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استخدام الخرسانة سابقة الصب في مستحدثات العمارة الداخلية و أثرها على المفهوم العام للتصميم الداخلى

The Use of Precast Concrete in Interior Architecture Innovations and Its Influence on General Design Concept

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Summary thesis in English

Precast concrete is the raw materials that the interior designer should pay attention to as it saves time and effort . It has many ways of forming and has many advantages and characteristics that make it one of the best raw materials used in interior design.

The concrete is formed, prepared and processed by the factory and then transported to the site and installed there. This provides a lot of time and effort, and there are many uses of precast concrete from construction units and flat units (And roof tiles), small, medium, large, and troughs, known as box units, are complete spaces that can be manufactured, poured into the factory, processed and then transported for installation on site.

The green concrete, which has properties that make it environmentally friendly, They are recycled from waste and provide the energy that is more durable and economical, making it a viable alternative to ordinary concrete.

The forms of the formation of precast concrete are widely used, and are the most common. These are the traditional molds, which are more used in the formation of floor tiles and cladding of walls, and also form the previous concrete casting using the molds of the fabric are molds used to mold and form more smooth and smooth elements, These molds are used in the design of internal design elements such as interior joints and furniture, especially those that have thin thickness as these molds are characterized by accuracy, detail, durability, lightness of weight and energy saving in manufacturing, which makes these molds preferred to accomplish some designs.

One of the advanced modes of formation is the three-dimensional printing, which enables the designer to print a complete vacuum of precast concrete. The casting of the machine's pre-cast concrete is done in layers one by one and the path of the plan is determined. Cast to the installation location saving time and effort.

3D printing is also used to form parametric designs by computer programs, where parametric elements are designed on computer programs and then cast at certain coordinates.

This technique enables the implementation of more complex designs that are difficult to form manually. The modification in any part of the parts and their appearance automatically as soon as they are modified, saving the time and effort that may be taken by the modifications manually, and exceed the forms and aspects of those designs, whether furniture or walls or facades or cladding and others.

And the previous concrete casting many uses in the design of the elements of the interior design, the number of uses to the design of the stairs and is poured and processed by the plant and then transferred and installed for the site. And we also find the design of the Bishop and the variety of forms and designs Which is divided into two types of raised slabs or multicolored ceilings, and many designs of roofs and the ways of their formation either using traditional molds or using molds manufactured specially for the formation, taking into account the work of openings for electrical connections And adaptations and other links going through the ceilings, taking into account the necessary dimensions.

As for the interior walls, their shapes and designs are varied using precast concrete. Traditional molds may be used for molds or fabric molds, which give a sense of flexibility and aerodynamics of designs or the printing of three-dimensional design using computer programs.

Precast concrete is also used in the design of curtain walls. The panels may be filled with large sizes that may reach a full height. The cranes are used in carrying and fixing them with the possibility of replacement and installation if necessary for any repair. Interior wall cladding forms and designs, which may be a combination of tiles with hexagonal shapes or a specific composition of a design unit, are also processed, poured into the factory and then transported and installed on site.

As for the finishing of these concrete units accept several types of paints, which the designer can choose from the most appropriate and most suitable for the nature of the place and function.

Precast concrete is also used in interior and exterior flooring design, and is more durable than other materials. It is possible to print a specific decorative unit, color or design work, And molded molds.

Precast concrete is also used in the formation of building facades, and it provides a lot of time and effort. It is divided into a group of large aggregated tiles that are poured and processed and transported to the site and installed by Henkelk.

The inner space is rich in multiple elements of design and formation using precast concrete, saving time And effort.

For the former concrete casting abundant luck in its application elements of garden furnishing, from the seats and floors and stairs and slopes Flower basins, sculptures, lighting places, lighting units, fences and water elements.

As well as the previous concrete casting in the design of the elements of furnishing urban spaces (streets) and multiple uses of the required spaces of the durability and quality and high resistance to changing weather conditions, we find multiple designs for floors and waiting stations and plant units and sculptural works in fields and means of shading , With the possible diversity of designs and means of forming those elements.