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Techniques Developed in the Context of Earth-Based Building Material Production

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ABSTRACT

Earth has been used as a building material for many years. Because it is natural and environmentally friendly, it is a material that is compatible with human biology and promotes health. This material, which can be obtained from local sources and is readily available, has been used in the construction of buildings using traditional methods. The traditional use of soil in construction materials offers numerous advantages, including minimal waste generation at the end of its life cycle, low carbon emissions, and excellent thermal properties. In this context, efforts are being made to develop soil-based construction materials and expand their applications due to these advantageous properties. To this end, various construction techniques are being developed.
This material, which offers advantages from both human biology and building biology perspectives, is being further developed in contemporary architecture in terms of both construction techniques and material composition. Earth-based building materials can be produced using various newly developed techniques, and these techniques offer advantages such as improved strength, reduced sensitivity to water and moisture, and faster production. This study will examine innovative production techniques for earth-based building materials and investigate the current status of these techniques. The aim is to comprehensively analyze and present the production techniques for earth-based building materials. To this end, the literature will be analyzed, and a comprehensive framework on the subject will be presented.

KEY WORDS:
Production Techniques, Soil-Based, Building Material.