

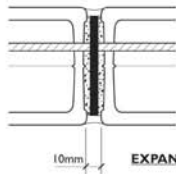
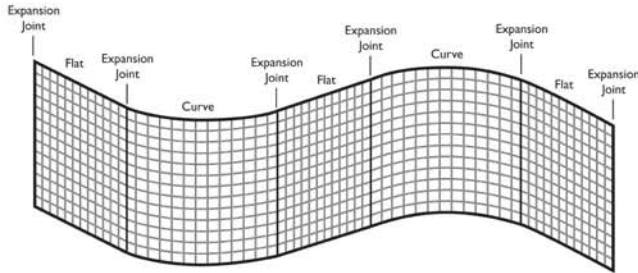
Formula to determine exterior joint width

$$E = (W+I) \times (1+(T+R)) - W$$

E = External joint width (mm)
 I = Internal joint width (mm)
 R = Radius to interior of wall (mm)
 T = Thickness of block (mm)
 W = Width of block (mm)

RADIUS MINIMUMS FOR CURVED PANEL CONSTRUCTION

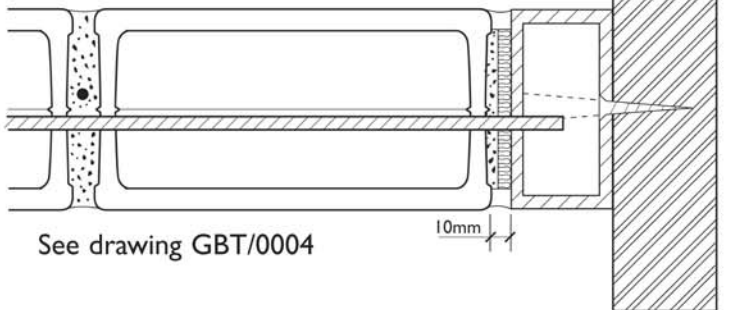
Block Width (mm)	Inside Radius (mm)	Number of blocks in 90° Arc	Vertical joint Width (mm) Inside	Outside
190/190/80	190	1650	13	10
190/90/80	90	900	15	10
240/115	115	1150	15	10



It is suggested that curved areas be separated from flat areas by intermediate expansion joints and supported as indicated in these drawings.

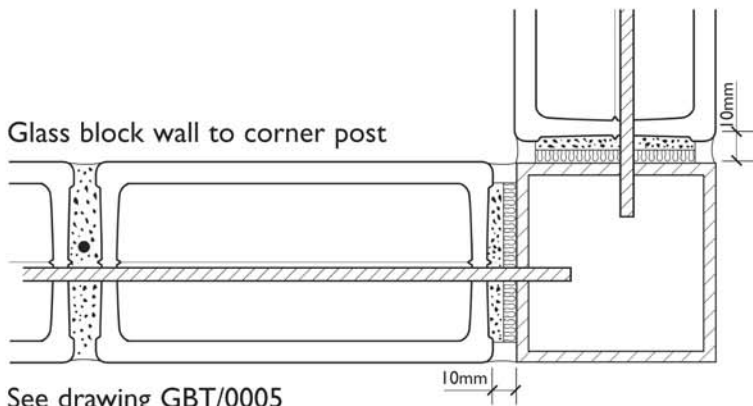
EXPANSION JOINT DETAIL

Glass block wall to metal box section - head, cill and jamb detail



See drawing GBT/0004

Glass block wall to corner post



See drawing GBT/0005

Guide to Installation - Golden Rules

1. Glass block walls are self supporting, but not load bearing.
2. For best integral strength, glass blocks should be installed into a four sided pre-prepared opening. This opening can be timber, brick, steel, concrete or blockwork.
3. Glass blocks expand and contract with temperature change. Expansion material must be incorporated to all four sides of the perimeter opening. 10mm expansion joints are recommended.
4. Glass blocks should not be installed when the surrounding temperature is 5°C and falling or 30°C and rising.
5. Openings must be square and perpendicular and made to suit glass block modules. Glass blocks cannot be cut like masonry bricks or tiles.
6. To calculate the minimum opening size based on using 190x190x80mm blocks with 10mm joints, multiply the number of blocks by 200mm (190 block + 10mm joint) then add 10mm for the other mortar joint. This is the minimum opening requirement. 10mm mortar joints are recommended.
7. All panels must be sealed with silicon mastic around the perimeter expansion joint to prevent moisture ingress and allow for expansion and contraction. Note: Do not bridge expansion material by pointing/grouting over using mortar.
8. Do not use metal tools against glass blocks, only wooden or rubber.
9. Maximum panel size without intermediate slip joint is 25m² with no single dimension exceeding 6m in any direction.

Accessories

1. 10mm plastic spacer pegs.
2. Ø 5.5mm stainless steel re-inforcement rods in 0.6 & 1.2m lengths.
3. Expansion material for head & jambs.
4. Expansion material for cill.
5. Spacer pegs.

Mortar

Colmef Vetromix glass block mortar is recommended as a bedding and finishing mortar, and can be diluted to use as a grout.

Re-inforcement

GBT recommend a minimum of 1 No. Ø 5.5mm rod every row horizontally and vertically.

Note : If 'U' channels are incorporated, they should be lined with expansion fibre and should have double rods positioned in the mortar. Channels should be fixed at 600mm centres.

DRAWING TITLE :

GUIDE TO INSTALLING GLASS BLOCKS USING RODS & MORTAR SYSTEM (I)

NOTES

1. Drawing not to scale. For information purposes only.

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DRAWING No.

GBT/0001