IEM (Southern Branch) 24B Jalan Abiad, Taman Tebrau Jaya

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The Institution of Engineers, Malaysia (Southern Branch)



Half Day Talk on "Post-Installed Technologies and Design to Malaysia Standard MS EN 1992-4:2023, MS EN 1992-1-1:2010 and TR069"

Email: iemsouthern@gmail.com

REGISTRATION FORM

| Name(s) | M/ship No | Fees |
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| | | |
| | TOTAL | |
| Enclosed herewith a Cheque No. : issued in favour of "The Institution of | | |
| Branch) " and crossed ' A/C Payee only '. If I/we fail to a not be refunded. | | - |
| Contact Person: Designatio | n: | |
| Name of Organisation: | | |
| Address : | | |
| | | |
| Tel (O): Fax: | | |
| Mobile : E-mail: | | |
| | Data | |
| Signature | Date | |

IMPORTANT NOTES

- CLOSING DATE: 25 March 2024 (Monday)
- For ONLINE REGISTRATION, payment <u>MUST BE MADE VIA ONLINE PAYMENT</u> (bank-in the participant fees into the Institution's Maybank Current Account (No. 5-013920-15708) before the closing date.
- FULL PAYMENT must be settled before commencement of the course, otherwise participants will not be allowed to enter the hall. If a place is reserved and the intended participants fail to attend the seminar, the fees is to be settled in full. If the participant made payment and failed to attend the seminar, the fees paid is non-refundable.
- The Organizing Committee reserves the right to alter or change the program due to unforeseen circumstances.

Half Day Talk on

"Post-Installed Technologies and Design to Malaysia Standard MS EN 1992-4:2023, MS EN 1992-1-1:2010 and TR069"

Organizer:

The Institution of Engineer, Malaysia (Southern Branch) Supported by:
IEM Civil and Structural
Engineering Technical Division
(CSETD)

In-collaboration with Hilti (Malaysia) Sdn. Bhd.

BEM APPROVED CPD HOURS: 4.0 IEM24/SB/071/T

Date:

30 March 2024 (Saturday) TROVE Johor Bahru

| Grade | Fees |
|-----------------|-----------|
| IEM Members | RM 90.00 |
| Non-IEM Members | RM 170.00 |

EARLY BIRD FOR IEM MEMBERS
BEFORE 22ND MARCH 2024
RM 70.00 NETT

Closing Date: 25 March 2024 (Monday)

SYNOPSIS

Designing steel-to-concrete and concrete-to-concrete connection in accordance with the latest local and international codes can be a very challenging task, given that these topics are not widely discussed in technical forums and not within the scope of any undergraduate civil engineering degree syllabus.

The first session of the seminar will be presented by Assoc. Prof. Dr. Daniel Looi from Sunway University, also the Chair for the MS EN 1992-4 (2023), to share how the latest Malaysian Standard can help structural engineers to achieve code-compliant post-installed fastenings design. In 2021, Department of Standards Malaysia (DSM) has formed a Working Group (NSC 04/TC 21/WG 07) with members representing government agencies, regulators, manufacturers, research agencies, certifying bodies, academia, builders and consultants to work on the adoption of EN 1992-4 Design of concrete structures - Part 4: Design of fastenings for use in concrete for Malaysia, and to produce its National Annex. The MS EN 1992-4 was successfully launched during the 11th International Conference on Advances Steel Structures (ICASS'2023) held at Kuching in Dec 2023, in the presence of the Director General of DSM. This new standard is an opportunity for structural and civil engineers to design and install anchors in such a way that our buildings and infrastructure are safer and more reliable. Historical information on the transition of ETAG to EN 1992-4 will be shared, along with technical insights of the clauses, and the use of design software will be demonstrated.

The second session of the seminar will be presented by Ir. Mun Yew Fai from Hilti Malaysia, to share on the post-installed reinforcement (PIR) design according to MS EN 1992-1-1 (2010) and EOTA Technical Reports (TR069). Concrete-to-concrete connection is very common in Malaysia construction industry. PIR is one of the technologies used to connect new reinforced concrete elements with existing members. PIR is drilled and installed into cured concrete, bonded by a qualified adhesive system in the existing concrete, and usually served as starter-bars and/or to create lap splicing with the reinforcements in new concrete structures on the other side of the interface. Mastering PIR behaviour and specifying their exact performance has been crucial for ensuring building safety. In this session we will discuss the qualification, assessment, and design of PIR for Malaysia construction industry. Also, the use of design software will be demonstrated.

SPEAKER BIODATA



Assoc. Prof. Dr. DANIEL LOOI TING WEE BEng (Hons) (UM, Malaysia) PhD and Postdoctoral Fellow (HKU, Hong Kong) has a PhD in structural engineering, with a focus on seismic engineering from The University of Hong Kong (HKU). He is Associate Professor and program leader for civil engineering at Sunway University, Malaysia. He is a chartered professional engineer (structural) of Engineers Australia and a working group (WG) member for the Malaysian national code development in EC1-1-6 and EC8-1. He is currently chairing the WG for the Malaysian EC2-4: Design of fastenings for use in concrete. He is the 2023/2024 Civil and Structural Technical Division committee member at The Institution of

Engineers, Malaysia. Dr. Daniel Looi is passionately researching seismic engineering, concrete mechanics, modular buildings, and fastening technologies. He has led and co-authored two books on post-installed rebars and some '40 papers. He is an Associate Editor (Civil) of HKIE Transactions, Editorial Board Member of Scientific Reports (Springer Nature) and an Early Career Editorial Board Member for a new international journal - Earthquake Engineering and Resilience. He also served as a Guest Editor for Materials Today: Proceedings by Elsevier and Special Issue in Buildings by MDPI. He is one of the pioneers to develop the www.quakeadvice.org website with the aim to educate and assist structural

engineers working in low-to-moderate seismicity regions in seismic analysis and design. He was the recipient of the HKIE Outstanding Paper Award for Young Researcher/Engineer in 2015. In his earlier career, Daniel worked as a structural application engineer in a multinational company, specialized in structural analysis and design computation for buildings and plants.



Ir. MUN YEW FAI graduated from University Malaya in 2008 with a B. Eng in the field of Civil Engineering. He has more than 15 years' experience in construction industry. He is a registered ASEAN Chartered Professional Engineer in the discipline of Civil Engineering, and registered Professional Engineer with BEM. He is the 2023/2024 Civil and Structural Technical Division committee member at The Institution of Engineers, Malaysia. Started career as structural engineer, he involved in the planning, detailed design and execution of mixed-use development, residential and commercial projects under consultant firm T. Y. Lin International Sdn. Bhd. He has been working in Hilti Malaysia since 2018 on

engineering and technical support, especially on fastening technology, i.e. post installed anchors and rebars. In 2022, he was promoted to Field Engineer Manager, leading Field Engineers to provide technical support and solutions to consultants and contractors for post installed anchor, post installed rebar and firestop system. He is also leading Testing Engineers providing anchor on-site testing services for contractors. Started from this year, he is appointed as Codes and Approval Manager to drive the code, design, and specification process in developing standards and specifications on fastening technology and passive fire protection for construction industry stakeholders.

PROGRAMME

| Time | Tentative Programme |
|-----------------------|--|
| 8.30 am – 9.00 am | Registration |
| 6.50 aiii – 5.00 aiii | registration |
| 9.00 am – 9.05 am | Welcome Speech by IEM (SB) Organizing Committee |
| 9.05 am – 10.45 am | Session 1: Post-installed anchors / steel-to-concrete connection |
| 10.45 am – 11.00 am | Coffee Break |
| 11.00 am – 12.30 pm | Session 2: Post-installed rebars / concrete-to-concrete connection |
| 12.30 pm – 1.00 pm | Question & Answer Session |
| 1.00 pm | Closing & End of Talk |



ATTENDEES WILL RECEIVE
A FREE TECHNICAL GUIDEBOOK
"A STATE-OF-THE-ART GUIDE FOR POSTINSTALLED REINFORCEMENTS"

*The guidebook authored by Looi, Su and Gad, was published by Sunway University Press 2022, worth RM 168.

For more info. click here https://sunwayuniversity.edu.my/gress/books/state-of-art-guide-post-installed-reinforcemen