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Saving lives and dollars with a proven and cost effective communications solution

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The tremendous gains in public safety and business productivity have, in too many cases, stopped at the front door of many large buildings. Due to the materials and construction techniques in these large buildings radio frequencies (both two way radio and cellular) are either drastically reduced or completely negated.

These black outs prevent critical communications for fireman and policeman responding to emergencies and important business conversations from taking place. In order to extend the safety and productivity gains into these buildings, federal, state and local governments have launched "Building Coverage Ordinances".

One local company is at the forefront of this nation wide effort to save lives and dollars. Radio Solutions has already come to market with a cost effective solution to guarantee that all first responders, business people and even parents will have reliable communications in any building.

Have you ever walked into a building and noticed your cellular signal is reduced or nonexistent?

The loss of cellular, Wi-Fi, Blackberry, two-way radio or any wireless coverage can limit productivity of employees, building occupants and inconvenience clients while working or visiting buildings.

More importantly, in-building two-way radio coverage is a necessity and a fundamental requirement for safety of first responders and building occupants. It is an obvious problem and a big security concern that public safety doesn't have radio coverage where they need it the most: inside a large building.

The policeman, the fireman, the first responder- public safety personnel are more significant to us today than ever before. The one thing we hear over and over from these front line champions is that vital, clear communication saves lives.

How can a public-safety team be effective if they are in the dark about the changing situation around them? How can critical resources be requested if all that is on the other end of their radio is static. They can't. Welcome the birth of the In Building Coverage Code.

These requirements are more prevalent as individual city and towns adopt and add variations of this addendum to their existing fire ordinances thru-out the country. Because this is not a universal building code, but a locally adopted ordinance, many contractors have found this an unexpected item to deal with.

Certain parameters surrounding these ordinances are fairly standard:

- 1) New buildings and structures greater than a measured s/f or additions and/or modifications which cause the buildings fire alarm system to be changed in anyway.
- 2) Any building that creates a "special hazard" for emergency services communication in addition to the normal hazard of the occupancy.
- 3) Any building additions or remodel work involving over 20% of the building.

A few of the variables that tend to occur relate to the actual frequencies that must be passed, the transmission strength required, and the testing method employed.

The fire department may require only its own emergency channels to be covered as does the Boston Fire Department, or they can make additional frequencies a stipulation as well. As an example, Mansfield, Mass. currently asks for their local police and fire channels to be amplified in-building. In regard to testing procedures, these ordinances will give field transmission strength requirements (that vary from city and towns), but they may also deem that testing include not only strength readings, but field tests to show the transmissions are both "reliable and intelligible." These are both subjective terms quantified by the authority enforcing the code.

These ordinances generally include a clause requiring annual testing as well. Regardless of who does the work, the owner of the building is ultimately accountable for the system performance. They are responsible for repairs or replacement if there is any degradation of signal due to their onsite system, remodeling, or adding onto the existing building. The implementation of signal boosters/ Bi-Directional Amplifiers (BDA) and antenna systems are becoming a more accepted and recognizable solution. Signals that would otherwise be greatly reduced or lost when passing through the elements of a building are amplified and then distributed throughout the structure. The responding signal is then carried back to the amplifier and relayed back to the initiator. This provides excellent incoming and outgoing communication for emergency personnel and cellular users.

The cost associated with installing such systems understandably causes some owners to resist the expenditure.

This is why local ordinances have become so necessary in order to provide some manner of protection to the public inhabiting and working in these spaces every day. Many owners, however, have accepted this as part of the cost of doing business.

They see the long term value of having these systems in place where safety and liability issues are concerned.

In this competitive real estate market, building owners are providing wireless access to tenants by installing cellular amplifiers. The expectation of tenants is to have uninterrupted cellular services in-building. This is a strong trend in the commercial real estate market.

The attitude that wireless access is a utility like providing heat/air conditioning/ hard line phone access is the mindset of tenants and fast becoming a requirement of property owners. Having access to cellular communications in an emergency situation is an added benefit to installing a cellular amplification system.

A 30 minute "BDA Basics" class covering BDA design, applications, cost factors and examples of existing In Building Coverage Codes is available to public safety organizations. Also, learn what it takes to get cellular coverage in your building.

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