

**UNIVERSITY TEKNOLOGI MARA
PERAK BRANCH**

**ADVANCED STAND INSTALLATION TOOLS
(ASIT)**

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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

August 2021

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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ACKNOWLEDGEMENT

First, I would like to thank Allah for giving me this opportunity to complete this innovation project for this semester. By having this opportunity, I would like to take this opportunity to thank Dr Ts. Asmat Binti Ismail, my lecturer for Innovation Project II, gave guidance during this semester to complete this innovation project. Not to forget, I would also like to extend my most profound appreciation to my previous lecturer for Innovation Project I, Prof. Dr Ts. Siti Akhtar Binti Mahayuddin and my supervisor Ts. En. Mohd Fareh Bin Majid has enabled me to learn and develop my understanding, knowledge and giving advice. Without them, I will not be able to complete this task. It is an honour for me to be allowed to be under your supervision.

Furthermore, this report would not materialize without support and guidance from my classmates. They are accommodating by giving advice and opinions when I needed them the most.

Finally, my special thanks to my beloved parents for their sacrifices over the years and for always supported me by giving moral support, especially when I lacked enthusiasm.

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ABSTRACT

Several problems occurred by using existing tools such as push-pull prop, plumb bob, and scaffolding. Wrongly aligned, defect to the wall panel, different thickness and jointing sizes always occur, leading to double of work, which is very ineffective. This research investigates the problems that occurred during the installation of the precast wall panel by using installation tools and implementing the innovation tool to benefit the construction industry. Literature review, online survey, and interpretation of data are used as the methodologies for this research. The innovation tools are produced based on the high-rise residential building and the urban area. The innovative product made plays a vital role in eliminating the existing problems to become more relevant in the construction industry. The current tools will combine to produce more rational, acceptable, and flexible tools. The main goal of the innovation product is to eliminate the problems that occur during the installation of precast wall panels, and it suits the high-rise building in the urban area as the design proposed applied a better working space than the existing t