



Title: Assistant Fire Protection Engineer

Locations Available:

- Arlington, VA
- Denver, CO
- Kansas City, MO (WHQ)
- Minneapolis, MN
- Morristown, NJ

Company Overview:

Burns & McDonnell is a 100% employee-owned engineering, construction, and consulting firm consistently ranked as a best place to work by Fortune and the Denver Post. We are seeking a Fire Protection Designer to join our growing team in the Denver office. Fire Protection Engineering is broad, exciting, and fast-growing engineering discipline offering excellent opportunity for growth.

You will join a team of Fire Protection Engineers and Designers who work on a wide range of exciting and challenging projects including manufacturing and food processing facilities, data centers, aircraft hangars, central utility plants, industrial facilities, and more. You will be working in a team environment with a premium placed on client and peer-to-peer interaction. You can expect to be a part of an energy-filled workplace at a successful and growing company.

Job Description:

The Assistant Fire Protection Engineer will assist in the design of multi-discipline projects and the preparation of comprehensive fire protection packages including fire suppression, fire alarm, smoke management and life-safety systems. This position will work on various projects with a diverse portfolio of project types and clients.

- Assist in the design, specification, and multi-discipline coordination of the following fire protection systems: Wet-pipe, dry-pipe, pre-action, deluge, and foam/water fire suppression systems. Fire water supply infrastructure including fire water storage tanks, fire pumps, underground and aboveground distribution piping and associated appurtenances. Outdoor fire suppression systems including monitors, spray systems, and exposure protection systems. Addressable and non-addressable voice evacuation fire alarm systems including initiation devices, supervision devices, and audible and visual notification appliances. Releasing systems for pre-action, foam/water, and clean agent systems.
- Assist in performing and evaluating fire protection calculations including the hydraulic analysis of fire water supply and demand, battery calculations, and voltage drop calculations.
- Assist in evaluating building and life safety requirements including building area and height limitations, building construction types, fire resistive assemblies and opening protections, occupancy classifications, hazards, building egress, and active and passive smoke management systems.



- Assist in the construction administration process including coordination with field personnel to resolve design related installation issues, the review of contractor shop drawings and calculations, field inspections, and testing of fire protection systems.
- Assist in performing site evaluations and documenting existing fire protection systems.
- Assist in the preparation and evaluation of project budgets and cost estimates.
- Responsible for compliance with company and site safety policies.
- All other duties as assigned.

Job Qualifications:

- Bachelor of Science in Fire Protection Engineering or related degree from an ABET accredited program.
- Or Bachelor of Science in Fire Protection or related Engineering Technology from an ABET accredited program and successful completion of Fundamentals of Engineering (FE) exam.
- Master of Science degree in Engineering may be substituted for one year of experience.
- Successful completion of Fundamentals of Engineering (FE) or Engineer-in-Training (EIT) strongly preferred.
- NICET certification in Water-Based System Layout, Fire Alarm Systems, or Special Hazards Systems (National Institute for Certification in Engineering Technologies) is preferred.
- Minimum of a 3.0 GPA strongly preferred.
- Prior internship and/or related consulting experience preferred.
- Involvement on campus or in the community.
- Basic knowledge in standard engineering techniques and procedures.
- Basic knowledge of building codes, fire codes, NFPA standards, FM Global datasheets, military standards, and refinery/industrial API guidelines a plus.
- Excellent written and verbal communication skills.
- Ability to work methodically and analytically in a quantitative problem-solving environment, and demonstrated critical thinking skills.
- Proficient computer skills (e.g. Microsoft Office Suite).
- Strong attention to detail, facilitation, team building, collaboration, organization and problem solving skills.
- Demonstrated leadership skills.
- Must have the ability to obtain and maintain access authorization to facilities and data of existing and potential clients, including, but not limited to DOE, aerospace, military, food and consumer product manufacturers, pharmaceutical, laboratories, and others necessary to perform work.
- Candidates must be legally authorized to work permanently (i.e. without time limitations, without restrictions or without need for work sponsorship) in the country where this position is located.

EEO/Minorities/Females/Disabled/Veterans