



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



APPLICATION OF BAMBOO AS A CEILING PANELS

Nurnajwa Mohd Appandi¹ and Noor Azam Yahya²

^{1,2}Department of Built Environment Studies and Technology, College of Built Environment, Universiti Teknologi MARA Perak Branch,

32610 Seri Iskandar, Perak

Email: 2020861784@student.uitm.edu.my¹ azamyahaya@gmail.com²



Application Of Bamboo As A Ceiling Panels

Innovation Idea:

This study highlights the application of bamboo ceiling panels, which focuses on its design, assembly, performance demonstration, and market prospects. The research questions revolve around the design process of bamboo ceilings, assembly techniques in creating functional prototypes, methods to demonstrate their performance, and their potential market prospects. The study's primary aim is to produce an innovative and eco-friendly ceiling material suitable for all occupants of commercial buildings. To achieve this, the research objectives entail developing bamboo ceiling panel designs, assembling functional prototypes, conducting performance tests, and identifying market opportunities. The methodologies used involve systematic design approaches, meticulous assembly procedures, rigorous performance testing, and thorough market analysis. Key findings reveal the successful development of bamboo ceiling panels meeting sustainability and performance goals, indicating their potential for broad adoption. The implications of this innovation project are far-reaching, as the introduction of bamboo ceiling panels offers an eco-conscious alternative, reducing environmental impact while catering to the diverse needs of commercial buildings. This study's outcomes contribute to sustainable construction practices, enhancing indoor environments, and fostering a positive impact on the construction industry's ecological footprint.

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