ALPEN

CLEAR PERFORMANCE

Sliding Glass Door Assembly and Installation Guide

Index

Components and Hardware 1
Frame Assembly 2
Frame Installation 4
Active Panel Installation 9
Handle Installation 10
Final Assembly 13
Triple and Quad-Panel Units 13
Mulled Units 17
Door Handing Guide 18

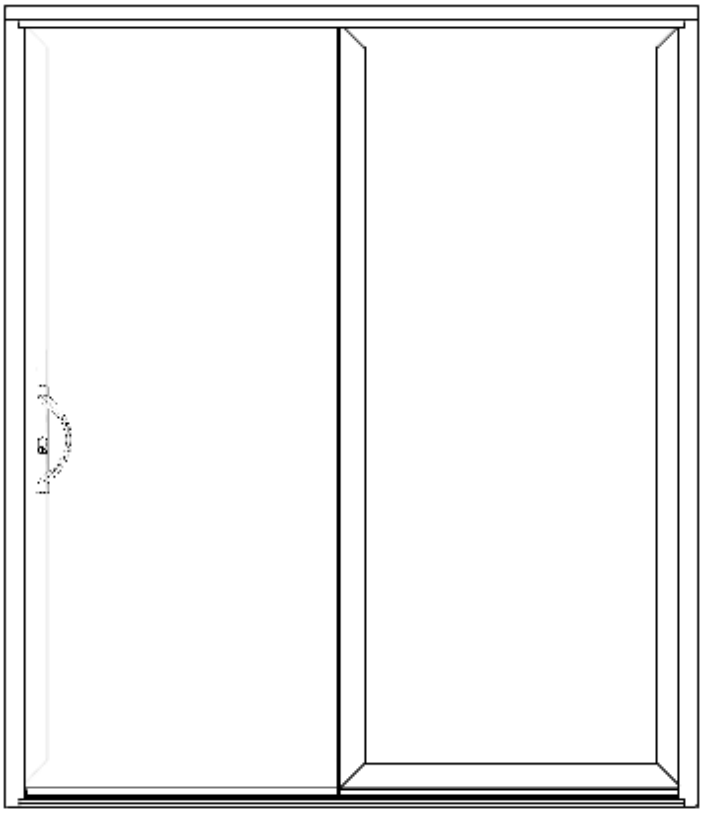
Door System Components and Hardware

The following components are needed to complete the installation of your Sliding Patio Door unit. Check all components for correct size, color, quantity, and for any damages.

*****DO NOT PROCEED WITH ANY ASSEMBLY IF DAMAGES OR MISSING COMPONENTS *****

Frame Kit

1 – Head Jamb
2 – Side Jambs
1 – Sill
1 – Active Weather Strip Carrier
1 – Inactive Weather Strip Carrier
2 – Active Panel Hole Plugs for Each Moving Panel
1 – Head Stop Bumper
12 - #10 x 3” Pan Head Screws
12 - #10 x 3/4” Pan Head Screws
1 – Panel Anchor
1 – Corner Anchor
2 - #10 x 1 ½” Phillips Anchor Screws
2 - #10 x 3” Phillips Pan Head Screws
1 – Sill Cover (2 Sill Covers with Quad-Panel)
1 – Footbolt Kit (Optional)
1 – Touch-Up Paint



Handle Set Kit

2 – Handles
1 – Strike Plate
1 – Escutcheon with Lock
1 – Escutcheon
2 – Phillips Screws with colored Heads
4 – Machine Screws
2 – Keys
2 - #8 x 1” Flat Head Screws
4 - #8 x 2 ½” Pan Head Sheet Metal Screws

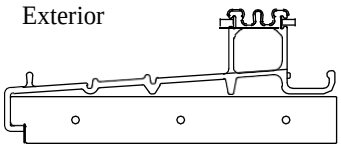
Required Materials

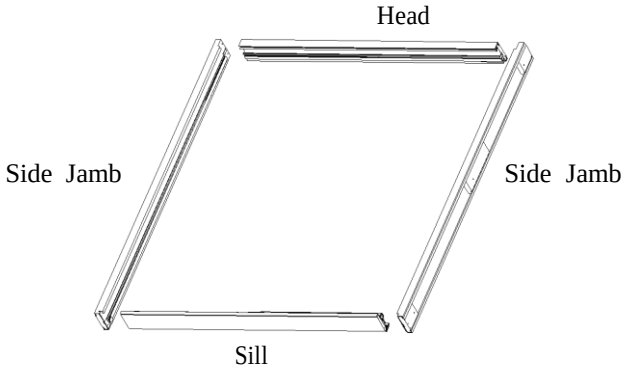
Silicone Sealant and Caulk Gun
6’ Level
Measuring Tape
Electric Drill
#2 Phillips Drive Bit
Staple Gun or Brad Nails
1/8” Drill Bit
Flat-blade Screwdriver
Shims
Head Flashing
Sill Pan (Optional)

Lay frame components onto work area.

Lay parts on floor and position sill, head and side jambs with interior side up.

Special note: A large work area is needed to assemble the frame kit. Cover area with cardboard to protect frame parts and floor.

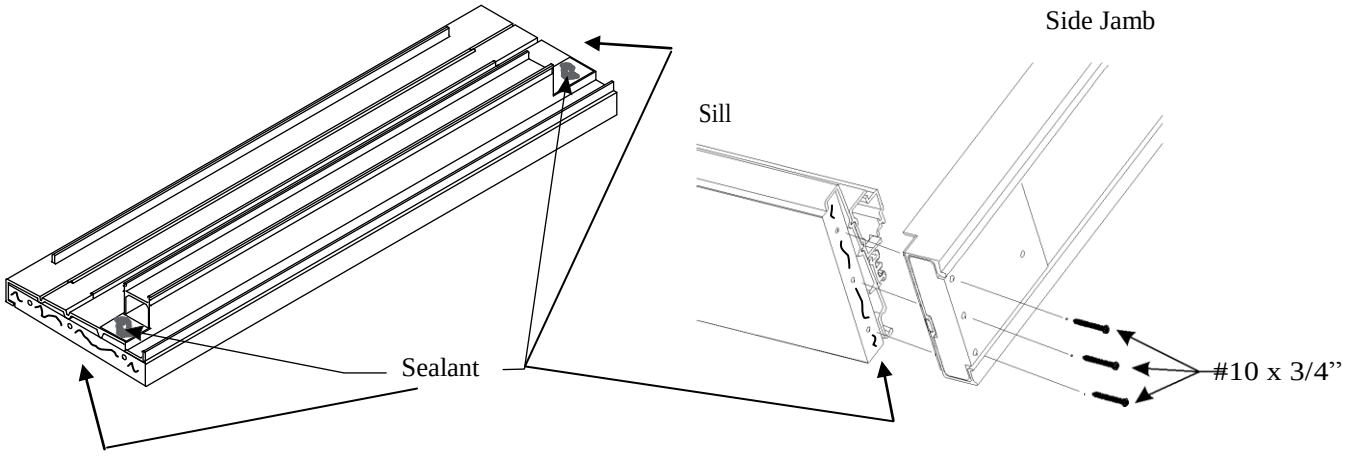




Attach sill to jambs

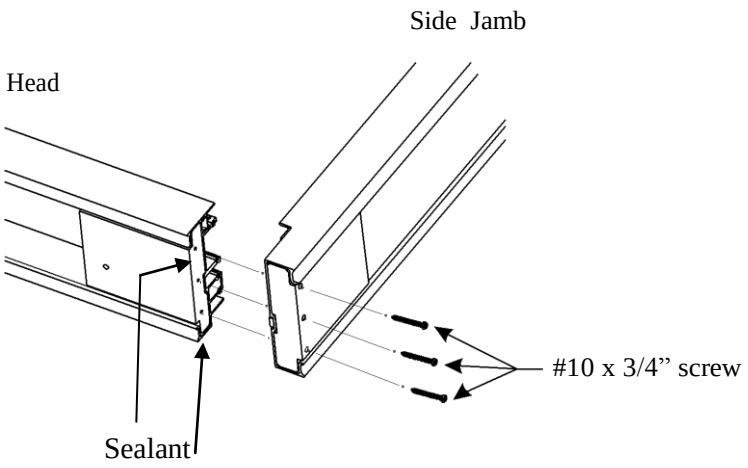
1. Apply sealant to bottom ends of sill as shown.
2. Fasten side jambs to sill through pre-drilled holes using (3) #10 x 3/4" screws. (Starting with center screw is recommended). Repeat for opposite side.

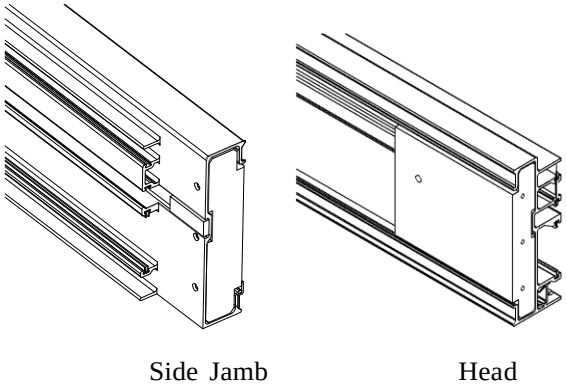
Special note: Be sure that foam pads are in place before assembling frame.



Attach head to jambs

Apply sealant to top ends of head frame. Fasten side jambs to head through pre-drilled holes using (3) #10 x ¾” screws. (Starting with center screw is recommended). Repeat for opposite side.

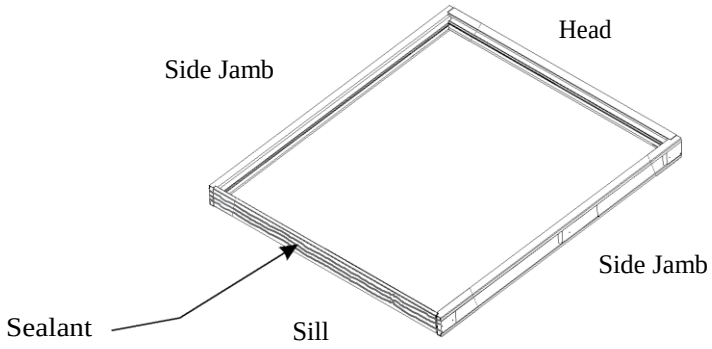




Apply silicone sealant to bottom of sill

Run beads of silicone sealant across entire length of sill bottom to provide a weather-tight seal.

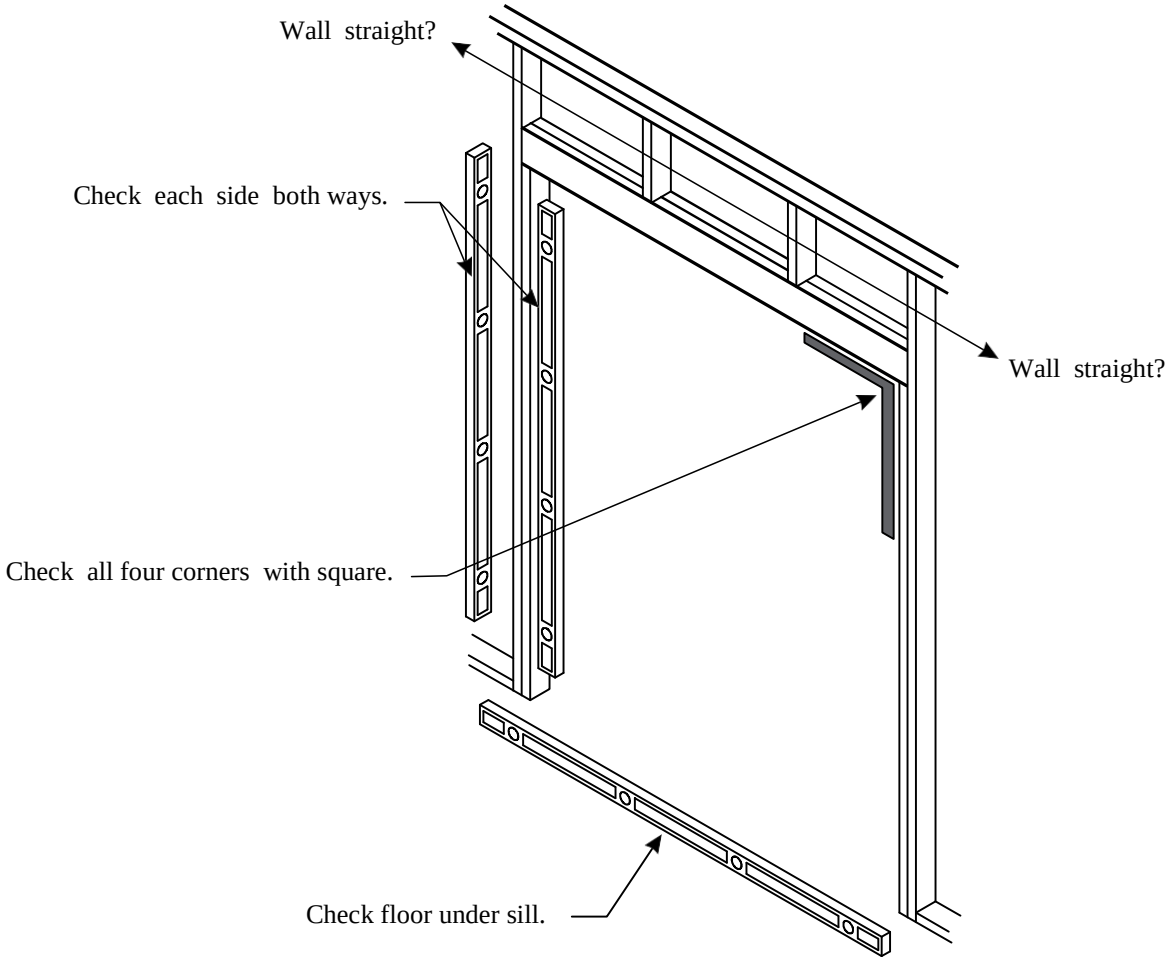
Special note: A continuous bead of sealant is required.



Frame Installation

Check rough opening as follows and correct if necessary:

- Sub-floor to be flat, level and clean. Sill must be supported throughout its entire length.
- All four corners to be square. Check with a framing square. Check cross dimensions.
- Framing and walls to be plumb. Use a 6-foot level to check both side of opening.
- All wall surfaces to be straight and sides parallel.
- Opening to be correct size. Allow 3/8“on sides and 1/2” at head.

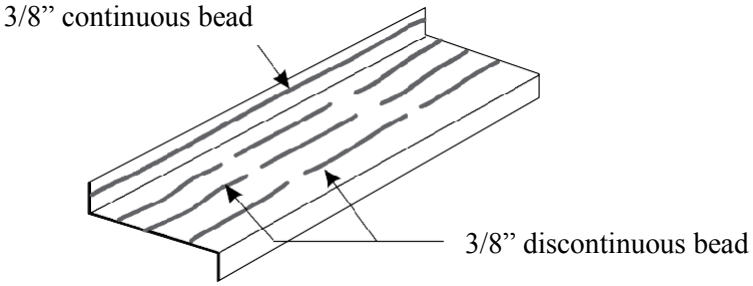


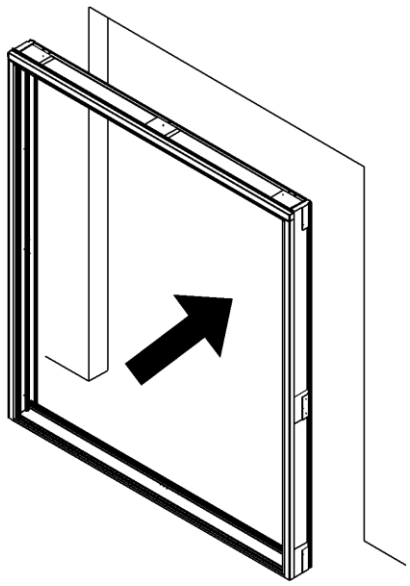
Set unit into rough opening

Seal all joints between the sill (pan flashing optional) and the end-caps for a watertight sill. Apply a 3/8” continuous bead of sealant to the backside of sill and two 3/8” discontinuous beads of sealant to the bottom of the sill and continue 6” up the jamb. Install drip cap to the head and flash as necessary.

Special note: the 3/8” beads of sealant applied to the bottom of the sill pan are discontinuous to allow for drainage

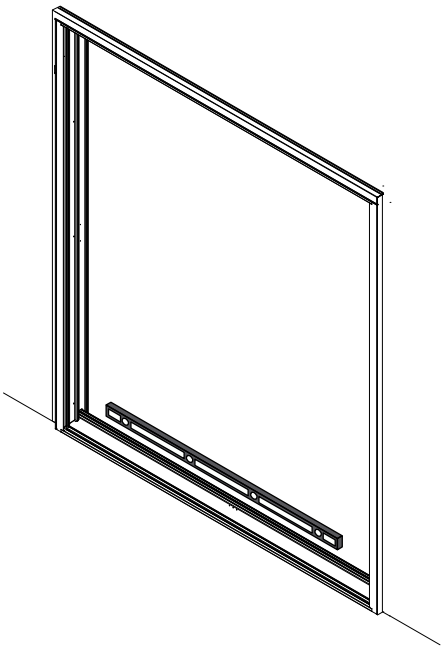
From outside of house, set unit into rough opening. Apply pressure on sill to set sealant.





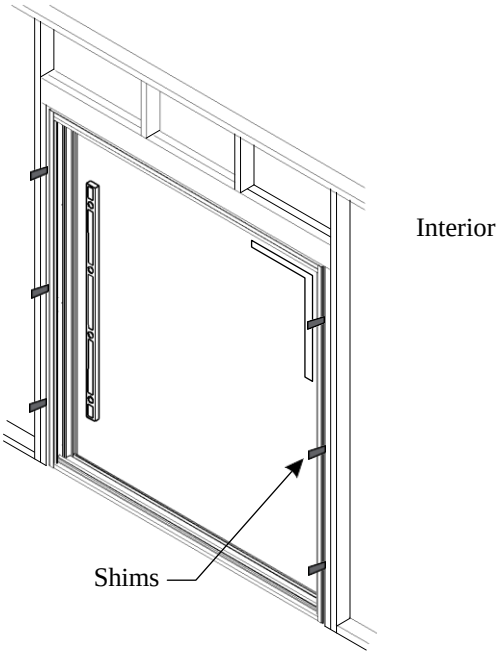
Level sill

Sill must be flat and level. Check and make any necessary adjustments. If necessary, add temporary blocking under projecting exterior edge of sill to serve as support during construction.



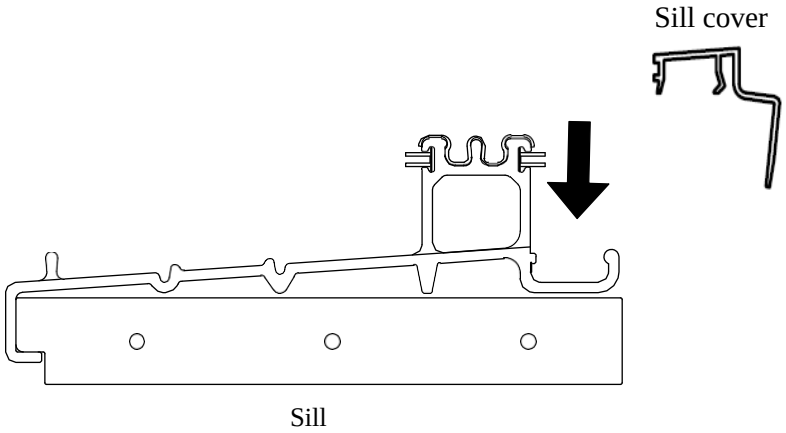
Plumb side jambs

Jambs must be plumb and straight. Shim as necessary to remove any bow. (Shim frame head as necessary to remove any bow). Secure jamb shims with screws taking care not to pull the frame out of square.



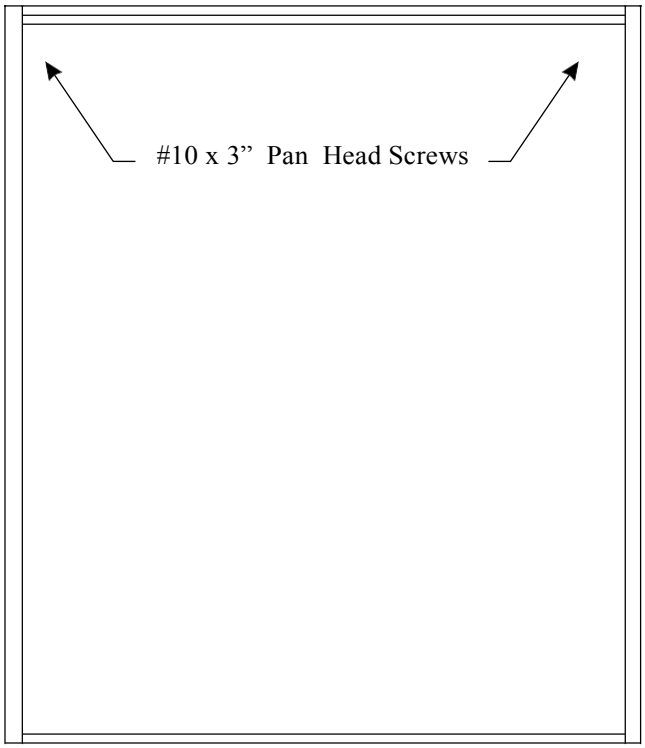
Install sill cover

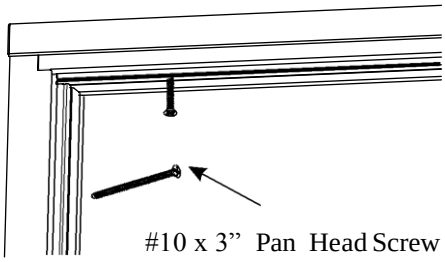
Install the vinyl sill cover base by starting at each jamb and working towards the center of the door. Use a rubber mallet to snap in place.

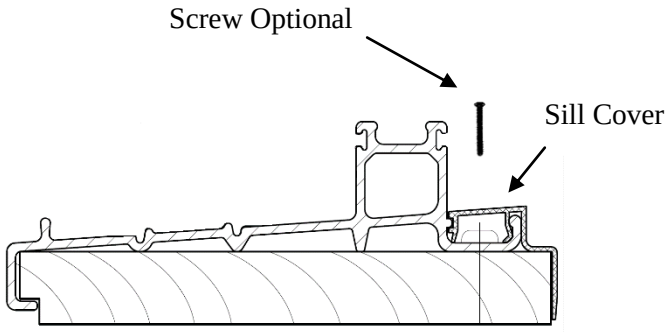


Secure frame in rough opening

Using (12) #10 x 3 pan head screws, fasten frame to rough opening through pre-drilled holes in frame. In the sill, there are no pre-drilled holes.

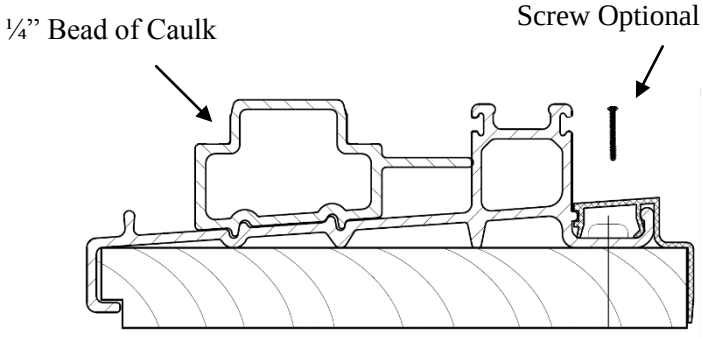


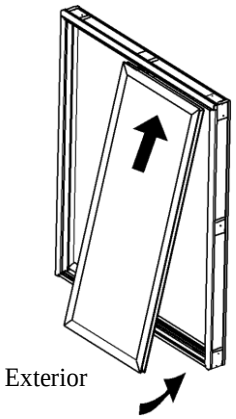




Install stationary panel

1. Apply a 1/4" bead of caulk (recommend clear sealant).
2. From exterior side of unit, install stationary panel by inserting top of panel into exterior channel. Rotate bottom panel inward until sill inactive door riser leg sets into groove.
3. Slide slab tightly against side jamb
4. Wipe off excess caulking.

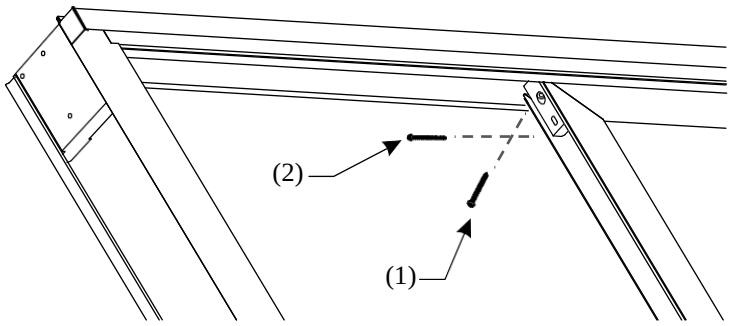


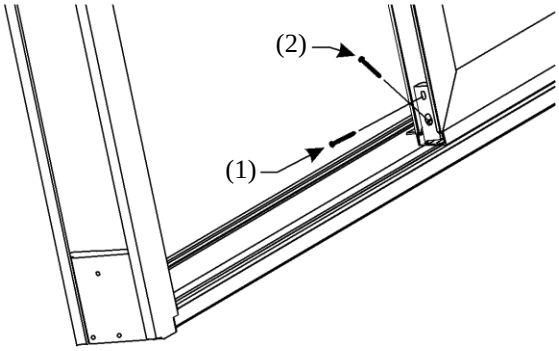


Install anchor to the inactive panel & head

First: Remove the top screw in the inactive panel and discard. Then insert the panel anchor as shown. Drill a 1/8" pilot hole in the frame head and blocking substrate. Install the #10 x 3" Phillips pan head screw (1) through the panel anchor to the frame. Install the #10 x 1 1/2" Phillips pan head screws (2) through the panel anchor into the bottom screw hole of the inactive panel

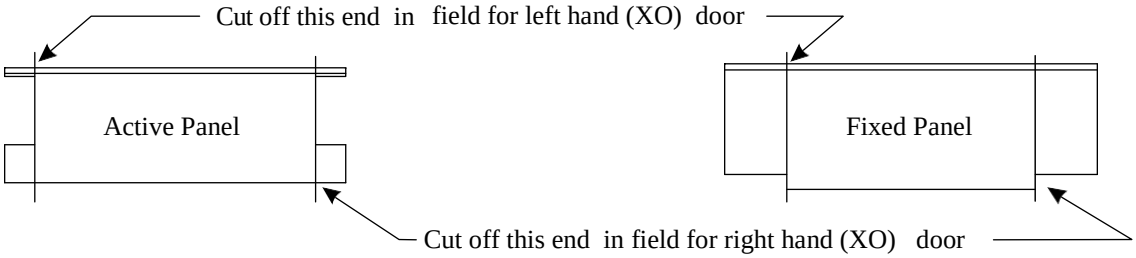
Second: Remove the bottom screw in the inactive panel and discard the screw. Then insert the panel anchor as shown. Drill a 1/8" pilot hole in the frame sill and blocking substrate. Install the #10 x 3" Phillips pan head screw (1) through the panel anchor to the frame. Install the #10 x 1 1/2" Phillips pan head screws (2) through the panel anchor into the bottom screw hole of the inactive panel.





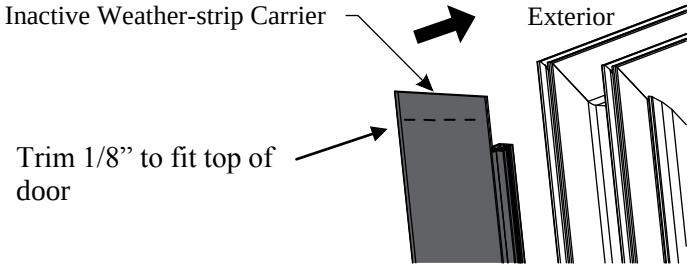
Cutting weather-strip carriers

1. Locate the two (2) weather-strip carriers in the frame box, one for the active panel and one for the fixed panel.
2. The carriers have been sent along for cutting in the field based on the handing of the door.
3. Follow the instructions below for the door handing you are installing.



Attach inactive weather-strip carrier

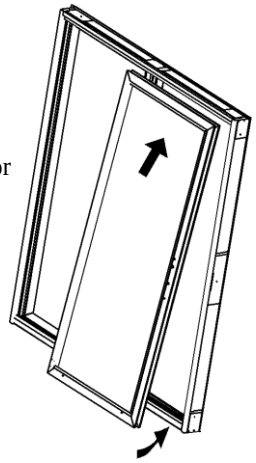
Install weather-strip carrier, use a block of wood or rubber mallet to avoid damage to the parts. Line up the fixed slab weather-strip carrier 1/8" under the bottom of the head jamb. Bottom straight edge of interlock cover may need to be trimmed 1/8". Insert barbs into stile grooves tap into place, then do the same at the sill. Work your way towards the center of the panel. Make sure that both carriers fit properly into the slots on the edge of each slab.



Install active panel

From interior side of unit, install active panel up into interior channel in head jamb. Push upwards as far as possible and rotate into place until rollers engage onto sill roller track.

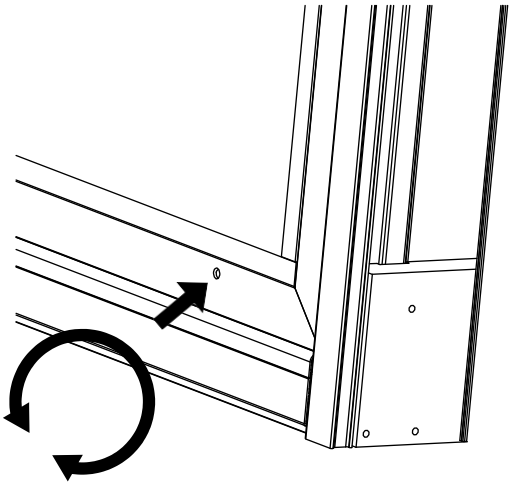
Interior



Special note: Be sure to have the active panel near the closed position before installing to ensure that the interlocks will meet when the door is closed. Be sure that the panel is square to the frame.

Adjust rollers

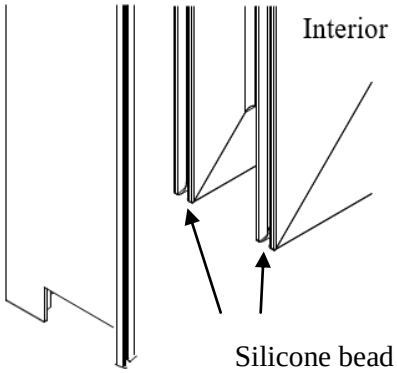
Using a #2 Phillips screw driver, turn adjustment screws in rollers left or right until panel is level and glides smoothly across the track. Close door to within 1/4" of lock jamb. Use visual margin to assure panel is adjusted straight with frame.



Active Panel Installation

Attach active weather-strip carrier

Align active interlock 1/8” above bottom edge of active panel. Top straight edge of bottom panel may need to be trimmed 1/8”. Starting at bottom, insert barbs into stile grooves. Working your way up, tap in place with a hammer and wood block or rubber mallet. Carefully inspect interior edge of interlock. Tap as necessary to obtain a tight fit along door edge.

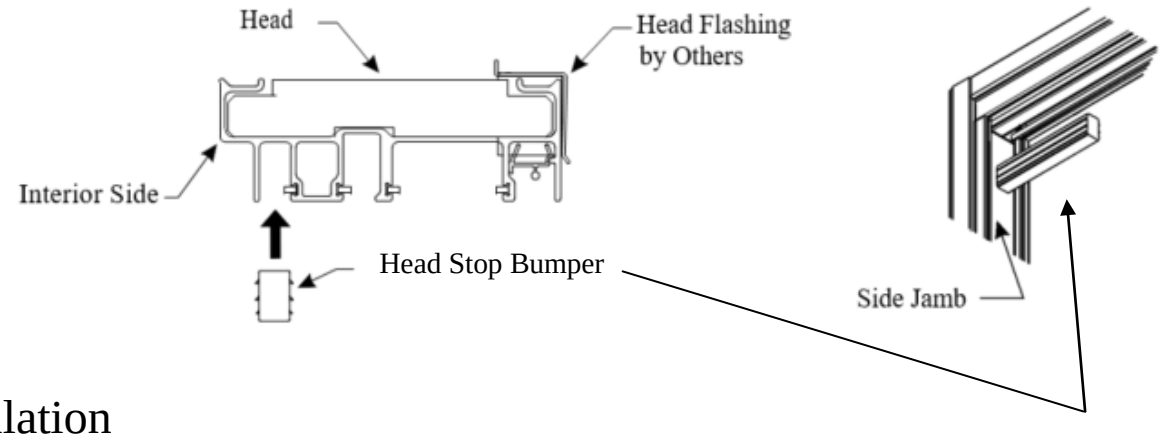


Silicone bead in channel to secure interlock cover in place

Insert head stop bumper

Insert head stop bumper into innermost channel in head jamb, butting end of bumper against stationary side jamb. Seat panel bumper flush with head jamb.

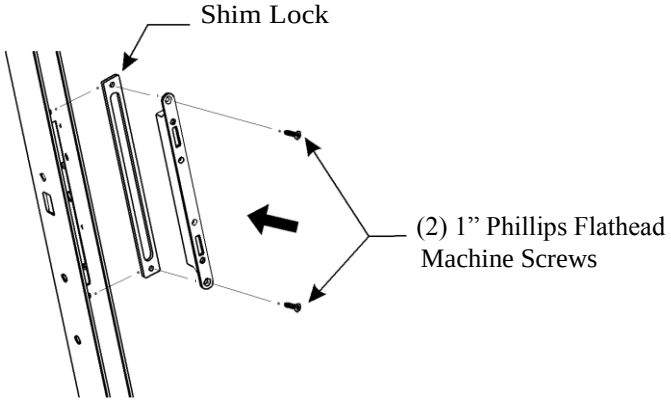
Special note: If needed, the bumper can be cut down from its original length of six inches to four and a half inches. This will allow for a wider entrance.



Handle Installation

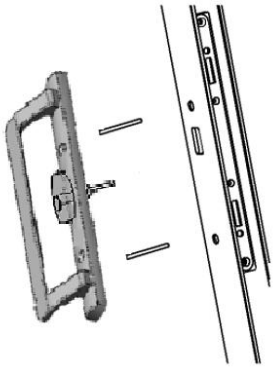
Install mortise lock

Install mortise lock and spacer through pre-fabricated holes in active door edge.



Align exterior handle

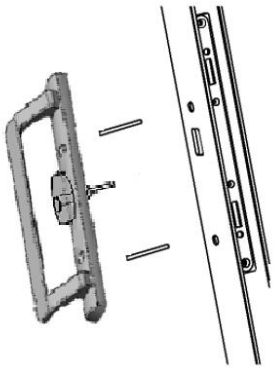
1. Assemble handle to escutcheon plate according to the hand of the door, with 2 machine screws. The curve of the handle should slope toward the center of the door. Tighten securely to prevent loosening during operation.
2. The tailpiece will require positioning prior to assembly on the door. Rotate the tailpiece until it reaches a horizontal position.
3. Place exterior handle on door aligning holes in panel.



Align interior handle

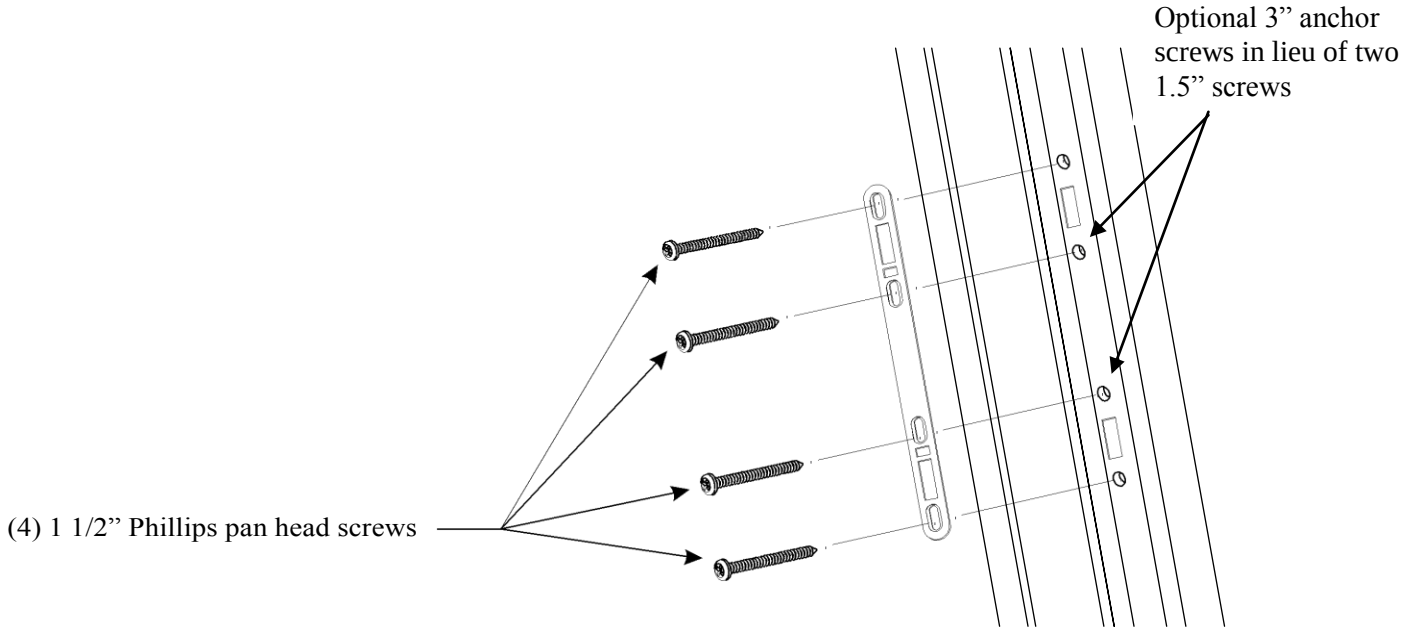
1. Assemble handle to escutcheon plate according to the hand of the door, with 2 machine screws. The curve of the handle should slope toward the center of the door. Tighten securely to prevent loosening during operation.
2. If desired, the thumb knob can be changed to different positions when in the locked and unlocked positions. To do this, remove the screw in the stem of the thumb turn. Next, rotate the adaptor so the desired threaded hole in the adaptor lines up with a hole in the thumb turn stem.
3. Turn the thumb knob to align it with the tailpiece Phillips pan head. Place interior handle over latch aligning holes in panel.
4. Fasten handles together with (2) colored screws, do not tighten the mounting screws completely.
5. Completely close the active door. Rotate the key to the locked and unlocked positions. In each case the key should be removable. This indicates that the key is installed properly. If it does not operate properly rotate the tailpiece in the opposite direction and reinstall. Tighten the mounting screws to complete the installation.

Special note: use caution not to over tighten screws



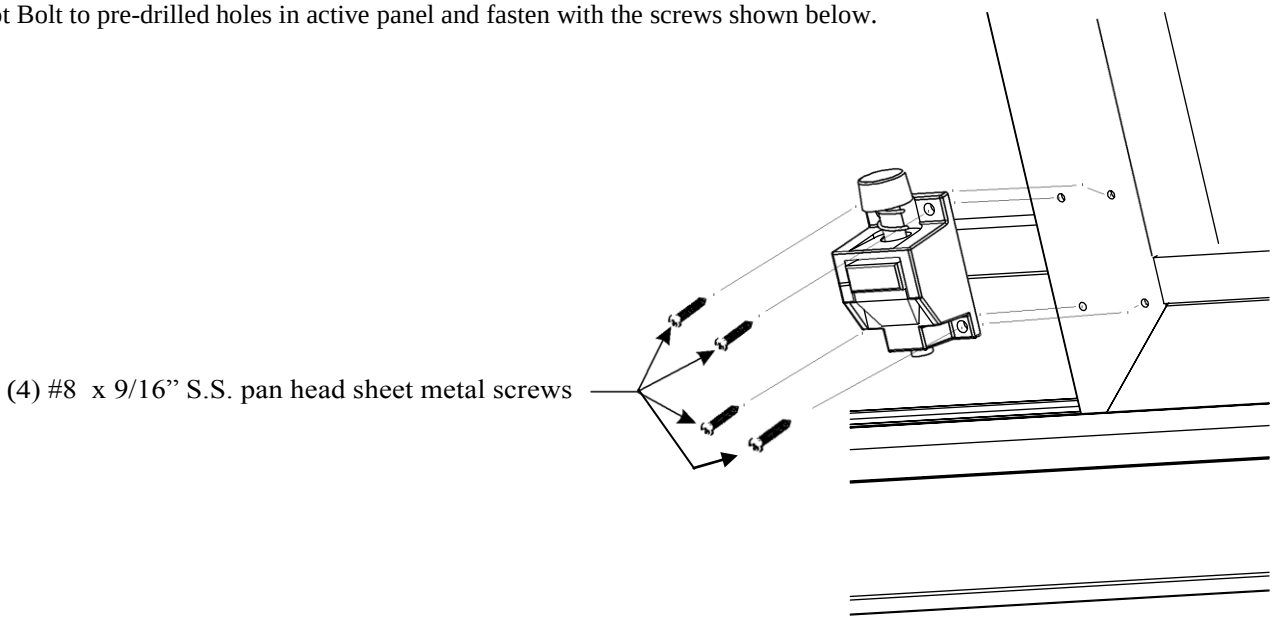
Install keeper

Align keeper to pre-drilled holes in active jamb and fasten with (4) 1 1/2” Phillips pan head screws. Close door and adjust keeper for proper latch engagement. Latch throw can be adjusted by the slotted adjustment screw on the face of mortise lock.



Install foot bolt (optional)

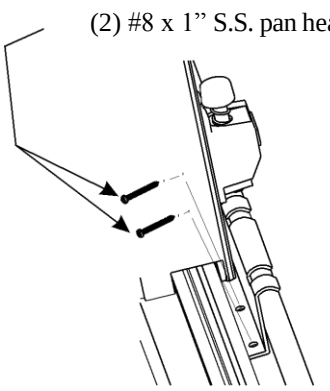
Call for quote - Must be ordered with door! Not available separately.
Align Foot Bolt to pre-drilled holes in active panel and fasten with the screws shown below.

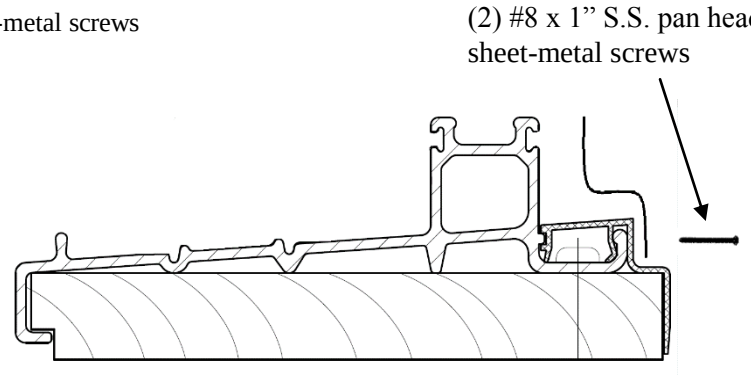


Final Assembly

Install footbolt keeper (optional)

Close the active door completely, align keeper with foot bolt. Use a 1/8" drill bit to drill two holes through the holes in the keeper into the sill cap and through the fiberglass of the sill. Fill the holes with a small amount of clear sealant. Screw the two #8 x 1" S.S. pan head sheet-metal screws into the holes. Clean up any excess sealant.





Three & four panel installation

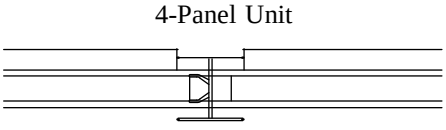
To install a three or four panel unit follow all the steps to assemble a double unit. Install all fixed panels before installing each active panel.

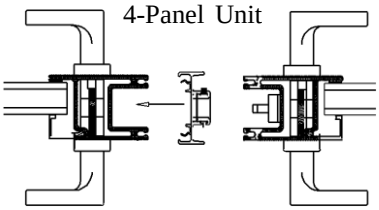
Three panel unit

The astragal will be installed between the two inactive panels. Install the astragal so the bottom is even with the bottom of the panel. Use a rubber mallet or wood block to tap the astragal onto the panel rail, making sure tips are properly aligned with slots. Work from top to bottom towards the center making sure the astragal stays centered.

Four panel unit

The astragal will be installed to the left side active panel (looking from the outside). The bottom of the astragal is notched from the factory to go over the sill track. Install the astragal so the bottom is even with the bottom of the panel. The head end should be just below the head track to allow for smooth operation. Use a rubber mallet or wood block to tap the astragal onto the panel rail, making sure tips are properly aligned with slots. Work from top and bottom towards the center making sure the astragal stays centered. Install lock keeper on the astragal, refer to hardware instructions for keeper attachment. Install screen astragal in same manner, make sure screen operates properly. Secure astragal to passive sash panel through pre-drilled holed located in the center of the astragal with #10 x ¾" pan head screws.





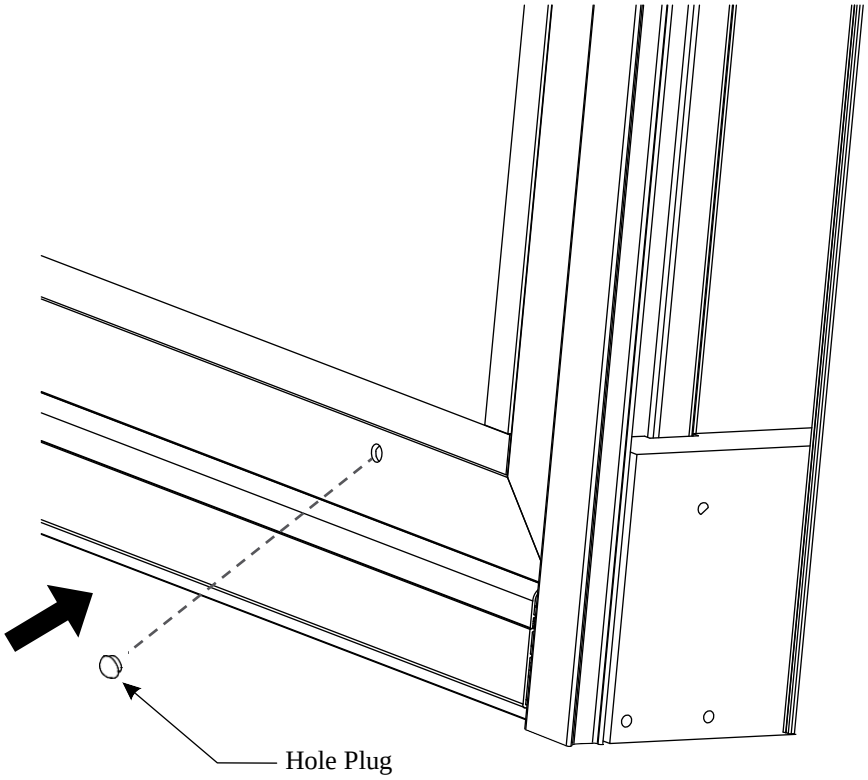
Sliding screen door

Refer to the instructions on the screen hardware bag attached to the screen handle. There is also an instruction label attached to the screen with partial instructions.

Special note: Use caution when removing the screen hardware bag as to not obscure the text.

Insert plugs

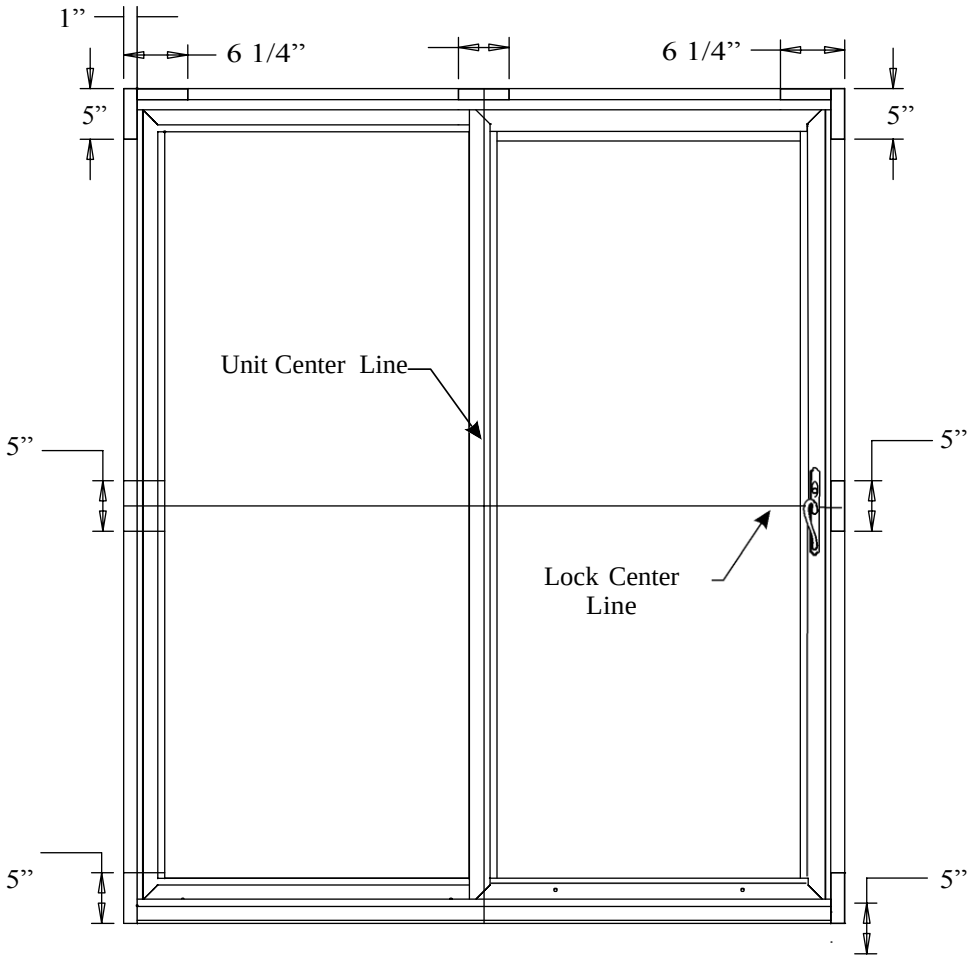
Two plugs are supplied. Insert the plugs into roller adjustment holes.



Interior casing attachment

Interior casing may be attached to the frame in either of the following ways. An air nailer can be used to fasten the interior casing to the frame using 0.050” x 1-1/2” wire brad nails through the casing and fiberglass frame. For maximum holding power, ensure that nails are installed through anchor blocks located within frame profiles. Locations are shown below for standard 2-panel units.

For manual application, we suggest using 4d-1-1/2” finish nails. They can be used to secure interior casing to the frame. Pre-drilled pilot holes (1/16” dia.) are recommended to avoid splitting casing or frame. Ensure that nails are installed through anchor blocks for maximum holding power.



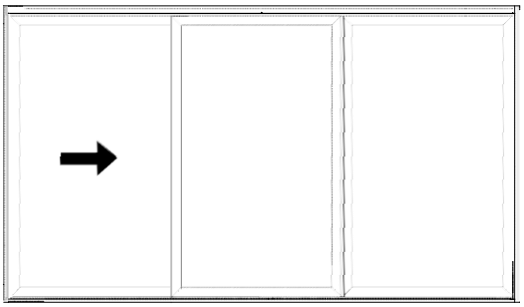
Triple unit information

The intention of this section is to clarify the differences between a triple mulled and triple continuous Sliding Patio Door System.
Handing Configurations for a Mulled Triple:

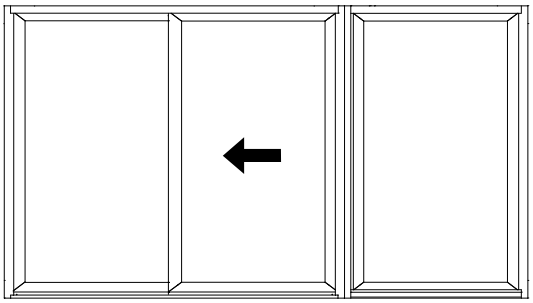
(Fixed, Left Hand Active, Fixed) OXO Left Hand
(Fixed, Right Hand Active, Fixed) OXO Right Hand

Handing Configurations for a Continuous Triple:
(Left Hand Active, Fixed, Fixed) XOO
(Fixed, Fixed, Right Hand Active) OOX

Please note that the overall width of a mulled unit is different than that of a continuous unit. Another significant difference between a mulled triple and a continuous triple is the packaging. A triple continuous unit will be shipped in two Uni-boxes and a long frame box. In comparison, a mulled unit will ship in just two unit boxes.



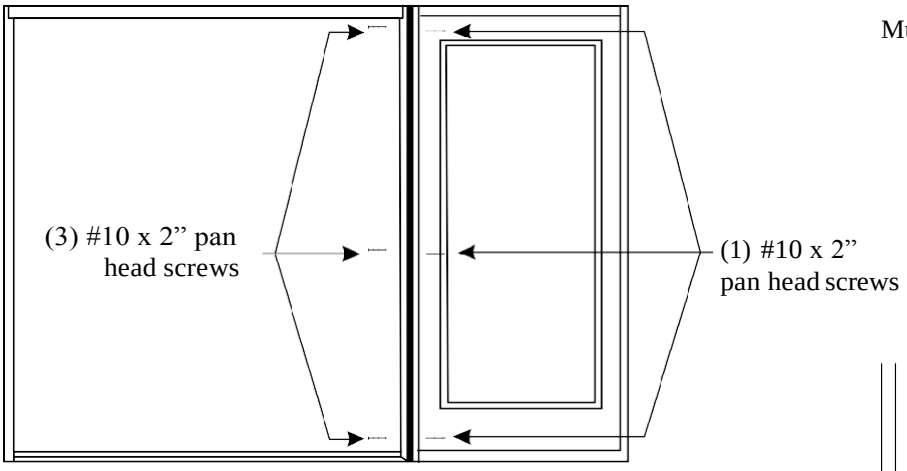
Triple continuous patio door XOO shown

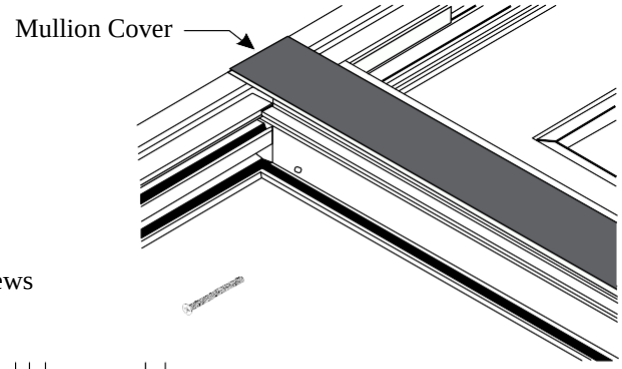


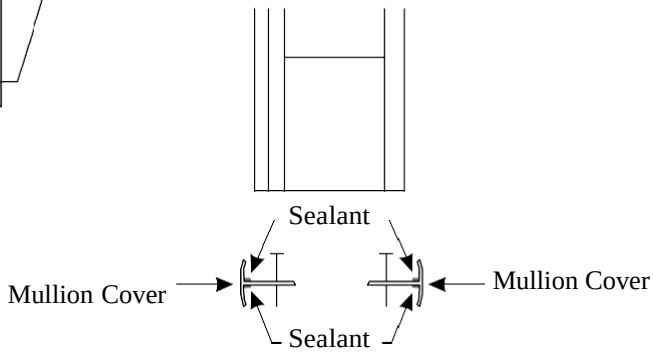
Triple mulled patio door XOX shown

Attach M.E.U. to two panel system (OXO Doors)

Run a bead of sealant on the mullion covers and then staple the covers to the sidelight. Staple into the substrate and not the fiberglass. A 3\4" staple is recommended. Staple the two mullion covers to the M.E.U. Align M.E.U. with the two-panel system. Using (6) #10 x 2" pan head screws, fasten M.E.U. and the two panel systems together through pre-drilled holes in frames. Use Backer Rod or Low Expansion Foam to fill in any cavity between the two frames being mulled together.

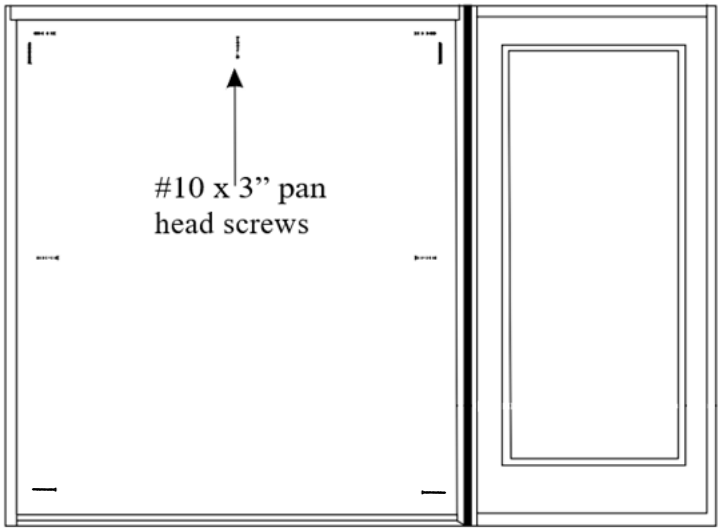


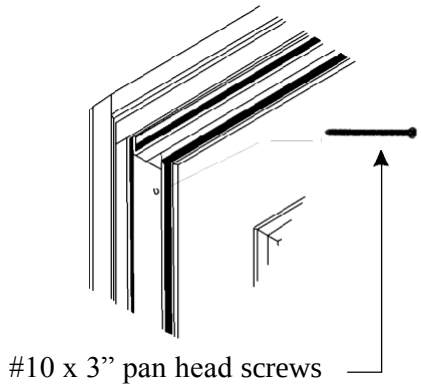




Install system

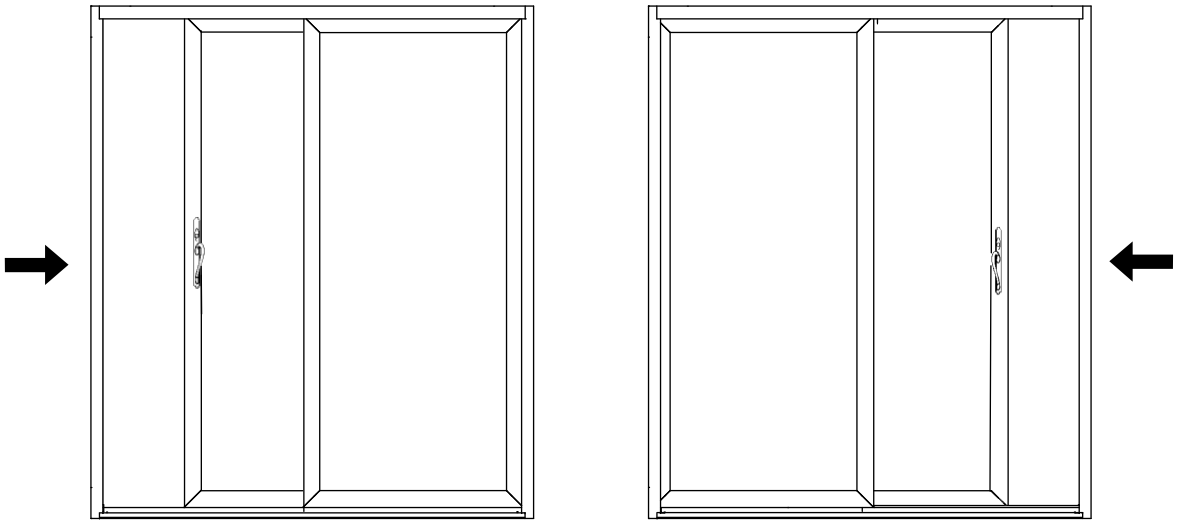
Turn to page 9 and follow installation steps. Note that some of the details on page 9 are tailored to the double patio system and may vary slightly. The attachment points for the mulled triple are shown below.





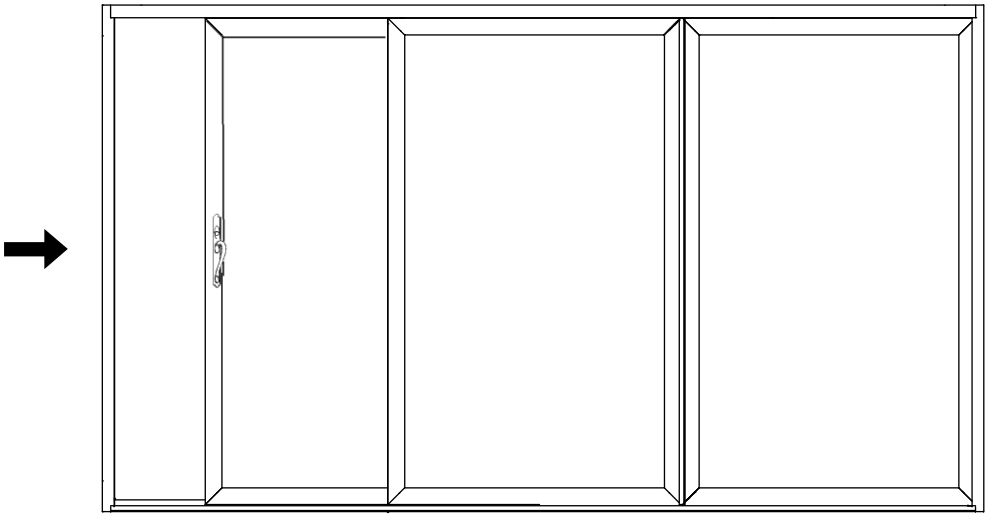
Door Handing Guide (Doors are handed as viewed from the exterior)

All quad units are left handed.



Left hand door (XO)

Right hand door (OX)



Left hand door (XOO) Shown. (OOX) Opposite

Weatherproof, finish and maintain system

- Apply backer rod where applicable to both the exterior and interior perimeters.
- Apply sealant over backer rod in a continuous manner around exterior side. Seal front bottom edge of sill (discontinuous), seal all joints between jambs and moldings.
- Seal joints between exterior hardware trim and door face to prevent air and water infiltration.
- Apply sealant over backer rod in a continuous manner around exterior side.
- Remove labels on the glass.
- Apply sealant over backer rod in a continuous manner around interior and exterior head and jamb perimeters to seal properly.

ALPEN

CLEAR PERFORMANCE