FLEETWOOD
WINDOWS & DOORS
www.FLEETWOODUSA.com

SERIES 3070-HI
INSTALLATION INSTRUCTIONS

Table of Contents

I. Care and Maintenance

Operational Warning: Fleetwood products operate smoothly and special care should be taken by the owner to make sure users are not injured.

This product is factory finished. Please handle with extreme care. Protect all exposed surfaces from contact with caustics, corrosives, solvents, abrasions, impacts, wet packing material etc. **FAILURE TO DO SO WILL NULLIFY THE WARRANTY.** Before **ANY CLEANING**, review the Care & Maintenance Instructions (go to www.fleetwoodusa.com for more information). **Contact the local dealer with any questions or concerns.** Fleetwood strongly recommends that all products be cleaned after installation and totally protected from construction debris and equipment.

II. Tools / Materials, Sealant Requirements, & Anchor Instructions

Tools Required: Tape measure, Level, Shims, Screws, #2 Phillips Bit, #4 Phillips Screw Driver, Power Drill, Sealant, Caulk Gun, Backer Rod, Utility Knife, Rubber/Plastic Mallet, Wax.

Sealant Requirements

- The sealant referred to within this document for seals associated with the assembly of the product should conform to **AAMA 800**. It may be a sealant recommended and approved by the sealant manufacturer that is compatible with the framing, finish, and surrounding materials.
- All sealant bead sizes must conform to the sealant manufacturers' size requirements.
- The Owner / General Contractor is responsible for identifying the need for any additional sealant to be applied by others. Such sealant shall be elastomeric material, with the framing, finish and surrounding materials.

Load / Anchor Instructions

- Live or Dead Loads can affect product functionality, loads shall be designed to withstand the most critical effects of load factors and load combinations as required by building code.
- Fleetwood requires maximum vertical deflection of the header not to exceed Span/720 or 1/8"
- Structural engineer to determine anchor quantity and spacing for design load requirements.
- Proper isolating material must be between dissimilar surfaces (i.e. block/concrete & aluminum).

III. Assembly and Installation

General: The key to any window or door installation is preparation. This extends from storage of the product to the final installation and to all points in between. Careful planning and attention to detail can help ensure proper installation.

Note: Add tube wax lubricant to the ends of all fasteners to reduce the drive torque required for installation, apply a small amount of tube wax to the head of the fasteners to assist with installation.

It is essential that each Fleetwood product be assembled and glazed in accordance with AAMA standards and factory instructions. It is the installer's responsibility to ensure that each Fleetwood product is assembled, glazed and installed and completely sealed to ensure that the product is leak-free and operates correctly**. Installation of Fleetwood products must be in accordance with the standards set forth in ASTM E 2112**. If there are any questions regarding the installation of a Fleetwood product contact the factory customer service department.

IV. Glazing Assembly

1. Start attachment of glazing vinyl at the top corner of the glass.
2. Cut glazing vinyl at corners as shown in 9, Detail “A”.
3. At start/end point (seam), cut glazing vinyl 1/8” oversize to compensate for stretching.
4. Apply sealant to top portion of this seam.
5. Apply a bead of sealant that is compatible with the insulated glass seal to all four exterior corners as shown in Figure 6, Detail “A”.

Notes:

a. The glass thickness, net width and height must be to size within ±1/32”.
b. Failure to install according to these instructions nullifies all warranties related to this product.

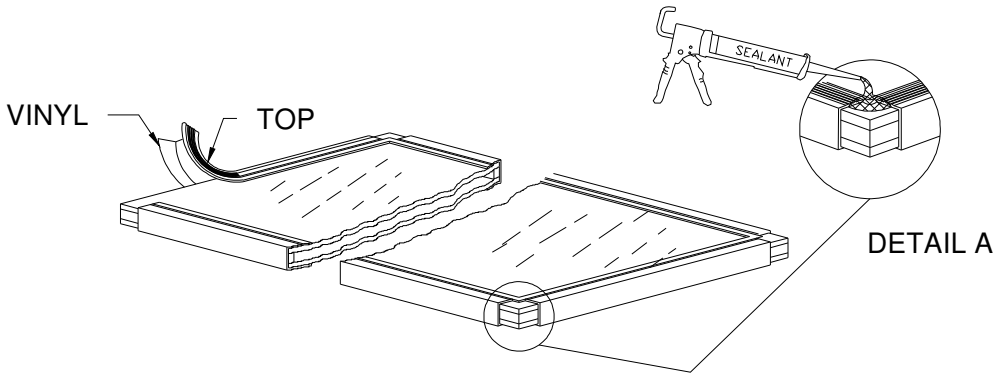


Figure 1:
Glazing Vinyl

V. Panel Assembly

Note: Match door configuration and panel orientation with customer order. Configuration and orientation of panels shown in assembly instructions is for illustration purposes only. Operating hardware or thumb turns are always to the interior.

“X” Panel

1. Adjust the roller assemblies (2 required per “X” panel) to the full up right position using the adjustment screw (Figure 2).
2. Center the top rail onto the glass. Using a rubber mallet, drive the rail onto the glass until the rail seats against the vinyl lip.
3. Repeat this procedure with the bottom rail.
4. Position the interlocker stile, weather-strip facing up (on the right for OX, left for XO) and drive it onto the glass.

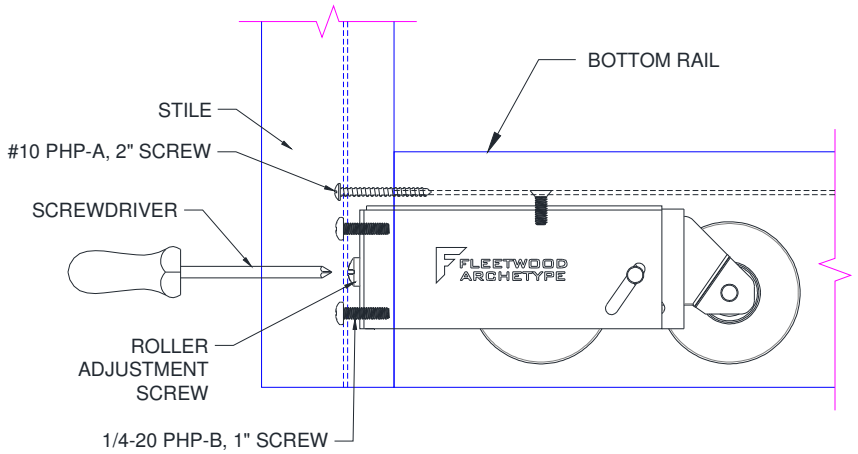


Figure 2:
Roller Adjustment

5. Position the lead stile or interlocker stile on the left side and drive it onto the glass.
6. Secure the stiles to the rails with (4) #10 x 2” pan head screws (Figure 3). Add wax to the ends of all fasteners to reduce the drive torque required for installation.
7. Install (2) ¼-20 UNC x 1” long pan head screws to bottom of interlocker stile or lead stile. Screws attached vertical rails to Roller Housing (Figure 2).
8. On doors with meeting stiles, a stainless-steel cover is provided to cover the oblong holes at the bottom of the male meeting stile (Figure 4).

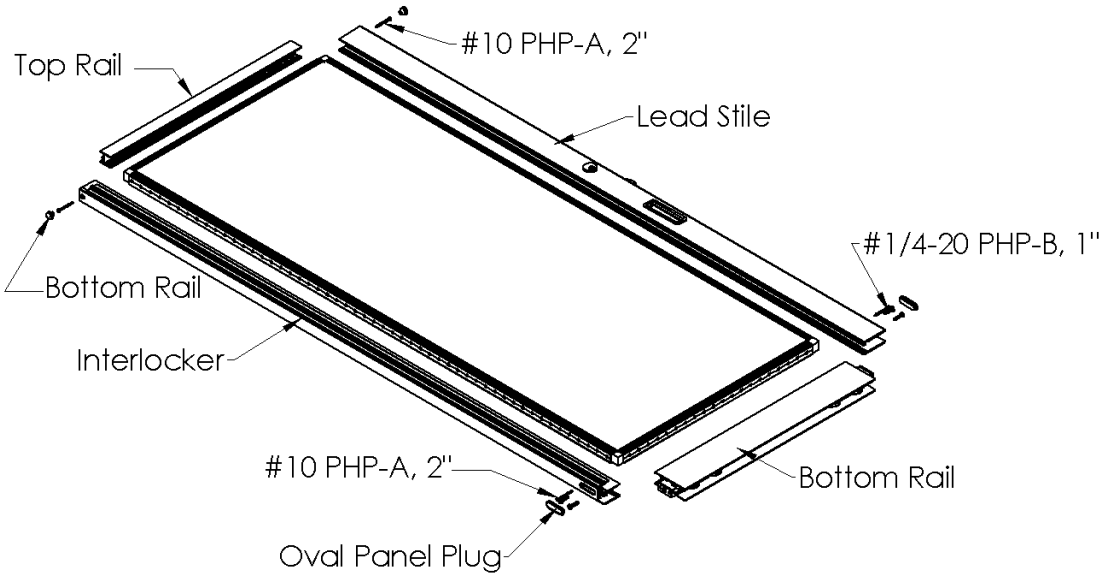


Figure 3:
X Panel Assembly

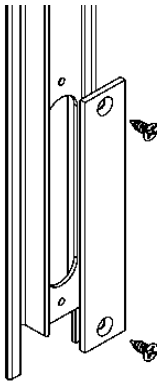


Figure 4:
Sliding Bottom Rail Assembly

"O" Panel

1. Center the top rail onto the glass. Using a rubber mallet, drive the rail onto the glass until the rail seats against the vinyl lip. Repeat this procedure with the bottom rail.
2. Position the fixed stile on the right side and drive it onto the glass.
3. Position the interlocker stile on the left side and drive it onto the glass.
4. Secure the stiles to the rails with (4) #10 x 2" pan head screws. Add wax to the ends of all fasteners to reduce the drive torque required for installation.
5. Insert vinyl plugs at top and bottom of stiles (Figure 5).

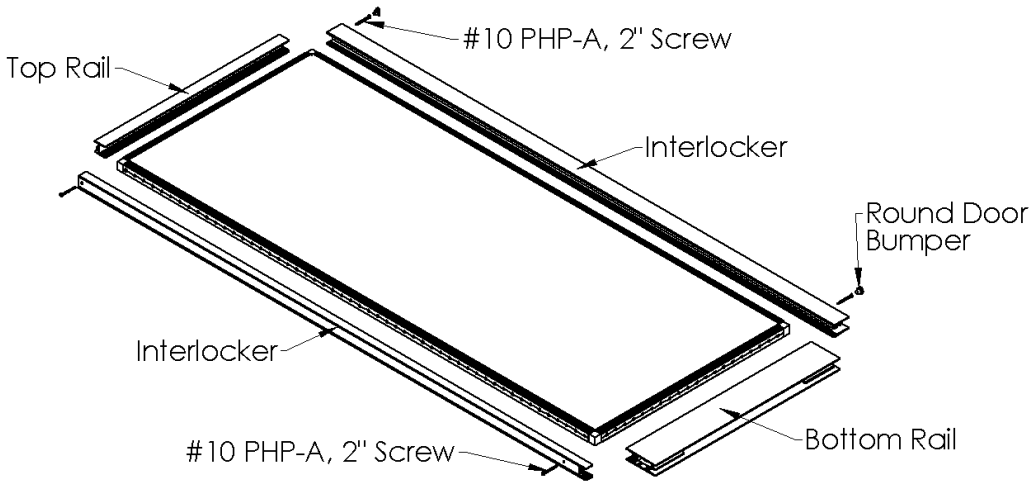


Figure 5:
O Panel Assembly

VI. Frame Opening Verification & Sillpan Installation

1. Sillpan Substitution

- If the factory provided sillpan is not desired, the product warranty will remain intact if the substitute panning system emulates the essential design of the factory pan. This sliding door has passed specific air, water, energy and structural testing with the factory provided sillpan.

2. Frame Opening Verification

- Check the measurements of the opening and verify that the door will fit into the opening. Measure all four sides of the opening to make sure there is a clearance of 1/2" in width and 1/4" in height.
- Remove the door(s) from the packaging and lay it in front of the opening. Check width and height dimensions.
- Verify the opening is plumb and level.

3. Pre-Fit and Leveling

- Place sillpan into the opening and determine leveling (Figure 6) that must be done prior to installation.
- Shim as necessary to stabilize the entire depth and length of the sillpan. No unsupported width of more than 8” is allowed.
- If more than 1/8” shim height is required, it is recommended that pouring self-leveling “Rock Hard” (or equal) to achieve level and stable surface.

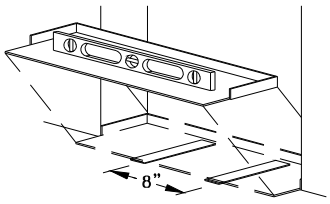


Figure 6:
Sillpan leveling

4. Flash the Opening

- Once the opening has been confirmed, flashing of the opening is required prior to Frame installation. Paper and/or liquid flashing methods are acceptable (see AAMA 711/714 for material requirements).
- Check local Building codes for any additional flashing requirements.

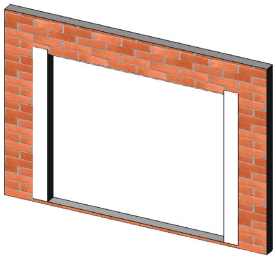


Figure 7:
Jamb Flashing

Paper Flashing

- At each Jamb the flashing paper should be cut at least 3” past the weep-screed or diado flashing and at least 6” above the head of the door. The flashing must wrap around the jamb and at least 3” back into the opening (Figure 7).
- At the Head run the flashing paper long enough to extend at least 3” past the jamb flashing and wrap around the Header at least 3” into the opening (Figure 8).

Liquid Flashing

- Follow the liquid flashing manufacturer instructions.

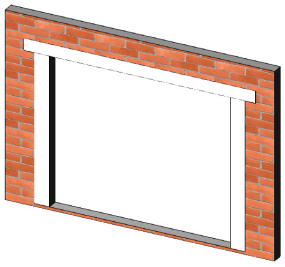


Figure 8:
Head Flashing

5. Sealant Application

- Apply bituminous paint to raw masonry or concrete at the sill to eliminate electrolytic and chemical reactions. It is recommended a PVC liner be placed to ensure separation of the metal frame with the substrate. In balcony situations flash the sill with aluminum or galvanized brake metal (Sillpan is provided).
- Apply sealant in all corners and seams of the sillpan (Figure 9).
- With bottom side of sillpan up, apply a 3/8" bead of compatible sealant 1/2" in from interior leg. Sealant bead to run across the bottom as well as up each vertical leg of the sillpan. Also apply sealant beads near the sides and across the front (Figure 10).
- Secure the sillpan to the floor with glue. Position sillpan as necessary to allow for proper installation of frame assembly (Figure 11).

Note: For pocket doors do not forget required space for post interlocker. Sill track is located 3/8" from pocket wall on side with post interlocker.

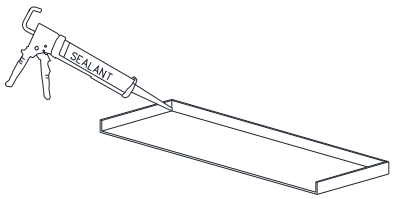


Figure 9:
Seal corners and seams

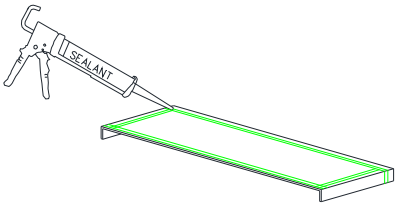


Figure 10:
Seal underside of Sillpan

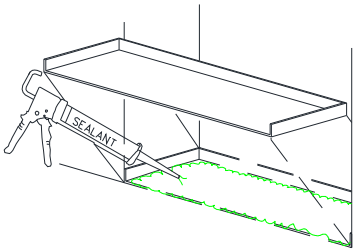


Figure 11:
Set pan in full bed of sealant

- If sillpan is more than one piece, butt the pieces and glue them to the floor together.
- Cut a piece of adhesive backed waterproof material to fit the joint as specified in Figure 12, A=¼". Select waterproofing material that is compatible for your application. Waterproofing material must have an adhesive backing and be capable of withstanding the temperature ranges for your region (Figure 13).
- Apply sealant to all interior and exterior seams.

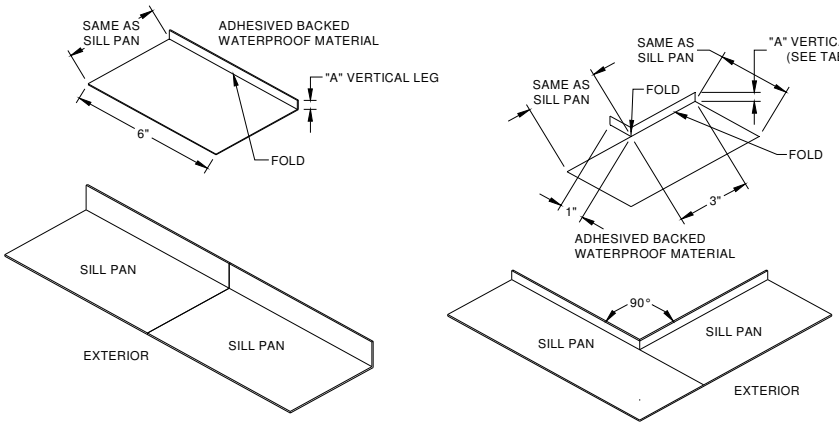


Figure 12:
Joining Sillpans with adhesive backed material

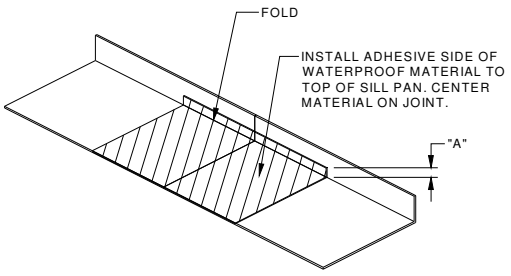


Figure 13:
Adhesive backed material centered on seam

VII. Frame Assembly

Note: Due to the potential disruption during handling and installation, the installer is responsible for the integrity of all areas requiring sealant whether or not these frames were factory assembled.

1. Remove Jamb Fillers from jambs, these will be installed after frame installation.
2. Add sealant to the upper corners of the jamb(s) and to the end of the head that is compatible to the entire assembly (Figure 14).
3. Attach the jamb(s) to the head using #10 x 3/4" long pan head screws, check that the screws past through jamb(s) and into the screw raceways in the head. Add wax to the ends of all fasteners to reduce the drive torque required for installation.
4. Do not add sealant to the lower corners of the jamb(s) or ends of sill track(s).
5. On pocket installations orient sill track so that no weeps holes are located in pocket.
6. Attach the jamb(s) to the sill using #10 x 3/4" long pan head.
7. If sill riser (optional) is included, insert riser tab into sill pocket and slide together (Figure 15).
8. After frame has been assembled make sure ample sealant is forced in and around each contour at all head joints.

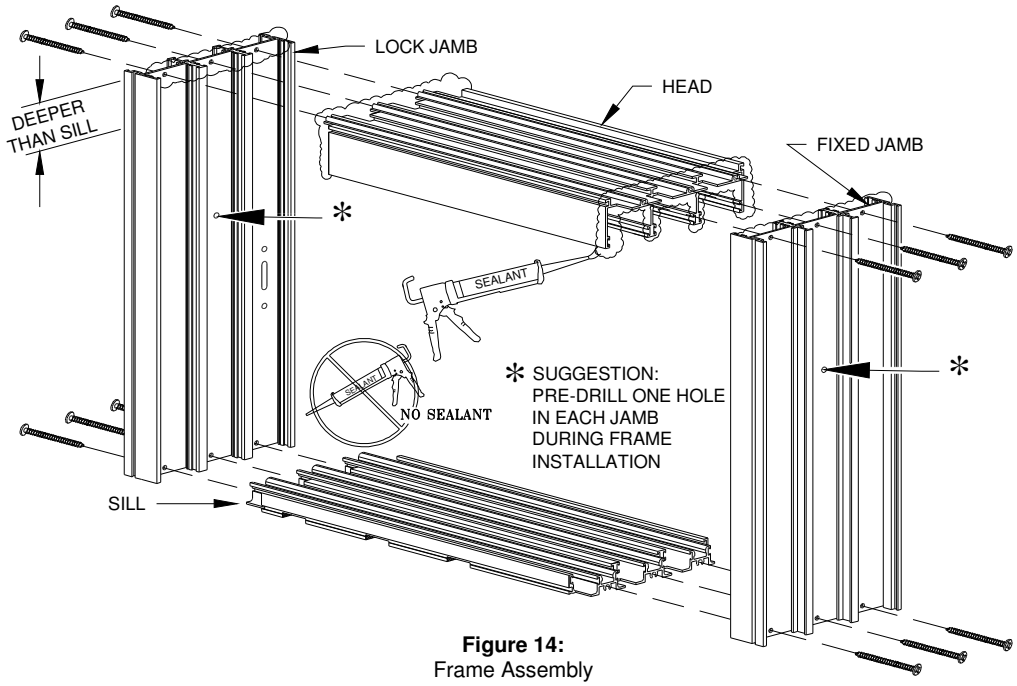


Figure 14:
Frame Assembly

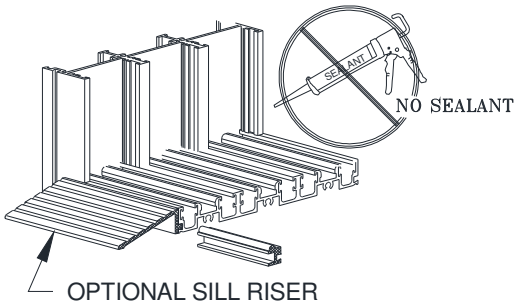


Figure 15:
Optional Sill Riser

VIII. Sill Assembly for 90° Corner Doors

1. Remove the "L-Shaped" braces and Screw #8 FHP - A - UC, 1/2", SS, Clear from the frame pack. There should be (4) screws per brace (Figure 16).
2. Orient the sill with the bottom side up and install the "L-Shaped braces as shown in the figure below. Make sure to protect the top side of the sill with cardboard or other materials to prevent damage to the finish while installing braces. Keep corner tight while installing braces to prevent a gap at the mitered corner.

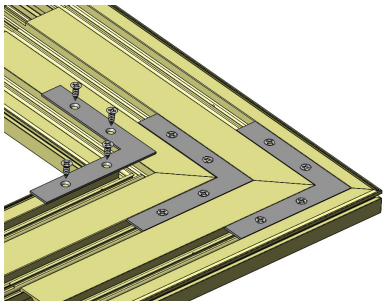


Figure 16:
90° Corner Braces

IX. Frame Installation

Note: If shim space between substrate and door frame member exceeds 1/4", a continuous wood member, with depth equal to or greater than the frame depth must be placed between the frame and substrate and the frame anchors must run through the spacer into the substrate with the specified embedment.

1. Anchor Requirements

Frame may be either direct mounted to the opening, mounted onto a continuous wood spacer, anchored to a min. 18 ga. 33 ksi metal stud or anchored to a min. 2x4 no. 3 southern pine wood buck. When anchored to a 2x_ buck or metal stud, no. 10 screws shall be used. When direct mounted or mounted with spacer to block/concrete, 1/4" concrete screws shall be used. See "Frame Anchor Requirements Table" for embedment requirements.

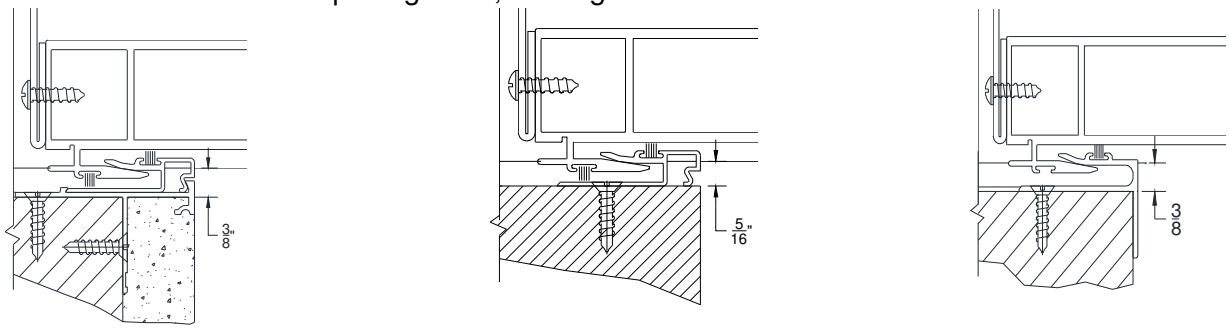
Frame Anchor Requirements Table

Opening Type (Substrate)	**Jamb to Opening** Fastener Type	**Minimum** Embedment	**Minimum** Edge Distance
2X_ Wood Frame of Buck	No. 10 SMS Screw	**1-1/4"**	3/4"
Min. 18 GA. 33 KSI Metal Stud	No. 10 SMS Screw	FULL	3/8"
CMU/Concrete	(1) 1/4" Concrete Screws	**1-1/4"**	1-3/4"

(1) Concrete screws shall be ITW Ramset/Red Head Tapcons, ELCO Tapcons, Hilti Kwik-Con II or Powers Rawl Tapper (Hardened Steel or S.S.).

2. Pocket Requirements

Depending on the pocket interlocker option chosen the minimum spacing requirements between the frame and the opening differ, see Figure 17 below.



2 Piece Pocket Interlocker | J-Post Pocket Interlocker | L-type Pocket Interlocker

Figure 17:
Pocket Interlocker Options

3. **Anchor Locations**

- Frame installation anchors furnished by installer, not by Fleetwood. Stainless steel screws are recommended.
- **Head & Sill** – Frame anchors spaced 6” from ends, center of the panel, and concentrated loads at the interlocker. One anchor required per track, at interlockers 3” spacing typical. Example: 3-Track system requires 3 anchors per location at both the head and sill (Figure 18 and 19).
- **Jambs** – Frame anchors spaced 4” from ends and then evenly on 16” (max.) centers. Two frame anchors are required per location for both 2 and 3 track jambs. When additional jamb tracks are used a minimum of one row of anchors is required for each track.

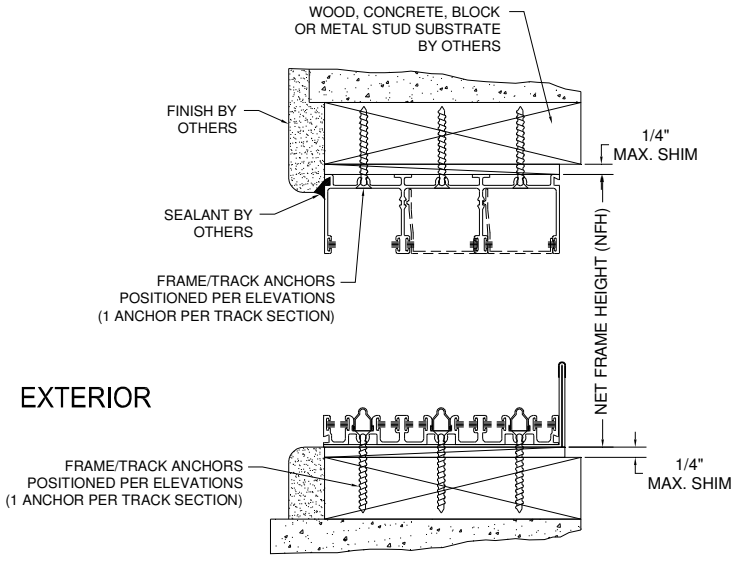


Figure 18:
Fastener locations, Head and Sill

- **Pocket Interlocker** – Frame anchors spaced 8” on center.
- **Meeting Stiles** – When meeting stiles are used in a 2-track system an additional set of anchors is required at the meeting point of the stile ends in both the head and sill.
- **90 Degree Corners** – Frame anchors spaced 5” from ends and then evenly on 16” (max.) centers. One frame anchor required per track per location. Example: 3-Track system requires 3 anchors per location at both the head and sill. Anchors at miter corner connection of frame shall not be more than 5” from exterior corner.

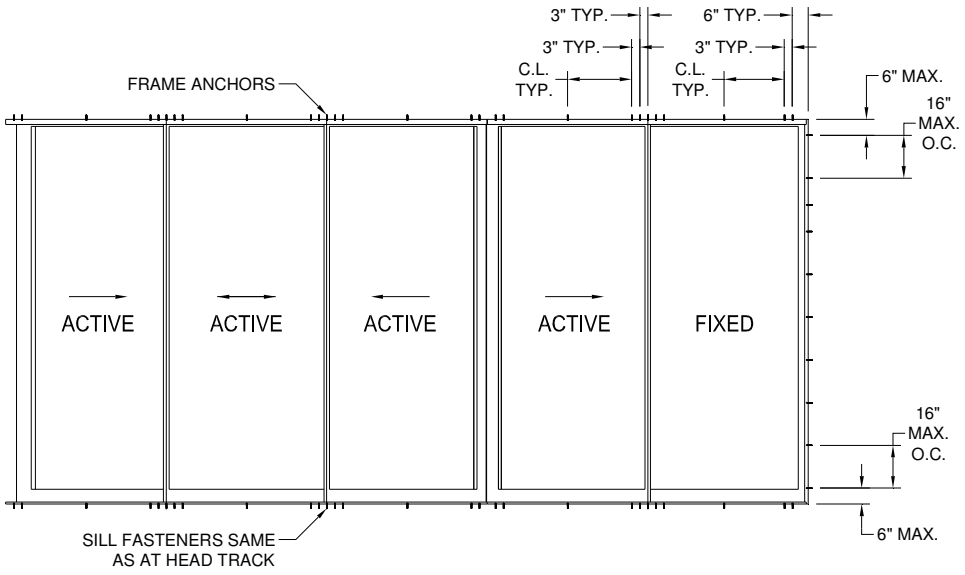


Figure 19:
Anchor Spacing

4. **Sealing Sill Anchors**
   - When using 1/4" concrete screws, remove dust from around drilled hole after drilling.
   - Before installing sill anchors, apply a compatible sealant into the drilled hole, filling the pocket area between the sill track and sill pan.
   - After installing the anchor, apply sealant over the anchor screw head (Figure 21).

5. **Sill Placement**
   - Attach sill to the sillpan with a compatible sealant (Figure 20). Do not place sealant in or next to weep slots or weep holes cut (Figure 21). Sealant that blocks weep slots will prevent sill from weeping.

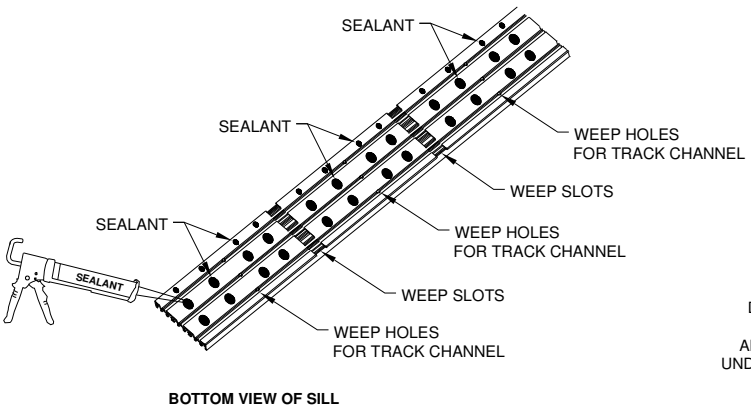


Figure 20:
Sill Sealant Locations

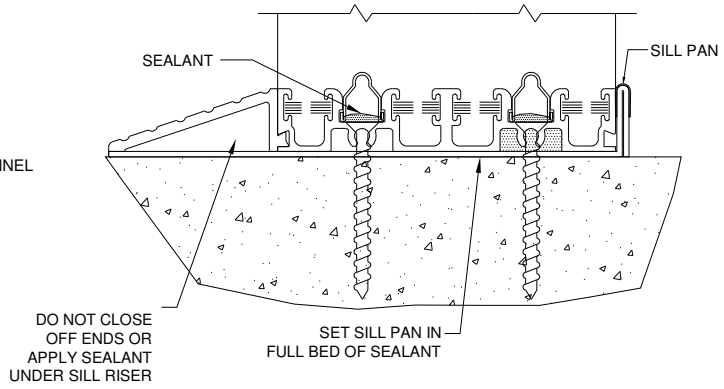


Figure 21:
Sill Sealant Locations

6. **Head Bumper Installation (optional)**
   - Install black rubber bumper in the frame head as shown below (Figure 22).

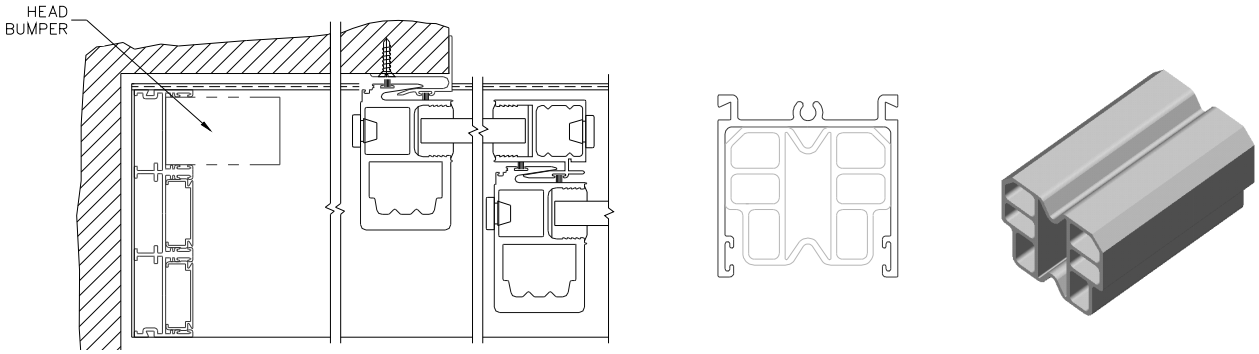


Figure 22:
Head Bumper location-*(L-type post interlocker shown)*

X. Sill Track Installation

1. Using a pair of pliers, slightly squeeze one end of the track to create a tapered edge.
2. Push tapered edge of track into the sill (Figure 23).
3. Using a rubber mallet, tap the track into the sill.

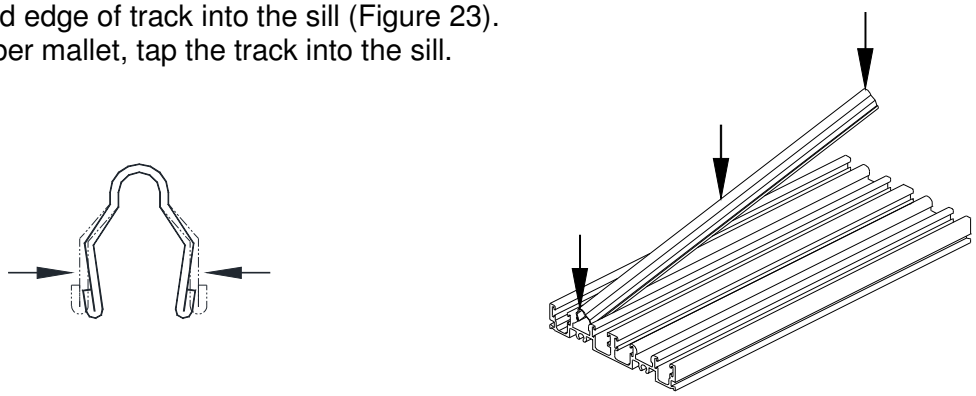


Figure 23:
Sill Track Installation

XI. Sill Track Removal

1. Using a pair of pliers, slightly squeeze the track together at one end and pull up (Figure 24).
2. Using a screwdriver, slowly pry the track out of the sill. Although you can reinsert the track, we recommend a new track be installed for optimal performance of sliding door.

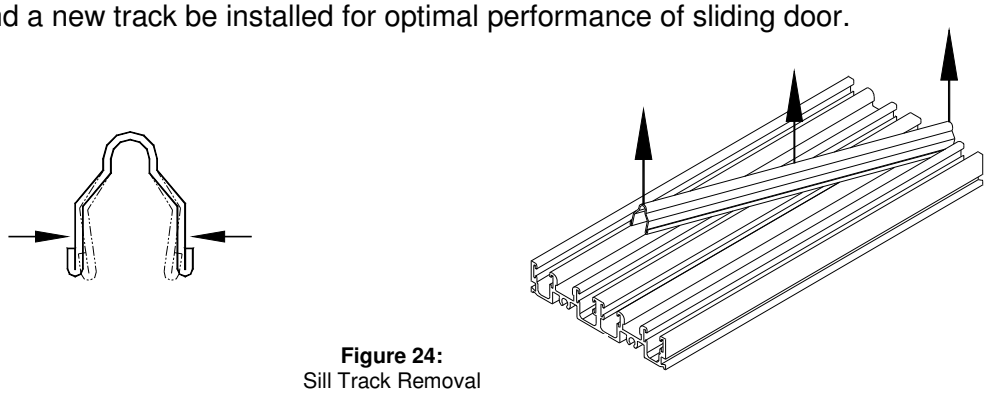


Figure 24:
Sill Track Removal

XII. Panel Installation Non-Pocketed Doors (OX, OXX, etc.)

Note: Check customer order for proper panel configuration and orientation.

1. Sequence of panel installation is from interior to exterior.
2. Insert panel (panel located on the track closest to the interior) into the upper head channel. Push up and swing the bottom inward until panel is vertical, then lower panel down onto the track (Figure 25).

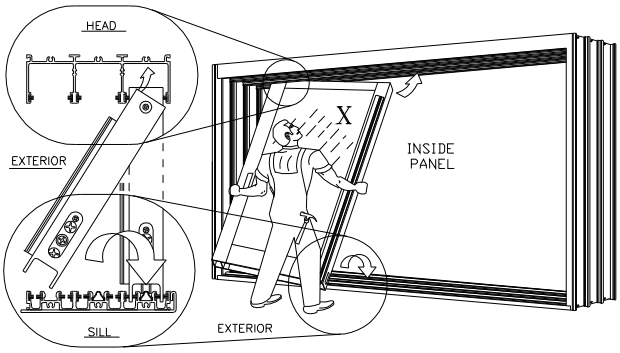


Figure 25:
Panel Installation

- **"X" Panel** - Do not attempt to slide the panel unless the rollers have been adjusted. Adjust the rollers as needed to make the panel plum and level. The top of the bottom rail should be 3-5/8" above the sill for the standard bottom rail (rail height 4-1/32") and 4-3/4" for mammoth bottom rail (rail height 5-5/32") for the best weather seal. If the panel contains a lock stile, verify that the latch height is correct for proper operation with the frame. Insert vinyl plugs into the holes at top and bottom of the panel.

- **"O" Panel** - Lift and move the panel into the fixed jamb as far as possible. Verify that the weather stripping in the frame head is located so that it contacts the width of the "O" panel. Add (4) #8 x 1/2" long flat head screws to all fixed panels (Figure 26). Screws shall be countersunk and located 39" from top and bottom.

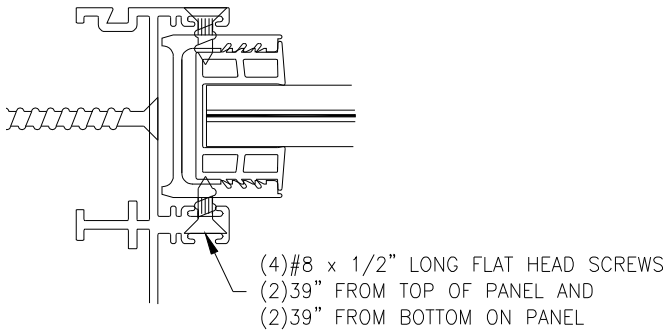


Figure 26:
Fixed Panel anchoring

3. Repeat step 2 until all panels have been installed. Panels must overlap during installation to allow proper engagement of interlockers.

4. Verify that all panels with interlocker hooks engage properly. If lead stile panel is not engaging properly with the jamb or meeting stiles, remove interlock spacers as necessary.

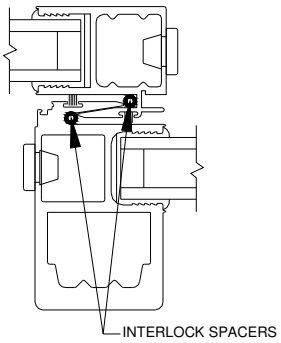


Figure 27:
Interlock spacers

5. Install sill fillers into sill tracks except where it will interfere with the sliding panels (Figure 28).

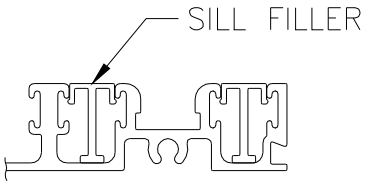


Figure 28:
Sill Fillers

6. Install head closer(s) into the head except where the closer interferes with sliding panel(s) (Figure 29).

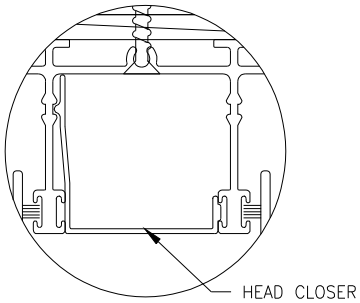


Figure 29:
Head Closers

7. After all panels have been adjusted plum and level and panels close and lock, open panels and install air barriers. Air barriers are attached to the bottom (Figure 30) and top (Figure 31) of all sliding interlockers and secured with (2) #6 x 3/8" long, Tek screw.

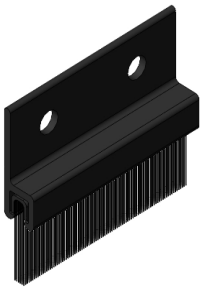


Figure 30:
Bottom Air Barrier

Figure 31:
Top Air Barrier

XIII. Panel Installation Pocketed Doors (PX, PXX, etc.)

a) Check customer order for proper panel configuration and orientation.
b) Pocket walls: Installer to flash inside pocket walls to adequately protect from moisture.
c) Installation of panels should be completed before construction of pocket is complete.

1. The sequence of panel installation is from interior to exterior.

2. Insert panel (panel located on the track closest to the interior) into the upper head channel. Push up and swing the bottom inward until panel is vertical, then lower panel down onto the track.

   Note: On PX or XP configurations, if the pocket construction has been completed, it may be necessary to remove the lead stile from the panel before installation into the frame can be accomplished.

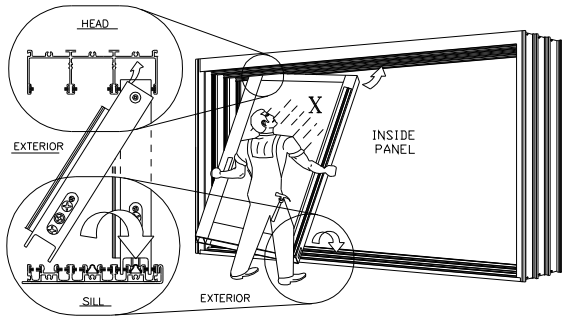


Figure 32:
Panel Installation

3. Do not attempt to slide the panel unless the rollers have been adjusted. Adjust the rollers as needed to make the panel plum and level. The top of the bottom rail should be 3-5/8” above the sill for the standard bottom rail (rail height 4-1/32”) and 4-3/4” for mammoth bottom rail (rail height 5-5/32”) for the best weather seal. If the panel contains a lock stile, verify that the latch height is correct for proper operation with the frame. Insert vinyl plugs into the holes at top and bottom of the panel.
4. For doors with an exterior pocket interlocker, move panel into the closed position; otherwise move panel into the wall pocket.
5. Repeat steps 2-4 until all panels have been installed.

   Note: Panels must overlap during installation to allow proper engagement of interlockers.

6. Verify that all panels with interlocker hooks engage properly. If lead stile panel is not engaging properly with the jamb or meeting stiles, remove interlock spacers as necessary (Figure 33)

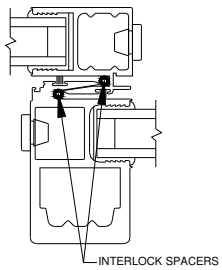


Figure 33:
Interlock Spacers

7. To install pocket interlocker slide all panel(s) into the wall pocket. Pocket interlocker is furnished net frame height and must be field cut. Attached pocket interlocker with anchors as specified in table below. Drill and countersink as required.

Pocket Interlocker Anchor Requirements Table			
Substrate Type	**Jamb to Opening** Fastener Type	**Minimum** Embedment	Locations
2X_ Wood Frame of Buck	No. 8 Flat Head Screw	**1-1/4"**	4" From Ends & 12" O.C.
Min. 18 GA. 33 KSI Metal Stud	No. 10 Flat Head Tek Screw	FULL	4" From Ends & 9" O.C.
CMU/Concrete	(1) 3/16" Flat Head Concrete Screws	**1-1/4"**	4" From Ends & 18" O.C.
(1) Concrete screws shall be ITW Ramset/Red Head Tapcons, ELCO Tapcons, Hilti Kwik-Con II or Powers Rawl Tapper (Hardened Steel or S.S.).			

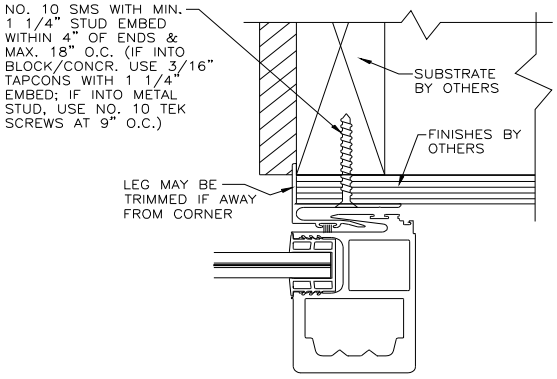


Figure 34:
Post Interlocker Anchor Spacing
(L-Type shown)

8. Install head closer(s) into the head except where the closer interferes with sliding panel(s).

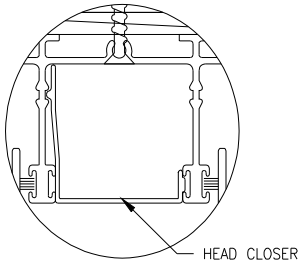


Figure 35:
Head Closer location

9. After all panels have been adjusted plum and level and panels close and lock, open panels and install air barriers. Air barriers are attached to the bottom (Figure 35), and top (Figure 37) of all sliding interlockers and secured with (2) #6 x 3/8" long, TEK screws.

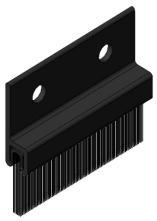


Figure 36:
Bottom Air Barrier

Figure 37:
Top Air Barrier

XIV. HP Interlocker at Pocket

Note: This option allows HP stiles to pocket flush to your finished wall in the open position.

10. Panels are installed in the same manner as describe in section VII, page 15.
11. The Pocket panel (panel that interlocks to the post interlocker) will install into the 2nd track from the exterior on doors with an exterior post interlocker. The outermost track is a false track with sill fillers and head closers filling the entire length. On doors with an interior post interlocker the panel will install into the 2nd track from the interior. (refer to the customer order for configuration)
12. Once the panel is installed and adjusted, install the air barriers at the top and bottom of the interlocker at the pocket.

.

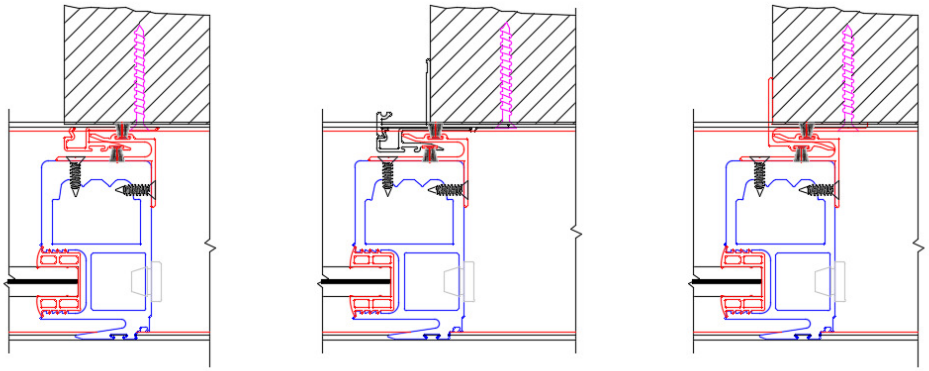


Figure 38:
HP Interlocker at Pocket