UNIVERSITI TEKNOLOGI MARA
PERAK BRANCH

RECYCLE TYRE RUBBER PRECAST WALL PANEL

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Innovation project report in partial fulfillment of the
requirement for the degree of
Bachelor of Science (Hons.) Construction Technology

Faculty Of Architecture, Planning and 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.

If 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

Recycle Tyre Rubber Precast Wall Panel is an innovative product which use recycle crumb rubber tyre in concrete mixed design as partial replacement for aggregate. There are a few issues that has been discovered with precast wall elements such as mold growth, crumbling and peeling paint on the wall surface, also cracking that could damage the structure. As a result, this innovative product is proposed as an innovation to a problem identified with existing precast wall elements, and it also for improving the performance of existing precast wall. The research study aims to develop an effective product that can keep the wall in a safe condition, long-lasting and lowering the maintenance cost. In this research, the method used for the development of this innovation idea includes a literature review on relevant topics related to Recycle Tyre Rubber Precast Wall Panel. Other than that, an observation on precast wall in the Construction Industry has been conducted, it is because this technique provides the most accurate information. By doing this approach all the findings will be developed, and it will be easier to highlight the issues. A simulation study also will be used to support the explanation of developing the innovative production process. It may provide a better understanding of how this proposed innovation product works to improvise the existing precast wall. In addition, Recycle Tyre Rubber Precast Wall Panel has the potential to be marketed to potential users. It is believed with this innovative technology will generate change that can overcome the needs of the Construction Industry. Not only that, it also will improve the building's wellbeing while also to sustain Green Building as well as green environment.

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