

## **Evaluation of Energy Performance of Adobe Buildings**



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### **ABSTRACT**

Currently, the energy performance of buildings has become more important issue due to rapid consumption of energy resources. Physical environmental conditions and building shell components are the most important factors in determination of it. The best-performing building to physical environmental conditions is to provide appropriate comfort conditions as well as to reduce requirements of energy for heating, ventilation quantity and illumination of the building. However, providing of these requirements by natural means is impossible in some period of year. Since, they depend to regional conditions and design parameters of the building shell. In these cases, the structure characteristics of the shell are effective to minimize energy used. Opaque component, which is important parameter in the shell, has become great importance to minimize the energy consumption. This study has been conducted to evaluate energy performance of an adobe building located in Diyarbakır province. In addition, the energy performance variability of this building was measured with different alternative of wall quality.

**Keywords:** Adobe structures, energy performance.