





# CLAD WOOD SUBSILL INSTALLATION INSTRUCTION


## Installation Instructions for Typical Masonry Wall Construction.


These instructions were developed and tested for use with typical masonry 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 or multiple units may be obtained from Pella® Corporation or your local Pella retailer. Building designs, construction methods, building materials, and site conditions unique to your project may require an installation method different from these instructions and/or additional care. Determining the appropriate installation method is the responsibility of you, your architect, or construction professional.


### YOU WILL NEED TO SUPPLY:


- Cedar or Impervious shims/spacers (12 to 20) 


- Closed cell foam backer rod/sealant backer (12 to 30 ft.) 


- Pella® SmartFlash™ foil backed butyl window and door flashing tape or equivalent 


- High quality exterior grade polyurethane or silicone sealant (1 to 2 tubes per window) 


- 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 


- Installation clips 


- #8 x 1-1/4" or longer corrosion resistant screws 


- #6 x 5/8" flat head corrosion resistant wood screws 

- 3/16" x 1-1/2" masonry screws 


- #8 x 1-3/4" and/or #8 x 2-1/2" corrosion resistant finish screws 

- 1" frame expander 


- Wood subsill 


- Subsill clips 


### TOOLS REQUIRED:


- Tape measure 


- Level 

- Square 

- Hammer 

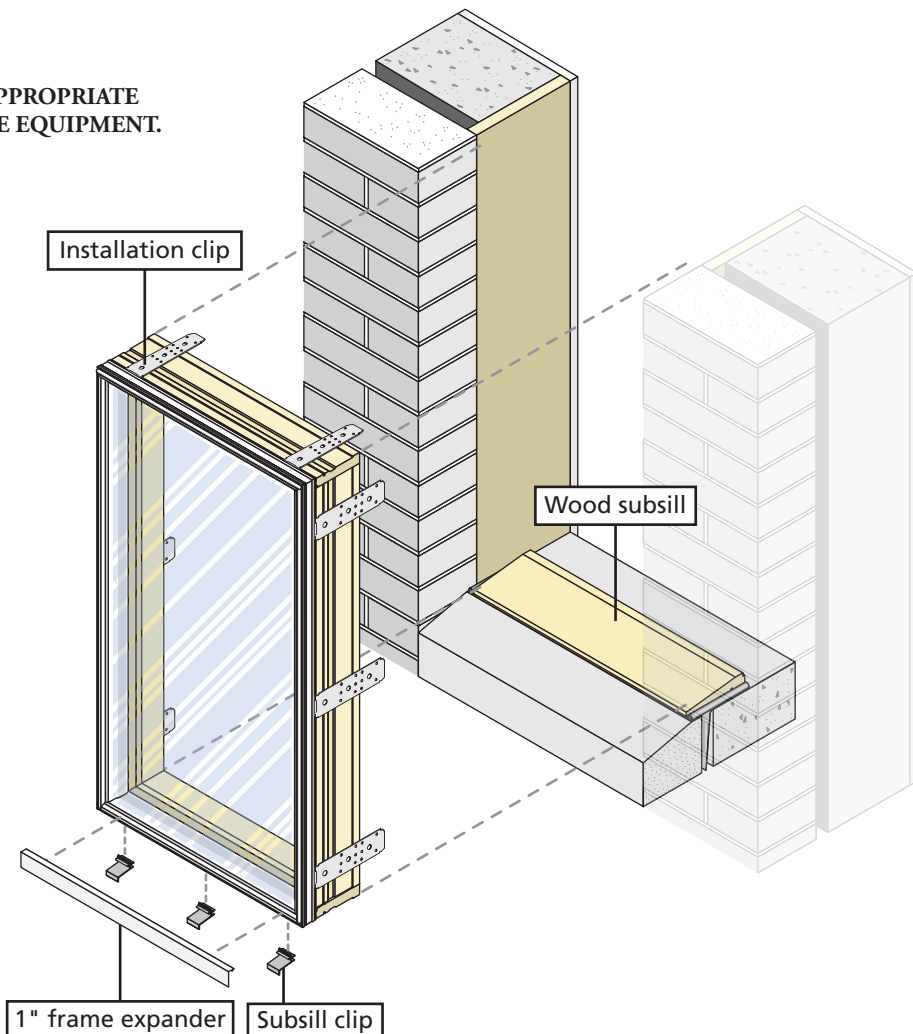
- Utility knife 

- Caulk gun 

- Screwdrivers #2 Phillips and Flat blade 

- 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 PREPARING THE OPENING

- A. Check the opening to ensure the product will fit. Unit or combination width plus 3/4", frame height plus 1-1/2".
- B. Ensure the sill of the rough opening is level from side to side and from interior to exterior.

# 2 INSTALLING SUBSILL

- A. Cut the subsill 1/4" shorter than the opening width.

*Note: If the opening width is greater than 96-1/4", the subsill may be spliced. When splicing, the minimum length of any one piece of subsill should be 24".*

- B. Determine the location of the subsill in the opening. The exterior edge of the subsill should be positioned 1/8" back from the exterior face of the window. The window should be positioned so that the exterior face of the window frame extends a minimum of 3/4" onto the exterior wall material to allow for the application of backer rod and sealant (see illustrations in Step 5 for sealant details).

- C. Apply a minimum 3/8" tall bead of sealant to the sill of the rough opening, 1" back from the exterior edge of the subsill. Ensure there is a continuous seal between the subsill and the rough opening.

- D. Apply a minimum 3/8" tall bead of sealant where the sill and jamb of the rough opening meet.

- E. Apply a minimum 3/8" tall bead of sealant to the bottom of the subsill, 1" back from the interior edge of the subsill, and 1/4" from each end.

*Note: When splicing the subsill, place a bead of sealant on each surface being spliced.*

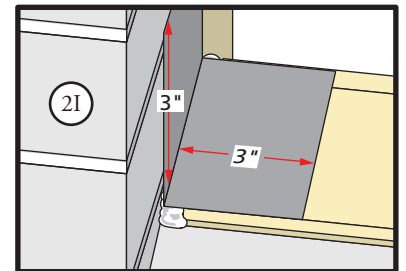
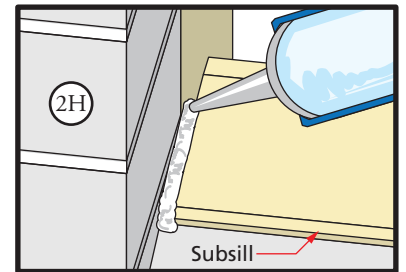
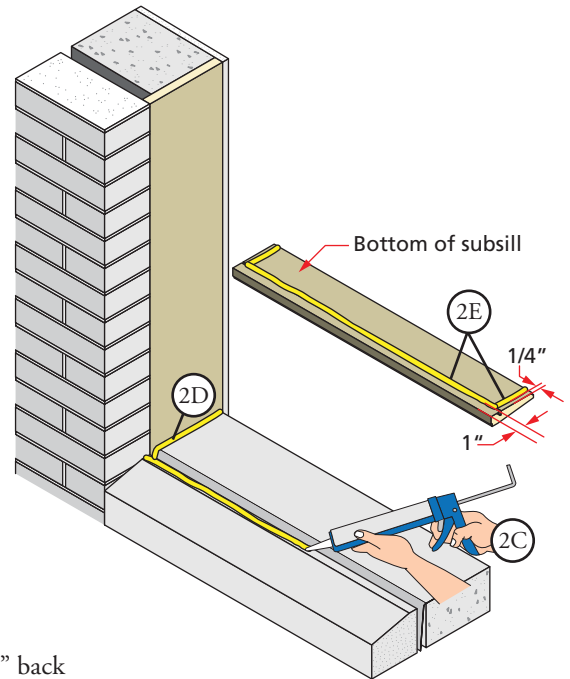
- F. Place the subsill in the opening.

- G. Fasten the subsill to the sill of the rough opening using #8 x 2-1/2" flat head corrosion resistant screws or masonry screws with a minimum of 1" embedment. Place screws 4" from each end and not more than 16" on center. Ensure the subsill is level from the interior to the exterior. Additional screws may be installed to ensure the subsill remains level while installing the windows.

- H. Seal the ends of the subsill to the rough opening jambs with corner beads of sealant.

- I. Cut two 6" long pieces of flashing tape. Apply the tape to the ends of the subsill; lap 3" onto the subsill and 3" up the rough opening on each side.

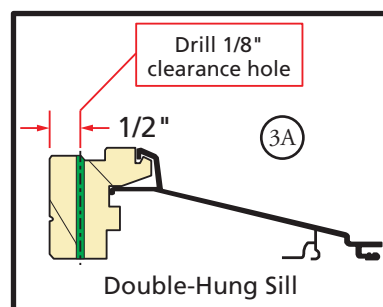
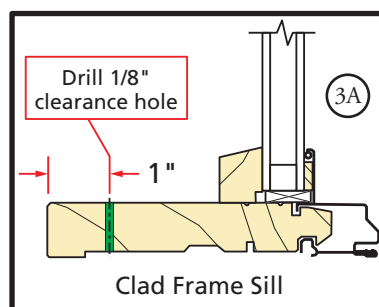
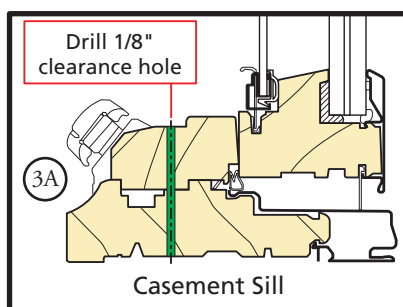
*Note: If the subsill has been spliced, place a piece of tape on the sloped surface of the subsill, centering the tape on the splice joint. The tape should cover the joint on the top and exterior face of the subsill.*



# 3 PREPARING AND INSTALLING WINDOWS

- A. Pre-drill 1/8" diameter installation holes into the sill of the window. Place the holes 6" from each end and not more than 16" on center.

*Note: On vent casements, place the holes so that they do not interfere with the roto operator and the latch points on the lock side of the window.*

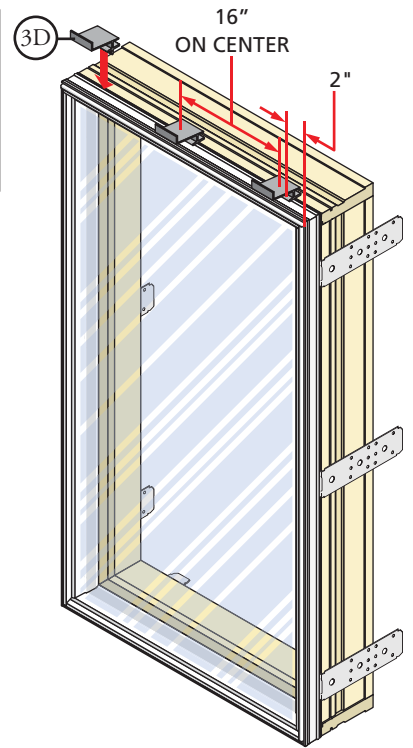
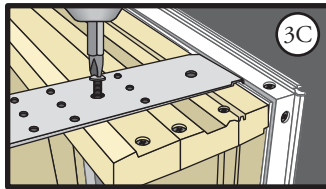
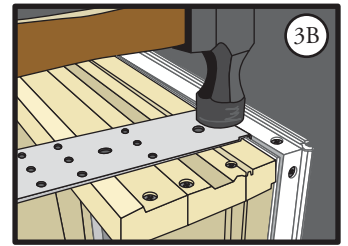
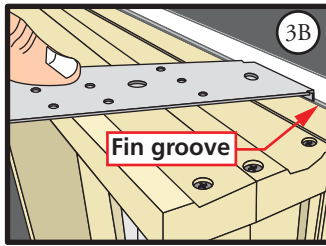


- B. **Install the installation clips into the fin grooves** at the window head and jambs. Hold the clip so that one corner is started into the fin groove. Using a hammer, tap that corner into the fin groove, then tap the other corner of the clip into the fin groove. Position the clips beginning 6" from each end, then uniformly spaced not more than 16" on center.

*Note: Double-Hung windows only - Ensure a clip is positioned at the mid point of the jambs.*

- C. **Drive one #6 x 5/8" screw** through the slotted hole in the center of each clip.

- D. **Place subsill clips on the bottom of the window 2" from the ends and not more than 16" on center.**



## 4 SETTING AND FASTENING THE WINDOW

- A. **Slide the window into the opening**, placing the bottom of the window on the subsill at the bottom of the opening. Center the window between the sides of the opening to allow clearance for shimming, and insert one #8 x 1-1/4" or longer screw into one hole in each of the top corner clips. This will hold the window in place while shimming it plumb and square.

*Note: For masonry openings use one 3/16" x 1-1/2" masonry screw.*

- B. **Place shims between the installation clips/window jamb and the sides of the rough opening.** Double-hung vent units, place shims at the midpoint of the window side. Adjust the shims as required to plumb and square the window in the opening.

*Note: DO NOT shim above the window or between the subsill and the bottom of the window. DO NOT over shim.*

- C. **Fasten the window to the opening** by driving 1-1/4" or longer screws into the pre-punched holes in the clips.

*Note: For masonry openings use one 3/16" x 1-1/2" masonry screw per clip.*

- D. **Install a corrosion resistant finish screw** into the pre-drilled holes at the sill. Use #8 x 2-1/2" for casement and double-hung or #8 x 1-3/4" for clad frame and circle head.

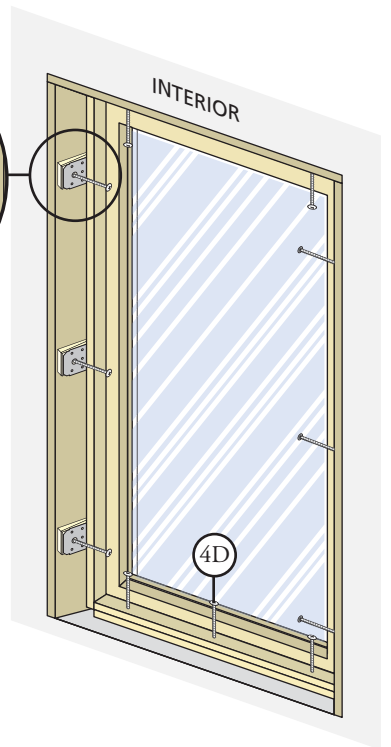
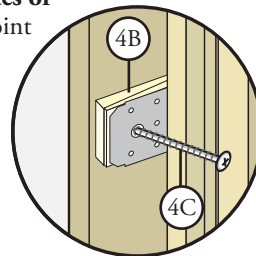
- E. **Check window operation** (vent units only).

**Architect Series and Designer Series Double-hung:** Cut the checkrail bands and remove the shipping spacers. Open and close the window a few times to check for proper operation. Make sure the window will tilt correctly. Close and lock the window.

**ProLine Double-hung:** To remove the side spacers, slide them up to approximately 4" above the bottom sash. Lift the clip by the interior leg and rotate upward to remove. Raise the bottom sash approximately 2", and tilt the sash in by depressing the jamb liner and pulling inward on the top corners of the sash. Remove the sash clips and return the sash to its original position.

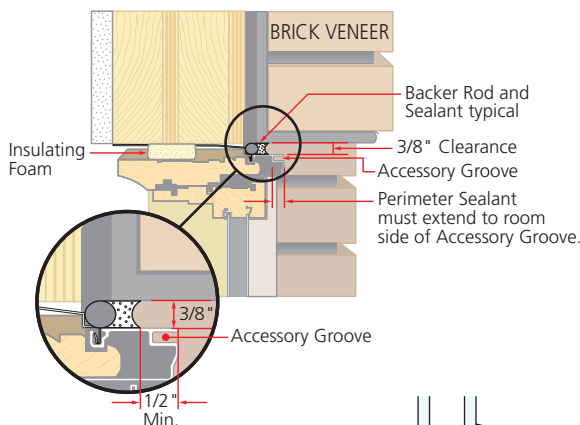
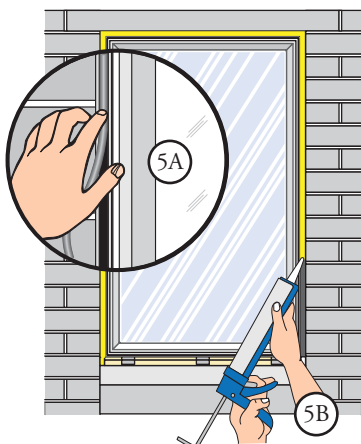
**Casement:** Unlock the window by lifting up on the lock handle. Turn the crank to open the window. Remove the shipping spacers from between the sash and window frame. Close and lock the window.

*Note: If there are any problems with the operation of the window, recheck shim locations and adjust for plumb and square.*



# 5 SEALING THE WINDOW TO THE EXTERIOR WALL CLADDING

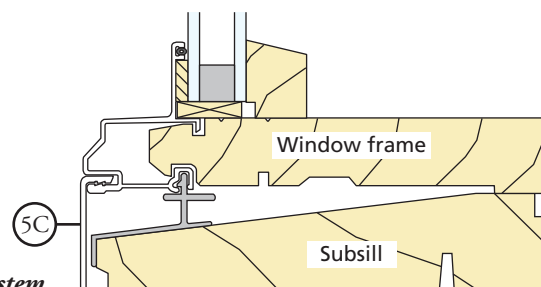
- A. From the exterior, insert backer rod at the top and sides into the space between the window frame and the rough opening. The backer rod should be approximately 3/4" back from the face of the windows.



- B. Apply a bead of high quality exterior grade sealant to the top and sides of the window. Connect the sealant at the sides to the sealant line between the subsill and the side of the opening. Connect the perimeter sealant at the top of the opening to the mullion reinforcement.

- C. Place a 1" frame expander at the sill of the opening.

*Note: DO NOT seal the frame expander to the opening, as this is the weep system.*



# 6 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 window to bow and hinder operation.

- A. **Apply insulation foam.** From the interior, apply foam at each clip location, between the installation clip and the rough opening. Then, insert the nozzle between the window frame and the rough opening and apply a 1" deep bead of insulation, ensuring the insulating foam is between the window frame (not the jamb extension) and the rough opening. Also ensure the insulating foam is deep enough to contact the flashing tape at the bottom of the rough opening. 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 backer rod to the interior face of the opening.*

- B. **Vent windows only:**

**Check window operation** by opening and closing the window.

*Note: If the window does not operate correctly, check to make sure it is still plumb, level and that 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. **Apply a bead of sealant to the interior groove of the subsill,** sealing it to the sill of the windows.

*Note: This bead of sealant must connect to the insulating foam at the sides of the opening.*

- D. **On the interior, apply a bead of sealant at each end of the subsill,** connecting the bead at the top of the subsill to the sill of the rough opening.

