

Cawangan Perak

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# 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

### BUILDCON 2023 COMPILATION OF PROJECT INNOVATION IDEAS SEMESTER MARCH – AUGUST 2023



Organised by Department of Built Environment Studies and Technology College of Built Environment Universiti Teknologi MARA Perak Branch Malaysia

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

#### Editors

Siti Akhtar Mahayuddin Noor Rizallinda Ishak Nor Asma Hafizah Hadzaman Sallehan Ismail

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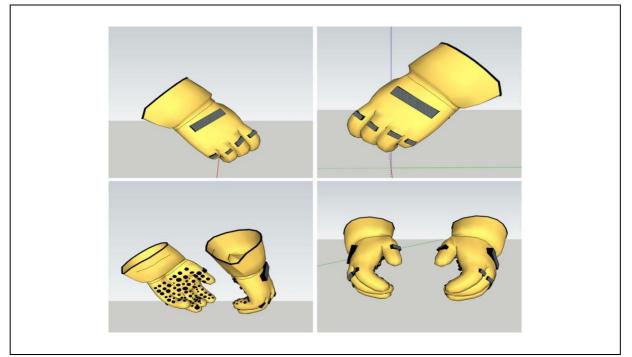
#### **SMART SAFETY GLOVES**

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Smart Safety Gloves

#### **Innovation Idea:**

The construction industry in Malaysia has risen to become the fastest growing industry in Malaysia. As a revolution in the construction industry, the demand for safety gloves has also increased. A pair of safety gloves is recognised as personal protective equipment (PPE) for hand protection on construction sites. The Occupational Safety and Health Act (OSHA) requires employers to ensure that their employees wear safety gloves when working in environments where there is a possibility of hand injury. In the construction industry, safety gloves are very important because the workers are exposed to hazards at work. Based on previous studies, there are several issues regarding the safety and comfort levels of workers when it comes to safety gloves in construction workspaces. This research focuses on safety gloves as a safety tool at construction sites. The findings showed that the existing safety gloves do not provide a high level of protection to workers at the construction site. If the safety gloves do not provide enough protection to the construction workers, it can have adverse effects such as permanent disability, injury, and so on. Therefore, the purpose of this study is to develop Smart Safety Gloves to reduce the incidence of limb accidents, especially those affecting the hands, and provide convenience to workers in carrying out their duty on construction sites. The Smart Safety Gloves has been developed through a combination of literature reviews and design thinking. These implications of this research are profound: the use of the Smart Safety Gloves can enhance employee safety levels and reduce accident rates at construction sites.

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Sekian, terima kasih.

#### **"BERKHIDMAT UNTUK NEGARA"**

Saya yang menjalankan amanah,

Setuju.

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