

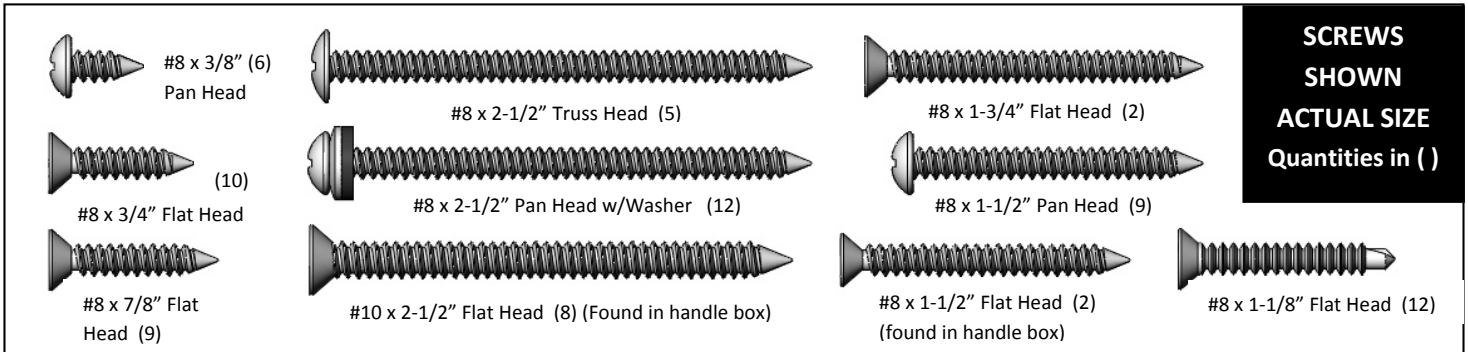
INOVO 3-LITE SLIDING PATIO DOOR

ASSEMBLY AND INSTALLATION INSTRUCTIONS

IMPORTANT: READ THE INSTRUCTIONS AND FAMILIARIZE YOURSELF WITH THE DOOR PARTS AND PIECES BEFORE BEGINNING ASSEMBLY AND INSTALLATION.

NOTE: DOORS ARE NOT FIELD REVERSIBLE!

TOOLS NEEDED: Cordless Screw Gun, Tape Measure, 4' Level, #2 Phillips Bit (4" minimum in length), #3 Phillips Screwdriver, Rubber Mallet, Caulk Gun and Clear Silicone Caulk



- 1) Prepare a clean flat work space for the door frame assembly. Remove the door frame pieces and all other components. Refer to packing list to ensure that no parts and pieces are missing.
- 2) Remove all parts and pieces from the vinyl head, sill, and side jambs. Lay the frame pieces out with the exterior side up, arranged in the order they will be assembled (Fig. 1).

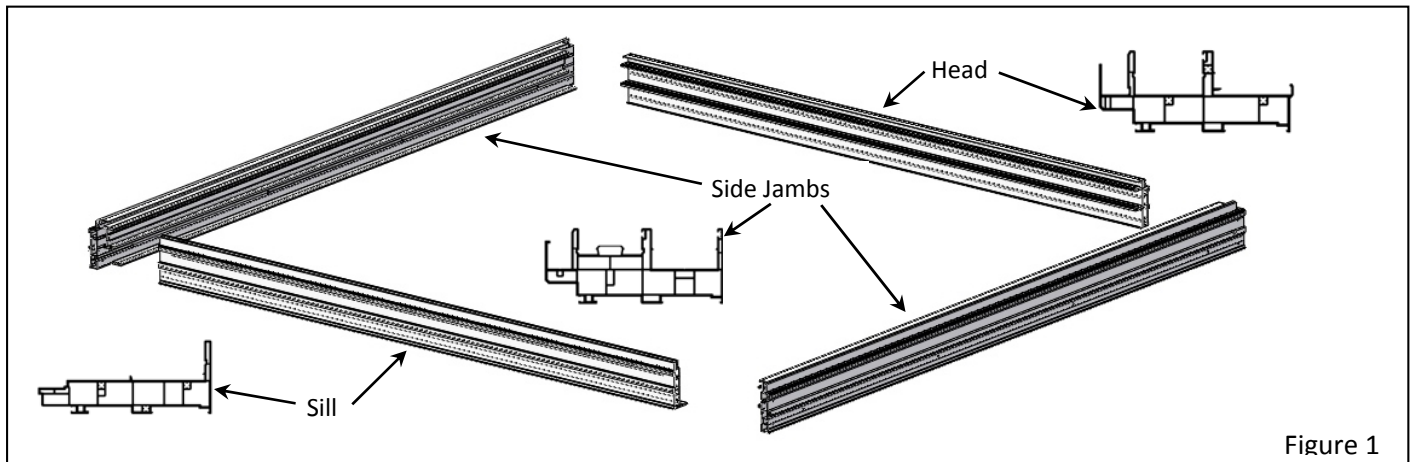


Figure 1

- 3) Clean any dirt or debris from the end surfaces of the side jambs. Remove the frame gaskets (located in hardware package) from the paper backing and carefully place them on each end of the side jambs as shown. **NOTE:** The gaskets for the sill end (Fig. 2) are different from those for the head end (Fig. 3). If gaskets are damaged, do not install them and call your Simonton dealer for further instructions. Proper gasket alignment is critical to prevent water from entering through the frame corners.

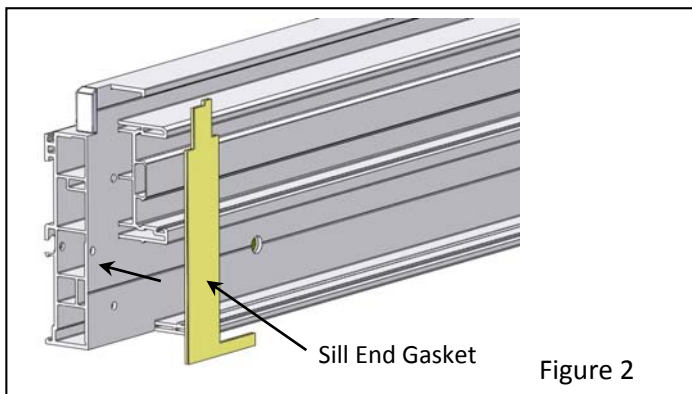


Figure 2

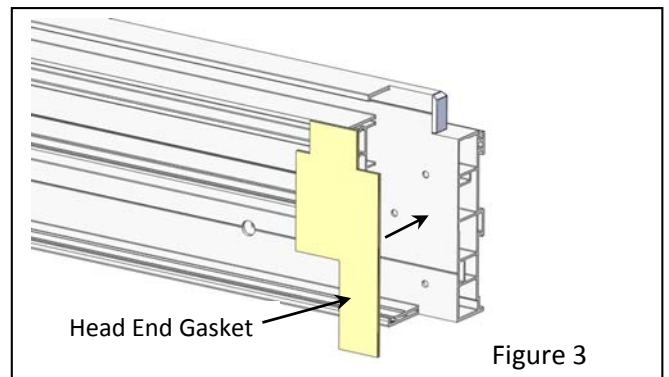
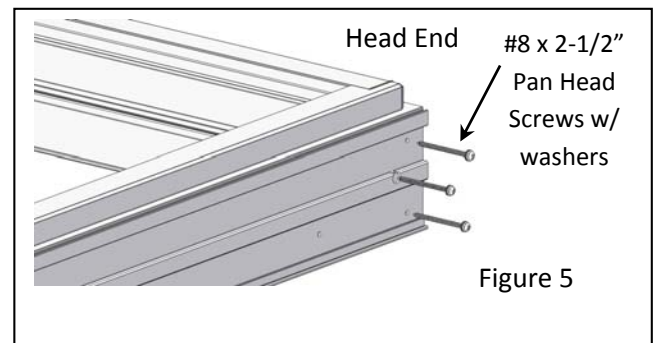
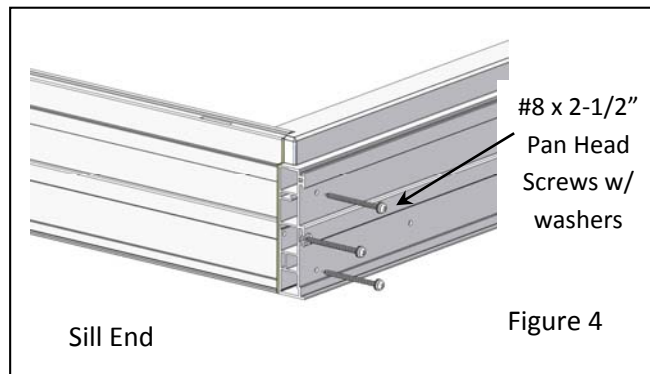
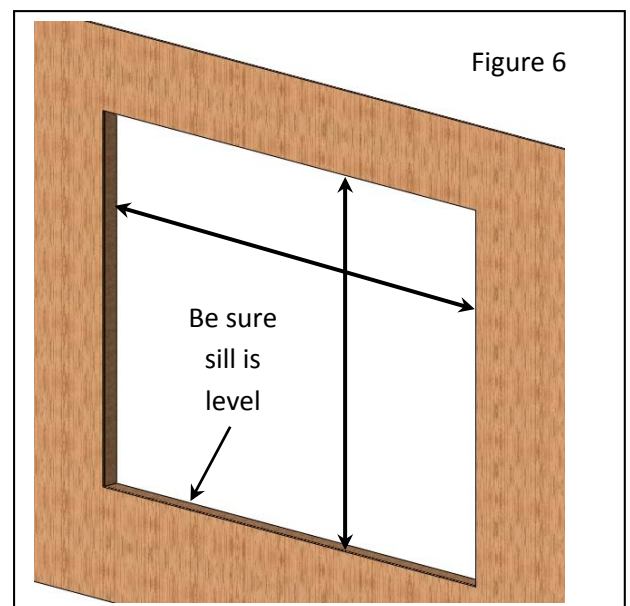


Figure 3

- 4) Attach each side jamb to the sill (Fig. 4) and head (Fig. 5) with three #8 x 2-1/2" Pan Head screws with washers through pre-drilled holes. Start screws in each screw hole by hand to ensure proper screw alignment and to prevent damage to the gasket. Be careful that you do not over tighten the screws, which could crush the vinyl frame members and damage the frame.



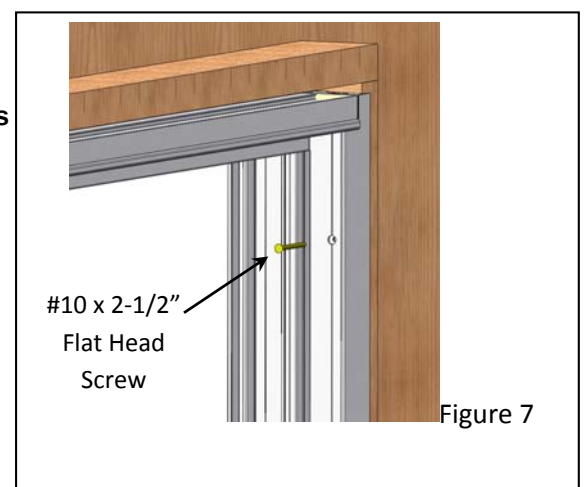
- 5) Check opening for proper size before installing frame. Opening should be approximately 3/4" larger in width and height than the assembled frame (Fig. 6). Check to see if the sill is level. If not level, correct at this time. Once the sill is level, apply a minimum 1/2" bead of silicone caulking across the sill of the opening in a crisscross pattern before installing the frame.



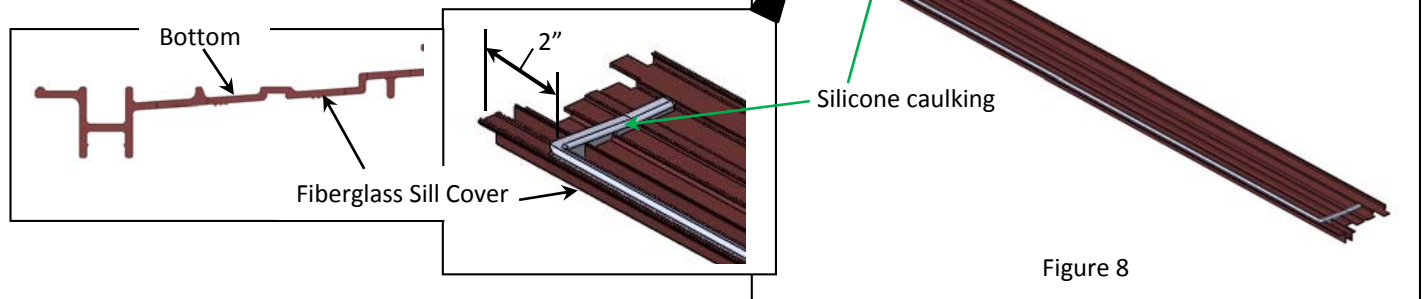
- 6) Carefully move the frame into the opening, making sure it is kept square during movement. Shim frame so that it is plumb, level, and square. Attach frame to opening using provided #10 X 2-1/2" Flat Head installation screws (Fig. 7). Place screws in each side jamb in the pre-drilled holes. Screws are required to have an embedment of 1-1/2" in wood or 1-1/4" in a masonry structural member. Shims should be placed at all anchorage locations between the jamb and opening to prevent bowing of the frame, which could affect performance.

No screws are required through the head or sill.

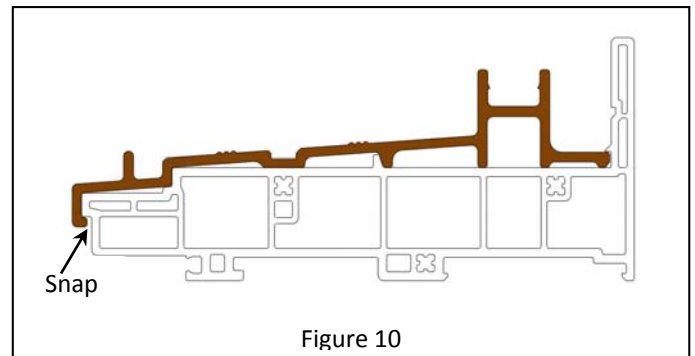
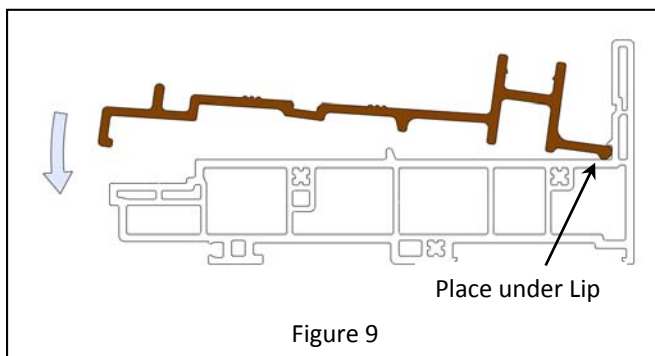
Do not install screws through sill. This could cause water infiltration which would damage to the structure.



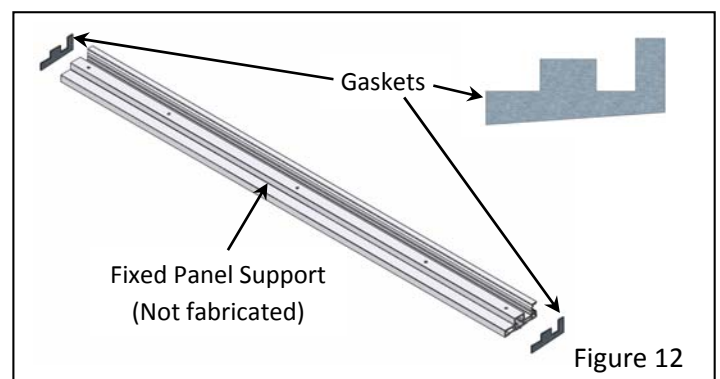
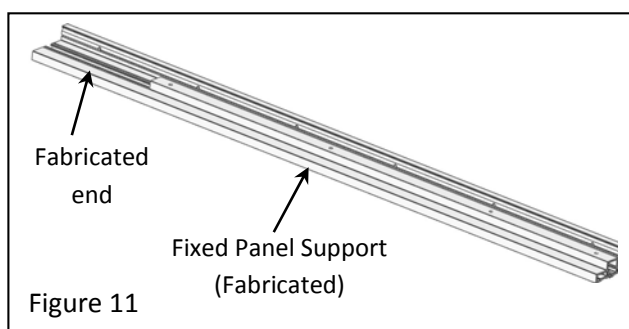
- 7) Apply a 3/8" bead of silicone caulking to the bottom side of the fiberglass sill cover, in a U-shaped pattern as shown (Fig. 8). Start the pattern approximately 2" from the end of the cover.



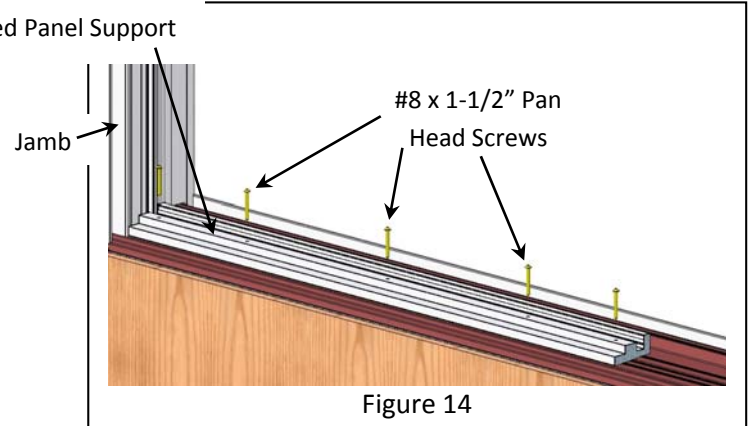
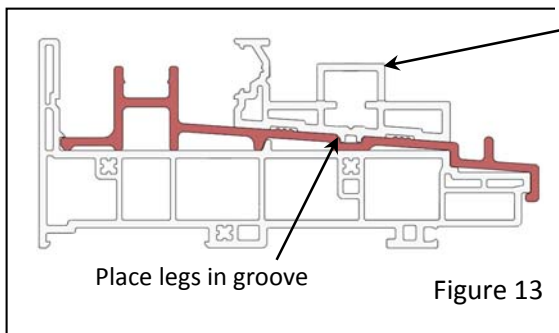
- 8) Center the fiberglass sill cover over the vinyl sill side to side and install the cover onto the sill. Start by placing the front of the cover under the lip on the back side of the sill dam (Fig. 9) and rotate the cover down until it snaps over the ledge on the exterior of the vinyl sill (Fig. 10).



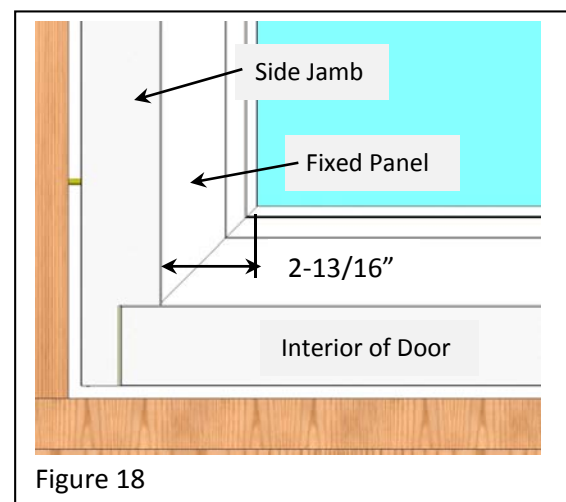
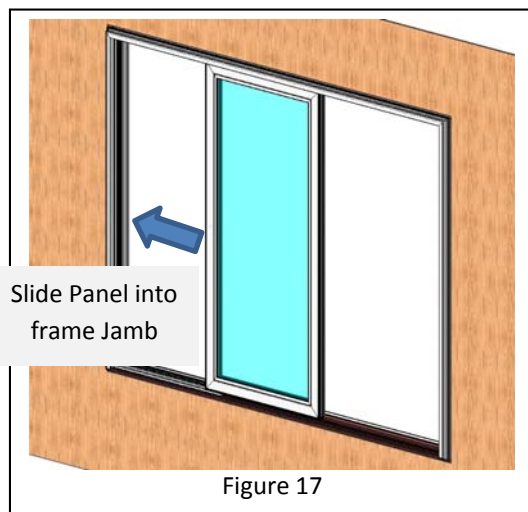
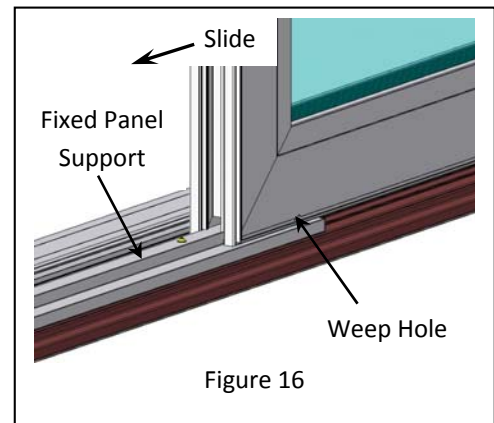
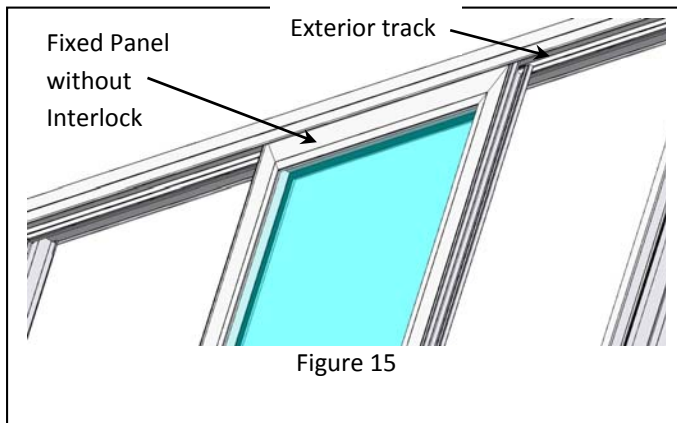
- 9) There are two Fixed Panel Support pieces. One is fabricated on one end (Fig. 11) and the other is not fabricated (Fig. 12). The piece that is not fabricated will be installed onto the sill first, but before installing, gaskets need to be placed on both ends. Peel the backing from the left and right foam gaskets and carefully apply one to each end of the part. Be sure that the gaskets align with the contour of the part.



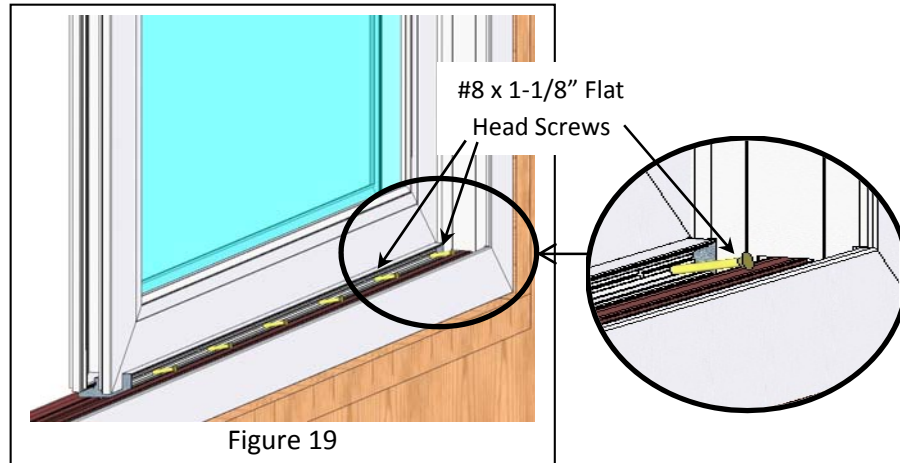
- 10) Place the non-fabricated Fixed Panel Support onto the fiberglass sill cover, with the legs on the bottom of the Panel Support in the groove in the fiberglass cover as shown in Figure 13. If you have a left opening door (opens left to right when viewed from the exterior), the Panel Support should be placed at the left end of the frame, (and on the right end for a right opening door). Hold the Panel Support firmly against the side jamb and drive five #8 x 1-1/2" Pan Head screws through the holes in the Panel Support and into the sill (Fig. 14).



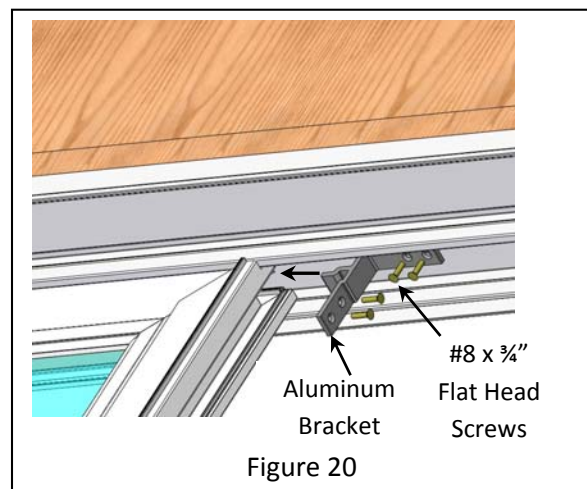
- 11) There are two door panels that do not have rollers on the bottom. These are the fixed panels. One has an interlock on one vertical stile and the other does not. The panel without the interlock gets installed next. To install, start with the panel placed in the center of the frame, so that the bottom of the panel clears the fixed panel support just positioned. Lift the top into the exterior track of the head (Fig. 15). Swing the bottom of the panel in and slide it onto the fixed panel support as shown (Fig. 16). Make sure the weep holes in the panel are at the bottom and on the exterior. Slide the panel on the fixed panel support and into the side jamb (Fig. 17), making sure it is fully seated in the jamb. The exposed vinyl on the panel should measure 2-13/16" from the side jamb leg when the panel is fully seated (Fig. 18).



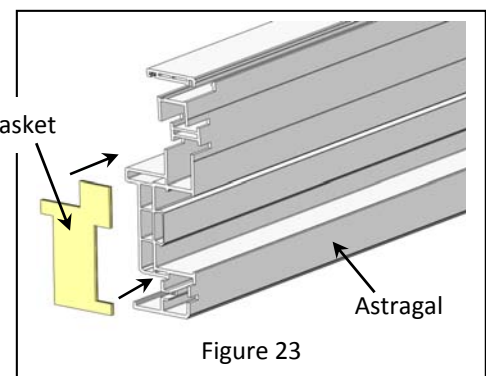
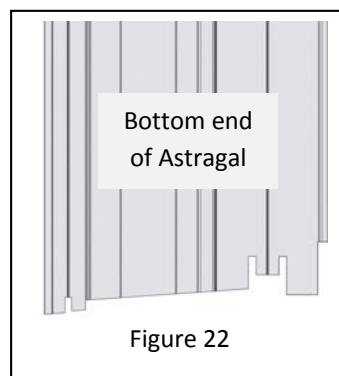
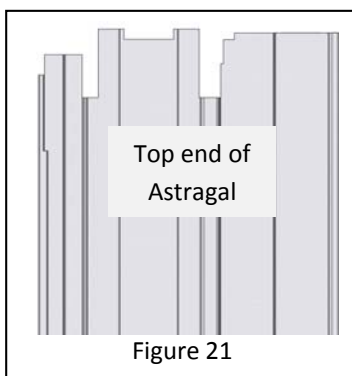
- 12) To secure the panel to the sill, install six #8 x 1-1/8" Flat Head screws into the pre-punched holes at the bottom of the fixed panel support and into the panel (Fig 19). Screws are meant to be driven at a slight downward angle.



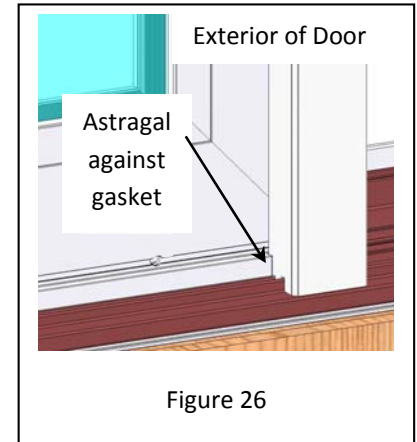
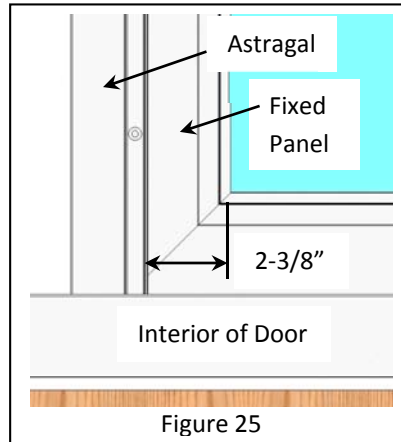
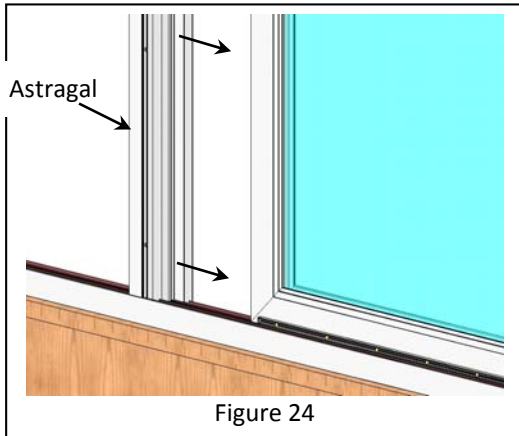
- 13) Place an aluminum bracket into the groove at the top of the fixed panel as shown (Fig. 20). The tab on the bracket should be placed at the top of the panel to space the panel the correct distance from the frame head. Install two #8 x 3/4" Flat Head screws through the bracket into the panel. Check the panel again near the top for full engagement into the side jamb (2-13/16"). With the panel fully seated, install two #8 x 3/4" Flat Head screws through the bracket and into the head.



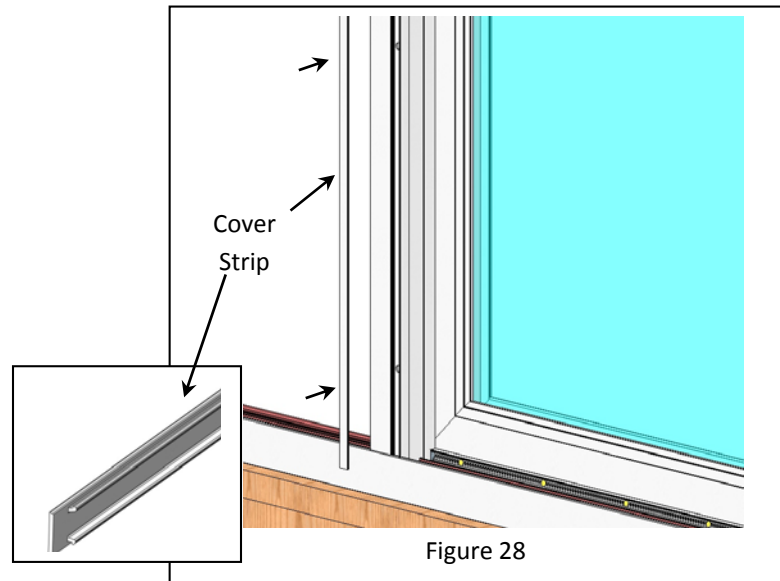
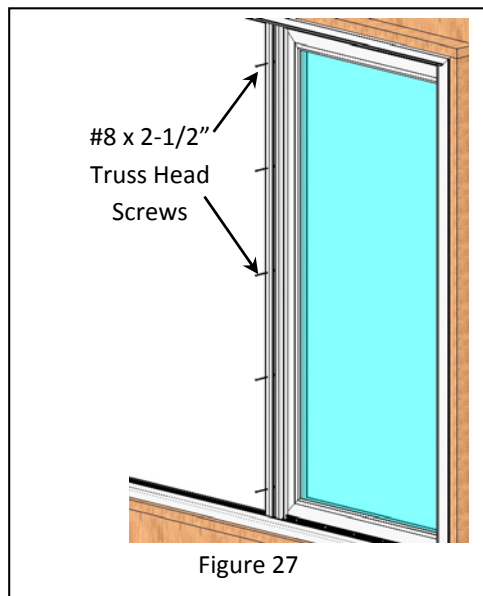
- 14) Distinguish the top end of the Astragal (Fig. 21) from the bottom end (Fig. 22) by matching the notching for each end to the figures as shown. Peel the gasket for the bottom end (located in the hardware package) from its backing and carefully apply the gasket as shown in Figure 23. Be sure to align the gasket to match the contour of the Astragal.



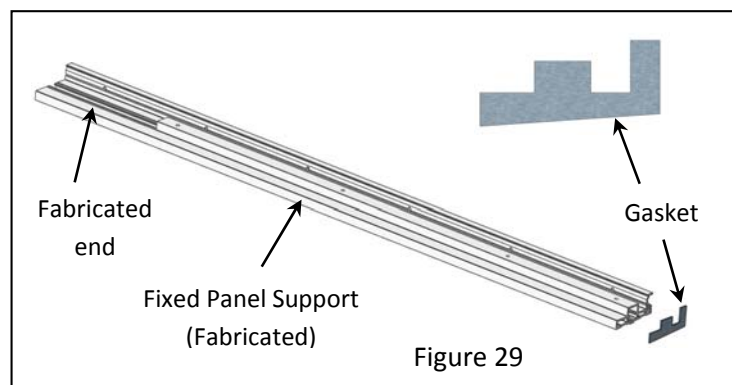
- 15) Install the Astragal onto the previously installed fixed panel, fitting the notches on the ends into the head and sill profiles. Start the Astragal at the sill end, taking care not to damage the gasket, and work it up to the head end (Fig. 24). Tap the Astragal onto the panel with a rubber mallet, making sure it is fully seated onto the panel. The exposed vinyl on the panel should measure 2-3/8" from the Astragal (on the interior) when it is fully seated (Fig. 25). The Astragal should be tight against the gasket on the end of the fixed panel support on the exterior (Fig. 26).



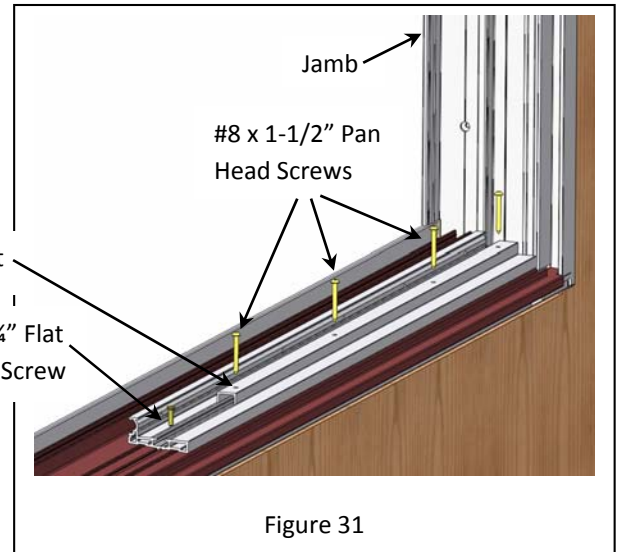
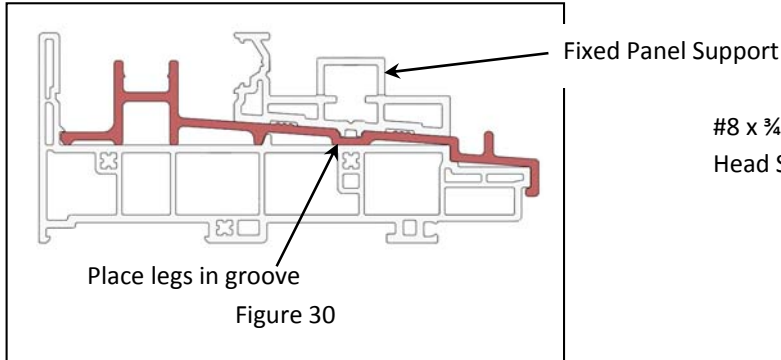
- 16) Install five #8 x 2-1/2" Truss Head screws into the pre-drilled holes in the Astragal and into the panel (Fig. 27). Screw heads should pass through the large counter-bored holes. After installing screws, snap the cover strip into the groove in the astragal to cover the screws (Fig. 28). Be sure the cover strip is centered top to bottom.



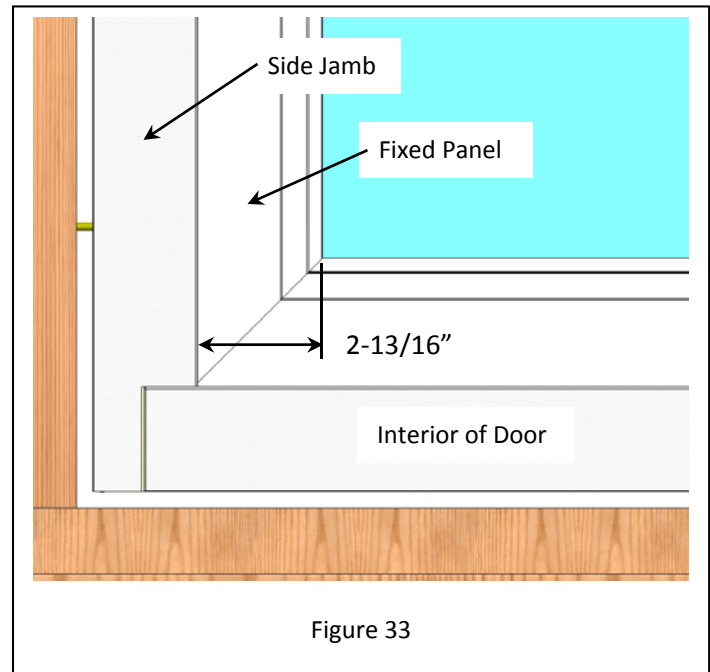
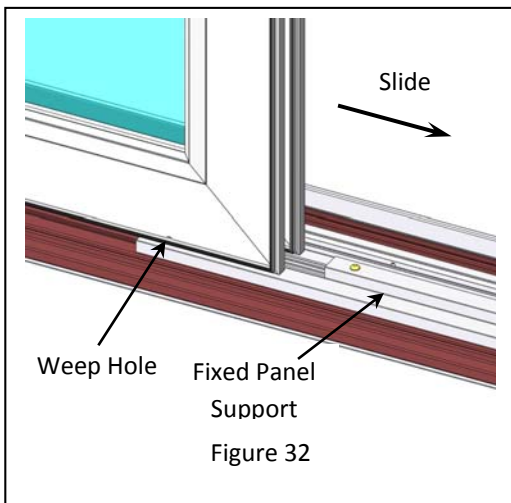
- 17) Peel the backing from the foam gasket for the Fabricated Fixed Panel Support and carefully apply the gasket to the end of the Panel Support that is not fabricated as shown (Fig. 29). Be sure that the gasket aligns with the contour of the end of the part.



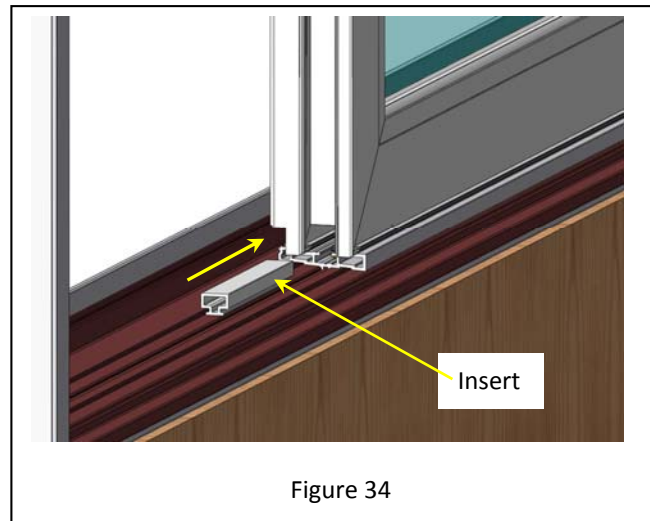
- 18) Place the Fixed Panel Support onto the fiberglass sill cover on the other end of the frame, with the legs on the bottom of the panel support in the groove in the cover (Fig. 30) as done in Step 10. Holding the panel support firmly against the side jamb, drive #8 x 1-1/2" Pan Head screws through the Panel Support and into the sill, except for the last hole in the fabricated end. Use a #8 x 3/4" Flat Head screw here (Fig. 31).



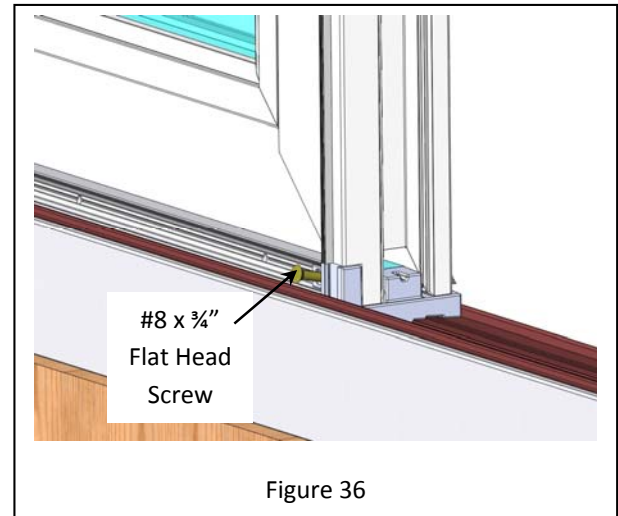
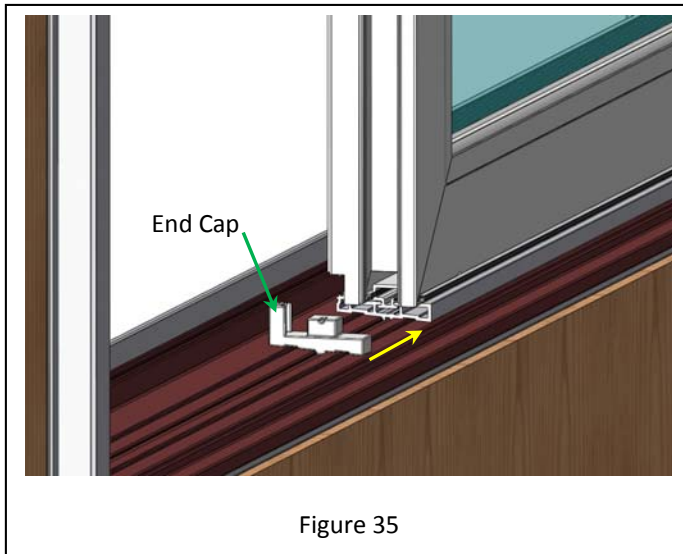
- 19) Install the fixed panel with the interlock in the same manner as the other fixed panel was installed in Step 11. Start with the panel centered side to side in the frame, and lift the top of the panel into the outer track in the head. Swing the bottom of the panel in and place it onto the fabricated portion of the fixed panel support as shown (Fig. 32). Make sure the weep holes in the panel are at the bottom and to the exterior. Slide panel on fixed panel support and into jamb, making sure it is fully seated in the jamb. The exposed vinyl on the panel should measure 2-13/16" from the side jamb leg when the panel is fully seated (Fig. 33).



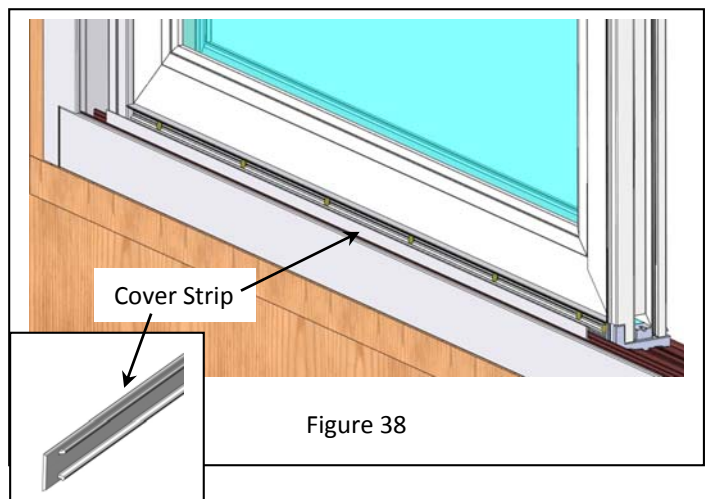
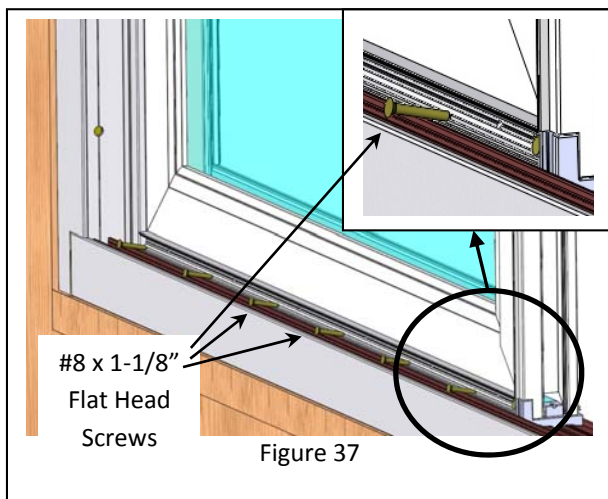
- 20) Slide the T-shaped insert into the fabricated end of the fixed panel support (Fig. 34), under the panel as shown. Be sure the legs on the insert interlock with the projecting legs on the panel support. Push the insert in until it is flush with the end of the fixed panel support.



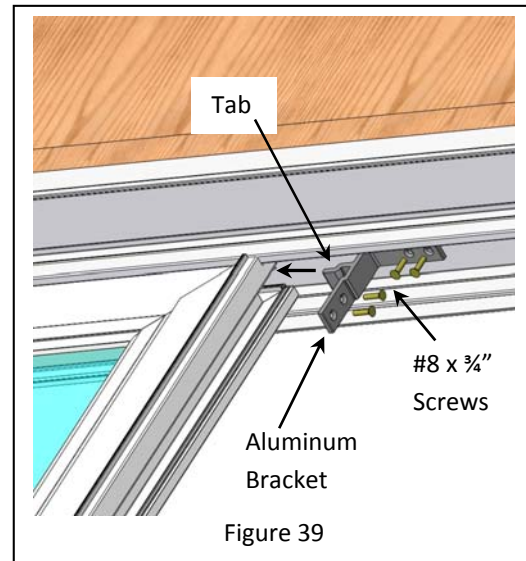
- 21) Push the end cap into the end of the fixed panel support and the insert as shown in Figure 35. It might be necessary to lift the panel slightly. There should be no gap between the cap and the panel support when the cap is fully seated. While holding the cap in, drive a #8 x 3/4" Flat Head screw into the hole in the end cap (Fig. 36). NOTE: The end cap is shown without the finseal pads for clarity.



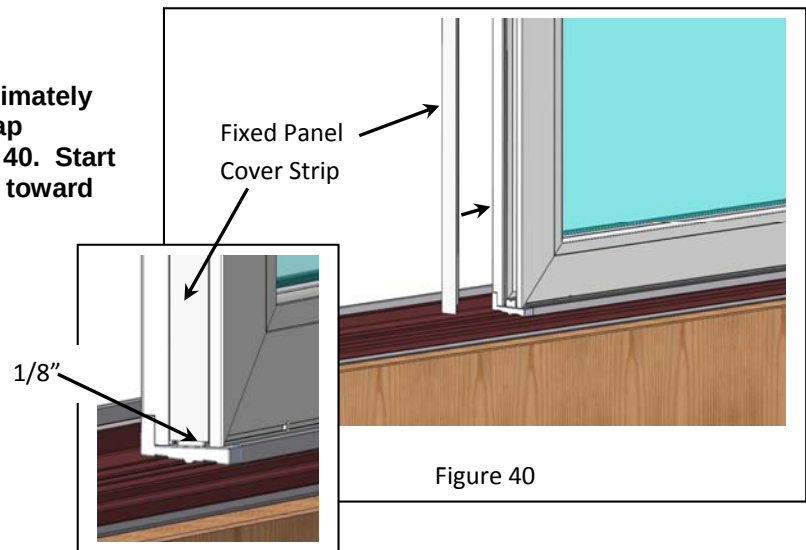
- 22) Drive six #8 x 1-1/8" Flat Head screws into the pre-punched holes at the bottom of the fixed panel support as shown in Figure 37. Screws are meant to be driven at a slight downward angle. After screws are installed, snap the cover strip into the fixed panel support to hide the screws (Fig. 38). Start the strip at the end with the end cap and work towards the side jamb end.



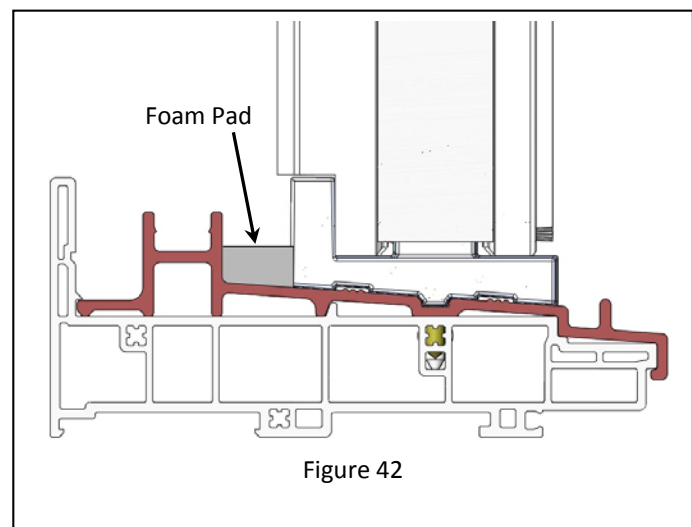
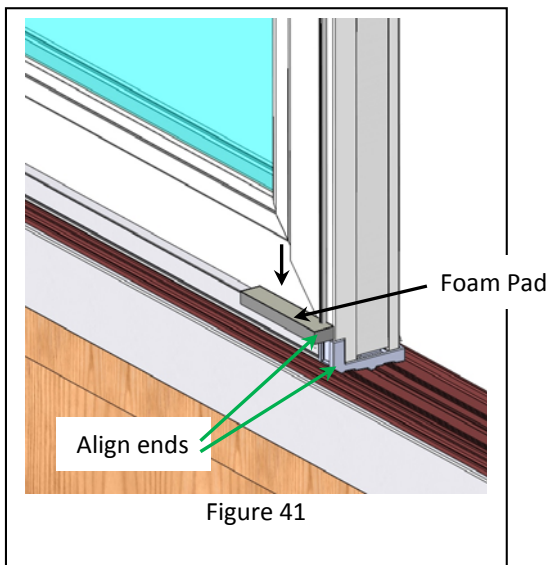
- 23) Place an aluminum bracket into the groove at the top of the fixed panel as done in Step 13 for the other fixed panel. Check the panel again near the top for full engagement into the side jamb (2-13/16") before installing the #8 x 3/4" Flat Head screws through the bracket and up into the head (Fig. 39).



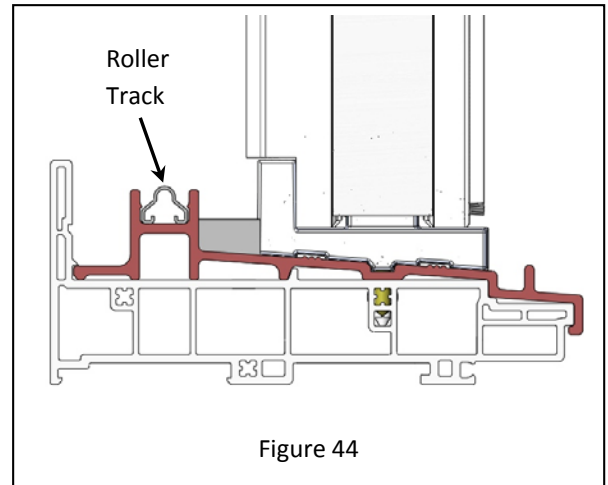
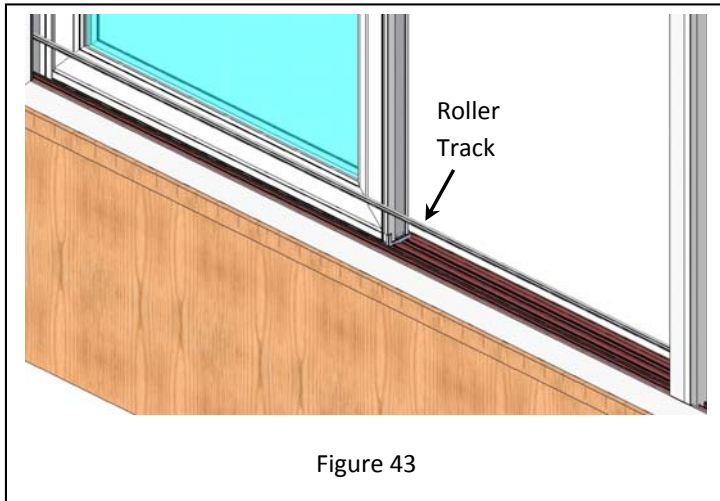
- 24) Position the fixed panel cover strip approximately 1/8" above the bottom of the panel and snap the strip into the panel as shown in Figure 40. Start the strip at the bottom and work the snaps toward the top.



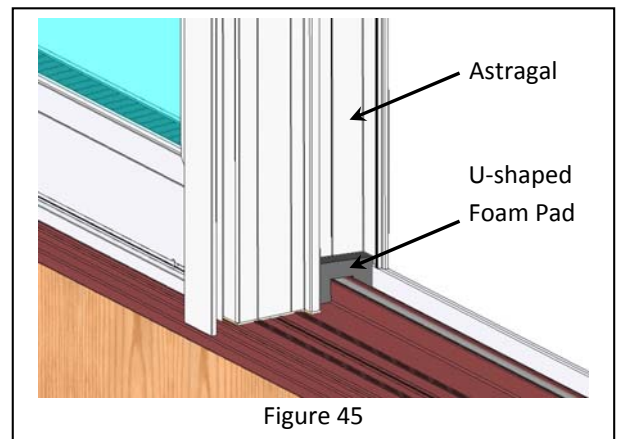
- 25) Peel the backing from the rectangular foam pad and place the pad onto the fiberglass sill, between the fixed panel support and the tower of the fiberglass cover, with the adhesive side down (Figs. 41 & 42). The end of the pad should align with the end of the fixed panel support end cap as shown in Figure 41. Press the foam pad down firmly.



- 26) Install the steel roller track into the pocket in the tower of the fiberglass sill cover, between the astragal and side jamb, where the operating panel will be located (Fig. 43). The roller track should be oriented as shown in Figure 44 when installed correctly.

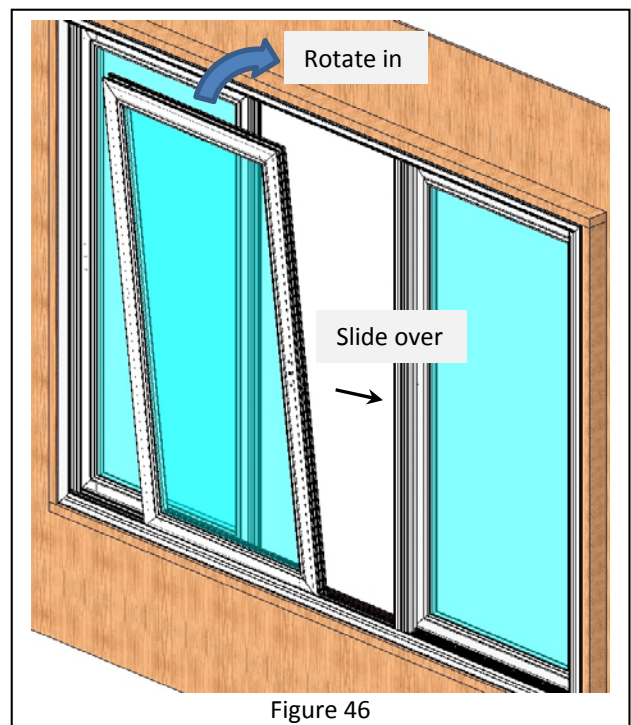


- 27) Peel the backing from the U-shaped foam pad and place the pad into the bottom corner formed by the astragal and the sill as shown in Figure 45. The legs of the pad should straddle the tower on the sill cover with the adhesive side toward the astragal.

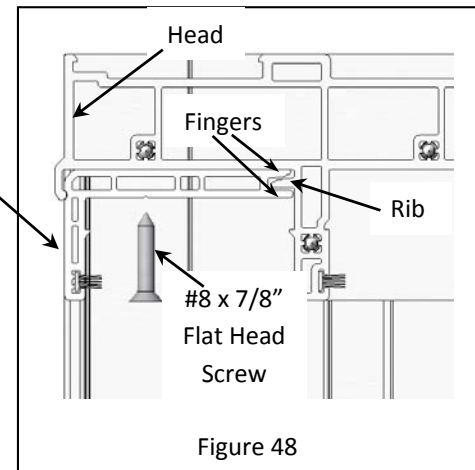
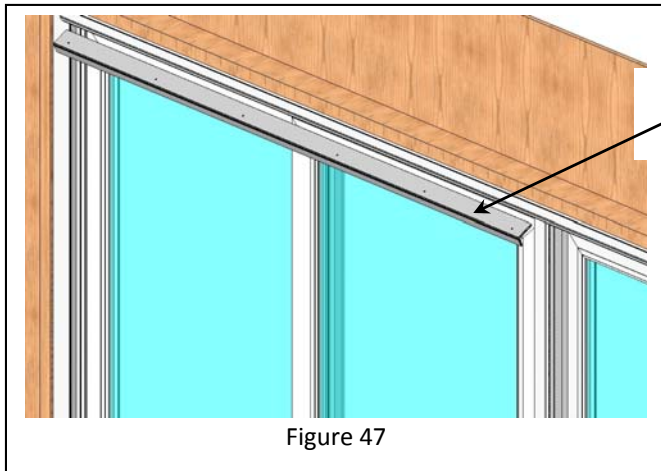


- 28) To install the operating panel, lift the panel from the interior and set the rollers onto the roller track in the fiberglass sill cover (Fig. 46). Rotate the top of the panel into the head, and slide it into the astragal.

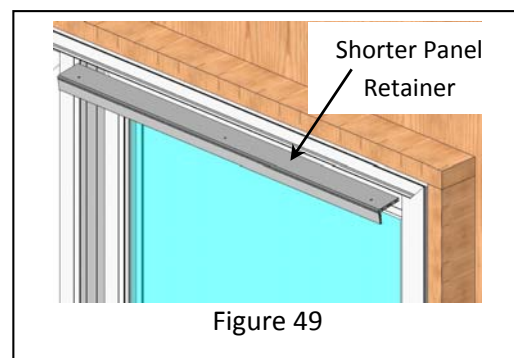
IMPORTANT: BE SURE TO NOT LET GO OF THE PANEL UNTIL IT IS SLID SECURELY INTO THE ASTRAGAL. PANEL CAN EASILY FALL OUT OF FRAME UNTIL THE PANEL RETAINER IS INSTALLED.



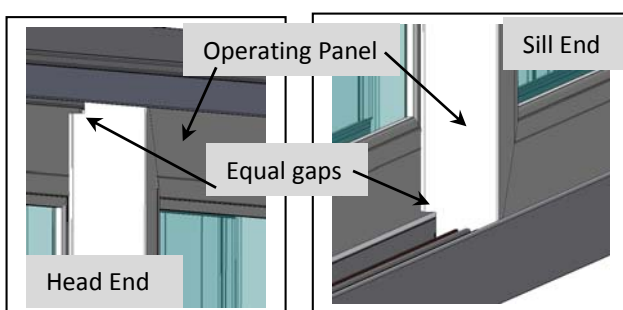
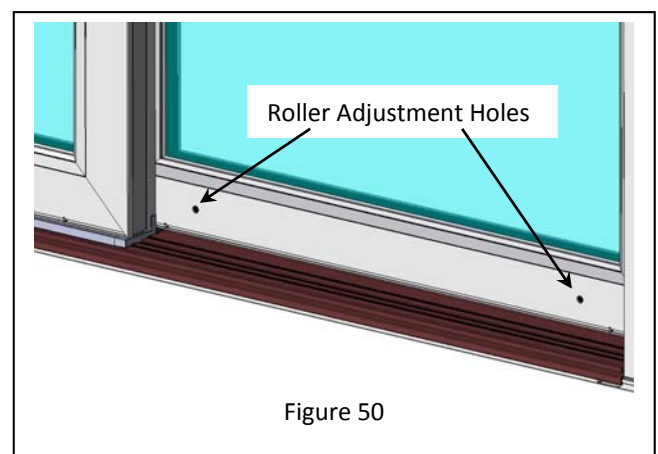
- 29) Place the longer panel retainer into the head, between the astragal and the side jamb and over the operating panel as shown in Figure 47. Rotate the retainer up into the head until it is seated. Be sure the rib in the head goes between the fingers on the retainer as shown in Figure 48. Install #8 x 7/8" Flat Head screws into the pre-punched holes in the retainer and up into the head. Start with the screws at the fixed panel end and then open the operating panel and install remaining screws.



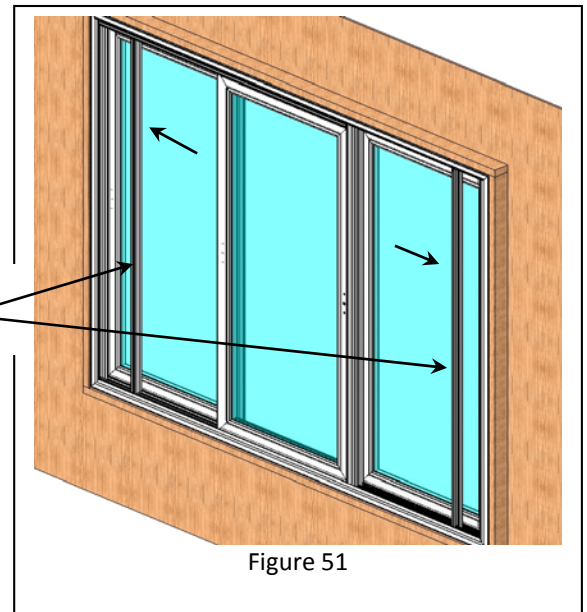
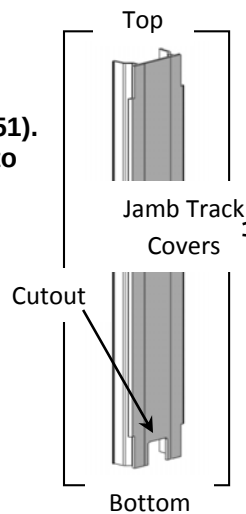
- 30) Install the shorter panel retainer piece up into the head in the same manner, on the other side of the astragal (Fig. 49). Secure the retainer with three #8 x 7/8" Flat Head screws.



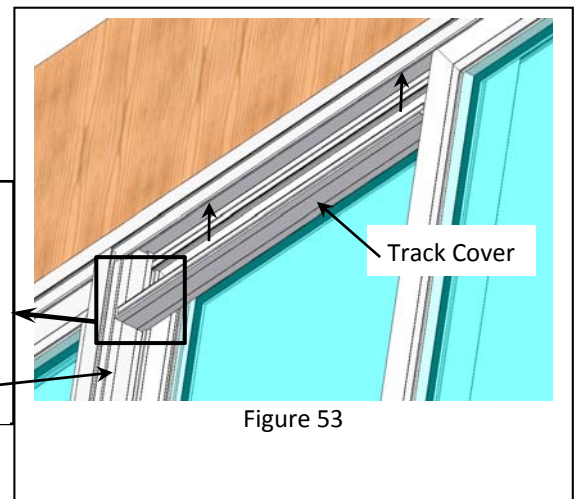
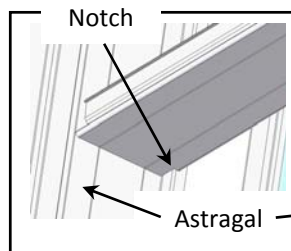
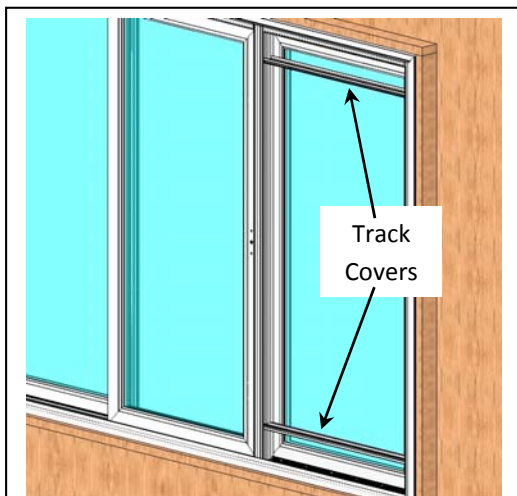
- 31) Adjust the height of the rollers using a Phillips screwdriver until the operating panel is centered from top to bottom (the gaps between the interlocks and the head and sill are approximately equal), and the lock side of the panel is parallel with the astragal. Lifting or temporarily shimming the panel will make adjustment easier. Check the operation of the panel to see if any further adjustments are necessary. After final adjustment, install color matched hole covers (Fig. 50).



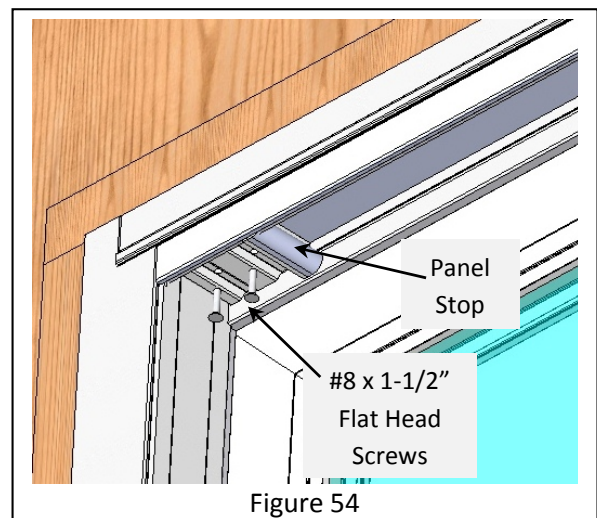
- 32) Snap the side jamb track covers into the interior tracks of the jambs as shown (Fig. 51). The cutout in one end of the covers needs to be placed at the bottom.



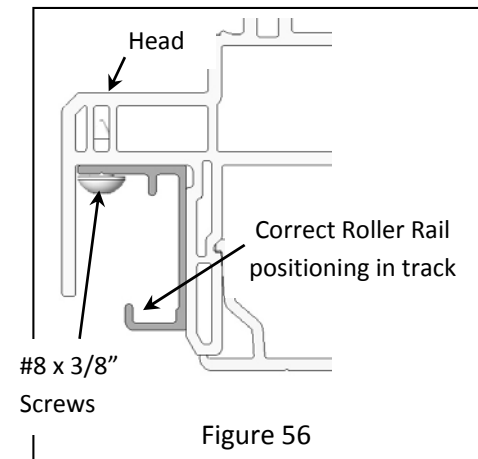
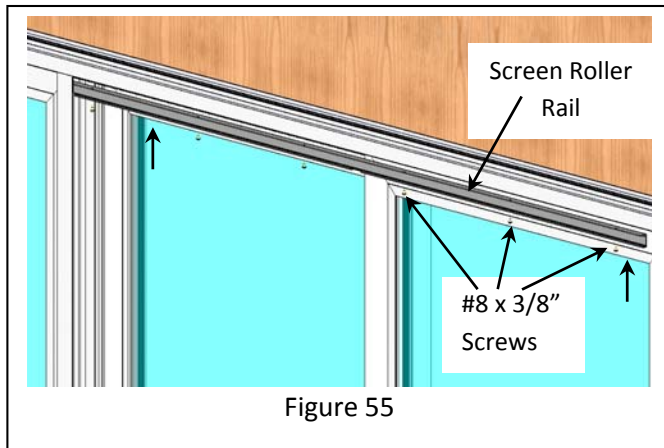
- 33) There are two short track covers that are the same length (Fig. 52). Snap these covers into the interior tracks in the head and sill between the astragal and side jamb. Snap the remaining track cover, which is slightly shorter, into the interior track in the head, between the two fixed panels. The end with the notch goes toward the astragal as shown in Figure 53.



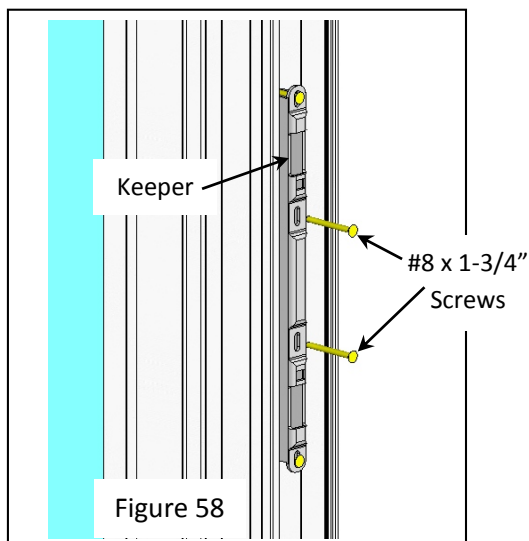
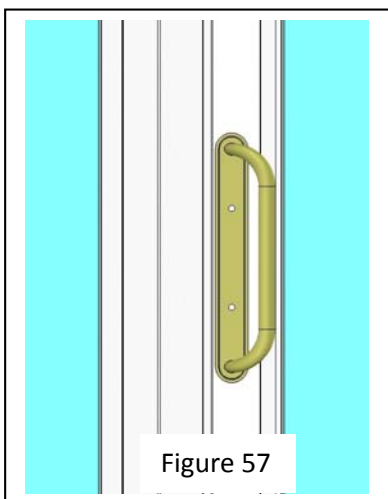
- 34) Install the panel stop (located in the handle hardware box) into the interior track in the head as shown. Place the end of the stop against the interior track cover in the side jamb and drive two #8 x 1-1/2" Flat Head screws into the head (Fig. 54).



- 35) Install the aluminum top hung screen roller rail into the screen track in the head as shown in Figure 55. Slide the roller rail completely against the astragal and fasten the rail with six #8 x 3/8" Pan Head screws into the pre-punched holes (Fig. 56). The rail will not be centered between the astragal and the side jamb. A screen stop will be installed in the track near the side jamb later.

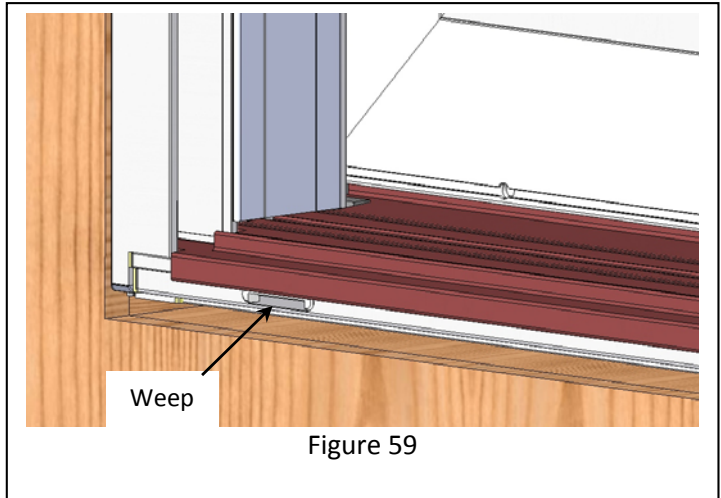


- 36) Install the lock handle assembly (Fig. 57). Refer to the instructions in the handle set package. Close the operating panel and verify that the lock will engage and disengage properly with the keeper. It might be necessary to adjust the keeper up or down by loosening the two screws fastening the keeper to the astragal. Once the keeper is adjusted properly, install the two #8 x 1-3/4" Flat Head screws through the remaining slots in the keeper and into the astragal (Fig. 58).



- 37) Install the top hung screen, screen bumper stop, and screen keeper. Refer to the instructions included with the screen. NOTE: The screen bumper stop is found in the handle hardware box.

- 38) Finish off the installation of the door's exterior by caulking around the perimeter of the door using a premium silicone caulk. Do not leave any gaps where water or outside elements can penetrate into the home. Pay close attention to not caulk over weeps when caulking across the sill as shown in Figure 59.



- 39) Finish off the installation of the door's interior by insulating between the door frame and the opening. Do not over pack the insulation or the frame could become bowed or twisted. Use of spray foam is acceptable as long as it meets AAMA 812 specifications. If gaps between the frame and opening are less than 1/8", insulation may not be required. When this occurs, Simonton recommends an exterior and interior seal to create a dead air space.
- 40) Remember: The homeowner is the final inspector. Clean the door well and remove all debris from the job site. Be sure the homeowner is familiar with the proper operation of door.