

## 4.11 Sprinkler System Water Flow Alarms and Monitoring (2019)

**Reference:** 2019 San Francisco Fire Code (SFFC), Section 903.4 and 2016 NFPA 72

**Scope:** This bulletin applies to sprinkler systems serving only one building. Systems serving more than one building will be reviewed on a case by case basis.

### I. GENERAL REQUIREMENTS

- A. Electrical monitoring of the sprinkler system is not required for any NFPA 13D system.
- B. Electrical monitoring of the sprinkler system shall be required for any NFPA 13R system in R2 or R-3 (Occupancy) buildings not complying with 2019-SFFC Section 903.4 Exception 3.
- C. Electrical monitoring of the sprinkler system shall be required to any NFPA 13 system in any building. Exception: limited area system with less than six (6) sprinklers.

### II. MONITORED SYSTEMS

Sprinkler systems that are electrically monitored in accordance with 2019-SFFC, Section 903.4 and 2016-NFPA 72, Section 23.8.5.5 shall be subject to the following features and requirements:

- A. One exterior approved audible device located directly above the FDC or other approved location.
- B. The exterior audible device shall sound upon *water flow switch* activation only and shall not be silenced until the *water flow switch* has been reset.
- C. One Manual Fire Alarm Box (pull station) in an approved location.
- D. The system shall be electrically monitored by a UL 864 listed fire alarm control unit installed at an approved location and supervised off-site by an approved supervising station.
- E. A single smoke detector shall be provided at the location of each fire alarm control unit.
- F. All fire alarm installations require building and electrical permits, and shall be designed and installed in accordance with 2016-NFPA 72.

### III. UNMONITORED SYSTEMS

Unmonitored sprinkler systems are required to have an audible water-flow alarm on the exterior of the building in an approved location.

**Exception:** Systems installed in accordance with 2016-NFPA 13D, equipped with smoke detectors installed in accordance with 2016-NFPA 72.

**GENERAL NOTE:** Water-flow devices that are not part of a fire alarm system shall be installed in accordance with 2019 California Electrical Code. There is no requirement for the water-flow device to be connected to a fire alarm control panel when the system is not monitored and there is no fire alarm system in the building.