LIFTSLIDE DOORS

Installation and Site Preparation



GENERAL INFORMATION ON INSTALL

Manufacturer's Notes

The building envelope must be correctly prepared with weather resistant barriers - that meet local and state codes. All frame and sill surfaces must be correctly prepared for air, water and structural integrity by the builder or contractor before attempting installation.

It is recommended that Loewen LiftSlide systems are installed with sufficient overhangs to aid in prevention of water or air infiltration that may contribute to structural damage to the surrounding area, finished and/or systems.

In order to meet warranty requirements, all systems are required to be installed by a certified installer.

Finishing Requirements

Metal Clad:

- · Interior within 14 days of installation.
- All door panels Interior immediately upon installation.

Non-clad:

- · Exterior immediately upon installation.
- Interior within 14 days of installation.
- All door panels Interior and Exterior immediately upon installation.

Factory primed:

- Exterior within 14 days of installation.
- Interior within 14 days of installation.
- All door panels Interior and Exterior immediately upon installation.

See Loewen warranty and finishing guidelines at www.loewen.com

Product Adjustments

Adjustments to Loewen products are required as part of the installation process. It is up to the installer to ensure that all products operate properly and seal adequately.



Adjustable FASTrack System



Interlock Drain Assembly



Finished floor of a flush track assembly

Adjustments to hinges and other hardware to achieve uniform reveals and consistent weatherstrip contact should be made and verified during the installation.

Should technical support be required please contact us at 1-800-563-9367

GENERAL INFORMATION ON INSTALL

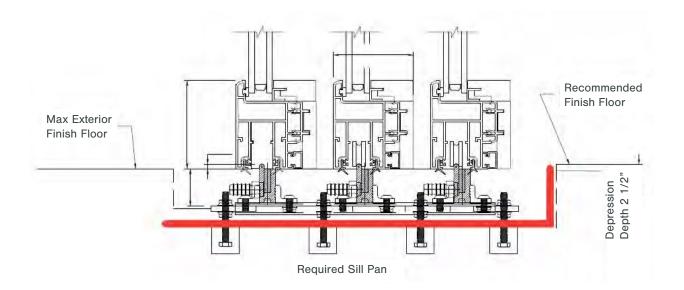
The following pages are to be used as a guide when installing Loewen LiftSlide Door systems.

Note: The preparation of the rough opening for large openings such as those required by, but not limited to, LiftSlide, BiFold or MultiSlide doors have unique requirements.

Structural headers that allow for deflection no greater than 1/8" along the unsupported length once the header is fully loaded are required. Special care needs to be taken when installing any unit including transoms above such large opening units.

This manual is intended for construction professionals with proven competency installing doors for large openings. It is recommended that certified installers are used when installing this product.

Sill Pans must be used in every installtion of a Loewen LiftSlide system.



Three Panel; Jamb; 1 1/2" Flush Sill

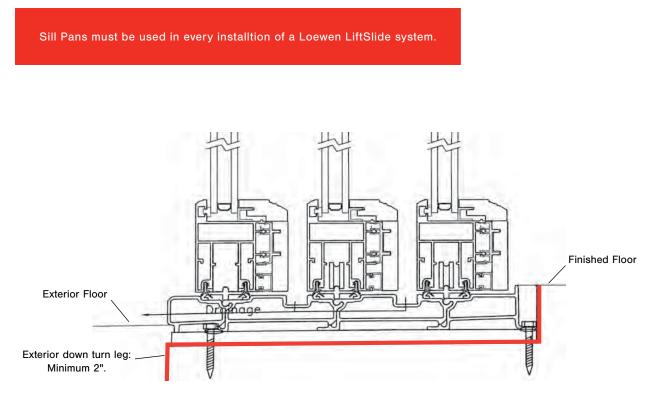
Preparing The Opening

Yout must work from the provided drawings to prepare the opening.

- The rough opening is the correct size, plumb and square. No sagging header. Take into account if the roof has been loaded or not. The maximum deflection over entire length of opening should not exceed 1/8 after the roof is loaded.
- Correct recess from finished floor location to bottom of slot. Minimums are listed on the drawings, but more is always better. Adjusting the track up or down is far easier than chipping out concrete or having to re-frame the slot.
- It is important that your framer knows the finished floor thickness to determine the header height.
- The level of the finish floor needs to be determined ahead of time and noted somewhere near the opening. If the track will be embedded into concrete, the slot for the track needs to be set in the concrete according to the drawing. If the system will be over a framed truss structure, a way to contain the track to accommodate the dry pack of concrete surrounding the track after installation should be determined.

- The LiftSlide Door System will be built with a weep system. The drain locations should be identified so the drain tubing can be run before filling the track.
- For pocketing systems, ensure that the finished pocket width and depth is correct. These dimensions are referenced in your drawings.
- The outside wall of the pocket needs to be framed in and sheathed according to the building codes in your area. Wait to build the interior pocket walls until after the installation of the doors. This will allow easier access to the exterior pocket walls for installation of the head and bottom track; easier installation of the panels once the head and bottom track have been installed.
- Paint the interior surfaces black because a certain amount of the interior pocket wall surfaces will be visible. Do this before the doors are permanently installed.

Preparing The Opening (Continued)



3 Panel - Raised Track with Sill Pan

Preparing The Opening (Continued)

- Seal and finish all the panels and wood surfaces (specifically the edges) prior to installation, as it will be difficult to complete after the panels are installed. It also protects the wood from swelling and contracting, which can damage the wood itself and cause problems with operation.
- Once the doors are installed, it is difficult to access the overlapping stiles on the doors for any final finishing.
- Solid wood framing should be in place to anchor the head and/or side jamb.
- The location of the mounting holes, which are pre-drilled, is dependent on system length and as such the complete sheathing makes the installation easier. This will allow mounting fasteners (not supplied) to be placed where necessary.



Rigid Sill Pan Installation

Preparing The Opening (Continued)

- Sill pan options are rigid, flexible, or liquid and sill pans are supplied by the contractor / builder.
- Pan flashing is used at the base of openings and designed to collect and drain water directly to the exterior or onto the weather resistive barrier.
- Sill pans should be slightly sloped outward or flat with a minimum 6" end dam, 1/2" interior upturn leg and 2" exterior down turn leg.
- Before fastening the rigid sill pan, apply three heavy 3/8" rounded beads of OSI Teq Seal onto the construction plate, outboard, inboard and at the exterior down turned leg. Continue the sealant 6" up both jambs at each end.
- Set the pan into the sealant and check for level.
- Secure the end dams with fasteners as required.
- Seal the end dams with sealant; tool the end dams to the framing.



Rigid Sill Pan

TOOLS AND MATERIALS LIST

Site Preparation Advisory

Loewen recommends a high level installer or someone that has been trained as a Loewen Certificed Installer. Loewen offers service and install training through our dealer network.

LiftSlide installations are complex and should not be attempted with simple written documentation.

Your dealer or certified LiftSlide Installer would be glad to review the entire instructions and familiarize you with this service instruction prior to installation in order to ease the process of preparation and installation.

Tools Required

- Laser Level
- Hammer
- Pry Bars
- Utility Knife
- Screw Gun
- Applicator Foam Gun
- "J' Roller
- Tape Measure
- · Caulk Gun



Materials Required

- · High Impact Slopped Shims
- Screws
- OSI Quad Sealant
- · OSI Flash or Henry Blue Skin
- · OSI or Great Stuff "PRO SERIES" Foam
- · Rigid Head Flash
- Sill Pan (rigid or flexible)
- Optional liquid rubber sealer when appying sill into concrete - Prosco or OSI Quad Flash



Tools and Supplies Check List - For Jamb and Head Track Installation

- Battery Screw Gun
- Vertical Laswer with Rotating Head
- 6 Foot Level
- Step Ladders / Scaffold etc.
- #10 x 2 1/2" Minimum Flat Head Stainless Steel Screws (supplied)
- Acrylic Caulk, shade that comes close to paint color (supplied).



Installation

- Ensure you have the current version drawings before starting.
- Remove the screws from the lid on the plywood box; it will contain the bottom track, head track, jambs and accessories.
- Verify that your rough opening matches the dimension on the drawing.

Note: The rough opening for height includes the depression depth.

- Check rough opening dimensions before proceeding, and make corrections as required. Verify the finish floor height in the room with the contractor prior to installing the bottom track. Set up the laser level into the center of the room and find the high spot, reference the sill from there.
- Create a "Bench mark" in the room 3/16" above the finish floor height. Note: The bottom track must protrude 3/16" above the finish floor for the door to slide and seal properly.
- With a pencil mark the center of the opening on the sub floor, left to right.



Flush Track Assembly



Filling in Concrete Base

Installation (Continued)

- Follow the plan or general contractors instructions for the door setback from the outside wall of the structure.
- Make a mark representing the centerline of the longest track on the framing on each end of the track noting setback. Note: The jambs can be used as a guide to locate the setback of the track.
- Use a chalk line and snap a line on the interior from left to right.
- Fasten with a 2" concrete or wood screw.
- Continue working your way along the sill, ensure the sill is straight in and out, shim as required and fasten with screws. (Leave your laser set up in the interior of the room until sill is completed).
- It is critical for the sill to be perfectly level; there are NO adjustments to the panels later.
- Your sill is now installed.

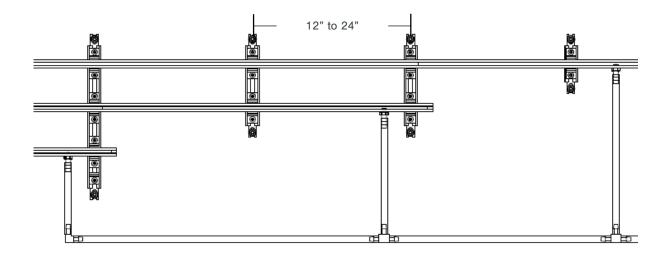


Filling in Concrete Base

Drainage Installation - Planning Your Assembly

If concrete is used in flooring, it should be free of chlorinated additives (to prevent track corrosion). Do not mix and match parts between the FFI Stainless Steel FASTrack system and Aluminum FASTrack system. They will not be compatible.

- The Drain Channel: face the flat top to the interior. Flat top should be level with the interior floor.
- Recommended: 12" to 24" space between Track Bridges for effective height adjustment.
- 12" for maximum adjustability, up to 24" for basic installations.
- Assemble the system either in the floor at the jobsite, or pre-assemble elsewhere.
- Take care to protect the system during transport.



Drainage Installation - Planning Your Assembly (Continued)

- Plan drilling of floor holes for Track Bolts: center approximately ¹/₄" to ⁵/₈" wider side than the bridge piece length on each side.
- Decide whether to anchor the Track Bolts in subfloor be-fore attaching assembly on top or, attach Track Bolts to assembly structure and then move the whole assembly over and lower into floor holes.
- FASTrack Drainage System can be assembled to slope up to 2° for surface drainage.



Track Clip Assembly



Track Bolt Assembly

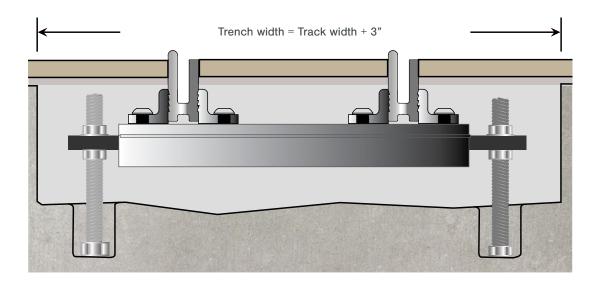


Bridge Clip



Bridge Clip Assembly

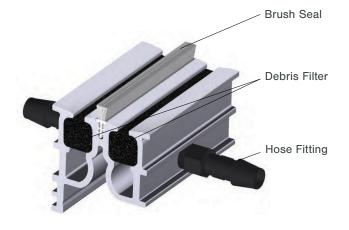
Drainage Installation - Planning Your Assembly (Continued)





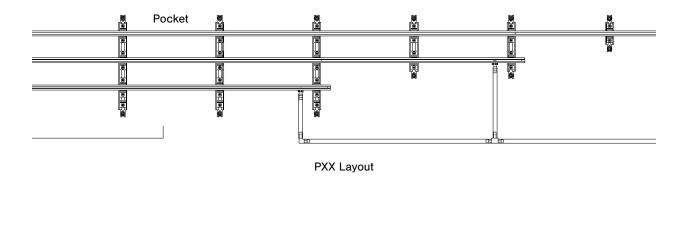
Assembled Bridge

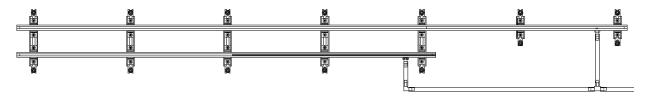




FLUSH TRACK EXAMPLES

Typical drainage tubing assembly for single-sided panel

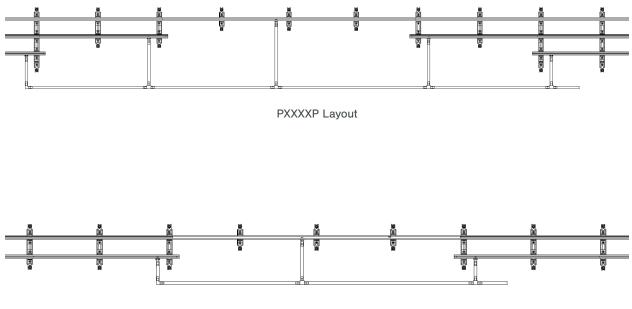




OXX Layout

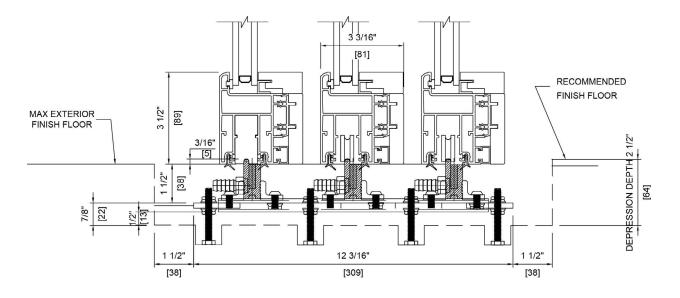
FLUSH TRACK EXAMPLES

Typical drainage tubing assembly for 2-sided panels



OXXXXO Layout

SYSTEM DRAINAGE EXAMPLE



OXX Flush Track

Raised Track Installation

- Ensure that you have the most current version of the drawings before starting.
- Verify the rough opening matches the Rough Opening dimensions on the drawing.

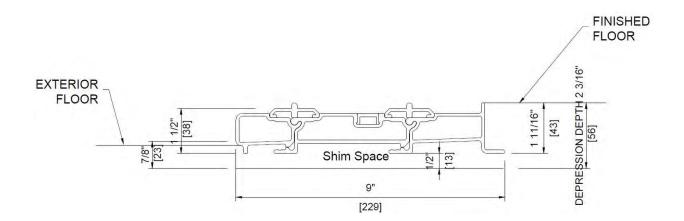




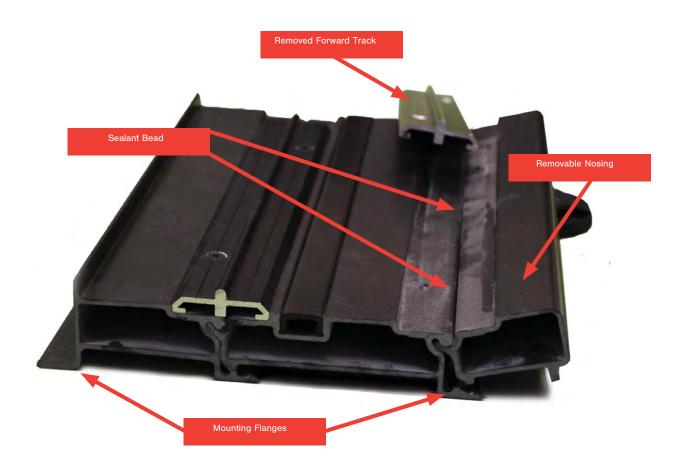
Raised Sill Track (Fiberglass)



Raised Sill Track (Aluminum)



Notes on Disassembly of Track System to Prepare For Install



Disassembled Track for Installation

Raised Track Installation (Continued)

- Verify the finish floor height in the room with the contractor prior to installing the bottom track.
- Apply a rigid or flexible sill pan. (or liquid flashing system).
- Follow the plan or general contractors instructions as to the door setback from the outside wall of the structure.
- Make a mark representing the centerline of the longest track on the framing on each end of the track noting setback. Note: The jambs can be used as a guide to locate the setback of the track.
- Place the track evenly left to right on sill pan. Dry fit and level the sill using a laser level and composite shims.
- Set up your laser over the center of the longest track so that the laser will follow the entire length of the track.
- Swing laser to the marks on the framing at each end of the track. Note: This procedure lines up the laser in the vertical plane.
- Start at the end with the most tracks and move the track assembly so that the laser line is on the center of the longest track the entire length. Note: Don't worry if the track is bowed at the far end, this will be taken care of in the following steps.
- Ensure the track is aligned with the laser as you move along the track. Drill into concrete through the pre-drilled holes in the sill.



Flexible Sill Pan Installation

Raised Track Installation (Continued)

- After all holes are drilled, inject sealant into the holes and fasten with 2" stainless steel concrete screws.
- Remove bottom track from depression.
- Apply sealant bead in nosing grove and reassemble. Apply sealant to track holes, and re-attach tracking.
- It is critical for the sill to be perfectly level; there are NO adjustments to the panels later. Reposition the laser over the top of the bottom track and verify the track is still in alignment.
- Your raised sill is now installed.

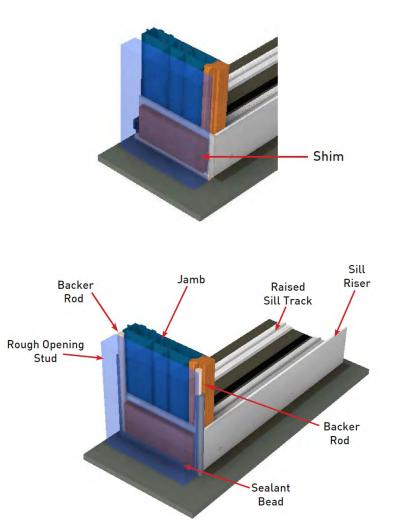


Raised Track Without Nosing Piece

LiftSlide End Sill Riser Installations

LiftSlide sill risers are factory applied to increase storm performance of the sill. To support long term integrity, mandatory shims must be applied to support the open cavity between the sill assembly and rough opening.

- Apply a generous bead of sealant at base of sill assembly.
- Shim to be inserted tightly between the sill riser and rough opening. Allow enough room for backer rods and sealant.
- Apply a backer rod and sealant between the rough opening and jamb to achieve a water tight seal.



Jamb to Sill Install (Clockwise or Counter Clockwise)

- Set up your vertical laser over the center of the longest track so that the laser will follow the entire length of the track and up the jamb.
- This procedure will help to keep your jamb plumb in and out.
- The jambs have lines on the extrusions that correspond with the head and bottom track. The jamb sits on top of the bottom track and beside the top track.
- If you have a raised track then ensure a generous bead of sealant is applied to the sill before you set the jamb into place.
- Once the jamb is set into the sealant apply one screw half way up the jamb to hold it while you fasten the bottom. (Screws are supplied in box of materials.)

Note the adjustment screws are adjusted through the hole in the extrusion. The screw must be removed to adjust the jamb jack.



Generous Caulking Bead

Jamb to Sill Install (Clockwise or Counter Clockwise) (Continued)

- Use the supplied align key to extend the bottom jamb jacks across the jamb and make sure the jamb to sill is tight before fastening with supplied screws.
- Continue fastening the jamb all the way to the top.
- The one jamb is now installed.



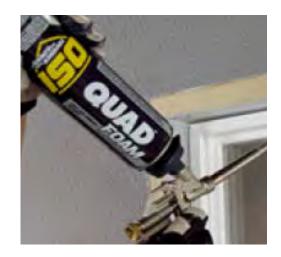
Jamb Jack Key - Showing Back of Jamb and Alignment Screws

Complete the Rough Opening to Jamb Seal

Materials used to seal windows and doors should:

- Maintain shape and sealing properties in all ambient temperatures.
- Material MUST NOT have any voids during application.
- Not cause window frame to bow or bend.
- Top of all doors should have drip flash or other mechanical means of water deflection installed.





Complete the Rough Opening to Jamb Seal (Continued)

- **Backer Rod:** as most commonly used in the building industry.
- Sealant: Ultra-low VOC content. Doesn't harden, crack, separate, or yellow. All-weather application, chemically compatible with backer rod and other materials.
- Closed cell foam with low expansion: Will not deflect window and door jambs. Quick-setting formulation can be cut or trimmed in less than 1 hour. Will not absorb moisture.



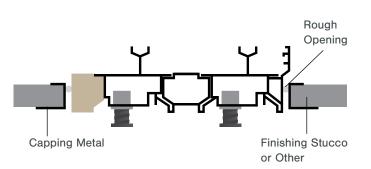
Note: Chinking the gap between window and door units and rough openings with fibrous insulation does not provide an air/water barrier connection and is not sufficient. Similarly, wrapping WRB into openings adds a wick point through the envelope, threatening its integrity.

Please refer to your local building codes for specific requirements and regulations in your area.

ADDITIONAL NOTES

NOTE: On Interior and exterior finish work to complete the opening.

The only adjustment in the entire system is at the jacking screws in the head track and side jambs. The finish work that is near the opening needs to allow and support any adjustment that might be necessary in the future.



IMPORTANT:

Do not use expanding foam in the head track gap as it will not allow the head track to be adjusted.

- The space between the rough opening header and the head track should be filled with compressible foam backer rod, or other insulation that can be compressed.
- A U shaped or J shaped capping metal cover may be run between the finish work and the system. This will allow any vertical movement without doing any damage to the surrounding finish work. The capping metal should be installed near the head track and side jambs but not in contact with them. There should be a caulking joint between the cap metal and the head track and side jambs in order to allow adjustment.

Head to Jamb Installation - Head Installation

There are two versions of our head track, a stepped version and a straight version. The installation procedures are the same for both versions.

Note: The weight of the head will vary widely depending on length and number of panels. It is recommended to use two crank-up beam lifts to raise and maneuver the head tracks.

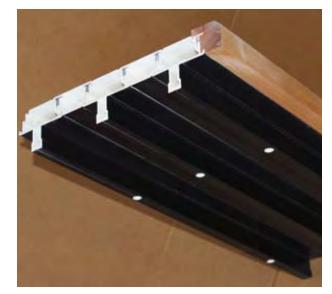
- Make sure all the adjustment screws on the head track are screwed all the way in.
- Position your vertical laser over the center of the longest bottom track and align the laser the length of the track.
- Swing the laser vertically to the head of the door.
- Start at the end where the completed jamb is and apply a generous amount of sealant to the top of the jamb before sliding the head jamb against the fastened jamb.
- Again use the align key to tighten up the head jamb to the side jamb.



Stepped Head Track

Head to Jamb Installation - Head Installation (Continued)

- Use supplied screws to secure the head through the holes provided keeping the head in line with the laser. Note: Be careful to hold the end of the track until most of the screws are in the head. Do not over tighten the screws, they can bend the extrusion or in some cases the screw head will pull through.
- Use a Story Pole supplied in the wooden box, length = Door Panel Height- 7 /16") to set the height of the top track using a 6mm Allen wrench to turn the adjustment screws. Screws are adjusted through the hole in the extrusion. The screw must be removed to adjust.



Head Track (Fiberglass)

Head to Jamb Installation - Head Installation (Continued)

- Using the adjustment screws, level the head.
 Note: Do not use hard shims on the head track.
 The adjustment screws may be used at a later date to correct a sagging head track.
- The story pole must be used on each track individually to ensure the track is level.
- Tighten all screws, recheck with story pole. (Do not over tighten as head track may bend break etc.)
- Leave a little room at the end to fit the 2nd jamb into place before completely tightening the head track.
- If the opposite side is a pocket then completely fasten the head jamb into place.
- The pocket interlock can be fastened now or after the panels are set into the frame.



Head Track Installation

Head to Jamb Installation - Second Jamb Installation

- Apply a liberal amount of sealant at the top of the jamb and sill; wipe excess sealant with a isopropyl soaked rag.
- Make sure the head, bottom track and jamb all line up properly.
- Install the 2nd jamb (opposite) jamb in a similar fashion using the adjustment shims and screws.
- Pull the jambs into the sides of the head track utilizing the adjustment screws and shims. Be careful not to scratch or chip the paint.
- Plumb the jamb with a 6' level using the top of the jamb as the control point.
- The sill, head and jambs are now installed.



Final Hardware Install

Door Panel Installation

The panels are marked on the cardboard wrapping indicating where the panels go into the frame. There can be three types of door panels in a Pocketing Installation: **Fixed Panels, Operable Panels**, and **Pocket Panels**.

Fixed Panels

- Fixed panels can be located anywhere in the system depending on the initial configuration. They normally have gear mechanisms to enable the door to be locked into the jamb but they have no wheels or handles.
- Fixed panels should be lifted and slide into place with suction cups as NOT to slide the panel along the sill ripping the weather strip at the bottom of the panel.

Operable Panels

 Operable panels are designed with gears and wheels. When the handle is turned the panel raises 3/16" to lift the gasket off of the floor. The operator then slides the pane with little effort.

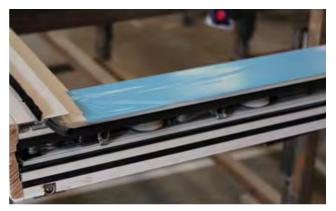
Door Panel Installation (Continued)

Tools and Safety Equipment: Glass Cups, belts, straps, mechanical lifts.

- Unpack the panels.
- Identify the fixed and operable panels. Fixed panels have a grooved block in the bottom of the door instead of wheels.
- Affix the glass cups to the glass on the first fixed panel on both sides... Please use care and proper lifting techniques when carrying heavy panels.
- Insert the fixed panels first by lifting the top of the door panel into the outermost track, then swing the bottom of the panel over the innermost bottom track and set the panel down so that the groove in the bottom block rests on the bottom track.
- Remove 1" black plug from fixed panel stile to expose the gear hole.



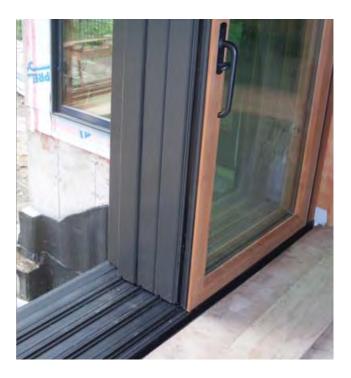
Fixed Door Panel (Groved Blocks)



Operating Door Panel (Wheels)

Door Panel Installation (Continued)

- Insert a handle into the gear hole in the fixed panel and make sure that the gear is in the up or unlocked position.
- Slide the fixed panel into the jamb and rotate the handle in the opposite direction to lock the panel into the jamb.
- The next panel to go in must overlap the preceding panel for the interlocks to engage.
- The operable panel inserts into the head and bottom track the same way as the fixed panel except that the wheels must be in the up position to go over the bottom track and engage.
- Operable panels are designed with gears and wheels. When the handle is turned the panel raises 3/16" to lift the gasket off of the floor. The operator then slides the panel open with little effort.
- Install remaining panels.
- Test the closing of the unit by closing the door panels. Note: Initially, when closing the door panel it may seem hard to engage the panel into the jamb or opposite door. The unit is designed to make a snug fit into the bulb gasket (with a little time the panel will set itself into the bulb gasket).
- The door system is now installed.





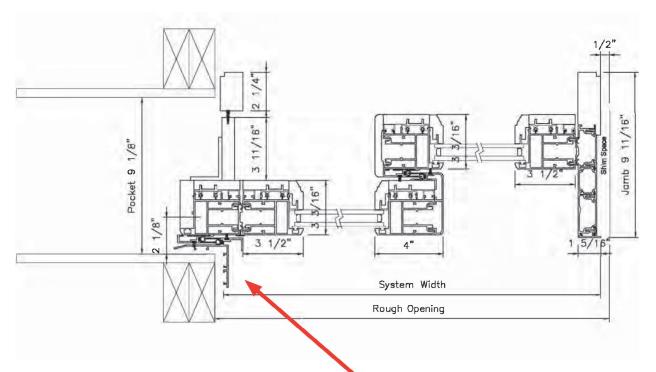


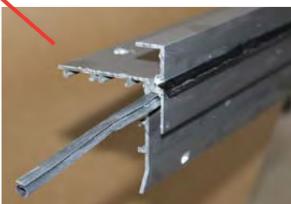
Interior Flush Handle

Marcos Handle

Pocketing Installation - Pocket Jambs

• The pocket jamb is installed as shown.





Pocket Interlock

Pocketing Installation - Pocket Jambs (Continued)

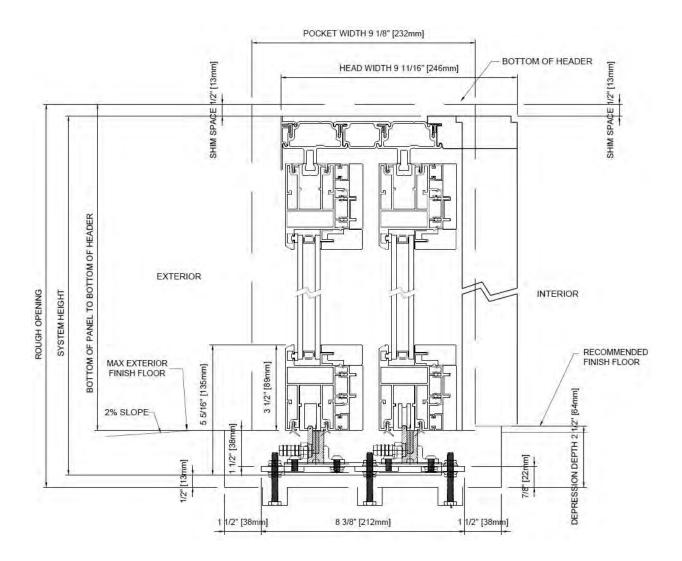
- The stucco key on the external fascia of the head track has a notch milled into the end. You will also notice a black piece of rubber in the same location. The notch in the fascia locates the Pocket Jamb in relation to the door system.
- The pocket jamb is then plumbed from the locating notch down using the adjusters. Once the jamb is plumb, use a chisel and cut off the protruding ends of the adjusters and secure the jamb with screws through the adjusters.

NOTE: Do not be afraid to drill and use additional screws and shims on the pocket jamb when needed making sure the screw heads do not interfere with the operation of the door; the entire assembly will be covered with the exception of the stucco key.

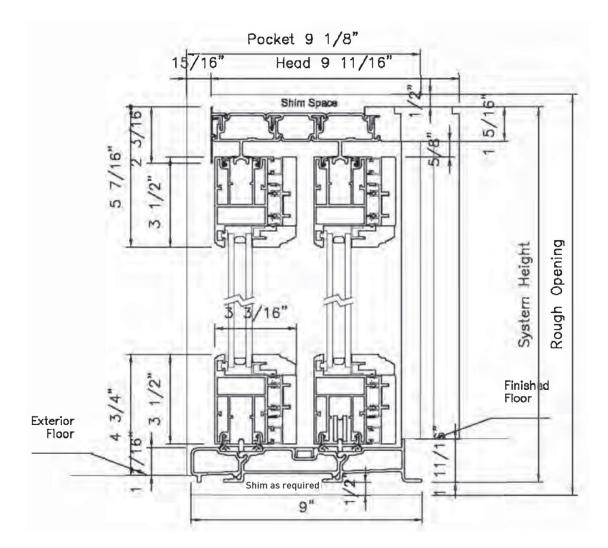
The placement of the pocket jamb is critical to the operation of the door system. When setting the head make sure there is enough room to set the pocket jamb.

• To the interior of the pocket jamb, a 2" x 1 3/8" pocket trim is provided. This trim is the last piece to be installed. The pocket door trim is to be installed in the notch on the interior fascia and plumbed. The skirt board brush should be touching the pocket door trim along the entire length.

Pocketing Installation - Two Panel Pocket - 1 1/2" Flush Sill

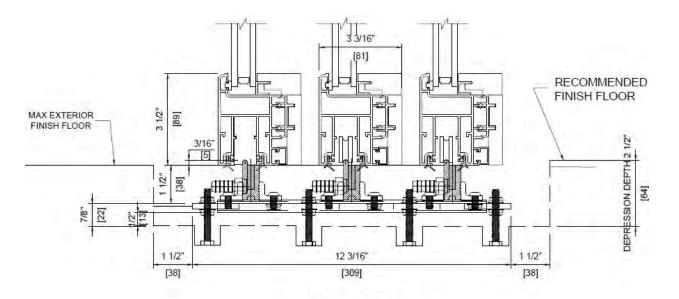


Pocketing Installation - Two Panel Pocket - Raised Threshold

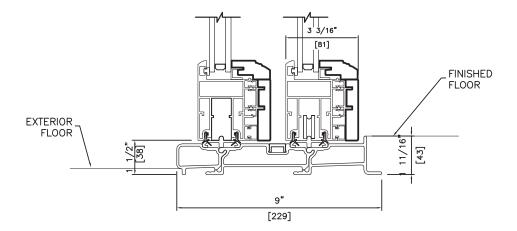


Shim as required

Sill Options



OXX Flush Track



Raised Threshold

LOEWEN is not responsible for deficiencies in building design, construction and maintenance and/or failure to install products in accordance with Loewen installation instructions. The determination of the suitability of all building components, including the use of products, as well as the design and installation of flashing and sealing systems, are the responsibility of the Buyer or User, the architect, contractor, installer, or other construction professional and are not the responsibility of Loewen.

All such risks related to building structural integrity, design and construction, or the maintenance, installation, and use of LiftSlide products shall be assumed by Buyer and/or User.

LOEWEN is not responsible for claims or damages caused by anticipated or unanticipated water infiltration into unwanted areas of the home

This is the responsibility of the homeowner, architect, contractor and or the installer to ensure all related risks from structural or water issues are considered before installation takes place.

Information subject to change without notice.

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