

Role Definition

Job title: Fire Engineer

Reporting to: Senior Fire Engineer on a day to day basis and ultimately to the Deputy Head of Technical Design Team.

Responsibilities

- As part of the Fire Safety Team, you will help drive a proactive, holistic, and risk-based design methodology within the Architectural Studios and Engineering Groups.
- Provide support to the Architectural Studios and Engineering Groups and use creativity to assist in the development of solutions which fulfil the project fire safety objectives.
- Build and maintain strong positive relationships throughout the organisation.
- Contribute to the identification and addressing of fire-related constraints and opportunities for projects throughout their lifecycle using evidence-based methods.
- Cultivate and propagate an awareness of the impact of the fire safety design on construction, installation, commissioning, and maintenance.
- Contribute to the growth and promotion of the Fire Safety Team within F+P.
- Remain abreast of developments in national and international fire-related legislation, fire technologies, and materials and products – and feed this back to the wider team.
- Develop and describe fire safety design options for further discussion with the team.
- Assist in providing fire safety and fire engineering advice during the undertaking of Construction Reviews and follow up on requests for further guidance, information, or advice.
- Attend meetings as required; in some cases international travel may be necessary.
- Give guidance and assistance on appropriate fire engineering approaches office-wide and, where applicable, interact with externally appointed fire engineers.
- Assist in the update and maintenance of the relevant F+P Guides.
- Thorough knowledge of and compliance with F+P procedures and standards.
- Contribute, or otherwise assist, as required the Senior Partner/Senior Fire Engineer.

Secondary responsibilities

- Maintain and provide records of advice given.
- Maintain a record and evidence of professional development and review this with the Senior Fire Engineer.
- Identify personal and Fire Safety Team training needs, stay up-to-date regarding training opportunities, and feed this back to the wider team.
- Review fire engineering reports/studies/strategies where provided by external consultants with the exception of Integrated Design Team project involvement.

Qualities & skills required

- Chartered or working towards Chartered Engineer status with a relevant Institution.
- Over 4 years' experience in a fire engineering or related discipline role.

- Solid proven experience of applying engineering methods to safety. For example, qualitative and quantitative risk assessment, probabilistic risk analysis, and detailed deterministic analysis.
- Capable to demonstrate ability to undertake the above responsibilities.
- Legally able to work in the country in which the position is based.
- Evidence of a good design understanding.
- Willingness to expand knowledge into other disciplines related to fire safety and fire engineering.
- Good interpersonal skills, proven ability to interact with a diverse range of people, and the ability to work well in a team.
- Ability to use a variety of media in the development and documentation of a design project.
- Ability to take initiative in response to direction or instruction.
- Evidence of the ability to understand design decisions taken by others.
- Ability to manage own time to work well under pressure and meet expected timeframes.
- Ability to use some of the following: MicroStation, InDesign, Word, Excel, Outlook, PowerPoint, FDS, CFAST, B-RISK, OZone, MACS+, and structural software packages.

Qualities & skills desired

- Experience in the use of advanced engineering methods. For example, CFD-based modelling, FEA analysis, quantitative probabilistic/reliability analysis.
- Experience with the use of Matlab, Python, R, or similar, to carry out data analysis, automation, and/or model development.
- Experience with BIM, Rhino, Grasshopper or similar to carry out parametric design and multi-objective optimisation.
- Experience with a range of international regulatory and guidance frameworks.
- Demonstrated good network with the fire science, fire engineering, and wider community.

This description reflects the core activities of the role. It is not intended to be all-inclusive and other duties within the group/department may be required in addition to changes in the emphasis of duties as required from time-to-time. There is a requirement for the post-holder to recognise this and adopt a flexible approach to work. Job descriptions will be reviewed regularly and where necessary revised in accordance with organisational needs. Any major changes will be discussed with the post-holder.

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