

The open unsupported edge if subjected to impact may vibrate ever so slightly, not a major area for concern, just a point that should be ented, when considering the location of this style of panel relevance to its environment or application. For example it is highly addisable onto of use this panel style in a nightculb, sha environment or in an area subjected to high levels of general public traffic.

A corner glass block wall using corner glass blocks (rule not applicable when using Safewall corner post).

This style of panel can be constructed with Rods & Mortar: Easyfix would make building this complicated (orner glass blocks are a good solution to linking striaght or curved panels around a 30 angle.

One vertical adge must be anchored to a wall, the secondary panel connected by the corner block, could be striaght or curved or opin ended and stepped using an end block and double end block combination. I'vo sets of corner blocke may be used to link three glass block panels together to create an enclosed space or large walk-in shower (for example).

A panel supported at the base and restrained into just one vertical side (jamb) will probably be finished using end glass blocks and a double-end glass block at the open corner to make the panel look pasthically pleasing. To increase the panel strength, the panel strength is the panel strength in the part of the panel strength is the panel strength in the panel strength in the panel strength in the panel strength is the panel strength in the panel strength in the panel strength is the panel strength in the panel strength in the panel strength is the panel strength in the panel strength in the panel strength in the panel strength is the panel strength in the panel strength in the panel strength is the panel strength in the panel strength i

After construction, the perimeter joint should be cleared of any residue mortar and caulited with Rods & Mortar expansion sealant for fire stop mastici, Bridging the joint would restrict flexibilty and movement and negate the expansion fibre and can cause glass blocks or joints to crack.

example. When building with corner glass blocks a vertical slip joint must be incorporated in either the 2nd or 3rd joint away from the corner block.

JECHNOLOGY JTECHNOLOGY

Colmet Vetronix is a specifically designed and formulated premix mortar for glass block construction it ensures accuracy and consistency of performance. It can be used infernally, externally, striaght, curved and fire-rated glass block walling. Vetronix has a fine texture, low stump and the whitest mortar available. It is used as bedding and pointing mix, therefore there are no bonding issues between building and grouting. Mixing instructions are on the reverse of each bog and should be strilly athered to 10 kilos mix building approximately teelive 190 x 190 x 80 blocks. The surrounding temperature should not be 5 C and falling or 30 C and rising and the joint width should not exceed 22mm.

For situations where connecting the rods to the opening may prove difficult, panel anchors can be used (similar to the brick-tie principle secured by either screw or bolt fixing or can mechanically shot fired).

One reinforcement bar should be used in each horizontal and vertical joint as a minimum. More rods may be required if using end glass blocks or a TF30 or TF60.

1. Glass block walls are self supporting, but not load bearing. In addition to their own weight, they can withstand wind loads, horizontal live loads and impact loads. A lintel provides the head for the panel to be anchored into whilst ensuring no downward pressure is placed on the glass blocks.

2. Openings must be square and perpendicular and the opening dimensions must be designed to suit glass block modules. Glass blocks cannot be cut like an assonary bricks or itses To calculate the minimum opening size based on using 190 x 190 x 80mm blocks with 100mm joints, multiply the number of blocks by 200mm (190 block - 100mm joint) then add 100mm for the other mortar joint. This is the minimum opening requirement. I00mm mortar joints are the most commonly used 6mm spacers can also be used for thinner joints, if openings have been prepared incorrectly or if retiro installing glass blocks, or to create a righter radii, when building a curved glass block panel.

4. Between the opening and glass blocks it is essential to incorporate expansion joints to the perimeter to allow the panel to expand and contract freely with temperature change. The foam must not by bridged by morts freeder/plaster etc. I and caulked with Rods & Mortar expansion joint sealer (fire-retardent in fire-rated applications). ilass block walls are connected to the surround by reinforcement bars being inserted pre-drilled holes for panel anchors!, For best integral strength, panels should be alled into a four sided pre-prepared opening. The opening can be timber, brick, steel, crete or block-work.

Glass blocks will expand and contract by 0.25mm per 25 (temperature change 5 off expansion joints must be incorporated into the perimeter between the substrate opening and block, being caulted with a white silicone (or fire-stop mastic). This will visually look similar to a standard mortar joint. For the head and jambs of an opening, 10mm thick foam is used. This is a white expansion block. The horizont a expansion joint between the first row of glass blocks and the base of the opening is formed using high-density bitumen or neoprene material to support the weight of the panel. Alternatively two coats of bitune enuision can be applied as the barrier between the bottom course mortar joint and base of opening.

Connection details are purely representative to demonstrate the principals how glass blocks can be constructed with U channels, or box sections, either for structural and practical purposes, i.e.: interface of glass blocks and render or aesthetical use.

tion detail principles, should be designed and be specific to each project ment and calculations checked and qualified by independant structural engineers

sing standard glass blocks the maximum panel size without intermediate support or joints is $25m^2$, with no dimension exceeding 6m in either direction. For TF30 and TF60 blocks, the maximum panel size permissable is $9m^2$ (in line with test specification).

5. Glass blocks should not be inst falling or 30°C and rising.

Tomm is the most common joint size for specifying and building glass blocks. A 190 x 190 block plus flomm spacer modulates to 200mm. Spacer pegs serve multiple functions: They prevent mortar squeeze, increasing the number of courses that can be constructed in a day. They prevent stainless steel reinforcement bars coming into direct contact with the glass block as metal and glass have different expansion and contraction properties. When a spacer pegi is fitted and the wall is finished, the tabs at he end twist off and can then be grouted over:

Other spacers are available for the 80mm-thick blocks-6mm \times 6mm and 6mm \times 10mm also for 100mm-thick blocks – 10mm \times 10mm.

TYPICAL GLASS BLOCK PANEL SUPPORTED ON TWO SIDES WITH AN UNSUPPORTED TOP AND ONE VERTICAL EDGE

All information is accurate to the best of our knowledge at time of data sheet production, however Glass Block Technology Ltd. cannot be held liable in any way regarding the usage of glass blocks and the manner in which they are installed. Glass Block Technology Ltd. reserve the right to amend or correct changes at any time.

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