

WZC | CASE STUDY

Implementation

WZC Networking conducted a comprehensive public safety communications survey to map existing RF signal strengths throughout the Clawson Manor Co-op Apartments. Advanced diagnostic tools identified 77 out of 152 areas (51%) with weak signal strength, failing to meet the required -95 dBm benchmark. Critical areas, including entrances, emergency exits, and staircases, showed significant gaps, with only 34% meeting NFPA and IFC standards. Test findings informed the precise design and placement of ERCES components.

- An Emergency Responder Communication Enhancement System (ERCES) was installed, integrating state-of-the-art Bi-Directional Amplifiers (BDAs) and strategically placed antennas. Engineered to deliver uniform signal amplification, the system incorporates two-way filtering and precise calibration to overcome the building's structural challenges. The solution was deployed with minimal disruption to the building's operations.
- After installation, WZC Networking performed rigorous RF testing throughout the facility using advanced signal measurement equipment, confirming uniform signal distribution.
- The project delivered a significant improvement, raising facility-wide coverage from 51% to 100%. All critical areas meet and exceed public safety communication standards.



Clawson Manor Co-Op Apartments - Public Safety DAS (ERCES)

Testing, Design, Coordination, and Implementation of Public Safety DAS (ERCES) System

Client

Clawson Manor Co-op is a fifteen-story, 251-unit high-rise urban senior living community serving a diverse population of seniors who rely on a secure and well-maintained living environment. As part of its renovation and safety efforts, Clawson Manor must comply with stringent emergency radio response signal requirements.

Challenge

Reliability of emergency radio communication systems is a major safety concern in public buildings, especially in an area as expansive as the Clawson Manor Apartments. The National Fire Protection Association (NFPA) and International Fire Code (IFC) have set strict standards for emergency radio coverage for new and renovated buildings. The IFC and NFPA require **95% signal coverage in all areas** and **99% in critical zones**, with a minimum signal strength of -95 dBm. Such standards are in place to protect lives and enable first responders to act quickly during emergencies.

Upon initial public safety communication survey conducted by WZC Networking, it was found that 77 out of 152 areas surveyed (51%) had weak signals, and only 34% of critical areas had passed the signal benchmarks.

It was also discovered by the Fire Marshal for the City of Clawson that the building's radio system coverage was significantly below the minimum signal strength required for public safety use. This issue was attributed to the entire exterior being cladded with metal sheeting and low E-coated window glazing, providing a unique challenge for WZC Networking to bring the emergency communications up to code for Clawson Manor Co-op.



Solution

Clawson Manor Co-op recognized the importance of complying with the NFPA and IFC regulations, and they sought to partner with a dependable network solution provider. WZC Networking was brought in to enhance signal coverage and achieve full building compliance through advanced RF solutions and expert-driven implementation. ERCES compliance allowed the cooperative to maintain its certificate of occupancy and meet NFPA and IFC standards.

Impact and Testimonial

WZC Networking's solution enhanced Clawson Manor Co-op's emergency communication coverage, resolving critical safety vulnerabilities and delivering **100% coverage for the facility's key areas**. The upgraded system improved safety for residents and emergency responders and maintained the facility's compliance with NFPA and IFC safety standards and building requirements.

- 100% of the facility now complies with the -95 dBm signal strength requirement.
- The IFC's requirement of 95% general coverage and the NFPA's 99% requirement for critical areas were achieved without exceptions.
- All improvements met the City of Clawson's Office of Fire Marshal requirements.



Client Testimonials

"WZC Networking didn't just install Wi-Fi they unlocked a new revenue stream for us. This project took a basic amenity and turned it into something that added real NOI and helped us position the property for a strong exit. They understood the big picture and delivered across the board by consistently going above and beyond."

— **Zak Danz**, Chief Revenue Officer, B7 Properties

"The rollout went smoother than I expected especially for a garden-style layout with multiple buildings. WZC handled everything, even coordinated around our roof work. Tenants are happy, support is streamlined, and it's one less thing we have to manage day-to-day."

— **Mike Ross**, Regional Project Manager, B7 Properties

