SAWDAC is not responsible for or liable for any use or misuse of the information contained in this window installation guide.
**Window Installation Guide**

This guide provides basic information on the installation of PVC windows in low-rise housing in both new and replacement situations. For detailed information about window technology, shims, fasteners, polyurethane foam, flashing, glazing technology, low-emissivity coatings, inert gas and other window related topics go to [www.sawdac.com](http://www.sawdac.com) or [www.windowwise.com](http://www.windowwise.com).

**Window types:**

- **Awning:** Hinged at the top. Swing in or out.
- **Casement:** Hinged at side. Swing out.
- **Fixed:** Does not open.
- **Side Sliders:** One or both sash slide horizontally.
- **Single Hung:** Top sash is fixed. Bottom sash slides vertically.
- **Double Hung:** Both sash slide vertically.
- **Tilt & Turn:** Tilts in for ventilation or opens in.
- **Hopper:** Hinged at bottom. Opposite of awning.
- **Bay & Bow:** Combination of windows that project out.

**Handling:**

Windows are stored upright, sill down indoors or under protection from sun and rain. Carry windows by the jambs or by the sill not by the head.

**Shimming and Fastening:**

Position and shim window in the opening, plumb, level and square. Shim every 16 inches on the sill and every 24 inches on the jambs. Fasten through jambs at shim locations (see shimming diagrams) with round head rust protected screws. No shims go at the head due to possible deflection of header. No fasteners go through a sill because they could compromise drainage. Wide windows (> 65") may require a fastener placed at the mid-point of the sill through the accessory groove to prevent bowing.

Shim placement is very important and varies depending on style of window (see shimming diagrams).

Note: Brick mould or nailing flange: These window components cover the outside of the space around the window and they assist in alignment (plumb) of the window. Fasteners placed through the nailing flange hold the window in place while shimming and fastening through the jambs is carried out. Nailing flange fasteners does not replace jamb fasteners.
Weather Tightness

The components of a weather tight installation are:

**Interior Air (vapour) Barrier:** The air-barrier provided by the polyethylene sheet under the drywall must be continued through to the window frame. To accomplish this, apply low-expanding polyurethane foam in the space around the window making sure that the foam makes continuous contact with the poly. Caulk the ends of shims.

**Insulation:** Use polyurethane foam. Apply two beads of foam about one inch in depth on all four sides of the window frame. One bead goes along the outside edge of the window frame directly behind the brick mould (nailing flange). The other bead of foam goes near the inside edge of the window frame. If jamb extensions are not sealed to the frame be sure that the bead of foam covers the joint between the jamb extension and the window frame on all four sides of the window.

**Shedding of Rain Water:** The space around a window must be covered on the outside with a brick mould (nail flange) or with flashing. Caulk where brick mould meets adjacent siding or masonry finish. In new construction the window is placed before the exterior finish so caulking of the joint between these two components is done after the exterior finish is installed.

**Drip Cap:** The building code requires a drip cap be placed above the head of a window. This is a very important flashing for effective shedding of rain water. The back leg of a drip cap extends at least 2 inches up behind the building paper / exterior air barrier. If siding j-channel is placed above a drip cap it must have drainage holes.

**Sub-Sill Drainage:** Flashing of the sub-sill before installing a window creates a secondary drainage path for any rain water that may enter the window opening. If the window drains as it should and if the window is installed as per these instructions no water will enter the window opening.
Shimming and Fastening Diagrams:

**FIXED WINDOW**

**HORIZONTAL SLIDER**

**VERTICAL SLIDER**

**CASEMENT WINDOW**
Replacement Window Drawings:

**Retrofit:**

- New caulking exposed
- New caulking hidden

**Complete-Tear-Out or New Construction:**

- Cross sections through jamb