

LAWSON INDUSTRIES SERIES 9400 IMPACT SLIDING GLASS DOOR ASSEMBLY INSTRUCTIONS



Figure 1

NOTICE

READING THESE INSTRUCTIONS FIRST AND FOLLOWING THE PROCEDURES IN PROPER SEQUENCE WILL SAVE FRUSTRATION AND REDUCE COSTLY MISTAKES AND WASTED TIME.

- Protect mainframe only with light coating of oil, grease or soap. Action of lime in plaster can destroy finish.
- Sill must be smooth ... buff edges and fill any valleys left by mason. A ridge or lump could cause latching problems.
- If installed in wood surround, measure assembled doorframe, add shim space and make surround to these dimensions.

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- Before installing any sliding glass door it is recommended that you read through this document, identify all of the parts being used and verify that you are not missing any before attempting to install the product. This will keep you from having to board up an opening if any parts are damaged or missing.
- Once all parts are accounted for and are viewed as being in good condition, only then should you follow the instructions step by step.

FRAME ASSEMBLY BY-PASS (if pocket door skip to pocket section)

1) Gather the main frame header, sill and jambs. Trace the frame ends with sealant.

Note: It is good practice to seal the outside of all four corners heavily after the frame is assembled.

2) Assemble mainframe head, jambs, and sill using the supplied Philips pan head screws at each assembly hole. See *Figures 2-3* >

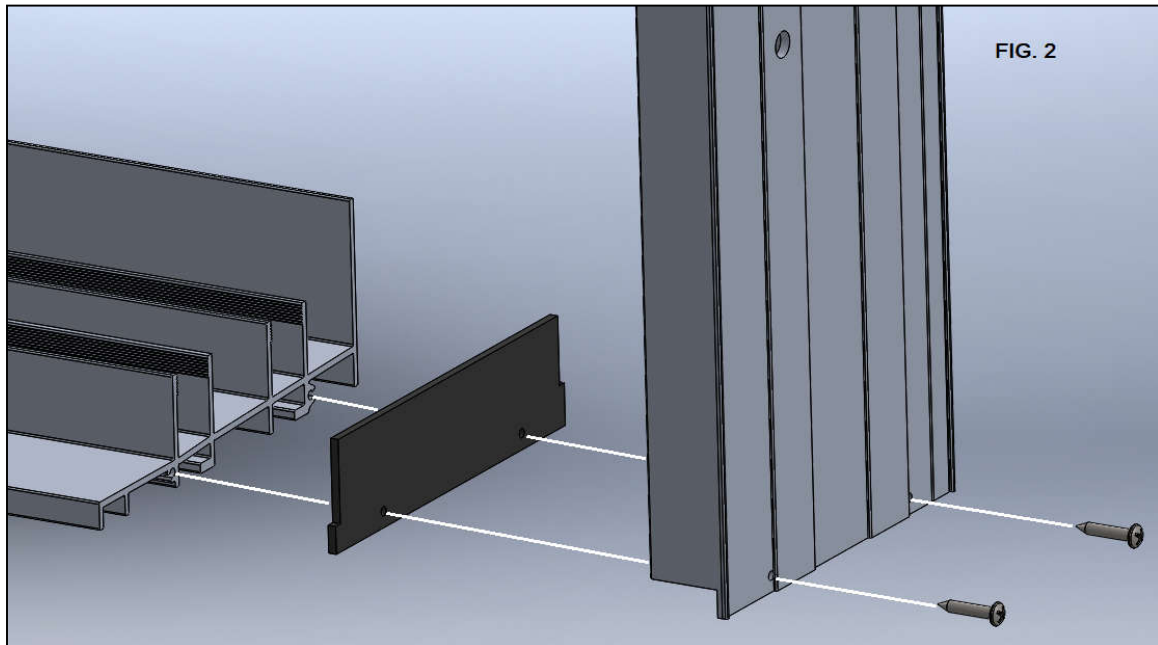


Figure 2

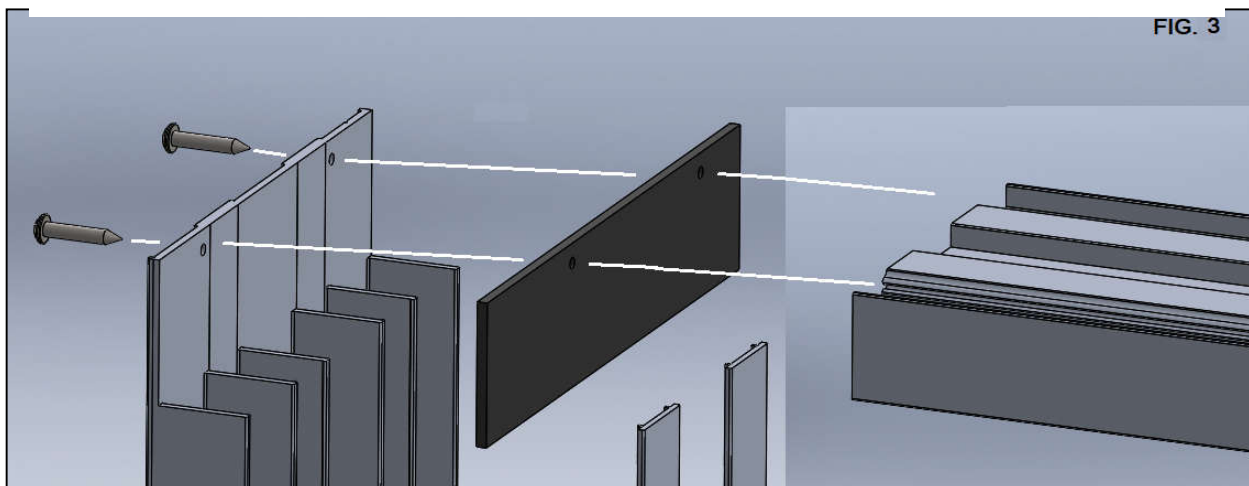


Figure 3

3) IF NEEDED TO MEET WATER PRESSURE REQUIREMENTS, apply the sill riser adapter to the main frame sill. First, place sealant along entire length of riser adaptor in area shown (See Figure 4).

4) Set the track on an even, flat, fully supported surface and then connect the sill riser to the sill.

APPLY SEALANT INSIDE GROOVE BEFORE INSTALLING.

Note: Risers can be applied at the end of the installation as well should panels need to be set from the inside or to protect from job site damage.

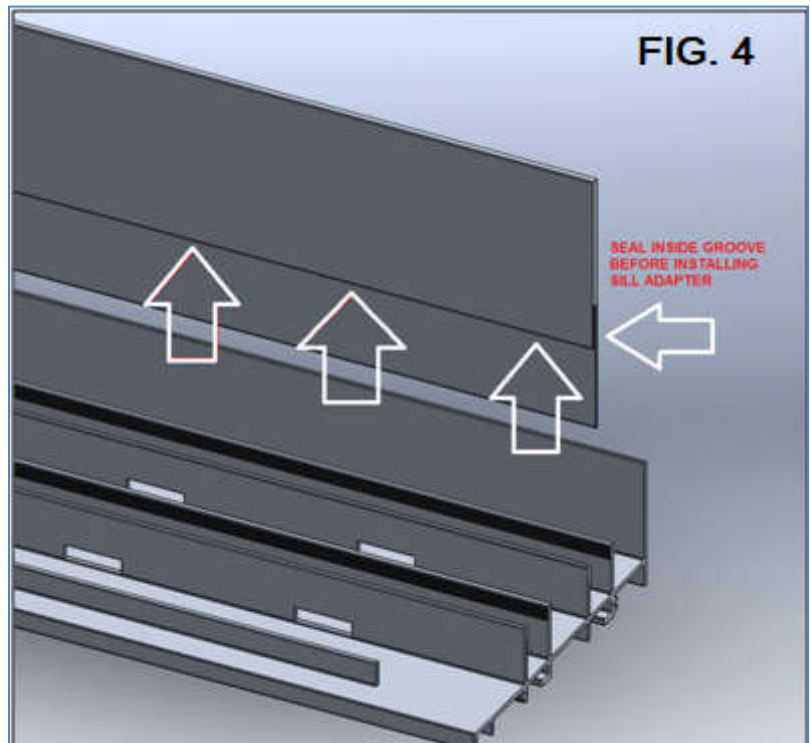


Figure 4

5) Make sure the opening which the door is to be installed to is clean and clear of debris. Dry fit the frame into the opening. Gap should be no more than 1/4" max. on all sides.

6) Once the frame fits into opening freely, seal under entire length of sill and all frame seams. Make sure to include where the frame sill and head meet the main frame jambs.

7) Set frame in bed of mud (1/2" deep max) and shim as necessary to make frame plumb, level and square. Shim (1/4" max) behind all frame jamb and header installation screws and near mortise keeper to prevent frame distortion when installation screws are tightened.

Important: Frame head and track must be level, square and plumb at frame jambs. **Measure at head, sill and midpoint horizontally to be certain that frame is not bowed, also measure from top to bottom across the entire frame from left to right** to make sure there are no rises in the sill or dips in the header. See Figure 5 >

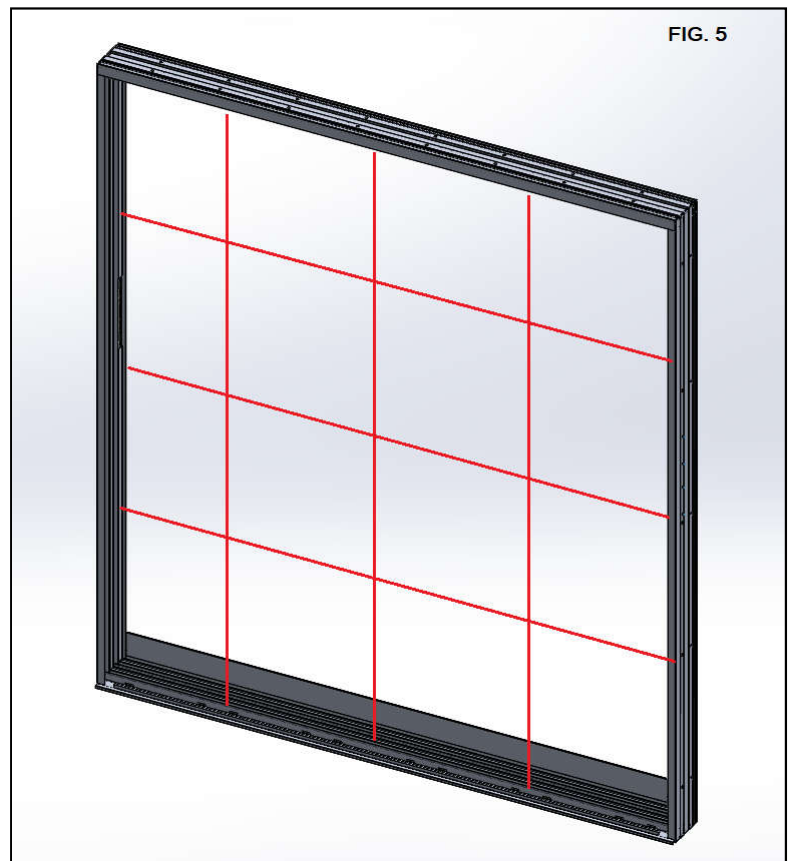


Figure 5

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Rises in the sill or dips in the header in concrete openings could prevent the panels from being installed. Do not over tighten frame installation screws as this could warp the frame. For wood openings, make certain that the jamb bucks do not extend down into the sill recess.

Helpful Tip: Use a short torpedo level across the sill (without setting it on the riser) and at the head to verify the sill and head are level from inside to outside. If the track at sill or head are not level from inside to outside it could cause stiff panel operation. Take notice that the head and sill are not the same depth, it is important to make sure that the tracks align at the head and sill in order for the panels to roll correctly. Use a plumb bob to make sure the head and sill are in alignment, this is especially important in pocket conditions.

Note: Do not force the frame into the opening. If the frame is tight then clear away obstructions.

SEAL ENTIRE WIDTH AND LENGTH OF FRAME TO BUILDING CODE

8) **Anchor frame to opening** per LAWSON specifications and in compliance with all local code requirements, Miami-Dade NOA, or test reports.

9) Once the frame is secured and is plumb, level, and square, **seal installation screws**.

10) Next install the **frame head caps** as shown In Figure 6>.

11) After installation screws are sealed, **install the sill anchor covers** as shown **after inspection**.

See Figures 6 & 7 for positioning:

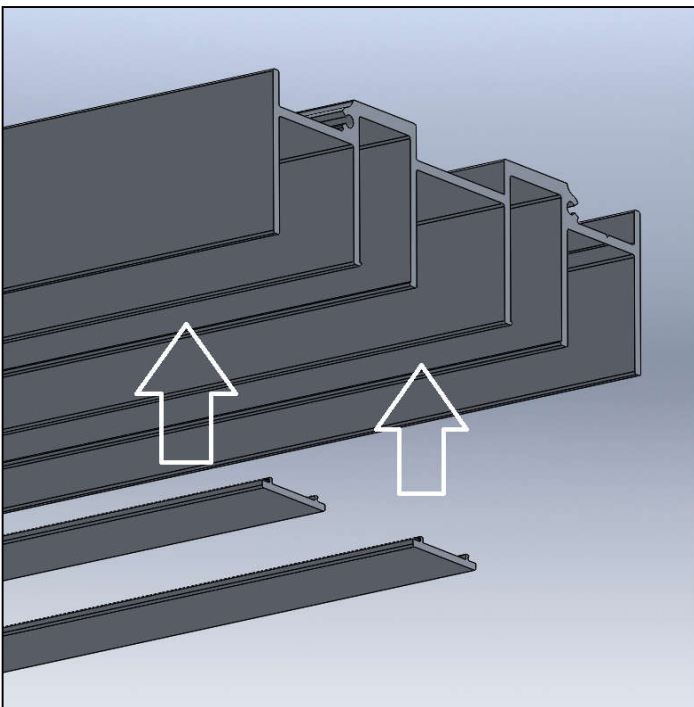


Figure 6

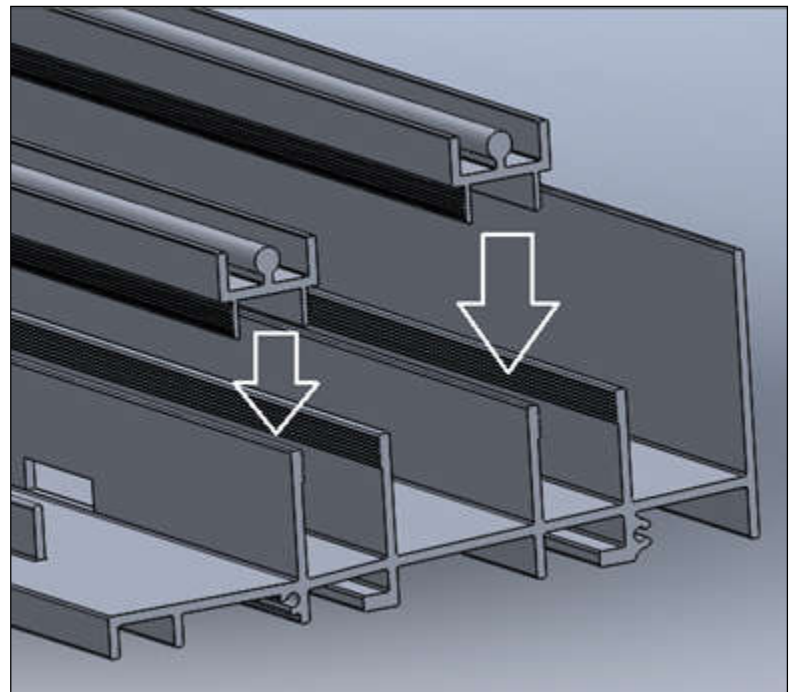


Figure 7

FRAME ASSEMBLY POCKET

1) Gather the main frame header, sill and jamb (if single pocket). Trace the frame head and sill ends with sealant on jamb side of single pocket doors. It is not necessary to trace the frame ends if the unit is a double pocket door.

Note: It is good practice to seal heavily the outside of all corners where the frame head and sill meet a jamb after the frame is assembled. Not available on double pockets. (Refer to Figures 2 & 3)

2) Assemble mainframe head, sill, and jamb, on a single pocket door using the supplied Philips pan head screws at each assembly hole. This step is not required on double pocket units.

3) Apply the sill riser adapter to the main frame sill. First, place sealant along entire length of riser adaptor in area shown (Refer to Figure 4)

4) Set the track on an even, flat, fully supported surface and then connect the sill riser to the sill.

Important: Sill riser must be installed prior to the p-hook being installed if needed to meet water pressure requirements. Sill riser can be attached near the end of the installation but must be attached prior to installation of the p-hook should panels need to be set from the inside or to protect from job site damage. It is recommended that the sill riser be attached (without sealant) until the main frame is secured.

5) Make sure the opening which the door is to be installed is clean and clear of debris. Dry fit the frame into the opening. Do not force the frame into the opening. If the frame is tight then clear away obstructions.

6) Once the frame fits into the opening freely, set entire length of sill in a bed of mud (1/2" max depth) seal and all frame seams. Make sure to include where the frame sill and head meet the main frame jamb if the unit is a single pocket. (Refer to Figures 2-3)

7) Set frame in opening and shim as necessary to make frame plumb, level and square. Shim behind all frame jamb and header installation screws and near mortise keeper to prevent frame distortion when installation screws are tightened.

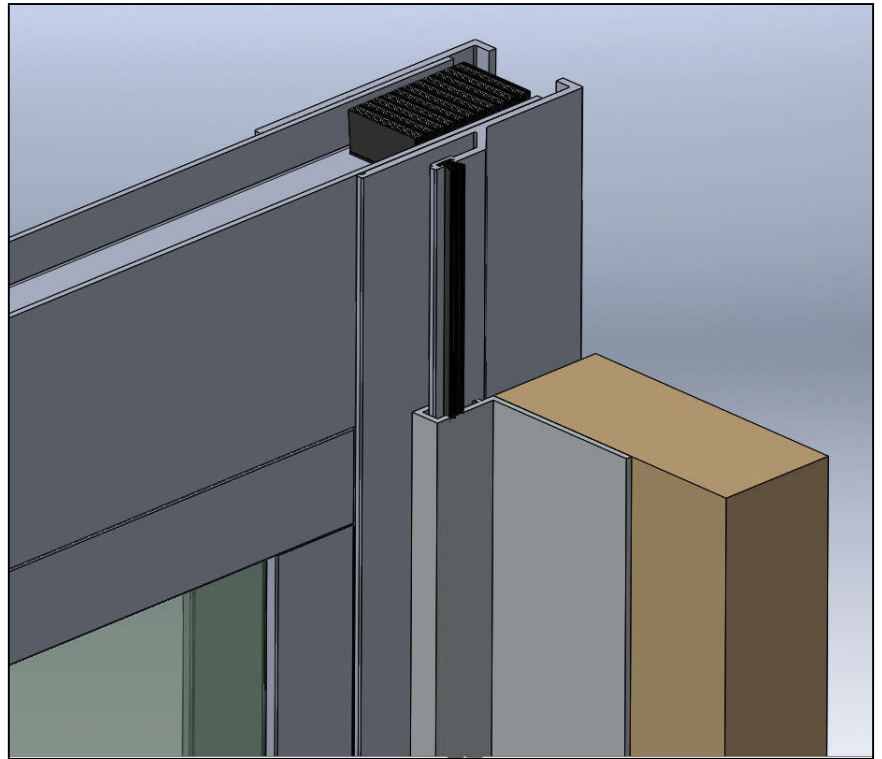


Figure 8

Important: Frame head and track must be level, square and frame jamb (if used) must be plumb at jamb. **Measure at head, sill and midpoint horizontally to be certain that frame is not bowed, also measure from top to bottom across the entire frame from left to right** to make sure there are no rises in the sill or dips in the header. Rises in the sill or dips in the header could prevent the panels from getting installed. Do not over tighten frame installation screws; this could warp the frame. *Refer to Figure 9*

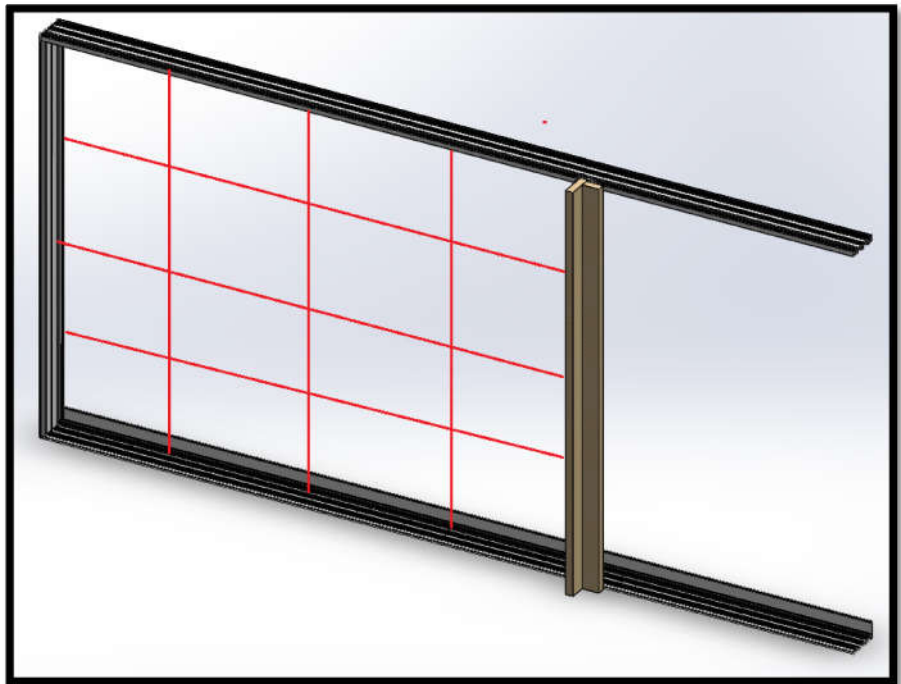


Figure 9

Helpful Tip: Use a short torpedo level across the sill (without setting it on the riser) and at the head to verify the sill and head are level from inside

to outside. If the track at sill or head are not level from inside to outside it could cause stiff panel operation. Take notice that the head and sill are not the same depth, it is important to make sure that the tracks align at the head and sill so that the panels to roll correctly. Use a plumb bob to make sure the head and sill are in alignment, this is especially important in pocket conditions.

8) Anchor frame to opening as per LAWSON specifications and in compliance with all local code requirements, Miami-Dade NOA or test reports.

9) Next attach the P-hook.

Note: Pocket doors will only assemble at head, jamb and sill if single pocket. The Double pocket main frame is not assembled, as there are no jambs supplied with the unit. Riser heights will determine how many dust plugs will be needed at the sill. Install as many as needed to fill the void from the bottom of the panel to the underside of the P-hook

10) Hook strip P-hook will attach interior panel to substrate. Attach frame and hook strip to opening as per LAWSON specifications and in compliance with all local code requirements, Miami-Dade NOA or test reports.

11) The P-hook is not notched and sits on top of the sill and just under the header.

12) If a panel is not available to set the location of the p-hook from inside to outside then align the p-hook back with the riser and header.

13) Once the frame is secured and is plumb, level, and square; seal installation screws.

14) After installation screws are sealed and inspected, install all anchor covers. (See Figures 3, 6 & 7)

POCKET DOOR PANEL STOP INSTALLATION

Pocket door panel stops provided are installed behind the end pocket panel at sill track end with screw as shown.

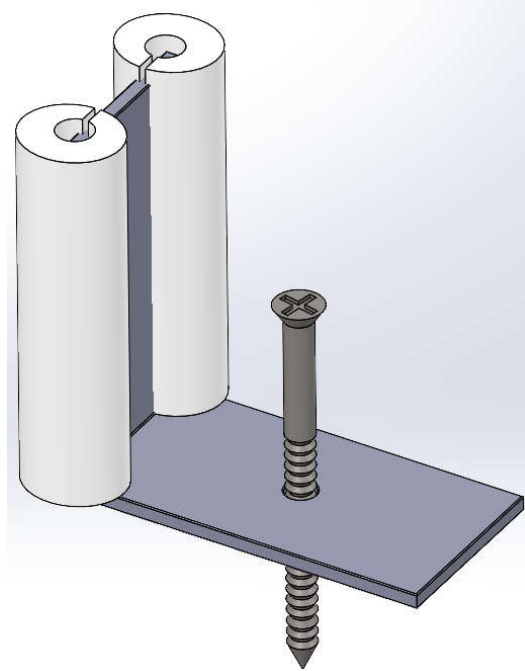


Figure 10

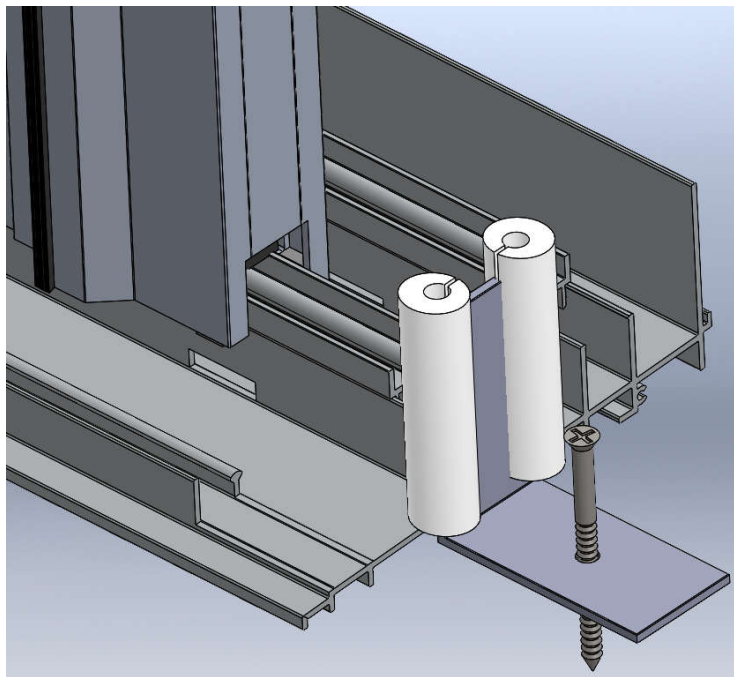


Figure 11

PANEL INSTALLATION

LAWSON offers many sliding glass door configurations, please see the panel orientation sheet to make sure the correct panels are on the correct tracks.

- 1) Shipping labels on panels will have the panel number and letter name on them; they will be installed in order from left to right. Please see the configuration appendix for the proper track the panel goes on to.
- 2) **Position the inner most panel** so that the top of panel slips over track frame header. Swing bottom of panel in until bottom of panel is aligned over sill and set panel on roller spline. (*Figures 13-15 next page*)
- 3) Repeat procedure, with next outer panel until all panels are installed.
- 4) **Panels are always installed with roller adjustment holes to the exterior.** (*Figure 12.*)

To adjust panel rollers, use a Phillips head screwdriver to turn adjustment screws located on the bottom outside of panel. Screw guns can strip the adjustment and therefore are not recommended. (*Figure 20.*)

- 5) To raise panels, pick up the panel at the edge to relieve the weight pressure on the wheels and then adjust by turning adjustment screw clockwise. To lower panels turn adjustment screws counter clockwise then use weight pressure on the panel to set the wheels to the new adjustment level.



Figure 12

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Figure 13

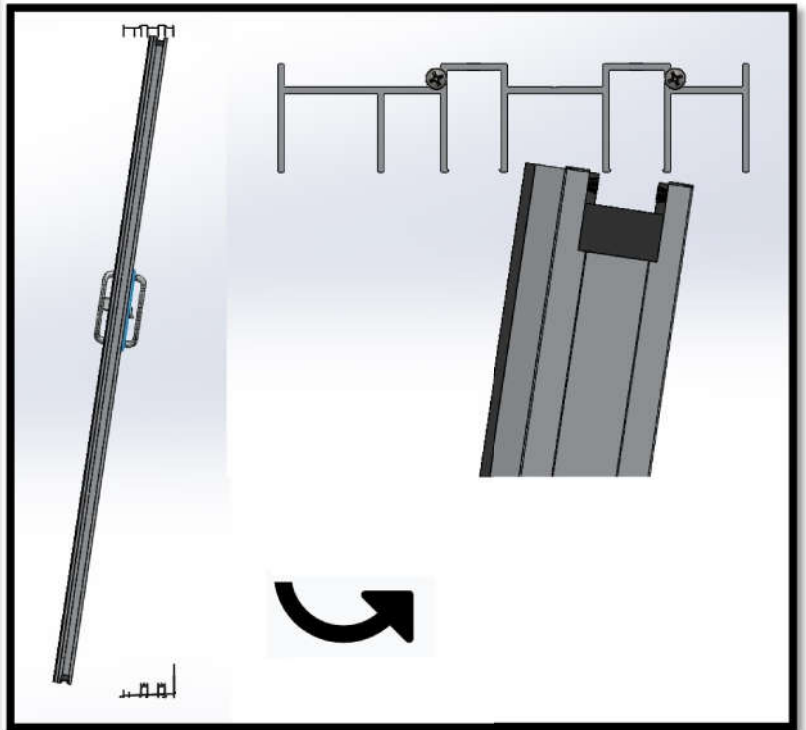


Figure 14

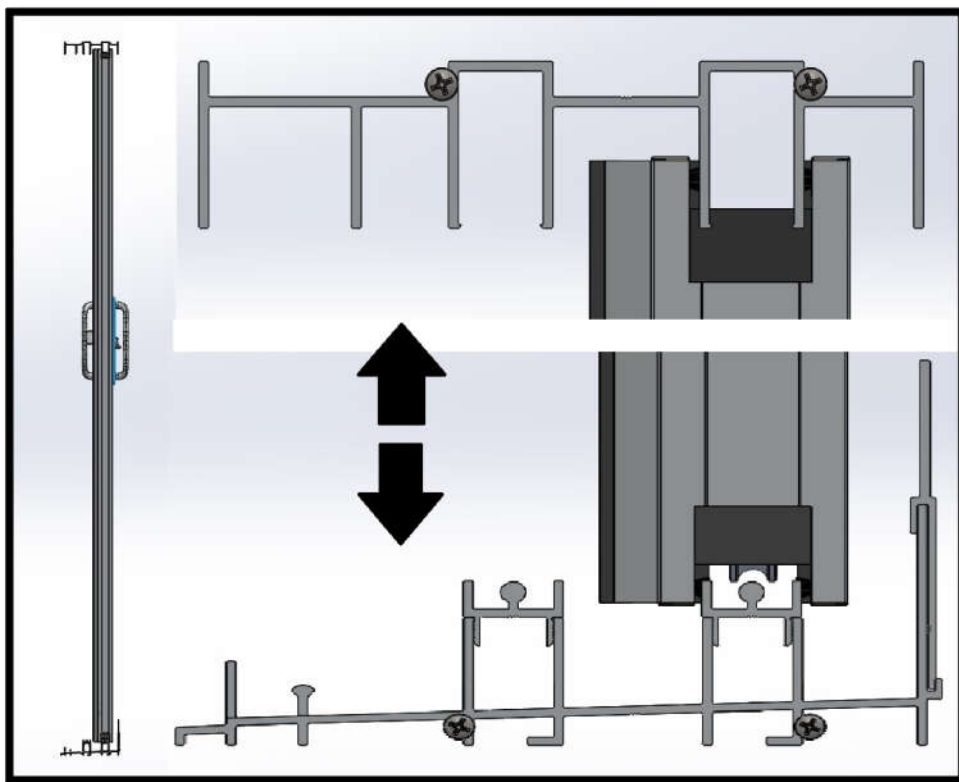


Figure 15

Repeat procedure, with next outer panel until all panels are installed. (Figures 16-19)

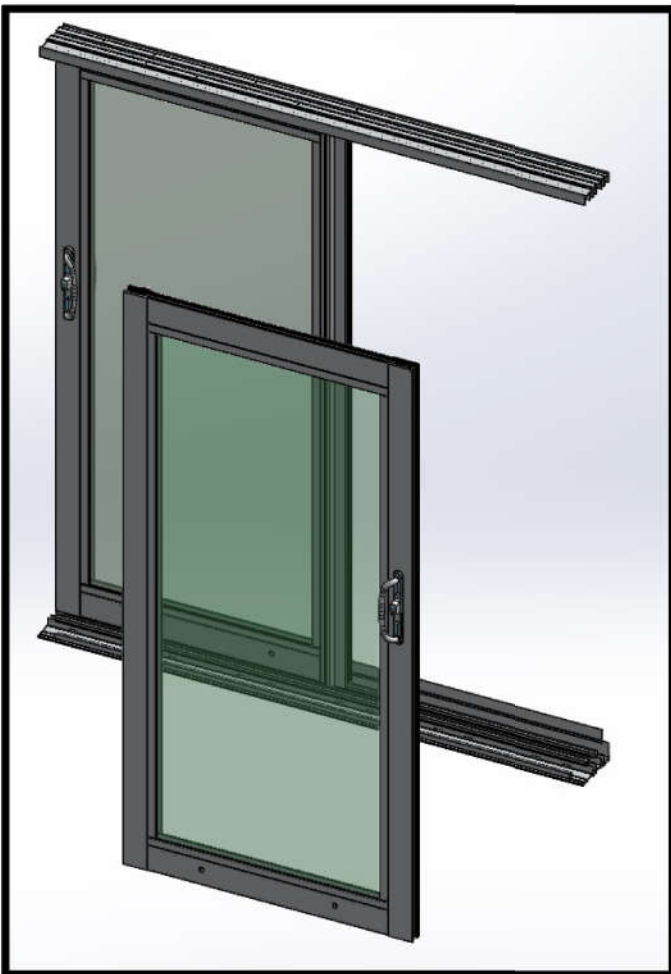


Figure 16

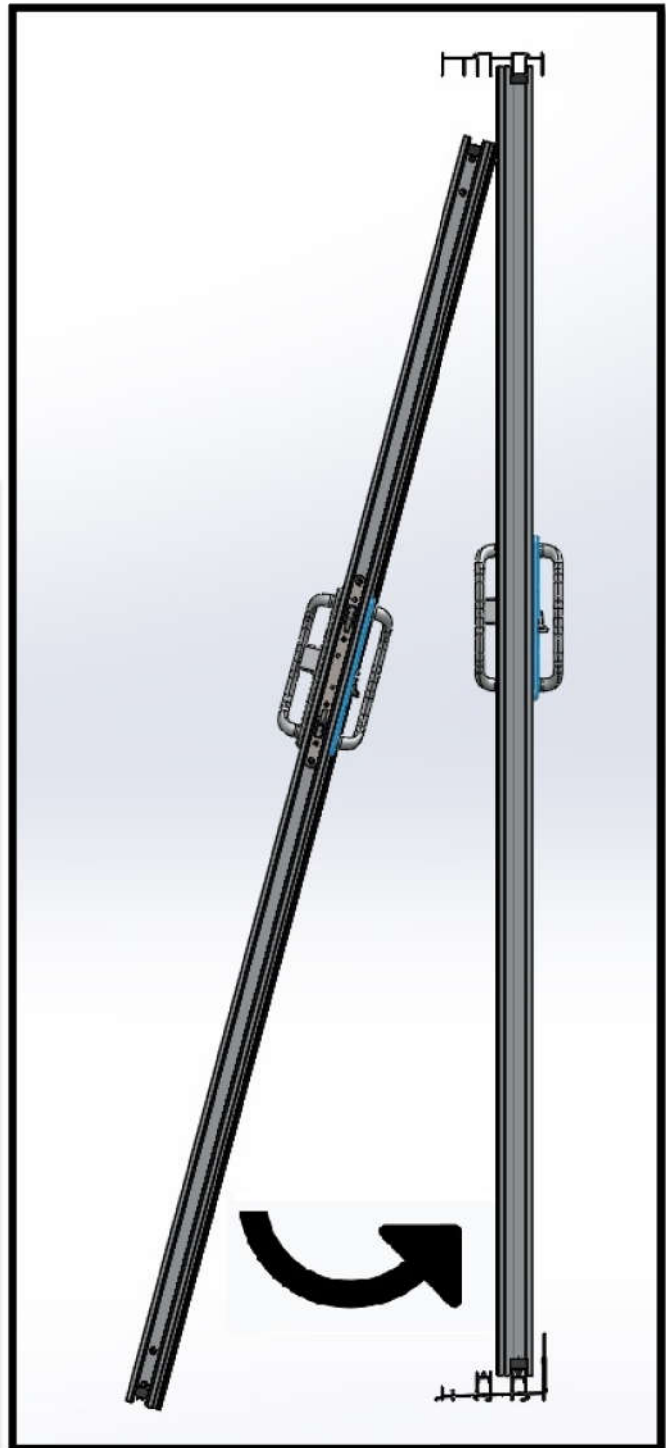


Figure 17

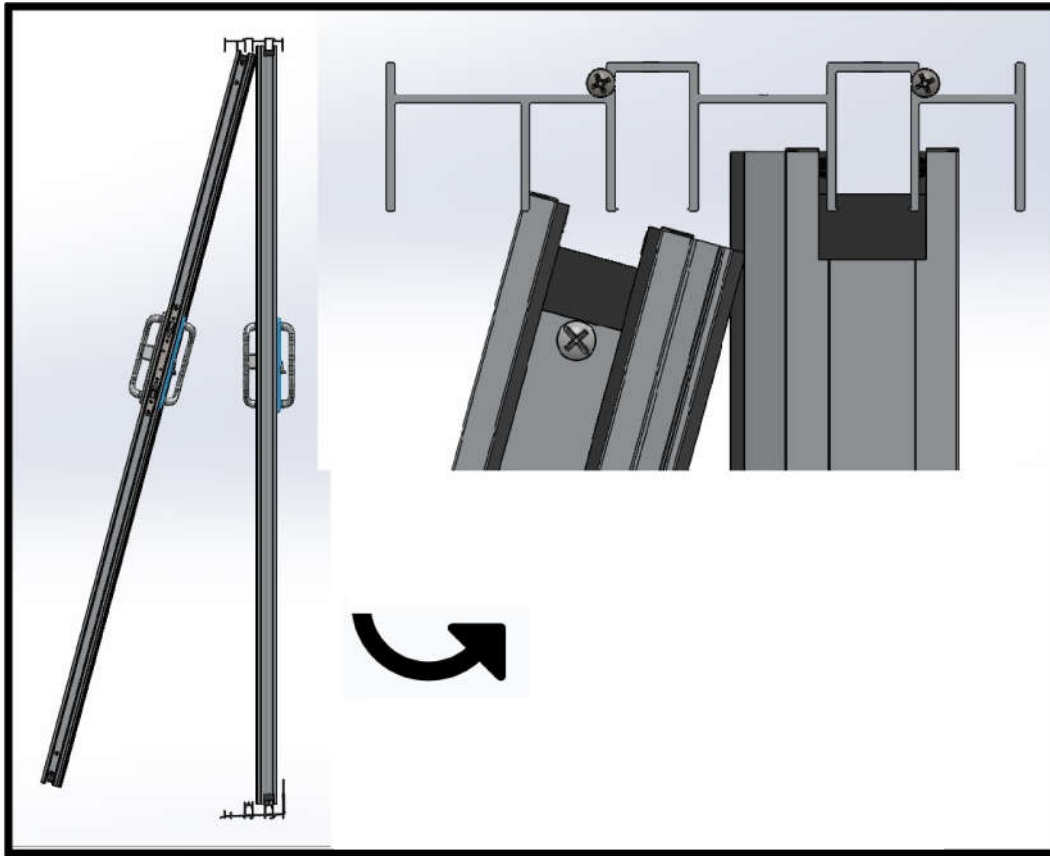


Figure 18

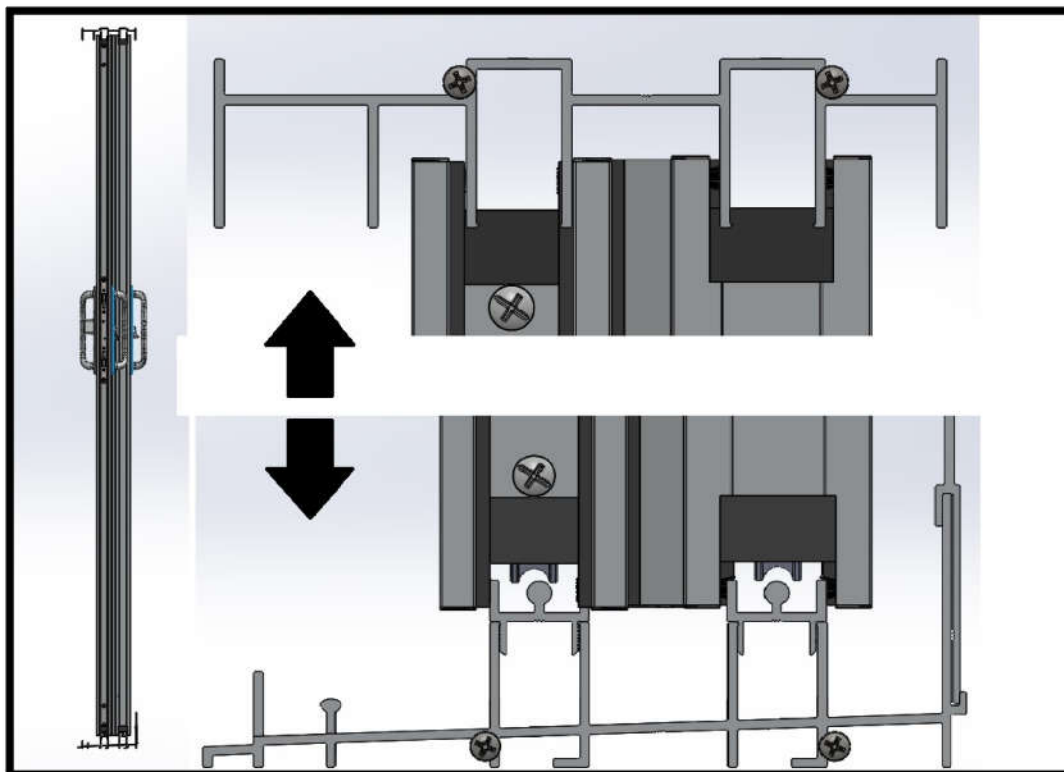


Figure 19

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WARNING: When raising and lowering the wheels, if you feel pressure do not continue as this could cause the adjustment screw to strip. Adjust each panel until all panels roll freely and all panels' stiles and frame jambs are parallel when in the closed position.

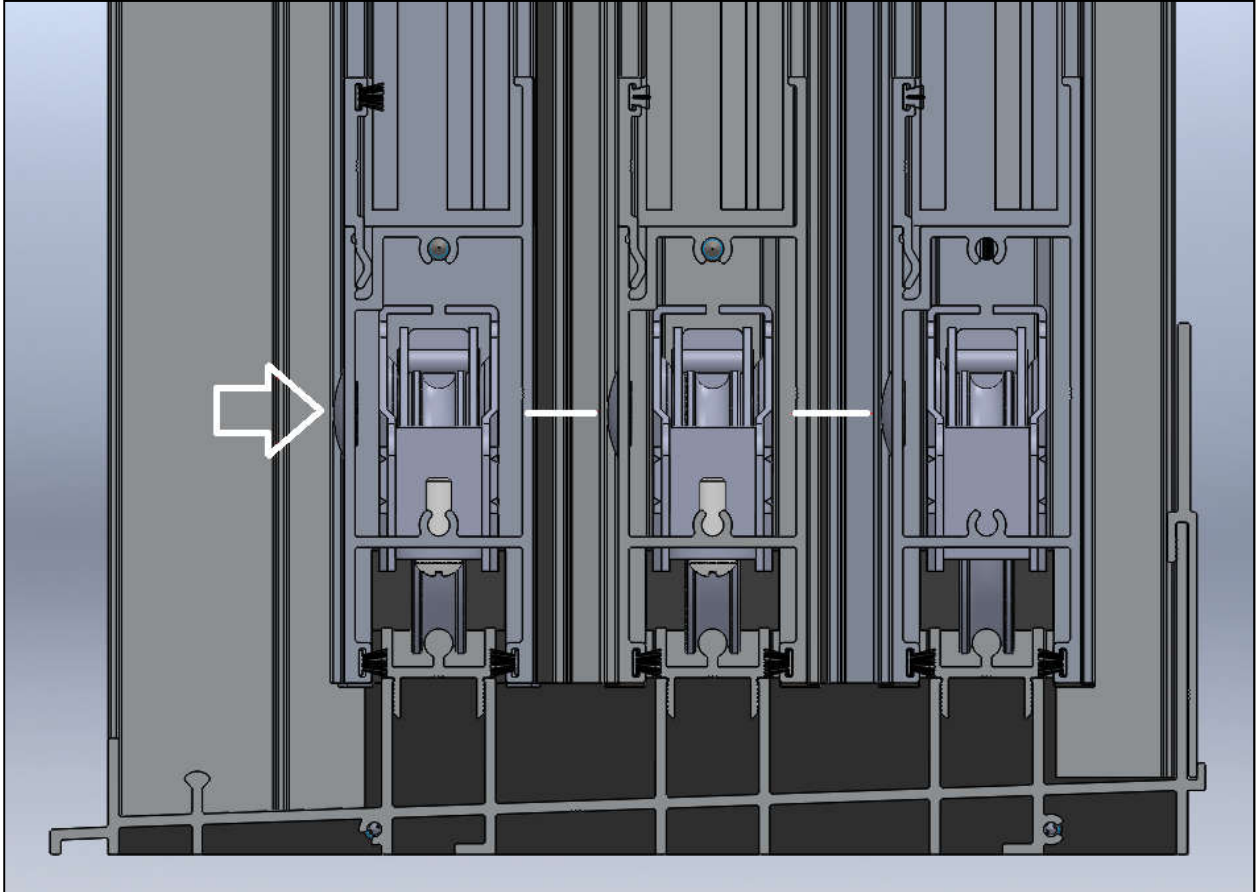


Figure 20

6) Once all panels are set into place and have been adjusted properly, check the reveals and operations to verify that everything is in proper working order. You are now ready to start to install the hardware.

It is recommended to install the locking hardware BEFORE attaching any of the fixed panel hardware.

Locking Hardware

A factory installed dual point Mortise Latch is used to lock the doors. (See Fig. 21) The lock keeper is placed on the main frame jamb or the astragal. This allows the panel to lock into the main frame or lock into the astragal panel. The lock Kit comes complete with two metal handles, one on the interior & one on the exterior with color match screws. There is also an optional flush handle kit available.

- 1) Align the thumb turn tail piece of the interior handle into the slot of the mortise assembly.
- 2) Attach handles using the two (2) pan head screws provided.

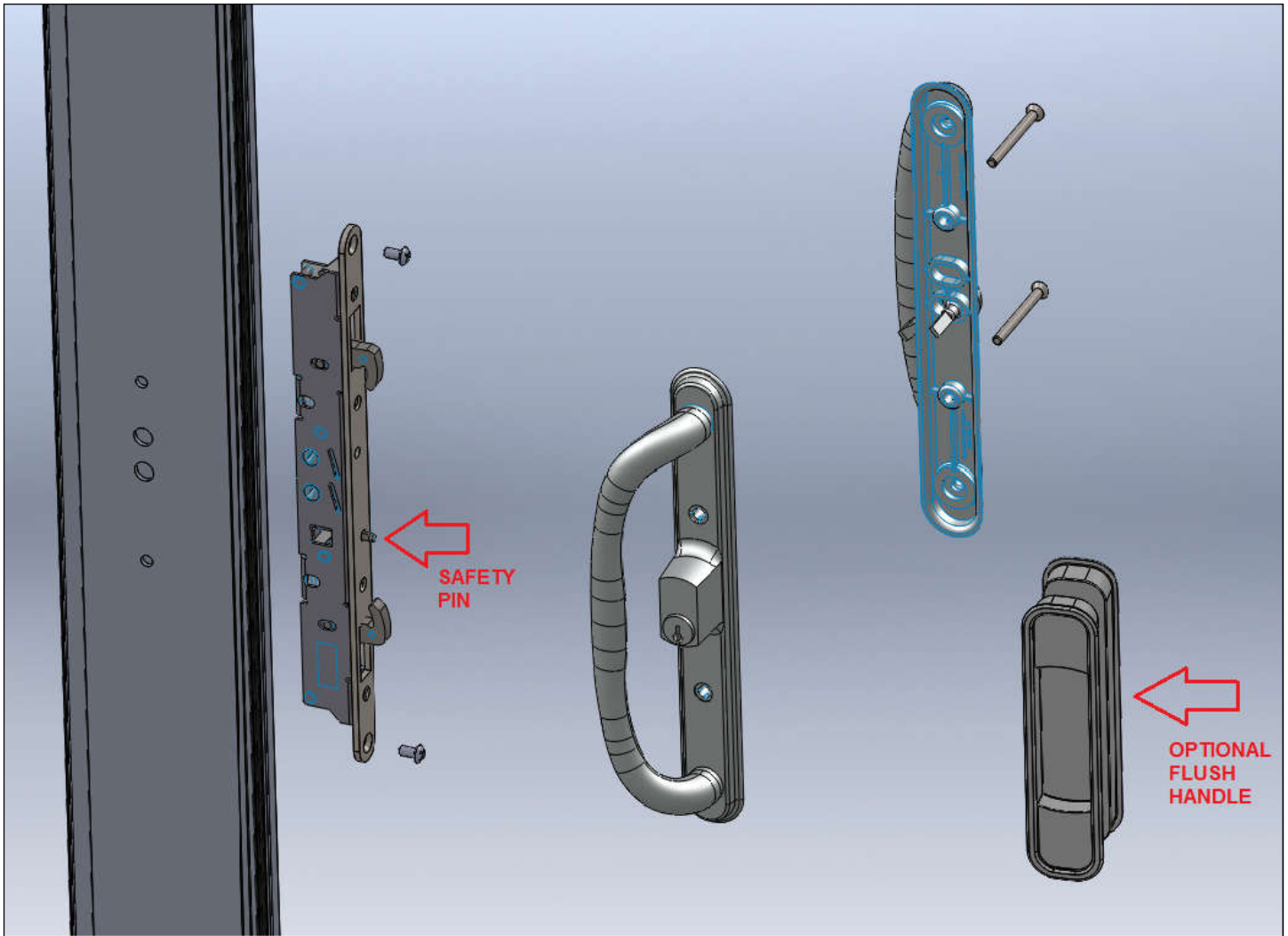


Figure 21

Note:

Latch may not be operated unless the safety pin (located between the two mortise pins) is depressed.

- 3) Attach keeper (see Fig. 22) to frame jamb using four (4) pan head screws supplied. Jamb will be punched in the location the keeper is installed into the frame jamb.

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4) With the mortise lock latch extended, adjust the keeper to maximize bite with the latch. Check operation of the lock and adjust the keeper up or down if required.

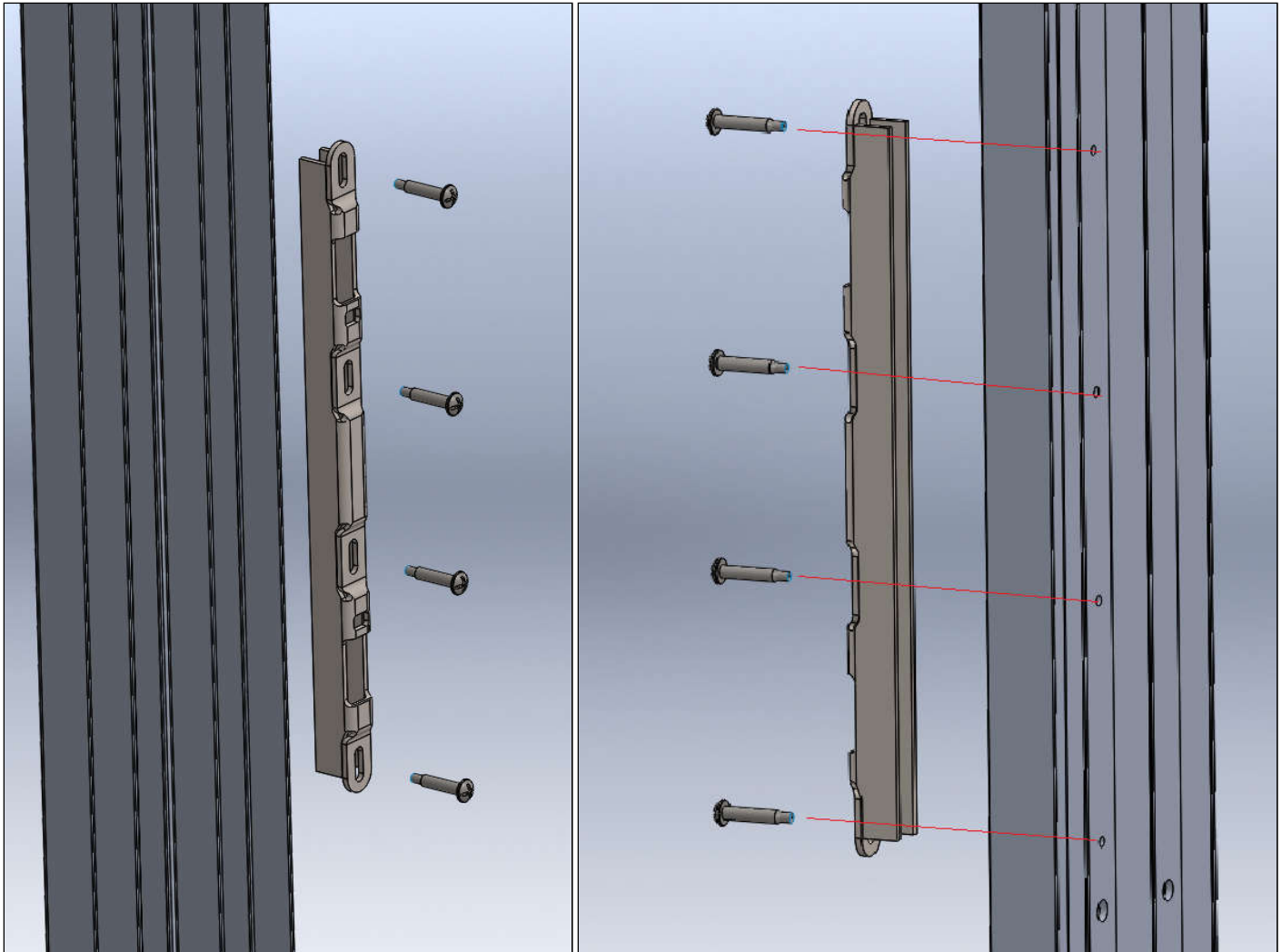


Figure 22

FIXED PANEL HARDWARE

- 1) Each fixed panel has one 10 inch fixed panel clip, and one full jamb length vinyl fixed panel clip screw cover. See Figs. 23 & 24.
- 2) The fixed panel clip will be screwed into the main frame jamb at mid panel height of the jamb with the 4 screws provided. Screws will be placed at 0.875" from each end and at 2-3/4" C to C.
- 3) Attach the clip cover by tapping it into place with a hard plastic mallet after both clip and panel have been anchored with screws.

20	SP3510-17	FIXED PANEL ANCHOR CLIP
57	-----	Fixed Panel Clip Attachment Screw # 10 x 3/4" PH Phillips

LAWSON INDUSTRIES SERIES 9400 IMPACT SLIDING GLASS DOOR ASSEMBLY INSTRUCTIONS

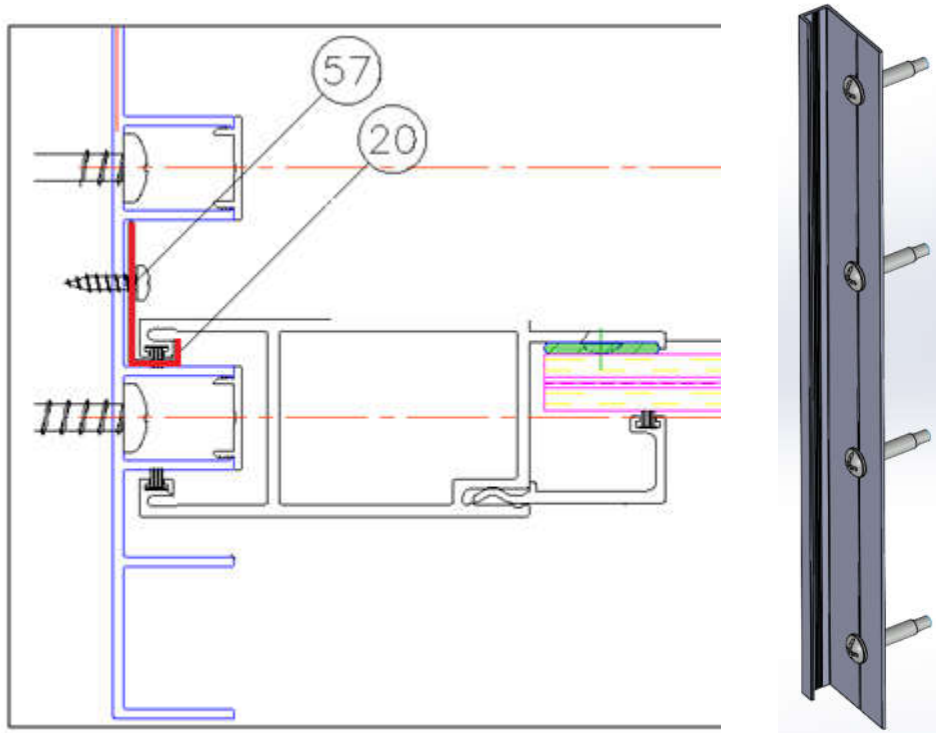


Figure 23

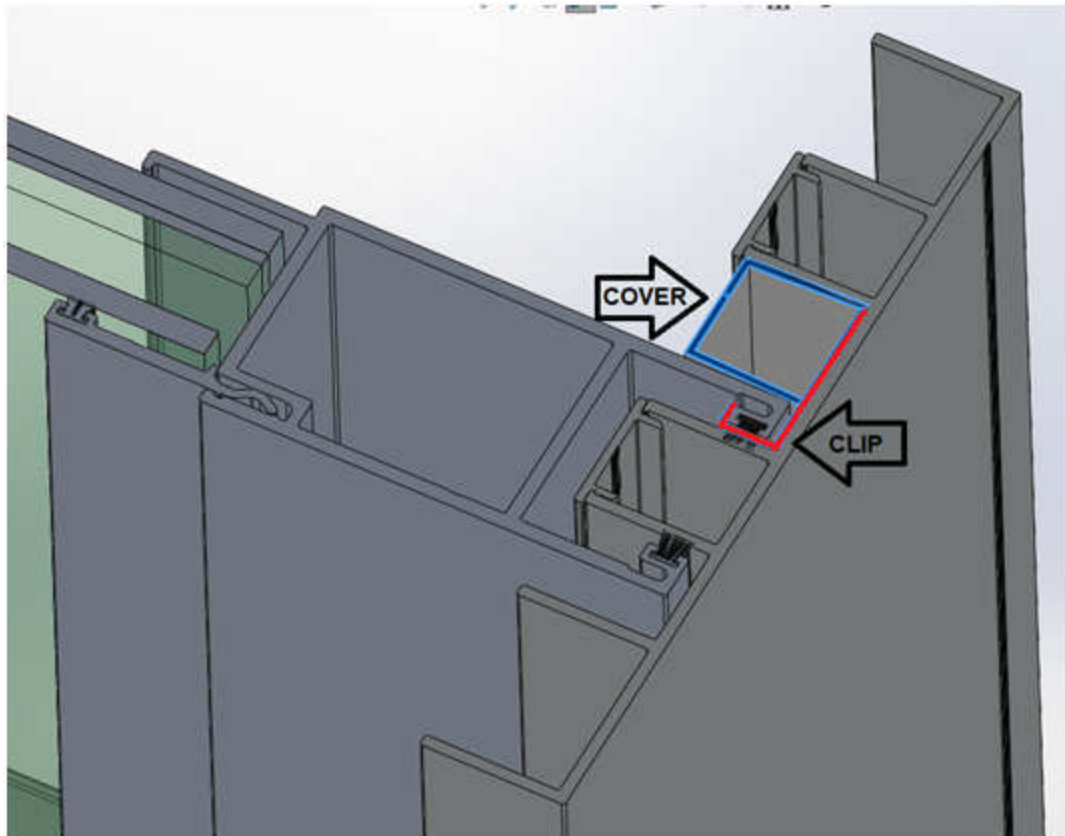


Figure 24

SCREEN PANEL INSTALLATION

- 1) Position panel so that top of panel slips onto frame header fin. Swing bottom of panel in until bottom of panel is aligned over sill add on fin and set panel roller on fin.
- 2) Repeat procedure, with next in line screen until all screens are installed. Please see the configuration page for the track the screens go on to.
- 3) Adjust screen rollers located at bottom of screen at each end. See Fig. 25.

WARNING: When raising and lowering the wheels, if you feel pressure do not continue as this could cause the adjustment screw to strip. Adjust each screen until all screens roll freely and all screen stiles and frame jambs are parallel.

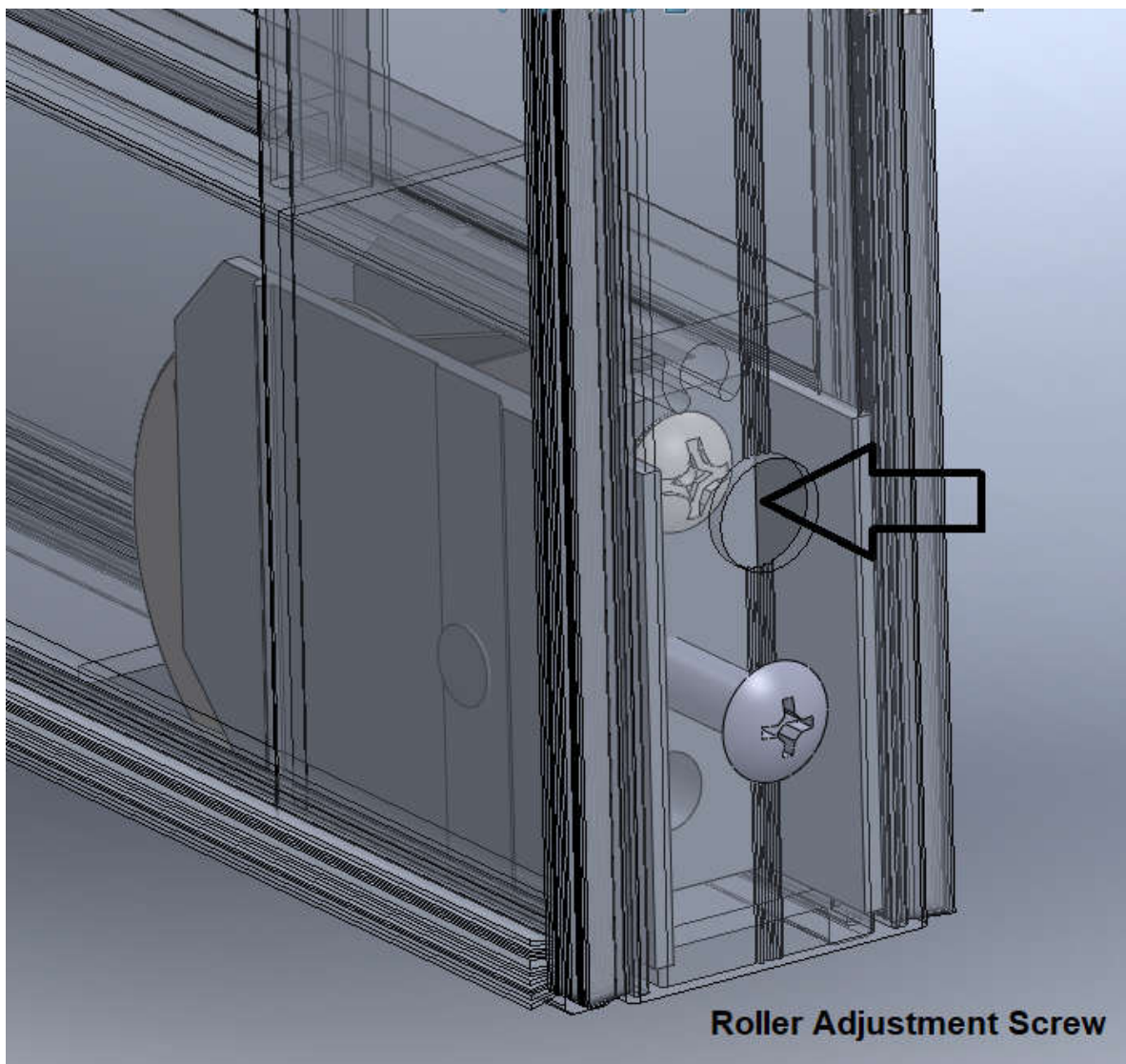


Figure 25

LAWSON INDUSTRIES SERIES 9400 IMPACT SLIDING GLASS DOOR ASSEMBLY INSTRUCTIONS

4) When screens are properly adjusted, latch keepers may be installed and raised or lowered to make proper contact with latch P-cam. Keeper shims are provided as shown in Fig. 26.

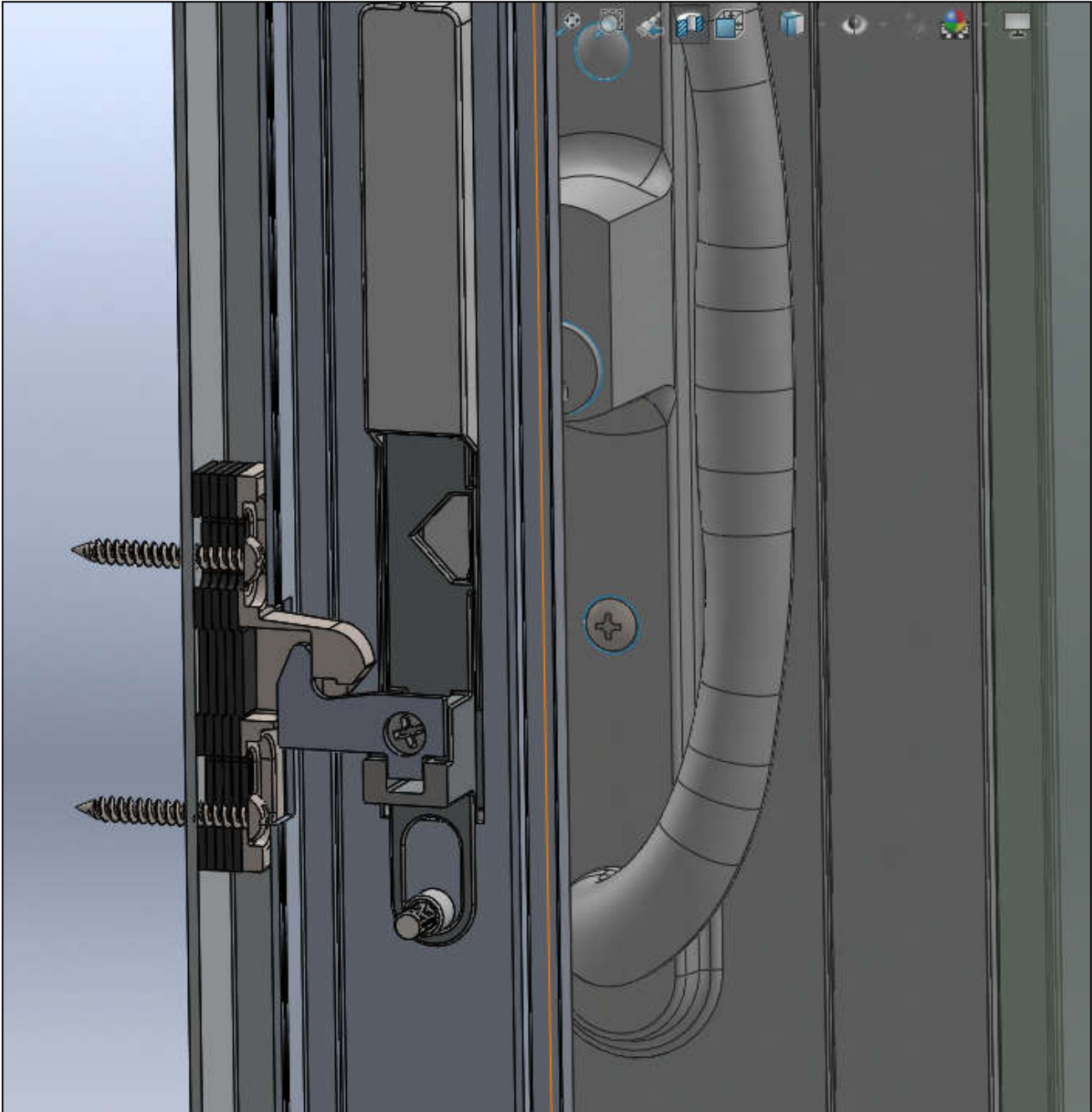


Figure 26

Panel Come-A-Longs

If the unit is a multi-panel, multi-track or pocket door unit it may be necessary to install panel come-a-longs. Refer to Figs. 27 and 28.

This allows the door to open without having to move each panel individually. They also keep the panels from hitting the interlocks, or making contact with the handle hardware.

They should be installed on the inside top and bottom rail of all door panels, and positioned next to the opening side vertical stiles.

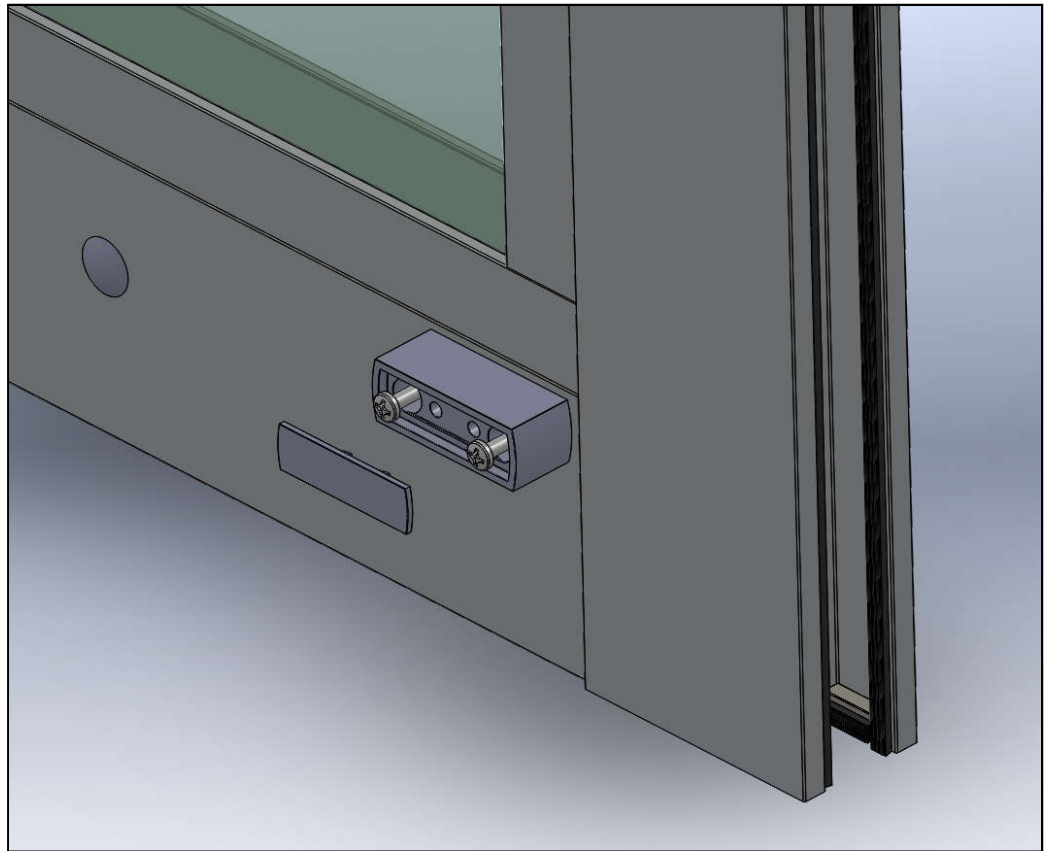


Figure 27

As the panel moves down the track, it will make contact with the panel come-a-long and start driving the next panel down the track.

It is installed with two enclosed sheet metal screws. When located in the correct position it should leave a gap between the handle and the interlock of the panel.

Note: Do not locate the part in any other area than shown in the figure; doing so could cause damage to the frame or glass. Do not use longer screws; doing so could cause interference or operational problems.

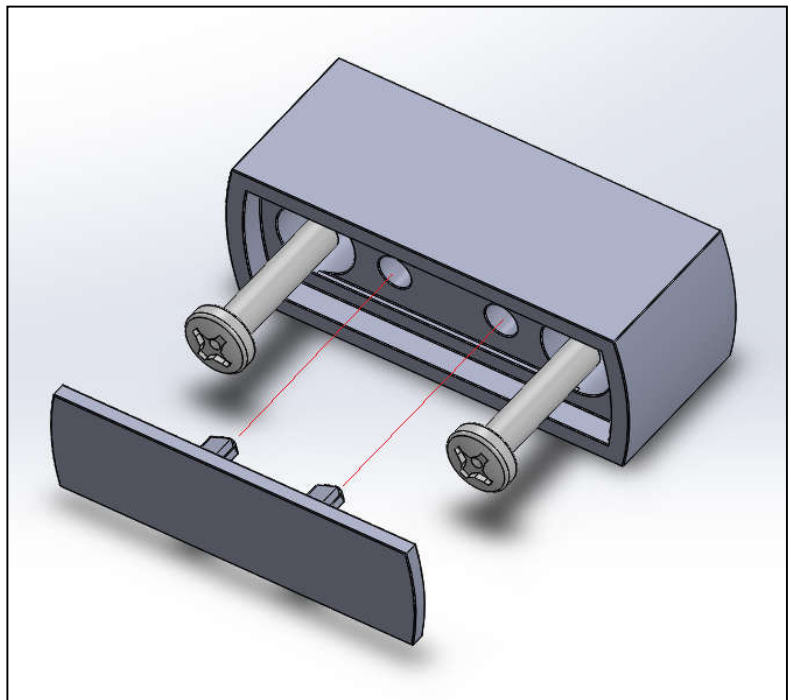


Figure 28

Adjustment Hole Plugs

Once the doors are installed, adjusted and working properly, install the roller adjustment hole plugs. There are two per panel and are always located on the outside face of the door. See Fig. 29.

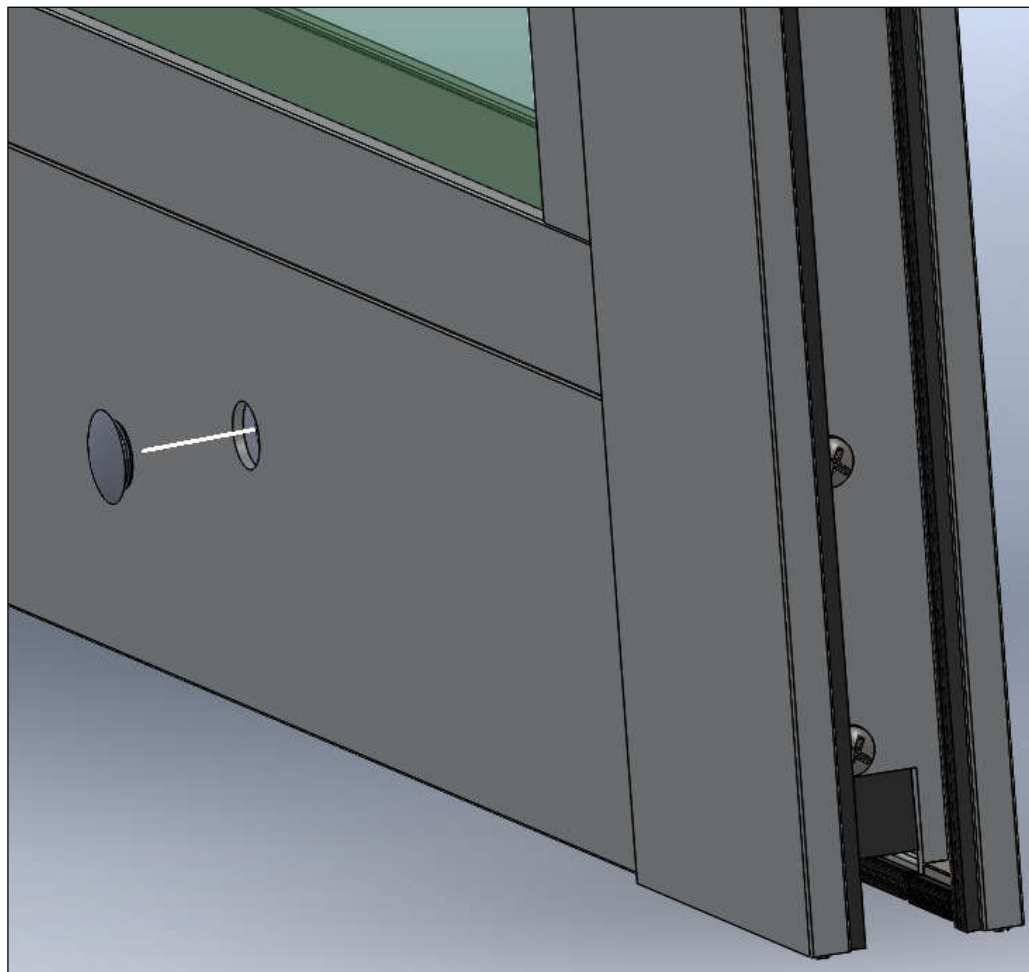


Figure 29

Final Screw Covers

Once the installation and anchor inspections are complete, install any remaining jamb screw covers as shown in Fig. 30.

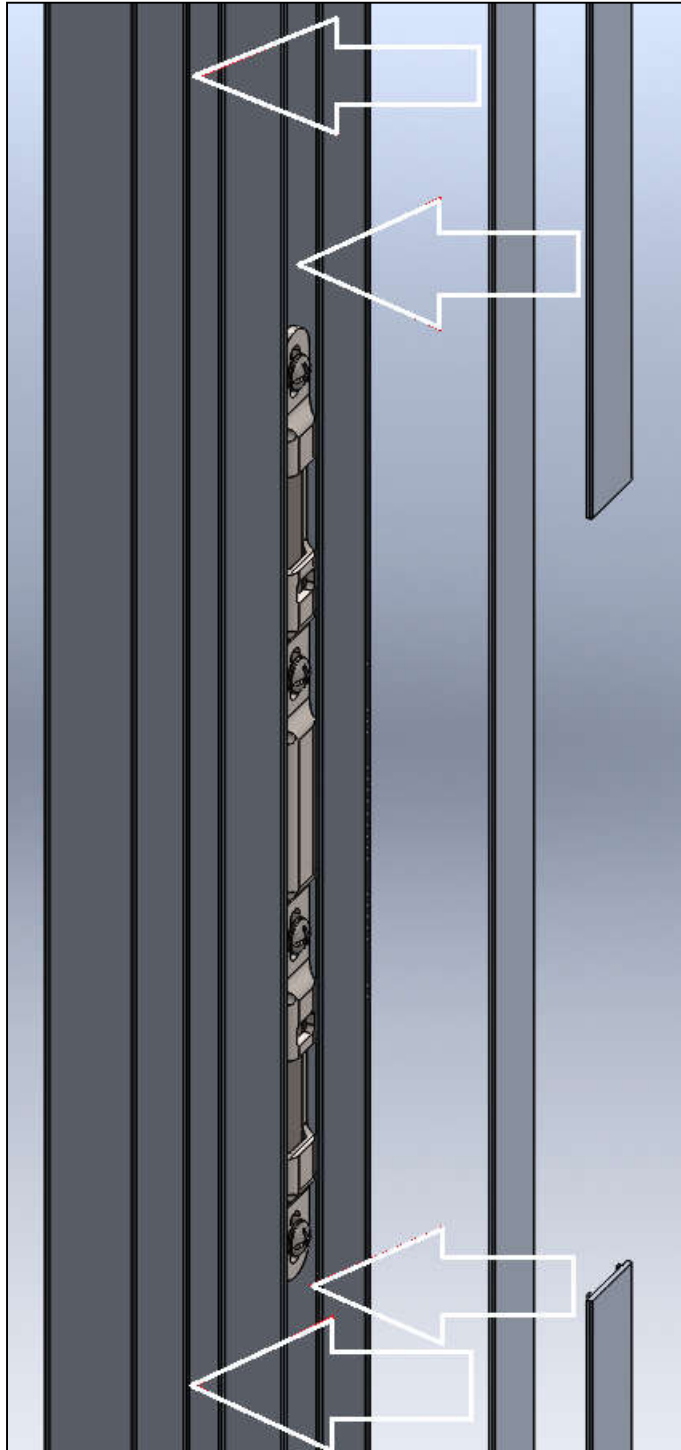
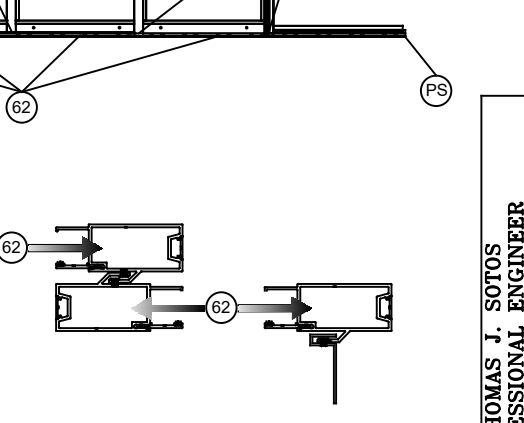
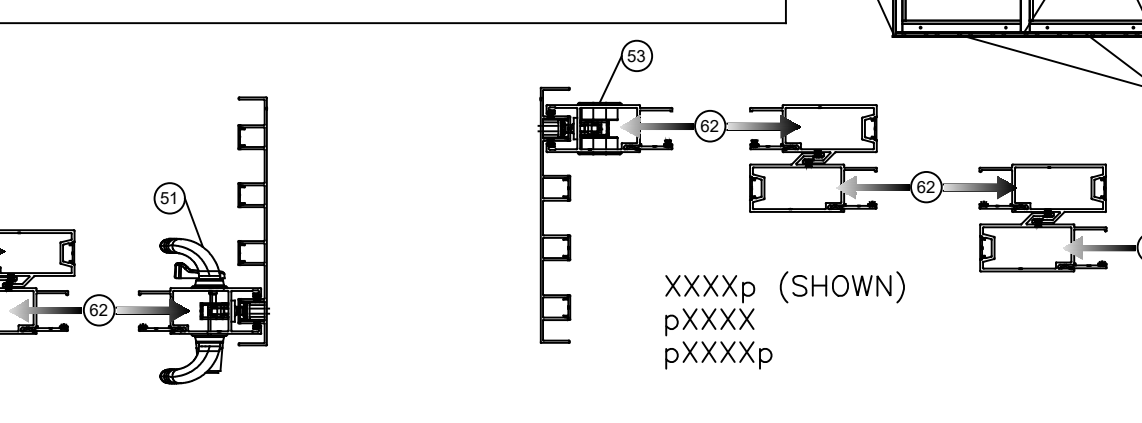
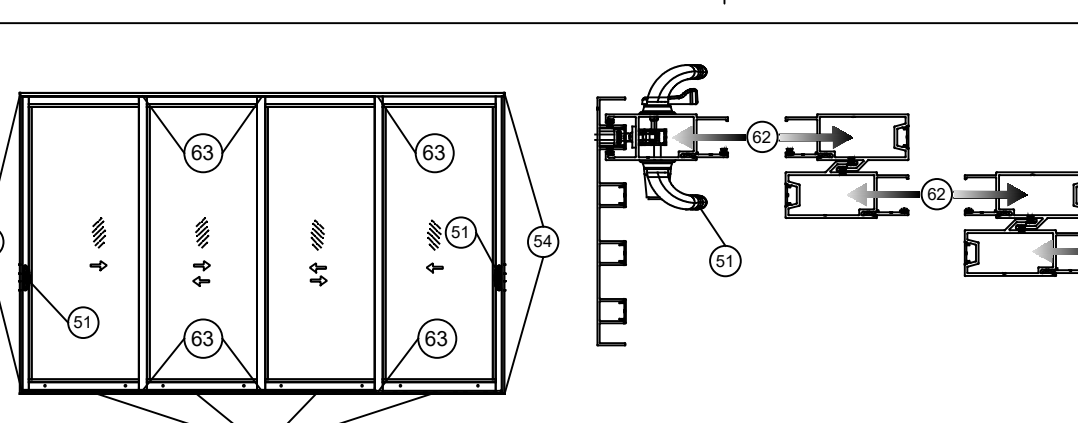
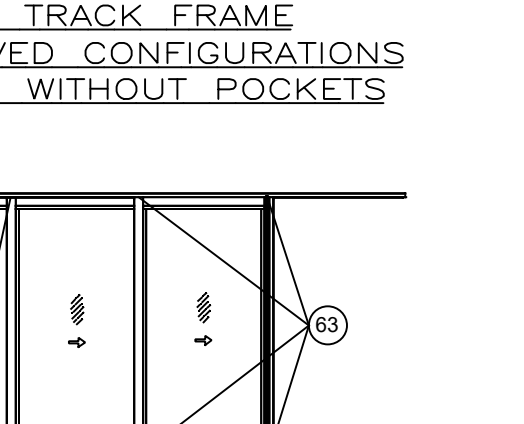
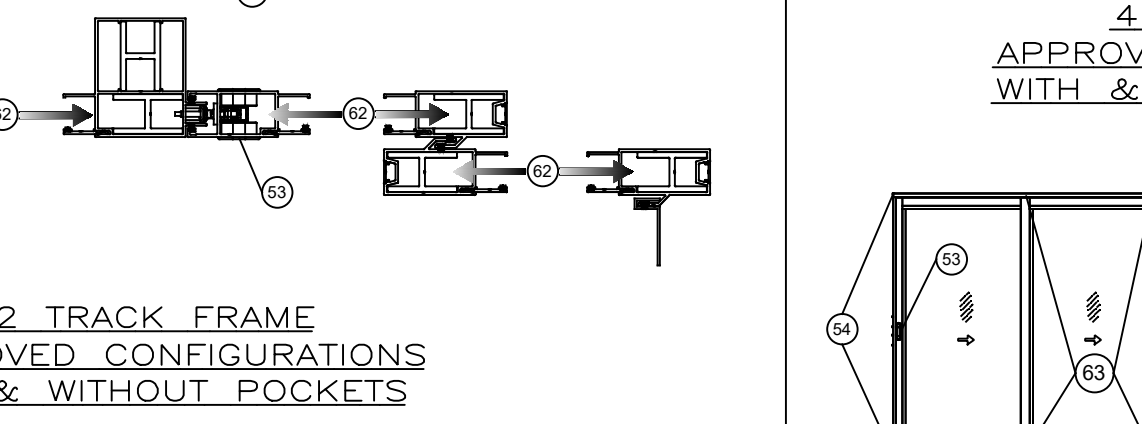
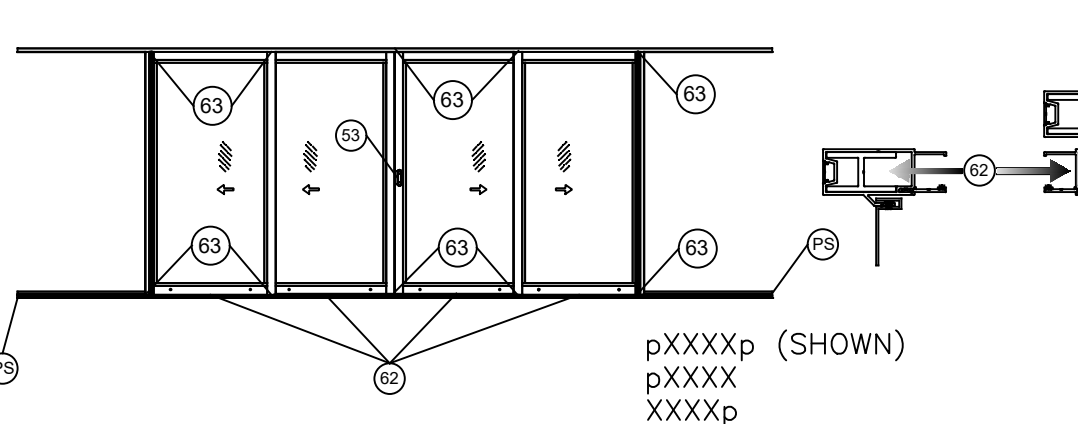
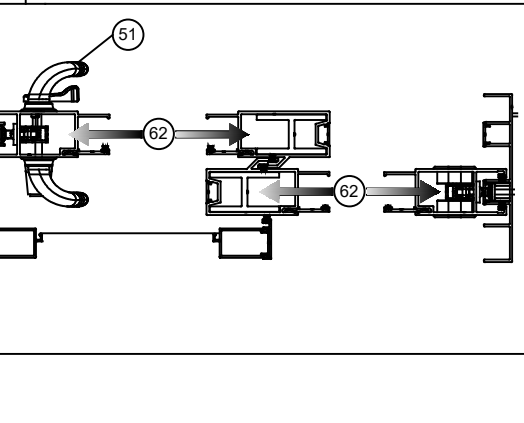
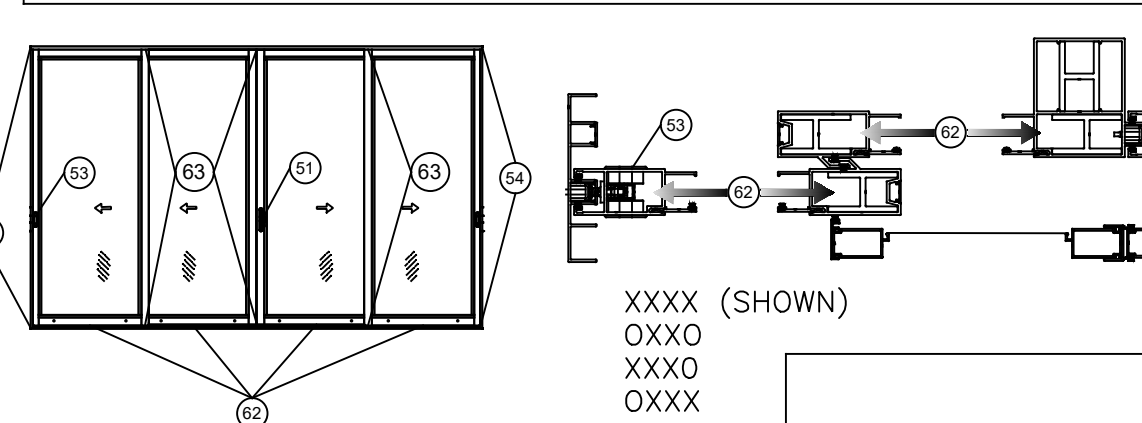
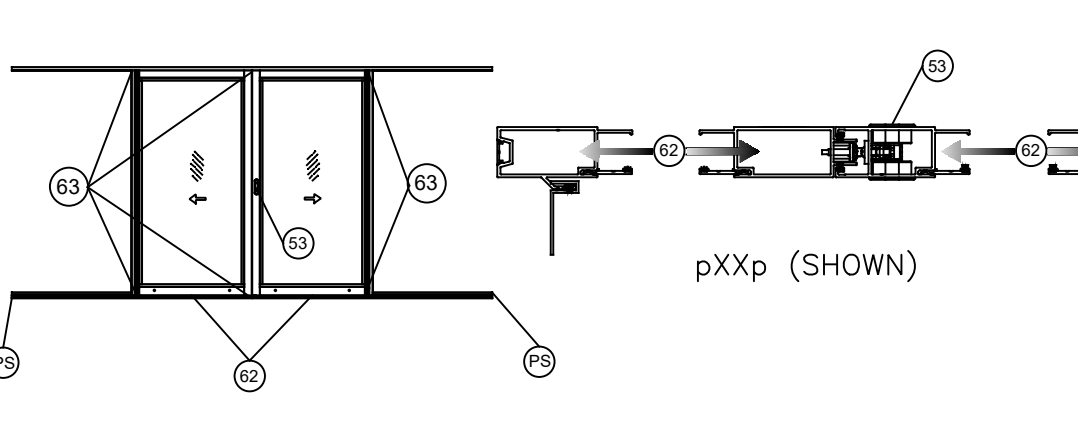
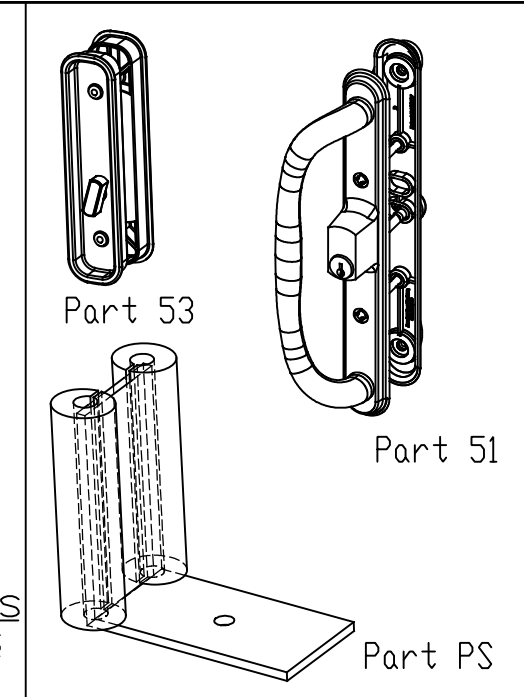
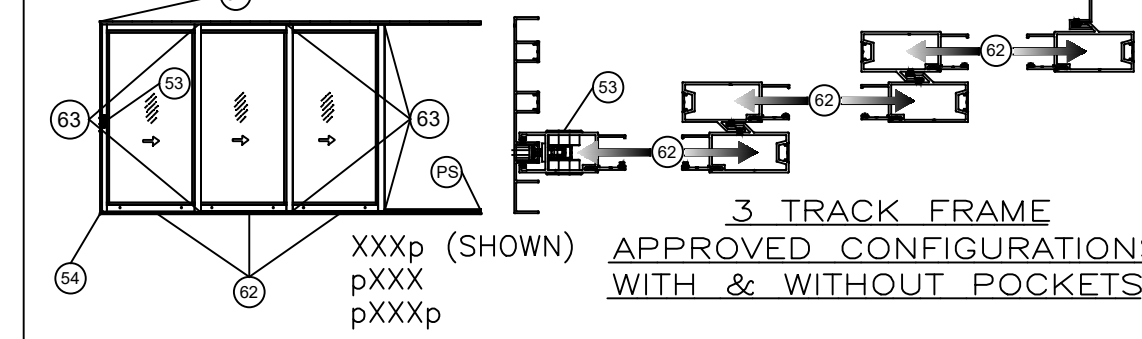
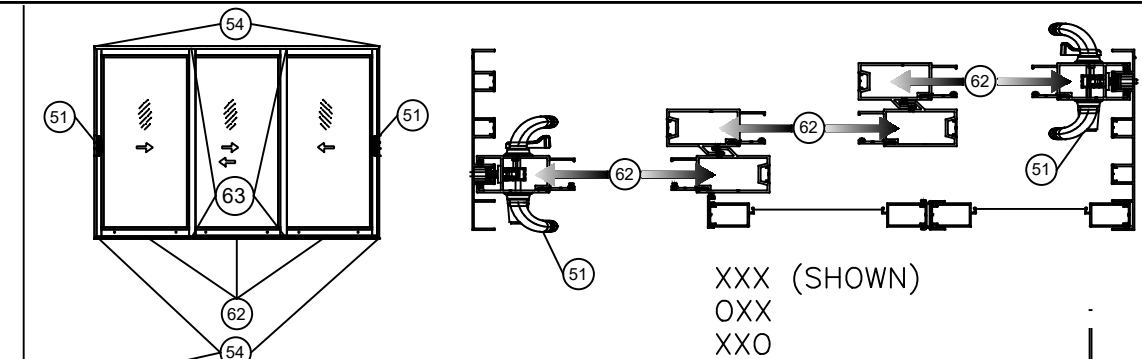
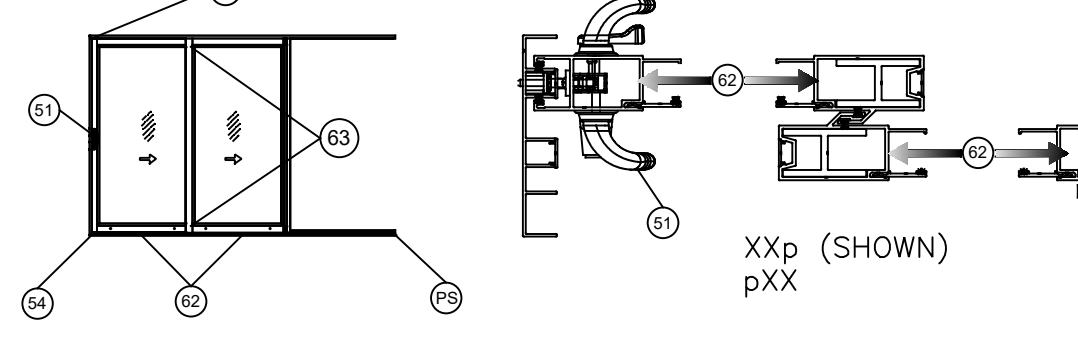
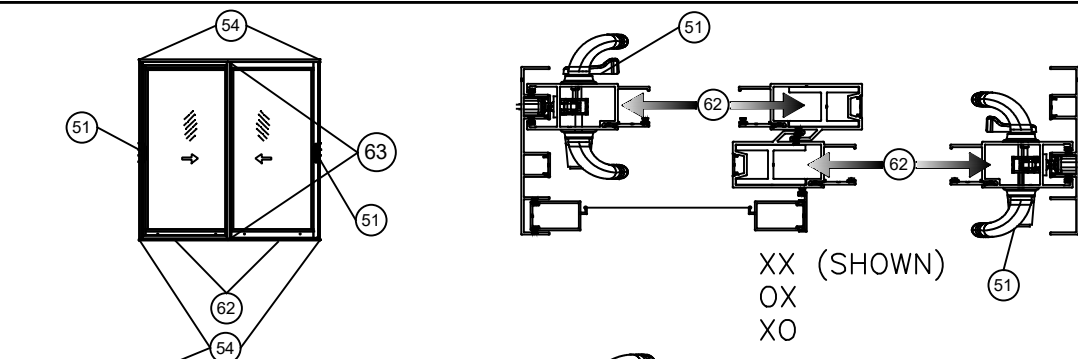


Figure 30



51	OLYMPUS SGD "D" HANDLE SET (Locking)
53	FLUSH HANDLE SET (optional)
54	Frame Assby Screw #6 x 3/4" FH Phillips

62	1/2" x 1/2" x 2" Open Cell Foam Pad (at sill weeps)
63	1-1/4" x 1-1/2" Adhesive Multiple Fin Pad (H&S @ Interlock Ends)

Revision Notes:

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LAWSON INDUSTRIES, INC.

MANUFACTURER OF QUALITY ALUMINUM WINDOWS AND GLASS DOORS

SGD-9400 ALUMINUM SLIDING GLASS DOOR (L.M.I.)

BAG PART PLACEMENT LOCATIONS - APPROVED CONFIGURATIONS

Product Reference Number: L9400-2

Sheet: 1 OF 1

Revision #: _____

Drawing Number: L9400-2

Date Drawn: 07/02/20

Date Revised: _____

Scale: _____

Drawn By: T.J.Sotos

Revised By: _____

Revision Level: _____

THOMAS J. SOTOS
PROFESSIONAL ENGINEER
FL LIC. # 55225

DATE: _____