



Thank you for selecting JELD-WEN products. Attached are JELD-WEN's recommended installation instructions for aluminum windows without a nailing fin (including finless, flush fin and front/Florida flange). Read these instructions thoroughly before beginning. They are designed to work in most existing applications, however; existing conditions may require changes to these instructions. If changes are needed, they are made at the installer's risk. For installations other than indicated in these instructions, contact a building professional.

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 creates an air seal on the interior, integrating the window with the rough opening.

IMPORTANT INFORMATION AND GLOSSARY

Not all window 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.

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 windows into 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 warranty as part of the terms of the sale.

GLOSSARY

Backer Rod (backing material)

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

Buck

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

Finless Window

A window without a nailing fin that is secured by fastening through the head, sill and jambs. Finless windows may also be known as block frame or box frame windows.

Flush Fin Window

A window without a nailing fin that has a face flange (trim only). Flush fin windows may also be known as flange, stucco flange or Florida flange windows.

Precast Sill

A pre-formed concrete block placed in a masonry/block wall to support a window.

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 window.

Please allow sufficient time to properly prepare the rough opening, install the window, and ensure its proper operation.

Estimated Install Time for New Construction	<input type="checkbox"/> First Time: 4.0 hr.
	<input type="checkbox"/> Experienced: 2.5 hr.
	<input type="checkbox"/> Professional: 1.5 hr.

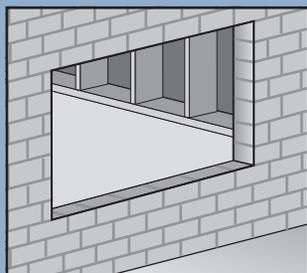


ROUGH OPENINGS

These instructions specifically address:

- Installation of a flush fin window into a masonry wall.
- Installation of a finless window into a masonry or stud-framed wall.

Masonry Wall



MASONRY/BLOCK WALL CONSTRUCTION

Windows can be installed into a rough masonry opening with or without a buck.

Without A Buck

The window will be attached directly to the concrete/masonry.

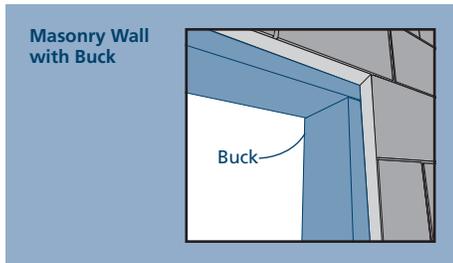
ROUGH OPENINGS - CONTINUED

MASONRY/BLOCK WALL CONSTRUCTION - CONTINUED

With Buck

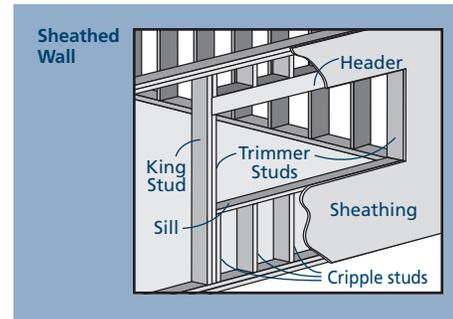
This installation assumes that a building professional has already fastened and sealed a framework of studs (often called a buck) to the concrete/masonry wall.

If using a precast sill, the buck will be installed only on the head and jambs.



STUD-FRAMED WALL CONSTRUCTION

The window will be mounted inside of the rough opening.



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.

- **WARNING:** Drilling, sawing, sanding or machining wood products generates wood dust, a substance known to the State of California to cause cancer. Use a respirator or other safeguards to avoid inhaling wood dust.

WINDOW AND MATERIALS HANDLING

- Make sure operable windows are closed and locked prior to installation.
- Heed material manufacturers' handling and application instructions.
- Protect adhesive surfaces from dirt, moisture, direct sunlight and folding over onto themselves.
- Handle in vertical position; do not carry flat or drag on floor.
- Do not put stress on joints, corners or frames.
- Store window 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 materials are dry.

IF INJURY OCCURS, IMMEDIATELY SEEK MEDICAL ATTENTION!

MATERIALS AND TOOLS

NEEDED MATERIALS

Note! JELD-WEN exterior window and door products should be installed in accordance with JELD-WEN's recommended installation and flashing directions, which are shipped with the products or can be found on our website: www.jeld-wen.com. Note that 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 to the substrates in the application.

Fasteners: Follow certified anchor drawings if available. If no certification is required, fasten as follows:

- #10 x 2-1/2" corrosion-resistant flat head screws. Screws must penetrate at least 1" into framing (or as required by local code).
- 3/16" x 2-1/2" self-tapping concrete screws for masonry applications (or as required by local code).

- Sealant: For sill fasteners and if left exposed use 100% silicone. If painted 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).
- Non-compressible or non-water degradable shims.
- Polyurethane low expansion Window and Door foam: We recommend OSI® QUAD® Foam or equivalent.

For installations into a masonry wall:

- Liquid applied flashing (Protecto Wrap LWM 200 or equivalent).
- Spray adhesive/primer for self-adhered flashing. Such as Loctite® 300 or equivalent.

For installations into a stud-framed wall:

- 4", 6", or 9" (as required by local code and window configuration) wide self-adhered flashing: We recommend OSI® Butyl Flash or equivalent.

NEEDED TOOLS

- Tape measure
- Utility knife
- Level (4' minimum recommended)
- Screwdriver
- Putty knife
- Caulking gun
- Drill with bits

1 REMOVE PACKAGING AND INSPECT WINDOW

REMOVE PACKAGING

Remove shipping materials such as corner covers, shipping blocks or pads. If there is a protective film on the glass, do not remove it until installation and construction are complete.

INSPECT WINDOW

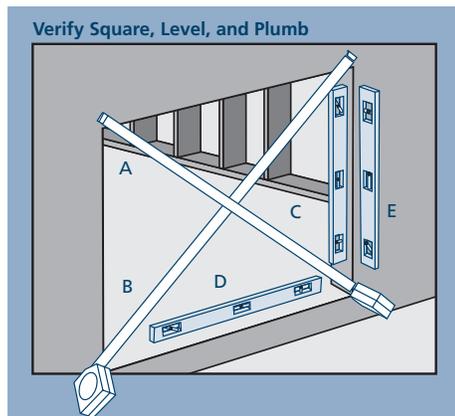
- Cosmetic damage
- Product squareness (diagonal measurements not more than 1/8" different).

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

If any of the above conditions represent a concern, or if you expect environmental conditions to exceed the window's performance rating, do not install the window. Contact your dealer or distributor for recommendations.

2 INSPECT ROUGH OPENING

- Verify the width and height of the window are each 1/2" smaller than the rough opening width and height.
- Verify the rough opening is square. The (A) and (B) measurements above should be the same. Maximum allowable deviation from square for windows over 20 sq. ft. is 1/4" and for windows under 20 sq. ft. is 1/8".

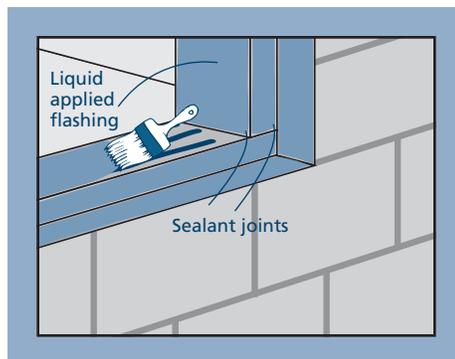


- Verify the rough opening is level and plumb (C), (D) and (E). The maximum allowable deviation is 1/8".
- Verify the rough opening sill is not crowned or sagged (D), but rather level or sloped (positive slope) to the exterior.
- Verify the exterior face of the rough opening is a single plane (E) with less than 1/8" twist from corner to corner.
- Verify the rough opening is structurally sound.
- Correct any deviations before installing the window.
- For retrofit installations remove the old window and contact your local waste management entities for proper disposal or recycling of products being removed.

Installation into masonry begins with section 3 "PREPARE MASONRY/BLOCK WALL"; installation into a stud-framed wall begins with section 4 "PREPARE STUD-FRAMED WALL."

3 PREPARE MASONRY/BLOCK WALL

Note! This section applies to installations into a masonry wall only. For installations into a stud-framed wall, begin with section 4, "PREPARE STUD-FRAMED WALL."



INSTALLATION USING A BUCK

1. Seal any joint larger than 1/16" in the buck and between the buck and the concrete/masonry with sealant.
2. Cover the buck and the surrounding concrete/masonry at the head and jambs with liquid applied or self-adhered flashing as shown.
3. If installing into a four-sided buck, seal the sill in a similar manner.

INSTALLATION WITHOUT USING A BUCK

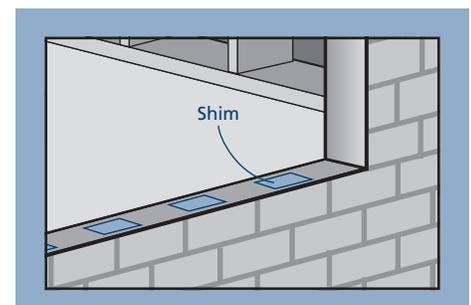
Cover the concrete/masonry at the head and jambs with liquid applied or self-adhered flashing as shown. If using self-adhered flashing, follow manufacturers' instructions for appropriate use of primers and other application methods.

ALL INSTALLATIONS

Note! Shims must be at least 1/2" shorter than the depth of the window sill, should level the rough opening sill and be no more than 1/4" thick.

4. Shim the sill 4" from each corner, at 8" intervals, and on both sides of mull joints with non-compressible or non-water degradable shims. Secure shims with sealant.

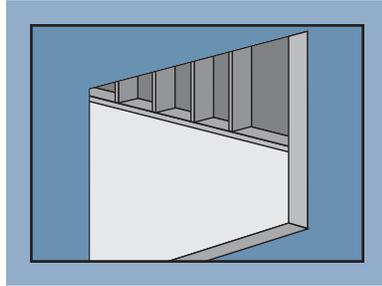
End of masonry instructions, SKIP TO SECTION 5, "INSTALL WINDOW."



4 PREPARE STUD-FRAMED WALL

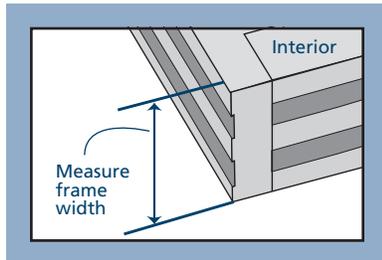
PREPARE BUILDING WRAP

Trim building wrap flush with the edges of the rough opening (or follow manufacturers' instructions for trimming).



PREPARE/SHIM THE SILL

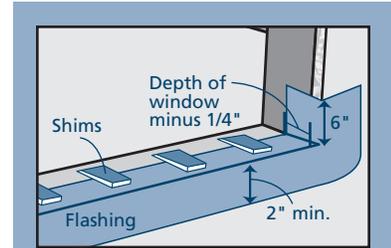
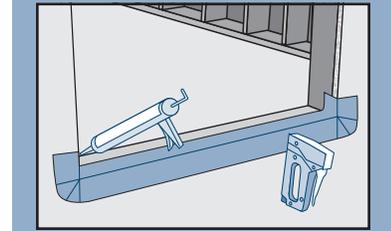
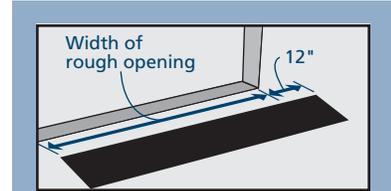
1. Use self-adhered flashing to waterproof the sill.
2. Flashing must have at least 2" of material wrapped below the sill onto the vertical wall. Flashing width must be at least frame width + 1-3/4".
3. Measure the width of the frame and subtract 1/4". Transfer this measurement from the outside edge of the rough opening sill and draw a line all along the rough opening sill. This is where the back of the flashing will sit.



4. Cut a piece of flashing the length of the sill plus 12".
5. Place flashing on rough opening sill, wrapping the flashing up 6" on each jamb as shown.
6. Pull release tape and set flashing into place.
7. Fold the flashing down onto the sheathing. Staple flashing to the wall and seal the corner edges as shown if needed.
8. Smooth out any bubbles or creases with a J-roller.

Note! Shims must be at least 1/2" shorter than the depth of the window sill, should level the rough opening sill and be no more than 1/4" thick.

9. Shim the sill 4" from each corner, at 8" intervals, and on both sides of mull joints with non-compressible or non-water degradable shims. Secure shims with sealant.



5 INSTALL WINDOW

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

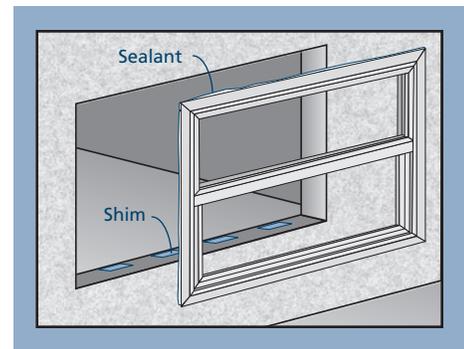
Note! Areas such as Florida and the Texas TDI region have different anchoring requirements based on product certification. For information on specific products, visit www.floridabuilding.org or www.tdi.texas.gov and follow the anchoring schedule given in the drawings for the product instead of the anchoring schedule in this document.

1. Some products come pre-punched for fasteners. If the product is not pre-punched, mark fastener locations on the jambs and head and fasten as follows:
 - PG30 and below: 3"-6" from each corner and every 24" on center.
 - Above PG30: 3"-6" from each corner and every 18" on center.
2. At each fastener location, countersink and drill a pilot hole through the frame.

Note! On very heavy units, the sash(s) can be removed before installation to make the unit easier to handle.

IF INSTALLING A FLUSH FIN WINDOW

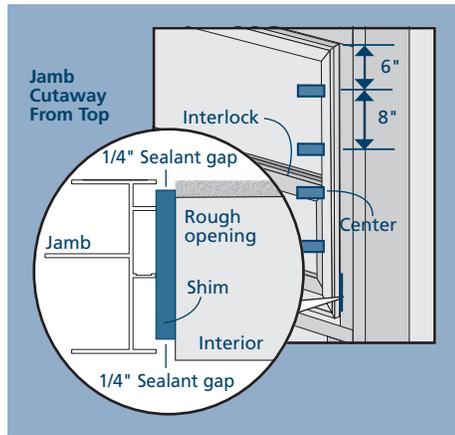
1. Apply a 3/8" bead of sealant to the interior face of the flush fin where it will contact the opening.
2. Place window in the opening, making sure the window rests on the shims and press firmly onto the exterior face. The window and sealant must have continuous contact with the opening. **Continue with "ALL INSTALLATIONS."**



5 INSTALL WINDOW - CONTINUED

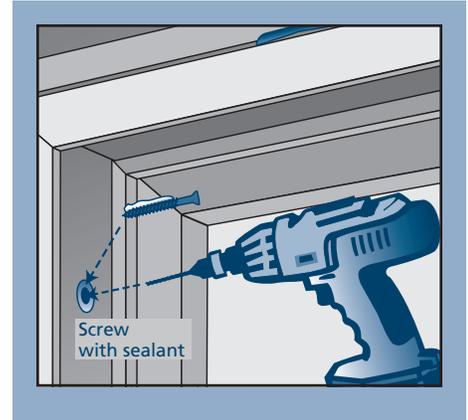
IF INSTALLING A FINLESS WINDOW

Place window onto the shims and tilt into the rough opening. The window sill must rest on and be supported by the shims. Continue with "ALL INSTALLATIONS."



2. Fasten window through a side jamb through a pre-drilled hole in one upper corner as follows:

- a. Apply sealant to the screw and drive through the pilot hole.
- b. Cover the screw head with sealant. If installing a hung window, tool the sealant so that it will not extend past the face of the extrusion as it will interfere with the balance system operation.



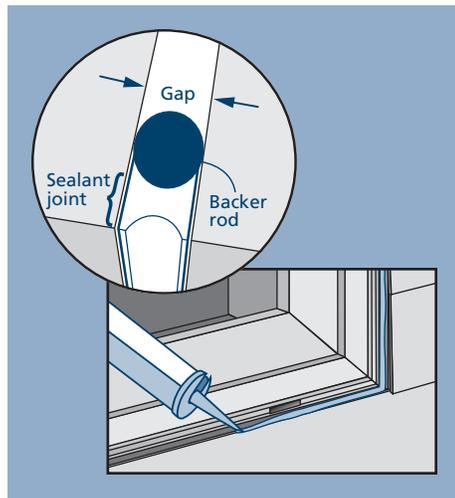
ALL INSTALLATIONS

1. Shim the side jambs at each pre-drilled hole so the fasteners will penetrate the shims. Shims must be set at least 1/4" back from the interior of the window frame. Secure shims with sealant.

3. Inspect window for square, level and plumb (adjust shims or remove and reinstall if necessary).
4. Fasten window in a similar manner through the remaining corners, and then through the rest of the fastener locations.

6 COMPLETE INSTALLATION

1. Create a continuous air seal on the interior by filling the gap between the rough opening and the window frame with low expansion polyurethane foam or backer rod and sealant.
2. On the exterior, apply backer rod and sealant between the window frame and the rough opening (not applicable to flush fin windows).



AFTER INSTALLATION

- Install exterior wall surface per manufactures' guidelines.
- If installing a finless window, leave an expansion/contraction gap of approximately 3/8" between window 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.
- Ensure weep holes/channels are clear of debris for proper water drainage; do not seal weep holes/channels if present.
- 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

