

# Installation Instructions for Replacement Casement / Awning Windows

## Installation into Existing Wood Opening

These windows are normally double hung frames with sloped sills.

1. Remove screens and place the window in the opening for a trial fit. Determine the desired height of the sill extender (and header extenders if required).
2. Remove the window from the opening. Score and break off excess leg of the sill extender (head extender), caulk accessory groove(s) and snap into the accessory groove on the sill (header). (See Fig. 1)

**Note:** If the sill is to be covered with coil stock, apply coil stock prior to setting the window into the opening.

3. Place insulation the length of the sill between the stool and the location of the exterior face of the window. This should be a thin strip of insulation so as not to cause the sill to bow up. (See Fig. 2)

**Note:** Due to the narrow reveal of the casement main frame, the exterior stops may need to be altered prior to installation.

4. Place the window in the opening. Center the window and pull the interior edge of the sill tight against the existing stool.
5. Fully open the casement. Removal of the sash will make fastening the mainframe easier.
6. Place a shim at the upper hinge jamb installation hole and run a screw into the existing framing. Be sure to press the window tight against the stop while fastening. (See Fig. 3)
7. Check that the jambs are plumb and the sill is level. Check for square by measuring diagonally from the top corners to the opposite bottom corners. Shim and screw through the remaining installation holes. (See Fig. 4)
8. If the sash was removed, re-attach it.
9. Close the sash and check the alignment between the sash and the main frame. If necessary, the sash can be adjusted by turning the adjustment stud on the hinge track. See "Adjustment Instructions".
10. Insulate the jamb and header pockets with pre-cut strips of batt insulation. Stuff them between the replacement window frame and the existing wood frame (be careful not to overstuff insulation). (See Fig. 5)

**Note:** If spray-in foam is chosen, Must use AMI approved spray-in foam product

11. If the installation was from the interior, replace the interior trim or replace with new trim if necessary. Apply a continuous bead of silicone caulk around the perimeter where the new window meets the interior trim.
12. If the installation was from the exterior, it is recommended that exterior wood stops be used in all casement / awning installations to lend proper support when the sashes are in the open position. Caulk the perimeter joint between the replacement window and the stop.

**Note:** The replacement window should be in the closed and locked position prior to caulking the interior and exterior. If coil stock is to be used on the exterior, apply before caulking.

13. Replace the screen.

## Installation into Stud Wall

The stud wall opening is the rough wood framing that remains after removing the old window sashes and frame. These installations can be done easier from the exterior. The new replacement window will be placed tight up against the remaining drywall return or frame extender on the interior.

The main difference between this application and the installation into a wood frame is the new replacement window is going to sit on a flat sill. The use of a sill extender will most likely not be necessary. Follow all instructions for "Installation into Existing Wood Opening" less the frame extenders.

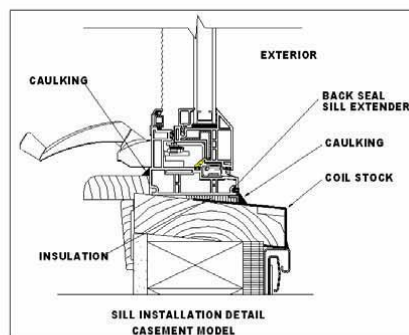


Figure 1

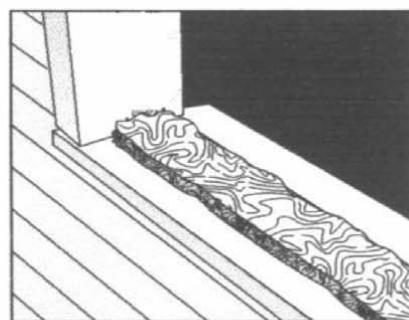


Figure 2



Figure 3

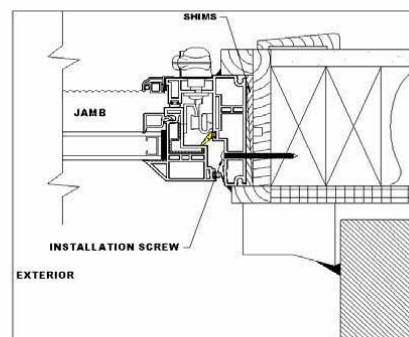


Figure 4

### Installation into Existing Metal Frame

This installation process uses the existing metal frame and can be accomplished from the interior or exterior.

The existing metal frame must have wood blocking fastened into the sash tracks on the sill and jambs to help support the weight of the new window and supply a means for fastening the new window into the opening. Wood blocking is to be cut so that it is flush with the top of the metal frame.

1. Remove screen and sash and place the window in the opening. Position the frame so that the installation screw holes line up with the wood blocking.
  2. Center the window in the opening. Be sure to position the window in the opening where the depth from the interior wall is equal on all four sides.
  3. Place a shim at the upper hinge jamb installation hole and a screw into the blocking. (See Fig. 3)
  4. Check that the jambs are plumb and the sill is level. Check for square by measuring diagonally from the top corners to the opposite bottom corners. Shim and screw through the remaining installation holes. (See Fig. 6)
  5. If the sash was removed, re-attach it.
  6. Close the sash and check the alignment between the sash and the main frame. If necessary, the sash can be adjusted by turning the adjustment stud on the hinge track. See "Adjustment Instructions".
  7. Insulate the jamb, sill, and header pockets with pre-cut strips of batt insulation. Stuff them between the replacement window frame and the existing frame (be careful not to overstuff insulation). (See Fig. 5)
- Note: Spray-in foam insulation is not recommended as it may cause frame distortion.**
8. The interior and exterior can be finished in several ways. Wood trim or vinyl frame extenders are the most prevalent. It is recommended that exterior wood stops and interior trim be used in all casement / awning installations to lend proper support when the sashes are in the open position. All needed installation materials should be noted so that they are on hand at the time of the installation.
  9. All interior and exterior perimeter joints are to be sealed with silicone caulk. If coil stock is to be used on the exterior, put in place prior to caulking. (See Fig. 6)
  10. Replace the screen.

### Installation into Rough Concrete Masonry

This installation process involves the use of a wood buck frame attached to a concrete masonry opening.

1. With the old window frame and sash removed, install new wood buck framing. Typically the buck consists of a 1" x 4" board ripped down to the depth of the new window. (See Fig. 7)
2. The new wood buck must be sealed against the concrete masonry. Place a generous bead of masonry adhesive caulk around the perimeter of the concrete rough opening where the wood buck will be placed.
3. Place the wood buck in the opening over the adhesive caulk. Press firmly to insure a good seal.
4. Fasten the wood buck to the concrete with ram set nails or concrete masonry screws long enough to penetrate the concrete by a minimum of 1" to 1-1/4".
5. Proceed to step #1 of Installation into Stud Wall.

#### Notes:

- #8 x 2 1/2" pan head screws are supplied with all casements and awnings. For rough concrete masonry openings, a shorter screw will be necessary where the 1" x 4" wood buck is used. The installer will need to substitute a #8 x 1" pan head screw.
- Check Local Building Codes for all installation requirements.
- Do not fasten the new casement / awning windows through the sill as it will allow water leakage to the interior wall cavity.
- All caulk should be a neutral cure silicone (colored to match).



Figure 5

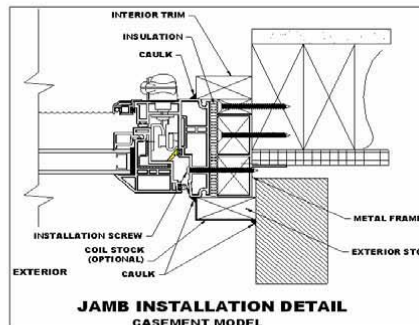


Figure 6

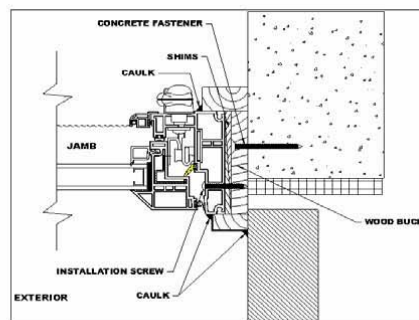


Figure 7

### Casement Hinge

#### Adjustment Instructions

At times windows may sag causing the sash to drag on the sill when closing. In order to accommodate this, casement hinges come with adjustment as standard. When the following instructions are followed, hinge adjustment is easy and convenient for installers, service departments, and end users.

With a full 0.078" adjustment, at the hinge, in both directions, the overall adjustment can make substantial changes in window function depending on the window size.

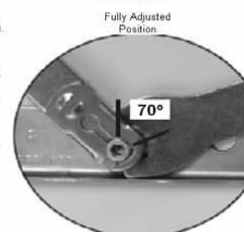
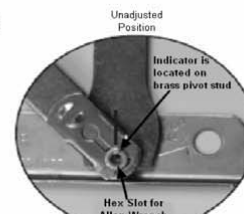


#### TOOLS REQUIRED

Hinges can be adjusted with either a standard 7/64" Allen wrench, or the specially designed flat wrench as seen in the photo's.

#### INSTRUCTIONS for SASH ADJUSTMENT

1. Open the window at least far enough to access the adjustment feature as shown in the closeup photographs.
2. Insert or attach either wrench
3. Rotate the adjustment stud away from the hinge shoe to raise the lock side of the sash.
4. Try to close and lock the window. Be sure to check that all locking points are engaged.
5. If the sash still drags, insert either wrench in the adjustment stud on the top of the sash.
6. Rotate the adjustment stud toward the hinge shoe to raise the lock side of the window further.



**NOTE**  
To avoid injury, it is recommended that the hinge arm not be disconnected from the hinge track during adjustment. Make adjustments in small turn increments and try out window function after each adjustment as over adjustment may cause the hinge to bind in certain applications. When using an Allen wrench, please check that the wrench has not been worn out and corners rounded prior to engaging into adjustment stud.