



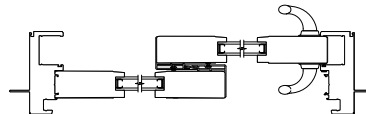
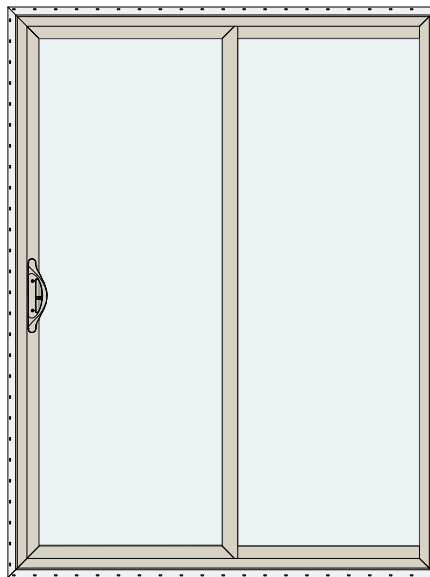
Installation Instructions

for Vinyl Patio Doors with Integral Nailing Fin (JII006)

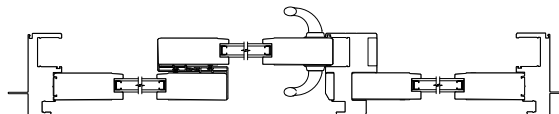


Thank you for selecting JELD-WEN products. Attached are JELD-WEN's recommended installation instructions for Vinyl Patio Doors with an Integral Nailing Fin. Not all patio door types may be installed into every wall condition in all areas. Consult your local building code official for applicable building 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.

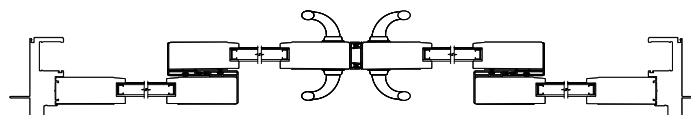
Sliding Patio Door



2-Panel



3-Panel



4-Panel

7 STEP INSTALLATION STICKER

The 7 Installation Steps below are included with the product:

- 1. Inspect Product:** Products should be inspected for shipping damage, color, configuration, handing, etc. Additionally, inspect products for any manufacturing anomalies prior to installation (e.g. warp, bow, squareness). Contact Dealer or JELD-WEN if issues are identified.
- 2. Inspect Rough Opening (R.O.):** Inspect R.O. prior to installation of the product. Correct any deviation that would prevent the window/door product from being installed plumb, level, square and without twist.
- 3. Install Sill Pan:** A sill pan is **required** prior to window/door product installation (refer to the latest version of **ASTM 2112** for sill pan definitions). Sill pan should have a positive slope and must be installed onto the sill of the R.O. in a weather-tight manner and able to drain to the exterior. For aftermarket sill pans, such as SureSill™, follow manufacturer's instructions. For sill pans without a positive slope, place 1/4" tall plastic shim 2" from each corner and no more than 8" on-center in between (**excludes Canada**).
- 4. Temporarily Fasten and Shim Product:** Position window/door product into R.O. and apply a screw through-frame/fin at an upper corner. Verify product is level. Add shims along the sides and head to make product square, plumb and without twist (min. of 3 shims per side – top, bottom, middle).
- 5. Fasten Product (Size and Spacing):** Generally, products can be secured with a #8 pan-head, corrosion resistant screw; embedment must be a minimum of 1 1/4" into the structural framing. Place a shim at each through-frame screw location. **NOTE:** Florida, Texas and other jurisdictions may have additional requirements – **check local code**. Additionally, folding nail fins and some exterior trim options are not structural, so through-frame fastening is required. As a default, screw spacing is 4" from corners and 8" on-center.

6. Install Drip Cap: The use of a drip cap on all window/door products is recommended, regardless if supplied. A drip cap is **required** on any **vertical** mulled/joined products, regardless if supplied. **NOTE:** A drip cap may not be suitable for some product lines (e.g. brickmould vinyl, flush fin, vinyl flat casing, various wall systems), regardless these product lines need to be incorporated into the wall in a weather-shedding manner.

7. Create "Interior" Air Seal: A "continuous" interior air seal is **required** (use low expansion window-door foam or backer rod and sealant) between the window/door frame and the R.O. framing (jamb extension is not to be considered part of the frame). An air space should remain between the nail fin/exterior sealant joint and the interior air seal.

NOTE: Shims may need to be cut back, so the interior air seal is "continuous" between the window/door frame and rough opening. Additionally, some wall systems may not allow for the application of an interior air seal.

Weather-Proofing of the Rough Opening (R.O.) and/or Product is the responsibility of the Installer: JELD-WEN recommends the use of industry-recognized flashing systems, such as OSI (www.ositough.com) or other professional sources.

NOTE: It is the responsibility of the Owner, Architect or General Contractor to select products in compliance with applicable laws and building codes.

These 7-steps serve as the basic/default steps during the installation process and are in conjunction with the following installation instructions which better refine fastener spacing, shimming, fastener location, etc.

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.

Table of Contents

Safety and Handling	3
Materials and Tools	4
Inspect Product	4
Inspect Rough Opening (R.O.)	5
Install Sill Pan	6
Temporarily Fasten and Shim Product	6
Fasten Product (Size and Spacing)	7
Install Drip Cap	8
Create "Interior" Air Seal	8
Complete Installation	9

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).

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.

Shiplap

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

Weep Hole (weep channel)

The visible exit or entry part of a water drainage system used to drain water out of a 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 the 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, two panel units only).

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.

Needed Materials

- #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 sealant 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
- 5-in-1 Putty Knife
- #2 Phillips Head Screwdriver

1

INSPECT PRODUCT

Remove Packaging

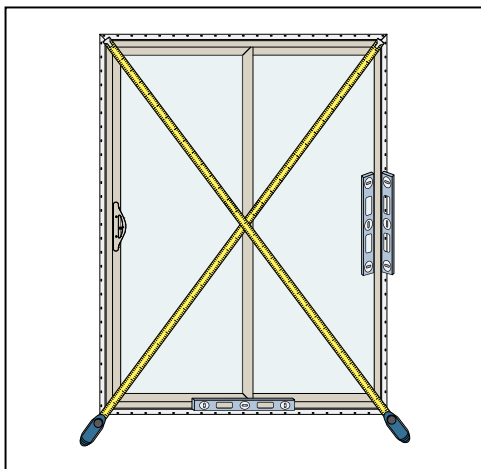
- Remove shipping materials such as corner covers, shipping blocks, shrink wrap or pads. If there is a protective film on the glass, do not remove it until installation and construction are complete.
- Do not remove the installation label until after the inspection of the job is complete.

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.).
- Frame and panel 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.

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 and 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.** 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.

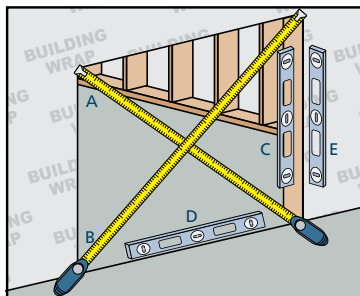


2

INSPECT ROUGH OPENING (R.O.)

- Verify the width and height of the rough opening is 1/2" 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



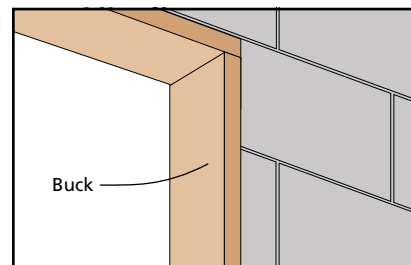
For Retrofit Installations

Verify the rough opening framing is structurally sound. Contact your local waste management entities for proper disposal or recycling of products being removed.

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.

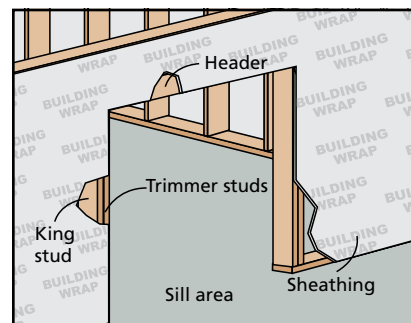
Masonry/Block Wall Construction

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. The patio door will be installed into the buck in a weatherproof manner.



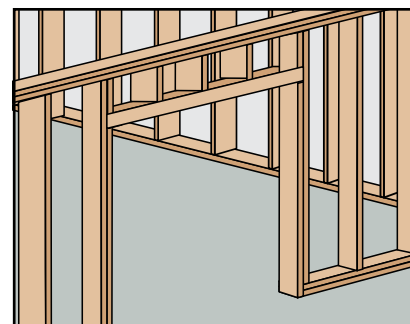
Fully Sheathed Wall Construction

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).

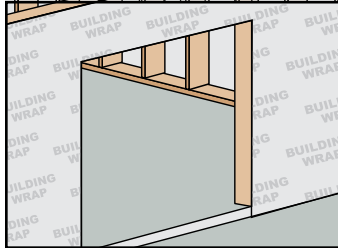


3

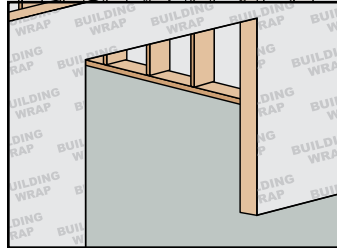
INSTALL SILL PAN

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.



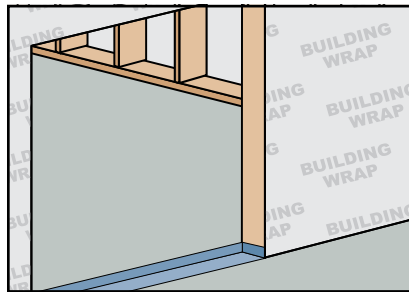
Step-Down Landing



Continuous Slab Landing

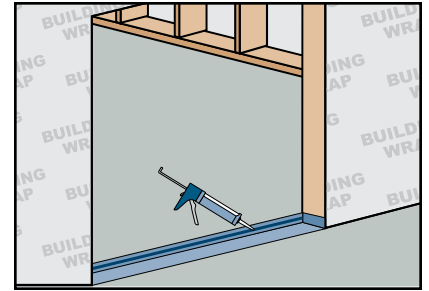
Prepare Sill

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 plane or to the exterior.



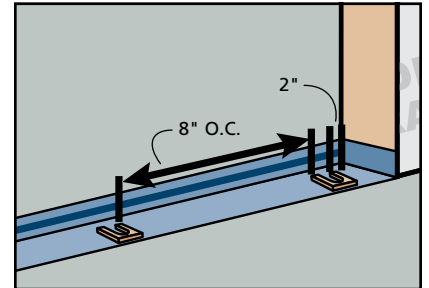
NOTE: Sill pans for step-down landings will have a folded down edge in the front to accept the step-down landing.

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 2" from each side of the rough opening (if the rough opening is sized correctly, this should be approximately 1 1/2" - 2" from the corner of the patio door).
 - Shims should be no more than 8" on-center.
 - There should always be a drainage path to the exterior out of the sill pan.
 - Shims can be held in place with sealant.



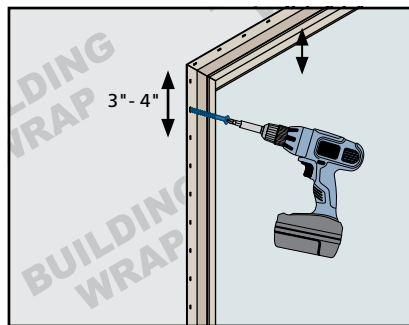
4

TEMPORARILY FASTEN AND SHIM PRODUCT

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

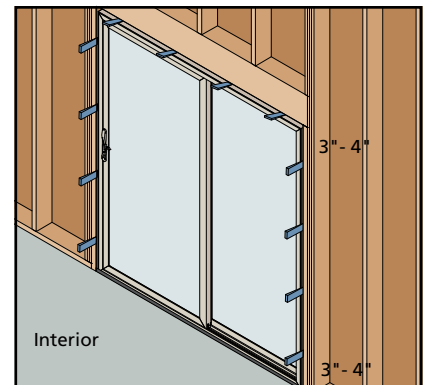
1. For continuous slab landings only, score and remove nailing fin at the sill.
2. Place the patio door onto the shims and tilt into the rough opening. The shims must fully and evenly support the sill of the patio door. Adjust the shims as needed.
3. From the exterior, temporarily fasten patio door through the nailing fin between 3" - 4" from one upper corner.

NOTE: For larger units, both upper corners may need to be fastened to adequately hold the door unit.



4. From the interior, shim 3" - 4" from each corner and in the center of the head jamb and both side jambs.
5. Evaluate the door position within the opening for plumb, level, square and twist (**Reference the Product Installation Tolerance Table**).

6. Add additional shims as necessary to ensure proper support and alignment of the door frame. Larger door frames need additional shims.
- NOTE:** All shims should be cut back 1/4" - 1/2" from the interior face of the main door frame.



4

TEMPORARILY FASTEN AND SHIM PRODUCT (CONTINUED)

Product Installation Tolerance Table

Products must be installed in a manner that **Does Not** exceed the tolerance below

Plumb	+/- 1/8"
Level	+/- 1/8"
Twist	+/- 1/8"
Square	+/- 1/8" product sized up to 20 sq. ft. +/- 1/4" product sized over 20 sq. ft.

- For 2-panel door configurations, place additional shims between the door frame and rough framing where the strike plate is located. The longer strike plate screws should penetrate through the shims.

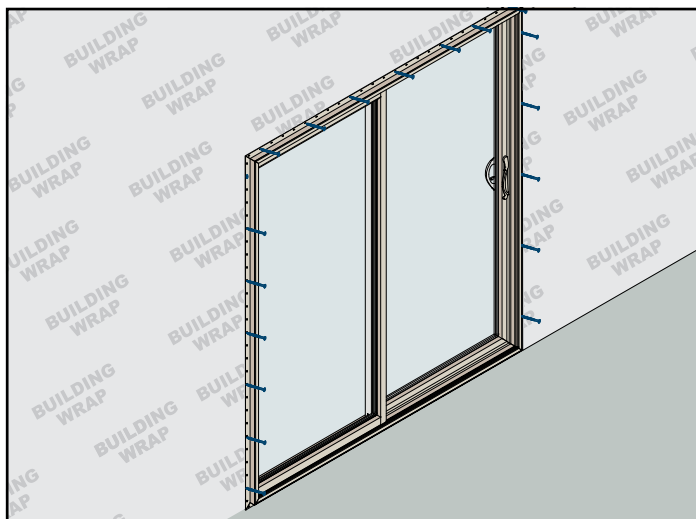
5

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.



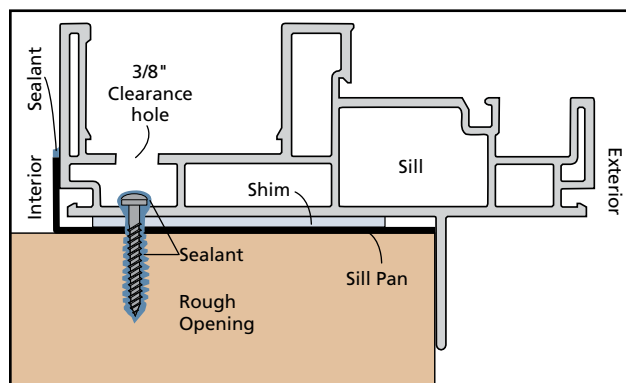
NOTE: Embedment must be a minimum of 1 1/4" into the structural framing. Fastener (anchor) heads must be flush. Use the table to find the correct product and fasten it as directed.

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.
Above 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.

Through Sill Fastening

Generally, through sill fastening is not needed for door under a door rating of PG 35 as long as a sealant bead (sealant bead should be discontinuous to allow for drainage of water out of the sill pan) has been used to secure the door frame to the sill pan. If fasteners are applied through the sill, then the following steps are recommended.

- Remove the operating panel(s).
- Use a 5-in-1 putty knife or hook tool to remove the track.
- Drill a 3/8" clearance hole through the first wall of the vinyl.
- Pre-drill a fastener hole through the outer wall of the frame.
- Apply sealant to the threads of the fastener and around the pre-drilled hole.
- Seat the fastener until the head is flush with the outer wall of the frame.
- Apply sealant to the fastener head ensuring the head is sealed to the frame.
- Re-install track and panel(s).



6

INSTALL DRIP CAP

The use of a drip cap on all window/door products is recommended, regardless if supplied. A drip cap is **required** on any **vertical** muller/joined products, regardless if supplied. **NOTE:** A drip cap may not be suitable for some product lines (e.g. brickmould vinyl, flush fin, vinyl flat casing, various wall systems), regardless these product lines need to be incorporated into the wall in a weather-shedding manner.

7

CREATE "INTERIOR" AIR SEAL

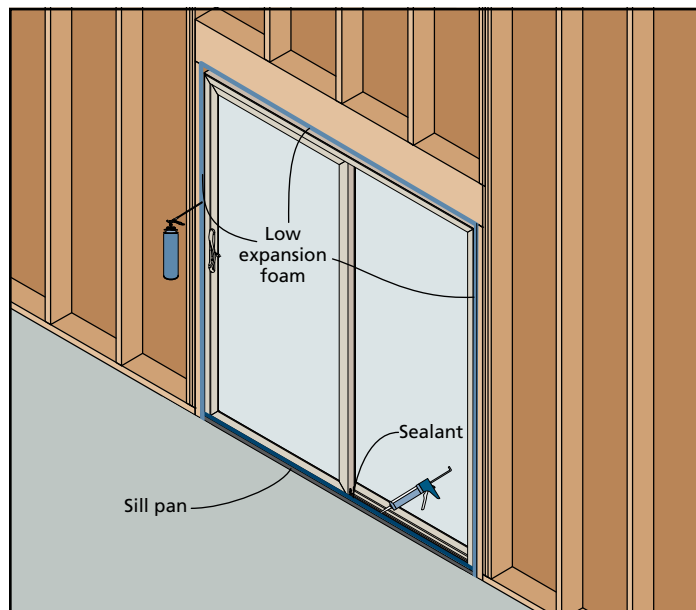
Continuous "Interior" Air Seal

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.**
- 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.



8

COMPLETE INSTALLATION

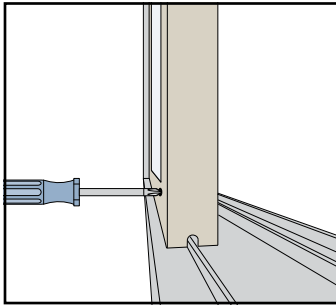
Patio Door Adjustment

Roller Adjustment

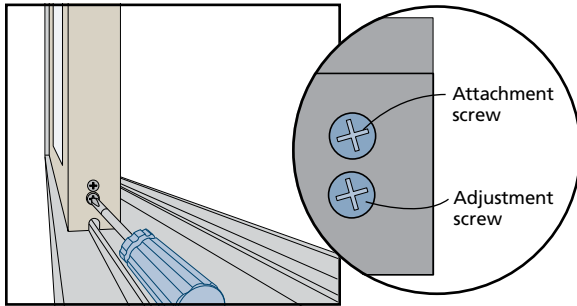
NOTE: Adjusting door too high may allow water and air leakage. Adjust rollers just high enough to clear sill track and still roll smoothly.

1. 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). Builders doors have an adjustment screw on each lower end of the operating panel(s).

Premium Patio Door



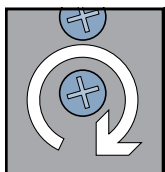
Builders Patio Door



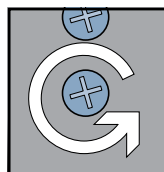
2. Open operating panel enough to expose a 1/4" gap between the panel and frame jamb. Verify the gap is even along the entire height of panel to frame. If uneven, adjust by referring to the following steps.

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 Phillips head screwdriver, turn the adjustment screw clockwise to raise the panel, and counterclockwise to lower the panel.



Raise panel

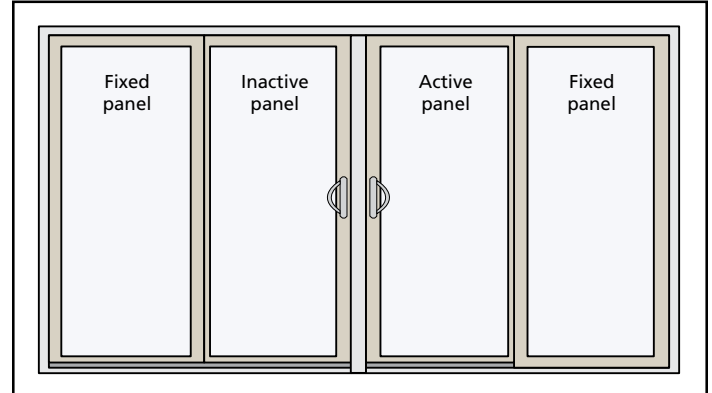


Lower Panel

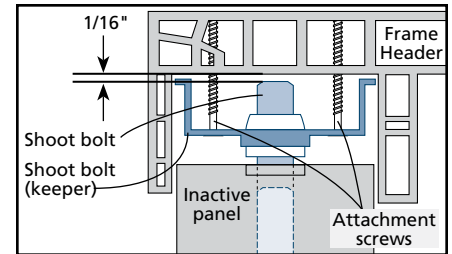
4. Adjust as needed until interlocks, grid patterns, and jambs line up.
5. Test the operating panel for proper operation.
6. Re-apply the small vinyl caps over the roller adjustment screw holes if applicable.

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 above the handle edge/stile 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 (**screws should embed into the header above the door frame**).
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 require two or more people.

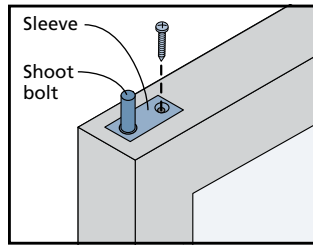
- a. Remove the inactive panel from the door frame. The rollers may need to be adjusted up into the panel to clear the sill track. Slide the panel to an open position and lift up and over the sill track.
- b. Place the door on saw horses. At the head of the panel, remove the screw and the sleeve.
- c. Turn the shoot bolt clockwise to shorten the height and counterclockwise to increase the 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.

8

COMPLETE INSTALLATION (CONTINUED)

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

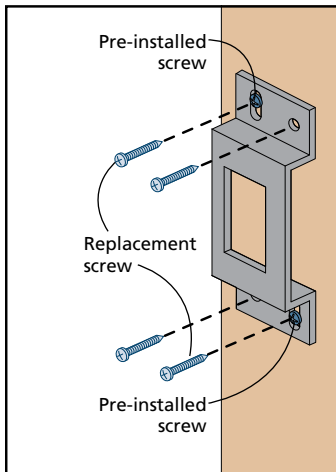
- d. When the desired height is achieved, replace the sleeve and screw.
9. Reinstall the inactive panel back into the frame and re-adjust the rollers as necessary.
10. Check door for proper operation.
11. Adjust the keeper as necessary by loosening the four screws and sliding up or down until the lock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



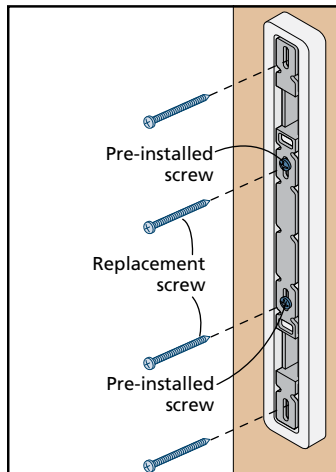
Finish Installation

1. For 2-panel door systems, drive two #10 x 2 1/2" screws through the open screw holes in the strike plate (included in hardware pack).
NOTE: Screws should penetrate through the door frame, shims and embed into a rough framing member.
2. Shut the door and test for locking capability. If an adjustment is needed, reference the "Lock Adjustment" section and/or adjust rollers.
3. Once the lock is adjusted, remove the pre-drilled 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



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.

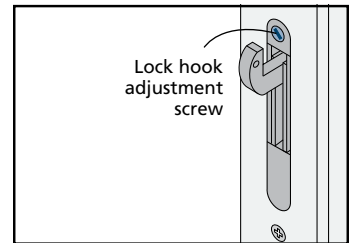
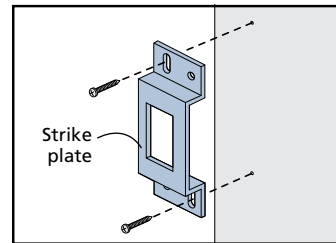
If the lock does not properly engage the strike plate:

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

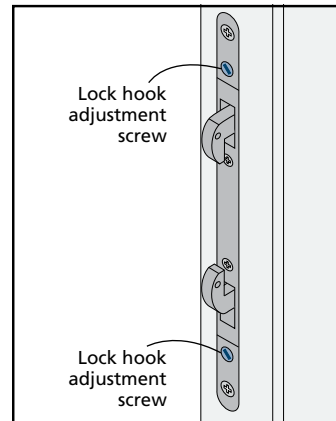
If the door does not lock or is loose when locked:

- 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.

Builders Patio Door



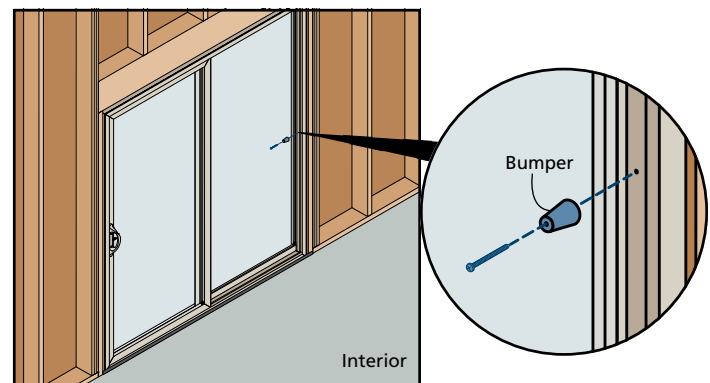
Premium Patio Door



Install Bumper

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

Builders Patio Door



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

Thank you for choosing

