MARYSVILLE FIRE DISTRICT
REGIONAL FIRE AUTHORITY
Fire Marshal's Office
1635 Grove St. Marysville, WA 98270 - (360) 363-8500
MFInspectors@MFDRFA.org - www.marysvillefiredistrict.org

Standard for NFPA 13D Fire Sprinkler Systems

1. SCOPE

This standard covers the permitting, installation, inspection, testing and maintenance of NFPA 13D residential fire sprinkler systems in the City of Marysville as administered by the city fire marshal (hereinafter referred to as the AHJ). The most current version of NFPA standards shall govern these installations. Fire sprinkler systems shall meet the requirements of these codes and standards, unless specifically amended or noted otherwise, and as approved by the AHJ:

A. NFPA 13D 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) Chapter 9.04 FIRE CODE.

2. DESIGN REQUIREMENTS

A. 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/).
B. All plans and calculations shall be stamped with a valid Washington State certificate seal identifying the appropriate level of competency.
C. For new construction, systems shall be installed as NFPA 13D multipurpose piping sprinkler looped systems with a minimum of 2 interconnections to domestic appliances and at least 1 per floor.
D. Backflow preventers are prohibited from all new construction.
E. A single control valve shall be arranged to shut off both the domestic system and the sprinkler system. Sprinkler Control Valve signage shall be provided.
F. A drain shall be installed on the system side of the domestic shut- off.
G. A minimum of one head shall be installed on the garage side of the door leading into the residence from an attached garage.
H. Dead-ends or arm-overs shall not exceed 5 feet in length.
I. Designate most remote heads to be used for bucket testing on plans.

3. SUBMITTAL REQUIREMENTS

A. Working isometric plans of the system in a digital format shall be submitted for review.
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 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. All underground sprinkler supply piping shall be included on civil drawings and shall be approved by the water supplier and the Marysville Fire District (MFD).
B. Supply piping shall be flushed until clear of any debris prior to above ground tie in.
C. Per City of Marysville Water Dept.: "*Install the water service per our Standard Plan 2-090-001 Full ¾" x 1" Meter Service. Under this plan a 1" tap is made at the water main and 1" piping is run to the 1" meter setter. If in the end a ¾" water meter will suffice then all that is required is to install two reducer bushings with the ¾" water meter. A single service tap should be used where sprinklers are required, not a double service installation.*"

8. WATER SUPPLIES & ACCEPTANCE TESTING

Water supplies for residential sprinkler systems shall be from the public main unless a private water supply main is approved by the AHJ. Available flow information shall be obtained from the Marysville Water Utilities Division. Hydraulic calculations are required for all installations, and for alterations involving more than five sprinklers. Sprinkler flow tests are required to prove the water supply adequacy (bucket tests). Pre-testing required prior to inspection request.

9. 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). 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:

1st Inspection: Rough in, hydrostatic test, tenting, and bucket test.

2nd Inspection: Final* (leave trim / concealment covers off for sprinkler head visualization, unless otherwise approved).

*Note: For final inspections, appointment times are not provided *unless specifically requested*. Inspector will arrive on the day of the requested inspection during regular business hours. You will be contacted only if inspection is not available on the requested day. Check the permit portal to confirm receipt. **Please leave permit and approved plans on the counter inside the house**.

10. 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.