

4.10 Testing of Fixed Extinguishing Systems (Sprinkler and Standpipe Systems) (2016)

Reference: California Code of Regulations Title 19, Chapter 5, and the 2016 SFFC, Sections 901.6 and 901.7

Purpose: Title 19 of the California Code of Regulations, includes regulations for automatic extinguishing systems. Chapter 5 contains the criteria and time frames for maintenance and service inspections for all fixed automatic extinguishing systems. Sections 904.2 (i) and (j) permit the local fire department to require notification prior to any service inspection and also to be sent a report of the results.

Scope: SFFC, Section 901.7 specifies that when a required fire protection system is out of service, the building shall be evacuated or a fire watch shall be provided when required by the fire code official. In addition, this section specifies that all building owners have certain responsibilities (impairment coordinator) when a required fire protection system is planned to be out of service for routine maintenance.

The San Francisco Fire Department shall be notified at least twenty-four (24) hours prior to any servicing of a system that requires it to be placed out of service. The building owner shall be responsible to comply with Section 901.7.4, implementing a pre-planned impairment program and employing fire watch personnel whose sole duty shall be to perform constant patrols of the protected premises and keep watch for fires. Such individuals shall be provided with a reliable means to call 911 in the event of a fire. Building owners shall maintain all records of inspection, testing, and maintenance and shall provide them to fire department personnel on request. In addition, any inspection, testing and maintenance report that reflects a failure of any component of the system shall be immediately forwarded to the San Francisco Fire Department at:

*San Francisco Fire Department
Bureau of Fire Prevention
698 Second Street, Room 109
San Francisco, California 94107
Fax: (415) 558-3323*

Pressure Reducing Valves-Certification:

- Section 904.4(c)(3) and (d)(3) states that each hose valve outlet shall be inspected in a manner that will indicate the valves are fully operable.
- The primary function of a PRV type hose outlet is to reduce pressures under both flow and no-flow conditions. The only way this pressure reducing feature can be tested and certified as operational is to flow test the valve.
- All PRV type hose outlets shall be flow tested for certification. The following test results and information shall be submitted to the Fire Department for review: valve type or model, valve pressure setting, reduced static pressure, outlet residual pressure flowing 500 for the first standpipe and 250 for each additional standpipe with the pump running at its rated capacity.
- PRV hose valves shall be certified as per the design criteria at the time of their installation.
- Hose valve design criteria for new installations require outlet pressures of 100 to 125 psi residual pressure flowing 250 GPM and 75-100 psi residual pressure when flowing 500 GPM from the roof manifold of the hydraulically remote standpipe and 250 GPM for each additional standpipe. Maximum static pressure must not exceed 150 psi.
- All test results will be reviewed by the San Francisco Fire Department.