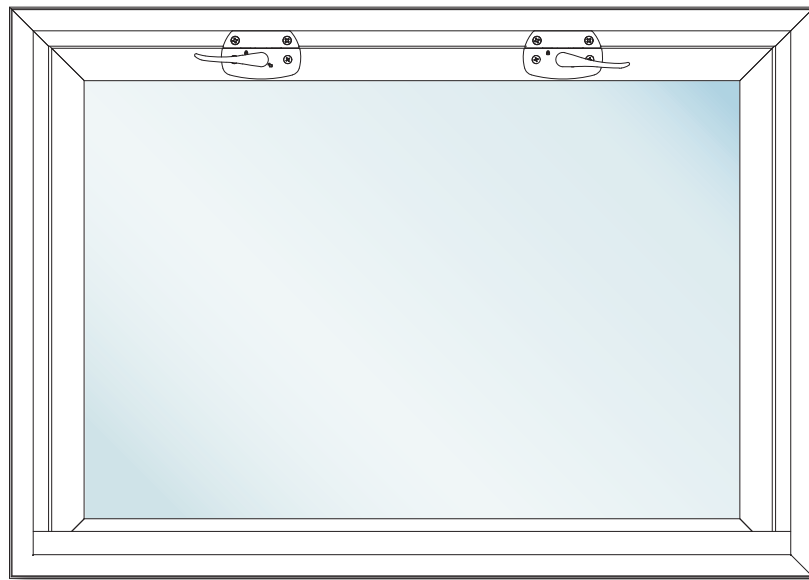




# INSTALLATION INSTRUCTIONS

## VINYL HOPPER WINDOW WITHOUT NAIL FIN

(ASPECT™, ENDURE™, ECOLITE™)



*\* Find QR Codes inside for additional information, helpful installation tips, and videos.*



Contact the local recycling waste management center for waste disposal in the area. Always check local waste requirements and carefully dispose of waste in accordance with Federal and other regulations.



Homes built before 1978 may contain lead paint. All replacement installations must comply with the U.S. EPA's Lead-Based Paint Renovation, Repair, and Painting Program (RRP Rule). Read more about the RRP Rule and lead-safe work practices, on the U.S. EPA's website at: [www.epa.gov/lead](http://www.epa.gov/lead)



# GETTING STARTED

## TOOLS & MATERIALS YOU WILL NEED

- Tape Measure
- Pencil
- Shims
- Drill & Drill Bits
- Utility Knife
- Putty Knife
- Square
- Level
- Hammer or Mallet
- AAMA approved Low-Expanding Window Insulation Foam in accordance with ASTM C1620
- High Quality Silicone Caulking in accordance with ASTM C920, Class 25 & Caulking Gun



**REMEMBER: ALWAYS USE THE APPROPRIATE PERSONAL PROTECTIVE EQUIPMENT.**



*Read these instructions carefully before starting installation. Product warranty does not cover damages resulting from improper installation.*



## IMPORTANT NOTES BEFORE YOU BEGIN

- Inspect your package(s) for any visible damage to the product. In addition, double check your paperwork with label on product(s) and verify all information is a match. Open packaging to confirm style, color and that order was shipped complete. Double check size of new unit by comparing it for fit to opening.
- If damage or irregularities are found, please scan the product's packaging QR Code label using your phone's QR Code Scanner to access ProVia's After Sale Product Support to enter a request and post pictures/videos to the order, or you can call the Customer Support Team at 1-800-669-4711.
- If you have ordered optional items, verify that they are included in packaging contents. This includes checking for multiple packages (For example, 1 of 2 and 2 of 2).



# VINYL HOPPER WINDOW CONTENTS

**NOTE:** Please refer to information below for the assembly and installation contents.

## Assembly Contents

Vinyl Window Unit (3¼" Main Frame Depth)

Sill Extender (Bottom Only), shipped loose. (Refer to Section 'D')

### OPTIONS:

- Sill Extender (NC Extended Flange), Part #: S-VE-8350-CC (Refer to Section 'D')
- Head Expander, Part #: S-VE-5860-CC (Refer to Section 'A' & 'D' for installation)
- Applied Stucco Flange, Part # S-VE-4485-CC (Refer to Section 'G')
- J-Channel Filler Strips, factory installed or shipped loose, Part #: S-VR-667-CC (Refer to Section 'A')

**MULLION KIT** (Only included when field mulling is necessary): (Refer to Section 'E' & 'F')

- Zero Mull Rebar, Part #: S-AE-4710-00
- Zero Snap Mulls, Part #: S-VE-4492-CC
- Header Cover, Part #: S-VR-461-CC (Flat)
- Stacking Plate Pack, Part #: S-HG-604P-00

## Installation Pack

S-HS-521S-01/13

(6) ⅜" Low Profile Hole Plug, (Color Matched), Part #: S-HG-698-CC



(6) #8 x 2" Phillips Pan Head Screws, Part #: S-HS-046-00



(2) #6 x ½" Phillips Pan Head Screws, (Color Matched), Part #: S-HS-783-CC (Use for optional head expander)



# WINDOW INSTALLATION GUIDELINES

- Windows achieve maximum performance from proper installation methods. It is critical to maintain consistent margins between sash and master frame.
- A window gains strength from the surrounding wall structure. This is obtained with proper sizing, support and installation methods.
- Use a high quality grade of silicone with a neutral base.
- Approved sealants for this use must meet the requirements of ASTM C920, Class 25.
- The plastic applied to UV resistant paint finish windows is for the protection of the paint finish and should remain on the window until the installation is complete.
- **DO NOT OBSTRUCT WEEP HOLES** with flashing or sealant. The weep holes located at the bottom sill area of window are necessary to prevent water accumulation. Covering or applying trim to the product will need to allow for proper drainage. Failure to do so will create a risk of water infiltration.
- Windows should be stored in a cool location. **DO NOT** store in direct sunlight or in non-vented hot containers.
- **IMPORTANT!** Allow for expansion and contraction of the window unit when contacting exterior finish material. For installation of the finished exterior material surrounding the window, tap or scan the QR code shown for all gap recommendations per exterior material type.



**THIS INFORMATION MUST BE PASSED TO THE EXTERIOR FINISH INSTALLER.**



## IMPORTANT INFORMATION!

- ProVia understands there are various methods and conditions affecting the installation of a replacement window. We feel the most critical steps to follow are securing and shimming as instructed in this document.

### FIELD MULLED WINDOW UNITS:

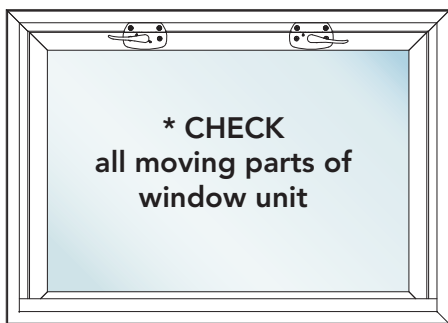
- Refer to Section E, Field Mulling on page 9 and Section F, Install Header Cover - Flat on page 10-11. Units must be mulled together before window unit is set in the opening.

### STUCCO FLANGE:

- Refer to Section G, Stucco Flange Accessory Installation on page 12. The stucco flange must be installed and prepped on field mulled units before setting in the opening. Factory installed stucco flange must be prepped on single window units before setting in the opening.

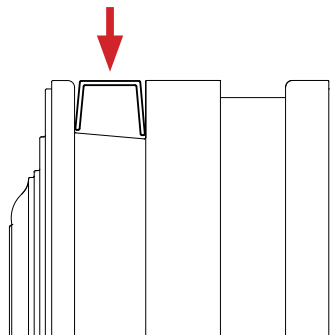
# A. INSPECT AND PREPARE VINYL WINDOW UNIT

## INSPECT HOPPER AND SCREEN



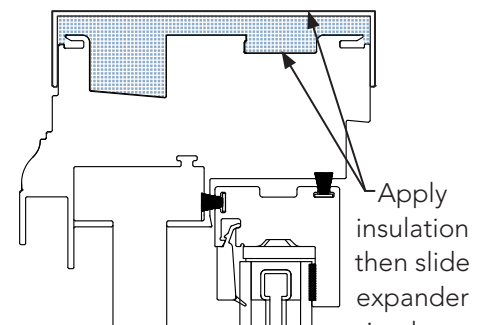
(Figure A.1)

## CHECK FILLER STRIP



(Figure A.2)

## OPTIONAL HEAD EXPANDER



(Figure A.3)



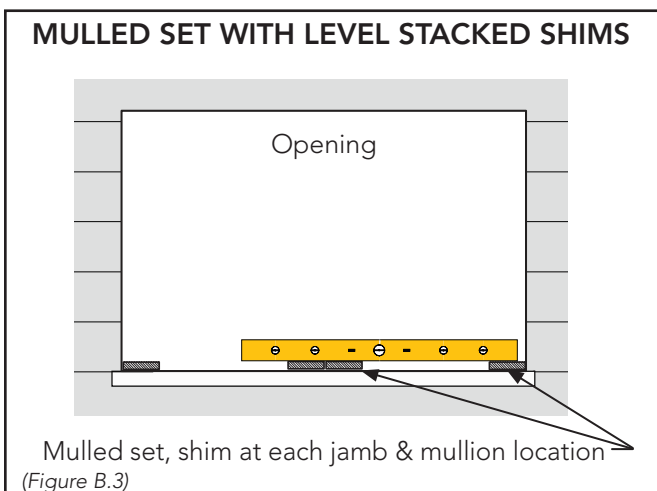
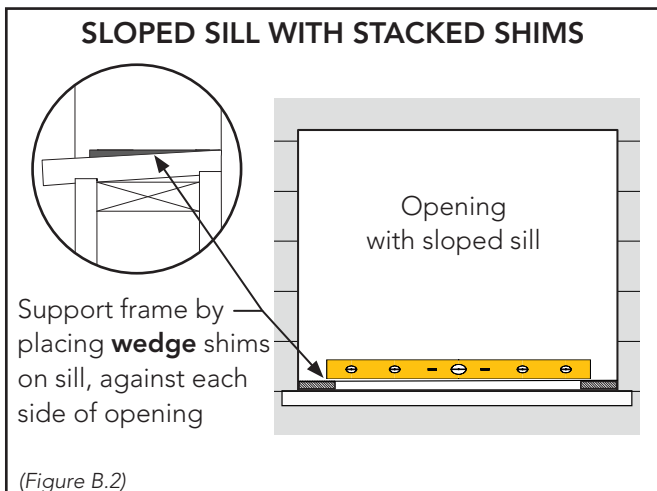
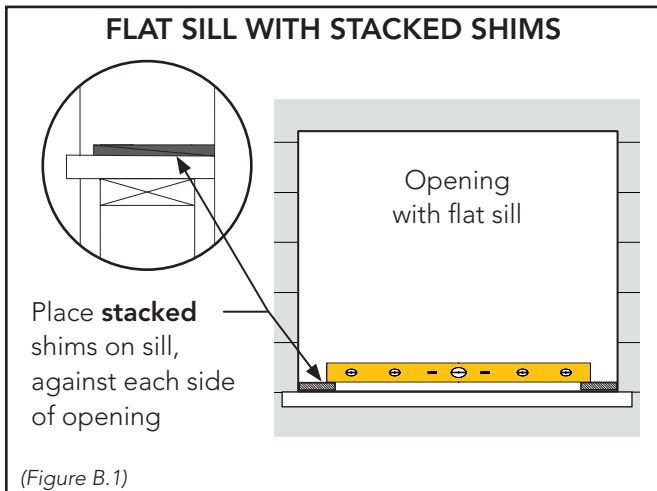
**IMPORTANT!** For window units with painted exterior, **DO NOT** remove the protective plastic cover until after installation is completed.



For units to be field mulled, complete Section A, then proceed to Section E - "Field Mulling Window Units". After mulling is complete, resume this instruction to complete Sections B - D.

- 1 Inspect new window unit and screen for any material damages. Check all moving parts: locks, all operational hardware, glass, etc. **NOTE:** Moving parts can be repaired AFTER window is installed. Scan the product packaging QR Code label to access ProVia's **After Sale Product Support** to enter a request and post pictures to order, or call the Customer Support Team. (Figure A.1)
- 2 If unit was ordered with J-channel filler strips, check to be sure all filler strips are factory located within the window J-channel. If filler strips were ordered as "shipped loose", install at this time. Note, the sill filler strip will have a slightly different profile. (Figure A.2)
- 3 If optional **head expander** is to be used, lightly place batt insulation between frame header and the expander. Allow for compression without distorting header frame. Slide head expander in place. (Figure A.3)
- 4 If the optional **stucco flange** is to be used in a true stucco application against stucco, refer to Section G - "Stucco Flange Accessory Installation". If stucco flange is shipped loose, flange must be installed and prepped before window is installed in opening. *If used as trim only, no prep is required.*

# B. PREP OPENING



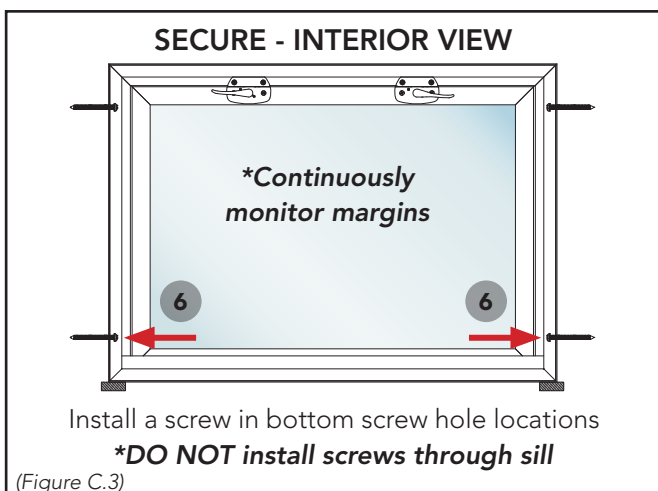
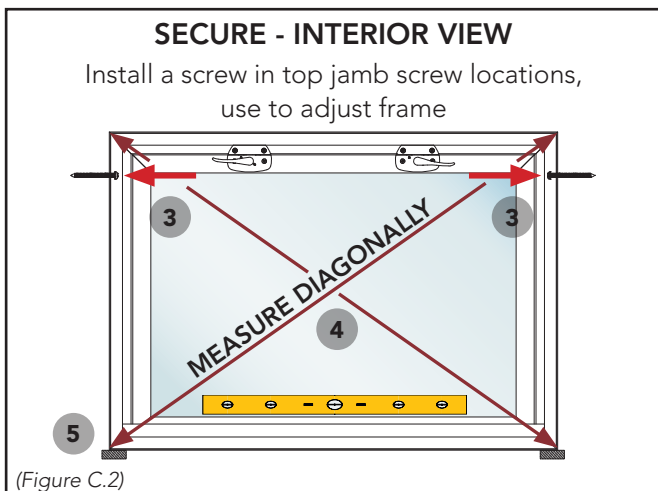
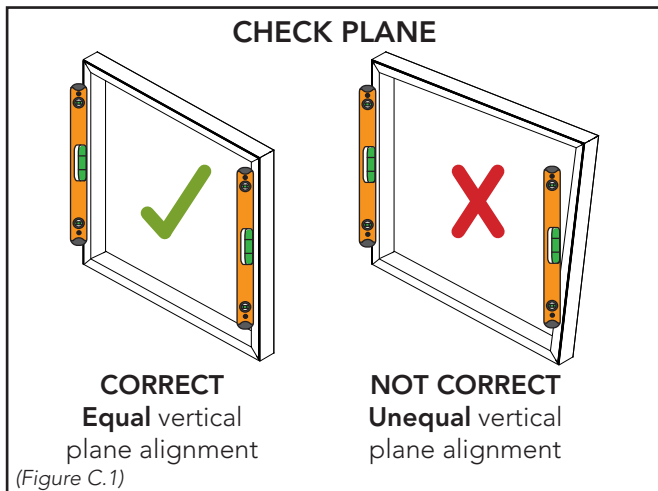
- 1 Clean opening of all dirt, debris and obstructions.
- 2 Fill all voids or open cavities, found after removal of old window, with AAMA approved low-expanding window insulation foam that complies with ASTM C1620.
- 3 Check sill for level, flat, and for proper structural support of opening to ensure a proper installation and seal of window unit. For flat sill plate, refer to Step 4. For sloped sill plate, refer to Step 5.

**NOTE:** For window units 36" wide or greater, an additional shimming location may need added to prevent sill from deflecting.

**NOTE:** If foam wrap is used under sill, shim thickness **MUST** be increased to prevent foam wrap from crowning the sill. Be careful to not push frame into head of opening.

- 4 For flat sill plate, place **stacked** shims on sill, against each side of opening. Be careful shims **DO NOT** tilt sill toward inside of home. For mulled sets, place stacked shims under all side jamb locations. (Figure B.1 & B.3)
- 5 For sloped sill plate, place **wedge** shims on sill, against each side of opening. Wedge shims are critical to provide full support of frame bottom. Be careful shims **DO NOT** tilt sill toward inside of home. For mulled sets, place a wedge shim under each jamb location. (Figure B.2 & B.3)

# C. INSTALLATION



**Hand icon** Frame alignment is critical for the success of the installation and sash operation. Step 1 provides an alignment reference check that should be used throughout the full installation procedure to identify and correct any alignment issues.

**1** Check plane of the window. Each vertical jamb side frame should be equal and parallel to the other. See illustration for equal and unequal plane. (Figure C.1)

**2** Set window unit directly onto shimmed sill. Center unit in the opening. If top of window is against top of opening, reduce height of bottom shims. Shims are still required below sill as specified.

**3** Unlock sash and carefully open. Install a #8 x 2" Phillips pan head screw into each top factory prepped jamb screw location to hold in place. **DO NOT OVER TIGHTEN screw causing frame to pull!** Note, if screw holes cannot be accessed from the interior, remove the screen so screw holes can be accessed from the exterior. Refer to QR code on back. (Figure C.2)

**4** Check for overall square by measuring diagonally from corner to corner. Use top screws to adjust frame alignment in order to establish an even sash to frame margin along top of sash. (Figure C.2)

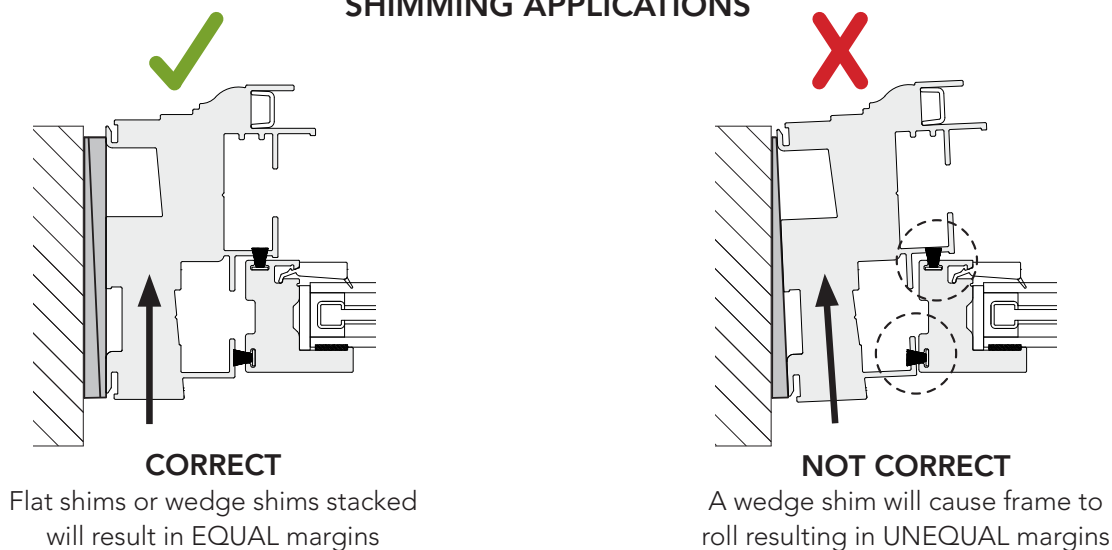
**5** Use sill shims to adjust/re-adjust sill to level if needed. For muller units, be sure shims are placed directly under mull location for support. Reminder, if foam wrap is used under sill, shim thickness **MUST** be increased to prevent sill from crowning. (Figure C.2)

**Warning icon** **IMPORTANT!** Shims can be installed prior to screw installation. It is critical to monitor sash to frame alignment throughout installation.

**6** Install a #8 x 2" Phillips pan head screw in each bottom prepped screw location. Then install a screw in each middle prepped location (if applicable). **DO NOT over tighten screws! DO NOT install screws through sill!** If spacing between screws is greater than 24", additional jamb screws may need added. Pre-drill  $\frac{3}{8}$ " hole through first wall of frame. **Note**, additional jamb screws may need added if foam wrap is used on jambs, causing over-tight margins and difficult sash operation. (Figure C.3)

# C. INSTALLATION (CONTINUED)

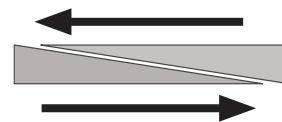
## SHIMMING APPLICATIONS



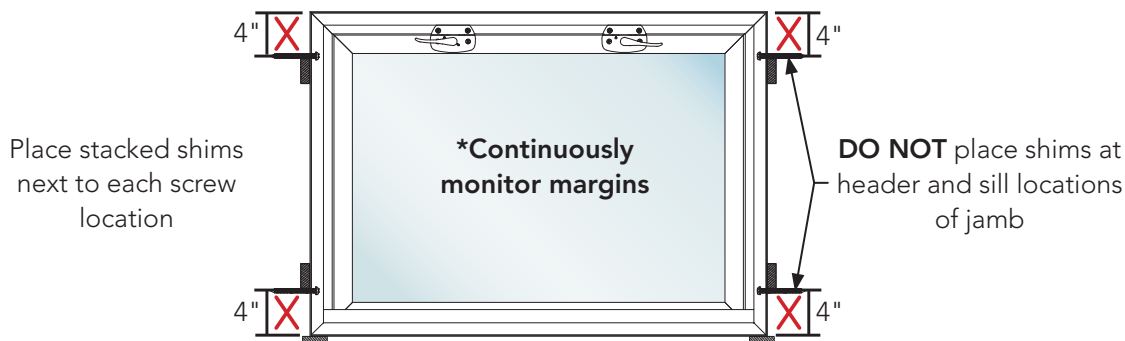
(Figure C.4)

**! IMPORTANT!** Shims are needed to achieve sash to frame alignment. The alignment needs to be **CONTINUOUSLY** monitored throughout installation. Shimming as instructed in Step 7 is critical to maintain stability of the frame.

**! IMPORTANT!** **CORRECT** shimming application; stack wedge shaped shims contrasting and plane to plane. See diagram below. **DO NOT** use a single wedge shim. This will cause the frame to roll, resulting in unequal alignment. (Figure C.4)



## SHIMMING - INTERIOR VIEW

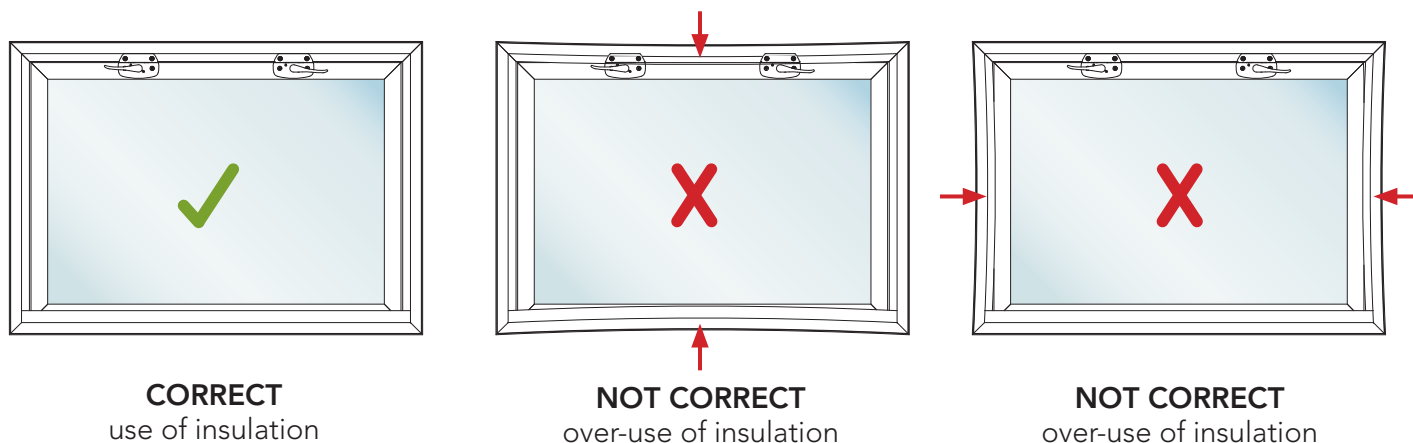


(Figure C.5)

- 7** Place shims next to all screw locations. **DO NOT PLACE SHIMS WITHIN 4" OF TOP OR BOTTOM CORNERS.** This will cause frame distortion. If spacing between side jamb shims is greater than 12", additional shims may be needed to maintain margins and stabilize frame. **CONTINUOUSLY CHECK SASH TO FRAME MARGINS WHILE SHIMMING.** Note, window hardware should not be visible between exterior sash weather strip and frame. (Figure C.5)
- 8** Final check on frame alignment. Adjust shims and screws as needed to achieve and maintain equal and straight alignment, all sides. If needed, additional screw and shim locations may be added to header to improve margins. Align from interior side of window.

# D. INSULATE AND FINAL ADJUSTMENTS

## LOW-EXPANDING FOAM MARGIN CHECK



(Figure D.1)

1 Install hole plugs into all jamb screw locations.

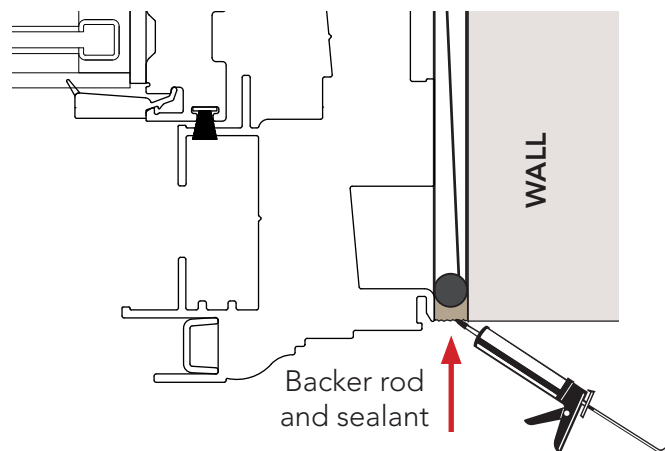
2 Close and lock sash.

**!** **IMPORTANT!** Sash must operate properly before and after application of foam insulation.

3 Insulate by using an AAMA approved ASTM C1620 low-expanding foam to fill all cavities between frame and opening. Check and maintain all margins during insulating. **Over use of low-expanding foam may cause frame to bow, jeopardizing operation of window.** (Figure D.1)

## SEAL EXTERIOR FRAME TO WALL JOINT

DO NOT SKIP THIS STEP!

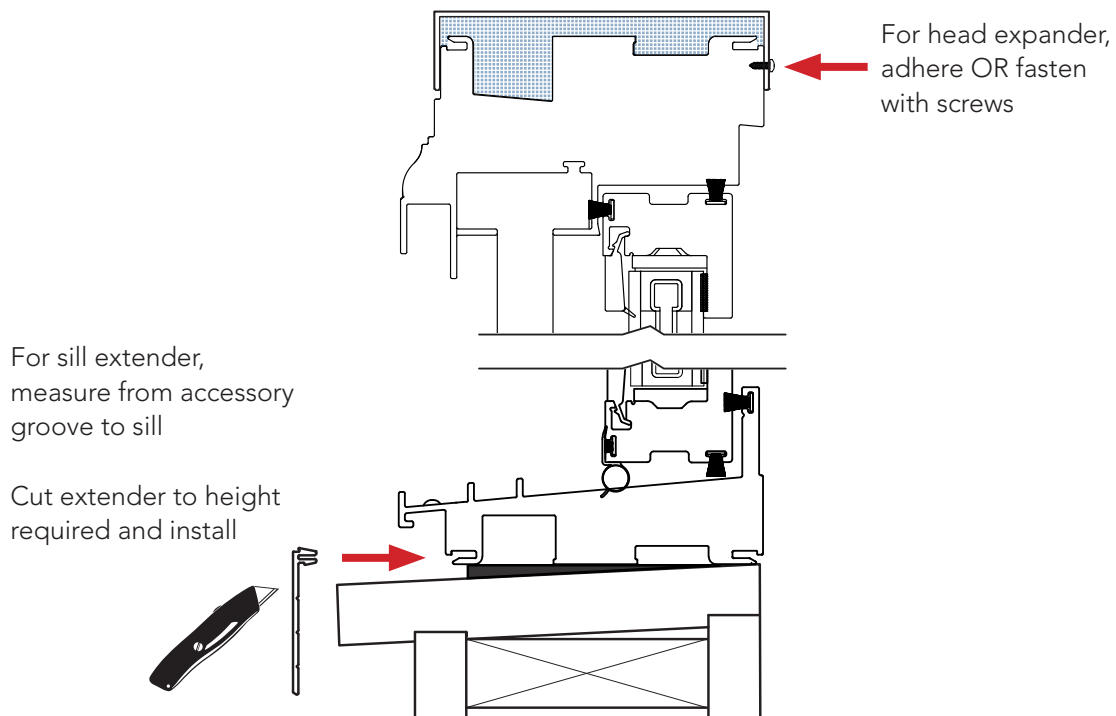


(Figure D.2)

4 Apply caulking to seal the **EXTERIOR** window frame to wall joint. Use backer rod if needed. **DO NOT SKIP THIS STEP** (Figure D.2)

# D. INSULATE AND FINAL ADJUSTMENTS (CONT.)

## OPTIONAL HEAD EXPANDER AND SILL EXTENDER

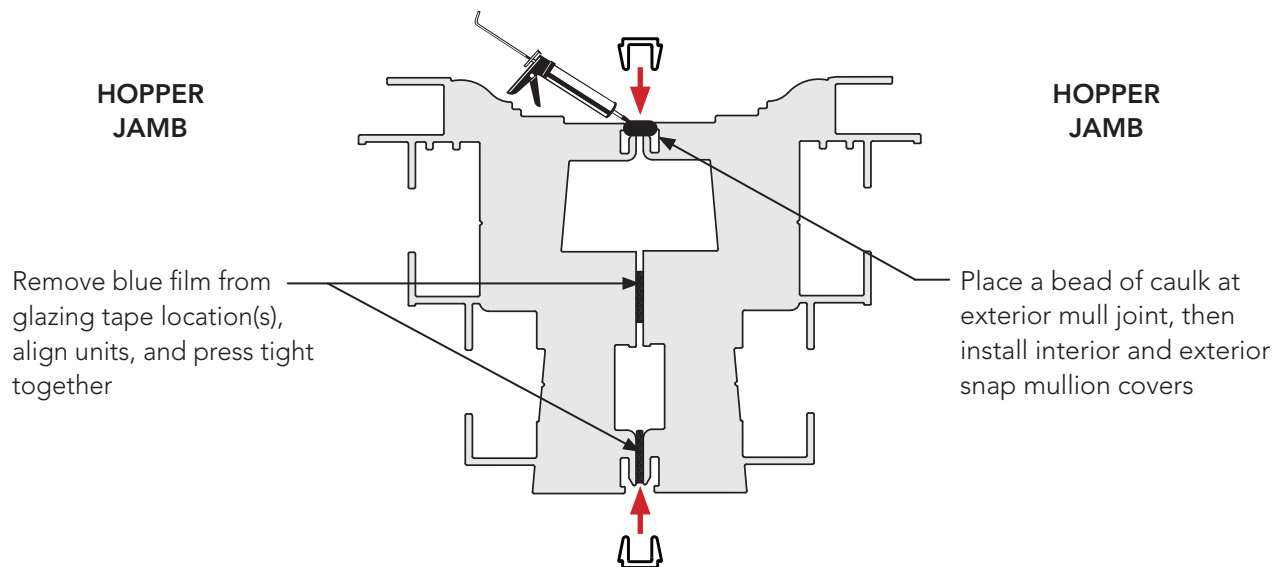


(Figure D.3)

- 5 If optional **head expander** was installed, adhere in place with silicone OR fasten in place with (2) #6 x 1/2" Phillips pan head screws (included) from INTERIOR side. *If exterior accessory groove is to be used, cut expander in half lengthwise. Only use interior half as needed. Discard exterior half.* (Figure D.3)
- 6 If optional **sill extender** is to be used, measure distance from sill accessory groove to existing sill or edge of rough opening. Cut fin to height required and install. **DO NOT** install until foam has fully cured. (Figure D.3)
- 7 If **MasterFit™ Trim** is ordered, **DO NOT** nail trim to jamb extension. Refer to QR code on back for measuring assistance.

# E. FIELD MULLING WINDOW UNITS

## SIDE-BY-SIDE AND/OR STACKED WINDOW MULL SECTION VIEW



(Figure E.1)



**Field mulling will be required if factory mullied unit size exceeds a specific shipping size parameter. A multiple window unit may ship partially mullied, requiring field mulling to complete the assembly. Units must be mullied together before setting into the opening.**

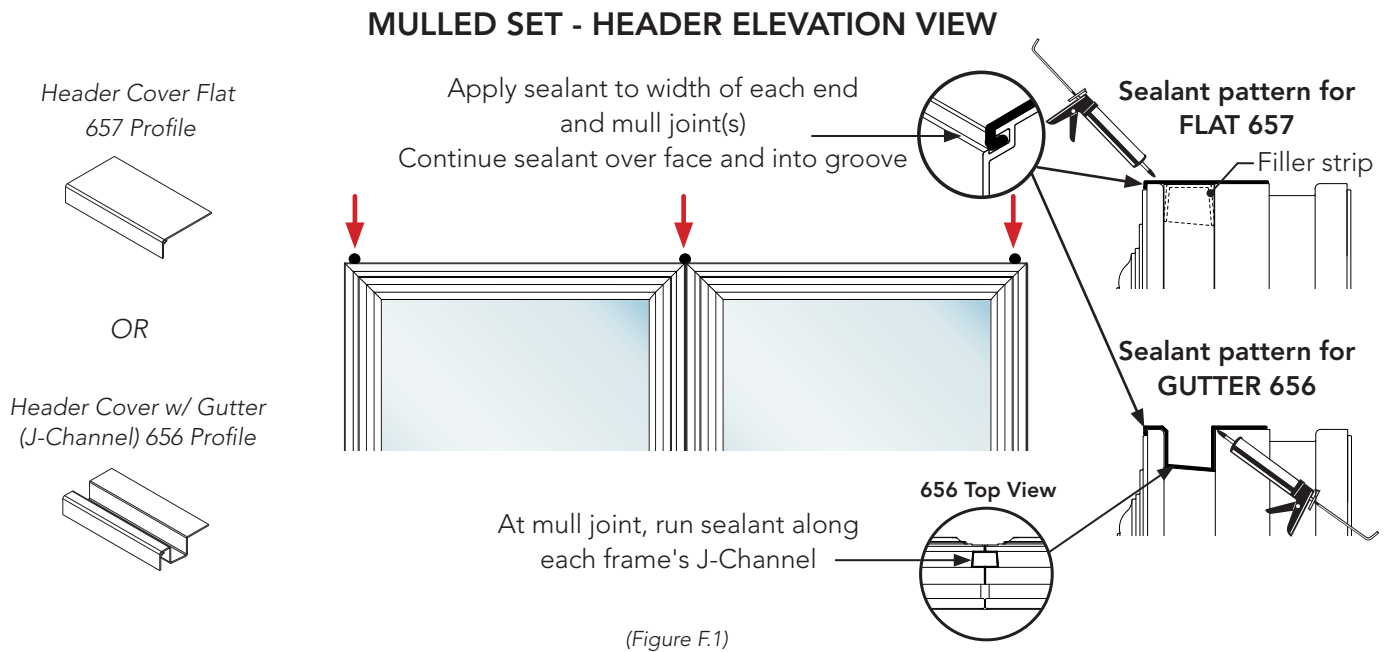
- 1 Check for weld flash at corners, which would prevent windows from a clean and tight mull. Clean away any excess weld on EXTERIOR and/or in the accessory grooves.
- 2 Arrange all windows, EXTERIOR side down, on a stable and well supported surface. Be sure EXTERIOR is fully protected from damage.
- 3 One window unit will have glazing tape factory applied. Remove backing from tape, align units to be mullied, and adhere to opposite frame. (Figure E.1)
- 4 Use a rubber mallet to tap INTERIOR snap mullion cover in place. Tap each end in place then work towards the center. (Figure E.1)
- 5 Carefully flip mullied set over, EXTERIOR side will be face up. Measure and trim EXTERIOR snap mullion cover to length, just below accessory groove. This will prevent header cover (installed in following section) from lifting at joint.
- 6 On EXTERIOR side, place bead of sealant for full length of horizontal or vertical mull joint. Install the mullion cover just below groove using a rubber mallet to tap into place.
- 7 Install stacking plates at all exterior mullied joints. Please scan the QR code on back of this instruction to view the "Vinyl Window Stacking Plate #604 Installation Instruction".
- 8 For ALL side-by side mullied sets, continue to the following section for installation of the header cover. Units with a stack mull will not receive a header cover. In this case, proceed to main installation instruction.

# F. INSTALL HEADER COVER - FLAT OR WITH GUTTER

## IMPORTANT INFORMATION BEFORE YOU BEGIN!

The 656 and 657 header cover is intended to provide extra protection at mull joint location(s) for side-by-side mullied window units. Windows must be mullied together with header cover applied before window unit is set into opening.

**NOTE:** Window units ordered with a Stucco Flange, factory installed or shipped loose, will not receive the header cover shown below. Install as instructed in this document.



**Recommendation:** If head expander is to be used, cut the expander in half. Only use the interior half, as needed. Discard exterior half. This will allow the FLAT header cover to be installed as instructed.

1

**Check to BE SURE front accessory groove is CLEAR of any obstructions. Clear away extra vinyl in welds.** The previously installed exterior zero mullion cover must be located just below groove to prevent header cover from lifting at mull joint. Trim or remove any excess weld material as required.

2

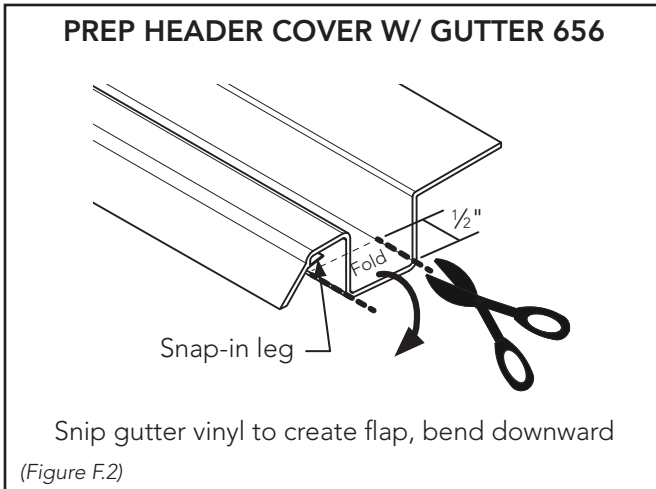
Apply a bead of silicone or sealant along each end of the mullied window header and mull joint(s). (Figure F.1)

- **Header Cover Flat 657**, apply a bead of silicone or sealant along each end of the mullied set header and mull joint(s) for the frame width. At each location, continue over front face and into the front accessory groove as shown in Figure F.1 details.

- **Header Cover with Gutter 656**, apply a bead of silicone or sealant along each end of the mullied set header and mull joint(s) for the frame width. At each location, continue over front face and into the front accessory groove as shown in Figure F.1 details. Run a bead of sealant along the frame's J-channel.

# F. INSTALL HEADER COVER - FLAT OR WITH GUTTER

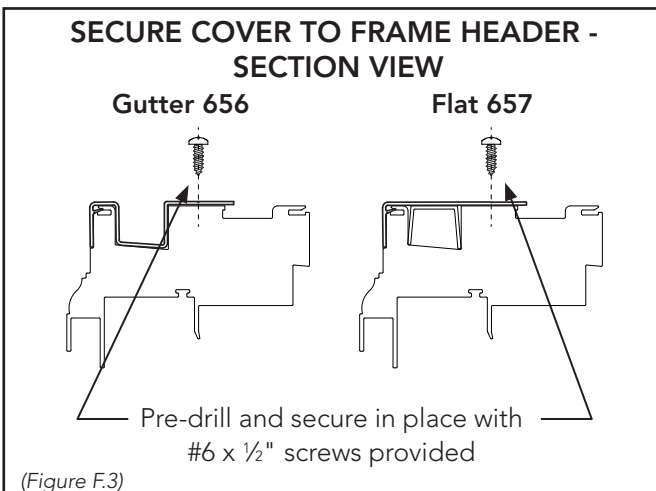
(CONTINUED)



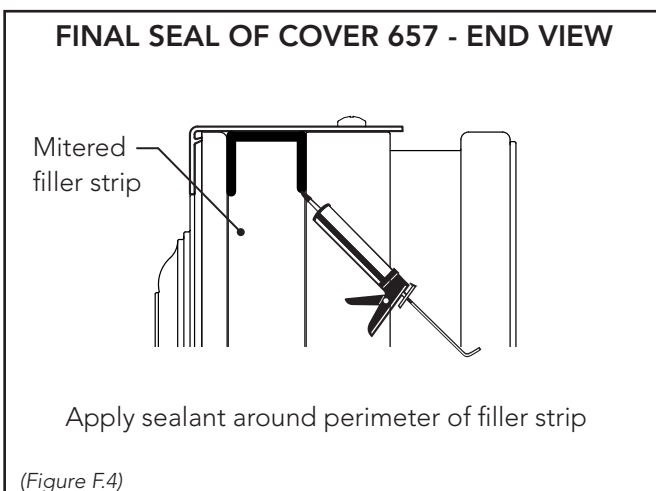
**3** For Header Cover with Gutter 656, snip each side of the J-channel gutter approximately  $\frac{1}{2}$ ", creating a flap. Bend flap down and against the window's jamb side J-channel, as shown. (Fig. F.2)

**4** For both cover options, mark and cut approximately  $\frac{1}{2}$ " of the snap-in leg located on underside of the extrusion at mull joint location(s). This will allow gutter/cover to lay flat against window frame. (Figure F.2)

**5** Place cover over window header, snapping the cover's leg into front accessory groove. Align the cover miter with window miter, each end. Use a soft mallet to tap into position and seat into the bead of silicone. Be sure cover with gutter 656 is fully seated in the window frame's integral J-channel. Re-check for proper end-to-end alignment. Remove any excess sealant.




**6** Along vinyl score line, pre-drill and secure cover in place with #6 x  $\frac{1}{2}$ " Phillips pan head screws (Pack #: S-HS-600S-01). Place 2 to 3" from each end and every 18" for width of mull unit, as shown. BE SURE to avoid placing a screw at mull joint location(s). Screws are intended to hold cover in position during installation. (Figure F.3)

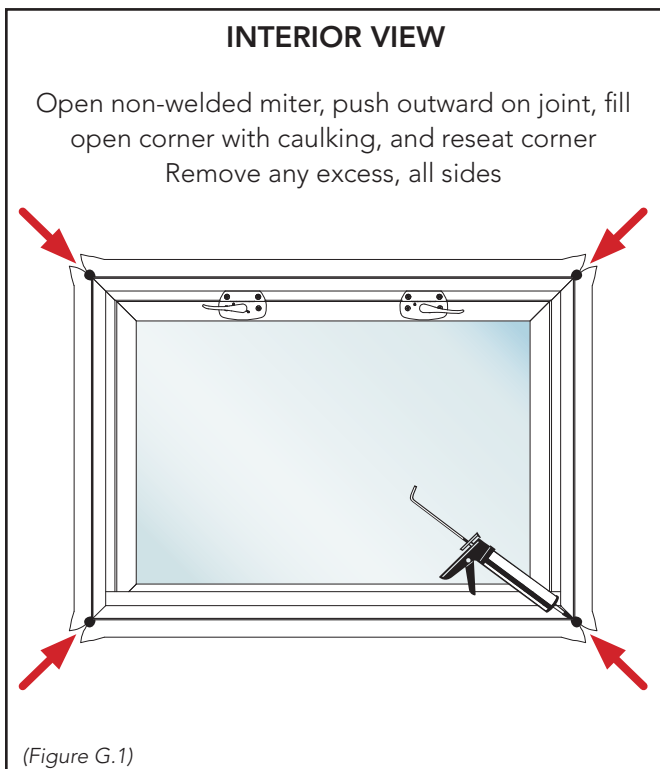


**7** For Header Cover Flat 657, at each end, apply a bead of sealant across width and approximately  $\frac{1}{2}$ " down each side of mitered filler strip for a complete seal, as shown. (Figure F.4)

**NOTE:** If the decision was made to not install the side filler strips (shipped loose), fill the end of the J-channel cavity with silicone or sealant, each end of mull set.

 Mull set is ready for installation into opening.

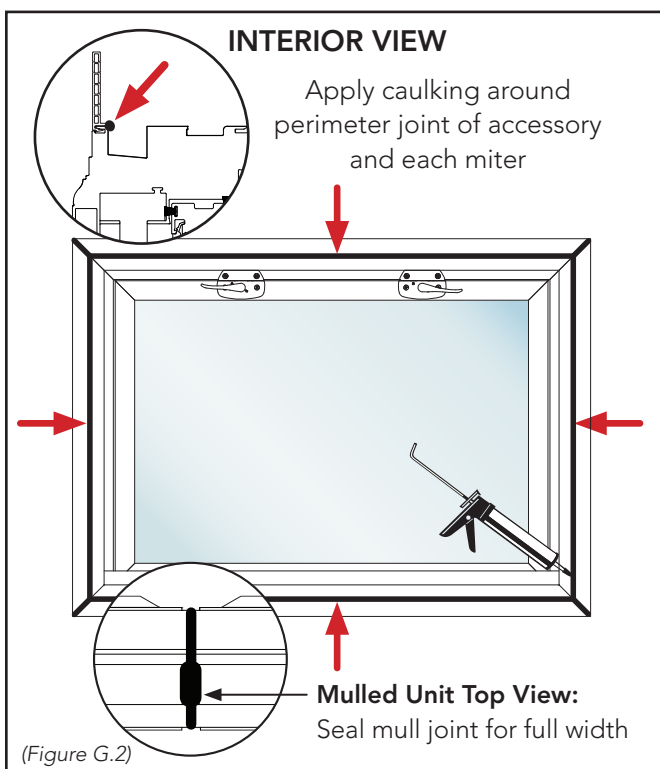
# G. INSTALL VINYL STUCCO FLANGE



**Hand icon:** For field mulled window units ordered with a stucco flange vinyl accessory, follow the steps in this section. Stucco flange must be installed and prepped on field mulled units before installing into the opening.

For single window units with factory installed stucco flange, follow Steps 4 - 7 ONLY.

- 1 Snap stucco flange accessory in place, all sides.
- 2 Open the non-welded corner miter by pushing outward on joint. From the interior side, fill the open corner with caulking. Reseat corner and remove any excess. Repeat on all sides. (Figure G.1)
- 3 Apply a bead of caulking along interior side of each closed corner miter to seal. (Figure G.2)
- 4 From the interior side, apply a bead of caulking around entire perimeter joint, where the vinyl accessory meets the frame for a complete seal. (Figure G.2)
- 5 For side-by-side mulled units, apply a bead of sealant along the top mull joint(s) for full width of surface as shown in detail drawing above, to provide a full seal. (Figure G.2)
- 6 Apply a generous amount of caulking to the interior side of the stucco flange. Cover as needed to create a complete seal.
- 7 After the installation of the window unit is fully complete, apply a bead of caulking to exterior edge of stucco flange, where flange meets existing finished stucco face.





# TROUBLESHOOTING & TIPS

PROBLEM	CAUSE	SOLUTION
Water leaking at top	<ol style="list-style-type: none"> <li>1. Top sash rail is bowed downward.</li> <li>2. Sash is bowed outward.</li> <li>3. Header cover was removed or not installed.</li> </ol>	<ol style="list-style-type: none"> <li>1. New sash is needed.</li> <li>2. Install an additional snubber at top center to pull sash inward. <i>(Please order through Customer Support.)</i></li> <li>3. Refer to Section F.</li> </ol>
Sill bows upward	<ol style="list-style-type: none"> <li>1. No shims below jambs. Critical on mulled units.</li> <li>2. Over insulating or over shimming below sill.</li> <li>3. Installing sill extender before foam below sill has cured.</li> <li>4. Insufficiently shimming under jambs when foam wrap is used under sill.</li> <li>5. Exterior trim is tight against window, not allowing for vinyl expansion in the heat.</li> <li>6. Jamb side shims placed too close to bottom of unit, not allowing for vinyl expansion in the heat.</li> </ol>	<ol style="list-style-type: none"> <li>1. Add shims to window sill per this instruction.</li> <li>2. Remove foam. Re-square and level window unit. Refer to this instruction for proper insulation procedure.</li> <li>3. Remove sill extender and foam below sill. Re-foam and let cure completely before re-installation of sill extender.</li> <li>4. Re-shim window unit per this instruction.</li> <li>5. Refer to "Installing Exterior Veneers to Windows" QR code at end of this instruction.</li> <li>6. Remove shims at bottom jamb side locations. Shim per this instruction.</li> </ol>
Header bows downward	<ol style="list-style-type: none"> <li>1. Excessive foam or over insulating above header.</li> <li>2. Jamb side shims placed too close to top of unit, not allowing for vinyl expansion in the heat.</li> </ol>	<ol style="list-style-type: none"> <li>1. Remove foam above header. Re-foam per this instruction.</li> <li>2. Remove shims at top jamb sides. Shim per instruction.</li> <li>3. It may be necessary to pre-drill and add a screw to correct bowed header.</li> </ol>
Frame racked or out of square	Improper or no shims below the jambs.	Re-shim window unit per this instruction.
Sash alignment is restricted	Outside corners of sash have an excess weld build-up.	Remove the excess weld on corners and from both sides of the bulb seal until a square corner is achieved.
Window leaks water at accessory corners	<ol style="list-style-type: none"> <li>1. Improper or no caulking on backside corners of accessory.</li> <li>2. Improper or no caulking at accessory to frame joint.</li> </ol>	<ol style="list-style-type: none"> <li>1. Caulk accessory per this instruction.</li> <li>2. Caulk accessory per this instruction.</li> </ol>
Condensation is present on inside or outside glass of window	Various normal conditions/reasons.	Refer to "Condensation, Humidity and Dew Point Temperature" QR code below for a detailed explanation of normal condensation conditions.

**\*Please call Customer Support for additional installation inquiries at 1-800-669-4711.**

**\*For additional information and helpful videos, SCAN or TAP the QR Codes.**

VISIT OUR INSTALLATION SUPPORT HOMEPAGE



Instruction for Hopper Window Quick Release Arm



Condensation, Humidity and Dew Point Temperature



Measuring Instruction MasterFit™ Trim



Installing Exterior Veneers to Windows



Install. Instruction Vinyl Window Stacking Plate #604

