



THE INSTITUTION OF FIRE ENGINEERS

FOUNDED 1918 • INCORPORATED 1924

The International Organisation
for Fire Professionals



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Special Interest Group (Fire Modelling)

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Special Interest Groups

- Fire Investigation
- Heritage Buildings
- Fire Suppression
- Fire Modelling

Raise and promote standards within the fire engineering industry.

Provide member benefits in terms of specialist information.



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Objectives and Scope





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Objectives – Member Benefits

It was agreed that the SIG objectives should be to:

1. promote (responsible use of) technology;
2. promote a consistent, high standard of quality control; and
3. provide guidance on the use of modelling in fire engineering.



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Scope

The scope of the SIG includes:

- **fire modelling** – fire development, growth and extinction;
- **evacuation** - time to detection, time to alarm, pre-movement time and travel time;
- **smoke** – smoke movement and smoke control;
- **heat transfer** – transfer of heat from a fire into its surroundings or the structure;
- **resistance** – the performance of elements of structure at elevated temperature;
- **risk** – assessment of the likelihood and consequences of a hazardous event; and
- **fire service response** – time to arrive at a fire, the impact of fire fighting operations and the physiological response of fire fighters.

For each of the above, the modelling techniques are likely to extend from simple hand calculations to complex computer simulations.