



## How To Install Windows: Block-Frame or Flush-Fin Application

### Required Tools & Materials:

#### Materials:

- 2 ½” to 3” corrosion resistant pan head screws. Screws must penetrate 1” into framing.
- 2 ½” to 3” self-tapping concrete screws for masonry applications.
- 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
- Solid wood (cedar, redwood or exterior grade plywood) for continuous support

If installing into an aluminum window, dimensions should be ½” shorter than the length of the sill track and ¼” taller than the depth of the track.

For installation into a wood window, dimensions should be ¼” thick, the length of the existing frame sill minus 1”, and the width of the new window side jamb minus ¼”

#### Tools:

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

### Safety:

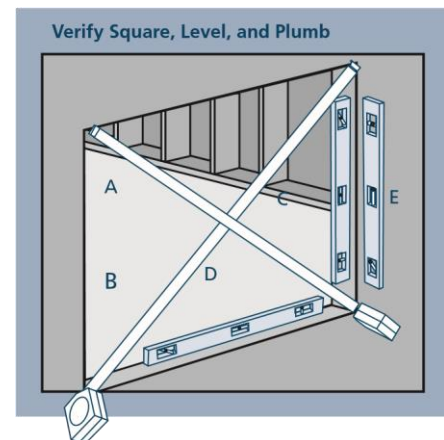
- Read and understand ALL instructions before beginning.
- Do not work alone. Two or more people are required. Use safe lifting techniques.
- Use caution when handling glass. Broken or cracked glass can cause serious injury.
- Wear protective gear (safety glasses, gloves, ear protection, etc.)

### 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 Existing Window Frame:

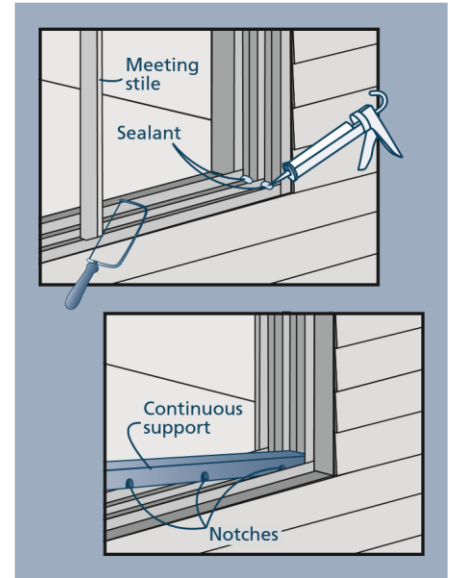
- Remove the sashes and/or glass in the existing window
- Remove all hardware and components that are not a part of the frame (locks, meeting rail, jamb liners etc.)

If installing into an Aluminum Window Frame

- Seal all four corners of the window frame with sealant.
- Notch grooves across the bottom of the continuous support 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.

#### If installing into a Wood Window Frame

- Remove any trim on the inside face of the wood frame. Do NOT remove the exterior stops.
- Apply enough sealant to the bottom of the continuous support to cover the entire surface.
- Center the support on the sill of the existing frame, flush to the outside edge and leaving a 1/2" gap at the ends. Secure with nails.

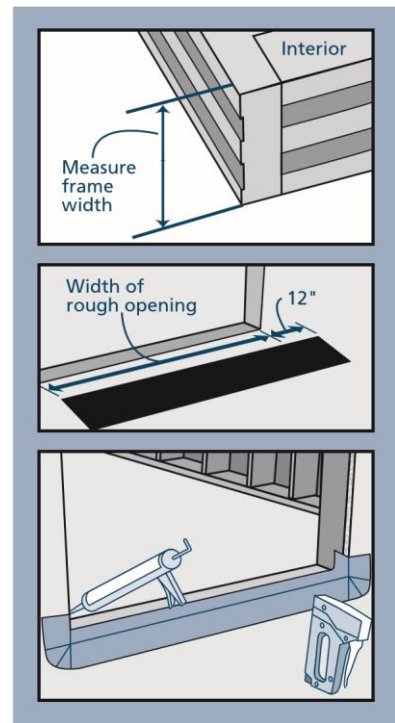


#### Prepare Buck:

- Seal any joint larger than 1/16" 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.
- If installing into a 4-sided buck, seal the sill in the same manner.
- 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:

- Trim the building wrap to be flush with the rough opening.
- Cut a piece of drain mat the length of the sill plus 6"
- Without cutting the drain mat, remove 3" of the foam wedge from each end of the drain mat
- 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.
- 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.

- Some windows will have a cover in non-operating tracks. This is true of most fixed windows. Remove track covers if present
- Single-Hung windows will sometimes have limit locks in the upper corners of the frame. Remove limit locks if present.
- Mark the fastener locations on the jambs 3" – 6" from each corner, and if the jambs are longer than 3', mark locations at 24" intervals. *Note: Single-Hung windows should always have the upper fastener location 3" from corner and under limit lock cover.*
- At each fastener location drill a clearance hole through ONLY the first wall of the side jamb to allow the screw to pass through. Do not drill through the exterior wall of the window frame.

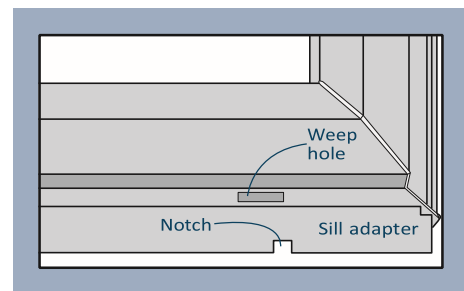
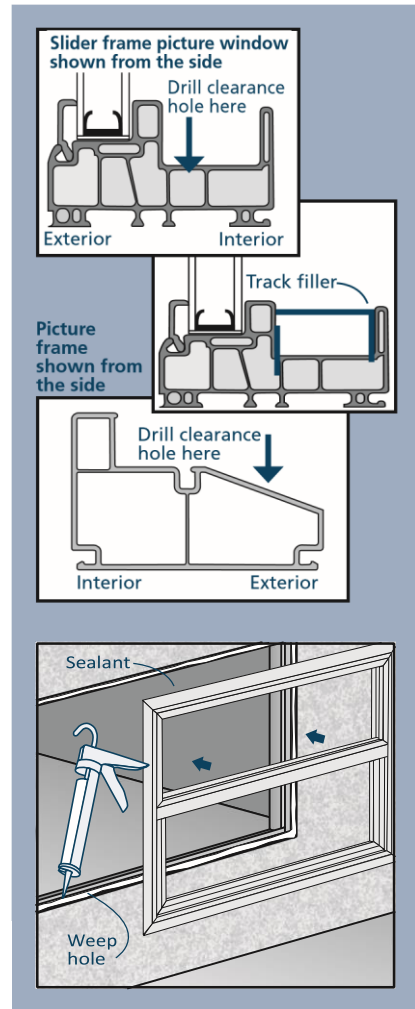
## If Installing a Flush-Fin Window

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

## If Installing a Finless or Block-Frame Window

Installing into an Existing Frame with a Sloped Sill:

- If a sill adaptor is used, cut to length and snap into accessory groove at the sill
- Cut notches in the lower edge of the sill adaptor to allow for water drainage; notches should be at least an 1/8" square and positioned under each weep hole of the window.
- From the inside, apply sealant to the inside edge of the outside stop. Set window with a sill adaptor fully against the outside stop.



### For All Installations

- Shim the side jambs between the existing frame and the new window at each fastener location. Shims should be set ¼” back from the interior of the window frame. Secure shims with sealant.
- Secure one lower corner through a side jamb. Apply sealant into hole and secure with a screw.
- Inspect window for square, level and plumb (adjust shims or remove and reinstall if necessary)
- Fasten window through the remaining corners and through all fastener locations.
- Fixed windows will have screw plugs. Insert plugs and replace track covers.
- Replace any removed track pieces or limit locks.

### Complete the Installation:

#### 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 on the interior 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.

#### For All other Installations:

- Fill any voids deeper than ½” with low expansion polyurethane foam.
- For voids less than ½” deep, a continuous bead of sealant around the perimeter of the window provides an air seal.
- Seal between the head and the window frame.
- Apply sealant to the joint between the existing sloped sill and sill adaptor (if applicable), leaving gaps at the weep holes.
- Adjust window for best operation.
- Ensure weep-holes and drainage channels are clear of debris. Do not seal weep holes!
- If applicable, apply exterior trim

