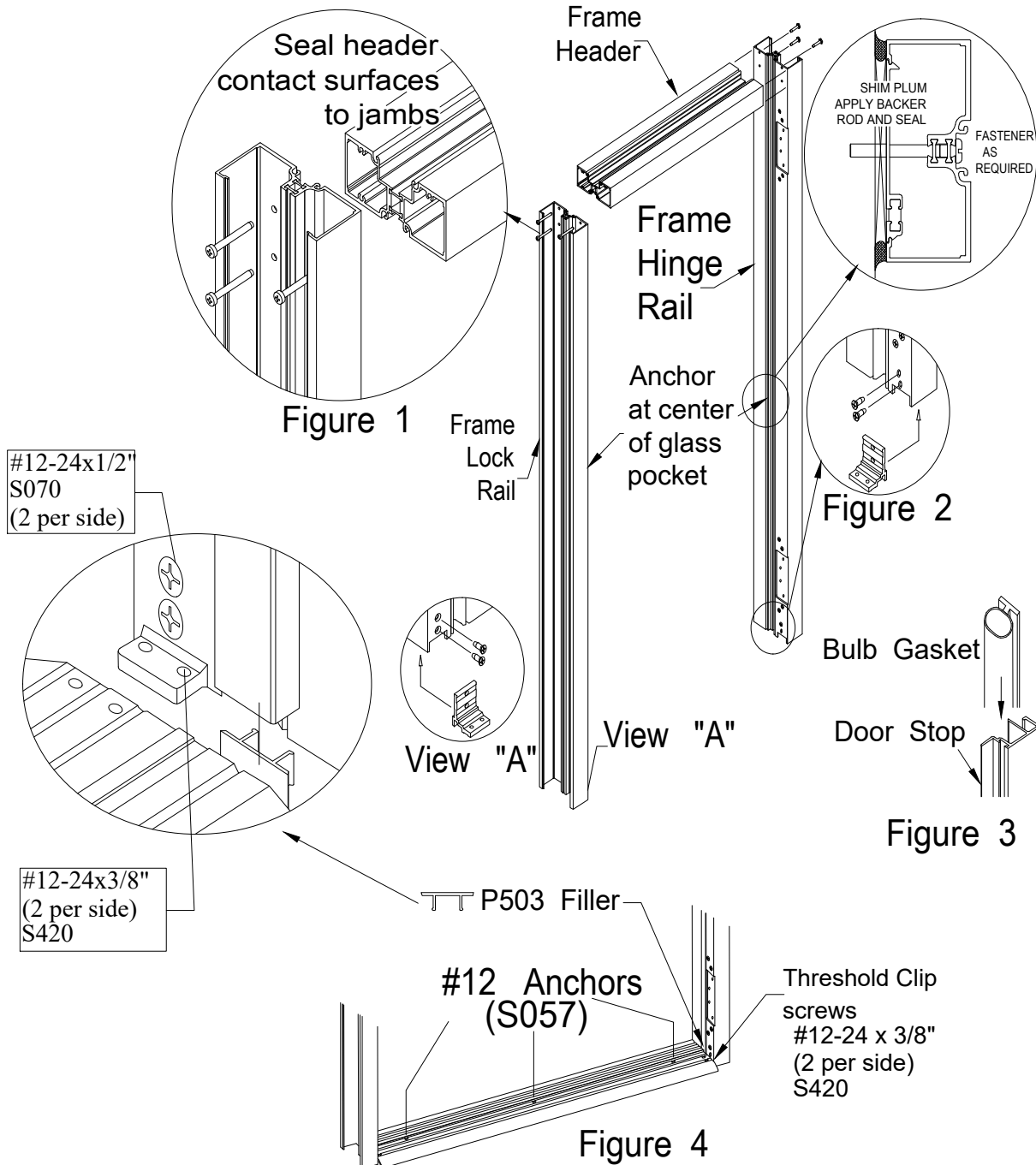
DESCRIPTION:	PART NO.	DESCRIPTION:	PART NO.
 <p>BULB GASKET</p>	P6296	 <p>INTERMEDIATE PIVOT REINFORCEMENT</p>	P360T-0R
 <p>THRESHOLD CLIP</p>	P797-0R	 <p>TAB FOR MOUNTED LOCKS</p>	P6250-0R
 <p>3/16" Versatherm - Interior side, Top &amp; Bottom WEDGE GASKET</p>	P2183 P1112	 <p>P092 FRAME HINGE REINFORCING</p>  <p>P1558 FRAME HINGE REINFORCING</p>	P2092-0R P2093-0R
 <p>TRANSOM GASKET</p>	P2728-0R	 <p>THERMAL DOOR FLUSH BOLT</p>	P062-0A P062-0D P062-3K
 <p>ASTRAGAL PILE WEATHERING</p>	P938-0R	 <p>THERMAL HEADER CLIP FOR TUBULAR JAMB</p>	P1152T-0R
 <p>DOOR GLASS SETTING BLOCK KIT</p>  <p>Anti walking block P1917</p>	P1914TH-0R	 <p>ELEMENT INHIBITOR</p>	P6240-0R
 <p>TRANSOM GLASS SETTING BLOCK</p>	P1132-0R	 <p>TIE ROD WASHER</p>	P0853-0R
 <p>1" HORIZONTAL GLASS CLIP</p>	E6291	 <p>P0131TA-OR</p>	P0131TA-OR
<p>TYPICAL ROD AND WASHER ASSEMBLY</p>  <p>4" DOOR LUG</p>  <p>5" DOOR LUG</p>  <p>10" DOOR LUG</p>	P6280B-0R P6281-0R P6282B-0R	 <p>P-503-OR</p>	P-503-0R

## BUTT HINGE FRAME INSTALLATION

- Attached threshold clips with provided screws (S070 - #12-24 x 1/2"). See Figure 2 and View A. Assemble frame as shown.

Install the frame into the opening:

- Shim and anchor frame so that it is plumb, square, level and true.
- Attached the threshold . (See Threshold Installation section for details.)
- Install vertical door stops and header door stops. (P503 filler can be installed at this time.)
- Use backer rods and caulk the perimeter of frame.

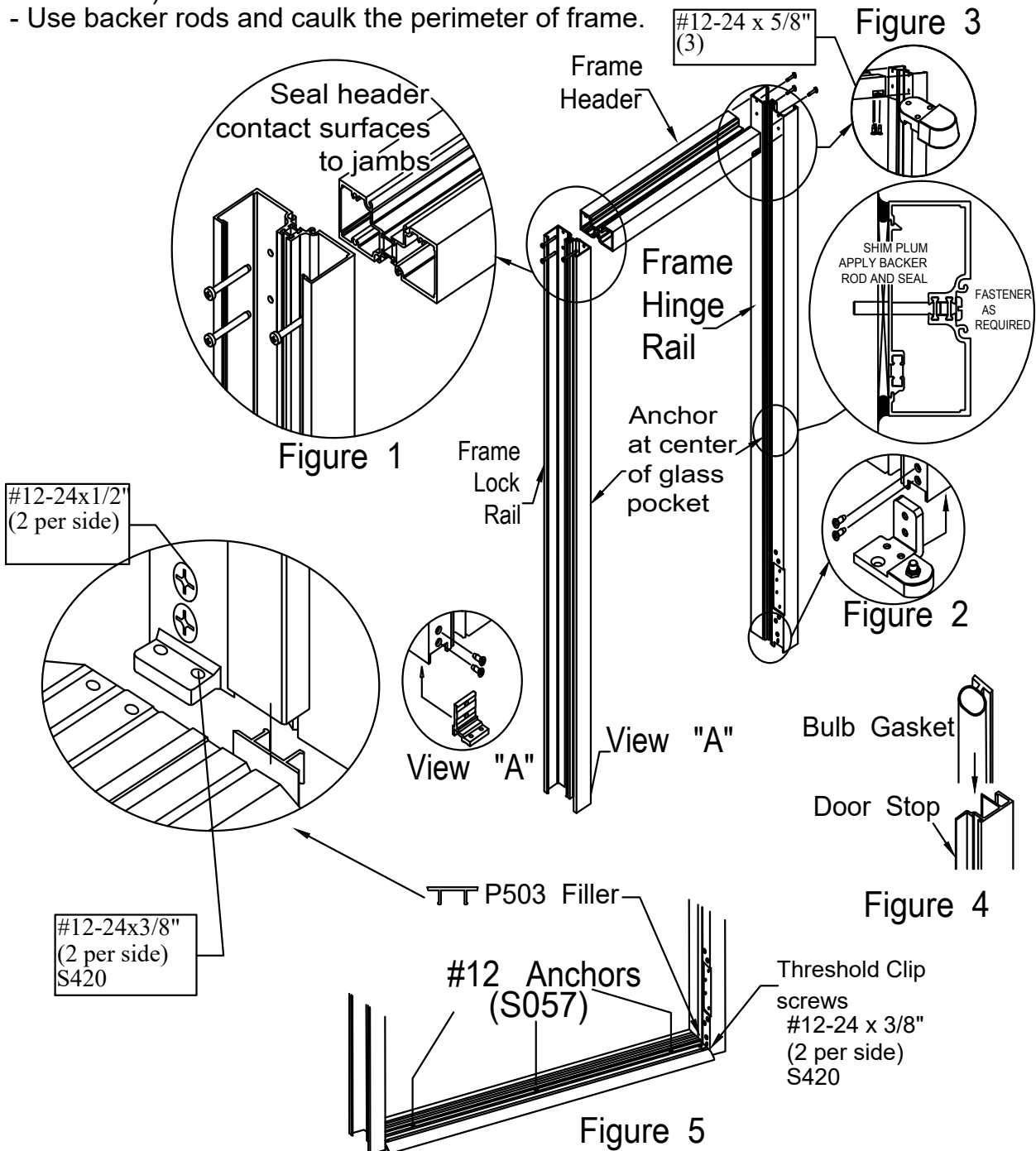


## OFFSET PIVOT FRAME INSTALLATION

- Attached threshold clips and offset frame portion with provided screws. See Figure 2 and View A.
- Assemble frame as shown.

Install the frame into the opening:

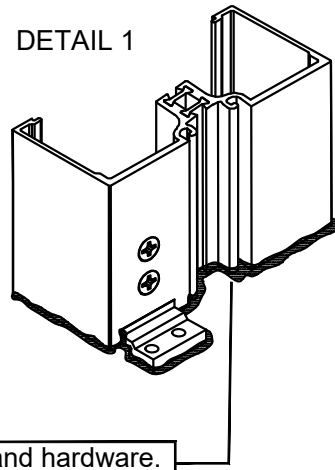
- Shim and anchor frame so that it is plumb, square, level and true.
- Attached the threshold . (See Threshold Installation section for details.)
- Install vertical door stops and header door stops. (P503 filler can be installed at this time.)
- Use backer rods and caulk the perimeter of frame.



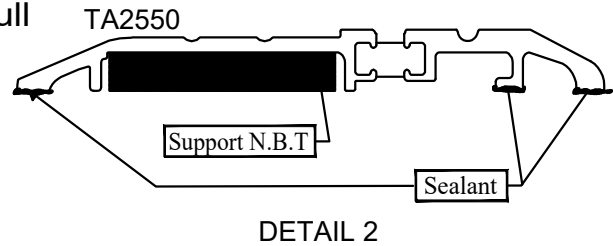
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- 1) Drill pilot holes in floor through pre drilled holes in threshold.
- 2) Threshold needs to be leveled. Shim threshold if needed.
- 3) Be sure all surfaces are cleaned. Apply a liberal amount of sealant around the perimeter of jamb. See Detail 1.

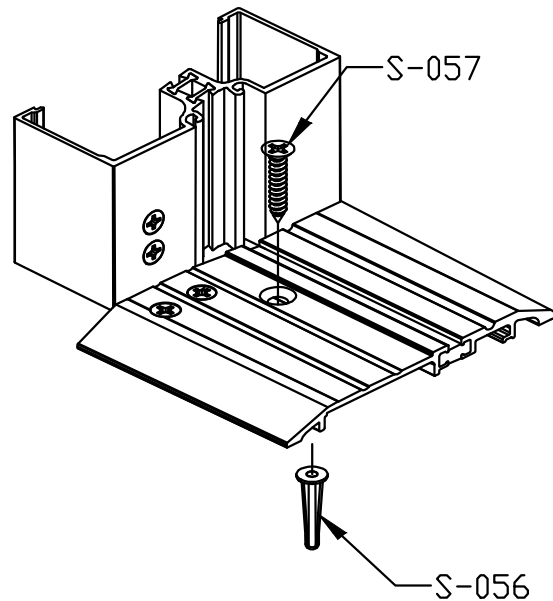


- 4) Caulk ends of threshold, and under full length of legs. See Detail 2
- 5) Set threshold on a bed of sealant.



VERIFY THAT THRESHOLD IS LEVEL.

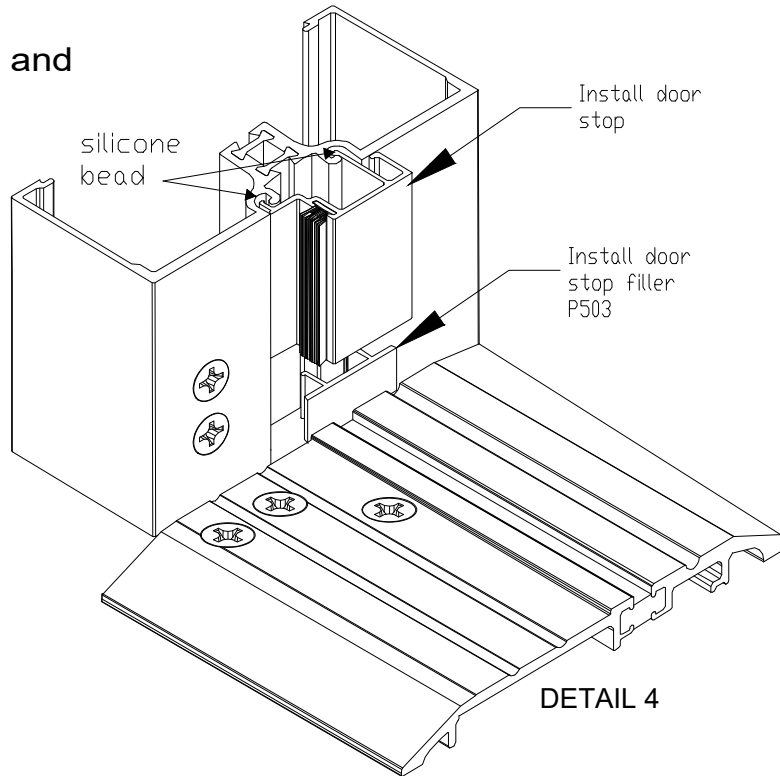
- 6) Attached anchor screws (#14 and plastic anchor) and threshold clip screws (#12-24 x 3/8").
- 7) Cap and seal anchor screws.





## THRESHOLD INSTALLATION

- 8) Install weather pilling to door stops.
- 9) Place a bead of silicone in the riglet prior to snap in place P503 filler and door stop. See detail 4. Door stop sit on top of the threshold.
- 10) Reseal around jambs and threshold if needed.



## Weather Inhibitor Installation

- Recommend to install weather inhibitor prior to attaching door to frame.

Note: The door stiles are machined in the factory to accommodate the weather inhibitor.

- Run a bead of sealant along the length of the weather inhibitor. See Figure 2.
- Install P6240 as shown below (w/o sweep):

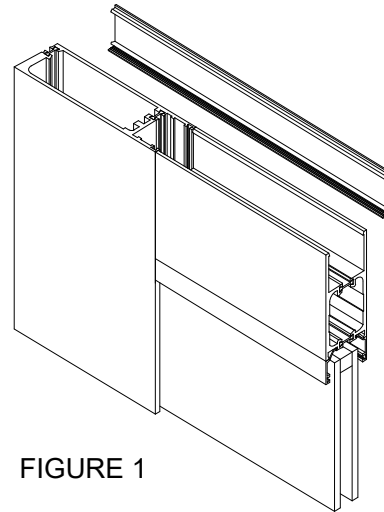
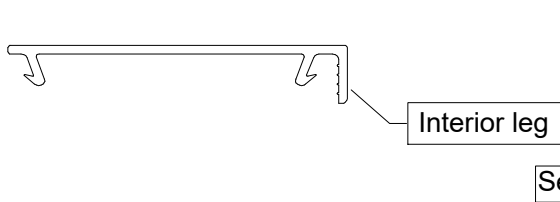


FIGURE 1



- If bottom door sweep is used. Install P6240 on top door rail as shown above. Install bottom door rail as shown below.

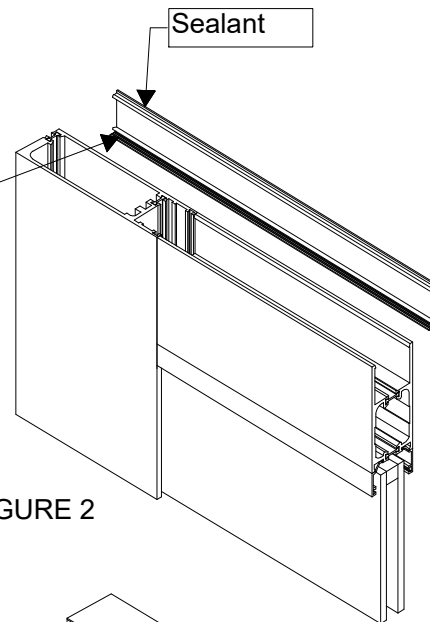


FIGURE 2

- Snap weather inhibitor into place on the top and bottom of the door rail. See Figure 3.

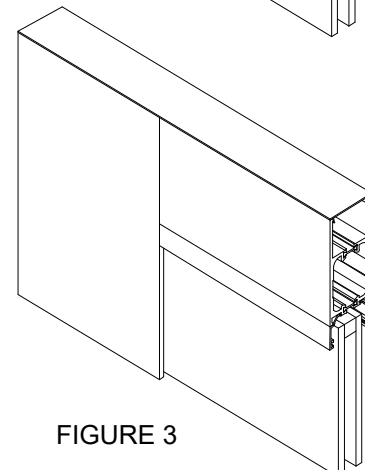
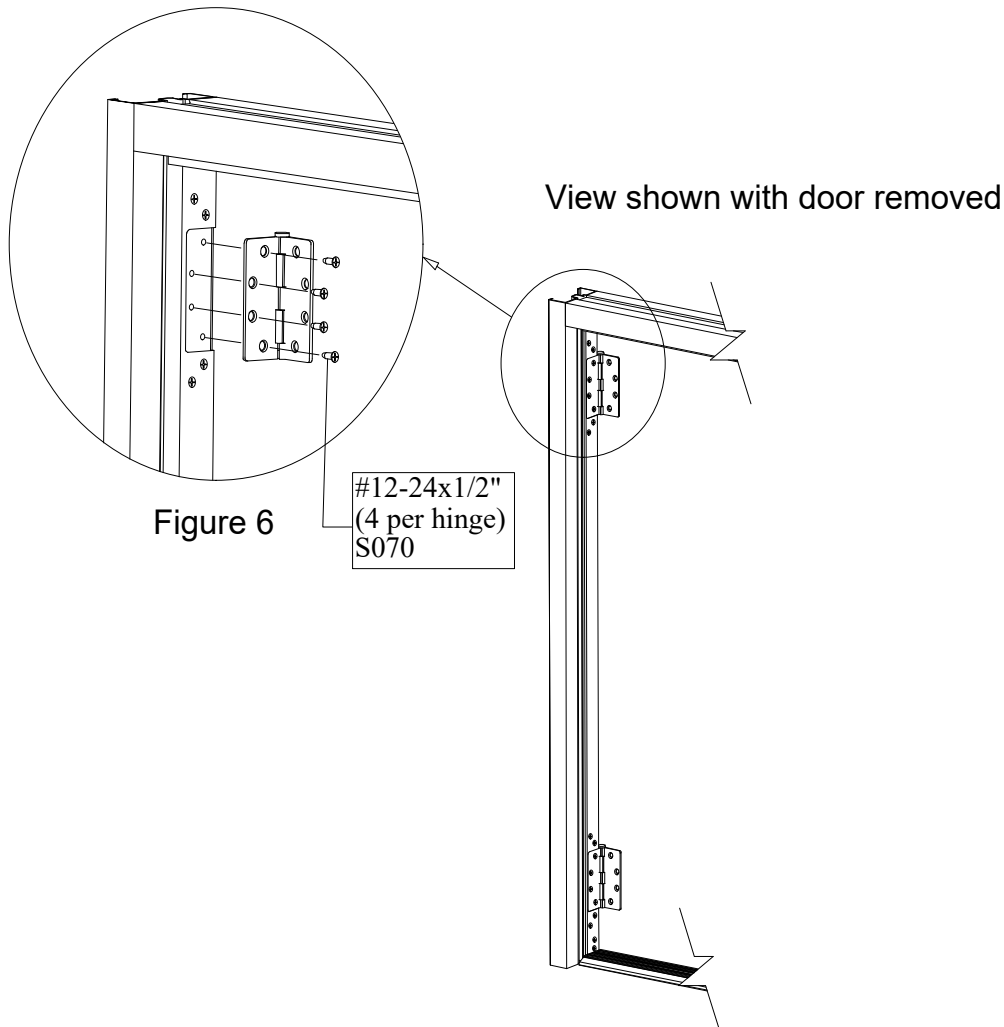


FIGURE 3

## BUTT HINGE DOOR INSTALLATION

- Support door and line up butt hinge mounting holes and screw into place.
- See Figure 6.
  
- Check the alignment of the door to frame. Alignment can be adjusted by adjusting cross-blocking of glazed door. See Glazing section for more details.



## OFFSET PIVOT DOOR INSTALLATION

- If pivot is not supported by the finished floor, grout or block under it as required. If door will be hung and operated prior to finished floor installation. Block under pivot and anchor to floor.
- Set bottom pivot on door over the pin on bottom frame pivot. See Figure 6.

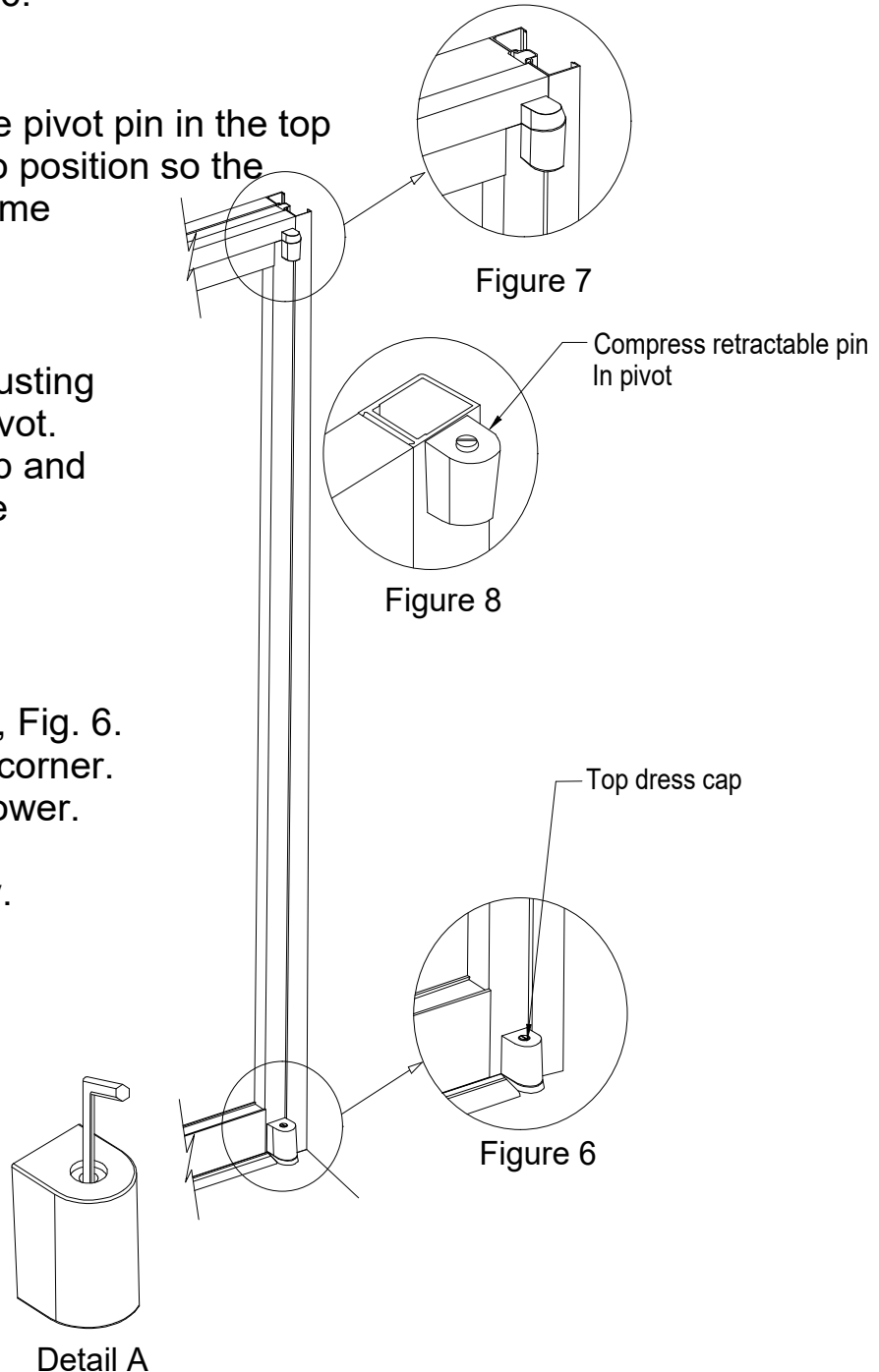
- Compress the retractable pivot pin in the top pivot and set door up into position so the pivot pin engages the frame pivot. See Figure 8 & 7.

- Align the pivot stile by adjusting the screw in the bottom pivot.

- Unscrew top dress cap and adjust the screw inside the pivot with an allen wrench. See Detail A.

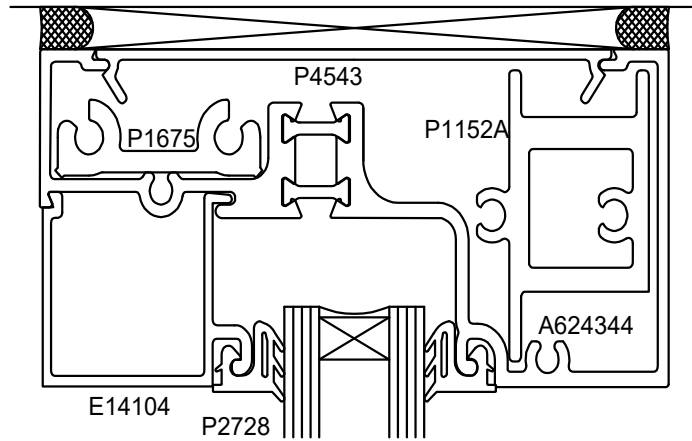
- Remove top dress cap, Fig. 6.
- Clockwise to raise the corner.
- Counter-clockwise to lower.

- Door should swing freely.

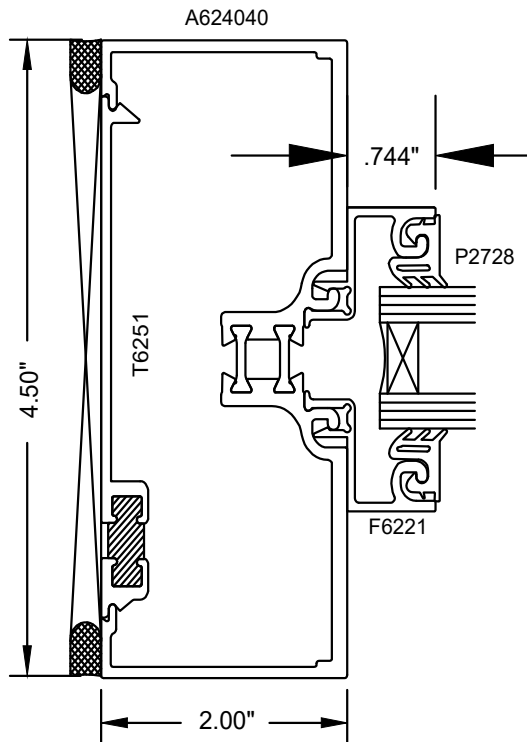


## TRANSOM GLASS INFORMATION

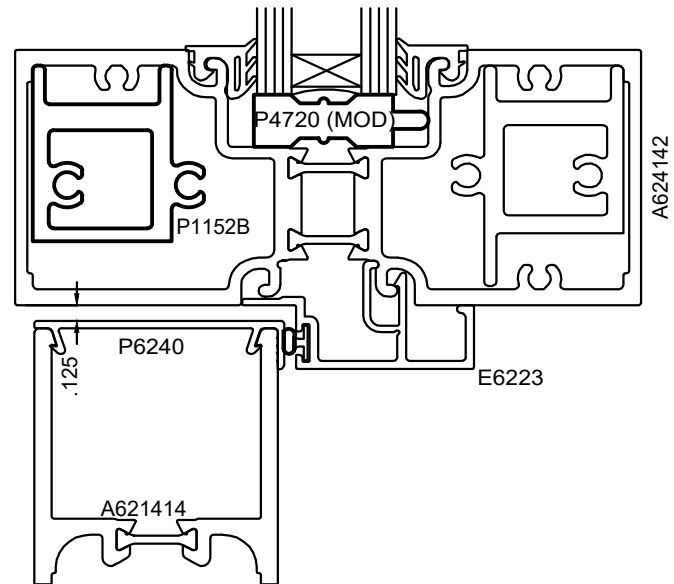
- Removable stop at header.  
See Detail 1.
- Recessed pocket at transom header. See Detail 2.
- Snap in stops at jambs. See Detail 3.
- Glass size = D.L.O. + 3/4" max.



DETAIL 1 - Header



DETAIL 3 - Jamb



DETAIL 2 - Transom Header

## GLAZING DOOR INSTALLATION

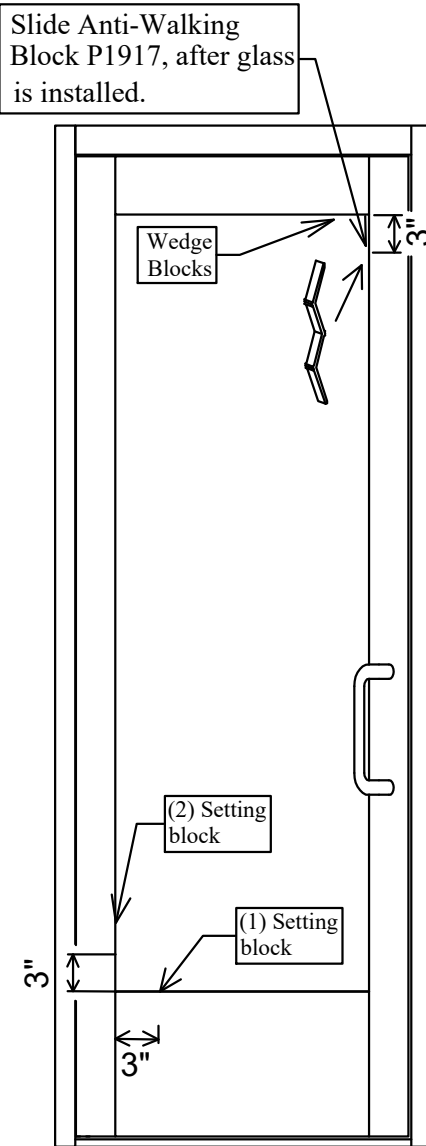


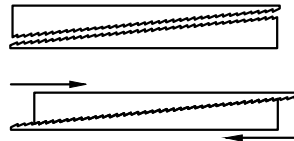
FIGURE 1

- Install top & bottom interior glass stops with gasket P2183.
- Place self adhesive setting blocks in 2 locations.
  - 1) One setting block at Bottom Horizontal rail. 3-4" from hinge stile.
  - 2) Two setting block at Hinge stile 3-4" up from bottom bottom horizontal rail. See Figure 1.
- Install 1" I.G. glass in door (see website for glass calculator). Placing the glass into the lock side pocket first. Then sliding it back to rest up against the adhesive setting blocks on hinge side.
- Stretch the "W" anti walking block. Place the wide width of the block flat up against the glass and slide it between glass and integrated glass stop into top lock side. Push W anti walking block all the way until it clears glass and locks into place. See Figure 1.

Make sure anti-block is not twisted when installed.



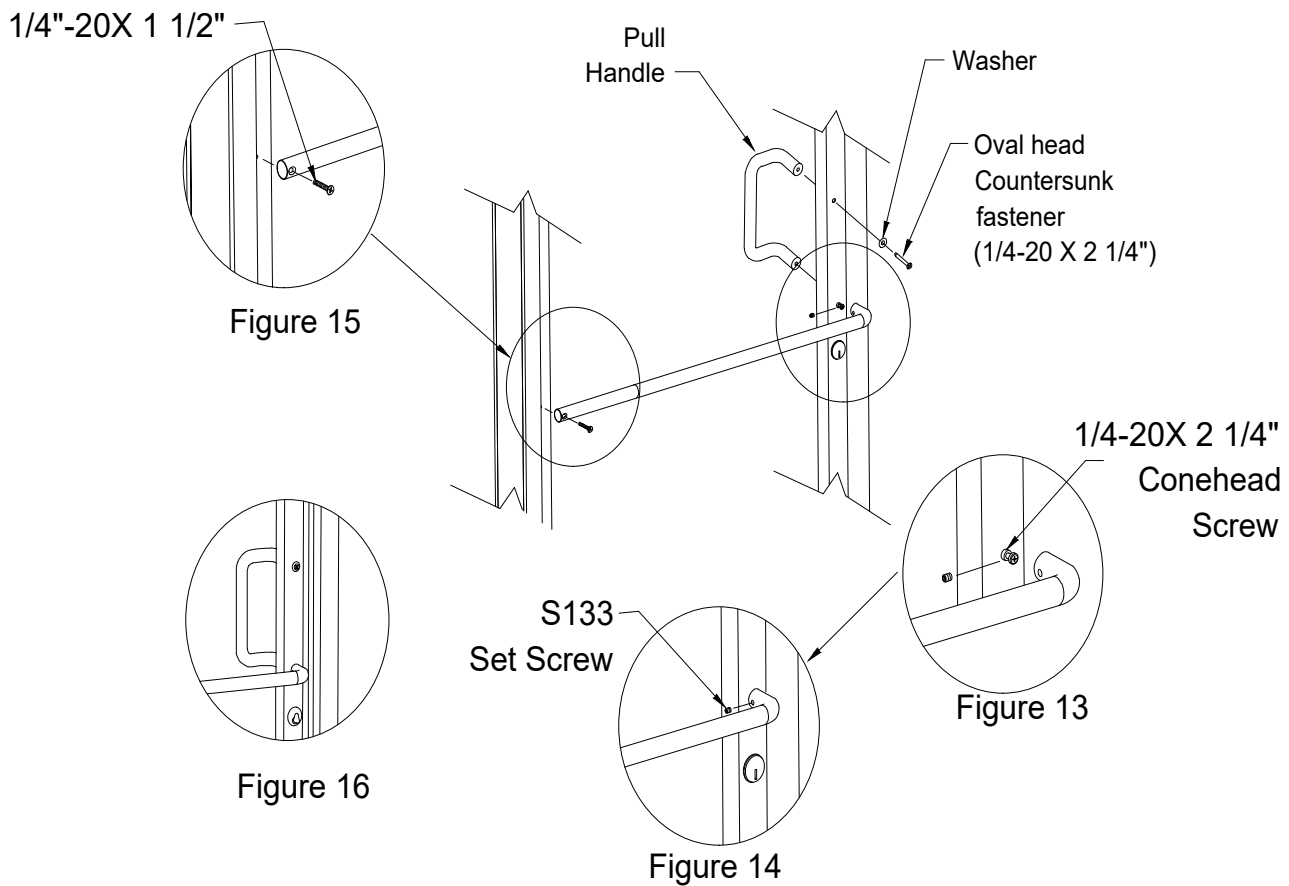
- Square up door as desired.
- Place 2 sets of wedge plastic blocks as shown in picture below. When together properly the wedge blocks will interlock and form two flat surfaces.



- Place set of wedge blocks on top of glass 3-4" from hinge side. See Figure 1.
- With the wedge blocks in place, push them together increasing the thickness. Push together until they press tightly against the glass.
- Install all exterior glass stop and interior vertical intergrated glass stop with wedge gasket P1112. Install top and bottom exterior glass stop.
- To square up the door. Remove top horizontal glass stop and adjust wedge blocks.

## PUSH/PULL INSTALLATION

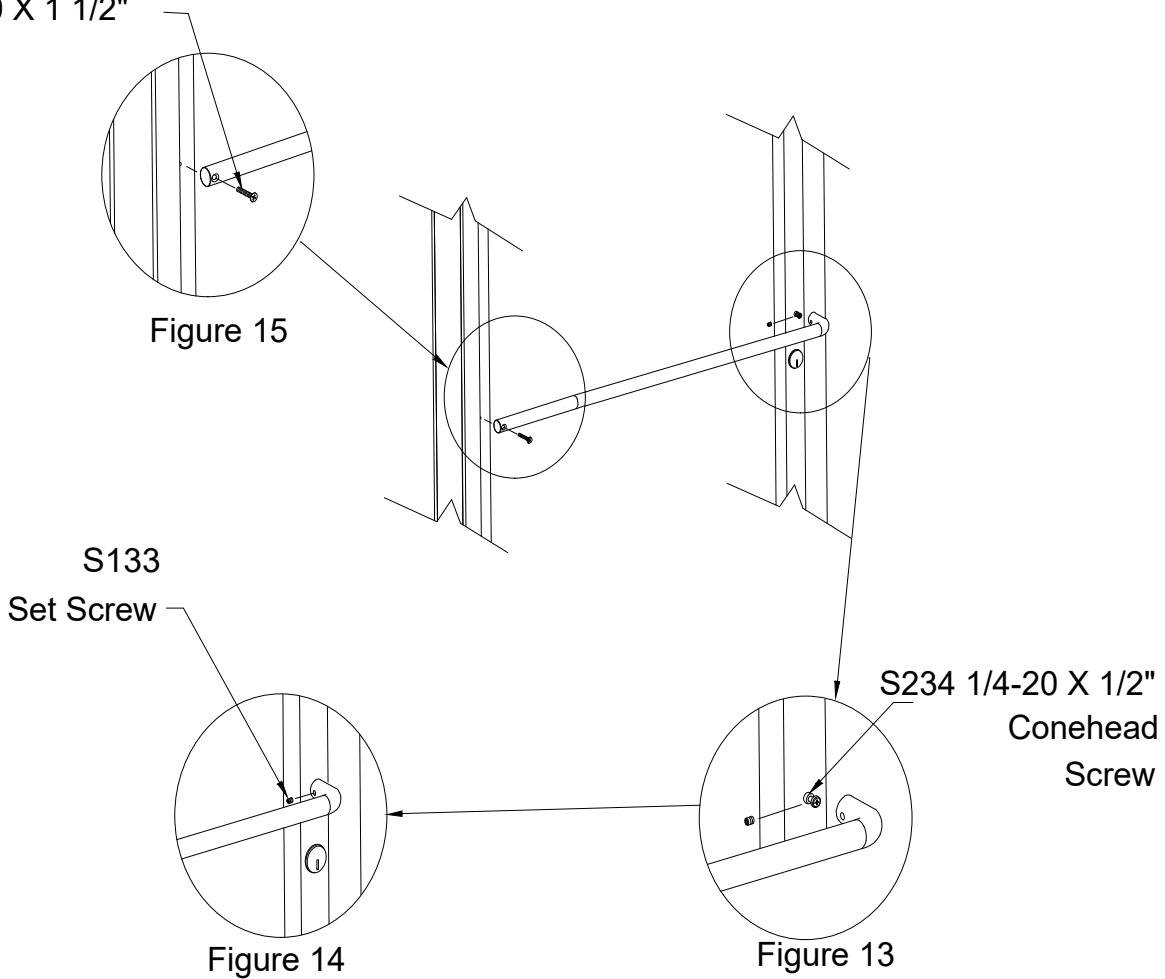
- Attached 2 1/4" cone head screw for push bar and bottom pull handle mounting location. Attached pull handle. See Figure 13.
- Attached push bar at the hinge stile. See Figure 15.
- Set push bar onto the conehead fastener. Insert set screw and tighten. See Figure 14.
- As completed. See Figure 16.



## BACK TO BACK PUSH BAR INSTALLATION

- Install onto lock stile S234 conehead screw in door stile. (See Figure 13.)
- Attached push bar into the hinge stile. See Figure 15.
- Set push bar onto the conehead fastener. Insert set screw and tighten. See Figure 14.
- Repeat above steps for the other side push bar.

1/4"-20 X 1 1/2"



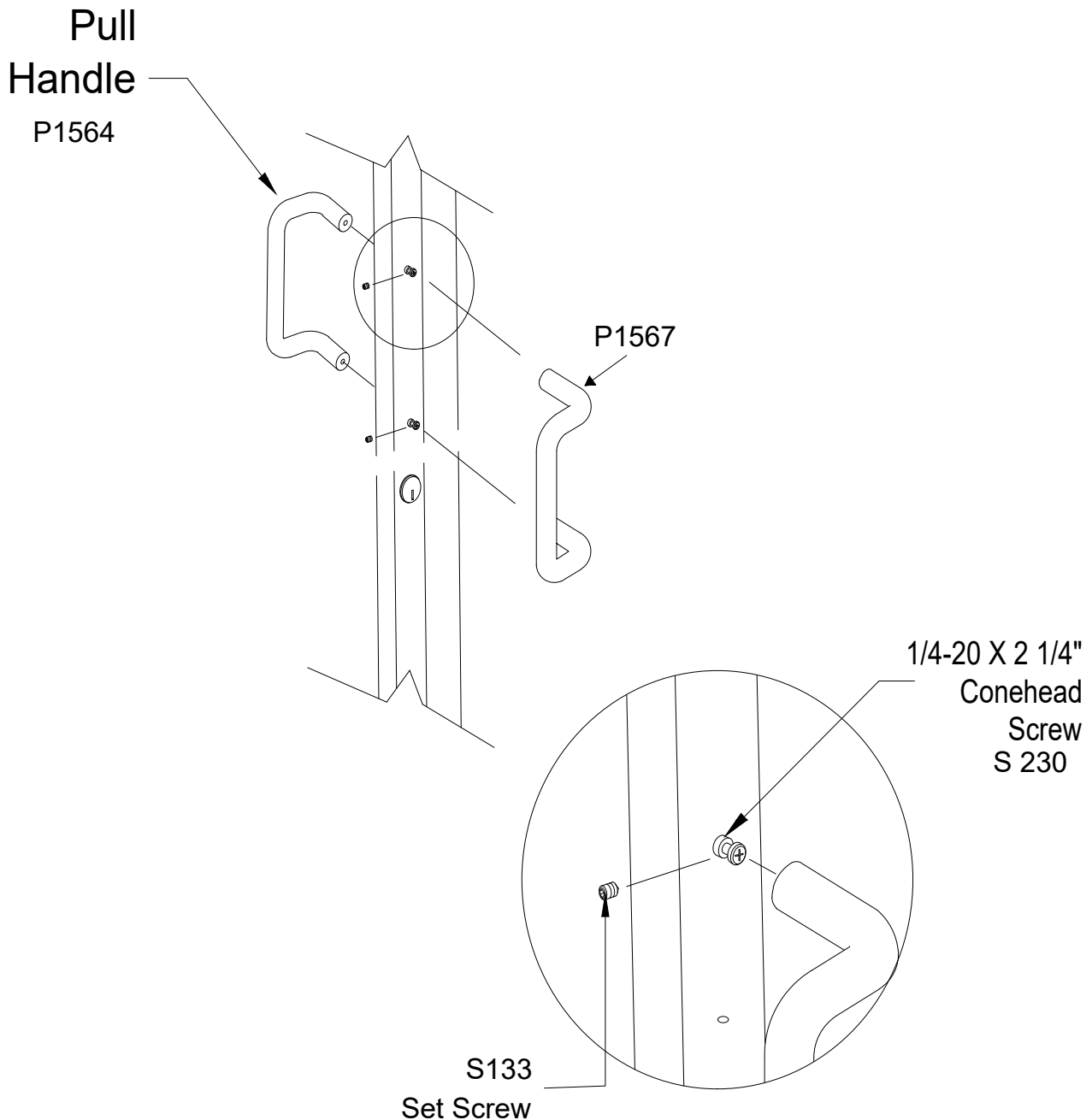


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## BACK TO BACK PULL INSTALLATION

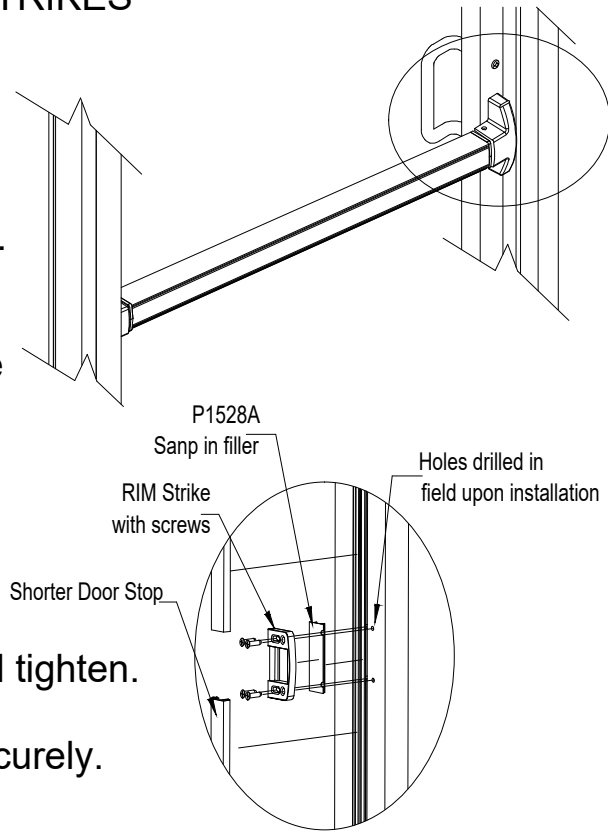
- Install onto lock stile S234 conehead screw in door stile and attached pull P1564. (Hardware kit: P1554).
- Set pull P1567 onto the conehead fastener. Insert set screw and tighten. See Figure 14.



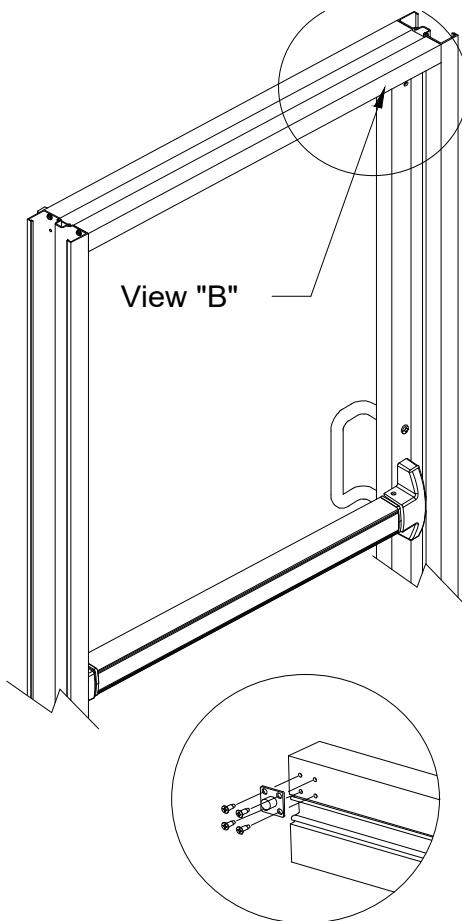
## PANIC STRIKES

### RIM PANIC STRIKE

- Snap on lower door stop and P503 filler.
- Screw on the strike plate See View A.
- Close door and ensure that panic latches into strike. If not, adjust strike by loosening screws and readjusting strike then re-tighten screws.
- Once adjustment is made, interior side holes will have to be drilled.
- Screw into holes that were drilled and tighten.
- Ensure that door open and closes securely.



VIEW "A"



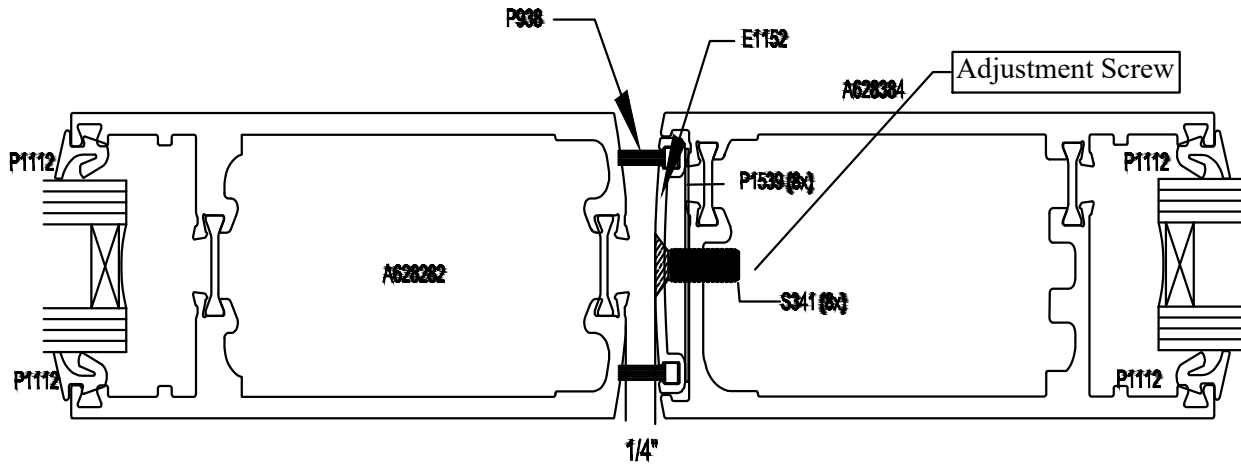
VIEW "B"

### CVR TOP STRIKE:

- Install top strike plate into pre-punch holes. See View B.
- Install vertical door stop then header stops and P503 filler.
- Open and close door to ensure proper secure engagement of concealed vertical panic device. If panic does not engage properly refer to panic manufacture installation instructions.

## ADJUSTABLE ASTRAGAL FOR PAIR OF DOORS

- Adjust the weather astragal by turning the adjustment screws located along the meeting stile of the active leaf.
  - Clockwise to increase the distance between leaves.
  - Counter clockwise to reduce the clearance between leaves.
- See detail below:



## DOOR SWEEP INSTALLATION

- Sweeps are designed to be attached to the interior face of the bottom rail.
- Transfer the pre drill hole locations in the door sweep to the interior surface of the bottom rail. See Figure 1.
  - Center sweep to rail.
  - Align the bottom edge of door sweep to threshold. The door sweep blade must make full contact with the threshold to obtain the full benefit of the door sweep.
  - Mark the center of hole locations to the bottom rail.
- Attached door sweep to bottom rail.
- Slide gasket back into the door sweep. See Figure 2.

