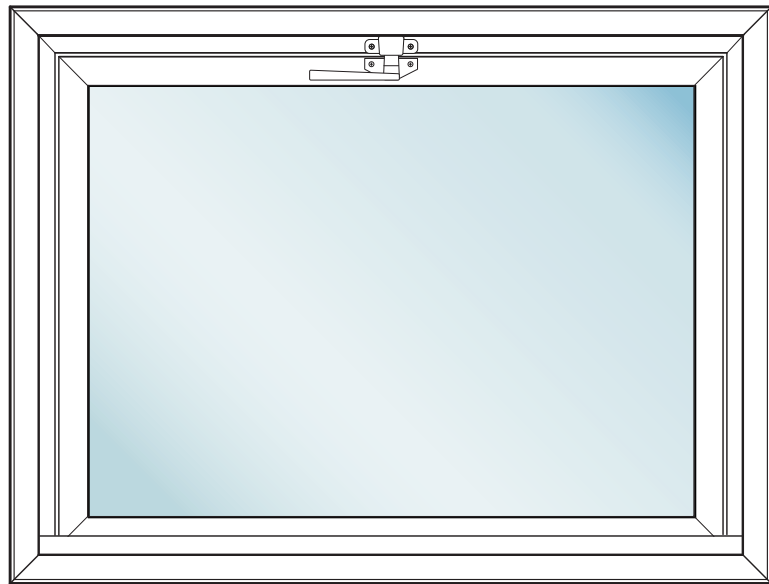




# INSTALLATION INSTRUCTIONS

## VINYL HOPPER WINDOW WITHOUT NAIL FIN

(ASPECT™, ENDURE™ AND 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 for any visible damages 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 damages 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 Service 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 (3/4" Main Frame Depth)

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

### OPTIONS:

- Sill Extender (NC Extended Flange), Part #: S-VE-8350-01 (Refer to Section 'D')
- Head Expander, Part #: S-VE-5860-01 (Refer to Section 'A' & 'D' for installation)
- J-Channel Filler Strips, factory installed or shipped loose, Part #: S-VR-667-01 (Refer to Section 'A' for installation)
- EcoLite 1.75" Stucco Flange, Part #: S-VR-662-01 (Refer to Section 'H')

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

- (2) Snap Mullion, Part #: S-VE-8410-01
- Header Cover, Part #: S-VR-656-01(with Gutter J-Channel) or S-VR-657-01(Flat)
- Header Cover Screw Pack (Qty 5), Part #: S-HS-600S-01
- Stacking Plate (Mull Strap) Pack, Part #: S-HG-604P-00

## Installation Pack

S-HS-521S-CC

(6) 3/8" 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 1/2" Phillips Pan Head Screws, (Color Matched), Part #: S-HS-783-CC (Use for optional head expander)



# VINYL WINDOW INSTALLATION GUIDELINES

- Windows achieve maximum performance from proper installation methods such as square frame, level sill and constant margins between sash and master frame.
- A window gains strength from surrounding wall structure. This is obtained with proper sizing, support and installation.
- Use a high quality grade of silicone with a neutral base. A silicone which releases an acetic acid during the curing process will not adhere to the vinyl.
- Approved sealants for this use must meet the requirements of ASTM C920, Class 25.
- **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:

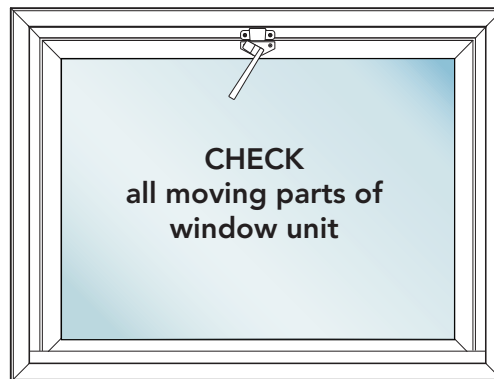
- Refer to Section F, Field Mulling Window Units, page 10 and Section G, Install Header Mullion Cover, page 11 - 12. Units must be mulled together before window unit is set into the opening.

### STUCCO FLANGE:

- Refer to Section H, Stucco Flange Vinyl Accessory Installation, page 13. Stucco flange must be installed and prepped on field mulled window units before setting into the opening. Factory installed stucco flange must be prepped on a single window unit before setting into the opening.
- 

## A. INSPECT AND PREPARE VINYL WINDOW UNIT

### INSPECT HOPPER AND SCREEN



(Figure A.1)



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



For units to be field mulled, complete Section A, then proceed to Section F - 'Field Mulling Window Units'. After mulling is complete, resume instruction to complete.

1

Inspect new window unit and screen for any material damages. Check all moving parts; locks, all operational hardware, glass, etc. Close and lock window unit to engage seals, locks, and weatherstripping.

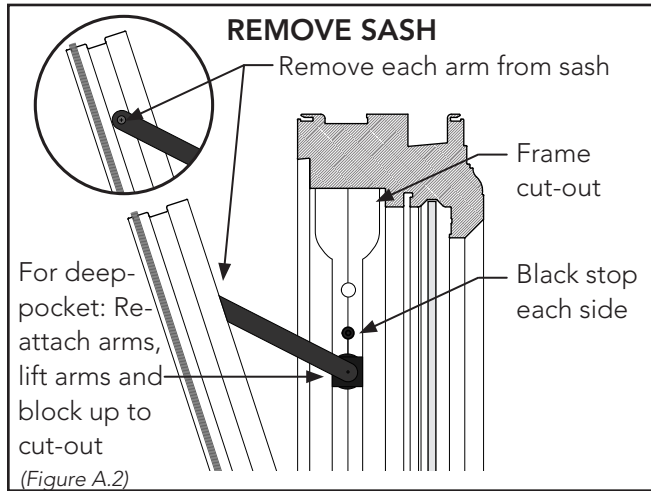
**NOTE:** Moving parts can be repaired AFTER window is installed. Scan the product packaging QR Code label to access ProVia's **After Sale Product Support** to enter a request and post pictures to order or call the Customer Service Team.

2

Determine ceiling clearance over and around window for proper window unit preparation.

- a.) **Standard Ceiling Application:** window unit is below ceiling with full access around entire unit.
- b.) **Deep-Pocket (Well) Application:** window unit is to be located within a deep wall pocket or tight to a drop or suspended ceiling, restricting access to the window.

# A. INSPECT AND PREPARE VINYL WINDOW UNIT (CONT.)



Screen and sash must be removed before installation. The sash must be removed first in order to remove screen. Screen and sash will be re-installed AFTER frame installation. Refer to following steps.

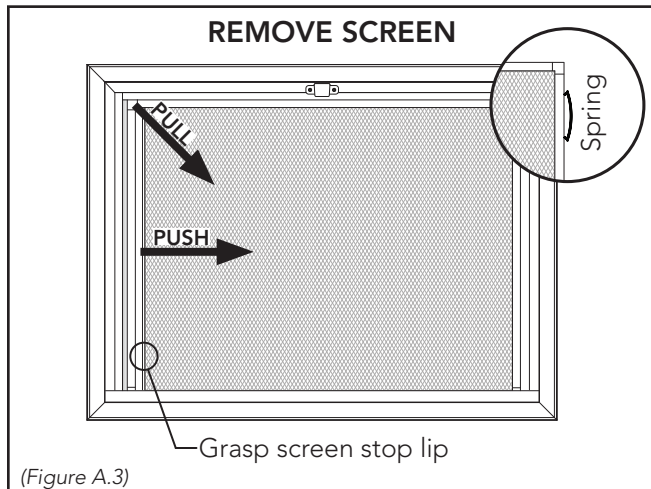
3

## Prepare Window - Sash Removal (Fig. A.2) Standard Ceiling Application:

- Open sash, use a Phillips screwdriver to disconnect arms from sash.
- Carefully lay sash horizontal to frame.
- Lift sash pivot pins from shoe turnbuckle. Sash may need lifted with one side ahead of other to gain proper clearance.

## Deep-Pocket Ceiling Application:

- Open sash, use a Phillips screwdriver to disconnect arms from sash.
- Carefully lay sash horizontal to frame.
- Remove black stop from each frame side.
- Slide each arm and block up to frame cutout and remove.
- Re-connect arms to sash. This step is required for installation with limited access.
- Lift sash pivot pins from shoe turnbuckle. Sash may need lifted with one side ahead of other to gain proper clearance.

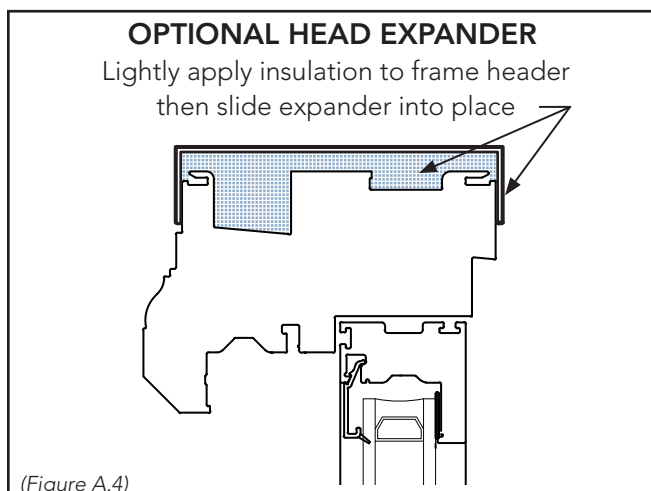


4

## Remove the screen (Figure A.3):

- From the interior, grasp screen stop lip to pull screen towards the right side, compressing the (2) screen springs.
- Holding screen compressed, pull top left corner then bottom left corner to the interior to free from exterior track.

**\* Reminder: DO NOT re-install sash or screen until after frame is installed.**



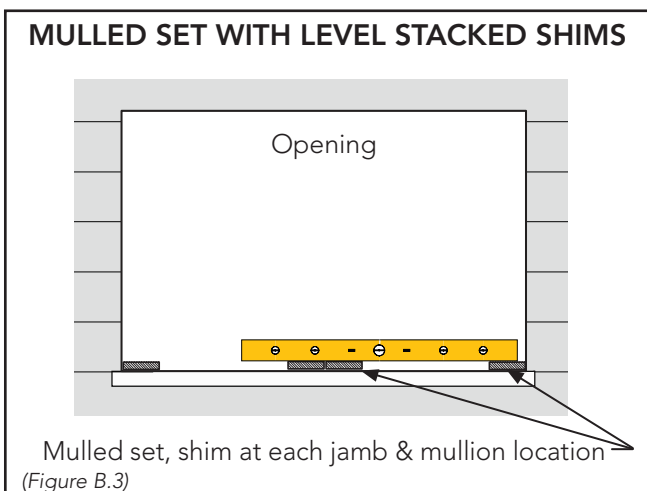
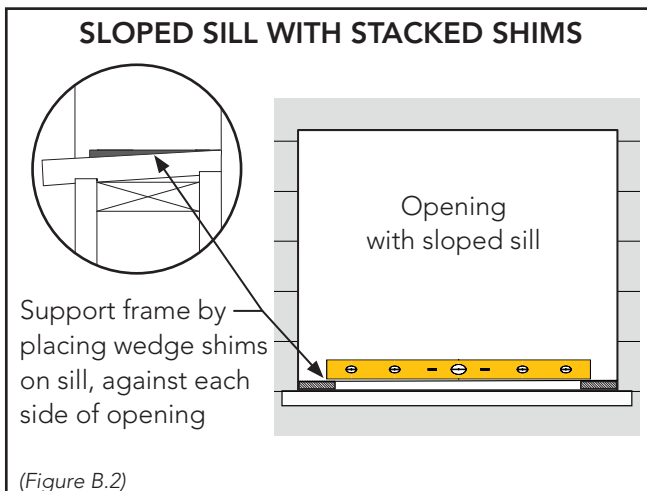
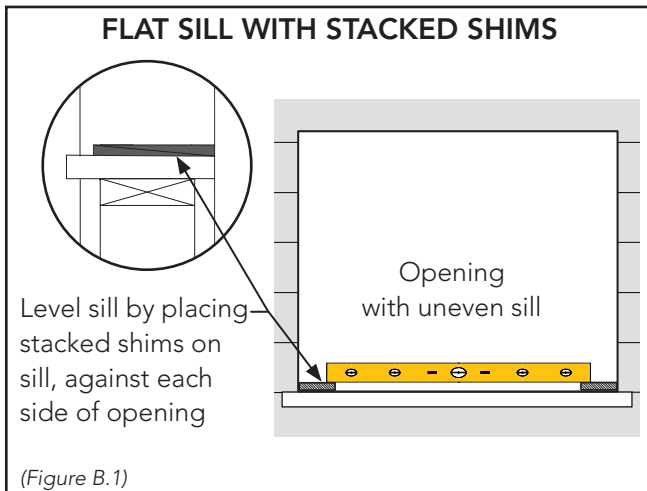
5

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.4)

6

If optional **stucco flange** is to be used in a true stucco application against stucco, refer to Section H - Stucco Flange Vinyl Accessory Installation, page 13. Stucco flange must be field installed and prepped before window unit is set in opening.

## B. PREP OPENING



1

Clean opening of all dirt, debris and obstructions.

2

Check for overall square of opening by measuring diagonally from corner to corner, each side.

3

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.

4

Check sill for level, flat, and for proper structural support of opening to ensure a proper installation and seal of window unit. If sill requires levelling, refer to Step 5. If sill is sloped, refer to Step 6. If sill is found to be flat and level, go to Section C.

5

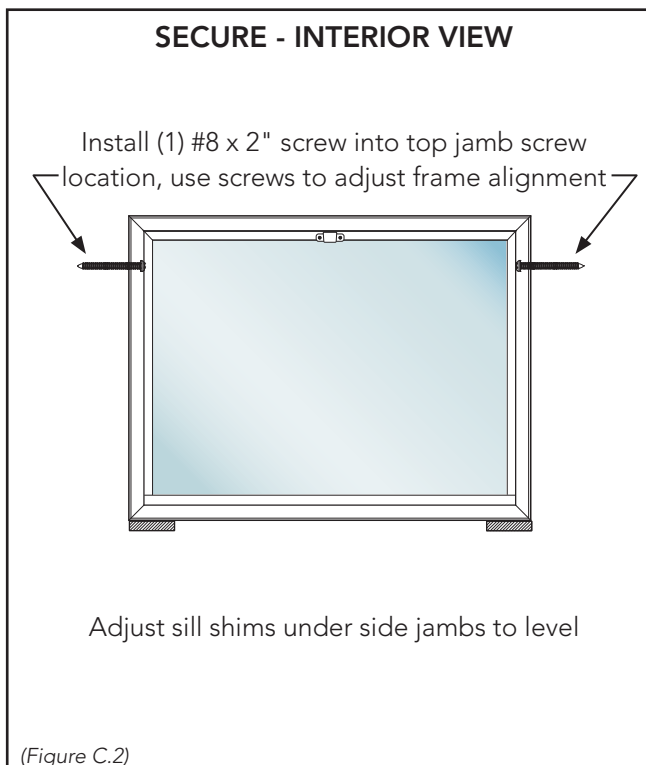
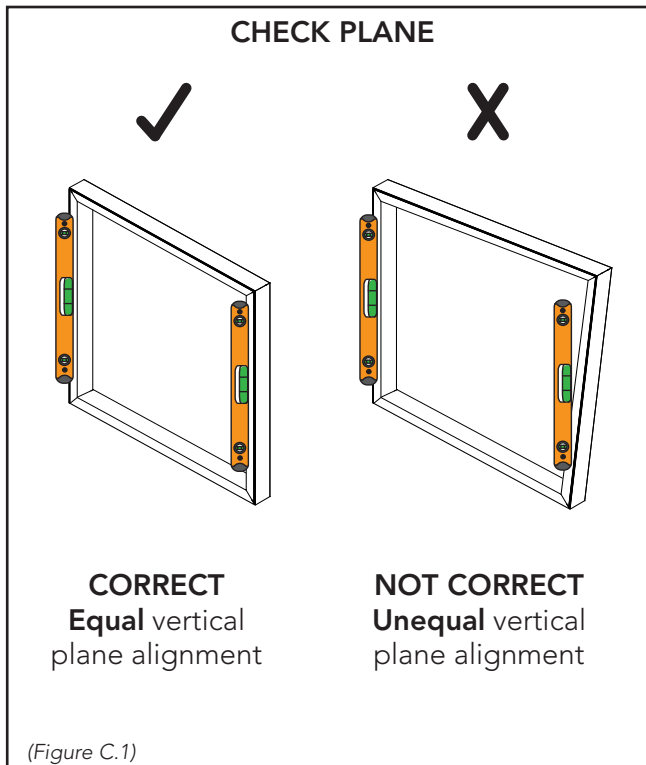
To level sill, place stacked shims on sill, against each side of opening. Be careful shims **DO NOT** tilt sill toward inside of home. For mulled sets, place stacked shims under all side jamb locations. (Figure B.1 & B.2)

**NOTE:** If foam wrap is used under sill, shim thickness **MUST** be increased to prevent foam wrap from crowning the sill.

6

To level a sloped sill, 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 stacked shims under all side jamb locations. (Figure B.2 & B.3)

## C. INSTALLATION



1

Check plane of the window unit. Each vertical jamb side frame should be equal and parallel to the other. See illustration for equal and unequal plane. **Frame alignment is critical for the success of installation and sash operation. Frame alignment will need to be CONTINUOUSLY monitored throughout installation.** (Figure C.1)

2

Set window frame directly onto shimmed sill. Center unit in the opening.

3

Install (1) #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!** (Figure D.2)

4

Use top screws to adjust frame alignment in order to establish an even sash to frame margin along top of sash. (Figure C.2)

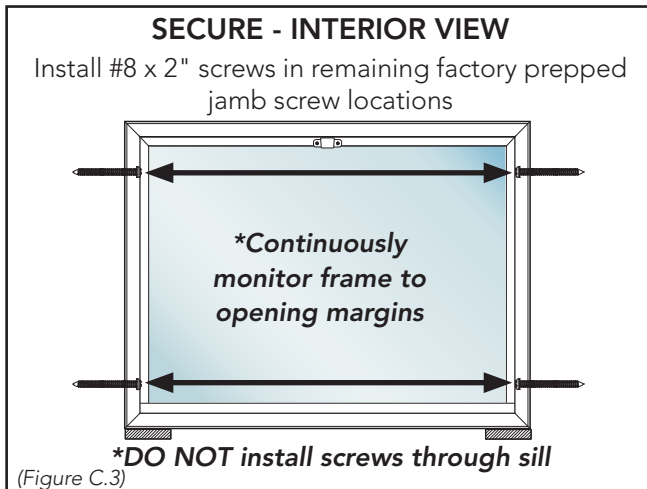
5

Use sill shims to adjust sill for level as needed. For mulled 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)



**IMPORTANT! Shims can be installed prior to screw installation. It is critical to monitor margins through this installation method.**

## C. INSTALLATION (CONTINUED)

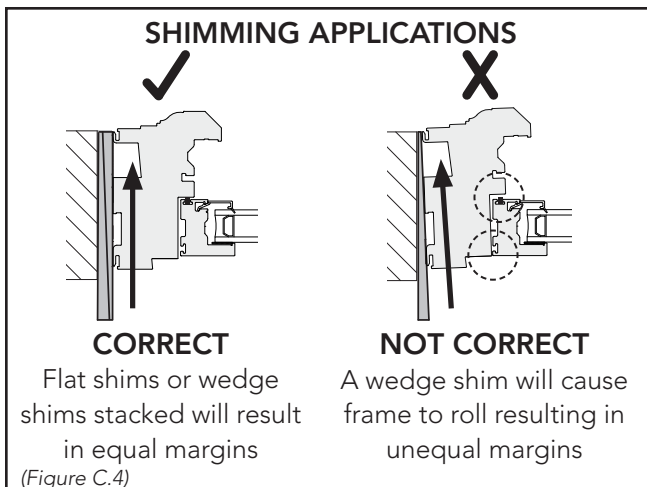


6

Install (2 - 4) #8 x 2" Phillips pan head screws. Place a screw in each remaining factory prepped screw location. If unit is prepped in middle, install bottom screws first. **DO NOT over tighten screws! DO NOT install screws through sill!** (Figure D.3)

**NOTE:** If spacing between jamb screws is greater than 24", additional jamb screws may need added to stabilize frame. 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.

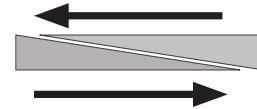


7

Adjust jamb screws as required to achieve straight frame alignment, uniform top and bottom.



**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 frame to roll, resulting in unequal margins. (Figure C.4)

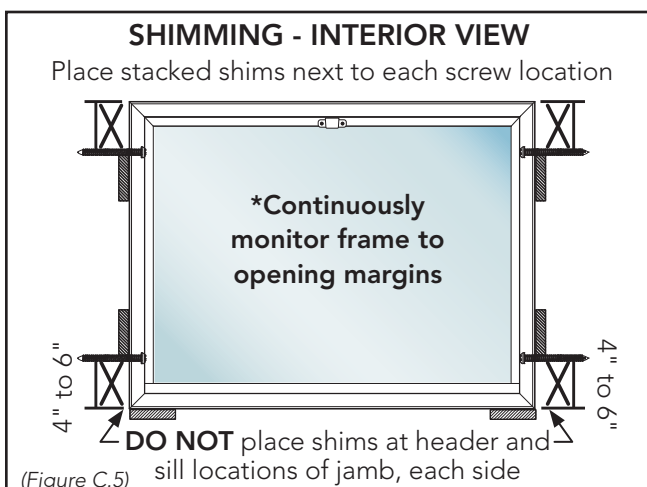


8

Place shims next to each screw location. Be sure top shims are located 4" to 6" from top of unit and bottom shims are 4" to 6" from bottom of unit. If spacing between shims is greater than 12", additional shims may be needed to maintain margins and stabilize frame. Use shims to adjust margins as needed. **DO NOT over shim. Over shimming may change the margins and jeopardize operational performance.** (Fig. C.5)

**NOTE:** Allow for vinyl expansion, **DO NOT** place shims at top header and bottom sill locations of jamb sides. Shimming in these locations will cause frame distortion.

**NOTE:** A screw and shim location(s) may be added to header to improve margin.



9

Final check on frame alignment. Adjust shims and screws as needed to achieve and maintain equal and straight alignment, all sides.



## C. INSTALLATION (CONTINUED)

### RE-INSTALL SCREEN AND SASH

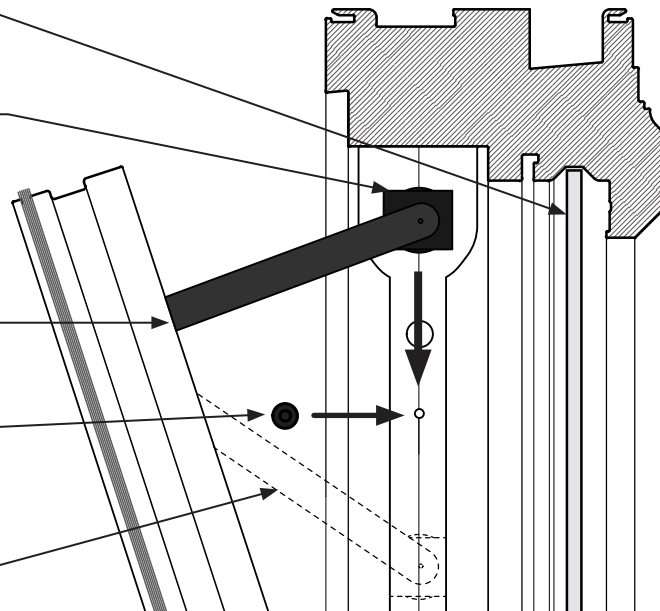
FIRST, re-install screen

For deep pocket, re-insert each arm and block into frame cut out - roller visible at top and bottom of block, as shown

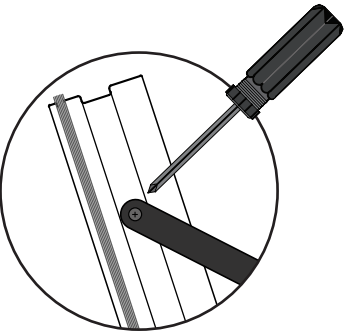
Arm (re-installation position)

For deep-pocket, if installation application allows, re-install black stops

Arm (operating position, shown dotted)



(Figure C.6)



For most applications, re-attach arms to sash

10

**Re-install screen** (Be sure screen is oriented with screen stop lip to the interior side.)

- From the interior, insert the right side of screen into exterior track of frame.
- Use screen stop lip to push screen to the right, compressing springs.
- With spring compressed, slightly twist and insert top and bottom left side of screen.

11

**Re-install sash (Standard Ceiling Applications)** (Figure C.6)

- Hold sash in horizontal position and insert pins into each shoe located in bottom of frame.
- Tilt sash up to re-attach arms with factory screws.

**Re-install sash (Deep-Pocket Ceiling Application)** (Figure C.6)

- Hold sash in horizontal position and insert pins into each shoe located in bottom of frame.
- Tilt sash up to re-insert each arm with block into the frame cut-out.
- Tilt sash up until arm blocks are located below black stop locations. Re-install black stops each side if installation application allows.

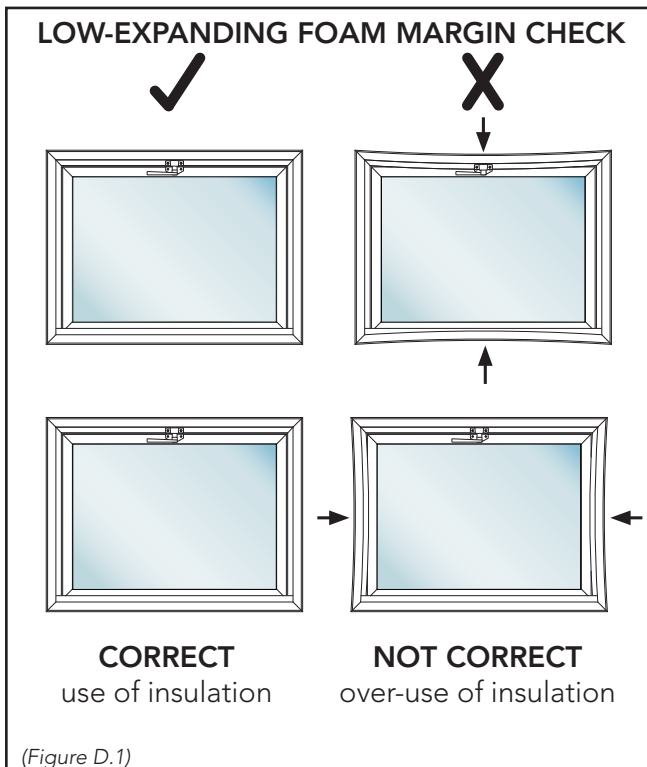


**IMPORTANT!** Deep-pocket (well) applications or applications with limited access may not have the accessibility to re-install black stops. Black stops will keep arms from sliding up and over center, preventing sash from closing. If black stops are not re-installed, the sash arms must be manually pushed down to close sash with each operational use.

12

**Check sash for proper operation.** For sash operation issues, refer to the Troubleshooting Section.

## D. INSULATE AND FINAL ADJUSTMENTS



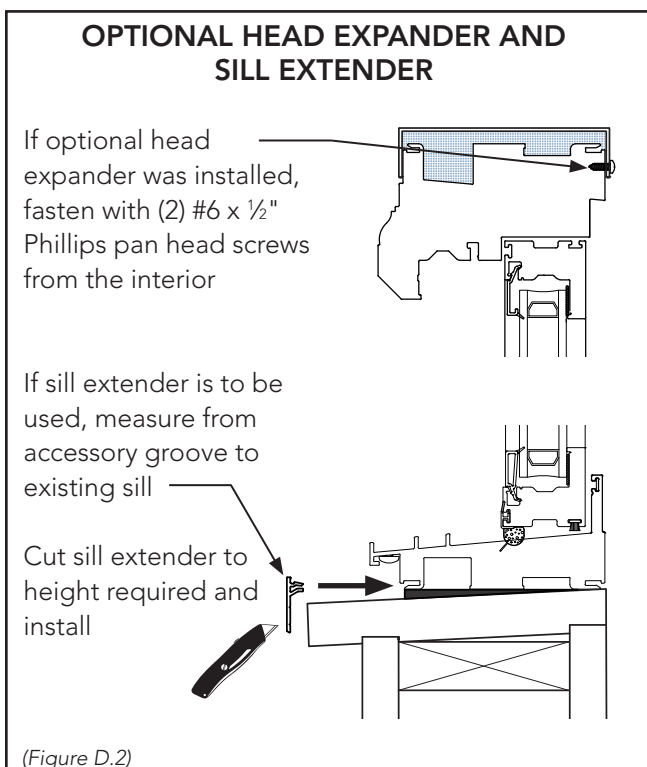
1 Install hole plugs into all jamb screw locations.

2 Close and lock sash.



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

3 From the interior, 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)



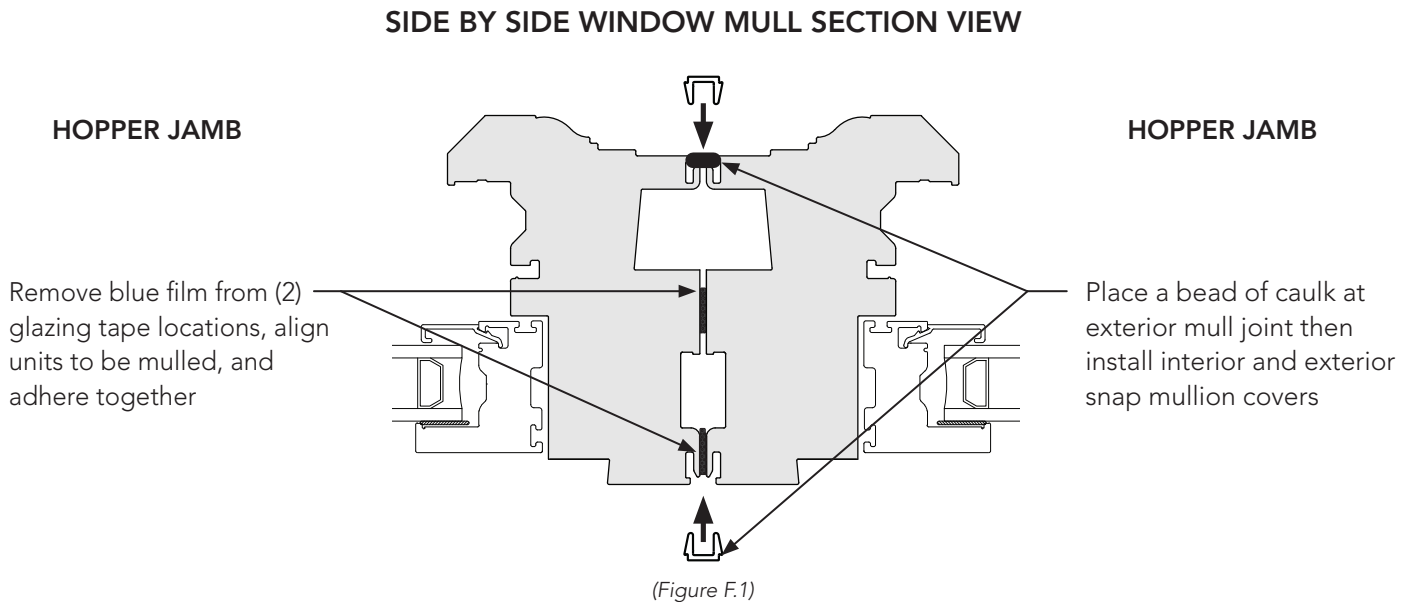
4 Use a high quality exterior sealant to caulk the exterior unit to wall joint to ensure water tightness. Use backer rod if needed.

5 If optional **head expander** was installed, fasten in place with (2) #6 x 1/2" Phillips pan head screws (included) from interior side. (Figure D.2)

6 If **sill extender** is to be used, measure distance from the sill accessory groove to the existing sill. Cut sill extender to height required and install. **DO NOT** install until foam has cured. (Figure D.2)

7 If **MasterFit™ Trim** is ordered, **DO NOT** nail trim to jamb extension. For installation tips, call Customer Service. Refer to QR code on back for measuring assistance.

## F. FIELD MULLING WINDOW UNITS



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

**1**

Arrange all windows, EXTERIOR side down, on a stable and well supported surface. Be sure EXTERIOR is fully protected from damage.

**2**

Check for weld flash at corners, which would prevent windows from a clean and tight mull. Clean away any excess on EXTERIOR and/or in the accessory grooves.

**3**

One window unit will have glazing tape factory applied. Remove backing from tape, align units to be milled, and adhere to opposite frame. (Figure F.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 F.1)

**5**

Carefully flip mulled 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 exterior accessory groove at mull joint. Install the EXTERIOR mullion cover just below groove using a rubber mallet to tap into place.

**7**

Install stacking plates at all exterior mulled 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 mulled 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.

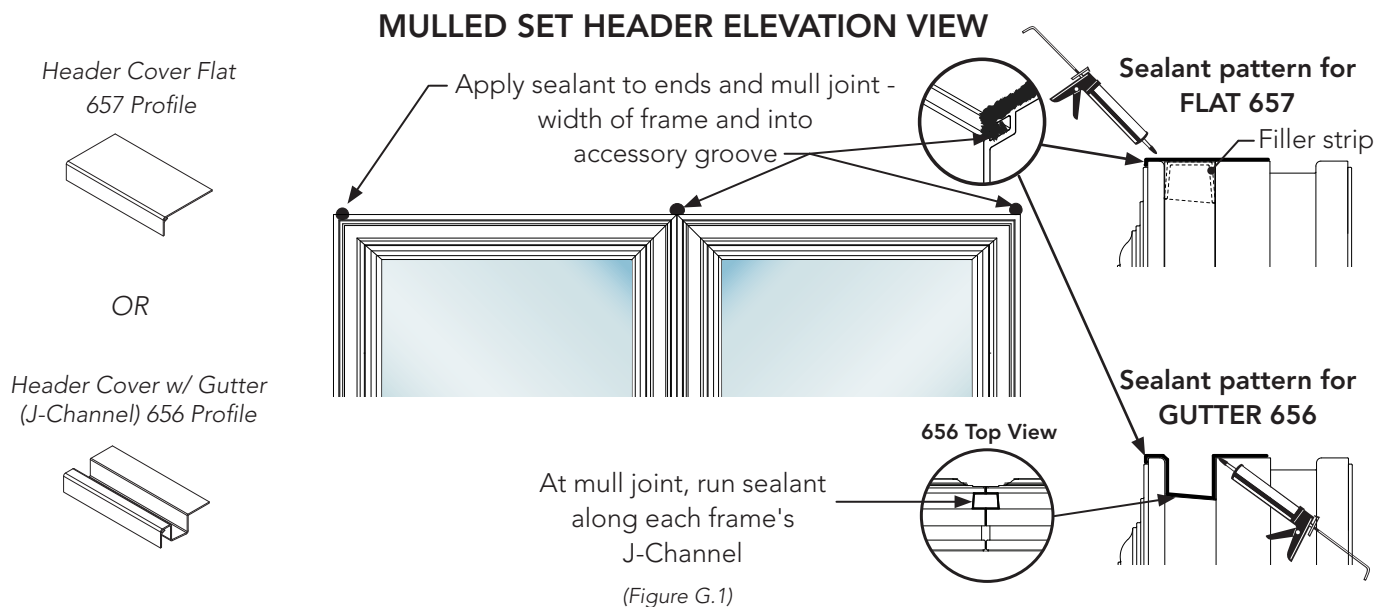
# G. INSTALL HEADER COVER - FLAT OR WITH GUTTER

## 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 mullion cover shown below. Install as instructed in this document.

**\*NOTE:** IF the decision is made to wrap vinyl cladding with termination into the unit's top accessory groove and the header cover is NOT installed, it is then the responsibility of the installer to provide the adequate protection required to avoid any leakage issues at the mullied joint location(s). Joint **MUST BE** fully sealed.



**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, i.e. extra vinyl in welds.** The previously installed exterior mullion cover must be located just below groove to prevent header cover from lifting at mull joint. Trim or remove any excess material as required.

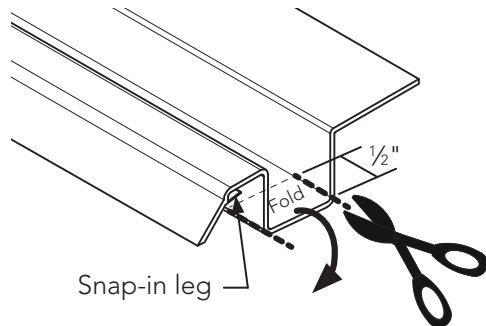
2

Apply a bead of silicone or sealant along each end of the mullied set header frame and along mullied joint(s). (Figure G.1)

- **Header Cover Flat 657**, apply bead of silicone along frame width and into the front accessory groove as shown in Figure G.1 section details. Repeat on mull joint(s).
- **Header Cover with Gutter 656**, apply bead of silicone along frame width and into the front accessory groove as shown in Figure G.1 section details. Repeat on mull joint - run bead of sealant along each frame's J-channel.

# G. INSTALL HEADER COVER - FLAT OR WITH GUTTER (CONT.)

## PREP HEADER COVER W/ GUTTER 656



Snip gutter vinyl to create flap, bend downward

(Figure G.2)

3

For Header Cover Flat 656, snip each side of the vinyl J-channel gutter approximately  $\frac{1}{2}$ " to create a flap. Bend flap downward and against jamb side frame J-channel, as shown. (Figure G.2)

4

For each cover option a small section of the snap-in leg, located on underside of vinyl extrusion (refer to Figure F.2), must be removed at mull location(s). Locate, mark, and cut approximately  $\frac{1}{2}$ " of the snap-in leg at window mull joint(s) to allow gutter/cover to lay flat against frame.

5

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

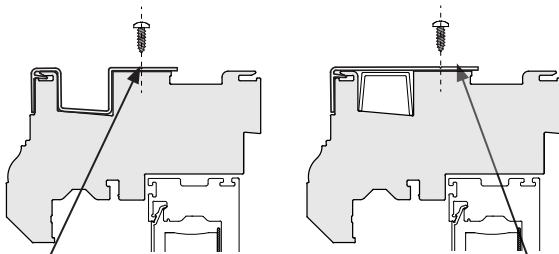
6

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

## SECURE COVER TO FRAME HEADER - SECTION VIEW

Gutter 656

Flat 657



Pre-drill and secure in place with #6 x  $\frac{1}{2}$ " screws provided

(Figure G.3)

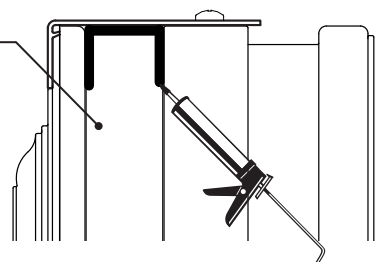
7

For Header Cover Flat 657, 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 G.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 for a complete seal, each end of mulled set.

## FINAL SEAL OF COVER 657 - END VIEW

Mitered filler strip



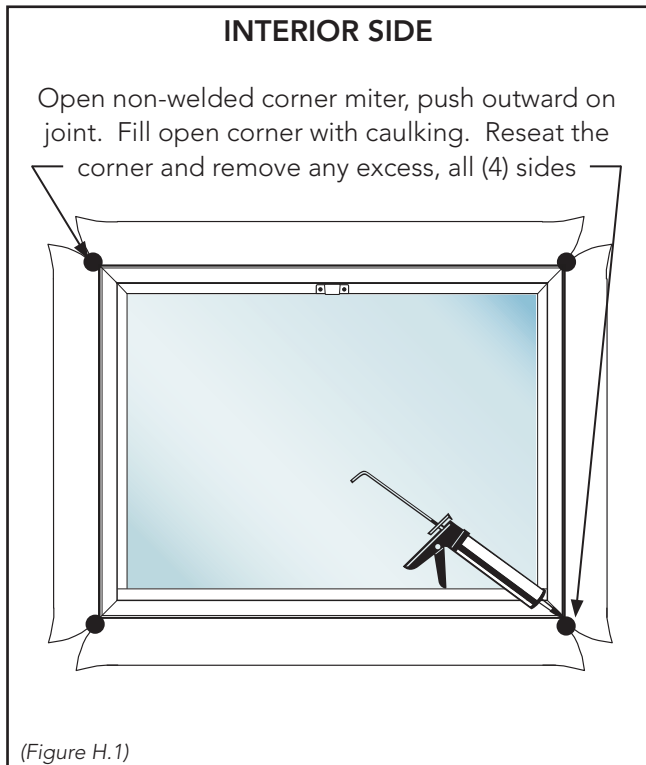
Apply sealant around perimeter of filler strip

(Figure G.4)



Mulled set is ready for installation into opening.

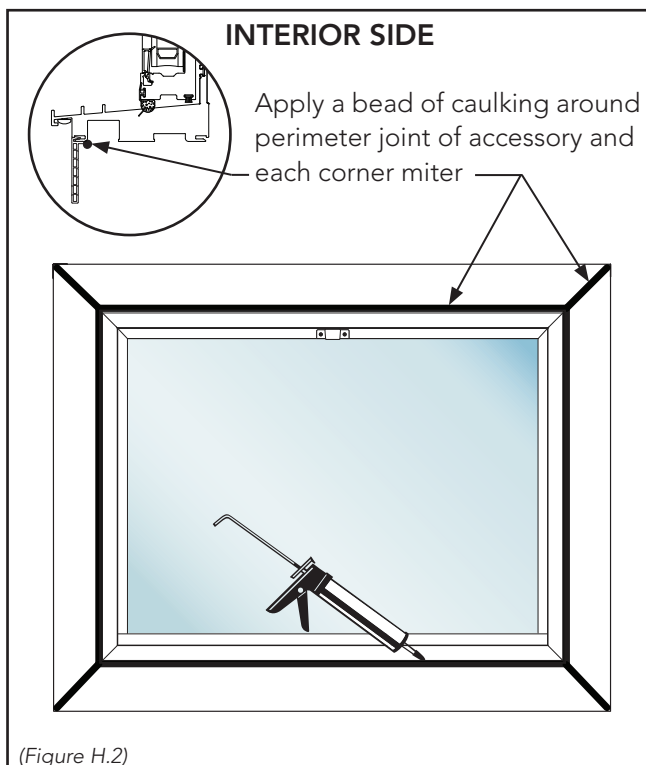
# H. STUCCO FLANGE VINYL ACCESSORY INSTALLATION



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 - 6 ONLY.

- 1 Snap stucco flange accessory in place, all (4) sides.
- 2 Open the non-welded corner miter by pushing outward on joint. Fill the open corner with caulking. Reseat the corner and remove any excess. Repeat on all (4) sides. (Figure H.1)
- 3 Apply a bead of caulking along interior side of each closed corner miter to seal. (Figure H.2)
- 4 Apply a bead of caulking around entire perimeter joint, where the vinyl accessory meets the frame for a complete seal. (Figure H.2)
- 5 Apply a generous amount of caulking to the interior side of the stucco flange. Cover as needed to create a complete seal.
- 6 After the installation of the window unit is fully complete, apply a bead of caulking to the exterior edge of the stucco flange, where the flange meets the 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 mullion cover not added or removed.</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 Service.)</i></li> <li>3. Refer to Section G.</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 side location. Shim per this 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.



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

*\*For additional information and helpful videos, visit our Homepage for Installers by TAPPING OR SCANNING the QR Code shown.*



Installing Exterior Veneers  
to Windows



Measuring Instruction  
MasterFit™ Trim



Condensation, Humidity and  
Dew Point Temperature



Install. Instruction  
Vinyl Window Stacking Plate #604

