



Standard for Emergency Responder Communications Enhancement Systems

1. SCOPE

This standard covers the permitting, installation, inspection, testing and maintenance of Emergency Responder Communications Enhancement Systems (ERCES) 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. ERCES shall meet the requirements of these codes and standards, unless specifically amended or noted otherwise, and as approved by the AHJ:

- A. NFPA 1221 Standard for the Installation, Maintenance, and Use of ERCES
- B. NFPA 1225 Standard for Emergency Services Communications
- 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

Systems shall be designed under the currently adopted codes.

The minimum qualifications of the system designer and lead acceptance test personnel shall include both of the following:

- A. A valid FCC-issued general radio telephone operator's license.
- B. Certification of in-building system training issued by an approved organization or approved school, or a certificate issued by the manufacturer of the equipment being installed
- C. All plans and calculations shall be stamped with a valid Washington State certificate seal identifying the appropriate level of competency.

3. SUBMITTAL REQUIREMENTS

The following is a list of information required on all plan submittals for review of ERCES systems.

- A. Certification and signature of system designer on layout drawings and calculations
- B. Code editions utilized for design of system
- C. Point of compass
- D. Frequencies and other modulation technologies required for the in-building emergency responder communications enhancement system and the point of contact for the frequency license holder(s)
- E. Location and effective radiated power (ERP) of public safety radio sites used by the emergency responder communications enhancement system
- F. Maximum propagation delay — in microseconds
- G. Other supporting technical information necessary to direct system design
- H. Manufacturer specification sheets for all equipment and materials used

4. PERMITS

A fire permit is required for all fire alarm 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. 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.

6. 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.

Per 2021 IFC; 510.6.4 Field testing.

Agency personnel shall have the right to enter onto the property at any reasonable time to conduct field testing to verify the required level of radio coverage or to disable a system adversely impacting the emergency responder communication enhancement system in the region.

7. MAINTENANCE

The installer shall provide to the owner/occupant instructions on inspecting, testing, and maintaining the system. ERCES systems shall be maintained and tested per WSFC and the manufacturers' manual.

510.6.2 Additional frequencies.

The building owner shall modify or expand the in-building, emergency responder communication enhancement system at his or her expense in the event frequency changes are required by the FCC or other radio licensing authority, or additional frequencies are made available by the FCC or other radio licensing authority. Prior approval of an in-building, emergency responder communication enhancement system on previous frequencies does not exempt this section.

8. DOCUMENTATION

Contractor's performing inspection, testing, and maintenance (ITM) of ERCES shall submit reports to TEGRIS FIRE within 10 days of completion of work.