

# Is your building's radio coverage compliant?

Our Emergency Responder Communication Enhancement System ensures in-building radio communications come through – loud and clear. usa.siemens.com/fireservices

### The importance of reliable, clear radio coverage for first responders

During emergencies, first responders – including firefighters, emergency medical personnel and police officer – rely on their portable two-way radios for sending and receiving communications to coordinate life-saving operations.

When facilities do not have proper in-building radio signal coverage or have dead spots, it can put first responders and building occupants in great danger.

Building designs and construction materials such as concrete, low-E glass, metal, and below-grade build-outs can obstruct radio signals, causing communications to degrade or fail.

To ensure reliable, clear first responder radio communications, many building codes and standards are now requiring facilities – both new and existing – to meet radio coverage requirements. An effective way to achieve this compliance can be with a properly installed UL 2524 Listed Emergency Responder Communications Enhancement System (ERCES).

## Siemens turnkey solution and services

Siemens turnkey UL 2524 Listed ERCES solution, when properly installed and combined with our fire and life safety code expertise and services, can help building owners attain compliant radio coverage throughout their facilities.

### **Complete, UL 2524 Listed ERCES**

Siemens turnkey, UL-Listed, FCC-certified solutions meet industry safety, design, and performance requirements. Our fire & life safety systems comply with FCC rules, IFC, and NFPA codes and standards and can be implemented to be fully compatible with the public safety radio system specified by local AHJs.

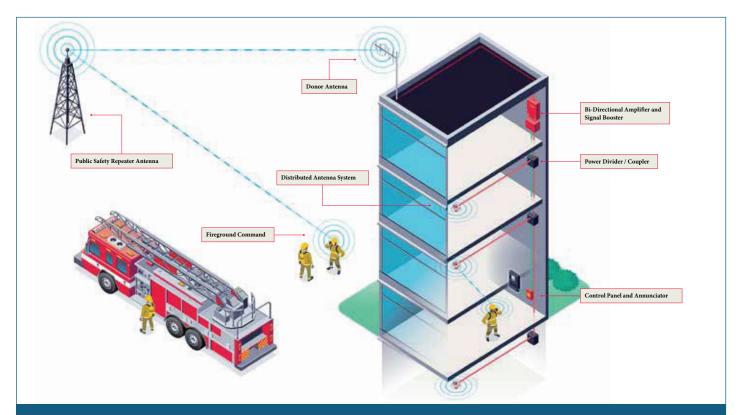
#### **ERCES Codes & Standards**

Per codes and standards, buildings must have approved emergency responder radio coverage:

- IBC Section 918: Radio coverage shall be provided in all new buildings in accordance with section 510 of the IFC.
- IFC Section 510: 95 percent coverage of all areas on each floor of new and existing buildings.
- IFC Section 1103.2: Existing buildings shall have approved radio coverage for emergency responders within the building.
- NFPA 1221/1225: Radio coverage shall be provided with 90 percent coverage in general building areas and 99 percent in critical areas.







**How ERCES works** 

Ground command signals are transmitted through the public safety radio repeater to a donor antenna. The donor antenna receives the signal and passes it to a Bi-Directional Amplifier (BDA) that boosts the signal and transmits it throughout the building via the Distributed Antenna System (DAS).

## Comprehensive ERCES services

Our team of fire and life safety emergency radio experts are familiar with local regulations and provide a range of services to help you meet code requirements.

- · Survey of in-building radio coverage
- System designs, installations, and certifications
- · System upgrades
- · Monitoring and supervision
- · Maintenance contracts
- · Annual inspection and testing
- 5-year recertifications

## The partner you can trust

Siemens has the right combination of fire & life safety, building technology, and service expertise to deliver an ERCES solution that ensures true peace of mind.

- Extensive knowledge of ERCES federal, state, and local requirements
- Strong participation in fire & life safety industry, research, and code writing committees
- UL 2524 Listed ERCES Solution
- Comprehensive solutions and services for fire & life safety and integrated building systems
- Siemens provides documentation pursuant to NFPA, AHJs, and regulatory requirement

Inspection, Testing & Maintenance Requirements for ERCES

Both the IFC and NFPA require inspection and testing of ERCES, applicable codes include:

- IFC 510.6.1: Requires annual inspection and testing or when structural changes occur.
- NFPA 1221 11.3.9.2.3.1: Requires annual operational testing to confirm system operation.
- NFPA 1221 11.3.9.2.3.2: At least every 5 years the system shall be quantitatively tested to ensure required audio quality levels in accordance with the commissioning requirements of Section 9.6.

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