

Role Description: Fire Protection Engineer

Reports to	Director, Office Manager, Discipline Leader or other assigned person
Liaison	Project Leaders, Discipline Leaders, Client and Design Team, Contractors and others
Function	Provide consulting services in support of the technical and commercial needs of the business

Role Purpose

The Fire Protection Engineer is responsible for the design, analysis, documentation, and delivery of fire protection systems and fire engineering solutions across a range of projects. The role supports the achievement of safe, compliant, and innovative outcomes by applying sound engineering principles, relevant codes and standards, and industry best practice. Working collaboratively with clients, consultants, contractors, and internal stakeholders, the Fire Protection Engineer contributes to project success from concept design through to construction and commissioning.

Core Responsibilities

Technical Delivery

- Design and develop fire protection systems including fire sprinkler, hydrant, hose reel, gaseous suppression, and fire detection and alarm systems.
- Perform engineering calculations, hydraulic modelling, and system analysis.
- Prepare technical reports, specifications, drawings, and design documentation.
- Ensure designs comply with relevant Australian Standards, National Construction Code (NCC), and client requirements.
- Assist in developing performance-based fire engineering solutions where required.

Project Delivery

- Support the delivery of projects through all design and construction phases.
- Coordinate fire protection designs with multidisciplinary engineering teams.
- Participate in project meetings, workshops, and design reviews.
- Monitor project progress and contribute to achieving project milestones and budgets.
- Undertake site inspections and construction support activities.

Client & Stakeholder Engagement

- Liaise with clients, architects, contractors, authorities, and project stakeholders.
- Respond to technical queries and provide engineering advice.
- Build and maintain positive professional relationships

Quality, Safety & Compliance

- Adhere to company quality assurance processes and procedures.
- Ensure all work complies with relevant legislation, standards, and regulations.
- Contribute to continuous improvement initiatives and technical excellence

Skills & Experience

Essential

- Bachelor's degree in Mechanical Engineering, Fire Protection Engineering, or related discipline.
- Experience in fire protection design and documentation.
- Knowledge of Australian Standards and the NCC.
- Strong analytical and problem-solving skills.
- Excellent written and verbal communication skills.
- Proficiency with engineering software and Microsoft Office applications.

Desirable

- Experience with hydraulic calculation software.
- Understanding of performance-based fire engineering principles.
- Interfacing with the authorities (Queensland Fire Department)
- Membership of Engineers Australia, or eligibility for membership.
- Membership of Fire Protection Association Australia (FPA Australia), or demonstrated involvement in the fire protection industry.
- Experience in building services consulting or specialist fire protection contracting.

Personal Attributes

- Technical proficiency
- Attention to detail
- Project coordination
- Communication and stakeholder management
- Problem-solving
- Team collaboration
- Commitment to safety and quality

Key Performance Indicators (KPIs)

- Deliver accurate and compliant fire protection designs in accordance with relevant Australian Standards, NCC requirements, and project specifications.
- Maintain a design documentation quality score of $\geq 95\%$ with minimal rework required.
- Complete engineering calculations, reports, and design deliverables within agreed project timeframes.
- Achieve successful technical reviews and design audits.
- Meet project milestones and deadlines for assigned tasks and deliverables.
- Maintain utilisation targets as set by the business.
- Contribute to projects being delivered within budget and scope.
- Respond to client and project team requests within agreed service timeframes.
- Ensure 100% compliance with company quality management systems and procedures.
- Minimise design-related defects, RFIs, and non-conformances during construction.
- Maintain up-to-date knowledge of relevant standards, regulations, and industry requirements.
- Establish and maintain positive working relationships with clients, contractors, authorities, and consultants.
- Receive positive feedback from project stakeholders regarding communication and technical support.
- Participate effectively in project meetings and coordination workshops.
- Complete agreed professional development and training objectives annually.
- Progress towards relevant professional accreditation (e.g., CPEng, RPEQ, NER, FPAA, QBCC accreditation).
- Contribute to knowledge sharing and continuous improvement initiatives.