



ASSOCIATION OF
CONSULTING ENGINEERS
SINGAPORE

ACES – MAPEI Technical Seminar



Date: 12 May 2026 (Tuesday)

Time: 9.30 am to 2.00 pm

Mode of Delivery: In-person

Venue: Orchard Hotel Singapore

442 Orchard Road Singapore 238879

Fee: Complimentary for ACES Member

\$50 nett per person for Non-Member

CPD: PDU to be confirmed

Registration Link

<https://forms.gle/SYRrucMxANtTDxkC8>



Programme

Time	Programme	Speaker
09:00 – 09:20 am	Registration	
09:20 - 09:30 am	Welcome address by ACES Welcome address by Mapei	Er. Jason Tan (ACES) GM of Mapei Far East
09:30 – 10:30 am (60 mins)	Technical Talk by Mapei <i>The Deterioration of Concrete and its Repair & Protection According to EN 1504</i>	Tengku Mohd Khairi Malaysia Product Manager
10:30 – 10:50 am (20 mins)	Tea Break Product Station Tour	Technical Team
10:50 – 11:20 am (30 mins)	Live Product Demonstration	
11:20 – 12:20 pm (60 mins)	Technical Session <i>Basement Waterproofing – Systems, Challenges & Solutions According to BS EN 8102-2022</i>	Mr. Gautam Karnik Regional Waterproofing Manager
12:20 – 12:50 pm (30 mins)	<i>Towards a Sustainable Building Landscape – the way forward</i> Q&A	Ms. Sorada Jingjid
12:50 – 14:00 pm	Lucky Draw & Lunch	

The Speakers

1.

Topic: *The Deterioration of Concrete and its Repair & Protection According to EN 1504*

Synopsis:

Although not readily obvious, concrete structures require repair and maintenance throughout their service-life; from newly-formed columns, beams and slabs with honeycombs due to poorly-placed and compacted concrete, to civil structures which have suffered degradation from exposure to aggressive environments.

Repairs to concrete structures are not a simple matter of removing and replacing deteriorated material. In order to help owners and engineers make the right decisions in potentially complex situations, the European Standard has issued the EN 1504 standard "Products and systems for protection and repair of concrete structures". covering all the essential principles including performance criteria, material selection and site application.

This seminar examines the many causes and reasons for defects and deterioration of concrete before reviewing the recommendations of EN 1504 and will conclude with demonstrations of some repair materials and methods.

Speaker: Tengku Mohd Khairi
Malaysia Product Manager

Tengku Mohd Khairi graduated from International University College Technology Of Twintech with Higher National Diploma (HND) in Quantity Survey in 2006. He started his profession as Quantity Surveyor in Golden Channel Service Sdn Bhd in 2009, where he gained his first relevant experience in waterproofing and refurbishment works.

In year of 2014, he joined Mapei Malaysia Sdn Bhd as Specification Executive for Concrete Repair, Protection and Structural Strengthening products range. He was promoted to be the Target Manager leading the Refurbishment Market Division with focus on Concrete Repair & Protection, Structural Strengthening and Waterproofing. Throughout his experience in Mapei Malaysia, he has been involved in various building and infrastructure projects such as upgrading works for National Mosque, Kuala Lumpur High Court, Kuantan Port, Water Reservoir package by AIR Selangor, Johor Bahru-Singapore Rapid Transit System (RTS Link) and many more. He was also called in as one of references to the committee for the revision of standard specification for concrete repair and protection under the Public Works Department Civil and Structural Engineering Branch (Jabatan Kerja Raya Cawangan Kejuruteraan Awam dan Struktur).



2.

Topic: Basement Waterproofing – Systems, Challenges & Solutions According to BS EN 8102-2022

Synopsis:

Fundamentals of Waterproofing in Modern Construction

In today's evolving construction landscape, waterproofing remains one of the most underestimated yet critical components of building design. From basements to roofs, choosing the right system is essential for long-term durability, occupant safety, and structural integrity.

This technical seminar titled "***Fundamentals of Waterproofing in Modern Construction***" aims to provide clarity on the various waterproofing methods, with a special focus on membrane systems for below-ground structures such as basements, which are particularly vulnerable to water ingress in tropical regions like the Philippines.

Far too often, waterproofing is approached reactively rather than strategically. The overabundance of systems, combined with limited practical guidance, often leads to inappropriate specifications, early failures, and unnecessary costs to the end user.

In this session, we will:

- Address common pitfalls in waterproofing design and execution.
- Discuss membrane solutions for basements, retaining walls, podiums, and foundations — highlighting the performance of both pre-applied and post-applied systems.
- Explain how spray-applied systems offer green, fast-track solutions suitable for today's construction timelines.
- Share key do's and don'ts from real project experiences across the region.

Speaker: Mr. Gautam Karnik
Regional Waterproofing Manager

Mr. Gautam Karnik is a Civil Engineer from Mumbai, Maharashtra, India, holding dual master's degrees in business administration and marketing.

With over 25 years of extensive experience in the construction chemicals industry, Mr. Karnik has specialized in key areas such as waterproofing, roofing, flooring, and sealants. His expertise spans from technical applications to strategic market development across diverse geographies.

He is a regularly invited speaker at major Architect Associations and Infrastructure forums across Singapore, Malaysia, Thailand, Vietnam, Indonesia, the Middle East, and India, where he shares insights on new technologies and best practices.

Mr. Karnik's career includes notable leadership roles with BASF and MBCC Group, where he worked in India before moving to the Middle East, eventually taking up responsibilities across the Asia Pacific region from 2015. Over the years, he has been actively involved in delivering solutions for infrastructure projects, iconic structures, and industrial developments across the region.

In early 2025, he joined Mapei as the Regional Manager for Asia Pacific, overseeing the Waterproofing and Roofing segment. His role involves engaging with consultants, contractors, and stakeholders to implement robust, sustainable, and performance-driven solutions in modern construction.



3.

Topic: *Towards a Sustainable Building Landscape – the way forward*

Synopsis:

In the world of building and construction, concerned and responsible manufacturers continue to innovate for more sustainable products. During the life-cycle, from its raw materials to production, from transport logistics to installation and disposal, every bag or pail of product used emits GHG (green house gases, such as CO₂) emissions into the environment.

What exactly are the categories we need to be aware of that impact our environment? What are the certificates available to verify the sustainable credentials of a product? What else can we do to mitigate the effects of CO₂ release to the environment? This seminar will introduce LCA (Life Cycle Assessment) and EPD (Environment Product Declaration) certification and what additional steps can be initiated by stakeholders, from developers to designers, in committing to building a sustainable future together.

Speaker: Ms. Sorada Jingjid

Sorada Jingjid holds a Master's degree in Chemical Engineering from Chulalongkorn University (2006). Currently based in Singapore, she is the Regional Technical Services & Product Development Manager – Adhesives, Resilient Flooring and Sustainability for Mapei Asia Pacific. With over 20 years of experience in construction materials and specialty construction chemicals, Sorada possesses extensive technical expertise in polymer-modified cementitious systems, resilient flooring systems, and performance-driven adhesive formulations. Her work spans research and development, product validation, regional technical support, in accordance with international standards and local regulatory requirements.

She has been actively involved in getting the environmentally responsible products, contributing to green building certifications and sustainable construction practices across the Asia Pacific region.

As a frequent technical speaker at regional seminars and professional development programs, Sorada delivers in-depth presentations on material science, performance standards, and sustainability integration within modern construction systems.

