

## INSTALLATION INSTRUCTION - INSTRUCCIONES DE INSTALACIÓN FOR DOUBLE-HUNG BAY AND CASEMENT BAY WINDOW







Lea las instrucciones en español en el reverso.

*Note: These instructions may be used for all Bay windows and for Bow windows that have a head and seat board.*


### 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.** 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. Installation instructions for use with other construction methods may be obtained from Pella Corporation or a local Pella retailer. Determining the appropriate installation method is the responsibility of you, your architect, or construction professional.

#### YOU WILL NEED TO SUPPLY:

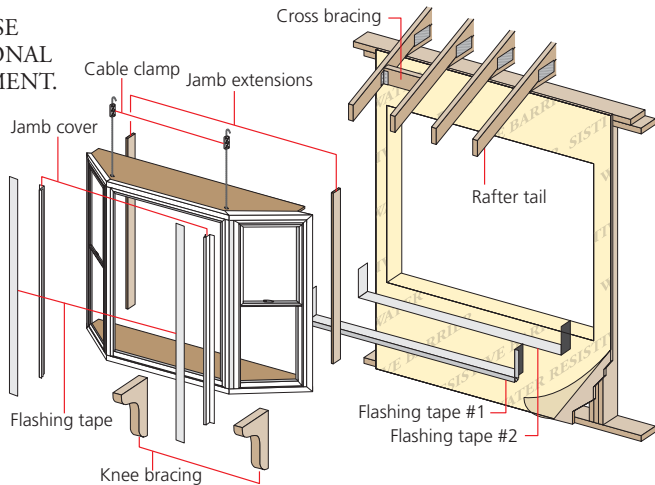
- Cedar shims/spacers (12 to 20) 
- #8 x 2-1/2" flat head corrosion resistant wood screws (16 to 20) 
- Closed cell foam backer rod/sealant backer (12 to 30 ft.) 
- Pella® SmartFlash™ foil backed butyl window and door flashing tape or equivalent 
- Great Stuff™ Window and Door Insulating Foam Sealant 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 or silicone sealant (1 tube per window) 

#### TOOLS REQUIRED:

- Tape measure 
- Level 
- Square 
- Hammer 
- Stapler 
- Scissors or utility knife 
- Drill with a #2 Phillips and #3 square drive bit 
- 1/2" open end wrench 
- 3/16" wrench or socket 
- Sealant Gun 

*Installation will require two or more persons for safety reasons.*

REMEMBER TO USE  
APPROPRIATE PERSONAL  
PROTECTIVE EQUIPMENT.



Always read the Vinyl Window and Door Limited Warranty before purchasing or installing Vinyl Windows and Doors manufactured by Pella Corporation. 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

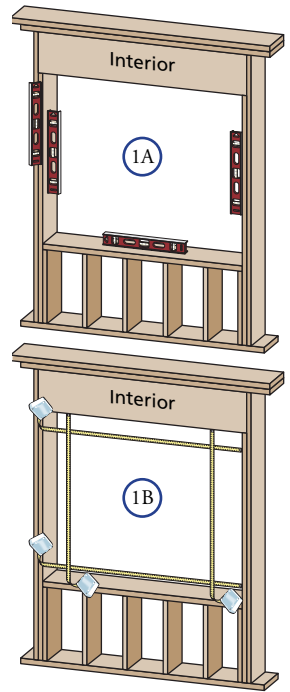
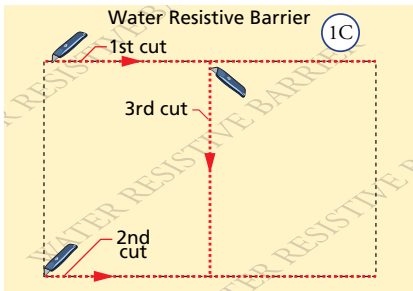
- A. Verify the opening is plumb and level.

*Note: It is critical that the bottom is level.*

- B. **Verify the window will fit the opening.** Measure all four sides of the opening to make sure it is 1/2" larger than the window in both width and height. Measure the width and height in several places to ensure the header or studs are not bowed.

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

- C. **Cut the water resistive barrier.** Fold sides, top and bottom flaps into the opening and staple to inside wall.



- D. **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 (1D) so it overhangs 1" to the exterior.

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

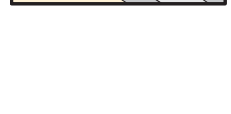
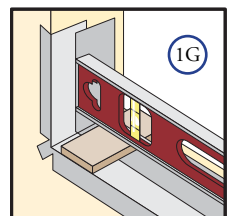
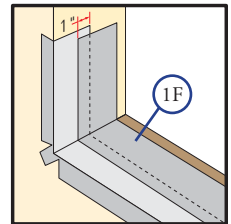
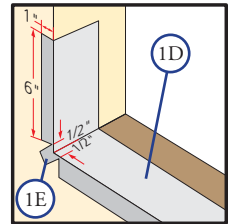
- E. **Tab the sill flashing tape and fold.** Cut 1" wide tabs at each corner (1/2" from each side of corner) (1E). Fold tape to the exterior and press firmly to adhere it to the water resistive barrier.

- F. **Apply sill flashing tape #2.** Cut a piece of flashing tape 12" longer than the opening width. Apply at the bottom, overlapping tape #1 by at least 1". Do not allow the tape to extend past the interior face of the framing (1F).

*Note: The flashing tape may not fully cover the framing members.*

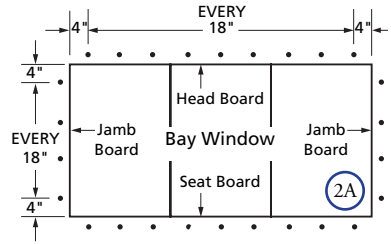
- G. **Install and level sill spacers.** Place 1" wide by 1/4" thick spacers on the bottom of the opening 1/4" from each side. Add shims as necessary to ensure the spacers are level. Once level, attach spacers and shims to prevent movement.

*Note: Improper placement of shims or spacers may result in bowing the seat board.*



## 2 PREPARING THE WINDOW

- A. **Drill 1/8" diameter installation holes 2" from the interior edges of the head board, seat board, and jamb boards.** Holes should be placed 4" from each end and not more than 18" on center.

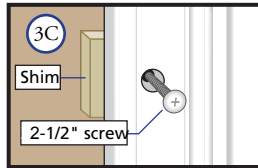
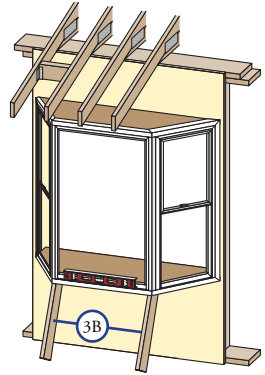


## 3 SETTING THE WINDOW

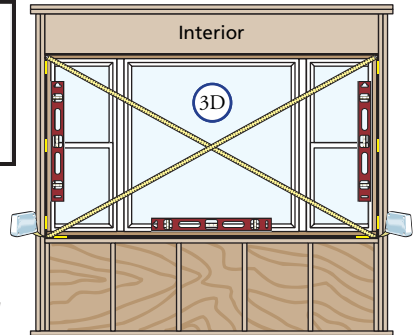
TWO OR MORE PEOPLE WILL BE REQUIRED FOR THE FOLLOWING STEPS

*Note: In some installations, the cable clamps will not be accessible for cable attachment and adjustment after the window is installed. For this type of installation proceed to Soffit Installation of Cable Clamps - Non Accessible Cable Attachment. The cable will have to be measured before the window is installed.*

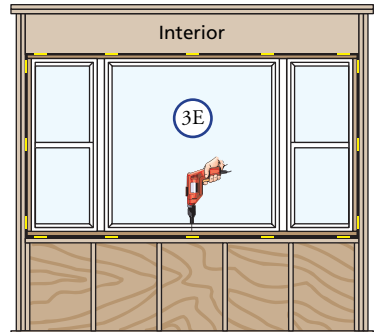
- A. **Insert the window from the exterior of the building.** Place the seat of the window at the bottom of the opening and slide the top into position. Center the window between the sides of the opening to allow clearance for shimming.
- B. **Place temporary bracing** under the seat of the window and raise the unit until level as shown (3B).
- C. **Place a shim** near the top of one jamb board, in line with the top pre-drilled hole in the jamb board. Partially insert a #8 x 2-1/2" flat head screw (not provided). Repeat process for other jamb.



- D. **Continue placing shims at each pre-drilled installation screw hole in jamb boards** as needed to plumb and square the window. Check window for squareness by making sure diagonal measurement from corner to corner is within 1/8" in both directions. Insert a #8 x 2-1/2" flat head wood screw into each pre-drilled hole in the jamb boards. Finish inserting the top screw in each jamb board.

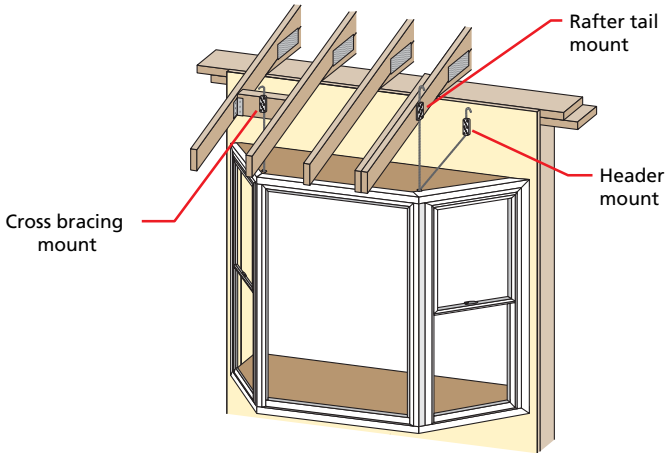


- E. **Place shims between the head and seat boards** at each pre-drilled installation screw hole, and install a #8 x 2-1/2" flat head wood screw in each hole.



# 4 CABLE CLAMP INSTALLTION

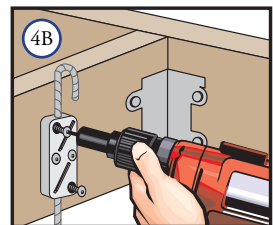
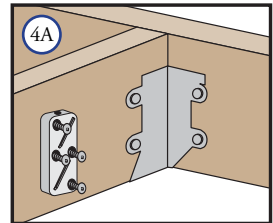
*Install Cable Clamps based on type of installation needed. Cross Bracing Installation consists of attaching 2" x 6" cross bracing between rafter tails. Header Mount Installation consists of attaching to a solid structural member - header, sill plates or wall stud.*



## CROSS BRACING MOUNT OF CABLE CLAMPS

- A. **Install 2" x 6" cross braces** between rafter tails, directly above the cable holes in the bay/bow head board.
- B. **Install the cable clamps** directly above the "T" nuts where adequate support is available. Holding the clamp parallel to the up-running cable, drive the #12 x 3-1/4" square screws part way into the mounting surface using a #3 square drive bit.
- C. **Run the cable up through the bottom of the cable clamp.** Hold the cable up tight above the clamp and drive the two center clamp screws all the way in, locking the cable in place. Drive in the remaining #12 x 3-1/4" square screws all the way.

*Note: Make sure all 4 screws are driven in at maximum torque. Additional tensioning may be done with the nuts on the opposite end of the cable at the bottom of the bay/bow unit.*

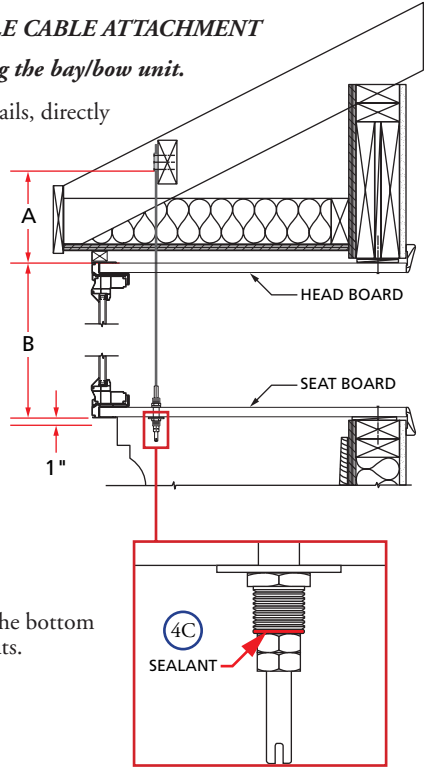


# 4 CABLE CLAMP INSTALLATION (CONTINUED)

## CROSS BRACING MOUNT - NON ACCESSIBLE CABLE ATTACHMENT

*Note: Install the cable clamp prior to installing the bay/bow unit.*

- A. **Install 2" x 6" cross braces** between the rafter tails, directly above the cable holes in the bay/bow unit.
- B. **Remove the cable from the window.** Measure the distance from the bottom of the cable clamp (A dimension). Measure the height of the unit from the top of the head board to the bottom of the seat board (B dimension). Add "A" to "B" to get the correct length of cable hanging below the bottom of the cable clamp. Insert the cable end through the round hole of the cable clamp. Ensure the correct length of cable is hanging below the bottom of the cable clamp. Tighten the two cable clamp corners screws. Insert one screw into each of the center holes in the cable clamp, and tighten to fully lock the cable in place.
- C. **Apply sealant** to where the cable goes through the bottom of the hex bushing, before tightening the two nuts.



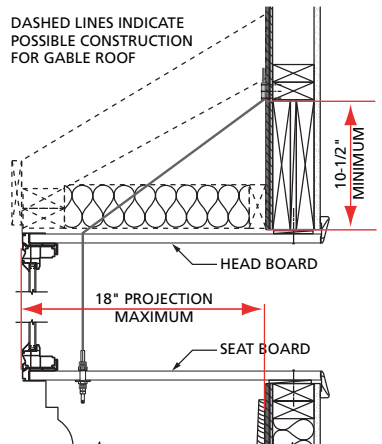
## HEADER MOUNT OF CABLE CLAMPS

This method may only be used if the projection of the bay/bow is 18" or less. Use the cross bracing method if the projection of the bay/bow is more than 18".

*Note: Be sure that the cable clamps are secured to a solid structural member - header, sill plates or wall stud. If the structural member or cable clamps are not securely attached, they may loosen during or after installation causing the unit to sag.*

- A. **Install the cable clamps.** Drive the #12 x 3-1/4" square screws part way into the mounting surface using a #3 square drive bit.
- B. **Run the cable up through the bottom of the cable clamp.** Hold the cable up tight above the clamp and drive the two center clamp screws all the way in, locking the cable in place. Drive in the remaining #12 x 3-1/4" square screws all the way.

*Note: Make sure all 4 screws are driven in at maximum torque. Additional tensioning may be done with the nuts on the opposite end of the cable at the bottom of the window.*



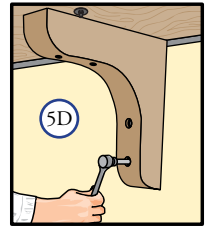
# 5 FASTENING THE WINDOW

- A. **Tighten the top hex nut on both cable ends.** Using a 3/16" wrench or socket, hold the cable end in position while tightening the top hex nut with a 1/2" wrench or socket. This will keep the cable from twisting as the hex nuts are tightened with a wrench.
- B. **Remove the temporary bracing.** Check the window for level, plumb, sash reveal and operation. Readjust, if needed.

*Note: Be sure to use the temporary support when readjusting the nuts.*

- C. **Tighten the locking (bottom) nut on both cable ends and remove the temporary support** once the final position is found. DO NOT cut the threaded end off the cable as this will prevent future adjustment should it be needed.

- D. **Installation of knee braces is recommended** to help support the weight of the bay/bow unit. Weight calculations must take into account the weight of the items that may be placed on the seat board of the bay/bow unit. Knee braces are required if more than 800 lbs. (not including the weight of the window units) will need to be supported by the window seat board.

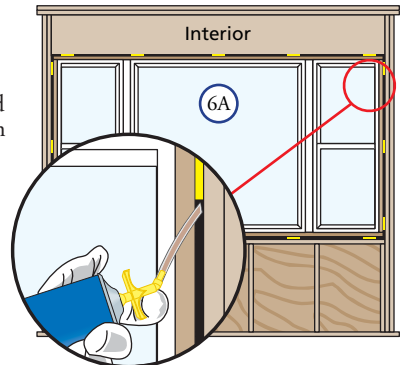


# 6 INTERIOR SEAL

*Caution: Ensure use of low pressure polyurethane window and door insulating 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 frame to bow and hinder operation.*

- A. **Apply insulating foam sealant.** From the interior, insert the nozzle of the applicator approximately 1" deep into the space between the window 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: It may be necessary to squeeze the end of the tube with pliers to be able to insert into the space between the jamb boards and the rough opening, and between the head and seat board and the rough opening.*

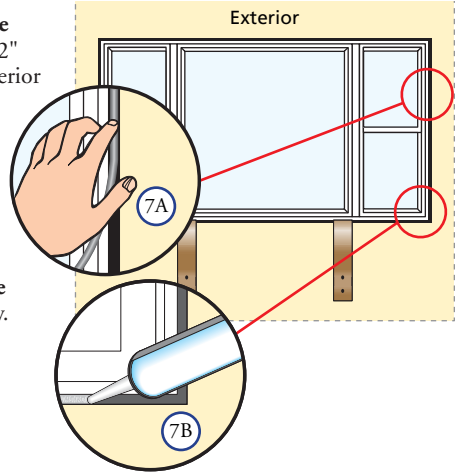


# 7 SEALING THE WINDOW TO THE EXTERIOR WALL CLADDING

When applying siding, brick veneer or other exterior finish material, leave adequate space between the window frame and the material for sealant.

- A. **Insert backer rod into the space around the window** deep enough to provide at least a 1/2" clearance between the backer rod and the exterior face of the wall sheathing.

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

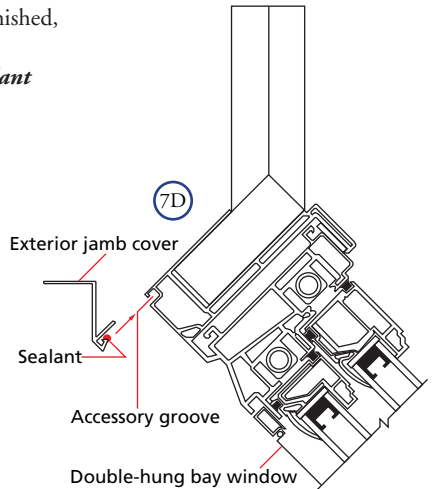


- B. **Apply a bead of high quality exterior grade sealant** to the entire perimeter of the window.

- 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.*

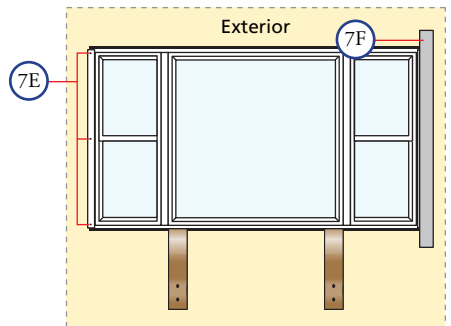
- D. **Install the exterior jamb covers onto the outer two windows.** Apply a bead of sealant to the edge of the leg that will be driven into the accessory groove. Drive the short leg into the accessory groove using a block of wood with rounded edges and a hammer.



- E. **Nail the jamb covers to the wall** using one nail on each end, and one in the center.

- F. **Cut two pieces of flashing tape 6" longer** than the frame height of the window. Apply the flashing tape 3" above the top of the jamb over, overlapping it onto the water resistive barrier.

- G. **Install roofing material per the manufacturers instructions.**



## CLEANING INSTRUCTIONS

Remove labels and clean the glass, using a soft, clean, grit-free cloth and mild soap or detergent. Be sure to remove all liquid by wiping dry or use a clean squeegee. The vinyl frame may be cleaned as described above. For stubborn dirt, a “non-abrasive” cleaner such as Bon-Ami® or Soft Scrub® may be used. DO NOT use solvents such as mineral spirits, toluene, xylene, naphtha or muriatic acid as they can dull the finish, soften the vinyl and/or cause failure of the insulated unit seal. Keep weep holes open and clear of obstructions.

## 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.