Role summary

The role is a Senior Fire Engineer within the Fire Safety Team of Foster + Partners. The Fire Safety Team is a fire safety, engineering and science team which provides fire safety leadership and advice cross-functionally within Foster + Partners. The team's mission is to assist in the delivery of adequate and inclusive fire safety – by constantly learning, championing, and driving evidence-based fire safety design and science.

You will be reporting directly to the Head of Fire Safety and will be expected to provide technical direction and management to other members of the team.

The team is relatively new, making this is an exciting opportunity to join a growing multi-disciplinary internal team, with opportunities to inform and drive team development.

Role definition

Job Title: Senior Fire Engineer

Reporting to: Head of Fire Safety

Responsibilities

- □ Attending collaborative meetings and workshops with internal and external stakeholders providing fire safety guidance, information, and recommendations.
- □ Reviewing design information, for example, drawings, presentations, and specifications, and providing fire safety comment and advice.
- □ Generating, issuing, and distributing memorandums, technical notes, and presentations on critical fire safety issues which may impact projects or the wider organisation.
- □ Carrying out research into and having proactive oversight over the fire safety implications of new technologies, materials, approaches, and regulation –feeding back insights to applicable stakeholders in a clear manner and making any relevant recommendations.
- □ Carrying out qualitative and/or quantitative risk assessments and presenting to stakeholders, to enable informed decision-making.
- □ Cultivating, understanding, and maintaining a trusted internal network across the organisation.
- □ Generating fire safety strategy reports for projects where Foster + Partners are the project fire engineer.
- □ Assisting in the updating and maintaining of internal best practice guidance and documentation.
- $\hfill\square$ Generating proposals, as required, for design or research services.
- $\hfill\square$ Carrying out fire safety and science research, as required, for multi-organisational projects.
- □ Supporting, reviewing and commenting on the output of the Fire Safety Team, as part of the internal quality assurance procedure.
- □ Organising and facilitating continuing professional development events within the organisation.
- $\hfill\square$ Keeping accurate and up-to-date notes in the Fire Safety Team project tracker.

- Managing your own workload, tasks, and time to hit relevant deadlines and meet stakeholder expectations.
- □ Identifying personal and team training needs, staying up to date with relevant knowledge and feeding this back to the organisation.
- □ Contributing or otherwise assisting, as required, the Head of Fire Safety or Senior Partner.

Qualities and skills required

- □ Evidence of strong professional conduct; including ethical working under pressure.
- □ Evidence of making evidence-based decisions and recommendations within an ambiguous and fast-moving context.
- Proven ability to apply rigorous and accurate engineering approaches to safety. For example, qualitative and quantitative risk assessment, probabilistic and deterministic analysis.
- □ Evidence of the ability to sensitively balance complex and interrelated objectives. For example, cost, programme, fire safety, carbon, quality, and constructability.
- □ Proven ability to foster and maintain strong cooperative relationships across a complex organisational landscape.
- □ Willingness to nurture knowledge of other disciplines related to fire safety and fire engineering.
- □ Good interpersonal skills, proven ability to interact with and adapt to a diverse range of people, and the ability to work well in a team.
- □ Chartered Engineer with a relevant professional engineering institution.
- □ Over 5 years of experience in fire engineering or related discipline role.
- □ Legally able to work in the country in which the position is based.

Desirable

☑ Experience of structural fire engineering, façade fire engineering, and/or fire experimentation.

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 multiobjective optimisation.

Isperience with a range of international regulatory and guidance frameworks (e.g. US, China, UAE).

- Working knowledge of the Chinese language.
- Demonstrated good network with the fire science, fire engineering, and wider community.

This description reflects the core activities of the role but 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.

April 21