

**PLEASE READ THE ENTIRE INSTALLATION INSTRUCTIONS BEFORE INSTALLING. All installation instructions are attached to the unit(s).**

These instructions are consistent with those used to achieve window ratings and must be followed to achieve the rating which was purchased. National, State, and Local codes vary and supersedes the procedures outlined in these instructions. It is the responsibility of the installer, builder/owner to comply with these codes.

## Installing a Double-Hung Window Unit

- Frame the rough opening width  $\frac{1}{2}$ " wider than the outside of jamb width and the rough opening height  $\frac{1}{2}$ " higher than the outside jamb height. Make sure to add clearance for the sill pan to rough opening width and height. Frame this rough opening square and plumb.
- Allow  $\frac{1}{4}$ " clearance between all window components and masonry openings. At no times should masonry be allowed to touch the window frame or casing.
- Do not remove corner braces or lockrail shipping strap.
- Close and lock sash.
- Apply caulk to the backside of the exterior casing across the top and both sides of the window where it comes in contact with the wall.
- Set the unit into the rough opening.
- Place level across the sill of the window. Shim under the side jambs and center sill support blocks as required.
- When the sill is level, partially nail through the exterior casing on the lower corner of the window casing 3" from the outside corner. Make sure not to drive the nail in completely in case you need to re-position the window during installation.
- Next, plumb the window and partially nail through the exterior casing on the opposite diagonal corner at the top of the window unit. Again make sure not to drive the nail in completely in case you need to re-position the window during installation.

INSTALLATION INSTRUCTIONS CONTINUED ON BACK

## Team Lift

Two people are required to set the window. For safety, a second person must secure window until unit is completely nailed in.

## Nails, Sealers, Foam

A 16D hot dipped galvanized nail is the minimum fastener required. Make sure nail length is appropriate for your type of wall construction. The nail must penetrate the wood framing a minimum of 1-7/8". (This does not include the thickness of the casing.)

Sealer must be ASTM C920-05 Standard Specification for Elastomeric Joint Sealants compliant and be compatible with the materials used on the outside of the building as well as the window and any other materials used around the window opening.

All flashing and sealing of the window must be done as specified in ASTM E2112-07. If expanding foam is used around the window is must be low expansion foam which complies with ASTM E2112-07.

## Warranty Claims

FAILURE TO INSTALL, FINISH OR CLEAN THIS PRODUCT ACCORDING TO THESE INSTRUCTIONS WILL VOID ANY WRITTEN OR IMPLIED WARRANTY.

Windows must be protected by the builder from



## INSTALLATION INSTRUCTIONS [cont.]

- For proper operation it is very important that the frame not be bowed in or out and the frame must be square.
- Re-check the window sill to confirm that it is still level. Measure diagonally from corner to corner in each direction to confirm window frame is square. Window is square when both diagonal measurements are the same. Once confirmed that the window is square, you may finish nailing the lower corner nail all of the way in.
- Check the side jambs for plumb. Shim between jambs and rough opening every 16" to maintain straightness, level and plumb. Window must be shimmed on each side at the lockrail. Window should measure the same width from the top of the window to the bottom of the window. Make sure all shims are secure and trim off any excess.
- Once the window is properly shimmed, you may finish nailing the nails all of the way in at the corners. Continue to nail through the casing around the perimeter of the window. Place nails at a maximum of every 8" on center.
- Once the unit is installed verify that the sashes are operating properly.
- Apply a bead of caulk around the entire perimeter of the unit where it meets the wall. Caulk all joints as required after installation is complete.
- Properly flash or seal all windows around the exterior perimeter in accordance to ASTM E1212-07.
- When applying the exterior fascia/finish on the house make sure that no weight of the structure is transferred to the window unit.
- After the exterior finish is applied (siding, brick etc...) apply caulk around the perimeter of the window casing following the caulking manufacturers directions.
- Note: During the installation of interior trim make sure that the nails do not penetrate the jamb liner (this is the track that the sash slide up and down in).

ASTM E2112-07 "Standard Practice for Installation of Exterior Windows, Doors and Skylights" ASTM International.

For referenced ASTM standards, visit the ASTM website, [www.astm.org](http://www.astm.org), or contact ASTM Customer Service at [service@astm.org](mailto:service@astm.org).

## Warranty Claims [cont.]

any cleaning chemicals and construction materials contamination (especially muriatic acid). Do not use any solvent based chemicals on windows.

Window films, interior insulated or reflective window treatments and storm windows can cause excessive heat build up which may lead to performance failures which would not be covered under the warranty.

For full warranty details, please see our website: [precisionmillworks.com/warranty](http://precisionmillworks.com/warranty)

## Instructions for Tilting and/or Removal of Double-Hung Sash

\*\*\*Caution! Sash are heavy. The aid of a second person may be required\*\*\*

- 1- Raise bottom sash three to four inches above window sill.
- 2- Slide tilt latches (located on each side of sash on lock-rail) toward lock.
- 3- While holding sash at corners at tilt latches, pull sash toward you. Tilt to 90 degree angle.
- 4- To remove sash. While sash is at the 90 degree angle, lift sash up 2-3 inches which will release it from the pivot shoe. Then raise one side of sash up and rotate free from the jamb liner.
- 5- To remove the top sash, lower the sash to around the middle of the frame and repeat the procedures above.
- 6- When installing the sash reverse the procedure as outlined above.
- 7- WARNING! Make sure that when installing the sash that the metal pivot pins on the sides of the sash are slid down into the pivot shoe in the jamb liner completely so that they are properly engaged.