GOLDEN RULES FOR EASIFIX INSTALLATION

Golden rules - essential guidelines that need to be considered prior to preparation of the opening and before beginning installation of glass blocks.

- Glass block walls are self supporting, but not load bearing. Therefore similar to doors and windows, support above should be provided in the form of a lintel.
- 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.
- Glass blocks expand and contract with temperature change. Then Easifix system allows for its own expansion and contraction because the extrusion is manufactured from exterior grade PVC and blocks are bonded together using silicone with high elasticity properties.
- Glass blocks should not be installed when the surrounding temperature is 5°C and falling or 30°C and rising.
- Openings must be square and perpendicular and made to suit glass block modules. It is important to remember that glass blocks should not be cut like masonry bricks or tiles.
- A glass block panel should never be freestanding. To secure panel into opening using Easifix, stainless steel anchor brackets and horizontal Easifix spacer, placed on every row acts as reinforcement.
- Maximum panel size recommended when constructing with Easifix for internal use only up to 9m^2. (Vertical dimension not to exceed 3m).
- Easifix cannot be used in fire rated situations.
- Easifix can only be used for straight walls in conjunction with 80mm glass blocks.

EASIFIX ACCESSORIES

EASIFIX EXTRUSION

The Easifix extrusion is designed to replicate the profile of a mortar joint where the hollow of two glass blocks meet. Easifix spacers are manufactured in 2 lengths : 2.4m - horizontal and 185mm (nominal) - vertical.

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

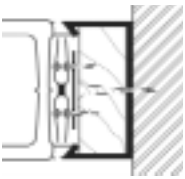
EASIFIX ANCHOR BRACKETS

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

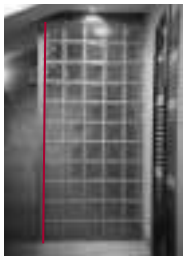
Easifix anchor bracket

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.



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!

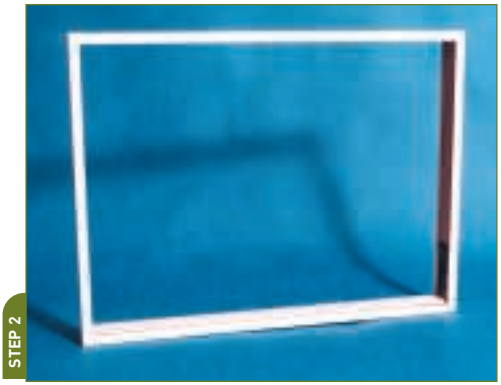


If Easifix is fitted into a timber stud wall and a clean line between the blocks and the plasterboard is required, it is permissable to screw the anchor brackets directly to the timber.

PREPARATION OF OPENING

Position 71 x 15mm planed timber into Easifix sleeve U channel, when mitre cutting ensure U profile sleeve is rigid as to avoid flexing. When fixing the sleeve to perimeter opening or end post fit at 600mm centres.

If installing directly to stud walling or end post etc, sleeve and timber may not necessarily be required. Go directly to Step 3.

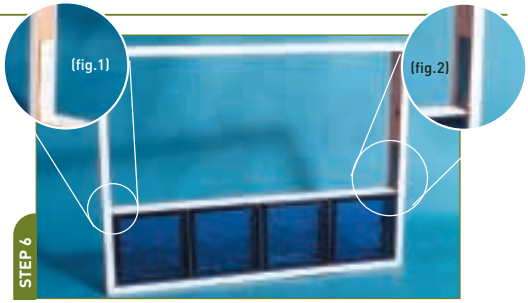


Lay out blocks and Easifix spacers dry to ensure modules fit. Secure Easifix sleeve and timber horizontally and vertically to perimeter opening at 600mm centres ensuring it is both square and perpendicular.

LAYING THE FIRST COURSE

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 Easifix sleeve or perimeter opening. (fig.1)
Remember each row has to be secured with anchor brackets at each end of the horizontal spacer.

- It is advised to construct the first course and allow this to initially cure so that on returning to build consecutive courses it becomes easier building a firm bed. In ideal circumstances around 6-8 courses before the panel will wobble to much, dependent on the panel width. Back shuttering could be considered for additional support.

  At this point it is advised to stop building and allow the panel to set prior to completing construction.

- For loose build of glass blocks ensure enough time is set aside to fully build.

ANCHORING THE HORIZONTAL SPACER

STEP 3

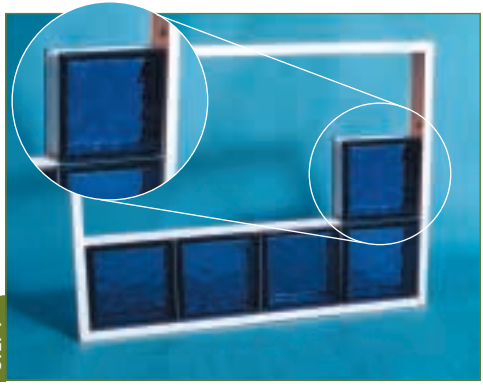
Cut a 2.4m long length of easifix spacer fractionally shorter than the horizontal length of opening. Take two anchor brackets and bend prongs to a right angle using pliers. Insert prongs into holes of easifix spacer at each end.

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.

Tip: As well as siliconing the base spacer, it can be screwed to the base to secure it instantly. Ensure screws are countersunk, so screw head avoids contact with blocks.

BUILDING THE PANEL



STEP 7

Repeat previous steps to complete the next and following rows.

FINISHING, SEALING AND WEATHERPROOFING THE GLASS BLOCK PANEL

STEP 8

When the wall is complete, grout using Colmef Vetromix mortar or a wide grout joint. Alternatively, caulk the joints with silicone.
Ensure that the perimeter joint is raked back, cleaned and siliconed. If grouted over it may crack.

Restriction can result in block cracking.

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. (BAL HD Tar Cleaner)

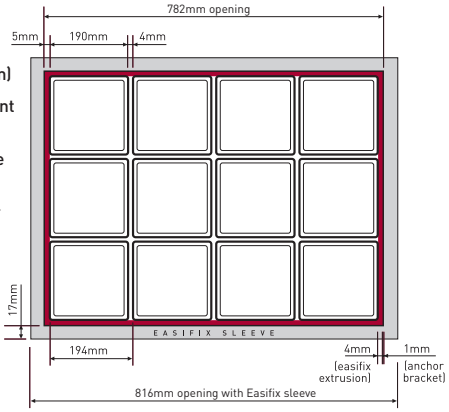
EASIFIX INSTALLATION SYSTEM

CALCULATING OPENING SIZES

Calculating the opening size accurately is essential because glass blocks should not be cut like masonry bricks or tiles. The diagram demonstrates the principle of how to calculate an opening size based on using 190x190x80mm glass blocks and 4mm joints. The Easifix extrusion is designed to create glass block panels with a minimum joint width. The perimeter joint will be approximately 5mm and the diagram and photographical step by step guide shows the use of easifix sleeve, which is 22mm deep.

Calculating opening sizes (Horizontal dimension)

- 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 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 vertical end (4mm spacer and 1mm anchor bracket).The remaining 1mm (anchor bracket) to be added to the opposite vertical Easifix joint of 4mm.



Calculating opening sizes (Vertical dimension)

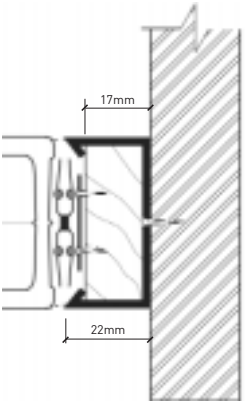
- Take the width of the block (eg. 190mm)
- Add the width of the horizontal spacer joint (4mm)
- Multiply by the number of blocks in the vertical course (eg 3 No.)
- Add one more joint width (6mm) as for 3 blocks you will have 4 joints
- The final joint dimension is 6mm. In the case of the vertical height, no anchor brackets are used. The 6mm allows a slight tolerance to allow easier positioning of the top horizontal row of glass blocks.

EXAMPLE 1: Using 4mm joints

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

Using Easifix sleeve

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



Easifix to sleeve connection

EXAMPLE 2: Using 4mm joints

190mm glass block :	**190**
4mm joint :	**+ 4**
	194
Number of blocks :	**x 3**
	582
Add fourth joint of 6mm:	**6**
Opening size :	**588mm**

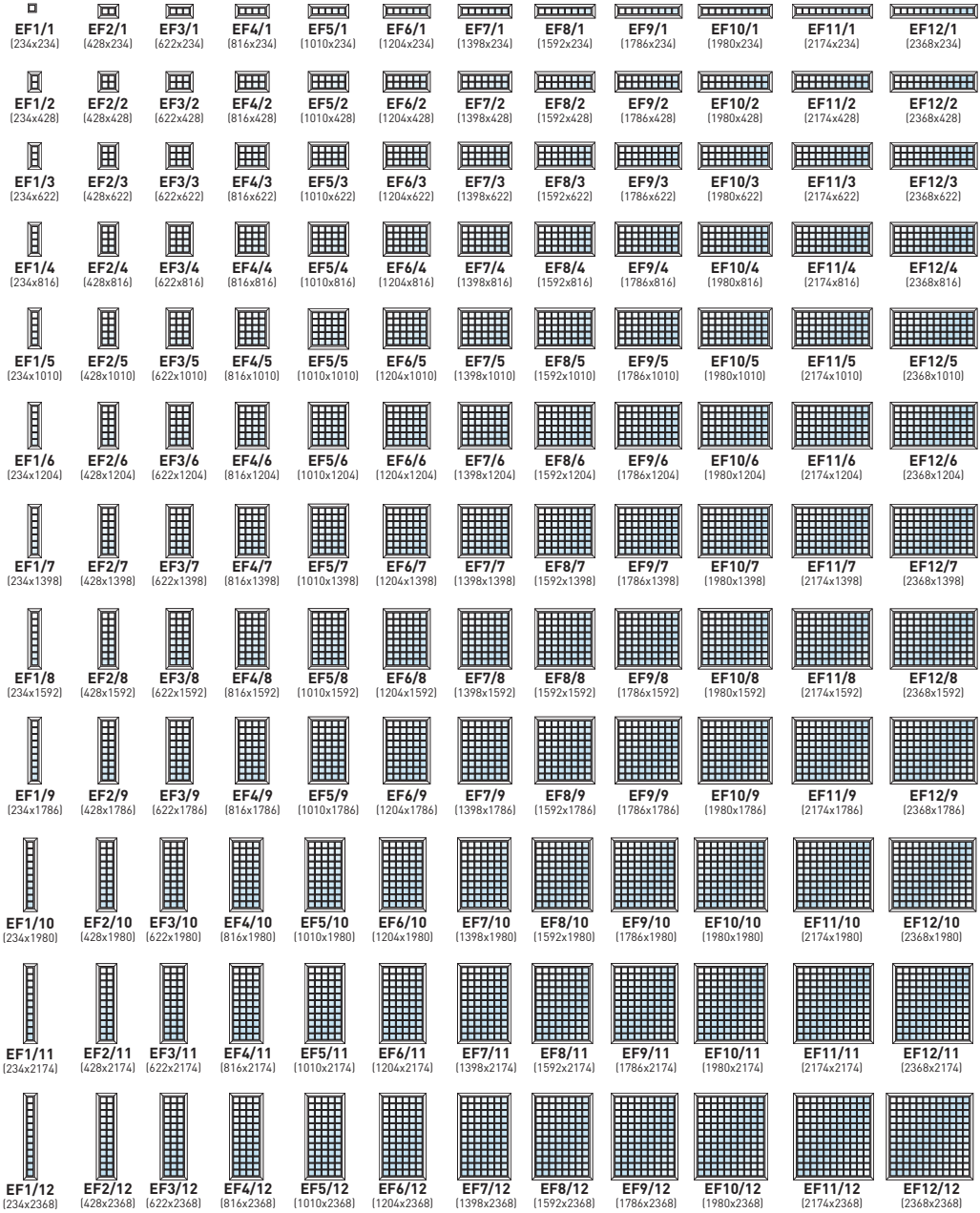
If using easifix sleeve add 17mm to each end resulting in an additional overall dimension of 34mm to be added to the required perimeter opening size.

EASIFIX INSTALLATION SYSTEM PANEL Kits

TERMS

- Easifix kits can only be used in conjunction with 190x190x80mm glass blocks.
- Easifix is not a fire-rated installation system.
- Rods & Mortar and Easifix kits and installation systems cannot be integrated.
- Grout/mortar is not supplied with Easifix kits as standard. To use Colmef Vetromix glass block mortar as a grout, for panels 1x1 to 6x6 order 1x10kg bag, for larger panels up to 12x12, order 2x10kg bags.
- ESL2400 Easifix sleeve and timber is supplied as standard with each kit. If not required, inform when ordering.
- Easifix minimum opening sizes shown include ESL2400 Easifix sleeve, used around the perimeter. If sleeve is not required, 17mm each side should be taken off the detailed sizes (34mm overall).
- Accessory fact sheets referring to fitting instructions are available in this A5 'Complete guide to glass blocks' or can be downloaded from www.glassblocks.co.uk/easifix

MATRIX



KITS INCLUDE:

GBT CODE	DESCRIPTION
ESP2400	Easifix profile - 2.40m
ESP185	Easifix profile - 185mm
DC794	Dow Corning Silicon (clear)*

GBT CODE	DESCRIPTION
MSSAB	Anchor brackets
TIM2400	Timber - 2.40m
ESL2400	Easifix sleeve - 2.40m

*If your glass block outlet does not stock Dow Corning, a high quality, low odour silicon should be used. (Glass Block Technology only endorses Dow Corning.)

precast EASIFIX

Precast Easifix is a dry fix system and one of the simplest ways of installing glass blocks. A revolutionary two part U channel manufactured by Glass Block Solutions allows you to fit precast ready made glass block panels quickly and easily.

Precast Easifix is an ideal product for bar fronts, counters, dividing walls, virtually any straight non fire rated glass block panel. Two types of panel are available: standard or interconnecting. Panels are finished with a 4mm grouted finish.

precast EASIFIX GOLDEN RULES

- The dimensions of the Precast panel will be adapted to fit whole blocks only and may increase or decrease in size and change from the customer's original requirements. You/The customer must be made aware of this.
- Precast Easifix is only recommended for internal use. It should not be used externally.
- Precast Easifix can only be used to construct straight walls.
- Precast Easifix is not a fire rated glass block installation system.
- Precast Easifix can only be produced in conjunction with 80mm wide glass blocks.
- When signed drawings are received confirming acceptance of dimensions, orders cannot be cancelled or changed. The merchant/retailer/client will be liable to pay 100% of the invoice.
- If Precast Easifix is being used in wet areas, you/the client is responsible for waterproofing all edges, joins & mitres between the Precast Easifix panel & Precast Easifix aluminium U channel. Dow Corning silicon should be used.
- Precast Easifix should be installed in to four sided openings for maximum strength & restraint.
- The Plasterboard Cover Strip is not supplied as standard. When requesting a quotation you must specify whether you require the plasterboard cover strip for one side or two.
- Connecting joints of the Precast Easifix panels must be grouted immediately after installation. Matching mortar is supplied with connecting Precast Easifix panels.
- Precast Easifix panels should be lifted vertically into position by a minimum of two people.

MERCHANT / RETAILER

HOW TO REQUEST A PRECAST EASIFIX QUOTE

1. Fill in your branch address and contact details and Customer Reference.
2. Ensure that the usage of the panel is also entered on the enquiry form. e.g. panel in stud wall.
3. Fill in the correct block type and ensure clear or colour and style is entered in the order form e.g. Cobalt Blue Flemish.
4. Enter number of blocks high by number of blocks wide required or dimensions of opening to fit.
5. Indicate if plasterboard cover strips are required.
6. State required delivery address: site or branch etc.
7. On completion, submit to GBT along with any drawings or plans.

Precast Easifix quotation request pads can be downloaded from www.glassblocks.co.uk/precast

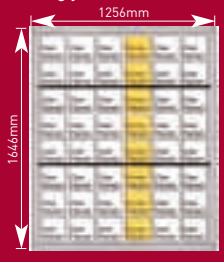
PRICING AND WHAT TO DO NEXT:

a. GBT will reply with a quotation and detailed drawings.

QUOTE
The quote will show the end user retail price. Contact GBT regarding relevant discounts.

DRAWINGS
Drawings will detail the channel dimensions along with any connecting joints.

Example



b. Once your client has accepted the price and ordered : Fax/send purchase order and signed drawings to GBT/your distributor.

c. Lead time for precast panels is approximately 6 weeks from date of receipt of deposit*, order and signed drawings.

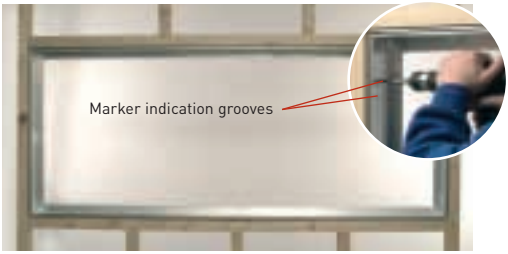
d. When the panels are produced GBT will notify the branch and request balance of payment*.

e. GBT will only despatch panels, subject to confirmation by the branch regarding settlement of client payment and delivery terms.

f. Panels can be delivered to branch or direct to site (by prior notification).

***Dependent on pre-negotiated trading terms, for further assistance contact GBT or refer to proposal.**

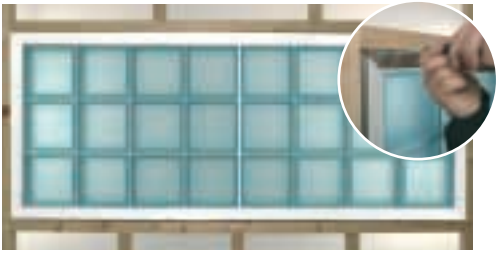
PRECAST EASIFIX STEP BY STEP INSTALLATION GUIDE



Step 1 : Position and screw in place first part of aluminium channel. Ensure that the screws are located to the relevant marker.

Step 2 : Vertically lift the first panel having placed plastic packers on base of aluminium **(a)** and slide into position. Temporarily secure in place using restraint anchors **(b)** supplied.

Step 3 : Apply silicone to the connecting joint on the second panel **(c)**. Carefully lift second panel in vertical motion onto plastic packers and slide up to first panel ensuring a neat joint at intersecting point.
Note : Apply more silicone if required.



Step 4 : Position second piece of channel and screw bolts into pre-drilled holes. Note : Fit sides first, then top piece, then bottom. If the Precast Easifix is a vertically or horizontally connecting panel, grout the connecting joint, both sides with the grout supplied.

Step 5 : If using plasterboard coverstrip carefully measure, mitre corners and slot into position.

Step 6 : Position plasterboard behind cover strip.