

AIN SHAMS UNIVERSITY FACULTY OF ENGINEERING Architecture department

EVALUATION OF THERMAL PERFORMANCE OF FAÇADE CLADDING IN OFFICE BUILDINGS IN EGYPT

A Thesis Submitted to the faculty of Engineering At Ain Shams University
In Partial Fulfillment of the Requirements for the Degree of
Master of Science In Architecture
By

Mai Mahmoud Saleh Abo Zeid

Bachelor of Science in Architecture engineering Faculty of Engineering , Ain Shams University ,2009

Supervised By

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Statement

This thesis is submitted as a Partial Fulfillment of the Master of Science in Architecture engineering, faculty of Engineering At Ain Shams University.

The Author carries out the work included in this thesis, and no part of it has been submitted for a degree or a qualification at any other university or institution.

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ABSTRACT

In dealing with the building as a thermal system, the correct choice of its parts and their relationships can be composed utilizing a frameworks approach. This can be accomplished by coupling an improvement method into the thermal performance of building right on time in the outline procedure. This requires planning the building all around as a thermal system in appropriate structure for the different methodologies.

The target of this thesis to estimate the potential of façade cladding to save energy by studying its thermal performance summarizes the result of a simulation analysis to determine the efficiency of envelope construction cladding in reducing energy consumption for office buildings in Egypt.

Key words

Energy Crisis, Energy Consumption, Building envelope, Cladding, Office buildings, Thermal performance

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