شبكة المعلومات الجامعية

التوثيق الإلكتروني والميكروفيلم

بسم الله الرحمن الرحيم

HANAA ALY

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التوثيق الإلكتروني والميكروفيلم

جامعة عين شمس

التوثيق الإلكتروني والميكروفيلم

قسم

نقسم بالله العظيم أن المادة التي تم توثيقها وتسجيلها
علي هذه الأقراص المدمجة قد أعدت دون أية تغيرات

يجب أن

تحفظ هذه الأقراص المدمجة بعيدا عن الغبار

HANAA ALY

REDUCING ENERGY CONSUMPTION AT COLLEGE BUILDINGS

By

Israa Sayed Mamdouh

A Thesis Submitted to the
Faculty of Engineering at Cairo University
in Partial Fulfillment of the
Requirements for the Degree of
MASTER OF SCIENCE
in
Architectural Engineering

FACULTY OF ENGINEERING, CAIRO UNIVERSITY
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Under the Supervision of

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Title of Thesis:

REDUCING ENERGY CONSUMPTION AT COLLEGE BUILDINGS

Key Words:
Collage Buildings; Environment; Sustainability; Shading; Energy

Summary:

After the industrial revolution, men intended - more than ever - to use energy, specifically the fossil fuels. In spite of providing comfort conditions for human life, too much use of these energy resources can cause environmental destruction. Buildings have the biggest share of the worldwide energy consumption; electricity generation today represents about 31% of the total global fossil fuel use and around 40% of all energy CO_2 emissions. With such measures, increasing the energy efficiency of buildings can make a considerable contribution to energy saving and global climate protection.

This research considers magnifying the effect of clean energies techniques at college buildings to reduce energy consumption and global warming. For the purpose of this investigation, a real case building was selected and some passive strategies were applied for enhancing the building thermal characteristics reaching the building thermal comfort with less energy consumption at Cairo and Aswan cities.

Disclaimer

I hereby declare that this thesis is my own original work and that no part of it has been submitted for a degree qualification at any other university or institute.

I further declare that I have appropriately acknowledged all sources used and have cited them in the references section.

Name: Israa Sayed Mamdouh Date:/ / 2021

Signature:

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This thesis work is dedicated to my beloved mother who, for years past, has encouraged me attentively with her fullest and truest attention to accomplish my work with truthful self-confidence, and my dear father and brother, who have been nicely my supporters until my research was fully finished.

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