Fire Projection Engineer

The buildings that make up the landscape of our daily lives seem like permanent fixtures, fastened to a time and place. But what if that didn’t have to be true? What if our built environment — where we live, learn, play, and conduct business — carried us forward instead?

Our Buildings practice keeps people at its heart, recognizing that our shared journey forward is shaped by the meaningful and responsive places we design. From iconic designs to monumental groundbreakings, join us to bring transformational building solutions to life. Every day we apply our expertise, creativity, and passion to propel communities into the future—join us!

Your Opportunity

Fire Protection Engineers plan, design, and direct engineering projects of a complex nature that prevent, detect, control, or reduce fire and smoke in buildings and structures, recommend materials, equipment, or systems to assist in safeguarding life and property against fire, analyze how fire behaves and model how safety features perform in a fire. Our buildings engineering team in Ottawa, Ontario is looking to hire a Senior Fire Protection Engineer. In this role you will assess the fire protection needs within projects, with an emphasis on the design and selection of the mechanical systems involved and create drawings and schematics for projects using computer-aided design (CAD) or Building Information Modeling (BIM) software. You will also assist in developing a local fire engineering team equipped with up-to-date engineering design tools and innovations, and work with our international team of fire protection engineers on projects across the continent.

Your Key Responsibilities

- Perform advanced engineering design tasks relating to fire protection system design on projects with minimal supervision, including engineering drawings, sprinkler system hydraulic load calculations, fire hydrant flow analysis, engineering reports, presentations, and required applications to meet NFPA and regulatory agency requirements.
- Conduct fire/life safety code reviews and analyses.
- Mentor and develop junior engineers and designers with respect to fire protection system design to establish a core support team within the Ottawa office, to support projects across Canada.
- Conduct quality assurance and quality control reviews on fire protection system projects.
- Develop project scope, budgets, and design approach for small size projects, and support marketing and business development in positioning for potential projects, writing technical portions of proposals, participating in client interviews, and supporting negotiations for project contracts.
- Collaborate with stakeholders in client project meetings, coordination meetings with internal and/or external consultants, owners and contractors, sub-contractors, and vendors while preparing project documentation.
- Lead project coordination meetings with internal team members and/or external consultants, owner and contractor, sub-contractors, and vendors.
- Lead the preparation and coordination of the project specifications with construction documents.
- Provide direct supervision to assigned staff; develop staff skills and abilities by providing guidance and mentoring to strengthen technical abilities.
- Engage in technically complex fire protection system projects and act as a technical resource to other team members.
- Apply advanced knowledge of current principles and practices of fire protection engineering and keeps informed of new methods and developments.
- Apply knowledge and expertise acquired through progressive experience to resolve complex issues where precedent may be limited.
- Contribute to the development of new standards and specifications of fire protection engineering design.
Your Capabilities and Credentials

- Strong understanding of all phases of project document production and the relationship between drawings and specifications.
- Strong experience working with HydraCAD to complete fire sprinkler hydraulic calculations.
- Experience with FDS, CFAST, ASCOS, and other CFD modeling tools is considered an asset.
- Strong knowledge of mechanical systems means and methods, materials, and industry standards.
- Comprehensive knowledge of codes and standards applicable to Ontario and Federal projects, including NFPA, OBC, NBCC, and NFCC.
- Ability to lead one or more teams through all phases of project document production.
- Checks the work of others for accuracy and completeness and manages time to meet project budget and schedule.
- Participates and collaborates in project team setting and to engage in creative and critical thought.
- Knowledge of and experience with high performance and sustainable building practices
- Demonstrates creativity, foresight, and mature engineering judgment in anticipating and solving problems
- Thorough understanding of mechanical engineering concepts and ability to communicate ideas to others.
- Strong presentation and interview skills.
- Requires understanding of Microsoft Office Suite, Revit, AutoCAD; Prefer experience with Newforma, Trane Trace & eQuest
- Ability to obtain PSPC reliability and secret clearance, and RCMP reliability clearance.

Education & Experience

Minimum of bachelor’s degree in Engineering (emphasis in Mechanical or Fire Protection Engineering preferred) and licensed as a Professional Engineer in Ontario.

Licensing within the province of Quebec is considered an asset.
Minimum of eight years of related work experience or, an equivalent combination of education and experience to successfully perform the essential duties of the job such as those listed above.

This role is a hybrid office working environment, resulting in a combination of office work, client site visits, and working from home.

This description is not a comprehensive listing of activities, duties or responsibilities that may be required of the employee and other duties, responsibilities and activities may be assigned or may be changed at any time with or without notice.

Stantec is a place where the best and brightest come to build on each other’s talents, do exciting work, and make an impact on the world around us. Join us and redefine your personal best.