



## INSTALLATION INSTRUCTION - INSTRUCCIONES DE INSTALACION 350 SERIES WINDOW WITH NAIL FIN

*Lea las instrucciones en español en el reverso.*

Illustrations shown are for a Double-Hung Window product. The steps are the same for Single-hung, Sliding, Fixed, Casement, and Awning units. Notes are provided at steps where the information is not the same for all products.

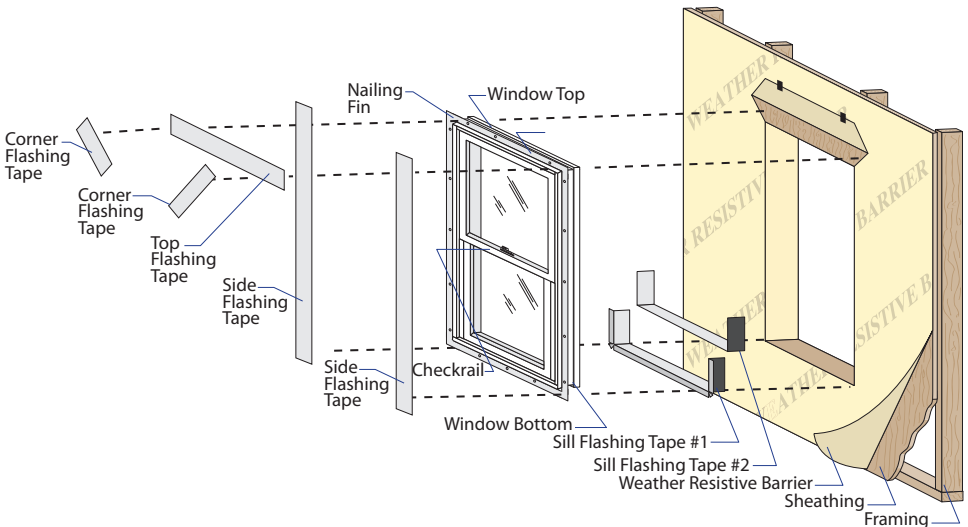
### Installation Instructions for Typical Wood Frame Construction.

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 or a 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 additional care. Determining the appropriate installation method is the responsibility of you, your architect, or construction professional.

### Handling and Storage:

Provide full support under the framework while storing, moving and installing the product. **DO NOT** lift the product by the head member only. Remove the plastic shipping material prior to storing or installing the product. **DO NOT** store in direct sunlight. Allow sufficient spacing between products for ventilation.

**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>.

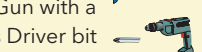
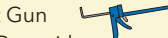
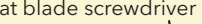
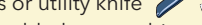
## YOU WILL NEED TO SUPPLY:

- Impervious or composite shims/spacers (12 to 20)
- 1-1/2" galvanized roofing nails (1/4 lb.)
- Closed cell foam backer rod/sealant backer (12 to 30 ft.)
- #10 x 2" Corrosion-resistant screws  
(See Anchor Table for use)
- Fender washers for #10 screws
- 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
- Small flat blade screwdriver
- Sealant Gun
- Screw Gun with a Phillips Driver bit



*Installation will require (2) or more persons for safety reasons.*

# 1 ROUGH OPENING PREPARATION

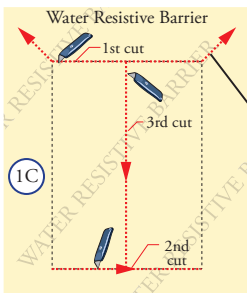
- A. **Confirm the opening is plumb, level and square.** Ensure the bottom of the rough opening does not slope toward the interior.

**Note:** Do not install in out-of-square opening or on a surface that is not level.

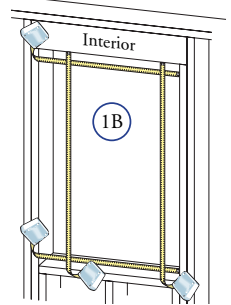
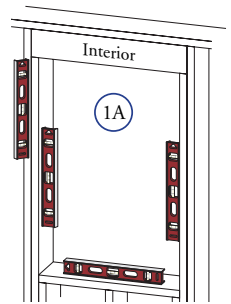
- B. **Confirm the window will fit the opening.** Measure all four sides of the opening to make sure it is 1/2" larger than the window in both width and height. On larger openings measure the width and height in several places to ensure the header or studs are not bowed.

**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.

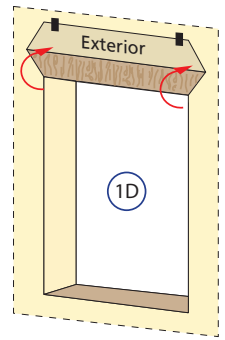
- C. **Cut the weather resistive barrier (1C).**



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



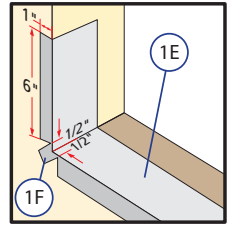
- D. **Fold the weather resistive barrier (1D).** Fold side flaps into the opening and staple to inside wall. Fold top flap up and temporarily fasten with flashing tape.



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

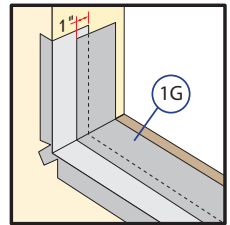
**Note:** *The tape is cut 12" longer than the width so that it will extend 6" up each side of the opening.*

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



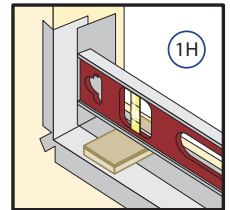
- G. **Apply sill flashing tape #2.** Cut a piece of flashing tape 12" longer than the opening width. Apply at the bottom, overlapping tape #1 by at least 1". Do not allow the tape to extend past the interior face of the framing (1G).

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



- H. **Install and level sill.** Place 1" wide by 1/4" thick shims on the bottom of the window opening, 1/2" from each side, beneath transition bars, mullion joints and sliding window interlockers. Place additional 1" wide by 1/4" thick shims, ensuring that the distance between shims is not more than 18" on center. Adjust shims as necessary to ensure the sill is level.

**Note:** *To determine the depth of the shim, measure the distance from the back of the fin to the interior frame edge of the window and cut the shim 1/2" shorter than this dimension. Place the exterior edge of the shim flush with the exterior of the building. Improper placement of shims may result in bowing the bottom of the window.*



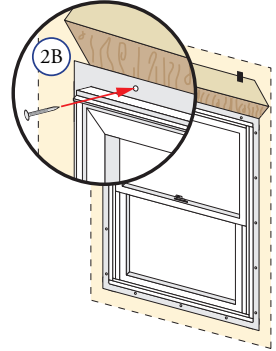
# 2 SETTING AND FASTENING THE WINDOW

For combination assemblies see **350 Series Combination Installation Instructions**.

- A. **Remove packaging from window.** DO NOT open the window until it is fully fastened. Inspect the unit for any cracks or penetration in the frame. DO NOT install damaged units.

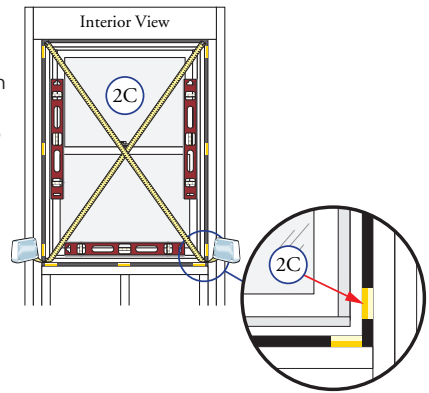
**TWO OR MORE PEOPLE WILL BE REQUIRED FOR THE FOLLOWING STEPS.**

- B. **Insert the window from the exterior of the building.** Place the bottom of the window on the spacer at the bottom of the opening, then tilt the top into position. Center the window between the sides of the opening to allow 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 window in place while shimming it plumb and square.



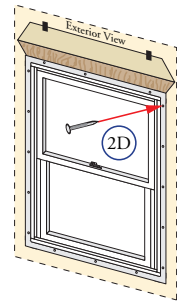
**Note:** DO NOT drive the nail all the way in.

- C. **Plumb and square window.** Place shims 1" from the bottom and top of the window between the window and the sides of the opening. Keep shims back 1/2" from interior face of window. Adjust the shims as required to plumb and square the window in the opening. Place additional shims between the top and bottom shims spaced < 18" apart. **Sliding Windows** - Place shims at the head using same spacing as the jambs.



- D. **Fasten the window to opening** using the appropriate anchor and anchor spacing based on your window type, desired performance, and window size. See Anchor Table.

**Multiple Unit Configurations - Continuous Frame Composites or Mullied Combinations:** See Supplemental "Combination and Composite Installation Instructions."



## NAIL-FIN ANCHOR REQUIREMENT SCHEDULE

Product	PG Rating Performance Grade	Max Frame Width (inches)	Max Frame Height (inches)	Anchor Type	Anchor Spacing	Anchor Cluster
DH, SH	30	40 in	63 in	Nails	8" O.C	None
	40	40 in	63 in	Nails	8" O.C	5 nails, 2 inches O.C Centered at check-rails
	All other ratings	All	All	Nails	8" O.C	5 nails, 2 inches O.C Centered at check-rails & end mullions
SW 2-Panel	30	76 in	48 in	Nails	8" O.C	None
	40	76 in	62 in	Nails	8" O.C	5 nails, 2 inches O.C Centered at meeting-stiles
	+40 / -60	76 in	72 in	Screws	8" O.C	3 screws, 2 inches O.C Centered at meeting-stiles
SW 3-Panel	30	123 in	48 in	Nails	8" O.C	None
	40	123 in	62 in	Nails	8" O.C	5 nails, 2 inches O.C Centered at meeting-stiles
	All other ratings	All	All	Screws	8" O.C	5 screws, 2 inches O.C Centered at meeting-stiles & end mullions
CM, AW, FX	40	All	All	Nails	8" O.C	None
	60	All	All	Nails	4" O.C	None
FX Composites	All ratings	All	All	Nails	4" O.C	5 nails, 2 inches O.C Centered at end mullions

O.C. = On center

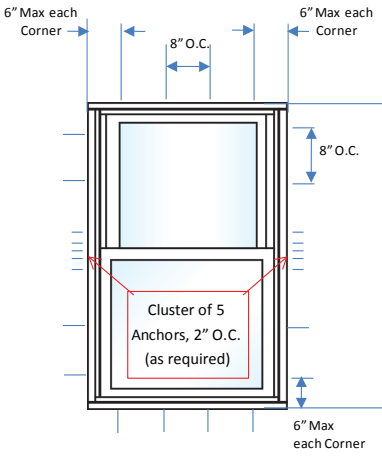
Nails = 1-1/2" galvanized roofing nails

Screws = #10 x 2" corrosion-resistant screws with washers under screw head

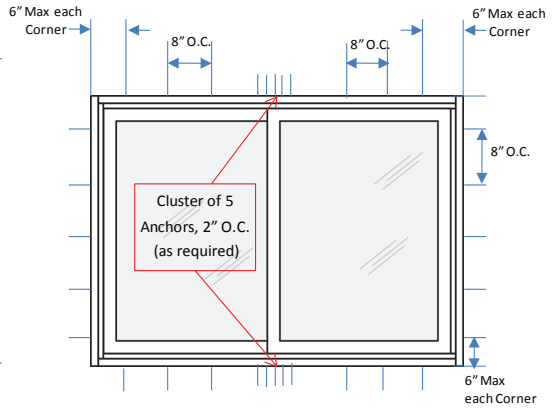
- E. **Check window operation** Lock and unlock the window. Open and close all sash.

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

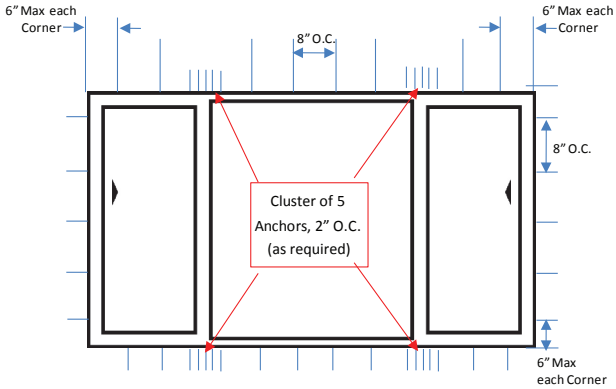
**Casements:** If additional adjustment is needed, use the adjustment tool and accompanying instructions.



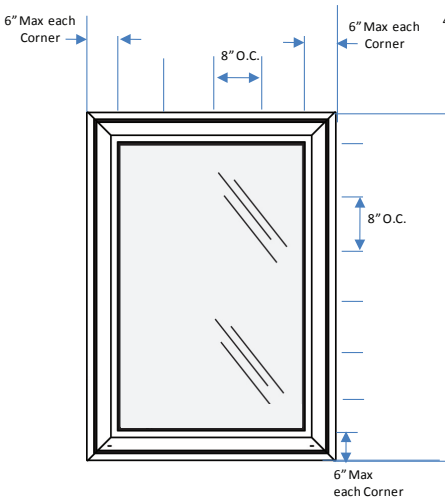
Single-, Double-Hung



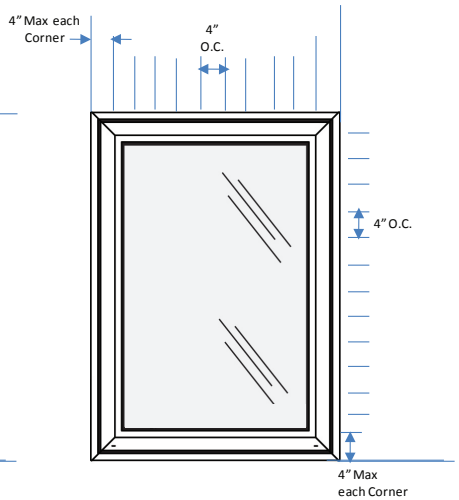
Sliding Window XO / OX



Sliding Window XOX



Casement - PG40



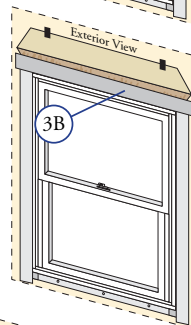
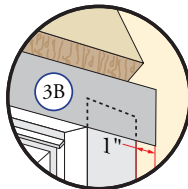
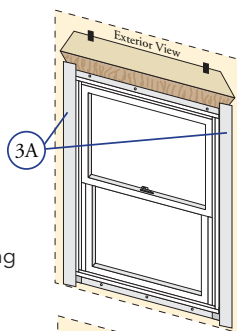
Casement - PG 60

### 3 INTEGRATING THE WINDOW TO THE WEATHER RESISTIVE BARRIER

A. **Apply side flashing tape.** Cut 2 pieces of flashing tape 4" longer than the frame height of the window. Apply one piece to each side over the nailing fin and onto the weather resistive barrier. The tape should extend 2" above the top of the window and 2" below the bottom of the window. Press the tape down firmly.

B. **Apply top flashing tape.** Cut a piece of flashing tape long enough to go across the top of the window and extend at least 1" past the side flashing tape on both sides. Apply the tape over the top nailing fin as shown. Press the tape down firmly.

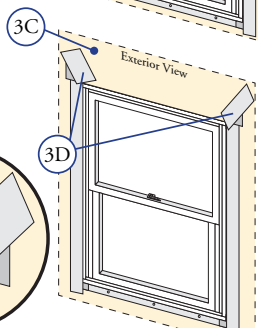
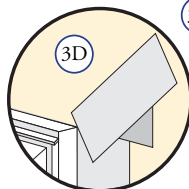
**Note: DO NOT tape or seal the bottom nailing fin.**



C. **Fold down top flap** of weather resistive barrier (3C).

D. **Apply flashing tape to diagonal cuts.** Cut pieces of flashing tape at least 1" longer than the diagonal cuts in the weather resistive barrier. Apply the tape, covering the entire diagonal cut in the weather resistive barrier at both upper corners of the window. Press the tape down firmly.

**Note: Be sure to overlap the top corners (3D).**

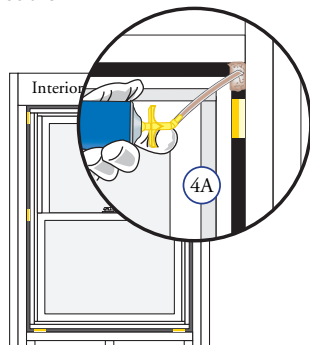


### 4 INTERIOR SEAL

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

**Note: It may be necessary to squeeze the end of the tube with pliers to be able to insert into the space between the window frame and the rough opening. DO NOT completely fill the space from the back of the fin to the interior face of the window.**

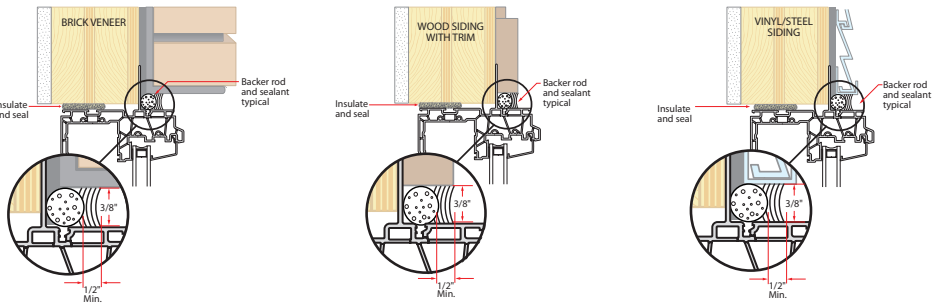


B. **Check window operation** by opening and closing the window.

**Note:** If the window does not operate correctly, check to make sure it is still plumb, level, square 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.

## 5 SEALING THE WINDOW TO THE EXTERIOR WALL CLADDING

**Note:** The Vinyl/Steel siding detail below applies to windows that do not have a J-mould as part of the frame. For windows that have J-mould as part of the frame, this step should be omitted. When using windows that have J-mould as part of the frame in masonry or with wood siding, the J-mould must be removed from the frame, and the backer rod sealant must be applied as shown in the details below.



A. **Insert closed cell foam backer rod** into the space around the window as deep as it will go. This should provide at least a 1/2" clearance between the backer rod and the exterior face of the window.

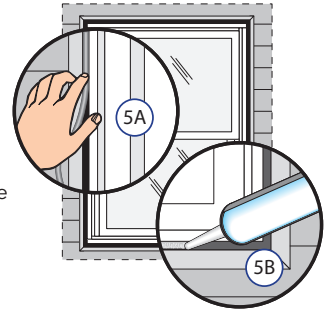
**Note:** Backer rod adds shape and depth for the sealant line.

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

**Note:** Refer to the sealant manufacturer's label to verify compatibility with vinyl and the adjoining building components and priming requirements.

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.



## 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 door tracks clear of dirt and debris. 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.