

13 September 2025

**The Hong Kong Institution of Engineers Fire Division and
Fire Discipline Advisory Panel support
the Implementation of Registered Fire Engineer Scheme**

The Hong Kong Institution of Engineers (“HKIE”) Fire Division and Fire Discipline Advisory Panel jointly write to reaffirm our unequivocal support for the proposed resolution under section 25 of the Fire Services Ordinance (Cap. 95), which seeks to establish the Fire Services (Registered Fire Engineers) Regulation and implement the Registered Fire Engineer (“RFE”) Scheme.

2. The introduction of the RFE Scheme marks a significant advancement in the regulation of fire safety in Hong Kong without compromising public safety. By establishing a comprehensive framework for the registration and regulation of qualified professionals, the RFE Scheme provides a robust legal and professional basis for undertaking fire safety risk assessments, formulating fire safety requirements as part of the licensing process, conducting inspections and testing of fire service installation & equipment (“FSI”) and ventilating systems, thereby synergistically enhancing the services currently provided by the Fire Services Department.

3. Over the years, all practitioners in fire engineering have played a pivotal role in maintaining and advancing fire safety standards in Hong Kong - a fundamental priority that must never be compromised. We recognise that fire engineering is a highly specialised and complex discipline, particularly when performance-based design approaches are required for projects where prescriptive fire safety codes may not be applicable. In such scenarios, fire engineers must apply advanced engineering knowledge and exercise professional judgement in the design, analysis, and evaluation of fire safety provisions in the built environment. The responsibilities of RFE extend beyond simply following prescriptive codes; they must possess deep expertise in subjects including fire science (e.g. fluid dynamics and engineering calculus), human behaviour in case of fire, and fire protection systems (e.g. FSI and ventilating system). This expertise enables RFE to make sound engineering judgments and provide qualitative and quantitative solutions to unique fire safety challenges. Such level of competence is critical in the licensing process, where thorough risk assessment and formulation of effective fire safety requirements are essential to protect lives and property.

4. We acknowledge and support the proposed regulatory mechanism put forward by the Government which prudently governs academic qualifications and experience for RFE. The criteria are rigorous and thoughtfully structured to ensure that all RFE possess the necessary knowledge and expertise to undertake these demanding

professional duties effectively before they are admitted. We also recognise that the Fire Services Department has carried out extensive consultations and careful assessment in formulating these criteria since the first consultation commenced in year 2007. Importantly, it is worthy to note that the current proposed regulatory framework incorporates a flexible approach that allows for the individual assessment of applicants' competence (i.e. a mature member who has at least 15 years of relevant working experience or any member who holds equivalent or higher academic qualification recognised by the Director of Fire Services), thereby accommodating a range of academic backgrounds while upholding high professional standards. This balanced mechanism not only safeguards the integrity of the profession but also ensures that only those with appropriate qualifications and experience are entrusted with the responsibility of protecting public safety under the RFE Scheme.

5. We once again express our full and unwavering support for the RFE Scheme further to our letter in **Annex** to the Legislative Council. We are confident that the RFE Scheme will strengthen the capacity of industry and, most importantly, contribute to the ongoing protection of the public safety in Hong Kong. We stand ready to continue our collaboration with the Government and all relevant stakeholders to ensure the successful implementation and operation of the Scheme soon.

The HKIE Fire Division
The HKIE Fire Discipline Advisory Panel

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27 July 2025

The Hon Benson LUK Hon-man
Room 706,
Legislative Council Complex,
1 Legislative Council Road,
Central, Hong Kong

Dear The Hon Benson LUK

**Views from The Hong Kong Institution of Engineers Fire Division and
Fire Discipline Advisory Panel on the Proposed Resolution under
Section 25 of the Fire Services Ordinance (Cap. 95)**

Further to the letter from the Hong Kong Institution of Engineers to your good self dated 30 June 2025, we would like to express our fullest and utmost support for the implementation of the Registered Fire Engineer (“RFE”) Scheme. In parallel, we wish to draw your attention to the following:

2. Registered Professional Engineers (“RPE”) in the Fire Discipline are highly specialised in the field of fire engineering. We possess in-depth knowledge of fire science, including fluid dynamics and engineering calculus, and are well-versed in the rationales concerning implementation of fire engineering principles, formulation of fire engineering solution, application of fire engineering approaches and functional testing of fire service installations and equipment (“FSI”) and ventilating systems.
3. We are subject to a rigorous registration process. For example, under the “General Experience” route, one must hold an honorary engineering degree, complete at least five years of general training, acquire at least one year of responsible experience, and pass a professional assessment covering six domains such as Active Fire Protection and Fire Science in order to be registered. These qualifications equip us with the expertise essentially required in the fire engineering field, ensuring the highest standards of fire safety are maintained.

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4. This is further exemplified by the fact that we are specialised to design, analyse and evaluate specific types of FSI, such as Dynamic Smoke Extraction Systems. In circumstances where insurmountable challenges arise, such as large atriums in hotels where prescriptive fire safety requirements are not applicable, performance-based designs have to be adopted. In such cases, we are responsible for compiling professional Fire Engineering Reports, formulating method statements, conducting acceptance tests to FSI and ventilating systems, and verifying compliance with relevant statutory requirements to uphold exemplary fire safety standard.

5. We have maintained ongoing dialogue and communication with the Fire Services Department (“FSD”) since their initial consultation with the industry in 2007 regarding the introduction of the RFE Scheme. While we fully support the Scheme, we opine that professionals performing duties of the RFE should have sound engineering knowledge and professional experience in order to ensure various aspects of fire safety such as fire and smoke behaviour, development of fire, propagation of smoke, human behaviour in case of fire, operation principles of various FSI, fire safety risk assessment, computational fire simulation, etc., have been well taken care of. This ensures the responsibilities and expertise of RFE remain fully aligned with those of RPE in the Fire Discipline. We highly support FSD’s proposal that professionals eligible for registering as either one class of RFE should possess sufficient relevant working experience. Such applicants should be actively and personally involved in the design, implementation and acceptance of various FSI instead of project management or administrative work only. Such practical experience can ensure the competency of the engineer in performing the duties of RFE in safeguarding fire safety.

6. In the construction industry, professionals play distinct roles. For instance, RPEs from various disciplines (e.g. civil, structural) handle their respective engineering domains. Each professional is an expert in their respective field, which justifies the need for distinct registration regimes tailored to different professionals in the same construction industry, as highlighted in the Government’s Consolidated Response [LC Paper No. CB(2)1471/2025(01)].

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7. Lastly, we thank you for your efforts in the legislative process towards implementing the RFE Scheme, which is now at an advanced stage. After years of discussion and evaluation since the first consultation in 2007 and having reviewed the current draft of the Fire Services (Registered Fire Engineers) Regulation, we observed that FSD has undertaken a comprehensive and prudent assessment on the Scheme's implementation and operation. The proposed registration regime is able to ensure the selection of qualified and competent professionals to perform the duties of RFE which is crucial to the safeguarding of public safety in respect of fire safety - a priority that must never be compromised under any circumstances.

8. We hope that you will bring the above points to the attention of the Subcommittee members for their due and thorough consideration.

Yours sincerely



Ir Prof. Eric Wai Ming Lee

Deputy Chairman of HKIE Fire Division
Deputy Chairman of HKIE Fire Discipline Advisory Panel (2025 - 2026)

CC: Ir Alice CHOW Kin Tak, President of The Hong Kong Institution of Engineers