

Re-Thinking Earthen Architecture for Sustainable Development, VAN Field Project

08 08 2022



Bilge IŞIK Prof Dr
Istanbul Technical University, Türkiye
E-Mail isik.bilge@gmail.com www.kerpik.org

ABSTRACT

Earthen architecture is carrying knowledge from the history of mankind, as it is mostly used construction material. Living in earthen buildings is healthy. Indoor climate can be established with physical and mechanical property of earthen material. As a result, heating and cooling energy demand, up to the geographic living area, is minimized or not used.

Today, demand for adobe structure can be identify in three ways: health living, little money for energy usage, 0-energy usage for sustainable environment. With the rise of global population and epidemic effect in recent years demand for widespread settlement gained importance.

There is a need for re-thinking of earthen architecture: material durability, earthquake safety of loadbearing earthen walls, industrialized construction techniques. General usage of earthen material is for masonry or loadbearing structures. This study will summarize the findings on: *zero energy earthen buildings, *learning from earthen architecture heritage, *development strategy on earthen construction. With the field project in VAN province, the study will contribute for the demand on legal and administrative process using earthen architecture.

Keywords: Earthen Architecture, Zero Energy Buildings, Learning from Heritage, Development strategy, Collaboration