

Picture Window and Welded Dead-Lite (Exterior)

Tools: (Not Provided by Manufacturer)

Tape Measure	Utility Knife
Drill	Caulk Gun
Level	Hammer
Putty Knife	Safety Glasses
Pry bar	Small/Large Flat head screw driver
Square	Wood (to be used as exterior stops)
Foam Gun (Optional)	3/8 drill bit

Supplies: (Not Provided by Manufacturer)

Sealant	Low expanding foam/Loose insulation
Drop Cloth	Non-biodegradable shims
Backer Rod	

Fig. 0-1

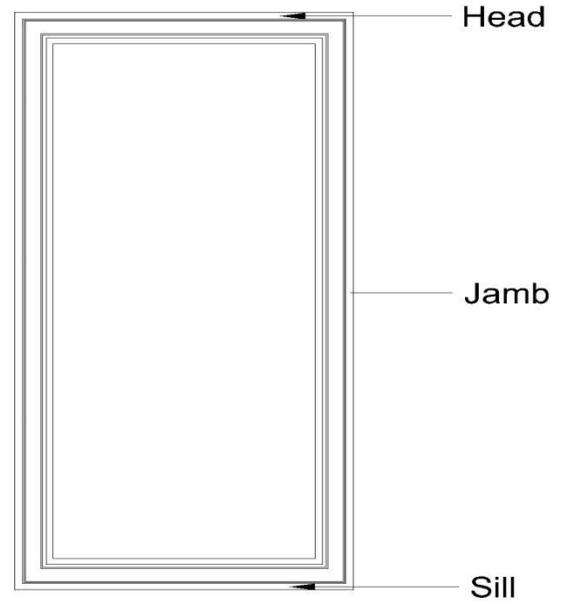


Fig. 0-2

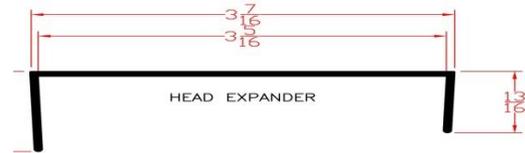
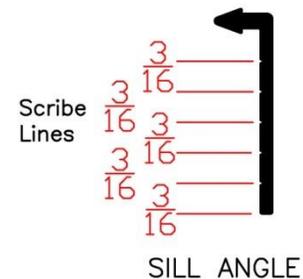


Fig. 0-3



! WARNING

Installer is responsible for following any local/Federal laws pertaining to the disturbance or removal of lead based paint or varnish. For general guidelines pertaining to lead removal go to www.epa.gov/lead

! WARNING

Windows should never be stored in direct sunlight when still in packaging. Be sure to store windows in a dry shaded area prior to installation.

! WARNING

Installer is responsible for proper disposal or recycling of all job site materials. Check your state and local laws for proper procedures for disposal and recycling of site waste.

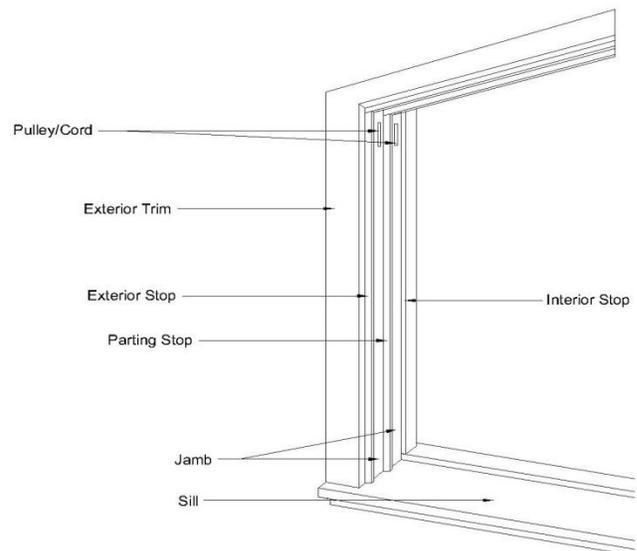
Step One: *Prepping the work area*

- Before beginning the installation, check window measurements of both the window opening and the new replacement window to make sure that the proper size was ordered and manufactured for that opening.
- Make note of any surfaces that may need to be repaired prior to the installation of the replacement window.
- Any household items that are blocking the window or that could potentially become damaged during the project should be removed. Items hanging from the wall or sitting loose on shelves may need to be removed.
- Protective coverings such as drop cloths or plastic sheeting should be used to cover the floor and furnishings at and near the work area.

Step Two: *Removing stops and sashes* (use figure 2-1)

- Remove the exterior stops. These stops may be re-used if not damaged.
- Pull the top sash down and cut the pulley cord to remove the sash.
- Cut the bottom pulley cords.
- Score and remove the parting stops that sit between the bottom/lock sash channel and the top/keeper sash channel. These will not be reused.
- Remove the bottom sash.
- Remove the pulley system at the top left and right of the jambs. The weight pocket cavity left by the pulley system should be insulated.

Fig. 2-1

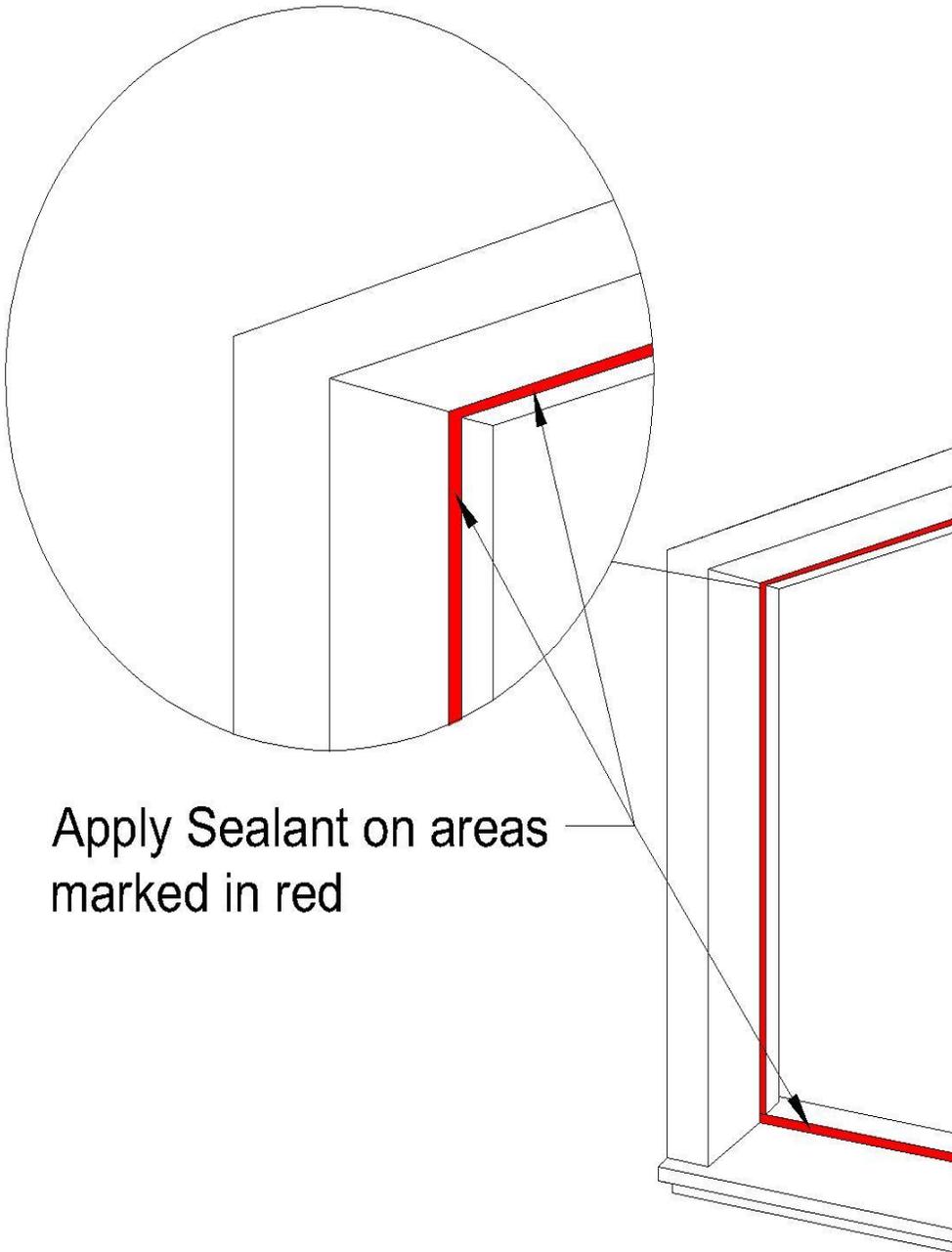


Step Three: *Prep the opening*

- Clean all debris from the opening.
- Any rotted or damaged materials in the opening must be replaced or repaired.
- Check the opening for sill crowning/bow. Level sill using shims. Check the opening for plumb and square.
- Remove packaging from the replacement window, making sure not to cut or damage the window or screen.
- Perform a dry fit to make sure that the new replacement window will fit properly and that there is adequate room for any adjustments that may be needed due to the opening being out of square, level or plumb.

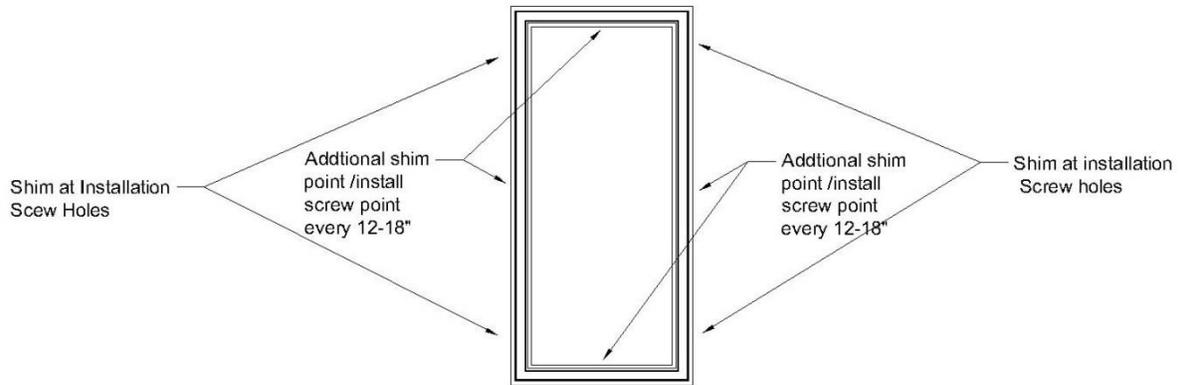
- At this time check, to see if a head expander will be necessary.
**If a head expander is needed, insulation should be placed between the head expander and head of the window. Head expanders are used to fill the gap between the top of the replacement window and the head of the existing window frame.*
- Sealant must be applied to the exterior portion of the interior jamb/head stops and the exterior portion of the stool (Fig.3-1)

Fig. 3-1



Step Four: *Installation* (use figure 4-1)

- Picture windows must have 3/8" installation screw holes drilled approximately 3" from each interior corner with additional installation screws holes placed every 12-18".
- Insert the replacement window into the opening bottom first, tilting the top back and then inwards making sure that the window is evenly seated in the sealant on the interior stops.

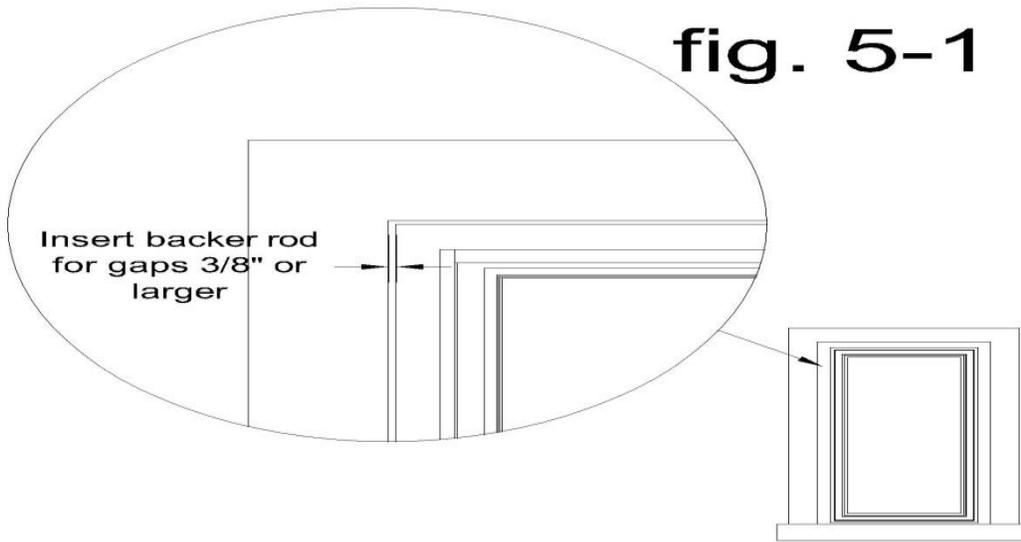


- Shims must be applied at all screw points making sure not to twist, bow, or distort the replacement window frame.
- Picture window must be secured using the provided installation screws into the previously drilled screw holes
- Insure the window is square after tightening each installation screw. Screws should be flush with interior pocket wall at the top and far enough in at the bottom points to allow the cap cover to be installed.

Step Five: *Finishing interior*

- Gaps around the perimeter of the windows should have a layer of low expansion spray foam added (refer to the spray foam manufacturer's instruction on the use of their product) or fiberglass insulation may be used. Insulation must not twist, bow, or distort the replacement window frame.
- If a sill angle is needed, it should be applied to the new replacement window at this point. Measure and cut the sill angle to the proper height and snap into the exterior sill snap groove.
- A bead of sealant must be placed around the exterior perimeter of the window. Any gaps larger than 3/8" will need to be filled using backer rod before a sealant is placed around the interior perimeter of the window. (figure 5-1)
- Two 3/8" gaps may be left in the sealant where the sill angle meets the previously existing sill, and the sill may be left uninsulated, if a "Drainage System" is desired (per ASTM E2112).

fig. 5-1



- New exterior stops or the previously removed exterior stops must be reinstalled.
- If no exterior capping is being applied, inspect the joint between the new replacement window and exterior stops for any gaps. If needed, sealant may be applied around the exterior where the stops meet the new replacement window.
- If capping the exterior trim, sealant should be applied where the capping meets the new replacement window.

Step Six: *Exterior finishing*

- Inspect the joint between the new replacement window and interior stops/stool. Remove any excess sealant and fill any voids. If needed, sealant may be applied around the interior where the stops/stool meets the new replacement window.

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.