



GLASSBLOCK 
TECHNOLOGY

AN INTRODUCTION TO GLASS BLOCK TECHNOLOGY LIMITED

Glass Block Technology Ltd is a stockist distributor of glass blocks and all fitting accessories, operating a distribution service covering the whole of the UK, generally within 3 to 5 days, overnight services are available by prior arrangement.

All staff in the Glass Block Technology sales office are highly trained in the entire glass block range and both Rods & Mortar and Easifix systems as well as specialist blocks and the Safe Wall system. Assistance is available with quotations, planning and estimating and talking through ideas and suitability for glass block walls in different applications.

No matter whether it's your first glass block enquiry or you simply need reassurance with a problem, contact Glass Block Technology.

Glass Block Technology also operate a dedicated Technical Helpline to help with liaison between yourself, client, architect, contractor and building officer in relation to any aspect of the project for example wind loadings, Kn and impact loading, U values and Part E & L of the Building Regulations.

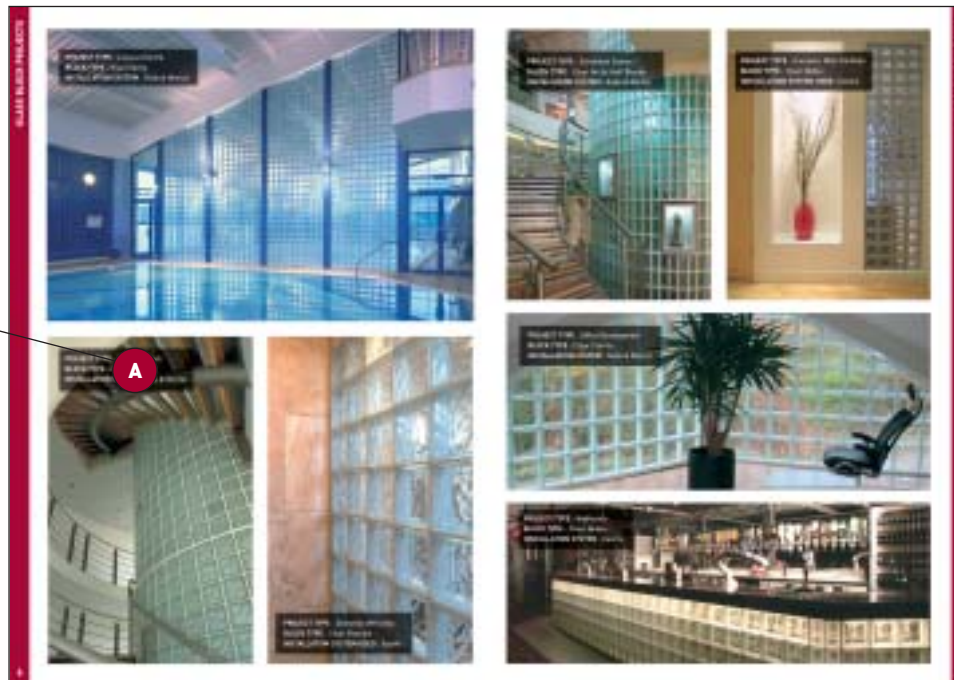
Combining all these quality products and services is how we formed the slogan 'Glass Block Solutions.'

GLASS BLOCK PROJECTS

Featured here are a selection of glass block projects that show different internal and external applications, the block type and installation system used.

Details of projects, installation system (ie: Rods & Mortar/Easifix) and fixing details if applicable listed to highlight versatility and flexibility of blocks.

A



A BRIEF INTRODUCTION TO SELECTING A FITTING SYSTEM

PROJECT	FITTING SYSTEM	
	EASIFIX	RODS & MORTAR
Straight Walls	✓	✓
Curved Walls	✗	✓
Internal Walls	✓	✓
External Walls	✗	✓
Fire-rated Walls*	✗	✓
Floor Panels	✗	✗

*Fire rated panels are based on Rods & Mortar. Variations apply regarding different fire ratings. Consult GBT for further information.



GLASS BLOCK RANGE THIS SECTION SHOWS THE SELECTION OF GLASS BLOCKS THAT GLASS BLOCK TECHNOLOGY OFFER FROM STOCK.

The name below each image denotes the pattern of the glass block, clear tint or coloured glass and the sizes they are manufactured in.

£ **La Rochere** glass blocks are fire rated to one hour fire integrity and fifteen minutes thermal isolation (when installed with rods and mortar) see La Rochere range.

£ Full range of block sizes shown pictorially to emphasise the extent of the **Weck** range and the choices available.

LA ROCHERE RANGE



WECK RANGE



A simple guide has been included to assist in selecting glass blocks when the level of transparency is an issue,

The face of any glass block can be sandblasted one side or two. Sandblasting takes the very top surface off the face of the glass block and creates an opaque finish and is also known as shot blasting or Sahara finish, appearance wise it resembles acid etching.

! Ventilation blocks can only be used in conjunction with Rods and Mortar, not Easifix.

i For floor blocks and panels, go to www.glassblocks.co.uk/floorpanels

Glass Block Technology stock glass blocks from two manufacturers La Rochere and Weck.

! La Rochere and Weck clear blocks should not be mixed in projects due to differing glass tints, although it is possible to mix colours with clear blocks across ranges.

LA ROCHERE BLOCK RANGE

- ✓ La Rochere glass blocks are manufactured with a very clear tint to the clarity of the glass.
- ✓ La Rochere glass blocks are predominantly 190x190x80mm, they are also produced in certain patterns 190x190x100mm and 240x240x80mm.
- ✓ La Rochere blocks have a 60/15 fire rating.

WECK BLOCK RANGE

- ✓ Weck produce a very diverse range of blocks in a number of sizes, styles and colours.
- ✓ Weck produce a number of specialist blocks which are listed later in the leaflet.
- ✓ Weck glass blocks contain a percentage of recycled glass resulting in a slight green tint in the clarity of the clear blocks.

QUESTIONS TO ASK WHEN SELECTING A FITTING SYSTEM.

Is the panel internal or external?

Internal - Rods & Mortar, Easifix or Precast Easifix can be used.
External - Rods & Mortar

Is the panel straight or curved?

Straight - Rods & Mortar or Easifix can be used.
Curved - Rods & Mortar only.

Is the block being used 80mm or 100mm wide?

80mm - Rods & Mortar or Easifix can be used.
100mm - Rods & Mortar only.

The panel has to be fire rated to one hour fire integrity and fifteen minute thermal isolation?

Only Rods & Mortar (using La Rochere 190x190x80 glass blocks).

i If a higher fire rating is required see F-30 Fire Block section or contact Glass Block Technology.

This is just a simple guide to help you choose between using Rods & Mortar and Easifix by eliminating a few processes.

i If this does not help you select an installation system for glass block wall construction please call the Glass Block Technology Sales Office.

USING THE 'RODS & MORTAR' INSTALLATION GUIDE

THIS SECTION OUTLINES THINGS TO CONSIDER AND HANDY TIPS

✓ Rods & Mortar is a system that can be used for virtually any vertical type of glass block project. It can be used internally or externally for straight and curved panels.

✓ The Golden Rules are essential guidelines that should be considered whilst preparing the opening prior to beginning building glass blocks.

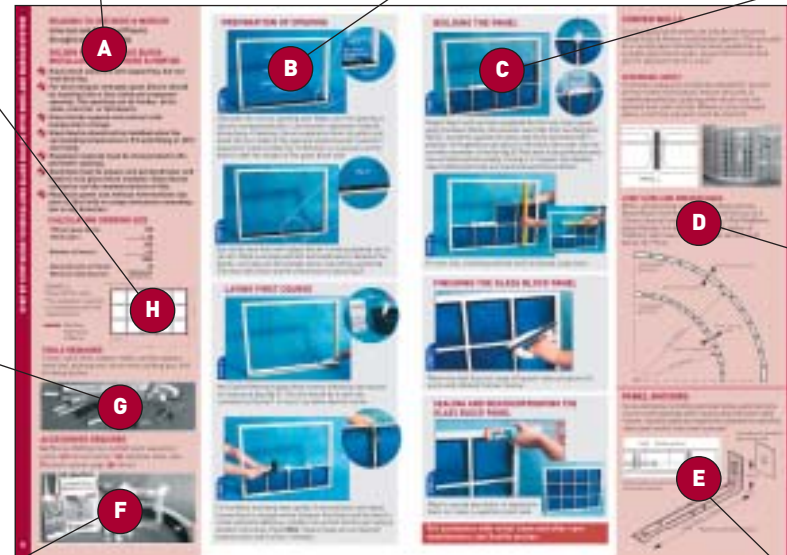
Timber frame on images represents opening : this can be constructed alternatively out of masonry, brick, stud wall, steelwork.

The photographic step by step guides have been designed to show a more realistic look at how to install glass blocks rather than just a list of instructions.

Calculating the opening size accurately is essential because glass blocks cannot 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 10mm joints.

The tools required image, simply gives a visual display of the tools needed for installing using the Rods & Mortar system.

The accessories image acts as a checklist to ensure you receive all the accessories required for successfully constructing with Rods & Mortar.



This covers information regarding the similarity when building straight and curved walls.
Note importance of minimum radius and expansion joints.

Panel anchors can be used as an alternative to drilling oversized holes and are an ideal alternative to drilling holes in a metal box section or steel I beam etc.

i For circumstances that require alternative block sizes, joint details or assistance in detailing curved walls contact Glass Block Technology Sales.

USING THE 'EASIFIX' INSTALLATION GUIDE

THIS SECTION OUTLINES THINGS TO CONSIDER AND HANDY TIPS

✓ Easifix is an installation method recommended for internal use only. It is ideal for shower screens, panels within partition walls and many interior features within the home. It can only be used for straight walls. Interior designers, property developers and shop fitters are all realising the benefits of the simplicity of construction using the Easifix system.

✓ The Golden Rules are essential guidelines that should be considered whilst preparing the opening prior to beginning building glass blocks.

The Easifix photographic step by step guides have been designed to show a more realistic look at how to install glass blocks rather than just a list of instructions.

Calculating the opening size accurately is essential because glass blocks cannot be cut like masonry bricks or tiles. The diagram demonstrates the principle of how to calculate an opening size based on using 190x190mm glass blocks and 4mm vertical and horizontal 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 photographic step by step guide shows the use of easifix sleeve, which is 17mm deep.

The tools required image, simply gives a visual display of the tools required for installing using the Easifix system.

The accessories image acts as a checklist to ensure you receive all the accessories required for successfully constructing with Easifix.

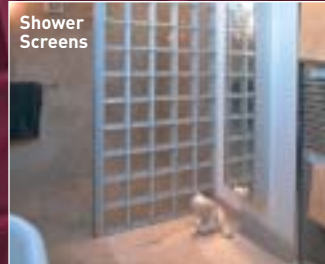
! Easifix cannot be used in fire rated situations.

! Easifix can only be used in conjunction with 80mm wide glass blocks.

Detailed is important information with regards to the initial clean and after care maintenance of your glass block feature whether constructed in Rods & Mortar or Easifix



£ It has a great potential in the commercial sector for example :



PRECAST EASIFIX

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 Technology allows you to fit precast glass block panels quickly and easily.

! When choosing blocks to make up your panels, you should avoid combining clear blocks from the Weck and La Rochere ranges as they have slightly differing tints.

! Precast Easifix panels are not fire rated.

✓ Precast Easifix panels are used in straight wall construction only.

✓ 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 Technology allows you to fit precast 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.

Copy explaining the concept of Precast Easifix.

The Precast Easifix photographic step by step guides have been designed to show a more realistic look at how to install glass block panels rather than just a list of instructions.

Connection details highlighting the various panels and methods of connection.

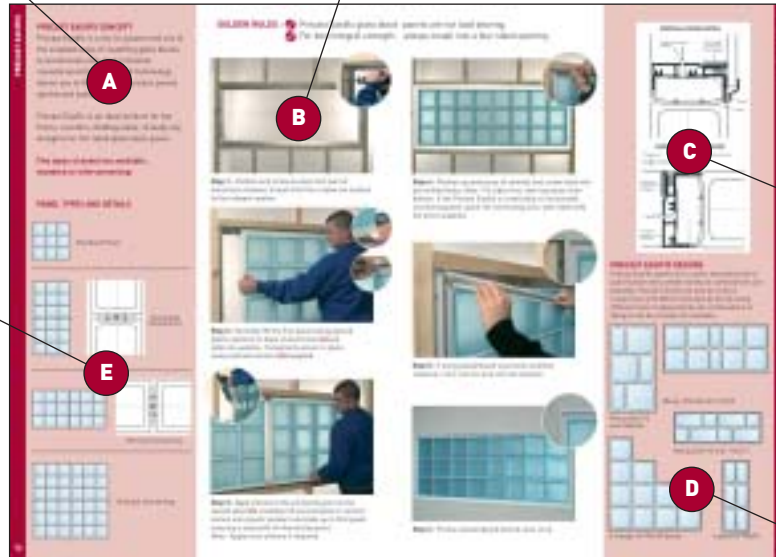
Precast Easifix fixing details illustrating the principle and detail of the connecting U channel and reference band.

! Precast Easifix is manufactured to order. Be aware of lead times, always check with Glass Block Technology prior to agreeing client delivery dates.

If time is an issue, consider building loose blocks with Easifix.

i For further information or a quotation for Precast Easifix panels contact Glass Block Technology Sales.

D Details demonstrating the flexibility of Precast Easifix panels allowing you to create any number of possible combinations.



THE SAFE WALL SYSTEM

- A END POST**
The end post offers a solution for constructing glass block walls with either Rods & Mortar or Easifix.
 - B CORNER POST**
The corner post offers a solution for constructing glass block walls around a 90° corner.
- ! End posts and Corner posts are only recommended for internal use and are not fire rated.
 - ! Both are suitable for building glass blocks in either Rods and Mortar or Easifix.
 - ! Only 80mm wide glass blocks can be used.

HOW TO INSTALL A CORNER/ END POST

A boss section is secured to the floor and another is secured into the ceiling and then the end post is slid into place, until the panel is fully constructed the post can temporarily be held in place by silencing inside the boss section.

- C** The **end post** is 3" x 2" (2.7m) extruded aluminium box section, powder coated in either gloss white or metallic grey and is secured in place by two specially fabricated boss sections available in either brushed or polished stainless steel. **1**
- D** The **corner post** is 3" x 3" (2.7m) long and can be cut down on site and it is secured in place similarly to the end post, by two stainless steel boss sections available in either brushed or polished stainless steel. **2**
- E** If a glass block wall can be restrained to a vertical jamb and the floor/horizontal base, the **end post** can be secured floor to ceiling to create another vertical jamb meaning that the glass block panel can be secured on three sides, four if fully extended up to the ceiling as illustrated.



F30 FIRE RATED GLASS BLOCKS

A miniature summary of each fire certificate is included, one detailing the Certificate Z-19.14-1258 for 120 minute fire integrity and the other showing Certificate Z-19.14-1257 for the 30 minute thermal isolation.

The brochure shows the four clear patterns that the F30 block is available in, Nubio being the most popular. The code for each block is clearly detailed below each picture.



A cross section diagram explains the difference between a standard 190x190x80 glass block in comparison to the 190x190x100 F30 glass block. Each wall of the F30 is between 23-26mm thick.

An explanation of the definition between fire integrity and thermal isolation.



Sizes and styles available.

- A** End blocks
- B** Corner blocks
- C** Radius blocks when constructing curved panels with an internal radius as tight as 300mm.

Accompanying the blocks is an image of that block in use to demonstrate suitable applications.

i Contact Glass Block Technology when you have a requirement for specialist blocks to discuss the application and clarify they are being used correctly.

FIRE BLOCKS CONCEPT

F30 glass block walls are normally specified via an architect or architectural practice. F30's are a product specified in conjunction with building regulation for compartmentalised areas, fire exit routes etc.

Who will use them and how do I instruct them to fit blocks in accordance with test data?

F30 fire blocks are being used more and more in public areas, loft apartments and dwellings where blocks are used in fire escape routes where heat could possibly transfer from the side of the fire through the block to the side of the exit route, whereby coming into contact with excess heat which could be extremely dangerous and cause serious injury.

F30 fire blocks have to be installed in accordance to strict fitting regulations that relate to how the panel was originally tested.

Glass Block Technology Ltd do not print the fitting instructions for F30 blocks in the A5 Glass Block Solutions brochure because there are a number of specific points we have to clarify with you and your client prior to any installation.

For example :
Maximum panel size, perimeter borders, specialist fire resistant expansion material and reinforcement etc.

! Be aware of the difference between the definitions of Fire integrity and Thermal Isolation.

FIRE INTEGRITY :
The time taken for a glass block to become destabilised and the blocks to crack in the situation of a fire.

THERMAL ISOLATION :
The time it takes for heat to transfer through the glass block from the side of the fire to the other face.

SPECIALIST GLASS BLOCKS

The range of specialist glass blocks Glass Block Technology stock are to overcome challenges you may come up against.



HOW TO REQUEST A QUOTATION

The simplest way to request an estimate is to fax your enquiry to **Glass Block Technology Sales on 0161 285 1503** with the following details :

- **The block style and size**
- **The height and width of the opening** - in measurements or numbers of blocks
- **The fitting system to be used** - either Rods and Mortar, Easifix or Precast Easifix.
- **The number of panels**

Alternatively complete the Rods & Mortar or Easifix quotation form (shown) and fax to the above number.



Pads can be downloaded at www.glassblocks.co.uk/quotepads

DISPLAY MATERIAL

These are a selection of displays, Glass Block Technology have available. For further information contact Glass Block Technology. Alternatively, you may wish to construct a bespoke display for your showroom.



Shelf Display

All blocks shown in display units are 190x190x80mm

Counter Display

Tower Display



From time to time Glass Block Technology may improve or introduce new display solutions, for instant access to these go to www.glassblocks.co.uk/display

ORDERING AND DELIVERIES

ORDERING

Glass Block Technology will accept your official purchase order when received in writing, by fax, email or post.

If your purchase order is based upon a quotation previously sent from Glass Block Technology, for quicker processing please clearly state the Glass Block Technology **Estimate Reference number**, found in the top right hand corner.

After your order has been received you will receive an order confirmation, please check this thoroughly. Ensure the block and quantity is correct, the installation system and quantities are correct and whether the carriage charge is correct (if applicable).

DELIVERY

If carriage is chargeable for your consignment, the price will be calculated based on weight. Some post codes within the UK are subject to a surcharge, the Scottish Highlands for example.



If you need assistance from stock checks, to calculating carriage, or you have special delivery requirements like tail lifts, contact Glass Block Technology Sales.

- **Please allow 24 hours for your order to be processed**
- **Parcels are despatched for next day delivery**
- **Pallets are despatched on 3 day Economy Service.**



If you require a next day or a timed service, please contact Glass Block Technology Sales.



GLASSBLOCK
TECHNOLOGY

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KEY TO SALES :



GOLDEN RULES



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SALES BENEFIT



FOR MORE INFORMATION