



INSTALLATION INSTRUCTION – INSTRUCCIONES DE INSTALACION HURRICANESHIELD IMPACT RESISTANT SLIDING PATIO DOOR

Instrucciones en español

Important Safety Information:




Pella HurricaneShield® Products have been tested in accordance with the large missile impact testing requirements of ASTM E1886 and ASTM E1996 Missile D, Windzone 4, and have been certified to meet those requirements. Check with the individual (building owner, architect, contractor, installer and/or consumer) responsible for the project in addition to local building code officials to determine if these products comply with local codes. Pella HurricaneShield Products are neither hurricane proof nor are they shatter proof. Severe wind and rain may produce temporary conditions which exceed product performance standards. When these units are subjected to intense storms or extreme conditions, which exceed the intended design pressures, air, water and flying debris infiltration may occur.

The performance of any building is dependent upon the design, installation, and workmanship of the entire building system. Pella Corporation strongly recommends consulting an experienced architect, contractor, or structural engineer prior to installation of Pella products.









The individual (building owner, architect, contractor, installer and/or consumer) responsible for the project must take into account local conditions, building codes, inherent component limitations, the effects of aging and weathering on building components, and other design issues relevant to each project.

The determination of the suitability of all building components for each project, as well as the design and installation of flashing and sealing systems, are the responsibility of the building owner, architect, contractor, installer and/or consumer.

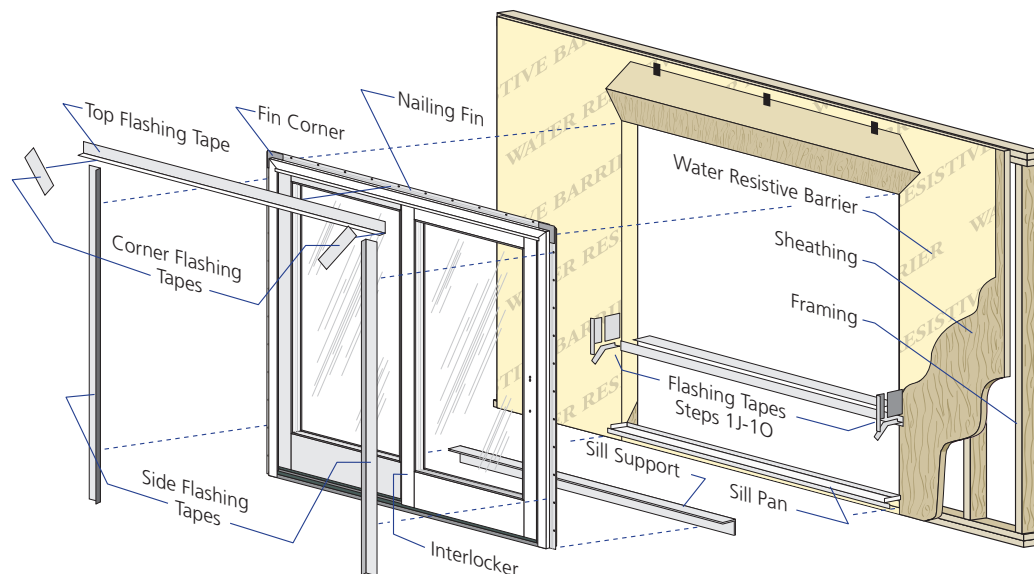
YOU WILL NEED TO SUPPLY:

- Cedar/impervious shims/spacers (12 to 20) 
- 2" galvanized roofing nails (1/4 lb.) 
- #8 x 2-1/2" pan head corrosion resistant wood screws or 3/16" x 1-3/4" screws for concrete applications
- #10 x 3-1/2" corrosion resistant wood screws
- Closed cell foam backer rod/sealant backer (20 to 30 ft.)
- Pella SmartFlash™ foil backed butyl window and door flashing tape or equivalent
- High quality exterior grade polyurethane or silicone sealant (2 to 3 tubes per door)
- Great Stuff™ Window and Door Insulating Foam Sealant by the Dow Chemical Company or equivalent low pressure polyurethane window and door foam - DO NOT use high pressure or latex foams 
- Pella aluminum sill support or 2 x 4 wood blocking
- Pella aluminum sill pan or equivalent
- Interior trim and/or jamb extensions (20 to 30 ft.)

TOOLS REQUIRED:

- Tape measure 
- Level 
- Square 
- Hammer 
- Stapler 
- Sealant gun 
- Scissors or utility knife 
- Screwdrivers (#2 Phillips with 8" shaft and small flat blade)
- Drill bits 13/64" and 1/8"
- Drill 

REMEMBER TO USE APPROPRIATE PERSONAL PROTECTIVE EQUIPMENT.



Always read the Pella Limited Warranty before purchasing or installing Pella products. By installing this product, you are acknowledging that this Limited Warranty is part of the terms of the sale. Failure to comply with all Pella installation and maintenance instructions may void your Pella product warranty. See Limited Warranty for complete details at <http://warranty.pella.com>

1 ROUGH OPENING PREPARATION

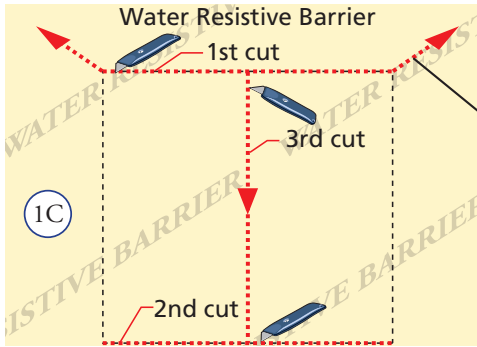
A. **Confirm the opening is plumb and level.**

Note: It is critical that the bottom is level.

B. **Confirm the door will fit the opening.** Measure all four sides of the opening to make sure it is 3/4" larger than the door in width and 1/2" larger in height. Measure the width at the top, bottom, and center. Measure the height at the far left side, the far right side, and in the center.

Note: 1-1/2" or more of solid wood blocking (studs) is required around the perimeter of the opening. Fix any problems with the rough opening before proceeding.

C. **Cut the water resistive barrier (1C).**

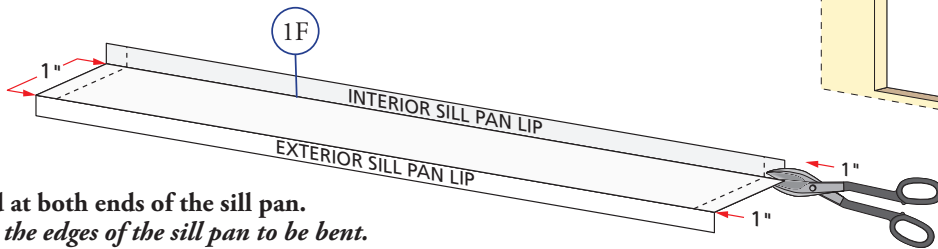


4th cut:
Make a 6" cut up from each top corner at a 45° angle to allow the water barrier to be lapped over the fin at the head of the door.

D. **Fold the water resistive barrier (1D).** Fold sides into the opening and staple to inside wall. Fold top flap up and temporarily fasten with flashing tape.

E. **Cut the sill pan** to the width of the rough opening plus 2".

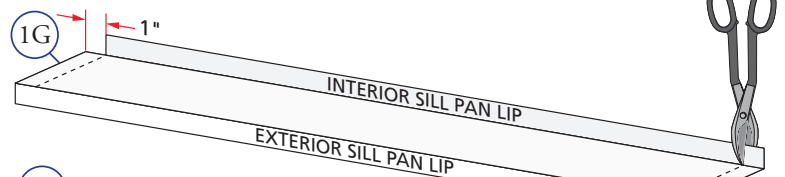
Note: The 2" added onto the rough opening width is for a 1" bend on each end.



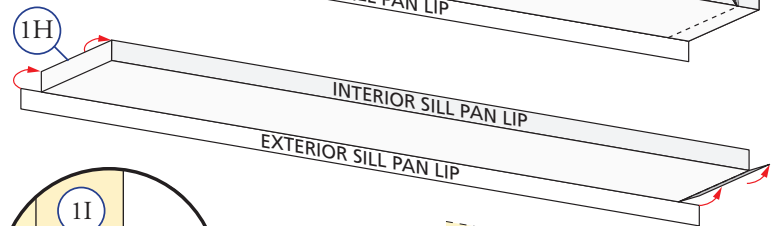
F. **Make a 1" cut in each fold at both ends of the sill pan.**

Note: These cuts will allow the edges of the sill pan to be bent.

G. **Cut 1" off each end of the interior sill pan lip.**

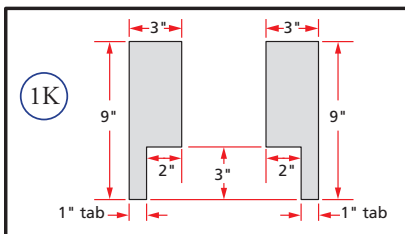


H. **Bend each end of the center panel up.**

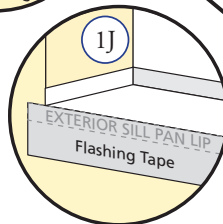
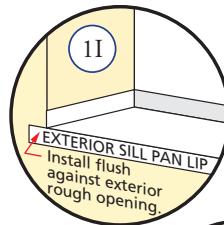
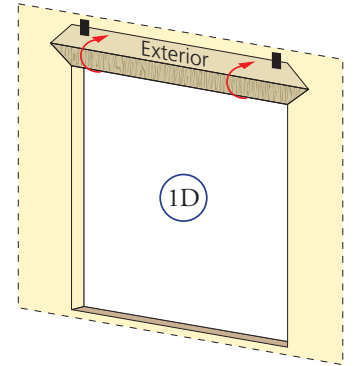
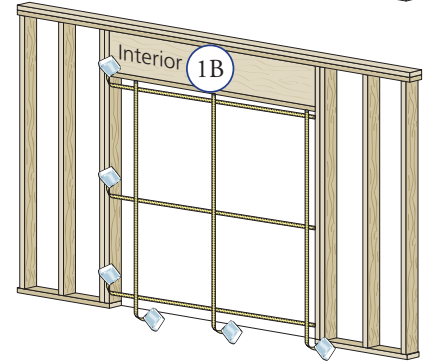
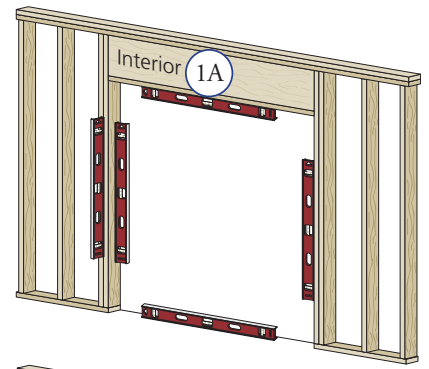
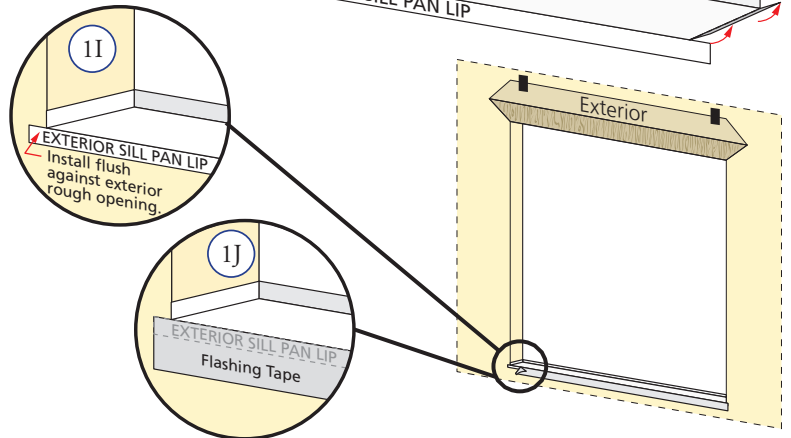


I. **Install the sill pan** by sliding into place until the exterior sill pan lip is flush with the exterior of the rough opening.

J. **Apply sill flashing tape.** Cut a piece of flashing tape 2" longer than the opening width. Apply at the bottom of the opening, covering the exterior sill pan lip as shown (1J).

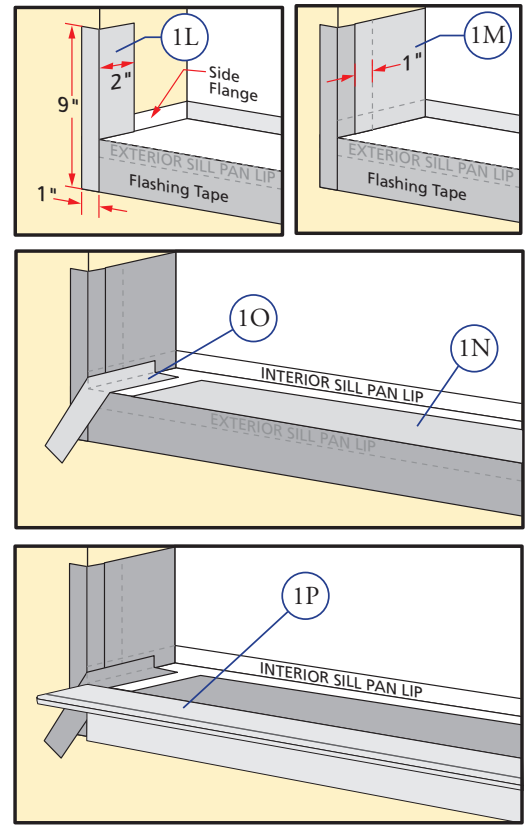


K. **Cut two 9" pieces of flashing tape** with a 1" x 3" tab at the bottom, on opposite corners as shown (1K).



1 ROUGH OPENING PREPARATION (CONTINUED)

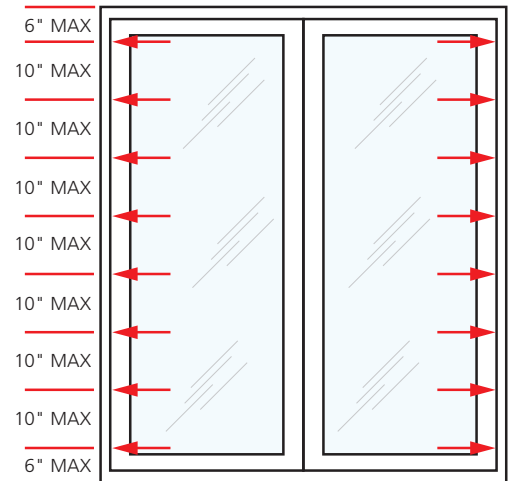
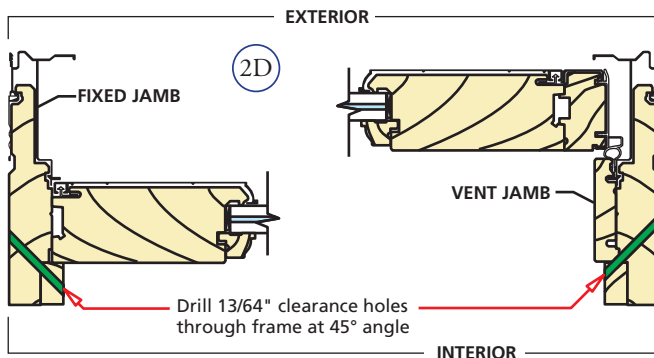
- L. **Apply the tabbed 9" pieces of flashing tape.** The tape is applied so 2" will cover the inside of the rough opening and lap over the side flange of the sill pan. The 1" x 3" tab laps over the bottom flashing tape as shown. (1L).
- M. **Cut two 6" pieces of flashing tape** and apply to each side of the rough opening, overlapping the first piece by 1" and lapping the bottom over the side flange of the sill pan as shown (1M).
- N. **Cut a piece of flashing tape 2" shorter than the width of the door.** Center the flashing tape between the side flanges of the sill pan and install with the exterior edge of the flashing tape flush with the exterior edge of the sill pan.
Note: The purpose of this tape is to seal the screws when installing the door.
- O. **Cut two pieces of flashing tape 1-1/2" x 6"** and apply to the bottom corners of the opening. Begin in the corner of the sill pan, with 3/4" of the tape applied to the sill panel and 3/4" of the tape applied to the side flange. The remainder of the tape is to be at a 45° angle onto the exterior.
- P. **Attach the aluminum sill support or wood blocking to the exterior of the box plate** to support the edge of the door sill. Place the sill support flush with the subfloor.



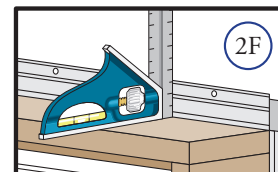
2 PREPARE THE DOOR FOR INSTALLATION

TWO OR MORE PEOPLE WILL BE REQUIRED TO HANDLE THE PANEL AND FRAME SAFELY.

- A. **Remove the plastic wrap and cardboard packaging from the door.**
Note: If screens, grilles or hardware are removed from the door at this time, label them and store them in a protected area.
- B. **Remove the shipping spacers.** Carefully slide the movable panel halfway open and remove the spacers from both the top and bottom of the movable panel.
- C. **Remove the venting panel** by lifting it off of the lower track and tilting the bottom of the panel away from the door frame. Then, lower the panel out of the top track. Carefully set the panel aside.
- D. **Drill 13/64" diameter clearance holes** through the frame at a 45° angle, on the room side of the door lock jamb and fixed jamb in the locations shown. Space the holes a maximum of 6" from each end and a maximum of 10" on center.

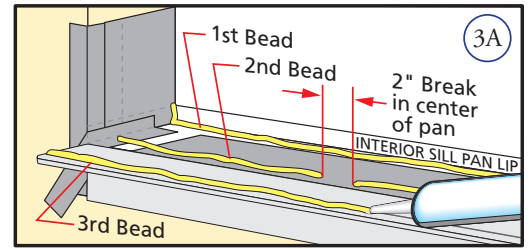


- E. **Drill a 13/64" clearance hole through the door frame** at each indentation in the extrusion at the top (head) of the door frame.
- F. **Fold out installation fin to 90°.** Be careful not to remove or tear the fin corners.
Note: If the fin is not at 90°, the door will not line up correctly on the interior.



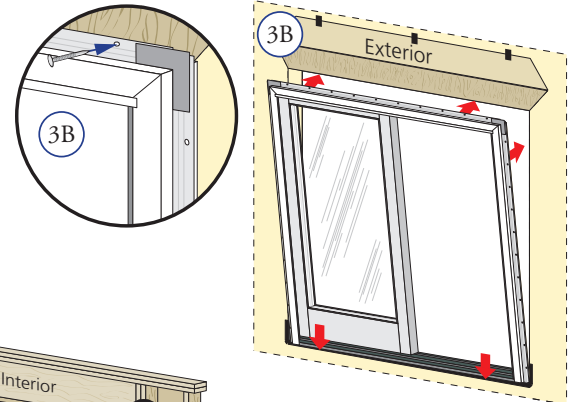
3 SETTING AND FASTENING THE DOOR

- A. **Place three 3/8" beads of sealant.** The first bead should be placed at the base of the interior sill pan lip. This bead should also continue up the corner of the sill pan at each end, sealing the joint of the vertical legs of the sill pan. The second bead should be approximately 3/4" from the exterior of the rough opening, running from jamb to jamb, with a 2" break in the center of the opening. Place a third bead of sealant in the groove of the sill support from end to end, or 1/4" from the exterior edge of the wood blocking.

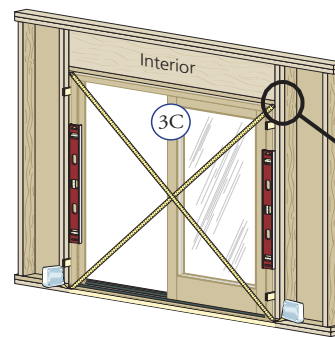


TWO OR MORE PEOPLE WILL BE REQUIRED TO HANDLE THE PANEL AND FRAME SAFELY.

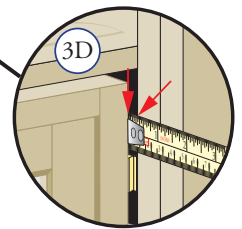
- B. **Insert the door from the exterior of the building. DO NOT slide the bottom of the door into the opening.** Sliding will damage the sealant lines. Place the bottom of the door at the bottom of the opening, then tilt the top into position. Center the door between the sides of the opening to allow equal clearance for shimming, and insert one roofing nail in the first hole from the corner on each end of the top nailing fin. These are used to hold the door in place while shimming it plumb and square.



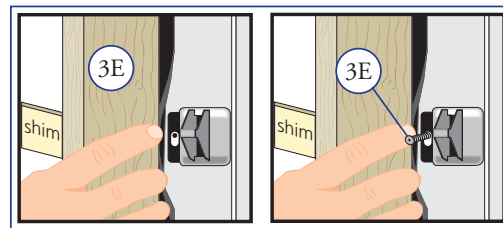
- C. **Plumb and square door.** Insert shims, as necessary, between the door and the sides of the rough opening starting up 6" from the bottom of the door.
Note: DO NOT OVER SHIM.



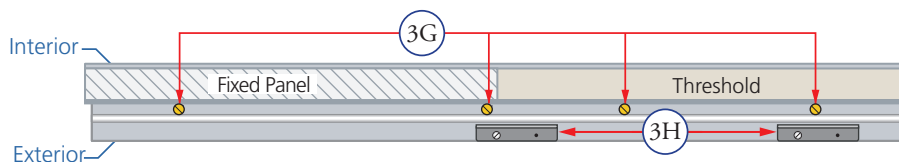
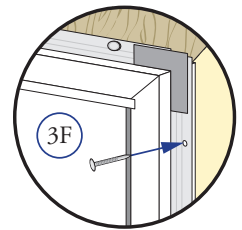
- D. **Check the interior reveal.** Make sure the measurement from the interior face of the door to the interior face of the wall is equal at several points around the door.
Note: If the dimensions are not equal, check to make sure the fins are folded out to 90° at all points.



- E. **Secure the frame.** Insert a 1" wide shim behind the pilot hole at the lock strike(s). Insert a #8 x 2-1/2" screw (included in the panel retainer and screw package) into the pilot hole making sure it passes through the shim and into the rough opening.
Note: The weather-strip must be pushed aside to reveal the pilot hole. Be careful not to damage the weather-strip.



- F. **Fasten the door to opening** by driving 2" galvanized roofing nails into each pre-punched hole in the nailing fin.
Note: Make sure the fin corner is lying as flat as possible.

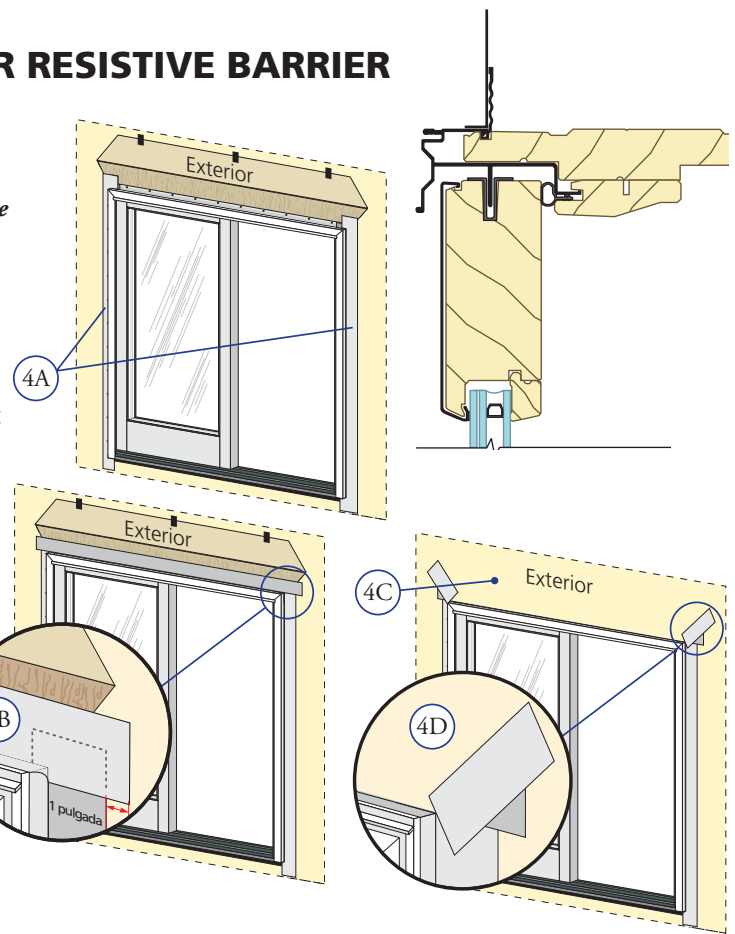


- G. **Apply sealant and insert a #8 x 2-1/2" pan head (provided) or 3/16" x 1-3/4" concrete screw into each hole** in the bottom of the door frame, as indicated above.
- H. **Position and secure the panel retainers** by drilling pilot holes through the remaining holes in the retainer into the sill support or wood blocking, then apply sealant to the holes and insert a screw into each hole as specified below.
Aluminum sill support: 9/64" pilot holes, #10 x 3/4" thread cutting screws (provided).
Wood blocking: 1/8" pilot holes, #10 x 2-1/2" flat head corrosion resistant wood screws (provided).
Masonry floor: 3/16" x 1-3/4" concrete screws. Pilot drill per screw manufacturer's recommendations.

4 INTEGRATING THE DOOR TO THE WATER RESISTIVE BARRIER

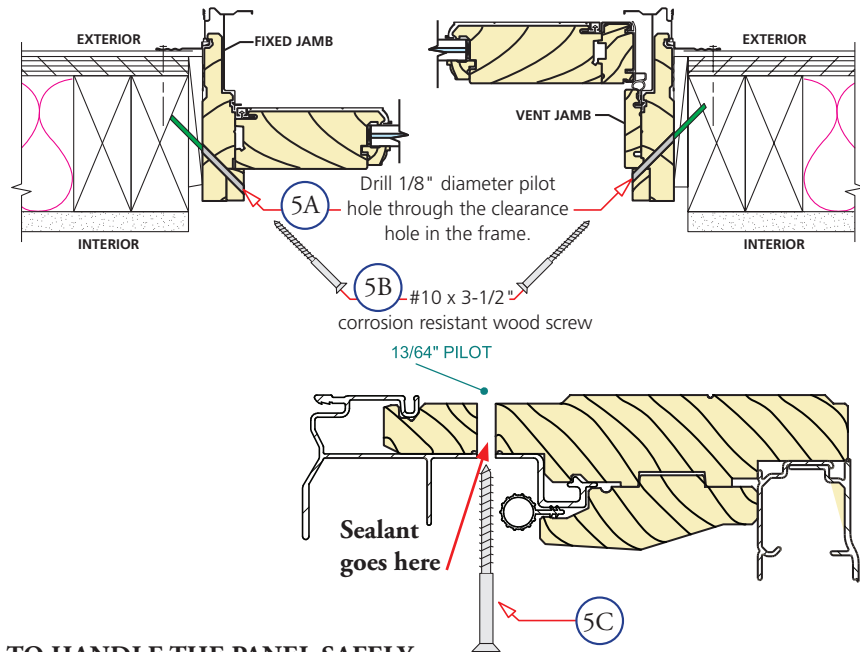
Note: The flashing tape must be applied approximately 1/2" onto the frame cladding at the jambs and head. Pre-folding the tape at 1/2" before removing the paper backing will make it easier to apply the tape correctly. If the siding is less than 1/2" thick, adjust the dimension of the fold so the exterior sealant line will cover the exterior edge of the tape.

- Apply side flashing tape.** Cut 2 pieces of flashing tape 4" longer than the frame height of the door. Apply one piece 1/2" onto the frame cladding, over the nailing fin and onto the water resistive barrier on each side. The tape should extend 2" above the top of the door and 2" below the bottom of the door. Press the tape down firmly while folding down the excess tape at the top and bottom of the door.
- Apply top flashing tape.** Cut a piece of flashing tape long enough to go across the top of the door and extend at least 1" past the side flashing tape on both sides. Apply the tape 1/2" onto the frame cladding over the top nailing fin as shown.
Note: The top flashing tape must overlap the side flashing tape to prevent water from getting behind it.
- Fold down top flap of water resistive barrier (4C).**
- Apply flashing tape to diagonal cuts.** Cut pieces of flashing tape at least 1" longer than the diagonal cuts in the water resistive barrier. Apply the tape covering the entire diagonal cut in the water resistive barrier at both upper corners of the door.
Note: Be sure to overlap the top corners (4D).



5 INSTALL THE INTERIOR INSTALLATION SCREWS

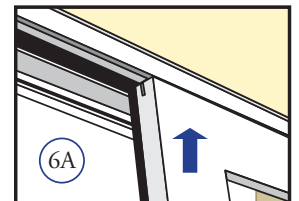
- Drill 1/8" x 1" deep pilot holes** into the rough framing through the clearance holes in the top (head) and sides (jambs) of the unit frame.
- On the sides of the door,** drive #10 x 3-1/2" corrosion resistant wood screws through the door frame into the rough framing. Drive the screws until snug, **DO NOT** over-tighten the screws. **DO NOT** bend or bow the unit frame.
- Apply sealant to each pilot hole drilled in the top (head) of the door frame,** then insert a #10 x 3-1/2" corrosion resistant screw into each hole.



6 REINSTALL THE SLIDING PANEL

TWO OR MORE PEOPLE WILL BE REQUIRED TO HANDLE THE PANEL SAFELY.

- Insert door panel.** From the exterior of the building, tilt the top of the panel toward the door frame and insert the top of the door panel into the top track. Move the bottom of the panel toward the door frame until it is vertical. Gently set the panel down into the bottom track. Adjust the panel clip and tighten the panel clip screw.
Note: Be careful not to pinch your fingers between the two panels. DO NOT close the sliding panel until you have installed the hardware. The door may lock when closed.
- Install the handles and panel retainer.** Follow the instructions included in the hardware package. If the panel is not square to the door frame, adjust the bottom rollers by removing the adjusting hole cover and inserting an 8" long #2 Phillips screwdriver into the hole. Turn clockwise to raise the panel and counter-clockwise to lower the panel.
- Install screen.** Instructions for installing the screen are found in the screen door package.



7 INTERIOR SEAL

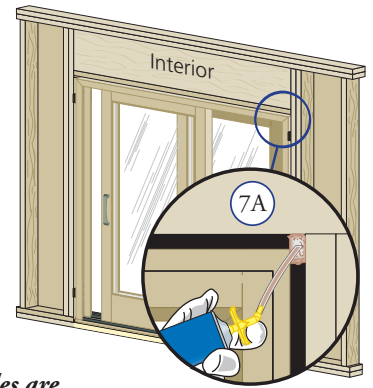
Caution: Ensure use of low pressure polyurethane window and door installation foams and strictly follow the foam manufacturer's recommendations for application. Use of high pressure foams or improper application of the foam may cause the door to bow and hinder operation.

A. **Apply insulating foam.** From the interior, insert the nozzle of the applicator approximately 1" deep into the space between the door and the rough opening and apply a 1" deep bead of foam. This will allow room for expansion of the foam and will minimize squeeze out. If using foam other than Great Stuff™ Window and Door Insulating Foam Sealant by the Dow Chemical Company, allow the foam to cure completely (usually 8 to 24 hours) before proceeding to the next step.

Note: Do not completely fill the space from the back of the fin to the interior face of the opening. Over filling the space may cause the door frame to bow.

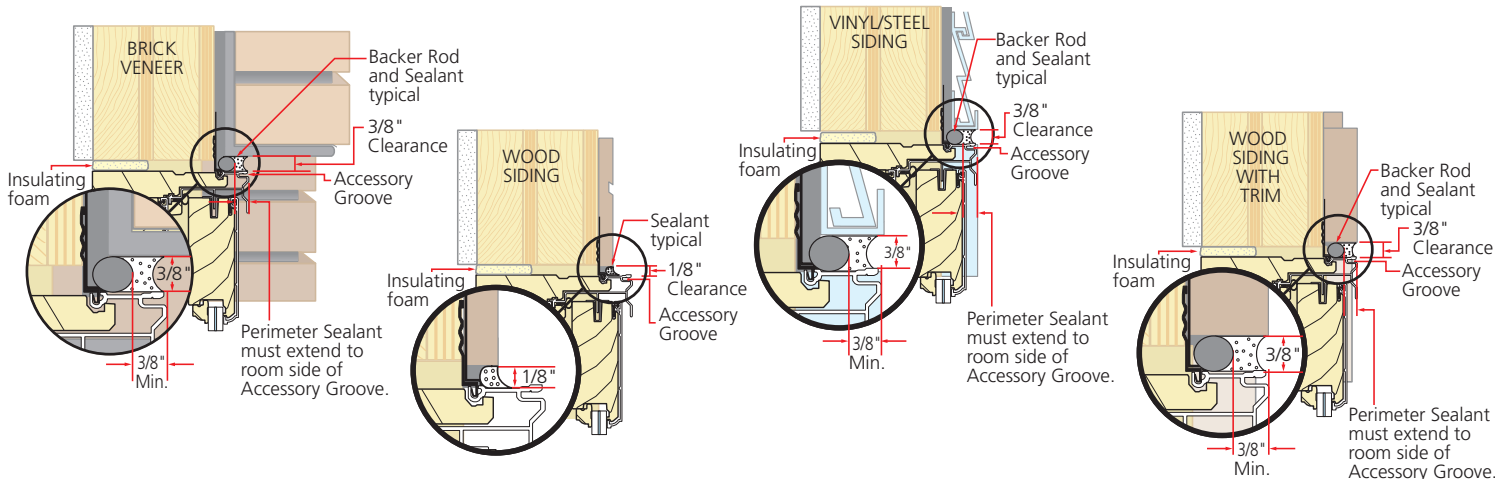
B. **Check the door operation** by opening and closing the door.

Note: If the door does not operate correctly, check to make sure it is still plumb, level and that the sides are not bowed. If the sides are bowed, remove the foam with a serrated knife and repeat the above steps.



8 SEALING THE DOOR TO THE EXTERIOR WALL CLADDING

Note: When applying siding, brick veneer or other exterior finish materials, leave adequate space between the door frame and the material for sealant. Refer to the illustration that corresponds to your finish material. Not allowing adequate space and not using backer rod may cause the sealant to break down prematurely and allow water to infiltrate.



A. **Insert closed cell foam backer rod** into the space around the door so there is approximately 3/8" to 1/2" clearance between the backer rod and the exterior face of the door.

Note: Backer rod adds shape and depth for the sealant line.

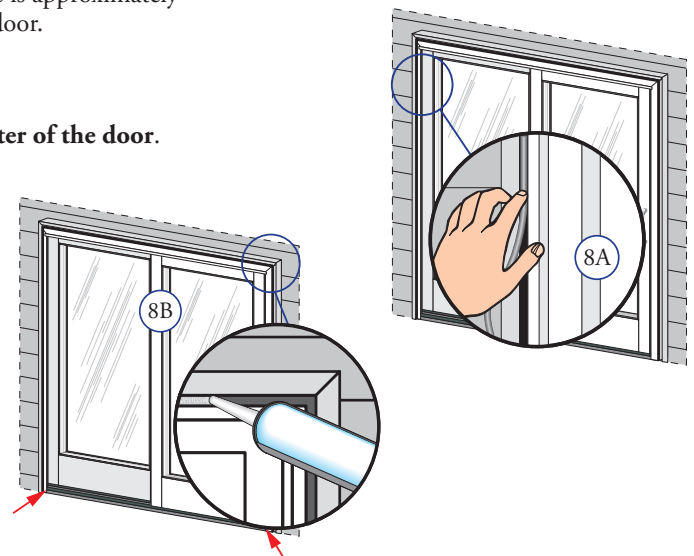
B. **Apply a bead of high quality exterior grade sealant to the entire perimeter of the door.**

At each end of the bottom of the door, insert sealant into the spaces between the bottom of the door and the sill support, and connect it to the perimeter sealant.

C. **Shape, tool and clean excess sealant.** When finished, the sealant should be the shape of an hourglass.

Note: This method creates a more flexible sealant line capable of expanding and contracting.

D. **Remove plastic guards at the base of the door** once construction is complete.



INTERIOR FINISH

If products cannot be finished immediately, cover with clear plastic to protect from dirt, damage and moisture. Remove any construction residue before finishing. Sand all wood surfaces lightly with 180 grit or finer sandpaper. DO NOT use steel wool. BE CAREFUL NOT TO SCRATCH THE GLASS. Remove sanding dust.

Pella products must be finished per the below instructions; failure to follow these instructions voids the Limited Warranty.

- On casement and awnings, it is optional to paint, stain or finish the vertical and horizontal sash edges.
- On single-hung and double-hung, do not paint, stain or finish the vertical sash edges, any finish on the vertical sash edges may cause the sash to stick; it is optional to paint, stain or finish the horizontal sash edges.
- On patio doors, it is optional to paint, stain or finish the vertical and horizontal panel edges.

Note: To maintain proper product performance do not paint, finish or remove the weather-stripping, mohair dust pads, gaskets or vinyl parts. Air and water leakage will result if these parts are removed. After finishing, allow venting windows and doors to dry completely before closing them.

Pella Corporation is not responsible for interior paint and stain finish imperfections for any product that is not factory-applied by Pella Corporation. Use of inappropriate finishes, solvents, brickwash, or cleaning chemicals will cause adverse reactions with window and door materials and voids the Limited Warranty.

For additional information on finishing see the Pella Owner's Manual or go to www.pella.com.

EXTERIOR FINISH

The exterior frame and sash are protected by aluminum cladding with a Pella EnduraClad® or EnduraClad Plus baked-on factory finish that needs no painting. Clean this surface with mild soap and water. Stubborn stains and deposits may be removed with mineral spirits. DO NOT use abrasives. DO NOT scrape or use tools that might damage the surface.

Use of inappropriate finishes, solvents, brickwash or cleaning chemicals will cause adverse reactions with window and door materials and voids the Limited Warranty.

CARE AND MAINTENANCE

Care and maintenance information is available in the Pella Owner's Manual. You can obtain an owner's manual by contacting your local Pella retailer. This information is also available at www.pella.com.

IMPORTANT NOTICE

Because all construction must anticipate some water infiltration, it is important that the wall system be designed and constructed to properly manage moisture. Pella Corporation is not responsible for claims or damages caused by anticipated and unanticipated water infiltration; deficiencies in building design, construction and maintenance; failure to install Pella products in accordance with Pella's installation instructions; or the use of Pella products in wall systems which do not allow for proper management of moisture within the wall systems. The determination of the suitability of all building components, including the use of Pella products, as well as the design and installation of allow for proper management of moisture within the wall systems. The determination of the suitability of all building components, including the use of Pella products, as well as the design and installation of flashing and sealing systems are the responsibility of the Buyer or User, the architect, contractor, installer, or other construction professional and are not the responsibility of Pella.

Pella products should not be used in barrier wall systems which do not allow for proper management of moisture within the wall systems, such as barrier Exterior Insulation and Finish Systems, (EIFS) (also known as synthetic stucco) or other non-water managed systems. Except in the states of California, New Mexico, Arizona, Nevada, Utah, and Colorado, **Pella makes no warranty of any kind on and assumes no responsibility for Pella windows and doors installed in barrier wall systems. In the states listed above, the installation of Pella Products in barrier wall or similar systems must be in accordance with Pella's installation instructions.**

Product modifications that are not approved by Pella Corporation will void the Limited Warranty.