



UNIVERSITI
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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**

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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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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

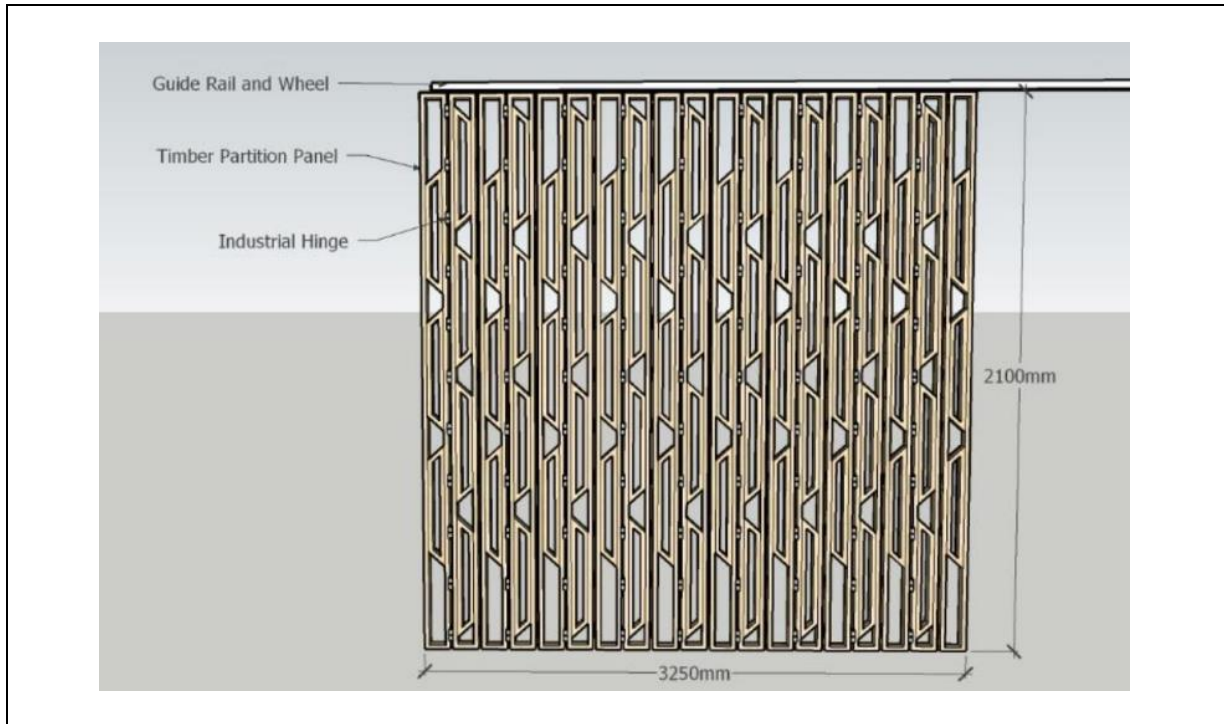


TRANSMOGRIFICATION PARTITION WALL (TRANSWALL)

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Transmogrification Partition Wall (Transwall)

Innovation Idea:

Partition walls are essential in building construction because they provide adaptability and seclusion in interior design. However, several challenges prevent its effective adoption. This project investigates new solutions to these difficulties while encouraging environmental sustainability, with a particular focus on compact dwellings with limited space. This study proposed an innovation, i.e., TransWall, built up from the existing partition wall designs through desktop research and simulations. TransWall stands out by enabling natural light to pass through, providing multipurpose use, and decreasing noise friction. These distinctive elements contribute to the creation of a comfortable and long-lasting living environment. With long-term growth goals in mind, this study seeks to overcome the limits of traditional partition walls and encourage the use of environmentally friendly products. The findings have important implications for architects, builders, and policymakers, as they provide practical methods for optimising space utilisation and enhancing the quality of life in small homes. The TransWall concept coincides with global efforts to avoid environmental problems and promote sustainable development by adopting sustainability principles. Overall, this research advances the design of partition walls by emphasising usefulness and sustainability in the setting of restricted space. The newly developed TransWall concept provides advantages such as improved natural lighting, multipurpose use, reduced noise friction, and useful insights in constructing efficient and environmentally responsible building interior designs.

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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Saya yang menjalankan amanah,

SITI BASRIYAH SHAIK BAHARUDIN
Timbalan Ketua Pustakawan

nar

Setuju.

27.1.2023

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