

THE COMPLETE GUIDE TO BUILDING GLASS BLOCKS

USING



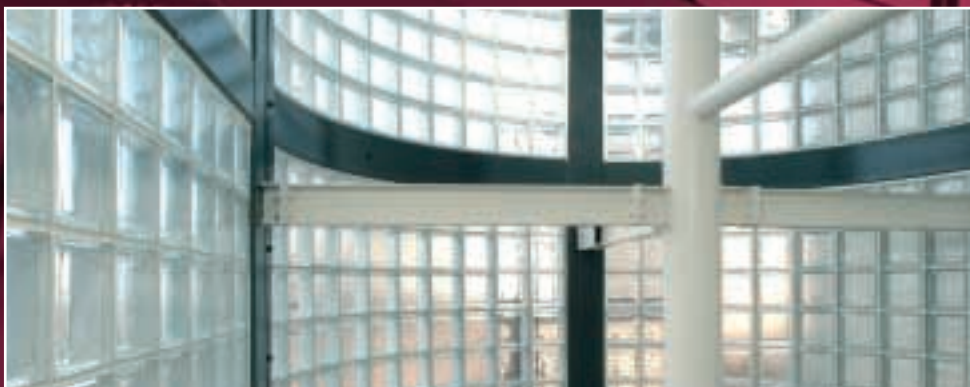
rods & mortar
INSTALLATION SYSTEM

EASIFIX
INSTALLATION SYSTEM

precast
EASIFIX

GLASSBLOCK 
S O L U T I O N S

Use for glass blocks vary in all market sectors as seen in this selection of photographs. Glass blocks are not just a fashionable decorating material, they are an excellent building medium that can be used in internal and external walling, offering benefits like:
light transmission, strength and security, they can be backlit for mood creation and can make dull corridors aesthetically pleasing.



This brochure is aimed at offering glass block solutions, ensuring successful completion of your project, no matter how difficult or innovative.

Glass blocks can be purchased in three easy steps:



Select the required blocks.

Choose the pattern, style and colour of glass blocks from the large diverse range available. The most common block size used is 190x190x80mm.



CLEAR FLEMISH



CLEAR FROSTED



TRANSPARENT



BLUE FLEMISH



COBALT BLUE FLEMISH



GREEN FROSTED

Use transparency guide to check level of transparency/opaque-ness.



TRANSPARENT



CLEAR FLEMISH



CLEAR BUBBLE



Select a fitting system that best suits the project specification.

Each installation system is separated into its own specific section and is colour coded for easier identification. It will cover a brief explanation and restrictions, a look at the Golden Rules, how to calculate opening sizes, step-by-step guides and panel kit references.



A loose build installation system, suitable for internal, external, straight or curved panels. Rods and Mortar is based on 10mm joints and is a wet mix system.

A loose build installation system suitable for internal, straight, non fire rated panels. Ideal for showers, shop counters, bars. Easifix uses 4mm joints and is a dry fix system. A UPVC profile replicates the mortar joint and is bonded to the blocks using silicon.



See for pre-constructed Easifix units.



Select the panel size.

The Panel Kits matrix displays combinations from a single block, to a panel 12 blocks wide by 12 blocks high (144 No blocks) for Rods & Mortar and Easifix to assist with simple selection.



An RM prefix denotes Rods & Mortar installation accessories. (EF denotes Easifix)

Details required opening size to construct glass block panel in mm.



RM6/6
(1210x1210)

The first number denotes the number of blocks wide

The second number denotes the number of blocks high

If the panel you require is not shown here, for example, it may be curved, fire rated, be larger than 12 x 12 blocks, constructed in an unusual configuration or involves other block sizes than 190x190x80, please consult with your glass block outlet for further assistance.

Basic points to be aware of:-

- ❗ Consider constructing glass block walls using the safewall system when not enclosed by 4 sides.
- ❗ The golden rules of each installation method are essential guidelines to consider prior to preparation of openings.
- ❗ If selecting precast systems, be aware that lead times apply.
- ❗ If panels require fire ratings, check difference between fire integrity and thermal isolation to ensure the correct product is selected.

CLASSES BLOCKS



The range of glass blocks featured are manufactured by La Rochere of France, who are renowned for their high quality glass production since 1475AD.

By extracting impurities of raw materials, La Rochere blocks have an extremely clear tint to the glass. A by-product is that the furnaces are heated to higher temperatures to fuse the blocks and this results in a basic fire rating of 1 hour fire integrity and a thermal isolation of 15 minutes when installed in accordance with Rods & Mortar and sealed in Firestop silicon.

PHYSICAL PROPERTIES OF GLASS BLOCKS

The following information is based on a typical 190x190x80 clear glass block.

GLASS	- Composition : Silica-sand, soda ash, calcium. Fusion is obtained at approximately 1550°C.
LIGHT TRANSMISSION	- Clear 190x190x80 = 80% - Coloured 190x190x80 = 60%
THERMAL TRANSMISSION	- Average value = 2.9 W/m ² °C : Single Wall
IMPACT STRENGTH	- 12.0 N/mm - Tested using 50kg sand bag and steel ball bearings
SOUND TRANSMISSIONS	- Rw = 42dB depending on frequency.

SANDBLASTING



Typical example : Turquoise Flemish & Transparent.

All blocks can be sand blasted one side or two.

Sandblasting can also be referred to as shotblasting, satinating or Sahara finish.

Sandblasting is a safer means of satinating Glass Blocks compared to acid etching.

Sandblasted blocks can be treated with a protective coating to offer resistance against smudges and water marks.

EXAMPLE :
Clear Flemish not sandblasted



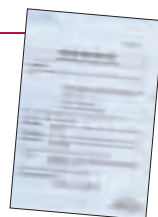
Clear Flemish sandblasted one side



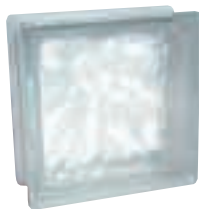
FIRE RATING

La Rochere clear blocks have a minimum 1 hour fire integrity and a minimum 15 minute thermal isolation. Glass Block Technology can issue a Fire Certificate for 60 minute fire integrity and 15 minute thermal isolation on application when installed in accordance with Rods & Mortar and sealed in Firestop silicon.

! NB: The difference between fire integrity and thermal isolation.
For further information see fire ratings on page 29.



Illustrated is the range of glass blocks produced by La Rochere. Below each image is the product name, and the size that the block is available. All measurements are in mm.



CLEAR FLEMISH
190x190x80 / 190x190x100 /
240x240x80



BLUE FLEMISH
190x190x80



COBALT BLUE FLEMISH
190x190x80



GREEN FLEMISH
190x190x80



TURQUOISE FLEMISH
190x190x80



ROSE FLEMISH
190x190x80



BRONZE FLEMISH
190x190x80



GREY FLEMISH
190x190x80



CLEAR FROSTED
190x190x80 / 240x240x80



BLUE FROSTED
190x190x80



COBALT BLUE FROSTED
190x190x80



GREEN FROSTED
190x190x80



TURQUOISE FROSTED
190x190x80



ROSE FROSTED
190x190x80



QUADRA BLOCK
190x190x80



MORSE BLOCK
190x190x80



REEDED
190x190x80



CROSS REEDED
190x190x80 / 190x190x100 /
240x240x80



FINE REEDED
190x190x80



TRANSPARENT ALPHA
190x190x80 / 240x240x80



TRANSPARENT
190x190x80 / 190x190x100 /
240x240x80



CLEAR BUBBLE
190x190x80 / 240x240x80



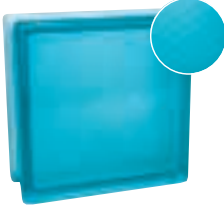
BRONZE BUBBLE
190x190x80



BLUE BUBBLE
190x190x80



CLEAR JAVA
190x190x80



BLUE JAVA
190x190x80



ROSE JAVA
190x190x80



TURQUOISE JAVA
190x190x80



ROUND TRANSPARENT
240x80
Porthole blocks can be precast into concrete by special order.




ROUND CLEAR FLEMISH
240x80



VENTILATION BLOCKS
Available in sizes : 190x190x80
*Only to be used in conjunction with
Rods & Mortar installation systems.*

Single blocks can be ordered with slimline concrete borders and unique U channel clamping system for easy fitting.
[See glassblocks.co.uk/
single blocks](http://See glassblocks.co.uk/single blocks)

TRANSPARENCY RATING

Here is a simple guide to assist in selecting glass blocks when the level of transparency required is an issue. Note : No ducks were harmed during the production of this photography. 



TRANSPARENT



TRANSPARENT ALPHA



QUADRA BLOCK



CLEAR FLEMISH



CLEAR FROSTED



CLEAR BUBBLE



REEDED



CLEAR JAVA

INTRODUCTION TO THE INSTALLATION SYSTEMS



A loose build installation system, suitable for internal, external, straight or curved panels. Rods and Mortar is based on 10mm joints and is a wet mix system.

Rods & Mortar also forms the basis for fire rated construction.



A loose build installation system suitable for internal, straight, non fire rated panels. Ideal for showers, shop counters, bars. Easifix uses 4mm joints and is a dry fix system. A UPVC profile replicates the mortar joint and is bonded to the blocks using silicon.



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 ready made glass block panels quickly and easily.



SELECTING AN INSTALLATION 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).

! If a higher fire rating is required see Fire Block section.

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

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, but construction variations apply regarding different fire ratings. Consult GBT for further information or visit glassblocks.co.uk