

FIRE DEPARTMENT
SANTA CLARA COUNTY

ASSOCIATE FIRE PROTECTION ENGINEER

DEFINITION

The classification of Associate Fire Protection Engineer reviews plans and specifications for buildings, fire protection equipment, and industrial processes; and serves in an advisory capacity to Department staff on a variety of fire protection requirements and procedures.

Work is performed under close to general supervision depending upon the complexity of the task and the skill of the incumbent.

This classification is a Fair Labor Standards Act non-exempt, represented position in the Classified Service.

DISTINGUISHING CHARACTERISTICS

This classification is distinguished from the next higher classification of Fire Protection Engineer in that the latter is a journey-level classification.

The classifications of Associate Fire Protection Engineer and Fire Protection Engineer are alternately staffed positions.

EXAMPLES OF DUTIES

Depending upon assignment, duties may include, but are not limited to the following:

- Review residential, commercial, and industrial construction plans and specifications for compliance with state and local fire prevention codes, standards, and ordinances.
- Review site development plans to ensure compliant fire department apparatus access, fire protection water supply, and fire hydrant locations.
- Test water distribution systems; confirm fire hydrant locations and evaluate water supply adequacy.
- Interpret state and local codes/standards with respect to plans submitted for construction and/or operational permit.
- Prepare written review comments for approval/disapproval of permit submittal documents, referencing applicable codes, standards, and ordinances.
- Provide guidance to engineers, architects, contractors, and building owners for effective resolution of compliance concerns.
- May be required to conduct field inspections of new building construction, tenant improvements, and fire protection system installations and modifications.
- Conduct fire safety inspections of weekend fairs or festivals, public fireworks displays, and/or special events.
- Maintain records and prepare reports and correspondence.

EXAMPLE OF DUTIES (continued)

- Perform basic engineering computations such as fire flow, hydraulic design, square footages, and occupant loads.
- Prepare letters outlining code interpretations and deficiencies found in plan review.
- May perform specialized types of field inspections as directed by the Deputy Chief of Fire Prevention.
- May be assigned duties in other Department programs at the discretion of the Fire Chief.
- Perform other duties as assigned.

EMPLOYMENT STANDARDS

Education and Experience: Equivalent to high school graduation and successful completion of two (2) years of engineering, drafting, or related courses at an accredited college. Experience in fire protection engineering, fire protection system design or related work may be substituted for the desired education on a year-for-year basis.

Knowledge Of:

- Basic principles and practices of fire protection engineering and fire prevention.
- Conceptual application of fire and life safety codes and standards.
- Basic building design, construction, and building material properties.
- Building construction design drawing techniques, conventions, and practices.
- Basic principles of fire alarm, fire sprinkler, and fire suppression systems.
- Basic principles of fire department organization and operations.
- Computer and computer software applications related to office work such as Microsoft Office suite, e-mail, use of the Internet, etc.

Ability To:

- Comprehend and evaluate building plans and specifications including architectural, fire extinguishing, and alarm system design.
- Maintain project data (computer records, paper files, construction drawings, etc.) for consistent records management.
- Evaluate and prepare moderate to complex engineering computations.
- Understand and carry out verbal and written directions.
- Communicate effectively with the public using oral and written methods.
- Establish and maintain effective working relationships with those contacted in the course of work.
- Maintain a calm and professional demeanor in a confrontational or difficult situation.

Working Conditions/Physical Demands: Work is performed both in an office setting and in the field. There may be exposure to noise, dust, flammable, and combustible materials. Work involves physical exertion, including standing, stooping, lifting, reaching, crawling and climbing. Manual dexterity; clear, understandable speech; and visual and hearing acuity are also required.

Required License: Possession of a valid state of California driver's license.

Employment Condition: An incumbent will remain in this classification until s/he fulfills the qualifications of a Fire Protection Engineer and has passed probation. The Deputy Chief of Fire Prevention may make the promotional recommendation to the Fire Chief, and upon approval of the Fire Chief, the incumbent will be promoted to the Fire Protection Engineer classification.

Pre-Employment Requirements: The candidate must pass a background check, Live Scan fingerprint, psychological evaluation, and medical examination.