



How To Install Windows: Nail-Fin Application

Required Tools & Materials:

Materials:

- 1 3/4" galvanized roofing nails. Nails must penetrate at least 1" into framing
- For mulled and/or DP50 or above units: #10 x 1 1/2" truss head or washer-head (stainless steel recommended) screws. Screws must penetrate at least 1" into framing
- Sealant (polyurethane or 100% silicone, TremCo TremGlaze Polyurethane or equivalent recommended by Glass-Rite)
- Polyurethane low expansion foam (Dow Great Stuff™ Window and Door or equivalent, ENERFOAM foam sealant recommended by Glass-Rite)
- Shims – not water degradable or compressible

For installations into a stud-framed wall:

- 4" drain mat material or equivalent
- 6" wide self-adhesive flashing or equivalent (9" if required by local code)
- Spray adhesive/primer (Protecto Wrap Safseal Systems 5500 or as recommended by the self-adhesive flashing manufacturer)

For installations into a buck:

- Liquid applied flashing (Protecto Wrap LWM 200 or equivalent)

Tools:

- Utility knife
- J-roller
- Hammer
- Tape measure
- Caulking gun
- Construction stapler with 3/8" staples
- Level (4' minimum recommended)
- Drill with bits

Safety:

- Read and understand ALL 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 (safety glasses, gloves, ear protection, etc.)

Handling:

- Make sure operable windows are locked prior to installation.
- Protect adhesive surfaces from dirt, moisture, and direct sunlight.
- Handle windows in vertical position: do not carry flat or drag across the floor.
- Do not put stress on joints, corners, or frames.
- Store window in dry, well-ventilated area in a vertical leaning position. Do not stack horizontally.
- Protect from exposure to direct sunlight during storage.
- Install only into vertical walls.

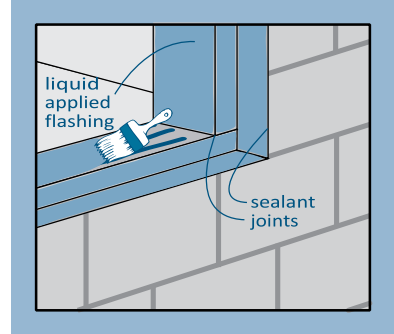
Installation Preparation:

- Remove any shipping materials such as corner covers, shipping pads or blocks. If window has a protective plastic sheet over glass, do not remove until after installation is complete.
- Inspect the window for any damage. Look for cracked frame welds, splits, cracks or holes in the nail-fin or the frame of the window. Check for fractures in the glass or evidence of a failed unit.
- Check product size and squareness. Make sure you have the correct color, grid pattern, glass pattern, energy efficiency requirements, etc.
- Inspect the opening and verify the width and height of the window are each 1/2"- 5/8" smaller than the rough opening.
- Verify that the rough opening is square, level and plumb.
- The rough opening sill must not be crowned or sagged.

Prepare Buck:

This section applies to installation into a masonry wall only. For installation into a stud-framed wall, begin with the next section "Prepare Stud-Framed Wall"

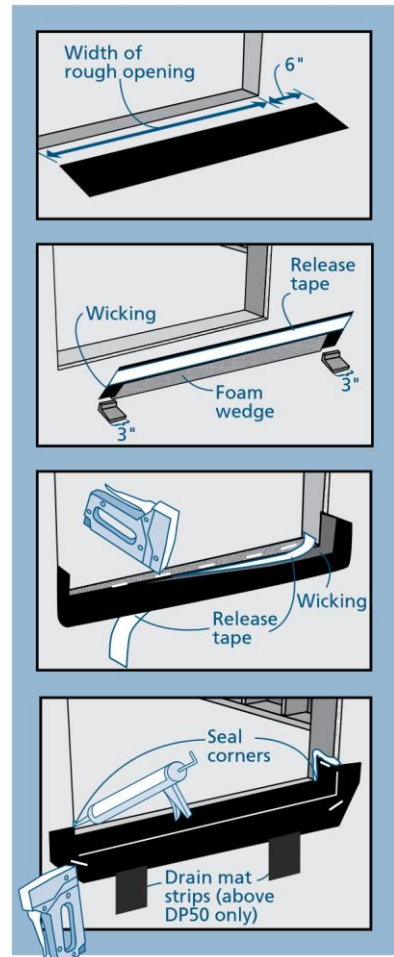
- Use sealant to seal any joint in the buck and between the buck and the concrete / masonry.
- Cover the buck and the surrounding concrete / masonry at the head and jambs with flashing.
- Shim the sill 4" from each corner, at 8" intervals, and on both sides of a mull-joint and secure shims with sealant. Use non-water degradable or compressible shims that are 1/4" shorter than the depth of the window sill and no more than a 1/4" thick.



Prepare Stud-Framed Wall:

After removing the old window, remove a sufficient amount of siding to expose enough intact building wrap to properly seal the window to the opening. If damaged, new building wrap should be applied. Verify that the framing is structurally sound before you continue.

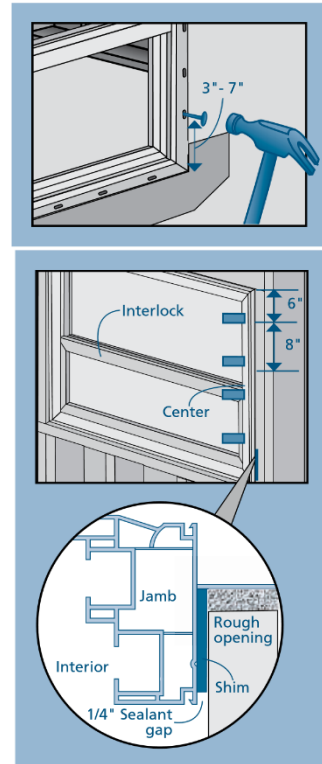
- Trim the building wrap to be flush with the rough opening.
- At the head, cut building wrap at a 45° and tape up
- Cut a piece of drain mat the length of the sill plus 6"
- Place drain mat on rough opening sill, wrapping the drain mat 3" up each jamb.
- Lift up the back of the wicking and staple into place on the sill.
- Pull release tape and set drain mat into place.
- Fold the drain mat down onto the sheathing, staple drain mat to the wall, and seal the corner edges.
- For additional drainage cut a 2" wide strip of drain mat and apply vertically beneath the drain mat at 12" intervals.
- Smooth out any bubbles or creases with a J-roller



Install the Window:

To avoid injury use at least two people to install, and support the window until completely fastened.

- Run a continuous bead of sealant around the interior side of the nail-fin where it will contact the rough opening.
- Place the window onto drain mat / flashing and tilt into the rough opening. The window must rest on and be fully supported by the rough opening.
- Fasten window with a galvanized roofing nail through the nail-fin between 3"-7" from one lower corner.
- Shim the jambs on both sides just above the interlock and evenly spaced no more than 8" apart. Secure the shims with sealant.
- Verify that the window is square, level, and plumb. Test for proper operation (remove and reinstall if necessary).
- *Fastener head must be flush. Do not dent the nail-fin.*
- Fasten the window through every nail-fin hole (every 4").



Flash Window – Windows Installed into Stud-Framed Wall:

Cut pieces of flashing as follows:

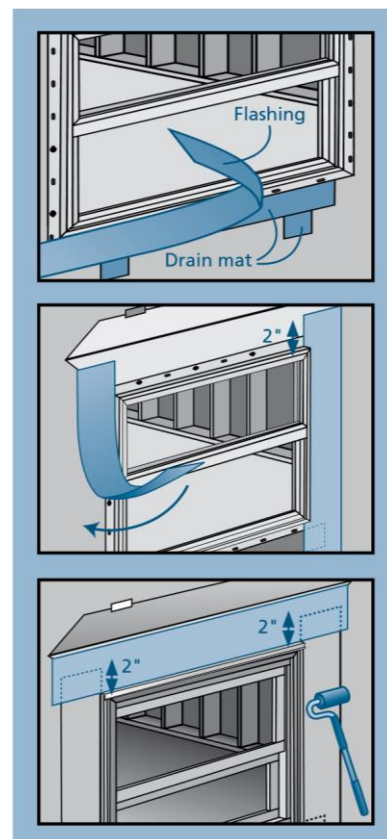
- One header piece – 14" longer than header
- Two side pieces – 10" longer than the jamb
- One sill piece – 6" longer than the sill.

Spray adhesive / Primer:

- Apply spray adhesive (protect window from overspraying) to nail-fin and building wrap around the window.

Apply the flashing:

- Center and apply 6" wide flashing below the sill.
- Apply the side pieces starting 2" above the head and overlap the drain mat on the sill.
- Center and apply the header piece, overlapping the side pieces.
- Press the flashing down with a J-roller, being careful to remove any gaps or bubbles beneath the flashing (remove and replace if necessary).



Complete the Installation:

- Release the building wrap from above the header (previously taped up) and overlap the header flashing. Seal the ends with adhesive flashing or building wrap tape.
- Adjust window for best operation.
- Seal the top corners of the window with a ¼” bead of sealant.
- Create a continuous seal on the interior between the rough opening and the window frame by using low expansion polyurethane foam. If installing into wood framing with a drain mat, apply sealant to the foam wedge on the back of the drain mat.
- Ensure weep-holes and drainage channels are clear of debris. Do not seal weep holes!
- Install exterior wall surface within 30 days of window installation.

