

Edgewater FL

SECTION 21-260 - PUBLIC SAFETY RADIO BUILDING AMPLIFICATION SYSTEM

21-260.01 - General

a. Except as otherwise provided, no person shall, erect, construct, change the use of or provide an addition of more than 20% to, any building or structure or any part thereof, or cause the same to be done which fails to support adequate radio coverage for Volusia County 800Mhz Radio Communications System, including but not limited to firefighters and police officers. For purposes of this section, adequate radio coverage shall include all of the following:

1) A minimum signal strength of -95 dBm available in 95% of the area of each floor of the building when transmitted from the Volusia County 800MHz Radio Communications System;

2) A minimum signal strength of -95 dBm received at the closest Volusia County 800MHz Radio Communications Site when transmitted from 95% of the area of each floor of the building;

3) The frequency range which must be supported shall be 806 – 825 (816 after rebanding) MHz (Tx) and 851 – 870 (861 after rebanding) MHz (Rx); and 4) with a 95% reliability factor.

Exemptions - This section shall not apply to: Buildings less than 5000 square feet or any R-1 or R-2 occupancy.

21-260.02 – Amplification Systems Allowed

a. Buildings and structures which cannot support the required level of radio coverage shall be equipped with any of the following in order to achieve the required adequate radio coverage; a radiating cable system or an internal multiple antenna system with or without FCC type accepted bi-directional 800 MHz amplifiers as needed. If any part of the installed system or systems contains an electrically powered component, the system shall be capable of operating on an independent battery and/or generator system for a period of at least one (1) hour without external power input. The battery system shall automatically charge in the presence of an external power input.

21-260.03 – Testing Procedures

a. Acceptance Test Procedure - When an in-building radio system is required, and upon completion of installation, it will be the building owner's responsibility to have, the radio system tested to ensure that two-way coverage on each floor of the building is a minimum of 95%.

Each floor of the building shall be divided into a grid of approximately 20 equal areas. A maximum of 1 of the areas will be allowed to fail the test. If the system continues to fail, it will be the building owner's responsibility to have the system altered to meet the 95%

coverage requirement. The test shall be conducted using an EDACS portable radio talking through the Volusia County 800 MHz Radio Communications System. A spot located approximately in the center of a grid area will be selected for the test, then the radio will be keyed to verify 2-way communications to and from the outside of the building through the Volusia County 800 MHz Radio Communications System. Once the spot has been selected, prospecting for a better spot within the grid area will not be permitted.

b. The gain values of all amplifiers shall be measured and the test measurement results shall be kept on file with the building owner so that the measurements can be verified each year during the annual tests. In the event that the measurement results become lost, the building owner will be required to rerun the acceptance test to reestablish the gain values.

c. Annual Test - When an in-building radio system is required, it shall be the building owner's responsibility to have all active components of the system, such as amplifiers and power supplies and backup batteries tested a minimum of once every 12 months. Amplifiers shall be tested to ensure that the gain remains within manufacturer tolerances. Backup batteries and power supplies shall be tested under load to verify that they will properly operate during an actual power outage. All other active components shall be checked to determine that they are operating within the manufacturers specifications for the intended purpose.

d. Qualifications of Testing Personnel - Personnel conducting radio system tests shall be qualified to perform the work. All tests shall be documented and signed by a designee from Volusia County Radio System Management or the City of Edgewater with jurisdiction over the tested area. All test records shall be retained on the inspected premises by the building owner and shall be subject to inspection by Fire Department Officials upon request.

e. Field Testing - Police and Fire Personnel, after providing reasonable notice to the owner or his representative, shall have the right to enter onto the property to conduct field testing to be certain that the required level of radio coverage is present.