1. Easifix

2. Easifix is a dry-fix system designed on the principles of a mortar joint, where the opposite collars of two glass blocks create an oval shape. The Easifix extrusion securely locates between the collars so that a panel can be built with a slim line 4mm joint. The blocks are bonded to the horizontal and vertical Easifix extrusion by using Easifix adhesive (low-modulus silcone based) and can either be grouted or siliconed for an all-glass appearance. Colmef Vetromix mortar can be used as a grout, for coloured grouts please consult the technical department.

3. Easifix is aimed predominatly at the DIY market, but commonly used in other market sectors by property developers and the leisure industry for nightclubs and restaurants.

4. The system should only be used internally for striaght walling in conjunction with 80mm thick glass blocks. It cannot be used in accordance with a fire-rated specification.

5. The Easifix extrusion is manufactured from PVC. Easifix adhesive supplied to bond and point glass blocks will expand and contract 50% of its own volume.

6. The perimeter expansion joint between blocks and Easifix sleeve or perimeter opening should always be caulked with silicone. If this joint is grouted it may be susceptible to cracking because of restrictions in expansion and contraction.

Guide to Specifying Glass Blocks - General considerations

1. Glass block walls are self supporting, but not load bearing. In addition to their own weight, they can withstand loads like: 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 masonary bricks or tiles.

3. Between the Easifix Sleeve and edge of glass block, the joint should be treated as an expansion joint and sealed with silicone, for best performance, as opposed to being grouted with glass block mortar or wide joint tile grout.

4. Glass blocks should not be installed when the surrounding temperature is 5°C and falling or 30°C and rising.

5. Using standard glass blocks the maximum panel size without intermediate support or slip joints is 9m , with no dimension exceeding 6m in either direction. For TF30 and TF60 fire blocks, cannot be constructed with Easifix - see TF range, Fire blocks and Rods and Mortar construction.

1. Accessories - Perimeter expansion joints.

2. Easifix Sleeve and Timber

3. Easifix sleeve is a unique extruded PVC U-channel which accommodates a timber liner (71 x 15mm - supplied). This is used as perimeter framing to house an Easifix panel.

4. oOnce the panel opening size is determined the timber can be square cut and screwed together. Then the sleeve can be mitred or square cut and positioned over the timber. The sleeve and timber framing can be fitted and screwed to the opening.

5. Anchor brackets are secured to the timber using four screws and are much easier than fixing directly to masonary, steel or aluminium stud-work or safewall (which could be difficult and time-consuming to pre-drill. For example, Easifix direct to end post (no sleeve): 4 pilot holes per anchor bracket need to be pre-drilled. Four holes per anchor bracket x 11 11 blocks high x 2 sides = 88 pre-drilled holes. Hence Easifix sleeve!

6. If an Easifix panel is constructed into a timber stud wall and a clean line between the blocks and plasterboard is required, this can be achieved by omitting the Easifix sleeve and timber framing. However, re-calculate the opening size for just glass blocks and Easifix spacer, including perimeter expansion joint. To install to a plasterboard opening, the screws must penetrate the plasterboard and be screwed inti the struts and noggins.

7. Easifix Extrusion

8. Easifix spacer is designed from the profile where the oppsite collars of two glass blocks create an oval shape. The extrusion is an accurate fit to scurely locate glass blocks and stably build a panel with slim line joint of 4mm. The blocks are bonded to the spacer using Easifix adhesive both horizontally and vertically.

9. Uniquely designed the same profile is used for both the horizontal and vertical joints, Available in 2.4m for horizontal coursing and (circa) 184mm for vertical use.

Anchor Brackets

Easifix anchor brackets are located at each end of every horizontal spacer profile (except at the head). The two prongs should be bent to a 90 angle (with pliers) and then inserted into the the chambers within the horizontal extrusion. After inserting anchor bracket prongs, apply a dab of Easifix building adhesive. Brackets should be connected to either the timber liner (inserted in Easifix sleeve) or perimeter stud framework.

Anchor brackets provide the glaas block panel restraint as it securely fastens the panel to the perimeter opening (similar to a brick tie or Rods & Mortar reinforcement rods). These"are manufactured from polished stanless steel, with four countersunk pre-punched holes for flat insertion of four screws.

Easifix Adhesive

The extrusion is adhered to the blocks using Easifix adhesive, indepenently tested and verified for use. It should be applied either in a zig-zag manner from side to side or as two perpendicular beads within the grooves of the profile.

Calculating Opening Sizes

There are two formulae to calculate the opening (including Easifix Sleeve and timber).

Option 1 is to calculate the dimensions for the inside edge of the perimeter opening (including Easifix Sleeve and timber).

Option 2 is to omit the Easifix Sleeve and timber.

Joint sizes and spacer pegs.

Connecting to the Perimeter Opening

If an Easifix panel is construction into a timber stud wall and a clean line between the blocks and plasterboard is required, this can be achieved by omitting the Easifix sleeve and timber framing. However, re-calculate the opening size for just glass blocks and Easifix spacer, including perimeter expansion joint. Also it is vital to ensure the plasterboard is fitted first, so the plasterboard does not bridge the glass blocks.

Connection detail principles, should be designed and be specific to each project requirement or environment.

A glass block panel should never be freestanding (constructed just off the fllor/base). For best integral strength a panel should be installed into a minimum of three sides, preferably four. To create a secondary vertical restraint, the Safewall End Post can be installed and is secured top and bottom, by the anchor brackets being screwed to the floor and ceiling.

An open-ended panel using and glass blocks should not be built with Easifix but Rods and Mortar. The exposed edge would be a weak point.

GLASSBLOCK TECHNOLOGY

EASYFIX FIXING DETAIL TO BRICK/TIMBER AND FINISHED OPENING

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