

EASIFIX

INSTALLATION SYSTEM



EASIFIX

REASONS TO USE EASIFIX

Easy and speedy installation of straight (non fire rated) internal glass block walls.

GOLDEN RULES OF GLASS BLOCK INSTALLATION USING EASIFIX SYSTEM

- 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.**

The glass block panel is secured in place by being anchored into the head, cill and both jambs. **(a)** An independent support is required above the head to eliminate downward pressure being placed on the glass block panel.
- 3 Glass blocks expand and contract with temperature change.**

Glass blocks should not be installed when the surrounding temperature is 5°C and falling or 30°C and rising. Perimeter seal acts as an expansion joint.
- 4 Ensure all sides of opening are square and perpendicular and made to suit glass block modules.**

Glass blocks cannot be cut like masonry bricks or tiles.
- 5 A glass block panel should never be freestanding. **(b)****

Ideally for best integral strength - fitted into 4 sides. To secure panel into opening using Easifix, stainless steel anchor brackets and horizontal Easifix spacer, every row acts as reinforcement.
- 6 Maximum panel size**

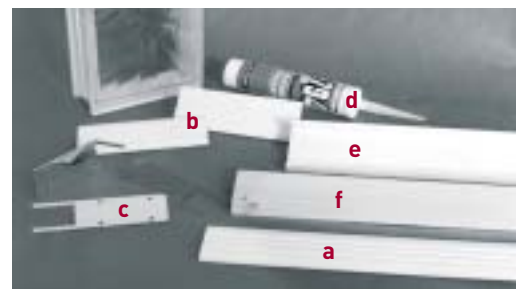
Easifix is recommended for internal use only up to 9m². (Vertical dimension not to exceed 3m).



Office partitions installed using Easifix into end posts to create two vertical jambs resulting in a four sided opening.

- 7 Accessories for Easifix construction :**
 - (a)** 2.4m (nominal) Easifix spacer profile
 - (b)** 185mm Easifix spacer profile
 - (c)** Stainless steel anchor brackets
 - (d)** DC794 silicon
 - (e)** Easifix sleeve
 - (f)** Planed timber

A full explanation of how to use each accessory is detailed in the relevant section of this brochure.

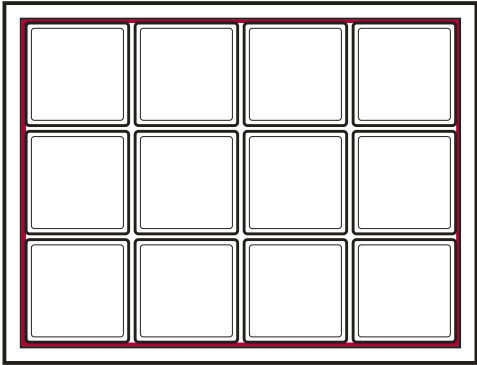


EASIFIX

EXPANSION JOINTS

Similarly to the rods and mortar system, the perimeter joint must be siliconed. It is critical that the perimeter edge between the glass block and edge of the Easifix sleeve or wall is not grouted in glass block mortar. If the joint is bridged, this will not permit the natural expansion and contraction of the panel.

Expansion and contraction within an Easifix glass block screen is allowed for by the overall construction being manufactured from UPVC combined with silicone.



Highlighted area indicating perimeter expansion joint

EASIFIX JOINTS

Easifix joints are 4mm and can be grouted in Colmef Vetromix glass block mortar or silicone with Dow corning to create an all glass look. Coloured silicones can also be considered.



Grouting with Colmef Vetromix glass block mortar

CALCULATING OPENING SIZES

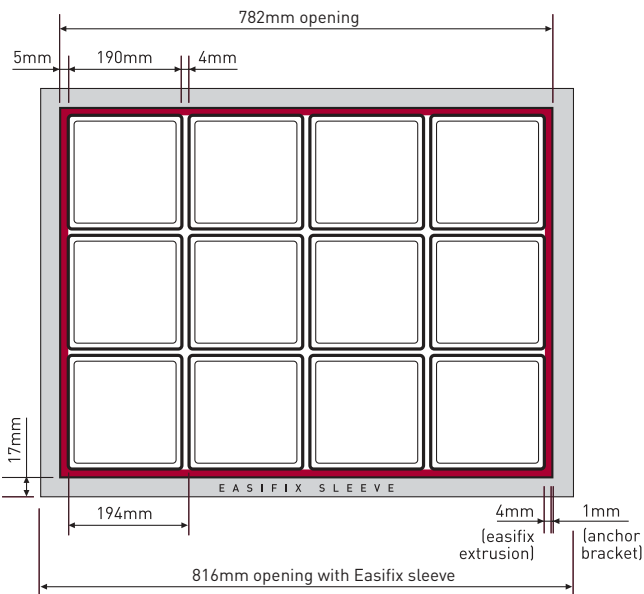
- Take the width of the block (eg. 190mm)
- Add the width of the vertical spacer joint (4mm)
- Multiply by the number of blocks in the horizontal/vertical course (eg 4 No.)
- Add one more joint width (6mm) as for 4 blocks you will have 5 joints
- The final joint dimension is 6mm. This allows for 5mm at one end (4mm spacer and 1mm anchor bracket) and 1mm to be added to the 4mm Easifix joint at the opposite end.

EXAMPLE 1: Using 10mm joints

190mm glass block :	190
4mm joint :	+ 4
	<hr/> 194
Number of blocks :	x 4
	<hr/> 776
Add fifth joint of 6mm:	6
Opening size :	<hr/> <hr/> 782mm

EXAMPLE 2: Using Easifix sleeve

As above but add a further 17mm to each end (the thickness of the sleeve)	782mm
	+ (2 x 17mm)
Opening size with Easifix sleeve:	<hr/> <hr/> 816mm.



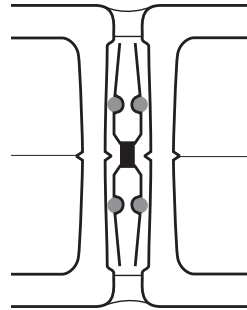
EASIFIX

EASIFIX EXTRUSION

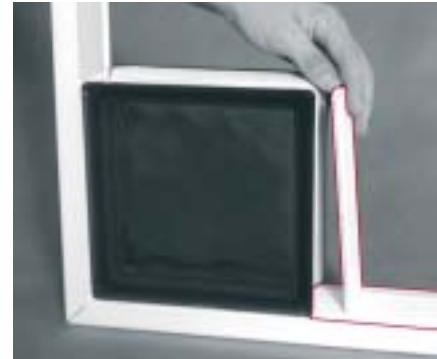
The Easifix extrusion is designed to represent the profile of a mortar joint where the hollow of two glass blocks meet.

As illustrated, the extrusion is adhered to the blocks by two beads of silicone. Glass Block Technology only recommend the use of Dow Corning 794, which is a neutral odour silicone that's elasticity expands and contracts at 50% of its own volume.

Easifix spacers are manufactured in 2 lengths : 2.4m - horizontal and 185mm - vertical.



Easifix extrusion



Easifix extrusion (highlighted) is placed between blocks and held with two, 5mm beads of silicone.

EASIFIX ANCHOR BRACKETS

Easifix anchor brackets are manufactured from polished stainless steel. Two number are used, one at each end of each course and locate into the Easifix extrusion, holding each horizontal spacer in place.



Being positioned in Easifix extrusion



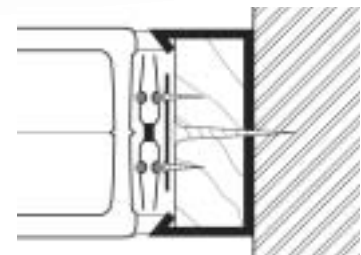
Easifix anchor bracket



Shower Screen utilising End Post

EASIFIX SLEEVE

Easifix sleeve is a UPVC U channel which accommodates a timber insert and is used around the perimeter edge of an Easifix glass block panel. The sleeve and timber allow anchor brackets to be secured easily and avoid screw fixing directly to masonry, steel or aluminium end/corner post. If used in a wet area the joint between the glass block and sleeve should be sufficiently caulked with silicone.



Easifix fixing detail

If Easifix is fitted into a timber stud wall and a clean line between the blocks and the plasterboard is required, it is permissible to screw the anchor brackets directly to the timber.

e.g. Easifix direct to End post (no sleeve)

4 pilot holes per anchor bracket need to be pre-drilled.

4 holes per anchor bracket x 11 blocks high x 2 sides = 88 pre-drilled holes. Hence Easifix sleeve!

EASIFIX

MAXIMUM PANEL SIZES

Easifix is only recommended for internal use for glass block panels up to 10m² not exceeding 3m in height.

If the wall being built is a bar or counter and the height is about 5-6 blocks high (based on a 190x190x80mm block) approximately 6 metres in length can be built before intermediate supports should be incorporated.

Glass block walls are non-load bearing. When using Easifix for a bar or counter front, the counter top must not rest directly on to the top of the blocks, therefore it is important to consider vertical supports at both ends of the panel or behind the glass blocks.



PRECAST EASIFIX

Precast Easifix has all the advantages of Easifix, being lightweight in comparison to rods and mortar construction and having 4mm joints. Rather than constructing brick by brick, Precast panels are specified, made to measure panels that can be fitted speedily, as single or connecting panels, decreasing installation time on site.

Two types of panels are available : standard sizes or inter connecting.



Standard



Interconnecting

For further information, refer to **Precast Easifix** brochure.

For a 3D animated visual explanation of Precast Easifix go to www.glassblocks.co.uk/precasteasifix

GUIDE TO INSTALLING EASIFIX SYSTEM

TOOLS REQUIRED

Drill or screwdriver, mitresaw or hacksaw, caulking gun, screws, pliers and spirit level.



ACCESSORIES REQUIRED

2.4m Easifix spacer profile, 185mm Easifix spacer profile stainless steel anchor brackets, DC794 silicon, 71x15mm planed timber and Easifix sleeve.



PREPARATION OF OPENING



STEP 1

Cut 71 x 15mm planed timber and place into Easifix sleeve to create a neat finish. Mitre cut the corners of easifix sleeve.



STEP 2

Lay out blocks and Easifix spacers dry to ensure modules fit. Secure frame horizontally and vertically to surfaces at 600mm centres ensuring it is both square and perpendicular.

LAYING FIRST COURSE



STEP 3

Cut long length of easifix spacer fractionally shorter than the horizontal length of opening. Take two anchor brackets and bend prongs to a right angle using pliers. Insert prongs into holes of easifix spacer at each end. The first horizontal Easifix can be screwed to the base/cill providing a firm base to begin constructing the panel. Note : The screw must be countersunk and not be in contact with any of the glass blocks.

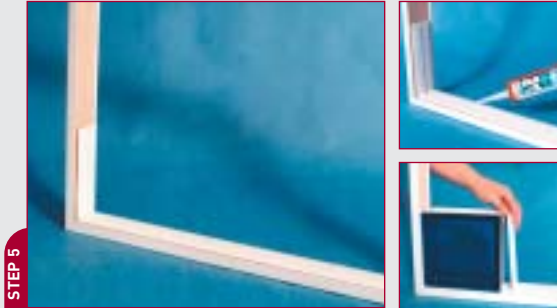


STEP 4

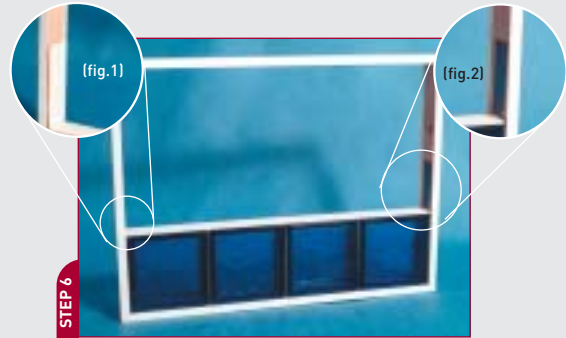
Silicon two 5mm beads of mastic into the under-side of the easifix spacer, fit to base of opening. Screw fix anchor brackets in place.

GUIDE TO INSTALLING EASIFIX SYSTEM

LAYING THE FIRST COURSE (CONT'D)

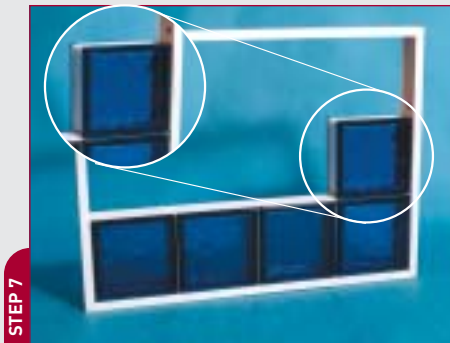


Take a 185mm length of spacer profile and silicon two beads of mastic on one side. Place over the anchor bracket. Silicon two beads of mastic to the easifix spacer profile. Fit first block. Take another piece of 185mm easifix, apply silicon and fit to exposed vertical of first block. Fit next block and repeat this process until first row is complete.



Note : Easifix spacer must always separate blocks from frame. (fig.1) Remember each row has to be secured with anchor brackets. (fig.2)

FINISHING THE GLASS BLOCK PANEL



Repeat previous steps to complete the next and following rows.

SEALING AND WEATHERPROOFING THE GLASS BLOCK PANEL



When the wall is complete, caulk the joints with silicon. Alternatively, grout using a wide grout joint. The perimeter expansion joint should always be caulked with mastic to avoid bridging the expansion joint.

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.

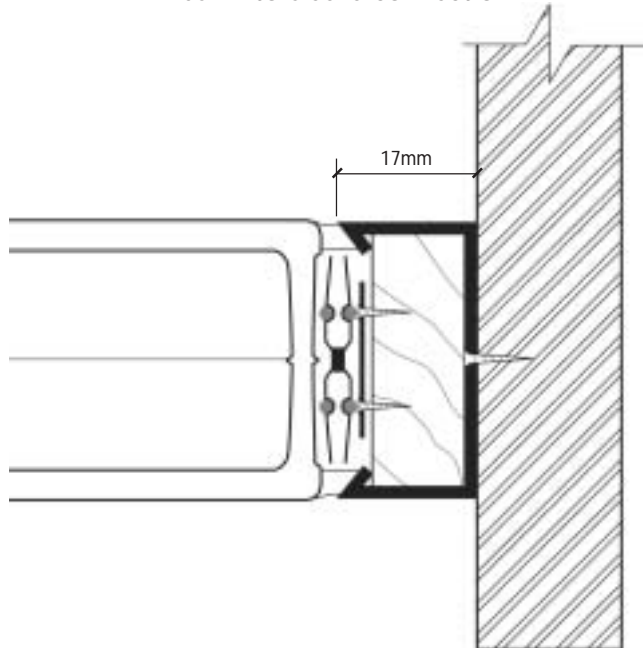
However, there may be a residue of cement on the glass surface left from mortar/tiling grout identified by whiteish bloom when dry. This may be removed by use of proprietary cement stain remover.

HYDROFLUORIC ACID OR DERIVATIVES MUST NOT BE USED.

Paint or cement may be removed by a blade taking care not to scratch the surface of the glass.

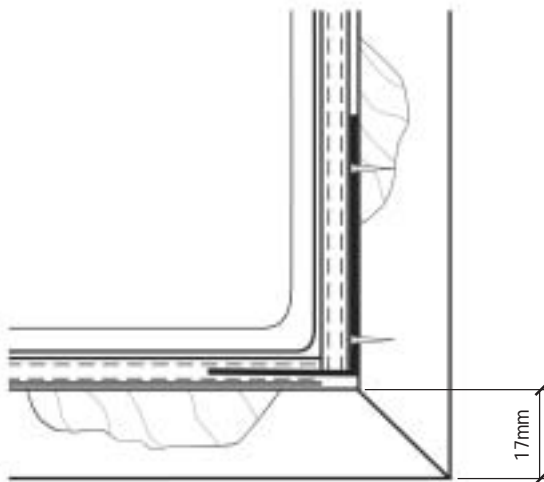
Periodic cleaning is required using clean water and buffing up with a chamois leather or in clean water use a proprietary glass cleaner and clean off with a lint free cloth.

Easifix to sleeve connection

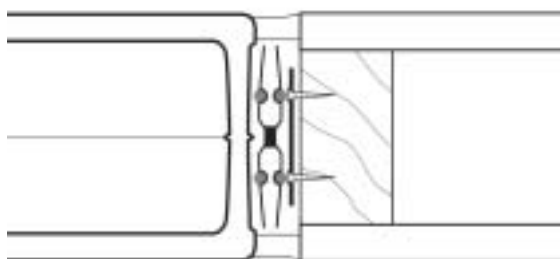


FOR FURTHER DETAILS SEE DRG GBT/0014

Anchor Bracket Fixing Detail



Easifix to timber stud with no sleeve



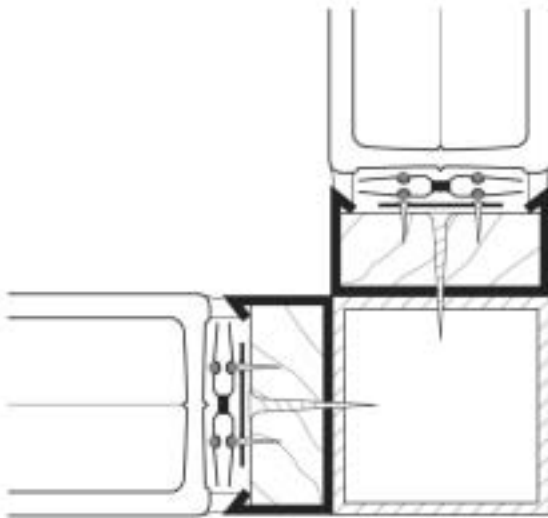
Guide to Installation - Golden Rules

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. The glass block panel is secured in place by being anchored into the head, cill and both jambs. An independent support is required above the head to eliminate downward pressure being placed on the glass block panel.
3. Glass blocks expand and contract with temperature change. Glass blocks should not be installed when the surrounding temperature is 5°C and falling or 30°C and rising. Expansion material must be incorporated to the perimeter opening.
4. Ensure all sides of opening are square and perpendicular and made to suit glass block modules. Glass blocks cannot be cut like masonry bricks or tiles.
5. A glass block panel should never be freestanding. Ideally for best integral strength - fitted into 4 sides. To secure panel into opening using Easifix, stainless steel anchor brackets and horizontal Easifix spacer, every row acts as reinforcement.
6. Maximum panel size :
Easifix is recommended for internal use only up to 9m².
(Vertical dimension not to exceed 3m).
7. To calculate the minimum opening size based on using 190x190x80mm blocks with 4mm joints, multiply the number of blocks by 194mm (190mm block + 4mm joint) then add 6mm for the other easifix joint. This is the minimum opening requirement.
8. If an Easifix sleeve is used, allow a further 17mm around the perimeter.
9. 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.

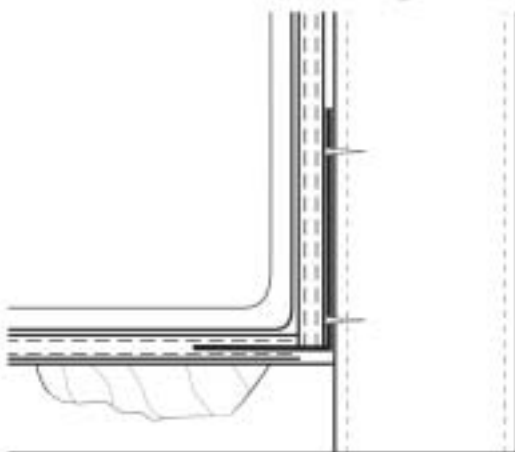
Accessories

1. 2.4m (nominal) Easifix spacer profile
2. 185mm Easifix spacer profile
3. Easifix sleeve
4. Stainless steel anchor brackets
5. 71x15mm planed timber to suit Easifix sleeve
6. DC794 silicon sealant

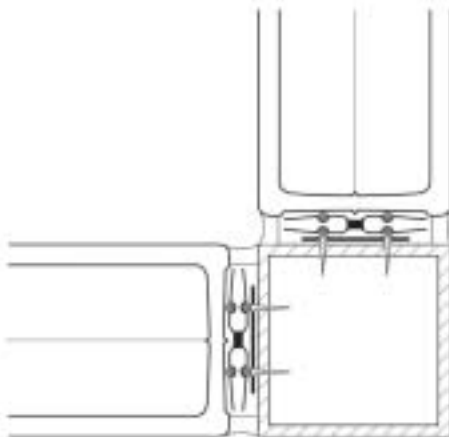
Easifix to Corner/End Post using sleeve



Anchor Bracket Fixing Detail



Easifix to Corner/End Post with no sleeve



Step by step guide to installing a glass block feature using the Easifix UPVC method.

1. Cut 71 x 15mm planed timber and place into Easifix sleeve to create a neat finish. Mitre cut the corners of easifix sleeve.
2. Lay out blocks and Easifix spacers dry to ensure modules fit. Secure frame horizontally and vertically to surfaces at 600mm centres ensuring it is both square and perpendicular.
3. Cut long length of easifix spacer fractionally shorter than the horizontal length of opening. Take two anchor brackets and bend prongs to a right angle using pliers. Insert prongs into holes of easifix spacer at each end.
4. Silicon two 5mm beads of mastic into the under-side of the easifix spacer, fit to base of opening. Screw fix anchor brackets in place.
5. Take a 185mm length of spacer profile and silicon two beads of mastic on one side. Place over the anchor bracket.
6. Silicon two beads of mastic to the easifix spacer profile.
7. Fit first block. Take another piece of 185mm easifix, apply silicon and fit to exposed vertical of first block. Apply silicon to exposed face of 185mm spacer and fit next block and repeat this process until first row is complete.
8. Note : Easifix spacer must always separate blocks from frame. Remember each row has to be secured with anchor brackets.
9. Repeat Step 7 until panel is complete.
10. When the wall is complete, caulk the joints with silicon. Alternatively, grout using Colmef Vetromix glass block mortar.
11. Silicon the perimeter joint to allow for expansion and contraction.

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.

Bathroom- 190x190x80 Weck Clear Clarity,
Sandblasted both sides.



Nightclub Bar
190x190x80 Clear Bubble



Nightclub
190x190x80 Clear Nubio



Shower Screen
190x190x80 Clear Flemish
using Safewall System - Silver Grey End Post



Supermarket Chiller Cabinets
Weck 190x190x80 Turquoise Arctic



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