



Thank you for selecting JELD-WEN products. Attached are JELD-WEN's recommended installation instructions for Vinyl Patio Doors with 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. Areas such as Florida and the Texas TDI region have different anchoring requirements based on product certification. For information on specific products, visit www.floridabuilding.org or www.tdi.texas.gov and follow the anchoring schedule given in the drawings for the product instead of the anchoring schedule in this document.

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

IMPORTANT INFORMATION AND GLOSSARY

Not all patio door types may be installed into every wall condition in all areas. 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 such that 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 peak and valleys) 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.

Continuous Air Seal

Backer rod and sealant or low expansion foam applied to the interior gap between the product and the building, in a continuous fashion, which serves to block air flow between the interior and exterior of the building envelope.

Mulled Unit

Two or more door units structurally joined together.

Pilot Hole

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

Score

Make a cut mark in the same location multiple times.

Shiplap

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

Sill Pan

A flashing component installed in the sill of the rough opening underneath the door. Sill pans have upturned walls along the interior edge and at both ends, creating a three sided box. This component serves as a collection device to drain incidental water to the exterior of the building and should be properly sealed to the opening. The best sill pan design has a positive slope to the exterior and offers continuous support to the door's sill.

Weep Hole (weep channel)

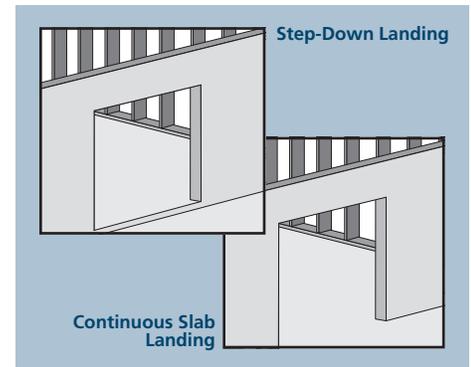
The visible exit or entry part of a water drainage system used to drain water out of a door frame.

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: 1½ hr	
	<input type="checkbox"/> Experienced: ¾ hr	
	<input type="checkbox"/> Professional: ½ hr	

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

Only **pre-installed** 6'8" and 6'10" Builders sliding patio doors without blinds between the glass that have weep holes on the top and bottom are reversible, or specially designed to be converted to be opened either from the left or the right. Patio doors that are set up for left hand operation (door opens from the left on the exterior) or vice versa, can be converted to open from the opposite side by following the instructions in our document SVC001, available at www.jeld-wen.com. **Do not install the patio door until after completion of the reversing instructions and the fixed panel is on the desired side.** Please contact us with questions:

Email: customerserviceagents@jeld-wen.com

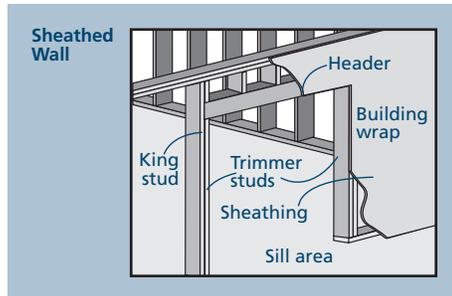
Phone: (800)-JELD-WEN/(800)-535-3936

ROUGH OPENINGS

This installation guide specifically addresses sheathed wall and open-stud construction.

FULLY SHEATHED WALL CONSTRUCTION

The wall framing is covered by sheathing. This installation assumes building wrap is properly installed over the sheathing and the door will be mounted with the nailing fin flush against the sheathing.

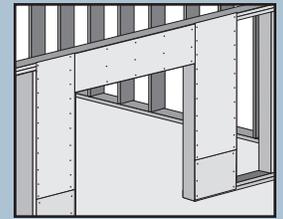


OPEN-STUD CONSTRUCTION

If self-adhesive flashing is to be applied so that it is wider than the framing of the wall, it may be necessary to cover the wall with backing support sufficient to support the entire width of the flashing.

This backing support should be a non water-degradable, thin (max. 1/8" thick) sheet material such as vinyl sheeting. Completely surround the rough opening with the backing support as shown. Backing support must be applied before building wrap.

Open-Stud with Backing



SAFETY AND HANDLING

SAFETY

- Read and fully understand ALL manufacturers' instructions before beginning. Failure to follow proper installation instructions may result in the denial of warranty claims for operational or performance problems.
- 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.
- If disturbing existing paint, take proper precautions if lead paint is suspected (commonly used before 1979). Your regional EPA (www.epa.gov/lead) or Consumer Product Safety Commission offices provide information regarding regulations and lead protection.

MATERIALS AND 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.
- 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.
- Only use recommended sealants on vinyl products.

IF INJURY OCCURS, IMMEDIATELY SEEK MEDICAL ATTENTION!

MATERIALS AND TOOLS

PROVIDED MATERIALS

4 - #10 x 2 1/2" screws (to secure the strike plate)

NEEDED MATERIALS

Note! Follow all material manufacturers' instructions for proper use and compatibility. When using flashing, spray adhesive/primer, sealant and foam products, we recommend using the same manufacturer and verifying compatibility. It is the End User's responsibility to determine if dissimilar materials are compatible to the substrates in the application.

- 1 3/4" galvanized roofing nails or #8 x 1 1/4" pan head or washer head (stainless steel recommended) screws. Fasteners must penetrate at least 1" into framing (or as required by local code).
- Non-compressible or water degradable shims.
- Sill pan: It is best practice to use a pre-formed, rigid, positively sloped, pvc pan that provides continuous support. We recommend using SureSill™ Sloped Sill Pan™, manufactured by SureSill™, Ltd. An alternative would be a non-sloped pre-formed sill pan or one that can be fabricated on site from metal or vinyl sheet material with the proper tools.
- Sealant: We recommend OSI® QUAD® Max Sealant or equivalent. This can be used in any application and can be painted or ordered in a color matched product, if desired.
- Backer rod 1/8" larger than the widest portion of the gap (used in conjunction with sealant bead).

- Polyurethane low expansion Window and Door foam: We recommend OSI® QUAD® Foam or equivalent).
- 4", 6", or 9" (as required by local code and window configuration) wide self-adhesive flashing: We recommend OSI® Butyl Flash Tape or equivalent.
- Spray adhesive/primer for self adhesive flashing. Such as Loctite® 300 or equivalent.
- For step-down landings only: Plastic drain screen with crisscross or woven pattern (sold in 6" widths to protect rain gutters) and 3/8" staples. The drain screen provides a path for air to dry any incidental moisture in the rough opening.
- Drip cap material, if not supplied, required only for side-by-side mulled units that extends the length of the frame plus 1/8" overhang on each end.

NEEDED TOOLS

- Hacksaw (used only for SureSill sill pan)
- Cutting shears (used only for fabricated sill pan)
- Tape measure
- Utility knife
- Level (4 ft. minimum recommended)
- J-roller
- Caulking gun
- Drill with bits
- Construction stapler

1 REMOVE PACKAGING AND INSPECT WINDOW

REMOVE PACKAGING

Remove shipping materials such as corner covers, shipping blocks or pads.

INSPECT PATIO DOOR

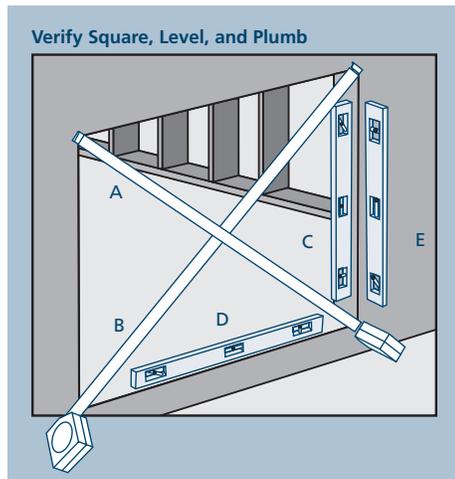
- Cosmetic damage
- Product squareness (diagonal measurements must be within 1/4" difference).
- Correct product (size, color, grid pattern, handing, glazing, energy-efficiency requirements, etc.).

- Splits, cracks, holes, missing sections or other damage to the nailing fin longer than 6" and/or within 1/2" of patio door frame.
- For side-by-side mulled units only, a drip cap may be pre-installed. If not pre-installed, see Needed Materials list above for details.
- Included parts (See Provided Materials above)

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). The maximum allowable deviation is 1/8".
- The rough opening sill must not be crowned or sagged (D), but rather level or sloped (positive slope) to the exterior.
- 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.

FOR RETROFIT INSTALLATIONS

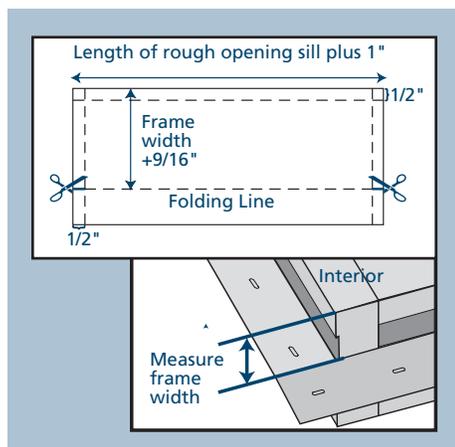
After removing the old patio door, remove sufficient cladding (siding, stucco etc.) to expose enough intact building wrap to properly seal the patio door to the opening. If damaged, apply new building wrap in shiplap manner. Verify the rough opening framing is structurally sound. Contact your local waste management entities for proper disposal or recycling of products being removed.

3 INSTALL SILL PAN

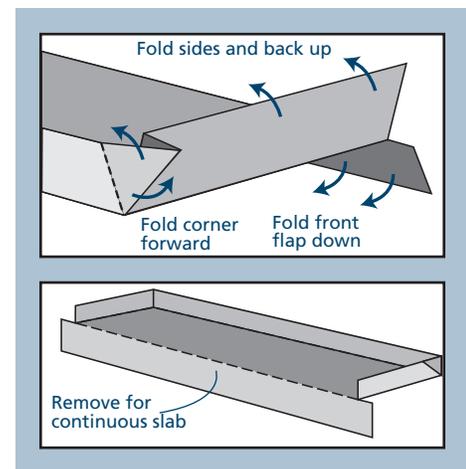
The sill can be prepared using one of two methods: **We recommend SureSill™ Sloped Sill Pan™ available from SureSill at www.suresill.com, building supply stores, and some manufacturing locations.** As an alternative, a sill pan can be fabricated on site, by following the instructions below. **If installing a SureSill™ sill pan, follow SureSill™'s instructions for installation and skip to section 4 "PREPARE STUD-FRAMED WALL".**

JOBSITE FABRICATED 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 this line on both sides of the sheet material.



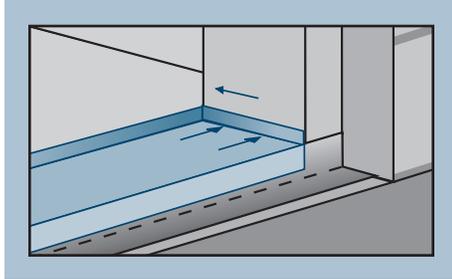
6. For continuous slab, cut across the folding line.
7. Fold the three back sides up to make a 3-sided box, and, for step-down landings, fold the front flap down.



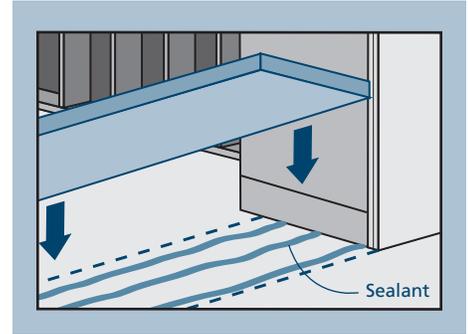
3 INSTALL SILL PAN - CONTINUED

INSTALL SILL PAN

1. Set the sill pan in the rough opening, aligning the front edge (for continuous slab) 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.
3. Apply three 3/8" beads of sealant between the lines.
4. Place the sill pan in the rough opening. Firmly press the sill pan into the sealant with a J-roller.

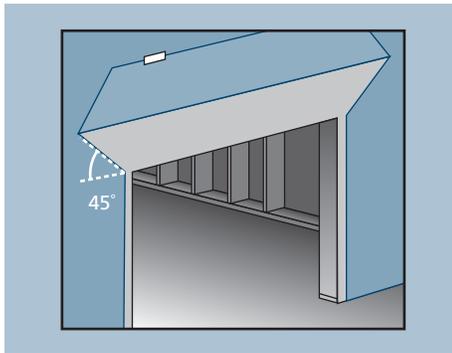


4 PREPARE STUD-FRAMED WALL

PREPARE BUILDING WRAP

Note! Check with the building wrap manufacturer to verify the following steps will not void their product warranty.

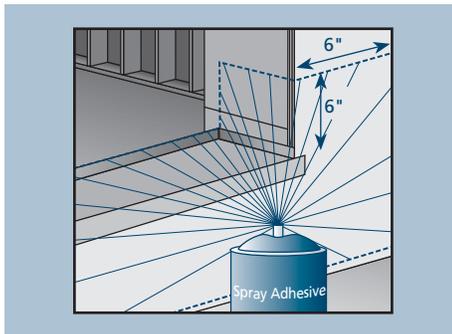
1. Trim building wrap flush with the rough opening.
2. At the head, cut building wrap at 45° and tape up as shown.
3. Trim the sides of the building wrap sufficiently to allow the nailing fin to be mounted against the sheathing.



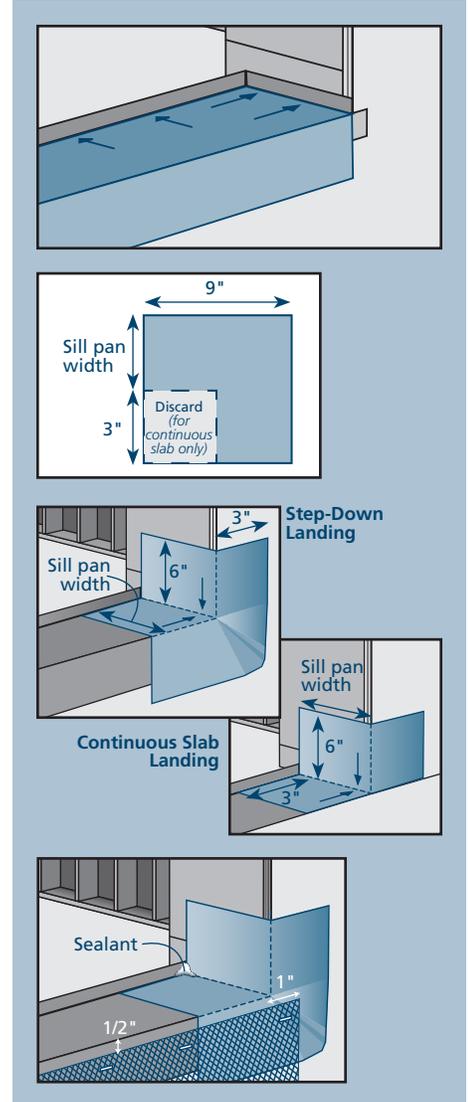
INSTALL JOBSITE FABRICATED SILL PAN

Note! The rest of the steps in this section only apply to a job site fabricated sill pan. If installing a sill pan that you have purchased, follow manufacturer's instructions for installation and skip to section 5, "INSTALL PATIO DOOR."

1. If installing a metal sill pan on concrete, cut a piece of self-adhesive flashing the length of the sill pan and adhere it to the entire bottom surface where the pan will sit on the concrete.
2. If fasteners are required through the sill, apply spray adhesive/primer to the sill pan and surrounding area. Follow spray adhesive manufacturers' instructions for application methods.



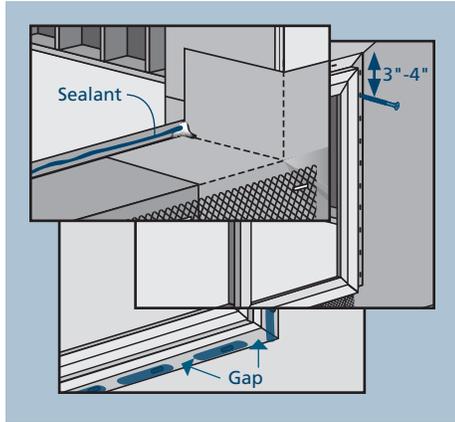
3. Cut a piece of self-adhesive flashing the length of the sill and apply over the entire sill pan. For step down landings, fold flashing down as shown. For continuous slabs, trim flush with rough opening.
4. Cut two pieces of self-adhesive flashing 9" wide by the sill pan width + 3" long.
 - a. For continuous slab landings only, cut out the inside corner.
 - b. Adhere the pieces of flashing to the inside corners. Stretch flashing as needed to cover corners and lay flat.
5. Smooth gaps or bubbles beneath self-adhesive flashing with a J-roller (remove and replace if necessary).
6. Seal back corners of sill pan with sealant.
7. For step-down landings only, cut plastic drain screen to length of sill + 2", center, and staple 1/2" below sill edge.



5 **INSTALL PATIO DOOR**

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

1. For continuous slab landings only, score and remove nailing fin at sill.
2. If installing a pre-formed sill pan, follow manufacturer's instructions and skip this step. If installing a job site fabricated sill pan, run a continuous 3/8" bead of sealant along the sill pan back dam. When the frame is installed, make sure the frame makes solid contact with the sealant. Add more sealant if necessary.
3. Run a continuous 3/8" bead of sealant around the interior side of the nail fin on the side jambs and head. On the sill, leave at least a 2" gap every 8" where it will contact the rough opening.
4. Tilt patio door into the rough opening. Adequately support the door until fully installed.
5. Fasten patio door between 3" and 4" from one upper corner.

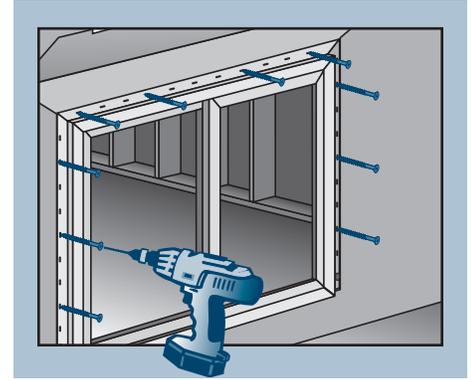


3. Shim the head jamb 4" from the corners of each panel.
4. Confirm the patio door for square, level, and plumb. Test for proper operation (remove and reinstall if necessary).

SECURE PATIO DOOR

Note! Fastener heads must be flush. Do not dent nailing fin. Always use pre-punched holes or pre-drill with a 3/16" bit.

Patio doors will be fastened according to performance rating. This rating is located on the gold AAMA label fixed somewhere on the frame, generally in the head jamb. Look for something like this example: R-PG20-3645X2426 (144X96)-SD. If this label is missing, use the PG35 and above fastener pattern below. Fasten through nailing fin holes as follows:

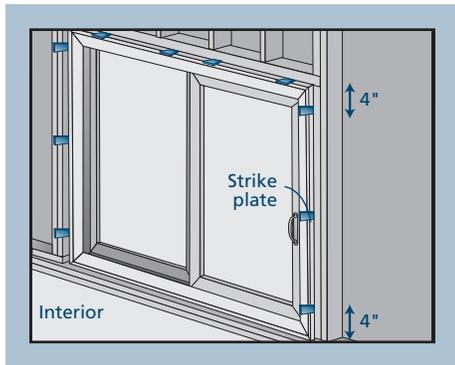


- PG20-4" from the corners and every 12" on center.
- PG35 and above-4" from each corner and every 8" on center.

SHIM THE JAMBS

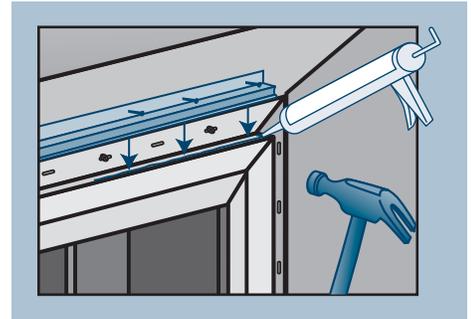
Note! Secure all shims with sealant.

1. From the interior, shim the operating panel side jamb 4" from the corners and at the strike plate. Align shims so that strike plate screws (installed later) will each penetrate a shim.
2. Shim the stationary panel side jamb 4" from the corners and at center.



APPLY DRIP CAP (IF APPLICABLE)

1. Apply 1/4" bead of sealant to header as shown.
2. Center drip cap on the header with 1/8" overhang on each end.
3. Nail drip cap in place as shown.



6 **FLASH PATIO DOOR**

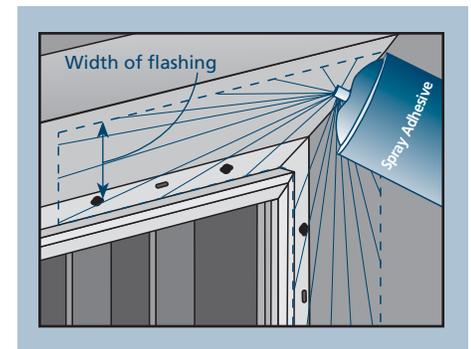
PREPARE FLASHING

Cut pieces of self-adhesive flashing to length as follows:

Min. sizes or other specified	4" Flashing	6" Flashing	9" Flashing
One header piece	10" longer than the header	14" longer than the header	20" longer than the header
Two side pieces	for continuous slab landings, 3" longer than the sides, or for step-down landings, 3" + the height of the step	for continuous slab landings, 5" longer than the sides, or for step-down landings, 5" + the height of the step	for continuous slab landings, 8" longer than the sides, or for step-down landings, 8" + the height of the step
For step-down landings only, one sill piece	6" longer than the sill and 1" narrower than the height of the step	10" longer than the sill and 1" narrower than the height of the step	16" longer than the sill and 1" narrower than the height of the step

SPRAY ADHESIVE/PRIMER

Apply spray adhesive per manufacturer's instructions (protect door from overspray) to nailing fin, sheathing, and building wrap around the patio door as shown.

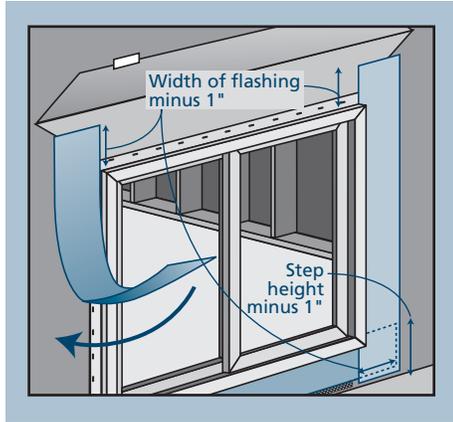


6 FLASH PATIO DOOR - CONTINUED

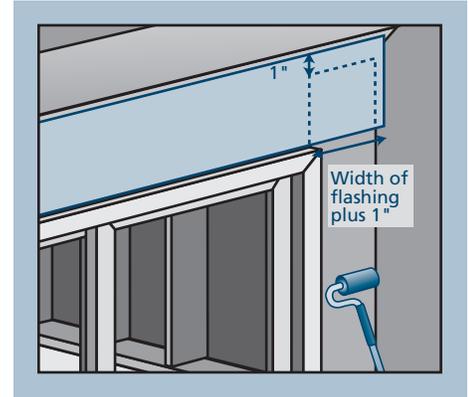
APPLY THE SELF-ADHESIVE FLASHING

Note! Keep the edge of the self-adhesive flashing as close to the patio door frame as possible.

1. If applicable, center and apply the sill piece underneath the sill (bottom 1/2" of the drain screen must remain visible). Trim drain screen and/or flashing as necessary to fit the specific wall condition.
2. Apply the side pieces at a point above the head jamb that is 1" less than the width of the flashing and proceed downward along the side jambs.

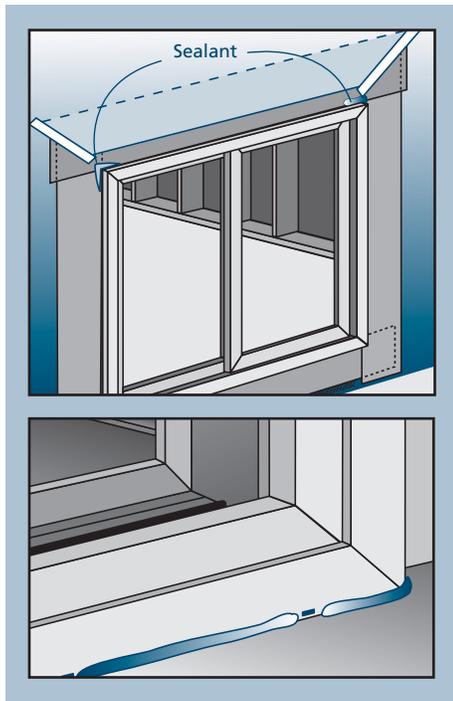


3. Center and apply the header piece above the header.
4. Press the flashing down with a J-roller.
5. Do not allow gaps or bubbles beneath self-adhesive flashing (remove and replace if necessary).



7 COMPLETE INSTALLATION

1. Seal the upper corners of the patio door to flashing with a 1/4" bead of sealant. Tool into a fillet shape.
2. Release the building wrap from above the header (previously taped up) and overlap the header flashing. Seal the ends with self-adhesive flashing or building wrap tape.
3. For continuous slab landings, apply a 1/4" bead of sealant around the sill where it meets the slab. Leave gaps at the weep holes as shown.
4. Ensure sealant on back dam of the sill pan fully seals to the inside face of the door frame sill. Apply more sealant as necessary to ensure an airtight seal.

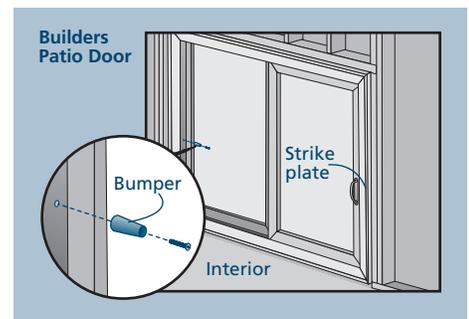


SUPPORT TRIM (STEP-DOWN LANDING ONLY)

On the exterior, install support trim underneath the sill where it extends past the landing. Position trim snugly against the underside of the door frame.

INSTALL BUMPER (WHERE APPLICABLE)

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



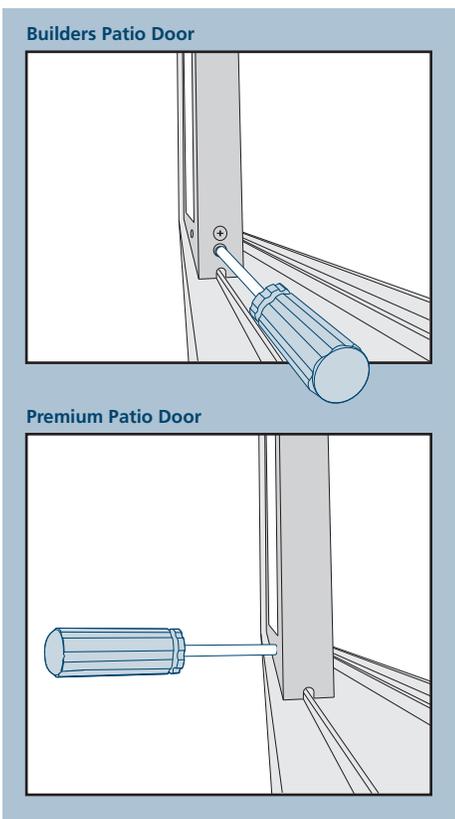
7 COMPLETE INSTALLATION - CONTINUED

PATIO DOOR ADJUSTMENT

Roller Adjustment

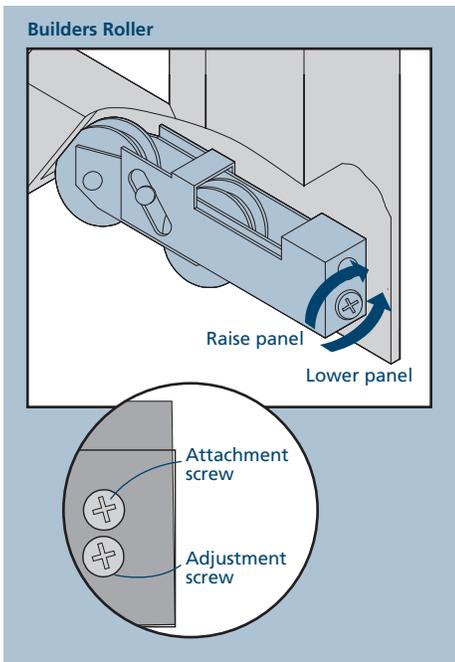
Note! Adjusting door too high may allow water and air leakage. Adjust rollers just high enough to clear sill track and still roll smoothly.

1. Builders doors have an adjustment screw on each lower end of the operating panel(s). Premium 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 expose a 1/4" gap between the panel and frame jamb. Verify the gap is even along entire height of panel to frame. If uneven, adjust by referring to the following steps.



Note! Builders roller adjustment screws are in close proximity to the attachment screw. Adjust only the lower screw (as shown); 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. Adjust as needed until interlocks, grid patterns, and jambs line up.
5. Test the operating panel for proper operation.
6. Re-apply the small vinyl caps over the roller adjustment screw holes if applicable.



Lock Adjustment

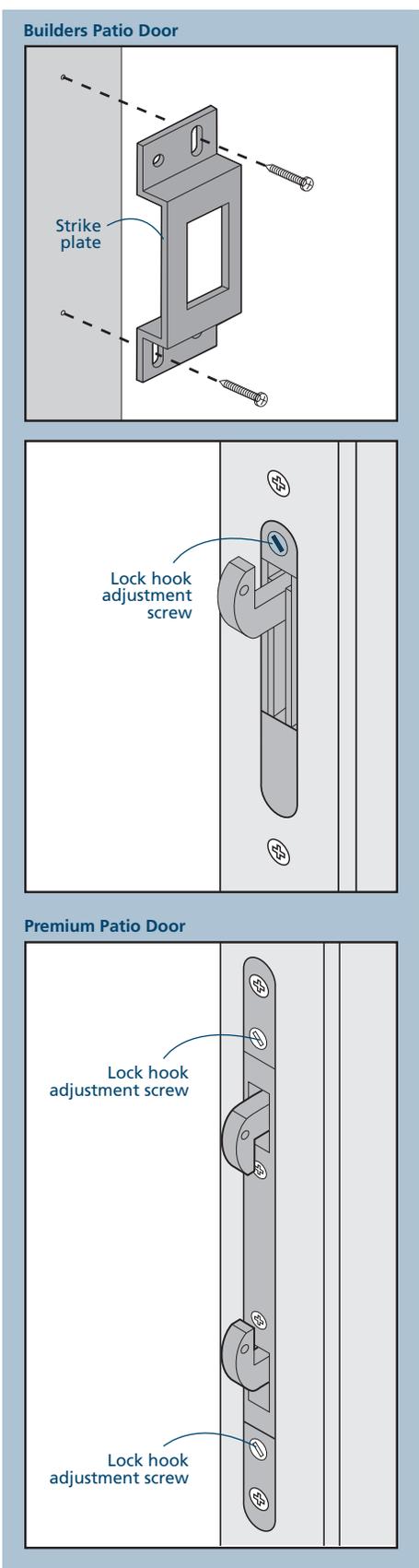
Note! If the strike plate was not previously installed, line up the screw holes with the dimples in the operating panel side jamb and drive screws through the two slotted screw holes.

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 doors have a double latch and two adjustment screws.

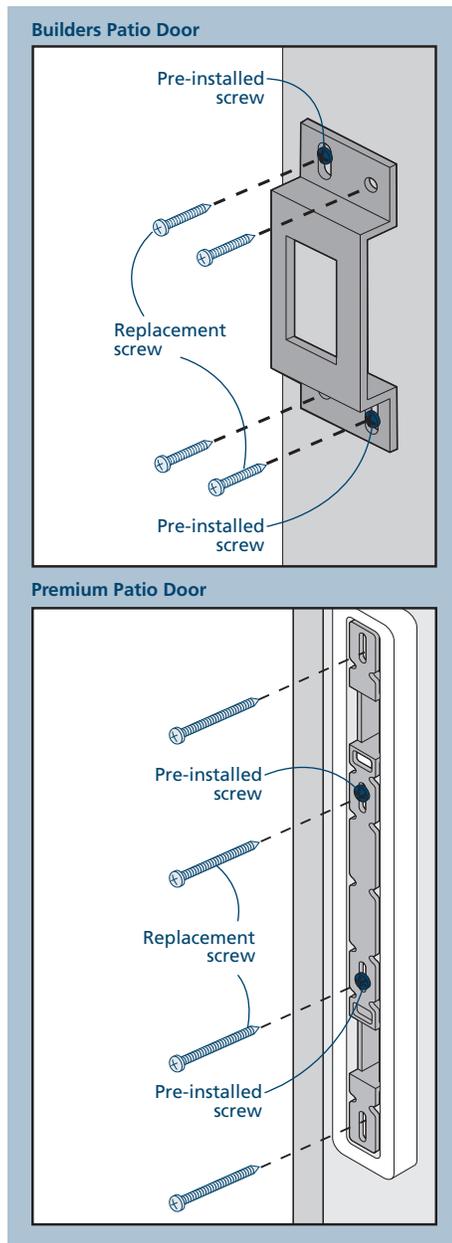


7

COMPLETE INSTALLATION - CONTINUED

FINISH INSTALLATION

1. Drive two #10 x 2 1/2" screws (included in hardware pack) through the open screw holes in the strike plate.
2. Remove the pre-installed screws from the strike plate and replace them with the remaining #10 x 2 1/2" screws from the hardware pack. This will increase security by attaching the patio door to the structure.

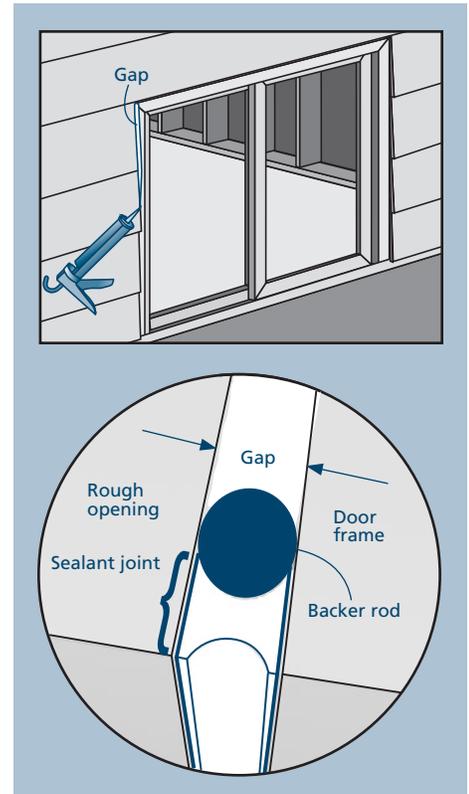


CONTINUOUS AIR SEAL

Create a continuous air seal on the interior between the rough opening and the door frame with backer rod and sealant or low expansion foam. Allow the foam to fully cure and cut flush with a sharp knife. Make sure the foam cuts cleanly and doesn't tear.

AFTER INSTALLATION

1. Install exterior wall surface per manufactures' guidelines.
2. Seal any gaps or openings at end of horizontal mull joints with sealant.
3. Leave an expansion/contraction gap of approximately 3/8" between door frame and final exterior wall surface (siding, stucco, etc.). For a finished look and additional protection, seal this gap on the sides with backer rod and sealant. If sealant is applied above the drip cap ensure the sealant bead is discontinuous to allow for drainage.
4. Protect recently installed units from damage from plaster, paint, etc. by covering the unit with plastic.



Please visit jeld-wen.com for warranty and care and maintenance information.

Thank you for choosing

