

## ROLES OF BUILDING PRACTITIONERS IN FIRE SAFETY ENGINEERING

PoS:01

### Summary

It is the position of the Society of Fire Safety (SFS) that:

- *Design* of fire safety solutions which vary from the Building Code of Australia (BCA) Deemed-to-Satisfy Provisions is the role of professional Fire Safety Engineers. The design Fire Safety Engineer cannot be the Independent Certifier or Approval Authority for a same project.
- *Certification* of the design that it complies with the relevant BCA Performance Requirements is the role of Independent Certifiers who possess the relevant expertise. The Independent Certifiers cannot be a practitioner in the same company or organisation as the design Fire Safety Engineer.
- *Approval* of the design that it complies with statutory requirements is the role of Approval Authorities registered in their relevant jurisdiction. The Approval Authorities cannot be involved in the design of the fire safety solutions.

### Preamble

SFS is a learned society of Engineers Australia established to foster excellence in fire safety for the benefits of the community and the engineering profession in Australia.

In the context of building industry, Fire Safety Engineering is the use of engineering principles, rather than the prescribed solutions of BCA Deemed-to-Satisfy Provisions, to develop building solutions that satisfy BCA Performance Requirements with respect to fire safety. SFS considers that the level of fire safety for a building can be determined by the verifiable and repeatable approach of Fire Safety Engineering which analyses the behaviour of fire and people, taking their surrounding environment into consideration. While the design Fire Safety Engineers may necessarily make some subjective decisions regarding aspects of this behaviour, SFS believes that its impact on life safety, property and the environment should be quantified as far as practical. This is a role for suitably qualified and experienced Fire Safety Engineers.

In order to ensure the community is provided with suitably qualified and experienced engineering practitioners, Engineers Australia and other stakeholders in the engineering professions have jointly set up a National Professional Engineers Register (NPER) which listed Fire Safety Engineering as a specific area of practice. To maintain the highest standards of professionalism for the register, only professional engineers who achieve, or eligible for, a Chartered Professional Engineer (CPEng) status are qualified to be listed in NPER.

Fire Safety Engineering and the regulatory approval process incorporate a range of activities that can broadly be described as *design*, *certification* and *approval*. Engineering design in Australia relies upon review by an independent person, to maintain quality and technical rigour. The design Fire Safety Engineer must be independent of the Approval Authority and this must be recognised at both the corporate and practitioner levels. It is important to note that the regulations in each State and Territory differ; therefore, the roles may be undertaken by different practitioners in different jurisdictions.

This position statement is intended to clearly articulate the opinion of the SFS on these matters in a concise and precise manner to remove all ambiguity for practitioners or Government Departments. This position is considered to adhere to the Code of Ethics stated by Engineers Australia and provide the best outcome for the community and the profession of Fire Safety Engineering.

## Design of Fire Safety Solutions

Design of fire safety solutions which vary from BCA Deemed-to-Satisfy Provisions is the fire safety engineering process of deriving the solutions and demonstrating that the solutions satisfy the relevant BCA Performance Requirements. The appropriate methodology for the delivery of fire engineering design is the International Fire Engineering Guidelines (IFEG).

Design of fire safety solutions is the role of professional Fire Safety Engineers. Professional engineers shall be eligible for CPEng status with Engineers Australia. Additionally, practicing Fire Safety Engineers should be listed on NPER in the specific area of Fire Safety Engineering. State or Territory based accreditation schemes are in addition to this basic criterion.

The design Fire Safety Engineer may provide a statement that the design has been undertaken to satisfy the relevant BCA Performance Requirements. The design Fire Safety Engineer cannot be the Independent Certifier or Approval Authority for the same project

## Certification of Fire Safety Solutions

Certification of fire safety solutions is the process of an independent technical review of the design and issuing a document or statement to confirm that the design meets the relevant BCA Performance Requirements. It may incorporate a review of relevant design documents, site inspection and system testing.

Certification is undertaken by practitioners who possess specific expertise in the area of certification.

The Certifier is independent of the design Fire Safety Engineer and the design process for the fire safety solutions. This precludes the design Fire Safety Engineer and a practitioner in the same company/body as the design Fire Safety Engineer from carrying out certification for the fire safety solutions.

## Approval of Fire Safety Solutions

Approval of fire safety solutions is the statutory process of independently determining that a design complies with relevant Acts and/or Regulations. The design may incorporate various options or standards of performance that are subject to statutory acceptance by the Approval Authorities.

Approval is undertaken by the Approval Authority registered in their relevant jurisdiction. Fire Brigades also have a statutory responsibility to review and comment on the design, as required by state or territory legislation, as part of the approval process.

An Approval Authority must be independent and must not be involved in the design process, either by direct consulting or by intermediate analysis of the design, except as involved with approvals meetings, such as a Fire Engineering Brief discussion. The Approval Authority must be in a position to clearly identify the Fire Safety Engineer who undertook the design. If there is any doubt as to the involvement of the Approval Authority in the design, the Approval Authority should engage an independent person for review or certification of the design.

### Revision History

Version	Date	Prepared/revised by	Reasons for revision
1.0	tbc	tbc	
2.0	Feb 2011	tbc	
3.0	Jun 2015	Weng Poh, Stephen Kip	Convert to unified SFS document format, add Summary, and modify document to improve clarity of the position which is unchanged