

Installation Instructions for New Construction: Single Hung and Picture Windows

Inspect all windows carefully. DO NOT INSTALL if damaged or defective.

FIG. 1

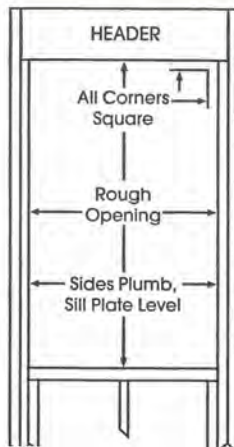
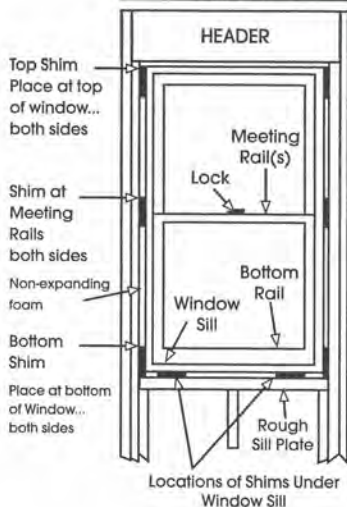


FIG. 2
INTERIOR VIEW



Window Opening

The rough opening must be plumb, level and square and slightly larger than window size in width and height, not including the nailing fins (see fig. 1). **Close and lock the sash to aid in keeping the window square during installation.** All packaging materials including wood support for bottom nailing fin, cardboard and aluminum shipping angles for mullered combinations need to be removed prior to installation of the window.

Apply a $\frac{3}{8}$ " continuous bead of Sealant caulking to the interior surface of the nailing fin covering the holes in the fin, to seal the window's fin to the sheathing or house wrap. If the rough opening is larger than the window unit by more than $\frac{1}{2}$ " also apply the caulk to the sheathing or house wrap, making sure the bead is no more than $\frac{1}{4}$ " from the edge of the rough opening, so that it is covered by the nailing fin when the window is installed.

Setting Shims (if necessary)

The sill of the window must be supported in a straight and level position at a minimum of three points, at either end and in the middle. Windows wider than 30" should be supported at a maximum of every 12" (see fig. 2). **Shims should be used when applicable.**

Placing Shims

Place $\frac{1}{4}$ " shims on the sill plate of the window opening spaced as described above. Multiple twin or triple windows should have a support under each mullion (see fig. 2).

Setting Window

Set window on the shims and adjust side clearance to be equal on both sides. Tack one upper corner of the fin to keep window in place. Check sill with a level and adjust thickness of shims as required to level sill. Readjust side clearance as necessary. Shims must be cut to exact thickness to fit snug and not fall out but do not force shims into place, pushing the sill upward out of level. Shim both sides of window (see fig. 2) and adjust thickness of shims to make diagonal measurements equal with the window plumb and square.

If the above has been done correctly the width across the top, middle and bottom will measure the same. Clearance between the sash stile and jamb main frame will be equal. The meeting

rail and lock rail will align evenly at the top and clearance between the sash stile and Jamb mainframe will have parallel sight lines. The sweep latches should lock smoothly.

Fastening Windows with Nail Fins

Selection of fasteners are the responsibility of the installer. Structure and load requirement should be taken into account with regard to selection. The windows shall be secured to the framing through the nail fin. Fasteners are corrosion resistant as specified in the International Building Code (IBC), International Residential Code (IRC) and the Texas Revisions. To achieve published test results #8-1 $\frac{1}{2}$ " truss head screw or equivalent should be used.

Fasteners shall be spaced approximately 2" from each corner and approximately 12" on center around the perimeter of the window. The fasteners shall be long enough to penetrate a minimum of 1- $\frac{1}{2}$ " into the wall framing. Mullered or multiple window units must be fastened directly at the mull and approximately 6" on either side of the mullion. On mullered combination windows place a small piece of self-adhesive flexible flashing tape to seal the 1" void between nailing fins. Make sure head and sill are not bowed up or down. Check side jambs are not bowed in or out

Flashing Recommendations

Use self adhesive flexible flashing (minimum 4" wide and meets local requirements) which has a self-adhering surface on one side, approved for use on vinyl, aluminum and other substances such as house wrap. This flashing material must meet a minimum water resistance of 24 hours in accordance with ASTM-D779 and MMA Certified Installation Guidelines.

(see fig. 3) Sill flashing is applied first up against the bottom of the window sill extending beyond the sides of the window jamb fin and side flashing at least 2" Apply jamb flashing next over the jamb-nailing fin, continuing over and beyond the sill flashing, 2" below. Apply head flashing similarly, extending 2" past either side of the jamb flashing, to complete the window flashing detail.

(see fig. 2) Install non-expanding foam or insulation between the window and rough opening. It is very important that these openings are not overstuffed and bow the frame. Do NOT use expanding foam.

FIG. 3 EXTERIOR VIEW

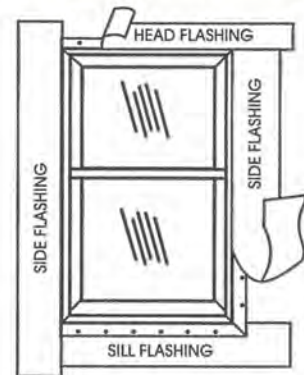
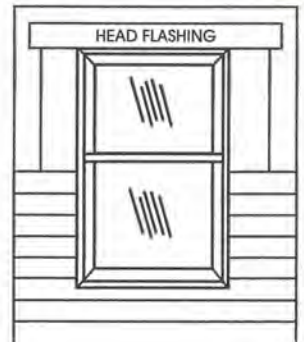


FIG. 4 EXTERIOR VIEW



CAUTIONS

- Do not use large razor knives, metal scrapers or razor blades to clean glass. Never scrape dry glass!
- Do not remove shipping clips from lock rail until window is installed.
- Do not lay windows flat or store in sun. The heat will shrink the plastic wrapping and warp the frame.
- Do not caulk or plug weep holes.
- Do not drill into or through the sill of the window.
- Protect the window during construction and plastering.
- Do not lift window by top of frame, only by jambs.
- Protect vinyl sill from traffic and damage.

These recommended guidelines are based on Industry accepted practices, however there are other accepted methods. Knowing, understanding and satisfying local code requirements is the sole responsibility of the installer.

Check with local building codes for particular installation and performance requirements.

For updated information on approvals and/or installation guidelines, go to

WestlakeRoyalWindows.com