Impact Collection 7600i Multi-Slide Door Non-Pocketing Installation Instructions

Things to Know Before You Start

Removal of Old Fenestration Products

Before removing existing fenestration, verify that the replacement unit is the correct size and configuration and is free of damage. Inspect the opening for conditions that could affect installation and resolve any discrepancies before proceeding.

Ensure that old fenestration products are removed and properly disposed of. You may be able to recycle or donate removed glass and frames. For more information, check with your local recycling agency or organizations that accept used windows, doors, and building supplies.

Please note: Homes and condominiums built before 1978 may have lead-based paint, which can pose serious health hazards during removal. Information and instructions regarding proper management of lead-based paint are available at www.epa.gov/lead.

Installation Preparation

Multi-slide doors are custom-manufactured for each application. Before installation, carefully review and understand these instructions and the drawings supplied.

Western Architectural Openings products should be installed only by experienced and qualified installation professionals. Failure to follow these instructions may result in poor performance, including operation, security, and weatherproofing failures, and may void Western Architectural Openings' express limited warranties.

Install the Impact Collection 7600i Multi-Slide Door using the anchorage requirements in drawing FPA-7600-1 for the applicable door configuration and substrate. Frame assembly screws, panel attachment screws, and nail-fin fasteners do not replace the required structural anchors.

Product Handling and Storage

This is a finished product that must be protected before, during, and after installation to prevent damage to the glass, frame, finish, and hardware. Remove the individual sill track protectors before assembling and installing the frame. After installation, the protectors can be selectively cut to length and reinstalled to allow specific panel operation or prevent operation during construction.

Store door panels in a dry location protected from the elements. Wet packaging can damage product finishes. If packaging becomes wet, immediately replace it with dry packaging. Door panels should be stored and transported upside down. To avoid damage to the bottom rail extension, do not drop or drag panels from the delivery vehicle.

Components

The components supplied will vary depending on the configuration being installed. Before proceeding, inspect the components to become familiar with them and confirm that there is no damage that could affect the appearance or performance of the installed product. Report damaged or missing parts to your supplier immediately. If screens are included, they will be installed in a similar fashion as the glass panels. Screen-track anchors are nonstructural and do not count toward the required structural door anchorage.

Things to Know Before You Start

Tools and Products Necessary for Installation

1. Flashing membrane.
2. Sealant compatible with the flashing membrane.
3. Impact driver with #2 Phillips bit.
4. Drill with a 6-inch-long, 9/64-inch drill bit.
5. Hammer drill with the drill bit specified by the approved anchor manufacturer.
6. #3 Phillips screwdriver.
7. #8 x 3/4-inch flat-head screws.
8. #8 x 3/4-inch Phillips pan-head screws for the stucco return.
9. #8 x 1-1/2-inch pan-head screws.
10. Structural anchors appropriate for the substrate, as specified in Frame Installation, Step 8.
11. #10 x 1-1/2-inch pan-head screws for frame assembly.
12. 1-1/4-inch pan-head self-tapping screws for nail-fin attachment.
13. Levels of various sizes or a laser level.
14. Pry bar.
15. Putty knife.
16. Dead-blow rubber mallet.
17. Plastic block.
18. Glazing roller for vinyl.
19. 9-inch-wide moldable flashing membrane for the stucco return.
20. Shims appropriate for the installation and applicable building requirements. Shimming must be even across the unit. Each shim must be long enough to cover the full frame depth at the attachment point. Provide continuous sill support as described in Frame Installation, Step 6.

Weatherproofing

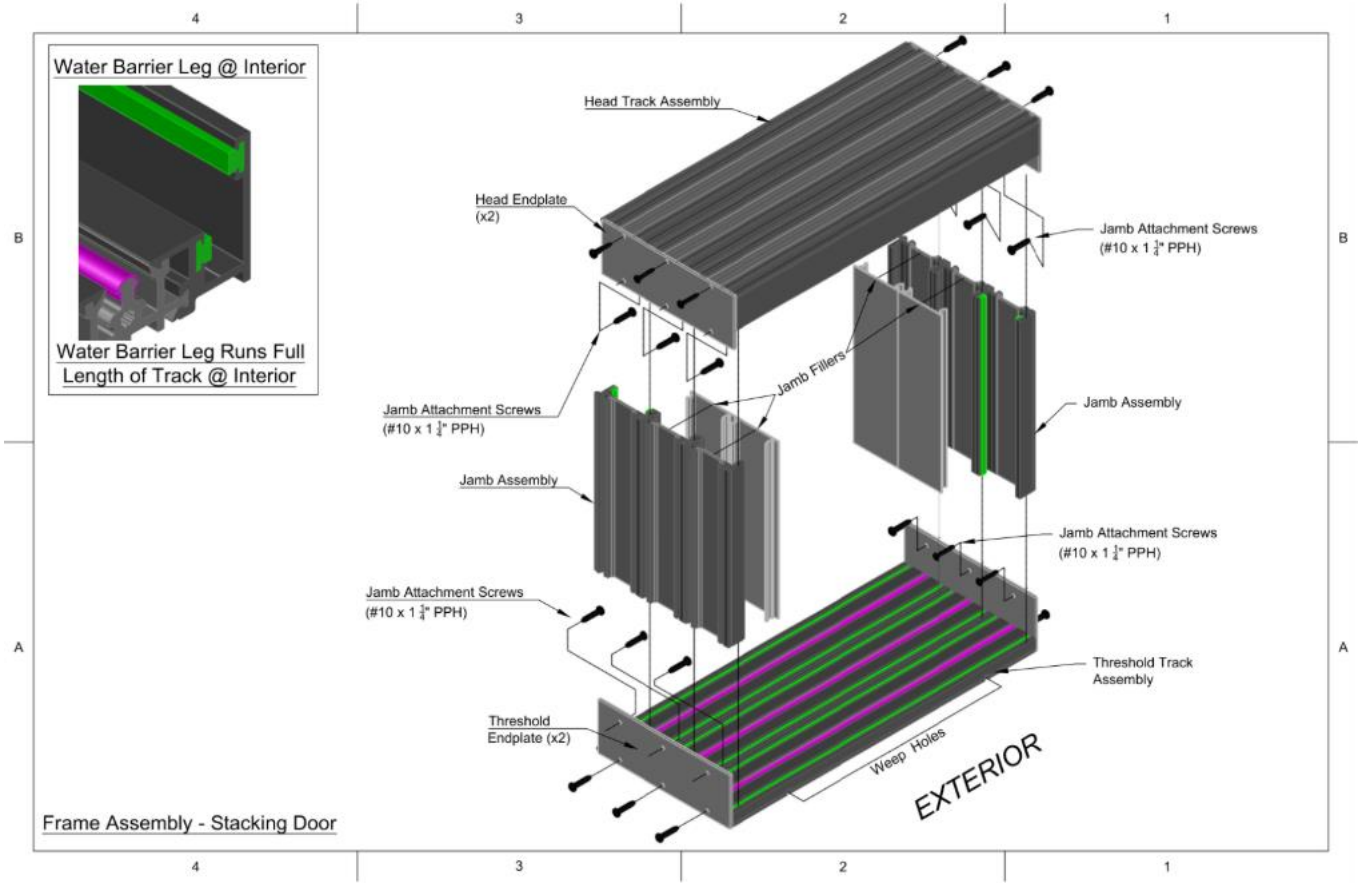
The rough opening must be waterproofed in accordance with applicable AAMA installation standards, flashing and sealant manufacturer instructions, and local building codes.

Coordinate the flashing and sealant installation with the required structural anchorage. Seal penetrations through flashing with compatible sealant. Do not omit required anchors to avoid penetrating the flashing, and do not obstruct the sill drainage system.

Frame Installation

1. Frame components: Each door will have a Head Track Assembly, Threshold Track Assembly, Lock Jamb Assembly, and Fixed Jamb Assembly. See Fig. 1.

Fig. 1 Frame Assembly



2. Refer to the CAD drawings supplied or the order acknowledgement and inspect the rough opening carefully to ensure that it has been prepared correctly for the configuration and size being installed.

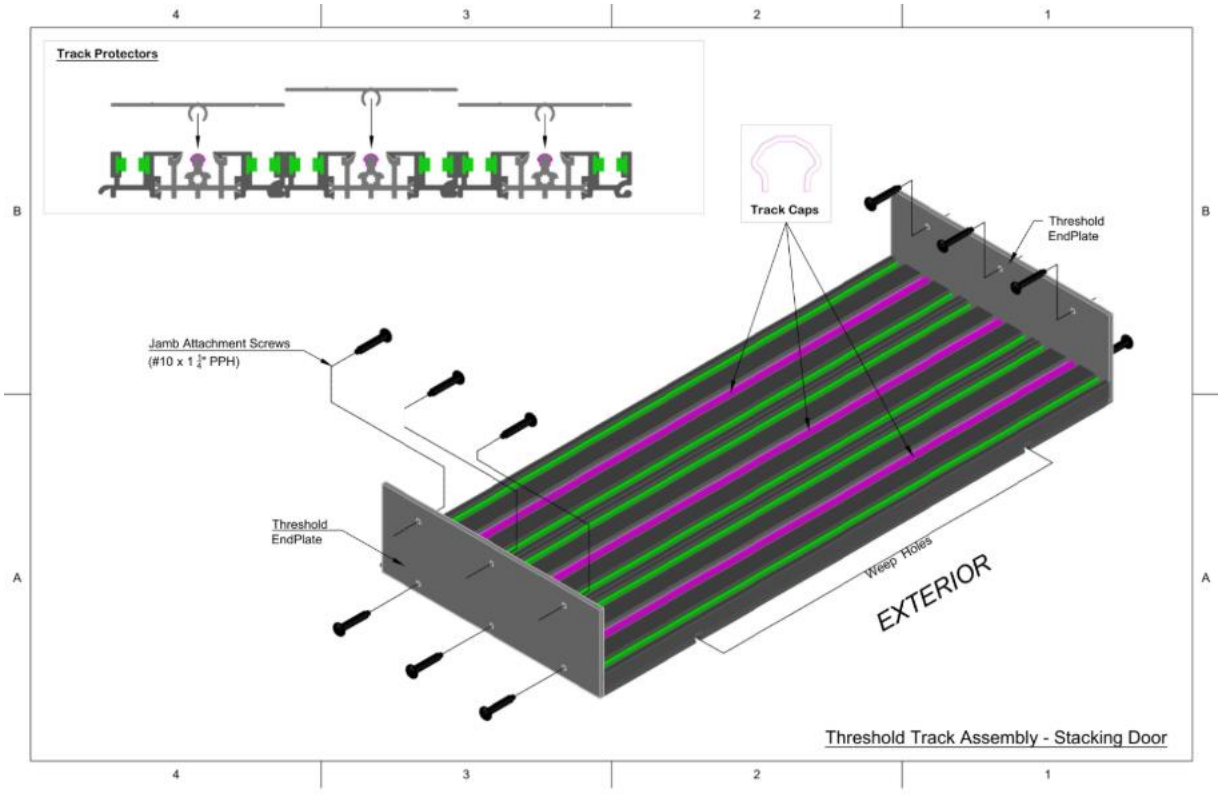
Confirm that the supporting substrate matches an approved anchor-and-substrate combination in Step 8. Wood bucks must be secured to transfer door loads to the structure. Wood bucks designated 1x are less than 1-1/2 inches thick; 2x bucks are 1-1/2 inches thick or greater. The installation details show a maximum 1/4-inch gap between the frame and supporting substrate.

3. Check the floor to ensure that it is flat and level. If the floor varies more than 1/16 inch per foot or a total of 1/4 inch over the entire opening width, correct it before proceeding.

Frame Installation

4. Remove the track protector covers and save them for use at the end of installation. See Fig. 2.

Fig. 2 Threshold Track Assembly



5. Identify the top inside of the Threshold Track Assembly by locating the weep holes. Weep holes must face the exterior. Position the Threshold Track Assembly on the floor in its approximate location and ensure that its inside edge is properly aligned with the structure.

6. Inspect the Threshold Track Assembly where it meets the floor. Check for and mark gaps that require correction before final anchoring. The threshold must be level and continuously supported.

If the sill is tight to the substrate, grout or other support material is not required. Where grout is used, provide non-shrink, non-metallic grout with a maximum thickness of 1/4 inch and a minimum compressive strength of 3,400 psi. The grout must fully support the sill wherever it is not tight to the substrate and transfer shear loads to the substrate.

7. Once the Threshold Track Assembly is correctly positioned, inspect the header to confirm that the Head Track Assembly can be installed directly above it at the proper height. Mark the inside edge of the sill along its full length and across each end to locate the inside corners. Lay out the sill anchor locations according to the applicable configuration on Sheets 1-3 of FPA-7600-1 and the anchor quantities in Step 11. Verify that the installation holes provide the required layout. Mark the floor through the required anchor holes, beginning with the inside track, and remove the Threshold Track Assembly.

Frame Installation

8. Prepare the substrate for the approved anchors listed below. For concrete or concrete masonry, use the specified anchors. Follow the anchor manufacturer's requirements for drill diameter,

hole depth, hole cleaning, and installation. Do not use the green plastic anchor plugs described in the non-impact installation instructions.

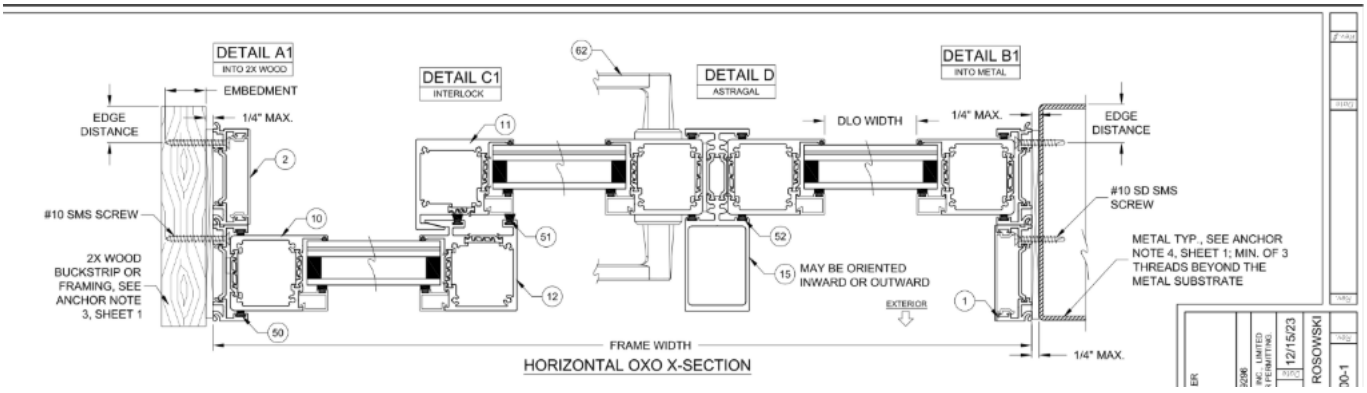
Anchor type	Substrate	Minimum edge distance	Minimum embedment or metal thickness
#10 flat-head sheet metal screw	Southern Pine, SG 0.55	9/16 inch	1-3/8 inch embedment
#10 flat-head sheet metal screw	6063-T5 aluminum	3/8 inch	0.060 inch thickness
#10 flat-head sheet metal screw	A36 steel	3/8 inch	0.050 inch thickness
#10 flat-head sheet metal screw	Grade 33 steel stud	3/8 inch	0.045 inch thickness (18 ga)
3/16-inch Trimfit Head DeWalt Ultracon	Concrete, minimum 3,000 psi	1 inch	1-3/4 inch embedment
3/16-inch Trimfit Head DeWalt Ultracon	Filled or hollow block, ASTM C90	1 inch	1-1/4 inch embedment
3/16-inch Trimfit Head* DeWalt Ultracon*	Southern Pine, SG 0.55	1/2 inch	1 inch embedment

**Refer to certification documents.*

SG means specific gravity. Select anchor lengths that provide the required embedment after accounting for the frame, installation gap, and intervening materials. Anchors into metal must extend at least three threads beyond the metal substrate. Use materials compatible with the frame and substrate in accordance with applicable building requirements.

If drilling through the Threshold Track Assembly, vacuum all debris from the weatherstripped channels to avoid contaminating the weatherstripping and roller assemblies.

Impact attachment into wood and metal FPA-7600-1 Sheet 4



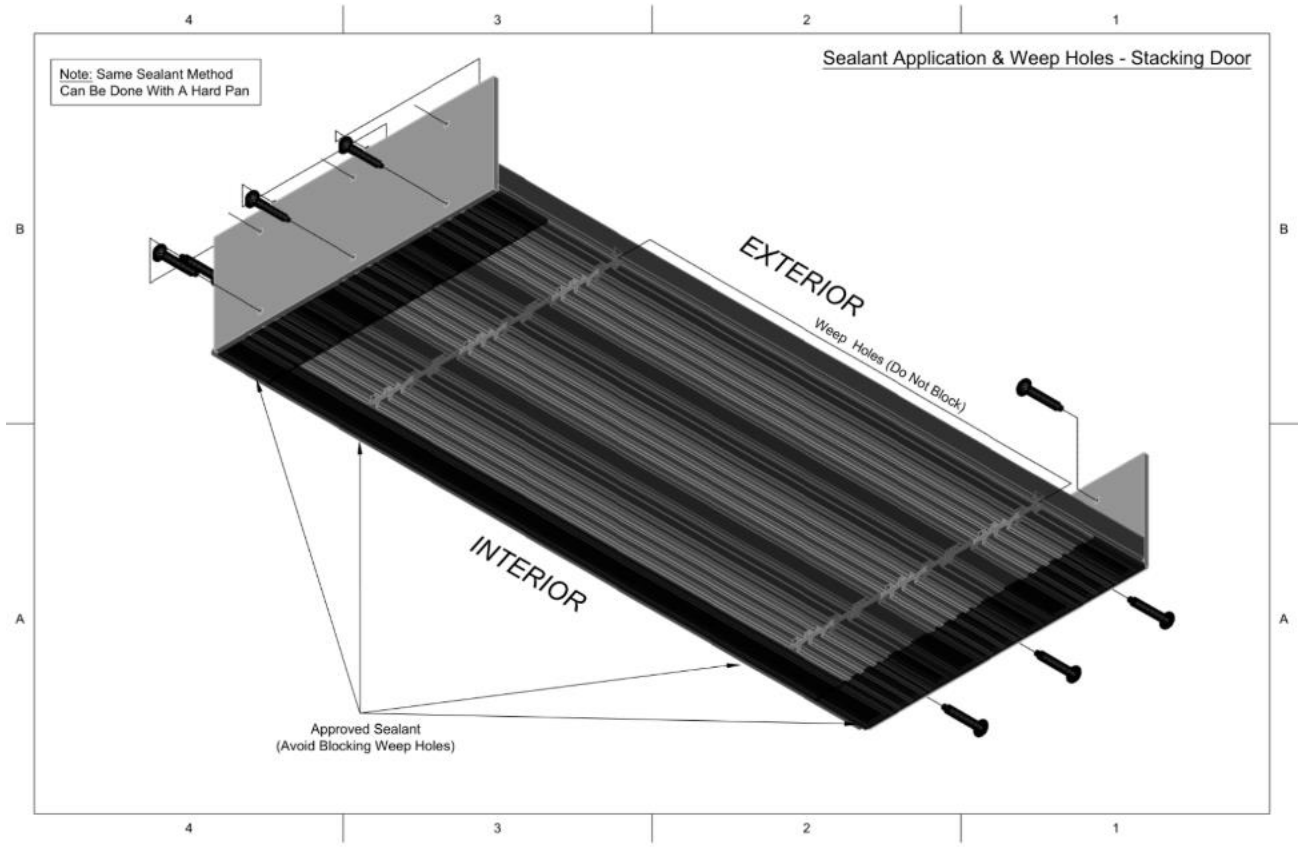
Frame Installation

9. Where installation screws penetrate flashing or waterproofing, apply a generous amount of compatible sealant at each penetration. Install all required sill anchors. Additional sealant under the threshold does not replace structural anchorage. Keep sealant clear of the weep system.

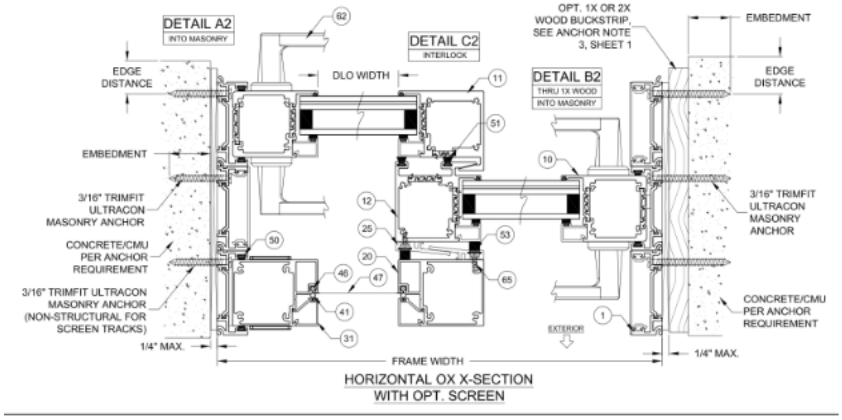
10. Apply a 1/2-inch-wide by 1/2-inch-high bed of sealant on the floor along the exterior side of the marked line from jamb to jamb. Continue the sealant 6 inches up each jamb and from the inside corners across each end to the outside edge of the Threshold Track Assembly location.

Inspect the sealant to ensure a continuous water barrier across the full opening width. Do not block the weep holes. See Fig. 3.

Fig. 3 Sealant Application and Weep Holes



Impact attachment into masonry FPA-7600-1 Sheet 4



Frame Installation

11. Using the floor marks, set the Threshold Track Assembly back in place. Maintain level and continuous support as described in Step 6. Anchor through the weatherstripped channels using the approved anchors from Step 8.

Follow the dimensioned anchor layouts on Sheets 1-3 of FPA-7600-1. The layouts show 55-7/16-inch maximum head-and-sill spacing, 6-inch maximum end offsets, 4-inch maximum spacing within anchor clusters, and jamb anchors positioned a maximum of 10-3/4 inches from the end with 24-5/8-inch maximum spacing. Apply these dimensions at the locations shown for the applicable configuration.

Use the following minimum quantities from Table 2 on Sheet 3 of FPA-7600-1. Quantities are across all structural tracks at each indicated cluster or jamb location.

Minimum Anchors at Each Head and Sill Cluster

Panel width / DLO width	80-inch frame	84-inch frame	96-inch frame	108-inch frame	120-inch frame
24 / 18-5/8	4	4	4	4	6
30 / 24-5/8	4	4	6	6	6
36 / 30-5/8	6	6	6	6	8
42 / 36-5/8	6	6	8	8	8
48 / 42-5/8	6	6	8	8	10
54 / 48-5/8	8	8	8	10	10
60 / 54-5/8	8	8	10	10	12

Minimum Anchors at Each Jamb

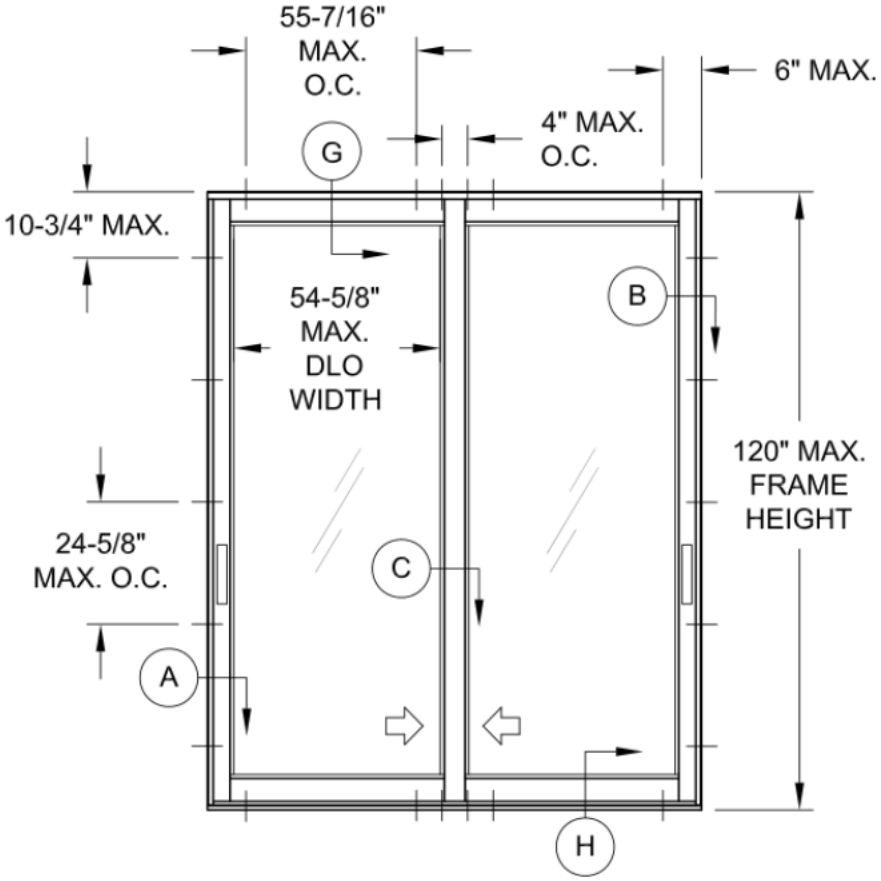
Panel width / DLO width	80-inch frame	84-inch frame	96-inch frame	108-inch frame	120-inch frame
24 / 18-5/8	4	4	4	6	6
30 / 24-5/8	6	6	6	6	8
36 / 30-5/8	6	6	6	8	8
42 / 36-5/8	6	8	8	8	10
48 / 42-5/8	8	8	8	10	10
54 / 48-5/8	8	8	10	12	12
60 / 54-5/8	10	10	10	12	14

Dimensions are in inches. Panel width is nominal. DLO means daylight opening. The corresponding DLO heights are 72, 76, 88, 100, and 112 inches.

Each structural track must have an even number of anchors. Depending on the number of tracks, the actual quantity may exceed the table minimum. For example, a 48 x 96-inch panel requires at least eight anchors at a cluster; a three-track configuration requires twelve anchors evenly distributed across the tracks. For sizes not listed, use the quantities established in the approved project drawings. Do not interpolate the table values.

Frame Installation

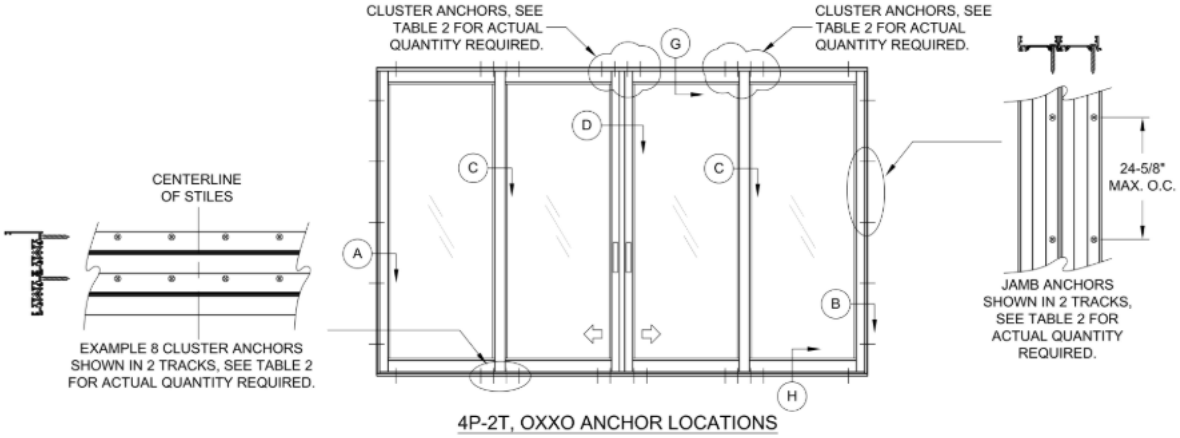
Impact anchor locations FPA-7600-1 Sheet 1



2P-2T XX ANCHOR LOCATIONS

SEE SHEET 2 & 3 FOR ADDITIONAL CONFIGURATION EXAMPLES, ANCHOR LAYOUTS AND NOTES.

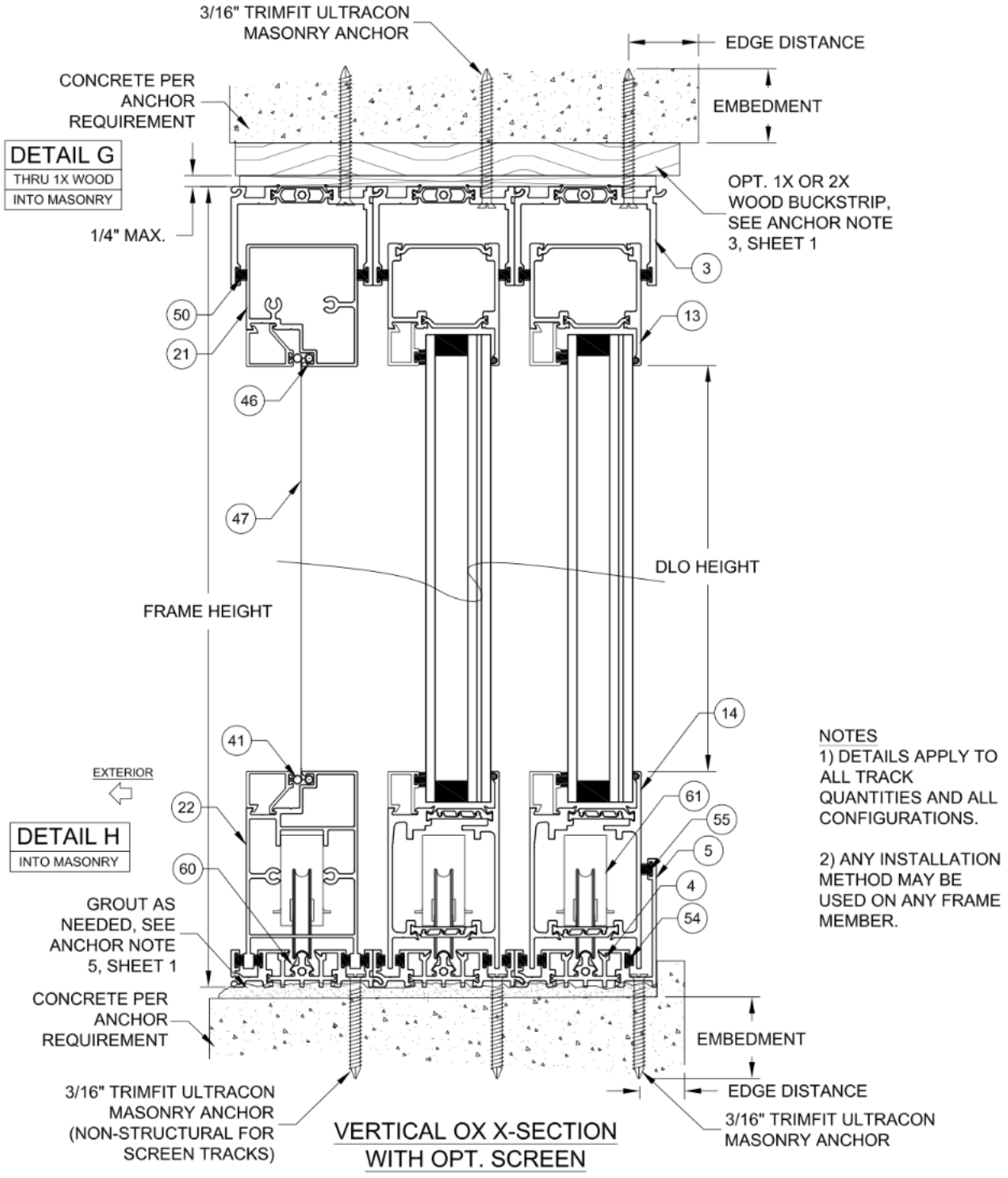
Impact anchor clusters and jamb distribution FPA-7600-1 Sheet 2



4P-2T, OXXO ANCHOR LOCATIONS

Frame Installation

Impact head and sill anchorage FPA-7600-1 Sheet 6



Frame Installation

12. For doors with a Threshold Track Assembly supplied in two sections, completely butter the end of the extreme inside track of the left section with sealant before setting the right section in place. Seal this joint completely. Once positioned, fasten the right side of the sill to the splice fingers with #8 x 3/4-inch flat-head screws.

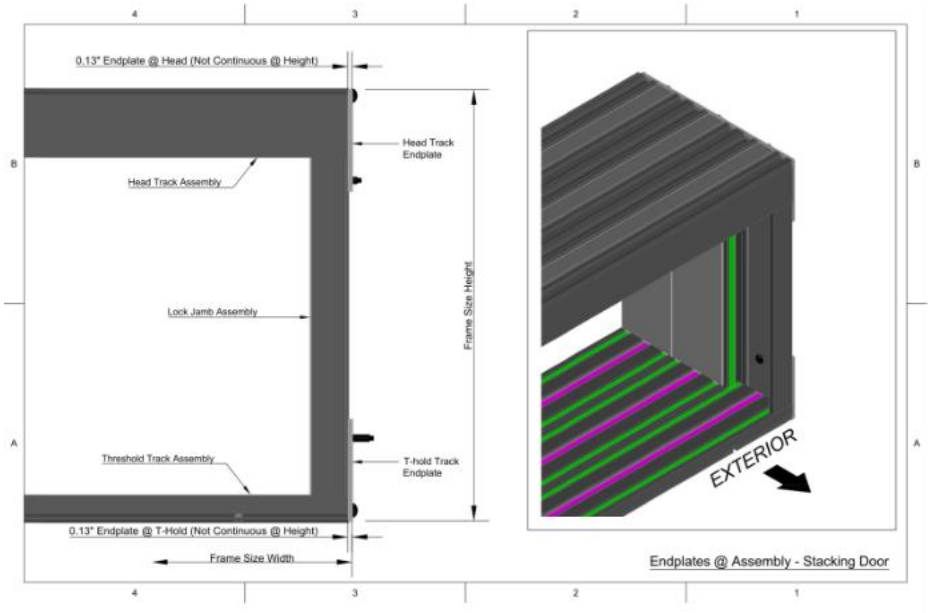
13. Once anchoring is complete, walk along the full length of the track to settle the sealant.

14. Inspect the opening header to confirm that it is ready to receive the Head Track Assembly and has sufficient backing for anchorage. The header should have continuous backing.

15. Using a self-leveling laser, project several points onto the structure above to position the Head Track Assembly directly above the Threshold Track Assembly. Carefully raise the Head Track Assembly into position and temporarily secure it through the required anchor locations using the approved anchor for the header substrate. Provide sufficient attachment to hold the assembly safely.

16. Seal the predrilled holes in the T-Hold Endplates with a compatible sealant. Place the jamb in position and raise or lower the head to align the jamb holes with the T-Hold Endplate holes. Attach the jamb to the endplates using #10 x 1-1/2-inch pan-head screws. Shim the Lock Jambs as required to maintain plumb, with support at every structural anchor point. Anchor the jambs to the structure using the approved anchors from Step 8 and the quantities and layout requirements in Step 11. Maintain the required embedment, edge distance, and maximum installation gap. See Fig. 4.

Fig. 4 Frame Endplates and Alignment



17. Complete the anchorage of the Head Track Assembly using the approved anchors, quantities, and layout requirements in Steps 8 and 11. Ensure that the head is flat, level, and parallel with the threshold.

Panel Instruction

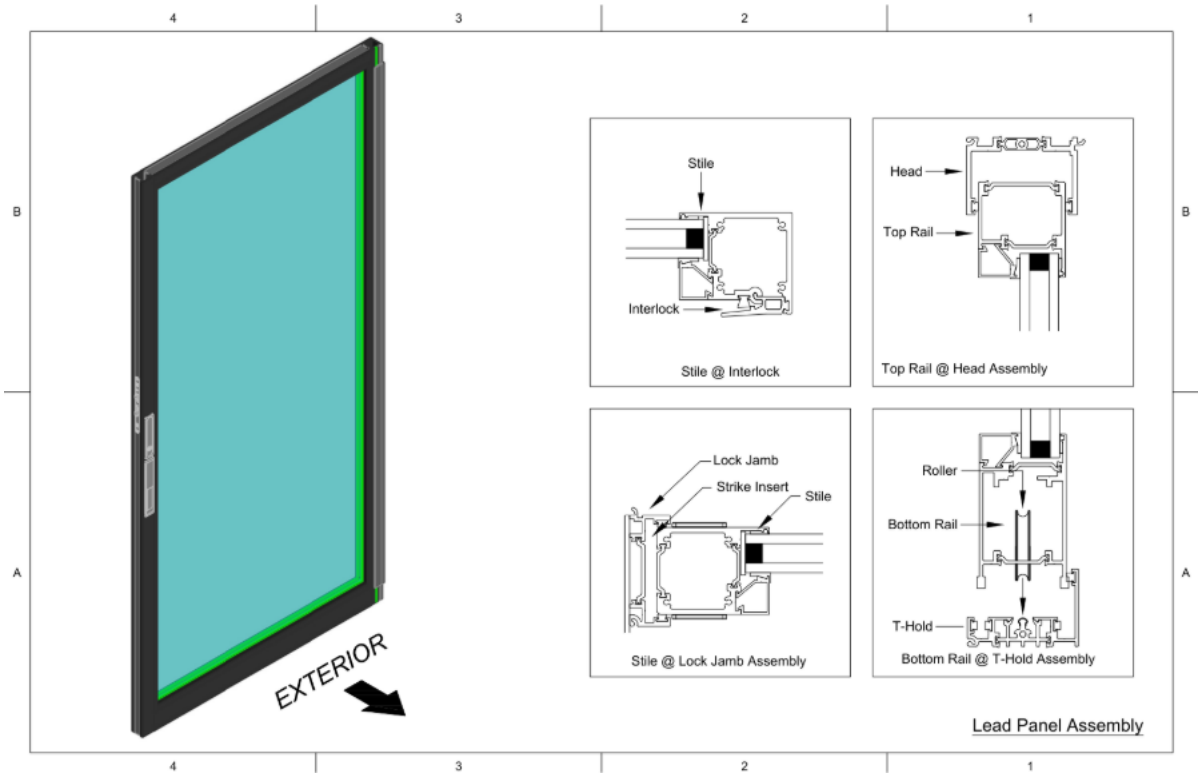
1. Remove the black foam blocks from the head channels. The blocks are approximately 1 x 1 x 2-1/4 inches, with one in each channel except the locking-panel channel. Set them aside for reinstallation after panel installation.

2. Each panel will be marked with the unit number and a designation of Lead Panel, Intermediate Panel, or Fixed Panel.

3. Identify the Lead Panel.

4. Lead Panel components: Top Rail, Lock Stile, Interlock Stile, and Bottom Rail with Skirt. See Fig. 5.

Fig. 5 Lead Panel Assembly



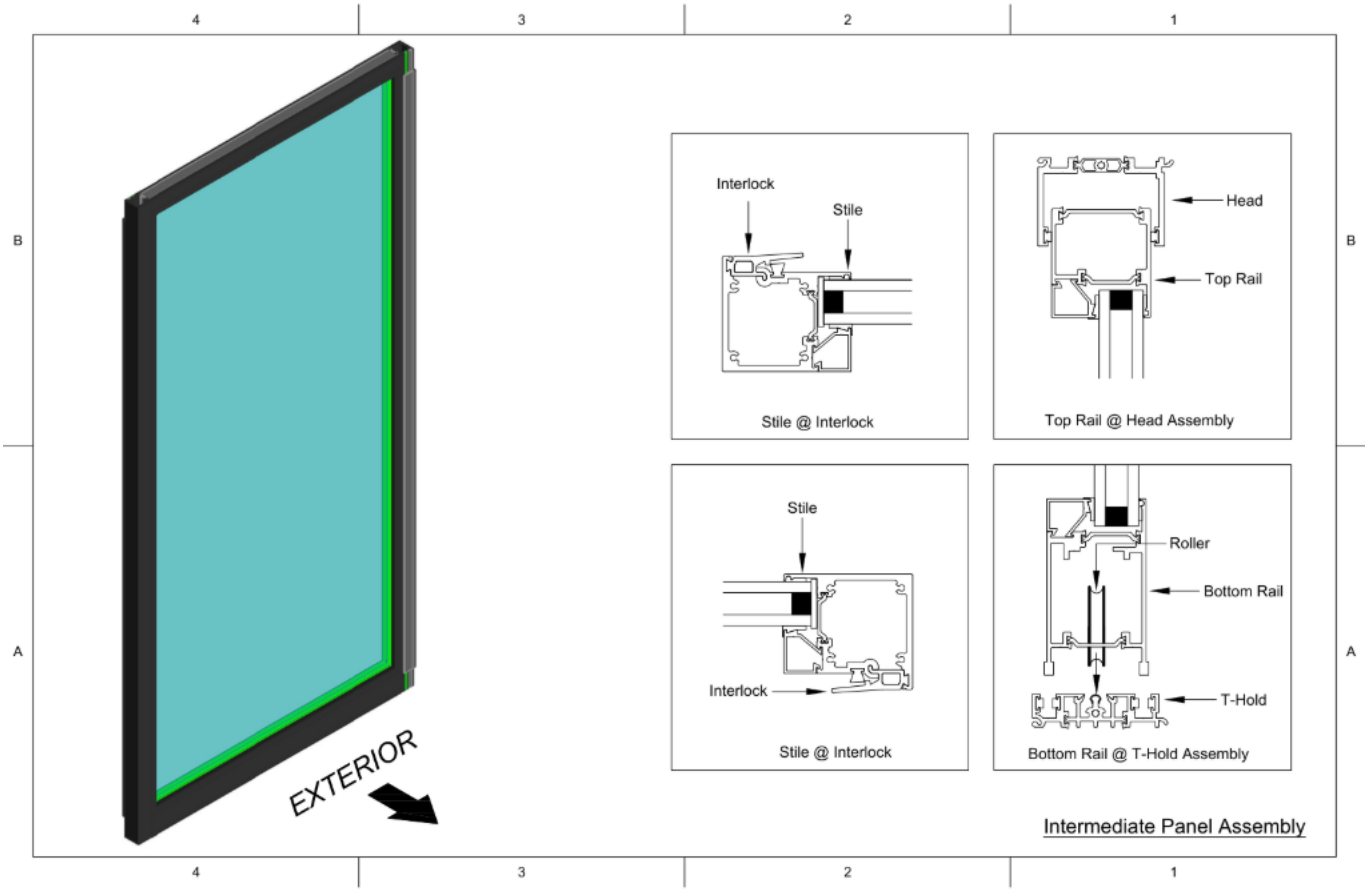
5. For a bi-parting door, there will be two Lead Panels. Install the Active Panel, the panel containing the lock mechanism, first. If the door has one Lead Panel, install it on the extreme inside track of the Head Track Assembly on the appropriate side for the configuration. From outside the building, with the glazing stop facing outside, lean the top of the panel inward, insert it into the extreme interior head track, and lower it onto the threshold. Insert a #3 Phillips screwdriver through the access hole at the bottom of each stile and adjust the rollers until the end sweep lightly contacts the threshold's top surface. Relieve weight from the rollers by holding the panel up when adjusting the roller height. Roll the panel toward the Lock Jamb and check the vertical gap. Make final roller adjustments until the gap is consistent from top to bottom.

Panel Instruction

6. Locate the Intermediate Panel that will be installed directly adjacent to the Lead Panel. For a two-panel door without an intermediate panel, proceed to the Fixed Panel instructions.

7. Intermediate Panel components: Top Rail, two Interlock Stiles, and Bottom Rail with Skirt. See Fig. 6.

Fig. 6 Intermediate Panel Assembly



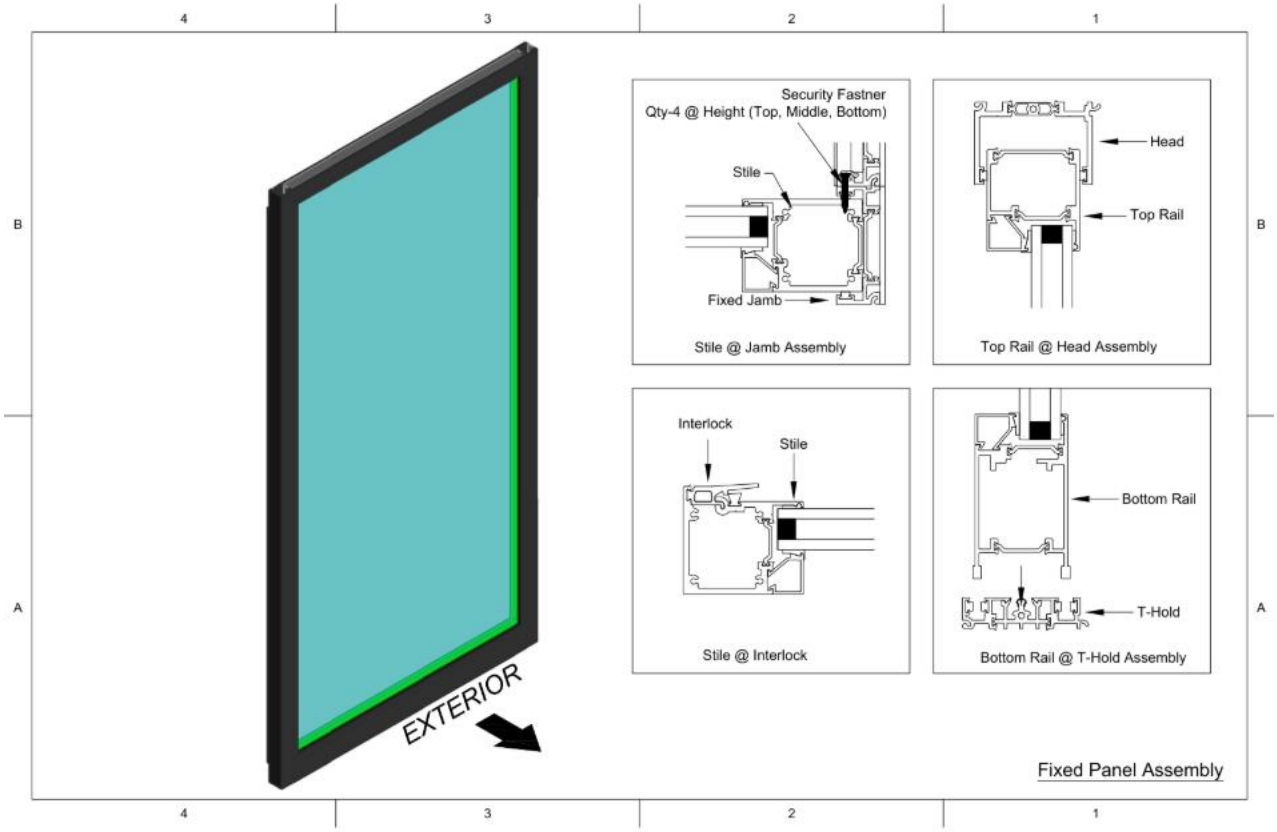
From outside the building, position the panel so it partially overlaps the Lead Panel's interlock. Insert the top into the next track in the Head Track Assembly and lower it onto the threshold. Repeat with the remaining panels. Adjust each rolling panel as it is installed so it rolls freely and its sightlines align with the preceding panel. Relieve weight from the rollers by holding the panel up when adjusting the roller height.

8. If the door has Fixed Panels, install them last.

Panel Instruction

9. Fixed Panel components: Top Rail, Interlock Stile, Fixed Stile with Fixed Spacer, and Bottom Rail with Skirt. See Fig. 7.

Fig. 7 Fixed Panel Assembly



10. Position the adjacent rolling panel to allow the Fixed Panel's interlock to overlap it when the Fixed Panel's Jamb Stile is within a few inches of the Fixed Jamb. Do not final-anchor the Fixed Panel until the door is fully adjusted and in the closed and locked position.

11. Make final roller adjustments to achieve alignment throughout the door. The Fixed Panel also has rollers to align the horizontal sightlines. Relieve weight from the rollers by holding the panel up when adjusting the roller height.

12. Adjust the strike plate on the Lock Jamb by loosening the two machine screws and moving the strike plate up or down until the lock fully engages. To remove excessive slack, open the sliding panel and adjust the lock using the slotted adjusting screw in the center of the lock.

13. With the door fully closed, push the Fixed Panel into the Fixed Jamb. From the interior, install the #8 x 1-1/2-inch pan-head Fixed Panel screws according to Fig. 7. Predrill using a 6-inch-long, 9/64-inch drill bit. Install a minimum of four screws evenly spaced along the jamb.

Panel Instruction

14. With the door fully closed, reinstall the black foam blocks from outside the building. Position them in the head channels against each Intermediate and Fixed Panel to close the gap above the panels. Use a small dab of sealant to hold each block in place.

15. Complete the Jamb Assembly by placing the Jamb Filler into the jamb. Use a plastic block and lightly tap it into place with a non-marring mallet.

16. Seal the interior side of the Threshold Track Assembly to the floor from jamb to jamb. Seal the exterior of the frame at the head and jambs. Do not caulk the exterior of the Threshold Track Assembly. The exterior weep slots must remain open.

17. The door installation is complete.

Special Instructions for Stucco Return

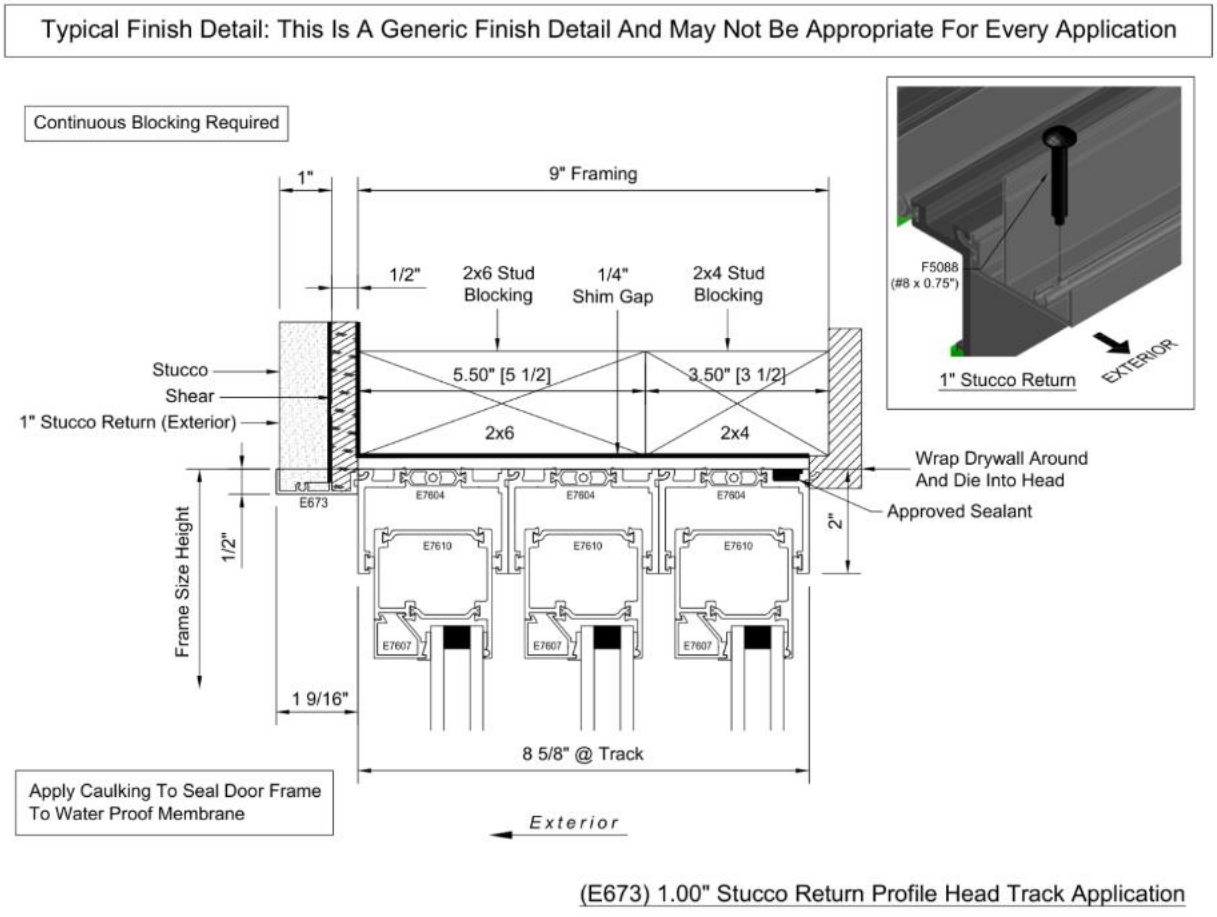
1. See Figs. 8-13 for the stucco-return details.

2. The stucco return is not the primary anchoring point for the door's perimeter frame. Install all required head, sill, and jamb structural anchors according to Frame Installation, Steps 8, 11, 16, and 17.

Apply a quality flashing membrane to the studs in weatherboard fashion and a liberal amount of compatible sealant to the back of the nail fin before placing the frame in the opening. Use additional corrosion-resistant fasteners to secure the nail fin to the stud face, spaced every 12-16 inches around the frame perimeter. Do not place a nail-fin fastener within 3 inches in either direction of the top corners. These accessory fasteners do not replace the impact structural anchors. See Figs. 8-11 for the 1-inch and 1-3/8-inch stucco-return details.

Special Instructions for Stucco Return

Fig. 8 1 Inch Stucco Return at the Head



(E673) 1.00" Stucco Return Profile Head Track Application

Fig. 9 1 Inch Stucco Return at the Jamb

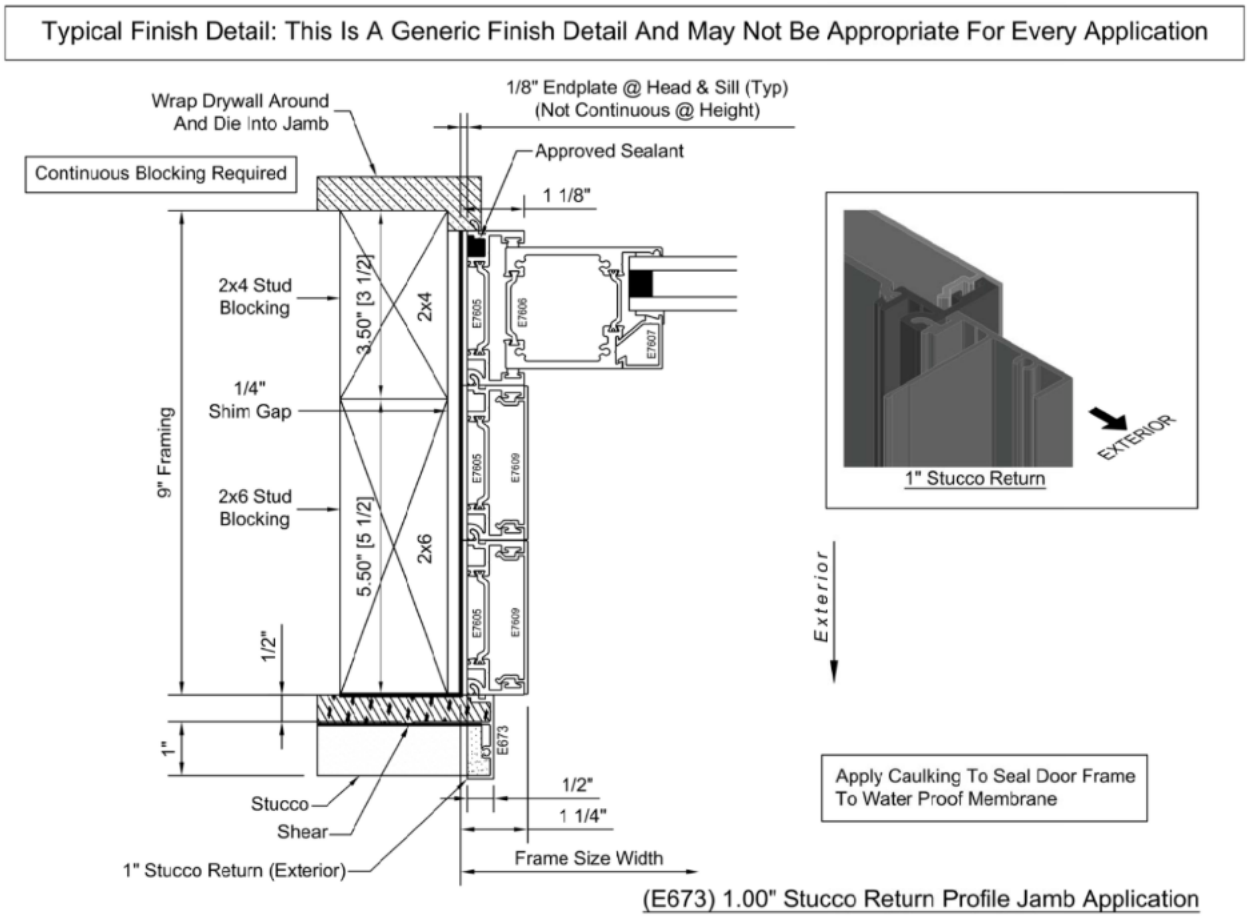


Fig. 10 1 and 3 Eighths Inch Stucco Return at the Head

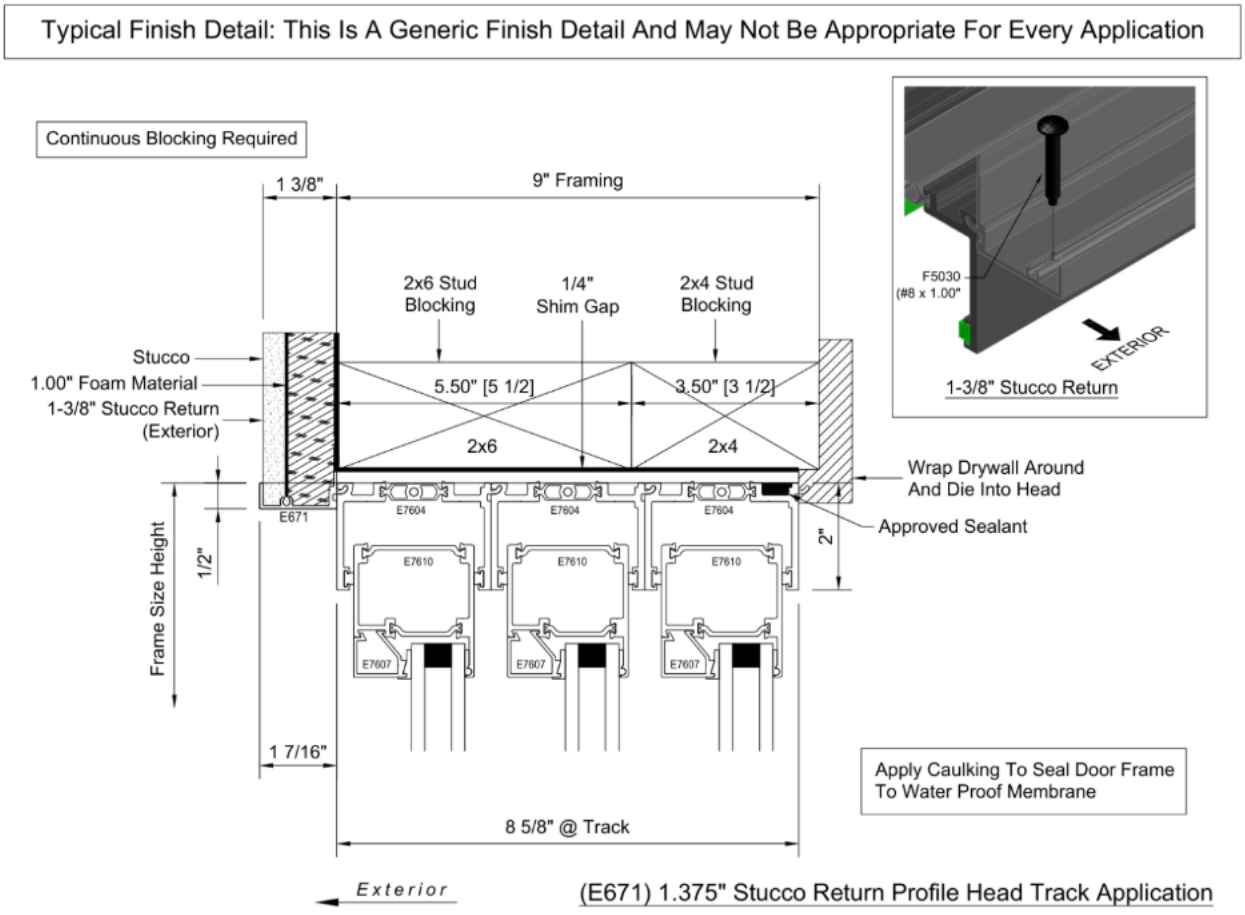
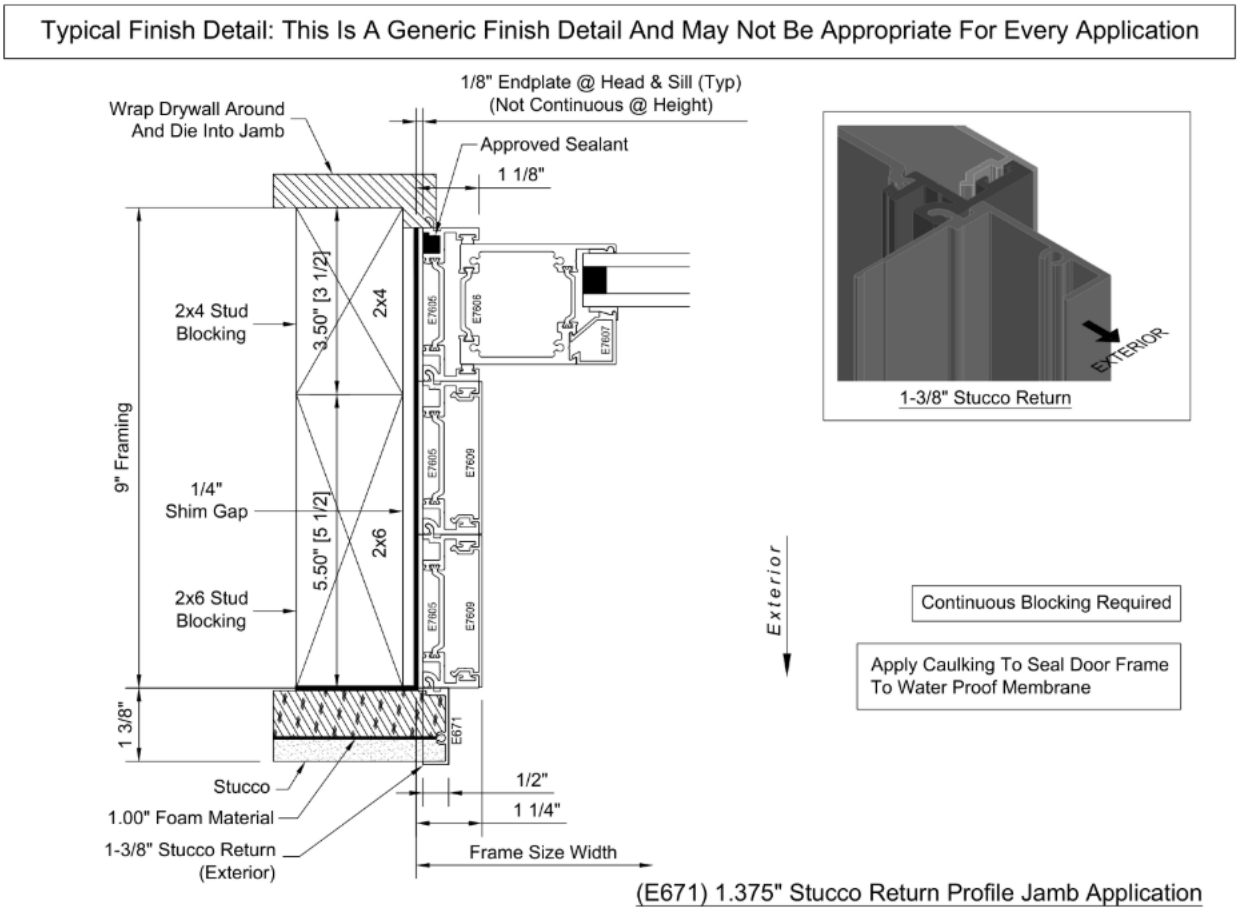


Fig. 11 1 and 3 Eighths Inch Stucco Return at the Jamb



The optional stucco-return kit provides a return surface to assist with installation, waterproofing, and the application of stucco or other exterior finishes. It is designed for non-pocketing multi-slide doors from Western Architectural Openings. Due to field conditions, 90-degree corner units are excluded from this kit option.

The stucco return is factory applied and sealed to the head and jambs only. The installer is responsible for assembling the frame, connecting the head return to the jamb return using a #8 x 3/4-inch Phillips pan-head screw, and applying the supplied corner pieces to the nail fin before placing the frame in the opening.

Waterproofing is the responsibility of the installer.

Fig. 12 Exterior Stucco Return Profile

