

**CENTRE OF STUDIES FOR QUANTITY SURVEYING  
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UNIVERSITI TEKNOLOGI MARA  
CAWANGAN SARAWAK**

**STRATEGIES AND CHALLENGES IN  
IMPLEMENTING GREEN ROOF IN  
THE CONSTRUCTION PROJECT**

Final Project submitted in partial fulfilment  
of the requirement for the award of  
Bachelor of Quantity Surveying (Honours)

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## DECLARATION

"I declare that this Final Project/Dissertation is the result of my own research and  
that all sources are acknowledged in the references"

Student's Signature



Student's Name

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Date

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26<sup>th</sup> June 2020

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## **ABSTRACT**

There is an arising in the global concern regarding the adverse impact of today's rapid growth of development and economy which could give large impact to the environment and the depletion of energy resources. The used of green roof in a building can reduce the building energy consumption and reduce air pollution from the amount of dust particles in the air. However, the main obstacle to implement the green roofs in Malaysia is the limitation of local expertise and inexperienced green roof professionals. It is difficult to get green roofs installer and specialist companies for green roofs system due to the limitation of green roofs suppliers which results to high cost of installation and materials. Hence, the aim of this research is to study the strategies and challenges in implementing green roof in the construction project. Data collection for this paper involves survey using questionnaires which were distributed among the Quantity Surveyors. The outcome of this research will includes several concepts of green roof, challenges in term of cost and the strategies in order to implement the green roof in construction project. This is important in order to develop green roof technology in Malaysia in the near future.

**Keywords: Challenges, Construction Industry, Cost, Green Roof, Strategies**

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## **1.5 Scope of Study**

The scope of this research study will be focusing in Sarawak, Malaysia construction industry. Besides that, the data will be gathered among the Quantity Surveyor in the construction industry as the research will be related to the cost of implementing the green roof in a building.

## **1.6 Limitation of Research**

Due to the characteristic of the research questions and limited use of green roofing in Malaysia, this research will be based on the quantitative research methods. While the research are conducted and validated, the results are limited by the sample size and scope of study. As a result, the information obtained regarding the strategies and challenges are limited towards the areas of the scope of research.

## **1.7 Structure of Research**

### **1.7.1 Introduction**

Chapter 1 will explain on the background information of the selected title of the research. It also defined the terms and scope of the research title, outline the current situation and to identify the gap from the current situation.