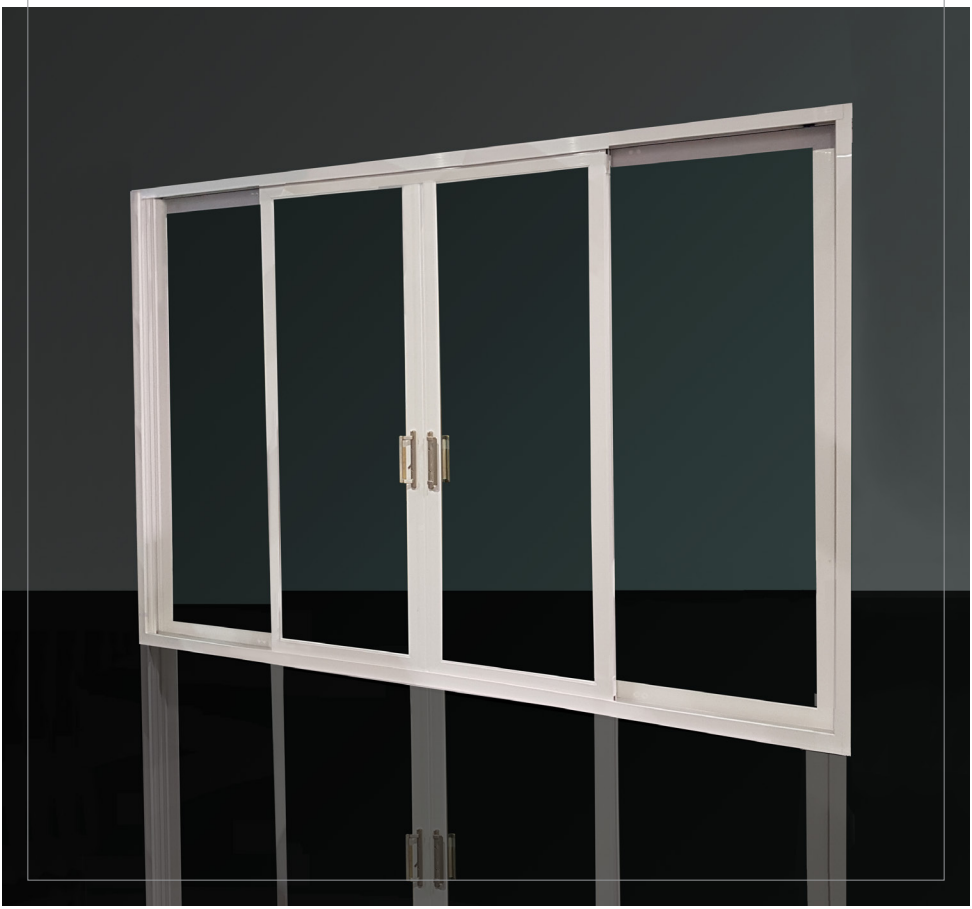
1617
SLIDING
GLASS DOOR

Assembly and Installation

1617 Knockdown Sliding Glass Door



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Required Screws

#4 x 3/8", pan head, screw
(For screen keeper in a three (3) panel door only).

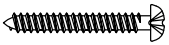
#6 x 5/8", pan head, screw
(For screen keeper and screen stopper in a four (4) panel door).

#10 x 5/8", flat head, screw
(For metal anchor and for secondary lock).

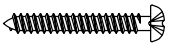
#8 x 7/8", pan head, screw
(For fixed panel).

#8 x 1", flat head shutter, screw
(For mullion and screen mullion
in a three (3) panel door).

#8 x 1", pan head, screw
(For three (3) panel door mullion and for
keeper for secondary lock).



#8 x 1 1/4", pan head, black screw
(For head weatherseal and sash stopper).



#8 x 1 1/4", pan head, screw
(For keeper).

#8 x 1 3/4", pan head, screw
(For mullion in a four (4) panel door).

#8 x 1 3/4", flat head shutter, screw
(For sash stopper in a four (4) panel door).

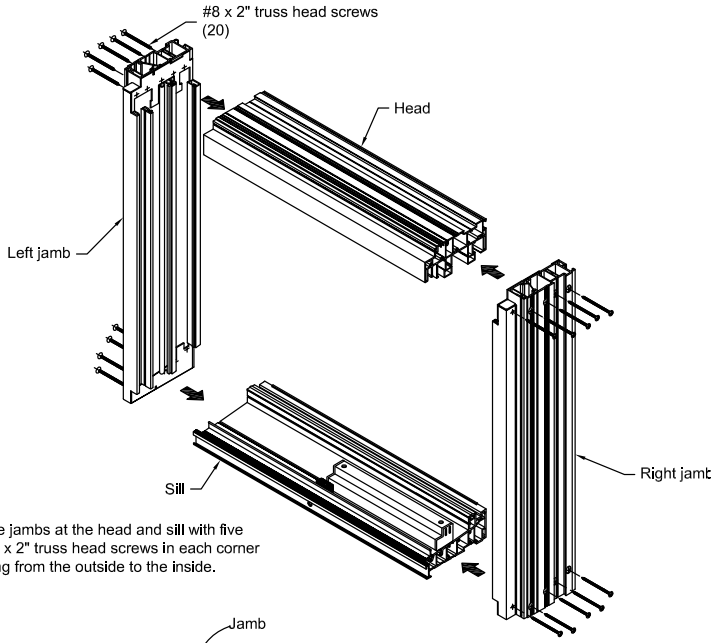
#8 x 2", pan head, screw
(For screen mullion in a four (4) panel door).

#8 x 2", truss head, screw
(For frame assembly).

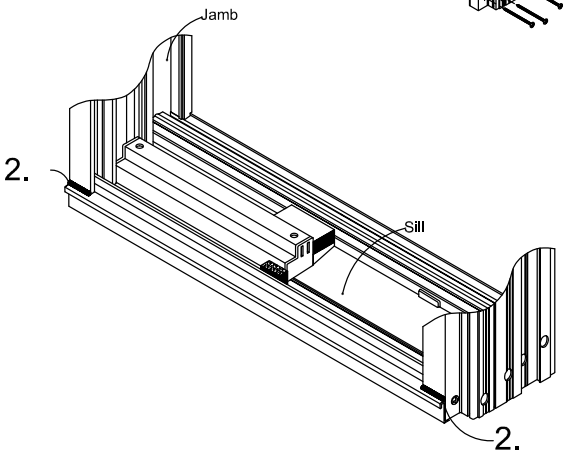
#10 x 2 1/2", flat head, screw
(For mortise lock).

#8 x 2 3/4", flat head, screw
(For anchor block and three (3) panel door
mullion).

Frame Assembly



1. Fix the jambs at the head and sill with five (5) #8 x 2" truss head screws in each corner starting from the outside to the inside.



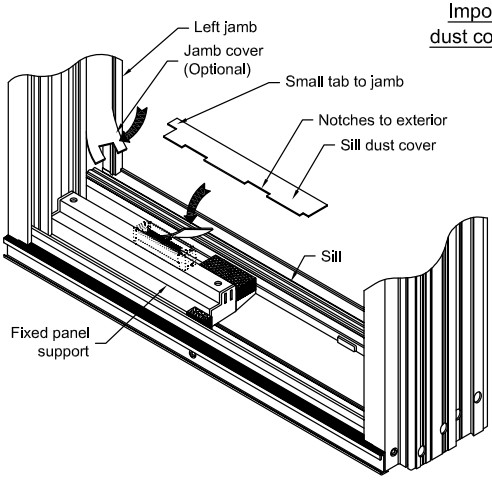
2. On the outside face of the sill, at the jamb, apply a sealant that is approved and compatible with PVC.

3.

Insert sill dust cover between the fixed panel support and the sill.

Important: Make sure to install sill dust cover correctly as per drawing. There should be a gap between the sill dust cover and the dust plug.

Install a jamb cover on both jambs. (Optional)



Installation Hole Drilling and Anchor Installation

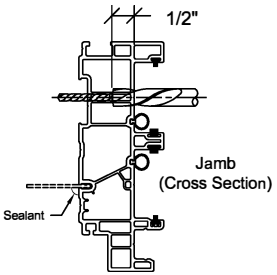
4.

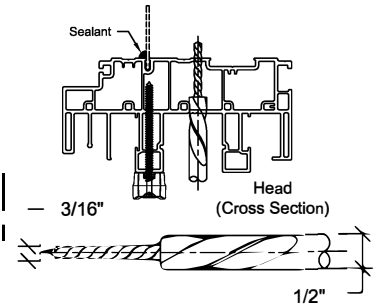
Fasteners
Note that some areas such as Florida and Texas require more fasteners than those employed on the physical test unit. For fastener information regarding these areas, visit www.floridabuilding.org or www.tdi.texas.gov. Search for the product series you are installing and follow the schedule shown rather than the following.

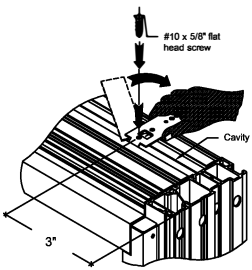
A) All aluminum product mainframes are pre-punched for fasteners. Fasten through each pre-punched hole.
B) Some vinyl door frames require field drilling for fasteners.

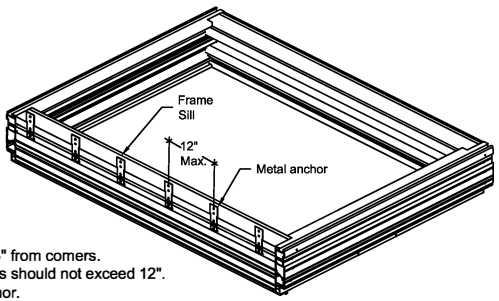
Installation holes and Metal Anchors.
Using a step drill bit, drill the installation holes in the head and jambs. Drill installation holes no closer than 3" from each corner and 12" on center. To prevent any water infiltration, screwing through the sill is not recommended. Metal anchors should be installed across the sill. Install metal anchors no closer the 3" from each end and 12" on center.

Mounting fin installation - Install mounting fin in main frame as shown. Apply sealant between mounting fin and frame. Install fasteners in every other pre-punched slot in the mounting fin. Fasteners must penetrate the rough framing a minimum of 1-1/2". After fastening the frame through the fin, drill the installation holes in the head and jambs. Drill installation holes no closer than 3" from each corner and 12" on center.







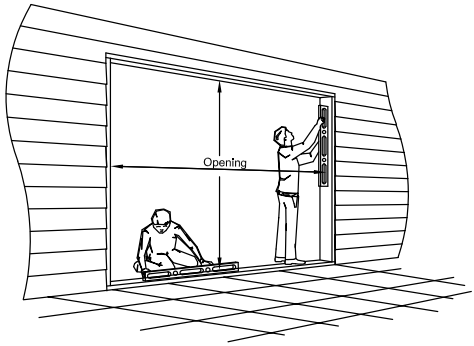


5.

Install metal anchors on the frame sill - 3" from corners.
The maximum distance between anchors should not exceed 12".
If this is the case, add an additional anchor.
The installer must pre-drill jambs and head installation holes.

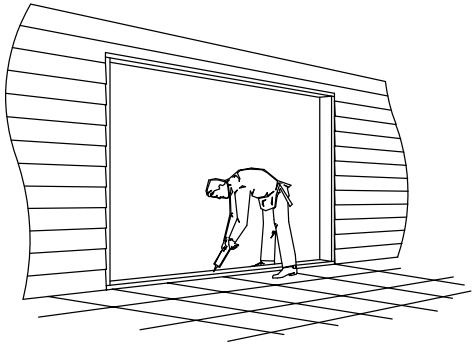
Preparing the Opening

Inspect Product and Prepare the Rough Opening
Inspect the product thoroughly before beginning installation. Confirm the door size and rough opening size. Rough opening dimensions are ½" larger than door size. Make sure the rough opening is plumb, level, and square. We recommend the squaring tolerances in ASTM 2112: 1⁄8" nominal for units less than 20 sq. ft. and ¼" for units more than 20 sq. ft. If the building already has a weather resistant barrier (WRB) installed, it is necessary to prepare an opening in the WRB to accept the door. MI recommends that the installer follow the WRB manufacturer's recommendation to prepare the opening.



6.

MI suggests installers use pan flashing combined with a complete interior air dam around the product. Many pan flashing systems are readily available. Choose one that best suits your construction application. Follow the instructions of the pan and flashing supplier. MI recommends that the installers follow the WRB and flashing manufacturer's recommendations to prepare the rough opening. Use caution to ensure the flashing is installed so that the door properly integrates into the building and does not direct water into the structure itself.



7.

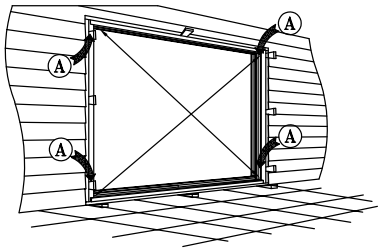
Apply a 3/8" diameter bead of sealant to the sill pan back dam. When frame is installed, ensure the frame makes solid contact with the sealant. For mounting fin installation, apply a 3/8" bead of sealant to the backside of the mounting fins at the head ,sill and jambs, near the outer edge of the mounting fin. Seal joints where mountin fins meet.

8.

Install Frame
To avoid injuries, two people are recommended for installation. Support frame until fully installed.
Sit the door unit in the opening, sill first. Make sure caulking compound makes a perfect seal between the door sill and the floor.

If you purchased your door KD, tilt the frame, which was assembled earlier, into the rough opening. Align the exterior plane of the frame with the most exterior surface of the structure (exterior face of masonry wall, framing, or sheathing).

If you purchased your product as set-up (with panels installed), carefully tilt the product into the rough opening. Align the exterior plane of the frame with the most exterior surface of the structure, (exterior face of masonry wall, framing, or sheathing).

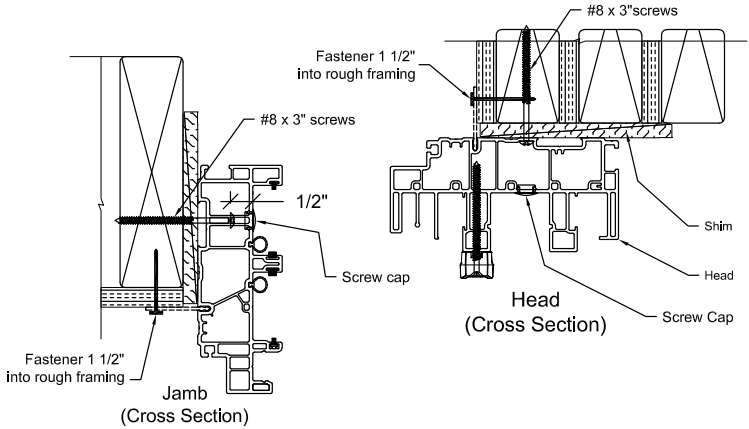


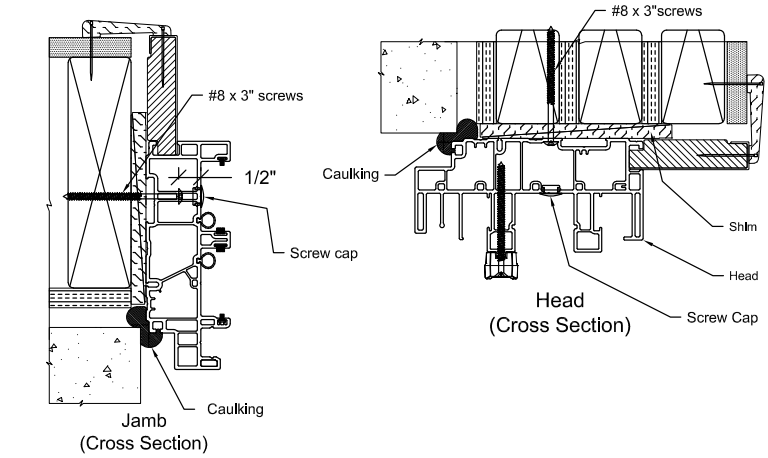
9.

Shim the door as shown above (shim from interior for fin installation). Note: Do not over-shim as it will cause the unit to bend and jeopardize performance of the door.

Finless install - After the door is centered in the opening, install fasteners in the top and bottom holes of each jamb (A) through the pre-drilled installation holes or the metal anchors (if installed). Measure the diagonals to ensure the door frame is square. Adjust as required. Complete shimming and install fasteners in the jambs and head. If metal anchors are installed across the sill, install #8 x 1-1/2" screws.

Fin installation - After the door is centered in the opening, install a fastener near each corner at the head of the window no closer than 3" to either corner. Measure the door to ensure it has remained level and square, and the frame is not bowed. Adjust as required and place additional shims, as necessary, to secure the unit and ensure proper operation. Place additional fasteners in the bottom corners. Confirm again unit is level, plumb, and square. Install fasteners in every other pre-punched slot in the mounting fin. Fasteners must penetrate the rough framing a minimum of 1-1/2". After fastening the frame through the fin, drill the installation holes in the head and jambs. Drill installation holes no closer than 3" from each corner and 12" on center.

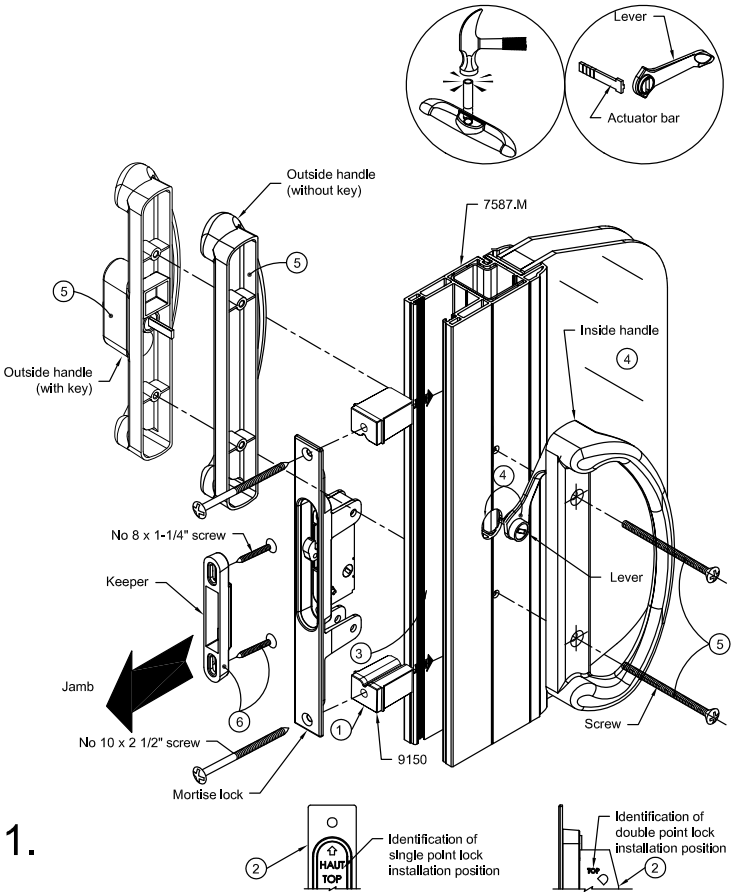




10.

Seal exterior perimeter of door frame using backer rod where necessary.
Do not apply sealant to perimeter in a fashion that plugs the weeps at sill.
IMPORTANT- If using pan flashing leave at least 2 gaps that are 2" wide in the sealant bead at the sill. Do not align sill gaps with weeps. The use of a drip cap is recommended. Install Z flashing and integrate into the weather barrier.

Handle and Mortise Lock Installation



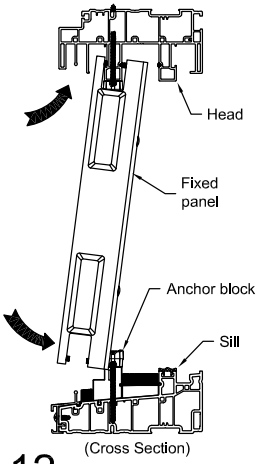
11.

Assembly Sequence

Important: If you use a handle with key lock, fix the cylinder in the outside handle with the restraining plug.

1- Insert No. 9150 plugs into front cavity of operating panel.
1- On the mortise lock, find the identification HAUT/TOP for single point lock and TOP for double point lock. (This indicates the installation position of the lock). Always install lock with identification towards the top to insure a proper operation of the lock.
2- Insert lock into front cavity of operating panel No. 7587.M and fasten with two (2) No. 10 x 2-1/2" screws.
3- From the inside, adjust the inside handle making sure the actuator bar is well inserted into the slot of the lock.
4- Position outside handle in place and secure from the inside with two (2) screws.
5- Adjust keeper into the jamb and fasten with No. 8 x 1-1/4" screws.

Fixed Panel Installation



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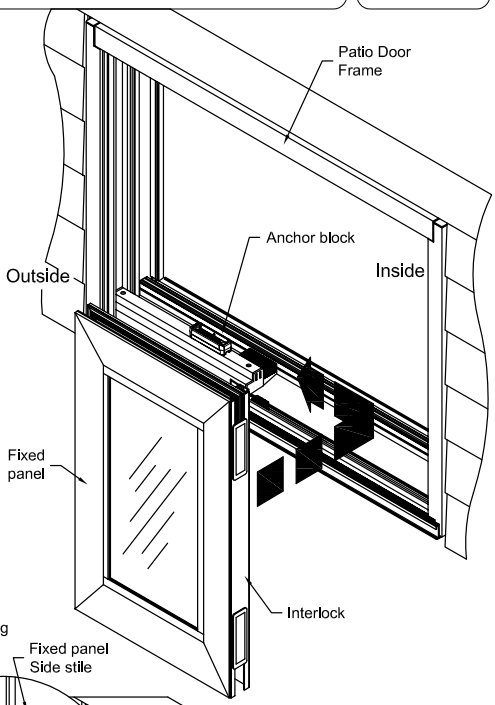
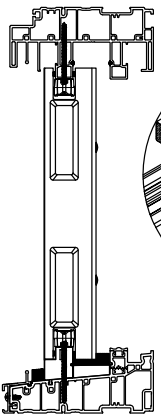


12.

Insert fixed panel into the outside track of the head, bypassing the anchor block and making sure the interlock weatherstrip is facing inward.



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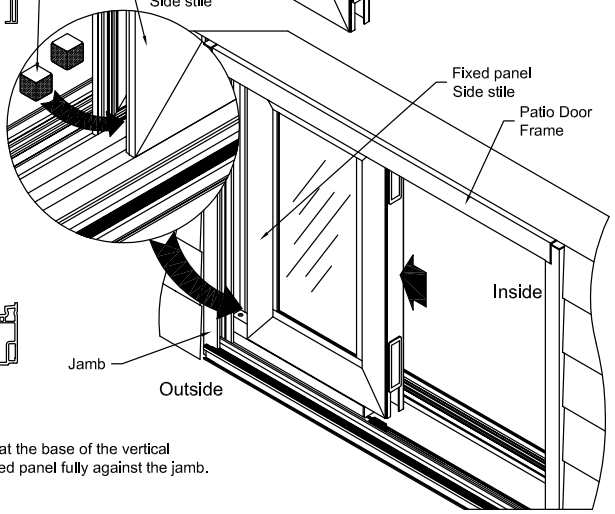
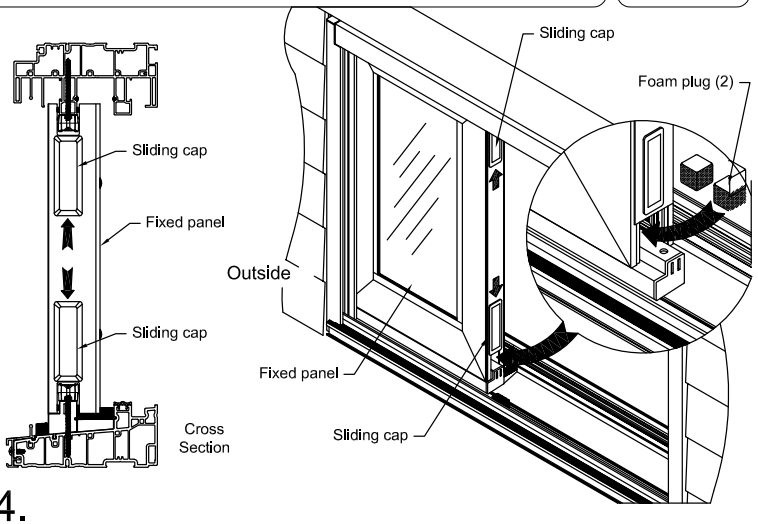


13.

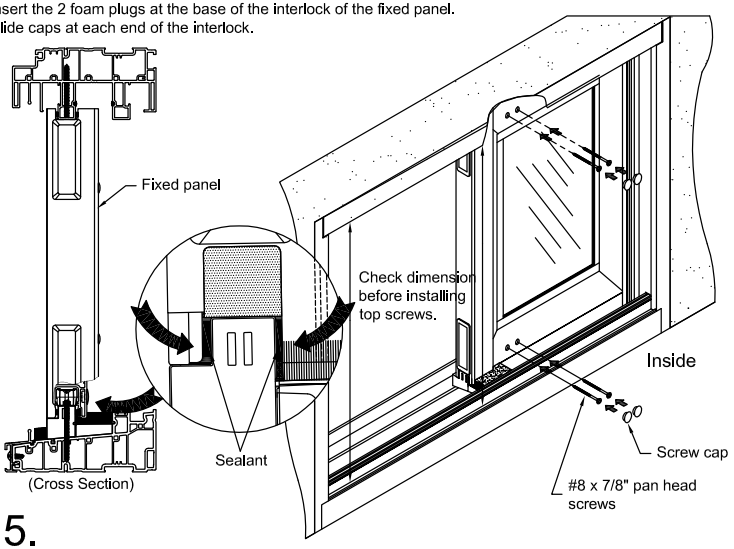
Insert two (2) foam plugs at the base of the vertical side stile and slide the fixed panel fully against the jamb. Check for squareness.

Fixed Panel Installation



14.

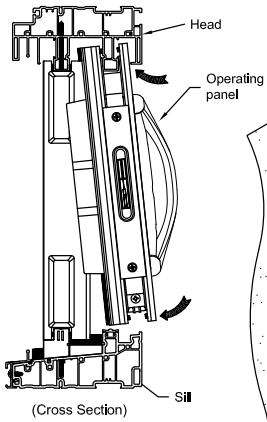
Insert the 2 foam plugs at the base of the interlock of the fixed panel.
Slide caps at each end of the interlock.



15.

Install two (2) #8 x 7/8" pan head screws into the holes provided at the bottom of the horizontal panel rail. Check the measurement between the head and sill before installing two (2) #8 x 7/8" pan head screws into the holes provided at the top of the horizontal panel rail.
Cover each hole with the screw cap.

Operating Panel Installation



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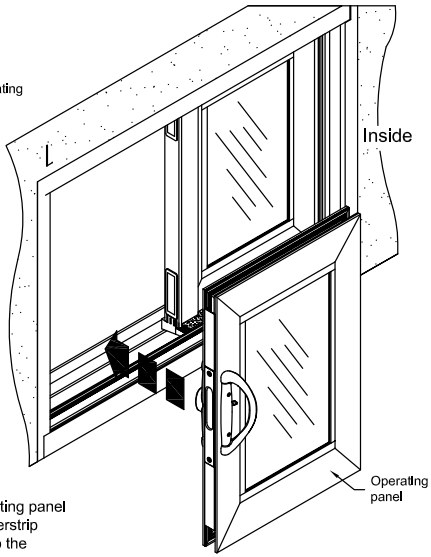
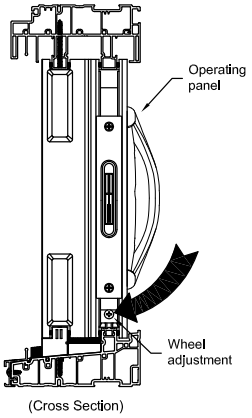


16.

From the inside, insert the top of the operating panel into the head track making sure the weatherstrip is facing outward. Set operating panel onto the operating panel rail of the sill.



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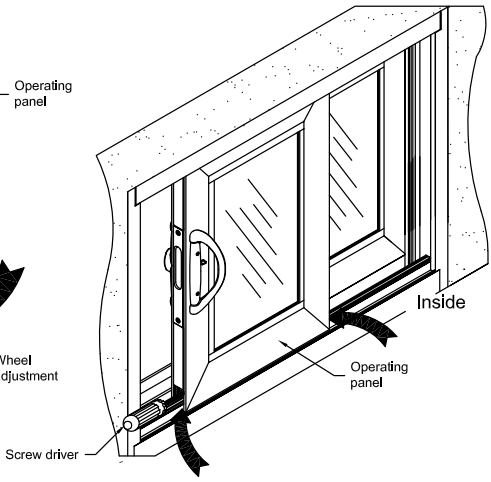
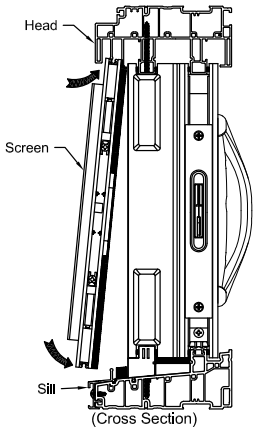


17.

If necessary, adjust height and squareness of the operating panel with the adjustment screws from the wheels. (Clockwise to raise / Counter-clockwise to lower).

Screen Installation



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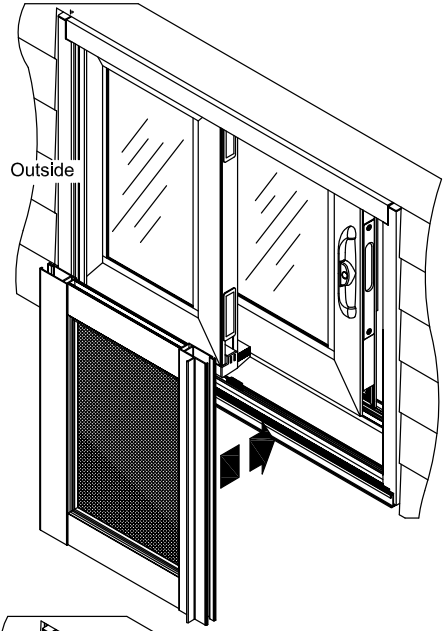
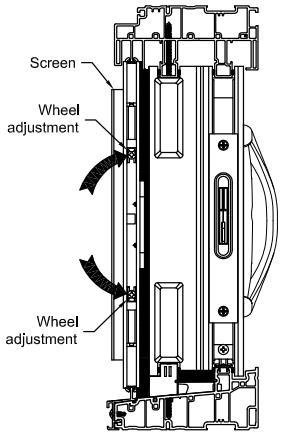


18.

From outside, insert the top of the screen in the head track making sure that the insect stopper felt is facing inward. Insert the bottom of the screen onto the rail of the outside sill cladding.



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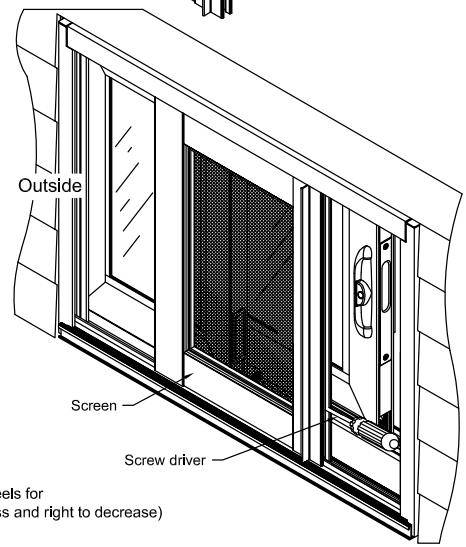
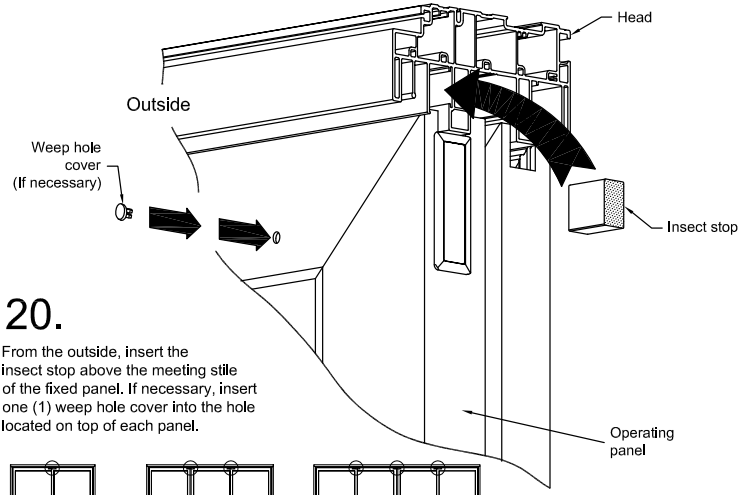


19.

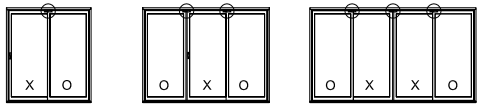
If necessary, adjust for squareness and ease the operation with adjustment screws. Adjust bottom wheels for squareness and then top wheels for ease of operation. (Turn left to increase tightness and right to decrease)

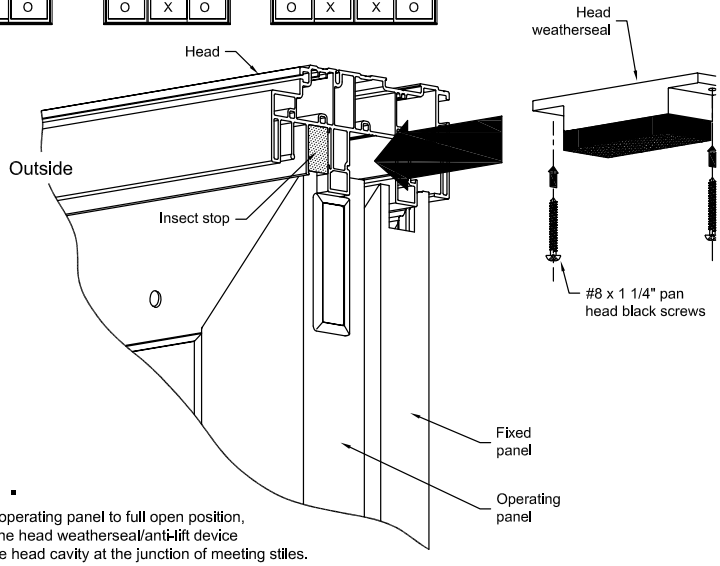
Head Weatherseal and Insect Stop Installation



20.

From the outside, insert the insect stop above the meeting stile of the fixed panel. If necessary, insert one (1) weep hole cover into the hole located on top of each panel.

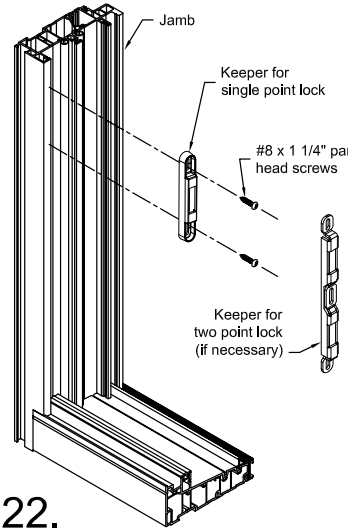




21.

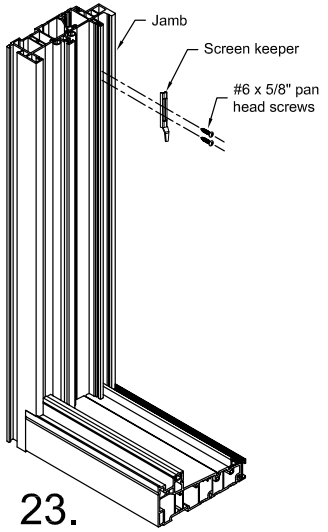
Move operating panel to full open position, slide the head weatherseal/anti-lift device into the head cavity at the junction of meeting stiles. Fasten head weatherseal with two (2) screws #8 x 1 1/4" pan head black screws.

Keeper and Sash Stopper Installation



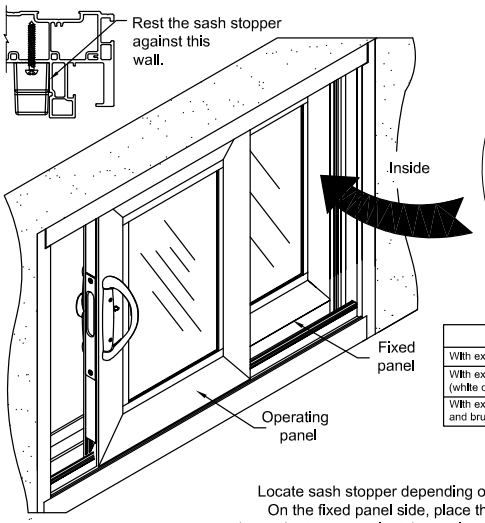
22.

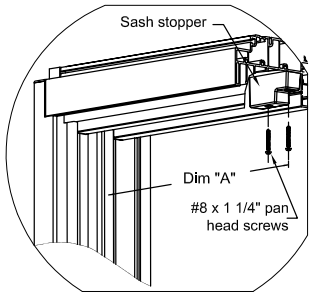
Locate keeper and fix with #8 x 1 1/4" pan head black screws.



23.

Locate screen keeper and fix with two (2) #6 x 5/8" pan head screws.



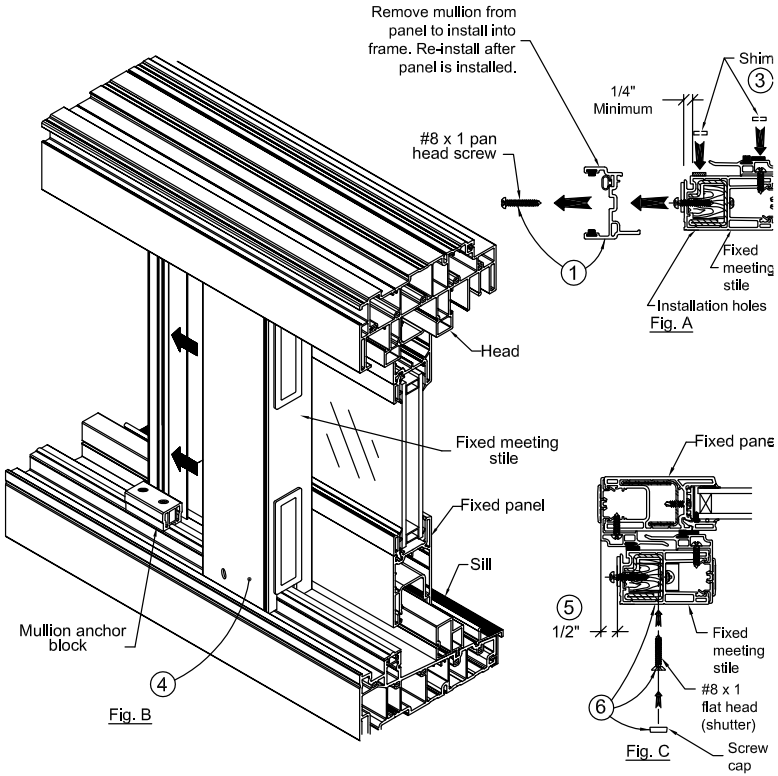


	Dim "A"
With exterior straight handle	2 3/4"
With exterior "C" handle (white or black)	4 1/4"
With exterior brass, black nickel and brushed chrome handle.	3 7/8"

24.

Locate sash stopper depending on type of handle chosen. (See table above) On the fixed panel side, place the sash stopper at the indicated place. Rest the sash stopper against the vertical wall in order to prevent an interference with the fixed panel. Fasten the sash stopper with (2) #8 x 1 1/4" pan head black screws.

Mullion Assembly for Three (3) Panel Doors

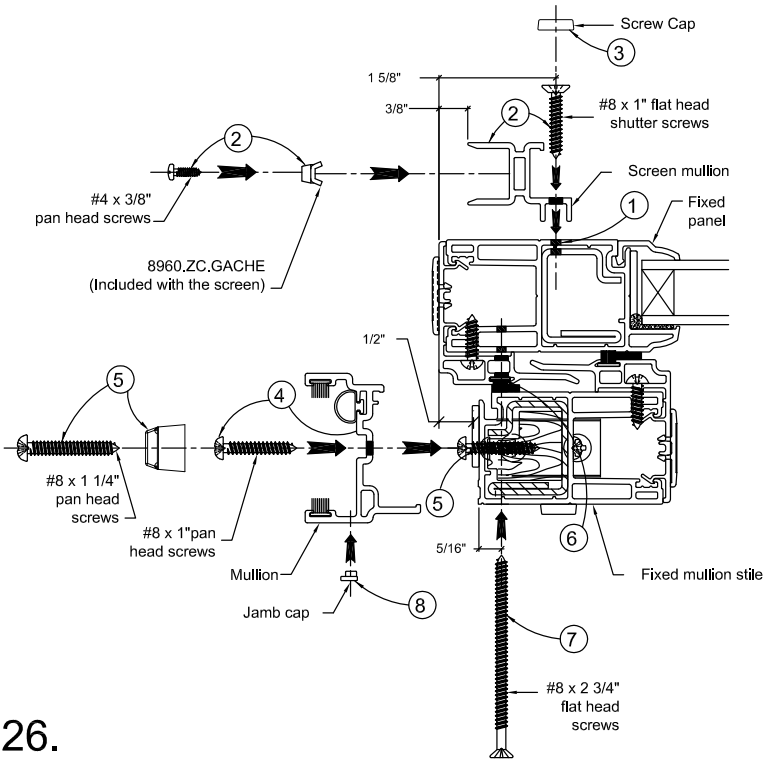


25.

Assembly Sequence

1- Remove #8 x 1 pan head screws from fixed meeting stile and remove the mullion. (See Fig. A)
2- Apply shims under each of the four (4) installation holes on fixed meeting stile and three (3) along the weatherstrip, as Indicated. (See Fig. A)
3- Slide fixed meeting stile on mullion anchor blocks. (See Fig. B)
4- Install fixed meeting stile in order to keep a distance of 1/2"as shown. (See Fig. C)
5- Fasten fixed meeting stile with two (2) #8 x 1 flat head shutter screws. Cover each screw with screw cap. (See Fig. C)

Final Mullion Assembly for Three (3) Panel Doors



26.

Assembly Sequence

1- Using the screen mullion as a jig, drill four (4) holes with a No. 29 (Ø0.136") drill. (Respect the location indicated by the dimension).

2- Fasten screen mullion to fixed meeting stile using four (4) #8 x 1" flat head shutter screws and fasten the keeper to screen mullion with two (2) #4 x 3/8" pan head screws. Important : When installing a screen keeper for a (3) sash door, never use the screws included with the keeper, since these are too long. Use screws #4 x 3/8" pan head screws (3/8" long) which are included with your (3) sash door hardware bag.

3- Cover each screw with a screw cap.

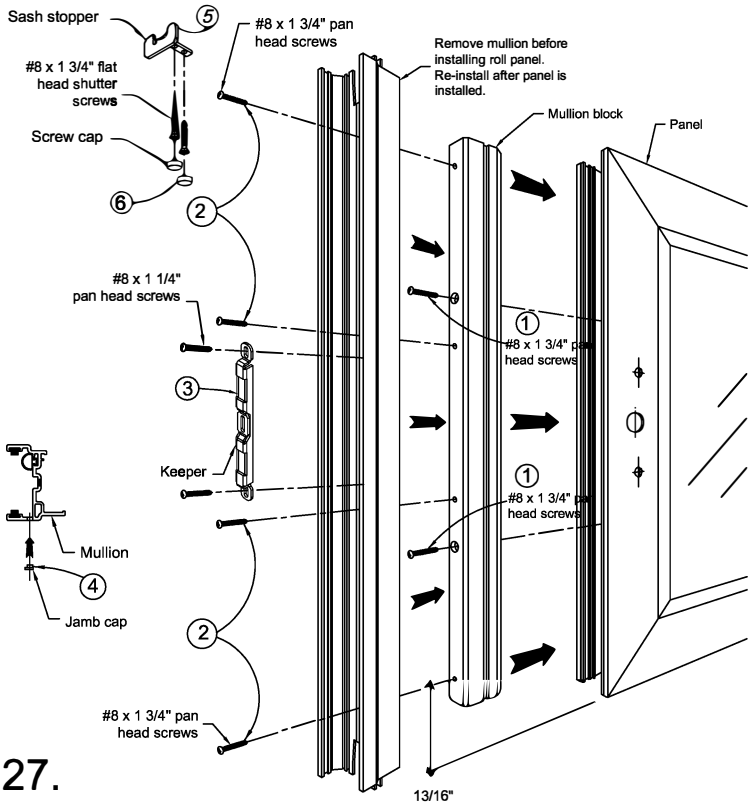
4- Fasten mullion to fixed meeting stile using four (4) #8 x 1" pan head screws.

5- Drill two (2) holes with a No. 29 (Ø0.136") drill and fasten the keeper with #8 x 1 1/4" pan head screws.

6- Using the fixed meeting stile as a jig, drill four (4) holes with a No. 29 (Ø0.136") drill into the fixed panel. (Respect the location indicated by the dimension).

7- Fasten fixed meeting stile with four (4) #8 x 2 3/4" flat head screws.

8- If you use a mortise lock, from the inside, stick a No. 8926 jamb cap in the opening for the keeper on mullion. (CAUTION: Too much PVC cement could damage PVC profiles).



27.

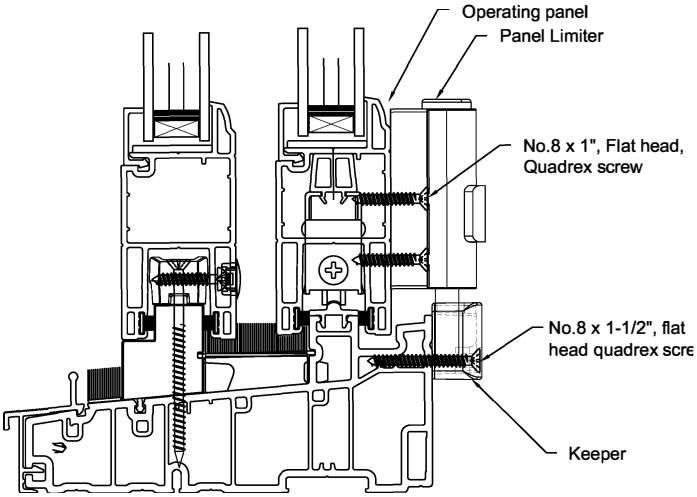
Assembly Sequence

1- Insert mullion block into the side stile cavity as shown. Fasten mullion block with two (2) #8 x 1 3/4" pan head screws in holes provided.
2- Install the mullion on the side stile using four (4) No. 9615.ZC.VIS08 screws. Make sure the longest leg is on the inside.
Note: It is important that the mullion be pre-machined.
3- Fix the keeper to the mullion with two (2) No. 8 x 1 1/4" pan head screws.
4- If you use a mortise lock, from the inside, stick a jamb cap in the opening for the keeper on mullion. (CAUTION: Too much cement could damage PVC profiles).
5- Install the sash stopper at the center of the head track using two (2) #8 x 1 3/4" flat head shutter screws
6- Cover each screw with a screw cap.

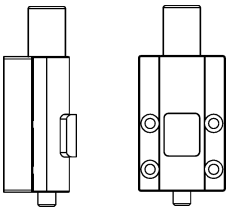
Panel Limiter Detail and Parts list

Warning: This is not a security device (Not a lock). It is intended to limit the operation of the rolling panel for ventilation.

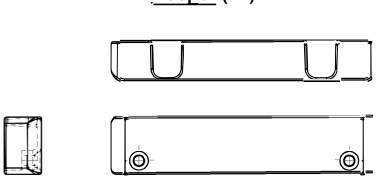
Panel Limiter Detail



-Secondary lock (1x)

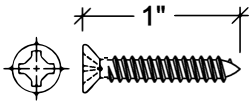


Keeper (1x)



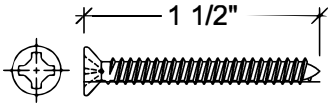
Mounting screw for Panel limiter

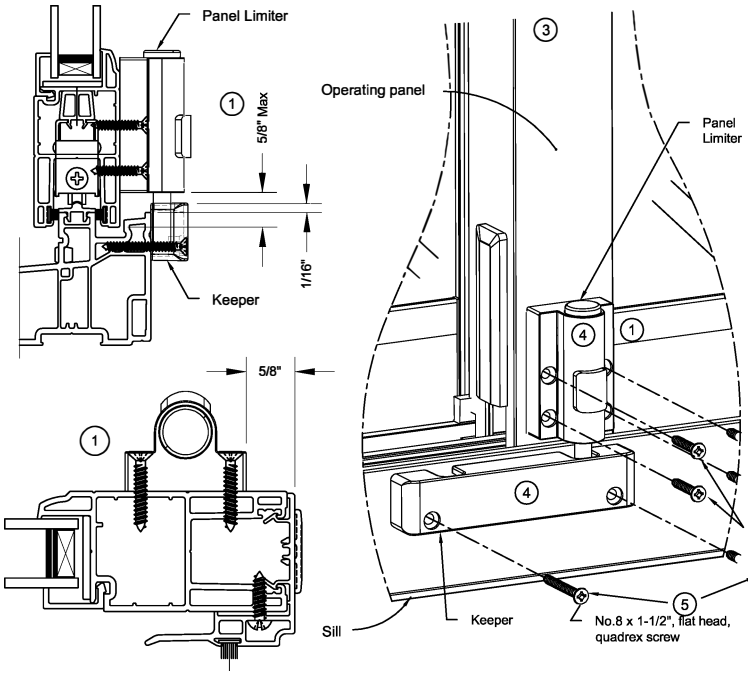
-No. 8 x 1", flat head, Quadrex screw (4x)



Mounting screw for keeper

-No. 8 x 1 1/2", flat head, Quadrex screw (2x)





Assembly Sequence

1- Locate panel limiter on operating panel in the middle of meeting rail, making sure the height is as indicated on drawing. (5/8" from the edge & 5/8" from the bottom of the panel)
2- Install panel limiter to operating panel meeting rail, using four (4) screws No.8 x 1", flat head.
3- Make sure the operating panel is in a closed and locked position.
4- Engage the panel limiter and position keeper on sill with limiter bolt in the middle of first keeper hole. Position the top of the keeper 1/16" above the sill.
5- Install keeper to sill, using two (2) screws No.8 x 1 1/2", flat head screws.

Warning: This is not a security device (Not a lock). It is intended to limit the operation of the rolling panel for ventilation.

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