

**UNIVERSITI TEKNOLOGI MARA
PERAK BRANCH**

SMARTROOF SYSTEM

NUR IZZATIEY NADIA BINTI IBRAHIM

BSc

August 2022

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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

August 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. 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.

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Innovation Title : Smartroof System
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ABSTRACT

The Green Campus concept is an innovation to existing elements such as improving the concrete ratio or producing new products. High technology has contributed to the improvement of the country's economy in construction industry. As know, clay roof tiles are frequently used on buildings including homes, schools, and hostels. In addition to environmental pollution, utilizing clay roof tiles will also have a harmful effect on individuals and building structures. In attempt to develop the Green Campus Concept in this century, clay tiles should be taken into consideration in construction. This is due to the fact that clay tile installation and repair require specialised labour and take some time to complete. To portray the idea of a green campus, this research used the analytical techniques of observation, simulation, and literature review. The problems that occur can be addressed with the innovative product produced which is Smartroof System. This product is compatible with the Green Concept, particularly in student accommodation.