JELD-WEN WINDOWS & DOORS

INSTALLATION INSTRUCTIONS
for Vinyl Windows without Nailing Fin (JII011)

Thank you for selecting JELD-WEN products. Attached are JELD-WEN's recommended installation instructions for vinyl 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, box frame, or pocket 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.

Head Expander
A vinyl accessory used to cover the head of the window in some retrofit applications.

Installation Clip
A vinyl accessory that snaps into the accessory groove of some fixed windows, used to secure the window to the rough opening.

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.

Sill Adapter
A replacement frame component attached to the sill of a finless window being installed into an existing double-hung window frame (pocket installation) with a sloped sill. The component cancels out the sloped sill of the existing double-hung, helping to support the front edge of the window sill.

Stop
The trim pieces on the sash or frame.

Weep Hole (weep channel)
The visible exit or entry part of a water drainage system used to drain water out of a window.

ROUGH OPENINGS

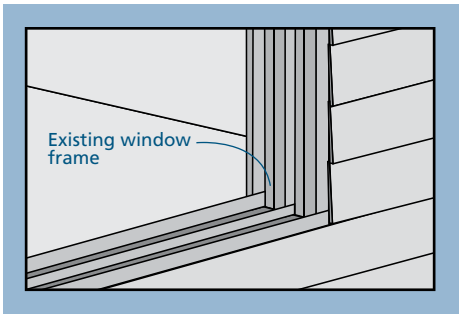
These instructions specifically address:

- Installation of a flush fin window into an existing aluminum window frame or masonry wall.
- Installation of a finless window into an existing window frame.
- Installation of a finless or flush fin window into a masonry or stud framed wall.

INSTALLATION INTO AN EXISTING WINDOW FRAME

The new window is used as a replacement product installed into an existing window frame after the old sash(es) and hardware have been removed. The existing window frame must be watertight within the structure. Correct pre-existing water leaks before installation. Any damaged portions of the existing sloped sill must be repaired and sealed to be waterproof.

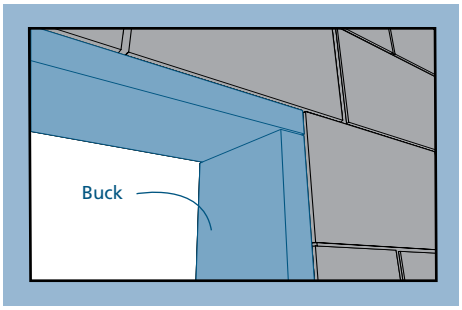
Flush fin windows must be installed into an existing aluminum frame with at least a 3/8" wide exterior face. This face must be flush with or protrude past the exterior wall surface.



ROUGH OPENINGS - CONTINUED

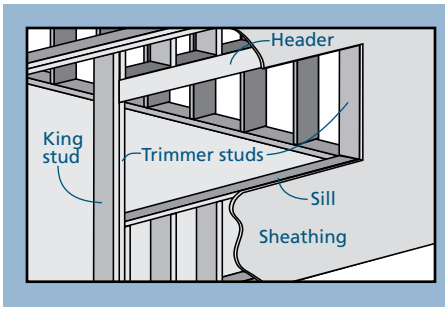
MASONRY/BLOCK WALL CONSTRUCTION

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.



SHEATHED 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.

MATERIALS AND WINDOW HANDLING

- Make sure operable windows are 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 sheathing 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 pan 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)

Additional Materials Needed if Installing into an Existing Window Frame

Solid wood (cedar or redwood recommended) or exterior grade plywood for continuous support.

- If installing into an aluminum window, dimensions should be 1/2" shorter than the length of the sill track and 1/4" taller than the depth of the track.
- If installing into a wood window, dimensions should be 1/4" thick, length of the existing frame sill minus 1" and the width of the new vinyl window side jamb minus 1/4".

Additional Materials Needed if Installing into a Masonry Wall

Liquid applied flashing (Protecto Wrap LWM 200 or equivalent)

Additional Materials Needed if Installing into a Stud Framed Wall

JELD-WEN drain mat material or equivalent.

TOOLS

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

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.

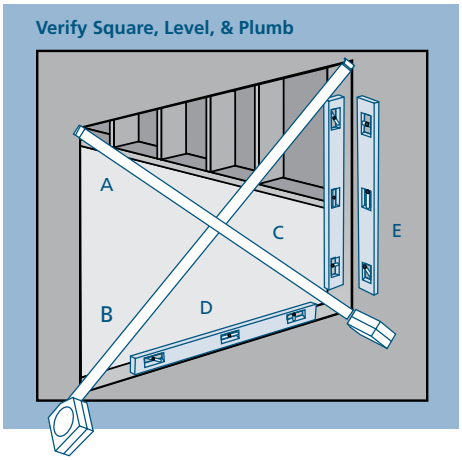
INSPECT WINDOW

- Cosmetic damage
- Product squareness (diagonal measurements not more than 1/8" different)
- Correct product (size, color, grid pattern, glass type, energy-efficiency requirements, etc.)
- Cracked frame welds

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.

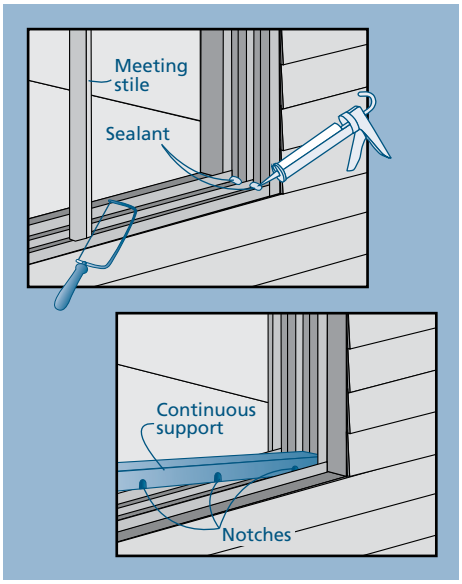
Installation into an existing window frame begins with section 3, "PREPARE EXISTING WINDOW FRAME." Installation into a buck begins on page 4 with section 4, "PREPARE BUCK." Installation into a stud-framed wall begins with section 5, "PREPARE STUD-FRAMED WALL."

3 PREPARE EXISTING WINDOW FRAME

1. Remove the sashes and/or glass in the existing window.
2. Remove all hardware and window components not a part of the frame (meeting stile, jamb liners, locking mechanisms or other hardware etc.).

If Installing into an Aluminum Window Frame:

1. Seal all four corners of the window frame as shown.
2. Notch grooves across the bottom of the continuous support (see materials list) to allow for water drainage through the weep holes. Set the continuous support into the exterior sill track, creating a level surface at the sill.



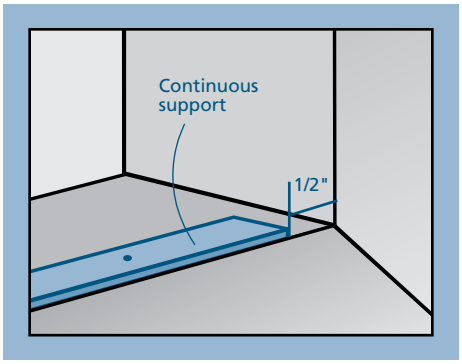
END of Aluminum Frame Instructions, SKIP to section 6, "INSTALL WINDOW."

If Installing into a Wood Window Frame:

1. Remove any trim on the inside face of the wood frame. Do not remove the exterior stops.

Note! Steps 2 and 3 are not applicable if installing into an existing double-hung with sloped sill.

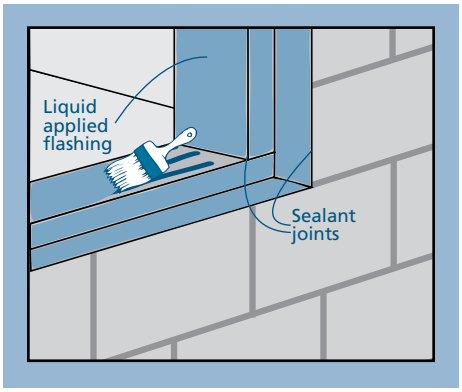
2. Apply enough sealant to the bottom of the continuous support to cover the entire surface.
3. Center the continuous support (see materials list) on the sill of the existing frame, flush to the exterior edge and leaving a 1/2" gap at the ends. Secure with nails.



END of Existing Window Frame Instructions, SKIP to section 6, "INSTALL WINDOW."

4 PREPARE 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 1/4" shorter than the depth of the window sill, should level the rough opening sill and be no more than 1/4" thick.

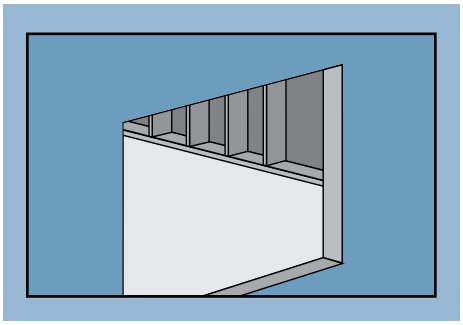
4. Shim the sill 4" from each corner, at 8" intervals, and on both sides of mull joints with non water-degradable or compressible shims. Secure shims with sealant.

END of Buck Instructions, SKIP to section 6, "INSTALL WINDOW."

5 PREPARE STUD-FRAMED WALL

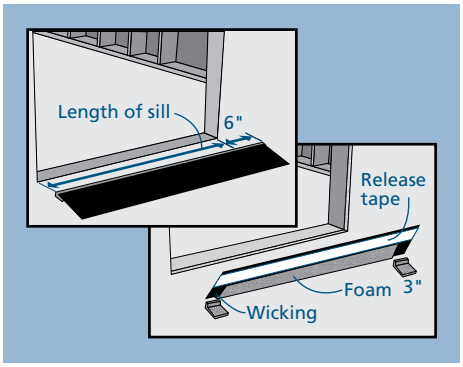
PREPARE BUILDING WRAP

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



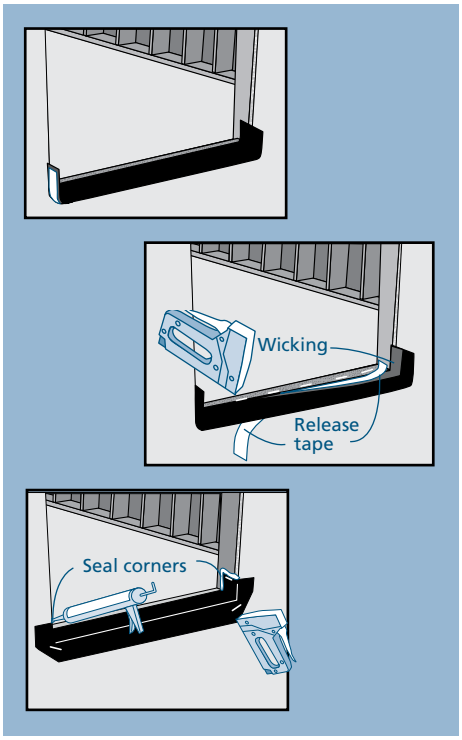
PREPARE SILL

1. Measure the width of the window's sill + 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 the foam wedge from each end of the JELD-WEN drain mat.



4. Place drain mat on rough opening sill, wrapping the drain mat up 3" on each jamb as shown.
5. Lift up the back of the wicking and staple into place on the sill.
6. Pull release tape and set JELD-WEN drain mat into place.
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.

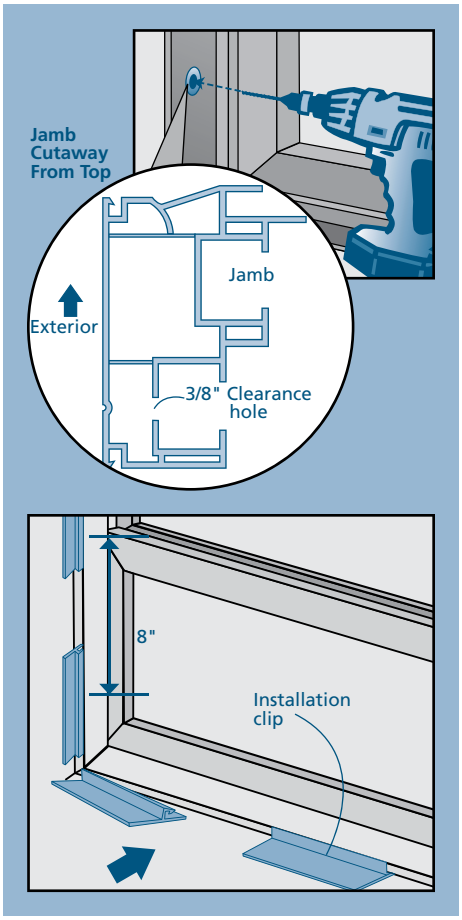
Continue with section 6, "INSTALL WINDOW."



6 INSTALL WINDOW

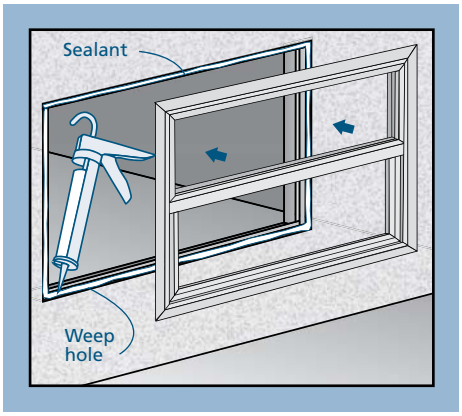
Warning! To avoid injury, use at least two people to install. Adequately support the window until fully installed.

1. Some windows have a vinyl cover in non-operating tracks. Remove track covers if present.
2. If the window has open tracks, mark fastener locations on the jambs and head 3" – 6" from each corner and if the jambs and/or head are longer than 3', mark locations at 24" maximum intervals (some holes may be pre-drilled).
3. At each fastener location, drill a 3/8" clearance hole through **ONLY** the first wall of the side jamb to allow the screw head to pass through. Do not drill through the exterior wall of the window frame.
4. Fixed windows without open channels will come with installation clips. Snap a clip into the interior accessory groove at each corner and at 8" intervals as shown.



IF INSTALLING A FLUSH FIN WINDOW

1. If using an applied fin, apply a continuous bead of sealant around the window where the fin meets the frame.
2. Apply a 3/8" bead of sealant to the exterior face of the opening , leaving gaps at any weep holes if installing into an existing frame.
3. Place window in the opening, making sure the window rests on the sill and makes positive contact with the sealant.



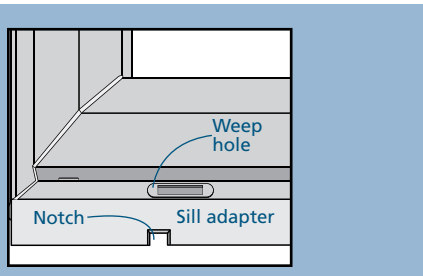
Continue with "All INSTALLATIONS."

IF INSTALLING A FINLESS WINDOW

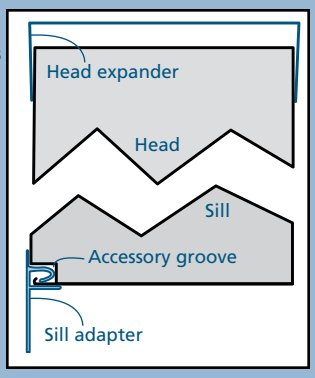
If installing into an Existing Frame with a Sloped Sill:

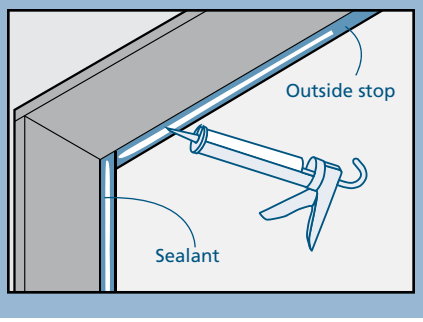
1. If a detached sill adapter is used, cut to length, and snap into accessory groove at the sill.
2. Cut notches in the lower edge of the sill adapter to allow for water drainage; notches should be a minimum of 1/8" square and positioned under each weep hole of the window.
3. Center the head expander (optional) over the head of the window as shown.
4. From the interior, apply sealant to the inside edge of the outside stop. Set window with a sill adapter fully against the outside stop.

Continue with "All Installations."



Window Frame & Accessories Shown from the Side



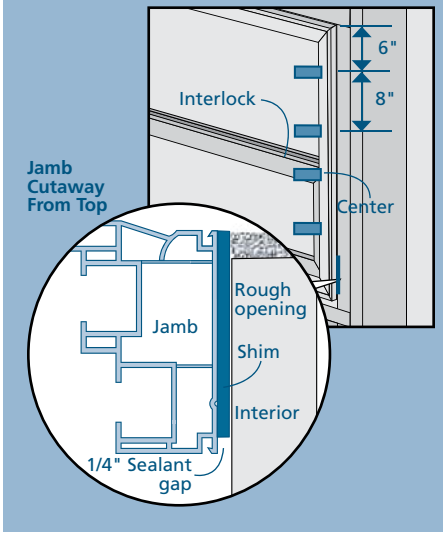


If installing into an Existing Frame or Rough Opening with a Flat Sill:
Center the head expander (optional) over the head of the window. Set new window into the existing window frame or rough opening.

Continue with "All INSTALLATIONS."

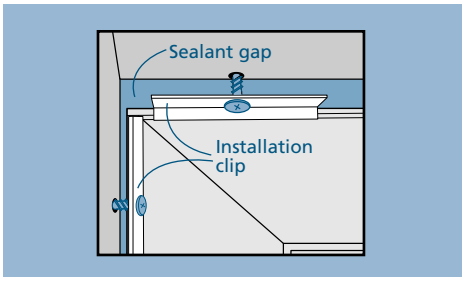
ALL INSTALLATIONS

1. Shim the side jambs between the existing frame and the new window at each fastener location. Shims must be set 1/4" back from the interior of the window frame. Secure shims with sealant.

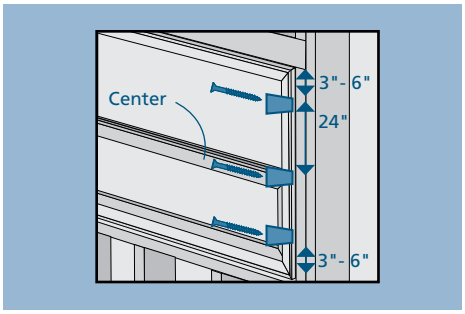


6 INSTALL WINDOW - CONTINUED

2. Secure one lower corner as follows:
   a. If installing a window with installation clips, drive a screw through the clip until the screw head contacts the clip. Do not bend the clip toward the rough opening.



   b. Fasten all other windows through a side jamb. Apply sealant into hole and secure with a #10 screw (without deforming vinyl). 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.
5. Insert plugs into fastener holes not located in any operating track. Replace track covers if applicable.

7 COMPLETE INSTALLATION

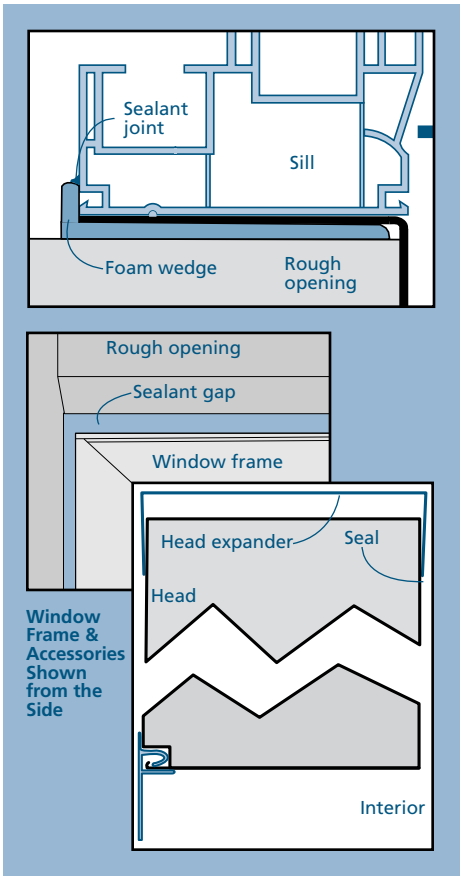
On the interior between the new window and rough opening, a continuous air seal is created and all voids are filled as follows:

If installing into wood framing with a drain mat:

On the sill, apply sealant to the back of the foam wedge. The sealant must create a continuous air seal by integrating the back of the drain mat with the window frame. On the other three sides, create a continuous air seal on the interior by integrating the rough opening and the window frame with low expansion polyurethane foam (or backer rod and sealant).

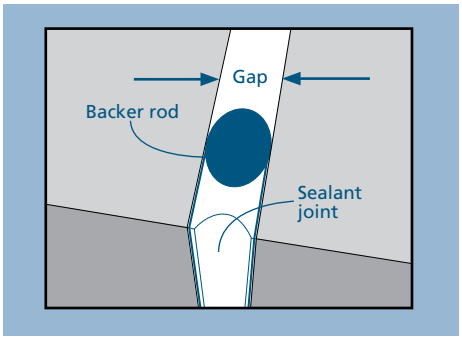
For all other installations:

1. Fill any voids deeper than 1/2" with low expansion polyurethane foam (or backer rod and sealant). For voids less than 1/2" deep, a continuous bead of sealant around the perimeter of the window provides an air seal.



2. Seal between the head expander (if used) and the window frame.

Note! Step 3 does not apply to flush fin windows or to installations into an existing double-hung frame with exterior stops.



3. On the exterior, apply backer rod and sealant between the window frame and the rough opening.
4. Apply sealant to the joint between the existing sloped sill and sill adapter (if applicable), leaving gaps at the weep holes.

AFTER INSTALLATION

- Install vinyl plugs (available through dealers) if desired.
- Ensure weep holes/channels are clear of debris for proper water drainage; do not seal weep holes/channels if present.
- If applicable, apply desired exterior vinyl trim.
- 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 for warranty and care and maintenance information.

Thank you for choosing

JELD-WEN WINDOWS & DOORS

(06/09)