

**UNIVERSITI TEKNOLOGI MARA
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**SELF-CLEANING PRECAST REFLECTIVE
SLAB (SEPRAB)**

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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 certify that the work in this innovation project report was completed in compliance with Universiti Teknologi MARA's regulations. Unless otherwise stated or acknowledged as referenced work, it is original and the result of my own efforts. This topic has not been submitted for any degree to any other academic or non-academic institution.

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ABSTRACT

Electrical consumption in commercial, residential, and industrial buildings is increasing year after year as a result of rising human population, high demand, and the country's status as a developing country. The continued burning of fossil fuels to keep the lights on will have an impact on the environment. As a result, the burning of fossil fuels to keep the electrical demand running will have an impact on the environment. Longer effects from fossil fuel combustion, on the other hand, may harm the environment in the future. Introduction of Self-Cleaning Precast Reflective Slab (SEPRAB) is a new product that builds on the success of prior Reflective Floors. The goal of this product is to save time, money, create a safe working environment, and reduce pollution in the surrounding region. Furthermore, this product complies with the report's criteria, which is an IBS concept that can help the environment by reducing reliance on artificial lighting through the use of building envelope strategies. In actuality, it is based on the Industrialised Building System (IBS), which manufactures and designs off-site and just requires transportation to the building site for installation. In fact, because the Precast Reflective Slab is fully finished, it saves money and reduces the building's dead weight. Furthermore, these products can increase project duration, making them vulnerable, and it will be a loss to the construction sector if they are not developed for mass manufacturing.