UNIVERSITI TEKNOLOGI MARA
PERAK BRANCH

ECO – SUPERPLASTICIZER IN CONCRETE MIX FOR PRECAST SLAB

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Innovation project report submitted in partial fulfilment

of the requirements for the degree of

Bachelor of Science (Hons.) Construction Technology

Faculty of Architecture, Planning & Surveying

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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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ABSTRACT

Eco – Superplasticizer in Concrete Mix For Precast Slab is an innovative product that uses rice husk in concrete as superplasticizer. There are few issues that have been discovered such as decreasing the permeability of concrete, reducing the water content of the concrete, extended time for concrete to reach full strength, cause the concrete to bubble during the mixing and pouring processes and harm the environment as it includes chemical materials. As a result, this innovative product is produced as a solution to problems identified and for improving existing superplasticizer. The research study aims to develop an effective product that can keep the superplasticizer economical material, and low cost and improve the structure's sustainability. The method used for the development of this innovation idea includes desk study of superplasticizer in concrete mix, secondary data collection to find existing datasets that have already been collected from sources and simulation method using Sketch Up software. In addition, with this innovative technology, Eco – Superplasticizer in Concrete Mix For Precast Slab has the potential to be marketed. Changes made about this might fulfil the demands of the construction industry, enhance the welfare of buildings, and support green building as well as green building and the environment.

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