VERTICAL AND HORIZONTAL VEGETATION AS A TOOL TO INCREASE ECO-SKYSCRAPERS ENVIROMENTAL EFFICIENCY.

CASE STUDY: RESIDENTIAL BUILDINGS

By

REEM MOHAMED REDA EL-TAHER

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
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FACULTY OF ENGINEERING, CAIRO UNIVERSITY
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Under the Supervision of

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Doctor of Architecture
Modern Academy for Engineering and Technology

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Approved by the
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Title of Thesis : VERTICAL AND HORIZONTAL VEGETATION AS A TOOL TO INCREASE ECO-SKYSCRAPERS ENVIRONMENTAL EFFICIENCY

Key Words:
Vertical greening systems, Green roofs, vertical farming, ecology, eco-skysrapers, energy efficiency and atmosphere, water efficiency.

Summary :

Now the world change, especially after the impact of major oil crises in 1973/ 1979. This research is trying to bring a new way of thinking to understand the need of incorporating nature in the design as one of the aspects and new technologies for eco-design policy, which reduce the negative impacts of buildings and increase the environmental efficiency. By clarifying importance of integrating systems of vertical and horizontal vegetation into eco-skyscrapers, and learn how to develop green spaces in buildings.

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