

### **Vinyl Windows and Doors**

Part Number: V985971 © 2013 Pella Corporation



# INSTALLATION INSTRUCTION - INSTRUCCIONES DE INSTALACION 350 SERIES - HURRICANESHIELD° IMPACT RESISTANT SLIDING PATIO DOOR

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### Lea las instrucciones en español en el reverso.

### **Important Safety Information:**

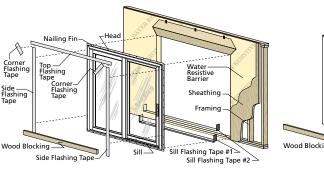
Pella® HurricaneŚhield® products have been tested in accordance with the large missile impact testing requirements of ASTM E1886 and ASTM E1996 Missile D, Windzone 4, and have been certified to meet those requirements. Check with the individual (building owner, architect, contractor, installer and/or 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.

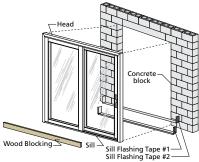
The performance of any building is dependent upon the design, installation, and workmanship of the entire building system. Pella Corporation strongly recommends consulting an experienced architect, contractor, or structural engineer prior to installation of Pella products. The individual (building owner,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

**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

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.

#### REMEMBER TO USE APPROPRIATE PERSONAL PROTECTIVE EQUIPMENT.





#### YOU WILL NEED TO SUPPLY:

- Cedar/impervious shims/spacers (24 to 40)
- 2" galvanized roofing nails (Nail-fin only) (1/4 lb.)
- #10 x 2" Pan Head Screws for wood construction (70-130)
- 1/4" x 2" masonry screws for concrete applications (70-130)
- Closed cell foam backer rod/sealant backer (20 to 30 ft.)
- Pella® SmartFlash foil backed butyl window and door flashing tape or equivalent
- Pella Window and Door Installation Sealant or equivalent high quality, multi-purpose sealant (2 to 3 tubes per door)
- Low expansion, low pressure polyurethane insulating window and door foam sealant
- Pella aluminum sill support or 2 x 4 wood blocking
- Pella sill pan or equivalent
- Interior trim and/or jamb extensions (20 to 40 ft.)

Installation will require two or more persons for safety reasons.

#### **TOOLS REQUIRED:**

- Tape measure 🛐
- Rubber mallet
- Hammer

• Square •

- Stapler
- Sealant gun
- Scissors or utility knife
- Screwdrivers (#2 Phillips and small flat blade)
- 3"-5" Wide putty knife
- Drill
- #2 Phillips driver
- 5/16" Socket driver





## persons for safety reasons.

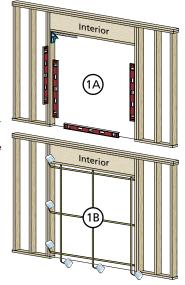
A. Confirm the opening is plumb and level. Ensure the bottom of the rough opening does not slope toward the interior.

Note: For peak water performance it is critical the bottom be level within +/- 1/16".

ROUGH OPENING PREPARATION

B. Confirm the door will fit the opening. Measure all four sides of the opening to make sure it is 1/2" larger than the door in width and 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" or more of solid wood blocking is required around the perimeter of the opening. Fix any problems with the rough opening before proceeding.

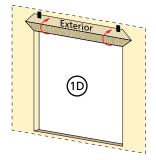


# 1 ROUGH OPENING PREPARATION (CONTINUED)

C. Nail-fin only: Cut the water resistive barrier (1C).

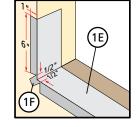


4th cut: Make a 6" cut up from each top corner at a 45° angle to allow the water resistive barrier to be lapped over the fin at the head of the door.



- D. Nail-fin only: Fold the water 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.

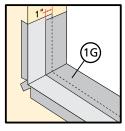
Note: The tape is cut 12" longer than the width of the opening so it will extend up each side approximately 6".



- 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 water 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.





### **2** PREPARE THE DOOR FOR INSTALLATION

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

A. Remove the packaging from the door frame and door panels. Inspect the frame and panels for damage. DO NOT install damaged units.

Note: If screens or hardware are removed from the door at this time, label them and store them in a protected area.

Note: Save 2 x 4's from packaging for later use.

B. Locate the kitted parts bag. Remove from the unit and place in a safe location that is accessible during the door installation.

**TRANSOM / SIDELIGHT ONLY:** Remove the sill track and interior frame pocket covers by pulling on the paper ring. Do not damage these items. These will be reinstalled once the frame is fastened to the opening.

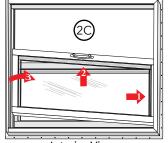
# **2** PREPARE THE DOOR FOR INSTALLATION (CONTINUED)

If panels are shipped in the frame, perform steps 2C-2L; otherwise proceed to Step 3.

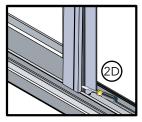
#### TWO OR MORE PEOPLE WILL BE REQUIRED TO HANDLE THE PANEL SAFELY

C. Remove the vent panel. With the jamb side of the door down, slide the panel all the way to one side, while lifting the panel out of the bottom frame pocket. Swing the panel out of the frame.

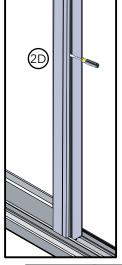
If the unit shipped with the interlocker pre-installed, perform steps 2D-2E; otherwise proceed to 2F.

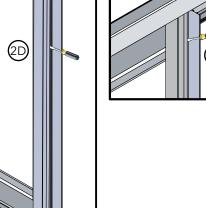


Interior View

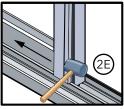


D. Use a flat blade screwdriver to pry the edge of the interlocker from the fixed panel. Pry on the edge facing the lock jamb. Pry the edge loose along the entire length of the interlocker.





E. Start at the bottom of the interlocker, use a rubber mallet to tap on the edge, to release the interlocker from the two interlocker receptor grooves on the fixed panel. Work up along the length of the interlocker to loosen it from the fixed panel. When approximately 1/3 of the length of interlocker is free from the fixed panel bottom; grasp the interlocker and pull it completely out of the grooves on the fixed panel and away from the panel.



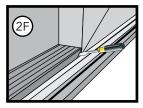


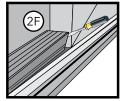




# **2** PREPARE THE DOOR FOR INSTALLATION (CONTINUED)

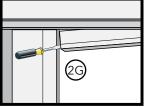
F. Use a straight blade screwdriver or Allen wrench to pry out the threshold and remove it from the head and sill frame.

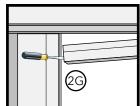






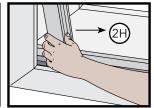
G. Use a straight blade screwdriver or Allen wrench to pry the pocket cover and remove it from the head of the frame.



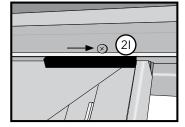


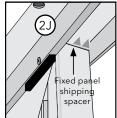
H. Use a straight blade screwdriver or Allen wrench to pry the pocket cover and remove it from the frame jamb on the fixed panel side. This will allow access to the fixed panel screws on the frame jamb.





 If the door has shipping support screws at each end of the interlocker, remove these screws which are located at the head and sill.





J. If step I was required, you must remove the fixed panel shipping spacer located between the fixed panel and the head of the unit.

- K. Slide the fixed panel over to the vent panel side of the frame where the threshold and head pocket cover was removed so it is no longer on top of the riser block.
- L. Remove the fixed panel by lifting it out of the frame following the same process used to remove the vent panel.

Note: Panel is very heavy.



### **SETTING AND FASTENING THE DOOR**

#### TWO OR MORE PEOPLE WILL BE REQUIRED TO HANDLE THE DOOR SAFELY

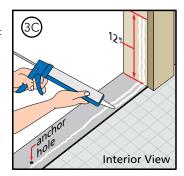
If installing in a block replacement or a concrete floor, go to Step 3A to remove the bottom fin. If NOT removing the bottom fin go to Step B.

A. **To remove the bottom fin,** lay the door down with the interior facing up. With a utility knife, carefully score the entire length of the fin three times where it meets the sill. Bend the fin back and forth a few times, then peel the fin off.

Note: Keep the body of the knife against the frame to prevent gouging the sill.

- B. **Dry fit the door.** Make sure the door is plumb, square and level. Drill anchor locations with 1/8" masonry bit at each pre-drilled installation hole. Mark the interior of the door frame at the sill to show a boundary for sealant placement. Carefully remove and set the door aside.
- C. Apply two continuous 1/4" to 3/8" diameter beads of sealant across the sill of the opening and 12" up the jambs, towards the interior side of the door (between the anchor holes and interior edge of door). DO NOT apply sealant between the anchor holes and the exterior side of the sill plate or floor.

Note: Failure to properly seal the sill attachment screws and sill plate may allow water to penetrate the interior of the home.

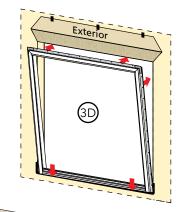


D. Insert the door from the exterior of the building. Place the bottom of the door at the bottom of the opening, then tilt the top into position. Center the door between the sides to allow equal clearance for shimming. Make sure the door is plumb, level and square.

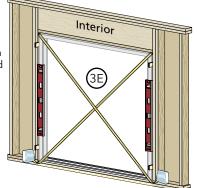
<u>Door Frames with Nail Fin:</u> Insert one 2" galvanized roofing nail into the top of each jamb nailing fin.

<u>Door Frames without Nail Fin:</u> Insert one screw in the top hole of each jamb.

Note: When installing doors without a bottom fin, DO NOT slide the bottom of the door into the opening, as sliding will damage the sealant lines.



E. **Plumb and square the door.** Insert shims at the jambs between the door and the sides of the rough opening. Place shims behind each of the pre-drilled installation holes. **DO NOT** place shims at the sill.



### **SETTING AND FASTENING THE DOOR (CONTINUED)**

### F. Fasten the door to the opening:

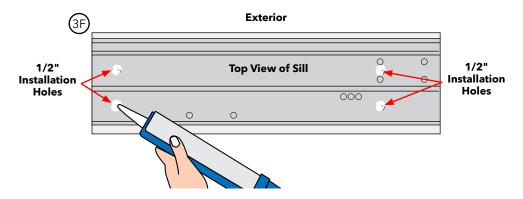
**Door Frames with Nail Fin Only:** Insert one 2" galvanized roofing nail into every other prepunched hole in the nailing fin at the jamb and sill. **WAIT TO FASTEN THE HEAD.** 

#### **ALL FRAME TYPES:**

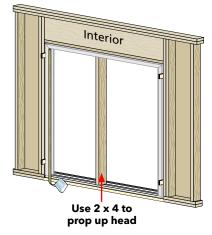
<u>Jambs:</u> At each pre-drilled installation hole, drill 1/8" pilot holes through the outer door frame wall, shims and the rough opening. Drive #10 x 2" corrosion resistant pan head screws (wood rough openings) or 1/4" x 2" masonry screws (masonry rough openings) into each pre-drilled hole.

<u>Sill:</u> Use the figure 3F to identify the installation holes. Place a dab of sealant in each predrilled installation hole in the sill prior to installing the (provided) bonded washers and sill screws. Drive #10 x 2" corrosion resistant pan head screws (wood rough openings) or 1/4" x 2" masonry screws (masonry rough openings) into each pre-drilled hole.

Note: At the sill, it is imperative sealant be applied under the bonded washers and screw heads and surrounding them to prevent water leakage. Failure to properly seal the sill attachment screws may allow water to penetrate the interior of the home.



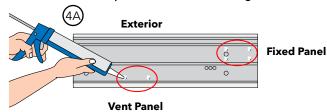
**Head:** Use vertical support brace 2 x 4 (provided and labeled) to prop up the head while fastening. This will ensure a level head and proper panel fit. Use the same fastening process as the jambs.



### **INSTALL HURRICANE IMPACT RETAINING BRACKETS**

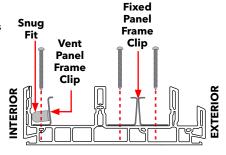
A. Place a dab of sealant in each impact clip screw hole in the sill.

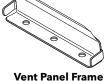
Note: It is critical to seal all holes in the sill to prevent water from entering the home.



B. Install sill retaining clips as shown. Locate the appropriate sill clips from the kitted parts bag and place them over the pre-drilled hole pattern. Use the same fasteners as used to fasten the sill of the door.

Note: It is critical the vent panel frame clip is snug against the interior vinyl wall.

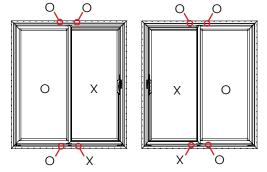




Clip(=X)

) **∍** 

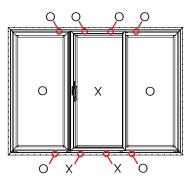
Fixed Panel Frame Clip (=O)

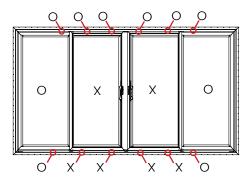


Note: Door frames come from the factory with the frame clip locations predrilled at the head and sill. (Vent panel frame clips are always placed at the sill in the vent panel channel. Fixed panel frame clips are located at both the head and sill.) The correct type and amount of clips will be provided.

Refer to illustrations for clip type, quantity and locations based on door type.

- 2-Panel door (OX/XO)
- 3-Panel door (OXO)
- 4-Panel door (OXXO)





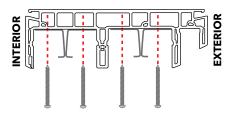
Page-8

# 4 INSTALL HURRICANE IMPACT RETAINING BRACKETS (CONTINUED)

C. Install head retaining clips as shown.

Locate the appropriate fixed frame clips from the kitted parts bag and place them over the pre-drilled hole pattern. Use the same fasteners as used to fasten the head of the door.

**DO NOT OVERTIGHTEN** screws to prevent waviness in the frame head.



## 5

### **DOOR ASSEMBLY AND ASSEMBLY VIEWS**

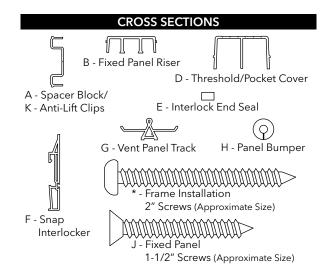
**Installation from interior** - all directional references are "As viewed from the interior".

Parts to be assembled in door frame in order as listed below:

Note: Provided parts may be labeled with letters as indicated below.

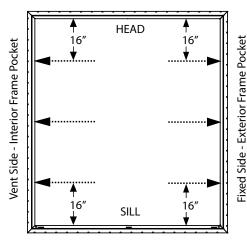
### 2-PANEL (OX/XO)

- A Spacer Block
- **B** Fixed Panel Riser
- **C** Fixed Panel
- D Threshold
- E Interlock End Seals
- F Snap Interlocker
- **G** Panel Track
- **H Panel Bumper**
- I Vent Panel
- J Fixed Panel Screws
- K Anti-Lift Clips
  - \* Frame screws in head
  - \* Hardware/fasteners



### **DOOR ASSEMBLY AND ASSEMBLY VIEWS (CONTINUED)**

A. Install spacer blocks. If spacer blocks are pre-installed, verify spacing matches the graphic below. If spacers are not preinstalled; Insert three spacer blocks in the jamb of each frame pocket that will contact a panel. Space the blocks as illustrated in the graphic below.



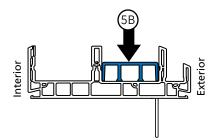
Vent Side - Interior Frame Pocket

Solution Frame Pocket

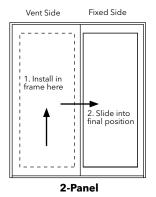
Solution Frame Pocket

Fixed Side - Exterior Frame Pocket

B. Install fixed panel riser(s). If not already pre-installed, install the fixed panel riser(s) in the exterior sill panel pocket where the fixed panel(s) will be located. Make sure the riser does not block the weep holes.



### DOOR ASSEMBLY AND ASSEMBLY VIEWS (CONTINUED)



Fixed Side Vent Side Fixed Side

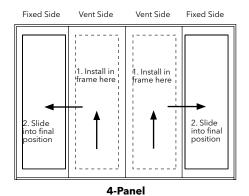
1. Install in, frame here 2. Slide into final position

2. Slide into final position

C. Install Fixed Panel(s). In order to clear the impact clips installed in the frame, the fixed panel(s) must be installed in location and sequence shown in the graphic.

Slide the fixed panel into the exterior pocket so the weather strip faces the frame jamb and the panel glazing stop (bead) faces the exterior.

For 3-Panel (OXO) Doors; the panel with the interlocker must be installed on the left side (as viewed from the interior).



D. Install the thresholds. Make sure the fixed panel is pushed tight against the spacer blocks inserted earlier into the jamb pocket.

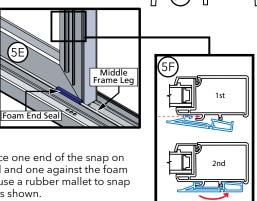
Note: Thresholds have mitered ends, install in head and sill of the exterior frame pocket.

E. Place the foam end seals against the panel at the bottom (sill) and top (head) of the interior of the fixed panel as shown.

Note: Remove adhesive release paper and adhere to the top of the middle frame leg.

F. Install the snap on interlocker(s). Place one end of the snap on interlocker on the foam pad at the sill and one against the foam pad at the head. Starting at the end, use a rubber mallet to snap the interlocker in place in the order as shown.

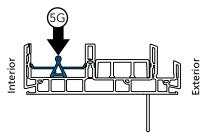
NOTE: Bowing the center of the interlocker out will help seat the ends first.



### **DOOR ASSEMBLY AND ASSEMBLY VIEWS (CONTINUED)**

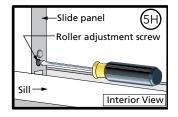
G. Install the vent panel track. Clean the pocket of any debris and snap the track into the interior panel pocket. The cutouts in the track should align with the vent panel clips that were installed in section 4.

Note: For 3-panel (OXO) door - verify the panel track is installed on the left end of the pocket as viewed from the interior.

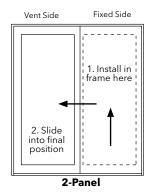


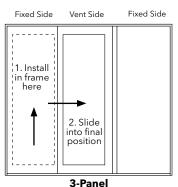
H. Install the vent panel(s) in the orientation as shown in the graphic below. Rollers will need to be raised to clear the frame. A wide putty knife may be needed to raise rollers above the sill when installing panel. After the panel is installed, adjust the rollers for equal reveal on the top and bottom panel rails.

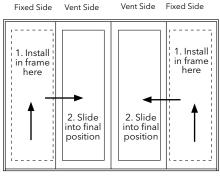
NOTE: Proper vent panel height is critical to prevent dragging on the panel clips installed in the frame.



**Install vent panel(s).** In order to clear the impact clips installed in the frame, the vent panel(s) must be installed in location and sequence shown in the graphic below. (VIEWS ARE AS SHOWN FROM INTERIOR.)



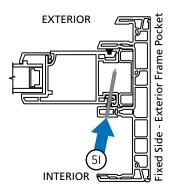




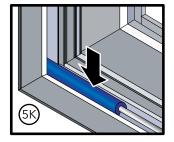
4-Panel

### **DOOR ASSEMBLY AND ASSEMBLY VIEWS (CONTINUED)**

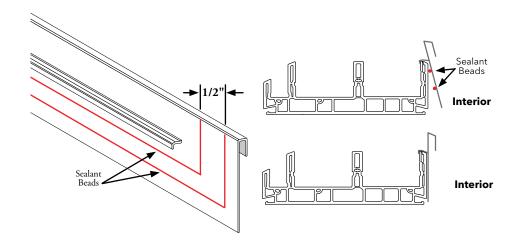
- I. Secure the fixed panel(s) by driving in the #10 x 1-1/2" fixed panel screws. Install the screws from the interior at an angle as shown. Space one screw 16" from the top and one 16" from the bottom then one screw in the center.
- J. Open the vent panel(s) and install the two spacer blocks (anti-lift clips) in the frame head over each panel.



K. Install the panel bumpers. Locate the slit on the bumpers(s) and place it on the track. Press down to seat the bumper onto the panel track cap.



**Install Sill Riser:** Apply two continuous 1/4" to 3/8" diameter beads of sealant 1/2" apart across the entire length of the sill riser. Attach the sill riser as shown. DO NOT smear sealant lines, as this will damage the lines and may allow water to penetrate the building.



# ASTRAGAL INSTALLATION (3-PANEL OXO and 4-PANEL OXXO DOORS ONLY)

#### Parts to be assembled in the door frame in the order as listed below:

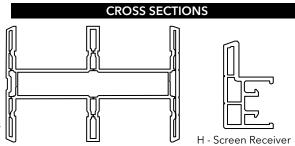
Note: Provide parts may be labeled with letters as indicated below.

#### 3-PANEL (OXO)

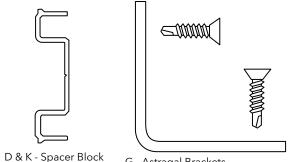
- A (Process Step)
- B Astragal
- C (Process Step)
- D Spacer Blocks
- E (Process Step)
- F Astragal Fasteners
- G Astragal Brackets and Screws
- H Screen Receiver (optional)

### 4-PANEL (OXXO)

- I (Process Step)
- J Astragal
- K Spacer Blocks
- L (Process Step)
- M (Process Step)
- N Astragal Screws
- O Screen Stop and Screws







G - Astragal Brackets & 5/8" Screws (Approximate Size)



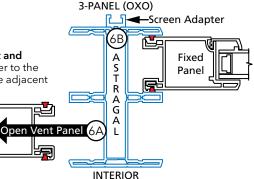
4-Panel (OXXO) configuration proceed to Step 61.

### 3-Panel (OXO) configuration:

A. Open the vent panel.

B. Position the astragal between the vent and the fixed panels with the screen adapter to the exterior. The lock keeper pilot holes are adjacent to the vent panel.

Note: The pocket with the keeper/strike pilot holes should be adjacent to the vent panel with the lock.



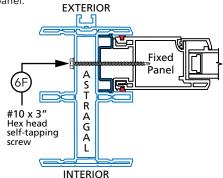
# ASTRAGAL INSTALLATION (CONTINUED) (3-PANEL OXO and 4-PANEL OXXO DOORS ONLY)

- C. Insert the bottom of the astragal between the panel track and the fixed panel.
- D. Place three spacer blocks into the exterior pocket of the astragal where it will meet the fixed panel. Position the spacer blocks 16" from the top and bottom and one at the center along the height of the astragal.
- Spacer Blocks

  Fixed
  Panel
  Panel

  INTERIOR
- E. Tilt the astragal into place against the fixed panel.
- F. Secure the astragal by fastening to the fixed panel using three #10 x 3" hex head self-tapping screws (provided). Place the fasteners at the same place the spacer blocks were installed.

Note: Astragal and panel have metal reinforcement.



G. Attach the astragal brackets to the interior pockets at the head and sill. Use the #6 x 5/8" self-drilling screw to attach the bracket to the right side of the astragal as shown in the image. Align the astragal so it is flush with the frame and secure the bracket to the sill using the screw. DO NOT use longer than 5/8" screw in the sill. A longer screw will allow water to penetrate the building.



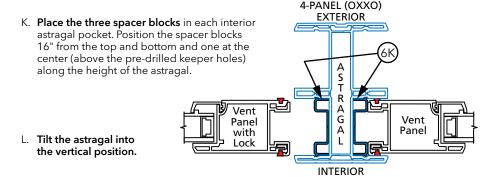
3-PANEL (OXO) Screen الراك Receiver H. Install the sliding screen receiver Fixed (optional) on the screen bracket (exterior <sup>∍</sup> Panel of astragal). S Ť R Α Vent G Panel Α INTERIOR

# ASTRAGAL INSTALLATION (CONTINUED) (3-PANEL OXO and 4-PANEL OXXO DOORS ONLY)

### 4-Panel (OXXO) configuration:

- I. Open the vent panels.
- J. Position the astragal next to the panel without a lock installed.

Note: The pocket with the keeper/strike pilot holes should be adjacent to the vent panel with the lock.

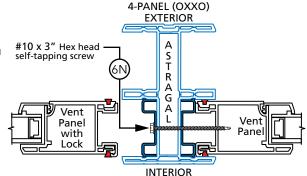


M. **Provide sliding clearance for the astragal** by centering it between the head and sill. Shim the astragal up for equal spacing at the head and sill.

Note: Check the panel reveal to make sure the astragal is completely attached before securing.

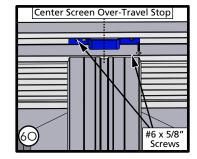
N. Secure the astragal by fastening to the non-locking vent panel using three #10 x 3" self-tapping screws (provided). Place the fasteners at the same place the spacer blocks were installed.

Note: Astragal and panel have metal reinforcement.



### Sliding Screen Only:

O. Install the screen over-travel stop in the head and sill of the screen pocket. Center the screen stop with the center of the astragal with the vent panels in the closed position. Use #6 x 5/8" screws to attach the screen stop.

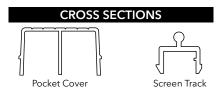


### T LOCK KEEPER/STRIKE, POCKET COVER AND SLIDING SCREEN TRACK INSTALLATION

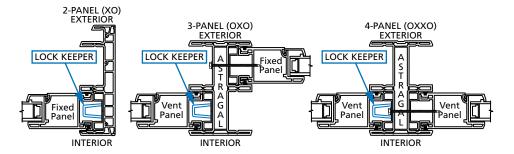
Parts to be assembled in door frame in order as listed below:

Note: Provided parts may be labeled with letters as indicated below.

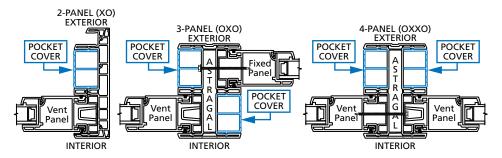
- A Keeper and Screws
- B Pocket Covers
- C Weep Hoods
- D Screen Track



A. **Install the lock keeper/strike.** Position the keeper/strike at the pre-drilled pilot holes. Insert a shim between the frame jamb and rough opening at the keeper/strike location. Fasten using #10 x 3" screws (provided).

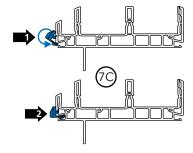


B. **Install the pocket covers** in all exposed jamb and astragal pockets. DO NOT install where the keeper is installed. The 3-panel (OXO) frame will have pocket covers for the head and sill on the right side of the astragal (as viewed from the interior).



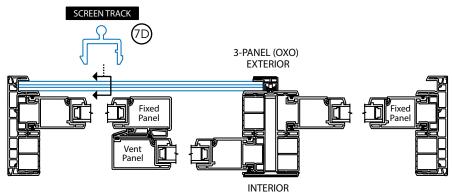
C. **Install the weep hoods** in the weep slots on the sill. Place the top of the weep hood against the sill then swing the bottom into the latched position.

Nota: Los extremos del riel de la malla corrediza no necesitan campanas de drenaje. Aquí es donde el riel de la malla drena



# **T** LOCK KEEPER/STRIKE, POCKET COVER AND SLIDING SCREEN TRACK INSTALLATION (CONTINUED)

 D. 3-panel (OXO): Install the sliding screen track against the left jamb (as viewed from the interior).



Exterior

# INTEGRATING THE DOOR TO THE WATER RESISTIVE BARRIER

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

B. Apply the 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 over the top nailing fin as shown. Press the tape down firmly.

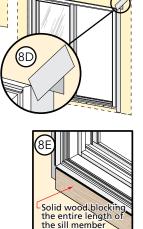
Note: The tape should cover the entire nailing fin, but not extend onto the door frame. The top flashing tape must overlap the side flashing tape to prevent water from getting behind it.

C. Fold down the top flap of the water resistive barrier.

D. **Apply flashing tape to the 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. Press the tape down firmly.

Note: Be sure to overlap the top corners.

E. Attach the wood blocking or aluminum sill support to the exterior of the opening to support the edge of the door sill.



Exterior

Exterior

8B

# **9** 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 door 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 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 interior surface of shims to create a continuous seal. 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 door frame and the rough opening. DO NOT completely fill the space from the back of the fin to the interior face of the door.



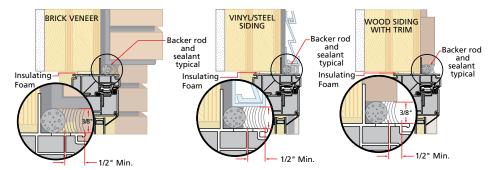
- B. On the interior, seal the door sill to the floor with a corner bead of sealant. Connect this bead of sealant to the insulating foam at both door jambs.
- C. Check the door operation by opening and closing the door.

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.

# 1 0 SEALING THE DOOR TO THE EXTERIOR WALL CLADDING

#### **NAIL-FIN FRAME:**

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 corresponding to your finish material. Not allowing adequate space or not using backer rod may cause the sealant to break down prematurely and allow water to infiltrate.

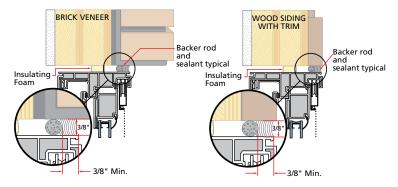


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# 1 0 SEALING THE DOOR TO THE EXTERIOR WALL CLADDING (CONTINUED)

#### REPLACEMENT FRAME:

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 corresponding to your finish material. Not allowing adequate space or not using backer rod may cause the sealant to break down prematurely and allow water to infiltrate.



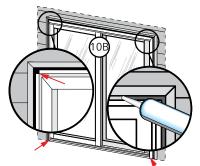
### **Nail-fin Frame and Replacement Frame:**

A. Insert closed cell foam backer rod into the space around the door approximately 1/2". This should provide at least a 1/2" clearance between the backer rod and the exterior face of the door.

B. Apply a bead of high quality exterior grade sealant to the entire perimeter of the door. On doors where the bottom fin has been removed, insert sealant into the spaces between the bottom of the door and the sill support and connect it to the perimeter sealant.

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

C. Seal the exterior drainage weeps at the head only with high quality exterior grade sealant. DO NOT seal the drainage weeps at the sill.



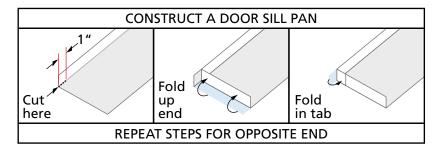
D. Shape, tool and clean excess sealant. When finished, the sealant should be the shape of an hourglass.

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

### OPTIONAL SILL PAN FABRICATION AND INSTALLATION

**Construct a door sill pan for the door using Pella sill pan or equivalent.** Measure the distance between the cut ends of the existing door sill and add 2". Measure 1" from each end and cut through the vertical leg of the pan material. Bend bottom flaps of the pan material up, then bend the back leg around the end of the pan.

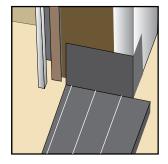
Dry fit the sill pan and the door into the opening.



From the exterior, set the door into the opening. Set the sill of the door on the sill panel and tilt the door into position. Using a pencil, mark the interior and exterior edges of the sill pan on the sill of the rough opening. Remove the door and sill pan.

### Place a 1/4" diameter bead of sealant in the following locations:

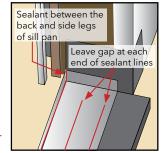
- The exterior side of the interior pencil mark.
- The interior side of the exterior pencil mark.
- Midway between the exterior and interior sealant heads



**Install the sill pan** into the opening, aligning the interior and exterior edges with the pencil marks from above. Press down on the sill pan to seal it into the opening.

### Place one 1/4" diameter bead of sealant in the following locations:

- In the bend at the back of the sill pan.
- 1/2" from the exterior edge of the sill pan.
- Midway between the interior and exterior beads of sealant.
- Leave a 2" sealant gap at teach end of the two exterior lines of sealant for drainage.



Also seal the joint between the back and side legs of the sill pan with sealant.

### **Return to Step 2**

### 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 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 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 installation instructions.

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