

ASSEMBLY AND INSTALLATION INSTRUCTIONS

for Premium Aluminum and Premium Atlantic Aluminum Sliding Patio Doors (JII020)



Thank you for selecting JELD-WEN products. Attached are JELD-WEN's recommended installation instructions for Premium Aluminum Sliding Patio Doors with two or three tracks and up to six panels.

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 & GLOSSARY

Not all patio door types can 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 full 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.

GLOSSARY

Astragal

The vertical trim attached to one of the panels of a sliding patio door that bridges the gap between the panels when closed and provides weather protection.

Buck

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

Continuous slab

A concrete floor that is continuous through the door opening.

Interlock

A weatherstrip component that runs vertically along the stiles of either horizontal sliding sashes or sliding patio door panels. When the window/door is closed, the interlocks engage, locking together, to create a weather barrier.

Pilot hole

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

Sill pocket

A cavity recessed into a concrete floor to hold the sill of a patio door.

Step-down landing

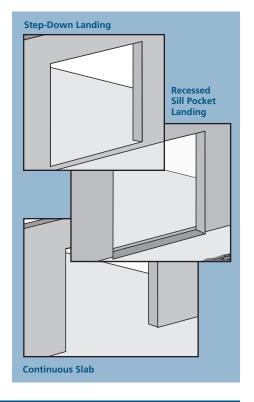
A patio door sill in which the interior floor surface is higher than the exterior surface.

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



LANDINGS

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





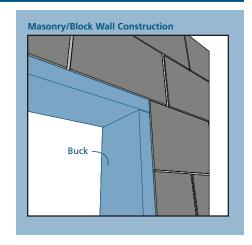


ROUGH OPENINGS

These installation instructions specifically address masonry/block wall, sheathed wall and open-stud construction. In each case, the door will be mounted by fastening through the jambs into the rough opening.

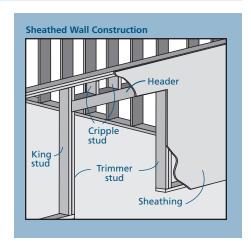
MASONRY/BLOCK WALL CONSTRUCTION

For installation in a masonry/block wall construction, a buck (a wood framework attached to the masonry) is required. We will refer to this buck as the rough opening.



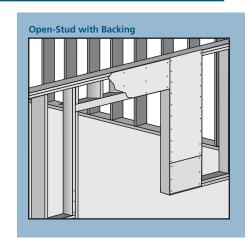
FULLY SHEATHED WALL CONSTRUCTION

The wall framing is covered by sheathing.



OPEN-STUD CONSTRUCTION

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



These illustrations show construction details complete with all components necessary for door installation. Do not attempt to install door if any of these components are missing. If necessary, call a contractor for assistance. Improper installation may result in denial of claims for operational or performance problems.

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.

PATIO DOOR HANDLING

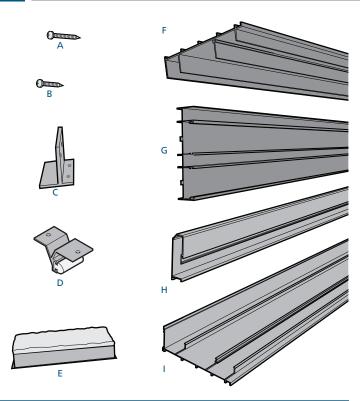
- Heed material manufacturers' handling and application instructions.
- Handle in vertical position; do not drag on floor.
- Do not put stress on joints, corners or frames.
- Store patio door in dry, well-ventilated area in vertical, leaning position to allow air circulation; do not stack horizontally.
- Protect from exposure to direct sunlight during storage.
- Install only when conditions and sheathing are completely dry.

IF INJURY OCCURS, IMMEDIATELY SEEK MEDICAL ATTENTION!





NEEDED MATERIALS & TOOLS



PARTS (INCLUDED WITH PATIO DOOR)

A #8 x 1" Phillips pan head sheet metal screw

B #8 X 3/4" Phillips pan head self-tapping screw

C Offset T clip (DP50 / DP80 doors only)

D Panel bumper

E Adhesive weather strip pad

F Head frame

G Left and right side frame

H Sill riser (on DP 80 doors, only)

I Sill track

- Handle package not shown
- Interior door panel(s) not shown
- Exterior door panel(s) not shown
- Screen not shown (optional, on some configurations)

MATERIALS

- Sealant (polyurethane if painted, 100% silicone if left exposed)
- · Shims, high-density plastic or composite
- Backer rod
- Liquid applied flashing (Wet-Flash® PM-7000, or equivalent)
- JELD-WEN self-adhesive flashing (part #08987) or equivalent, or flexible flashing (Width requirement may vary according to local code)

For installation in sheathed wall or open stud construction:

• #12 x 2 1/2" corrosion-resistant, flat-head screws; (length of screw must penetrate at least 1 3/4" into the framing). Forty (40) or more screws will be needed for the smallest size door installation.

For buck framing in a concrete (masonry) structure:

• 1/4" diameter self-tapping concrete screws (Tapcon®, or equivalent); length of screw must penetrate at least 1 1/4" into the concrete

For step-down landing:

• Sheet metal flashing or bendable vinyl sheeting for sill pan

For concrete subfloors in DP 50/DP 80 applications (securing the sill):

• 1/4" diameter self-tapping concrete screws (Tapcon®, or equivalent); length of screw must penetrate at least 1 1/4" into the concrete

For wood subfloors in DP 50/DP 80 applications (securing the sill):

• #12 x 2" corrosion resistant flat head screws; length of screw must penetrate at least 1 3/4" into the subfloor

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 with bits (assembly)
- Construction stapler
- Putty knife
- Screwdriver, Phillips
- Hammer drill and masonry bits for masonry applications

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REMOVE PACKAGING & INSPECT DOOR

REMOVE PACKAGING

Remove packaging materials.

INSPECT DOOR

- Cosmetic damage
- Included parts (See Parts List above)
- Correct product (size, color, number of panels, grid pattern, glass type, etc.)

If any of the above represents a concern, BEFORE installing, contact your dealer or distributor for recommendations.

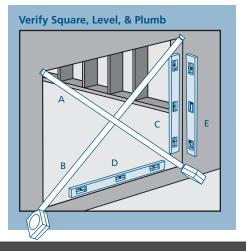






INSPECT ROUGH OPENING

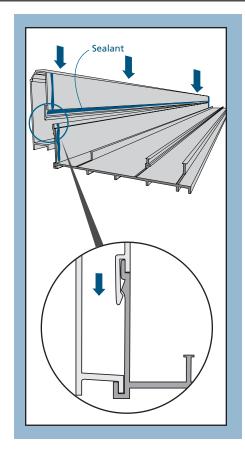
- · Verify the rough opening (inside the buck) is no larger than 1/2" wider and 1/4" taller than the patio door frame.
- Verify the rough opening is square. The (A) and (B) measurements should be the same. Maximum allowable deviation from square is 1/4".
- · Verify the rough



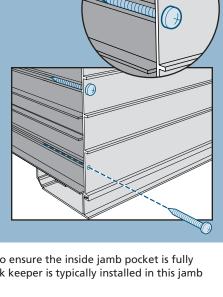
- opening is plumb (C). The maximum allowable deviation is 1/8".
- The rough opening sill must not be crowned or sagged (D).
- The exterior face of the rough opening must be in a single plane with less than 1/8" twist from corner to corner (E).
- In wood frame construction, the header must be supported by trimmer studs and designed to ensure that no load is transferred to patio door unit.
- Correct any deviations before installing the patio door. Consult a building professional as needed.
- Verify the rough opening is clean and dry.

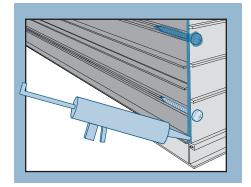
ASSEMBLE FRAME

• DP 80 doors come with a sill riser accessory which is installed as follows. Apply a bead of sealant in the groove of the sill riser. Snap the sill riser to the sill so the pieces lock together as shown. Using a rag, clean up any excess sealant.



- Using the supplied 1" screws, fasten the sill to the right and left frame parts. The pre-drilled holes in the sill will line up with the screw bosses (grooves in the frame sides). Make sure the attached gasket lies flat and the screws are inserted properly into the screw bosses.
- Using the supplied 1" screws, fasten the header to the right and left frame parts by inserting screws into the screw bosses through the pre-drilled holes in the header.
 - Verify handing of parts to ensure the inside jamb pocket is fully weatherstripped; the lock keeper is typically installed in this jamb pocket.
- Seal the screw heads, screw bosses, and the outside of each corner joint with polyurethane or 100% silicone sealant as shown.
- Dry fit the door by inserting the door frame into the rough opening to verify proper fit.







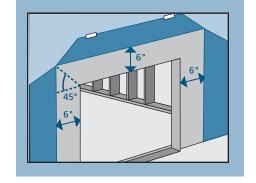
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PREPARE ROUGH OPENING

PREPARE BUILDING WRAP

(For masonry/block wall construction, skip to PREPARE SILL PAN)

- Trim building wrap flush with the edge of the rough opening at the head and sides. Trim flush at the sill for stepdown landings.
- At the head, slit building wrap 6" at 45°. Tape up as shown. Also pull back building wra

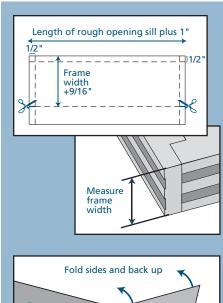


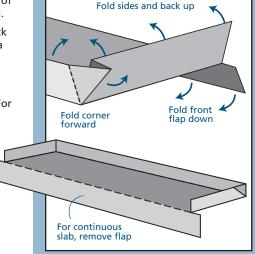
back building wrap 6" away from jambs and tape up as shown.

PREPARE SILL PAN

(For a recessed sill pocket, skip to COMPLETE OPENING PREP)

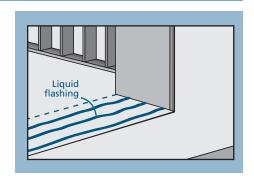
- Cut a piece of sheet material to the length shown.
- Lightly crease folding lines 1/2" in from the two short sides and one long side.
- Measure the width of the exterior edge of the frame and add 9/16".
- Take this distance from the back edge of the sheet material and lightly crease a folding line.
- Cut 1/2" in at this line on both sides of the sheet material.
- Fold the three back sides up to make a 3-sided box.
- For step-down landings, fold the front flap down. For continuous slabs, remove the front flap.





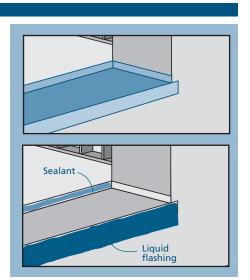
PREPARE SILL

- Set the sill pan in place and mark a line across the back of the sill pan with a pencil as shown.
 Remove sill pan.
- Apply three 3/8" beads of liquid flashing between the marked line and the exterior edge of the rough sill.



INSTALL SILL PAN

- Set the sill pan in place pressing it down firmly into the sealant. Use a J-roller if necessary to ensure a smooth, secure seal.
- Apply a 3/8" continuous bead of sealant across the sill pan back dam.
- For step-down landing apply a layer of liquid flashing across the lower lip of the sill pan, joining it to the face of the foundation.



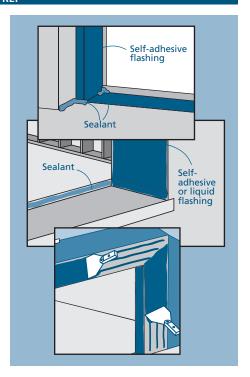
COMPLETE OPENING PREP

Waterproof the rough opening with one of the following methods:

 Wrap the buck or stud completely with self-adhesive flashing, then seal the joint between the flashing and the structure, and at the corners as shown.

OR

 Apply liquid applied flashing in a smooth 1/16" thick layer covering the exterior face of the structure in a 6" width. Apply 1/16" thick layer to cover the entire surface of the head and jambs, extending onto the sides of the sill pan or across the entire surface of the sill pocket.







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INSTALL FRAME

Caution! A minimum of two (2) people are needed to install this product.

Note! These steps apply to all landing types.

- Tilt patio door frame into the rough opening. (If using a sill pan, make sure the back of the sill makes solid contact with the sealant.) Hold door in place until fully fastened.
- Align the exterior of the frame with the most exterior surface of the structure (the exterior face of the concrete wall, framing or sheathing).
- Pre-drill installation holes in floor and fill with sealant prior to anchoring screws into sill.
- Fasten patio door frame with appropriate screws (see Materials section above) through pre-drilled jamb, head and sill holes, and through any needed shims. Screw through each pre-drilled hole in the frame pieces. Shims must be 1" narrower than the frame jamb to allow 1/4" backer rod and sealant to be installed later. Use caulking if necessary to secure shims in place while anchoring.

Note! For wood framing screws must penetrate 1 3/4" into framing; for masonry/block construction screws must penetrate 1 1/4" into concrete or block.

- Verify the unit is square by re-measuring on the diagonals.
- Verify the unit is plumb and level.
- Use a level (4 foot recommended) to ensure there are no bows in the framing.
- Adjust screws and re-shim as needed to correct any bows.

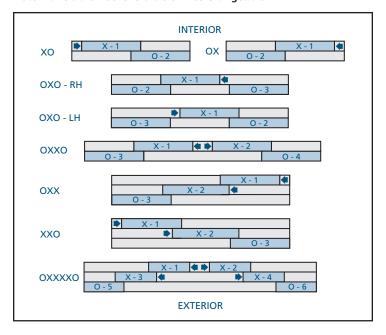
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INSTALL PANELS

DETERMINE DOOR CONFIGURATION

Each panel will be labeled with a number indicating the order of installation into the frame. Refer to the sections below for detailed instructions on installing each interior and exterior panel into the frame. After all panels are installed, follow the instructions for adjusting the rollers and fixing the stationary panels in place.

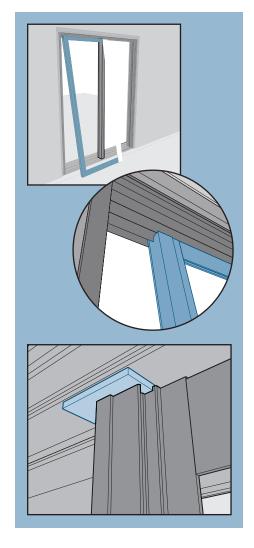
Note! Panels are not reversible or interchangeable.



INSTALL INTERIOR PANEL(S)

Interior panels must be installed first. Using the configuration diagram above, install each interior panel. All panels are marked numerically, in order of installation. Make sure the panel interlock (when present) is facing the exterior. Two panel doors are shown, but also apply to three or more panels.

- Working from the outside, place the slot of the panel head over the interior guide leg of the frame head.
- Raise the panel and swing the bottom in so the wheels are properly located over the interior track.
- After installing an interior operating panel, move the panel to a closed position.
- Locate one or more adhesive weather strip pads with peel off backs in the enclosed hardware pack. Peel off backing and place into the frame head where any panel interlocks will meet.
- If weatherstrip is not already pre-installed at the bottom of each interlock, apply a second weatherstrip pad on the sill below the panel.



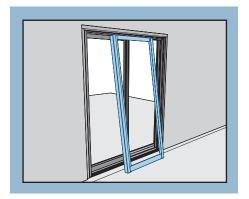


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INSTALL PANELS - CONTINUED

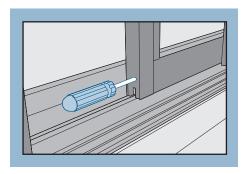
INSTALL EXTERIOR PANEL(S)

- Insert exterior panels, making sure the panel interlock is facing the interior.
- Place the slot of the panel head over the middle guide leg of the frame head.
- Raise the panel and swing the bottom in so the wheels are properly located over the track.



ADJUST ROLLERS

Lift each panel and adjust the rollers with a #2 Phillips head screwdriver by turning the bottom screw on the ends of both panels. Do not use a power driver. All door panels, including stationary panels, have wheels that need to be adjusted. Adjust door to ensure jambs,



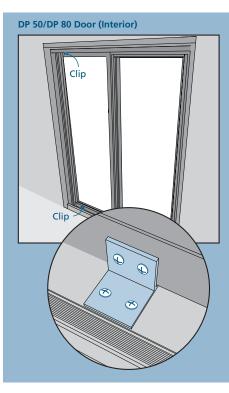
interlocks and grid patterns line up.

Note! Turn clockwise to raise the panel, counterclockwise to lower the panel.

SECURE STATIONARY PANEL(S)

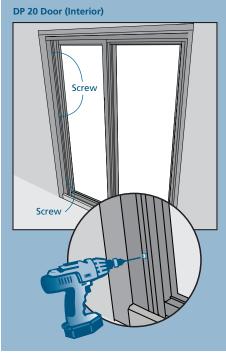
On units with a stationary panel in the exterior track, the fixed "O" panel will need to be secured.

- Working from the inside, slide the stationary panel into the jamb pocket (in a closed position).
- For DP 50/DP 80 units, secure using offset T clips located at the head and sill, 6" from the iamb as shown. First, screw the clips into the stationary panel pocket at the head and sill. Then, secure the other end of each clip to the interior side of the panel; seal screw points with polyurethane or 100% silicone sealant.

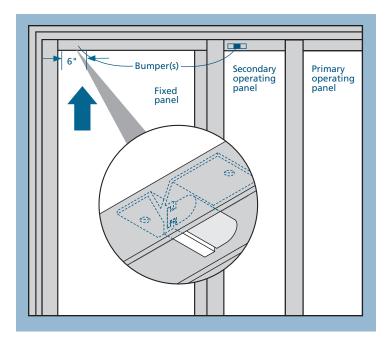


SECURE STATIONARY PANEL(S) - CONTINUED

• For DP 20 units, secure with 3 screws through the jamb into the panel frame using #8 x 3/4" self tapping screws as shown; seal screw points with polyurethane or 100% silicone sealant.



For fixed panels on the interior track, screw through the face of the jamb on the interior side of the door, through the fixed panel, securing the panel in place.



Bumper(s) must be installed 6" from each jamb in the head track behind operating panel(s). Secure in place using frame installation screws to anchor into the building structure.

An additional bumper must be installed on the secondary operating panel of any set of stacking panels.







INSTALL & ADJUST HARDWARE

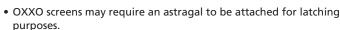
INSTALL HANDLE

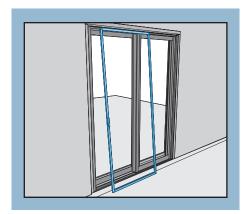
Refer to the manufacturer's instructions supplied in the handle package. OXXO configurations will require interior handles on both operating panels.

INSTALL SCREEN

Note! Screen is designed to be placed in front (on the same side) of the interior panel for normal use in all configurations.

- Install the screen from the exterior.
- Put the head of the screen lip onto the outside header rail.
- Lift the screen and swing the bottom onto the screen track.

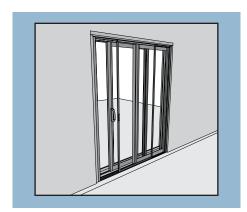




 Adjust the wheels at both the top and bottom in order to center the screen between the head and track.

Note! Too much tension will not allow the screen to roll properly.

- Locate the screen keeper in the plastic bag attached to the screen.
- Install the keeper into the screen track of the jamb, so it is aligned with the latch on the screen panel. Pre-drill holes if necessary.



VERIFY OPERATION

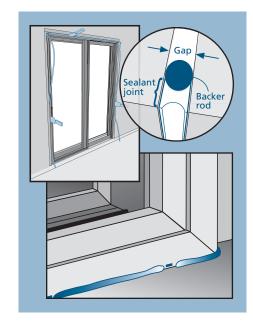
• Test the door panel(s), screen and lock to verify proper operation.

Note! If the screen does not travel evenly, check to ensure top and bottom are level and parallel to the head or sill.

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COMPLETE INSTALLATION

- Install backer rod on the interior of the door.
- Apply sealant around the side jambs and head of the door frame.
- Ensure sealant on back dam of the sill pan fully seals to the inside face of the sill.
 Apply more sealant as necessary.



INSTALL SUPPORT TRIM (STEP-DOWN LANDING ONLY)

On the exterior, install support trim underneath the sill where it extends over the landing. Position trim snugly against the bottom of the sill toe.

AFTER INSTALLATION

- Install exterior wall surface within seven days of patio door installation.
- Maintain gap of 1/4"-3/8" between door frame and final exterior wall surface (siding, stucco, etc.).
- Install backer rod on the exterior of the door.
- Apply sealant around the side jambs and head of the door frame.
- Apply sealant to the exterior of the sill leaving a 1" gap located 4-6" from each corner as shown. Leave additional 1" weep gaps at each interlock, or every 4 feet, whichever is less.
- For recessed sill pocket slabs, on the exterior, apply a 1/4" bead of sealant around the sill where it meets the slab. Leave 1" gaps as shown. For step-down landings, fully seal under the patio door sill.
- Protect recently installed units from damage from plaster, paint, debris, etc. by covering the unit with plastic.

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

Thank you for choosing



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(06/09)

