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## **Standard for NFPA 13 & 13R Fire Sprinkler Systems**

### **1. SCOPE**

This standard covers the permitting, installation, inspection, testing and maintenance of NFPA 13 and 13R fire sprinkler systems in the City of Marysville as administered by the fire marshal. Fire sprinkler systems shall meet the requirements of the currently adopted codes and standards, unless specifically amended or noted otherwise, and as approved by the AHJ:

- A. NFPA 13 Sprinkler Systems Installation Standards.
- B. NFPA 25 Fire Protection Systems Maintenance Standard.
- C. The International Fire Code (IFC) as amended by the city and state.
- D. The Marysville Municipal Code (MMC) [Fire Code Chapter 9.04](#).

### **2. DESIGN REQUIREMENTS**

- A. Systems shall be designed under the currently adopted codes.
- B. System designer qualifications shall comply with Chapter 212-80 WAC, Chapter 18.160 RCW, and Chapter 18.270 RCW as administered by the WSP (<http://www.wsp.wa.gov/fire-sprinklers/>).
- C. All plans and calculations shall be stamped with a valid Washington State certificate seal identifying the appropriate level of competency.
- D. For IFC Section 903 Automatic Sprinkler Systems, the definition of FIRE AREA shall be as follows: The aggregate floor area enclosed and bounded by exterior walls of a building (MMC 9.04.902). An area or occupancy separation wall or fire wall shall not constitute a separation between two areas within a structure for sprinkler requirement purposes.
- E. The main fire sprinkler riser, its appurtenances and the building's fire alarm panel shall be located in a room with 1-hour fire separation and with an exterior door.
- F. A minimum 3-foot clearance in front of the entire width of the fire sprinkler equipment and 1-foot clearance on the remaining 3 sides shall be provided.
- G. Backflow preventers are required to be installed inside the riser room unless otherwise approved.
- H. Pressure gauges shall be installed on both sides of backflow preventer.
- I. Fire pumps shall be diesel driven or motor driven with a diesel electric backup power.

### **3. SUBMITTAL REQUIREMENTS**

- A. Working plans of the system(s) per NFPA 13 Chapter 27, including signed owner's certificate.
- B. Hydraulic calculations are required for all new systems or modifications exceeding five heads.
- C. Data sheets for all system components.
- D. Completed permit application through the City of Marysville.

#### **4. PERMITS**

A fire permit is required for all fire sprinkler installation and modification work. The application for a fire construction permit is available on the City of Marysville's permitting [portal](#).

Approved plans and permit inspection cards shall be available onsite for the permitted work. A permit is only valid for the contractor and work designated by the permit.

#### **5. CONTRACTOR LICENSING**

Contractors must be WA licensed for the type of work performed. (U = Underground; Level 1 = 13D; Level 2 = 13R & 13D; Level 3 = 13, 13R, 13D & Underground). Proof of licensing shall be available onsite for all workers.

#### **6. EMERGENCY REPAIR WORK**

A permit is required for repairs. Emergency repairs may begin without a permit provided the system configuration is not altered and a permit application is submitted the next working business day. A fire inspection is required for final approval of all repair work.

#### **7. UNDERGROUND PIPING**

- A. Fire line permits shall be approved by the water supplier and the Marysville Fire District (MFD).
- B. AHJ approval required for tie in to underground fire lines. Contact 360-363-8525 and leave a voicemail. FMO staff will return your call as soon as possible.

#### **8. INSPECTIONS**

Fire inspections are required from the Marysville Fire District (MFD) for permitted work.

**Scheduling Instructions:** please use the permit portal with the City of Marysville to request all fire inspections via: [eTRAKiT \(marysvillewa.gov\)](http://etrakit.marysvillewa.gov). MFD will contact you to confirm appointment time. If you are not contacted by 5pm the business day prior to the requested date, or if you need to reschedule, please call (360)363-8525 and leave a voicemail. Approved plans and permit inspection cards must be available on site during inspections. The installing contractor shall pretest all systems prior to requesting an inspection. If fire code violations are noted, correction will be required for approval and a re-inspection fee will be assessed via permitting services.

Each system is allotted two inspections by MFD, *unless otherwise approved:*

- **1st Inspection:** Hydrostatic Test and Cover Inspection. Timestamped image required 2 hours prior to inspection time, please show to inspector as well as WA State Sprinkler Fitter card.
- **2nd Inspection:** System Acceptance Testing and Final Approval. (Includes forward flow testing as applicable per NFPA standards).

## **9. MAINTENANCE**

The installer shall provide to the owner/occupant instructions on inspecting, testing, and maintaining the system. The sprinkler system shall be inspected and tested periodically to make sure the system is in good working condition. Sprinkler systems shall be maintained and tested per the procedures in NFPA 25 and manufacturers' instructions.

## **10. SYSTEMS OUT OF SERVICE**

Where a required fire protection system is out of service, the fire district and the fire code official shall be notified immediately.

- A. Contact MFD at (360) 363-8500 during business hours Monday-Friday 8am-5pm.
- B. Call 9-1-1 to report fire systems out of service outside of business hours.
- C. Where required by the fire code official, the building shall be either evacuated or an approved fire watch shall be provided for all occupants left unprotected by the shutdown until the fire protection system has been returned to service.
- D. Buildings that have been evacuated shall not be reoccupied without approval from the fire code official.
- E. MFD Fire Watch Guideline shall be followed, including a fire watch log maintained.  
<https://www.marysvillefiredistrict.org/services/other/>