

**UNIVERSITI TEKNOLOGI MARA
PERAK BRANCH**

**INTEGRATED PAVEGEN TILE FOR PRECAST
FLOOR PANEL**

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Innovation project report submitted in partial fulfilment of the
requirements for the degree of
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Department of Built Environment and Technology Studies, FSPU

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AUTHOR'S DECLARATION

I declare that the work in this innovation project report was carried out in accordance with the regulation 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.

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ABSTRACT

Nowadays, although there is a growing demand for and importance of green building in Malaysia, not all segments of the construction sector are yet interested in it. To lessen the total influence of the built environment on its surroundings, green buildings should be constructed and maintained practically. Moreover, the way Malaysians live, work, study, and play is changing as a result of environmental issues and technology advancements. These elements place additional demands on building/urban facilities, as well as the infrastructure that supports them, in terms of design, construction, and operation. There is an increase in Malaysia public interest and understanding of how buildings impact worker productivity, the environment, and the general public health. Because of this, the public and private sectors are starting to require buildings that encourage energy utilisation, resource efficiency, and indoor environmental quality are all improved. This study is focusing toward implemented new kind of green innovation toward student's accommodation at UiTM Seri Iskandar, Perak. The idea of this innovation case study is to develop an innovation toward the Industrialised Building System (IBS) component that focusing on the precast floor panel that can help to support the demand for electricity at the student's accommodation. This study will be focusing toward implementing new kind of device that can harvest and generate electrical energy toward the precast floor panel. The main purpose of this study will develop a component that can generate harvest kinetic energy that produce by the footstep and convert it into electrical energy.