

# Casement/Casement Picture Rough Opening Installation with Sheathing Intact

**Tools:** (Not supplied by manufacturer)

- Tape Measure                      Utility Knife
- Drill                                      Caulk Gun
- Level                                      Hammer
- Putty Knife                              Safety Glasses
- Square                                      Hand Roller
- Foam Gun

**Supplies:** (Not supplied by Manufacturer)

- 9" flashing tape                      Sealant
- Low expanding Foam              Non-biodegradable shims
- Fasteners

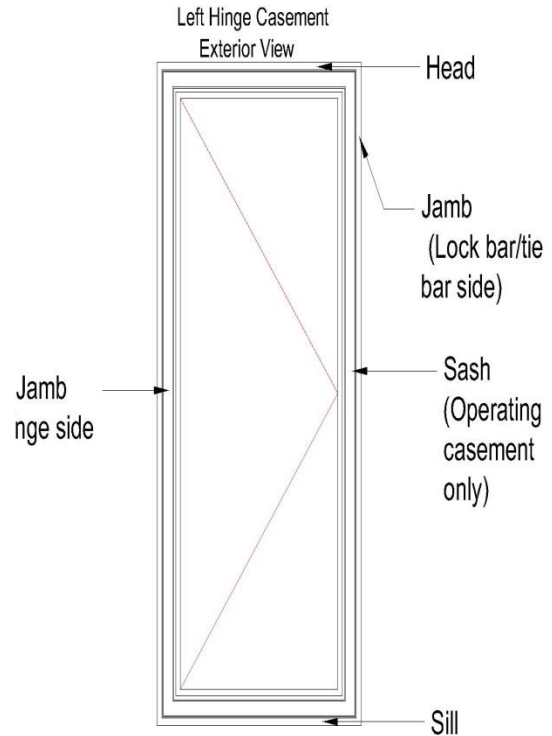
**Manufacturer supplied items:**

- Nail fin (if applicable)              Chevrons (if applicable)

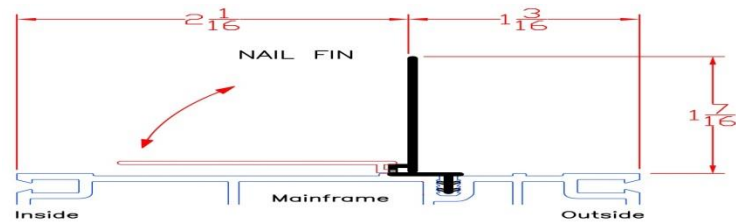
## Warnings:



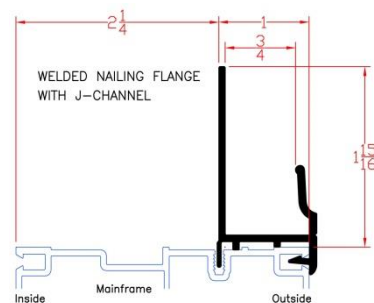
**Fig. 0-1**



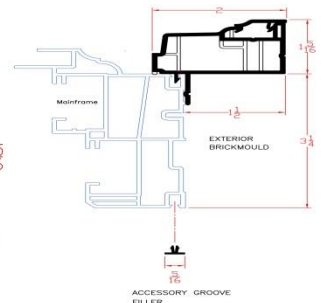
**Fig. 0-2**



**Fig. 0-3**

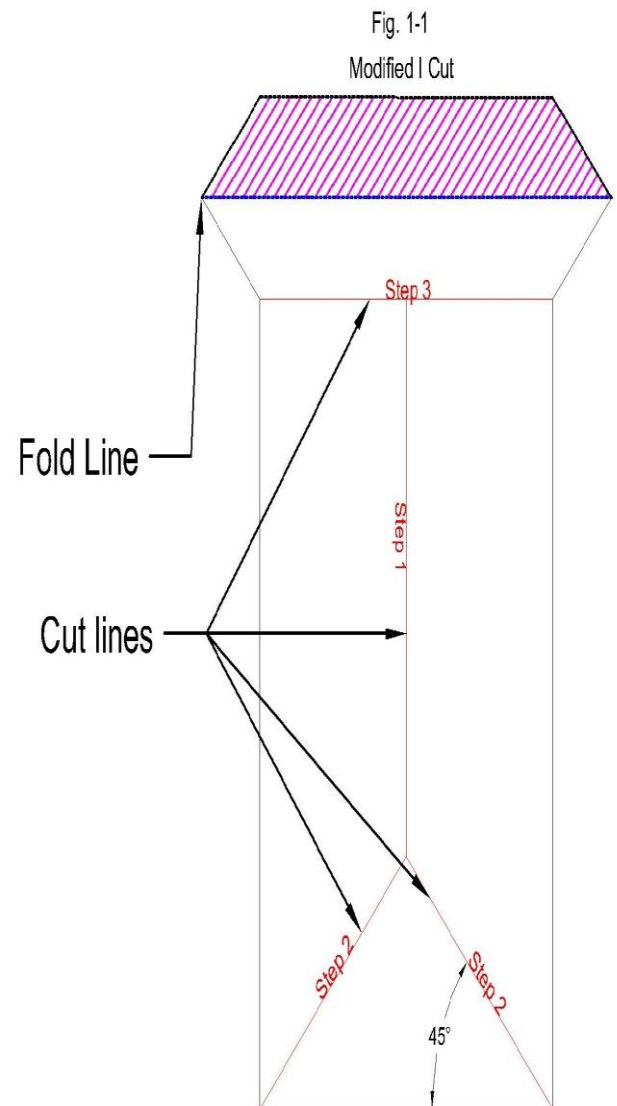


**Fig. 0-4**



## Step One: Rough Opening (RO) Prep

- Check opening for level, plumb and square. Note any discrepancies for proper shimming in later steps, or if possible, adjust rough opening to create a level, plumb and square opening.
- The exterior surface of the home should already have a weather barrier such as but not limited to Tyvek, TYPAR, or PINKWRAP.
- At the opening, create a modified I cut running from the top middle portion of the opening running down the middle stopping high enough to allow a diagonal 45 degree cut from bottom left and bottom right to meet your middle cut. (fig.1-1 Steps 1 and 2)
- Finally cut along the top or head of the window opening. (fig 1-1 Step 3)
- Fold the wrap toward the interior of the home and staple along the rough framing.
- Cut any excess house wrap off.
- At the top left corner of the opening, come up 9" and out away from the opening 9" and make a mark.
- Repeat this step for the right side.
- From each of the corners using a utility knife, cut from the created mark down to the top corner of the rough opening.
- From the left mark, cut down to the upper left of the rough opening.
- From the right mark, cut to the upper right corner of the rough opening. This will create a flap at the top of the window opening
- Fold the flap up and temporarily tape. (Fig. 1-1 Fold line)



***Below is the formula to determine the flashing tape lengths:***

Sill is RO width + 18"

Jamb is RO width + 17"

Head is RO width + 20"

- Cut the self-adhesive flashing tape to size using the formula provided above. If 9" flash tape is not being used, formulas will need to be adjusted. 9" is the minimum width permitted.
- At the bottom left corner of the opening come down 9" and out 9"; mark this spot and repeat for the bottom right corner.
- Apply your precut sill flashing tape starting at the one of the predetermined spots made in the previous step and end at the other pre-marked spot. The flashing tape should touch both marks and reach up to the outside bottom of the rough opening. (fig. 1-2)
- Use a hand roller to ensure a smooth even application of the flashing tape.
- Using a single piece of self-adhesive flashing tape, make a sill pan with end dams (sides) that run up the rough framing jamb at least 6" and fold over on to the face of the rough opening and extend outward from the rough opening at least 2". (Figure 1-3 and 1-4)
- Next, set your level on the sill of the rough opening and shim accordingly.

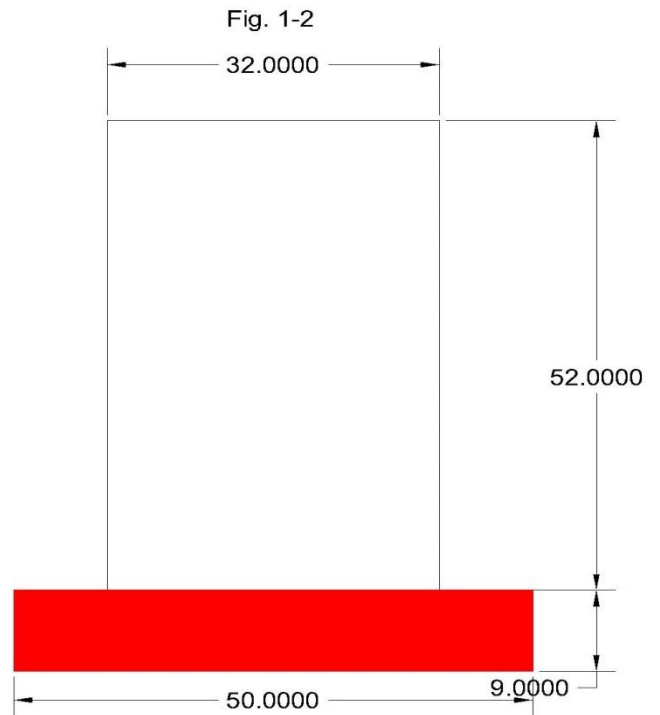


Fig. 1-3

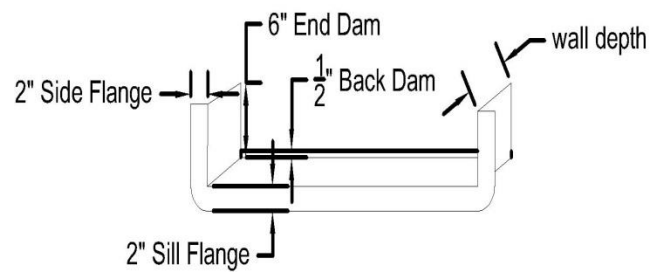
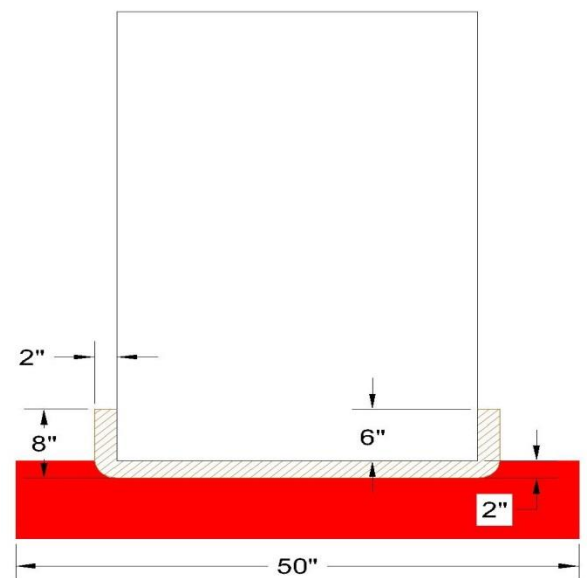


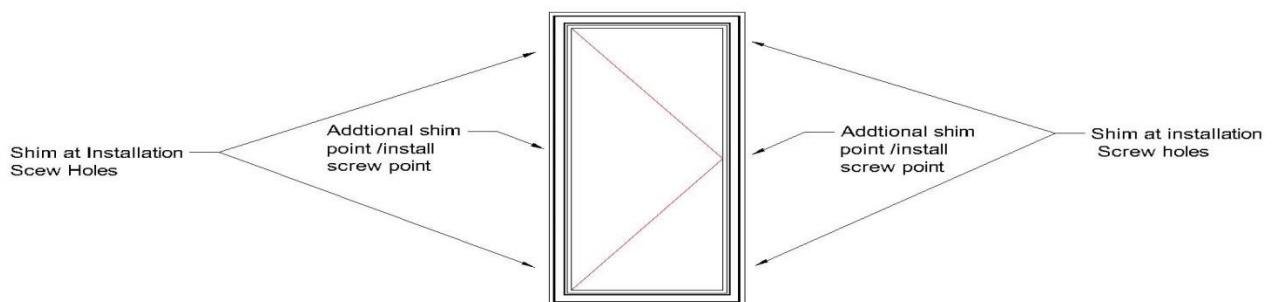
Fig. 1-4



## Step Two: *Window installation*

- Remove packaging from the replacement window using making sure not to cut or damage interior or exterior frame/sash areas or screen.
- If applicable, apply loose nail fin flange to all four sides of the window frame. (Fig. 0-2)
- To apply, press nail fin into the accessory groove located on the frame 1" back from the exterior face of the window. At each corner on the back side of the nail fin, (side closer to the interior of the window) apply the Sunrise Window supplied chevrons connecting each corner.
- Apply a 3/8" thick bead of sealant across the entire perimeter of the nail flange/j-channel nail flange following along the same line as nailing flange holes.
- Set the window in place tilting it so that the bottom of the unit is set in place first with the head of the unit tilted in afterwards.
- Make sure the window is centered in the rough opening.
- Press the nailing flange against the sheathing to create a seal good seal between the seething and nail fin. (Squeeze out of the sealant should present around the entire perimeter of the unit)
- Check for level, plumb and square.
- Shim at interior screw points. (fig. 2-1)
- Starting at the top of the left jamb side loosely install one mounting fastener. (tighten after final adjustments have been completed)
- Operate the sashes making sure they operate correctly, all locks function smoothly, and all sight lines are even.
- Check for level, plumb and square.
- Apply a fastener at the bottom right jamb nail flange.
- Check for level, plumb and square. Adjust if necessary.
- Apply fasteners to the remaining nail flange holes occasionally checking for level, plumb and square.
- Place a 3/8" thick bead of sealant around the window unit in a "U" shape. Each leg of the "U" should extent up past the head of the window unit up approximately 8.5".

Fig. 2-1



- Apply the left side and right side flashing tape. Each piece should extend 8.5" above the head of the window and set 1/2" above the bottom of the sill flashing tap (Fig. 2-2)
- Use a hand roller to press the flashing into the previously applied sealant making sure that the flashing tape has a smooth even application.
- Apply a 3/8" thick bead of sealant across the top of the nail flange following along the line of nail flange hole overlapping the jamb side flashing tape to the end of the nail flange on both sides.
- Apply flashing tape to the head of the unit. The flashing tape should overlap the left and right jamb flashing by 1".
- Using a hand roller, press the flashing tape into the previously applied sealant while make sure that the flashing tape is smooth and evenly applied.
- Lower the house wrap flap that was previously taped in the upward position and apply house wrap tape along the diagonal cut lines.

Fig. (2-2)

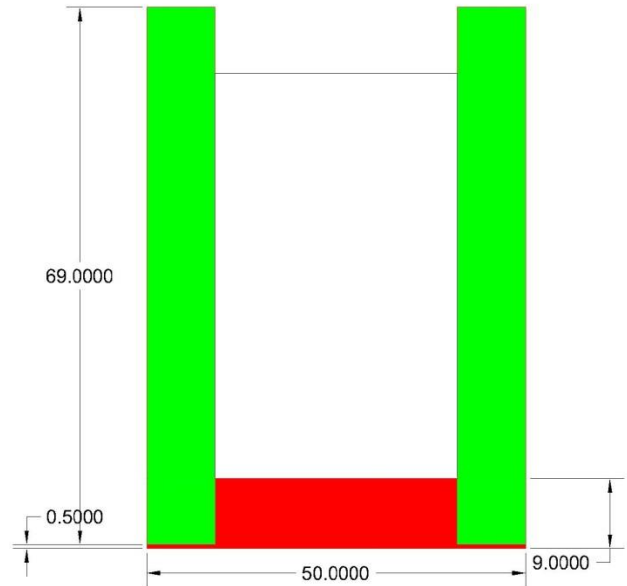
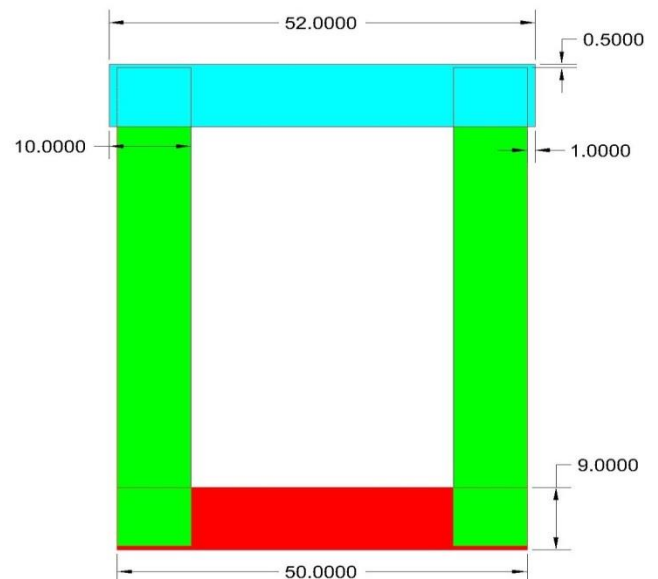


Fig. 2-3



### Step Three: *Interior Finishing*

- Secure the window using the provided installation screws in the pre-drilled screw holes. (Fig.2-1)
- Gaps around the interior perimeter of the window should have a layer of low expansion insulating spray foam added (refer to the spray foam manufacturer's instruction on the use of their product), or fiberglass insulation may be used. Insulation should not twist or distort the frame.
- Finish as desired.

**NOTE: There are many variations of install that may be encountered when replacing windows. One conventional replacement scenario is described in these instructions. For questions on appropriate installation procedures, refer to your GENERAL CONTRACTOR, LOCAL and STATE BUILDING CODES, ARCHITECTURAL SPECIFICATIONS, and ASTM E2112.**