

## INSTALLATION INSTRUCTIONS FOR NEW CONSTRUCTION

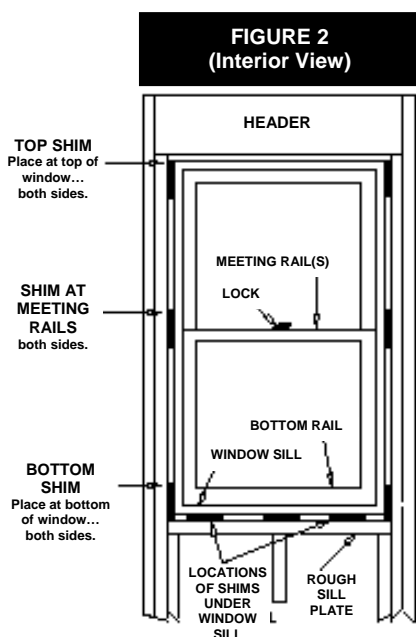
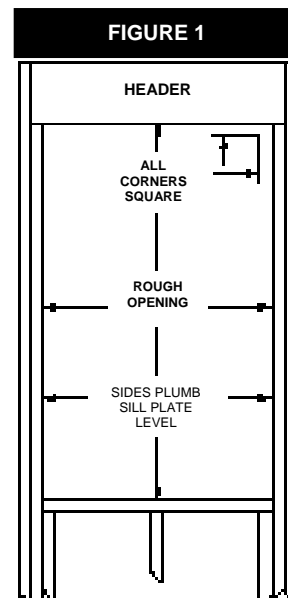
Before you begin, please read these instructions completely. Remember, a properly installed unit will provide superior weather protection and trouble free service.

When installing for new construction, the rough opening should be  $\frac{1}{4}$ " to  $\frac{1}{2}$ " larger than the window unit perimeter. Ensure the sill plate is level. (Figure 1)

Close and lock the sash to aid in keeping the window square during installation.

Apply a continuous  $\frac{3}{8}$ " bead of sealant around the interior perimeter of the nailing fin or the brickmold before setting the unit in place, or seal the fin with waterproof tape after the unit is installed.

The window sill must be supported in a straight and level position at a minimum of three points, where both jambs meet the sill plate, and in the middle. Windows greater than 30" should be supported every 12". Multiple windows should have a shim under each mullion. Ensure a minimum gap of  $\frac{1}{4}$ " between the sill plate and the window frame to allow for fluctuations in building materials and the window unit. (Figure 2)



From the exterior, set the window on the sill shims and adjust the side clearance to be equal on both sides. Using galvanized steel roofing nails which are long enough to penetrate the framing by at least 1", tack one upper corner to the nail fin to keep the window in place.

Make sure the window is centered, plumb, level, square and true in the opening, then nail the bottom opposite corner at the sill.

The unit requires shims in both side members at the top, middle, and bottom. Units over 60" in height require 2 additional shims, per side, equally spaced between existing shims. (Figure 2)

The measurement across the top, the middle, and the bottom should be the same. The wool pile (weatherstrip) clearance between the sash and frame will be even. Units which have meeting rails will be aligned evenly, and the cam latches should lock smoothly.

Nail the entire perimeter using every other slotted hole in the nailing fin/brickmold (approx. 12" centers) to the sheathing. Multiple units must be nailed directly under and 6" either side of each mullion.

Nail the fin snug, but not tight, similar to installing siding. Nails should be just tight enough to hold the window, but not stop movement of the frame work beneath during expansion and contraction.

Operating window units should have additional fasteners installed through window frames into framing members, as shown in the North Star renovation installation sheets specific to the window type.

Use self-adhesive flexible flashing, (ice and water shield tape) a minimum of 4" wide, with a self-adhering surface on one side, approved for use on vinyl, wood, and other substances such as house wrap.

Apply sill flashing over the sill fin, extending at least 2" beyond each side jamb fins. Next, apply jamb flashing over the jamb fin, continuing at least 2" over and beyond the sill flashing. Apply head flashing, extending 2" past the jamb flashing. (Figure 3)

Leave a ¼" gap around the entire perimeter of the window frame when brick, stone, and stucco finishes are used on the exterior, to allow for fluctuation and expansion of materials and mortar.

Insert foam backer rod around the entire perimeter and apply generous amounts of caulking to provide a weather tight seal. Make certain that the drainage weeps on the outside of the window are open to allow water to drain from the sill.

On the interior, fill gaps between the window frame and framing members with fiberglass insulation, or low expansion type foam. Trim the interior to suit the application.

Check to ensure unit operates properly.

**IMPORTANT:** North Star Vinyl Windows and Doors will assume no responsibility for the consequences of inadequate or improper installation or lack of care of the installed product.

There are different methods that can be used for a successful installation. These are suggestions only.

