



UNIVERSITI
TEKNOLOGI
MARA

Cawangan Perak



BUILDCON2023

**COMPILATION OF PROJECT INNOVATION IDEAS
SEMESTER MARCH – AUGUST 2023**

EMBRACING SMART CONSTRUCTION TRANSFORMATION

BUILDERS' CONVENTION DAY 2023

**Department of Built Environment Studies and Technology
College of Built Environment
Universiti Teknologi MARA Perak Branch**

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COMPILATION OF PROJECT INNOVATION IDEAS
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Organised by
Department of Built Environment Studies and Technology
College of Built Environment
Universiti Teknologi MARA Perak Branch
Malaysia

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Editors

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Perpustakaan Negara Malaysia

Cataloguing in Publication Data

No e- ISBN: 978-967-2776-24-6

Cover Design: Muhammad Naim Mahyuddin

Typesetting : Siti Akhtar Mahayuddin

e ISBN 978-967-2776-24-6



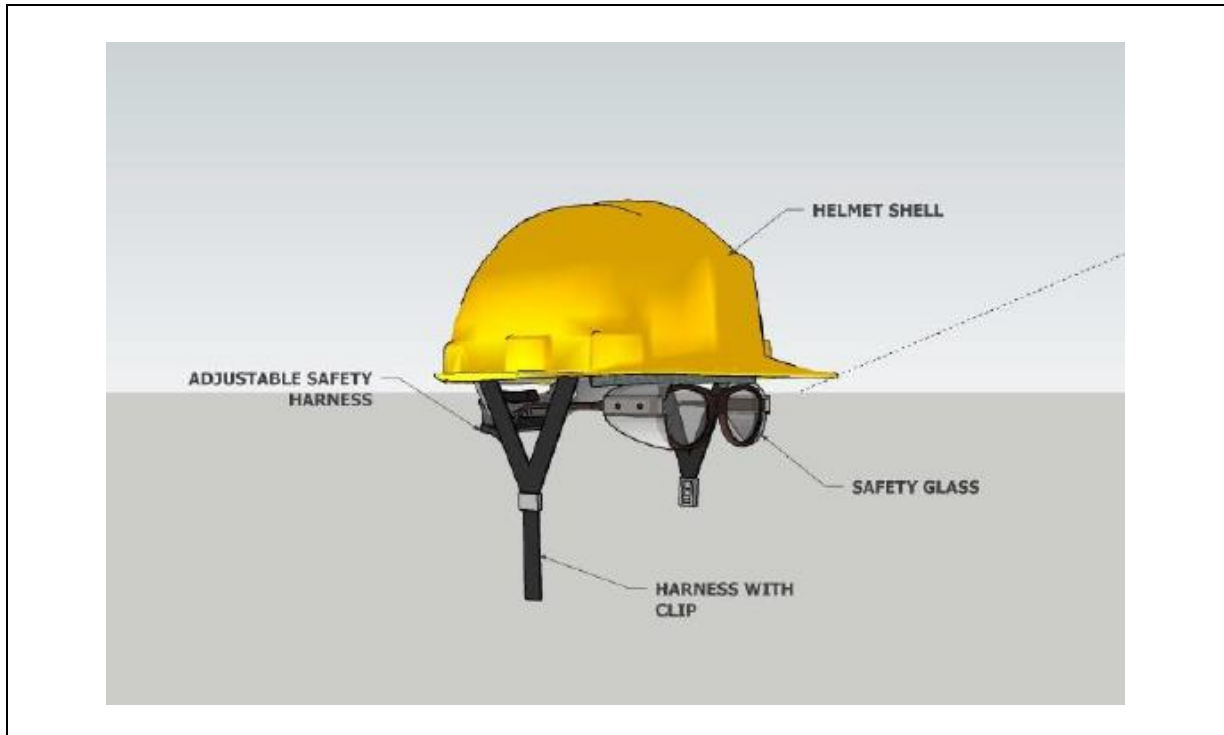
REFLECTIVE SAFETY HELMET

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Reflective Safety Helmet

Innovation Idea:

In this modernised era of construction, high number of accidents are still occurring in Malaysia's construction industry. Safety helmets are a necessary component of protection equipment on a construction site to prevent head injuries caused by falling objects or the force of a lateral collision. The aim of this study is the development of a reflective safety helmet. This innovation project is important in protecting the well-being of construction workers. The purpose of this study is to develop a reflective safety helmet design idea, construct a simulated prototype based on an improvised design, demonstrate the performance of the prototype, and showcase the entrepreneurial skills in proposing it. The methodology of the study includes literature reviews, desk studies, and simulations as the primary data collection techniques. Assembly process, functional system, practicable approaches, and comfort of the product are the four critical approaches that need to be evaluated in the study. The research objectives have been met, and the results and findings have been successfully determined. These include the current issues and problems, as well as the innovative product called the Reflective Safety Helmet. this study covers its proposed assembly process, performance evaluation, and marketing potential. As a result, it can be concluded from this research that the innovative Reflective Safety Helmet is intended to offer users several benefits, including enhanced comfort and increased worker awareness, with a particular focus on the construction industry.

Surat kami : 700-KPK (PRP.UP.1/20/1)

Tarikh : 20 Januari 2023

Prof. Madya Dr. Nur Hisham Ibrahim
Rektor
Universiti Teknologi MARA
Cawangan Perak



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Kelulusan daripada pihak tuan dalam perkara ini amat dihargai.

Sekian, terima kasih.

“BERKHIDMAT UNTUK NEGARA”

Saya yang menjalankan amanah,

SITI BASRIYAH SHAIK BAHARUDIN
Timbalan Ketua Pustakawan

nar

Setuju.

27.1.2023

PROF. MADYA DR. NUR HISHAM IBRAHIM
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