

An analytical and technological study of the glass bricks building system for architecture

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Abstract:

Glass blocks have a great importance for use in architecture and have a long history. The stages of manufacturing have evolved since the beginning of the appearance in 1800's in the form of- manufacturing the first half of the production until it reached the current known form, which works through the light through which provides visual hides. The glass block industry was developed based on the principles of lighting ergonomics in the early 1900's to provide natural light in the plant's greenhouse. Glass blocks are used in walls, partitions, separators, etc.

Glass blocks have two types according to the method of automatic glass forming, whether in the form of pressing method inside the mold or casting method in a mold to take the desired shape embossed, has more than one method of composition according to each type is different from the other, and glass blocks have more than the form and method of production according to the half-automatic method in production into a mold in the furnace to form glass sculpture blocks.

The glass blocks have the advantages of: It makes the place a sense more efficient because it has the characteristic of the implementation of light through it and reflect the reflections of the lights are wonderful in the presence of sunlight with transparent glass or frosted glass, and is a good heat insulation and gives a beautiful aesthetic look in shape and high quality in the endurance, and is transparent and available colors. It can be chosen from the colors according to the shape and use, so it is used in shops destinations so that the vision is obscured and light permeability, and easy to clean, the hallow glass blocks are manufactured by the method of automatic pressing does not need to finish and polishing after production directly other than the other type (solid glass blocks). The use of modern glass blocks has varied from before and its shape has evolved in a manner suitable for modern uses and has become the most of the interior and exterior designs. Glass blocks are used in interior design of architectural and architectural facades in the past and contemporary times; to give a functional and total aspect.

Keywords:

glass blocks - Scientific and technological assets – the history – sizes.