



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 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 & 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.

**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.

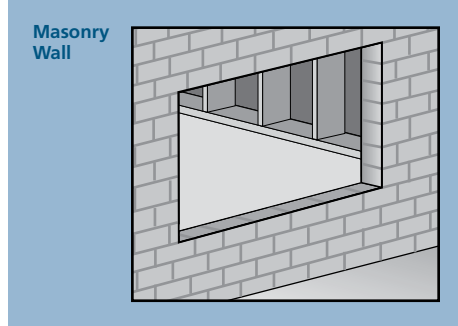
Estimated Install Time for New Construction	<input type="text"/>	First Time: 4.0 hr.
	<input type="text"/>	Experienced: 2.5 hr.
	<input type="text"/>	Professional: 1.5 hr.



## 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/BLOCK WALL CONSTRUCTION

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

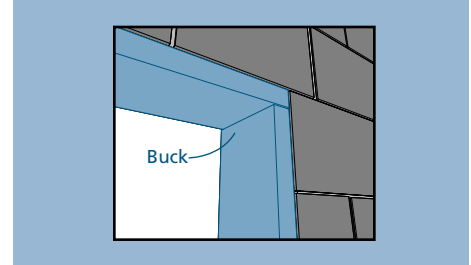
#### Without A Buck

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

#### With Buck

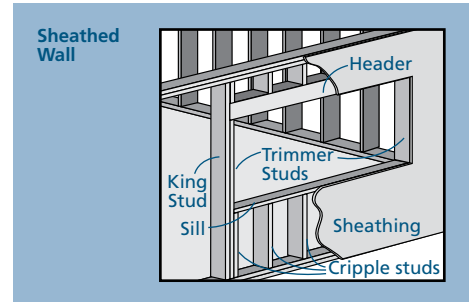
This installation assumes that a building professional has already properly fastened and sealed a framework of studs (often called a buck) to the concrete/masonry wall.

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 & 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.

### WINDOW & 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!**

## NEEDED MATERIALS & TOOLS

### NEEDED MATERIALS

**Note!** Follow all material manufacturers' instructions for proper use and compatibility.

- #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 (Protecto Wrap Protecto Sealant 25XL or equivalent)
- Backer rod
- Non-compressible or water degradable shims
- Polyurethane low expansion foam (Dow Great Stuff™ Window and Door or equivalent)

#### For installations into a masonry wall:

- Liquid applied flashing (Protecto Wrap LWM 200 or equivalent)
- Self adhesive flashing and spray adhesive/primer if required by local code (Protecto Wrap Safseal Systems 5500 or as recommended by the self-adhesive flashing manufacturer)

#### For installations into a stud-framed wall:

JELD-WEN drain mat material or equivalent

### TOOLS

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

## 1 REMOVE PACKAGING & 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

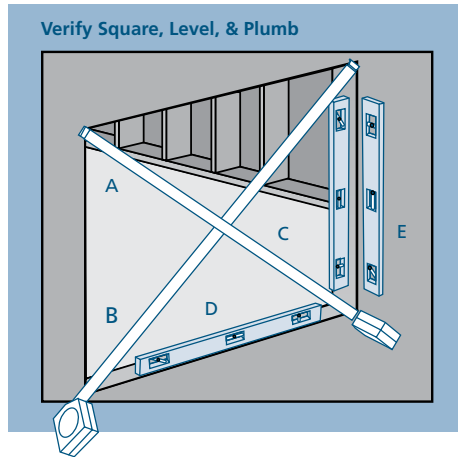
- Cosmetic damage
- Product squareness (diagonal measurements not more than 1/8" different)

- 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) and (D). The maximum allowable deviation is 1/8".
- Verify the rough opening sill is not crowned or sagged (D).
- 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.

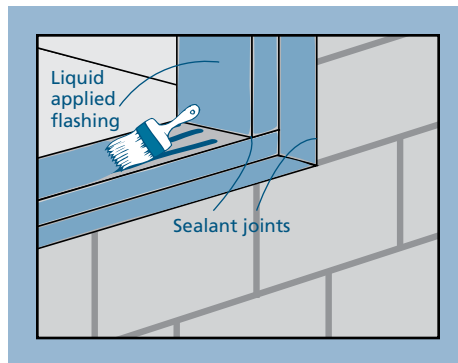
**Installation into masonry begins with section 3 "PREPARE MASONRY/BLOCK WALL"; installation into a stud-framed wall begins with section 4 "PREPARE STUD-FRAMED WALL."**

## 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."

If installing a window into a masonry wall without a buck, cover the entire rough opening surface with liquid applied flashing or self-adhesive flashing in the same manner as the following instructions for a buck.

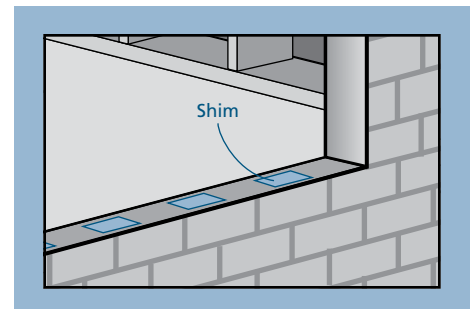
1. Seal any joint larger than 1/16" in the buck and between the buck and the concrete/masonry with sealant.
2. Cover the buck and the surrounding concrete/masonry at the head and jambs with liquid applied flashing as shown.
3. If installing into a four-sided buck, seal the sill in a similar manner.



**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 water-degradable or compressible shims. Secure shims with sealant.

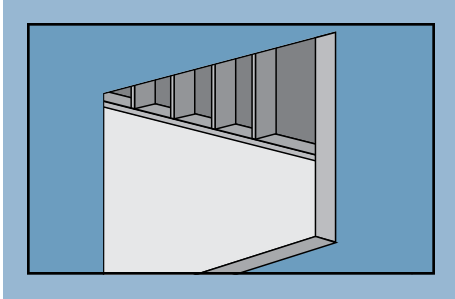
**End of masonry instructions, SKIP TO SECTION 5, "INSTALL WINDOW."**



**4 PREPARE STUD-FRAMED WALL**

**FOR RETROFIT INSTALLATIONS**

After removing the old window, remove sufficient siding to expose enough intact building wrap to properly seal the window to the opening. If damaged, apply new building wrap in shiplap manner. Verify the rough opening framing is structurally sound. Continue with the instructions.



**PREPARE BUILDING WRAP**

**Note!** Check with the building wrap manufacturer to verify the following steps will not void their product warranty. Follow manufacturers' instructions.

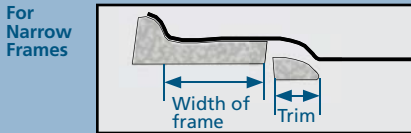
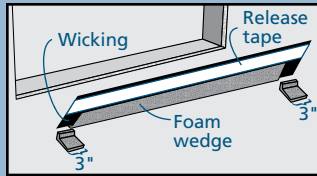
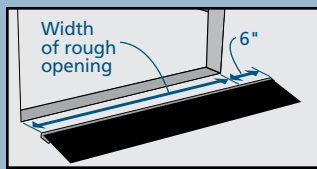
Trim building wrap flush with the rough opening.

**PREPARE SILL**

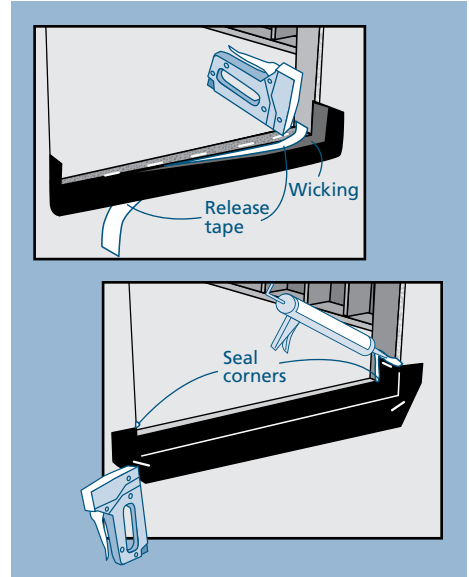
1. Measure the width of the window's sill, plus 1/8" and transfer the measurement onto the rough opening sill. This is where the back of the JELD-WEN drain mat will sit.

2. Cut a piece of drain mat the length of the sill plus 6".

3. Without cutting the drain mat material, remove 3" of foam wedge from each end of the JELD-WEN drain mat. If the width of the frame is narrower than the width of the foam wedge, also trim the front edge of the foam until it is the same width as the frame.



4. Place drain mat on rough opening sill, wrapping the drain mat up 3" on each jamb as shown.
5. Pull release tape and set JELD-WEN drain mat into place.
6. Lift up the back of the wicking and staple into place on the sill.
7. Fold the drain mat down onto the sheathing. Staple drain mat to the wall and seal the corner edges as shown.
8. Smooth out any bubbles or creases with a J-roller.



**5 INSTALL WINDOW**

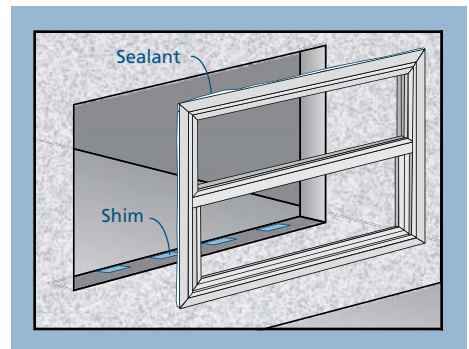
**Caution!** To avoid injury, use at least two people to install. Adequately support the window until fully installed.

- Mark fastener locations on the jambs and head 3" – 6" from each corner and at 8" intervals (some holes may be pre-drilled).
- At each fastener location, drill a pilot hole through the frame.

**IF INSTALLING A FLUSH FIN WINDOW**

- Apply a 3/8" bead of sealant to the interior face of the flush fin where it will contact the opening.

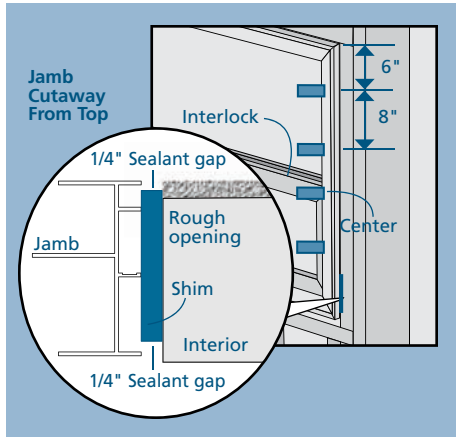
- Place window in the opening, making sure the window rests on the shims and press firmly onto the exterior face. The window and sealant must have continuous contact with the rough opening. **Continue with "ALL INSTALLATIONS."**



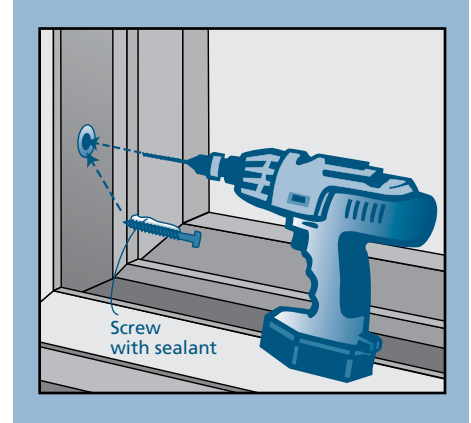
**5** INSTALL WINDOW - CONTINUED

**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 3"-6" from one lower corner as follows:
  - a. Apply sealant to the screw and drive through the pilot hole.
  - b. Cover the screw head 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.

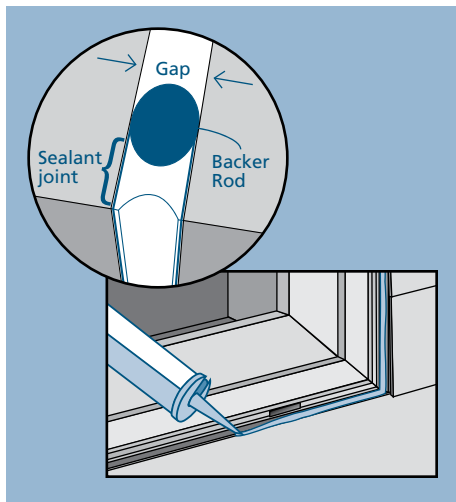


**ALL INSTALLATIONS**

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

**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**

- Ensure weep holes/channels are clear of debris for proper water drainage; do not seal weep holes/channels if present.
- Adjust window for best operation.
- Protect recently installed units from damage from plaster, paint, etc. by covering the unit with plastic.

Please visit [jeld-wen.com/resources](http://jeld-wen.com/resources) for warranty and care and maintenance information.

Thank you for choosing

