

Clad Casement & Awning Window Installation Instructions

Please read entire installation instructions carefully and thoroughly before starting.

These instructions include information for clad casement and awning windows.

Installation of unit:

1. Check rough opening to insure that opening is level, plumb and square. Verify that width and height dimensions are correct. Rough opening should be 3/4" wider than overall frame width and 3/4" greater than overall frame height. Sill plate should be flat and level. Make sure opening is dry, clean and free of dirt and debris.

✓ **Note:** Flashing and/or an appropriate method of sealing shall be designed as a part of an overall weather resistive barrier system. It is not the responsibility of the window manufacturer to design or recommend a flashing system appropriate for each job condition.

✓ **Note:** Self-adhered flashing material is recommended to be at least 9" wide.



Caution: Any variance from this installation procedure signifies that proper waterproofing becomes the responsibility of the design professional and/or the installer.

Sill flashing and sealing:

2. An overview of the proper flashing sequence is shown in figure 1.

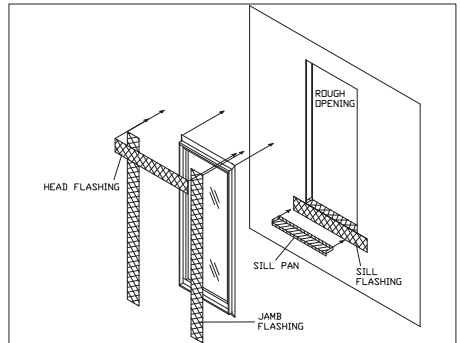


Figure 1

3. Begin flashing of the rough opening (RO) by applying flashing material along the exterior edge of the sill plate (see figure 2). Make sure that the flashing extends 8-1/2" beyond both sides of the RO (see figure 3).



Figure 2



Figure 3

4. Next, apply another length of flashing that will cover the sill plate. Cut to length a piece that is 2" wider than the opening and apply as shown (see figure 4). Overlap this flashing (in weather-board fashion) approximately 1" onto the previously applied flashing.



Figure 4

5. Carefully cut the flashing to fit the opening using the rough stud as a guide (see figure 5).



Figure 5

6. Fold the middle section of the flashing onto the sill plate. Keep as smooth and wrinkle free as possible (see figure 6).



Figure 6

7. Cut two small pieces of flashing to fit into the corners of the rough opening. Each piece should extend the width of the rough stud and approximately 1" up the side (see figures 7, 8 and 9). Check sill for level.



Figure 7



Figure 8



Figure 9

8. Next, pre-drill 1/8” holes through the nailing flange to prepare for installing the window into the rough opening (see figure 10). The holes should be drilled through the indentation that runs the length of the nailing flange. Start the holes approx. 3” to 4” from each corner and then 12” to 16” on center thereafter.



Figure 10

9. Once the flange holes have been pre-drilled, apply a 1/2” bead of polyurethane along the backside of the 45° clad frame miter joint (see figure 11). Tool sealant bead in place.

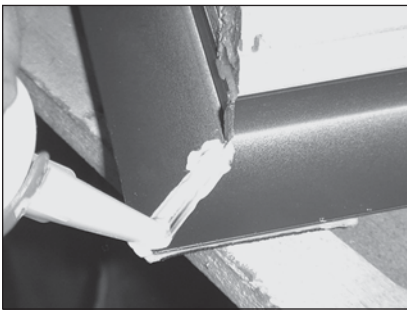


Figure 11

10. Sill Pan. Sierra Pacific strongly recommends the use of a sill pan. A rigid or flexible membrane pan may be used depending upon project specifications and installation conditions.

Installation should be compliant with ASTM E 2112 “*Standard Practice for Installation of Exterior Windows, Doors and Skylights.*” Figures 12, 13 and 14 illustrate using a rigid sill pan.

11. For rigid sill pans, apply two continuous beads of polyurethane sealant across the width of the sill plate, approximately 1/2” and 4” from the exterior edge (see figure 12). The sealant beads should extend 6” up each side of the rough frame members. One additional bead should be applied along the exterior vertical edge of the sill plate, as shown. Set the sill pan in place (see figure 13) and make sure that it is fully seated in the sealant.

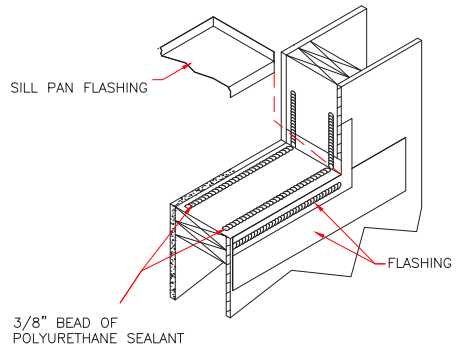


Figure 12

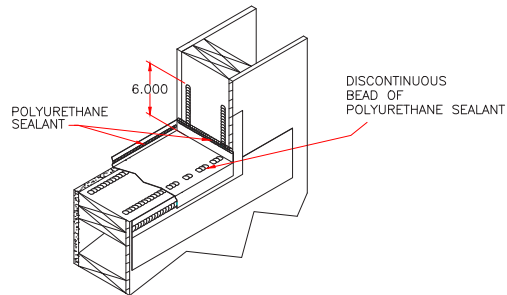


Figure 13

12. Once in place, apply a bead of sealant across the vertical back leg of the sill pan. The bead should be continuous and extend the entire length of the sill pan. A discontinuous bead should then be applied near the exterior edge of the sill pan to seal between the pan and the rough framing.

13. Prior to setting the window, place 1/4" non-compressible shims onto the sill pan as shown (see figure 14). Space shims 1" to 2" in from each end, then approximately 12" on center thereafter.

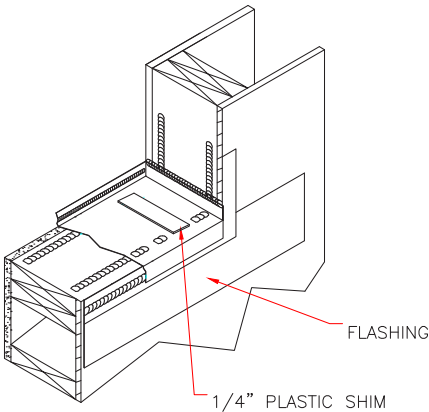


Figure 14

14. Next, apply a continuous 1/2" bead of polyurethane along the exterior edge of the rough opening at the head and both sides. Do not apply a continuous sealant bead along the front edge of the sill or sill pan.

15. Insert and center the window in the rough opening (see figure 15). When doing so, tilt the window back so that the sill can be set into the opening and onto the sealant. Take care not to scrape sealant off the sill plate.

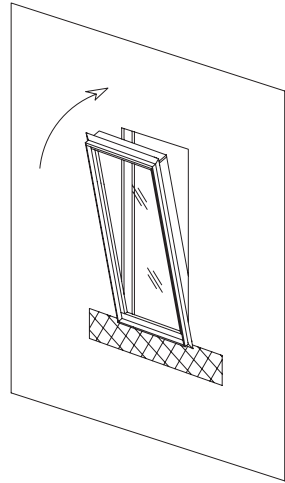


Figure 15



Caution: Lift and position windows with care. Some windows or window mullion assemblies are very heavy. Please use two or more people to handle heavy windows.

16. With the window set into the rough opening, check to make sure it is centered. Tack the window in place with one 1-1/2" stainless steel screw (or equivalent) in the side nailing flange within 3" to 6" of each corner (see figure 16).



Figure 16

Check for squaring and alignment:

Make sure that the window is set straight, flat and level. Use a tape measure to measure the diagonal dimensions of the frame to ensure that the frame is square. Also, check frame width across top, middle and bottom (see figures 17 and 18).

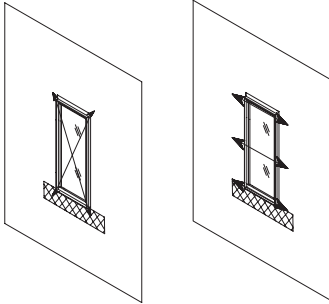


Figure 17



Figure 18

Use a framing square to check the squareness of the frame (see figure 19).



Figure 19

Shim at the top of the side jambs as required (see figure 20).



Figure 20

Use a level or straight edge to verify that the jambs and sill are straight (see figures 21 and 22).



Figure 21



Figure 22

Securing the window and final flashing:

1. With the window straight, square and level, finish securing in place. Secure the nailing flange to the sheathing, beginning 4” from the corner, then 12” to 16” on center thereafter (see figure 23).



Figure 23

2. Place a small amount of polyurethane over the head of each screw (see figure 24). Tool sealant in place.



Figure 24

3. With the unit completely secured to the structure, apply a bead of sealant at the edge of the head jamb nailing flange where it meets the sheathing. Also, apply similar beads of sealant between the edge of the side jamb nailing flange and the flashing material. Tool the sealant into the joint to ensure the joint is filled.

4. Apply a layer of flashing over the side jamb nailing flange. The length of the flashing should equal the height of the RO + (2x width of the flashing material) – 1”. Install the flashing so that the edge contacts the inside corner of the nailing flange. The top of the flashing should extend only 8-1/2” above the top edge of the window frame. Make sure that the side flashing overlaps and covers the ends of the sill flashing. Repeat for opposite side (see figures 25-28).



Figure 25



Figure 26



Figure 27



Figure 28

5. Next, apply the head flashing. The length of the head flashing should equal width of RO + (2x width of the flashing material) + 2". Extend 1" beyond edge of each side flashing (see figures 29 and 30). Attach top edge of flashing to the wall.



Figure 29



Figure 30

6. Unlock window and use crank operator to open window and verify that it opens smoothly and correctly (see figure 31).



Figure 31

7. Once the window has been anchored in the opening and properly flashed, from the interior, extend the continuous sealant bead applied to the sill plate up the gap between the window side frame jambs and rough studs (see figures 32 and 33). Apply the sealant 6" up from the sill. Use backer rod as necessary. Repeat opposite side.

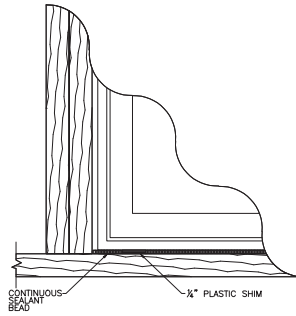


Figure 32

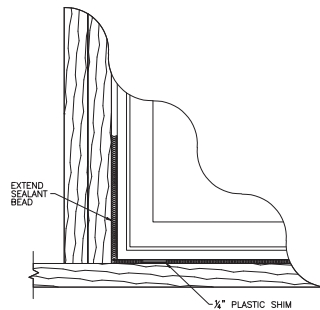


Figure 33

Applying the operator cover:

Observe the backside of the Encore style rotary operator cover. Note the built-in clips at each end of the cover (see figure 34). Orient the cover as shown in figure 35. Press the cover onto the base so that it snaps in place. Next, attach the folding handle and tighten the set screw to anchor in place (see figure 36). The handle folds neatly into the cover when not in use (see figure 37).



Figure 34



Figure 35



Figure 36



Figure 37

Applying the Aspen escutcheon cover and handle:

The Aspen window utilizes a unique hidden lock system. The locking mechanism for an Aspen casement or awning window is located beneath the rotary operator.

A nylon construction lock handle is provided with each window to prevent the finished metal handle from becoming damaged during manufacture and installation. To lock or unlock the window, rotate the lock handle to the opposite side of the lock base.

For convenience, a hole in the tip of the handle allows it to be used in place of a rotary operator handle to open or close the window. Insert the hole over the spline on the operator and rotate.

The lock handle inserts into the fork at the front of the lock base (see figure 38). Press the handle into the fork until it snaps into place. Handle can be removed by grasping firmly and pulling straight out. Make sure handle and fork are oriented as shown. Move the handle fully to the left or right to lock or unlock the window (see figure 39). When moving the handle into the locked position, the handle will snap into place.

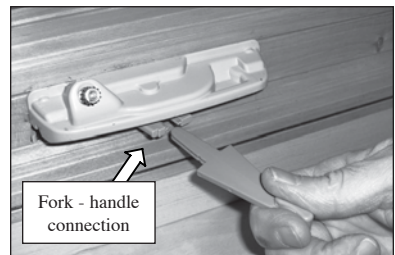


Figure 38

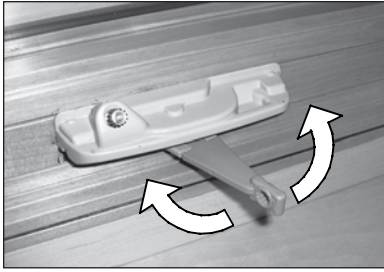


Figure 39

To install the finish hardware, first remove the construction handle. Align the lock escutcheon plate as shown (see figure 40) with the radius face up. Note that the fork fits through the slot in the escutcheon. Gently press the escutcheon plate into the lock base until it snaps into place. Insert the metal finish handle into the fork in same fashion as construction handle (see figure 41). Note the tip of the handle bends to one side (see figure 42). This bend allows for visual verification of the locked or unlocked position.

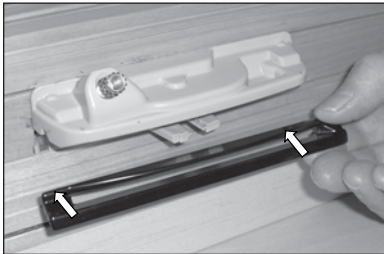


Figure 40

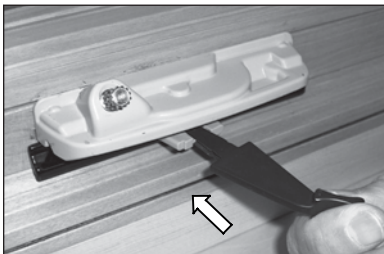


Figure 41

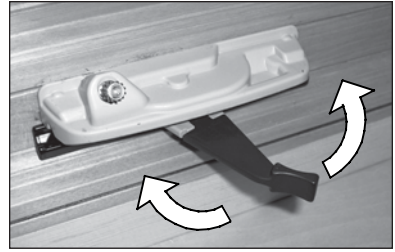


Figure 42

In the locked position, the handle tip will appear to lay flat against the window sill. In the unlocked position, the tip bends away from the window sill (see figure 43). Left hand window operation is shown. Right hand window lock handle opposite.

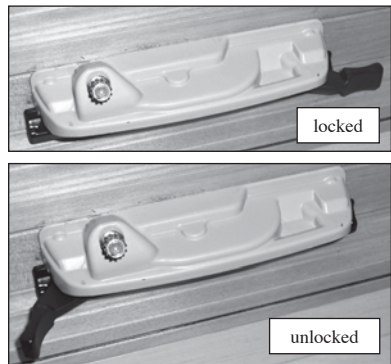


Figure 43

The application of the finish cover and handle for the rotary operator are shown previously in this section (see figures 34-37).