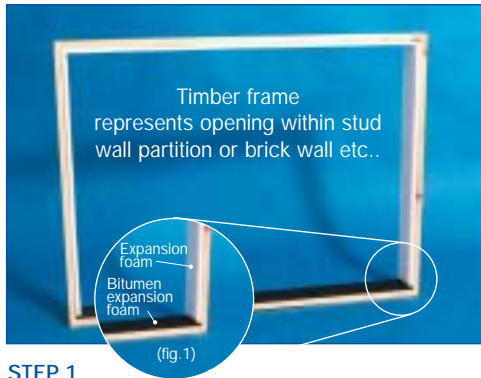


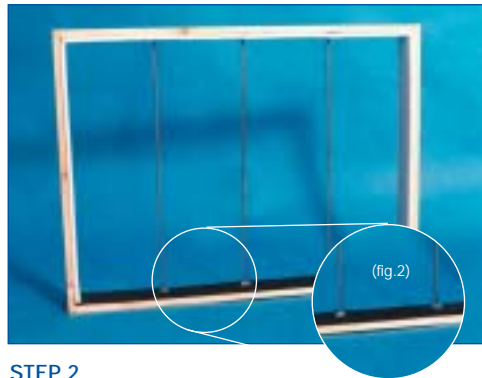
PREPARATION OF OPENING



STEP 1

Calculate the correct opening size. Make sure the opening is square and perpendicular. Lay bitumen expansion material along base of opening. Secure expansion foam to jambs and head. All four sides of the opening should now be covered in expansion material Bitumen is necessary on the base to take the weight of the glass block wall.

Timber frame on images represents a perimeter opening; this can be constructed alternatively out of masonry, brick, stud wall, steelwork.



STEP 2

Set out dry your first row of glass blocks to ensure opening size is correct. Mark accurately and drill oversized holes in between the blocks, vertically and horizontally where rods will be positioned. The holes need to be a depth of between 25 – 35mm. Fill holes with silicon and fit vertical bars in place (fig.2). When a horizontal or vertical joint dimension exceeds the length of a stainless steel re bar, overlap two by 150mm & tie loosely using stainless tie wire.

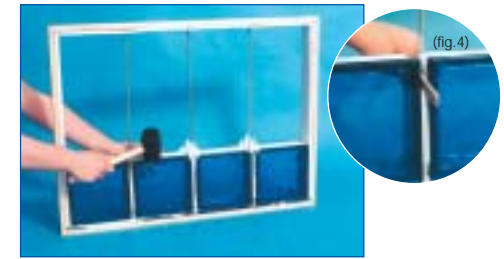
Panel anchors can be used as an alternative to drilling oversized holes and are an ideal alternative to drilling holes if the opening is a metal box section or steel I & H beam etc.

LAYING FIRST COURSE



STEP 3

Mix Colmef Vetromix glass block mortar following instructions on reverse of bag (fig.3). The mix should be a semi dry consistency (Slump 1 or less). Lay down a bed of mortar.

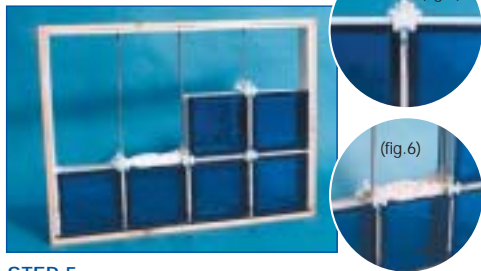


STEP 4

Fit first block and tamp down gently, fit second block and repeat. Ensure there is enough mortar between the blocks and the base to create sufficient adhesion, compact the vertical mortar joint using a wooden instrument. (fig.4) Note: Spacer pegs are not necessarily required between base and first row of blocks. When using spacers at the base or up the side jambs cut the legs of the cross spacer pegs to form a 'T' shape.

- ✓ It is advised to construct the first course and allow this to initially cure so that on returning to build consecutive courses it becomes easier building a firm bed. In ideal circumstances around 6-8 courses before the panel will wobble to much, dependent on the panel width. Spacer pegs assist with stability, but back shuttering could be considered for additional support. At this point it is advised to stop building and allow the panel to set prior to completing construction.
- ✓ For loose build of glass blocks ensure enough time is set aside to fully build.

BUILDING THE PANEL



STEP 5

Repeat Step 4 until you have completed the first row. Insert spacer pegs between blocks, this prevents steel rods from touching glass, assists with accuracy of vertical & horizontal joints whilst preventing mortar squeeze, enabling more courses to be constructed. (fig.5).

After the first course is complete, if left & allowed to set it will make building subsequent rows easier due to building off a firm bed. Lay half the quantity of mortar and fix the horizontal rod in position, not forgetting to put silicon in the holes, and then cover over the rod with remainder of mortar (fig.6). Rods have to be positioned every row vertically and horizontally.

If using a 'U' channel, two stainless steel reinforcement rods are required around the perimeter. (fig.5).



STEP 6

Fit next row, checking vertical and horizontal alignment.



FINISHING THE GLASS BLOCK PANEL



STEP 7

When the wall has set, snap off spacer tabs and grout all joints with diluted Colmef mortar.

SEALING AND WEATHERPROOFING THE PANEL



STEP 8

Rake back and mastic around perimeter of expansion foam to create weatherproof seal and prevent bridging which can restrict expansion and contraction of overall panel.

- ! Restriction can result in block cracking.

INITIAL CLEAN AND AFTER CARE MAINTENANCE

Do not clean with any acidic products, the best product for cleaning is water. Polish each block with a soft cloth using good old elbow grease. **Note** : Clean face of block as work proceeds. The glass block installer should have left the glass block wall in a clean, unblemished condition. Requiring only periodical cleaning to maintain an excellent appearance. However, there may be a residue of cement on the glass surface left from mortar/tiling grout identified by whiteish bloom when dry. This may be removed by use of proprietary cement stain remover. (BAL HD Tar Cleaner)