PITTSBURGH CORNING

Prefabricated Glass Block Panels in Masonry or Wood Frame Construction

ASSEMBLY INSTRUCTIONS





SOME GENERAL INFORMATION BEFORE YOU BEGIN

The installation recommendations presented here are for replacing bath, kitchen, basement and other residential windows. Each application will vary slightly, and your local supplier can assist you with any questions or variables.

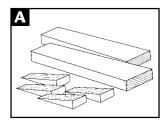
Glass block panels are nonloadbearing, so at the top of the window opening there must be a lintel (load-bearing wood or metal supporting member).

TOOLS & MATERIALS YOU WILL NEED

All the tools and materials, with one or two exceptions, are found in the average home.

- Hammer
- Chisel
- Crowbar
- Trowel
- Premixed glass block mortar
- Level
- Hacksaw or wood saw
- Striking tool (for finishing mortar joints)
- Caulking gun
- Clear or colored caulk
- Wood or aluminum molding(s)
- Expansion strip material
- Gloves

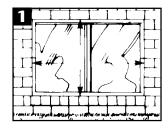
For positioning panels in masonry openings, you'll need wood wedges — $3-\frac{1}{2}$ " long, tapered from $1-\frac{1}{2}$ " to 0" in height. To hold the panel in place in wood frames, you'll need wood shims. And, for reducing oversize openings in wood frames, you'll need lengths of 1" x 4" or 2" x 4" lumber (See Fig. A).



MASONRY Step 1. Measure Opening

Before ordering a glass block panel, carefully measure the opening from the outside of the house. Measure the full width of the masonry opening, as if the existina frame were already removed. Measure the height of the opening from the top of the foundation wall (at the sill bottom) up to the wood or steel supporting member. This height dimension should include the sill thickness. Most sills, especially sloped ones, are removable. To be sure, tap it if it sounds hollow, it should come off easily when you're ready to install the new window. If the sill appears permanent, take the height dimension from sill top (See Fig. 1).

The window opening should be a minimum of $\frac{3}{8}$ " to $\frac{1}{2}$ " greater in both height and width than the glass block panel. When ordering prefabricated glass block panels, be sure to specify "opening size." Your local retailer or fabricator will recommend the size which best fits your opening.

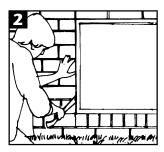


Step 2. Remove Old Window

You've made your preparations and the glass block panel is at hand. Now you're ready to start the actual work by removing the old window. First, working from the *inside*, take the *movable* part of the window out of the frame

Then, from the *outside*, pry the bottom of the frame away from the sill by using a crowbar at the middle of the frame bottom (place a piece of scrap wood under the crowbar to protect the masonry). Using a hacksaw, cut the bottom of the metal frame where necessary to remove it.

Repeat this procedure at the sides and top of the frame (See Fig. 2).

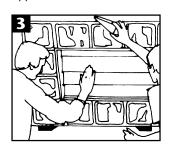


Step 3. Set the Panel

Prepare a mortar mix stiff enough to prevent slumping. Freshly mixed mortar may cause skin irritation. Avoid direct contact where possible and wash exposed skin areas promptly with water. If any gets into eyes, rinse immediately with water and seek prompt medical attention.

Working from *outside*, place a wood wedge toward each end of the sill and trowel on a smooth, flat "bed" of mortar on the foundation/sill. Set the glass block panel on top. Vertically center the panel by adjusting the wedges in and out. Place a third wedge between the top of the glass block panel and the top supporting member in order to secure the centered panel (See Fig. 3). If panel adjustment creates voids in the mortar (*inside or outside*), additional mortar should be applied with the trowel and a striking (tucking) tool (See Fig. 4).

Use your level to make sure your glass block window is level and plumb, horizontally and vertically. Your opening may be out of square, so adjust the panel position for best appearance.



Step 4. Secure the Panel

Using a trowel and the striking (tucking) tool, push mortar into openings on the *sides* and *bottom* of the panel until all voids are filled completely (See Fig. 4). Do not put mortar into the top opening. Mortar both the *inside* and *outside* of the window. When mortar begins to set, remove the wood wedges and fill the wedge holes on the sides and bottom with mortar. Clean excess mortar off the glass block with a damp cloth.

Fill the *top* opening with expansion strip material. Then, caulk this joint on both the inside and outside to provide a positive seal and assure that no weight bears on the glass block panel.

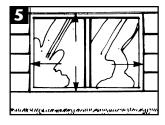


WOOD FRAME Step 1. Measure Opening

Before ordering a glass block panel, carefully measure the opening from the outside of the house.

Measure the width of the opening from the wood jamb or the aluminum siding covering the wood. Measure the height of the opening from the top of the sill up to the header (See Fig. 5).

The window opening should be a minimum of $\frac{3}{8}$ " to $\frac{1}{2}$ " greater in both height and width than the glass block panel. When ordering prefabricated glass block panels, be sure to specify "opening size." Your local retailer or fabricator will recommend the size which best fits your opening.

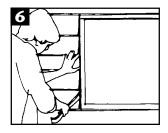


Step 2. Remove Old Window

You've made your preparations and the glass block panel is at hand. Now you're ready to start the actual work by tearing out the old window.

First, working from the *inside*, take the *movable* part of the window out of the frame. From the outside, pry the bottom of the metal frame away from sill using a crowbar (place a piece of scrap wood under the crowbar to protect wood or aluminum siding). With a hacksaw, cut the bottom of the metal frame where necessary to remove it. Repeat this procedure at the sides and top of the frame (see Fig. 6).

If your window has a wood frame, and it's in good condition, you may leave it in place with just the sash removed.



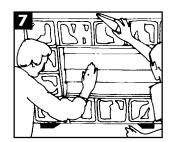
Step 3. Set the Panel

It may be necessary to adjust the window opening to the proper size by cutting or chiseling out some of the surrounding frame if the opening is too small or by adding 1" x 4" or 2" x 4" lumber at sides or top if it is too large. To assure longevity, use pressure-treated lumber or prime and paint wood surfaces.

Fasten a wood or metal stop molding around the *inside* of the window frame. Working from the *outside*, place the glass block panel into the opening and shim where necessary to hold the panel firmly in place. Trim the shims flush with the face of the panel (See Fig. 7).

Prepare a mortar mix stiff enough to prevent slumping. Freshly mixed mortar may cause skin irritation. Avoid direct contact where possible and wash exposed skin areas promptly with water. If any gets into eyes, rinse immediately with water and seek prompt medical attention.

Working from the *outside*, use a trowel and the striking tool to push mortar into the opening at the bottom of the panel up to the stop. Then, still from the outside, fill the side openings to the stop to prevent air leakage. Provide expansion strip material at the top and then seal with caulking.

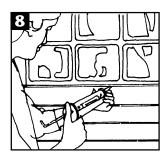


Step 4. Secure the Panel

When the mortar has set, fasten wood or metal stop molding around the *outside* of the window frame.

Caulk the *outside* molding at sides, top and bottom to ensure a complete weather seal (See Fig. 8).

You may also desire to cover wood surfaces exposed to exterior weathering with aluminum to assure a positive seal and ease of maintenance.



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A Pittsburgh Corning window provides excellent protection from vandals and intruders. It reduces heating and cooling costs, dirt and drafts — and does it all beautifully.

Panels with optional fresh air or dryer vents are available from most Pittsburgh Corning distributors or retailers (See Fig. 9).



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