

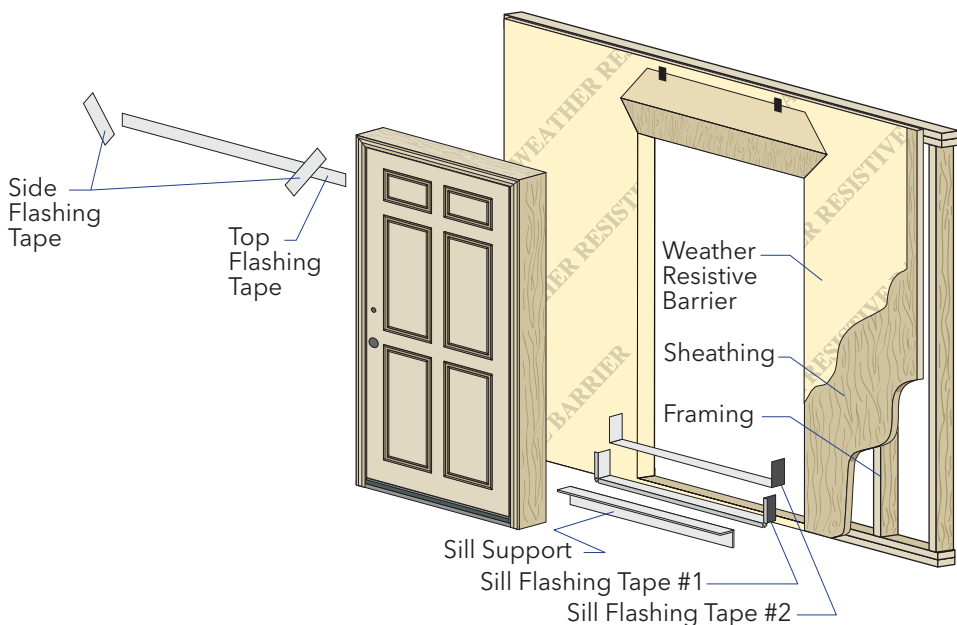


INSTALLATION INSTRUCTION - SINGLE PANEL, SINGLE PANEL WITH SIDELIGHT COMBINATION AND 20 MINUTE FIRE RATED WOOD FRAME ENTRY DOOR

Installation Instructions for Typical Wood Frame Construction.

These instructions were developed and tested for use with typical wood frame wall construction in a wall system designed to manage water. **These instructions are not to be used with any other construction method.** Installation instructions for use with other construction methods may be obtained from Pella Corporation, a local Pella retailer or by visiting <http://www.pella.com>. Building designs, construction methods, building materials, and site conditions unique to your project may require an installation method different from these instructions and additional care. Determining the appropriate installation method is the responsibility of you, your architect, or construction professional.

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>.

YOU WILL NEED TO SUPPLY:

- Composite/impervious shims/spacers (12 to 20)
- #8 x 3" corrosion resistant woodscrews
- 16d galvanized finish nails or exterior grade finish screws
- Pella foil backed butyl window and door flashing tape or equivalent
- Closed cell foam backer rod/sealant backer (17 to 21 ft.)
- 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.
- High quality exterior grade polyurethane sealant (2 to 3 tubes per door)
- Pella aluminum sill support or 2 x 4 wood blocking
- Interior trim and/or jamb extensions (15 to 40 ft.)
- Aluminum head flashing
- Installation Clips (Optional)



TOOLS REQUIRED:

- Tape measure
- Level
- Square
- Drill with 1/8" and 3/16" drill bits
- Stapler
- Scissors or utility knife
- #2 & #3 Phillips screwdrivers
- Hammer
- Caulking gun
- Putty knife



1 ROUGH OPENING PREPARATION

A. Confirm the opening is plumb and level.

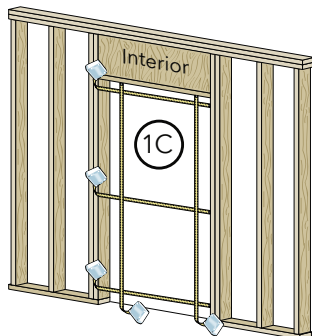
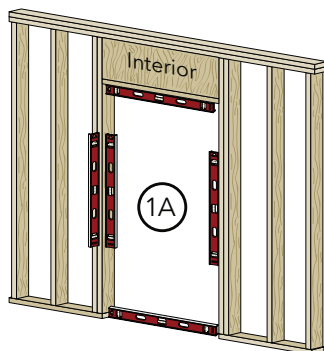
Note: It is critical the bottom is level.

- B. **Determine the finished floor height.** If the finished floor height will be more than 1" higher than the surface the door will be set on, add a filler board under the sill. The top of the filler board should be within 1" of the finished floor height.

C. Confirm the door will fit in the opening.

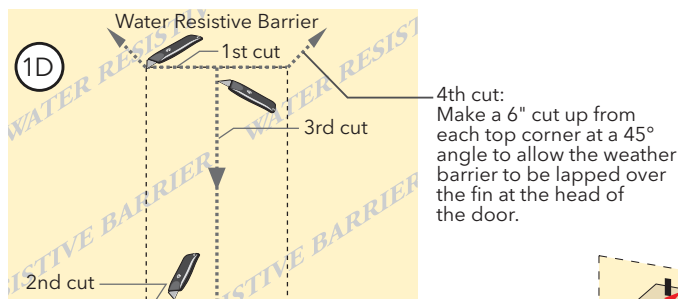
Measure all four sides of the opening to make sure it is 3/4" larger than the door in width and 1/2" larger in height. Measure the opening width in several places to ensure the studs are not bowed.

Note: 1-1/2" or more of solid wood blocking (studs) is required around the perimeter of the opening. Check the wall for plumb and the opening for square by checking opening diagonal measurements. Fix any problems with the rough opening before proceeding.

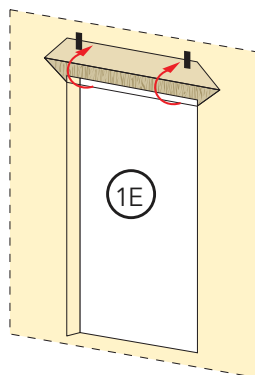


1 ROUGH OPENING PREPARATION (CONTINUED)

- D. **Cut the weather resistive barrier, if applicable (1D).**



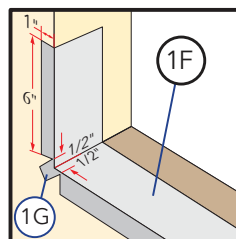
- E. **Fold the weather resistive barrier (1E).** Fold side flaps into the opening and staple to inside wall. Fold top flap up and temporarily fasten with flashing tape.



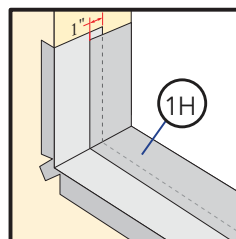
- F. **Apply sill flashing tape #1.** Cut a piece of flashing tape 12" longer than the opening width. Apply at the bottom of the opening as shown (1F) so it overhangs 1" to the exterior.

Note: The tape is cut 12" longer than the width so it will extend 6" up each side of the opening.

- G. **Tab the sill flashing tape and fold.** Cut 1" wide tabs at each corner (1/2" from each side of corner) (1G). Fold tape to the exterior and press firmly to adhere it to the weather resistive barrier.

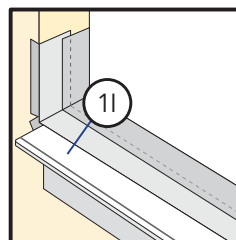


- H. **Apply sill flashing tape #2.** Cut a piece of flashing tape 12" longer than the opening width. Apply at the bottom further towards the interior, overlapping tape #1 by at least 1". Do not allow the tape to extend past the interior face of the framing (1H). If the wall depth is greater than 5", add a third piece of flashing tape. The flashing tape should come to within 1" of the interior face of the framing.



Note: The flashing tape does not need to extend all the way to the interior of the framing.

- I. **When required for adequate sill support,** attach the optional aluminum sill support or wood blocking to the exterior of the box plate to support the exterior edge of the door sill (1I). Place the sill support flush with the sill rough opening.



2 PREPARE THE DOOR FOR INSTALLATION

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

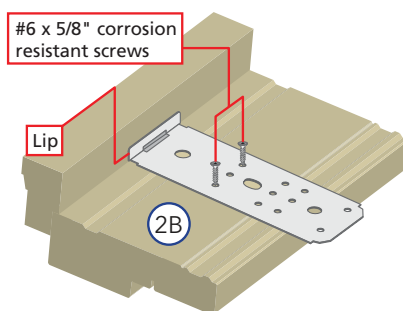
- A. **Remove plastic wrap and cardboard packaging from door.** DO NOT remove plastic shipping spacers. The shipping spacers will help keep the door square during installation. DO NOT open the door until it is fully fastened.

If Attaching with fasteners through the Brickmould go to Step 3

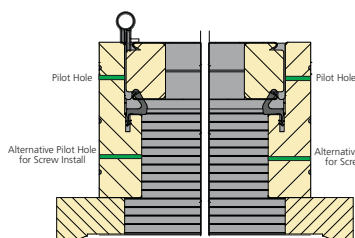
Anchoring Method - (Installation Clip or Frame Screw Through Frame)

- B. **Doors using Installation Clips:** Install installation clips. Place each clip so the lip is facing up and against the brickmould at the locations shown in the placement diagram. Secure each clip by driving a #6 x 5/8" corrosion resistant screw through each of the outer two holes of the three holes shown.

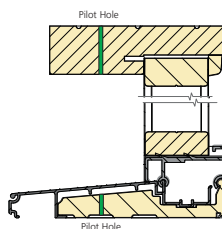
Note: If clips are to be bent; pre-bend before attaching to frame.



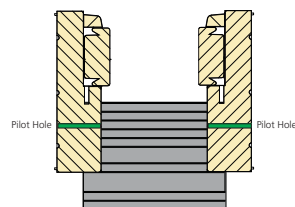
- C. **Doors using Frame Screws:** Open door panels; drill and counter-sink 3/16" diameter clearance holes through the door frame jambs, (head and sill of sidelight units) but not into the rough opening at the locations shown. Where applicable, clearance holes are drilled through open hinge screw holes and each strike hole.



DOOR UNIT, JAMB TO JAMB



SIDELIGHT UNIT, HEAD TO SILL



SIDELIGHT UNIT, JAMB TO JAMB

2 PREPARE THE DOOR FOR INSTALLATION

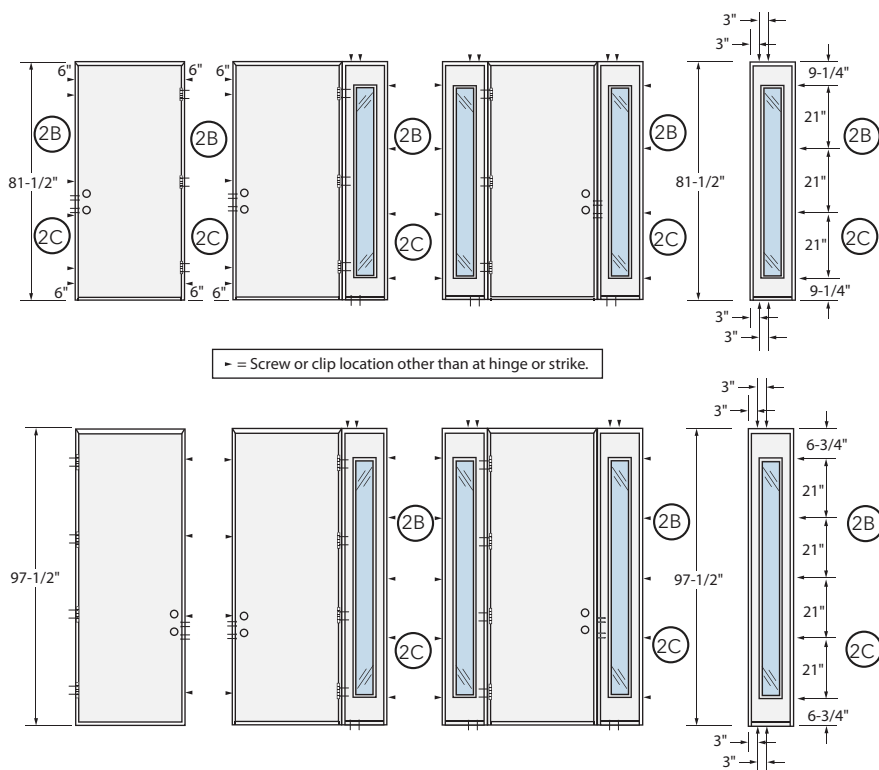
Anchor Spacing for Single Units:

- 2 - #10 x 2-1/2" screws at each hinge
- 2 - #10 x 2-1/2" screws at each strike
- #10 x 3" screw or clip directly across from each hinge
- #10 x 3" screw or clip 6" from each corner on 81-1/2" entry door frames only (not sidelights) interacting with the rough opening
- #10 x 3" screw or clips as indicated on 97-1/2" entry door frames

Anchor Spacing for Combination Units:

- 2 - #10 x 3" screws at each sidelight head and sill
- #10 x 3" screw or clip at other indicated locations
- 2 - #10 x 2-1/2" screws at each hinge
- 2 - #10 x 2-1/2" screws at each strike

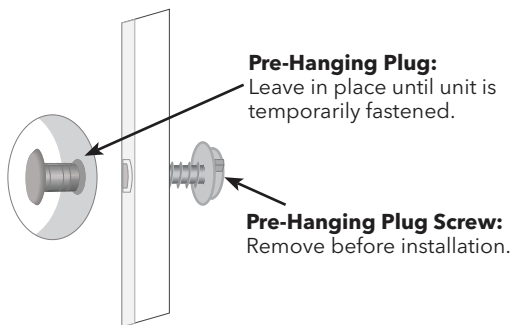
Diagrams for placement of installation clips or frame screw clearance holes for 6'8" and 8' height doors and single doors with sidelights.



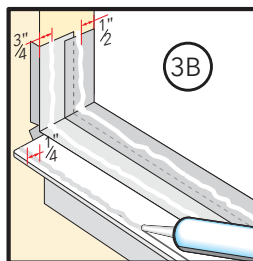
3 SETTING AND FASTENING THE DOOR

- A. If unit is equipped with a screw type pre-hanging plug for transporting, remove the screw portion from the exterior of the jamb before setting the door.

Note: If a brickmould/exterior trim is being added to the door, install and seal it to the frame at this time. Align the inside of the brickmould/exterior trim with the end of the sill.



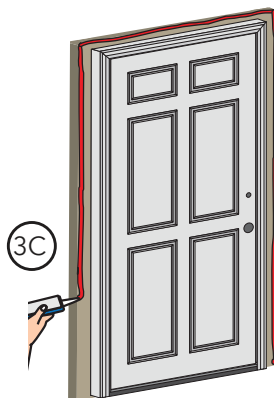
- B. **Place three 3/8" beads of sealant long the bottom of the opening.** Place the first bead approximately 3/4" from the exterior of the rough opening. Continue the first two beads up 6" onto each jamb of the rough opening. (3B). Place the second bead so it is 1/2" from the interior surface of the door sill. Place a third sealant bead in the sill support groove of 1/4" from the exterior edge of the wood blocking.



TWO OR MORE PEOPLE WILL BE REQUIRED FOR THE FOLLOWING STEPS

- C. **Apply sealant to the entire bottom surface of brickmould** to help prevent moisture absorption.

Apply sealant to the back side of brickmould around the entire perimeter of the door unit that will seal the brickmould to the wall.



3 SETTING AND FASTENING THE DOOR (CONTINUED)

Fasteners Through Brickmould Method:

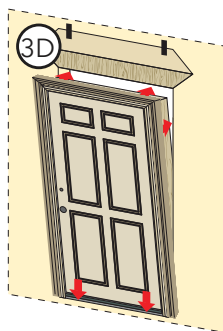
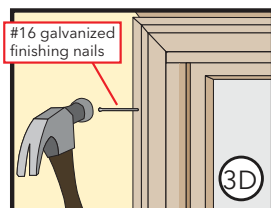
- D. **Insert the door from the exterior of the building. DO NOT slide the bottom of the door into the opening (2D).** (Sliding will damage the sealant lines.) Place the bottom of the door at the bottom of the opening, then tilt the top into position. Center the door between the sides of the opening to allow clearance for shimming.

For doors with brickmould, drive a 16d galvanized finish nail or an exterior grade finish screw through the brickmould in each upper corner to secure the door.

For doors with NO brickmould, Follow frame screw or installation clip method.

Frame Screw Method: Insert one #8 x 3" screw into the top anchor hole on each side of the frame.

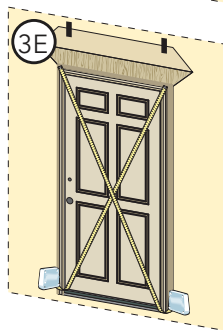
Installation Clip Method: Insert one screw into one hole in each of the top clips. These are used to hold the door in place while shimming it plumb and square.



- E. **Plumb and Square Door.** Shim unit in place by driving in shims from the interior. Shim behind each hinge, at each screw or clip location, and behind the dead bolt lockstrike. Keep shims back 1/2" from the interior face of the door frame.

Use a level to plumb the hinge side jamb both ways (right to left and inside to outside) and check for square. Make any necessary adjustments.

Note: It may be necessary to use additional fasteners for the applicable fastening method to maintain plumb in the inside to outside orientation.



Fasteners Through the Brickmould: Use 16d galvanized nails or exterior grade finish screw as needed through the brickmould.

Frame Screw Method: Insert additional screws as required through the installation holes.

Installation Clip Method: Insert additional screws as required through the holes in the installation clips frame to maintain plumb in the inside to outside orientation.

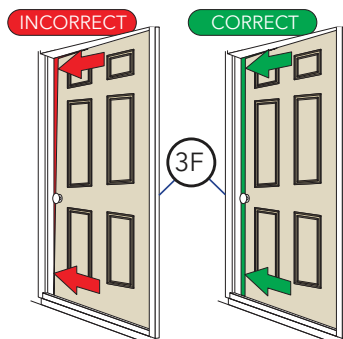
Note: DO NOT over shim. (DO NOT bow the jamb inward.)

3 SETTING AND FASTENING THE DOOR (CONTINUED)

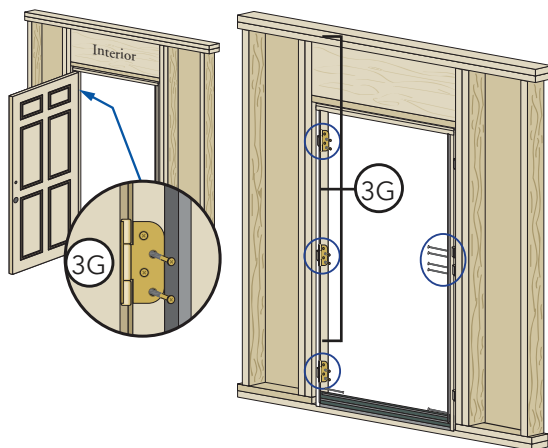
- F. **Carefully open the door and remove all shipping spacers.** Remove pre-hang plug from the bore hole. Carefully open and close the door.

Check for even contact between the door panel and weatherstrip on both jambs and across the head. (3H) If space exists between weatherstrip and door panel at top, move the bottom of the lock side out. If space appears at the bottom, move the top lock side out.

Note: By design the hinge side reveal of the door will be closer to the jamb than the lock side.



- G. **Pre-drill with 3/16"** bit through the door frame at each open hinge screw hole (not into wall framing) and drive screws (provided) through each hole in the hinge leafs, through the shims and into the wall or sidelight. Pre-drill with 3/16" bit through the frame (not into the wall framing) behind the weatherstripping at each remaining hinge side location as well as at each lock jamb shim location (and also through the holes in the lock and if applicable in the dead bolt strike) Drive #8 x 2-1/2" screws through each lock jamb shim and into the wall or sidelight. Screw heads must be driven flush with door frame to avoid interference with door operation.



- H. **Check door operation.** Open and close the door to check for proper operation.

Note: If there are any problems with the operation, recheck and adjust the reveal by adjusting the shims.

- I. **Fasteners through brickmould method:** Place and set additional 16d galvanized finish nails or exterior grade finish screws through the brickmould to achieve a final spacing of approximately 4" from ends and 24" O.C. Countersink all fasteners and cover with exterior grade putty.

3 SETTING AND FASTENING THE DOOR (CONTINUED)

Frame Screw Method:

- J. **Drill 1/8" x 1" deep pilot holes through the clearance holes** and into the rough opening framing in the head, jambs, and threshold of the door frame.

Note: Be certain to shim between jambs and rough opening at all screw locations.

- K. **Secure the jambs and head of the door.** Drive #10 x 3" corrosion resistant wood screws through the door frame and shim, into the rough opening. Drive the screws until snug but DO NOT over-tighten the screws. DO NOT bend or bow the unit frame. Apply sealant to the screw heads not located at the hinges or strikes.

Installation Clip Method:

- L. **Fasten the door to the opening by driving two #8 x 1-1/4"** corrosion resistant screws into the pre-punched holes in the clips. If the clips are bent and fastened to the interior stud/block, install the screws as close to the bend as possible.

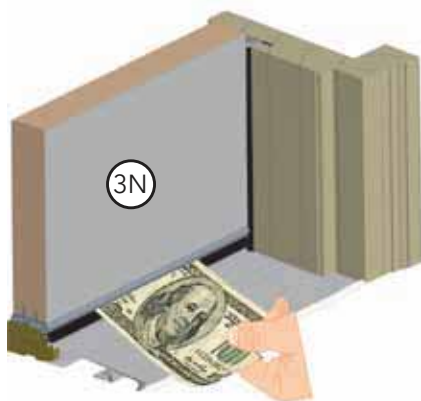
Note: DO NOT shim above the door. For masonry openings use two masonry screws a minimum size of 3/16" x 1-1/2" per clip. Pre-drill the masonry per screw manufacturer's recommendations.

Frame Screw and Installation Clip Methods:

- M. **Sidelights of combinations only:** Drive # 10 x 3" through each of the holes in the sill. Apply sealant to the screw heads not located at the hinges or strikes.

Note: For concrete floors, use masonry screw a minimum size of 3/16" diameter x 3". Pre-drill the masonry per screw manufacturer's recommendations.

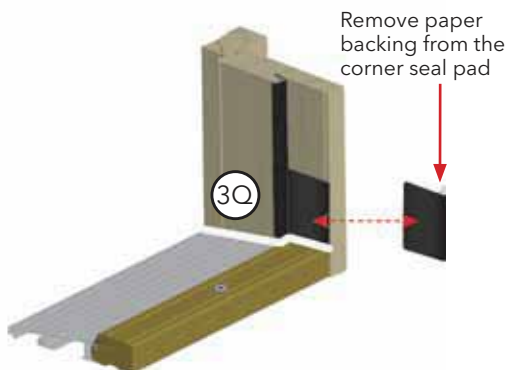
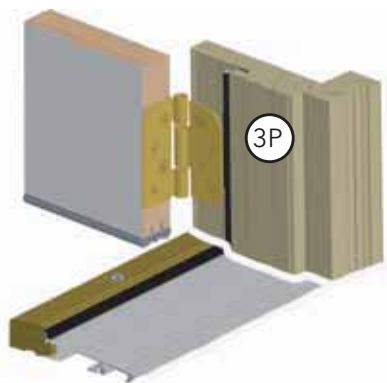
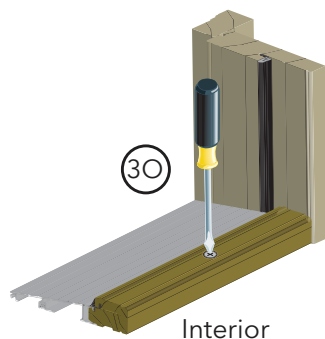
- N. **Check for sufficient weatherstrip contact between the bottom weatherstrip** and the threshold. Close the door on a dollar bill or sheet of paper located above an adjustment screw; light friction should be felt when pulling the paper out indicating a good seal is being made. If there is not, adjust the threshold. Repeat for each adjustment screw.



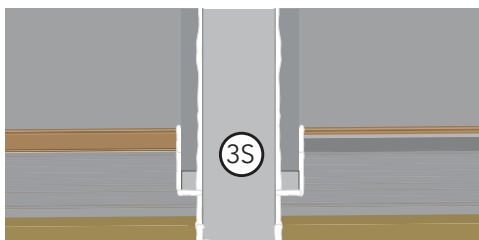
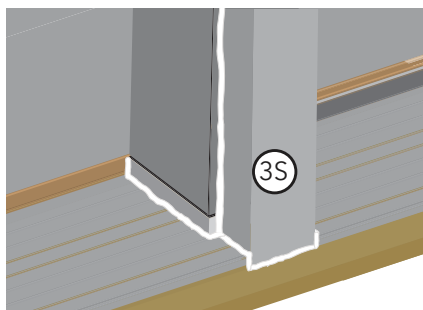
3 SETTING AND FASTENING THE DOOR (CONTINUED)

- O. **If needed, the height of the threshold can be adjusted** to achieve appropriate contact with the door sweep. Remove screw cover caps as necessary and use a #3 Phillips screwdriver to turn the adjustment screws clockwise to lower the threshold or counter-clockwise to raise the threshold.
- P. **Place a 1/4" bead of sealant** along the corners where the sill meets both side jambs.
- Q. **Before the sealant sets up;** remove paper backing from the corner seal pad and position the pad embedded in the sealant and tight against the top of the adjustable threshold, with the thin portion of the pad flush with the interior face of the jamb (both jambs).
- R. **Install handle and lock hardware.** Refer to manufacturer's instructions included with the hardware.

Note: At this time, install any additional fasteners if needed to meet local code requirements such as those required to comply with the Florida Building Code.



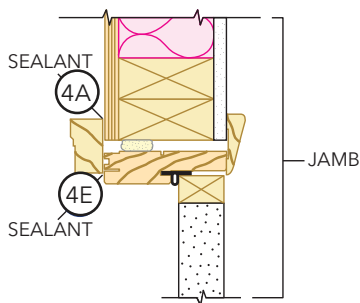
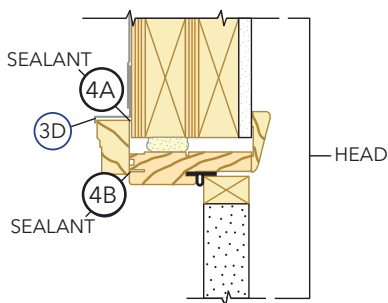
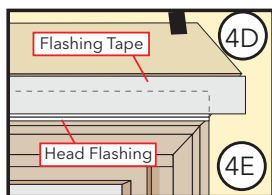
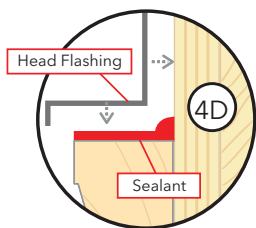
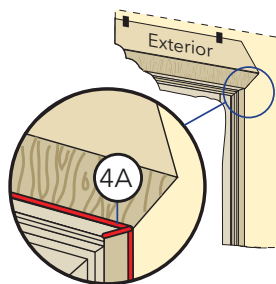
- S. **Apply 1/4" bead of sealant where each sidelight jamb meets the sidelight sill** and around the exterior mullion cover where the door and sidelight frame are joined together.



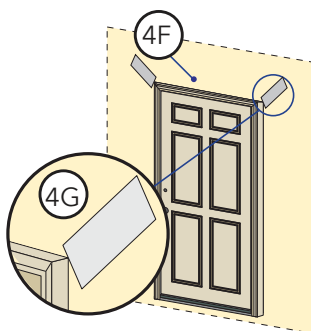
Front View

4 INTEGRATING THE DOOR TO THE WEATHER RESISTIVE BARRIER

- A. **Place a corner bead of sealant** between the brickmould and the exterior wall.
- B. **Place a corner bead of sealant** between the brickmould and the exterior door frame.
- C. **Place sealant over brickmould miter joints.** Tool all sealant lines and remove any excess sealant.
- D. **Install aluminum flashing** over the top of the head brickmould or trim. Seal both ends of the flashing to the top brickmould and the wall.



- E. **Install top flashing tape.** Cut one piece of flashing tape 2" wider than the width of the top brickmould. Apply the top flashing tape so it extends 1" beyond the end of the top brickmould. Position the tape so it covers the vertical leg of the aluminum flashing and laps onto the sheathing above the door.
- F. **Fold down the top flap of the weather resistive barrier.** Cut the barrier so it covers the vertical leg of the aluminum flashing, however does not lap onto the horizontal leg of the flashing.
- G. **Apply flashing tape to the diagonal cuts.** Cut pieces of flashing tape at least 1" longer than the diagonal cut in the weather resistive barrier. Apply the tape covering the entire diagonal cut at both upper corners of the door. Press the tape down firmly.



5 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. Apply sealant across the interior surface of shims to create a continuous seal. Follow foam manufacturer's instructions. For doors with jamb extensions installed, ensure the foam is placed between the door frame and the rough opening, not between the jamb extension and the rough opening.

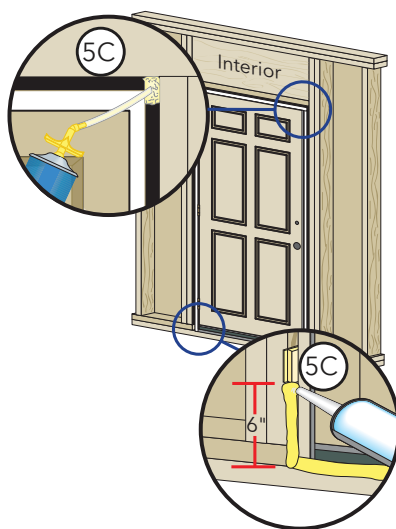
Note: DO NOT apply foam to the lower 6" of each jamb. (see 5D).

Note: DO NOT completely fill the space from the back of the brickmould to the interior face of the opening.

Note: You may need to cut excess foam out of the lock strike.

- 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, square and the sides are not bowed. If adjustments are required, remove the foam with a serrated knife. Adjust the shims and reapply the insulating foam sealant.



- C. **Add a sealant bead across the inner sill and 6" up each jamb** between the frame and rough opening and tie in with the foam sealant application.

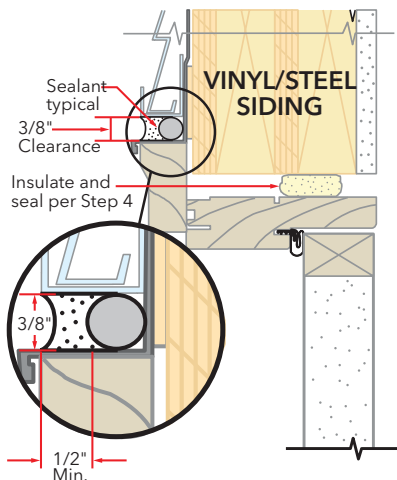
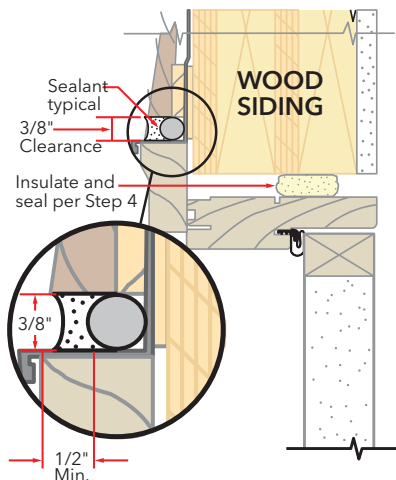
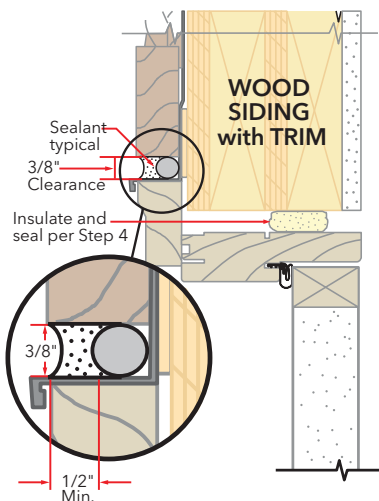
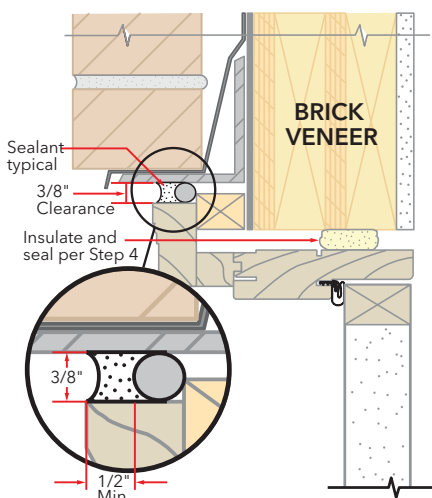
- D. **Apply interior trim as desired.**

Note: Use backer rod between the frame jamb and opening 6" up each jamb in accordance with sealant manufacturer's instructions.

6 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.

Note: If brickmould or exterior trim is not used, install backer rod and sealant between door frame and adjacent material.

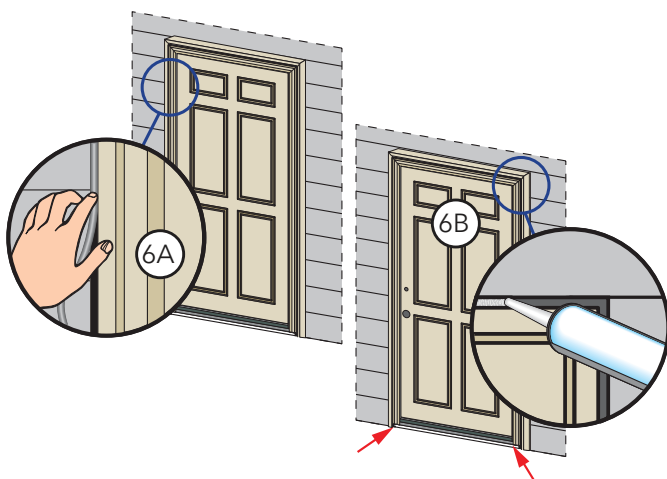


6 SEALING THE DOOR TO THE EXTERIOR WALL CLADDING (CONTINUED)

- A. **Insert backer rod into the space around the door** so there is approximately 1/2" clearance between the backer rod and the face of the door frame.

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 and connect it to the perimeter sealant.



- C. **Apply a bead of sealant** between the exterior edge of the sill and the sill support.
- D. **Shape, tool and clean excess sealant.**

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

FINISHING INSTRUCTIONS

Paint or finish immediately after installation.

Note: DO NOT paint, stain or finish weather strip or vinyl parts! If paint, stain or finish gets on the weather stripping, wipe it off immediately with a damp cloth. To maintain proper product performance, do not remove weather strip, foam corner seal wedges or gaskets. Air and water leakage may result if these factory-installed items are removed. After finishing, allow doors to dry completely before closing them. Pella will not be responsible for finishing imperfections. The use of unapproved finishes, solvents or cleaning chemicals may cause adverse reactions with door materials. Pella will not be responsible for problems caused by the use of unapproved materials. If in doubt, contact your local retailer or representative.

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

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 on www.pella.com.

Factory Prefinished Panels: A door panel that has been prefinished with stain or paint from the factory requires no additional finishing. Clean the surface with mild soap and water. **DO NOT** use abrasives. **DO NOT** scrape or use tools that might damage the surface.

Clad Exterior Frame:

The exterior frame is protected by aluminum cladding with our tough EnduraClad® baked-on-factory finish that needs no painting. Clean this surface with mild soap and water. **DO NOT** use abrasives. **DO NOT** scrape or use tools that might damage the surface.

Panel Cleaning and Prep Instructions for Unfinished or Primed Panels:

Dry wipe dust from doors gently. Examine door for possible smudges or fingerprints made from normal handling or construction. To remove smudges, lightly wipe surface with warm water. **DO NOT** sand surface of fiberglass panel. Scuff sand with light grade sand paper or abrasive pad (220 grit or higher). Rinse surface with mineral spirits for fiberglass panels and warm water for steel panels. Let door and sidelight surfaces dry completely before applying finish. Finish the door panels as soon as possible after installation.

Staining fiberglass panels or unfinished interior frame members:

Fiberglass door and sidelight panels may be stained with a gel stain if a wood look is desired. Pella offers stain kits in a variety of colors. Apply and finish per the stain kit manufacturer's instruction. Ensure that all exposed panel edges are finished to minimize the chance of damage. Unprimed interior frame parts may be stained with wood stains and should be finished with a minimum of two coats of a clear polyurethane finish. **DO NOT** bridge the top coat between the outer edge of the glazing frame and the door panel.

Note: The fiberglass base color tone will vary. This variance is normal and will not impact the stain color of the door.

FINISHING INSTRUCTIONS (CONTINUED)

Painting Instructions:

Wood door frame exteriors, premium steel door panels, sidelights are factory primed. If a paint finish is desired, finish the parts with two coats of a 100% latex paint that has a good blocking resistance. On units with glass, do not bridge paint between the outer edges of the glazing frame and the door panel. On fiberglass products, brush the paint in the same direction as the simulated wood grain. Ensure that all exposed panel edges are finished to minimize the chance of panel damage.

Failure to use the correct type of finish may result in a door that sticks shut. Ask a qualified paint professional to specify a product with good blocking resistance.

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 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.