

RODS AND MORTAR INSTALLATION GUIDE

First things first: calculate the wall opening. Before anything, you will need to calculate the wall opening for your Rods & Mortar kit. To calculate the wall opening area, take the following steps:

1. Take the width of the block (190mm) and multiply by the number of blocks you need (in this example we use 6 blocks): $190\text{mm} \times 6 = 1140\text{ mm}$
2. Multiply the width of the spacer joint (10mm) by the number of blocks (6), and add it to the above number: $10\text{mm} \times 6 = 60\text{ mm}$
3. Add one more end joint (10mm) to close to the wall
4. The total comes to: $(190\text{mm} \times 6) + (10\text{mm} \times 6) + 10\text{mm} = 1210\text{ mm}$

Note: You can use the [Rods & Mortar Calculator](#) if you prefer. This will calculate everything you need based on the recommended measurements.

Note: Expansion foam is only required when you are building wall into a four-sided cut out, opened ended walls do not require expansion foam. The Rods and Mortar calculator automatically adds expansion foam, you can delete this from the cart if not required.

INSTALL PANEL TIES

The glass block panel is tied into the frame by use of panel anchors (these become embedded in mortar). Anchors are attached to jambs and head but not the sill. Anchors are usually placed at 400 mm centres. Glass block ties are to be added on each course vertically on both sides of the wall if going into a four-sided cut out and on every course on the top horizontally. As the rods and mortar calculator adds ties based on putting your wall into a four-sided cut out you will have to amend the number of ties if your wall is open ended. i.e ties are only to be used on sides and top that are connected to a wall or ceiling.

INSTALL EXPANSION STRIPS

Expansion strips should be stapled or nailed along jamb and head between anchors (no strip necessary to sill).

PREPARING GLASS BLOCK SPACERS

The standard spacer is three spacers in one. By simple trimming of certain elements, 'L' and 'T' spacers are also created.

POSITION SPACER CORRECTLY

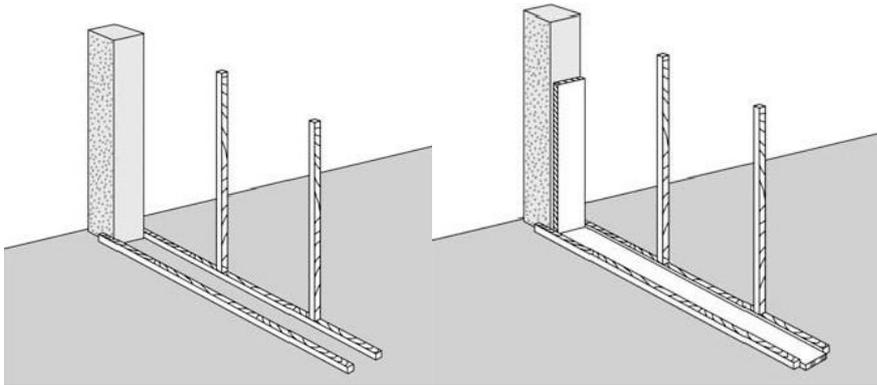
Normally, the spacer crossbar should face downward. The crossbar should only face upwards at the sill as a 'T' spacer.

PREPARE THE MORTAR

A 25 kg bag of pre-mixed glass block mortar is sufficient for installing approximately 25 No. 190 x 190 x 80 mm blocks. Follow the instructions on the bag.

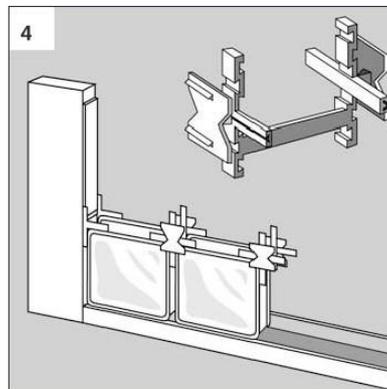
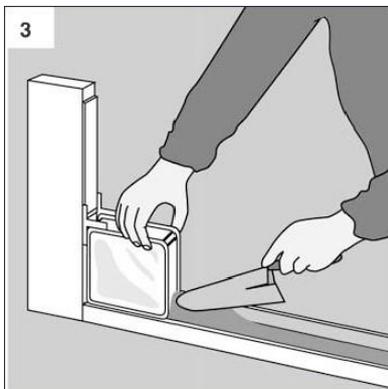
GOLDEN RULE NEVER DRILL OR CUT GLASS BLOCKS!

LAYING THE FIRST COURSE

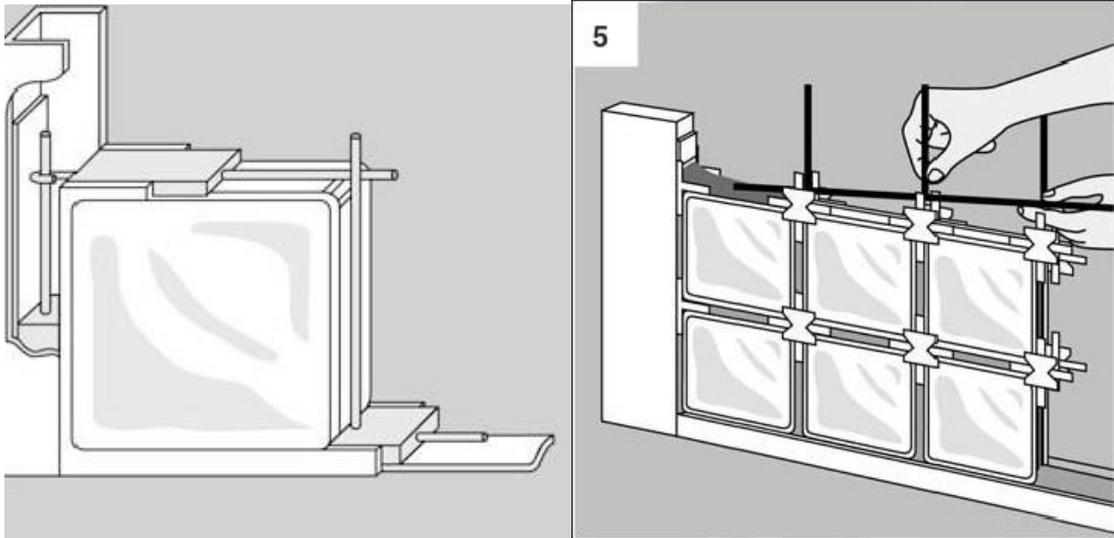


1. Apply glass block mortar to a clean level sill. Use enough mortar so that a 10mm joint will remain when blocks are in place.
2. Using the 'L' and 'T' spacers on the sill and jamb surfaces, insert first at lower corner.
3. Push the block snugly into place ensuring it is properly seated. Place a regular spacer on upper corner of the first block. Apply layer of mortar to the vertical edge of the new block and put into place. Once again, check the block is properly seated.
4. Continue laying first course by repeating steps 1, 2 and 3. Periodically, use level and plumb line to ensure accuracy of panel. Adjust as necessary before continuing.

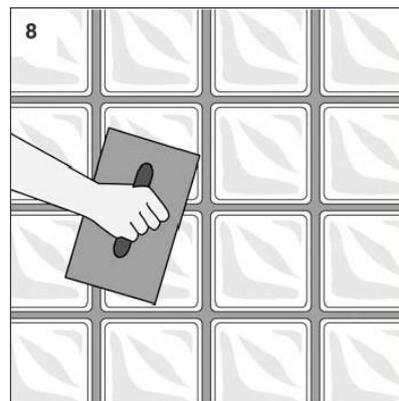
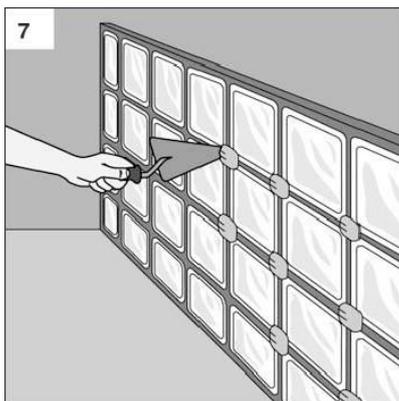
INSTALLING THE REMAINING COURSES



5. When the first course is completed, apply a layer of mortar to the top of the blocks and spread and smooth the mortar making sure that cross-legs of spacers are free of mortar. This ensures accurate spacing.
6. Continue laying blocks repeating steps 1-5. When you encounter panel anchors (glass block ties), ensure that the top of the block (with spacer in place) slips under the tie. Continue finishing that course then apply mortar to the top embedding tie.
7. For panels with spans of more than 1.4 m, panel reinforcing must be used on top of every horizontal course for 190 x 190 x 80 mm blocks. Once mortar has been placed on top course, simply press strips of reinforcing into mortar. If you use more than one strip, an overlap of 150 mm is required.
8. When laying top course, put appropriate spacers in place before inserting block.



FINISHING AND CLEAN UP



9. Using a sponge or damp cloth, remove excess mortar from the face of the glass blocks (both sides). Be sure to rinse often using water only (no abrasive products). Do not let mortar dry completely before removal from block. Block will be left with a light film of mortar dust which can be removed later using a dry cloth.
10. Twist end tabs of all spacers after the mortar has been left to set for one hour. Use a striking tool / trowel for joints. This produces professional results and compacts the mortar to create a moisture resistant seal. After striking, all joints should be left full of mortar (for shower joints, you may rake the joints to a depth of 5 mm and then after a 24 hour cure, fill the joints with a wide joint panel grout. After two hours, wipe blocks with soft, clean cloth).

One or two hours after striking joints, wipe the block faces with a soft, clean cloth.

Using a caulk gun, apply silicone continuously along the seams where the block panels join the jambs and the head. Be sure to apply sealant on both sides of the panel. Trim may also be applied at the seams. If you have a wooden curb, cover it with a suitable moulding.

These instructions are for guidance only. They are not intended to imply suitability for any purpose. Glass block panels are not load bearing. If you are building a fire rated wall different equipment is needed, please check our glass block range page for more information.