

Green Architecture in Built Environment

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LANDSCAPE DESIGN AS PART OF GREEN AND SUSTAINABLE BUILDING DESIGN

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ABSTRACT

This paper presents the theoretical review of the importance of landscape design in the execution of green and sustainable buildings as a trend of current development concept. Instead of beautifying the environment, strategic landscape design may help to prevent from extensive building heat gain, reduce the energy and water consumption as well as produce the natural and healthy ambience to the surrounding. Landscape design in green buildings should be viewed as not just mere decorative afterthought but it must be well conceive as a multi-function factor that provides various critical green services for a building including water efficiency and energy efficiency. The framework covers two main aspects which are green wall or vertical landscape design and roof top garden. The aim of the paper is to highlight the demand for the proper landscape design that should be provided in any development of sustainable buildings. It is hoped that the paper will contribute to further enrich the landscape design innovation as part of green and sustainable building design.

Keywords: Sustainable Landscape Design, Green Wall Design, Rooftop Garden Design, Vertical Landscape Design

1.0 INTRODUCTION

A green building or known as a sustainable building is designed and operated in an ecological and resource efficient manner (De Morsella, 2009; Cruz De La Cruz, 2008). Although new technologies are constantly being developed to complement current practices in creating greener structures, the common objective of green building is to reduce the overall impact of the built environment on human health and the natural environment by implementing the four defining strategies; energy-efficient design, water-efficient design, materials-efficient design as well as non-toxic building design. A building is not worth to be marked or rated as 'green' if any of these core attributes are left out. In short, these four defining strategies are the core essential things that a green building must demonstrate in order to be qualified as being green. However, the scenario of green building development nowadays tend to solely focus on these four strategies with less concern towards another qualities that can help to make a green building which includes the natural environment surrounding the