



Thank you for selecting JELD-WEN products. Attached are JELD-WEN's recommended assembly and installation instructions for Builders Aluminum Sliding Patio Doors with integral nailing fin. Read these installation 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 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.

Note! Installation such that the sill is higher than 35 feet above ground level or any product installation 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 peaks 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 product warranty as part of the terms of the sale.

Estimated Install Time for New Construction	<input type="text"/> First Time: 1½ hr
	<input type="text"/> Experienced: ¾ hr
	<input type="text"/> Professional: ½ hr



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

GLOSSARY

Backer Rod (backing material)

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

Pilot Hole

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

Self-Adhesive Flashing

An adhesive backed material used to waterproof the rough opening, that directs any incidental water to the exterior of the building's weather barrier.

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.

Step-down Landing

A patio door sill in which the interior floor surface is higher than the exterior surface.

Weep Hole (weep channel)

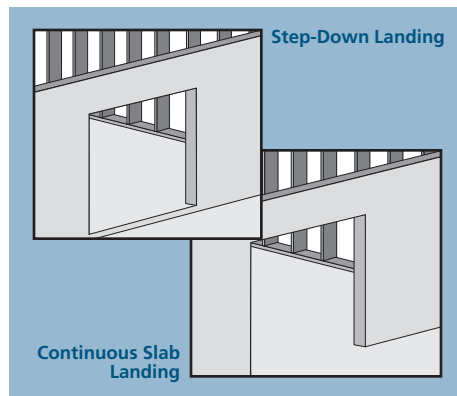
The visible exit or entry part of a water drainage system used to drain water out of a door.

REVERSE PATIO DOOR HANDING

Door kits are set up for left to right operation (XO) when viewed from the exterior. To reverse the handing (OX), move the door rollers to the top and flip the operating panel over before installation.

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.

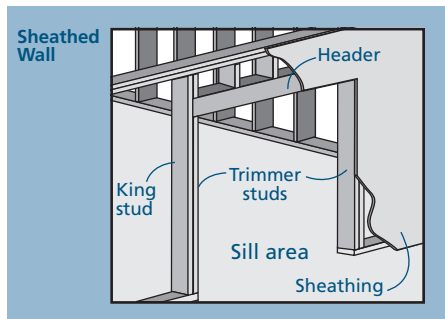


ROUGH OPENINGS

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

FULLY SHEATHED WALL CONSTRUCTION

The wall framing is covered by sheathing and the door will be mounted with the nailing fin flush against the sheathing.



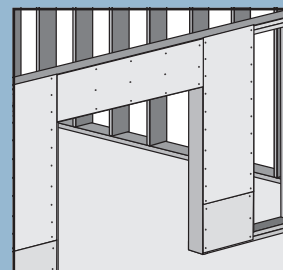
OPEN-STUD CONSTRUCTION

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.

IF INJURY OCCURS, IMMEDIATELY SEEK MEDICAL ATTENTION!

MATERIALS AND PATIO DOOR HANDLING

- 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 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.

MATERIALS AND TOOLS

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 shims.
- 4", 6", or 9" (as required by local code and patio door 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.
- 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).
- 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, 4" for a continuous slab).
- #8 x 1/2" self-tapping stationary panel security screws.
- For concrete subfloors (securing the sill) 3/16" x 1 1/4" self-tapping concrete screws.
- For wood subfloors (securing the sill) #10 x 3" corrosion-resistant pan head screws.

NEEDED TOOLS

- Hacksaw (used only for SureSill™ sill pan)
- Cutting shears (used only for fabricated sill pan)
- Tape measure
- Utility knife
- Level (4' minimum recommended)
- J-roller
- Caulking gun
- Hammer drill and masonry bits for masonry applications
- Drill with bits
- Putty knife
- Phillips head screwdriver
- Construction stapler

NEEDED MATERIALS AND TOOLS - CONTINUED

PARTS (INCLUDED WITH PATIO DOOR)

Builders Materials:

- A Head closer
- B Bumper
- C Sill closer
- D Self-adhesive nailing fin chevron gaskets

Items not shown:

- #6 x 1/2" Closer screws
- #8 x 5/8" Bumper screws
- #8 x 3/4" Frame screws

Premium (A-500) Materials:

- I Door Bumper with clip and #8 x 1 1/4" pan head screw
- J (2) Anti lift blocks with #8 x 1/2" screws

Items not shown:

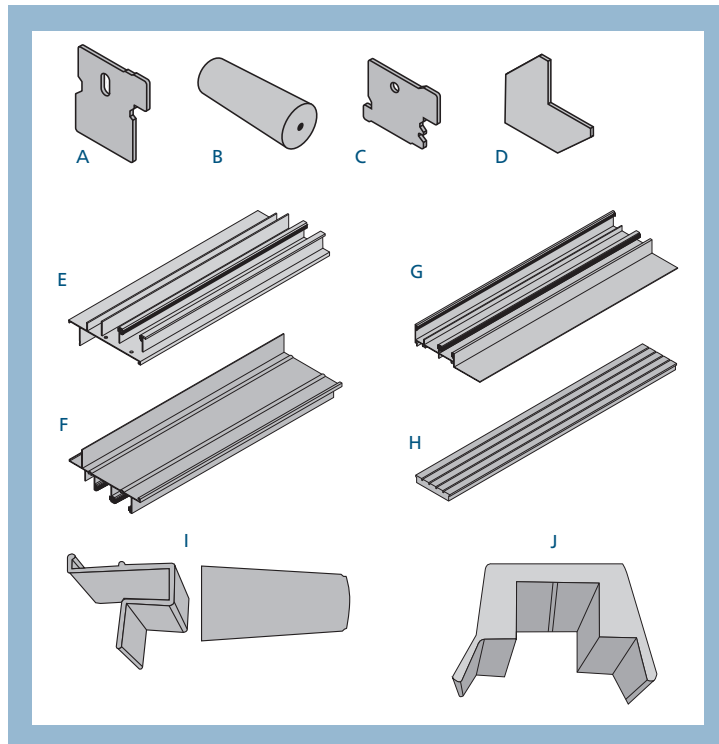
- #10 x 3/4" Phillips pan head screws for frame assembly
- #8 x 2" Phillips pan head screws for frame header
- #8 x 2" Phillips pan head screws for securing the frame to the rough opening
- Fixed panel clips with #8 x 1/2" screws

All Products:

- E Side jamb
- F Header
- G Sill
- H Sill cap

Items not shown:

- Handle set with instructions
- Operating panel with pre-drilled holes for the handle set
- Fixed panel
- Optional screen door (including lock keeper and screw)



1

REMOVE PACKAGING AND INSPECT PATIO DOOR

REMOVE PACKAGING

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

INSPECT PATIO DOOR

- Cosmetic damage.
- Correct product (size, color, grid pattern, handing, glazing, energy-efficiency requirements, etc.).

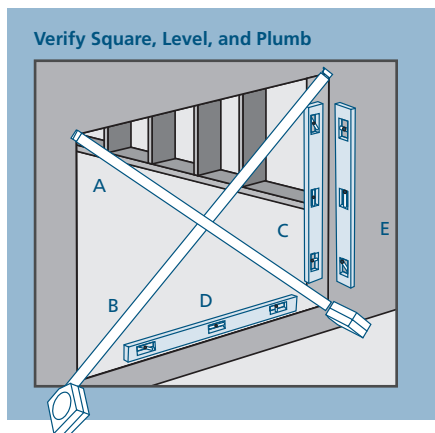
- Splits, bends, holes, missing sections or other damage to the nailing fin longer than 6" and/or within 1/2" of door frame.

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 rough opening is 1/2" wider and 1/2" taller than the patio door frame.
- 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 rough openings.
- The header must be supported by trimmer studs.
- Correct any deviations before installing the patio door.

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.

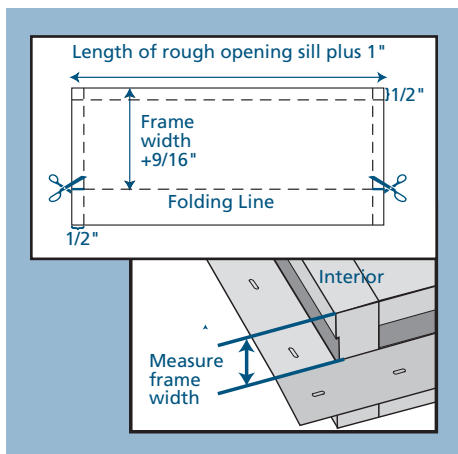
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INSTALL SILL PAN

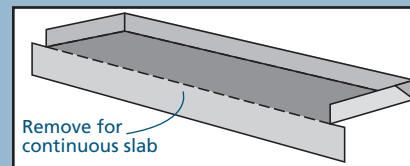
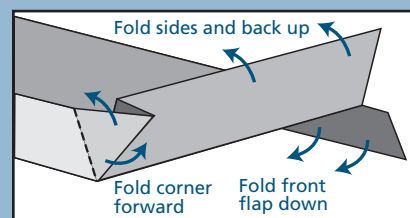
The sill can be prepared using one of two methods: We recommend SureSill™ Sloped Sill Pan™ available from SureSill at www.suresill.com, building supply stores, and some manufacturing locations. As an alternative, a sill pan can be fabricated on site, by following the instructions below. If installing 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.

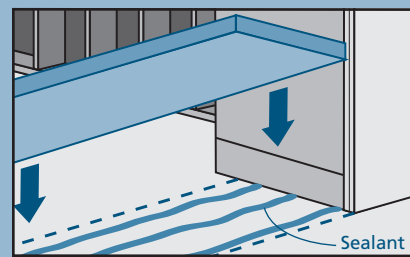
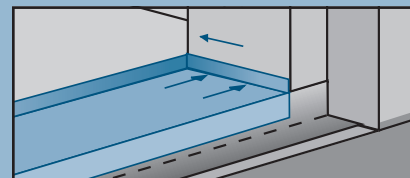


7. Fold the three back sides up to make a 3-sided box, and, for step-down landings, fold the front flap down.



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.



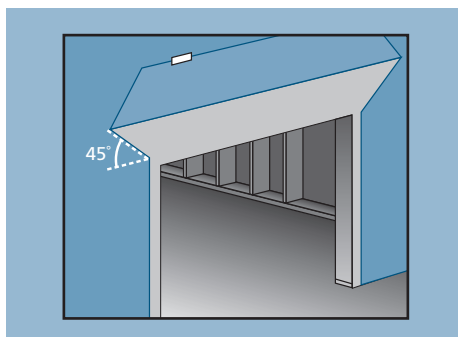
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PREPARE STUD-FRAMED WALL

PREPARE BUILDING WRAP

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

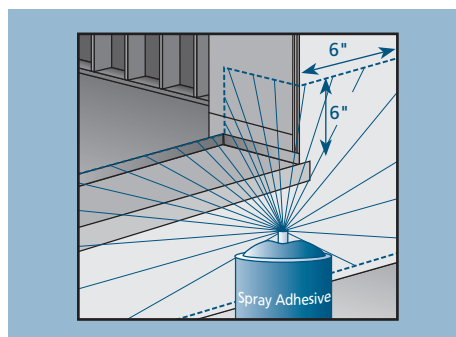
1. Trim building wrap flush with the rough opening.
2. At the head, cut building wrap at 45° and tape up as shown.
3. Trim the sides sufficiently to allow the nailing fin to be mounted against the sheathing.



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 4, "ASSEMBLE FRAME."**

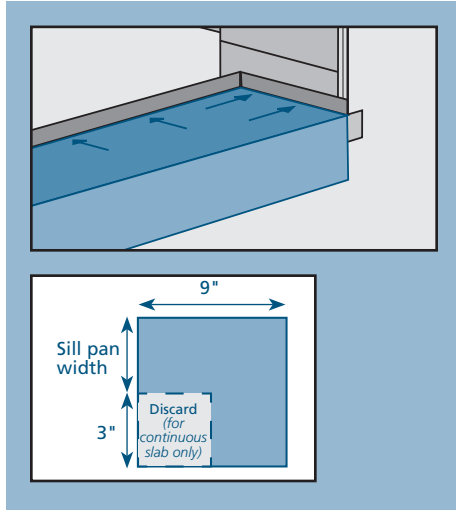
1. If installing a metal sill pan on concrete, cut a piece of self-adhesive flashing the length of the sill pan and adhere it to the entire bottom surface where the pan will sit on the concrete.
2. If fasteners are required through the sill, apply spray adhesive/primer to the sill pan and surrounding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



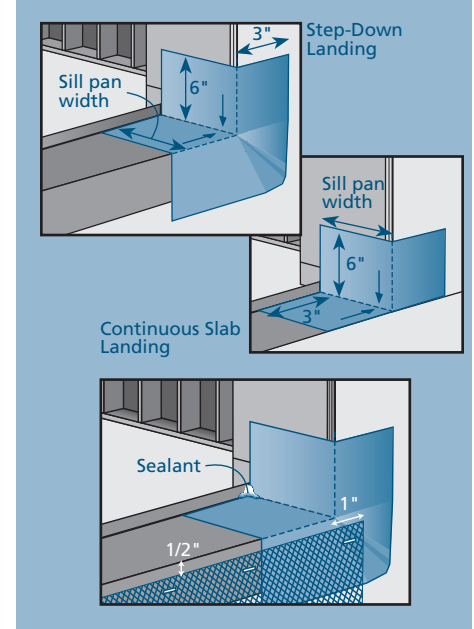
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PREPARE STUD-FRAMED WALL - CONTINUED

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.



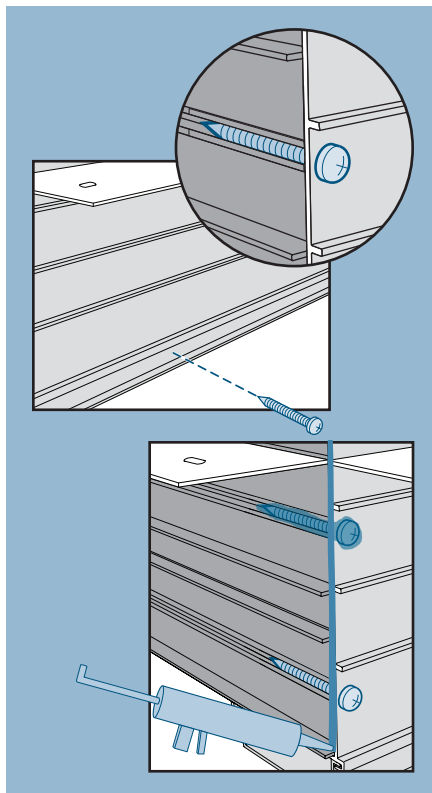
- b. Adhere the pieces of flashing to the inside corners. Stretch flashing as needed to cover corners and lay flat.
5. Smooth gaps or bubbles beneath self-adhesive flashing with a J-roller (remove and replace if necessary).
6. Seal back corners of sill pan with sealant.
7. For step-down landings only, cut plastic drain screen to length of sill + 2", center, and staple 1/2" below sill edge.



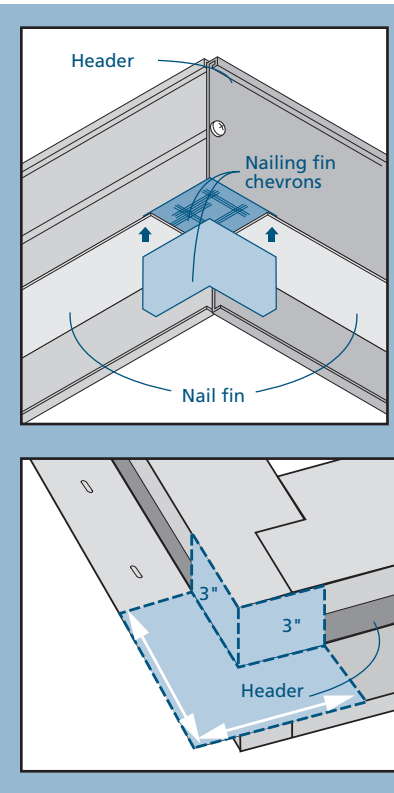
5

ASSEMBLE FRAME

1. Line up the side jamb with the sill. Secure with two #8 x 3/4" frame screws. Screws must engage sill screw channels.
2. Attach the opposite side jamb.
3. Attach header piece in the same manner.
4. Seal the frame members where they connect and all screws as shown.



5. For Builders doors only, attach two nailing fin chevrons (one on interior side and one on exterior side) to each upper corner of the frame.

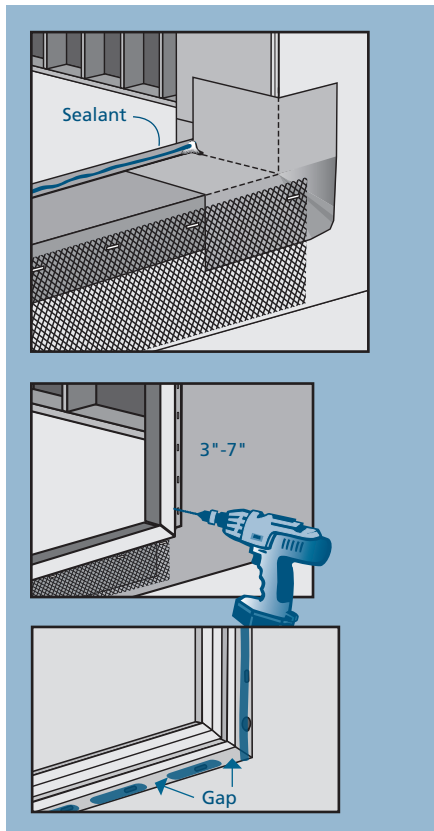


6. Cut two pieces (for Builders doors) or four pieces (for Premium doors) of self-adhesive flashing 3" x 3" and apply to the upper corners to seal the triple joint where the header, side jamb and nailing fins meet. For Premium doors, apply flashing to both sides of nailing fin/frame.

6
INSTALL FRAME

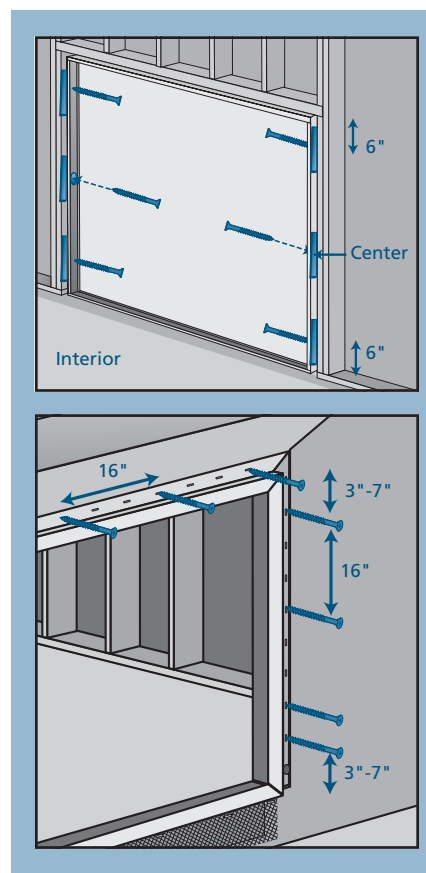
Warning! To avoid injury, use at least two people to install. Adequately support the door until fully installed.

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 frame into the rough opening. Adequately support the door until fully installed.
5. Fasten patio door frame between 3" and 7" from one lower corner.


SHIM THE JAMBS

Note! Secure all shims with sealant. Apply sealant to screw threads before driving through shims.

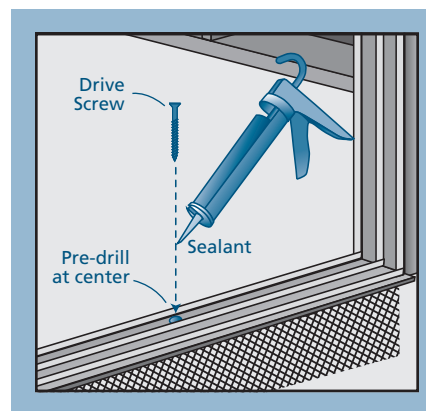
1. On the interior, vertically shim both side jambs at center and 3"-6" from each corner.
2. Inspect the door frame for square, level, and plumb (remove and reinstall if necessary).
3. For vertical shims at center, drive screws through the upper screw holes in the interior channel of the side jamb. For all other shim locations, pre-drill for screws. Drive screws through every shim in the rough opening.
4. Fasten the nailing fin around the frame 3"-7" from the corners and at maximum 16" intervals in between.
 - Premium Aluminum (A-500) Patio doors will be fastened through the vent pocket in the middle of the head and 4" from each corner and every 24" 12" on center with the provided screws.



5. Seal the inside joints of each sill to jamb connection.

SECURE THE SILL

6. At the center point, pre-drill the interior sill track.
7. Fill the hole with sealant.
8. Drive a screw through the sill into the framing or concrete. Use concrete anchors in concrete floors.
9. Cover the top of the screw with sealant.



7

FLASH PATIO DOOR

PREPARE FLASHING

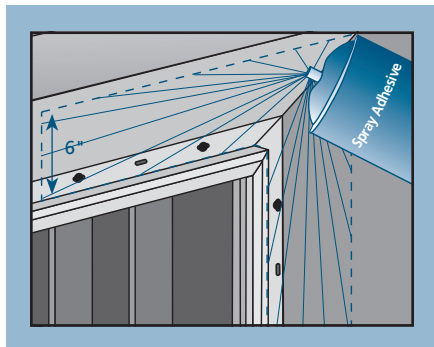
Cut pieces of self-adhesive flashing to length as follows:

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

Note! Protect patio door from overspray

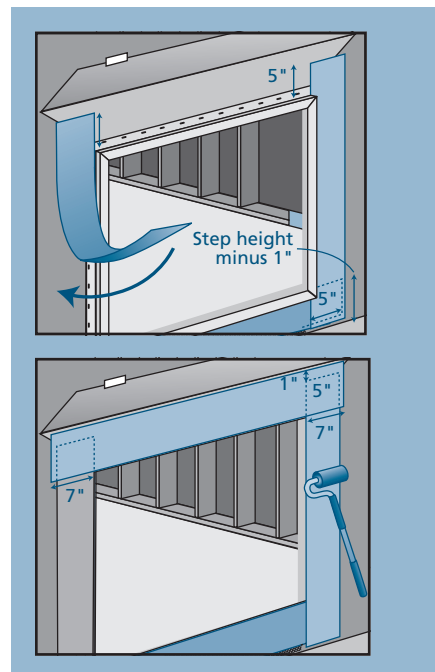
1. Apply spray adhesive to the nailing fin, sheathing, and building wrap around the patio door as shown.



APPLY THE SELF-ADHESIVE FLASHING IN THIS ORDER

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

2. If applicable, center and apply the sill piece underneath the sill (bottom 1/2" of the drain screen must remain visible).
3. Apply the side pieces starting 5" above the header.
4. Center and apply the header piece above the header.
5. Press the flashing down with a J-roller.



8

INSTALL PANELS

INSTALL THE OPERATING PANEL

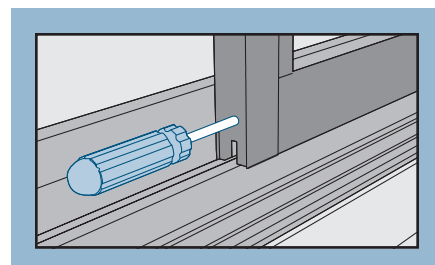
1. From the exterior, install the operating panel by tipping the top of the panel into the interior header track and swinging the bottom into the interior sill track.
2. Install the handle set using the instructions provided.
3. Install the anti lift blocks in the head track directly over where the operating panel will be when it's closed.



4. Adjust the operating panel rollers as follows:

Note! Adjusting the rollers too high may allow water and/or air infiltration. Adjust the rollers just high enough to clear the sill track without dragging.

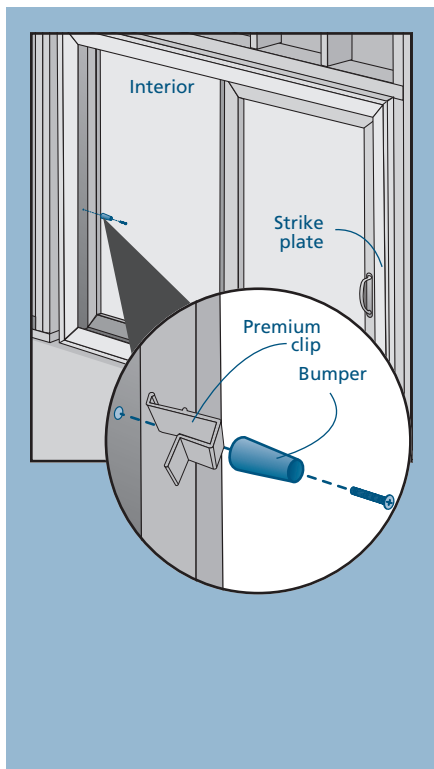
- Open the operating panel enough to compare with the side jamb.
- Adjust both rollers until the gap is even and the door rolls smoothly.



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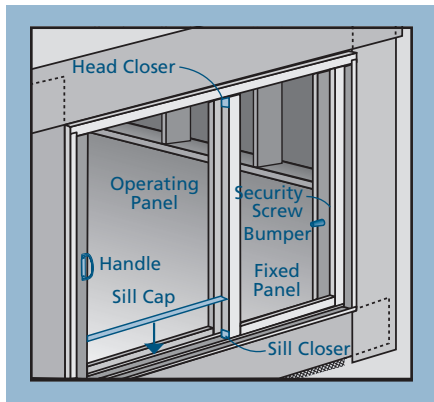
INSTALL PANELS - CONTINUED

- At vertical center of side jamb interior track, pre-drill and install bumper. For Premium doors, use the provided clip with the bumper.



INSTALL THE FIXED PANEL

- From the exterior, install the fixed panel in the exterior track in the same manner as the operating panel.
- Close the fixed panel. Install head and sill closers with #6 x 1/2" closer screws.
- Install sill cap.
- From the interior where the fixed panel meets the side jamb, mark security screw locations 4" - 6" from the top and bottom and one in center. Pre-drill at a slight angle and drive #8 x 1/2" self-tapping screws through the side jamb, weatherstrip, and then into the fixed panel. This will fasten the panel to the jamb for added strength and security.



INSTALL THE SCREEN (IF INCLUDED)

Adjustment screws are located at each corner of the door screen on the edge.

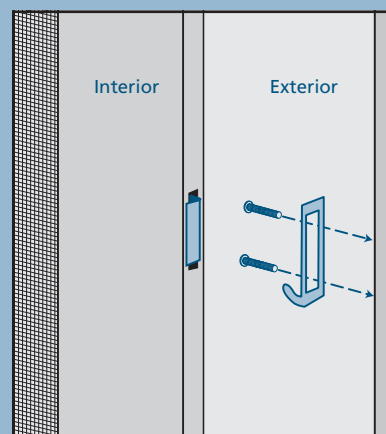
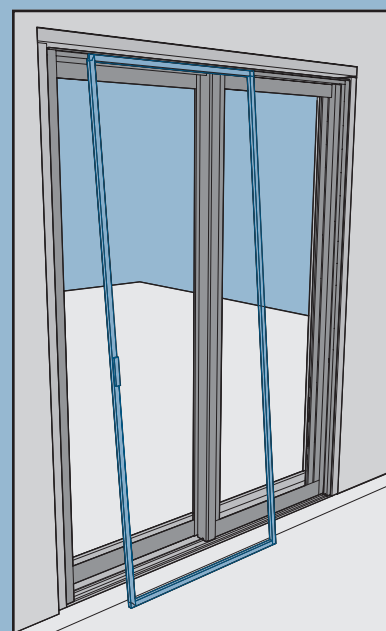
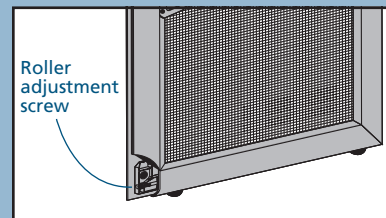
- Turn all four adjustment screws to retract rollers into the screen.

Note! If door screen has weatherstrip covering adjustment screw, pull out only enough to expose screw, then press back into place after adjustment.

- Grip both sides of the screen and lift up into the head track and then swing the bottom over the screen track (if needed, use putty knife to help lift rollers over track) and set on the track.

Roller Adjustment

- Ideal adjustment is as low as possible but just high enough to avoid drag. Turn the adjustment screw in quarter turn increments until the correct adjustment is achieved. Some rollers will require opposing rotations to move the roller in the same direction as the other rollers.
- Pre-drill and install lock keeper in the side jamb as shown.



9

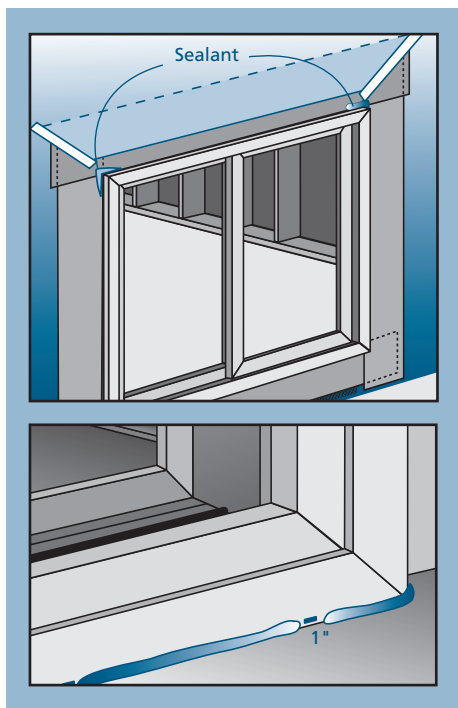
COMPLETE INSTALLATION

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.



INSTALL SUPPORT TRIM (STEP-DOWN LANDING ONLY)

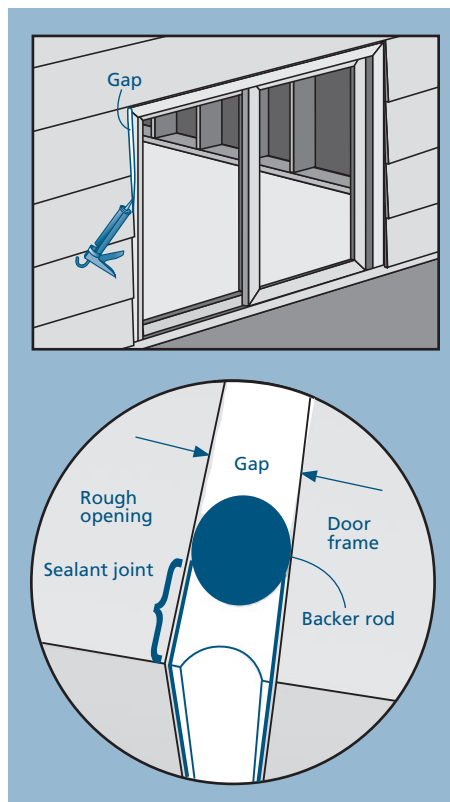
On the exterior, install support trim underneath the sill where it extends past the landing. Position trim snugly against the underside of the door frame.

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

JELD-WEN
WINDOWS & DOORS