

**SECTION 13 FIRE PROTECTION SYSTEMS**

The Certification Board suggest it will take a class of **40** individuals **16** hours to cover the following objectives in this section (actual time may vary based on class size).

**BASIC**

- 13-01.01 Trainee shall identify a fire department sprinkler connection and water motor alarm.
- 13-01.02 Trainee shall connect hose line(s) to a fire department connection of a sprinkler or standpipe system.
- 13-01.03 Trainee shall define how the automatic sprinkler heads open and release water.
- 13-01.04 Trainee shall temporarily stop the flow of water from a sprinkler head.

**INTERMEDIATE**

- 13-02.01 Trainee shall identify the main drain valve on the system.
- 13-02.02 Trainee shall open and close a main drain valve on the system.
- 13-02.03 Trainee shall identify the main control valve on the system.
- 13-02.04 Trainee shall operate a main control valve on the system from open to closed and back to open.
- 13-02.05 Trainee shall define the value of automatic sprinklers in providing safety to the occupants in a structure.
- 13-02.06 Trainee shall identify and define the dangers of premature closure of sprinkler main control valve, and of using hydrants to supply hose streams when the same water system is supplying the automatic sprinkler system.
- 13-02.07 Trainee shall identify the difference between an automatic sprinkler system that provides complete coverage and a partial sprinkler system.
- 13-02.08 Trainee shall identify at least three sources of water for supply to an automatic sprinkler system.
- 13-02.09 Trainee shall identify the following:
  - A. wet sprinkler system
  - B. dry sprinkler system
  - C. deluge sprinkler system
  - D. residential sprinkler system
- 13-02.10 Trainee shall demonstrate removing one head from a sprinkler system and replacing it with a head of the same type.

**ADVANCED**

- 13-03.01 Trainee, given an alarm valve of an automatic sprinkler system, shall identify the operation of the valve.
- 13-03.02 Trainee, given twelve various sprinkler heads, shall identify each of them correctly as to:
  - A. temperature rating
  - B. pendant or upright
  - C. special types
- 13-03.03 Trainee shall identify the alarm test valve on the system.
- 13-03.04 Trainee, given an automatic sprinkler system, shall operate the alarm test valve.
- 13-03.05 Trainee, given a velocity drain valve or ball drip valve on the fire department connection of an automatic sprinkler system, shall demonstrate that the valve is operational and the pipe is drained.
- 13-03.06 Trainee, given a check valve on the fire department connection to an automatic sprinkler system, shall identify the direction of flow of water through the valve.
- 13-03.07 Trainee shall read and record the indicated pressures on all gauges provided on both a standard wet and standard dry system, and identify each gauge.
- 13-03.08 Trainee shall define the reliability of automatic sprinkler systems, and give eight (8) reasons for unsatisfactory performance.
- 13-03.09 Trainee, by inspection of an automatic sprinkler system in a building, shall identify obstructions to sprinkler heads and the required clearance.
- 13-03.10 Trainee shall identify the types, components and operation of standpipe systems.
- 13-03.11 Trainee shall identify various types of special extinguishing systems.
- 13-03.12 Trainee shall identify various types of supervisory circuits.
- 13-03.13 Trainee shall identify the function of a fire annunciator panel.
- 13-03.14 Trainee shall identify various alarm initiating devices.