



Requirements for the Submittal of Two-Way Emergency Radio Communication Enhancement Systems NFPA 72

SECTION A – GENERAL SUBMITTAL REQUIREMENTS

1. Permits and submittals are required for all work involving any two-way emergency radio communication enhancement systems.
2. Scope of work shall be clearly noted on the plans and in the supporting documentation.
3. All information submitted for review shall be consistent with the approved architectural plans (as applicable) and shall be reflective of intended field conditions.
4. Fees are based on number of devices.
5. BDA/ERCES systems may be applied for as a separate permit or as part of the fire alarm permit.

SECTION B - DRAWING REQUIREMENTS

1. Plans must be submitted in .pdf format. See website for naming conventions and file size requirements.
2. Plans must include:
 - 2.1 Project name and address (include all addresses if more than one building).
 - 2.2 Project owner's name and address including zip code (tenant for tenant work; building owner for shell work).
 - 2.3 Building construction permit number and base building fire alarm permit number (where applicable).
 - 2.4 Contractor name, address, telephone number, and contact person.
 - 2.5 Symbol and abbreviation key.
 - 2.6 The preferred scale for floor plans is 1/8" per foot. Minimum 1/8" required.
 - 2.7 Location of all partitions. Indicate height of all moveable partitions. Smoke partitions, doors, duct penetrations, and associated detection.
 - 2.8 Rating of any fire walls, partitions, doors, and enclosures, etc.
 - 2.9 Location of the main fire alarm control panel.
 - 2.10 Modeling of the project signal strength throughout the building.
 - 2.11 The presence of a 2-way wired in-building communication system (fire fighter's telephones).
 - 2.12 Location of dedicated DAS monitoring panel.

SECTION C - EQUIPMENT REQUIREMENTS

1. Include catalog cuts and listings for all equipment to be used.
2. For system additions, submit existing equipment catalog cuts for coordination and compatibility.
3. Annotate all catalog cuts to show exact model(s) to be used.
4. Professional Engineer responsible for system design and evidence of qualifications.

SECTION D – WIRING/RISER DIAGRAM REQUIREMENTS

1. Wiring Diagram



- 1.1 This must be a point-to-point diagram showing all terminal connections at devices and panel(s).
- 1.2 Typical circuits or devices may be shown once.
- 1.3 Where applicable specific information about how survivability requirements are being met shall be included with the wiring/riser diagram.
- 1.4 Show all devices and panels.
- 1.5 Give all wire counts and circuit classifications.

SECTION E – SEQUENCE OF OPERATIONS

1. Show how the system will interface with the building fire alarm. Specific information must include the annunciation of signals on the required monitoring panel and the main fire alarm control panel.

SECTION F – CALCULATIONS

1. Provide secondary power supply calculations evidencing compliance with all applicable codes and standards.
2. The system shall be capable of operation at 100% capacity for not less than 12 hours and must show how this is accomplished.

SECTION G – TESTING PLAN

1. Provide a detailed written testing plan which provides, at a minimum, the following information:
 - 1.1 How the testing will be conducted
 - 1.2 Who will oversee the testing
 - 1.3 What equipment will be used in the testing
 - 1.4 How will you determine DAQ (Harvard Sentences)
 - 1.5 What are the testing area parameters
 - 1.6 What documentation will the testing produce
 - 1.7 Name and qualifications of the supervising design and testing engineer