INSTITUTION OF FIRE ENGINEERS, SINGAPORE

THE INTERNATIONAL ORGANISATION FOR FIRE PROFESSIONALS

Issue No. 36 | JAN – JUN 2025

Inside this issue

A WORD FROM THE EDITOR

As we reach the midpoint of 2025, we're thrilled to welcome you to the Institution of Fire Engineers, Singapore (IFES) community! Whether you're joining us as a practitioner, authority, industry member, or supporter, your presence strengthens our shared mission to advance fire safety standards and practices.

This year has already brought exciting developments, informative seminars and events, and collaborations across the globe. As part of IFES, you are connected to a dynamic network of likeminded people.

We encourage you to explore, engage, and contribute. Your voice matters, and your ideas can help shape the future of the organization. Stay tuned for upcoming events and opportunities to collaborate, network and socialize.

EVENTS & NEWS

51ST ANNUAL GENERAL MEETING

14h March 2025

On 14 March 2025, 70 members and invited guests came together at Furama City Centre for the 51st Annual General Meeting (AGM).

The event kicked off with a warm opening address by President Mr. K Ramanathan. He shared key highlights from the past year, presenting the annual reports from the various Management Council committees and providing a clear overview of the financial statement — setting the tone for the AGM.

As this year is not an election year, after the AGM agenda was concluded, we proceeded to the technical talk by Hydrocore Singapore Pte Ltd.

Mr. Teck Lim presented advanced fire protection solutions, highlighting water mist systems as a promising technology that offers efficiency and effectiveness in addressing the challenges of modern and increasing complex fire scenarios.

At the end of the talk, we enjoyed an intimate and joyous dinner with long-time IFES members, filled with warm conversations and shared memories.

Photograph: IFES Council at 51st AGM






Photograph: IFES members

EVENTS & NEWS

IFES COUNCIL RETREAT

21st to 23rd February 2025

From 21st to 23rd February 2025, IFES Council members gathered in the tranquil surroundings of Bintan for a retreat. This gathering marked the close of our Golden Jubilee year — a time to reflect on our achievements and celebrate a milestone in IFES history. More importantly, it was a time to look ahead.

During the retreat, council members engaged in discussions and strategic planning to shape the direction of the year to come, including preparations for the upcoming AGM.

As a result of the ideas and collaboration sparked during this retreat, we are excited to roll out a refreshed calendar of activities. We hope all members will enjoy and actively participate in the vibrant line-up planned for the year ahead!

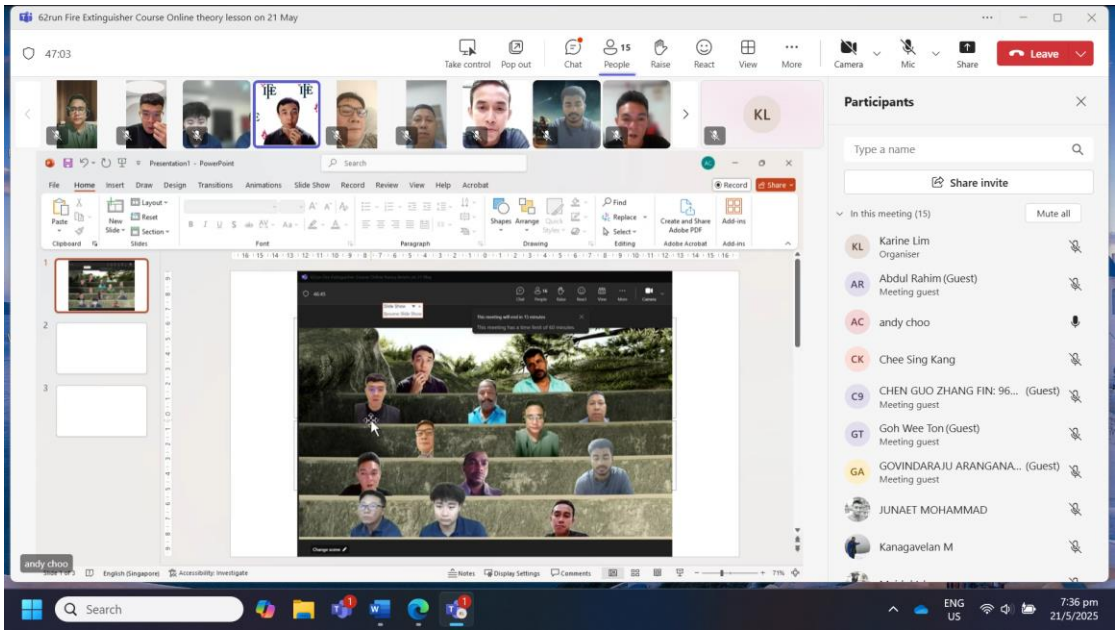
Photograph: IFES Council gathered to plan for the upcoming year activities and collaborations

EVENTS & NEWS

61ST AND 62ND FIRE EXTINGUISHER COURSE

January and May 2025

Photograph: Participants in the 61st fire extinguisher course (practical)



Photograph: Participants in the 62nd fire extinguisher course (theory and practical)

EVENTS & NEWS

MASTER FIRE CODE 2023 UPDATE – 3RD BATCH AMENDMENT

26th March 2025

This webinar was designed to equip building industry professionals with a clear understanding of the key changes introduced in the Fire Code 2023 (3rd Batch Amendment).

It provided a comprehensive walkthrough of the latest amendments, including the rationale behind each change and practical guidance for compliance through a combination of pictorial illustrations and clear, descriptive explanations.

The webinar was attended by more than 200 participants comprising of IFES members, strategic partners and interested members of public.

Photograph: The team at IFES hard at work behind the scenes

Photograph: The IFES webinar presenters and participants (online)

EVENTS & NEWS

IFES FIRE SIDE CHAT BY UL BATTERY FIRE SPECIALIST

23rd April 2025

IFES recently hosted a compelling Fire Side Chat featuring Ms Alex Schraiber, who is a Senior Research Manager at UL Solutions' Fire Research and Development group.

The workshop offered attendees (20 IFES members and invited partners) an opportunity to discuss the latest findings from UL's ongoing fire safety research on considerations for fire service response to residential battery energy storage system incidents.

This workshop served as a valuable platform for knowledge exchange, equipping fire professionals with the latest insights and tools to enhance their preparedness for battery-related incidents.

Photograph: Mr Kolin Low (UL) giving the opening remarks

Photograph: IFES attendees at the Fire Side Chat with UL (L) and Ms Alex Schraiber presenting the research findings (R)

Photograph: IFES attendees at the Fire Side Chat with UL

EVENTS & NEWS

IFES SEMINAR 2025

Enhancing Fire Safety: Regulatory Updates, Battery Storage Risks, and Alarm System

25th June 2025

The IFES seminar, held on 25 June and attended by more than 200 participants, brought together fire safety professionals, building managers, and industry experts for a dynamic exchange centered around the theme "Enhancing Fire Safety: Regulatory Updates, Battery Storage Risks, and Alarm System Enhancements".

Mr. Ramanathan, President of IFES, opened the seminar with a compelling message on the importance of continuous learning and collaboration.

DC Daniel Seet delivered an insightful keynote address, highlighting SCDF's strong support for fire engineering education and professional development, in particular with the Singapore Institute of Technology (SIT).

Photograph: Opening speech (by IFES President Ramanathan) and Keynote Speech (DC Daniel Seet)

Photograph: IFES delegation at the conference

Mr. David Goh provided an overview of addressable fire alarm systems, emphasizing the critical role FSMs play in ensuring proper installation and maintenance, aligned with SS 645:2019 standards.

Captain Muhammad Amin Bin Isa and Captain Foo Ce Yi presented the Fire Code amendments, focusing on key regulatory changes and their implications for building design.

Mr. Chan Kai Foo delivered an engaging session on the fire risks and safety strategies associated with Lithium-Ion Battery Energy Storage Systems. Drawing from Factory Mutual's current research and field experience, he outlined best practices for installation, monitoring, and fire protection.

Captain Koh Woon Siang concluded the technical sessions with a focused presentation on common audit findings observed during SCDF's fire safety plan reviews.

Er. Ho Victor wrapped up the seminar with a deep dive into fire safety considerations for Battery Energy Storage Systems (BESS), focusing on the interpretation and latest updates of UL9540A.

The seminar concluded with a robust and engaging Q&A session, moderated by Ar. Chan Kok Way, which brought together the day's speakers for a dynamic exchange with the audience. Participants posed thoughtful questions on topics ranging from regulatory interpretations to practical implementation.

Photograph: DC Daniel Seet and IFES Council Members

Photograph: Conference speakers and IFES President (Mr Ramanathan)

UPCOMING EVENTS & ACTIVITIES

Servicing And Maintenance of Fire Extinguishers

Commencement Date: 12th September 2025

Basic Design and Maintenance of Fire Protection Systems

Commencement Date: 20th August 2025

Tunnel Fire Safety and Forensic Fire Engineering

18th to 19th September 2025

Published quarterly by the IFES, we are always looking for members contributions. To provide any articles or feedback, please contact – admin@ife.org.sg

CONTACT DETAILS

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Singapore 573960

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Email admin@ife.org.sg
Website https://www.ife.org.sg/
LinkedIn https://www.linkedin.com/company/ifesingapore

Your Ref : **Our Ref:** CD/04/05/01/01

Date : 3 Mar 2025

Registrar, Board of Architects
Registrar, Professional Engineers Board
President, Singapore Institute of Architects
President, Institution of Engineers, Singapore
President, Association of Consulting Engineers, Singapore

Dear Sir/ Mdm,

AMENDMENTS TO FIRE CODE 2023 – 3rd BATCH OF AMENDMENTS

SCDF would like to issue the 3rd batch of amendments to the Code of Practice for Fire Precautions in Buildings 2023 (Fire Code 2023). The amendments, which were deliberated and accepted by the Fire Code Review Committee are attached as Annex A of this circular.

2. Amendments stipulated in Annex A shall take effect from the date specified therein. Qualified Persons who wish to comply with the requirements in this Circular for any proposed plans of fire safety works for new buildings or existing buildings to be submitted during the 6-month grace period (i.e., 3 Mar 2025 to 3 Sep 2025) can do so and are not required to apply for waivers. Such plans that are submitted to SCDF for approval on or after the effective date shall be subject to the amendments made to the Fire Code.

3. Please convey the contents of this circular to members of your Board/ Institution/ Association. This circular is also available in CORENET's e-Info: http://www.corenet.gov.sg/einfo.

HQ SINGAPORE CIVIL DEFENCE FORCE, 91 UBI AVENUE 4, SINGAPORE 408827
TEL: 68481457 FAX: EMAIL: TAN_Chung_Yee@@scdf.gov.sg

4. For general queries, you may contact Mr Randy Tan at DID: 68481461 or Mr Tan Yi Yang at DID: 68481734. However, for specific queries relating to edits for:

a. 1-hour fire separation for roof-mounted PV installations, please contact MAJ Muhammad Izwan Bin Ibrahim/ MAJ Daven Tan at 68481413/ 68481408, or email: Muhd_Izwan_IBRAHIM@scdf.gov.sg/ Daven_TAN@scdf.gov.sg.

b. Hose reel exemption for open-sided sheds for M&E plants/ equipment, and open-sided sheds for PG III field training usages, please contact CPT Lim Hoong Ta at 68481403, or email: LIM_Hoong_Ta@scdf.gov.sg.

c. Liquefied Petroleum Gas (LPG) cylinder installation, please contact Ms Koh Wen Xi at 68481428, or email: KOH_WEN_XI@scdf.gov.sg.

Yours faithfully

(transmitted via email)

LTC Tan Chung Yee
for Commissioner
Singapore Civil Defence Force

Distribution list

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Manager (Fire Safety & Building Control Unit), DSTA
SCDF Fire Safety Standing Committee
Fire Code Review Committee

Annex A

S/N	Amendment Date	Effective Date	Clause Status	Clause Before Amendment	Clause After Amendment
1	3 Mar 2025	3 Sep 2025	Relaxation/ Revised	2.3.9e. Vision panel The fire door to an exit staircase and smoke-free/ fire lift lobby shall be constructed to incorporate a vision panel. The vision panel shall have a clear view size of 100mm (w) x 600mm (h). The vision panel shall have the requisite fire resistance rating and shall not turn opaque when subject to heat. The bottom edge of the vision panel shall be located at 900mm above the finished floor level. The provision of vision panel shall not apply to fire doors of residential apartment or maisonette units.	2.3.9e. Vision panel The fire door to an exit staircase and/ or smoke-free/ fire lift lobby shall be constructed to incorporate a vision panel. The vision panel shall have a clear view size of 100mm (w) x 600mm (h). The vision panel shall have the requisite fire resistance rating and shall not turn opaque when subject to heat. The bottom edge of the vision panel shall be located at 900mm above the finished floor level. The provision of vision panel shall not apply to fire doors of residential apartment or maisonette units and public accommodation units (see *Table 1.4A*).
2	3 Mar 2025	3 Sep 2025	Relaxation/ Revised	6.2.8a.(3) Exemption (a) … (b) … (c) Other standalone buildings as follows: (i) … (ii) … (iii) … (iv) … (v) … (vi) … (vii) … (viii) …	6.2.8a.(3) Exemption (a) … (b) … (c) Other standalone buildings as follows: (i) … (ii) … (iii) … (iv) … (v) … (vi) … (vii) … (viii) …

					(ix) Open-sided sheds for M&E plants/ equipment with AFA not exceeding 20m^2 and openings that constitute not less than 80% of the perimeter wall area (measured along the roof eaves). (x) Open-sided sheds for PG III field training usages without any storage, with AFA not exceeding 300m^2 and openings that constitute not less than 80% of the perimeter wall area (measured along the roof eaves).
3	3 Mar 2025	3 Mar 2025	Clarification/ Revised	6.6.6c. For buildings which do not require standby generating plants, and for buildings with standby generating plants but without automatic fire alarm or sprinkler system (1) ……. (2) Smoke/ heat detectors shall be provided at all lift lobbies such that all lifts serving the same lobby shall be brought to the designated floor or alternate designated floor upon activation of the detectors. For buildings without a fire alarm system, the smoke/ heat detectors shall form part of the lift system and shall be connected to the lift control panel to home the lift under normal power upon activation.	6.6.6c. For buildings which do not require standby generating plants, and for buildings with standby generating plants but without automatic fire alarm or sprinkler system (1) ……. (2) Smoke/ heat detectors shall be provided at all lift lobbies such that all lifts serving the same lobby shall be brought to the designated floor or alternate designated floor upon activation of the detectors. ~~For buildings without a fire alarm system,~~ The smoke/ heat detectors shall form part of the lift system and shall be connected to the lift control panel to home the lift under normal power upon activation.

4	3 Mar 2025	3 Mar 2025	Relaxation/ Revised	7.4.1a. An engineered smoke control system as specified in *Cl.7.4.5* shall be provided where: (1) …….. (2) …….. (3) the total aggregate floor area of all basement storeys exceeds 2000m², except in any of the following situations: (a) Where the basement or a portion of the basement is used as a car park, the car park shall comply with the requirements of *Cl.7.4.3*, provided it is compartmented from the rest of the basement. (b) Where a plant/ equipment room with floor area not exceeding 250m² is compartmented from rest of the basement, two doors remotely located from each other for better reach in firefighting operations shall be provided. The provision of a single door opening for this room is permitted provided the most remote part of the room is less than 8m from the door, and the equipment found inside this room, does not obstruct the throw of a water jet from a firefighting hose.	7.4.1a. An engineered smoke control system as specified in *Cl.7.4.5* shall be provided where: (1) …….. (2) …….. (3) the total aggregate floor area of all basement storeys exceeds 2000m², except in any of the following situations: (a) Where the basement or a portion of the basement is used as a car park, the car park shall comply with the requirements of smoke purging system in accordance with *Cl.7.4.3*, provided it is compartmented from the rest of the basement. (b) Where a plant/ equipment room with floor area not exceeding 250m² is compartmented from rest of the basement, two doors remotely located from each other for better reach in firefighting operations shall be provided. The provision of a single door opening for this room is permitted provided the most remote part of the room is less than 8m from the door, and the equipment found inside this room, does not obstruct the throw of a water jet from a firefighting hose.

				(c) Where a plant/ equipment room with floor area exceeds 250m² but not 2000m², and for which smoke vents in accordance with *Cl.7.4.2* or smoke purging system of at least 9 air changes per hour are provided. (d) Where a service area comprising storerooms or workshops (restricted to staff only) which are compartmented, which are provided with smoke venting in accordance with *Cl.7.4.2*, or a smoke purging system of at least 9 air changes per hour in lieu of an engineered smoke control system. An automatic fire alarm/ extinguishing system in accordance with *Table 6.4A* shall be provided where required.	(c) Where a plant/ equipment room with floor area ~~exceeds 250m² but~~ not exceeding 2000m², is ~~and for which~~ provided with smoke vent~~s~~ in accordance with *Cl.7.4.2* or smoke purging system in accordance with *Cl.7.4.3*. ~~of at least 9 air changes per hour are provided.~~ (d) Where a compartmented service area comprising storerooms or workshops (restricted to staff only) ~~which are compartmented, which are~~ is provided with smoke vent ~~venting~~ in accordance with *Cl.7.4.2*~~,~~ or ~~a~~ smoke purging system in accordance with *Cl.7.4.3*. ~~of at least 9 air changes per hour in lieu of an engineered smoke control system. An automatic fire alarm/ extinguishing system in accordance with *Table 6.4A* shall be provided where required.~~ (e) Where the basement of a residential development is used as a car park, one office intended for ancillary use is permitted in the car park. The office shall be provided with smoke purging system in accordance with *Cl.7.4.3* and compartmented from

					the rest of the basement. The office floor area shall not exceed 40m².
5	3 Mar 2025	3 Sep 2025	Relaxation/ Revised	9.2.1a.(8) Travel distance (a) ……. (b) ……	9.2.1a.(8) Travel distance (a) ……. (b) …… (c) Travel distance for open-to-sky roof garden For habitable roof garden that is fully open-to-sky and provided with at least 2 exits, the travel distance can be based on the requirement for sprinkler-protected buildings as specified in *Table 2.2A*.
6	3 Mar 2025	3 Mar 2025	Clarification/ Revised	9.8.1b. Structural fire precautions (1) Vehicle parking area Fire compartmentation shall be provided between a vehicle parking area (PG VIII) and other areas, except for ancillary washrooms and other rooms stated in footnote (4) of *Table 6.4A*, the fire compartment walls and floors shall have at least 1-hr fire resistance rating. Exceptions:	9.8.1b. Structural fire precautions (1) Vehicle parking area Fire compartmentation shall be provided between a vehicle parking area (PG VIII) and other areas, except for ancillary washrooms and other rooms stated in footnote (4) of *Table 6.4A*~~,~~. The fire compartment walls and floors shall have at least 1-hr fire resistance rating. Exceptions:

				(a) For a sprinkler-protected factory, compartmentation between the vehicle parking areas and the factory is not required, provided the vehicle parking area and adjacent driveway are provided with an engineered smoke control system. (b) For a sprinkler-protected warehouse, thermal insulation of the fire-rated shutters between the vehicle parking area and the warehouse is not required, provided the vehicle parking/ loading and unloading area and adjacent driveway are provided with an engineered smoke control system.	(a) For a sprinkler-protected factory, compartmentation between the vehicle parking areas and the factory is not required, provided the vehicle parking area/ loading and unloading bay and adjacent driveway are provided with an engineered smoke control system. (b) For a sprinkler-protected warehouse, thermal insulation of the fire-rated shutters between the vehicle parking area and the warehouse is not required, provided the vehicle parking/ loading and unloading area and adjacent driveway are provided with an engineered smoke control system.
7	3 Mar 2025	3 Sep 2025	Clarification/ Revised	10.1.1a. This section stipulates the fire safety requirements for the commercial, industrial and residential premises with eating outlets, eating places, canteens, restaurants and other eateries which use LPG for cooking purposes. It is also intended for industrial applications involving hot works.	10.1.1a. This section stipulates the fire safety requirements for the commercial, industrial and residential premises with eating outlets, eating places, canteens, restaurants and other eateries which use LPG for cooking purposes. Usage of LPG systems that is not specifically covered in this Code (for e.g., non-manifold LPG systems in places of public resort for the purpose of social cooking events such as barbeques) is not allowed. It is also intended for commercial and industrial applications

					such as ~~involving~~ hot works, mass food production etc.
8	3 Mar 2025	3 Sep 2025	Clarification/ Revised	10.1.1b. All LPG cylinder installations shall be located outdoors and on the ground levels for all commercial and industrial buildings. Locating LPG cylinders indoor is normally not permitted, unless otherwise approved by the SCDF under special circumstances *(See Annex 10.1B*).	10.1.1b. All LPG cylinder installations shall be located outdoors and on the ground levels for all commercial and industrial buildings. Locating LPG cylinders indoors ~~is normally not permitted, unless otherwise approved by the SCDF under special circumstances *(See Annex 10.1B*).~~ shall comply to the requirements of *Cl.10.1.4*.
9	3 Mar 2025	3 Sep 2025	Relaxation/ Revised	10.2.1 Roof-mounted PV installations d. Design and installation criteria (4) Storages or services located below PV arrays excluding those stated under *Cl.10.2.1b.(1)(b)*, shall be separated from the PV arrays as follows: (a) For sprinkler-protected space below arrays, a non-combustible separation shall be provided. (b) For sprinkler-protected space below arrays, if the PV modules comply with *Cl.10.2.2b.*, no separation is required. (c) For non-sprinkler-protected space below arrays, a 1-hr fire-rated separation shall be provided.	10.2.1 Roof-mounted PV installations d. Design and installation criteria (4) Storages or services located below PV arrays excluding those stated under *Cl.10.2.1b.(1)(b)*, shall be separated from the PV arrays as follows: (a) For sprinkler-protected space below arrays, a non-combustible separation shall be provided. (b) For sprinkler-protected space below arrays, if the PV modules comply with *Cl.10.2.2b.*, no separation is required. (c) For non-sprinkler-protected space below arrays, a 1-hr fire-rated separation shall be provided.

				(d) For non-sprinkler-protected space below arrays, if the PV modules comply with *Cl.10.2.2b.*, a non-combustible separation shall be provided. (5) PV modules, wirings, switchboard assemblies and other equipment shall not cover any ventilation system on the roof (e.g., smoke control/ extraction systems or air well). (See *Diagram 10.2.1.d.)*	Exception: A non-combustible separation can be used in lieu of 1-hr fire-rated separation for the following: (i) PV installation on roof of PG VI except high hazard occupancy stated in *Cl.1.4.68*, with a minimum height of 4m measured between the vehicle access level/ highest habitable floor and the average roof level, or (ii) PV installation on roof of PG VIII, except high hazard occupancy stated in *Cl.1.4.68*, with a minimum height of 8m measured between the vehicle access level/ highest habitable floor level and the average roof level, or (iii) Buildings, except high hazard occupancy stated in *Cl.1.4.68*, shall be protected with an automatic fire alarm system compliant with *SS 645*, and the PV modules shall be installed at least 200mm above the finished roof level, or

					(iv) PV modules shall comply with *Cl.10.2.1c.* with its outer layers constructed of glass or non-combustible material, and shall be installed at least 200mm above the finished roof level of buildings, except high hazard occupancy stated in *Cl.1.4.68*, or (v) PV modules comply with *Cl.10.2.2b.*. ~~(d) For non-sprinkler-protected space below arrays, if the PV modules comply with *Cl.10.2.2b.*, a non-combustible separation shall be provided.~~ (5) PV modules, wirings, switchboard assemblies and other equipment shall not cover and have a minimum horizontal clearance of 500mm from any ventilation system on the roof (e.g., smoke control/ extraction systems or air well) and skylight. (See *Diagram 10.2.1.d.)*

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<td>10</td>
<td>3 Mar 2025</td>
<td>3 Sep 2025</td>
<td>Relaxation/
Revised</td>
<td>Existing <u>Table 1.4B</u>

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<tr><th colspan="3">TABLE 1.4B: OCCUPANCY LOAD FACTORS</th></tr>
<tr><th>FUNCTIONAL SPACES</th><th>OCCUPANCY LOAD FACTOR (m²/person)</th><th>REMARKS</th></tr>
<tr><td>Classroom</td><td>1.5</td><td></td></tr>
<tr><td>Computer classroom</td><td>1.5</td><td></td></tr>
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<td>See affected portion of <u>Table 1.4B</u>

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<tr><td>Classroom</td><td></td><td></td></tr>
<tr><td>computer classroom</td><td>1.5</td><td></td></tr>
<tr><td>nursery classroom for children under 7 years of age</td><td>1.5</td><td>or higher OL factor as required by the authority having jurisdiction</td></tr>
<tr><td>others</td><td>1.5</td><td></td></tr>
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Institution of Fire Engineers Singapore

Course Brochure

TRAINING COURSE FOR CERTIFICATE OF COMPETENCY

SERVICING AND MAINTENANCE OF FIRE EXTINGUISHERS

OBJECTIVES OF THIS COURSE:

To enable participants to qualify as competent persons in the inspection, maintenance and recharging of fire extinguishers.

Such qualified persons are required for a fire extinguisher service workshop to be registered with TUV SUD as an approved workshop.

ABOUT IFE SINGAPORE:

Institution of Fire Engineers, Singapore, (IFES) is an established professional engineering institution, affiliated with the Institution of Fire Engineers, UK, and its global network of international branches. IFES plays a leading role in promoting fire safety in Singapore.

CERTIFICATION:

Each participant who passes the examinations will receive a Certificate of Competency enabling them to be qualified operators in the maintenance of fire extinguishers in Singapore.

Our Certification is recognized by TUV SUD.

COURSE RUN No: 63rd

COMMENCEMENT DATE: 12 Sep 2025

(Detailed schedule & venue on next page)

COURSE FEE: *$700.00 per participant (NO GST)*

(includes SS578 code book & handouts)

ENTRY REQUIREMENTS:

Applicants must have completed secondary two mathematics and science or possess NITEC/NTC qualifications or equivalent standards and actively employed in the fire protection industry to benefit from this course.

COURSE CONTENTS

1. Introduction to fire extinguishers.
2. Types of fire extinguishers and their classification and ratings.
3. Overview of SS EN 3 – specification for extinguishers
4. Detailed study of SS 578 – selection, distribution, maintenance, recharging and hydro-testing (theory and practical).

WHO SHOULD ATTEND:

Participants who are currently working as fire extinguisher service personnel and wish to be certified as qualified operators in the inspection, maintenance and recharging of fire extinguishers

CPD POINTS:

SCDF – FSM – 5 points

Class size is limited to 20 person allowing optimal interaction between trainer and participants.

Seats will be reserved only after payment is received by Institution of Fire Engineers, Singapore (IFE). Refer to Payment Modes below.

Course Brochure

TRAINING PROGRAME

		Theory Lessons
Date	**Venue**	**6.30pm to 8pm**
12 Sep 2025 Friday	Online	Part 1-3 Introduction to Fire Extinguisher - Types of Fire Extinguishers SS EN 3 - Specification for Fire Extinguishers
15 Sep 2025 Monday	Online	Part 4-6 SS578 – Selection & Distribution of Fire Extinguisher SS578 – Inspection & Maintenance of Fire Extinguisher SS578 – Recharging & Hydrostatic test for Fire Extinguisher

		Practical Sessions
Date	**Venue**	**6.30pm to 9.30pm**
22 Sep 2025 Monday	32 Ang Mo Kio Industrial Park 2, #07-06 Sing Industrial Complex S569510	Practical Training
23 Sep 2025 Tuesday	32 Ang Mo Kio Industrial Park 2, #07-06 Sing Industrial Complex S569510	Practical Training

THEORY AND PRACTICAL TEST

Date	Venue	Theory Test
25 Sep 2025 Thursday	18 Midview City, Sin Ming Lane #06-01 Singapore 573960	**7.00pm to 8.00pm**

Date	Venue	Practical Test
26 Sep 2025 Friday	32 Ang Mo Kio Industrial Park 2, #07-06 Sing Industrial Complex Singapore 569510	**6.30pm to 9.30pm**

Course Brochure

COURSE SPECIFICS

COURSE INSTRUCTORS

The course will be conducted by qualified and experienced personnel from IFE Singapore. The training and the tests will be conducted in the English language.

***COURSE TRAINING PROGRAM*E**

Please refer to the details enclosed in this brochure.

COURSE DELIVERY

Theory sessions shall be conducted in a classroom setup at a venue stated in this brochure or confirmed by IFE Singapore separately via email. If there is a need to shift the theory classes online, we will notify participants via their email address. Theory examinations shall be conducted in a classroom setup. Practical sessions and examinations shall be conducted at a venue stated in this brochure.

CLASS SIZE

A total maximum of 20 participants. **Seats will be confirmed only upon receiving payment.**

HOW TO APPLY

Submit the online application form stated on your email or scan the QR code in theemail.

DISCLAIMER & REFUND POLICY

1. IFE reserves the right to postpone or cancel the course without stating any reasons.

2. If applicant withdraws his application prior to 4 weeks before commencement of the course or course is cancelled – full refund 100% of course fees as stated in this brochure

3. If applicant withdraws his application between 2 to 4 weeks prior to commencement of the course – 50% refund of course fees as stated in this brochure

4. No refund of course fees if applicant withdraws within 2 weeks of course commencement date.

PAYMENT MODE

Please note we do not issue invoice as we will issue a e-Receipt upon receiving payment. Please send us a confirmation slip if you are paying via Paynow or Bank transfer so that we will be able to identify your payment.

Enquiries and Further Information

Please contact Karine Lim at 96693176 or email: admin2@ife.org.sg

Course Brochure

MODES OF PAYMENT

Method 1 (PAY BY PAYNOW CORPORATE TO UEN)

UEN no	:	S75SS0037D
Entity Name	:	Institution of Fire Engineers, Singapore
Transfer Details	:	**Please indicate clearly your Name, Membership no (if any) and payment purpose.**
Confirmation slip	:	**Please print screen/ screen shot confirmation slip and send to** admin@ife.org.sg / admin2@ife.org.sg

Method 2 (PAY BY BANK TRANSFER)

Account Name	:	Institution of Fire Engineers, Singapore
Name of bank	:	United Overseas Bank
Account Number	:	314-304-819-3
Bank Branch Code	:	7375
Bank Code	:	007
Swift Code	:	Uovbsgsg
Comments for Recipient	:	**Please indicate clearly your Name, Membership no (if any) and payment purpose.**
Confirmation slip	:	**Please print screen/ screen shot confirmation slip and send to** admin@ife.org.sg / admin2@ife.org.sg

Method 3 (PAY BY CHEQUE)

Issue to	:	Institution of Fire Engineers, Singapore
Sent to	:	18 Sin Ming Lane #06-01 Midview City, Singapore 573960, Attn: Administrative Secretary, Dian Hayatu'llah
Back of your Cheque	:	**Please clearly indicate your Name, Membership no (if any) and payment purpose.**

COURSE BROCHURE - INSTITUTION OF FIRE ENGINEERS, SINGAPORE

TRAINING COURSE FOR CERTIFICATE OF COMPETENCY

BASIC DESIGN AND MAINTENANCE OF FIRE PROTECTION SYSTEMS

OBJECTIVES OF THIS COURSE: To provide course attendees with comprehensive understanding on the operation, maintenance, inspection and testing procedures of fire protection systems in buildings	**ABOUT IFE SINGAPORE:** Institution of Fire Engineers, Singapore, (IFES) is an established professional engineering institution, affiliated with The Institution of Fire Engineers, UK, and its global network of international branches. IFES plays a leading role in promoting fire safety in Singapore.
CERTIFICATION: Each participant who passes the examinations will receive a Certificate of Competency.	**COURSE RUN NO: 1/2025** **COMMENCEMENT DATE: 20 Aug 2025** (Detailed schedule & venue on next page)
COURSE FEE:	**COURSE FEE:** ***$1,800 per person (NO GST)*** *Seats will be reserved only after payment is received by Institution of Fire Engineers, Singapore (IFE)* Participants must complete **ALL** Sessions stated on the course program and pass the examination before they can be awarded the Certificate of Competency in the Basic Design and Maintenance of Fire Protection Systems.
ENTRY REQUIREMENTS: Applicants must have completed secondary two mathematics and science or possess NITEC/NTC qualifications or equivalent standards and actively employed in the fire protection industry to benefit from this course. (Strict compliance)	**COURSE CONTENTS** Please refer to the Course Schedule in this Brochure

COURSE BROCHURE - INSTITUTION OF FIRE ENGINEERS, SINGAPORE

WHO SHOULD ATTEND: Personnel involved in operating and maintenance of fire protection systems in all types of buildings from the Fire protection industry	**CPD POINTS:** **SCDF – FSM – 10points** *Class size is limited to 20 person allowing optimal interaction between trainer and participants.*

COURSE SCHEDULE AND VENUE

	Module Unit	Description	Date	Time	Venue
1	Module 1 & 2	Basic Fire Science Pipes, Valves & Fittings	Wednesday 20 Aug 2025	9am to 5pm	NUSS Guild House @ Suntec City 3 Temasek Boulevard (Tower 5) #02- 401/402 Suntec City Mall Singapore 038983 **Rm Name: TBC**
2	Module 3	Pumps, Drivers, Controllers & Water Storage Tanks	Wednesday 27 Aug 2025	9am to 5pm	
3	Module 4-1	Water Based Fire Protection Systems on Sprinkler, Water Spray, Water Mist (Part 1 & Part 2)	Wednesday 03 Sep 2025	9am to 5pm	
4	Module 4-2	Water Based Fire Protection Systems on Wet Riser, Dry Riser, Fire Hydrants, Hose reels	Wednesday 10 Sep 2025	9am to 5pm	
5	Module 4-3	Maintenance of Water Based Fire Protection Systems			
6	Module 4-3 (Practical)	**Practical** Maintenance of Water Based Fire Protection Systems	Wednesday 17 Sep 2025	6pm to 9pm	32 Ang Mo Kio Industrial Park 2 #07-06 Sing Industrial Complex Singapore 569510
7	Module 4-4	Foams Systems	Wednesday 24 Sep 2025	9am to 12pm	NUSS Guild House @ Suntec City 3 Temasek Boulevard (Tower 5) #02- 401/402 Suntec City Mall Singapore 038983 **Rm Name: TBC**
8	Module 5	Smoke Control System		1pm to 5pm	
9	Module 6	Fire Detection & Alarm Systems	Wednesday 01 Oct 2025	9am to 1pm	
10	Module 7	Clean Agent Fire Protection Systems		2pm to 5pm	

11	Module 6 (Practical)	**Practical** Fire Detection & Alarm System	Friday 03 Oct 2025	6pm to 9pm	32 Ang Mo Kio Industrial Park 2 #07-06 Sing Industrial Complex Singapore 569510
12	Module 7 (Practical)	**Practical** Clean Agent Fire Protection Systems			
13	Exam	Written Examinations	Wednesday 08 Oct 2025	2pm to 5pm	51 Cuppage Road (Former Starhub building, located behind Centrepoint) #03-03 Singapore 229469 **Rm Name: Havard 3**

COURSE SPECIFICS

COURSE INSTRUCTORS

The course will be conducted by qualified and experienced personnel from IFE Singapore. The training and the tests will be conducted in the English language.

COURSE TRAINING PROGRAME

Please refer to the details enclosed in this brochure.

COURSE DELIVERY

Theory sessions shall be conducted in a classroom setup at a venue stated in this brochure or confirmed by IFE Singapore separately via email. If there is a need to shift the theory classes online, we will notify participants via their email address. Theory examinations shall be conducted in a classroom setup.

Practical sessions and examinations shall be conducted at the venue stated in this brochure.

CLASS SIZE

A total maximum of 20 participants. **Seats will be confirmed only upon receiving payment.**

HOW TO APPLY

1. Submit the online application form stated on your email or scan the QR code in the email.

Or

https://forms.gle/EroXv89Zo8M8j6bK6

DISCLAIMER & REFUND POLICY

1. IFE reserves the right to postpone or cancel the course without stating any reasons.

2. If applicant withdraws his application prior to 4 weeks before commencement of the course or course is cancelled – full refund 100% of course fees as stated in this brochure

3. If applicant withdraws his application between 2 to 4 weeks prior to commencement of the course – 50% refund of course fees as stated in this brochure

4. No refund of course fees if applicant withdraws within 2 weeks of course commencement date.

PAYMENT MODE

Please note we do not issue invoice as we will issue an e-Receipt upon receiving payment.
Please send us a confirmation slip if you are paying via Paynow or Bank transfer so that we will be able to identify your payment.

Paynow or bank transfer are the preferred modes of payment.

COURSE BROCHURE - INSTITUTION OF FIRE ENGINEERS, SINGAPORE

Enquiries and Further Information
Please contact Ms. Karine Lim at 9669 3176 or 6338 9274 or email: admin2@ife.org.sg

MODES OF PAYMENT

Method 1 (PAY BY PAYNOW CORPORATE TO UEN) ***Preferred***

UEN no	:	S75SS0037D
Entity Name	:	Institution of Fire Engineers, Singapore
Transfer Details	:	**Please indicate clearly your Name and payment purpose.**
Confirmation slip	:	**Please print screen/ screen shot confirmation slip and send to admin@ife.org.sg** **For us to provide e- Receipt to you, transfer details and confirmation slip must be completed as per above instructions.**

Method 2 (PAY BY BANK TRANSFER)

Account Name	:	Institution of Fire Engineers, Singapore
Name of bank	:	United Overseas Bank
Account Number	:	314-304-819-3
Bank Code	:	7375
Branch Code	:	007
Swift Code	:	Uovbsgsg
Comments for Recipient	:	**Please indicate clearly your Name and payment purpose.**
Confirmation slip	:	**Please print screen/ screen shot confirmation slip and send to admin@ife.org.sg** **For us to provide e- Receipt to you, comments and confirmation slip must be completed as per above instructions.**

INSTITUTION OF FIRE ENGINEERS, SINGAPORE (IFES) COURSE 2025

Tunnel Fire Safety and Forensic Fire Engineering

Seminar Information

This two-day seminar will focus on two different topics, namely Tunnel Fire Safety (Day 1) and Forensic Fire Engineering (Day 2). In the area of Tunnel Fire Safety, attendees will learn about such aspects as (1) design fires, (2) smoke spread, and (3) smoke management, in relation to life safety, i.e., safe evacuation of occupants.

For Forensic Fire Engineering, attendees will get an introduction to the use of fire engineering tools and methods, e.g., evacuation modelling and CFD, for forensic investigation of accidents.

Target Audience

Fire Safety Engineers, Professional Engineers, Registered Architects, Fire Investigators, Fire Safety Managers, Safety Officers, Suppliers of Fire Products, Building Owners, Developers, Building Contractors, Facility Management and Maintenance Personnel, Authority Having Jurisdiction, etc.

Program

Day 1

Time	Topic
8.30 – 10:30	Design fires for tunnels
10.30-10.45	Coffee break
10.45-12.15	Tunnel Fire Dynamics (Part 1)
12.15-13.15	Lunch
13.15-15.45	Tunnel Fire Dynamics (Part 2)
15.45-16.00	Coffee break
16.00-18.00	Tenability (FED/FEC) assessment for tunnels

Day 2

Time	Topic
8:30-10:30	The Expert Witness Process. Fire and Smoke Spread Reconstruction (Part 1)
10:30-10:45	Coffee break
10:45-12:45	Fire and Smoke Spread Reconstruction (Part 2)
12.45-13.45	Lunch
13.45-15.45	Fire and Smoke Spread Reconstruction (Part 3) Evacuation Timeline Reconstruction (Part 1)
15.45-16.00	Coffee break
16.00-18:00	Evacuation Timeline Reconstruction (Part 2)

Date and Time

18 to 19 September 2025 (Thursday & Friday), 8.30am to 6pm

Venue

Holiday Inn City Centre
11 Cavenagh Rd, Singapore 229616

Fee

a. $1,200 for members of IFES
b. $1,500 for non-members

(includes coffee breaks & lunch and no GST)

Continuing Professional Development

a. Qualified CPE hrs by SCDF to FSE - 16
b. Qualified CPD points by SCDF to FSM TBA
c. Qualified CPD points by BOA- SIA – TBA
d. Qualified PDU points by PEB – TBA

Speaker's Profile

Prof. Daniel Nilsson is the Head of Department, Civil and Natural Resources, University of Canterbury. Professor in Fire Engineering, Civil and Natural Resources, University of Canterbury. Program director, FSE program, Lund University. Senior lecturer at the

Department of Fire Safety Engineering and Systems Safety, Lund University.

Dr. Aatif Khan Pete Thomson is Senior Lecturer, Dept. of Civil & Natural Resources Engineering, University of Canterbury. He developed an open-source package for coupling the CFD-FEM software to understand the structural response to real fires. Currently, he is focusing on developing the fire safety design for firefighters during the emergency response.

REGISTRATION INFORMATION

Closing Date

Registration closes on **19 Aug 2025** or seats fully sold out whichever is earlier.

Online Registration

Scan QR Code or click on the link to **register and pay** below

Click on Registration Link below:

https://forms.gle/SJkBzzossVtrvmG48

Registration Notes:

1. We accept registration via the above registration link ONLY

2. Please ensure you have completed the correct details on the registration page above and proceed to pay via the modes of payment stated here.

3. **IFES does not issue invoice however we will issue e-receipts upon receipt of payment. Please refer to the payment modes for payment.**

Disclaimer & Refund Policy

1. IFES reserves the right to postpone or cancel the course due to unforeseen circumstances.

2. No refund of course fees for cancellation. Replacements are allowed **before** the closing of the registration date line stated in this Brochure. No replacements **after** the closing of the registration date.

3. IFES may disclose personal information about individuals, for any of the purposes and in accordance with the PDPA, to any of our agents and service providers.

CONTACT INFORMATION

Any enquiries are to be sent to our official email below:

Ms Karine Lim
9669 3176 (HP) or 63389274 (Mon to Fri 9am to 5pm)
Email: admin2@ife.org.sg

Ms Dian Afifah hayatullah
8128 0771 (HP) or 63389274 (Mon to Fri 9am to 5pm)
Email: admin@ife.org.sg

PAYMENT MODES

Method 1 (PAY BY PAYNOW CORPORATE TO UEN)

UEN no	:	S75SS0037D
Entity Name	:	Institution of Fire Engineers, Singapore
Transfer Details	:	**Please indicate clearly your Name, Membership no (if any) and payment purpose.**
Confirmation slip	:	**Please print screen/ screen shot confirmation slip and send to admin@ife.org.sg** **For us to provide e- Receipt to you, transfer details and confirmation slip must be completed as per above instructions.**

Method 2 (PAY BY BANK TRANSFER)

Account Name	:	Institution of Fire Engineers, Singapore
Name of bank	:	United Overseas Bank
Account Number	:	314-304-819-3
Bank Code	:	7375
Branch Code	:	007
Swift Code	:	Uovbsgsg
Comments for Recipient	:	**Please indicate clearly your Name, Membership no (if any) and payment purpose.**
Confirmation slip	:	**Please print screen/ screen shot confirmation slip and send to admin@ife.org.sg** **For us to provide e- Receipt to you, comments and confirmation slip must be completed as per above instructions.**