



Thank you for selecting JELD-WEN products. Attached are JELD-WEN's recommended installation instructions for vinyl patio doors without nailing fin. Read these instructions thoroughly before beginning. They are designed to work in most existing applications, however; existing conditions may require changes to these instructions. If changes are needed, they are made at the installer's risk. For installations other than indicated in these instructions, contact a building professional.

Newer construction methods have led to an increase in air and water tightness in buildings. This frequently leads to negative air pressure inside the home, which can draw water through very small openings. Our installation method seals the patio door to the weather barrier (typically building wrap) and uses a sill pan to capture and drain incidental storm water from under the patio door.

### IMPORTANT INFORMATION & GLOSSARY

Consult your local building code official for applicable building codes and regulations. Local building code requirements supersede recommended installation instructions.

**Please Note!** Any patio door installation where the sill is higher than 35 feet above ground level or into a wall condition not specifically addressed in these instructions must be designed by an architect or structural engineer. Failure to install square, level and plumb and on a flat surface (without twist or warp) could result in denial of warranty claims for operational or performance problems.

**Note to Installer:** Provide a copy of these instructions to the building owner. By installing this product, you acknowledge the terms and conditions of the limited warranty as part of the terms of the sale.

#### GLOSSARY

##### Backer Rod (backing material)

A material (e.g. foam rod), placed into a joint primarily to control the depth of the sealant.

##### Buck

A wood framework attached to the masonry inside a window or patio door rough opening.

##### Pilot Hole

A drilled hole that is no larger than the body of the screw (minus the threads).

##### Shiplap

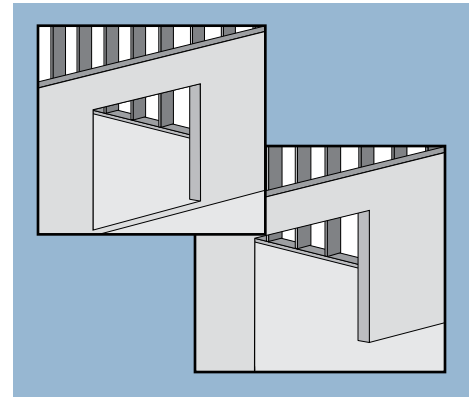
The layering method in which each layer overlaps the layer below it so that water runs down the outside.

##### Weep Hole (weep channel)

The visible exit or entry part of a water drainage system used to drain water out of a door.

#### LANDINGS

These instructions cover two patio door sill conditions: the **step-down landing** and the **continuous slab landing**. The installation methods vary slightly between landing types.



#### REVERSE PATIO DOOR HANDING

Builders 2-panel doors are the only configuration that may be reversed. Door kits are set up for left to right operation (XO) when viewed from the exterior. To reverse the handing (OX), contact us for instructions:

Email: [customerserviceagents@jeld-wen.com](mailto:customerserviceagents@jeld-wen.com)

Phone: 1-(800)-JELD-WEN/1-(800)-535-3936

Please allow sufficient time to properly prepare the rough opening, install the patio door and ensure its proper operation.

Estimated Install Time for New Construction	<input type="checkbox"/> First Time: 1.75 hr.
	<input type="checkbox"/> Experienced: 1.25 hr.
	<input type="checkbox"/> Professional: .75 hr.

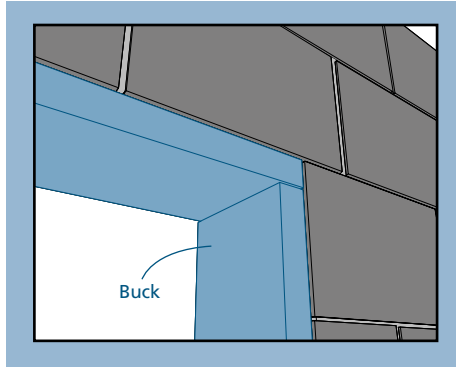


## ROUGH OPENINGS

This installation guide specifically addresses masonry/block wall, sheathed wall and open-stud construction.

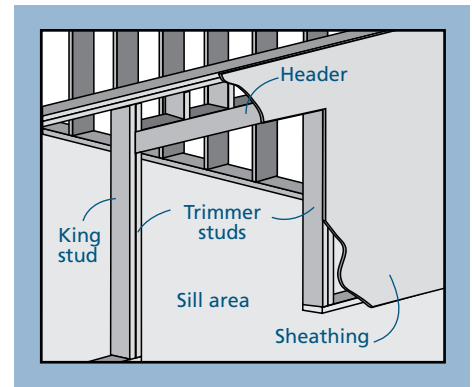
### MASONRY/BLOCK WALL CONSTRUCTION

This installation assumes that a framework of 2x studs (often called a buck) has already been properly fastened and sealed to the concrete/masonry wall by a building professional.



### FULLY SHEATHED WALL CONSTRUCTION

The wall framing is covered by sheathing. This installation assumes building wrap is properly installed prior to installation.



### OPEN-STUD CONSTRUCTION

Wall framing is not covered by sheathing.

## SAFETY & HANDLING

### SAFETY

- Read and fully understand ALL manufacturers' instructions before beginning.
- Do not work alone. Two or more people are required. Use safe lifting techniques.
- Use caution when handling glass. Broken or cracked glass can cause serious injury.
- Wear protective gear (e.g. safety glasses, gloves, ear protection, etc.).
- Operate hand/power tools safely and follow manufacturer's operating instructions.
- Use caution when working at elevated heights.

### MATERIALS & PATIO DOOR HANDLING

- Make sure the operating panel is secured prior to installation.
- Heed material manufacturers' handling and application instructions.
- Protect adhesive surfaces from dirt, moisture, direct sunlight and folding over onto themselves.
- Handle in vertical position; do not drag on floor.
- Do not put stress on joints, corners or frames.
- Store patio door in dry, well-ventilated area in vertical, leaning position to allow air circulation; do not stack horizontally.
- Protect from exposure to direct sunlight during storage.
- Install only into vertical walls and when conditions and sheathing are dry.
- Never use solvent-based sealants on vinyl products.

**IF INJURY OCCURS, IMMEDIATELY SEEK MEDICAL ATTENTION!**

## NEEDED MATERIALS & TOOLS

### MATERIALS

- #10 x 3" washer head or pan head corrosion-resistant screws. Do not use drywall screws.
- 3/16" x 2 1/2" self-tapping concrete screws (for securing the sill into concrete/masonry)
- Non compressible or water degradable shims
- JELD-WEN 6" wide self-adhesive flashing (part #08987) or equivalent (9" if required by local code)
- Protecto Wrap Safseal Systems 5500 spray adhesive/primer (or as recommended by the self-adhesive flashing manufacturer)
- Sealant (100% polyurethane if painted, 100% silicone if left exposed) compatible with the self-adhesive flashing
- Backer rod
- Plastic drain screen with crisscross or woven pattern (sold in 6" widths to protect rain gutters) for step-down landings

- Sheet metal flashing or bendable vinyl sheeting for sill pan (6" wide for 2" x 4" wall, 9" for a 2" x 6" wall)
- 3/8" staples for step-down landings

**Note! Follow all material manufacturers' instructions for proper use and compatibility.**

### TOOLS

- Cutting shears (sill pan)
- Tape measure
- Utility knife
- Level (4' minimum recommended)
- J-roller
- Caulking gun
- Drill
- Construction stapler
- Clean rags
- Phillips screwdriver

# 1 REMOVE PACKAGING & INSPECT PATIO DOOR

## REMOVE PACKAGING

Remove shipping materials such as corner covers, shipping blocks or pads. Remove any temporary handles just prior to installation into the rough opening.

## INSPECT PATIO DOOR

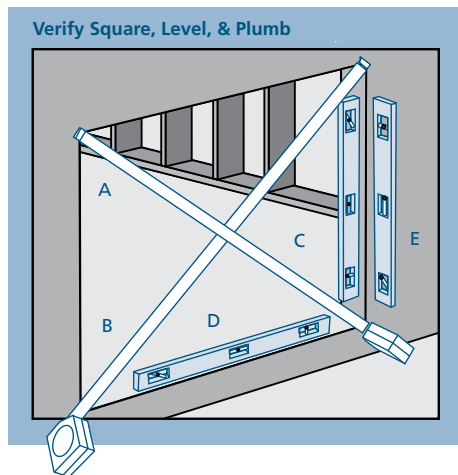
- Cosmetic damage
- Product squareness (diagonal measurements must be within 1/4" difference)

- Correct product (size, color, grid pattern, handing, glazing, energy-efficiency requirements, etc.)
- For side-by-side mulled units, a drip cap that extends the length of the frame plus 1/8" overhang on each end is required.

If any of the above conditions represent a concern, or if you expect environmental conditions to exceed the patio door's performance rating, do not install the patio door. Contact your dealer or distributor for recommendations.

# 2 INSPECT ROUGH OPENING

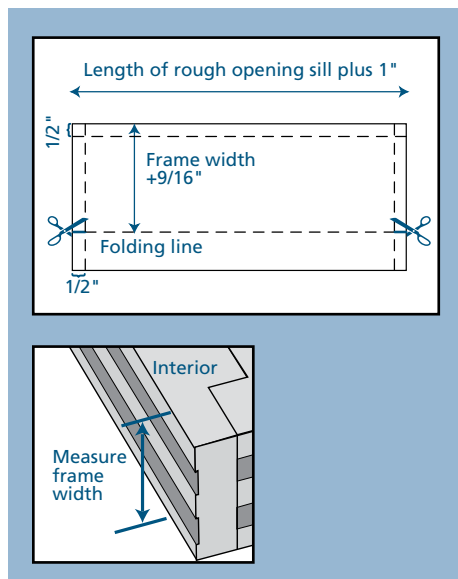
- Verify the width and height of the patio door are each 1/2" - 3/4" smaller than the rough opening width/height. Mulled units should be 3/4" smaller.
- Verify the rough opening is square. The (A) and (B) measurements should be the same. Maximum allowable deviation from square is 1/4".



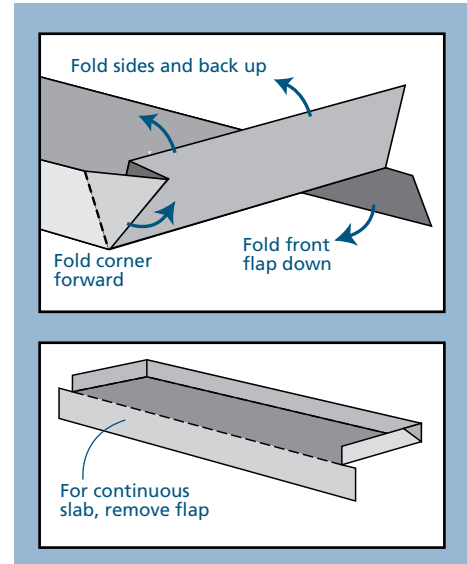
- Verify the rough opening is level and plumb (C) and (D). The maximum allowable deviation is 1/8".
- The rough opening sill must not be crowned or sagged (D).
- The exterior face of the rough opening must be in a single plane (E) with less than 1/8" twist from corner to corner.
- Minimum double studs should be used at all wood framed rough openings.
- The header must be supported by trimmer studs.

# 3 PREPARE SILL PAN

1. Cut a piece of sheet material to the length shown.
2. Lightly crease folding lines 1/2" in from the two short sides and one long side.
3. Measure the width of the frame and add 9/16".
4. Take this distance from the back edge and lightly crease a folding line across the sheet material.
5. For step-down landings, cut 1/2" in at the folding line on both sides of the sheet material.



6. For continuous slab, cut across the folding line.
7. Fold the three back sides up to make a 3-sided box, and, for step-down landings, fold the front flap down.



**4** PREPARE STUD-FRAMED WALL

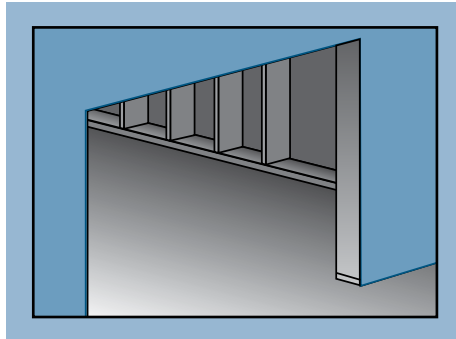
**Note!** This section covers stud-framed wall instructions. Masonry/buck instructions begin after with "PREPARE BUCK."

**FOR RETROFIT INSTALLATIONS**

Remove the old patio door. If installing into stud framing, remove sufficient siding to expose at least 9" of intact building wrap. If damaged, apply new building wrap in a shiplap manner. Verify header and trimmer studs are structurally sound. If installing into a block wall, removing the stucco is not necessary if the existing rough opening is waterproof and the patio door is downsized. Continue with the instructions.

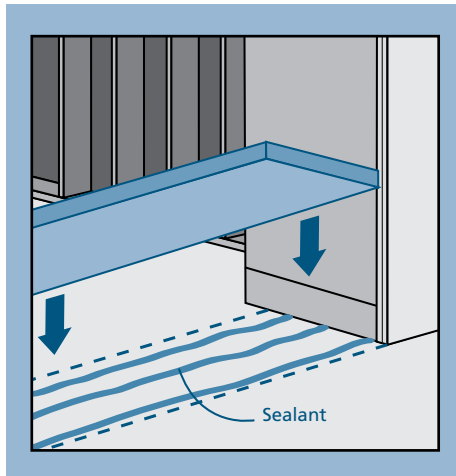
**PREPARE BUILDING WRAP**

Cut flush with the edges of the rough opening, or follow building wrap manufacturer's instructions for proper methods of preparing the weather barrier.



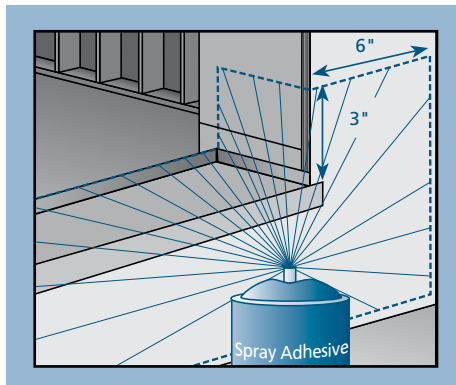
**PREPARE SILL**

1. Set the sill pan in the rough opening, aligning the front edge (for continuous slab, shown) or folded down edge (for step down) with the exterior of the rough opening.
2. Mark a line across the front and back of the sill pan and remove.
3. Apply three 3/8" beads of sealant between the marked lines.

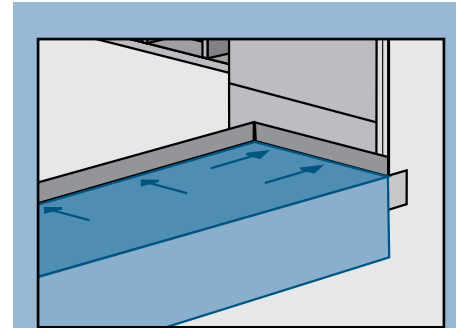


**INSTALL SILL PAN**

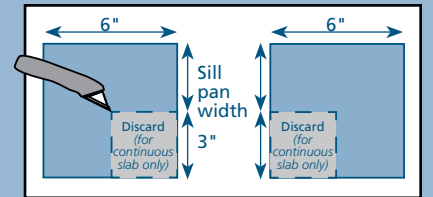
4. Place the sill pan in the rough opening. Firmly press the sill pan in place with a J-roller.
5. Apply spray adhesive/primer to the sill pan and surrounding area. Follow manufacturer's instructions for application methods.



6. Cut a piece of JELD-WEN self-adhesive flashing the length of the sill and apply over the sill pan as shown. The bottom of the sill pan should be completely covered by the self-adhesive flashing. For step down landings, fold flashing down as shown. For continuous slabs, trim flush with rough opening.

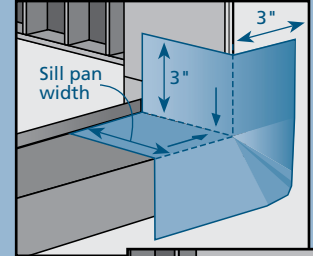


**Self-Sealing Corner Flash**



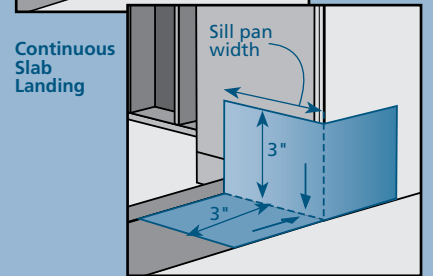
7. Cut two pieces of JELD-WEN self-adhesive flashing 6" wide by the sill pan width + 3" long.
  - a. For continuous slab landings only, cut out the inside corner.

**Step-Down Landing**



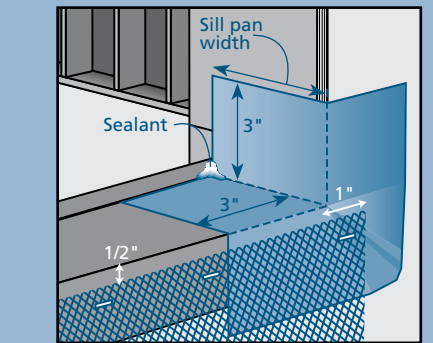
- b. Adhere the pieces of flashing to the inside corners. Stretch flashing as needed to cover corners and lay flat.

8. Smooth gaps or bubbles beneath self-adhesive flashing with a J-roller (remove and replace if necessary).



9. Seal back corners of sill pan with sealant.

10. For step-down landings only, cut plastic drain screen to length of sill + 2" and staple 1/2" below sill edge. The drain screen provides a path for air to dry any incidental moisture in the rough opening.



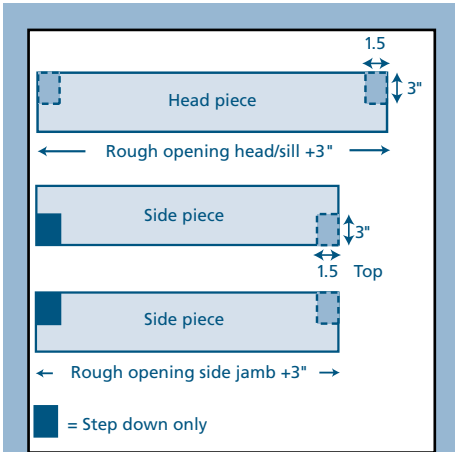
**5 PREPARE BUCK**

**PREPARE BUCK (MASONRY/BLOCK WALL ONLY)**

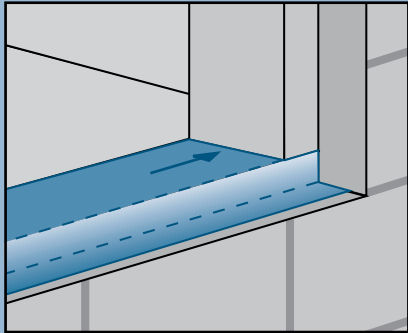
1. On the exterior, coat the buck and surrounding concrete/masonry with self-adhesive flashing primer. Follow manufacturer's instructions for application procedures.
2. Seal the joint between the buck and the concrete/masonry with JELD-WEN self-adhesive flashing as follows:

**Note! Do not allow gaps or bubbles beneath the flashing (remove and replace if necessary).**

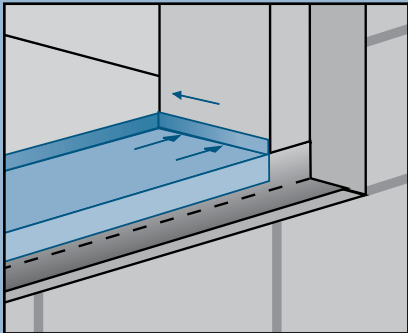
- a. Cut five pieces of self-adhesive flashing for the sill, sides, head, and sill pan as shown.



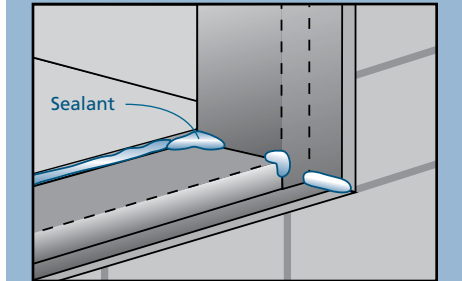
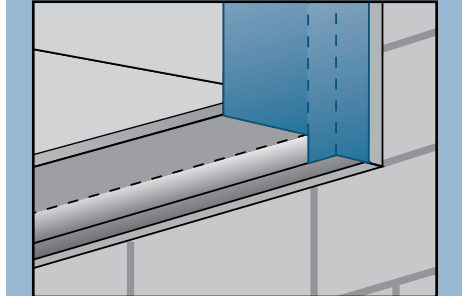
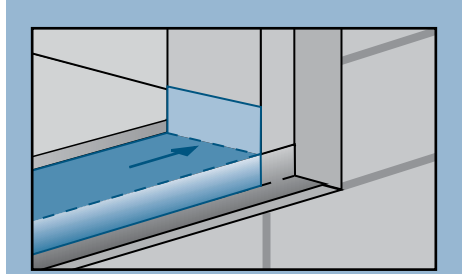
- b. Apply the sill piece as shown.



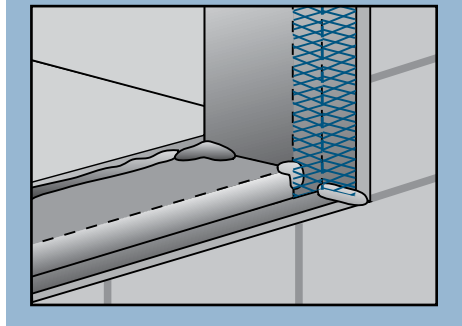
- c. Place the sill pan in the rough opening.



- d. Apply the sill pan piece of self-adhesive flashing over the sill pan as shown. The bottom of the sill pan should be sealed by the flashing.
  - e. Remove the upper end corner of each side piece, and for step-down landings, remove the lower end corner.
  - f. Apply the side pieces of self-adhesive flashing.
  - g. Remove the corners of the header piece and apply.
3. Apply sealant across flashing/masonry joints at corners of masonry opening.



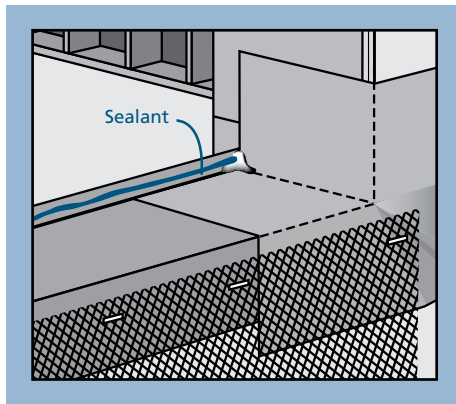
4. Apply diamond lath to all flashed surfaces to be covered by stucco.



**6** INSTALL PATIO DOOR

**Warning!** To avoid injury, use at least two people to install. Adequately support the door until fully installed.

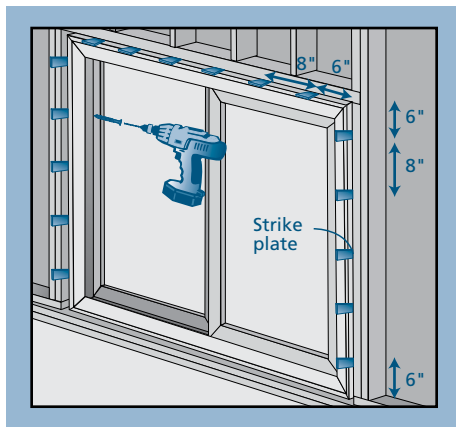
1. Apply a 3/8" continuous bead of sealant across the sill pan back dam.
2. Tilt patio door into the rough opening. Make sure the back of the door makes solid contact with the sealant.



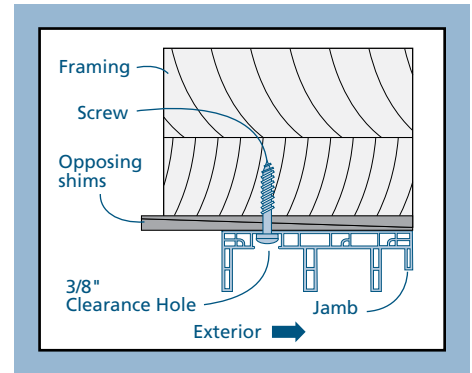
**SHIM THE JAMBS**

**Note!** Secure all shims with sealant.

3. From the interior, shim the head and side jambs 6" from the corners and then at 8" intervals. Install shims at the strike plate so that strike plate screws (installed later) will each penetrate a shim. Shim so the door is square, level and plumb.



4. At each shim and only through the first interior wall of the jamb, drill a 3/8" clearance hole. Then, drill a 1/8" pilot hole through the jamb wall, shim and into the framing.
5. Apply sealant to the threads of a #10 x 3" washer or pan head screw and drive through the shim located 6" from one lower corner.
6. Confirm the patio door is square, level, and plumb. Test for proper operation (remove and reinstall if necessary).



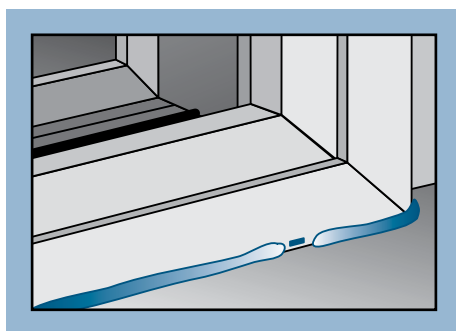
**SECURE PATIO DOOR**

**Note!** Apply sealant to screw threads before driving through shims. Do not over tighten fasteners and do not allow fasteners to deform the vinyl frame, it must be kept flat and straight.

At each remaining corner, fasten patio door through shims with #10 x 3" washer or pan head screws using the same technique above. Drive screws through each of the remaining shims.

**7** COMPLETE INSTALLATION

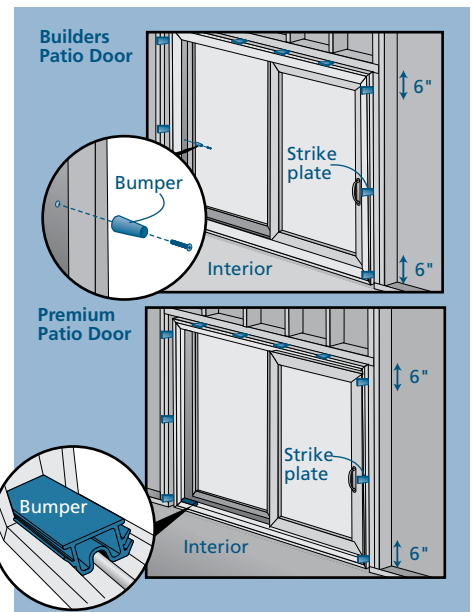
1. For continuous slab landings, apply a 1/4" bead of sealant around the sill where it meets the slab. Leave 1" gaps at the weep holes as shown.
2. Ensure sealant on back dam of the sill pan fully seals to the inside face of the sill. Apply more sealant as necessary to ensure an airtight seal.



**INSTALL BUMPER**

For Builders vinyl series doors, install the bumper in the stationary panel side jamb at vertical center using the 1" self-tapping screw provided.

For Premium vinyl doors, the bumper lays over the track and against the jamb opposite the operating panel.



**7 COMPLETE INSTALLATION - CONTINUED**

**PATIO DOOR ADJUSTMENT**

**Roller Adjustment**

**Note!** Adjusting door too high may allow water and air leakage. Adjust rollers just high enough to clear sill track and still roll smoothly.

1. Builders vinyl doors have an adjustment screw on each lower end of the operating panel(s), and Premium vinyl doors have access holes on the face of each lower end of the operating panel(s). Remove small vinyl plugs from each hole if present.
2. Open operating panel enough to compare with frame jamb.

**Note!** Builders vinyl roller adjustment screws on the end of the panel are in close proximity to the attachment screw. Adjust only the lower screw as shown because loosening the attachment screw will detach the roller from the operating panel.

3. Using a #2 Philips head screwdriver, turn the adjustment screw clockwise to raise the panel, and counterclockwise to lower the panel.

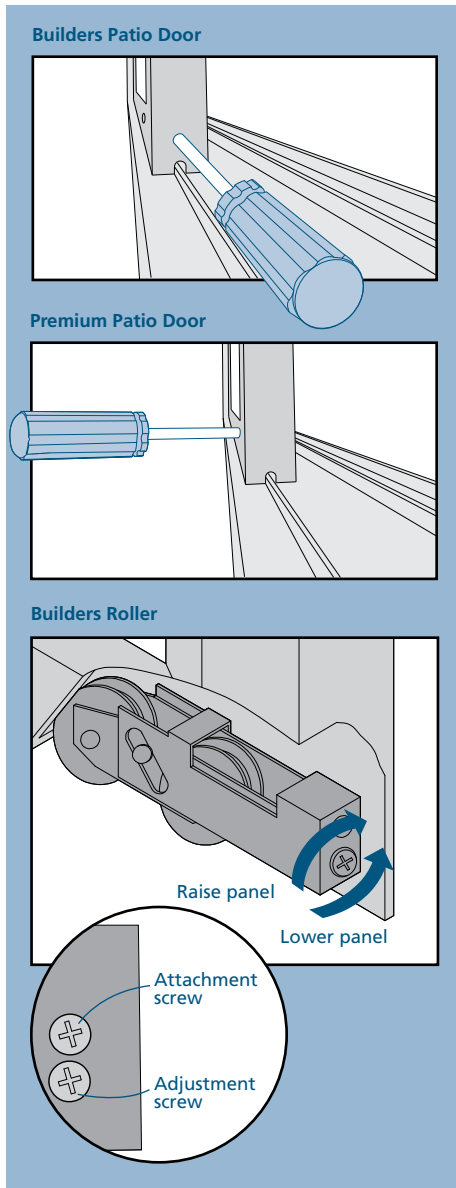
4. Premium vinyl doors may have different types of rollers. To identify the roller, look inside the adjustment hole.
  - If the roller has a plus (+) sign, clockwise rotations will lower the panel and counterclockwise will raise the panel.
  - If the roller has a minus (-) sign, the operations are reversed.

- If the roller has a plus (+) sign, clockwise rotations will lower the panel and counterclockwise will raise the panel.
- If the roller has a minus (-) sign, the operations are reversed.

5. Adjust as needed until interlocks, grid patterns and jambs line up.

6. Test the operating panel for proper operation.

7. Re-apply the small vinyl caps over the roller adjustment screw holes if applicable.



**Lock Adjustment**

**Note!** If the strike plate was not previously installed, line up the screw holes with the dimples in the operating panel side jamb and drive screws through the two slotted screw holes.

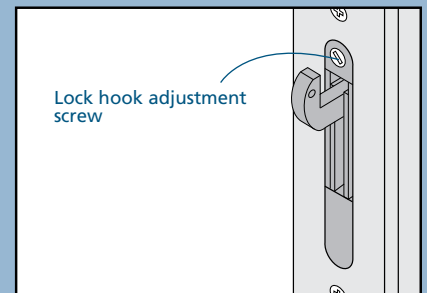
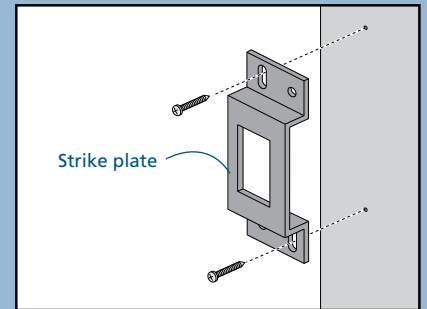
If the lock does not properly engage the strike plate:

- Loosen the strike plate screws and move up or down until the latch engages properly.

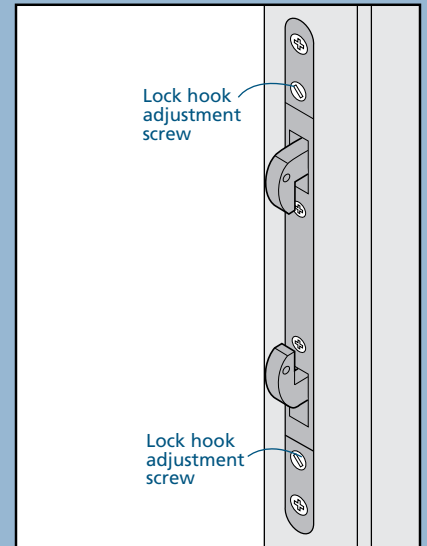
If the door does not lock or is loose when locked:

- Turn the latch adjustment screw(s) in 1/2 turn increments: clockwise to loosen or counterclockwise to tighten. Premium vinyl doors have a double latch and two adjustment screws.

**Builders Patio Door**



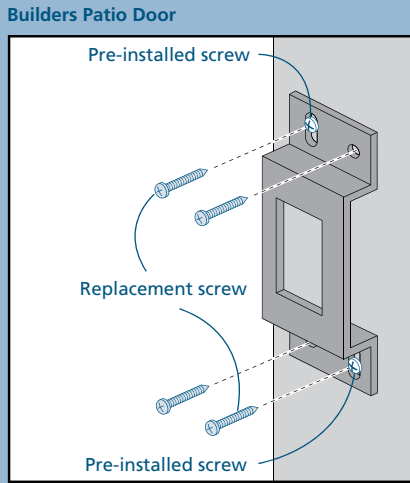
**Premium Patio Door**



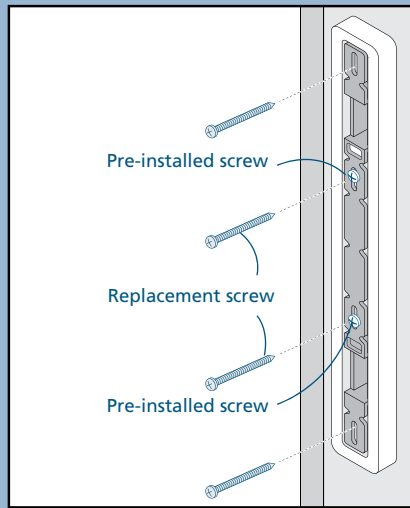
**7** COMPLETE INSTALLATION - CONTINUED

**FINISH INSTALLATION**

- Drive two #10 x 3" screws (included in hardware pack) through the open screw holes in the strike plate.



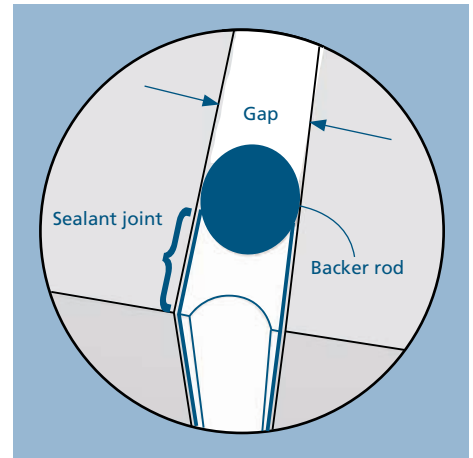
**Premium Patio Door**



- Remove the pre-installed screws from the strike plate and replace them with the remaining #10 x 3" screws from the hardware pack. This will increase security by attaching the patio door to the structure.

**AFTER INSTALLATION**

- Install exterior wall surface within seven days of patio door installation.
- Seal any gaps or openings at end of horizontal mull joints with sealant.
- Insulate the void between the rough opening and the frame with low expansion foam. Seal with backer rod and sealant on the exterior.
- Protect recently installed units from damage from plaster, paint, etc. by covering the unit with plastic.



Please visit [www.jeld-wen.com/resources](http://www.jeld-wen.com/resources) for warranty and care and maintenance information.

Thank you for choosing

