

Thank you for choosing Weather Shield Windows and Doors. These instructions will cover a typical installation of a pivot door with an integral nailing fin. Instructions may not be right for all installations due to specific building conditions. Consult a contractor or architect for recommendations.



Important: Please read completely before you begin.

Site Preparation Instructions

Opening Prep is critical to a successful installation, so take extra time to prepare and verify the opening prior to assembly of the door.

Frame Assembly Instructions

Larger doors that will not fit on a truck will be shipped with the frames knocked down (KD). These frames will need to be assembled on site. Make sure you have adequate room to assemble the full door frame to the exterior of the opening.

All necessary parts and fasteners to assemble the KD frame are included in the hardware and component packs. Please review that all necessary parts are available before beginning the assembly.

 WARNING	 WARNING
Doors can be extremely heavy. To avoid injury, use appropriate lifting techniques and an adequate number of people to carry and install the product. Mechanical lifting assistance may be needed for larger panels and glass. Failure to do so can result in injury or damage to product or property.	Special care must be taken with units with protective glass film applied. DO NOT remove protective film near flammable materials. Static charge created when removing the film can ignite flammable materials or cause a shock. DO NOT place suction grips over film seams. Suction grips will not hold if placed over film seam to lift heavy glass or panels.
 WARNING	 WARNING
This product may contain chemicals known to the state of California to cause cancer, birth defects, or other reproductive harm. For more information go to www.P65Warnings.ca.gov	This door is glazed with safety glass (tempered or laminated). If broken, glass must be replaced with safety glass in accordance with state and federal laws.

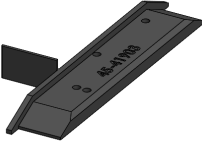
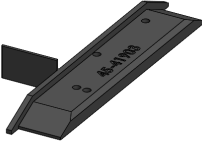
Tools and Supplies Needed

Tools

Measuring tape
Level (laser level works better for larger openings)
Speed Square
Rubber hammer
Power driver
Power drill
3/16" Drill Bit
J-roller
Caulk gun
Glass suction cups (heavy load)
Pry bar

Installation Materials (not included)

4" Flashing tape
Flexible corner flashing tape or preformed sill pan
#8 x 2" flat head screws
High quality sealant
Shims
Low-expanding foam
Isopropyl alcohol (clean up)

INCLUDED PARTS – Hardware Packs		
 A Qty. (6) #8 x 1" PH Pan Hd Part #971077 Head Jamb to Side Jambs	 B Qty. (6) #8 x 1" PH Pan Hd ^A Part #971077 ADA Sill to Side Jambs	 C Qty. (1) Tube Part #1318729 Black Silicone Sealant
 D Qty. (1) Fritzing Milling and Mounting Kit Part # TBD	 E Qty. (2) Left and Right ADA Sill End Caps Part # TBD	

^A Included with ADA sill doors only

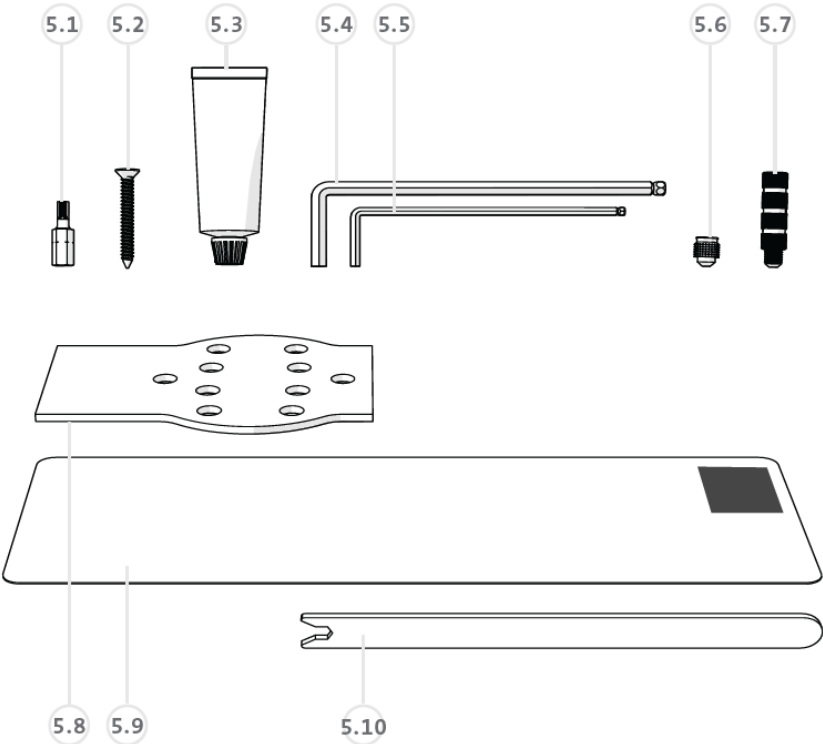
^B Included with no-sill doors only

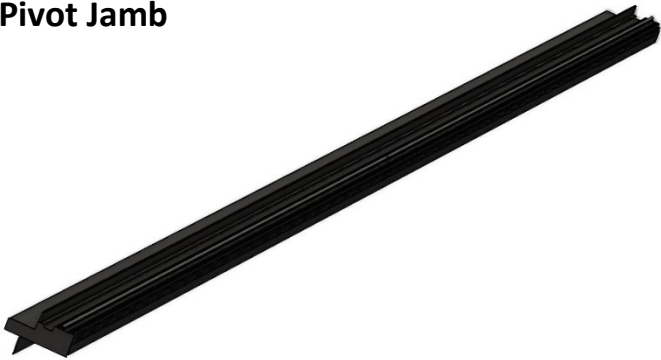
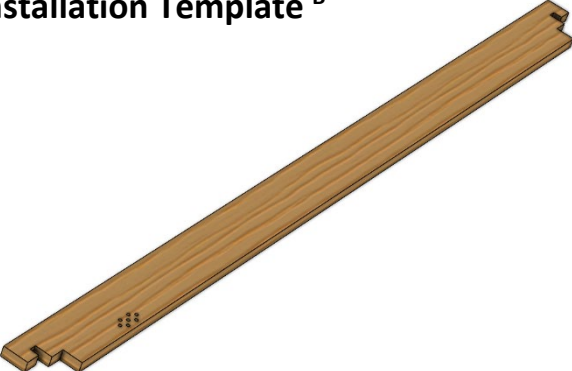
MILLING AND MOUNTING KIT

- 5.1 Torx bit TX20 (1x)
- 5.2 Screws (4x50) (10x)
- 5.3 Fitting adhesive
- 5.4 Allen key 5
- 5.5 Allen key 3
- 5.6 Mounting pins, short* (2x)
- 5.7 Mounting pins, long* (2x)
- 5.8 Fitting template
- 5.9 Double-sided fine-tuning sheet**
- 5.10 Adjustment spanner

* Only in box floor plate System M - Squared

** Only for M+



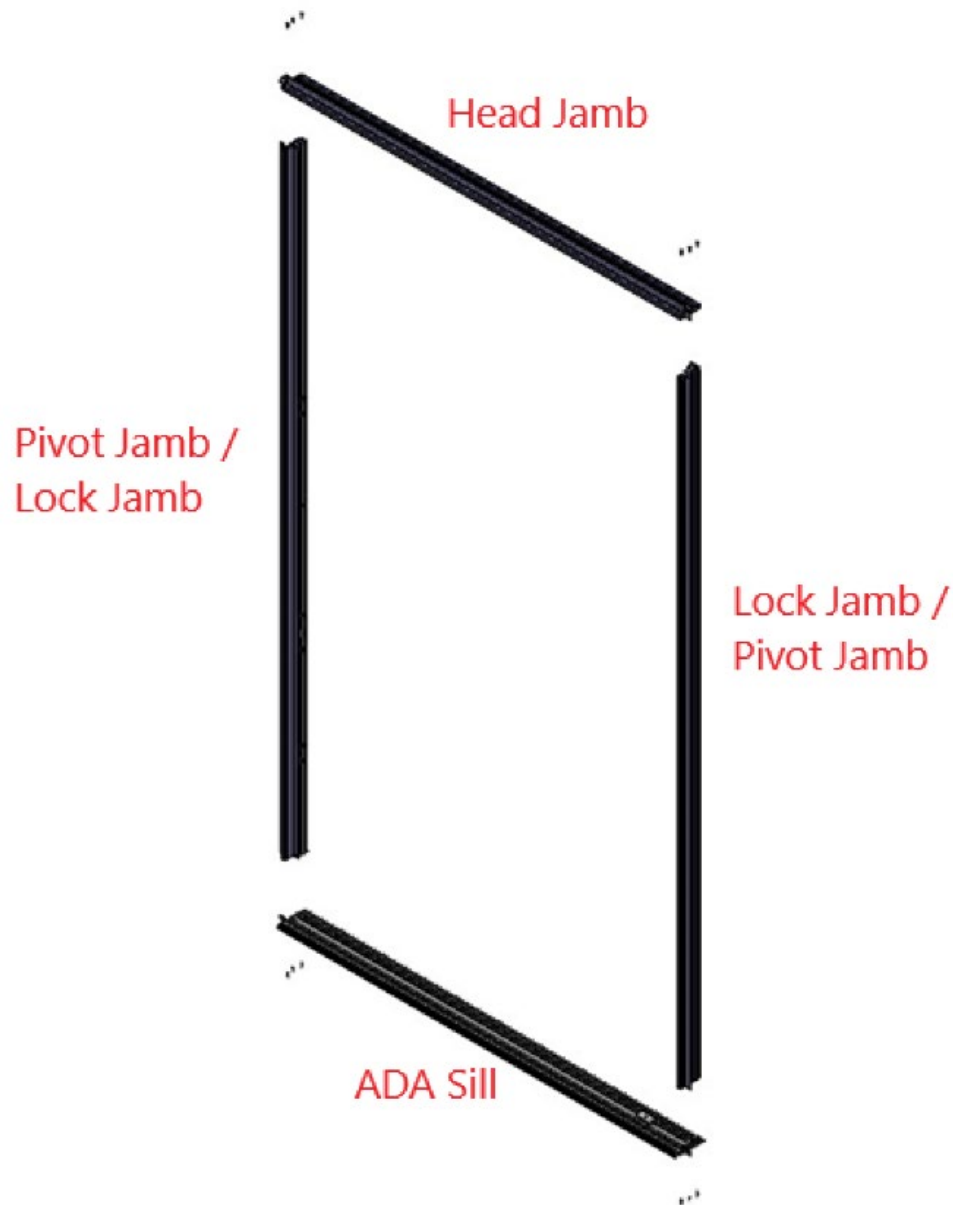
INCLUDED PARTS – KD Frame Components	
Head Jamb 	Pivot Jamb 
Lock Jamb 	ADA Sill ^A 
Installation Template ^B 	

^A Included with ADA sill doors only

^B Included with no-sill doors only

KD FRAME ASSEMBLY INSTRUCTIONS

EXPLODED VIEW PARTS PLACEMENT

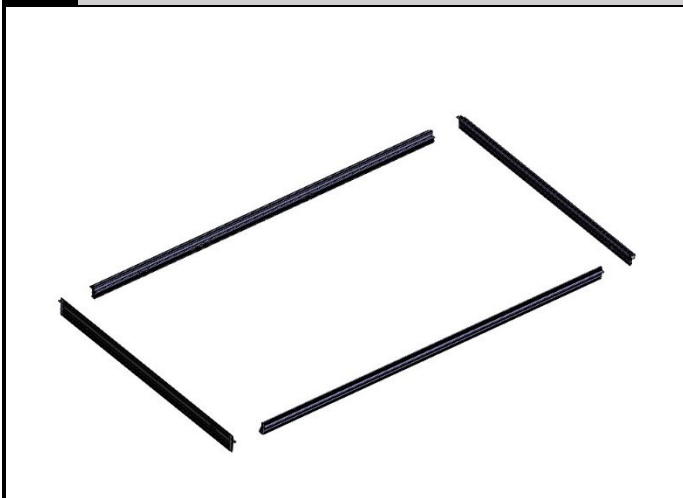


All necessary parts and fasteners to assemble the KD frame are included in the hardware and component packs. Please review that all necessary parts are available before beginning the assembly.

NOTE: If your door system includes sidelites, refer to the Sidelite Mulling instruction at the end of this guide.

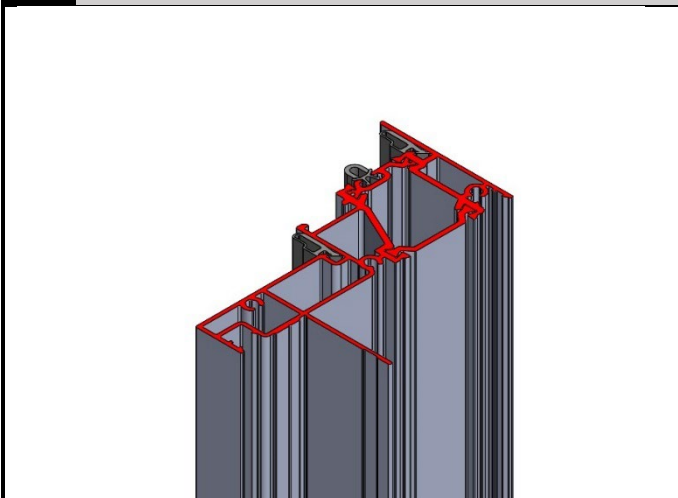
KD FRAME ASSEMBLY INSTRUCTIONS – PIVOT DOOR FRAME

1 PREPARATION OF FRAME PARTS



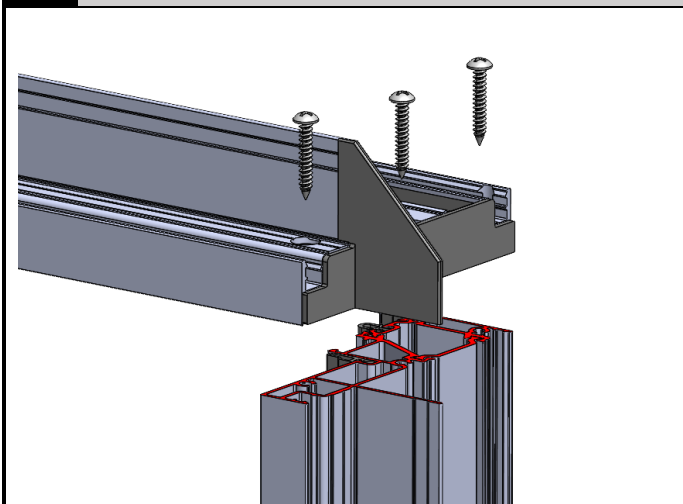
Lay parts out on the ground exterior side down. Use cardboard or other padding to protect them from damage. The final assembled frame will need to be tipped up and placed in the opening. Orienting the door sill nearest the opening will allow for easy placement during this step.

2 JAMB TO HEAD ATTACHMENT



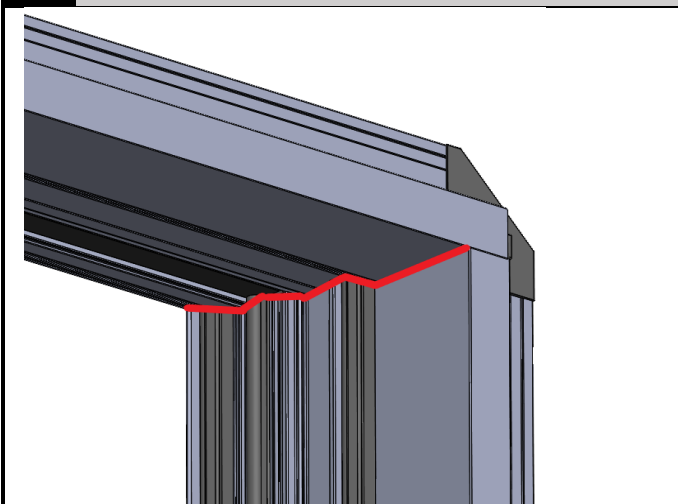
Starting with the assembly of the side jambs to the head jamb. Add silicone to the top sides of both the side jambs. Completely cover the walls of the jambs with silicone and add silicone generously.

3 JAMB TO HEAD ATTACHMENT



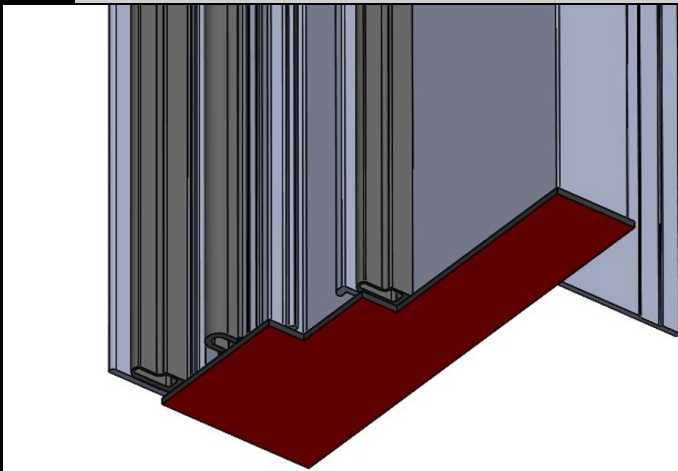
Align the head jamb on the top of the side jamb and attach the head jamb to the side jamb with the #8 x 1" pan head screws provided.

4 JAMB TO HEAD ATTACHMENT



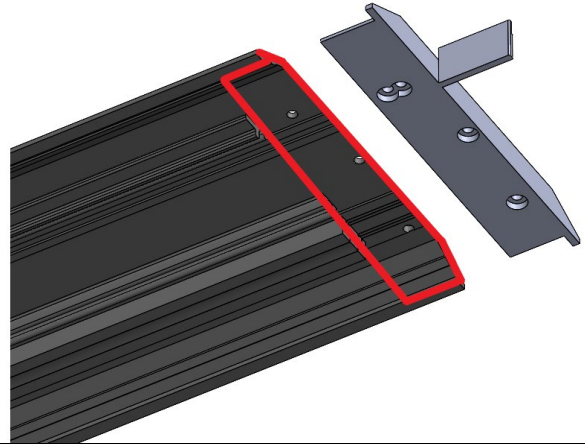
Make sure there is silicone squeeze out along the interior side of the jamb corner. If not, apply silicone on the interior side to completely seal the interior joint. Clean up the excess silicone.

5 JAMB TO SILL ATTACHMENT



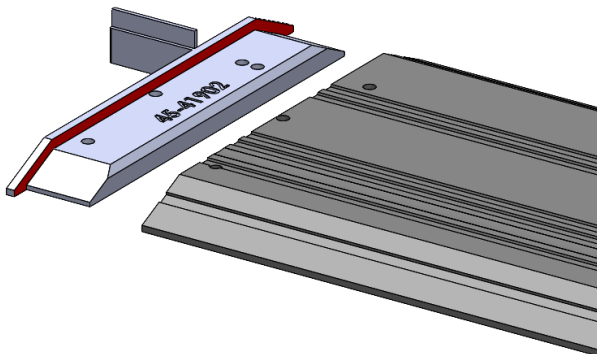
Apply silicone to the side jamb gaskets covering the entire face of the gaskets.

6 JAMB TO SILL ATTACHMENT



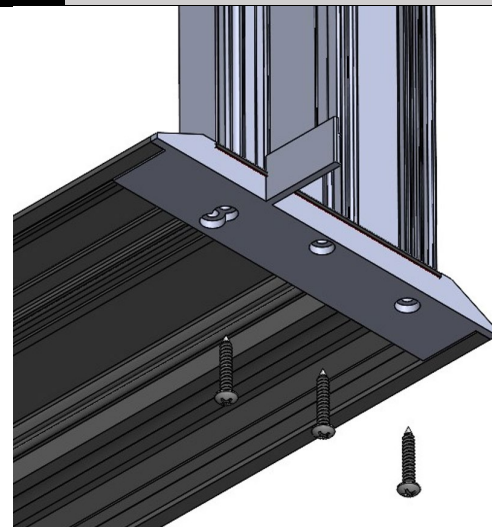
On the underside of the ADA sill, add silicone on the machined ends. Also add silicone to the end faces of the sill.

7 JAMB TO SILL ATTACHMENT



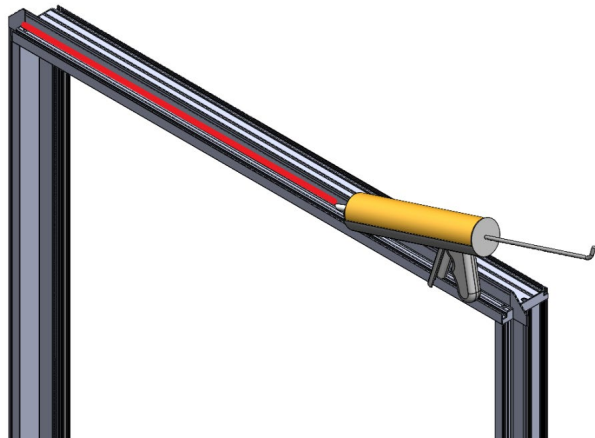
Add silicone on the flange of the end cap and slide the end cap and attach to the end of the sill.

8 JAMB TO SILL ATTACHMENT



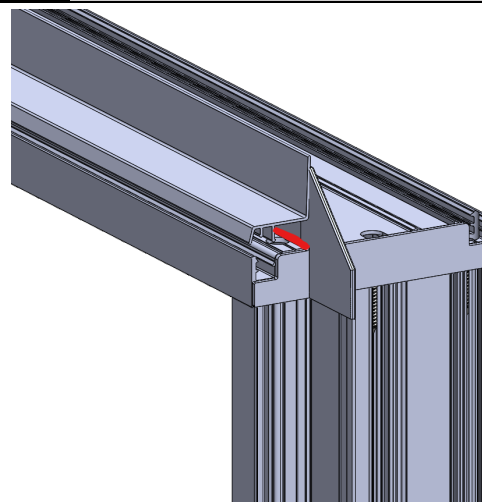
Align the ADA sill to the bottom of the side jambs. Attach the ADA sill to the side jamb with the #8 x 1" pan head screws provided. Make sure the joint is properly sealed and clean up the excess silicone.

9 DRIP CAP INSTALLATION



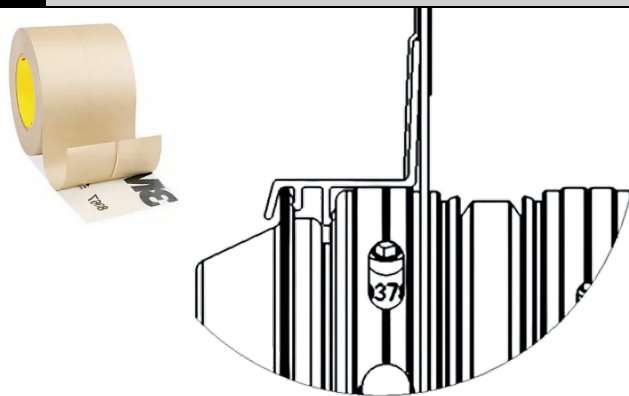
A continuous aluminum drip cap will be provided as frame kit. This part should be the same width as the door (minus the nailing fins). To install, apply a continuous 3/8" bead of silicone using the corner of the nail fin to jamb as a guide.

10 DRIP CAP INSTALLATION



Place the drip cap into place flush with the edge of the jamb. Push the barb legs of the extrusion into the accessory channel of the frame. Using a wood block and a hammer, gently tap the drip cap into place.

11 DRIP CAP FLASHING



Using the provided self-adhesive flashing tape, wrap the flashing tape over the drip cap and nailing fin to completely seal the seam of the drip cap and nailing fin.

12 DRIP CAP INSTALLATION

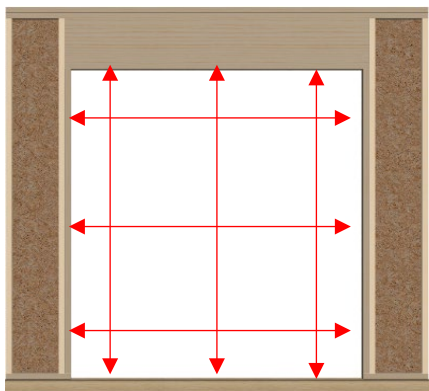


With the drip cap in place predrill holes for installation fasteners. Using 3/16" bit drill holes through the drip cap and the nailing fin (approximately 1/2" from top of fin). Place holes 4" from each end and spaced every 4"-8" on center.

SETTING AND FASTENING THE FRAME IN THE OPENING

For proper water management it is recommended that all doors be installed with a sill pan in accordance with ASTM E2112. Weather Shield recommends a Type I, Rigid Sheet option for best results. Before installing the frame into the wall, make sure the steps outlined in the Site Preparation guide are fully completed.

1 VERIFICATION OF OPENING



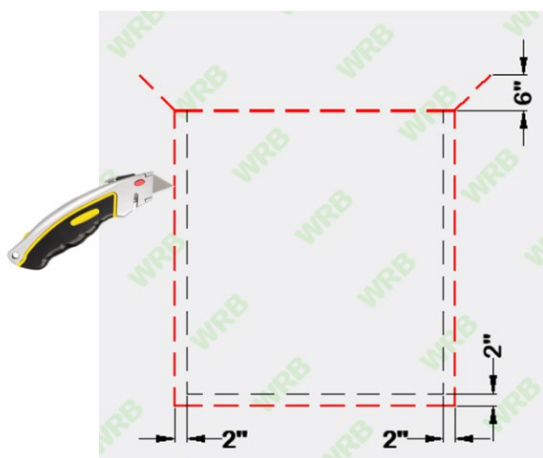
Make sure the door will fit in the rough opening. Measure the opening width and height in three separate places to ensure the framing is not bowed. Opening size should be $\frac{3}{4}$ " larger in width and $\frac{1}{2}$ " larger in height than the door frame.

2 VERIFICATION OF OPENING



Verify the opening is plumb, level, and square. Make sure the sill area is free from debris.

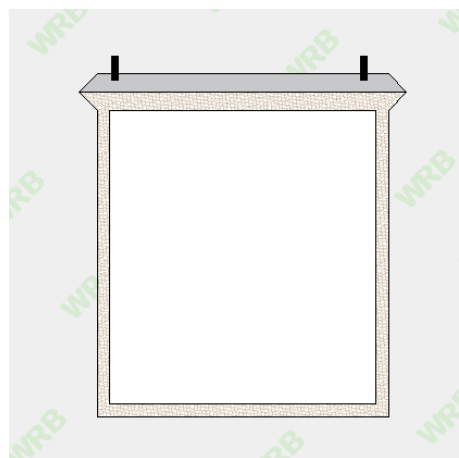
3 CUTTING WEATHER RESISTANT BARRIER



EXTERIOR

Cut the house wrap at the sill 2" below the rough opening and 2" past the jambs on each side. Cut the house wrap at the head even with the framing and diagonally past the jambs 6" to create a flap.

4 ROUGH OPENING VERIFICATION

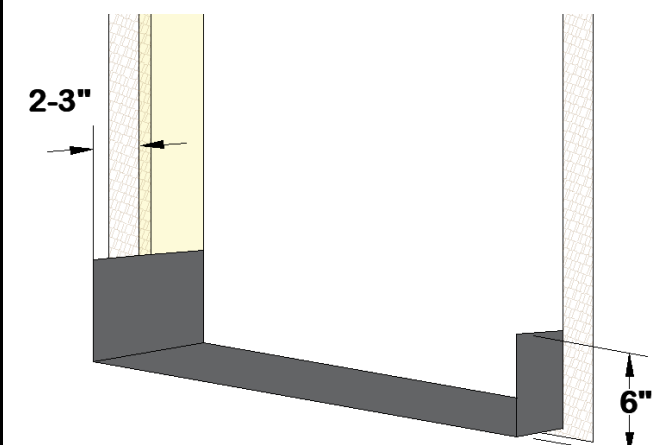


EXTERIOR

Fold the flap up and temporarily tape it above the opening.

NOTE: This method will allow the nailing fin to mount directly to the sheathing. Check with the building wrap manufacturer to verify this does not void their warranty.

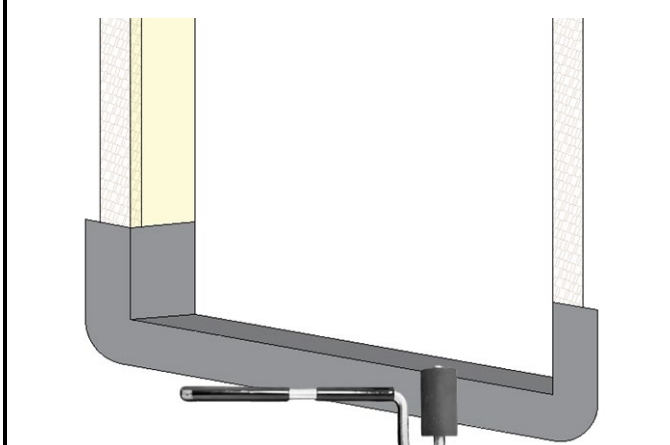
5 APPLY SILL FLASHING



EXTERIOR

Cut flexible sill flashing material so it is long enough to extend up a minimum of 6" up each side jamb (R.O. + 12" min.).

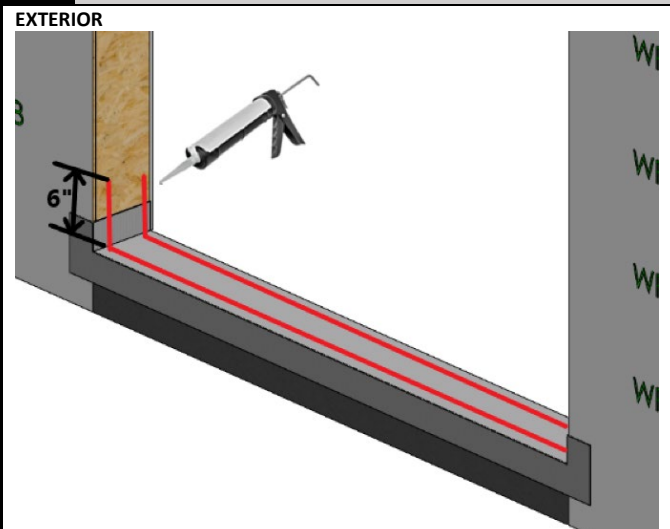
6 APPLY SILL FLASHING



EXTERIOR

Pull the backing from the flashing and apply to the sill allowing the flashing to extend up the side jambs 6". Fold the flashing over the sheathing and WRB. Roll smooth with J-roller to remove air pockets and promote adhesion.

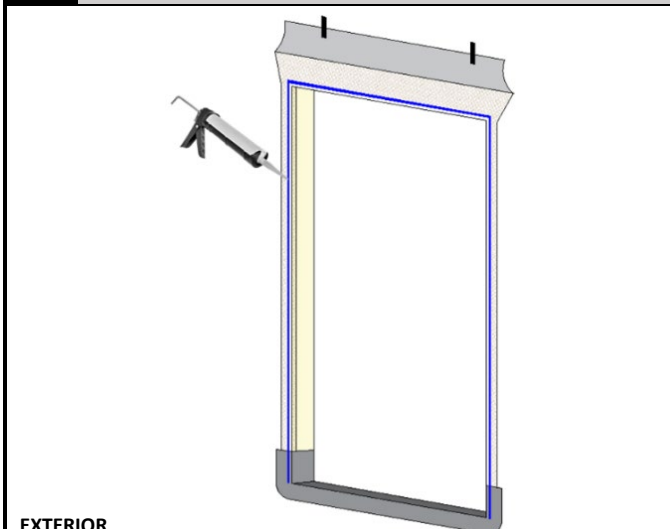
7 APPLY SEALANT TO THE SILL FLASHING



EXTERIOR

Apply a continuous 3/8" bead of sealant in line with the innermost part of the door sill continue up the jamb 6". For the outermost part of the sill apply sealant the full width of the door leaving 2" gaps approximately every two feet. Continue the bead 6" up the jamb on each side.

8 APPLY SILL FLASHING



EXTERIOR

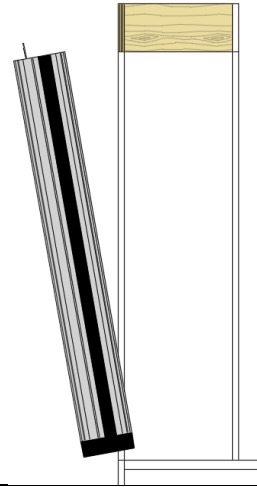
Apply a continuous 3/8" bead of sealant directly to the sheathing along both side jambs and across the head. Make sure the sealant bead is aligned where it will make full contact with the nailing fin.

9 APPLY SEALANT TO THE ADA SILL



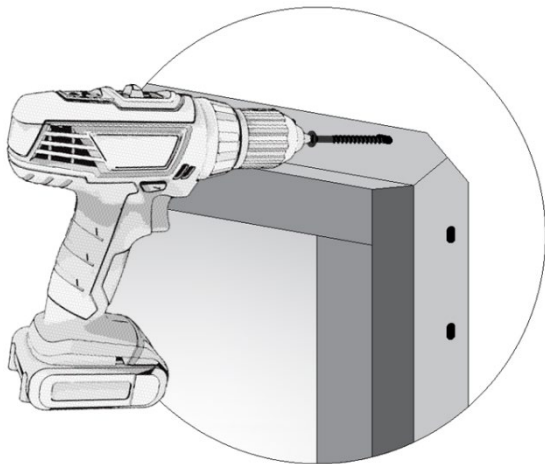
Apply a continuous 3/8" beads of sealant on the bottom side of the flat surfaces of the ADA sill.

10 INSERT THE DOOR IN THE OPENING



Immediately after applying sealant, lift and center door in the opening from the exterior setting the sill in first and tipping the door into place.

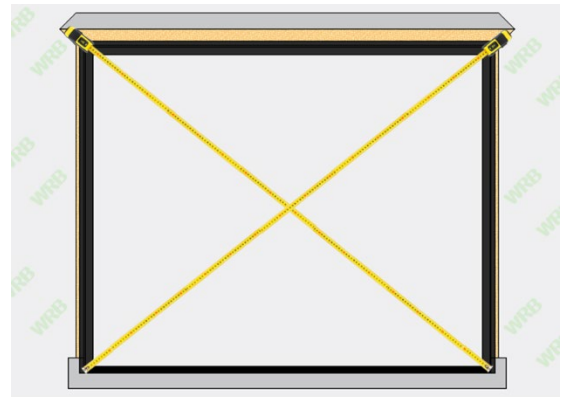
11 TEMPORARILY SECURE FRAME



EXTE

Apply a continuous 3/8" beads of sealant on the bottom side of the flat surfaces of the ADA sill.

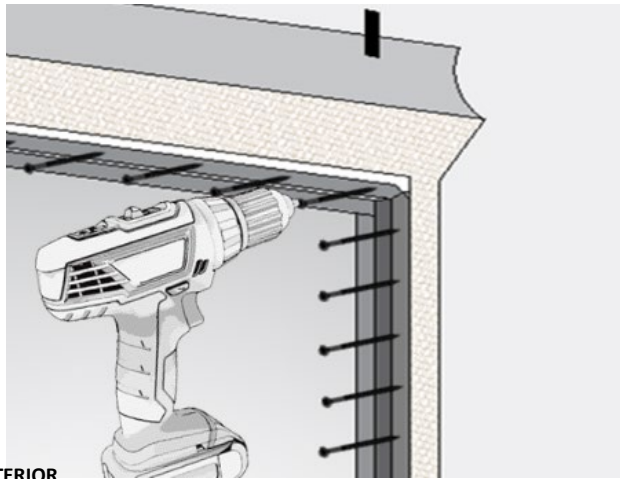
12 SQUARE THE FRAME



EXTERIOR

Make sure the frame is square by taking diagonal measurements. Shim frame as needed until diagonal measurements are within 1/8"

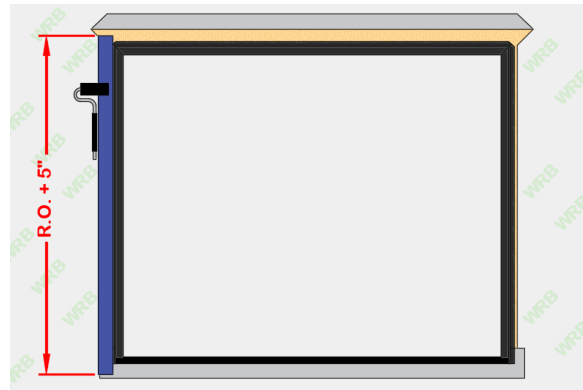
13 SECURE THE FRAME



EXTERIOR

When the door is plumb, level, and square, continue fastening through the nailing fin holes. Place fasteners 4" from each corner and spaced every 4" - 8" on center

14 JAMB FLASHING



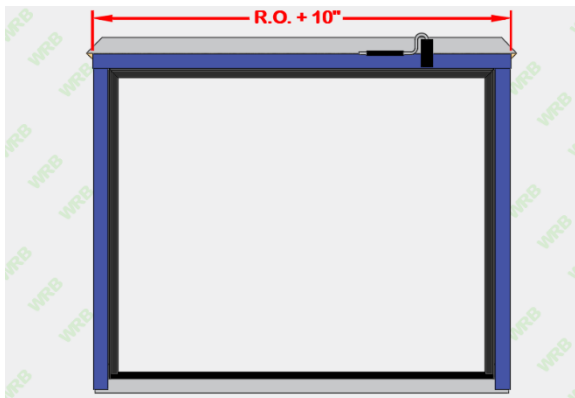
EXTERIOR

Cut two lengths of flashing tape equal to the rough opening jamb height plus 5".

- Remove the backing of the tape and apply over the nailing fin and the Weather Resistant Barrier keeping centered on the jamb.
- Roll the tape smooth with a J-roller to eliminate bubbles and to promote adhesion.

Repeat for the opposite jamb.

15 HEAD FLASHING



EXTERIOR

- Cut one length of flashing tape equal to the rough opening jamb width plus 10".
- Remove the backing of the tape and apply over the nailing fin and the Weather Resistant Barrier keeping centered on the jamb.
- Roll the tape smooth with a J-roller to eliminate bubbles and to promote adhesion.

16 HEAD FLASHING



EXTERIOR

Fold the head jamb WRB flap back over the head jamb flashing. Tape the diagonal seams with WRB tape or flashing tape.

17 SINSULATING ROUGH OPENING



NOTE: If using foam, make sure to use a brand that is recommended for doors and windows.

Insulate and seal the gap between the rough opening and the door frame using either loose fill fiberglass insulation or low-expansion polyurethane foam.

ADA SILL AND FLOOR PLATE MOUNT

ATTENTION

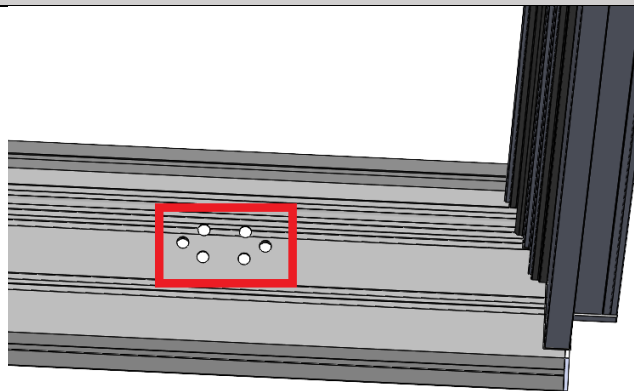
For doors where the panels are shipped loose follow the procedures below to install the panels into the frame.



WARNING

To avoid injury, use appropriate lifting techniques and adequate number of people to install panels. Larger panels may require mechanical lifting assistance.

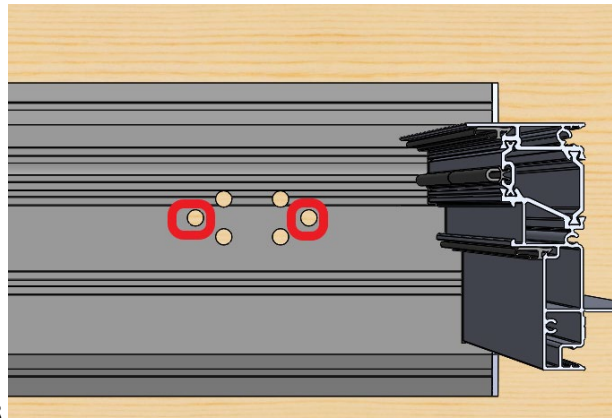
1 ADA SILL



EXTERIOR

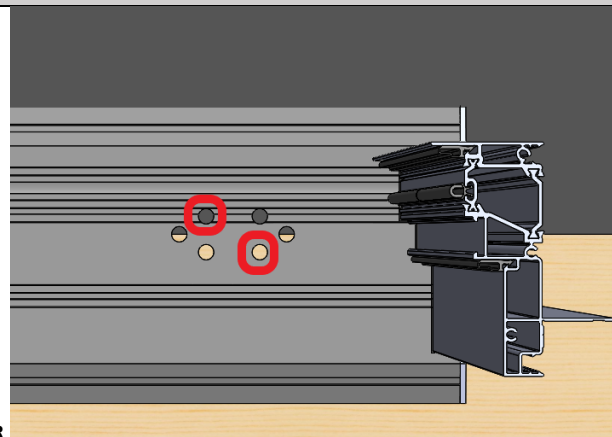
ADA Sill comes with holes for mounting the floor plate. 6 holes are predrilled on the ADA sill. These will help locate the floor plate precisely.

2 FLOOR PLATE HOLES



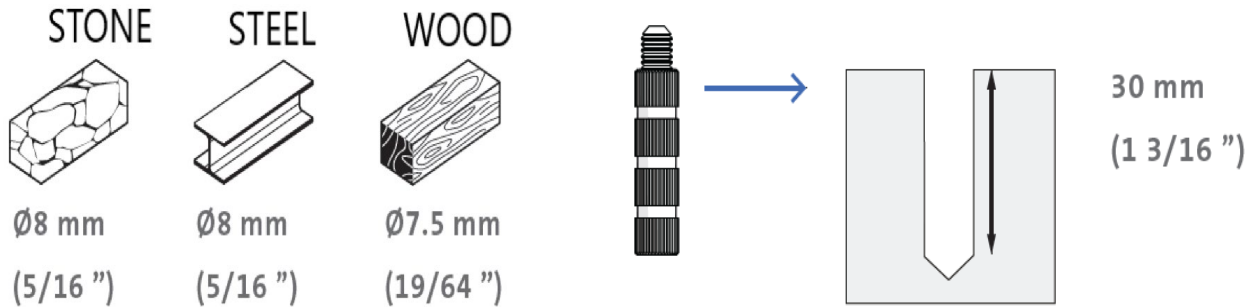
Depending on the type of the floor, holes need to be drilled through the sill into the floor for the mounting pins. If the floor material is the same through the depth of the door, from the interior side to the exterior side of the door, the end holes need to be drilled.

3 FLOOR PLATE HOLES



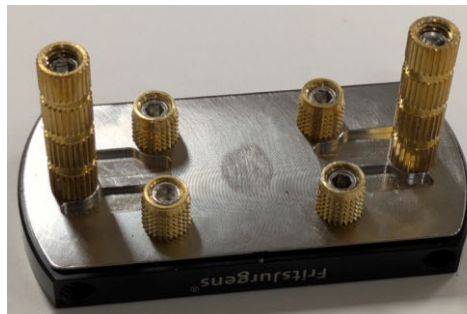
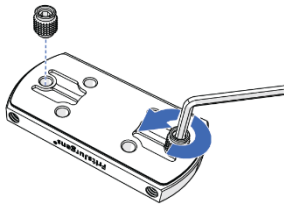
If there are two different floor types, with the seam directly through the end holes, then drill the circled alternate holes so there will be one pin each on the different floor type.

4 FLOOR PLATE HOLES



Depending on the type of material of the floor, the diameters of the holes in the opening will vary. For Stone / Tile / Concrete, drill 5/16" holes. For wood floor, drill 19/64" hole.
The depth of the holes needs to be 1- 3/16" from the top of the sill.

5 FLOOR PLATE PINS



SINGLE FLOOR TYPE



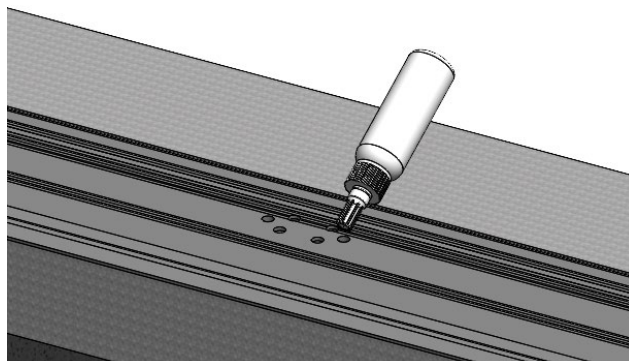
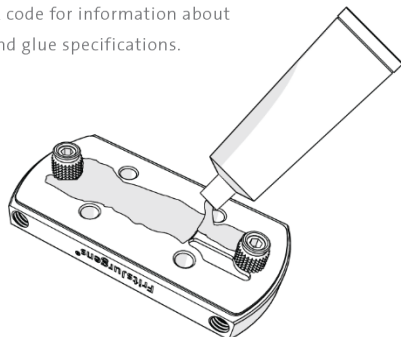
MULTI FLOOR TYPE

Depending on the floor type, determine the pin configuration needed. Use the 3mm Allen key provided to unmount the pre-installed pins and install them in the required configuration.

6 FLOOR PLATE PIN GLUE

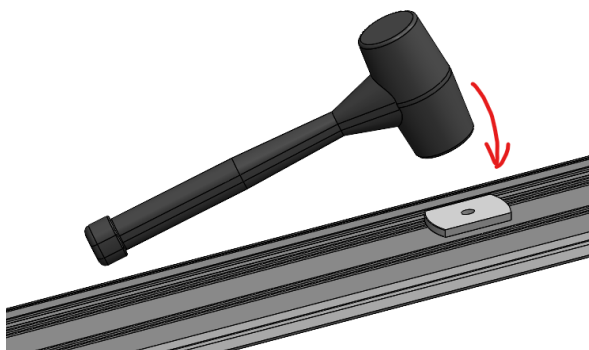


* Scan the QR code for information about drying time and glue specifications.



Fill the glue chambers in the floor plate with glue and apply a 1mm layer of glue in between the chambers. Add glue in the holes of the floor and to the pins attached to the floor plate.

7 ATTACH FLOOR PLATE



Using a rubber mallet, attach the floor plate through the sill into the floor.

NO SILL VERSION

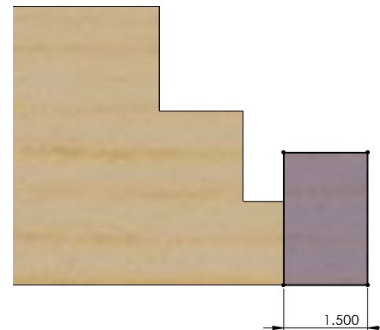
1 WOOD TEMPLATE INSTALL



EXTERIOR

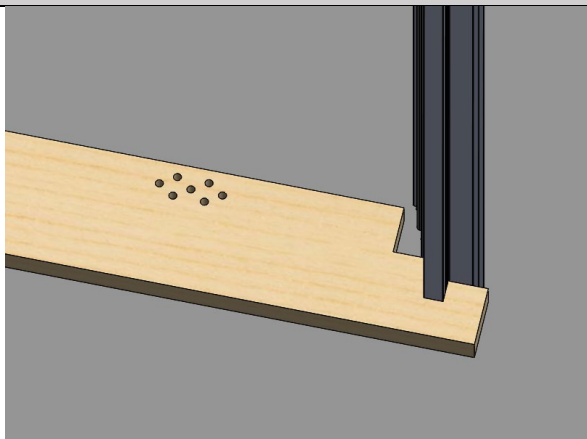
A wood template is provided along with the door which will help to install the bottom floor plate accurately. The holes in the template are located to the pivot location requested and should be used to accurately locate the floor plate location.

2 ATTACH THE WOOD TEMPLATE TO THE FRAME



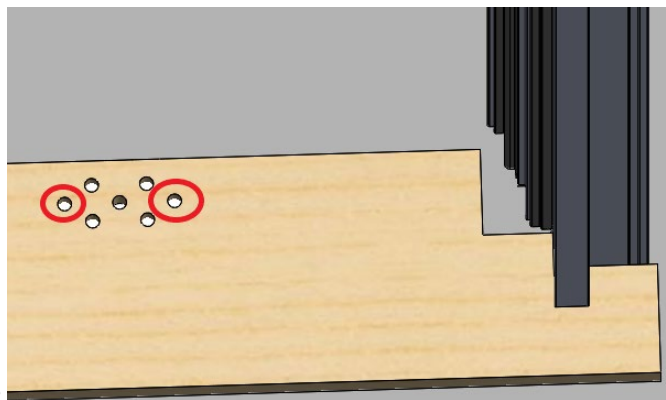
Once the frame is put into the opening, push both the ends of the template tight against the jamb from the exterior. If there are mulled units attached to the frame, trim 1.5" from the end of the wood template.

3 DRILLE HOLES USING THE TEMPLATE



After placing the template tight to the jambs, the holes in the template will help locate the pivot floor plate. Please adjust the frame as needed so the template is tight against the frame.

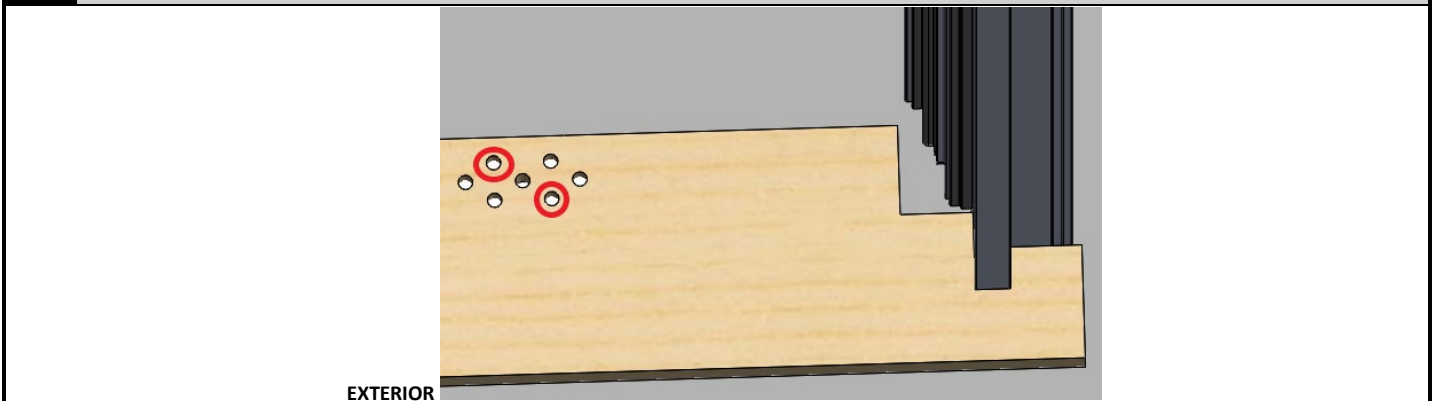
4 FLOOR PLATE HOLES



EXTERIOR

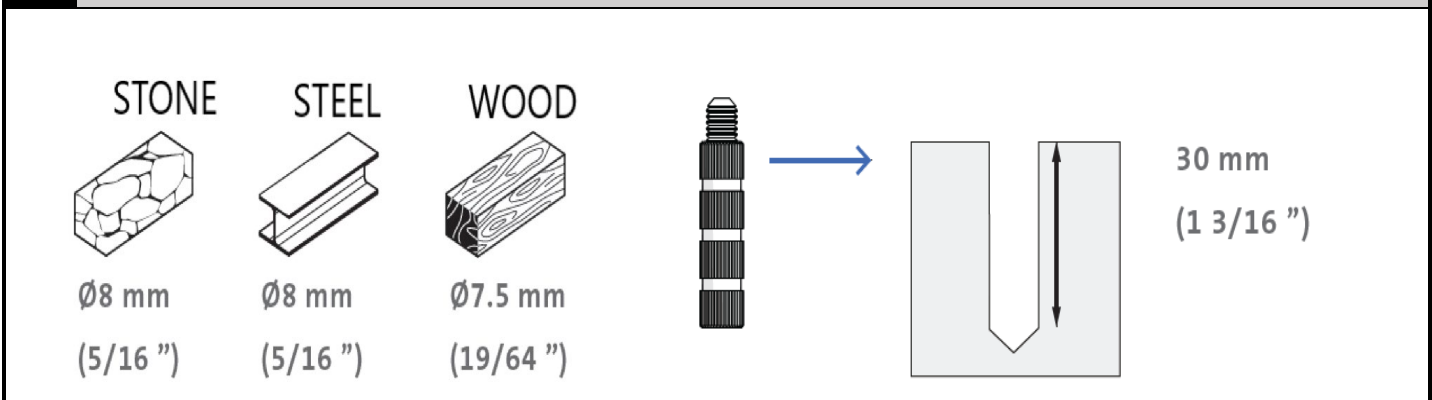
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5 FLOOR PLATE HOLES



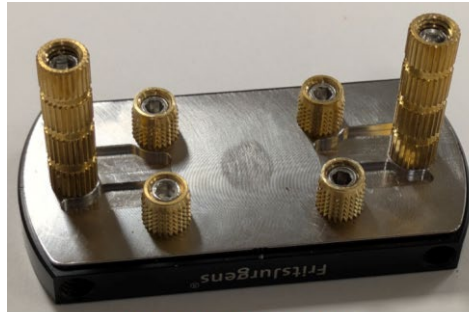
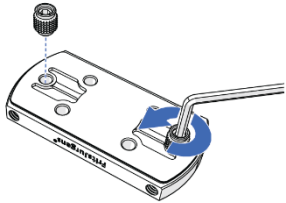
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6 FLOOR PLATE PIN HOLES



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7 FLOOR PLATE PINS



SINGLE FLOOR TYPE



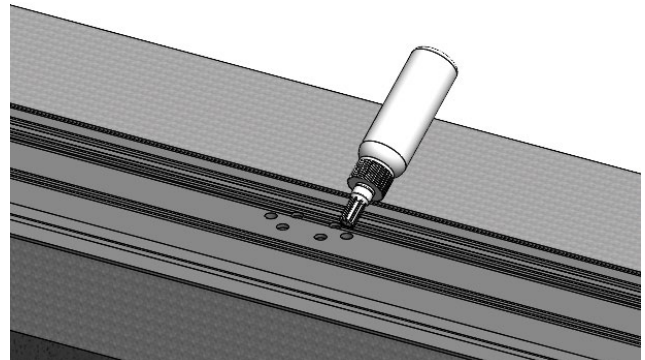
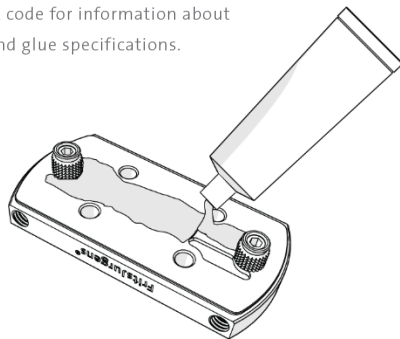
MULTI FLOOR TYPE

Depending on the floor type, determine the pin configuration needed. Use the 3mm Allen key provided to unmount the pre-installed pins and install them in the required configuration.

8 FLOOR PLATE PIN GLUE

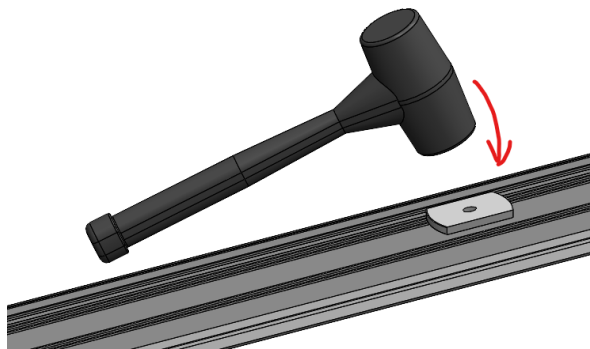


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9 ATTACH FLOOR PLATE



Using a rubber mallet, attach the floor plate through the sill into the floor.

INSTALLING THE PANEL

ATTENTION

For doors where the panels are shipped loose follow the procedures below to install the panels into the frame.



WARNING

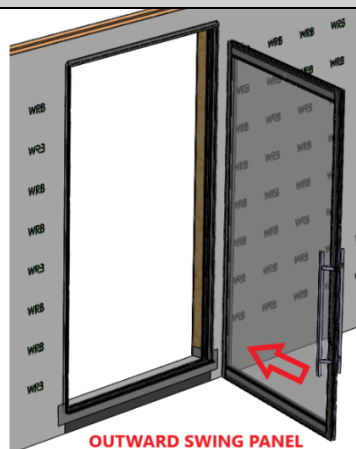
To avoid injury, use appropriate lifting techniques and adequate number of people to install panels. Larger panels may require mechanical lifting assistance.

1 PANEL INSTALL



EXTERIOR

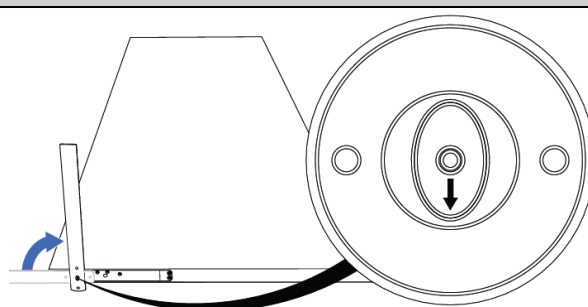
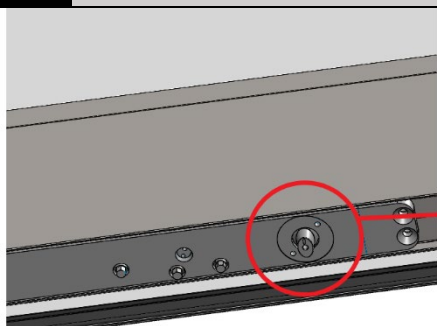
INWARD SWING PANEL



OUTWARD SWING PANEL

Inward swinging panel will need to be installed from the interior of the opening. Outward swinging panel will need to be installed from the exterior of the opening.

2 BOTTOM PIVOT VERIFICATION



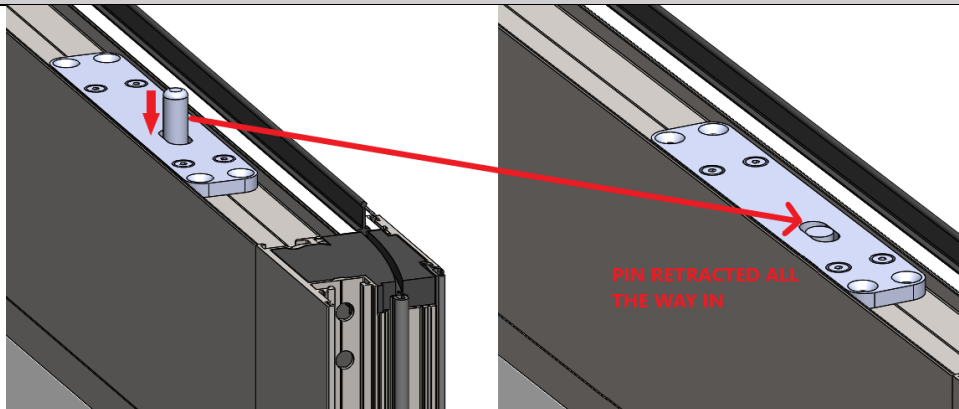
Before the panel is installed into the opening, the bottom pivot hardware spindle needs to be verified and adjusted if needed. The bottom pivot spindle is set in the factory as shown below. If they are not in this position, using the wrench adjust the spindle to the location as shown below. For an outward swinging door, the arrow must be pointing towards the interior of the panel (away from the glazing bead side).

3 BOTTOM PIVOT ADJUSTMENT



If the pivot pin is not perpendicular to the panel, it needs to be adjusted with the wrench.

4 TOP PIVOT PIN VERIFICATION



Verify and make sure the top pivot pin is retracted before installing the panel into the opening. If the top pivot pin is not retracted, the pivot pin will hit the frame and can damage the frame.

5 TOP PIVOT PIN LOCATION



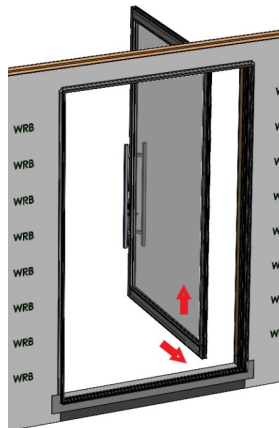
Add tape on the surface of the panel on the interior and exterior near the top pivot pin. This will help while aligning the panel during the install.

6 TOP PIVOT PIN LOCATION



Add tape on the surface of the panel on the interior and exterior near the top pivot pin. This will help while aligning the panel during the install.

7 PANEL INSTALL



Lift the panel and align the panel perpendicular to the frame in the opening. Inswing panels need to be installed from the interior side of the door. Outswing panel needs to be installed from the exterior side.

8 PANEL INSTALL



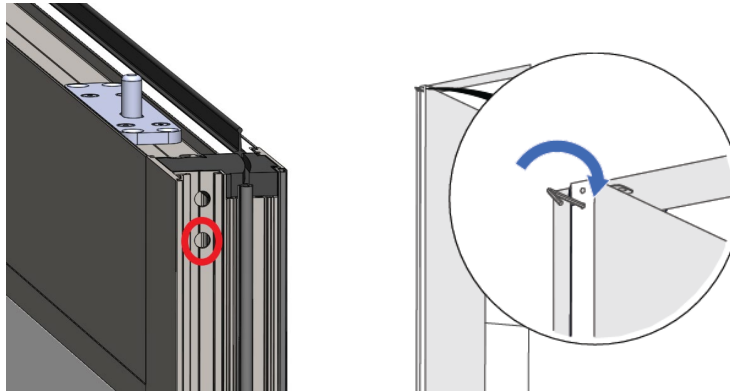
With the panel lifted, bring the pivot side of the panel into the frame. Slightly tilt the panel towards the interior side of the panel, move the panel into the frame, and set the bottom pivot pin into the floor plate.

9 PANEL INSTALL



With the panel lifted, bring the pivot side of the panel into the frame. Slightly tilt the panel towards the interior side of the panel, move the panel into the frame, and set the bottom pivot pin into the floor plate.

10 TOP PIVOT PIN

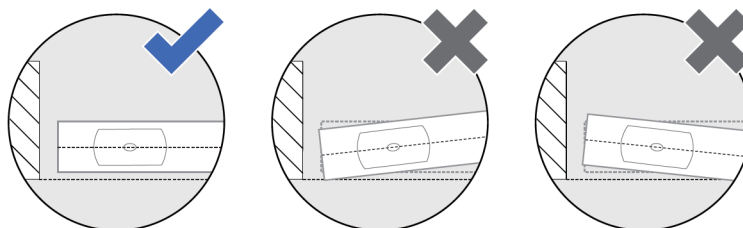


Once the panel is vertical and the top pivot pin aligned with the ceiling plate, extend the top pivot pin into the ceiling plate.

Using the 5mm Hex Key provided, the top pivot pin needs to be extended. On the pivot side of the panel, there are two holes for the top pivot adjustment. The bottom adjustment pin needs to be used to extend the top pivot pin. Eight full turns are needed to completely extend the top pivot pin.

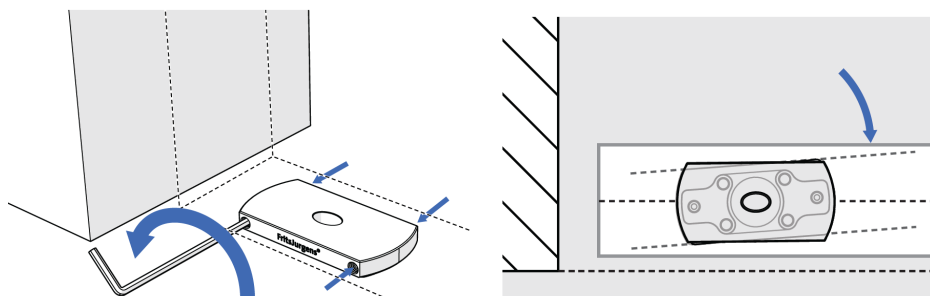
FINE TUNING RADIAL POSITION OF THE PANEL

11 RADIAL ALIGNMENT



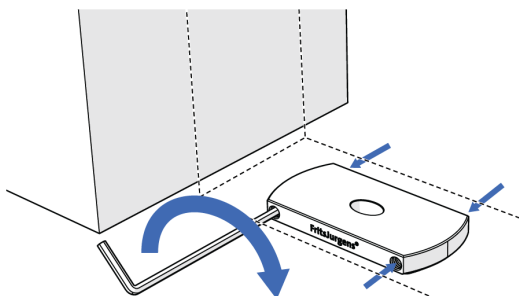
Check the radial alignment of the panel.

12 RADIAL ALIGNMENT



If the door is not properly aligned, unlock the floor plate with the allen key.
Rotate the floor plate until the door is aligned parallel to the wall.

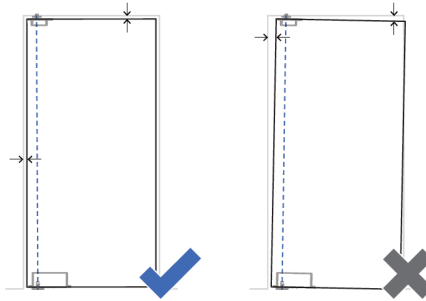
13 RADIAL ALIGNMENT



After adjusting the panel, lock the floor plate.

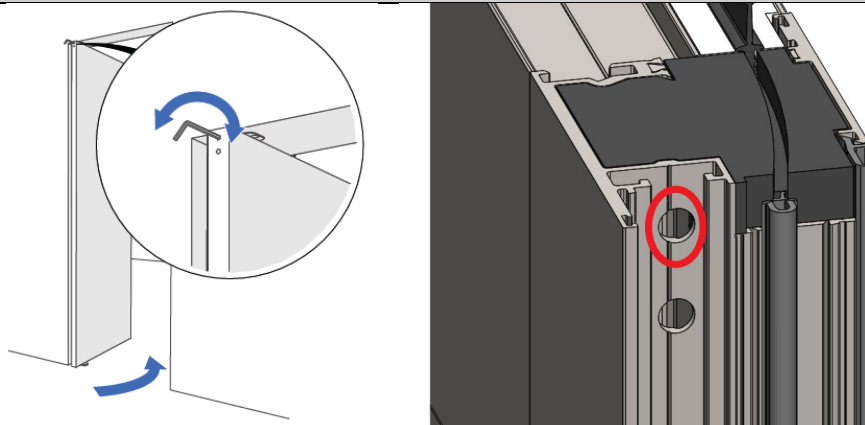
FINE TUNING ORIENTATION OF THE PANEL

14 OREINTATION OF THE PANEL



Check if the panel is aligned parallel to the ceiling and the wall.

15 OREINTATION OF THE PANEL



If the panel is not aligned properly, open the panel and using the 5mm allen key or the hexagon guide, adjust the door panel until the door is aligned parallel to the ceiling and the wall.
Use the top hole on the end of the panel to adjust the panel.

NOTE: Make sure the panel is adjusted using the top hole and the top pivot pin is adjusted. The bottom hole is to retract the top pivot pin, so if it is adjusted, the panel might fall off. Unless the panel needs to be taken off from the frame, do not adjust the bottom pin.

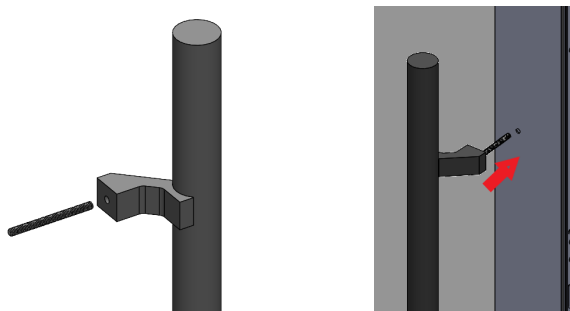
PULL HANDLE INSTALL

1 SET SCREW



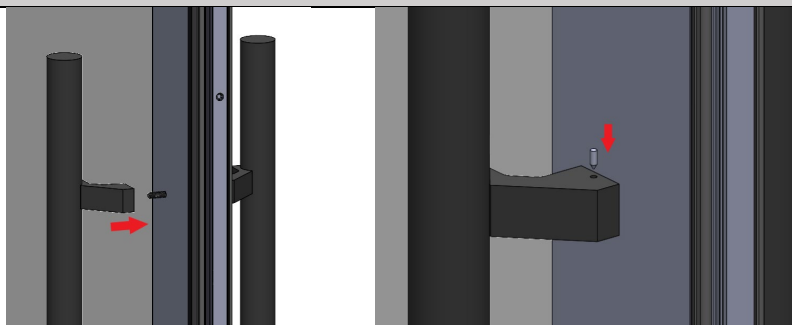
Remove the screw from the threaded bolt.

2 EXTERIOR HANDLE



Attached the threaded rod to the exterior handle. Add the pull handle with the threaded rod to the exterior side of the panel with the threaded rod going through the hole in the stile.

3 INTERIOR HANDLE



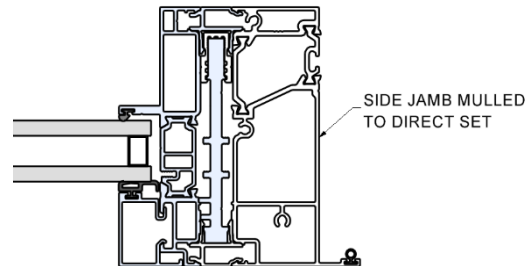
Attach the interior handle to the threaded rod and add the set screws and tighten it from the top and bottom.

NOTE: DO NOT USE THE PULL HANDLE TO LIFT THE PANEL.

SIDELITE MULLING

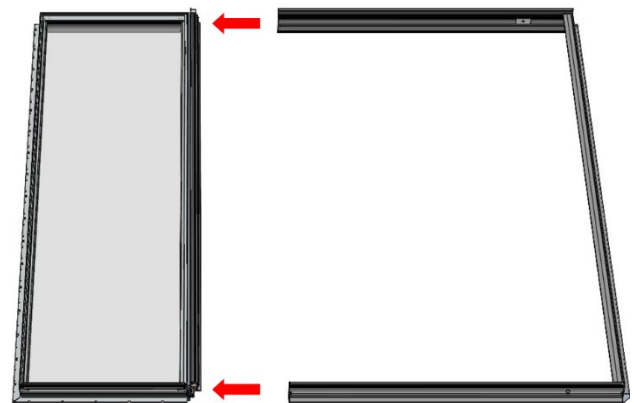
1 PATIAL FACTORY ASSEMBLY

- To make the assembly easy, the side jamb of the pivot door will be attached (mulled) to the sidelite.
- The mullion assembly will include the structural reinforcement.



2 SINGLE SIDELITE – FRAME ASSEMBLY

- Please refer to the KD Frame Assembly Instructions at the beginning of this guide (steps 1-8) to understand the Frame corner assembly process.
- Assemble the remaining three side of the pivot door frame following steps 1-8 at the beginning of this guide.
- With the three sides assembled, the door head and sill can be attached to the jamb side lite assembly.
- Be sure to follow the sealing details at the beginning of this guide (steps 1-8).



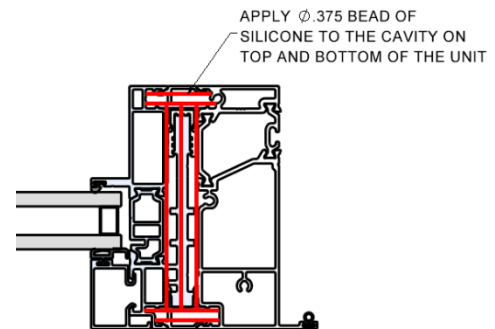
3 DOUBLE SIDELITE – FRAME ASSEMBLY

- Please refer to the KD Frame Assembly Instructions at the beginning of this guide (steps 1-8) to understand the Frame corner assembly process.
- Attach the head jamb to the side jambs following steps 1-8 at the beginning of this guide.
- Attach the sill following steps 1-8 at the beginning of this guide.



4 SEALING THE MULLION CAVITY

- The head and sill ends of the mullion need to be sealed to prevent water intrusion.
- Apply a generous amount of silicone using a 3/8" bead, filling all voids of the mullion connection at the head and sill.



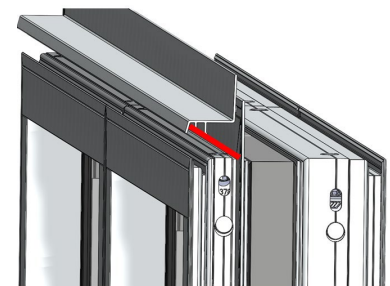
5 SEALING THE NAILING FIN JOINT

- If the frames are equipped with nailing fins, the gap between the head nailing fins will need to be sealed.
- Using the provided 3" x 3" self-adhering flashing tape, evenly cover the joint between the nail fins folding the tape 1/2" on to the frame. Press the tape firmly against the exterior wall of the fin and remove any gaps or air pockets.
- Fold the tape over the back of the nailing fin.



6 DRIP CAP APPLICATION

- A continuous aluminum drip cap will be provided as part of the field mulling kit. To install, apply a continuous 3/8" bead of silicone using the corner of nail fin to jamb as a guide.
- Center the drip cap at the head of the frames. Push the barb legs of the extrusion into the accessory channel of the frame. Using a wood block and a hammer, gently tap the drip cap into the place.
- Once the frame is assembled, please follow the Pivot Door Panel installation process.



CARE INSTRUCTIONS

CLEANING PRODUCT

Vinyl, aluminum, steel, and fiberglass may be cleaned with mild soap and water. Hard to remove stains and mineral deposits may be removed with mineral spirits. Factory-applied painted surfaces can be cleaned with mild household detergents and water.

- Do NOT clean any surface with gasoline, diesel fuel, solvent based, or petroleum-based products.
- Do NOT use abrasive materials or strong acidic solutions against vinyl, aluminum, glass, steel, fiberglass, or factory-applied finishes.
- Do NOT scrape or use tools that might damage the surface.
- Do NOT paint vinyl or aluminum surfaces.
- Do NOT paint or stain weatherstrip.
- Do NOT use mastic-type tapes such as Duct Tape®.

NOTE: If masking tape is used on any surface to aid in painting or staining, remove tape as soon as possible after use. Tape must be removed within 24 hours of application. For long term use such as stucco applications, use tape that will release even when exposed to high temperatures for an extended period.

WARRANTY

For Warranty information please refer to the Weather Shield website or use your phone to scan the QR code.

<https://www.weathershield.com/Resources/Warranties>

