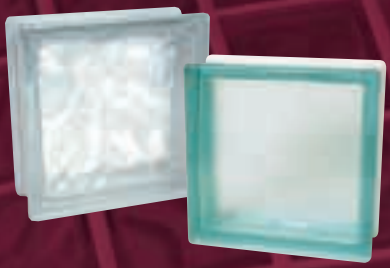


THE COMPLETE GUIDE TO BUILDING GLASS BLOCKS

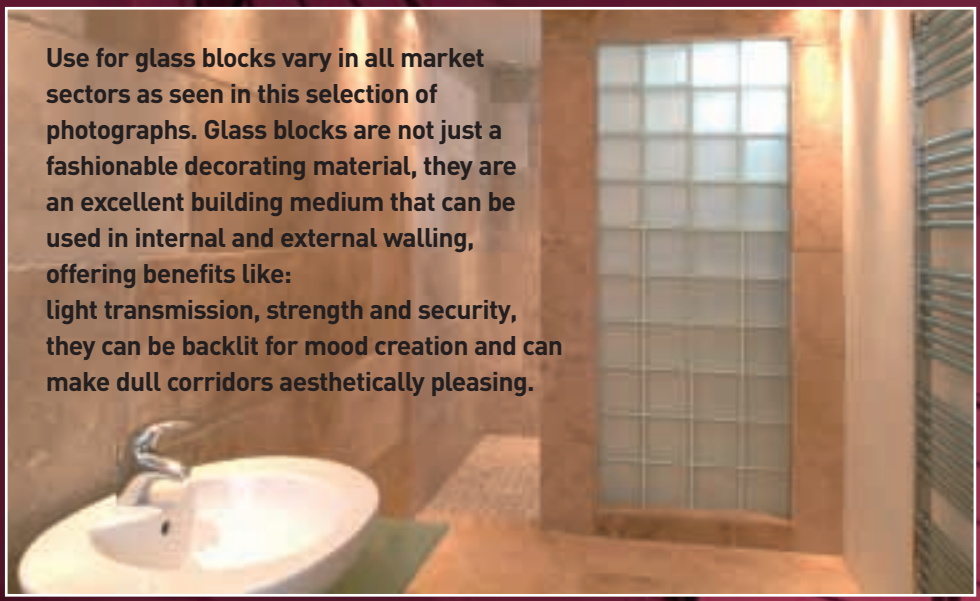
USING

rods&mortar INSTALLATION SYSTEM

EASIFIX INSTALLATION SYSTEM

precast EASIFIX

GLASSBLOCK SOLUTIONS



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/opaqueness.


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.

rods&mortar INSTALLATION SYSTEM

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.

EASIFIX INSTALLATION SYSTEM

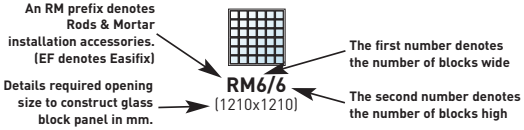
precast EASIFIX

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.

PANEL Kits



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.

GLASS 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 furnesses 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/m² °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

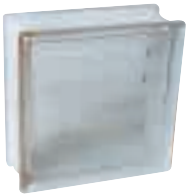
COBALT BLUE FROSTED
190x190x80

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

ROUND CLEAR FLEMISH
240x80

Porthole blocks can be precast into concrete by special order.

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

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

rods&mortar INSTALLATION SYSTEM

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.

EASIFIX INSTALLATION 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.

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 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