

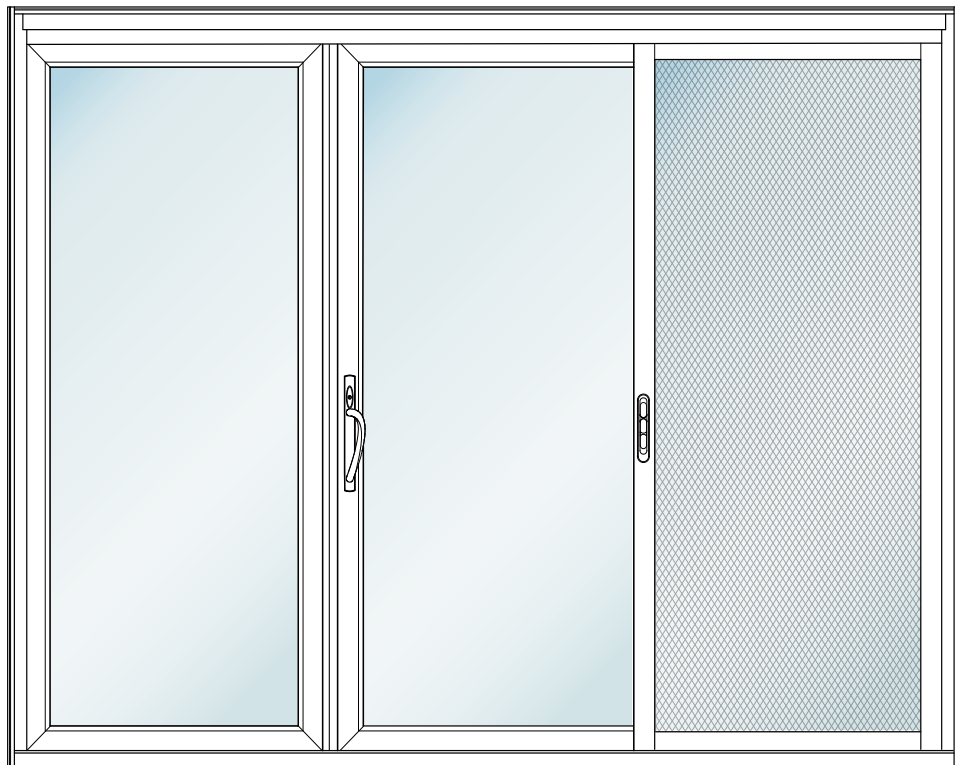


INSTALLATION INSTRUCTION MANUAL

3-LITE VINYL PATIO DOOR

CENTER ACTIVE, UNASSEMBLED

(ASPECT™ AND ENDURE™)



** 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



GETTING STARTED

MATERIALS YOU WILL NEED

- High Quality Silicone Caulking in accordance with ASTM C920, Class 25 & Caulking Gun
- AAMA approved Low-Expanding Window Insulation Foam in accordance with ASTM C1620
- 6" or 9" Adhesive Flashing Tape in accordance with ASTM D-779 (new construction application)
- Shims



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.

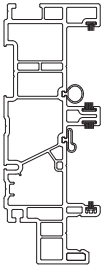
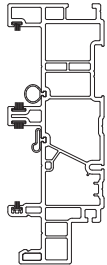
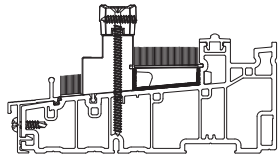
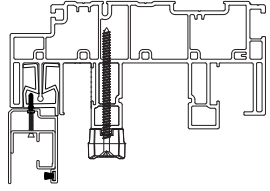
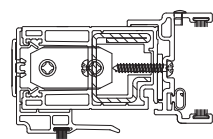



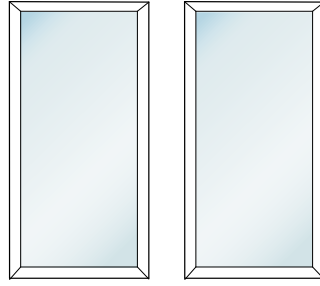
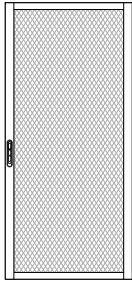
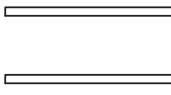
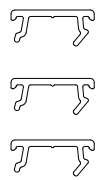


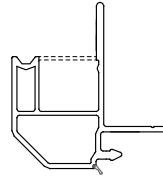
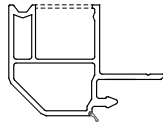

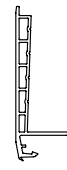

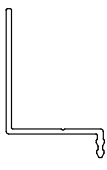
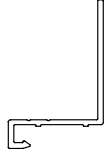


IMPORTANT NOTES BEFORE YOU BEGIN

- 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).
- **Do not remove existing patio unit from opening until the frame is fully assembled and all needed components are at the site and frame size matches the opening.**

ASPECT™ AND ENDURE™ 3-LITE CENTER ACTIVE PATIO DOOR ASSEMBLY CONTENTS

NOTE: Please refer to chart below for the required assembly contents of an Aspect or Endure patio door. The patio frame will arrive from the factory unassembled with a few pre-assembled components to allow for proper handling of the patio unit as ordered.

Main Frame Assembly Profiles							
	(1x) Fixed Jamb Assembly	(1x) Fixed Jamb Assembly	(1x) Sill Assembly with Sill Dust Cover factory installed	(1x) Header Assembly			
							
	(1x) 3-Lite Mullion Assembly (Interlock and H-Mullion)	(1x) Center Active Screen Mullion	(1x) Screen Mullion Spacer				
Sash and Screen							
	(1x) Active Sash	(2x) Fixed Sash	(1x) Screen				
Accessory Parts							
	(2x) Interior Vinyl Jamb Cover (2" x 80")	(3x) Interior Vinyl Groove Cover (Ships installed on frame)	(1x) Handle Set *Aeris/ Endure - included spring must be installed	(1x) Mortise Handle Set Keeper (Taped to Active Sash)			
Optional Installation Accessories <i>(Refer to the separate and included instruction document if applicable)</i>							
	5907 Brickmold w/ Nail Fin	5917 Brickmold	5927 Frame Adapter	5938 Stucco Flange	5940 Nail Fin (Partial Jamb)	5945 Nail Fin (Full Jamb)	5956 Nail Fin

ASPECT™ AND ENDURE™

3-LITE CENTER ASSEMBLY INSTALLATION PACK CONTENTS

NOTE: The individual installation packs are labeled and numbered. Please refer to the chart below for the appropriate pack contents and for the installation location.

**3-Lite Center Op.
Installation Pack**
S-DH-041S-CC



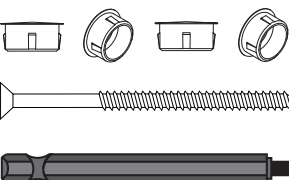
- (1) The individual installation packs are labeled, numbered and are all packed inside one main bag. Open up the main parts bag and refer to the appropriate pack contents for each installation location referenced below.

**(2x) Installation
Pack #1**
S-HS-344S-00
(Frame Assembly)



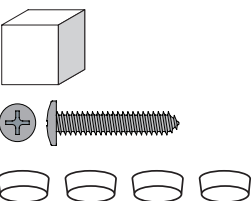
- (10) #8 x 2" Truss Quadrex Screw, Part #: S-HS-344-00

**(1x) Installation
Pack #2**
S-DH-020S-CC
(Jamb & Header)



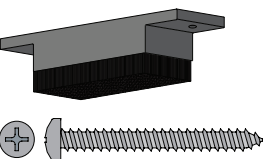
- (16) 3/8" Hole Plugs (Color Matched), Part #: S-HG-698-CC
- (16) #8 x 3" Phillips Square Screws, Part #: S-HS-350-00
- (1) #2 Phillips Square Combo Bit, Part #: S-ST-347

**(2x) Installation
Pack #3**
S-DH-023S-CC
(Sash & Fixed Sash)



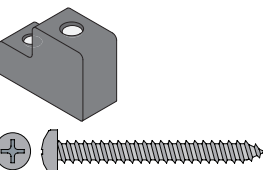
- (5) Foam Plugs, Part #: S-HG-521-01
- (4) #8 x 1" Phillips Pan Head Screws, Part #: S-HS-345-00
- (4) Screw Caps, Part #: S-HG-311-CC

**(2x) Installation
Pack #4**
S-DH-024S



- (1) Head Weatherstrip Block, Part #: S-HG-524-13
- (2) #8 x 1 1/4" Phillips Pan Head Screws, Part #: S-HS-342-13

**(1x) Installation
Pack #5**
S-DH-025S
(Header Bumper)

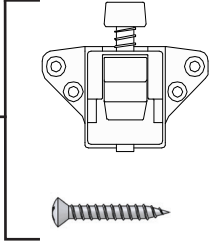
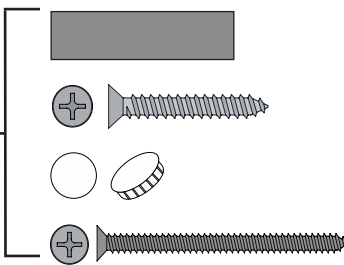
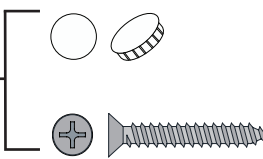
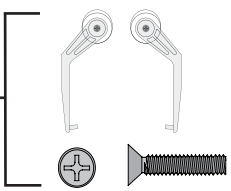
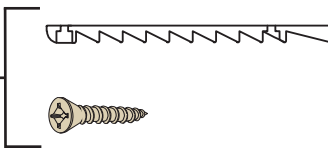


- (1) Sash Stopper, Part #: S-HG-532-13
- (2) #8 x 1 1/4" Phillips Pan Head Screws, Part #: S-HS-342-13

ASPECT™ AND ENDURE™

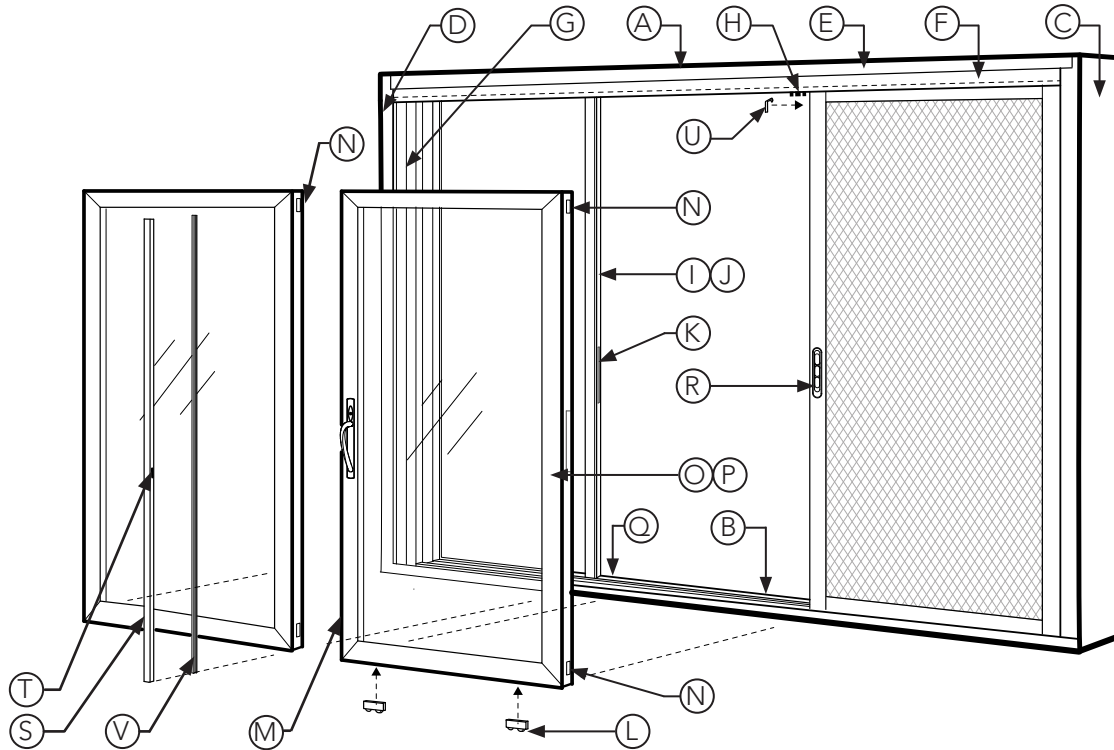
3-LITE CENTER ASSEMBLY INSTALLATION PACK CONTENTS

NOTE: The individual installation packs are labeled and numbered. Please refer to the chart below for the appropriate pack contents and for the installation location.

<p>(1x) Installation Pack #6 S-DH-026S-CC <i>(Standard on Aspect, Optional on Endure)</i></p>		<ul style="list-style-type: none"> (1) Active Sash Secondary Lock (Foot Lock) (Color Matched), Part #: S-HG-353-CC (4) #8 x 3/4" Phillips Oval Head Screws (Color Matched), Part #: S-HS-414-CC
<p>(1x) Installation Pack #7 S-DH-027S-CC <i>(Frame Header, Sash Mullion, & Screen Mullion)</i></p>		<ul style="list-style-type: none"> (7) 3-Lite Shims, Part #: S-HG-542-13 (2) #8 x 1" Phillips Flat Quadrex Screw, Part#: S-HS-351-00 (2) Screw Cap Cover (Color Matched), Part #: S-HG-534-CC (4) #8 x 2 3/4" Phillips Flat Head Wood Screws, Part #: S-HS-343-00
<p>(1x) Installation Pack #8 S-DH-028S-CC <i>(Screen Mullion)</i></p>		<ul style="list-style-type: none"> (5) Screw Cap Cover (Color Matched), Part #: S-HG-534-CC (5) #8 x 1" Phillips Flat Head Screws, Part#: S-HS-351-00
<p>(1x) Installation Pack #10 S-DH-010S <i>(Screen)</i></p>		<ul style="list-style-type: none"> Screen Wheel Brackets, (1) Part #: S-HG-366P-00 (Right Hand) (1) Part #: S-HG-367P-00 (Left Hand) (2) #6-32 x 7/8" Phillips Flat Head Screws, Part #: S-HS-360-00
<p>(1x) AccuVent™ Bolt Plate Kit S-HG-573S-CC <i>(Standard on Endure, Optional on Aspect)</i></p>		<ul style="list-style-type: none"> (1) AccuVent Bolt Plate (Color Matched), Part #: S-HG-573-CC (2) #8 x 1 Combo Vinyl Hold (Color Matched), Part #: S-HS-340-CC

RE-ORDER REFERENCE - PRODUCT PART # IDENTIFICATION

NOTE: Parts listed may be a subassembly or part of a subassembly.



FRAME PARTS:

- A. Header - S-VE-7002-CC
- B. Sill - S-VE-7000-CC
- C. RH Jamb - S-VE-7004R-CC
- D. LH Jamb - S-VE-7004L-CC
- E. Outer Cover - S-AE-6206-CC
(See page 20 for Detail)
- F. Common Screen Inner Track - S-AE-6207-32
(See page 20 for Detail)
- G. Jamb Covers (Ea. Side) - S-VE-0714-CC
(If Laminate, S-VE-0784-CC)
- H. AccuVent™ Bolt Plate - S-HG-573S-CC
(See page 19 for Detail) (*See note this page)

SCREEN PARTS:

- R. LH Common Patio Screen Handle - S-DH-071
(RH Common Patio Screen Handle - S-DH-068)
- S. Screen Mullion - S-VE-0715-CC
- T. Common Screen Keeper - S-DH-069
- U. LH Wheel Bracket Assembly - S-HG-367P-00
(See page 18 for Detail) (**See note this page)
(RH Wheel Bracket Assembly - S-HG-366P-00
hidden on opposite side of screen) (**See note
this page)
- V. Center Active Screen Mullion Spacer -
S-VR-444-CC

SASH PARTS - (2) Fixed, (1) Center Active:

- I. 3-Lite Mullion (H-Mullion) - S-VE-7036-CC
- J. Interlock - S-VE-7026-CC
- K. Multi-Pt Lock/Keeper - S-DH-072
(See page 17 for Detail)
- L. Tandem Wheel Patio Door - S-HG-355-00
with Shim - S-HG-529-01
- M. Sash Groove Cover - S-VE-7023-CC
- N. Sliding Cap - S-HG-530-CC
- O. AccuVent Latch Trim Plate - S-HG-570-CC
(See page 19 for Detail) (*See note this page)
- P. AccuVent Latch - S-HG-571-00
(See page 19 for Detail) (*See note this page)
- Q. Foot Lock Keeper - S-HG-354-CC
(Foot Lock - S-HG-353-CC, located on interior
of active sash. (See page 19 for Detail))

NOTES:

* For re-order of all AccuVent™ parts, please order the AccuVent Latch Repair Kit, S-HG-571S-CC.

**For re-order of Screen Wheel Bracket Assembly, please order Pack #10, S-DH-010S.

***For assistance on all re-orders, please contact your Dealer or our Customer Service Team at 1-800-669-4711.



IMPORTANT INFORMATION

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

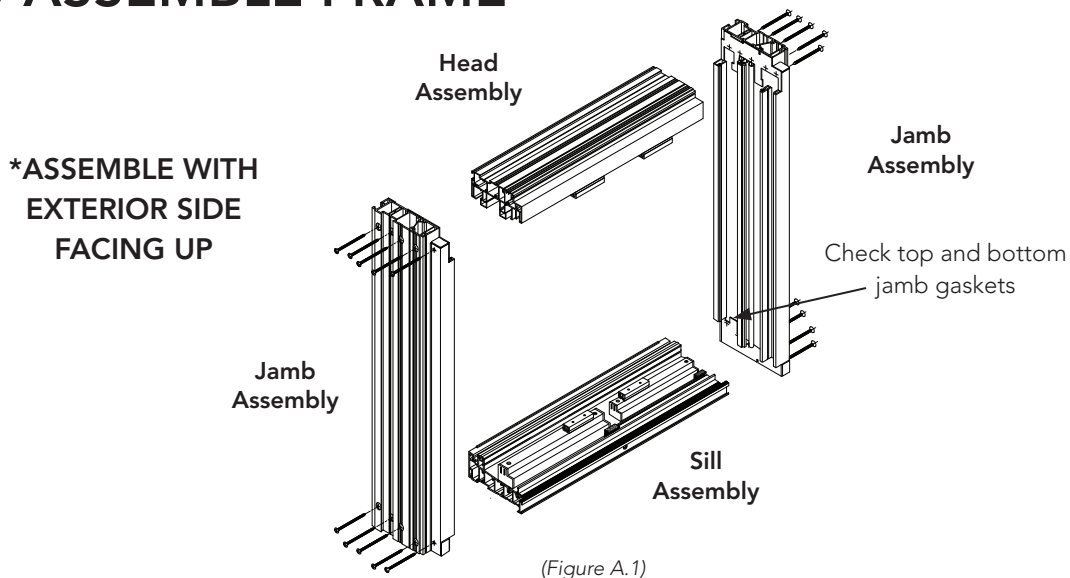
FIELD MULLED PATIO UNIT:

Refer to Section S, Field Mulling, page 24. Units must be mulled together before setting into the opening. For units requiring heavy reinforcement, refer to included instruction.

INSTALLATION ACCESSORY:

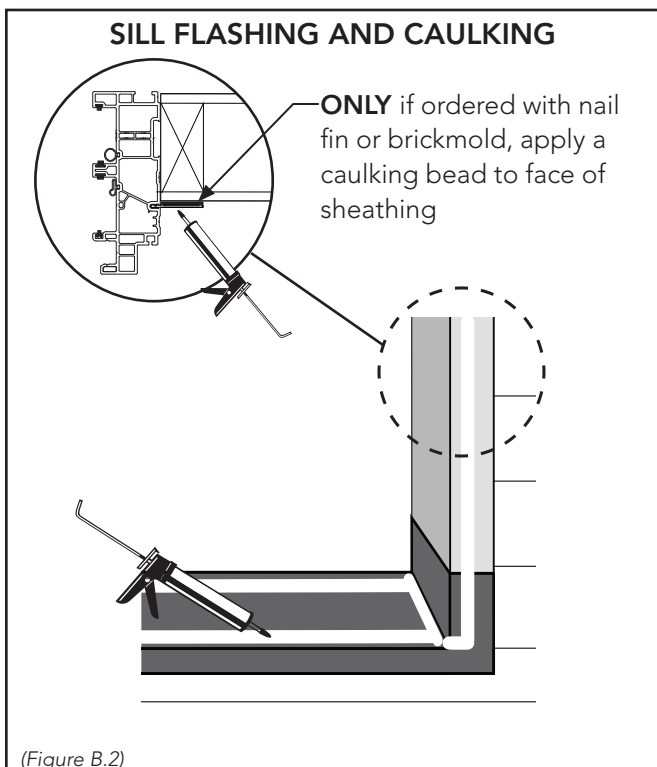
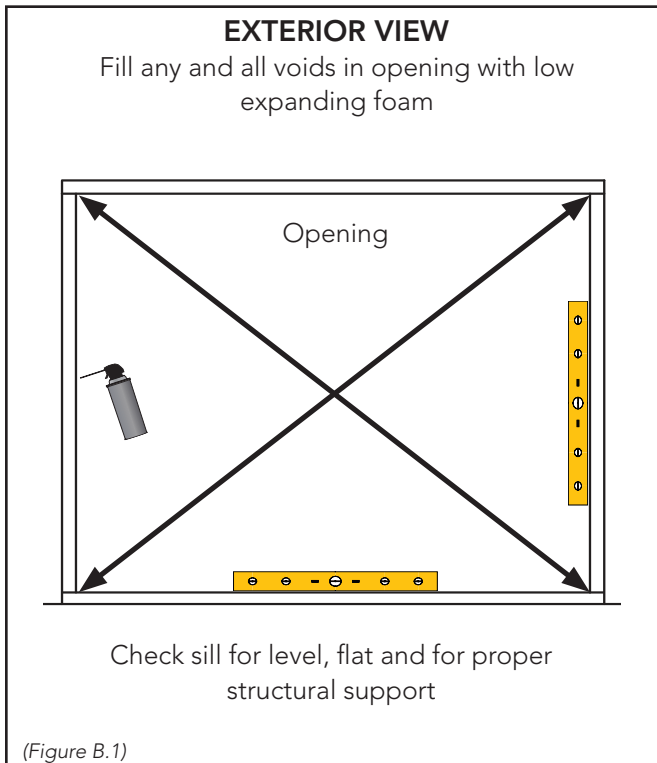
If the patio unit is ordered with an installation accessory, refer to the included document, 'Installation Instruction Vinyl Patio Door Installation Accessories and New Construction Flashing'. The QR code for this instruction can also be found at the end of this instruction document. Nail fin or installation accessory must be installed on patio unit before installing into the opening.

A. ASSEMBLE FRAME



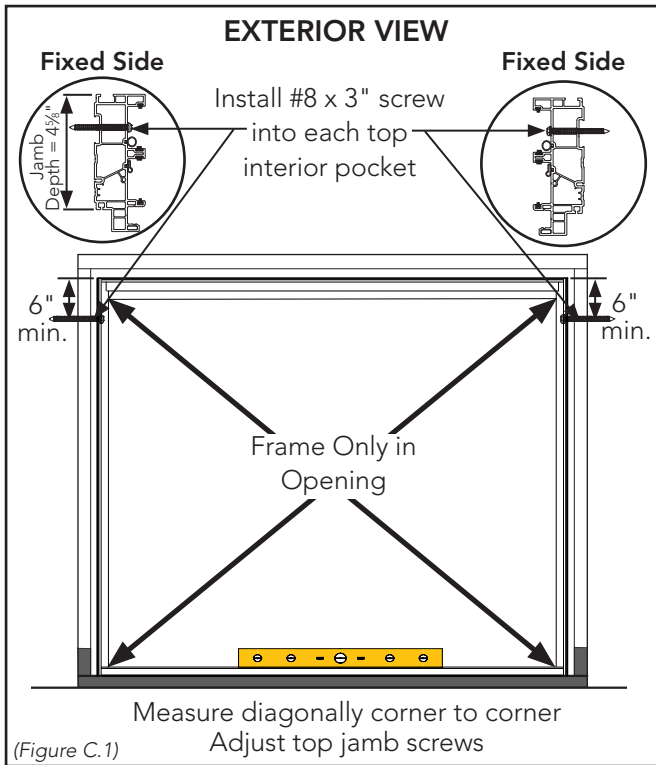
- 1 Unpack and inspect all new patio door assembly components for any material damages. Check glass, screen, and all operational hardware.
- 2 Check to be sure each top and bottom factory mounted jamb-side gasket is in place. (Figure A.1)
- 3 Carefully lay (4) main frame assembly pieces on a level and well supported area with the exterior side up. Be sure the interior side is fully protected from damage. Align each jamb side with header and sill. Check to be sure the jamb side screen bumpers are located at top and facing to the exterior.
- 4 Secure each jamb side frame to the frame header and sill using (5) #8 x 2" Phillips head screws in each top and bottom location (Pack #1). Make sure the top and bottom factory mounted jamb gaskets are well compressed. (Figure A.1)
- 5 If unit was ordered with a sidelite, transom, or optional installation accessory, field install at this time.

B. PREPARATION



- 1 Clean rough opening of all dirt, debris, and obstructions.
- 2 Fill all voids found with AAMA approved low-expanding window insulation foam that complies with ASTM C1620. (Figure B.1)
- 3 Check for level and flat sill. Verify structural integrity of opening to ensure a proper installation. If sill is not straight and level, place wood shims between sub-floor and sill to correct minor leveling and margin adjustments. (Figure B.1)
- 4 Check opening for square. Measure diagonally from corner to corner each side. (Figure B.1)
- 5 Verify opening width and height. Opening should be large enough to accommodate patio door with shims and insulation. The recommended opening size is $\frac{1}{4}$ " - $\frac{1}{2}$ " greater per side (or $\frac{1}{2}$ " - 1" greater than in total width) and $\frac{1}{4}$ " - $\frac{1}{2}$ " greater than in total height.
- 6 Apply flashing to sill opening in accordance with local building codes and best practices. (Fig. B.2)
- 7 Replace drip cap at the top of opening if necessary.
- 8 Apply (2) generous beads of premium caulking compound in a STRAIGHT LINE, on top of flashing and along entire length of sill opening. Place first bead of caulking to the exterior leading edge of sill. Place second bead towards interior (to bed flat surface of threshold). Apply caulking in each corner of sill as shown. (Figure B.2)
- 9 If nail fin or brickmold option is used, apply a bead of caulking to each vertical and header face of exterior sheathing to seal. To complete seal, apply bead of caulk from sill to exterior sheathing, as shown. (Figure B.2)

C. INSTALL FRAME

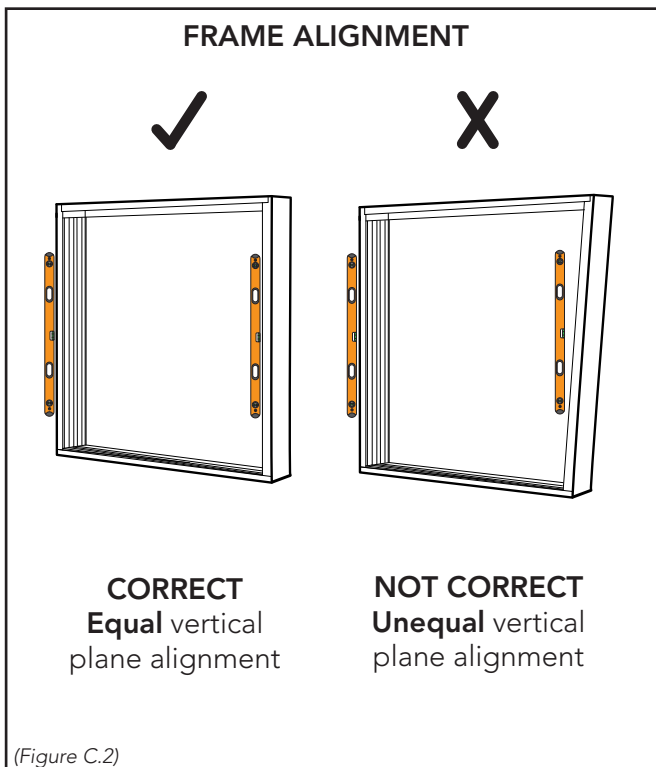


- 1 Place assembled patio frame into the opening, sill first. Center and square frame in opening. Leave enough space for proper shimming and insulation.

NOTE: Aspect™/Endure™ Jamb Depth = 4 5/8"

- 2 Install a #8" x 3" installation screw (Pack #2) into the top **INTERIOR** pocket of each side jamb, minimum 6" down from top corner. Locate screw on score line. **DO NOT over tighten screw causing frame to pull!** (Figure C.1)

- 3 Check for overall square of patio frame by measuring diagonally from corner to corner, each side. Recommended tolerance for the diagonal measurement is 1/8". Adjust top jamb screws as needed. (Figure C.1)



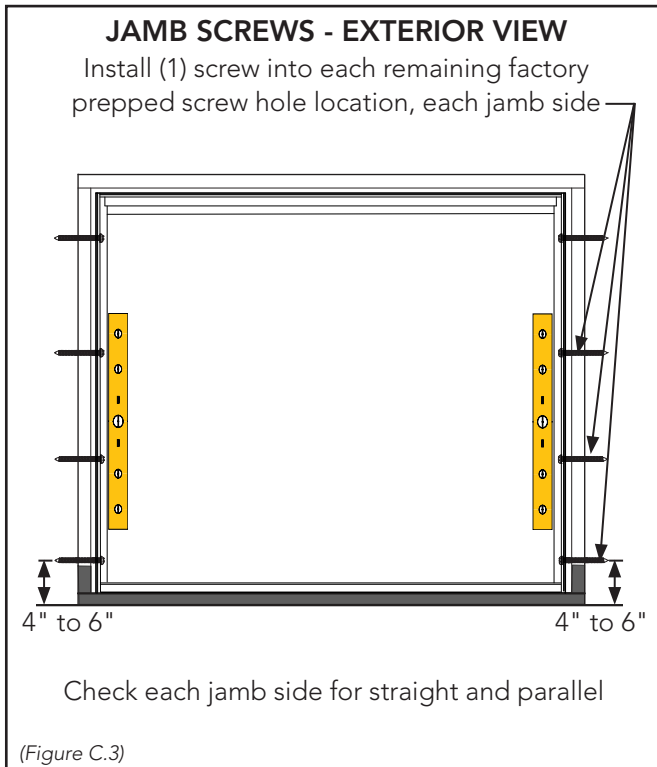
- 4 Level sill if needed. If sill is not straight and level, it must be shimmed for proper operation of the patio door.

- 5 Check plane of the patio frame. Each vertical jamb side frame should be equal and parallel to the other. See illustration for equal and unequal plane. (Figure C.2)



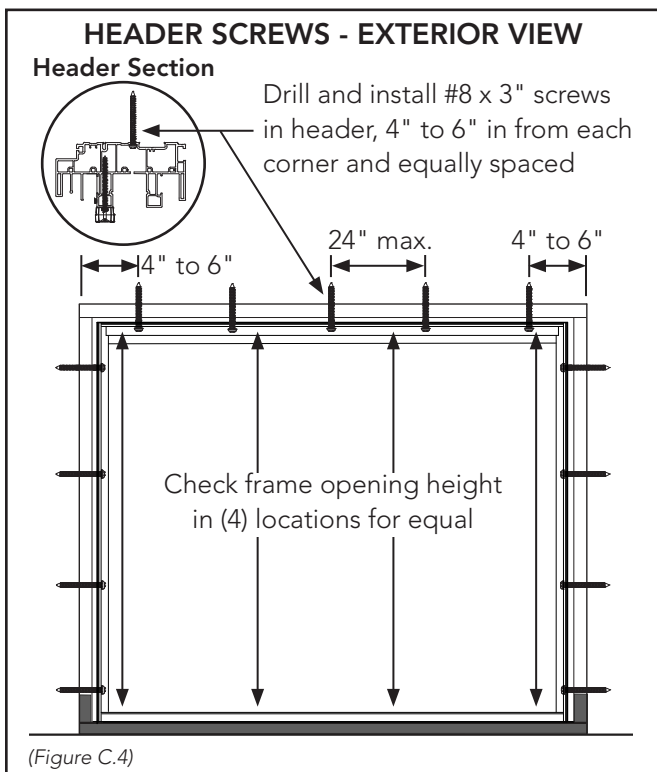
IMPORTANT! If frame is bowed, it may be necessary to shim frame at various locations before adding installation screws.

C. INSTALL FRAME (CONTINUED)



- 6 Drill and install (6) #8" x 3" installation screws (Pack #2) into the **INTERIOR** jamb pocket. Locate each screw along vinyl score line. Place bottom screw a minimum of 4" to 6" up from bottom corner of each jamb side. Place (2) screws equally spaced between the top and bottom screws of each jamb side. (Figure C.3)

- 7 Check each jamb side frame for straight and parallel to each other. Adjust jamb side installation screws as necessary for parallel. Be sure installation screws do not pull vinyl frame causing frame to bow. Re-check for overall square. (Figure C.3) (Also refer to Figure C.2 for correct plane alignment.)

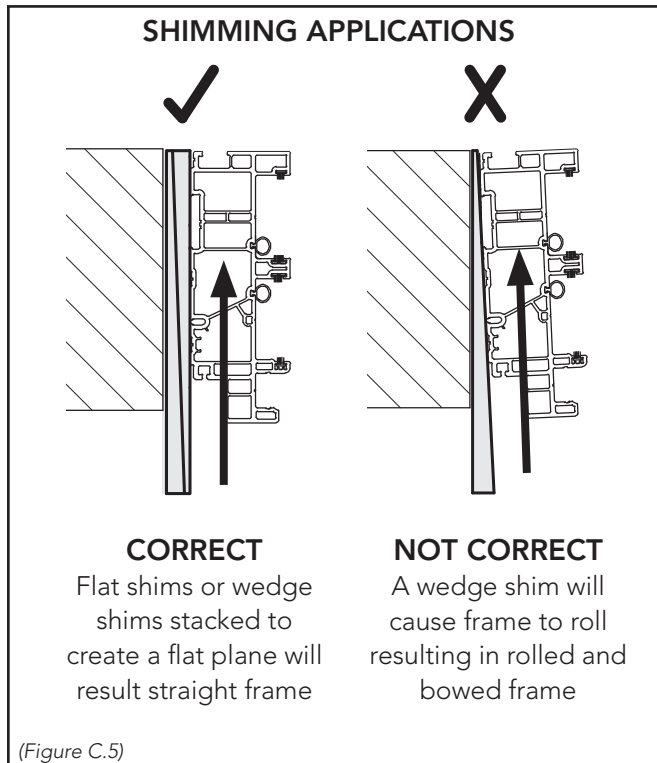


- 8 Drill a minimum of (5) $\frac{3}{8}$ " holes equally spaced at 24" maximum through the first wall of the vinyl header frame. Wider units will require more than the 5 screws. Place each corner screw hole a minimum of 4" to 6" in from corner. Install a #8 x 3" screw (Pack #2) into each pre-drilled header screw hole location. **DO NOT over tighten screws causing frame to pull.** (Figure C.4)

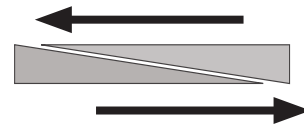
NOTE: DO NOT install screw hole plugs at this time. Plugs will be installed after installation is fully completed.

- 9 Check frame opening height in (4) locations, each jamb side and center. All (4) measurements to be equal. Adjust header installation screws as necessary to achieve equal measurements. Be sure installation screws do not pull vinyl frame causing frame to bow. Header and sill must be parallel for proper operation of active sash and screen. (Figure C.4)

C. INSTALL FRAME (CONTINUED)

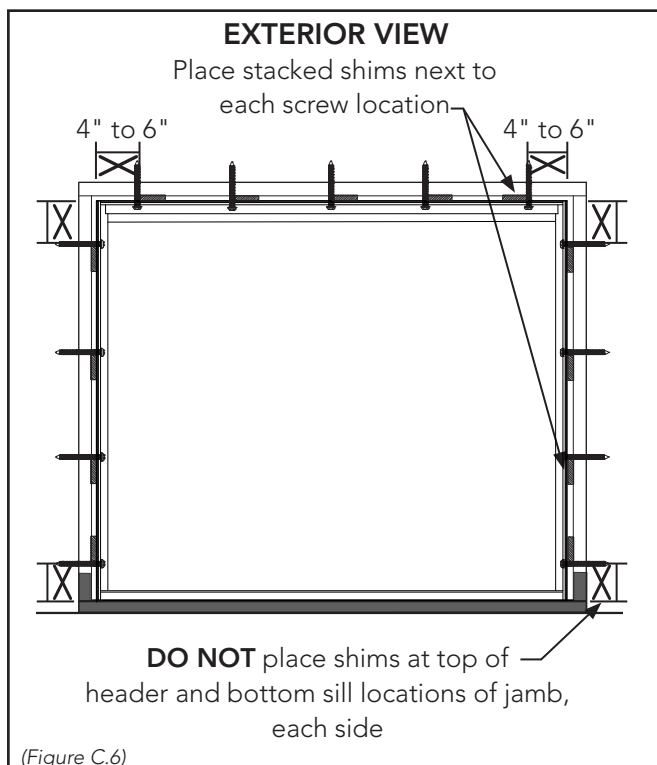


! IMPORTANT! **CORRECT** shimming application; stack wedge shaped shims contrasting and plane to plane. See diagram below. **DO NOT** use a single wedge shim. This will cause the frame to roll. (Figure C.5)



! IMPORTANT! Be careful to **NOT** over shim. Improper shimming may roll, bow, and change margins, jeopardizing operation.

! IMPORTANT! To prevent water infiltration, **DO NOT** install screws through sill.

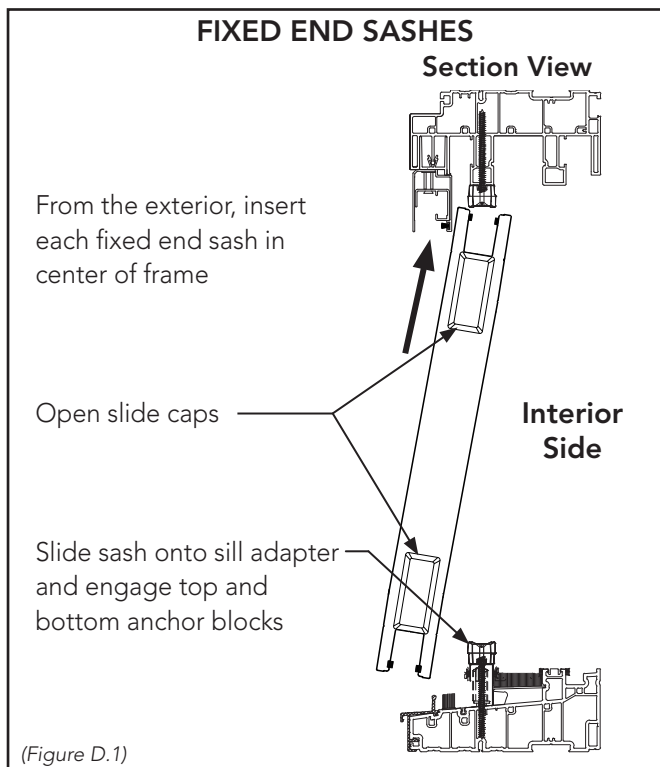


10 Place shims next to each installation screw location, each jamb side and header. Be sure top jamb shims are located 4" to 6" from top of frame and bottom shims are 4" to 6" from bottom of frame. Be sure header shims are located 4" to 6" from each corner. If spacing between side jamb or header shims is greater than 12" to 18", additional shims may be needed to maintain margins and stabilize frame. Use shims to adjust straight and parallel as needed. (Figure C.6)

NOTE: To allow for vinyl expansion, **DO NOT** place shims at top header, bottom sill, or header corner locations as shown. Shimming in these locations will cause frame distortion.

11 Confirm frame is square on the same plane and not rolled.

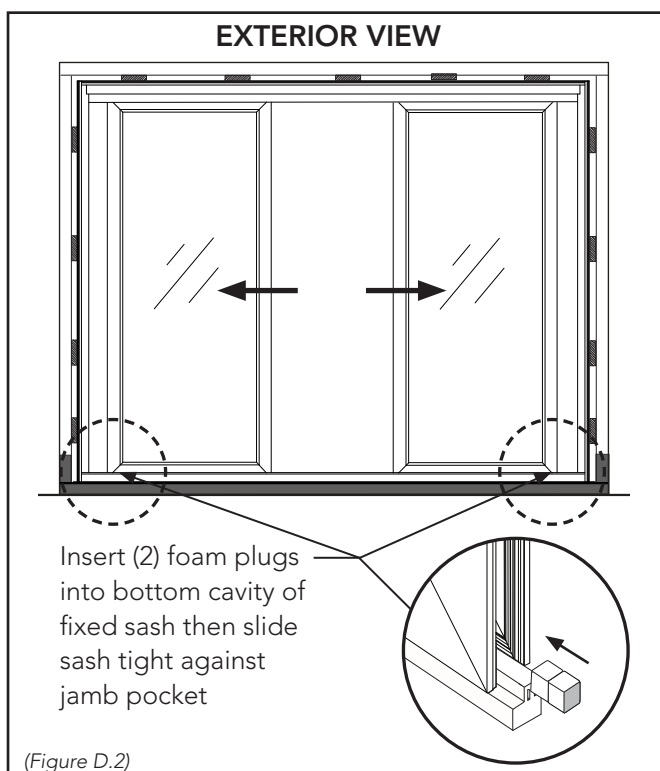
D. INSTALL FIXED SASHES



1 The slide caps located at the top and bottom of each fixed sash stile is shipped in the open position. Check to be sure caps have remained open. In addition, check to be sure the weather strip within each interlock has remained in place and continues to remain in place throughout the installation.

2 From the exterior, insert top of the fixed sash into outside header track in the center section of frame. Be sure the fixed sash is inserted away from the anchor blocks. Align door bottom with sill adapter. Slide the fixed sash towards jamb side and onto the sill adapter, over the top and bottom anchor blocks. Do not push fixed sash fully against jamb. Repeat this step for second fixed sash. (Figure D.1)

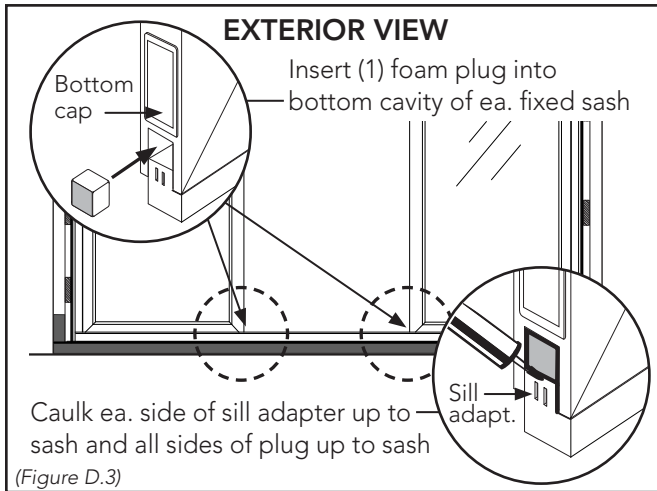
NOTE: Check to be sure the (4) sash anchor screw holes are located towards the center of unit of each fixed sash. Interlock rail should be to the center side of the unit.



3 For each fixed sash, insert (2) foam plugs (Pack #3), side-by-side, into the open bottom cavity of the jamb side stile. (Figure D.2)

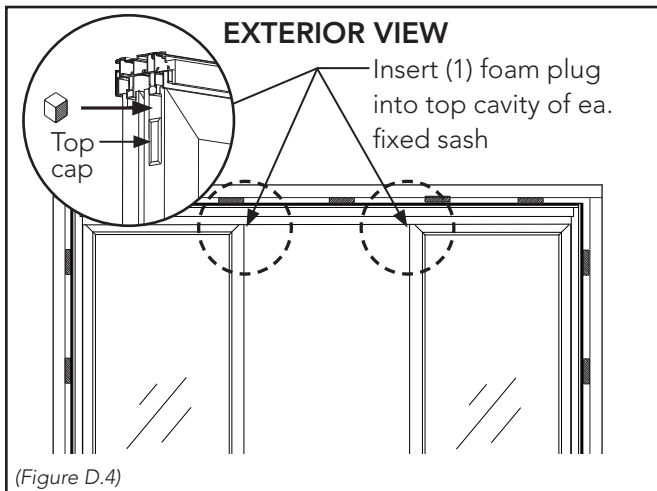
4 Slide each fixed sash tight into jamb pocket. Check square of frame to sash. (Figure D.2)

D. INSTALL FIXED SASHES (CONTINUED)



5 Insert (1) foam plug (Pack #3) into the open bottom cavity of each fixed sash stile, side facing center. With plug in place, caulk each side of the sill adapter to sash and all sides of the foam plug to sash to form a complete seal, as shown in Detail. (Figure D.3)

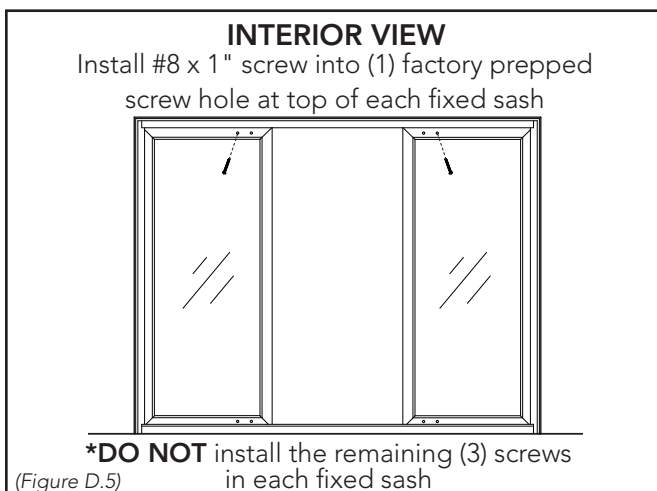
6 Insert (1) foam plug (Pack #3) into the top open cavity of stile, side facing center. (Figure D.4)



7 Slide top and bottom caps closed on each fixed sash.

8 Verify frame opening height in (4) locations, each jamb side, center sash mullion, and interlock as previously performed in Section B. Adjust frame header as necessary for equal measurements. Frame header may need to be pushed up or pulled down to achieve equal measurements.

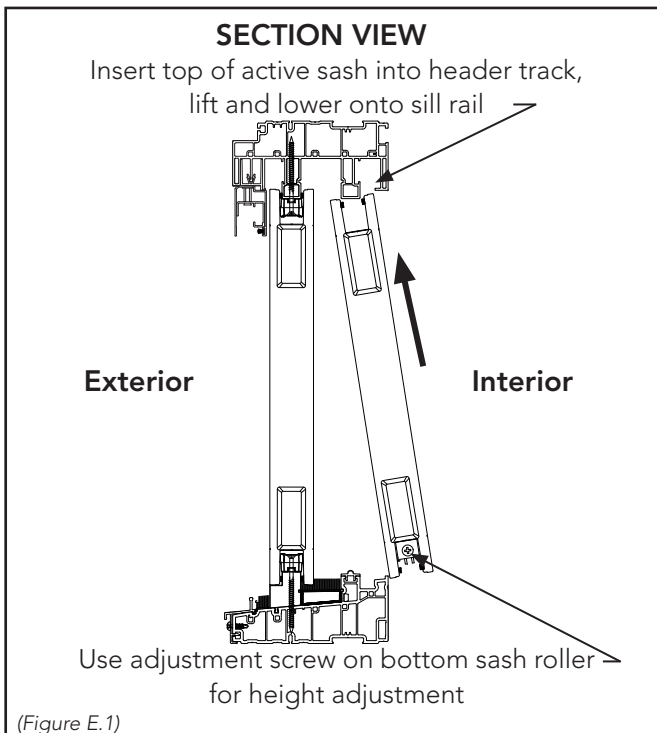
NOTE: THIS STEP IS CRITICAL for the AccuVent™ and screen to operate properly.



9 For each fixed sash, install ONLY (1) #8 x 1" Phillips pan head screw (Pack #3) into (1) factory prepped screw hole located at the top of the fixed sash. This will secure door to top anchor block. (Figure D.5)

NOTE: DO NOT install the (3) remaining screws in each fixed sash factory prepped screw hole locations. This will allow for adjustment with active sash once installed.

E. INSTALL CENTER ACTIVE SASH

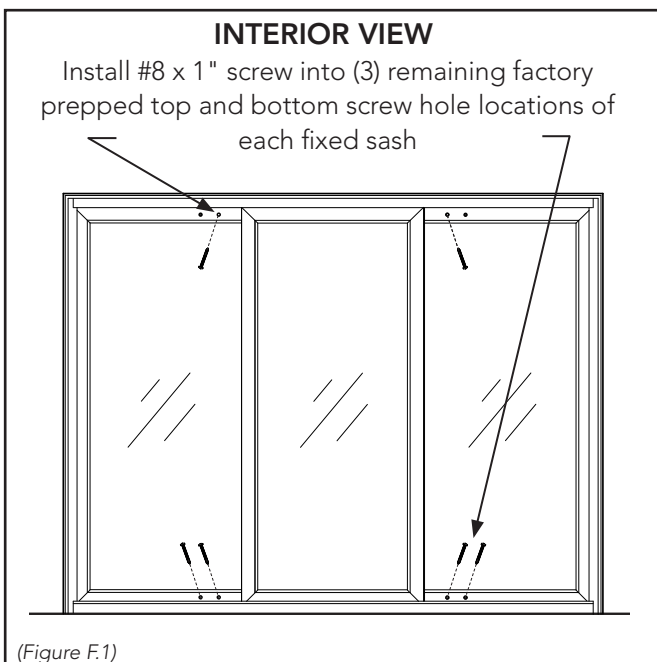


- 1 Check the active sash interlock rail to be sure weather strip, on exterior side, has not slid up or down. Properly re-seat if needed.
- 2 From interior of home, insert top of the active sash into the interior header track. Lift and lower sash onto the sill rolling rail. (Figure E.1)

NOTE: Check to be sure weather strip on all interlocks has remained in place.

- 3 Note the location of the adjustment screws located on bottom sash rollers to adjust each side of active sash as necessary for equal height, squareness, and margin. Turn adjustment screw clockwise to raise sash and counter-clockwise to lower sash. Un-weight sash to assist with upward adjustment. (Figure E.1)

F. INSTALL REMAINING FIXED SASH SCREWS

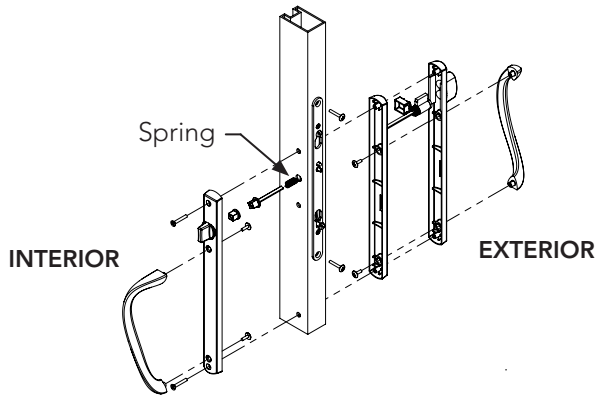


- 1 Re-check for equal height measurements and alignment with active sash. Check for equal spacing of fixed sashes and closed center active sash. If a fixed sash requires adjustment, remove screw from Section D, Step 9.
- 2 Install a #8 x 1" Phillips pan head screw (Pack #3) into (3) remaining factory prepped top and bottom screw hole locations of each fixed sash. (Figure F.1)

G. MULTI-POINT HANDLE SET

INSTALL HANDLESET - ACTIVE SASH

***ALL Aeris/Endure handlesets MUST install the included spring**



***DO NOT USE a power screwdriver to install. Doing so will cause damage and VOID WARRANTY**
***DO NOT OVER TIGHTEN the screws**

(Figure G.1)

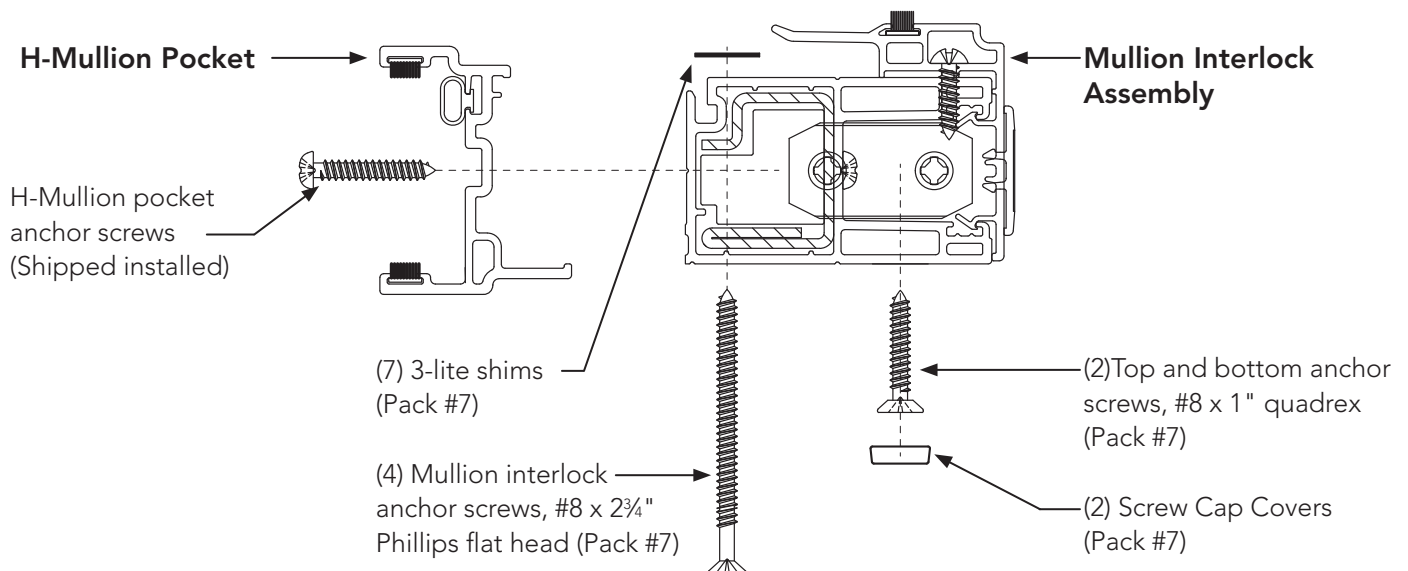
Hand icon: The manufacturer's hardware installation instruction is located inside the hardware box. Refer to the included document for the complete step-by-step instruction.

- 1** Fasten handles to each plate using the (2) mounting screws provided. (Figure G.1)
- 2** For all Aeris/Endure handlesets, the provided spring MUST be installed. (Figure G.1)
- 3** Position handle set into factory prepped holes. Align spindle with lock knob on inside handle. Confirm hand grip curves towards the glass. (Figure G.1)
- 4** Use (2) screws provided to install the exterior and interior handle set assemblies to the active sash. (Figure G.1)

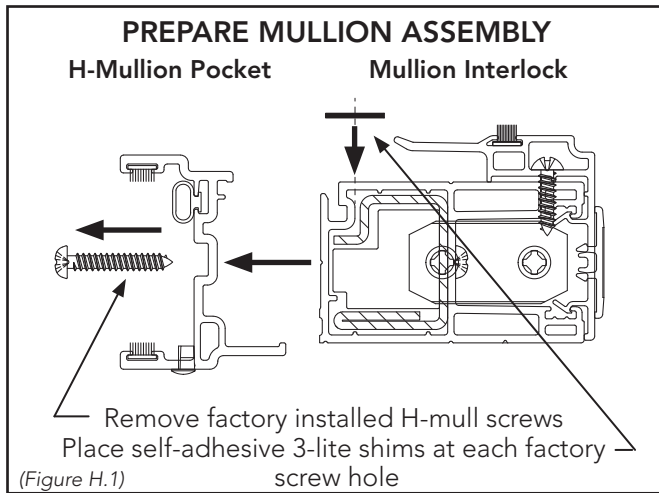
H. 3-LITE MULLION ASSEMBLY

MULLION ASSEMBLY COMPONENT REFERENCE

H-mullion pocket assembly will ship from factory assembled onto the mullion interlock assembly.
For installation, the H-mullion pocket MUST BE removed from the mullion interlock assembly.



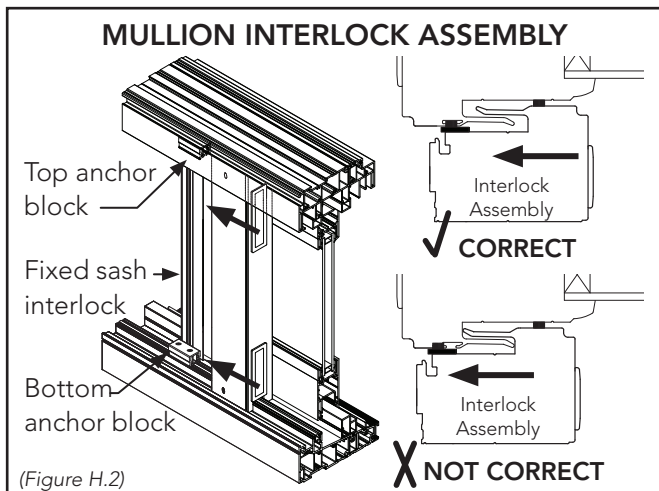
H. 3-LITE MULLION ASSEMBLY (CONTINUED)



- 1 Remove the H-mullion pocket from the mullion interlock assembly by removing the (4) factory installed h-mullion screws. (Figure H.1)

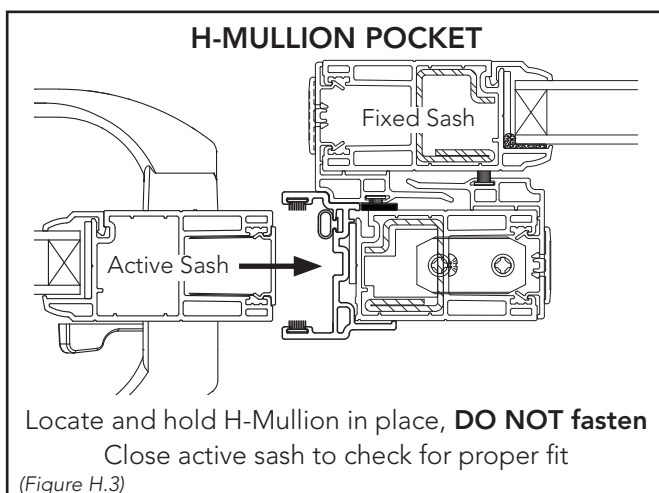
NOTE: Be sure to keep screws for re-installation of the H-mullion pocket in a later procedure.

- 2 On the interlock rail side of the mullion interlock assembly, place 3-lite self-adhesive shims (Pack #7) at each factory drilled screw hole location. Shims will prevent the interlock rail from twisting when installation screws are installed. (Figure H.1)



- 3 From the interior, slide the mullion interlock assembly onto the top and bottom anchor block until the fixed sash interlock is engaged. Be careful to NOT completely compress each interlock together. Refer to figure. (Figure H.2)

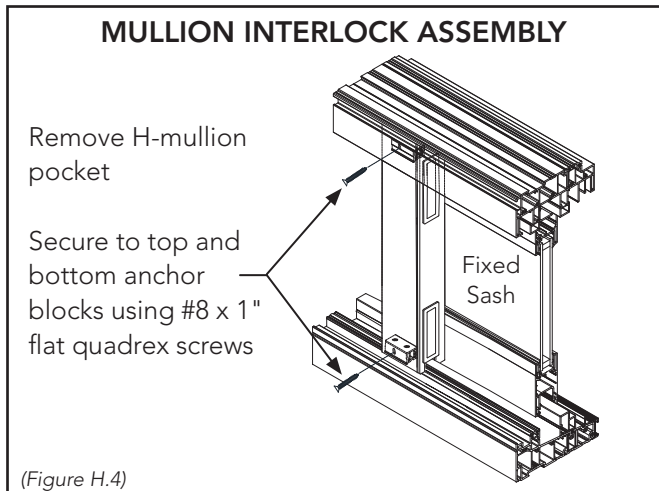
! IMPORTANT! DO NOT INSTALL SCREWS AT THIS TIME.



- 4 Locate and hold H-mullion pocket assembly in position to mullion interlock assembly, **DO NOT** fasten. Close active sash into pocket of mullion. Check for proper fit and spacing at both ends of active sash, interlocks and weather stripping. Adjust active sash and mullion interlock assembly left and right until centered between fixed sashes. (Figure H.3)

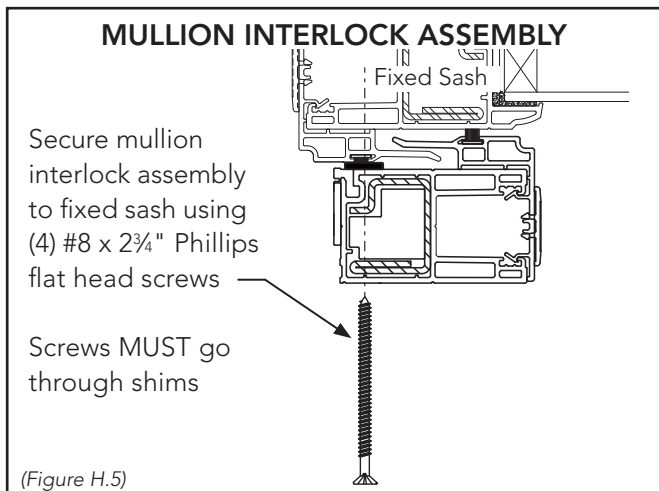
- 5 With the mullion assembly centered and located, use a pencil to lightly mark the location of mullion assembly on the header and threshold. This will help to relocate if mullion interlock assembly shifts location in following steps.

H. 3-LITE MULLION ASSEMBLY (CONTINUED)



6 Hold mullion interlock assembly in place. Carefully open the active sash and remove H-mullion pocket assembly from the mullion interlock assembly to expose top and bottom anchor screw holes.

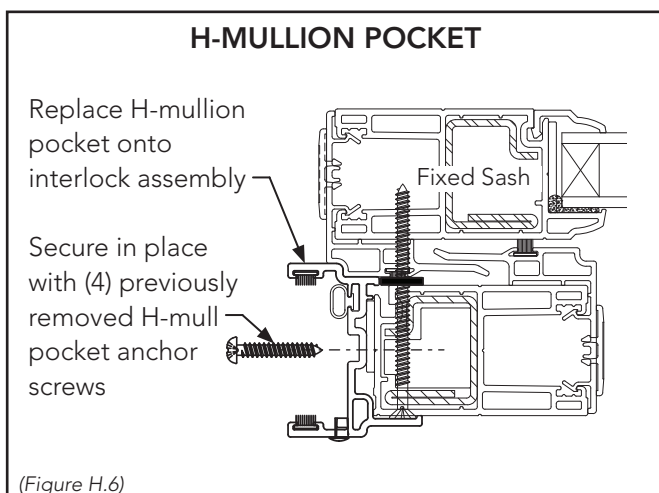
7 Hold mullion interlock assembly in place. Check to be sure mullion interlock is aligned with pencil marks previously made in Step 5. Secure mullion interlock assembly to anchor blocks using (2) #8 x 1" flat quadrex screws (Pack #7) through the top and bottom factory prepped screw holes locations. (Figure H.4)



8 Install mullion interlock assembly using (4) #8 x 2¾" Phillips flat head wood screws (mullion interlock anchor screws, Pack #7). The screws must go through shims at all locations. (Figure H.5)

9 Replace H-mullion pocket assembly onto mullion interlock assembly. Be sure to align with factory anchor screw holes. (Figure H.6)

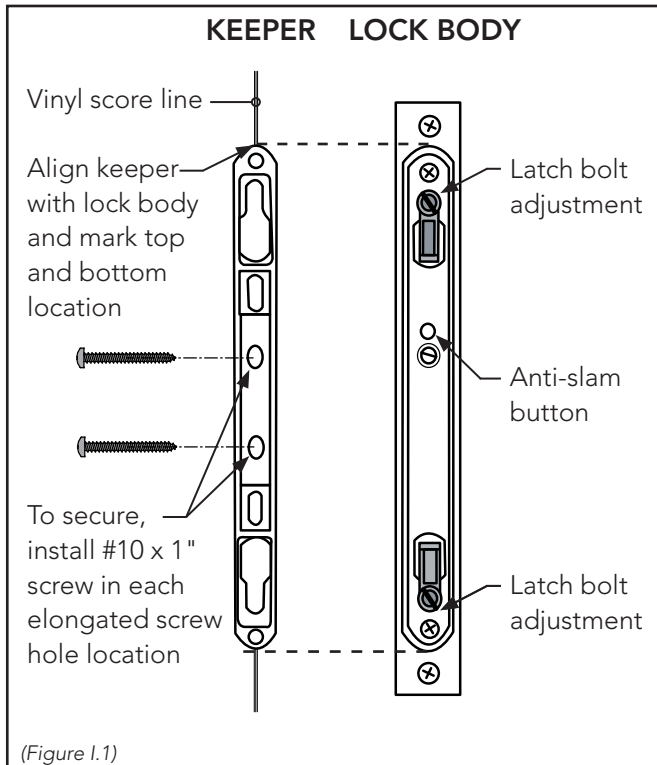
Tip: If H-mullion pocket requires vertical adjustment, create adjustable slots by moving same size drill bit slightly up and down at each H-mullion screw hole location.



! **IMPORTANT!** When H-mullion pocket is placed onto interlock rail, H-mullion pocket will cover screw locations.

10 Install H-mullion pocket assembly with the (4) previously removed H-mullion pocket anchor screws. (Figure H.6)

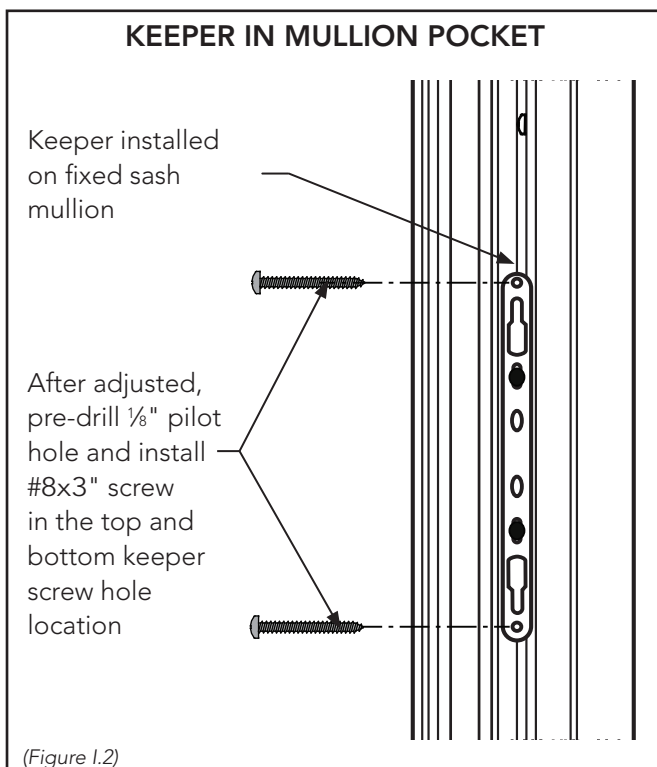
I. KEEPER



- 1 Slide active sash almost closed, leaving enough room to align keeper with lock body. Mark vinyl with the location of top and bottom keeper as aligned with lock body. (Figure I.1)

Tip: Place (2) strips of double-sided tape on back of keeper. Locate keeper onto lock body and lock in place. Close sash tight to adhere keeper to mullion. Unlock the lock body and open sash. Install keeper as directed below.

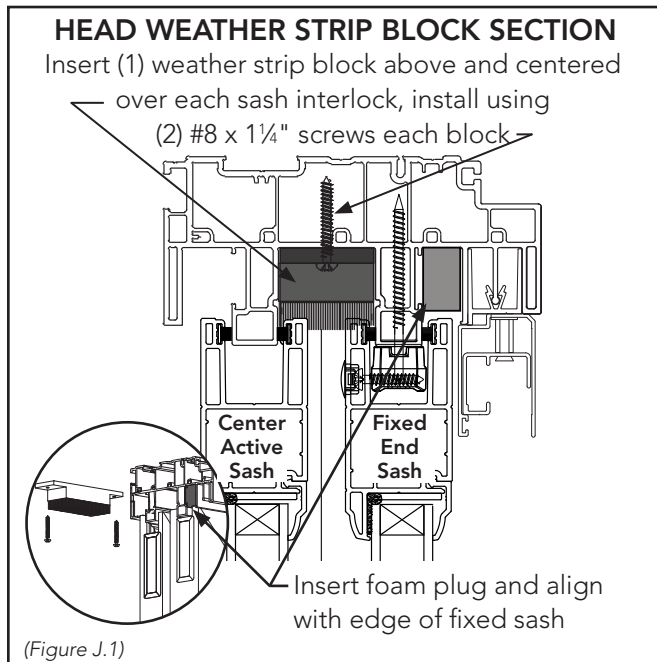
- 2 Center keeper on vinyl score line between marks made. Install a #10 x 1" screw in each elongated screw hole locations. This will allow for a slight up and down adjustment if needed. (Figure I.1)



- 3 Close active sash, locking and unlocking handle. If needed, adjust the latch bolt and keeper positions until sash latches securely without sash movement or excessive latching effort. To adjust latch bolt position, open sash and engage the anti-slam button to allow the latch bolt to lock. Use a flat head screwdriver to loosen or tighten latch bolt as needed. Test function of the lock. Repeat step if lock is still too tight or too loose. (Figure I.1)

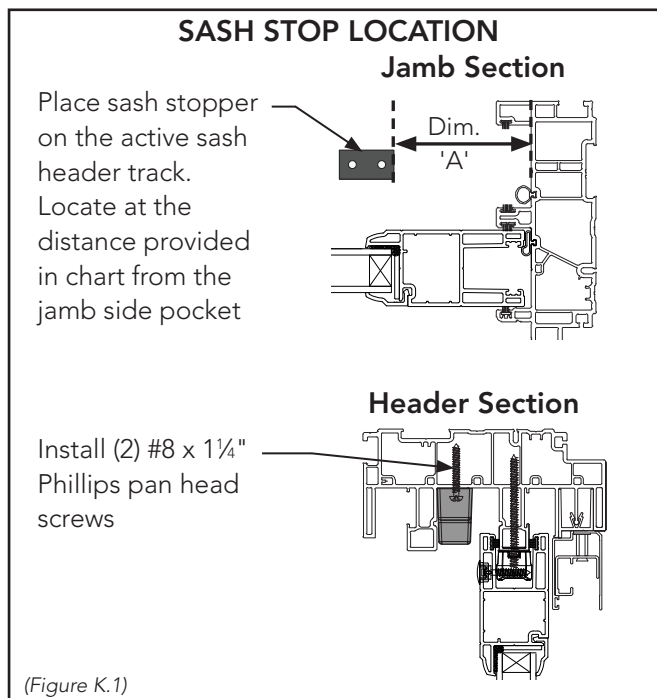
- 4 After final adjustments are completed, pre-drill a $\frac{1}{8}$ " pilot hole through top and bottom keeper. Note, metal reinforcement is located within mullion assembly. Install a #8 x 3" screw (Pack #2) at top and bottom of the keeper to secure in place. (Figure I.2)

J. HEAD WEATHER STRIP BLOCKS & INSECT STOPS



- 1 Locate head weather strip blocks directly above mullion and sash interlock. With active door open, insert (1) block into the center channel of frame header and locate directly above active/ fixed sash interlock. Insert (1) block directly above the fixed sash/ mullion interlock. (Figure J.1)
- 2 Secure each head weather strip block using (2) #8 x 1¼" Phillips pan head screws (Pack #4). Close active sash to access the screw hole located on the fixed jamb side. **DO NOT over tighten screws.** (Figure J.1)
- 3 Insert (1) foam plug (Pack #3) in the open cavity between the fixed sash and screen track, each side and as shown. Foam plug must align with edge of fixed sash, as shown in Detail. (Figure J.1)

K. SASH STOP

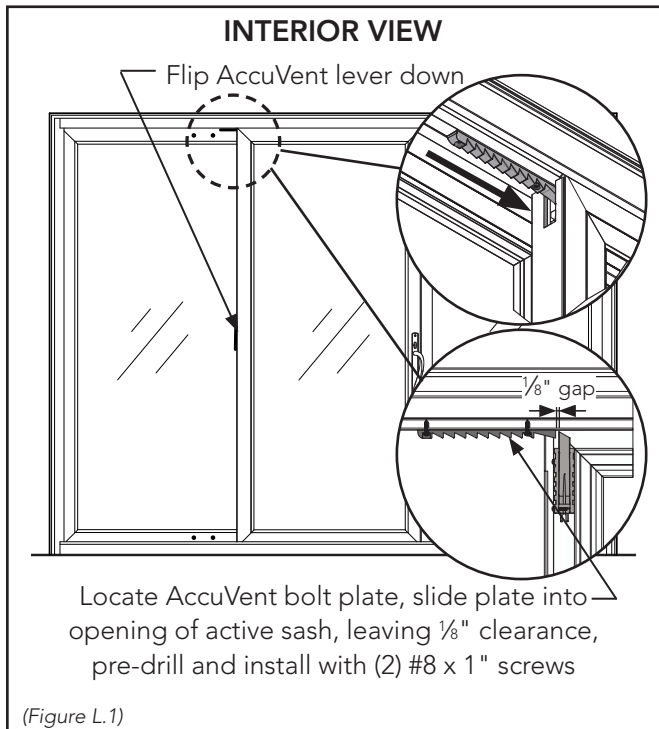


- 1 Place sash stopper (Pack #5) on the active sash header track, behind active sash. Locate the sash stopper per the appropriate dimension provided in chart below and per illustration in (Figure K.1).

Sash Type	Dimension 'A'
Without Blinds	2¾" from jamb sash pocket
With Blinds	4" from jamb sash pocket

- !** **IMPORTANT!** To avoid a pinch hazard between exterior handle set and fixed sash, do not allow less than the above dimensions.
- 2 Install sash stopper with (2) #8 x 1¼" Phillips pan head screws (Pack #5).

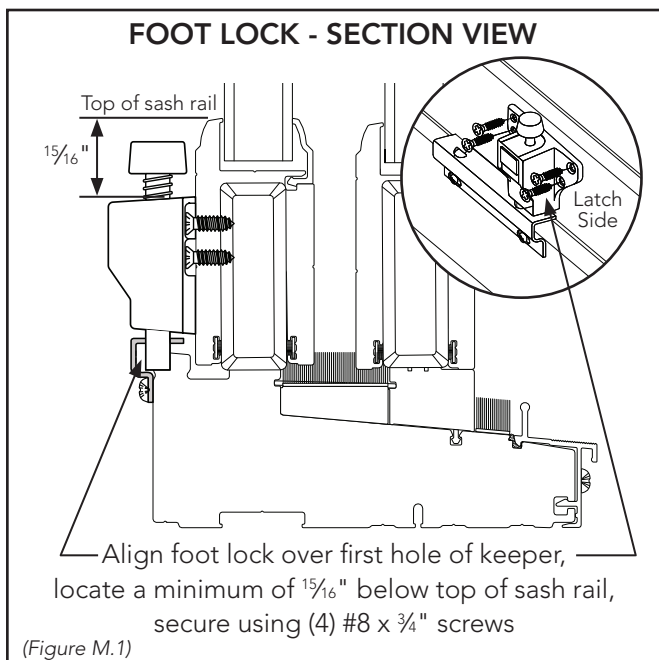
L. ACCUVENT™ VENTING SYSTEM BOLT PLATE



Hand icon AccuVent is a standard feature on all Endure™ and an optional feature on all Aspect™.

- 1 Close active sash and lock handle.
- 2 Flip AccuVent lever down into locked position. (Figure L.1)
- 3 Locate the AccuVent bolt plate (AccuVent Bolt Plate Kit) on the active sash header track. Slide plate into the stile opening of the active sash, next to the AccuVent bolt, as shown in Figure L.1. Provide a 1/8" clearance between bolt plate and bolt. (Figure L.1)
- 4 Pre-drill a 3/32" or a 7/64" hole and install (2) #8 x 1" screws (AccuVent Bolt Plate Kit). **DO NOT over-tighten screws.** (Figure L.1)

M. FOOT LOCK

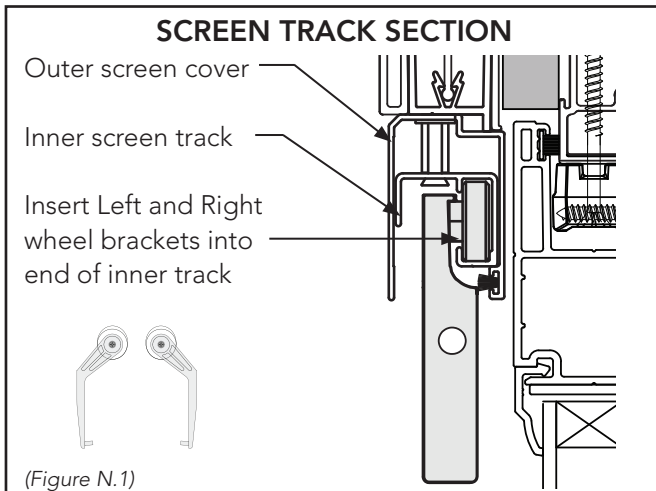


Hand icon Foot lock is a standard feature on all Aspect™ and an optional feature on all Endure™.

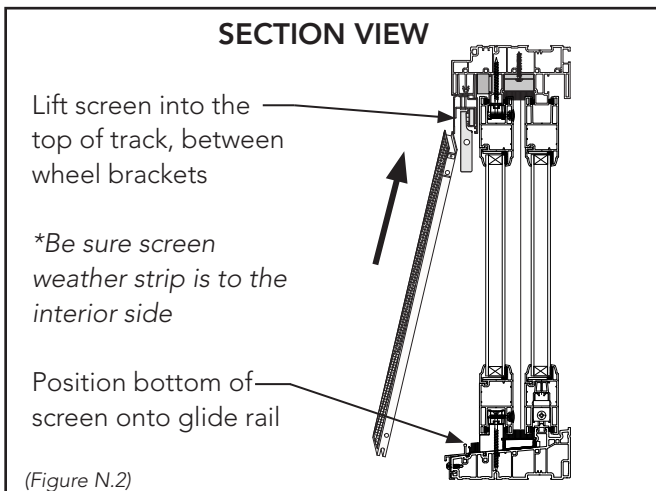
Foot lock keeper is factory mounted.

- 1 Close active sash and lock handle.
- 2 Align foot lock (Pack #6) over the first hole of keeper, closest to the latch side. Locate and install foot lock body a minimum of 1 5/16" below top of sash rail, as shown. Check to be sure bolt will engage keeper. Secure to sash using (4) #8 x 3/4" Phillips oval head screws (Pack #6). (Figure M.1)

N. INSERT SCREEN



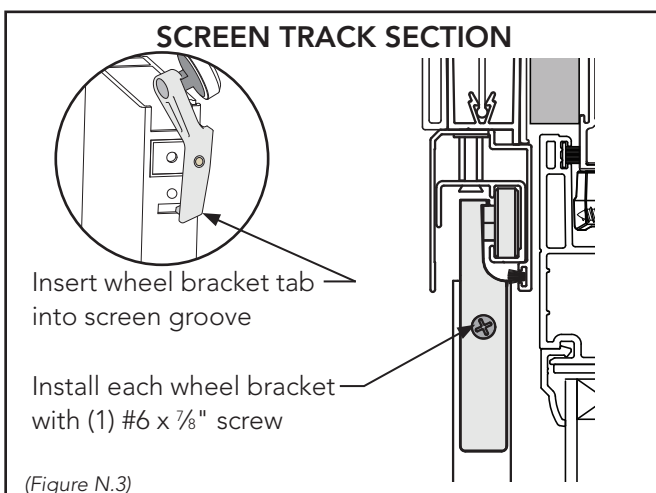
- 1 Insert Left and Right screen wheel brackets into the inner track of the top screen track assembly (Pack #10). Brackets are labeled and identified by outside looking in. Insert rollers into the open space located at the ends of the inner screen track and the jamb. BE SURE each wheel bracket is positioned correctly. (Figure N.1)



- 2 Lift screen into the top screen track assembly and between wheel brackets. Place screen with the weather strip to the interior side. (Figure N.2)

- 3 Lift and position bottom of screen onto screen glide rail. (Figure N.2)

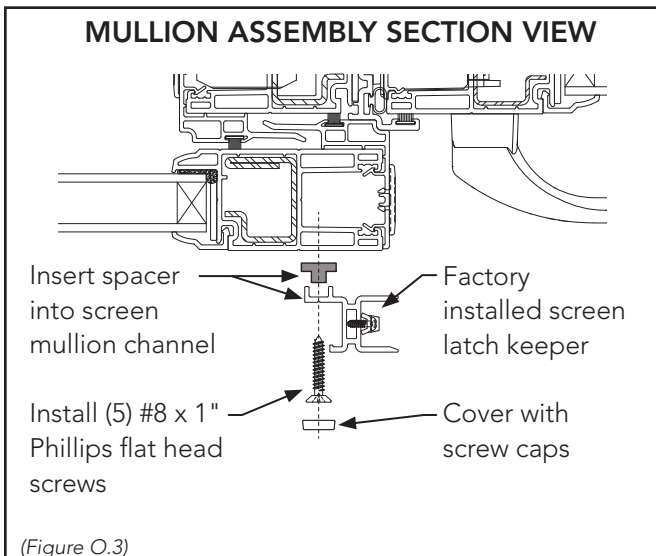
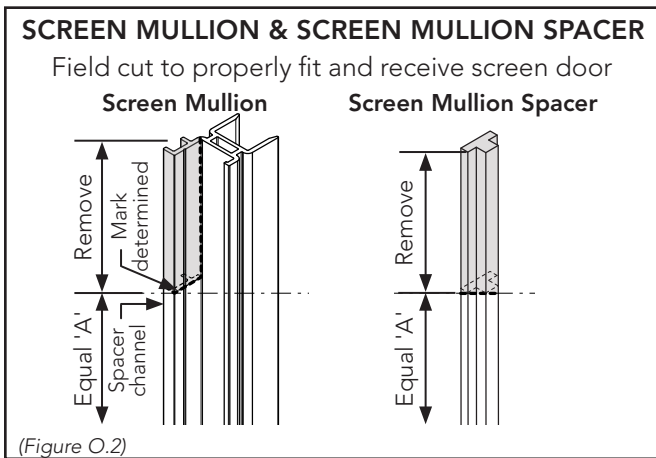
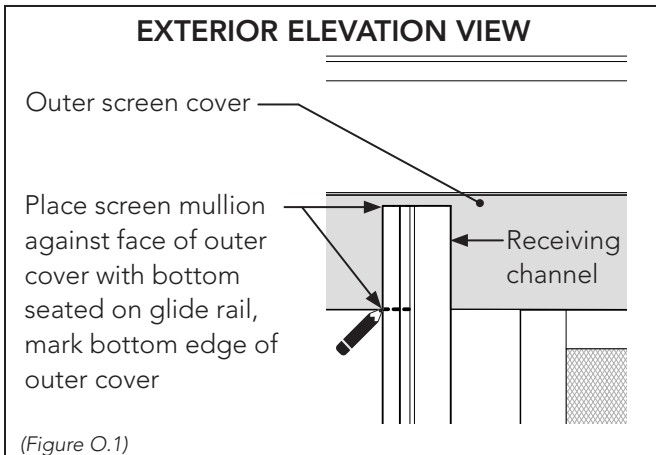
- 4 Insert the left and right wheel bracket tabs into groove located at the top of screen frame. (Figure N.3)



- 5 Install each wheel bracket using a #2 Phillips head screwdriver to install (1) #6-32 x 7/8" Phillips flat head screw (Pack #10). (Figure N.3)

NOTE: DO NOT use excessive torque on the bracket screws.

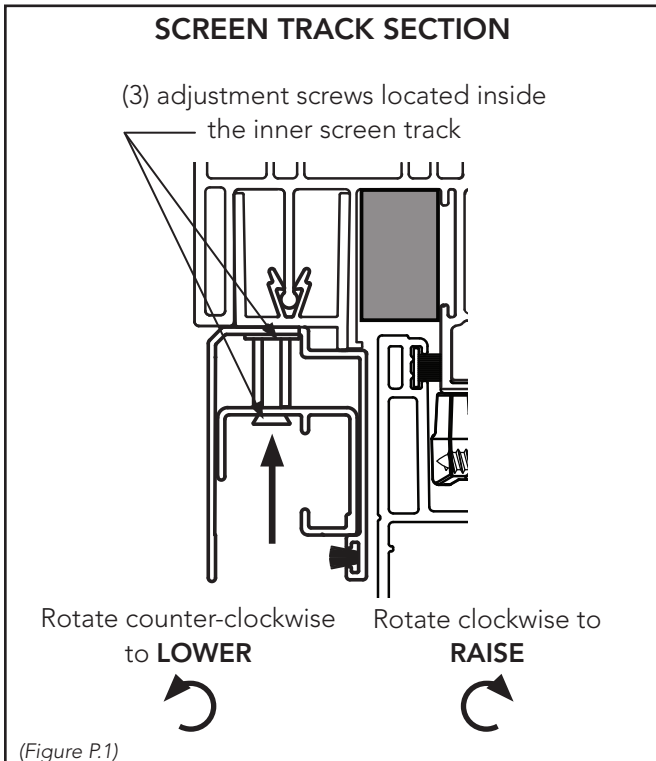
O. INSTALL SCREEN MULLION



⚠ IMPORTANT! Screen mullion and spacer is to be field prepped **BEFORE** installing for proper fit with in the outer screen cover and common screen inner track. Screen mullion will require one horizontal and one vertical cut.

- 1 Place the screen mullion against front face of outer cover with bottom of screen seated on glide rail. BE SURE mullion is positioned with receiving channel towards the screen. Locate and mark the bottom edge of the outer cover on the mullion, as shown. (Figure O.1)
- 2 Cut along the horizontal mark previously found then cut along the vertical leg of the same channel, as shown. (Figure O.2)
- 3 Measure the screen mullion from the cut notch to the bottom. Use measurement to mark and cut screen mullion spacer to corresponding length. Insert spacer into mullion channel. (Figure O.2)
- 4 Slide the screen mullion leg into the outer cover and against the inner track. The outer edge of the screen mullion receiving channel will align with the end of the inner track.
- 5 Approximately 3" below the outer cover, pre-drill a 1/8" hole through the screen mullion and into the fixed sash. Secure with a #8 x 1" Phillips flat head screw (Pack #8). Do not fully tighten. (Figure O.3)
- 6 Adjust screen mullion for parallel. Once proper location is determined, pre-drill and secure with (4) remaining #8 x 1" screws. (Figure O.3)
- 7 Close screen against screen mullion for proper alignment. Make any adjustments necessary to screen location according to steps found in Section P, 'Adjust Screen and Keeper'.
- 8 Cover (5) screw heads with color matched screw cap covers. (Pack #8) For painted vinyl, use touch-up paint (included) for color match screw cap covers if needed. (Figure O.3)

P. ADJUST SCREEN AND KEEPER

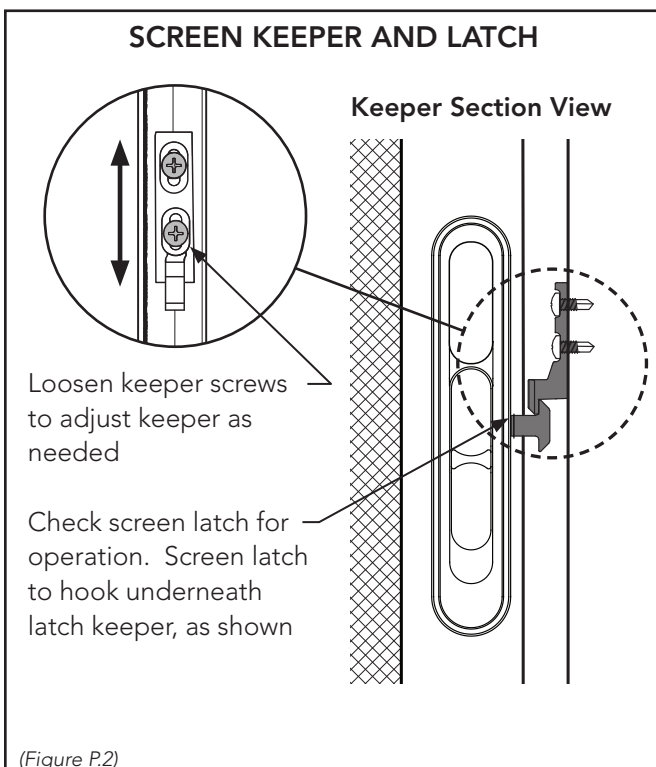


 Screen latch and screen keeper are factory installed.

- 1 To adjust the height and square of the screen, locate the (3) adjustment screws inside the inner screen track. Adjust the left and right screws until screen is parallel to sash and jamb. Once screen placement is established, align center screw to match.

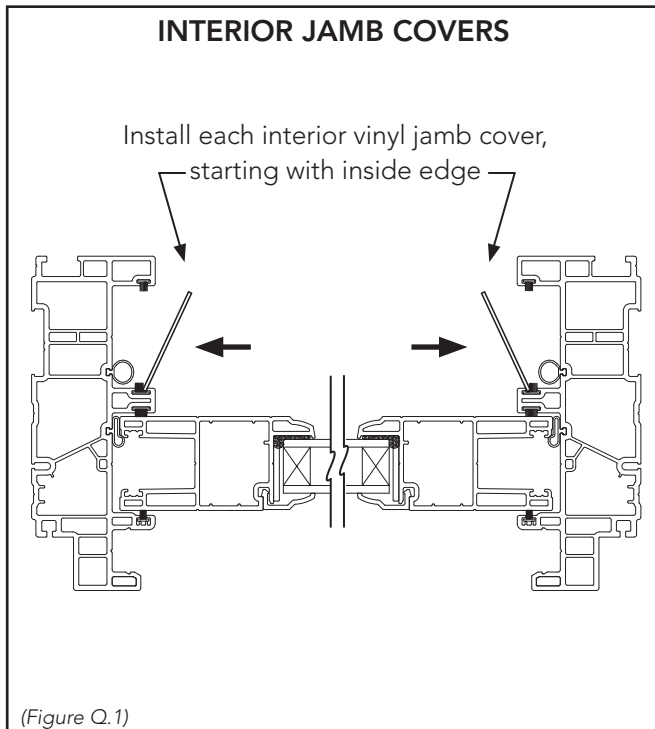
NOTE: Each complete turn of the screw will raise or lower the track by $\frac{1}{32}$ ". Turn counter-clockwise to **LOWER** the screen and clockwise to **RAISE** the screen. **DO NOT** remove the adjustments screws. (Figure P.1)

NOTE: DO NOT USE a power drill to make adjustments. Doing so will cause excessive torquing of adjustment screws. **ONLY** use a #2 Phillips head screwdriver.



- 2 If the screen is not latching properly after screen alignment has been established, check the screen latch for proper operation. Screen latch should hook underneath latch keeper. Latch should always unlatch while pushing down on keeper slide. If adjustments are required, use a #2 Phillips head screwdriver to loosen keeper screws and move keeper up or down as needed. (Figure P.2)

Q. JAMB COVERS, SCREW CAPS AND HOLE PLUGS



! **IMPORTANT!** Final check on sash and hardware operation. ALL frame and sash adjustments must be finalized before proceeding to the following steps.

- 1** Install each interior vinyl jamb cover, start at top by first inserting inside edge. Use thumb to guide edge into the frame pocket, located in front of weather strip. Use opposite thumb to apply slight pressure to top edge of cover closest to you, snapping in place. Run thumbs along edge from top to bottom of cover, apply continuous pressure, zip into place. (Figure Q.1)
- 2** Install (4) vinyl screw caps (Pack #3) in each fixed sash screw hole.
- 3** Install vinyl screw hole plugs (Pack #2) into all frame header installation screw holes.

R. INSULATE

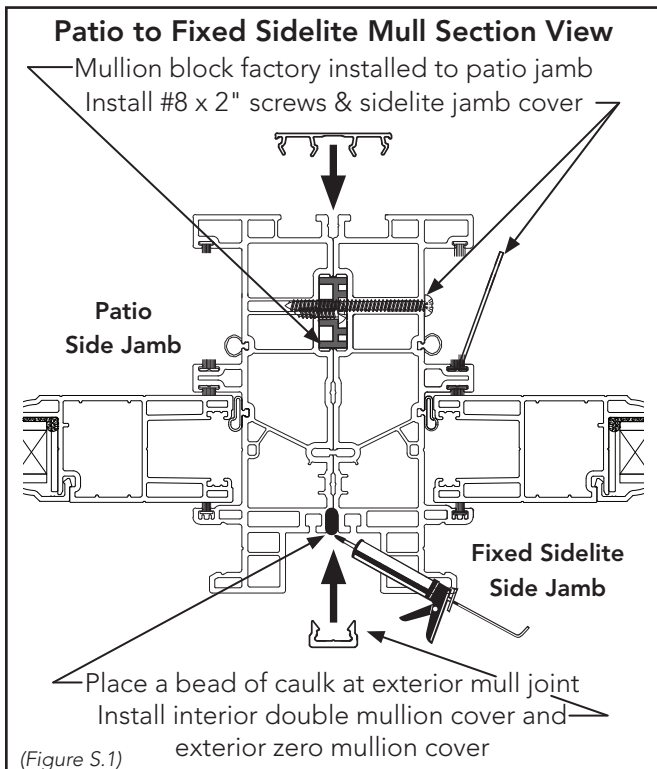
- 1** Insulate by using an AAMA approved ASTM C1620 Low-Expanding Foam to fill cavities between patio frame and opening.

! **IMPORTANT!** Over use of Low-Expanding Foam or use of any non Low-Expanding Foam may cause vinyl frame to bow, jeopardizing operational performance of door.

- 2** Trim all shims flush with patio frame. Caulk exterior of patio unit to ensure water tightness between rough opening and patio unit.

! **IMPORTANT!** Allowance must be given for expansion and contraction of exterior trim application. Refer to the QR code located at the end of this instruction for gap recommendations per exterior finish material type.

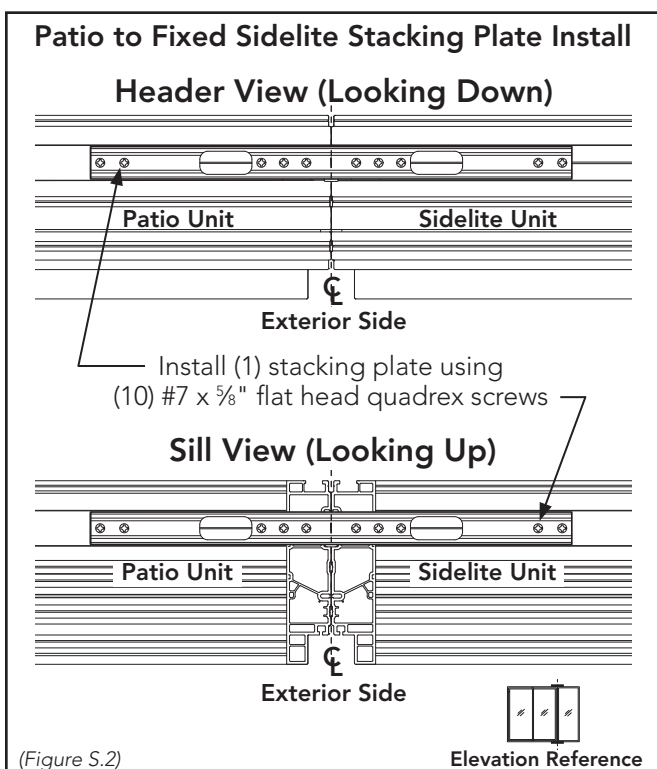
S. FIELD MULLING



 Units must be mulled together before setting into the opening. Use Installation Pack - Mulling Units, Part # S-DH-022S-CC for required field mulling components.

Mullion block(s) will be factory installed to patio unit. For sidelite units over 84" in height and ALL transoms units, refer to included document 'Installations Instructions Vinyl Patio Sidelite or Transom Field Mulling - Heavy Reinforcement'. Document can also be referenced by the QR Code found at the end of this instruction.

- 1 Align the fixed sidelite to patio unit. Check for flush, even and square alignment of frames.
- 2 Secure fixed sidelite to patio using (6) #8 x 2" screws, evenly spaced through the fixed sidelight jamb pocket. Center screws on vinyl score line. Install fixed sidelight vinyl jamb cover. (Fig. S.1)
- 3 Place a bead of caulk at all exterior mull joint locations. Be sure all voids between mulled frames are sealed. (Figure S.1)
- 4 Install the vinyl exterior zero mullion cover and interior double mullion cover into frame accessory channels, as shown. (Figure S.1)
- 5 Install (1) stacking plate to secure patio frame header to sidelite frame header. Align centerline of stacking plate with centerline of mull joint. Secure plate using (10) #7 x 5/8" flat head quadrex screws (provided) as shown. (Figure S.2)
- 6 Install (1) stacking plate to secure patio sill to sidelite sill. Align centerline of stacking plate with centerline of mull joint. Secure plate using (10) #7 x 5/8" flat head quadrex screws (provided) as shown. (Figure S.2)
- 7 If the patio unit was ordered with an installation accessory, install at this time. Refer to the included document, 'Installation Instruction Vinyl Patio Door Installation Accessories and New Construction Flashing'. The QR code for this instruction can also be found at the end of this instruction document.





TROUBLESHOOTING & TIPS

PROBLEM	CAUSE	SOLUTION
Sash is difficult to operate	1. Sill is crowning. 2. Header is sagging.	Measure distance between sill and header at each jamb and several locations in between. If measurements are not equal, the sill could be crowning or the header could be sagging. This will cause the head weather strip block to put too much pressure on the sash making it difficult to operate. Adjust shims and screws in header.
Handle set is difficult to lock	Keeper or latch bolt is not properly positioned.	1. Refer to Section I for adjustment and positioning instruction. 2. Latch the door for a period of time to allow the weatherstrip to compress. Operation will ease with time.
Screen is dragging	Outer screen track is slightly angled outward.	Re-align outer screen track.
Screen weather strip does not contact sash	Outer screen track is slightly angled outward.	Re-align outer screen track.
Active sash will not close into frame pocket or sash is catching in pocket	Frame is bowed or rolled.	Refer to Section C, 'Install Frame' for proper shimming. Re-shimming patio unit may be required.
Handle is loose	Sash is catching in frame pocket due to bow or roll in frame.	Refer to Section C, 'Install Frame' for proper shimming. Re-shimming patio unit may be required.
AccuVent™ bolt will not release from bolt plate	Head is bowed down or sill is bowed up.	Refer to Section E, 'Install Center Active Sash'. Adjust as required.
Screen rollers hitting	1. Inner track is too high. 2. Inner track screw is hanging down.	1. Lower top inner track. Refer to Section P, 'Adjust Screen and Keeper' of this instruction. 2. Adjust inner track screw height.
Active sash rolls uneven or rough	Dirt build up on the wheels.	Clean wheels.
Air leakage at the interlock	1. Top weatherstrip block is missing or incorrectly located. 2. Interlock weatherstrip is out of location. 3. Foam plugs are not installed.	1. Refer to Section J for installation and placement of head weather strip block. 2. Relocate weather strip. 3. Refer to Section D, 'Install Fixed Sash', Steps 3 & 5 for installation of foam plugs.
Condensation is present on inside or outside of glass	Various normal conditions/reasons.	Refer to "Condensation, Humidity and Dew Point Temperature" QR code listed below for a detailed explanation of normal condensation conditions.
Screen will not roll over screen track sill	Inner track is too high.	Lower top inner track. Refer to Section P, 'Adjust Screen and Keeper' of this instruction.
Screen latch rail is not properly aligned with jamb	1. Main frame is out of square. 2. Inner track is out of alignment.	Lower top inner track. Refer to Section P, 'Adjust Screen and Keeper' of this instruction.



TROUBLESHOOTING & TIPS

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

**For additional information and helpful videos, visit our Homepage for Installers.
SCAN or TAP the QR Code.*



Install Instruction Vinyl Patio
Sidelite or Transom Field Mulling -
Heavy Reinforcement



VIDEO: Aspect and Endure
3-Lite Patio Door Installing
Interlock Mull Post



Installation Instruction Vinyl Patio
Door Installation Accessories and
New Construction Flashing



Installing
Exterior Veneers to
Patio/Windows



Aeris/Endure Patio Door
Handle Set Instruction
(Manufacturer's)



Condensation, Humidity
and Dew Point
Temperature



