



ST. PETE BEACH FIRE & RESCUE

DIVISION OF FIRE PREVENTION SERVICES

7301 Gulf Blvd, St. Pete Beach, FL, 33706 Phone: 727-363-9207

INFORMATIONAL BULLETIN

Two-Way Radio Communication Enhancement System requirements

This document is intended to provide guidance to building owners of existing high-rise buildings in the City of St. Pete Beach, specifically for testing radio signal strength to determine the need for Two-Way Radio Communication Enhancement Systems.

Per Florida Statute **633.202 Florida Fire Prevention Code.**— (18) *The authority having jurisdiction shall determine the minimum radio signal strength for fire department communications in all new high-rise and existing high-rise buildings. Existing buildings are not required to comply with minimum radio strength for fire department communications and two-way radio system enhancement communications as required by the Florida Fire Prevention Code until January 1, 2022. However, by December 31, 2019, an existing building that is not in compliance with the requirements for minimum radio strength for fire department communications must apply for an appropriate permit for the required installation with the local government agency having jurisdiction and must demonstrate that the building will become compliant by January 1, 2022. Existing apartment buildings are not required to comply until January 1, 2025. However, existing apartment buildings are required to apply for the appropriate permit for the required communications installation by December 31, 2022.*

Modern building design and construction techniques, especially those required to satisfy requirements for LEED-certified building designs, make it difficult or impossible for the County's 911 system to provide reliable two-way radio coverage for first responders operating inside of buildings. Two-way radio communications enhancement systems help ensure the safety of building occupants and first responders by extending the coverage of a public safety communications system to the interior areas of the building through the use of special bi-directional amplifiers (BDAs) and a network of indoor antennas strategically located to provide reliable public safety radio system coverage throughout the interior of a building.

The BDA and network of antennas is known collectively as a Distributed Antenna System (DAS). DAS systems must be designed, installed, maintained and repaired by qualified personnel to ensure that they meet the coverage reliability requirements of NFPA72-2013 and do not cause unintended harmful interference to the County's radio system or other users of the RF spectrum licensed by the Federal Communications Commission (FCC).

Radio Communications Enhancement System Initial Testing Process

All high-rise buildings shall have an approved third-party integrator to provide a spectrum analysis grid test of the building and provide a copy of the analysis of the radio signal strength and recommendations for compliance to the Fire Marshal's Office.

The signal strength shall meet the requirements of radio system regulations for buildings per the Florida Fire Prevention Code 6th edition, NFPA 1 2015ed Section 11.10, NFPA 72 2013 edition Section 24.5.2.2, Section 24.5.2.3 and was tested in accordance with the provisions set forth in NFPA72 2013 edition 14.4.10 (1-6) and A14.4.10 (1-3).

A Certificate of Radio Coverage Compliance shall be posted at the fire alarm control panel, or at the main electrical panel if no fire alarm control panel is present. An additional copy shall be submitted to the St. Pete Beach Fire Marshal's Office.

If the radio signal strength testing indicates the need for the installation of a two-way radio communications enhancement system this shall be submitted for proper permits through the City building department.

If you have any questions, please contact the Fire Marshal's Office at 363-9207 or e-mail at firemarshal@stpetebeach.org