

**UNIVERSITI TEKNOLOGI
MARA
PERAK BRANCH**

**ENVIRONMENTAL
FRIENDLY WALL
CLADDING**

AHMAD DANIAL BIN NOR AZMAN

Innovation project report submitted in partial fulfilment of the
requirements for the degree of

Bachelor of Science (Hons.) Construction Technology

Department of Built Environment & Technology Studies

July 2022

AUTHOR'S DECLARATION

I declare that the work in this innovation project report was carried out in accordance with the regulations of Universiti Teknologi MARA (UiTM). It is original and is the results of my own work, unless otherwise indicated or acknowledged as referenced work. This topic has not been submitted to any other academic institution or non-academic institution for any degree or qualification.

In the event that my innovation project report, be found to violate the conditions mentioned above, I voluntarily waive the right of conferment of my degree and agree be subjected to the disciplinary rules and regulations of Universiti Teknologi MARA (UiTM).

Name of Student : Ahmad Danial Bin Nor Azman

Student I.D. No. : 2019804952

Programme : Bachelor of Science (Hons) Construction Technology

Faculty : Architecture, Planning & Surveying

Innovation Project Title : Environmental Friendly Wall Cladding

Signature of Student :

Date : April 2022

ACKNOWLEDGEMENT

With the blessing from Allah, I would like to express our sincerely gratitude and appreciation to my parents and family members for the unstoppable support and understand our students life while they give the space to finish this degree research.

I would like to express my gratitude to my supervisor, Tuan Haji Mohd Fareh Bin Mohd Majid who encouraged me to pursue this project and taught me throughout the production process of this report. I truly enjoyed working in research environment that stimulates original thinking and initiative, which she created. In addition, I am feeling blessed to have Tuan Haji Fareh Majid for being my supervisor because of his skillful guidance, innovative ideas and stoic patience are greatly appreciated.

Secondly, not forget to express my special thanks to my Dr Asmat Binti Ismail , for always guide me to finished up this task. He never give up in giving the knowledge and explain until I able to finished up this task. I could not have imagined having a better lecturer and advisor for my project.

Moreover, we would like to acknowledge and very appreciate thanks to all of my friends especially to my classmates for all the sharing, advice and cooperation during carried out this Innovation project. It was very valuable moment to having a good cooperation during this critical period caused by the Pandemic Covid-19. Last but not least, not to forget very grateful acknowledgment to all the people who are directly or indirectly involve in order to finish this assignment.

Table of Content

Author's Declaration	I
Acknowledgement	II
Contents	III
List of Tables	vii
List of Figures	viii
List of Plates	ix
List of Abbreviations and Glossary	xii
List of Symbol	xiii
Abstract	

Chapter 1.0: Introduction

1.1 Introduction to chapter	1
1.2 Problem Statement	2
1.2.1 Issues and problem	2
1.3 Research Question	3
1.4 Research Objectives	3
1.5 Scope of Study	3

Chapter 2.0: Literature Review

2.1 Previous Innovation in Environmental Friendly Wall Cladding	4
2.1.1 Bamboo Fiber Integrated Ecological Wood Ceiling Panels	5
Low Price House Design PVC Cladding Decorative Wall Board.	
2.1.2 Thermal-acoustic insulation CORKOCO.	7
2.1.3 Expanded Insulation Cork Board Cladding.	8

ABSTRACT

After the Second World War, the idea of industrialised building system (IBS) has received much attention in the devastated countries. Though, Malaysia did not suffer the impact of the war, the need to supply its population with affordable and quality houses has prompted the government to promote the use of IBS as an alternative to conventional building system. The objective of this paper is to document the experiences of Malaysia as well as other countries in the adoption of IBS. (W.A.Thanoon, Lee Wah Peng, Mohd Razali Abdul Kadir, Mohd Saleh Jaafar and Mohd Sapuan Salit, 2003).

Basically, wall cladding are divided into two categories which are natural and unnatural wall cladding. The natural cladding will use the raw material such as fibre from plants like coconut fibre, cork, bamboo and wood. The importance of use this is to produce a healthier life, no radiation, no formaldehyde and the most important it is 100 % green environmental protection. Natural materials like this are often forgotten, but we must remember that they have many advantage.

Thus, this study's methodology uses both experimental data collecting and document review as its data collection methods. These two techniques make it simple to identify the innovation project idea, which calls for the use of environmental wall cladding. Indirectly, it can provide a precise measurement of thermal conductivity by conducting an experiment and provide more knowledge while doing a document review online study project.