

Hopper Installation (Interior)

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) | |

Supplies: (Not Provided by Manufacturer)

- | | |
|------------|-------------------------------------|
| Sealant | Low expanding foam/Loose insulation |
| Drop Cloth | Non bio degradable shims |
| Backer Rod | |

Fig. 0-1

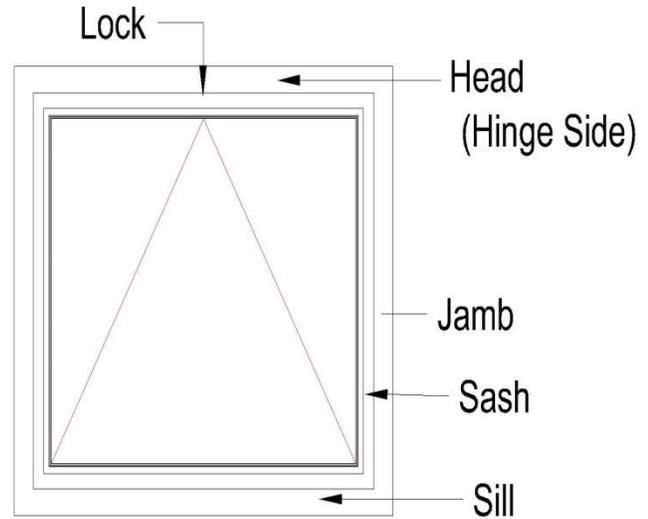


Fig. 0-2

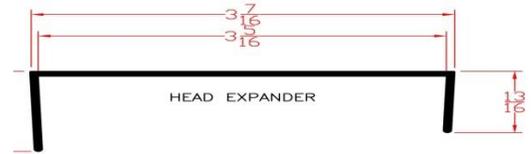
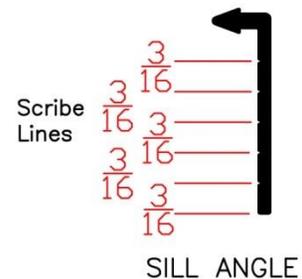


Fig. 0-3



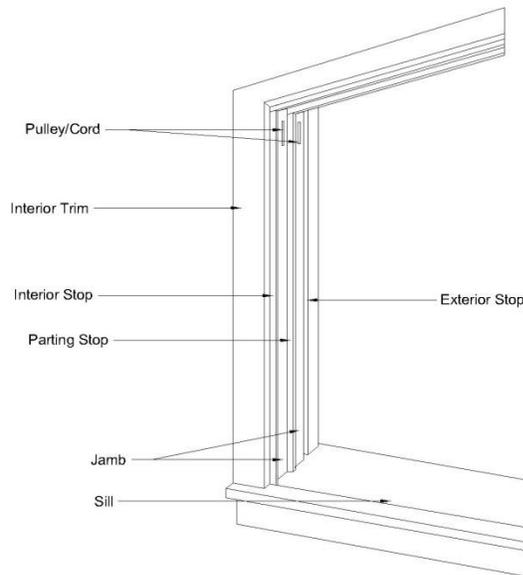
Step One: *Prepping the area*

- 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.
- Remove any house hold items that are blocking the window or hanging from the wall that could potentially become damaged during removal of the old window.
- Lay down a protective covering such as a drop cloth or plastic.

Step Two: *Removing stops and sash* (use fig 2-1)

- Using a utility knife, score the paint around the interior stops.
- Remove the interior stops. These stops can be reused if not damaged.
- Next, cut the left and right balance ropes with a utility knife. This should free the bottom/lock sash from the frame for removal.
- Remove the parting stops that sit between the bottom/lock sash channel and the top/keeper sash channel. These are not going to be reused.
- Pull down on the top sash and cut both the left and right side balance ropes to release the sash.
- Remove the pulley system at the top left and right of the jambs. Insulate the weight pocket cavity left by the pulley system.

Fig. 2-1



Step Three: *Prep the opening*

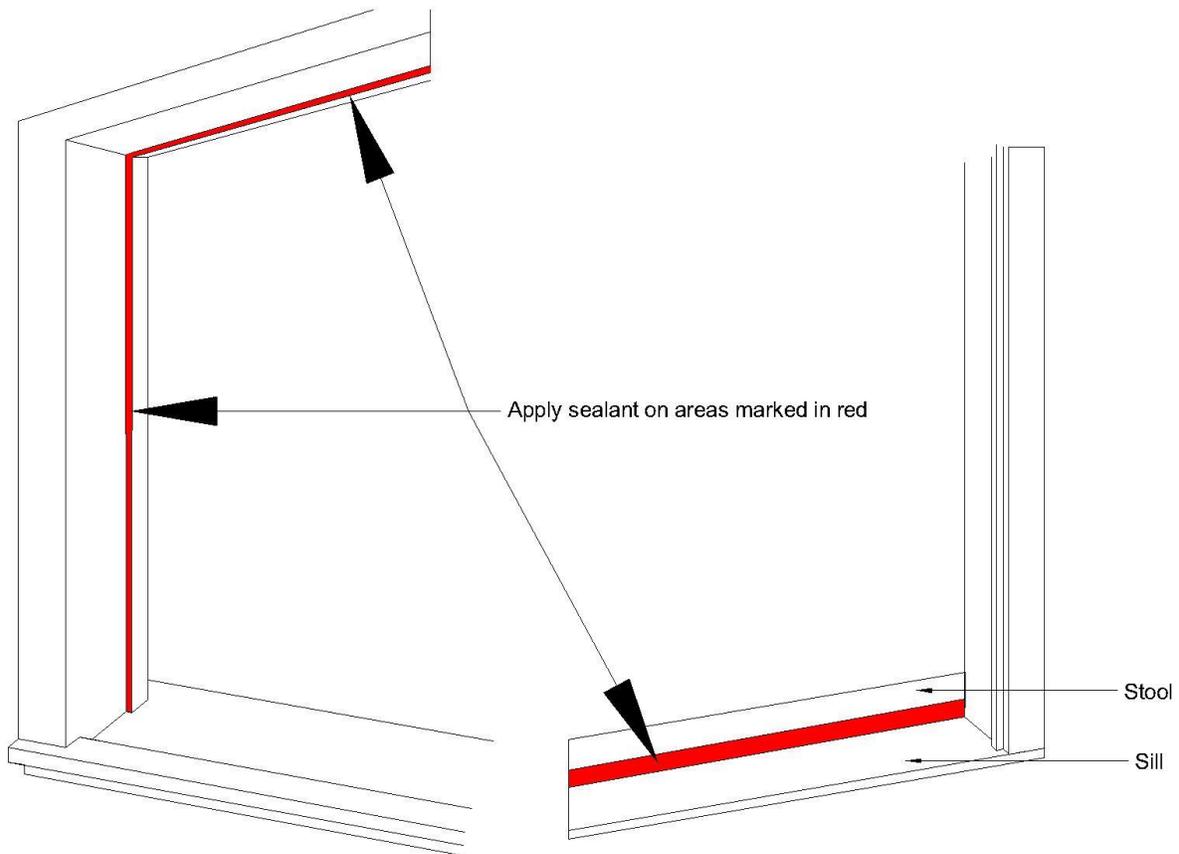
- Clean all debris.
- Inspect the opening for any damaged or rotted materials and replace or repair. This is also a good time to re-check the measurements of the opening.
- Remove packaging from the replacement window using a utility knife on the jamb edge only making sure not to cut or damage the window or screen.
**If a sill cap is being used you will want to add this at this time. Check the sill for Crowning/bowing and level sill using shims.*
- Remove the screen and set it aside.
- 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. If the sill is bowed or out of square attach shim at this point to level the sill.

- Measure for proper sill angle height and cut the sill angle.
- At this time, check to see if a head expander will be necessary and check/adjust the sill angle for proper fit.

****If a head expander is needed, insulation will need to be place between the head expander and head of the window. Head expanders are used to fill the space between the new replacement window and the head of the existing window frame.***

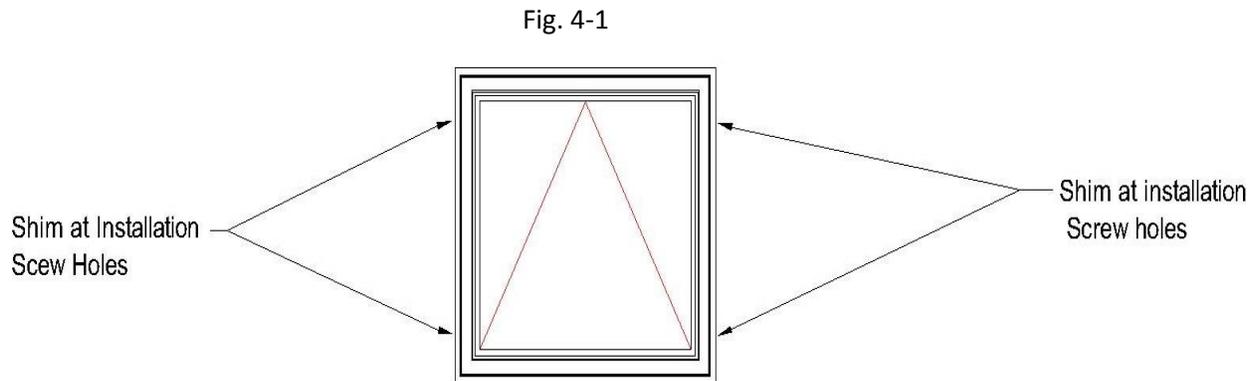
- Remove replacement window and attach sill angle and/or head expander if applicable.
- Apply sealant on the interior position of the exterior stops and the exterior portion of the stool.(fig 3-1)

Fig. 3-1



Step Four: *Installation*

- 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 exterior stops.
- Evenly shim all screw points making sure not over bow or twist the unit.(fig. 4-1)

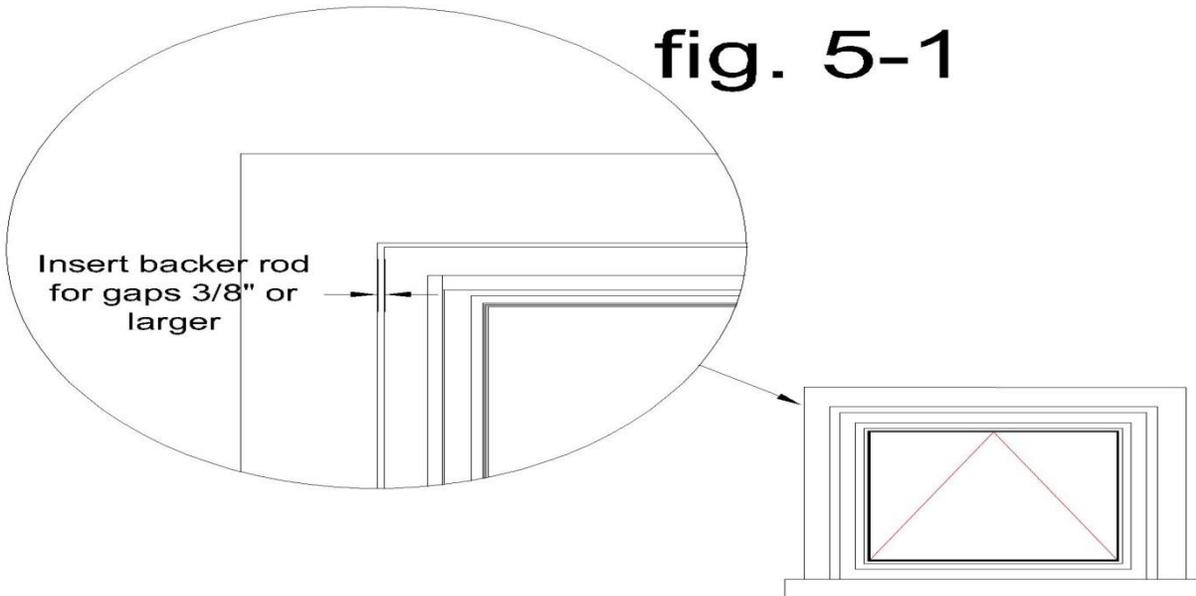


- Check window for square, plumb and level.
- Secure the window using the provided installation screws in the pre-drilled screw holes leaving all screws loose to allow adjustments.
- Insure the window is square after tightening each installation screw. Screws should be flush with interior frame wall at the top 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 manufactures instruction on the use of their product) or loose fiberglass insulation can be used to fill the gaps. (Remember loose insulation must remain fluffy in order to keep its insulation factor.)
- A bead of sealant should be placed around the interior perimeter of the window. Any gaps larger then 3/8" will need to be filled using backer rod before a sealant is placed around the interior perimeter of the window. (fig. 5-1)

fig. 5-1



- New interior stop or the previously removed interior stops (do not use if damaged) should be reinstalled and a bead of sealant should be used on any remaining gap between the sill of the replacement window and the stool. (Remember to use back rod on any gaps 3/8" of an inch or larger.)
- Replace the screen.

Step Six: Exterior finishing

- Any exterior damaged building materials should have been replaced prior to this point. As long as the exterior is in good shape, there is no need for capping, but capping can be used to finish if desired for a maintenance free exterior.
- Remove any excess sealant and fill any voids. If a sill angle was used, run a bead of sealant along the edge where the sill angle meets the previously existing sill. There is no need to leave gaps along this line of sealant as this product does not have main frame weep holes.

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.