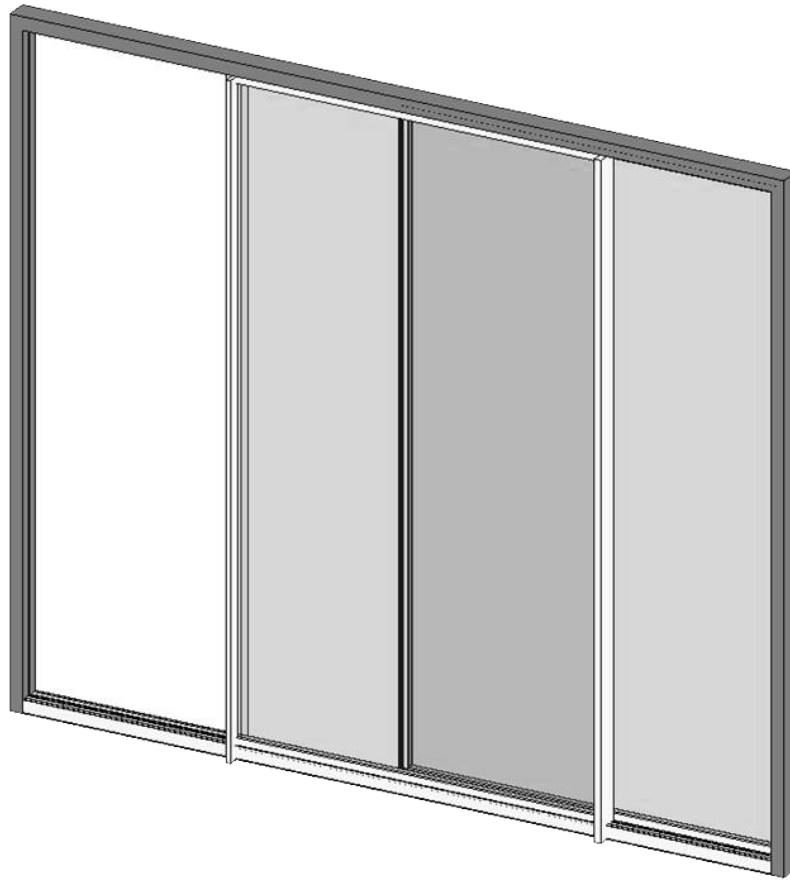


PALISADES S100 SERIES SLIDING DOOR SYSTEM



IMPORTANT: Please read these instructions completely before you start installation. The Palisades Door System is a unique operational system that requires precision and attention to detail during installation. To ensure proper door operation, the Top and Bottom Roller Tracks must be perfectly aligned to each other and every component of the frame must be installed square, plumb and level.

NOTE: This manual covers the Installation, Operation, Maintenance, and Warranty of the Palisades System. It is to be used by the Installer for installation and kept by the Owner for reference. Replacement parts should be ordered **ONLY** from C.R. Laurence.

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GUIDELINES FOR ALL INSTALLATIONS

IMPORTANT: READ COMPLETE INSTRUCTIONS BEFORE BEGINNING INSTALLATION. INSTALL AS RECOMMENDED; OTHERWISE, THE UNIT MAY NOT FUNCTION PROPERLY AND ANY WARRANTY, WRITTEN OR IMPLIED, WILL BE VOID.

REVIEW CONTRACT DOCUMENTS: Check Shop Drawings, Installation Instructions, Architectural Drawings, and Shipping Lists to become thoroughly familiar with the project. The Shop Drawings take precedence and include specific details for the project. Note any field verified notes on the Shop Drawings prior to installing. The installation instructions are of a general nature and cover most conditions.

CHECK ARRIVING MATERIALS: The system is fabricated specifically for your order and shipped with all necessary components. Not included are screws, bolts, shims, etc. to anchor the unit to the rough opening.

All frame components are cut to size. Frame and panels are to be assembled during installation. In most cases, weather stripping, multiple locking, and flat handles are factory installed to the panels and frame components. Some loose parts will be shipped separately. Be sure to locate and store in a safe place until needed. Panels can be factory assembled and glazed.

Upon receipt, inspect the shipment to ensure it is in good condition and all components are included. Ensure system configuration and size match initial order and included Shop Drawings. Note that Shop Drawings are viewed from interior.

INSTALLATION: The installation of the Palisades System requires a working knowledge and experience in the use of tools, equipment and methods necessary for the installation of aluminum doors, windows, storefronts and/or partitions. This practice assumes a familiarity with preparing a proper and structurally sound opening, proper anchorage, waterproofing, caulking and sealing and assumes an understanding of the fundamentals of building construction that affect the installation of large aluminum door systems. Use a trained installer with experience in installing these kind of systems. Precise measuring equipment should be used during installation. All materials are to be installed plumb, level, and true.

BUILDING CODES: As regulations governing the use of glazed windows, doors, storefronts and/or partitions vary widely, it is the responsibility of the building owner, architect, contractor or installer to insure that products selected conform to all applicable codes and regulations, including federal, state and local. C.R. Laurence assumes no obligation or responsibility whatsoever for failure of the building owner, architect, contractor or installer to comply with all applicable laws and ordinances and safety and building codes.

SURROUNDING CONDITIONS: For better performance it is recommended that all dead loads such as upper levels, roof, etc. be constructed before a unit is installed. Any exterior system should be installed under an overhang, or with other similar protection.

Properly flash and waterproof around the perimeter of the opening, especially at the sill. Make sure you seek proper professional advice for the appropriate construction needed for your particular application. Do not install unit in structures that do not allow for proper management/drainage of moisture.

A qualified engineer or architect should be used to determine the proper construction details and header to be used in your particular application. Customer is responsible to check to comply with applicable codes for maximum gap space allowed, especially in high wind areas, and correct opening size.

IMPORTANT: Because of the large opening sizes and the weight and movement of the panels, any application should take into consideration the following:

The structural integrity of the header is critical for proper operation. Vertical deflection of the header under full live and dead loads should be the lesser than 1/16". Structural support for lateral loads (both wind load and when the panels are stacked open) must also be provided.

HANDLING MATERIALS: Store in a clean and dry location and protect against defacement or damage, especially to the edges of panels. It is important that during the construction phase the unit be kept closed, covered and protected from damage. During this phase, a unit is often subject to the most extreme conditions from all types of construction operations that can permanently damage and destroy it. A unit can be damaged by cement splatter, tar, paint, weld splatter, falling objects, construction dust, sand blasting, etc. Do not use the large opening of an installed system for easy ingress and egress by tradesmen.

CONFIRM YOUR SHIPMENT

This Palisades Door System is fabricated specifically for the dimensions of your order.

Consult the included Shop Drawings when checking your shipment. Lay the components on a clean, flat surface in the position they are to be installed. Dry fit the parts, double check measurements against your opening and inspect for damage. NOTE: For orders with multiple units, do not mix and match panels and frames, even if two units are exactly the same.

If you notice damaged or missing parts, or have any questions, please contact the C.R. Laurence Technical Sales Department immediately at (800) 421-6144. Refer to the order number shown on your Packing List.

NOTE: Slider Will Not Function Properly if Any Part of the Main Frame is Not Level and Plumb or the Top and Bottom Roller Track are Not Perfectly Aligned.

IMPORTANT: It is critical to install Bottom Track level and plumb. Ensure the Jambs and Top Track are installed level and plumb. Align Top and Bottom Roller Tracks.

Check Small Parts

Check Packing List to determine which parts are required for your installation. Locate and store loose parts in safe place until needed.

All Installations:

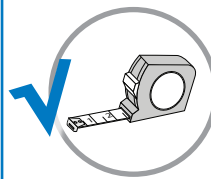
- ✓ Shop Drawings
- ✓ End Dams
- ✓ Fixed Stile Clips
- ✓ Installation Manual

Non-glazed Installations:

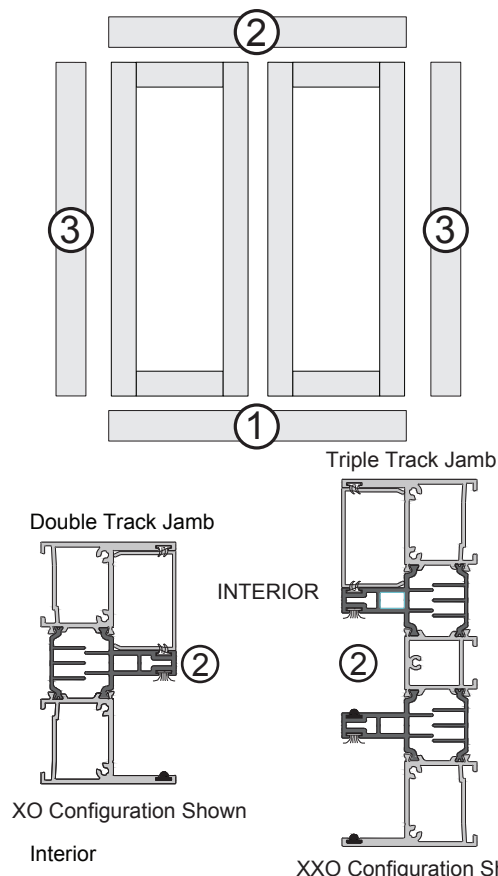
- ✓ Glazing Gasket
- ✓ Panel Assembly Hardware

Select Installations:

- ✓ Weep Hole Covers
- ✓ Shoot Bolt Strikes

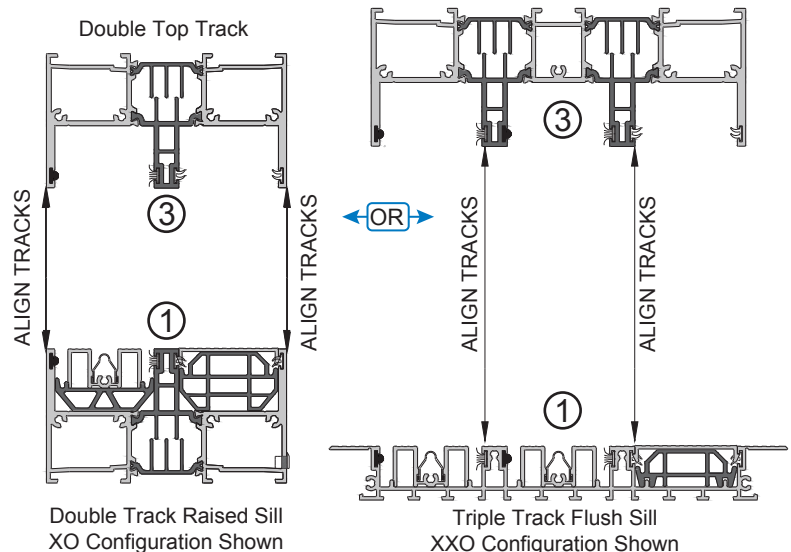


Before you begin, check to ensure nothing is missing or damaged. Lay components on clean, flat surface. Measure components and compare to details on your Shop Drawings.



General Order of Assembly

- ① Raised Sill or Flush Sill
- ② Jambs
- ③ Head



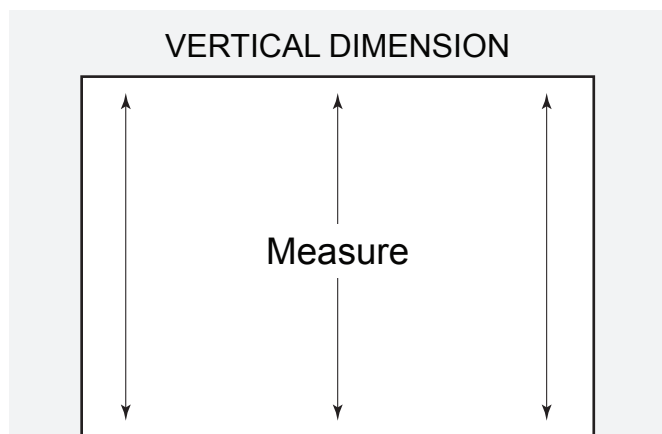
See next page for detail

NOTE: Units are available with Raised or Flush Sills. Refer to Shop Drawings for details on your installation.

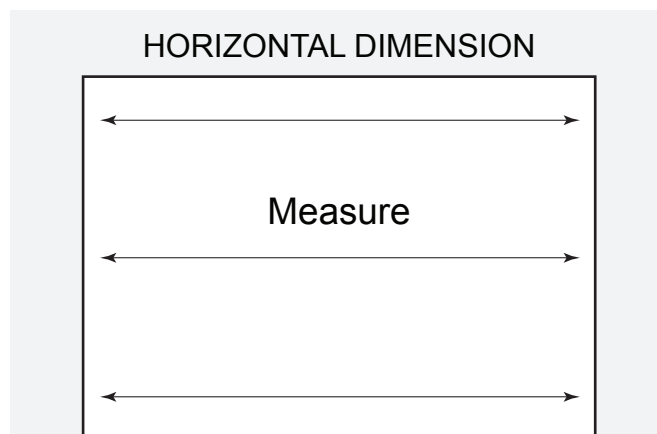
SITE PREPARATION

Check the Rough Opening

Verify that the rough opening is square and plumb as possible.



Measure top to bottom at left, center, and right to confirm proper height.



Measure side to side at top, middle and bottom to confirm proper width.

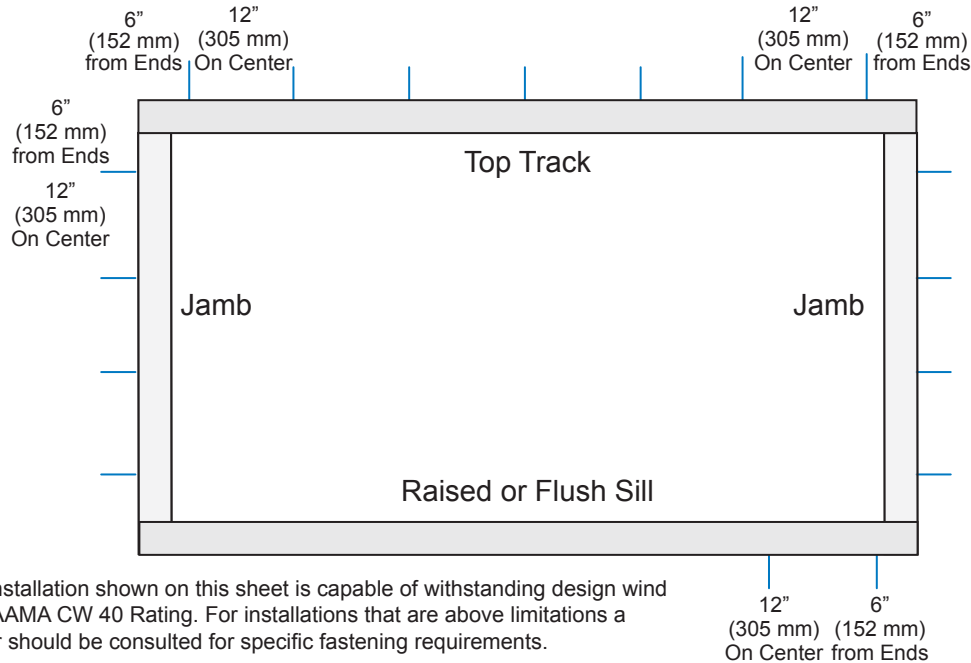
Verify Floor and Header Condition

The floor and header surface of the rough opening should be clean and in good condition. For better performance and protection, any exterior system should be installed under an overhang, or with other similar protection.

Flush Sill configurations require a recessed groove in the floor. Ensure it is straight and level. For exterior installations, a trench drain is required for proper drainage. A completely weather-tight seal is not possible with this sill and some air/water infiltration will occur.

Raised Sill configurations attach directly to the floor. In exterior applications the Sill must be level for proper drainage.

MAIN FRAME FASTENER SPACING



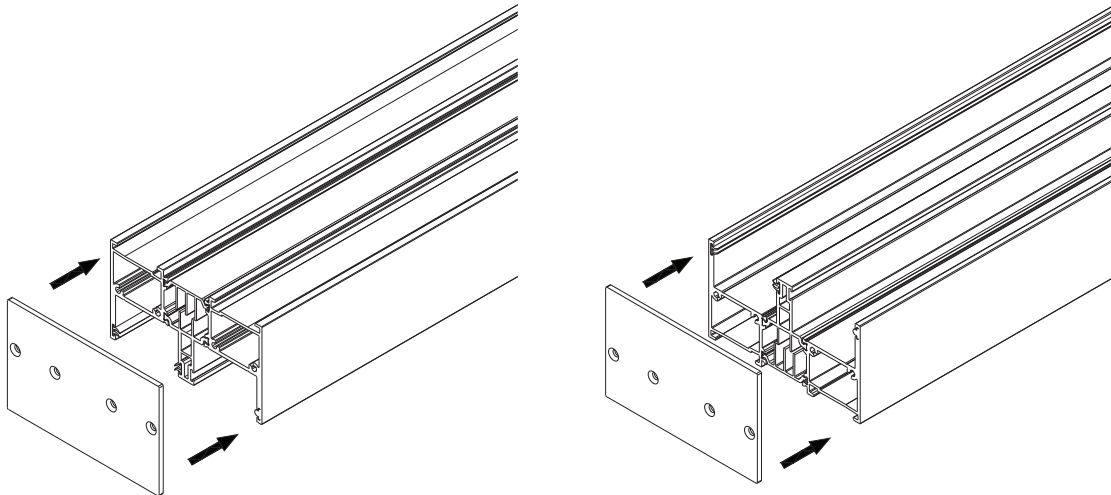
NOTE: Fastener installation shown on this sheet is capable of withstanding design wind load pressure for AAMA CW 40 Rating. For installations that are above limitations a structural engineer should be consulted for specific fastening requirements.

IMPORTANT: Fasten at each location with #10 fasteners appropriate to carry load. Do not overtighten fasteners. This can damage frame and interfere with door operation.

THE SLIDING DOORS WILL NOT FUNCTION PROPERLY IF ANY PART OF THE FRAME IS NOT PERFECTLY SQUARE, LEVEL AND PLUMB. CONSTANTLY CHECK DURING INSTALLATION.

END DAM INSTALLATION

1. Prior to frame assembly install end dams on head and sill tracks using #8 X 5/8" flat head, sheet metal, stainless steel screws. Apply RTV408 sealant at all contact areas and over screw heads. Application and tooling of silicone to end dams is critical to prevent water penetration.



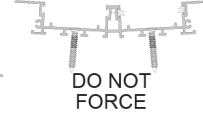
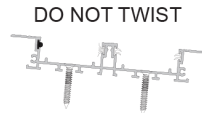
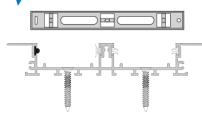
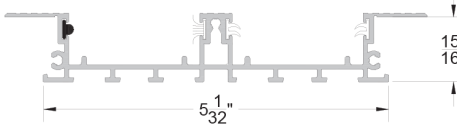
FLUSH SILL INSTALLATION (OPTIONAL)

IMPORTANT: Ensure required recessed groove is straight and level. Use fasteners appropriate for substrate. Shim at fasteners to ensure the Sill does not move. For exterior installations, a trench drain is required for proper drainage. Do not continue installation until sill is flat and level, does not tilt inward or outward and does not move from side to side.

Note proper orientation of Flush Sill.



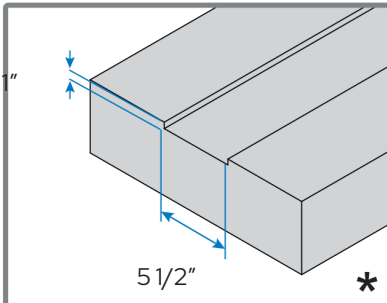
Sill must be straight, flat and level. Install securely.



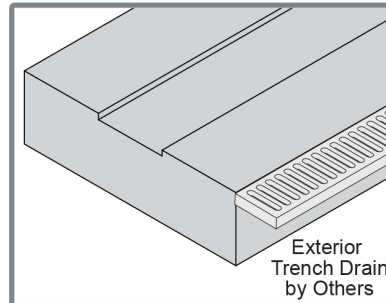
Do not overtighten fasteners. This can cause the sill to bow and/or distort and interfere with door operation. Clean cuttings from drill holes and any other debris from track.

NOTE: A completely weathertight seal is not possible and some air/water infiltration will occur.

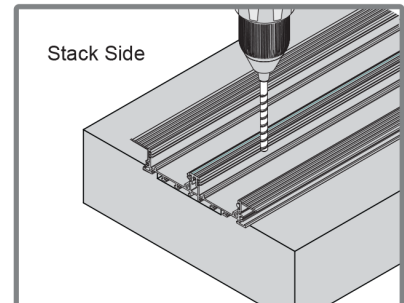
Prepare straight, level groove in floor.



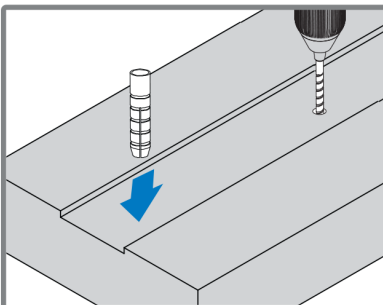
NOTE: Install drainage system for Exterior Installations.



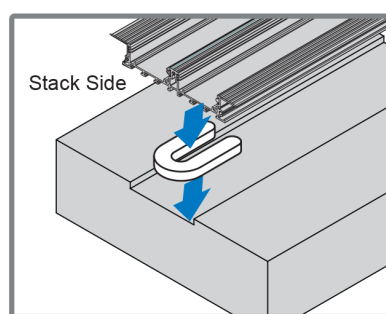
Use Sill as template to drill pilot holes for anchors.



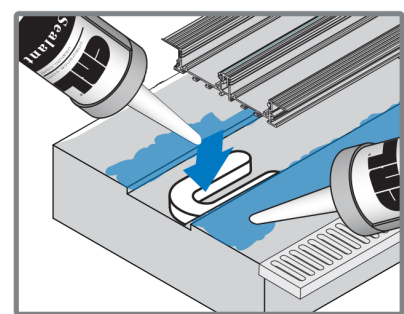
Remove Sill to drill holes and install anchors.



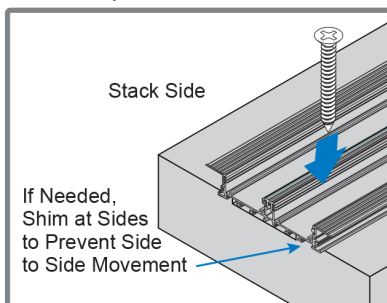
Shim at all anchor points.



NOTE: Apply silicone under Sill for Exterior Installations.



Secure but do not over tighten. Shim to prevent movement.



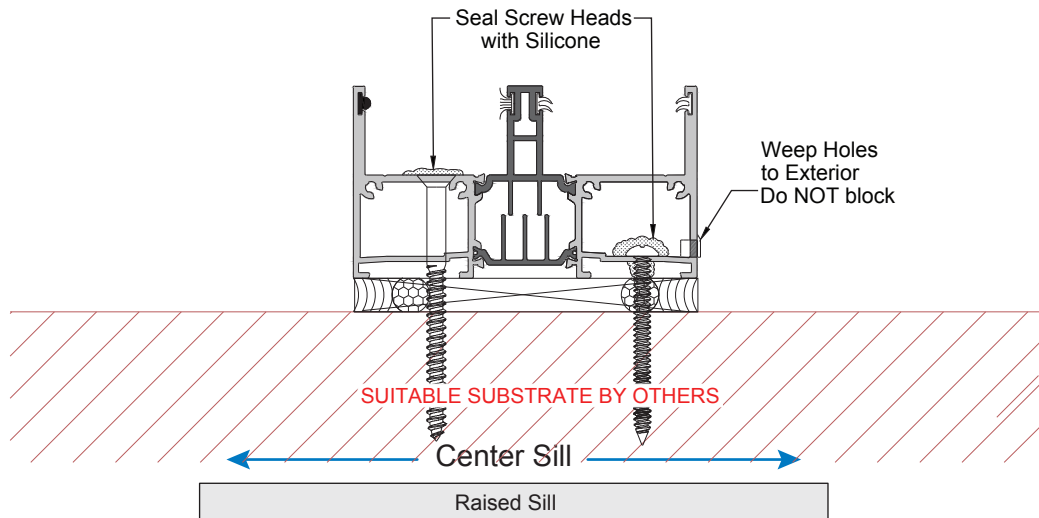
Two Flush Track Options, Double & Tripple
Flush Tracks available
7-7/8" x 1" groove for tripple
5-1/2" x 1" groove for double track

RAISED SILL INSTALLATION

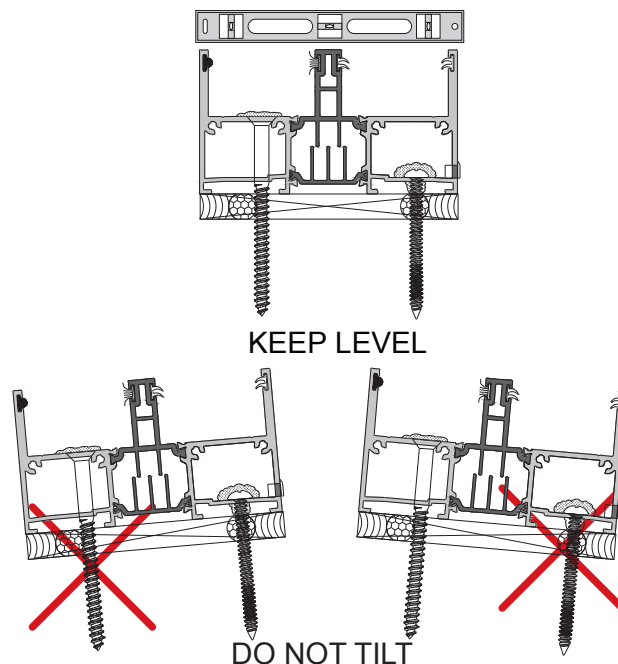
Install Raised Sill

IMPORTANT: Use fasteners appropriate for substrate. For exterior & interior installations, install End Dams and seal seams. Do not overtighten fasteners. This can cause frame to bow and/or distort and interfere with door operation. Ensure Sill is flat and level and does not tilt inward or outward. Clean cuttings from drill holes and any other debris from track.

Center Raised Sill in rough opening and secure with #10 fasteners appropriate for substrate. Install on flat leveled finished floor. If installed on rough floor shim flat leveled.



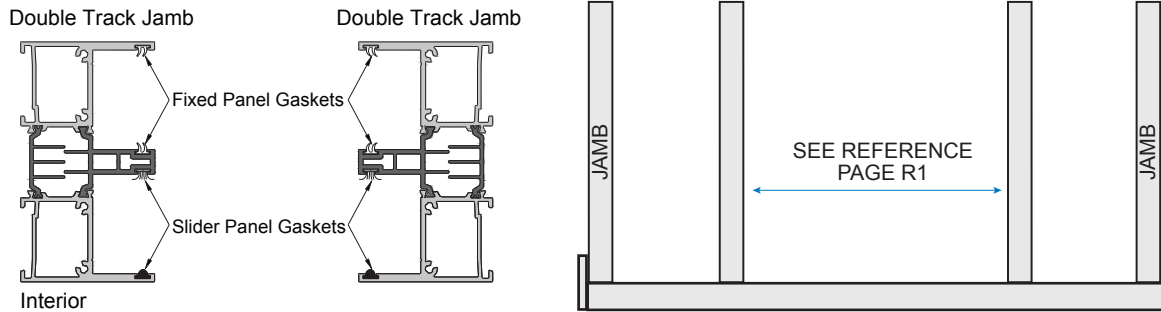
Raised Sill must be flat and level. Do not overtighten fasteners.



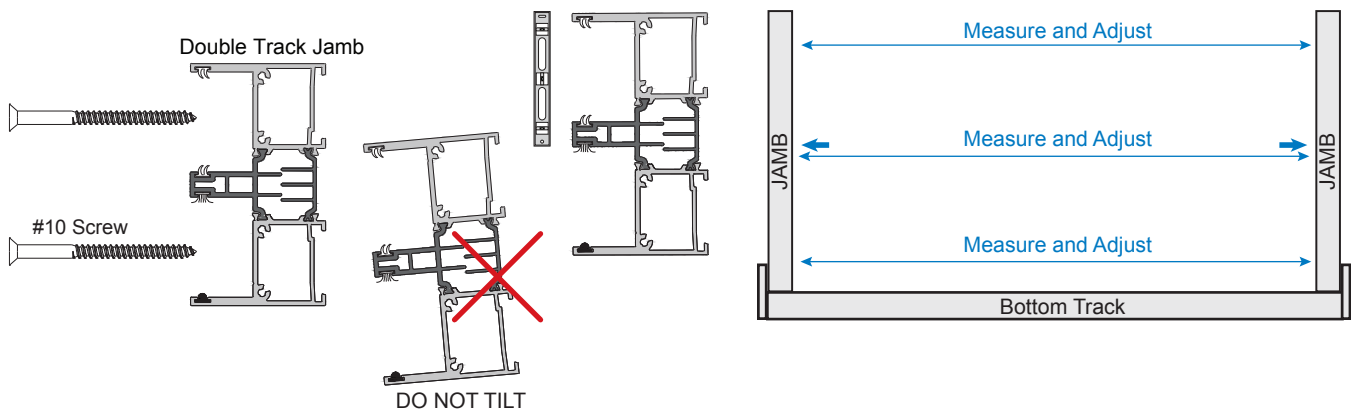
MAIN FRAME INSTALLATION

Place Jambs

- ① Apply sealant Cat. No. RTV408 to ends of jambs before assembly.
Place Jambs inside of rough openings. Rest Jambs on top of Sill and against END DAMS.

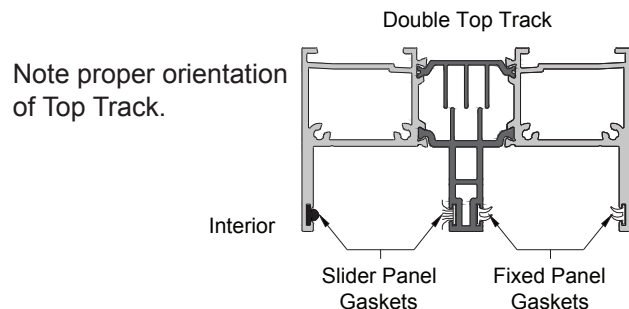
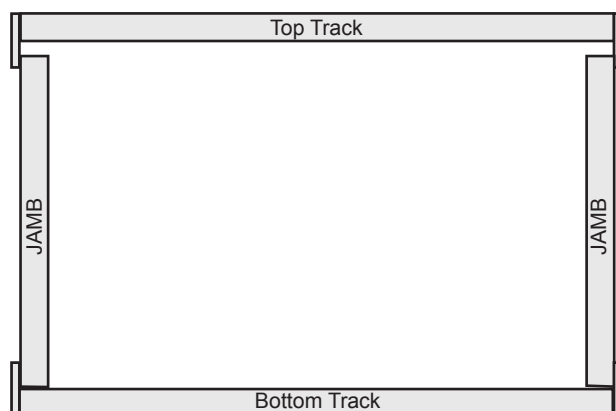


- ② Measure opening at top, middle, and bottom and compare to opening measurement on Shop Drawings. Adjust Shims as needed. Once Jambs are shimed plumb and square with sill secure with #10 fasteners.



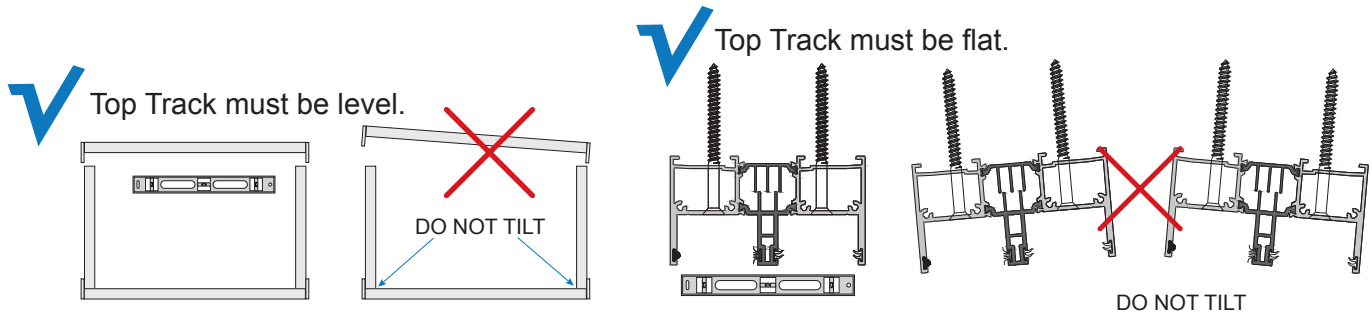
Place Main Frame Top Track

- ③ Carefully place Main Frame Top Track on top of Jambs.

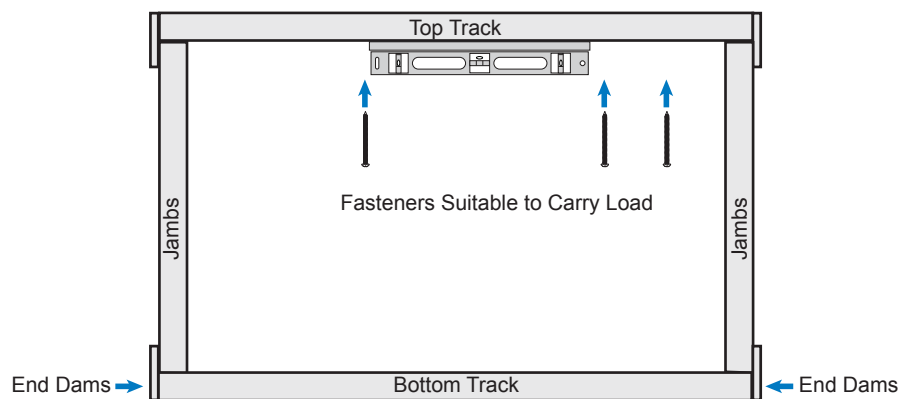
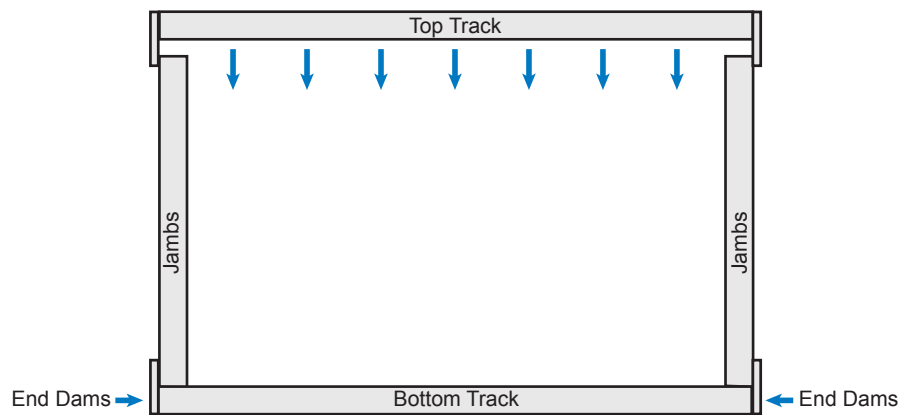


MAIN FRAME INSTALLATION (CONTINUED)

Secure Top Track



- ⑤ Lower Top Track so it rests on Jambs, Shim, & Level. Secure with fasteners appropriate to carry the load.



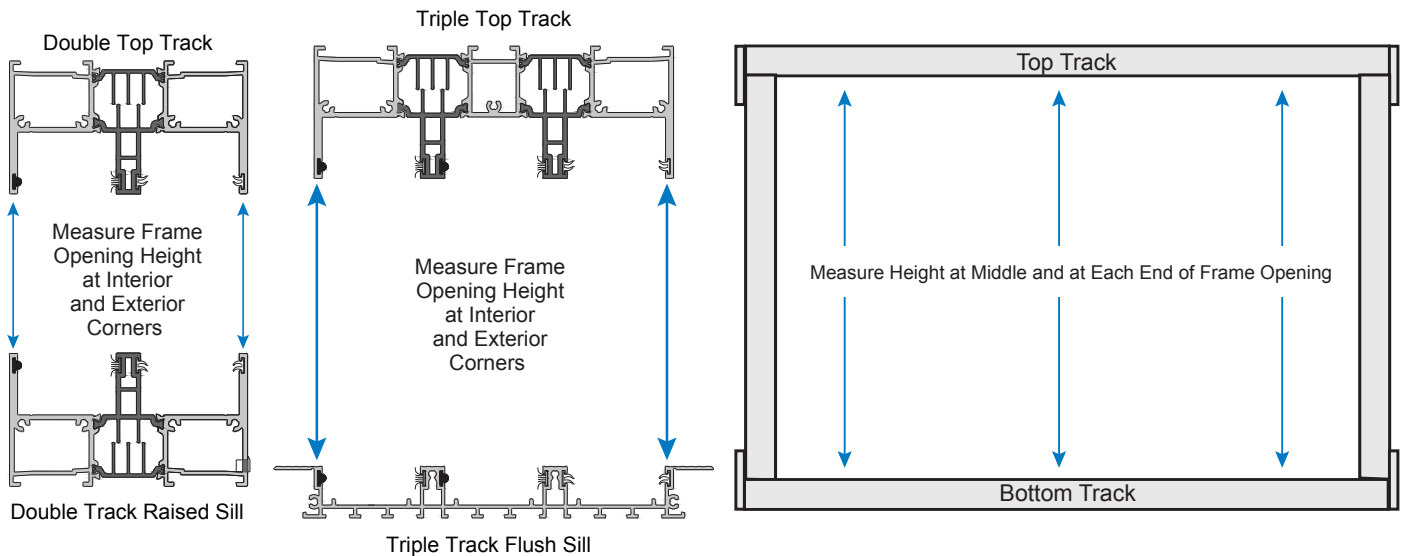
- ⑥ Apply sealant Cat. No. RTV408 to the full perimeter of assembled corners, butt joints, and end dam connections.

INSTALLATION OF FRAME (CONTINUED)

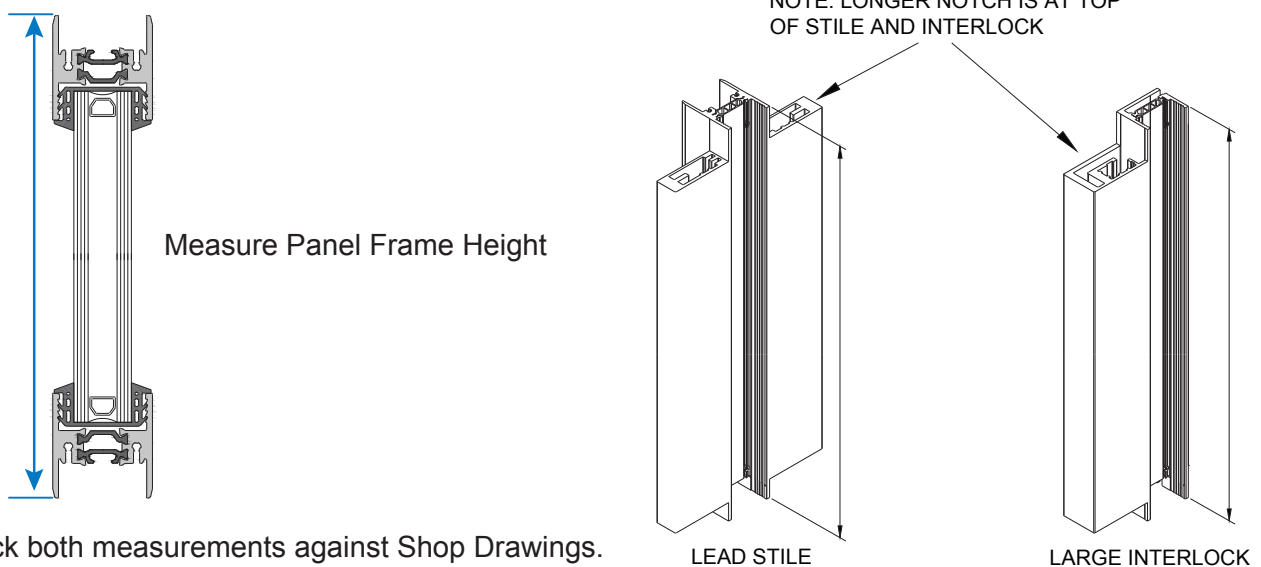
Final Adjustments

IMPORTANT: Check that the frame is level and installed correctly before installing doors. Make sure all measurements match those on your Shop Drawings. If there is a discrepancy, contact Technical Sales at (800) 421-6144.

- ① Measure between top of Sill and bottom of Top Track at interior and exterior corners along both ends and middle of opening. Make sure those numbers are equal and match Shop Drawings.



- ② For glazed panels, measure from top to bottom of each panel. For knocked down panels, measure Interlock and Stile lengths as they provide panel height.



- ③ Check both measurements against Shop Drawings.

If there is a discrepancy, contact Technical Sales at (800) 421-6144 before continuing.

DOOR PANEL ASSEMBLY AND GLAZING

1. Starting at the top center, wrap the glazing gasket around the perimeter of the glass. (FIG. 1)
Cut partially through the gasket at the glass corners as shown. (FIG. 2)
2. When joining the ends of the glazing gasket, cut glazing gasket 1/16" (1.6 mm) longer for each side of glass panel to allow for shrinkage. (FIG. 1)
3. Fill and tool corners with EPDM compatible sealant. (FIG. 3)

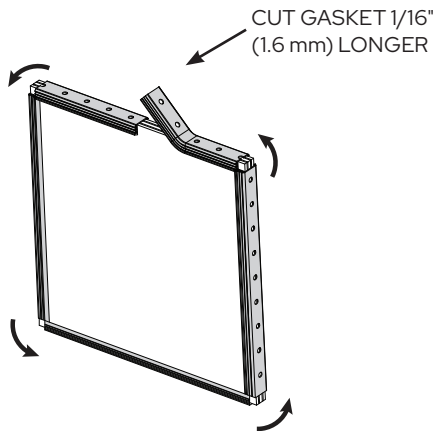


FIG. 1

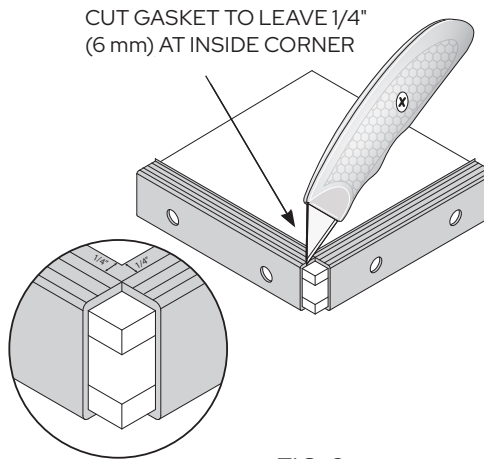


FIG. 2

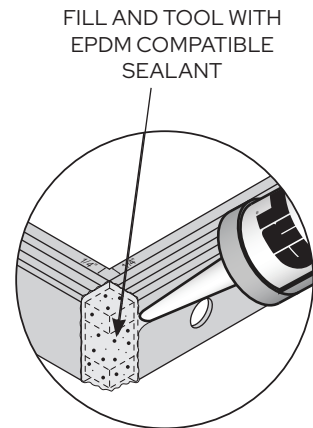


FIG. 3

4. **Install the top rail first**, the bottom rail second, and then the stiles.
5. Using a wood block and Cat. No. ST57532 CRL Soft-Face Power Hitter Mallet, work the top rail onto the glass and gaskets until it is fully seated. (FIG. 4)

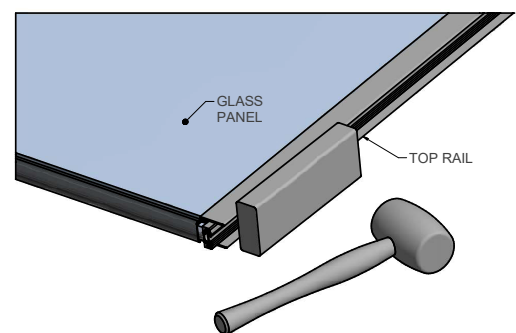
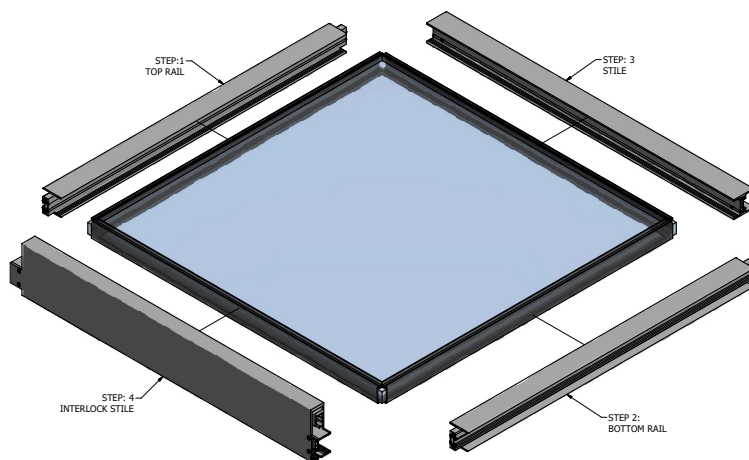


FIG. 7

NOTE: If difficult to install the verticles try engaging the horizontal and vertical at the ends and secure with two screws. Work you way from the ends toward the middle till flush.

DOOR PANEL ASSEMBLY AND GLAZING (Continued)

6. **Apply Cat. No. RTV408** sealant to the ends of the bottom rail. (FIG. 5)
7. Install the door stile. When installing lead stile start at top rail and align extrusions. Use soft face mallet to engage extrusion and secure with fasteners and shear chip. (FIG. 6)
Use mallet to align and engage bottom rail and secure with screws. Continue using wood block and mallet to push on stile until it is straight and has engaged 1/2" of glass bite.
8. Install door interlock. Use the same process from step 7.

NOTE: Use D.I. Water on gasket to make glazing easier.

NOTE: Make sure **ALL** fasteners are coated with CRL WS140 wax lubricant to prevent screw breakage.

9. Secure all corners with fasteners shown. (FIG. 7)

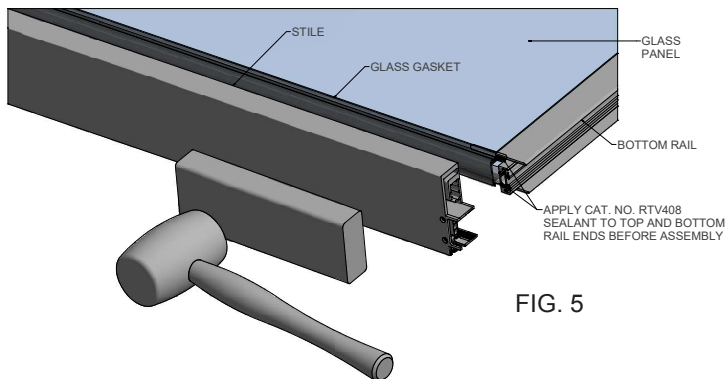


FIG. 5

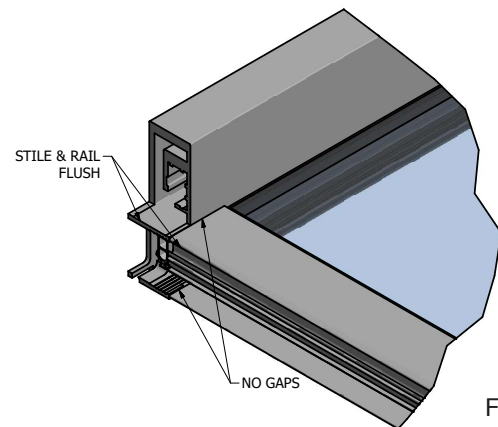
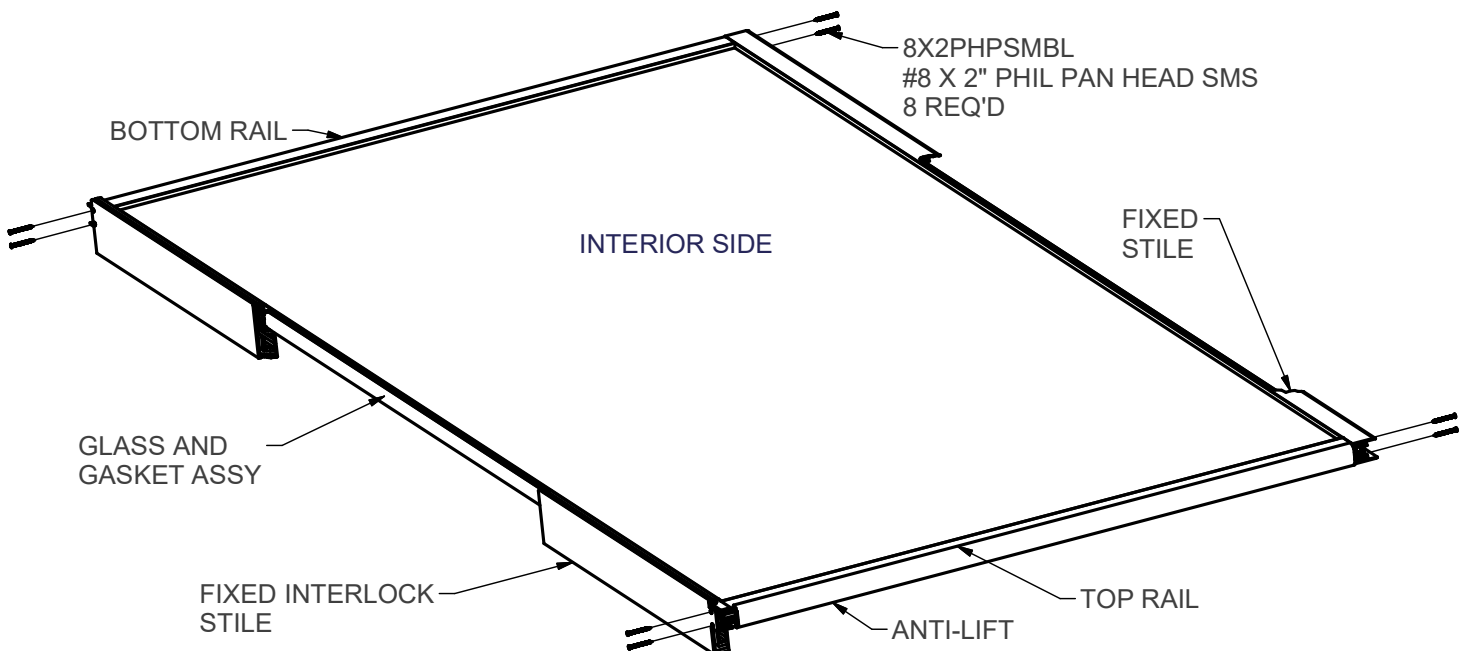


FIG. 6



VENT PANEL INSTALLATION:

1. Prep the vent panel sill. For raised sill add the PVC spacer and track assembly as shown. The PVC spacer has notches at the bottom that need to be aligned with weep holes on the center strut to allow for weeping of water. Flush sill does not require PVC spacer. (Fig. 8)

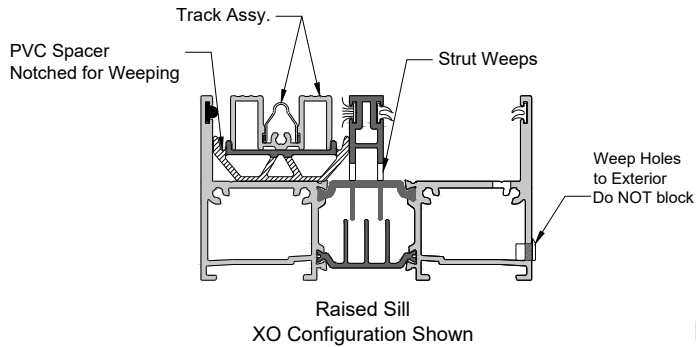
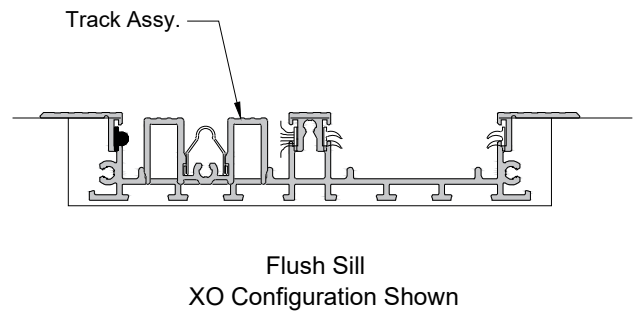


FIG. 3



2. Install the sliding vent panels from the exterior before the installation of the fixed panels. If glazing is being done from interior reverse the order.
3. The slider panel will have the bottom rollers attached from the factory to the bottom rail. Lift and tilt the vent panel and insert it into the interior of the head . (Fig. 9)

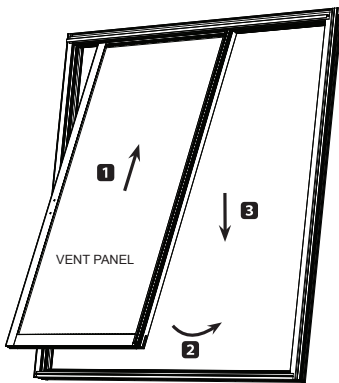
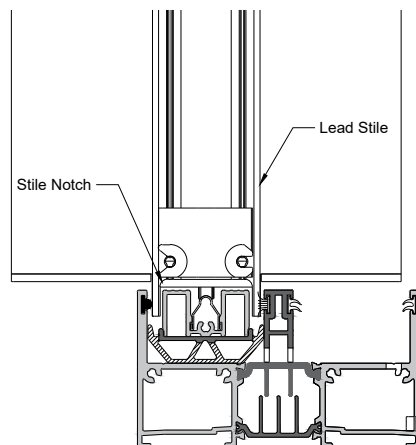
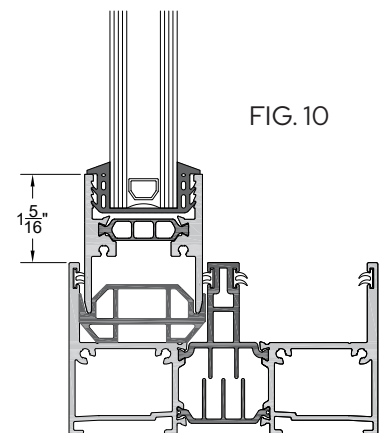


FIG. 9



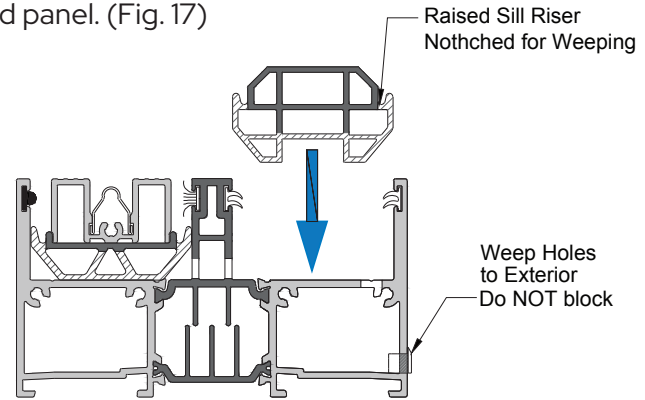
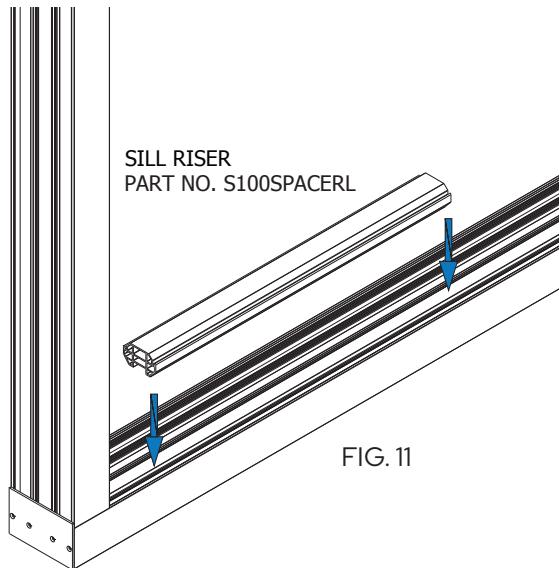
4. Lift the panel and swing the There should be a 1-5/16" to panel to ensure panel is sittir



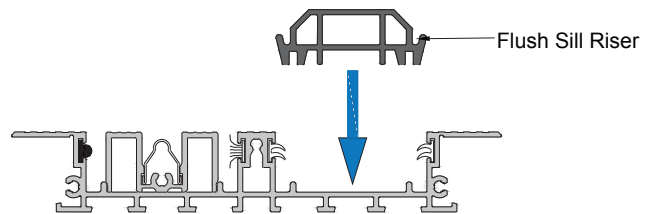
while centering the bottom notch.
eveal at both ends and center of the

FIXED PANEL INSTALLATION:

1. Insert the sill riser strip into the sill before the fixed panel. (Fig. 17)

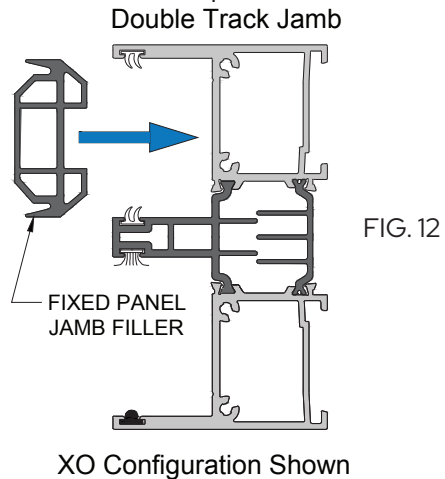


Double Track Raised Sill
XO Configuration Shown

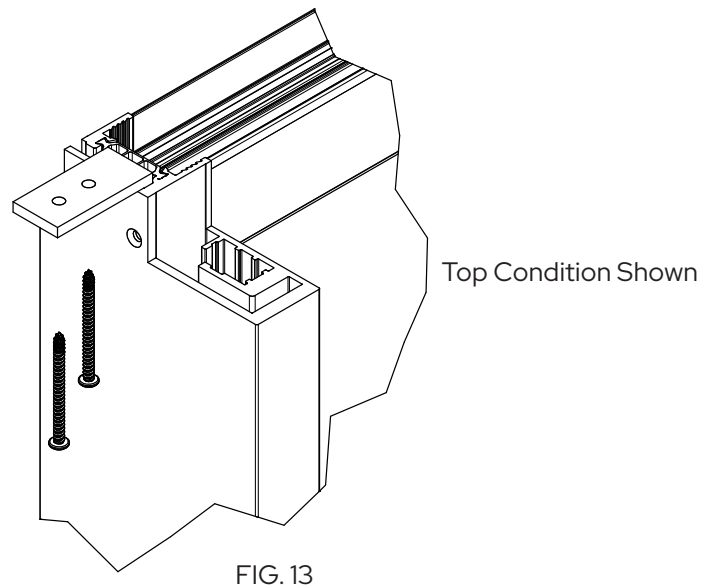


Flush Sill
XO Configuration Shown

2. Insert the fixed panel PVC filler into the fixed panel jamb. (Fig. 12)



3. Attach two Part No. S100FXCLIP L-shaped anchor clips to the fixed interlock. Insert clip in place on the outside top and bottom of the fixed interlock (Fig. 13)



FIXED PANEL INSTALLATION (Continued):

4. From the exterior, tilt the fixed panel and insert into top track. Swing bottom of panel in and set in place. The sill riser should sit centered on the rail. There should be a 1-5/16" top and bottom rail reveal. Measure rail reveal at both ends and center of the panel to ensure panel is sitting flat on sill riser. (FIG. 14)

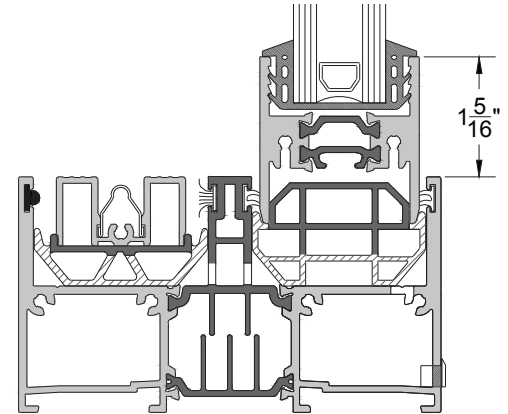


FIG. 14

5. Slide the fixed panel over and into the side jamb. There should be a 1-5/16" stile reveal. Measure stile reveal at top, center, and bottom of panel to ensure panel is fully engaged at the jamb and sitting flat on the sill riser. (FIG. 15)

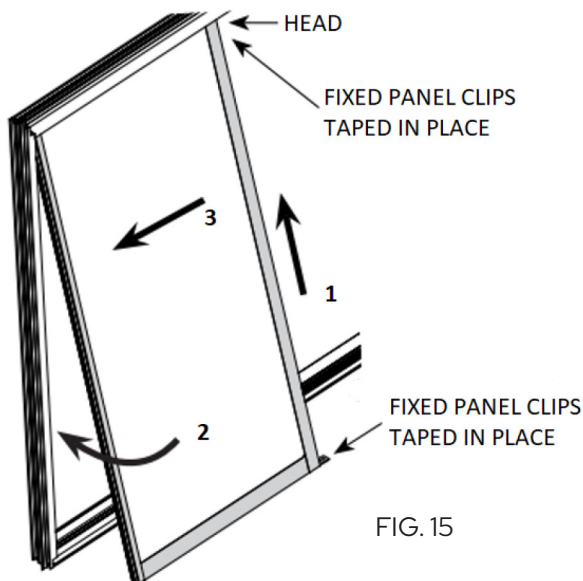
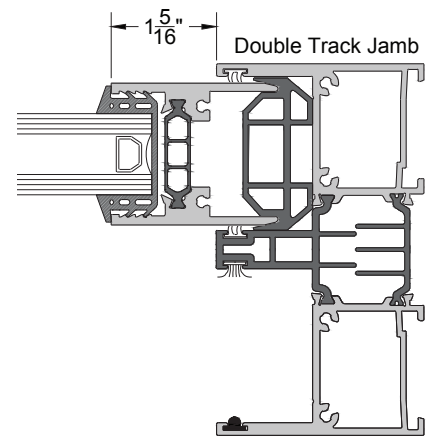


FIG. 15



XO Configuration Shown

6. Remove the tape from the fixed panel clips. Use #10 X 3/4" Pan Head SMS to fasten the top and bottom fixed panel clips to the top and bottom tracks. Apply sealant over clip screw heads. Seal all screw penetrations in the bottom track during assembly. (FIG. 16)

HEAD AND SILL:
CAT. NO. 33S SEALANT
AT ALL SCREW
PENETRATIONS AND
OVER SCREW HEADS

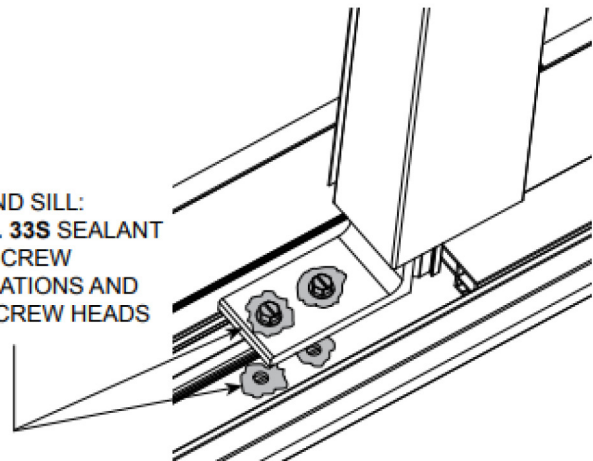
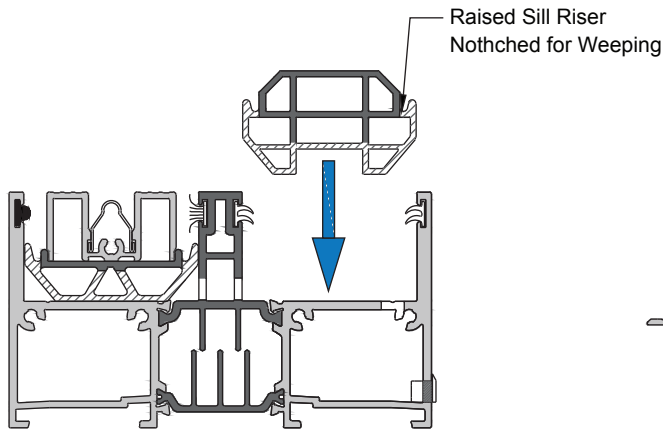


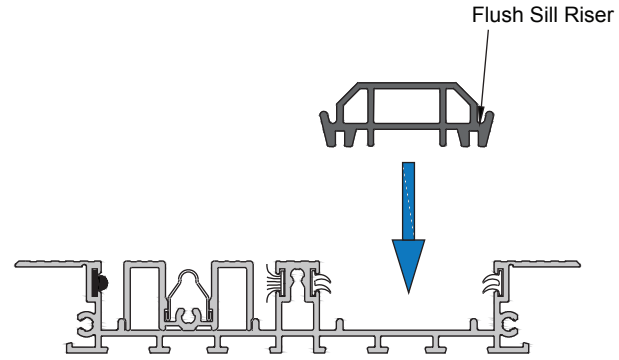
FIG. 16

FIXED PANEL INSTALLATION (Continued):

7. Install PVC sill riser in the space between the fixed panel and lock jamb. For raised sill the PVC spacer has notches at the bottom that need to be aligned with weep holes on the center strut to allow for weeping of water. Flush sill spacer is not notched.

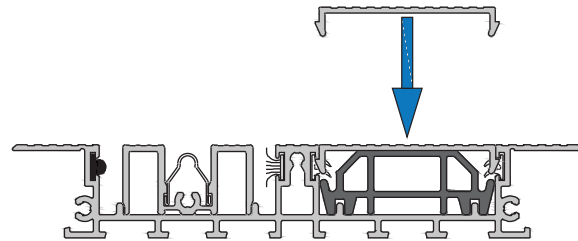
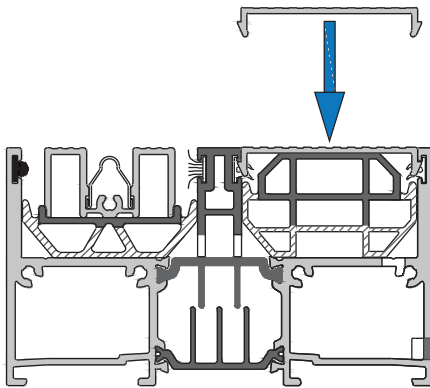


Double Track Raised Sill
XO Configuration Shown

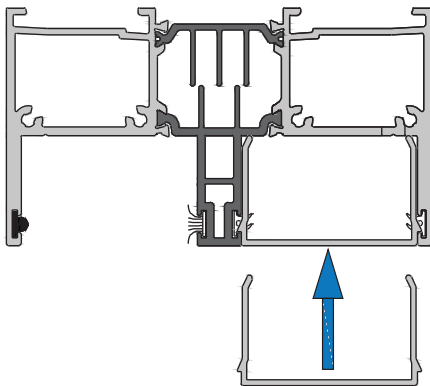


Flush Sill
XO Configuration Shown

8. Once PVC risers are installed install the threshold cap into the sill between the fixed panel and lock jamb.

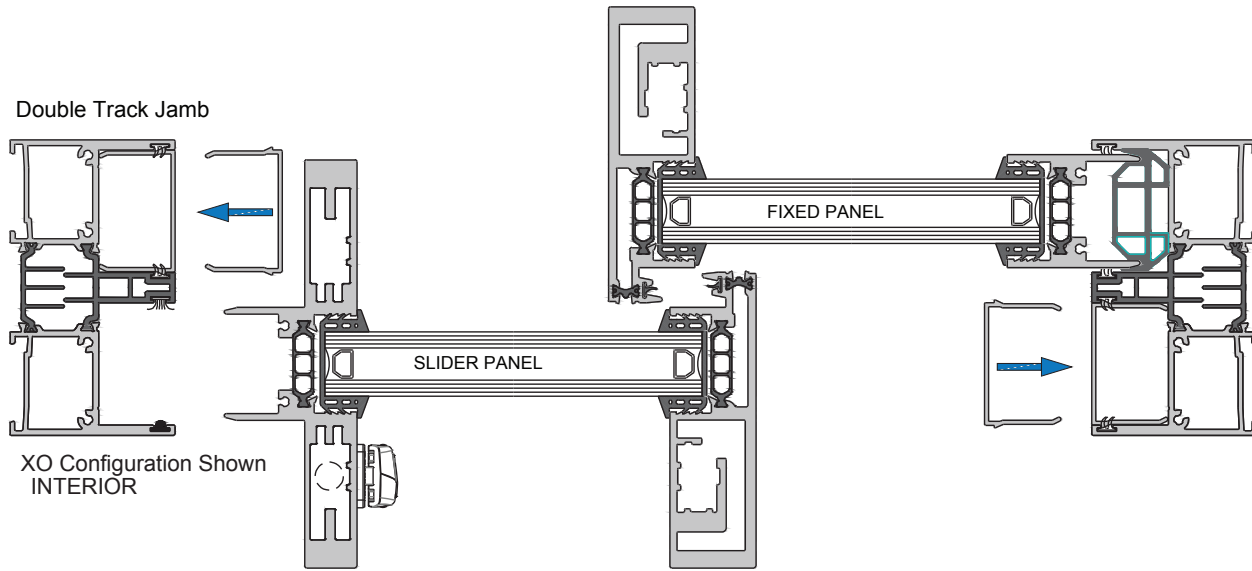


9. Install the header filler between the fixed panel and lock jamb. For OXXO the filler will come in two equal length parts for ease of install.

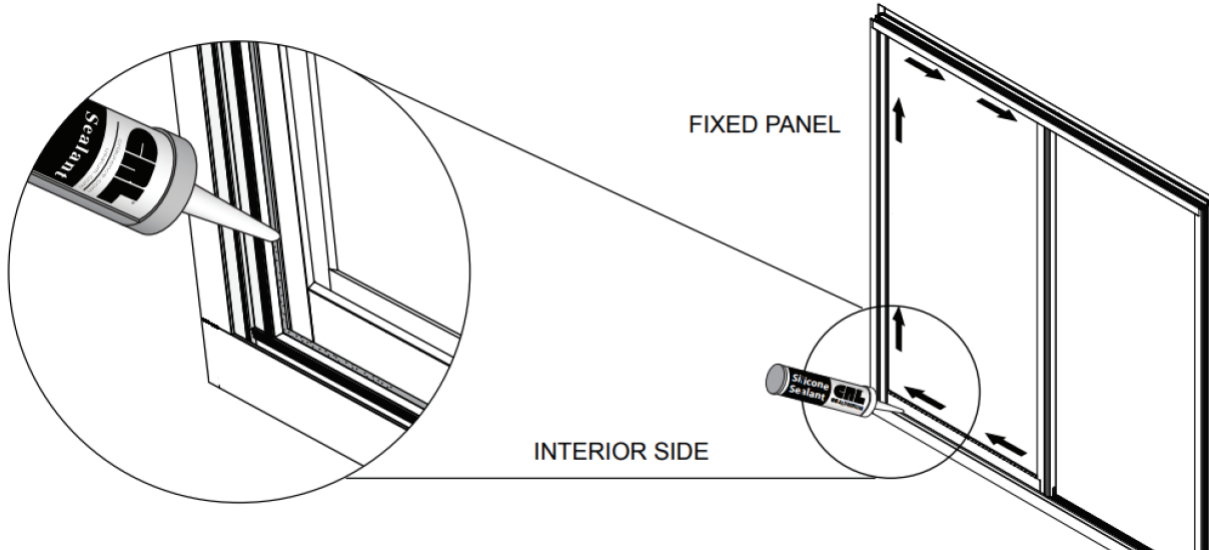


FIXED PANEL INSTALLATION (Continued):

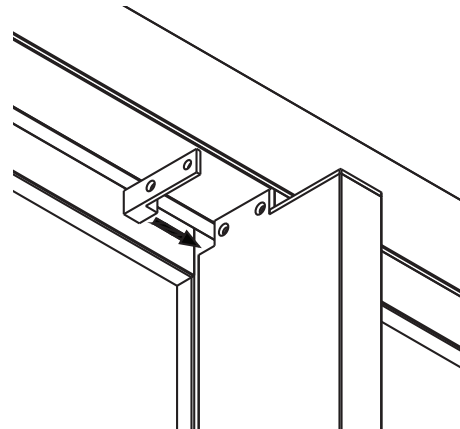
10. Install jamb fillers in the empty jamb pockets.



11. Seal the interior side of the fixed panel to the frame using RTV408 sealant. Run a 6" bead of sealant at each corner in both directions. Run a 6" bead of sealant at the head and sill at the interlock location.

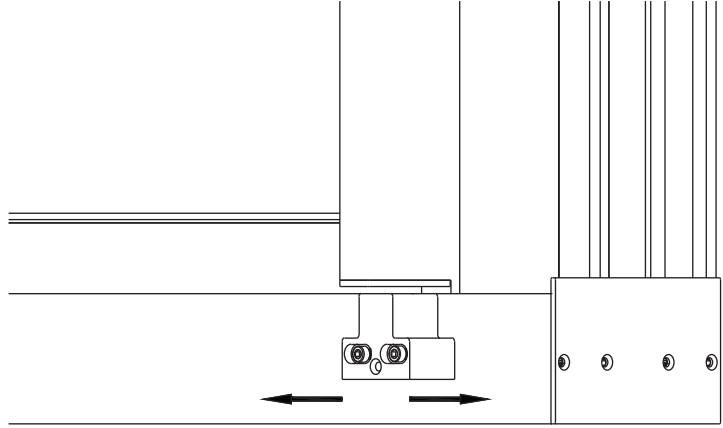


12. There will be a small cavity left after installing the panels at the interlock and top track junction. To plug that cavity remove the two top interlock screw spline screws, place the plug in the cavity and re-install the two flat head screws. Seal around plug using RTV408.



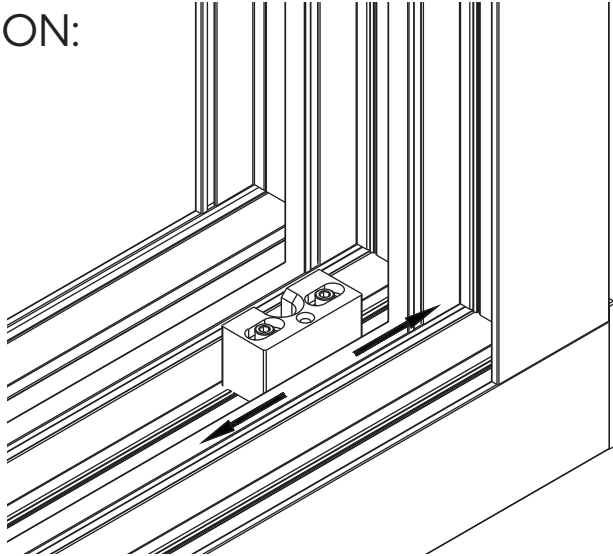
LOCK RECEIVER INSTALLATION:

Flush mounted bolt receivers are attached to the face of the raised head and sill. Attach the receiver block to the head and sill using the provided 10-24 socket head caps screws. After adjusting bolt receiver secure it in place using a #8 flat head screw.



RECESSED RECEIVER INSTALLATION:

Recessed are attached to the top and bottom tracks using provided 10-24 socket head cap screws. After adjusting the bolt receiver secure it in place using a #8 flat head screw.

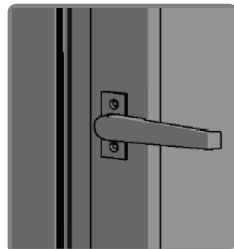


OPERATING CATCHES:

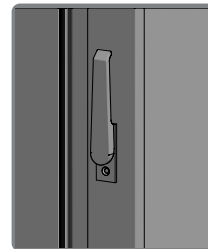
Catches are factory installed. The catch activates bolts into the top and bottom track to lock the door in the closed position. The catch handle faces down in the closed position. To activate locking bolts pull handle outward and rotate handle to face in the up position. Locking bolts must be in the unlocked position during installation.



Catch Handle faces down when locked.



Lift Handle away from plate to rotate up into unlocked position.

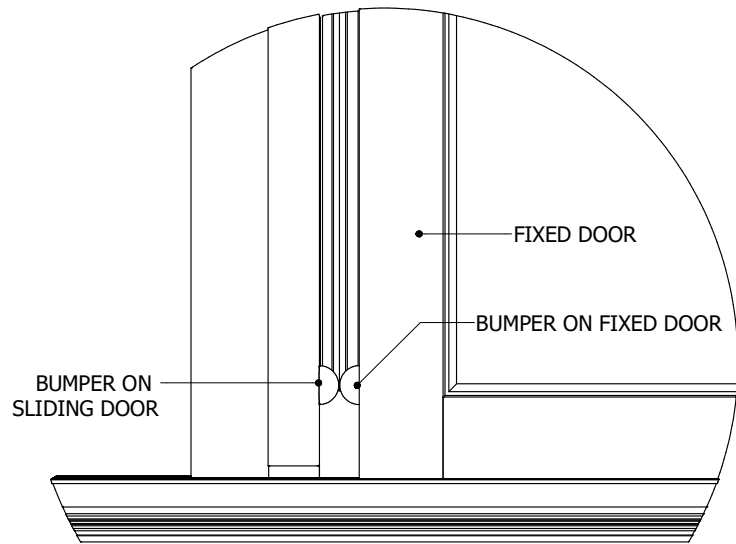


Catch Handle faces up when unlocked.

Note. Do not use Catch Handles to operate the sliding panel. Lead stile handles are to be used to open and close the sliding panel.

INSTALL SELF-ADHESIVE DOOR BUMPERS:

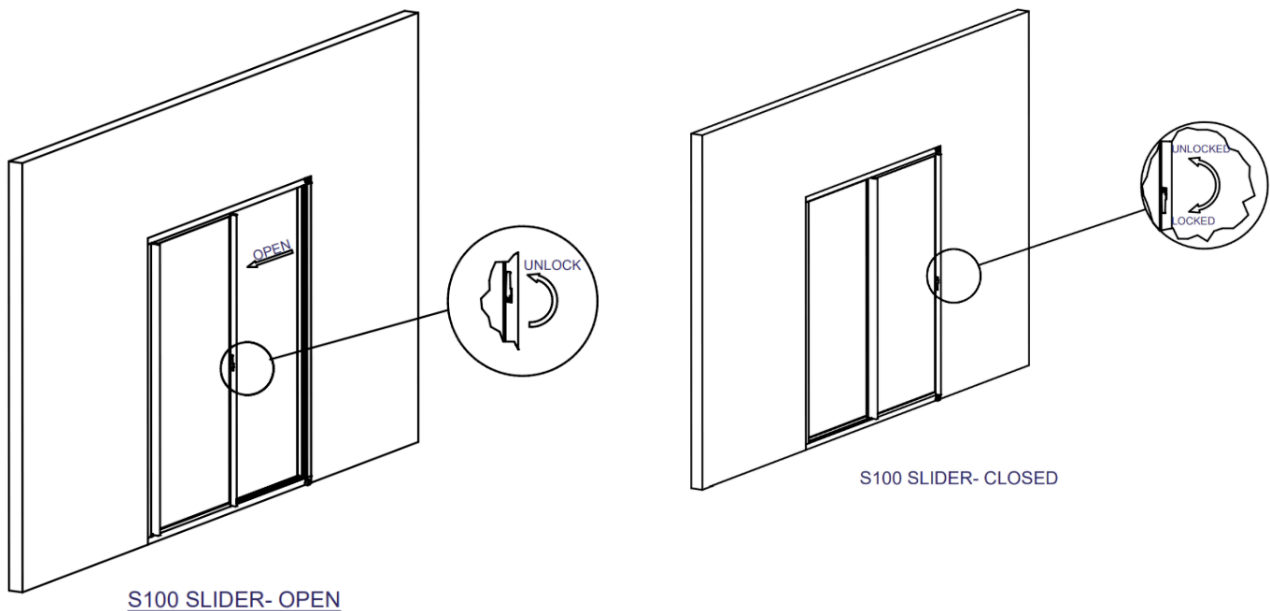
Bumpers are supplied with every unit. Bumpers can be located in hardware box, place (1) bumper 1-1/4" from bottom of Sliding door. Place the other bumper at the same location on Fixed door



PERFORMANCE CHECK:

NOTE: Panels must be opened and closed in a specific order that depends on the system configuration

1. Turn Catch Handle to retract Shoot Bolts from top and bottom track on active door. Make sure catch handle is able to rotate freely.
2. Next check rolling function by sliding door from open to close position



CARE AND MAINTENANCE

NOTE: The Palisades System must be correctly installed or it will not function properly, causing abnormal stress on components and lead to premature failure.

Your system should be easily operated. The doors should not bind or drag on the floor and locking points should engage smoothly. When the doors are closed, the reveal between panels and head, and between panels and sill should be consistent with no daylight seen from the inside.

As soon as you notice any problems, have them corrected by a qualified technician. A qualified technician may need to adjust the system periodically to compensate for any building movement or settlement.

Proper Operation

Panels should be opened and closed in the proper order and manner shown in the Operation section of this manual. Locking points should be gently opened and closed and not forced. If force is necessary, contact a qualified technician to adjust your system.

General Maintenance

Routine maintenance is required to maintain the appearance and safe operation of your system. Wash and inspect your system on a regular basis following these guidelines. Have a qualified technician replace worn or damaged components or perform any necessary repairs.

FRAME PERIMETER: Check the top track for signs of deflection or bowing in the middle. It should have little or no sag as you look down the length from one end to the other. Tighten and replace fasteners as needed. Inspect the exterior perimeter seal. Replace old, loose caulking and seal any gaps with a good quality sealant.

TOP TRACK: Inspect inside the top track for debris. Small obstacles can damage both the track and rollers, resulting in rough or noisy operation. Clean the inside surface of the track with a small brush or damp cloth and vacuum cleaner fitting.

BOTTOM TRACK: Remove debris and other foreign bodies that have dropped into the sill track immediately to prevent damaging the guides. Ensure all weep holes are clean and clear of any obstructions. Do not allow standing water in the track.

ALUMINUM COATING: Exposed surfaces should be cleaned regularly. Wash with soap or mild detergent and warm water followed by rinsing with clean cold water and wipe dry. Do not use aggressive alkaline or acid cleaners. Any chips or scratches must be repaired immediately with proper touch up paint.

GASKETS: Check gaskets for proper seating and condition. Remove dust and any deposits from gaskets and lubricate with a silicone spray applied to a soft cloth.

ROLLERS, GUIDES, BRACKETS AND HINGES: Wipe exposed surfaces with warm soapy water and a soft rag, and then rinse clean and wipe dry. Apply Cat. No. SP295 Dry Lubricant to all surfaces and remove excess with clean cloth.

HARDWARE: All hardware, hinges and handles should be periodically cleaned with a soft cloth and mild cleanser. Rinse clean and wipe dry. Ensure all fasteners are tight and in good condition.

FREQUENCY: These maintenance procedures need to be performed as often as necessary to prevent deterioration in the installed environment. As a guide, if a window or door requires washing then wash and inspect the hardware. At the minimum we recommend washing and inspecting your system every 6 months in general environments and every 3 months in marine and industrial environments.

Environments within one mile of a seacoast can be extremely corrosive and extra care should be taken to maintain your system. Open and close completely a system at least once a week and inspect all surfaces. Do not allow salt or sand to build up on surfaces. Wash and inspect your system at least once a month, more frequently as needed.