# Fold-A-Way Patio Door & Window

## ASSEMBLY & INSTALLATION GUIDE

Written warranty considerations for Lincoln Fold-A-Way door & window products are available from our authorized dealers, via our web site www.lincolnwindows.com or by phone request at (800)967-2461.

It is essential to read and follow these assembly instructions, utilize Lincoln's installation methods and perform periodic maintenance or warranties may be void.

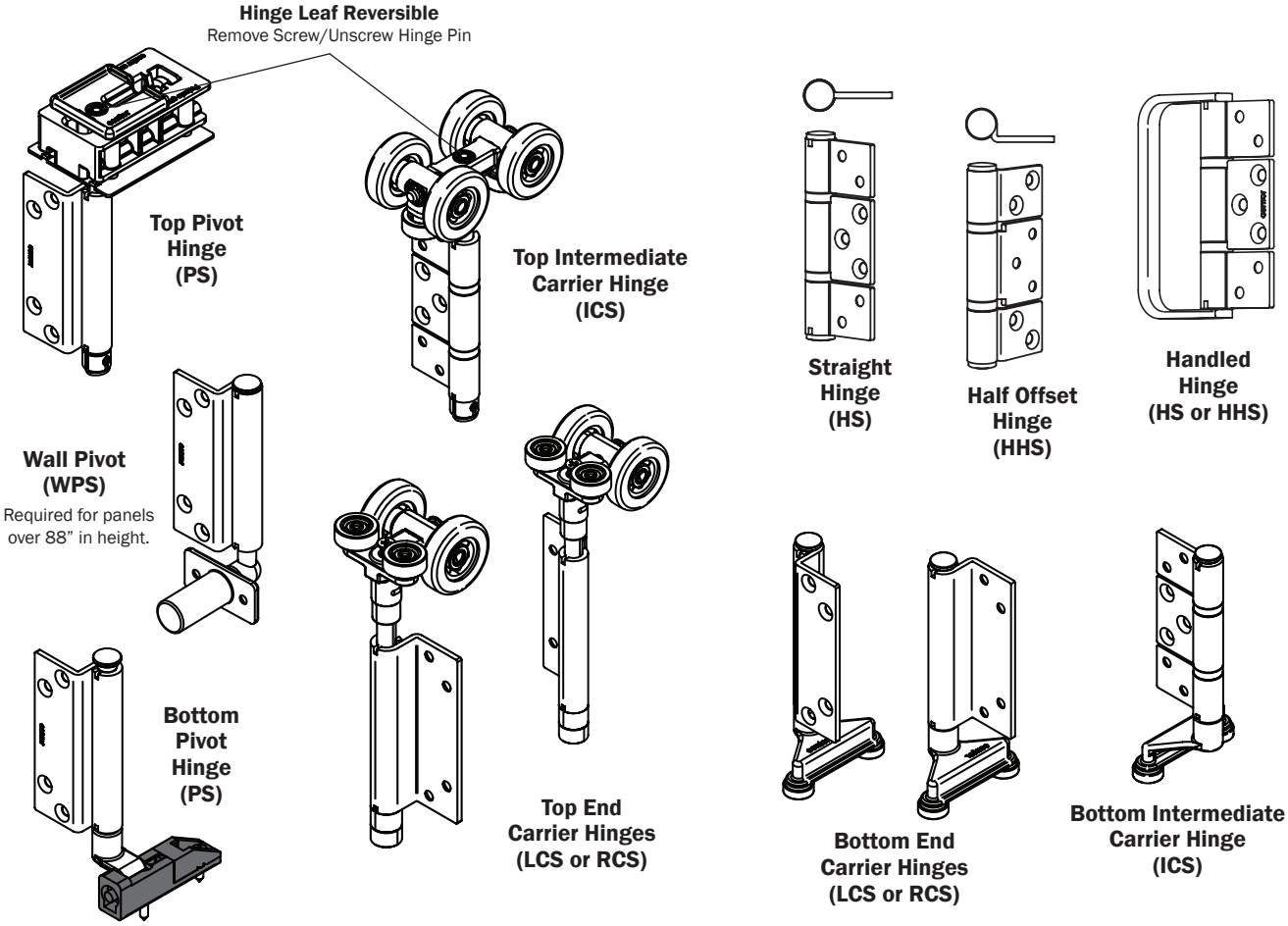
Fold-A-Way product installs are more labor intensive than typical patio doors or windows. Follow these special considerations prior to assembly:

1.) The header system carries the door panels or window sash. Ensure that the header size is substantial enough to support the structure and support the weight off of the Fold-A-Way door or window.
2.) Provide a plumb, level and square rough opening. Rough opening should be sized to Lincoln specifications allowing ample spacing for shims.
3.) Fold-A-Way product installations require at least two people. Door panels and window sash need to be held securely in place while fastening the hinges. Suction cup lifts are recommended for handling and installing door panels.

### REQUIRED TOOL LIST

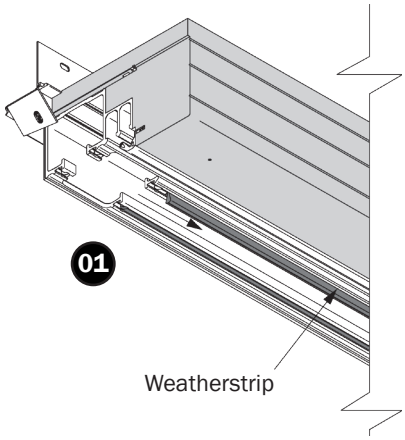
Here are the recommended tools necessary to install your Fold-A-Way Door system.

Safety Glasses, Tape Measure, Level, Screw Driver, Drill, Phillips and Square Head Bit, Silicone Gun, Silicone, 5/32" wood drill bit, 3/16", 1/8" & 3/4" (wall pivot option) metal drill bits, Suction Cup Lifts (for handling/installing panels/sash) and 1/2" Router Bit (U-Channel Option).

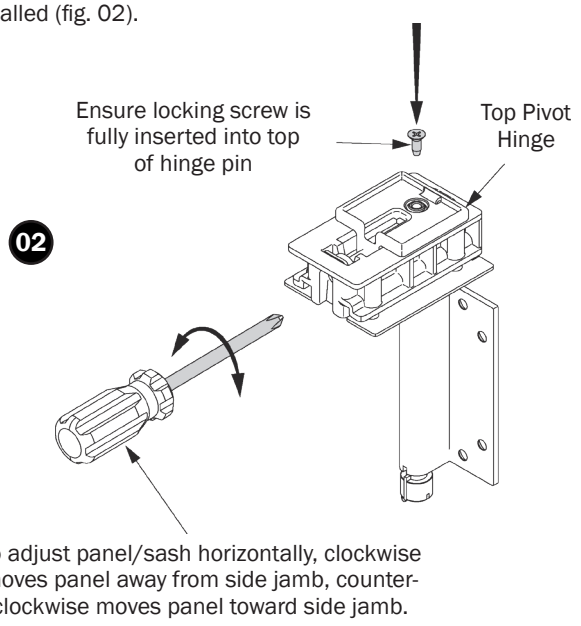


# HEADTRACK HARDWARE INSTALLATION

1. Slide the Head Track Weatherstrip out of way to reveal predrilled holes for the top pivot hinge (fig. 01).

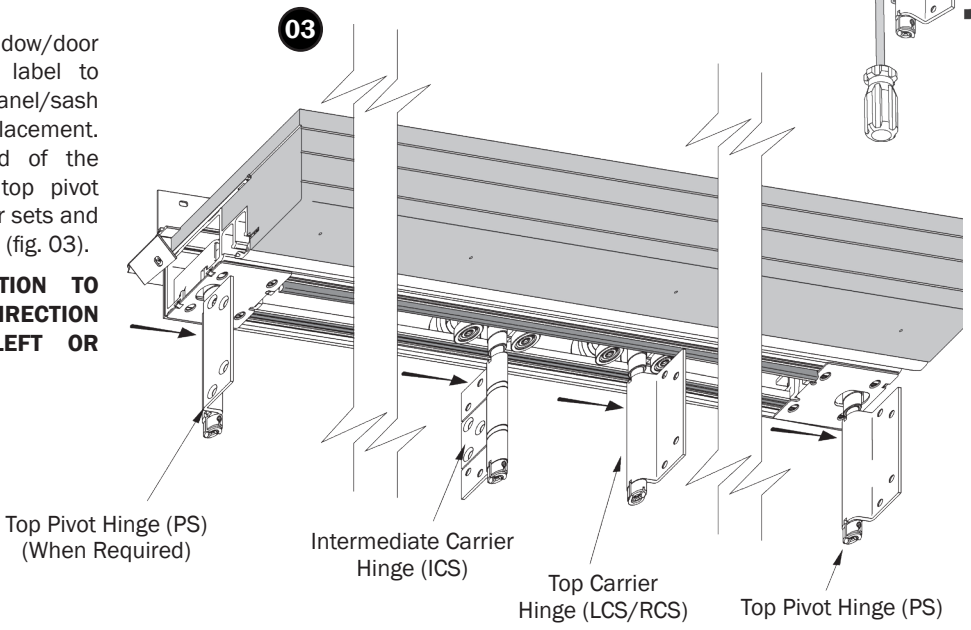



2. Before installing Top Pivot Hinge assembly, ensure Locking Screw is fully inserted into top of carrier pin. The top pivot Hinge assembly adjusts the door panels horizontally by turning the adjusting screw with a screwdriver after all panels/sash are installed (fig. 02).



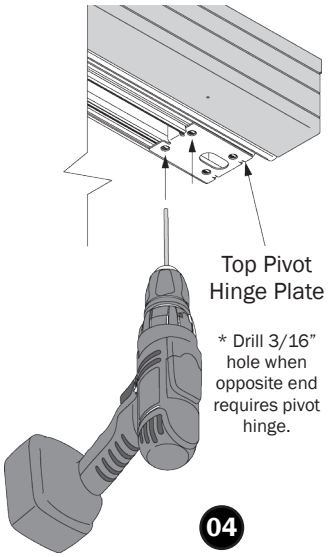

3. Refer to the folding window/door drawing on the glass label to determine the specific panel/sash set-up and hardware placement. Through the open end of the head track, load the top pivot hinge, left or right carrier sets and intermediate carrier sets (fig. 03).

**PAY SPECIAL ATTENTION TO ASSURE PROPER DIRECTION WHEN INSTALLING LEFT OR RIGHT CARRIER SETS**.

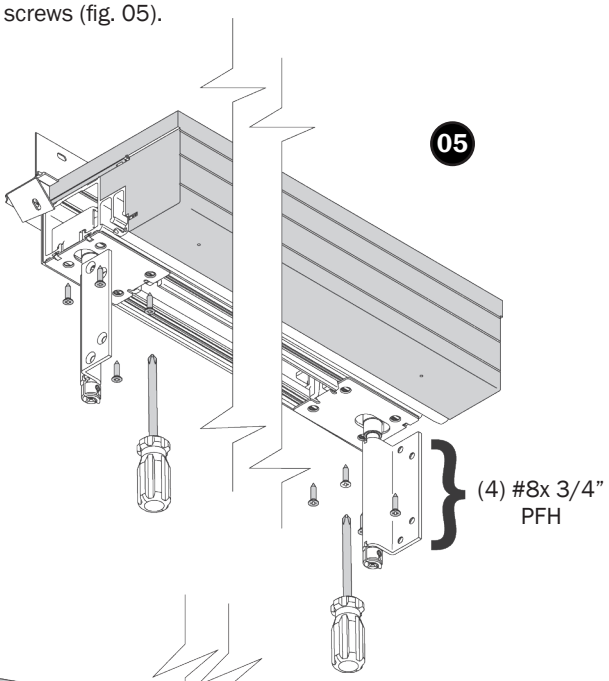



4. Line up pivot hinge assembly with predrilled holes in Head Track and attach with #8x3/4" screws. When required on opposite side of Head Track, insert Top Pivot Hinge and ensure it is flush with the end of Head Track and mark screw hole locations using the Top Pivot Hinge Plate as a guide and pre-drill four (4) holes using a 3/16" metal drill bit (fig. 04).

**NOTE:** There is no square cut out on opposite side of Head Track and a second pivot hinge is not always required depending on door/window configuration.



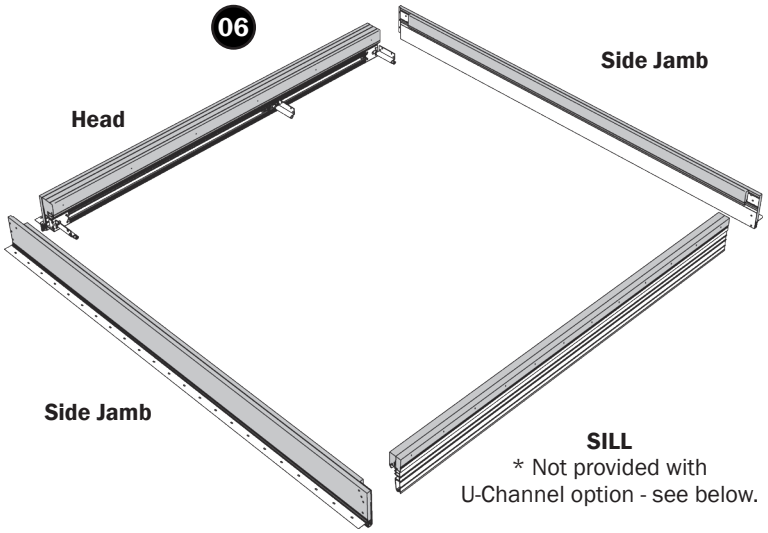

5. Fasten Pivot Hinge to Headtrack using the provided #8x3/4" PFH screws (fig. 05).



# FRAME ASSEMBLY - CLAD EXTERIOR

1. Lay the side jamb assemblies, head jamb assembly and sill on a clean level surface, exterior side down (fig. 06). Be careful to protect the exterior surface from being damaged.

   **NOTE:** No sill is provided with the u-channel option. Stabilize the side jambs by attaching a piece of scrap lumber to the interior side of the side jambs near the sill. This can be removed once the unit is installed in the rough opening and is plumb and square.




# U-CHANNEL OPTION

**IMPORTANT:** Finished flooring/counter must be installed and groove for u-channel must be prepared before installing folding product. If finished floor/counter is not installed, temporary blocks can be used to set frame at finished height.

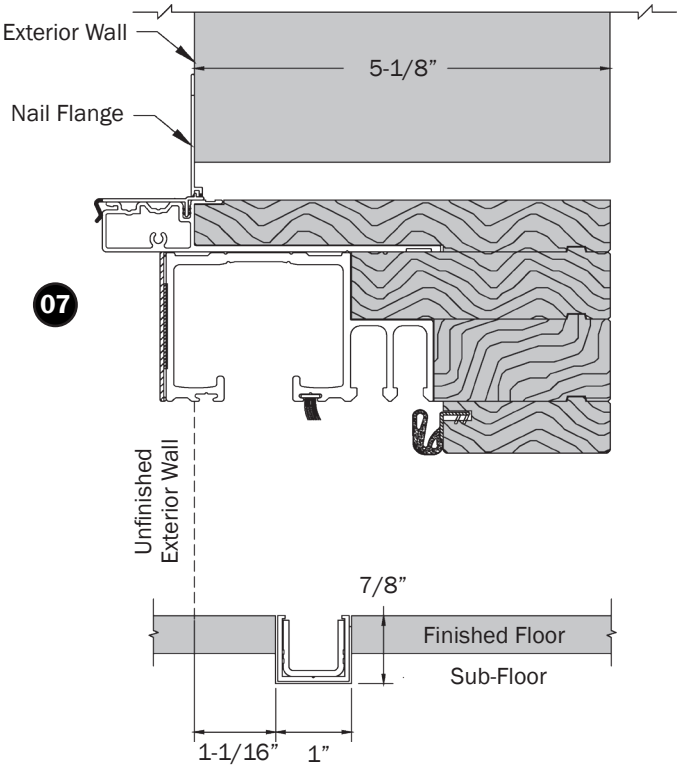
1. A 1”x7/8” pocket is required for the u-channel option. Locate the pocket 1-1/16” away from the face of the exterior wall (fig. 07).

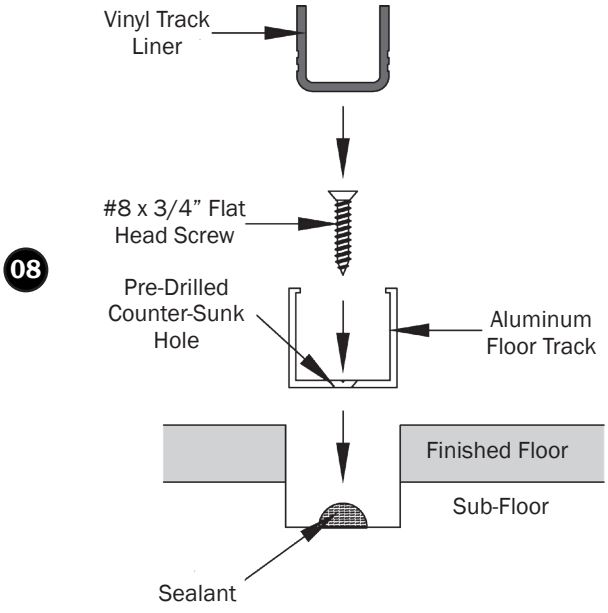
   Drill and countersink through the track channel for #8x3/4” flat head stainless steel screws. Place holes at 16” on center and fasten track to the floor. Caulk accordingly under track before fastening to sub-floor (fig. 08).

   **Note:** The u-channel is recessed into the finished floor/counter. The side jambs sit on top of the floor/counter and u-channel.

The ends of the side jamb must be sealed to the floor/counter. The ends of the u-channel under the side jamb must also be sealed to prevent water intrusion into sub-flooring.

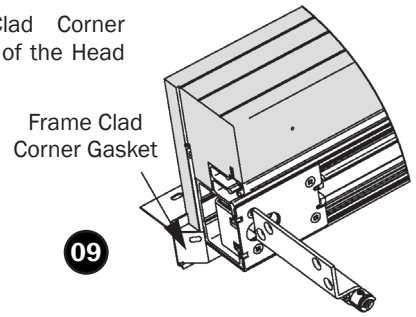
**Weatherproofing the u-channel is the responsibility of the installer. Prep for any water drainage system that may be required. An adequate overhang and a slope away from the u-channel are recommended. The system is to be determined by the installer.**



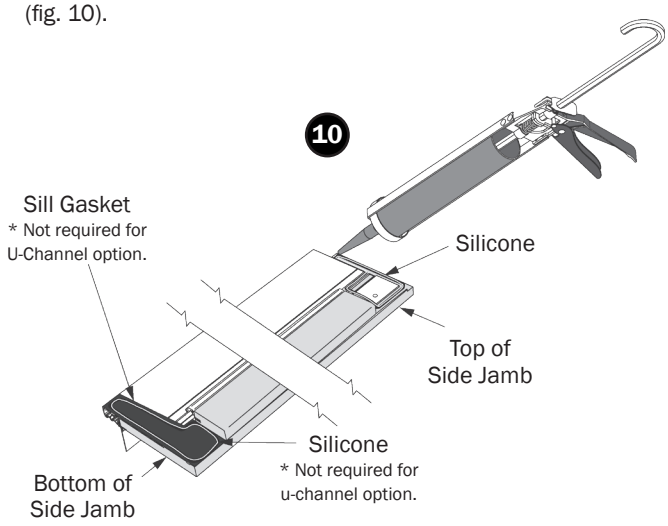



# FRAME ASSEMBLY - CLAD EXTERIOR

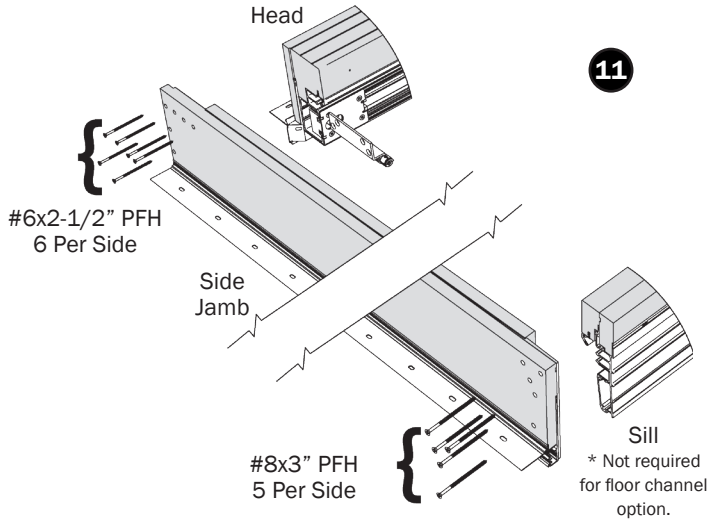
2. Affix the Frame Clad Corner Gaskets to each end of the Head Jamb Clad(fig. 09).



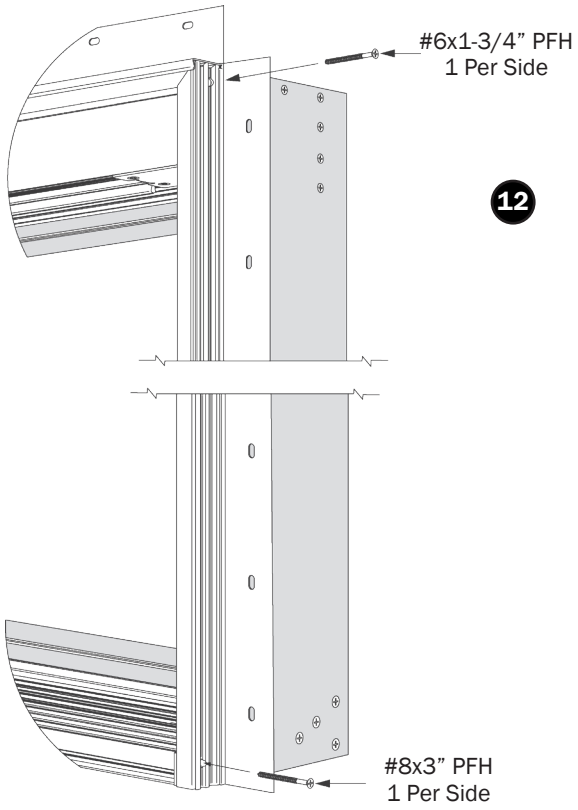

3. Affix Sill Gasket to both Side Jambs at the bottom of the jamb (fig. 10).

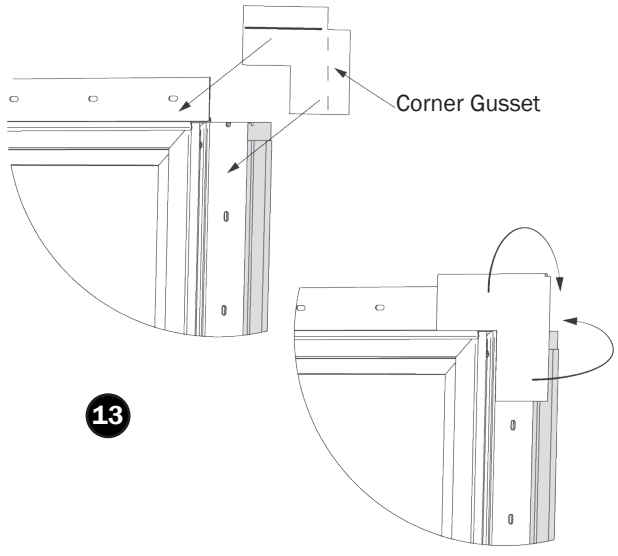



4. Place 1/4" silicone bead onto Side Jamb dado at both ends as shown (fig. 10).
5. Screw the wood portion of the lower Side Jamb and Sill corners together using (5 per side) #8x3" PFH screws (fig. 11). **Note:** This is not required for u-channel option.




6. Screw the lower side jamb frame cladding to the sill with (1 per side) #8x3" PFH screw (fig. 12). **Note:** This is not required for u-channel option.
7. Screw the wood portion of the upper Side Jamb and Head Jamb corners together using (6 per side) #6x2-1/2" PFH screws (fig. 11).
8. Screw the upper side jamb cladding into the head clad with (1 per side) #6x1-3/4" PFH screws (fig. 12).



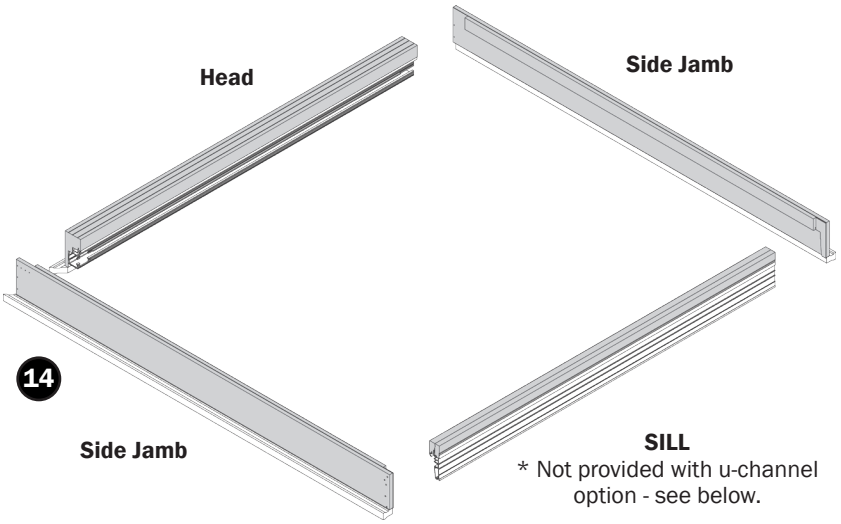

9. Apply Corner Gusset to each top corner on the exterior side of the nailing fins and fold gusset tabs over the nail fins so that it sticks to the back side (fig. 13).

**THIS COMPLETES THE FRAME ASSEMBLY.**

# FRAME ASSEMBLY - WOOD EXTERIOR

1. Lay the side jamb assemblies, head jamb assembly and sill on a clean level surface, exterior side down (fig. 14). Be careful to protect the exterior surface from being damaged.

   **NOTE:** No sill is provided with u-channel option. Stabilize the side jambs by attaching a piece of scrap lumber to the interior side of the side jambs near the sill. This can be removed once the unit is installed in the rough opening and is plumb and square.

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# U-CHANNEL OPTION

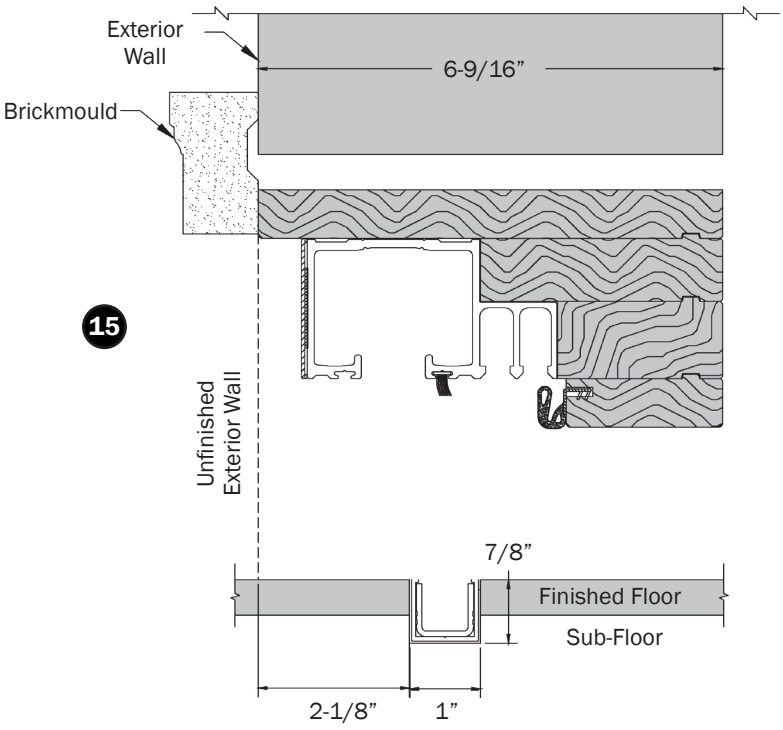
**IMPORTANT:** Finished flooring/counter must be installed and groove for u-channel must be prepared before installing folding product. If finished floor/counter is not installed, temporary blocks can be used to set frame at finished height.

1. A 1”x7/8” pocket is required for the u-channel option. Locate the pocket 2-1/8” away from the face of the exterior wall (fig. 07).

   Drill and countersink through the track channel for #8x3/4” flat head stainless steel screws. Place holes at 16” on center and fasten track to the floor. Caulk accordingly under track before fastening to sub-floor (fig. 08).

   **Note:** The u-channel is recessed into the finished floor/counter. The side jambs sit on top of the floor/counter and u-channel. The ends of the side jamb must be sealed to the floor/counter. The ends of the u-channel under the side jamb must also be sealed to prevent water intrusion into sub-flooring.

   **Weatherproofing the u-channel is the responsibility of the installer. Prep for any water drainage system that may be required. An adequate overhang and a slope away from the u-channel are recommended. The system is to be determined by the installer.**

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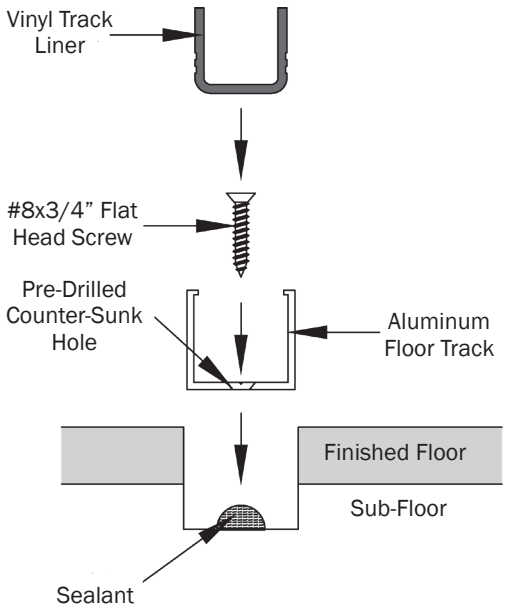


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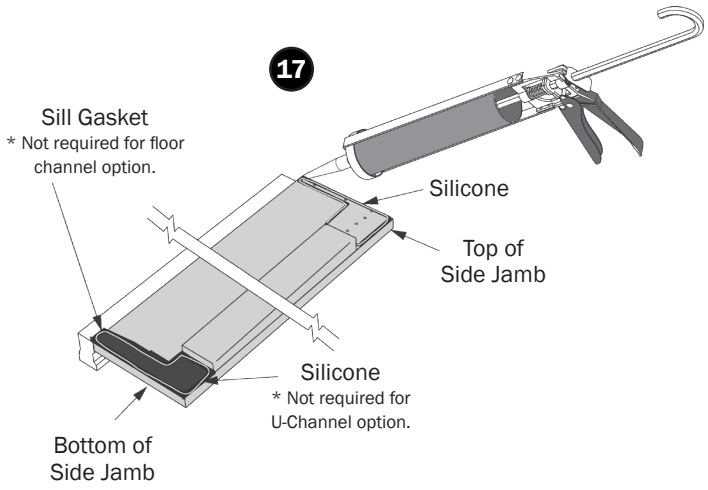
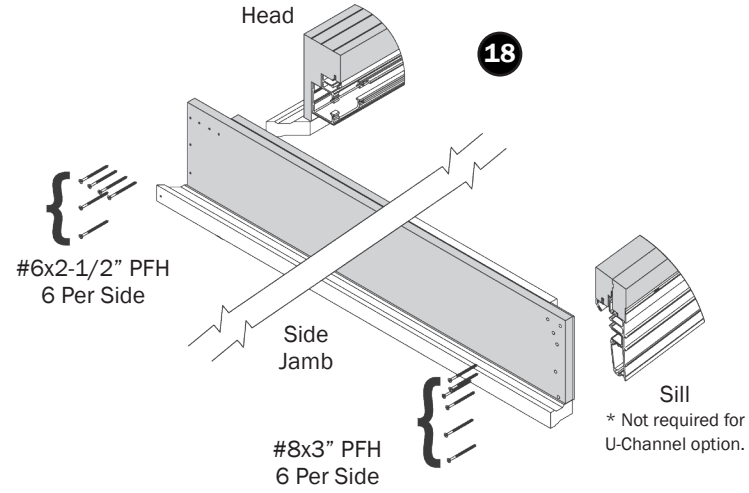
# FRAME ASSEMBLY - WOOD EXTERIOR

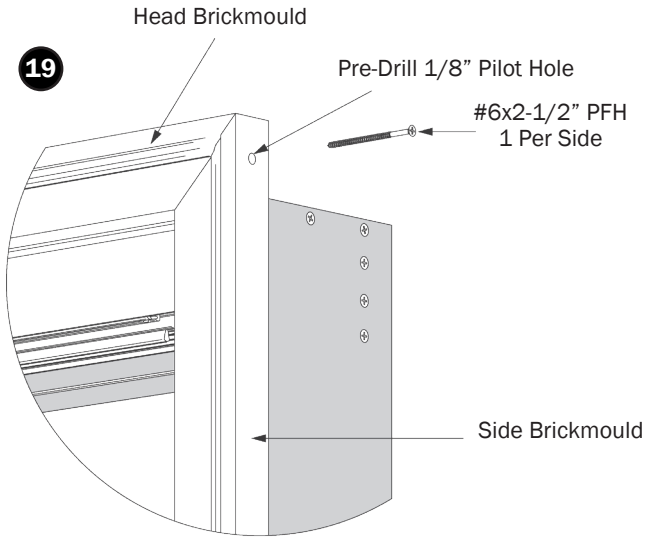
2. Affix Sill Gasket to both Side Jambs at the bottom of the jamb (fig. 17).




3. Place 1/4” silicone bead onto Side Jamb dado at both ends as shown (fig. 17).
4. Screw the wood portion of the lower Side Jamb and Sill corners together using (6 per side) #8x3” PFH screws (fig. 18). **Note:** This is not required for floor channel option.




5. Screw the wood portion of the upper Side Jamb and Head Jamb corners together using (6 per side) #6x2-1/2” PFH screws (fig. 18).

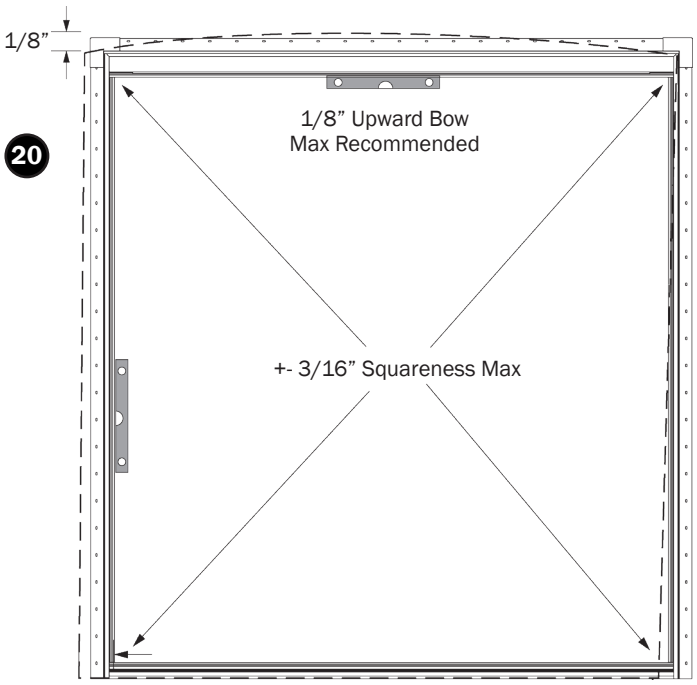



6. Screw the Side Brickmould into the Head Brickmould (1 per side) #6x2-1/2” PFH screws (fig. 19).

**THIS COMPLETES THE FRAME ASSEMBLY.**

# INSTALL FRAME INTO ROUGH OPENING

PER INSTALLATION INSTRUCTIONS INCLUDED WITH DOOR/WINDOW

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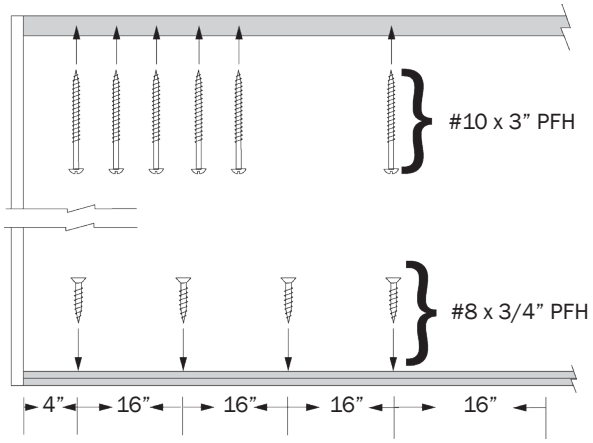
1. With frame in place and level, plumb and square, fasten the head jamb to the header with the provided #10x3" screws through all pre-drilled holes in the head track (fig. 20 & 21). Use shims at each screw location to prevent head from bowing more than 1/8". **Note:** Head track screws must penetrate at least 1-1/2" into the rough opening structural header beam that is carrying the load of the door panels.
2. If bowing occurs at sill, drill and countersink through the track channel for #8x3/4" flat head stainless steel screws. Place holes at 16" on center and fasten sill to the floor/counter. Caulk accordingly under sill at each screw hole location. (fig.21).

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# BOTTOM PIVOT HINGE INSTALL & ASSEMBLY

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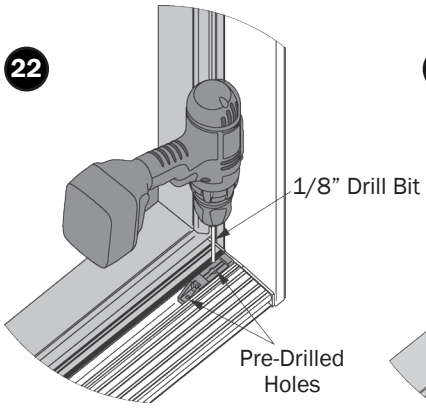


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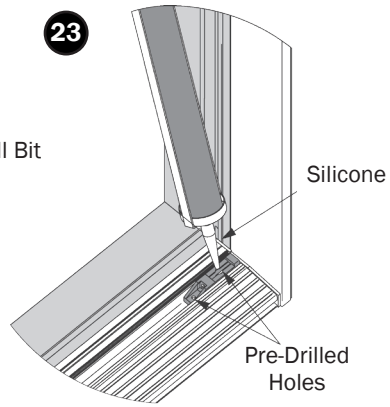


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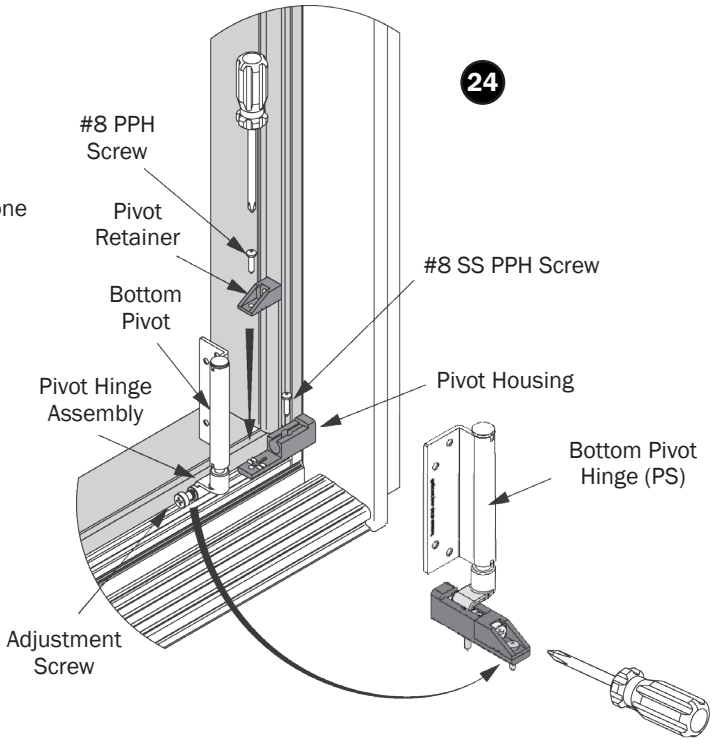



1. Place Pivot Housing into each end of sill channel tight to the side jamb and mark screw hole locations for Pre-Drilling.

   **NOTE:** Some configurations may only have a bottom pivot hinge on one end of sill.
2. Pre-Drill marks using 1/8" drill bit (fig. 22).
3. Apply sealant in the channel around the holes that were drilled. Install pivot housing into channel and fasten with the provided #8 stainless steel screws (fig. 23).
4. Insert Pivot Hinge Assembly into Pivot Housing (fig. 24).
5. Turn Adjustment Screw so Pivot Retainer can clip onto screw.
6. Attach Pivot Retainer with #8 SS PPH Screw into Sill.
7. Slide Bottom Hinge onto Pivot Pin Assembly.
8. After all the door panels/window sash have been installed, you can adjust the panels/sash horizontally using the adjustment screw on the pivot housing (fig. 24).

   **NOTE:** Counterclockwise will move panel/sash toward jamb and clockwise moves panel/sash away from jamb.

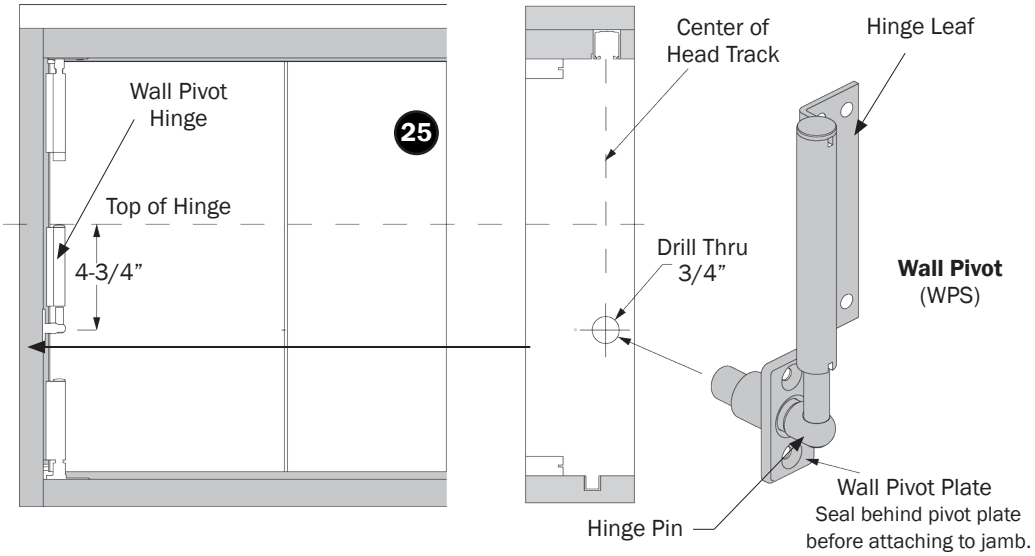
# PIVOT HINGE PANEL INSTALLATION - FOR DOOR PANELS OVER 88” HIGH

Door panels over 88” require the use of the wall pivot at center of panel. The wall pivot plate must be installed **before** the panel is installed. **Note:** Wall pivot is supplied with all doors for optional use under 88” panel height.

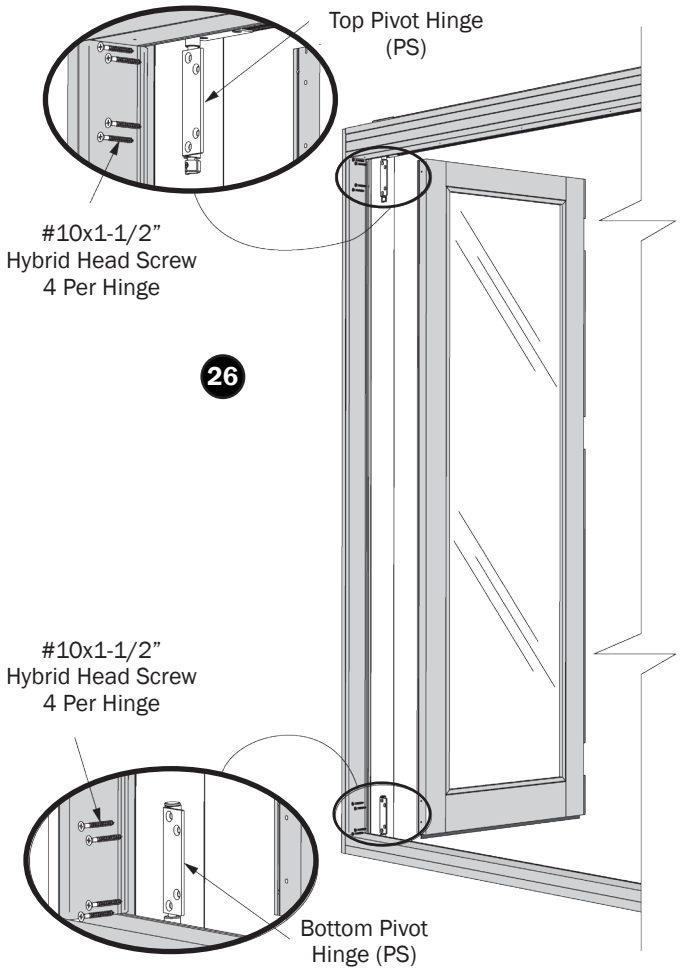
1. Install wall pivot plate in side jamb - **only required if panel is taller than 88”** (fig. 25). Hinge pin and hinge leaf are installed on panel later.

   To determine correct hole position vertically, dry fit the panel into the frame with the wall pivot hinge attached and measure 4-3/4” from the top of hinge to hole location and drill 3/4” hole through the jamb.

   **Note:** A 3/4” clearance hole may need to be drilled in rough opening framing studs for wall pivot plate clearance.




1. Line up pre-drilled holes on the panel with the Pivot Hinge set at the top and bottom of the frame. Using the supplied 10x1-1/2” Hybrid Head screws fasten the Pivot Hinges to the panel (fig. 26 & 27).
2. If wall pivot plate was installed (only required if door panel is taller than 88”), insert the hinge pin into the pivot plate and attach the hinge leaf to the hinge pin and then at the center of the door panel (fig. 25).

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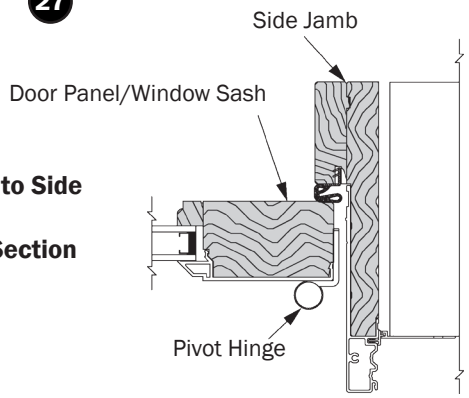
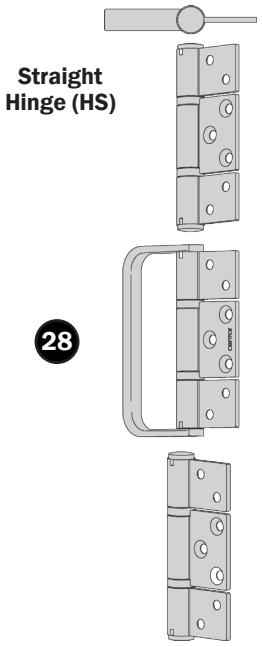
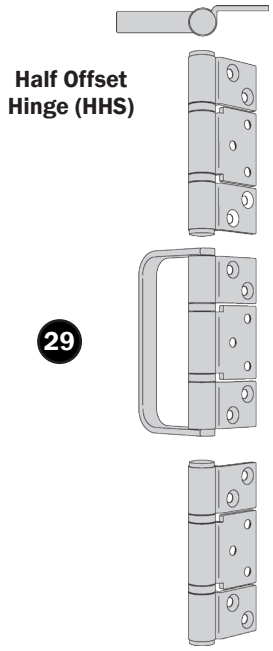
**Panel/Sash to Side Jamb Horizontal Section**

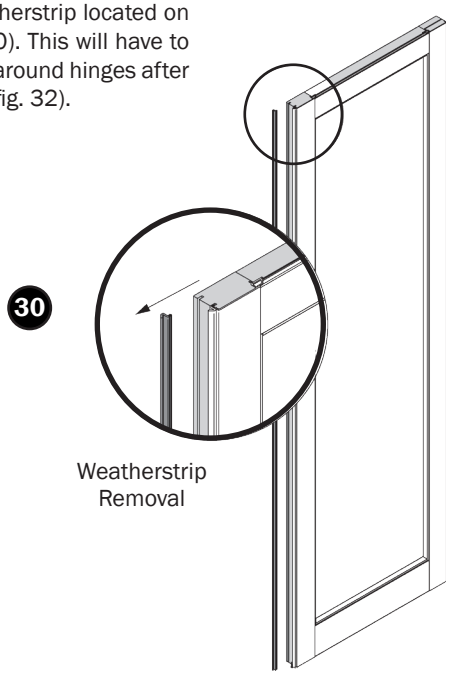


# STRAIGHT HINGE/HALF OFFSET HINGE ATTACHMENT (HS/HHS)



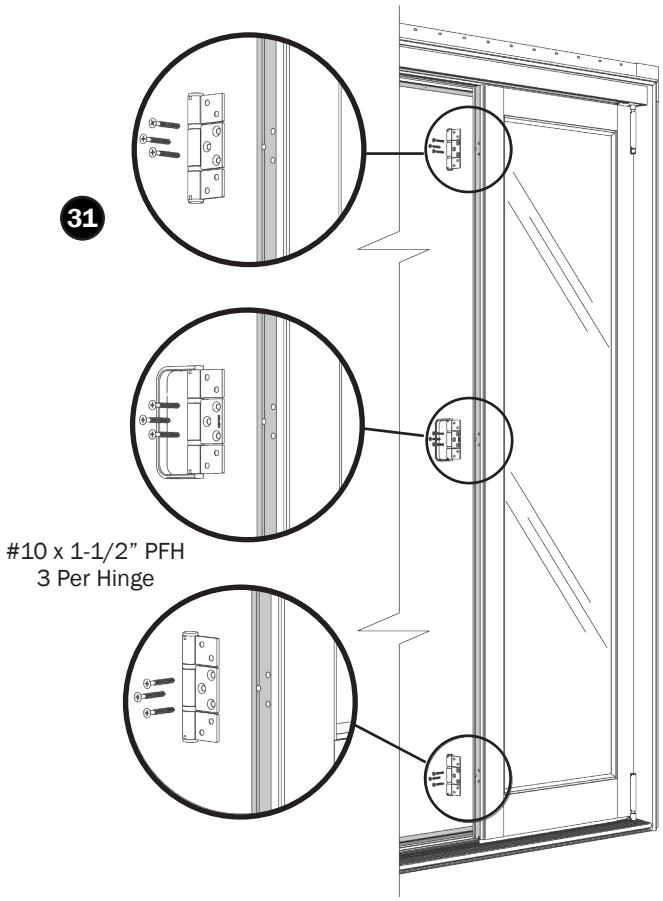

1. Before fastening hinges to panels/ sash, remove weatherstrip located on the the stile (fig. 30). This will have to be cut to size to fit around hinges after they are installed (fig. 32).



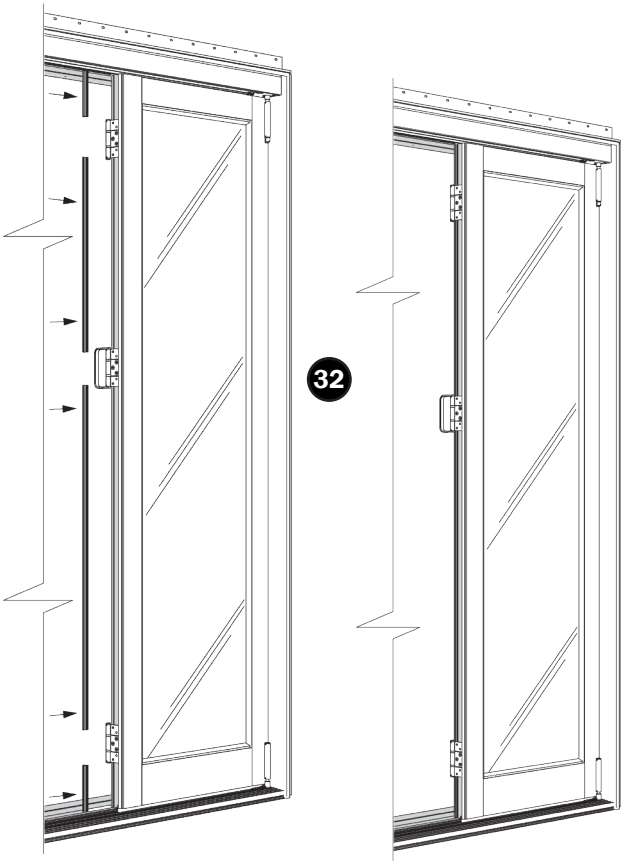

2. Fasten Straight/Offset Hinges to panel at pre-drilled locations with #10x1-1/2" Hybrid Head Screw (fig. 31).

   **Note:** Refer to diagram on glass label for hardware location designations. Door panels over 88" use 4 hinges per panel.

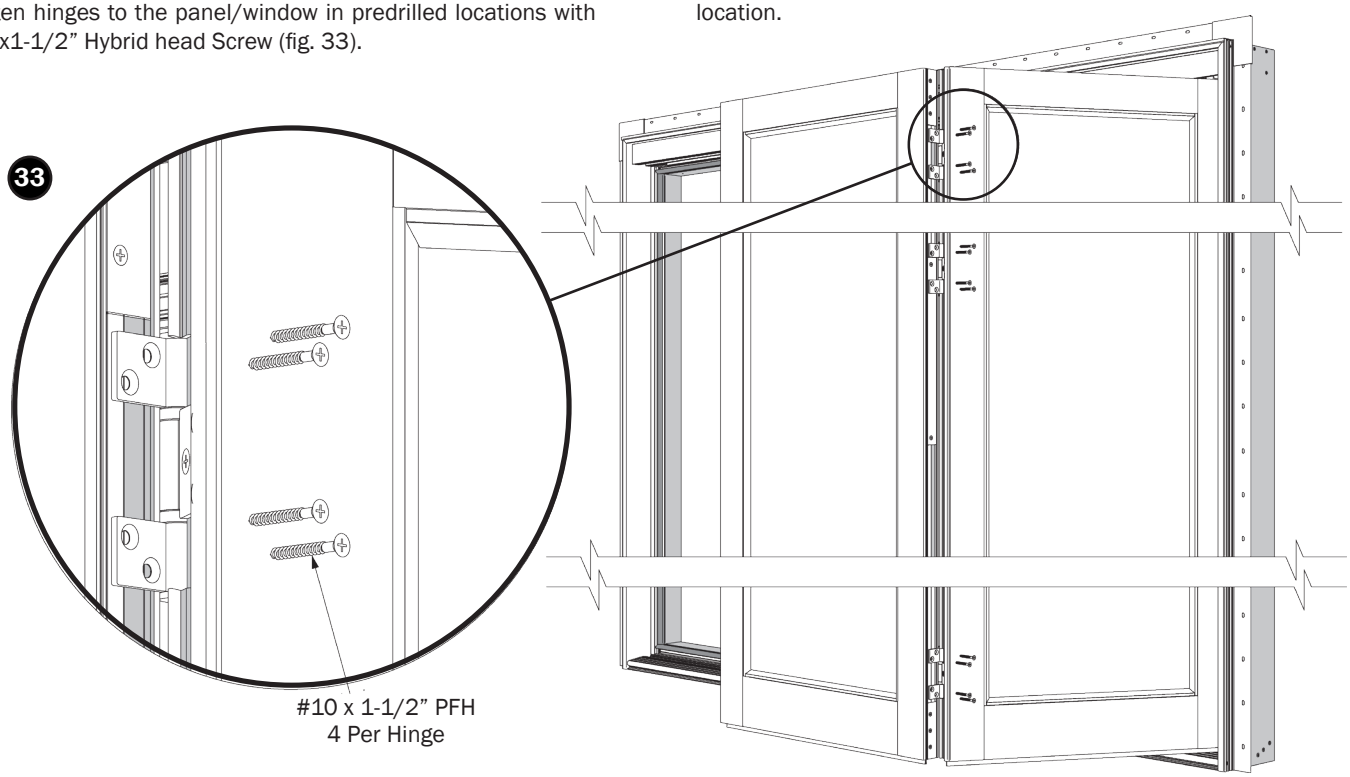
   Certain door/window configurations use a combination of Straight Hinges (HS) and Half Offset Hinges (HHS) between the panels. Half Offset Hinges are used to maintain equal panel width.



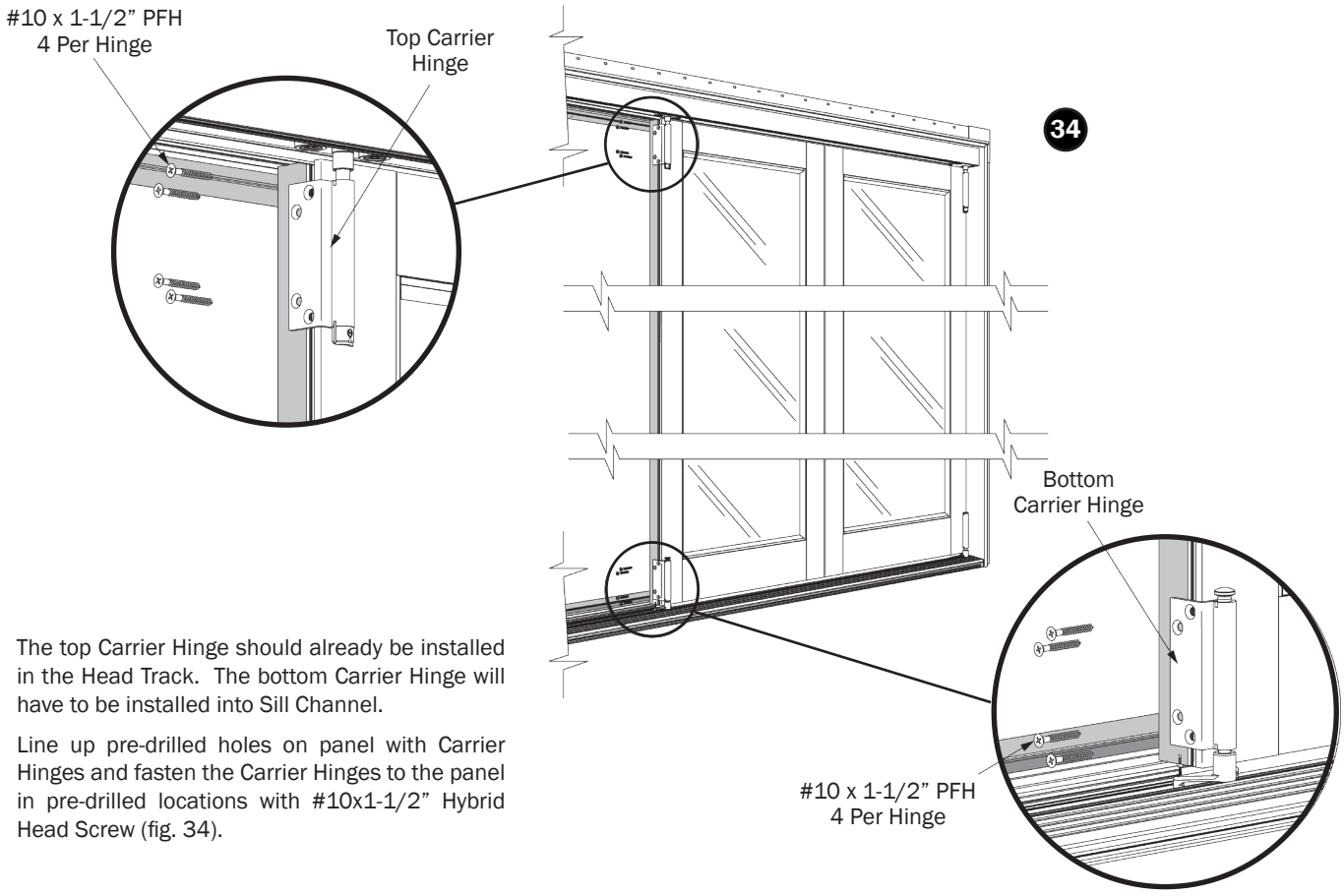

3. Cut stile weatherstrip to size for placement between hinges and install into kerf on stile (fig. 32).



4. Attach next panel/sash in series. Line up pre-drilled holes with the hinges installed on the panel/window in step 1 of this section.
5. Fasten hinges to the panel/window in predrilled locations with #10x1-1/2” Hybrid head Screw (fig. 33).
6. Cut the stile weatherstrip to size for placement between hinges and install into kerf on stile (fig. 32).
7. Install supplied adhesive backed foam hinge gasket at each location.




## END CARRIER HINGE ATTACHMENT - RIGHT CARRIER SET (RCS) OR LEFT CARRIER SET (LCS)

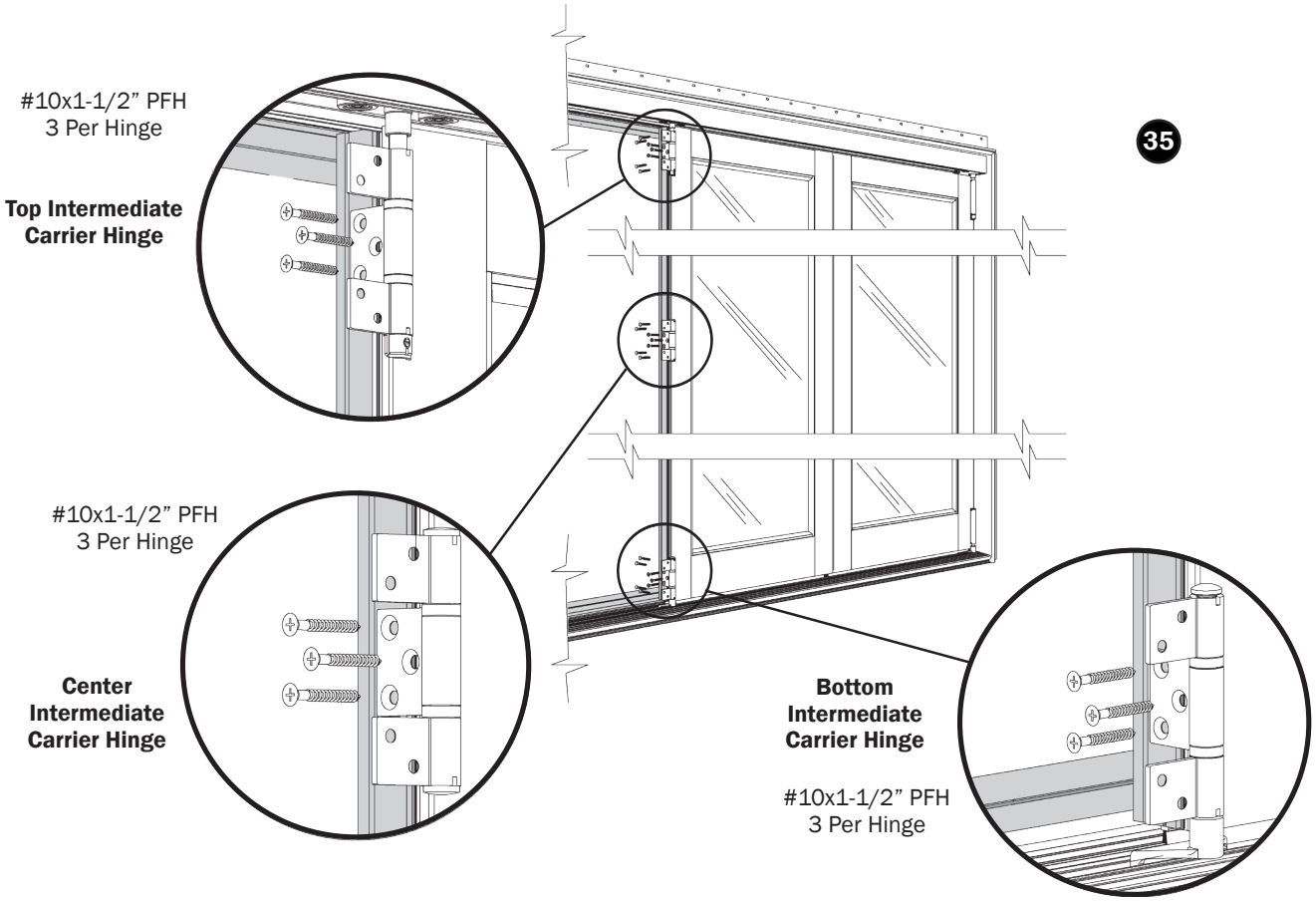



1. The top Carrier Hinge should already be installed in the Head Track. The bottom Carrier Hinge will have to be installed into Sill Channel.

   Line up pre-drilled holes on panel with Carrier Hinges and fasten the Carrier Hinges to the panel in pre-drilled locations with #10x1-1/2” Hybrid Head Screw (fig. 34).

# INTERMEDIATE CARRIER HINGE ATTACHMENT (ICS)

Used for certain configurations only. Reference label on glass for hardware location designations.

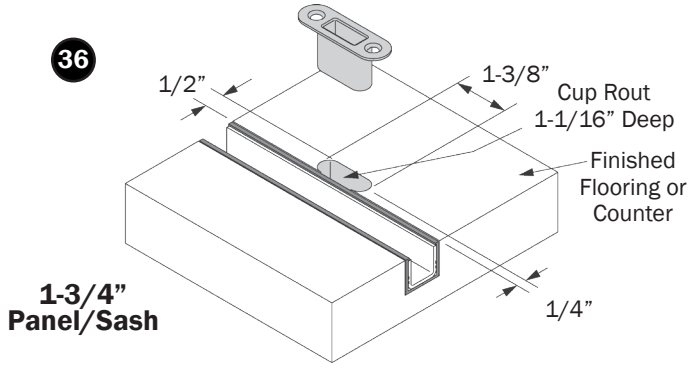


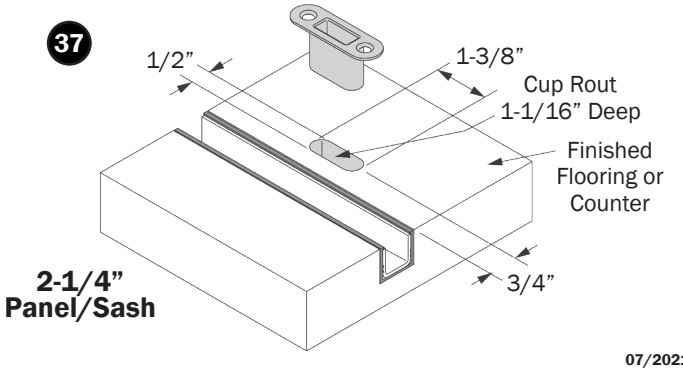

1. Before fastening hinges to the panels/sash, remove weatherstrip located on the the stile (fig 30).
2. The top Intermediate Carrier Hinge should already be installed in the Head Track. The bottom Carrier Hinge will have to be installed into Sill Channel.

   Line up pre-drilled holes on the panel/sash with Intermediate Carrier Hinges and fasten the Carrier Hinges to the panel/window in pre-drilled locations with #10x1-1/2" Hybrid Head Screw (fig. 35).
3. Doors/windows with intermediate carrier sets (ICS) have one or two hinges attached to the panel/sash between the top and bottom carrier hinges. Attach these hinges at the pre-drilled locations on the panel/sash (fig. 35).
4. Cut stile weatherstrip to size for placement between hinges and install into kerf on stile (fig. 30)
5. Install supplied adhesive backed foam hinge gasket at each location

# U-CHANNEL OPTION - FLUSHBOLT LOCATION

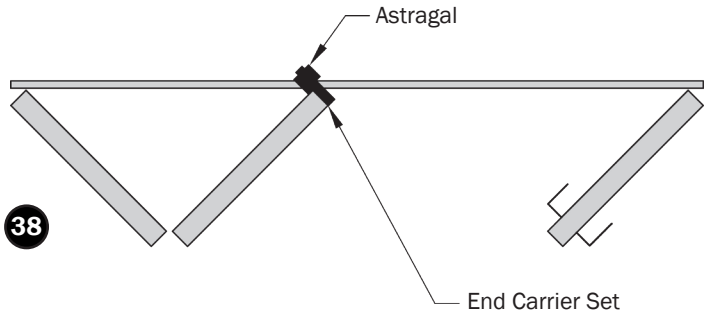
1. With the door panels/window sash in the closed position, turn the handle to engage the flushbolt until it stops on the sill. Mark these positions on the sill and rout for flushbolt cup using a 1/2" router bit as shown (fig. 36 & 37).
2. Ensure that the flushbolt cup fits into the rout and that the flushbolt works when engaged. Caulk around and in the hole before securing the flushbolt cup to the sill with supplied screws.



## ASTRAGAL ASSEMBLY

(For door/window configurations with left or right carrier sets and adjacent swing panel/sash only.)

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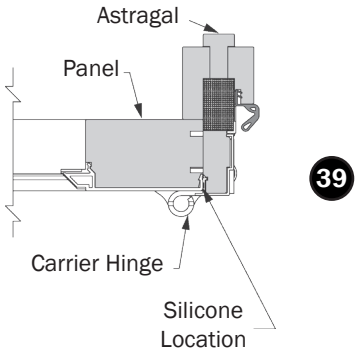


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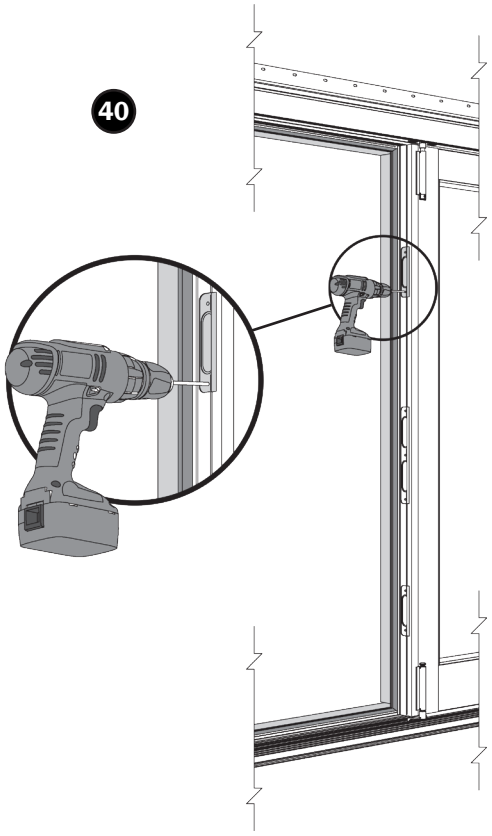
1. Place the strike plates into the strike plate routes on the astragal and mark the screw hole locations for the strike plate.
2. Place the astragal against the door panel/window sash and drill a 5/32” hole 2” deep through the astragal and into the panel at each marked location (fig. 40).



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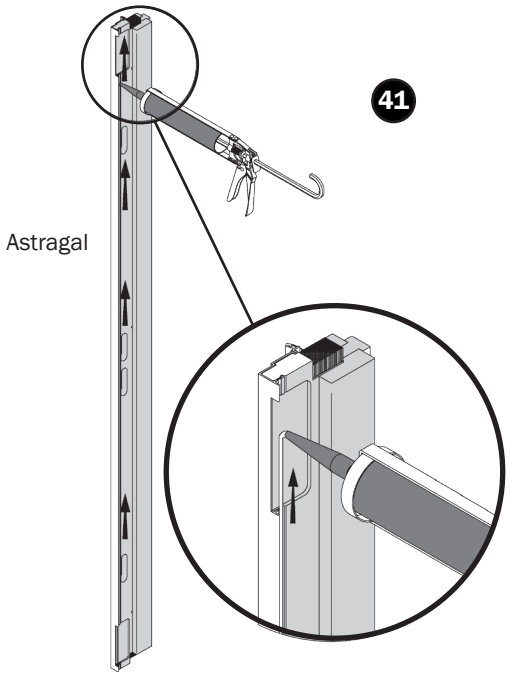
3. Remove the astragal and apply a bead of silicone from the botttom the Astragal to the top as show below. The bead should cover the inside leg of astragal and go over the carrier and hinge routes (fig. 41).

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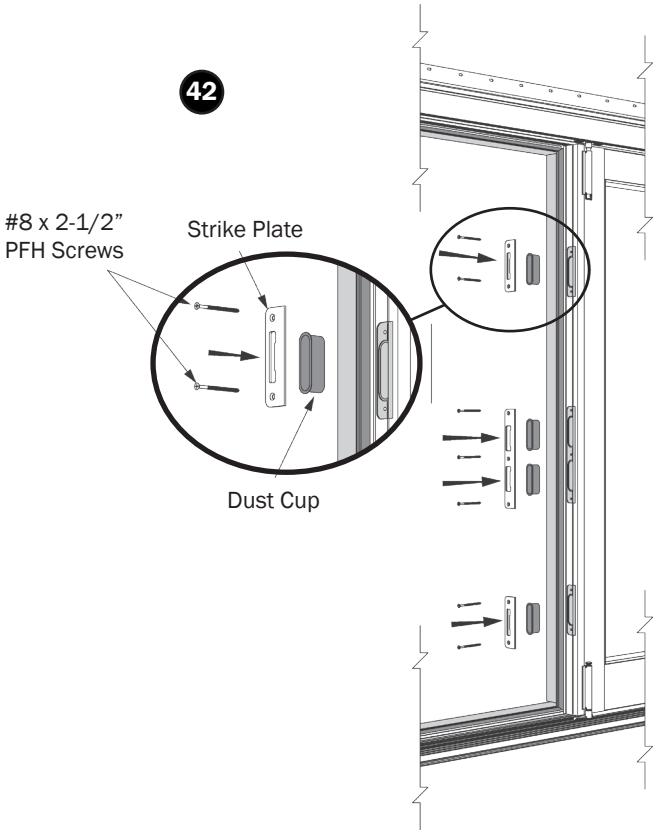
5. After the silicone is applied, place astragal against edge of panel and insert the dust cups into the hole at each strike plate location (fig. 42).
6. Ensure that the astragal is flush with the top and bottom of the panel then fasten the strikes and astragal to the panel/sash using the supplied #8x2-1/2” PFH screws at each of the pre-drillled hole locations (fig. 42).

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## LOCKING HARDWARE INSTALLATION

1. Install the lock set harware (when required) and the TwinPoint hardware per the enclosed manufacturers' instructions.

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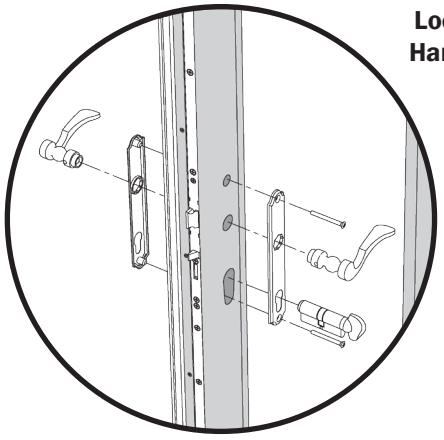


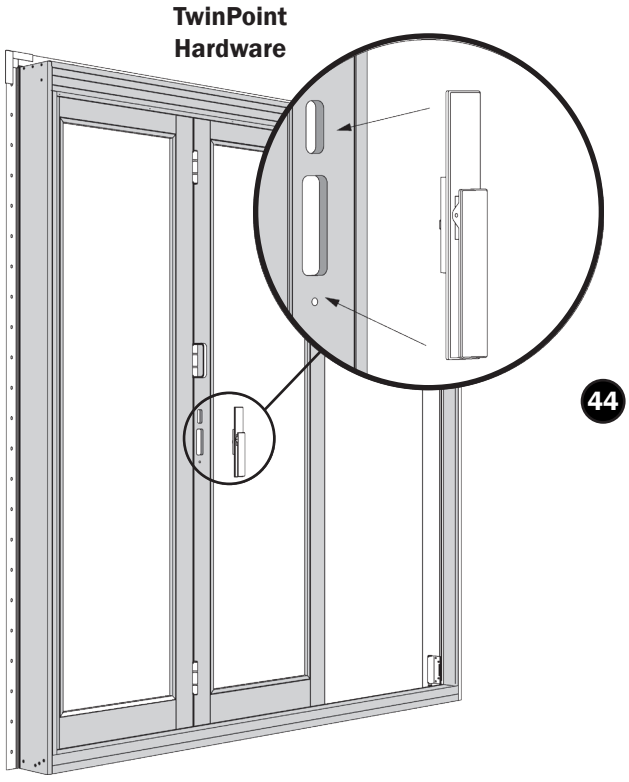


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## MAGNETIC DOOR CATCHES

1. For doors supplied with magnetic door catches, refer to the Centor installation instructions included with the magnetic door catches.

## EXTENDED STRIKE APPLICATION

If the door configuration has a strike plate attached to the jamb, an Extended Strike plate will need to be applied on the side jamb to prevent the scratching of the cladding when operating the door.

1. As shown in the figure below, measure 1-7/8" down from the top of the strike plate and, using the extended strike as a template, mark the screw hole locations on the side jamb.
2. Pre-drill using a 1/8" drill bit and fasten the extended strike plate to the side jamb using the supplied #10x3/4" screws (fig. 45).

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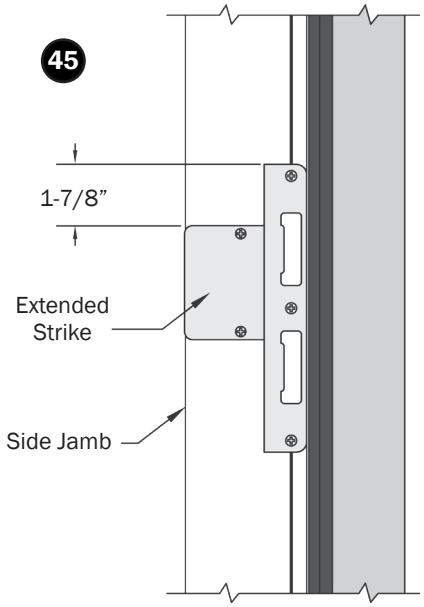


## FINAL ADJUSTMENT

1. The panels/sash can be adjusted at the Carrier Hinge and Pivot Hinge locations on the head of the unit using a 5/16" (8mm) Allen Key.

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