

## **Technological and aesthetic development of modern building materials and its impact on designing organic architecture facades**

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### **Abstract:**

The global need for environmental sustainability has become a duty for designer and architect More than being a "design or desire" option. With the change of civilizations, cultures and a crisis in energy sources and building materials, the need for new types of building that achieve the principle of sustainability and harmony with the environment has increased. Consequently, many laboratories interested on searching for new building materials have high possibilities that take into account the environmental, economic and aesthetic dimension, as well as employing new construction techniques to make the most of it with less consumption in quantities. The organic direction in design is considered one of the architectural schools based on trying to draw inspiration from the construction mechanics present in the elements of nature, so that the design (architectural facades, horizontal planes, and sections) is completely harmonious with the lines of the elements of the natural environment that complements its harmony and balance to achieve the concept of sustainable development, which is intended to achieve compatibility The design, color, and aesthetic homogeneity with the environment to reduce visual pollution, as well as not depleting natural resources to reduce the negative impact on the components of the environment by saving energy consumption and resource efficiency, taking into account the emergence of modern technology in design, and methods of employing raw materials.

Based on massive development in building technology, and the accompanying emergence of new building materials, and thus the development of architectural formations, the importance of the decorated designer recognizing how to optimally use building materials according to their capabilities in achieving the organic formation of designing architectural facades in the light of environmental sustainability contexts as well as making use of meanings Suggestive, color effects, and different textures of these materials.

### **Keywords:**

Organic architecture – Environmental Design - Nature & Architecture – Fabricated Materials.