



Job Performance Review

**Automatic
Sprinkler
Systems**

**Individual
Level
Competency**

JPR Title

Automatic Sprinkler Systems

JPR Number

JPR-15-2CC

Reference

NFPA 1001 – Standard for Firefighter Professional Qualifications
NFPA 13 – Standard for the Installation of Automatic Sprinkler Systems
IFSTA Essentials of Firefighting
ATFD Standards of Cover and Risk Analysis

Performance Criteria

Firefighter is able to articulate and explain the operation of an automatic sprinkler system. Performance criteria will include the following:

- ✓ Properly identifies the different types of indicating control valves for a sprinkler system and the operation of such
- ✓ Able to identify the main sprinkler system riser and associated components of the system
- ✓ Explains the relationship between the main sprinkler system riser and the fire department connection
- ✓ Identifies the difference between an upright, pendent and sidewall sprinkler head
- ✓ Is able to stop the flow of water from a sprinkler head using a wedging device
- ✓ Executes proper de-mobilization protocols and techniques

Time Parameters

Not established

Safety Precautions

Safe operations and control of all equipment
Full turnout gear with emphasis on eye protection
Tripping and fall hazards minimized

Procedure

Be familiar with the layout of the sprinklered building, i.e., is the building fully

sprinklered; what is the location of the main valve(s); what is the location of the Fire Department Connection(FDC); what concerns might the occupancy produce, etc.

In addition to traditional size up strategies, make a mental note of whether or not a water flow alarm was received or a fire alarm(or both); is the alarm sounding upon your arrival; is there apparent active water flow at the main riser; is the alarm on the outside of the building a water motor gong or an electric bell; is water flowing from the exterior drain just below the water motor gong, etc.

If a fire is discovered within a sprinklered building, crews should ascertain if the fire has been controlled by the sprinkler system. A crew should also be sent to the main valve, verifying that the main valve(s) is fully open and remain with the valve until told otherwise by the OIC. Crews should also check all areas of the building making sure there are not multiple fires and/or extension. The lead person of this crew should have a radio and will be referred to as the “Valve Operator.” Also, if you are part of the crew sent to secure the valve, bolt cutters should be in hand in the event the main valve is locked open with a chain/padlock.

If at all possible, sprinkler systems should NOT be shut down by the fire company. Instead, efforts should be made to stop the flow of water from the fused sprinkler heads. This can be done by utilizing wooden wedges or with the “Sprinkler Stop Tool.” If a sprinkler system is needed to be shut down as a last resort, say for property conservation measures, it should be done only after all areas of the building have been checked, verifying that no other fires or extension exist.

If a sprinkler system has activated due to a fire, an engine, backed up with a water supply, should connect to and supply the system via the sprinkler system fire department connection(FDC).

If a sprinkler system has activated and once the building is secure with regards to fire activity, NO efforts should be made by the fire company to restore the sprinkler system. The fire building should simply be turned over to the Authority Having Jurisdiction, Fire Marshal and/or building representative for restoration by an authorized sprinkler system contractor. If a sprinkler system has been turned off, it is essential that the building owner/representative be made fully aware that the fire protection systems in the building are out of service.

Firehouse Software Evaluator Notes

Link to “Sprinkler Systems” or “Firefighting Evolutions”