



FIRE PROTECTION ENGINEERING

The Fire Protection staff at Ulteig has a diverse background of experience that allows us to meet the needs and demands of any project. Our professionals are well-versed in many aspects of their discipline. They work with clients to provide the most cost-effective solution that meets the life safety and property conservation needs of the project.

FIRE PROTECTION WATER SUPPLY

- Water supply testing and analysis
- Determination of need for ancillary supplies
- Water tank sizing and selection
- Fire pump sizing and selection
- Fire pump controls layout

FIRE PROTECTION SYSTEM DESIGN & SPECIFICATIONS

- Automatic Sprinkler systems
- Fire alarm systems
- Fire walls
- Fire doors
- Interior finishes
- Emergency systems

ALTERNATIVE SUPPRESSION SYSTEM DESIGN

- Gaseous suppression systems
- High-expansion foam systems
- AFFF foam systems

AUTOMATIC SPRINKLER SYSTEMS

- Occupancy and hazards identification
- Storage analysis
- Protection performance parameters
- Complete piping and sprinkler layout
- Hydraulic calculations
- Aesthetics concerns

FIRE PROTECTION REPORT WRITING

- Building and fire code review
- Occupancy loadings
- Storage layout
- Amounts of hazardous materials
- Commodity classification
- Building construction materials
- Spill and secondary containment requirements
- Safety ventilation requirements
- High-pile storage requirements
- Determination for fire department access

PERMITTING FOR HAZMAT & CERTIFICATE OF OCCUPANCY

- Hazardous occupancy evaluation
- High-pile storage assistance
- Determination of occupancy classification
- Smoke and heat venting calculations
- New site evaluation
- Risk assessment
- Volatility and explosion hazards
- Reactivity and compatibility with suppression agents

CADD DRAWINGS & MODELS

- High-pile storage plans
- 2D and 3D System design plans
- 2D and 3D system models

ADDITIONAL SERVICES

- Code analysis
- Plan review
- AHJ coordination
- Outdoor storage area and tank farm evaluation
- Development of hazardous materials inventory statements (HMIS)
- Inspection of fire standpipes, sprinklers, clean agents, foam, dry chemicals, and fire pumps
- Fire pump testing
- Evaluation and master plan studies for fire protection systems
- Evaluation of fire barriers and fire-stopping materials
- Sprinkler system evaluation and hydraulic recalculation
- Fire safety inspections
- Fire risk assessment