



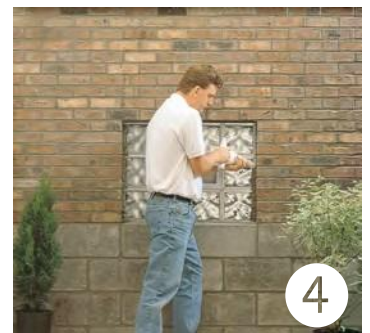
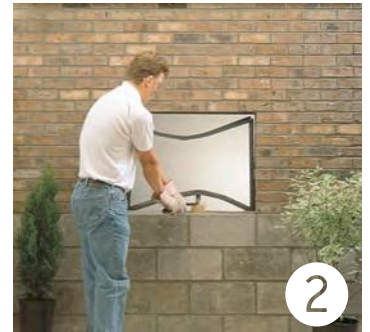
MASONRY OPENING INSTALLATION INSTRUCTIONS

- 1 To make sure your new window will fit properly, measure the window opening as if the frame were already removed. The rough opening size should be 1/2-in to 2-in larger than the actual size of your *Clearly Secure* block window. The space between the window and the rough opening will be filled with mortar.
- 2 Remove the window sash and then remove the window frame by bending the top and bottom in toward the center or by cutting it. Remove the old mortar sill if necessary.
- 3 Set the new window into place on top of 2 shims. Check that it is plumb and level, then secure it with 2 shims at the top. Do not use shims directly above or below a joint. If you are installing a vented window, the vent latch should be located on the inside at the top.
- 4 Mix the mortar according to the instructions on the bag. Apply the mortar around the perimeter using a grout bag or a margin trowel. Make sure the joints are completely full.
- 5 When the mortar begins to set, remove the shims, fill the holes, smooth the joints with a trowel and clean the glass with a cloth.

These are general instructions. Due to variations in window construction your installation may differ.

Suggested Tools and Materials List:

- Safety Goggles
- Work Gloves
- Tape Measure
- Hammer
- Pry Bar
- Stiff Brush
- Wood Shims
- Level
- Pre-mixed Mortar
- Clean Water
- Margin Trowel
- Bucket
- Grout Bag
- Clean Cloth



WOOD FRAME OPENING INSTALLATION INSTRUCTIONS

Many frameless glass block windows are installed into masonry openings using mortar to secure the window into place. But what if your project is going into a wood frame opening? Mortar does not adhere to wood properly. Here are a couple of easy-to-follow suggestions for installing new frameless glass block windows into a wood frame opening.

SUGGESTION 1: USING LOW EXPANSION SPRAY FOAM OR FIBERGLASS INSULATION

① Remove the Old Window

Remove the window sash and any hardware that will interfere with the installation of the new glass block window. Ideally remove everything down to the wood framework.



② Install an Inside Stop

Assuming you are doing the installation from the exterior of the building, install an inside stop on all four sides of the opening. The stops should overlap the face of the glass block window on all 4 sides by at least 1/2 inch. If you are installing in a bathroom or other wet environment, consider using a molding made of composite type material that will not rust or rot for this purpose. Apply a heavy bead of high-quality silicone adhesive such as REDI2BOND™ brand to all the edges of the stop that will come into contact with the glass block.

③ Install the Window into the Opening

Set the new window into place on top of 2 shims. Check that it is plumb and level; then secure it with 2 shims at the top. You can use a pry bar to raise or lower the window, adjusting the shims as needed, until it is square in the opening. Insert additional shims to ensure the window is securely in place. Do not use shims directly above or below a joint.

Note: If you are installing a vented window, the vent latch should be located on the inside at the top.

Trim off the shims by removing the portion that extends beyond the glass block. You may use a utility knife to cut the shims so that they are flush with the face of the glass blocks. You do not want any part of the shim to protrude past the edges of the glass block window.

④ Fill with the Perimeter around the Window

Pack the perimeter joint full with either low expansion spray foam or fiberglass insulation. Do NOT use high expansion foam.

When using spray foam, clean up any excess material *immediately* following the directions on the can.

⑤ Install the Outside Stop

Install the outside stops on all four sides of the window's perimeter. The stops should overlap the face of the glass block window on all 4 sides by at least 1/2 inch. The inside and outside stops will serve to secure your new window into place. If the stops will be exposed to water or moisture, make sure to use a rot resistant material.

⑥ Seal the Joints with Silicone

Seal all joints between the glass block, the stops and wood framework with a high-quality silicone adhesive such as RED12BOND™ Glass Block Silicone. The silicone will provide an airtight and watertight seal around the glass block window. This step is very important; do not leave voids or pin holes that water may seep into. Uncured smudged or excess silicone can be cleaned up using water and dish washing liquid.

⑦ Finish the Exterior

Finally finish the outside of the glass block window to complete your project.



SUGGESTION 2: USING MORTAR

- If the security feature of glass block is desirable, this method will provide the most secure installation. -

① Remove the Old Window

Remove the window sash and any hardware that will interfere with the installation of the new glass block window. Ideally remove everything down to the wood framework.



② Provide a Substrate for the Mortar to Grip or Adhere To:

Option A) Loosely attach brick ties, stainless steel glass block panel anchors or aluminum roofing nails with the nail heads remaining slightly up around the perimeter of the wood frame opening. When installing, the mortar will wrap around & fasten itself to these projections. Make sure these items and their fasteners are rust proof.

OR

Option B) Line the wood frame opening with a cement board, such as HardieBacker® or Durock® brands (this method can allow you to finish the inside sill, jambs and header with ceramic tile which can be particularly nice for a bathroom installation)

③ Install the Window into the Opening

Set the new window into place on top of 2 shims. Check that it is plumb and level. Then secure it with 2 shims at the top of the window. Do not use shims directly above or below a joint.

Note: If you are installing a vented window, the vent latch should be located on the inside at the top.

④ Fill with the Perimeter Around the Window

Mix the mortar according to the instructions on the bag. Apply the mortar around the perimeter using a grout bag or a margin trowel. Make sure the joints are packed completely full. Do not leave voids in the mortar.

When the mortar begins to set, remove the shims, and fill the holes with mortar. Trim out the exterior and interior with moldings to create inside and outside stops

Note: Glass Block Mortar is recommended. However, a Type S or Type N premix mortar will work when mixed to a consistency where it will hold its' shape when squeezed in your hand

If you have used Option B, "Line the wood frame opening with a cement board", and wish to finish the sill, jambs and header with ceramic tile:

When the mortar begins to set, remove the shims, fill the holes with additional mortar and slightly strike back the interior mortar joint around the perimeter.

Finish the exposed cement board on the sill, jambs and header with ceramic tile. When you grout the joints on the ceramic tile, you may float the same grout over the mortar joints around the perimeter of the window. Seal the grout joints with a grout sealer.

⑤ Finish the Exterior

Finally finish the outside of the glass block window to complete your project.



- *These are general instructions.* -

- *Due to variations in window construction your installation may differ.* -

