

Evaluation of Adobe External Wall and External Walls Used in Frame Structure Construction Systems in terms of their Heat Permeability



Caner GÖÇER

Istanbul Technical University Faculty of Architecture
Taşkışla Taksim/İstanbul/TURKEY

gocercan@itu.edu.tr

ABSTRACT

The objective of this study is to evaluate the thermal conductivity of external walls made of adobe or other external wall materials applied on reinforced concrete frame in residential structures of equal sizes, plan type and under similar effective external conditions from the perspectives of material qualities and construction systems. External wall material alternatives, whose thermal loads will be calculated, can be divided into three basic groups. They are:

- Adobe external wall
- External wall alternatives applied to reinforced concrete frame systems
- External wall alternatives with thermal bridge applied on steel frame systems

KEY WORDS :

Abode, External walls, Thermal bridge