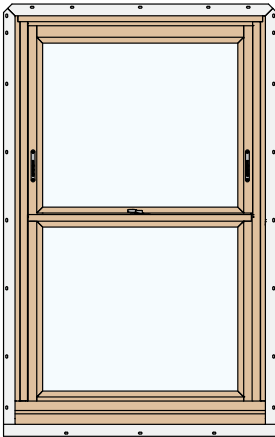


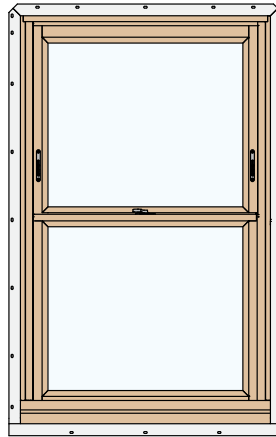


Thank you for selecting JELD-WEN products. Attached are JELD-WEN's recommended installation instructions for Aluminum Clad Wood Windows with Nailing Fin or Primed Wood Windows with Exterior Trim. Not all window types may be installed into every wall condition in all areas. Consult your local building code official for applicable building codes and regulations. Local building code requirements supersede recommended installation instructions. JELD-WEN does not endorse the installation of our products into a barrier-type install system unless a sill pan is present, incorporated with through-wall flashing and can drain to the exterior (along with other "required" components). Failure to do so may result in the denial of any warranty claims. 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.

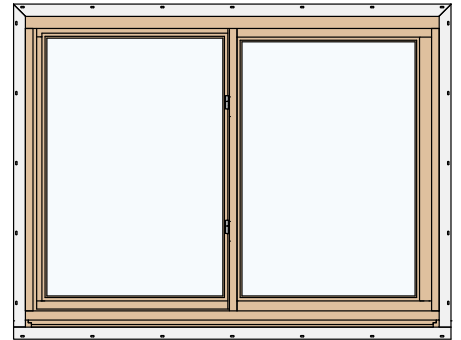
Double Hung



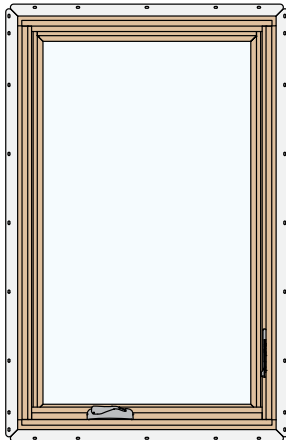
Single Hung



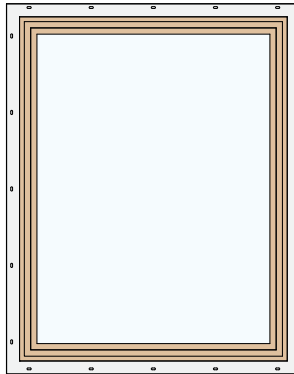
Horizontal Slider



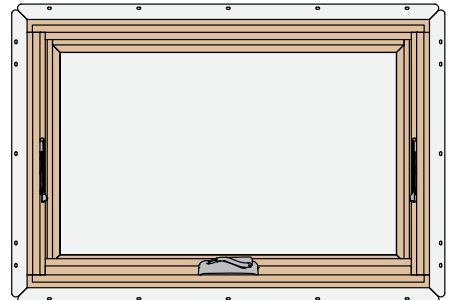
Casement



Picture



Awning



IMPORTANT INFORMATION, TABLE OF CONTENTS AND GLOSSARY

JELD-WEN does not endorse the installation of our products into a barrier-type install system unless a sill pan is present, incorporated with through-wall flashing and can drain to the exterior (along with other “required” components). Failure to do so may result in the denial of any warranty claims.

PLEASE NOTE: These instructions **DO NOT** apply to bow and bay windows and apply only to windows with a horizontal flat sill. Installations, where the sill is higher than 35 feet above ground level, 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 product warranty as part of the terms of the sale.

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NOTICE

JELD-WEN advises against product installation in high interior water exposure environments such as showers, steam rooms and enclosed pool areas. These areas are beyond the tested/certified design intent of the window and any related warranty claims could be denied on that basis.

Glossary

Applied Nailing Fin

A mechanically attached vinyl fin that creates a flange around the perimeter of the window and is used to attach the window to the rough opening. These products usually require fastening through the jambs.

Buck

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

Integral Nailing Fin

A fin that is part of the extruded aluminum cladding and used to attach the window to the rough opening.

Masonry Strap

A galvanized metal strap that secures the window to the structure.

Mulled Unit

Two or more window units structurally joined together.

Shiplap

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

SAFETY AND HANDLING

Safety

- Read and fully understand **ALL** manufacturer’s 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 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.

Materials and Window Handling

- Make sure operable windows are locked prior to installation.
- Heed material manufacturer’s handling and application instructions.
- Protect adhesive surfaces from dirt, moisture, direct sunlight and folding over onto themselves.
- Handle in a vertical position; **DO NOT** carry flat or drag on the floor.
- **DO NOT** put stress on joints, corners or frames.
- Store window in a vertical, leaning position to allow air circulation; **DO NOT** stack horizontally.
- Ensure the storage area is dry, well-ventilated and **protected from exposure to direct sunlight.**
- Only install into vertical walls when conditions and sheathing are dry.

IF INJURY OCCURS, IMMEDIATELY SEEK MEDICAL ATTENTION!

MATERIALS AND TOOLS

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

NOTE: On Siltline Impact casement and awning windows, fasten through the provided clip and nail fin with (1) #8 x 1-1/2" screw that penetrates the structural member.

- #8 x 1-1/2" pan-head, corrosion-resistant screws **OR** 1 3/4" galvanized roofing nails. Minimum embedment of 1 1/4" into the structural framing (or as required by local code).
- Galvanized drip cap (or factory supplied).
- Sill Pan: A pan flashing system (as defined in **ASTM E2112**) is **required** at the sill prior to window/door product installation. A sill pan should have a positive slope, **must be** installed onto the sill of the R.O. in a weather-tight manner and tied into the drainage plane of the building envelope. For sill pans without a positive slope, place a 3/16" - 1/4" tall plastic shim 2" from each corner and no more than 8" on-center in between (excludes Canada and potentially large door systems). If an aftermarket sill pan is preferred, then we suggest the Manufacturer's instructions be followed.

- Sealant: An exterior grade (**High-Performing, Low VOC**) sealant is recommended for installation practices. Check with the sealant manufacturer for color-match options and paintability.
- Polyurethane Low-Expansion Window and Door Foam: A low-expansion, polyurethane window and door foam is recommended for installation practices. Avoid using moderate to high-expansion products as operational issues or damage may occur.
- 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.
- Drip cap (if not supplied).

Masonry Straps (if applicable):

- 20 ga. Galvanized Masonry Strap
- 2 - #8 x 1/2" pan-head, coated, corrosion-resistant screws for attaching masonry straps to the window.
- 2 - #8 x 2" pan-head, coated, corrosion-resistant screws for attaching masonry straps to the structure. Screws must penetrate at least 1 1/4" into the structural framing.

Needed Tools

- Utility knife
- J-roller
- Hammer
- Tape measure
- Caulking gun
- Level (4' minimum recommended)
- Drill with 1/8" tapered bit and 3/8" countersink
- 3/16" Drill bit
- Finish nails (for trim)
- Screwdrivers
- Pencil
- Miter saw

1

INSPECT PRODUCT

Remove Packaging

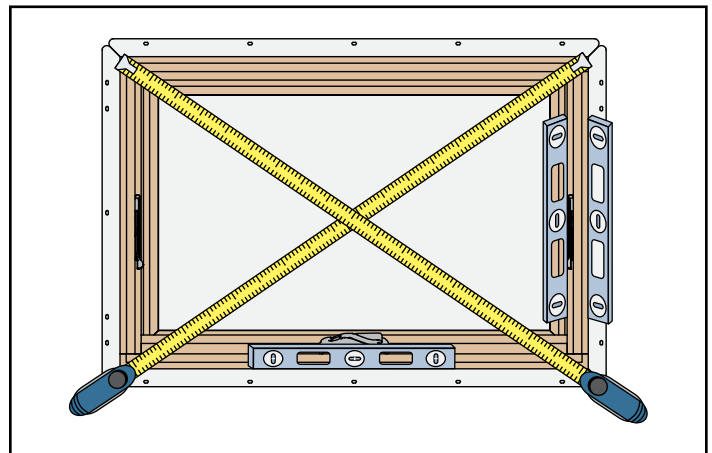
- Remove shipping materials such as corner covers, shipping blocks or pads. If there is a protective film on the glass, **DO NOT** remove it until installation and construction are complete. Cut off any staple legs exposed on the side of the frame.

NOTE: Double-hung windows may have banding on the interior of the unit. **DO NOT** remove until the window is secured in the opening to help keep the sash in place and the unit square.

Inspect Window

- Cosmetic damage and/or shipping damage.
- Product squareness (diagonal measurements not more than 1/4" different).
- Correct product (size, color, grid pattern, handing, glazing, energy-efficiency requirements, etc.).
- Manufacturing abnormalities (e.g., bow, warp, squareness).
- Drip cap that extends the length of the exterior trim plus 1/8" overhang on each end (all units require a drip cap); drip cap may or may not be pre-installed.
- Splits, cracks, holes, missing sections or other damage to the nailing fin longer than 6" and/or within 1/2" of the window frame.

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.



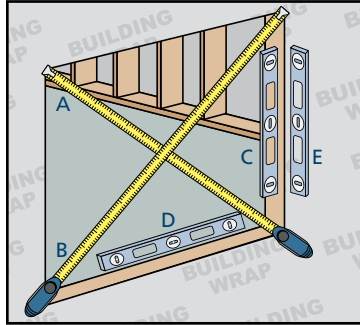
2 INSPECT ROUGH OPENING (R.O.)

⚠ WARNING

The use of a sill pan and other barriers will decrease the rough opening height clearance. Adjust the opening dimensions accordingly.

- Verify the width and height of the rough opening is 3/4" larger than the window 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). Suggested deviation is no more than 1/4".
- 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



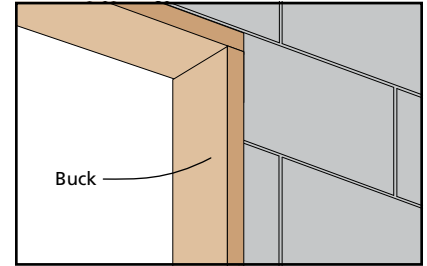
For Retrofit Installations

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, open-stud construction and exterior foam insulation. For exterior foam insulation construction, please reference the latest version of FMA/AAMA/WDMA 500 for additional install and framing details. If installing into an opening other than what is identified, consult a building professional.

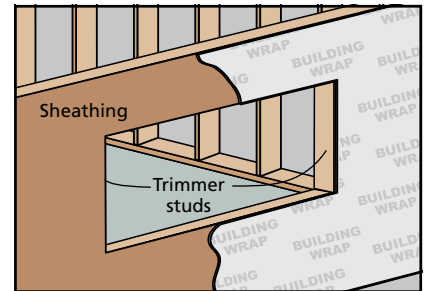
Masonry/Block Wall Construction

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 window will be mounted into the buck in a weatherproof manner.



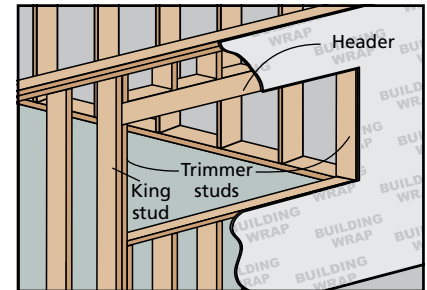
Fully Sheathed Wall Construction

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



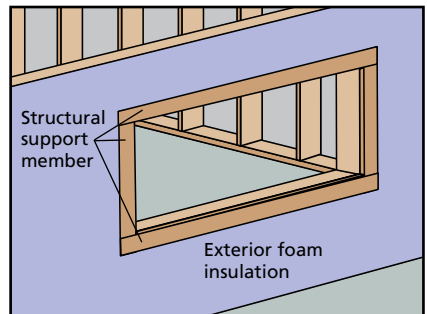
Open-Stud Construction

Sheathing is absent and building wrap is applied atop the wall framing. The window will be mounted into the rough opening in a weatherproof manner.



Exterior Foam Insulation Construction

Exterior Foam insulation is applied to the exterior of the wall framing. The window will be mounted to a structural support member on the same plane as the exterior foam insulation in a weatherproof manner (reference the latest version of FMA/AAMA/WDMA 500 for additional install and framing details).

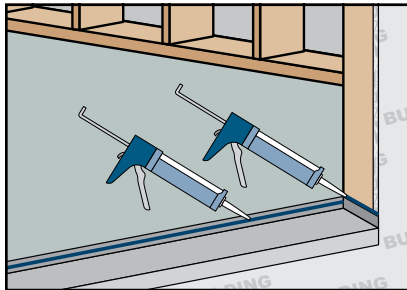
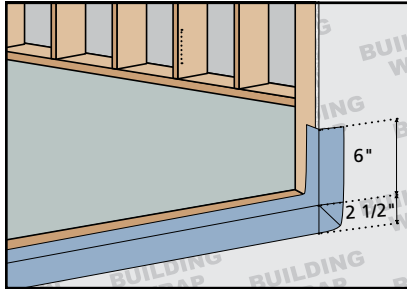


3

INSTALL SILL PAN FLASHING SYSTEM

Prepare Sill

1. A pan flashing system (as defined in **ASTM E2112**) is required at the sill prior to window/door product installation. Always allow water to drain out of the pan and onto the building wrap, drainage plane or to the exterior.
2. Apply a continuous bead of sealant to the interior of the upturned leg and end dams of the sill pan (if using a rigid sill pan).

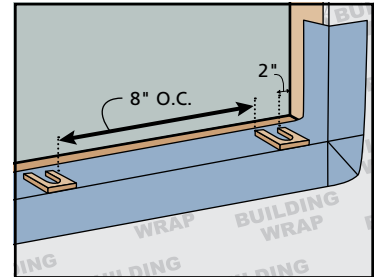


Shim the Sill

See **Product Installation Tolerance Table** for tolerances.

1. Unless installing into a sill pan with a built-in positive sloped draining system, shims should be aligned as defined by the label on the window 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.
- Shims should be no more than 8" on-center.
- For mullied units, ensure there is a shim located 1/2" on each side of the mull joint.
- There should always be a drainage path to the exterior out of the sill pan.
- Shims can be held in place with sealant.
- Increased shim height may be needed or may interfere with bar/grill alignment of adjacent windows/doors.

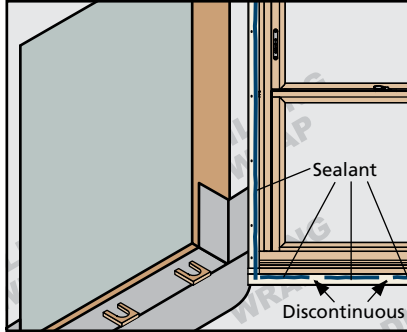


4 TEMPORARILY FASTEN AND SHIM PRODUCT

⚠ WARNING

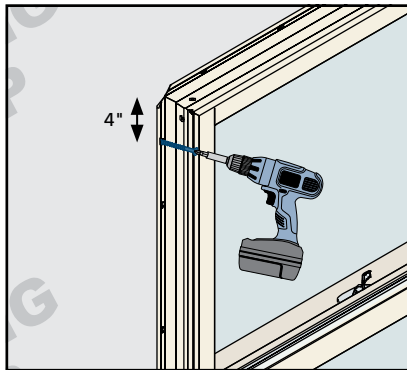
To avoid injury, use at least 2-people to install. Adequately support the window until completely fastened.

1. Run a continuous 3/8" bead of sealant around the interior side of the nail fin/trim, on the side jambs and head. A **discontinuous** bead of sealant should be applied at the **bottom nail fin** to allow for drainage.



2. Place window onto the shims and tilt into the rough opening. The window sill must rest on and be fully supported by the shims. Tool any sealant squeeze out until smooth. If necessary, add more sealant to create a continuous seal.
3. Fasten the window through the nailing fin 4" from one upper corner.

NOTE: Fastener (anchor) heads must be flush. **DO NOT** dent nailing fin.

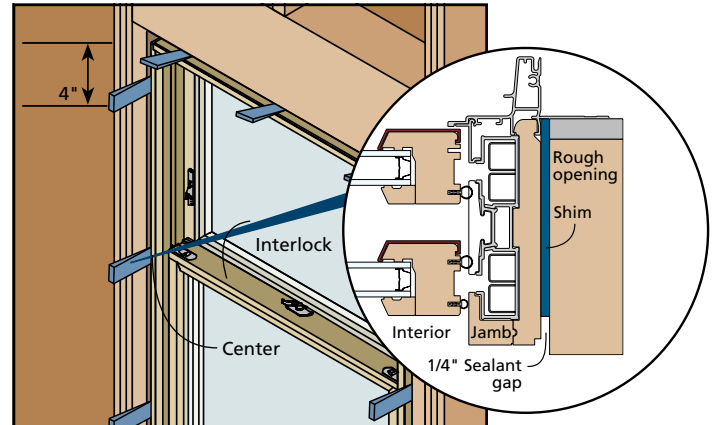


⚠ WARNING

The first screw should be placed at the top corner rather than the bottom corner. Support is **REQUIRED** at all times.

Shim the Jambs

1. Start by placing shims 4" from each corner and at the center of each side jamb. **NOTE:** Each location should be shimmed with two opposing shims (if tapered). Secure all shims with sealant.



2. Inspect the window for square, level, plumb and twist. See **Product Installation Tolerance Table** for tolerances.

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.

3. Shim at additional locations as needed.
4. Temporary fasteners can be used to hold the product within tolerance until properly fastened. Test for proper operation. Remove and reinstall if necessary.

5 FASTEN PRODUCT (SIZE AND SPACING)

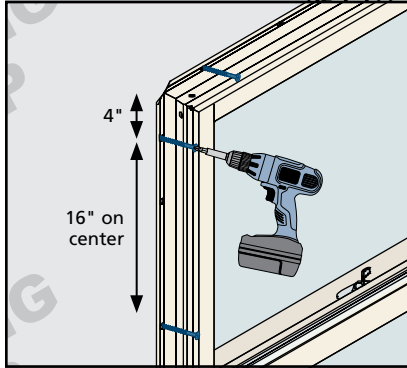
⚠ WARNING

Exterior trim is Deemed Non-Structural

Windows with Integral Nail Fin

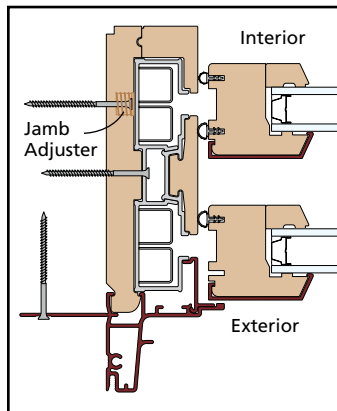
1. Apply sealant and place the drip cap atop the window frame (reference **Section 6 – Install Drip Cap**).
NOTE: If the drip cap is not pre-punched, use a 3/16" drill bit to generate a hole 4" from each end and 16" (max.) on-center.

2. If the nail fin is not pre-punched, use a 3/16" drill bit to generate clearance holes. Space clearance holes 4" from each corner and 16" (max.) on-center.
3. From the exterior, fasten the window through the nailing fin holes 4" from the corners and 16" (max.) apart around the window.



NOTE: DO NOT dent the nailing fin. Fastener heads should be flush with the fin.

4. Hung windows can be fastened through the jamb adjusters with #8 x 2" screws provided. Straighten the jambs per the instructions provided with the screws. **NOTE:** Remove, adjust and replace shims as necessary.



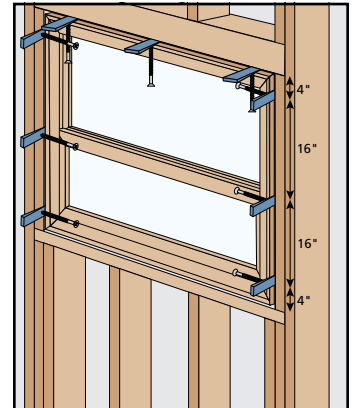
Windows with Applied Trim or Folding Nail Fin

1. Window units with exterior trim (e.g., Brickmould, Flat Casing or Vinyl Folding Nail Fin) must be fastened through the interior of the window frame.



Scan the QR Code for our **Installation Instructions for Wood/Clad Wood Windows without Exterior Trim or Nail Fin (JII025)** or locate the document in the Product Support section at jeld-wen.com.

2. Mark fastener locations 4" from the corners and 16" (max.) apart around the window.
3. Drill a pilot hole through the side jamb and into the framing at each marked location. Countersink for wood putty or plug covers.
4. Shims should be placed at each fastener location.



5 FASTEN PRODUCT (SIZE AND SPACING) (CONTINUED)

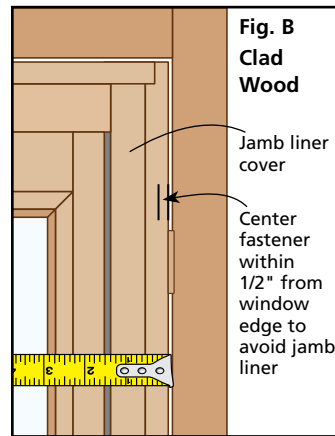
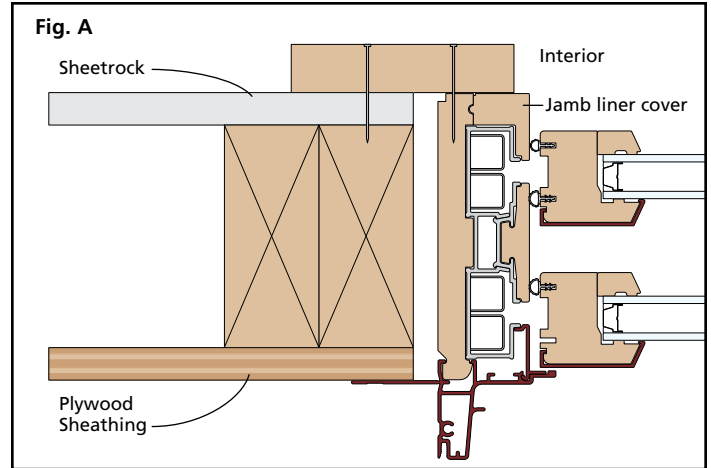
Interior Trim Application

⚠ WARNING

Some products have a jamb liner cover or parting stop that should not be nail through as damage may occur. Interior trim applied atop of these components may need to be removed for certain service repair work.

How to install interior trim/casing:

Mark a reveal line around the jamb, typically 1/8" to 1/4" around the frame (make sure not to nail into the jamb liner cover). Use a straight edge or square, to mark the line around the perimeter of the head, jambs and sill. For hung units, ensure you **DO NOT** nail through the jamb liner, measure from the outside edge of the frame to the edge of the jamb liner cover, this should be approximately 1/2". Place the intended fastener in the center of the 1/2" space for a clad/wood window (**Fig. A and B**).



6 INSTALL DRIP CAP

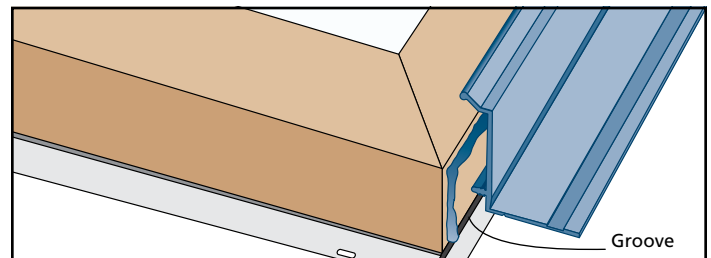
NOTICE

The use of a drip cap on all window/door products is recommended, regardless if supplied. A drip cap is **REQUIRED** on any **VERTICAL** mullled/joined products, regardless if supplied.

Metal Clad Windows

1. If the drip cap was not previously installed, apply a 1/4" bead of sealant across the head of the window frame and/or trim.
2. Seal the gaps at each end of the horizontal or vertical mull joint, if applicable.

3. Center the drip cap atop the window frame. If a barbed fin is present on the backside of the drip cap, seat the fin into the groove on the frame with the aid of a wooden block and hammer. **NOTE:** The barbed fin may have to be removed if applying the drip cap atop of trim.



Primed Wood Windows

NOTE: Drip cap to be sourced by the installer.

1. Apply a 1/4" bead of sealant across the head of the window frame and/or trim.
2. Seal the gaps at each end of the horizontal or vertical mull joint, if applicable.
3. Center the drip cap on the head of the window frame/trim.
4. Fasten the drip cap in place, **DO NOT** dent the nailing fin or drip cap.

7

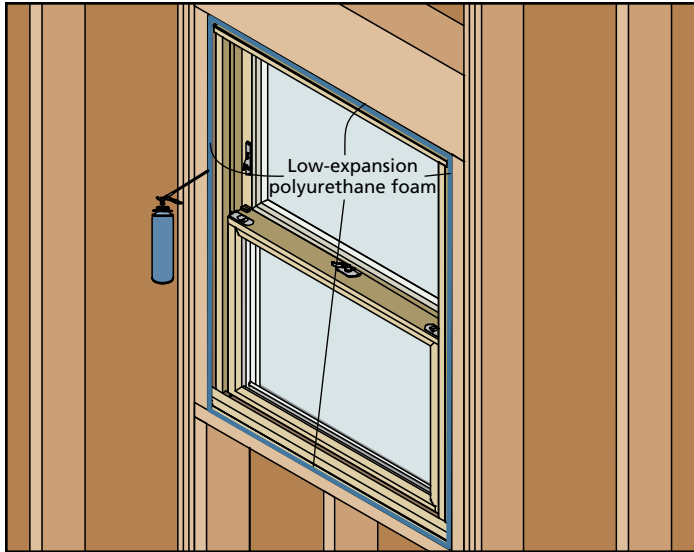
CREATE "INTERIOR" AIR SEAL

Continuous Air Seal

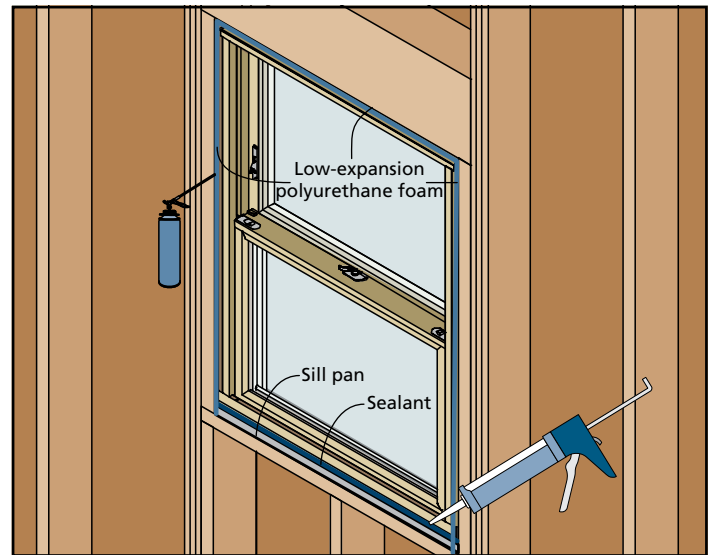
NOTE: Shims may need to be cut back, so the interior air seal is "continuous" between the window frame and the rough opening.

Create a **required** 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. **NOTE:** If foam is used, a 1/2" - 1" depth is prescribed. Backer rod can be used to control the depth.

Self-Adhered Flashing Sill Pan



Rigid Sill Pan

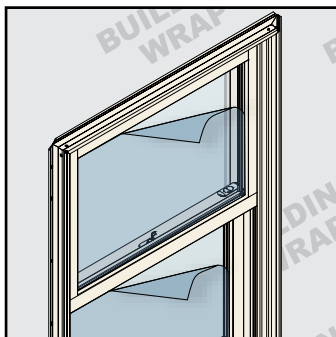


8

REMOVE PROTECTIVE FILM

NOTICE

If applicable, remove any protective film immediately from all surfaces of the frame/sash and within six months from any glass.



After Installation

- Install exterior wall surface per manufacturer's guidelines.
- Leave an expansion/contraction gap of approximately 3/8" between the window frame and final exterior wall surface (siding, stucco, etc.).
- Protect recently installed units from damage from plaster, paint, etc.

⚠ WARNING

DO NOT operate the casement sash in the extended position for long periods of time or leave unattended in the fully open position, as potential damage may occur from environmental factors (i.e., unexpected strong wind gusts).

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

Thank you for choosing

JELD-WEN