Hopper Pocket Installation (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)

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

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

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**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](http://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 area

- Before beginning 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 materials that may need to be repaired or replaced prior to the installation of the replacement window.
- Any household items that are blocking the window 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 top keeper sash channel. These will not be removed.
- 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.

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 opening for plumb and square.
- Remove packaging from the replacement window, making sure not to cut or damage the window or screen.
- Remove the screen from the window frame and set aside for re-installation later.
• 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 will need to 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)
**Step Four: Installation** (use figure 4-1)

- 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.

Fig. 4-1

- Shims must be applied at all screw points, making sure not to twist, bow, or distort the new replacement window frame.
- Check the window for square, level and plumb. Adjust shims accordingly.
- The window must be secured using the provided installation screws in the pre-drilled screw holes, leaving all screws loose to allow adjustments.
- Check the window for square after tightening each installation screw. Screws should be far enough in at the top and bottom points to allow the cap cover to be installed and out of the way of any moving components.
- Operate the window making sure that it opens and closes correctly, that all locks function smoothly, and that all sight lines are even.

**Step Five: Finishing exterior**

- 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 fiberglass insulation may be used. Insulation should not twist, bow, or distort the replacement window frame.
- If a sill angle is needed, it should be applied at this point. Measure and cut the sill angle to the needed height and snap into the exterior sill snap groove.
- A bead of sealant must be placed around the exterior perimeter of the window and sill angle. 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. (figure 5-1)
- Two 3/8” gaps may be left in the sealant where sill angle meets the old sill, and the sill may remain uninsulated, if a “Drainage System” is desired. (per ASTM E2112)
• New exterior stop or the previously removed interior stops must be re-installed.
• 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 of the new replacement window where it meets the exterior stops.
• If capping the exterior trim, sealant should be applied where the capping meets the new replacement window.
• Re-install screen.

**Step Six: Interior 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 interior stops/stool meets the new replacement window.

**NOTE:** There are many variations of install that may be encountered when replacing windows. One conventional installation 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.