# UNIVERSITI TEKNOLOGI MARA

## PERAK BRANCH

## INNOVATION OF ALUMINUM CLAY ROOF

## MOHAMMAD ZULHELMI BIN SATAR

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** 

**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. It is original and is the result of

my work, unless otherwise indicated or acknowledged as referenced work. This

the 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, is 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.

Name :

Mohammad Zulhelmi Bin Satar

Student I.D. No.

2019290768

Programme :

Bachelor of Science (Hons.) Construction Technology

Faculty

Faculty of Architecture, Planning and Surveying

Innovation Title

Innovation of the Aluminium Clay Roof

Signature of Student:

Date

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#### **ABSTRACT**

One of the industries with the fastest development was the construction industry. However, the environment's quality was impacted by the quickly expanding building industry. On the other side, one effect of the quickly expanding construction projects was the global warming, which was a problem today. Since global warming has occurred, the extreme changes in the weather have put the lives of all living beings in danger. However, action must be taken to lessen the effects of global warming and building on the environment. In an effort to encourage students to value protecting the environment, the idea of a "green campus" was established. The Seri Iskandar Campus student housing at the UiTM Perak Branch is where the innovation project that will be presented will be carried out. The aluminum clay roofing was the new item that was put out. This innovation product is aimed to produce the innovative product on the lightweight roof tiles to ensure that the new innovation of wall panel can accommodate the weight of roof system. This study is based on a review of the literature from earlier studies, and a product prototype was created in order to carry out an experiment and evaluate the prototype's functionality. The results of the experiment that was conducted are satisfactory and fulfill the goal of the investigation. As a result of the product's successful performance, it is recommended that it enter the market.