

WEBINAR ON

‘ADOPTING MODULAR VOLUMETRIC CONSTRUCTION AS AN ALTERNATIVE METHOD OF CONSTRUCTION’

Friday | 09 April 2021 | 11.00 a.m. – 1.00 p.m.

SYNOPSIS

Modular construction has been gaining popularity due to its significant contributions in improving construction productivity, quality control and increasing cost savings. Countries like Singapore and Hong Kong have realized the benefits of adopting such game changing technology by promoting Prefabricated Prefinished Volumetric Construction (PPVC). PPVC consists of individual self-supporting units complete with internal finishes, fixtures and fittings are constructed or manufactured in factories, then transported to and assembled on-site like Lego blocks.

Unlike conventional buildings such as cast in-situ structure, there is discontinuity in the structural elements at the connections between modules depending on the connection design. The nature of modular construction creates multiple floor diaphragms instead of the otherwise single rigid diaphragm present in conventional buildings.

The discontinuity in the structural elements and floor slab diaphragms may affect the development of catenary forces in beams, which are essential in the resistance against progressive collapse. Furthermore, there is an abundance of connections in a modular building and these connections are different from the typical connections used in conventional buildings.

Due to the relatively novel structural form of modular construction, this presentation highlights its structural behaviour, global modelling and design considerations. Multiple joints and connections require consideration for alignment, waterproofing and fire protection.

Registration Fees (effective 1st August 2020)

IEM Members : RM 15.00 | IEM Non Members : RM 70.00

CPD Hours : 2.0 | CPD Ref No : IEM20/HQ/085/T(w)

Register online | www.iem.org.my

SPEAKER 1

Dr. CHUA YIE SUE

Dr. Chua is a lecturer in Monash University Malaysia. She was a Research Fellow working in a modular construction research project under Sembcorp-NUS Corporate Laboratory, National University of Singapore. She graduated with a BSc (Hons) degree from Universiti Sains Malaysia and a PhD from NUS.

She has attached in Arup Perundingan Sdn Bhd and Surbana Jurong working on modular building for Housing and Development Board (HDB) Singapore. Her research interests focus on structural analysis, robustness, modular construction, design of connection, cold-formed steel and composite, and design of protective material against impact. She is also a committee member of Civil & Structural technical division of The Institute of Engineers, Malaysia.



SPEAKER 2

Mr. ANDREW LIAN

Andrew Lian, Director of Alda Consultants has over 30 years of architectural experience and is a sought-after expert in Modular Design and Construction. Andrew holds an MBA and is a registered Architect in Western Australia. He is also an Adjunct Associate Professor at the University of Western Australia.

Andrew was previously a Principal of Woods Bagot, a leading international Architecture Firm. Today, he is a sought after speaker and expert in Modular Construction, lecturing in DfMA at the BCA Academy Singapore, Hong Kong University and University of Western Australia. He has also been a speaker at the Singapore Institute of Architects, World of Modular (USA) and UK OFFsite Conference.

He is currently advising on modular high-rise development in Hong Kong and Kuala Lumpur adopting Modular Construction. Andrew previously served as Board Member of Prefabaus, Australia's peak body promoting offsite construction. Andrew resides in Perth, Western Australia

