

## Selecting Panel Types and Panel Sizes



### Panel supported on 4 sides

This style of panel can be constructed in either Rods & Mortar or Easifix\* The stability of a panel connected to the opening (supported) on all four sides is achieved by the rods being connected vertically and horizontally using Rods and Mortar. With Easifix, it is the horizontal spacer profile connected to both vertical jambs with anchor brackets. Restraining each side of the glass block panel to the perimeter opening means no edge is a weak point.

### Panel supported on 3 sides with an unsupported top

This style of panel can be constructed in either Rods & Mortar or Easifix\* A panel supported on the base and tied in to both vertical sides of the perimeter opening will be stable as the restraint is spanned through the horizontal joints by the rods being connected with Rods and Mortar. With Easifix, it is the horizontal spacer profile connected to both vertical jambs with anchor brackets. The two vertical edges could be brickwork, stud or plaster, etc. If setting off from a wall and the secondary vertical edge is exposed, a safewall end post could be used to create the secondary vertical restraint. End posts are 2.7metres long and must be secured at the floor and ceiling. The open, unsupported top edge could be left open or a ledge installed to cap the open edge or alternatively finished using end glass blocks\*\*, the void could also be filled with a bulkhead, using studwork and plasterboard. In any event of impact, force created would be carried in a horizontal motion into the vertical expansion joints.

### Panel supported on 3 sides with 1 unsupported vertical edge

A panel supported at the base and restrained into the head and one vertical side (jamb) will probably be finished using end glass blocks\*\* to make the panel look aesthetically pleasing. The most suitable installation system for this panel type is Rods & Mortar and to increase the panel strength, double reinforcement bars are recommended each course horizontally. 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 noted, when considering the location of this style of panel. The only way to construct this panel type with Easifix, is to build it the opposite way round to the recommended installation instructions, fitting the horizontal spacer vertically & screwing the anchor brackets to the head and base.

### Panel supported on 2 sides with an unsupported top and 1 vertical edge

This style of panel can be constructed with Rods & Mortar, Easifix should not be considered. 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 aesthetically pleasing. To increase the panel strength, double stainless steel reinforcement bars, each course horizontally, must be incorporated. 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 noted, when considering the location of this style of panel and relevance to its environment or application. For example it is highly advisable not to use this panel style in a nightclub, bar environment or in an area subjected to high levels of general public traffic. This style of panel should only be installed using Rods & Mortar, never Easifix!

### Two or more glass block walls connected with corner glass blocks

This style of panel can be constructed with Rods & Mortar; Easifix would make building this complicated. Corner glass blocks are a good solution to linking straight or curved panels around a 90° angle. One vertical edge must be anchored to a wall, the secondary panel connected by the corner block, could be straight or curved or open ended and stepped using an end block and double end block combination. Two sets of corner blocks may be used to link three glass block panels together to create an enclosed space or large walk-in shower (for 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.

### Two or more glass block walls connected with a safewall corner post

An alternative to using corner glass blocks is the safewall corner post. An aluminium box profile that neatly works with any 80mm wide glass block offering the same solution as corner blocks. The post has to be secured floor-to-ceiling using stainless steel boss sections (safewall fixing brackets). Using Rods & Mortar in conjunction with a corner post allows horizontal reinforcement bars to be drilled and anchored in to the post. If using Easifix, it is advisable to secure the Easifix sleeve and timber to the corner post to make construction easy. Screwing the anchor brackets to the timber will be much simpler than trying to screw fix the anchor bracket to the corner post.

\*Easifix in the right application, ie, internal and not fire rated.

\*\*End blocks are not available in every style & pattern!

