



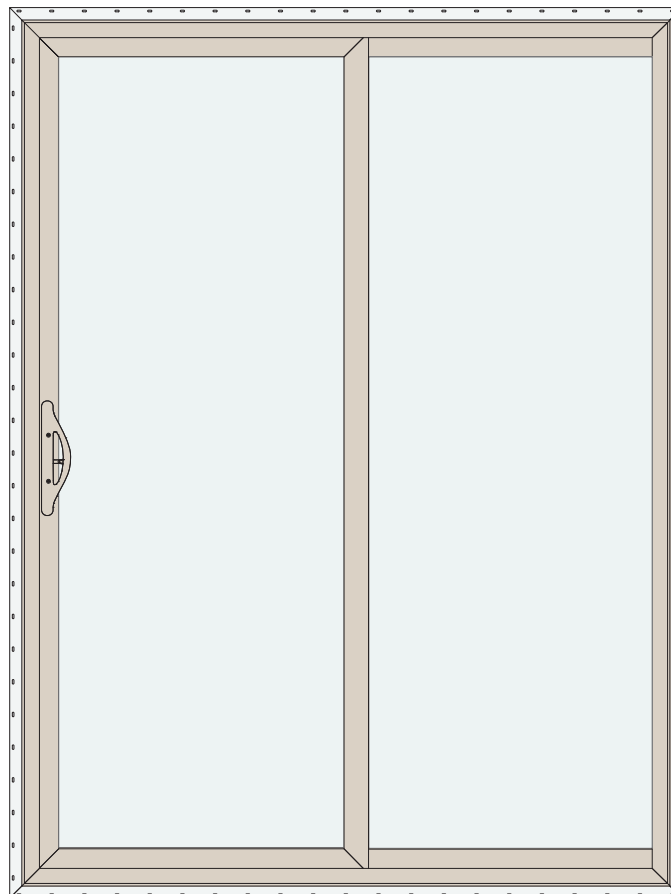
Installation Instructions

for Vinyl Patio Doors with Integral Nailing Fin (JII006)



Thank you for selecting JELD-WEN products. Attached are JELD-WEN's recommended installation instructions for Vinyl Patio Doors with an Integral Nailing Fin. 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. 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.

Sliding Patio Door



IMPORTANT INFORMATION | TABLE OF CONTENTS | GLOSSARY

PLEASE NOTE: Installations where 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 patio doors into a square, level, and plumb openings 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.

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Glossary

Buck

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

Mulled Unit

An assembly of two or more individual products that will be installed into a single rough opening. Mullion elements may be horizontal, vertical or both.

Pilot Hole

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

Precast Sill

A pre-formed concrete block placed in the sill of a masonry/block wall to support a patio door.

Score

Make a cut mark in the same location multiple times.

Self-Adhered Flashing

An adhesive backed tape material used to waterproof the rough opening and/or used to seal a patio door to the building's weather barrier.

Shiplay

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 patio door.

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 the 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.



WARNING: Drilling, sawing, sanding or machining wood products can expose you to wood dust, a substance known to the State of California to cause cancer. Avoid inhaling wood dust or use a dust mask or other safeguards for personal protection. For more information go to www.P65Warnings.ca.gov/wood.

Patio Door Handling

- Make sure operating panel is secured prior to installation.
- Heed material manufacturers' handling and application instructions.
- Handle in a vertical position; do not carry flat or drag on the floor.
- Do not put stress on joints, corners or frames.
- Store patio door in a vertical, leaning position to allow air circulation; do not stack horizontally. Ensure the storage area is dry and well-ventilated.
- Protect from exposure to direct sunlight during storage.
- Only install into vertical walls and when conditions/sheathing are dry.

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: JELD-WEN exterior window and door products should be installed in accordance with JELD-WEN's recommended installation instructions, which are printed on the product label or can be found on our website: www.jeld-wen.com.

NOTE: Alternative installation methods and flashing systems may be utilized at the installer's or owner's discretion and, in such situations the installation should be done in accordance with the flashing manufacturer's instructions. 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 with the substrates in the application.

- #8 pan-head or washer head, corrosion resistant screw. Minimum embedment of 1 1/4" into the structural framing (or as required by local code).
- 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 (for interior air seal). This can be used in any application and can be painted or ordered in a color matched product, if desired.
- Polyurethane low expansion Window and Door foam: We recommend OSI® QUAD® Foam or equivalent (for interior air seal).
- Backer rod: 1/8" larger than the widest portion of the gap (used in conjunction with sealant bead for interior air seal).
- Non-compressible or non-water degradable shims.
- Drip cap (if not supplied).

Potential Needed Tools

- Utility knife/shears
- Hacksaw (SureSill™ sill pan) or Cutting shears (fabricated sill pan)
- J-roller
- Tape measure
- Caulking gun
- Level (4' minimum recommended)
- Drill with bits

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INSPECT PRODUCT

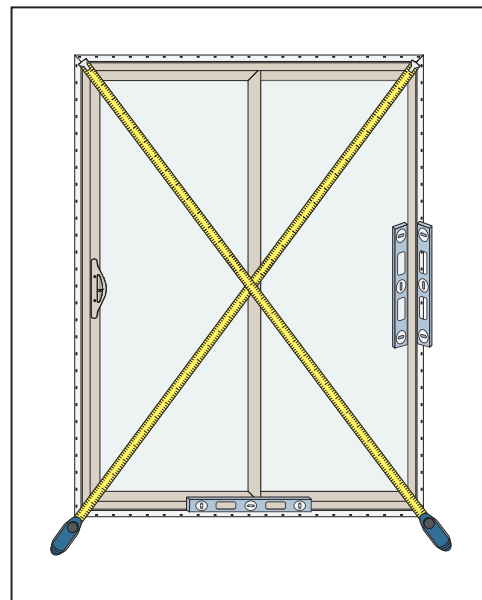
Remove Packaging

- Remove shipping materials such as corner covers, shipping blocks, shrink wrap or pads. If there is a protective film on the glass, do not remove it until installation and construction is complete.
- Do not remove the installation label until after the inspection of the job is complete.

Inspect Patio Door

- Cosmetic damage.
- Product squareness (diagonal measurements not more than 1/4" different).
- Correct product (size, color, grid pattern, handing, glazing, energy-efficiency requirements, etc.).
- Cracked frame welds or other frame damage.
- Splits, cracks, holes, missing sections or other damage to the nailing fin longer than 6" and/or within 1/2" of the patio door frame.
- 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 doors performance rating, do not install the patio door. Contact your dealer or distributor for recommendations.

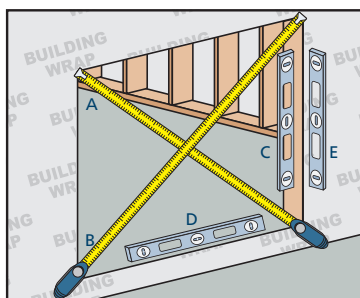


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INSPECT ROUGH OPENING (R.O.)

- Verify the width and height of the rough opening is 1/2" - 5/8" larger than the patio door width and height. Openings for mulled units should be 3/4" larger than the patio door width and height.
- Verify the rough opening is square. The (A) and (B) measurements should be the same. Suggested deviation from square is no more than 1/4".
- Verify the rough opening is level and plumb (C, D and E).
- The rough opening sill should not be crowned or sagged (D), but rather level or sloped (positive slope) to the exterior.
- The exterior face of the rough opening should be in a single plane (E) with less than 1/8" twist from corner to corner.
- Minimum double studs (king and jack/trimmer) should be used to support the header at all rough openings.

Verify Square, Level and Plumb



For Retrofit Installations

After removing the old patio door, remove sufficient cladding (siding, stucco etc.) to expose enough intact building wrap to install the patio door in a weatherproof manner. 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.

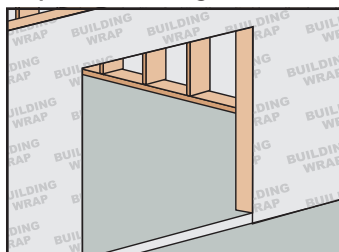
Landings

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.

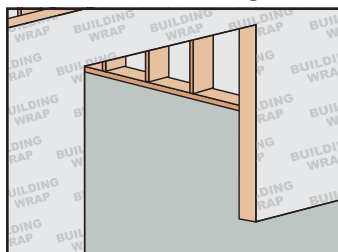
Reverse Patio Door Handing

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.**

Step-Down Landing



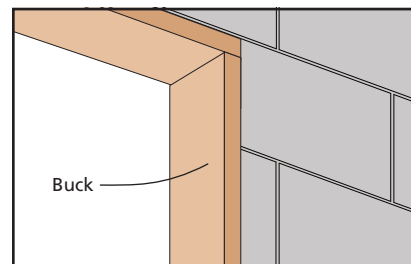
Continuous Slab Landing



This installation guide only addresses masonry/block wall, sheathed wall and open-stud construction. If installing into an opening other than what is identified, consult a building professional.

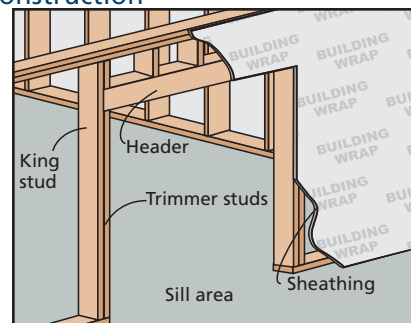
Masonry/Block Wall Construction

This installation assumes that a framework of studs (often called a buck) has already been properly fastened in a weatherproof manner to the concrete/masonry wall.



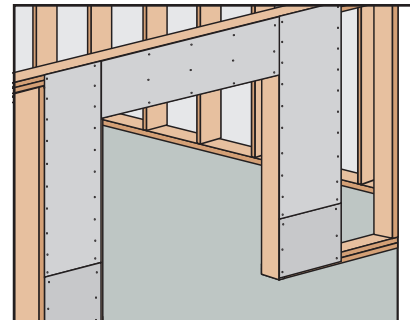
Fully Sheathed Wall Construction

Sheathing is applied to the exterior of the wall framing. The patio door will be mounted flush against the sheathing or building wrap in a weatherproof manner.



Open-Stud Construction

Sheathing is absent and building wrap is applied atop of the wall framing. The patio door will be mounted flush against building wrap and/or framing members (studs).



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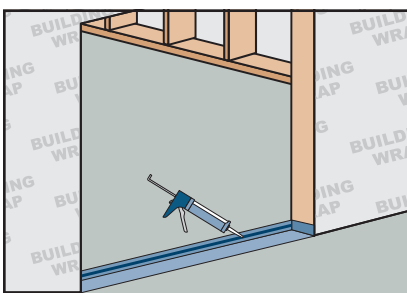
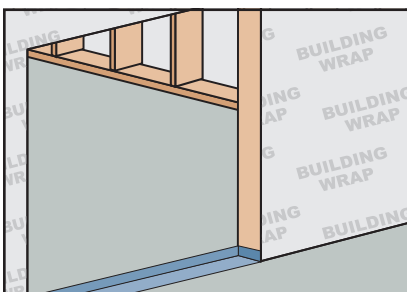
INSTALL SILL PAN

Prepare Sill

1. Install a sill pan in a weatherproof manner on the rough sill (refer to **ASTM 2112** for types of sill pans). Always allow water to drain out of the pan and onto the building wrap, drainage or to the exterior.

NOTE: Sill pans for step-down landings will have a folded down edge in the front to accept the step-down landing.

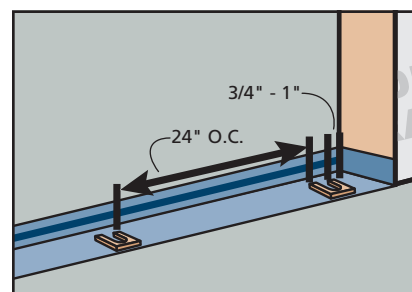
2. Apply a continuous bead of sealant to the interior of the upturned leg of the sill pan (if using a rigid sill pan).



Shim the Sill

1. Place the shims in the sill pan as needed to level the patio door and prevent sagging or bowing. Shims should be aligned as defined by the label on the patio door or as stated below:

- Shims (1/4" maximum) should be placed near the exterior edge of the sill pan.
- Place one shim 3/4" to 1" from each side of the rough opening (if the rough opening is sized correctly, this should be approximately 1/2" from the corner of the patio door).
- Shims should be no more than 24" on-center.
- For mulled units, ensure there is a shim located 1/2" on each side of the mull joint (see comments below).
- There should always be a drainage path to the exterior out of the sill pan.
- Shims can be held in place with sealant.



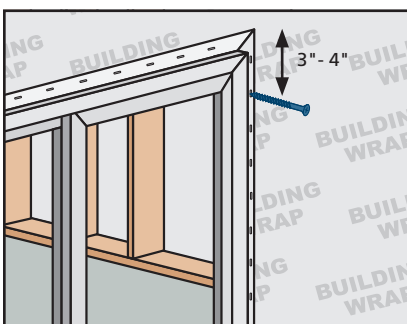
NOTE: For large, heavy or mulled units, shim at 8" on-center and no more than 2" from each corner to maintain proper sill alignment. This shimming schedule also pertains to regions where the ambient air temperature reaches or exceeds 95°F (35°C).

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TEMPORARILY FASTEN AND SHIM PRODUCT

WARNING! To avoid injury, use at least two people to install. Adequately support the patio door until completely fastened.

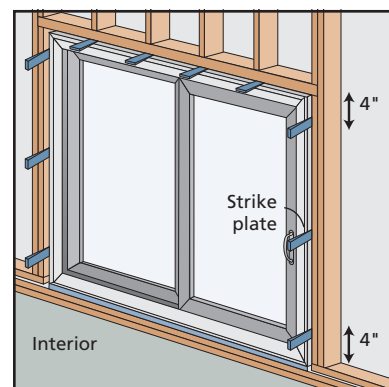
1. For continuous slab landings only, score and remove nailing fin at the sill.



2. Place the patio door onto the shims and tilt into the rough opening. The shims must fully and evenly support the sill of the patio door. Adjust the shims as needed.
3. From the exterior, temporarily fasten patio door through the nailing fin between 3" - 7" from one upper corner.

4. **From the interior, shim the operating panel side jamb at the strike plate.** Align the shims so the strike plate screws (installed later) will penetrate the shims.

5. Shim within 4" - 6" of each corner on the side and head jambs. Apply additional shims to the side and head jambs as necessary to ensure patio door position within the opening is plumb, level, and square. Larger patio doors usually need additional shims. Shims can be secured with sealant or adhesive.
6. Inspect the patio door for level, square and twist. Test for proper operation (remove and reinstall if necessary).

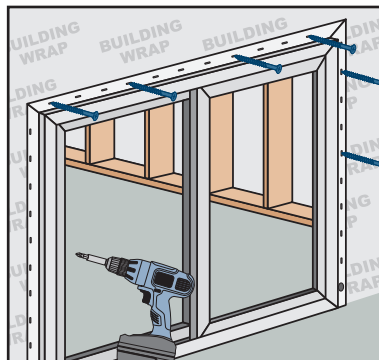


5

FASTEN PRODUCT (SIZE AND SPACING)

Common Patio Door Fastening

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.



Patio doors will be fastened according to the performance grade (PG).

This rating is located on the gold AAMA label applied somewhere on the frame, generally in the head jamb. Please reference the following example: R-PG20-3645X2426 (144X96)-SD. If this label is missing, use the PG35 and above fastener pattern.

NOTE: Embedment must be a minimum of 1 1/4" into the structural framing. Fastener (anchor) heads must be flush. Use the table to find the correct product and fasten it as directed.

PG20 up to PG35	Fasten through the nailing fin holes 3"-7" from the corners and 12" apart all the way around the patio door.
PG35 up to PG50	Fasten through the nailing fin holes 3"-7" from the corners and 8" apart all the way around the patio door.

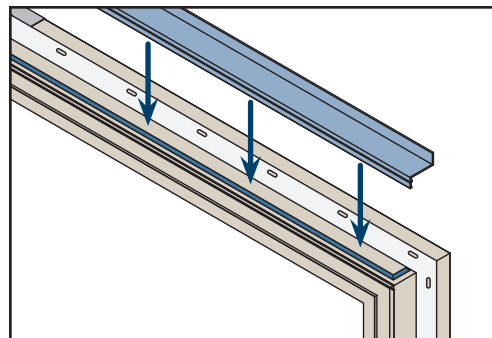
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INSTALL DRIP CAP

NOTE: A drip cap is *required* for all vertically mulled units and *recommended* for all products.

1. Apply a continuous bead of sealant to the top of the patio door frame. See drawing.
2. Position the drip cap on top of the patio door frame and seat into position with the aid of a wooden block and hammer or non-marring mallet.

NOTE: Barb maybe trimmed back 1/4" on each end to better assist in seating the drip cap into the accessory groove.



7

CREATE "INTERIOR" AIR SEAL

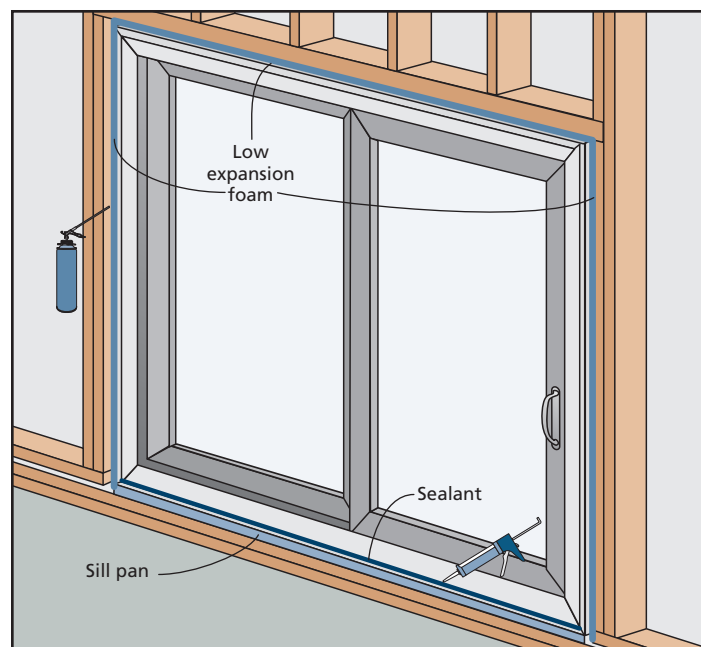
Continuous Air Seal

NOTE: Shims may need to be cut back, so the interior air seal is "continuous" between the patio door frame and the rough opening.

Create a continuous air seal on the interior by integrating the rough opening and the patio door frame with low expansion polyurethane foam or backer rod and sealant. If needed, apply additional sealant between the sill pan or rough sill and the patio door frame.

After Installation

- Ensure weep holes/channels are clear of debris for proper water drainage. Do not seal weep holes/channels.
- Install exterior wall surface per manufacturer's guidelines.
- Leave an expansion/contraction gap of approximately 3/8" between the patio 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.
- Protect recently installed units from damage from plaster, paint, etc.



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COMPLETE INSTALLATION

Patio Door Adjustment

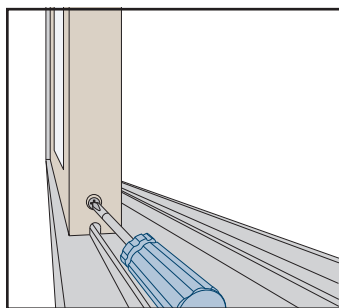
Roller Adjustment

NOTE: Adjusting door too high may allow water and air leakage.

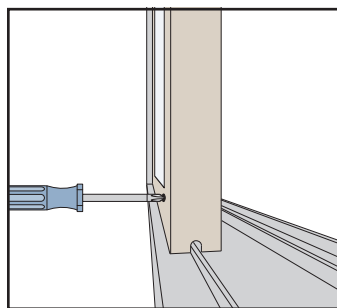
Adjust rollers just high enough to clear sill track and still roll smoothly.

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.

Builders Patio Door



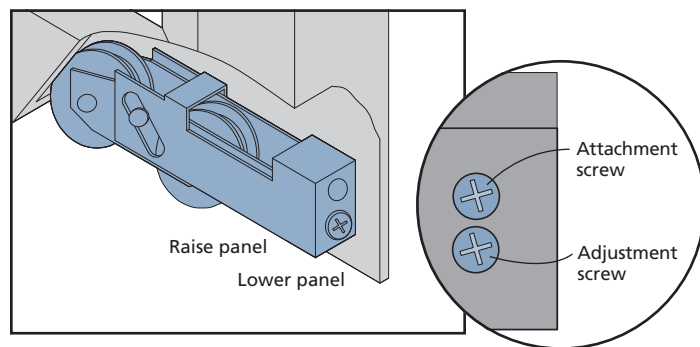
Premium Patio Door



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.

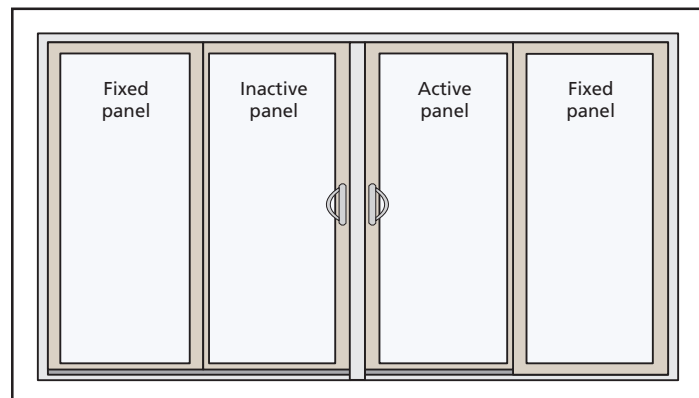
3. Using a #2 Phillips head screwdriver, turn the adjustment screw clockwise to raise the panel, and counterclockwise to lower the panel.
4. Adjust as needed until interlocks, grid patterns, and jambs line up.
5. Test the operating panel for proper operation.
6. Re-apply the small vinyl caps over the roller adjustment screw holes if applicable.

Builders Roller

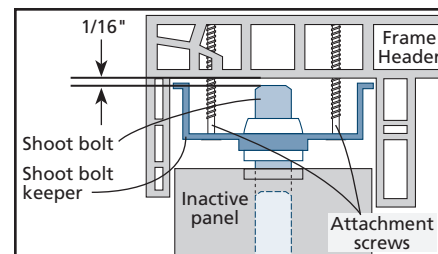


Installation Instructions for 4-Panel Vinyl Patio Doors

This door consists of two operating panels: an active panel with a handle and locking mechanism and an inactive panel with just a handle. The inactive panel contains a shoot bolt that is designed to secure the inactive panel in place and allow the active panel to lock into it.



1. Adjust the rollers as per the installation instructions.
2. Completely close the inactive panel and open the active panel.
3. Position the keeper at the handle end of the inactive panel and snap into the head track.



4. Position the keeper to allow the shoot bolt to align with the hole in the keeper.
5. Hold the keeper in place and slide the inactive panel out of the way.
6. Drive two of the provided 2 1/2" screws through the two elongated holes in the keeper, through the frame header and into the rough opening.
7. Slide the inactive panel back to the closed position and engage the shoot bolt. If it requires adjustment, loosen the screws and slide the keeper enough to achieve smooth operation, and then re-tighten. Drive the remaining 2 1/2" screws through the empty holes.
8. Engage the shoot bolt into the keeper and verify there is at least a gap of 1/16" between the end of the shoot bolt and the frame header. If necessary, perform shoot bolt height adjustment.

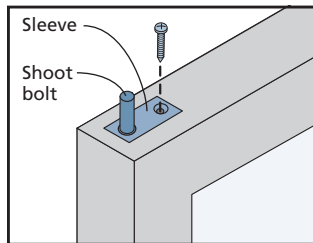
Shoot Bolt Height Adjustment:

NOTE: Patio door panels are very heavy. Removal and installation requires two or more people.

- a. Remove the inactive panel from the door. The rollers may need to be adjusted up into the panel to clear the sill track. Slide the panel to an open position and lift up and over the sill track.
- b. Remove the screw and the sleeve.
- c. Turn the shoot bolt clockwise to shorten its height and counterclockwise to increase its height. Only increase it enough to engage into the keeper and leave 1/16" gap at the frame header. If the shoot bolt hits the frame header, it will not fully lock when engaged.

NOTE: The shoot bolt only has 7/16" of adjustment.

- d. When the desired height is achieved, replace the sleeve and screw.
9. Reinstall the inactive panel back into the frame and re-adjust the rollers as necessary.
10. Check door for proper operation.
11. Adjust the keeper as necessary by loosening the four screws and sliding up or down until the lock engages properly. Tighten all screws.
12. Complete the installation instruction steps.



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.

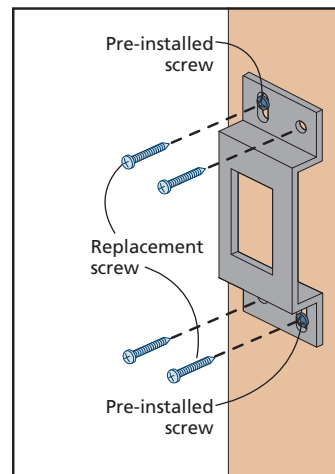
If the door does not lock or is loose when locked:

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

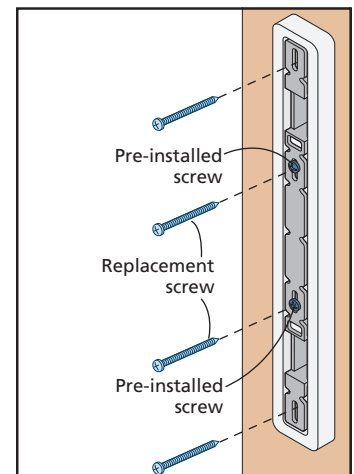
Finish Installation

1. Drive two #10 x 2 1/2" screws through the open screw holes in the strike plate (included in hardware pack).
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 secure the patio door to the structure.

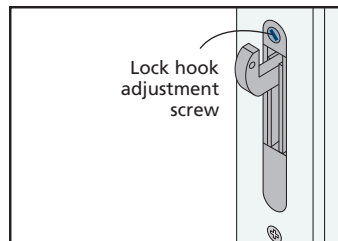
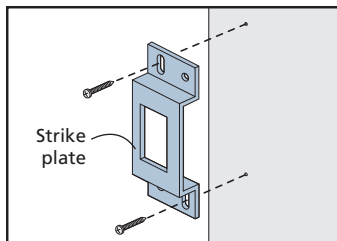
Builders Patio Door



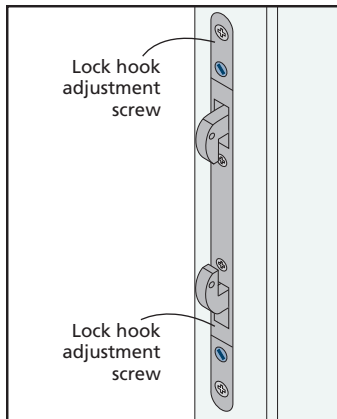
Premium Patio Door



Builders Patio Door



Premium Patio Door



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

Thank you for choosing