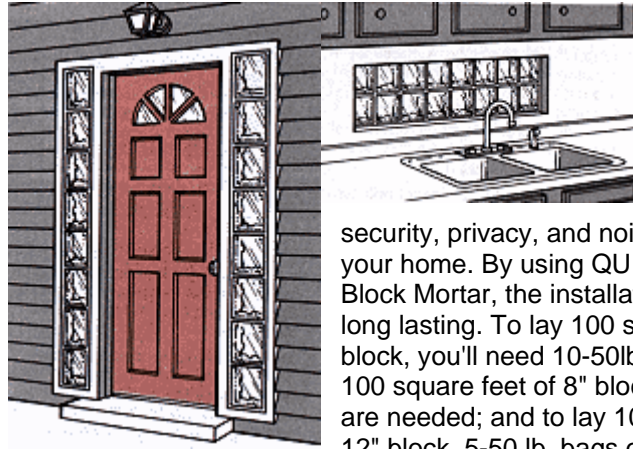


## Project

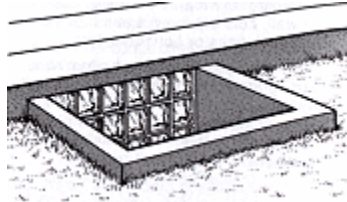
## Building with Glass Block



Besides admitting as much as 80% of outdoor light to dark areas, glass block also provides

security, privacy, and noise reduction to your home. By using QUIKRETE® Glass Block Mortar, the installation is easy and long lasting. To lay 100 square feet of 6" block, you'll need 10-50lb. bags; to lay 100 square feet of 8" block, 7-50lb. bags are needed; and to lay 100 square feet of 12" block, 5-50 lb. bags of QUIKRETE® Glass Mortar must be used.

An important point to keep in mind is this: glass block can never be used as a load-bearing building material. Structural support is a must above, below, and on both sides of any glass block assembly. You'll also need to make allowances for expansion and anchoring, as described in the following procedures.



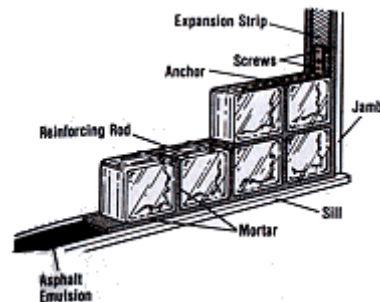
### Required Tools & Materials

- QUIKRETE® Glass Block Mortar
- QUIKRETE® Driveway Crack Filler
- QUIKRETE® Acrylic Fortifier (optional)
- Plastic connectors (optional)
- Glass blocks
- Polyethylene foam or fiberglass expansion strips
- Anchors
- Reinforcing bars and spacers
- Trowel
- Rubber mallet
- Sponge or cloths
- Level

### Step by Step

#### Standard Mortar Method

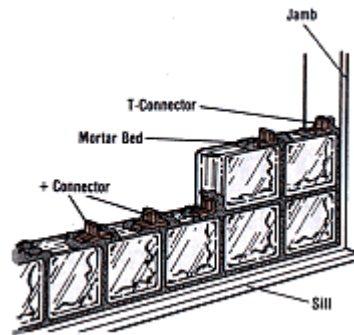
1. Secure expansion strips to the headers and jambs.
2. Lay a full bed of QUIKRETE® Glass Block Mortar on the sill. Set the first course of blocks using spacers and a level to ensure straightness. Tap each block into position with a rubber-tipped handle. Once a block is in place, do not shift its position.
3. Fill all joints completely, maintaining a ¼" to 3/8" mortar joint between blocks.
4. Lay a full mortar bed on top of the first course. Set the second course of blocks and fill the joints as before.
5. As you build the wall higher, the weight of the blocks may begin to force mortar out of the lower joints. If this happens, stop and let the mortar set before resuming the work.
6. For stability, reinforcement must be added every 24" vertically. To do this, first lay a 1/8" thick bed of QUIKRETE® Glass Block Mortar on top of the installed block and press reinforcing bars lightly into the mortar.



7. Set an anchor every 24" vertically on top of the bars; at least 1' of each anchor should extend from the jamb. Lay another 1/8" mortar bed over top of the reinforcing bars and anchors.
8. Before the mortar hardens, tool all joints to make smooth and concave.
9. Remove all excess mortar from the faces of the blocks with a damp sponge or cloth.
10. After allowing the mortar to cure for at least 1 full day, apply sealer between the blocks, headers, and jambs.
11. Give the faces of the blocks a final cleaning with clean water and a soft cloth. Do not use harsh cleaners, acids, or alkalines on glass block. Also, never use steel wool or a wire brush to clean glass block, because they will cause scratches.

### **Using Mortar and Plastic Connectors**

In this method, the previously described procedure for mortaring glass block is combined with plastic connectors to produce a structure of improved rigidity. The connectors also aid in alignment and spacing of the blocks, resulting in a more professional-looking job. Because all of the blocks rest on the connectors, there is no problem with the upper courses squeezing and mortar out of the lower courses. This enables you to work at your own pace, without constantly stopping to wait for the mortar to set. In addition, the connectors cannot be seen; they are buried in the mortar and therefore do not ruin the visual effect.



Plastic connectors are available to fit all sizes and thicknesses of glass block. There are two basic types of connector: a T-shaped design that can be used around the perimeter of the structure, and a plus-shaped design for use in internal joints. If you're planning a curved wall, tapered connectors are also available. Because T-shaped connectors are nailed or screwed in place, they serve as additional anchoring devices.

When placing T-shaped connectors prior to setting the first course of blocks, mortar them in place to prevent slippage. Once the first course has been installed in the joints and mortared down as part of the mortar bed for the next course. Use a rubber mallet to tap each block down so that it fits tightly on the connectors below.

#### **For Best Results**

- While plastic connectors add structural rigidity to any glass block installation, they should be used in conjunction with, never in place of, reinforcing bars and anchors. These basic methods of reinforcement must always be used.
- When installing anchors, bend them horizontally into the joint for added strength.