

4.11 Sprinkler System Water Flow Alarms and Monitoring (2022)

Reference: 2022 CFC Section 903.4 and 2022 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 2022 CFC 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 2022 CFC , Section 903.4 and 2022 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 2022 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 2022 NFPA 13D, equipped with smoke detectors installed in accordance with 2022 NFPA 72.

GENERAL NOTE: Water-flow devices that are not part of a fire alarm system shall be installed in accordance with 2022 California Electrical Code and 2022 SFEC. 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.