

Application-Based Experiences in Rammed Earth Construction



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ABSTRACT

This presentation aims to present the field-based practice developed in rammed earth construction and the direct experiences obtained throughout this process. The work focuses on the utilization of locally sourced soils and the development of natural mix design approaches without the use of cement.

The presentation will address the effects of soil selection, mix balance, moisture content, and compaction techniques on structural performance, supported by real-world application examples. In addition, the main challenges encountered during the construction process, critical mistakes, and the lessons learned from these experiences will be evaluated within a systematic framework.

The content is primarily practice-oriented rather than theoretical and will be supported by photographs and video recordings from site applications. In this way, it is aimed to provide a direct observation of different stages of the construction process.

The main objective of this presentation is to demonstrate that rammed earth, when approached with proper knowledge, appropriate techniques, and a disciplined application process, can be considered a contemporary, reliable, and sustainable building system.

“Earth, when properly understood, is not the oldest, but the most relevant building material of today.”

KEY WORDS:

Traditional Architecture, Cultural Ecology, Geographical Environment