



# Roseville Fire Department

## Fire & Life Safety Division

316 Vernon Street Suite 480 · Roseville, CA 95678 · (916) 774-5800 · [FLSDivision@roseville.ca.us](mailto:FLSDivision@roseville.ca.us)

### Fire & Life Safety Standard

#### Title: Automatic Fire Sprinkler System

**Note:** *This standard is a summary of Roseville Fire Department clarifications of City and State Codes. Information contained herein applies to typical circumstances and may not address all situations.*

#### PURPOSE

This standard was developed with safety as the principal objective, pursuant to the California Fire Code (CFC) the fire code official is authorized to render interpretations of the CFC, and to adopt policies, procedures, rules and regulations in order to clarify the application of its provisions. Such interpretations, policies, procedures, rules and regulations shall be in compliance with the intent and purpose of the CFC and shall not have the effect of waiving requirements specifically provided for in the CFC.

#### SCOPE

This standard applies to the installation of new and existing fire sprinkler, fire pump and standpipe systems. These systems shall be designed and installed in accordance with the CFC and the applicable National Fire Protection Association (NFPA) standards.

#### FINDINGS

The Roseville City Council adopted the CFC with local amendments contained within the [Roseville Municipal Code](#) and are as follows:

**Fire Control Room.** An approved fire control room shall be provided for all buildings protected by an automatic fire extinguishing system. Fire control rooms shall meet the following requirements:

1. Fire control rooms shall contain only fire system control valves, fire alarm control panels and other related fire system equipment.
2. The location of the fire control room shall be approved by the fire code official.
3. Fire control rooms shall have minimum dimensions of five feet by seven feet.
4. Fire control rooms shall be constructed with a one-hour fire rating.
5. Fire control rooms shall be provided with an exterior access door approved by the fire code official.
6. Durable signage shall be provided on the exterior side of the access door. "FIRE CONTROL ROOM" (See diagram on page 5 for sizing details)
7. Storage of materials in fire control rooms is prohibited.

**New Buildings.** An approved automatic sprinkler system shall be provided in every new building where the total fire area is 3,600 square feet or greater.

**Passive Purge Sprinkler System.** One- and two-family dwellings designed and installed with a sprinkler system in accordance with NFPA 13D shall utilize passive purge on a remote domestic plumbing fixture.

**Building Additions.** An approved automatic sprinkler system shall be provided in every existing building, except one- and two-family dwellings, when an addition to the floor area is made, increasing the size of the building to 3,600 square feet or greater.



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**Design Criteria.** Minimum sprinkler systems design requirements are as follows unless otherwise approved by the fire code official:

1. Office buildings shall be designed to Ordinary Hazard Group 1.
2. Mercantile and Storage occupancies with a ceiling height of up to twenty feet shall be designed to Ordinary Hazard Group 2; with a minimum design area of 3,000 square feet.
3. Mercantile and Storage occupancies with a ceiling height exceeding twenty feet shall be designed with a minimum sprinkler density of 0.495; with a minimum design area of 2,000 square feet.

**Upright Sprinklers.** Upright sprinklers shall be installed in all construction types.

Exceptions:

1. The following construction types: Type IA, IB, IIA.
2. In all construction types where the roof-system is exposed and contains no ceiling structure or concealed spaces.
3. Sprinkler systems designed in accordance with NFPA 13D.
4. Sprinkler systems designed in accordance with NFPA 13R.

### **PLAN SUBMITTAL REQUIREMENTS**

The Roseville Fire Department utilizes an [Online Permitting Services \(OPS\) Portal](#) for Fire System permit applications. All application packets, including plans and technical documents, must be submitted in digital format. Applications may also be submitted at the Roseville Permit Center on approved electronic medium.

### **DOCUMENTS**

1. [Fire Plan Submittal Application](#)

### **PLANS**

1. Plans shall be in accordance with the Roseville Fire Department's Automatic Fire Sprinkler System Standard.
2. Complete plan set, stamped and signed by the preparer, with the appropriate stamp and/or license number on all sheets, when applicable (electronic signatures accepted).
3. Scope of Work.
4. Floor plan indicating the location of partitions and fire walls.
5. Full height cross section or schematic diagram, including structural member information if required for clarity and including ceiling construction and method of protection for nonmetallic piping.
6. Ceiling/roof heights and slopes not shown in the full height cross section.
7. Size and location of the 1-hour rated fire control room.
8. Size, location, and piping arrangement of fire department connections.

### **TECHNICAL DOCUMENTS**

1. Make, type, model, and nominal K-factor of sprinklers, including sprinkler identification number.
2. Completed **City of Roseville Fire Flow Request**. Water supply capacity information must be completed within twelve months of submittal. Hydraulic reference points shown on the plan that correspond with comparable reference points on the hydraulic calculation sheets.
3. Manufacturer's data sheets indicating model numbers and listing information for equipment, devices and materials.



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### **FIRE DEPARTMENT CONNECTIONS**

The Fire Department Connection (FDC) shall be installed in accordance with the NFPA Standard applicable to the system design and shall comply with the CFC and the following:

1. FDCs shall be visible, accessible, and installed on the address street side of buildings or in an approved location.
2. FDCs shall be located at the nearest point of fire department apparatus access or in an approved location.
3. FDCs located as part of a backflow assembly shall be on the system side of the backflow device; readily accessible and facing within five feet of the fire apparatus access road or in an approved location.
4. FDCs shall be located between 10 and 40 feet from an accessible fire hydrant which is located on the same side of the fire apparatus access road or in an approved location.
5. Backflow devices serving two or more buildings shall be equipped with an approved post-indicating valve between the fire sprinkler system riser and the backflow assembly.
6. Valves controlling private fire service water main supplies, backflow assembly valves, post indicating valves and sectional control valves shall be supervised by the building's fire alarm system.
7. Address identification shall be provided on each fire department connection to indicate the building it serves. The address shall consist of black numbers, a minimum of two inches high on a white reflective background and shall be affixed to the main piping of the fire department connection. Numbers shall be arranged vertically.

### **FIRE DEPARTMENT ACCEPTANCE TESTING**

The following installation requirements must be met before an acceptance test is witnessed by a member of the Roseville Fire Department's Fire & Life Safety Division:

1. All welded fittings shall be inspected prior to hanging the pipe. All welds shall bear the stamp of a certified welder.
2. All risers, mains, branch lines, fire sprinkler drops, earthquake bracing and other system components shall be inspected to verify that the installation conforms to the approved plans.
3. A hydrostatic pressure test of 200 psi for two hours shall be performed on all new systems. No loss of pressure or water leakage during the test period is permitted.
4. Persons conducting the test shall be ready for the test to begin at the scheduled appointment time, and all pumps, hose lines and other equipment shall be disconnected.
5. Where a modification is made to an existing system affecting more than 20 sprinklers, the new portion shall be isolated and tested at not less than 200 psi for two hours. Modifications that cannot be isolated, such as relocated drops, shall require testing at system working pressure.
6. Portions of systems normally subjected to working pressure in excess of 150 psi shall be tested at a pressure of 50 psi in excess of system working pressure.
7. A main drain and inspector test drain test shall be performed during the final walk-through of the system.
8. Fire pump acceptance testing shall be in accordance with the standards established by NFPA 20.
9. Standpipe and hose station acceptance testing shall be in accordance with NFPA 14.
10. A set of approved fire sprinkler plans shall be kept at the job site prior to initial inspection.
11. A final inspection is required prior to occupancy.



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### INSPECTIONS

1. To schedule an inspection, research permit history, or apply for permits online please visit the City of Roseville Online Permitting Services Portal at [permitsonline.roseville.ca.us](https://permitsonline.roseville.ca.us).
2. Inspection times are approximate and may vary because of delays at previous inspections or emergency response by Roseville Fire Department personnel. Please allow time on either side of the inspection time for the inspector to arrive.
3. A 48-hour notice is required when requesting an inspection. After requesting an inspection, check the Online Permitting Services Portal after 9 AM on the next business day to see the date and time that was assigned.

### SYSTEMS OUT OF SERVICE

1. Refer to Roseville Fire & Life Safety Standard, **Fire Watch Procedures** for fire alarm/sprinkler systems out of service.

### FALSE ALARMS

1. Prior to any person working on any monitored fire alarm system, the person shall place the system in "test" through the monitoring company.
2. If an alarm is transmitted from the Central Station to the Roseville Fire Department whenever anyone is working on a system, Cost Recovery may apply. See the Roseville Fire Department Fee Schedule, as adopted by the City Council.



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### Example Fire Control Room

