

PATIO DOORS

These patio doors are usually installed in new construction applications but removal of the nailing fins allows for installation as a replacement product.

Door Frame Preparation

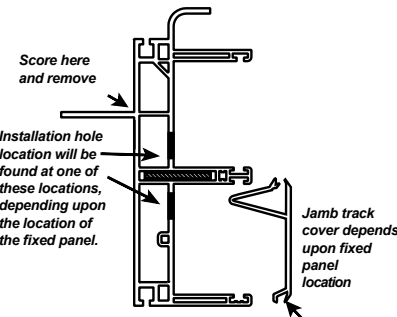
Carefully remove operable panel from door frame.

Replacement:

A Remove the nail fin by scoring the fin where it meets the frame and bend the fin back and forth until it snaps off the frame.

B Carefully pry out and remove the jamb track covers.

C Pre-drill a minimum of five 3/8" installation holes in the inside wall in each jamb. **Location depends upon the location of the fixed panel.** Also pre-drill a hole in the outboard head track at each door panel meeting location.



IMPORTANT:
For added safety, always lift patio doors using the handles in the cardboard corners or in such a way as to prevent component damage.

Store in a near-vertical position, do not drag on floor and never lay flat. Stack no more than five doors against each other. Store doors in a cool, shaded area and remove the shrink-wrap. Extreme heat or direct sunlight can cause uninstalled doors to warp.

CAUTION:
Always use the appropriate assistance in lifting and placing large units to avoid possible personal injury or product damage.

Installing the Door Frame

1 Check the rough opening for square (equal diagonal measurements) and plumb. The threshold area must be level.

Concrete Masonry: Head and jambs must be framed with 2x4 or 2x6 standard wood framing material. Frame the threshold with pressure-treated 2x4 or 2x6 wood. Check your local building codes.

Apply two continuous beads of masonry adhesive in a zigzag pattern to the rough opening where the framing contacts the concrete. Compress adhesive completely and fasten wood framing to the concrete.

Be sure the rough opening size will accommodate the door after the framing is in place.

Concrete floor only (not the walls): Pressure-treated 2x4 or 2x6 wood should be installed along the threshold only -- along with masonry adhesive as described. Seal any joints between framing members.

The pressure-treated 2x4 or 2x6 may also be embedded flush into the concrete floor. This will keep the door from sitting too high in the opening.

2 Place the patio door into the rough opening to check the fit. Modify the rough opening if necessary. Be sure the threshold is level.

Remove the door from the opening. If shims are needed at the sub-floor, use enough to support the weight of the fixed and operable panel.

INSTALLING A SILL PAN IS REQUIRED.

Install the sill pan, apply sealant above and below the shims to prevent water infiltration from under the sill.

Important: Shim sill pan systems between the opening and the pan, not between the pan and the door threshold.

3 Apply three continuous beads of construction adhesive along the threshold rough opening where the door will be seated. The two outside beads should be applied straight and the middle one should be applied in a zigzag pattern.

New Construction: Apply a bead of high-performance sealant around the perimeter of the rough opening where the nail fin will contact the surface.

Replacement: Apply a bead of high-performance sealant to the blind stop or interior trim where the door frame will make contact.

4 Place and center the door unit in the opening.

5 Press the frame firmly into all applications of sealant.

Fasten one of the upper corners as follows:

For New Construction applications, through the nail fin slot holes.

For Replacement applications, with #8 300 series stainless steel Phillips pan head screws through one of the pre-drilled holes in the jamb. Screws should be long enough to penetrate the substrate by 1" or greater. Shims are required at each fastener location.

6 Replace the operable panel, head first. Place the threshold end of the panel over the frame sill and lower it into the roller track. Carefully seat the panel rollers on the roller track.

7 Square the door frame until diagonal measurements are within 1/16" of each other. Shim as necessary. Use enough shims at the sub-floor to support the fixed and operable panel weight.

8 Securely fasten the door frame to the rough framing through the center of the slots in the nail fin. Fasten closest to each corner and then in every other slot in the nailing fin.

Hold the door frame tightly against the interior stop while fastening. Align and tap in the vinyl jamb track covers. Push the rubber bumper back into position in the threshold glide track against the lower jamb.

Do not install the frame twisted in the opening.

At the latch keeper location, the vinyl jamb should make solid contact with the rough opening or shims.

Adjusting Panel to Frame

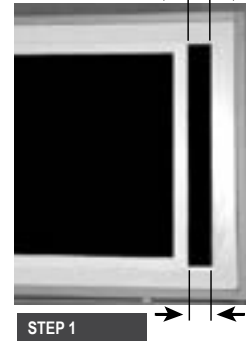
1 Slide the panel to the almost-closed position. Check the reveal between the panel and frame jamb; the gap should be even along the entire vertical edge of the panel. If uneven, adjust the panel by using the lower roller adjustment screws in the two holes located on the exterior side of the panel.

2 Start with the door panel all the way down. Adjust the rollers so that the operable panel aligns with the stationary panel(s), penetrates the sill track by at least 3/8" on both ends and creates an even reveal.

Turn the adjustment screws clockwise to lower the rollers; turn them counterclockwise to raise the rollers. Use hand tools to prevent stripping the hardware.

The correct adjustment of the rollers will ensure smooth operation of the panel.

3 Check the panel/frame jamb reveal. Adjust the rollers until the panel is correctly positioned in the frame and the panel operates smoothly. Tap in the adjustment screw hole covers.



Installing the Lock Keeper

Size #8 x 1-1/2" Phillips flat head screws are provided for the keeper. These screws will penetrate the door jamb and wood frame. To ensure the proper support of the jamb and the strike, before tightening the fasteners a support the length of the lock strike must be placed between the door jamb and the wood rough opening frame.

4-panel doors have an astragal (a vertical structure attached to one operable door where the operable panels meet) into which the keeper should be screwed.

The keeper and latch/lock housing include scribed center marks to assist with alignment.

NOTE: After assembly, if the lock-hooks and the strike are slightly misaligned, then the operable panel rollers may be adjusted. During and after this procedure, the panel must remain square with the frame and the reveal must remain even.

For Impact Doors Only

The impact clips will need to be adjusted at the head and threshold ends of the operable panels.

1 Loosen the screw holding the lower impact clip in place. Adjust the lower impact clip all the way down to the lowest position possible that still allows smooth door panel operation.

2 Tighten the screw. Run the other two screws (#8A x 1-1/2" Phillips self-drill flat head, supplied) into the other impact clip installation holes.

3 Loosen the screw holding the upper impact clip in place. Adjust the upper impact clip all the way up to the highest position possible that still allows smooth door panel operation.

4 Tighten the screw. Run the other two screws (same as above, supplied) into the other impact clip installation holes.

For Vinyl Sill Doors: All impact 3-panel patio doors will need additional installation screws installed in the following locations:

- Installation screws are needed in the 4-hole brackets located on the top and bottom of the fixed panel internal meeting stiles. The 2-panel door contains two brackets, and the 3-panel door contains four brackets. The bracket on the bottom of the fixed panel is located under the threshold cover; the bracket at the top of the fixed panel is located under the jamb track cover. Once the 4-hole brackets are located, the two screws closest to the interior side of the door need to be removed. Apply caulk to cover holes and insert #8 x 2.5" PFH so they penetrate framing member (if applying to masonry surface, use Tapcon #8 x 2.5" PFH screws).
- Additional installation screws on vinyl sill patio doors are also needed in the patio door interlock, a 12" aluminum reinforcement located in the head above the operable panel. When the door is installed, the eight #8 x 1" PFH screws need to be removed and replaced with #8 x 2.5" PFH screws.

Finishing

1 Loosely fill any gaps between the frame and rough opening with pre-cut strips of insulation. Do not overpack or use spray-in type foam unless approved by Viwinco, as doing so may cause frame distortion (see Viwinco.com for details).

2 Apply sealant around the entire exterior and interior perimeters of the frame. Seal all gaps between the vinyl frame and the wall opening.

3 Trim around the door frame.

Installing the Screen

1 Screens include rollers with spring tension. Place the top of the screen into the head of the screen track. Lift the bottom rollers onto the threshold screen track.

2 Be sure the rollers are seated correctly in the roller track.

3 Screws near both jamb ends can be used to adjust the rollers for the best spring tension. Optimal screen tension allows for even frame engagement in the screen track, an even reveal, and smooth operation.

IMPORTANT: Viwinco will not be responsible for finishing imperfections. Viwinco will not be responsible for damage from unapproved finishes or cleaning chemicals, which may cause adverse reactions to window or door materials. If in doubt, contact your local Viwinco Sales Representative.

Patio doors are supplied with safety glass. Many laws and building codes require safety glass to be used under certain conditions. Unapproved product modifications will void all warranties. Application of after-market window films can cause glass breakage due to thermal stresses. Application of such films will void all glass warranties.

Seek advice from sealant manufacturer, EIFS manufacturer and EIFS designer when installing any product that penetrates an EIFS structure.

Check your local building codes before installation. Local building code requirements replace these recommended installation instructions. Improper installation and care may void warranty.

CAUTION: Caustic or abrasive cleaners, silicone-based solvents, petroleum- or silicone-based lubricants, or insecticides on or near frame or sash surfaces may damage or discolor the PVC.

WARNING: *The manufacturer assumes no responsibility for failure, damage or injury resulting from inadequate or improper installation, inappropriate product care, or use in applications that exceed product rating. See the product warranty for additional conditions and limitations.*

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10/2022