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

# **BUILDCON 2023**

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## IMPLEMENTATION OF MALAY TRADITIONAL LAYOUT ON MODERN HOUSING USING THE INDUSTRIALISED BUILDING SYSTEM (IBS) CONCEPT

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Implementation Of Malay Traditional Layout On Modern Housing Using The Industrialised Building System (IBS) Concept

### **Innovation Idea:**

Traditional Malay Layout has been an integral component of Malaysian architecture, distinguished by its elevated floor levels, separate living quarters, and distinct outdoor and interior areas. Industrialised Building System (IBS) is a construction methodology that involves using prefabricated components and modular construction techniques to build structures. With the advent of contemporary housing design, however, these conventional characteristics have been largely neglected. As a result, an increasing number of Malaysians are opting for modern housing layouts, which frequently lack the warmth, personality, and functionality of traditional Malay residences. The objectives of this study are to: 1) identify issues related to modern housing, 2) implement the Malay traditional layout to the current modern layout using the IBS concept, and 3) determine the marketability prospect of the new proposed layout. Extensive literature reviews were conducted via various databases (i.e., Scopus, Web of Science, and Science Direct). Subsequently, a simulation model using SketchUp 2023 software was performed to visualise the concepts and ideas of IBS within

the traditional Malay layout of modern housing. The results indicated that the proposed new layout highly facilitates in providing natural ventilation, disaster resistance, social spacing, and privacy. Furthermore, the findings revealed that the proposed concept of IBS in the Malay traditional layout of modern housing has the potential to be marketed locally or internationally due to its great benefits (i.e., culturally pertinent and aesthetically pleasing).

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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Sekian, terima kasih.

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**SITI BASRIYAH SHAIK BAHARUDIN**  
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*nar*

*Setuju.*

*27.1.2023*

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