



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**

**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*

© Unit Penerbitan UiTM Perak, 2024

All rights reserved. No part of this publication may be reproduced, copied, stored in any retrieval system or transmitted in any form or by any means; electronic, mechanical, photocopying, recording or otherwise; without permission on writing from the director of Unit Penerbitan UiTM Perak, Universiti Teknologi MARA, Perak Branch, 32610 Seri Iskandar Perak, Malaysia.

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



## INNOVATION OF INTERLOCKING IBS WALL PANELS

Ain Zarifahazyan Muhamad Shukri<sup>1</sup> and Mohd Rofdzi Abdullah<sup>2</sup>

<sup>1,2</sup>Department of Built Environment Studies and Technology, College of Built Environment, Universiti Teknologi MARA Perak Branch,

32610 Seri Iskandar, Perak

*Email:* 2021482938@student.uitm.edu.my<sup>1</sup>, rofdzi159@uitm.edu.my<sup>2</sup>



Innovation of Interlocking IBS Wall Panels

### **Innovation Idea:**

Industrialised Building System (IBS) wall panels are a promising solution in the construction industry for improving construction efficiency, reducing costs, and enhancing sustainability. These prefabricated panels offer numerous benefits, including faster construction timelines, minimised labour requirements, improved quality control, and elevated potential for energy savings. However, several challenges exist including design limitations, transportation logistics, integration with other building systems, skilled labour requirements, initial investment costs, and regulatory considerations. This study provides an overview of the potential and identified challenges associated with IBS wall panels. By addressing these challenges through research, collaboration, and innovation, the widespread adoption of IBS wall panels can be further facilitated, leading to more efficient and sustainable construction practices.



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



Tuan,

**PERMOHONAN KELULUSAN MEMUAT NAIK PENERBITAN UiTM CAWANGAN PERAK  
MELALUI REPOSITORI INSTITUSI UiTM (IR)**

Perkara di atas adalah dirujuk.

2. Adalah dimaklumkan bahawa pihak kami ingin memohon kelulusan tuan untuk mengimbas (*digitize*) dan memuat naik semua jenis penerbitan di bawah UiTM Cawangan Perak melalui Repositori Institusi UiTM, PTAR.

3. Tujuan permohonan ini adalah bagi membolehkan akses yang lebih meluas oleh pengguna perpustakaan terhadap semua maklumat yang terkandung di dalam penerbitan melalui laman Web PTAR UiTM Cawangan Perak.

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  
REKTOR  
UNIVERSITI TEKNOLOGI MARA  
CAWANGAN PERAK  
KAMPUS SERI ISKANDAR