

Examination of Earthen Building Material of Modern Architectural Examples



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ABSTRACT

Earthen materials have been used as a building material for a shelter since the existence of human beings. It is still used as the main building material in many geographies. Soil is an economical and nature-friendly material that can be easily processed. On the other hand, the act of building includes many parameters such as construction techniques, materials, and design. Today, because of increasing energy demands and deterioration of the natural balance, the concept of sustainable building has gained importance for the act of building with these techniques and materials.

Today, we are faced with many environmental problems such as the rapid depletion of natural resources, environmental pollution, increased energy consumption, and increased carbon dioxide emissions. The construction industry, which has a large share of this consumption and damage, has started to turn to sustainable construction techniques and materials. Changing living conditions bring along new construction techniques and materials. Earth, which is one of the traditional and sustainable building materials, is still a preferred building material among contemporary architectural examples.

In this context, the study's main purpose is to reveal the importance of natural building materials within the scope of sustainability. Within the scope of the study, the relationship between adobe obtained from the earth, which is the oldest known building material, with sustainability, and examples made up to date in this context, and with the development of technology today, it is to examine the techniques used to construct adobe in modern buildings.

In today's world, with the development of technology, it has been evaluated on the examples of buildings selected in different geographies, that were built using different construction techniques. The examined building samples were compared with the tables and suggestions were made to encourage the use of earth building materials for sustainable construction.

Keywords: Earth based material, Sustainable materials, sustainability, Modern architecture