

Fire Marshal's Office



Plan Review

Emergency Communications System(s) (RADIO)¹

Job Name _____
 Address _____ Bldgs. _____ Suite: _____
 City _____ State _____ Zip: _____
 Responsible Party: _____ Phone: _____
 Email: _____

GENERAL INFORMATION:

Area of Building: _____ Number of Stories _____
 Occupancy Type: _____ Construction Type _____
 Radio System Type: BDA: Y N DAS: Y N Class A: Y N
 Radio Donor Site _____ Number of Remote Amplifiers _____
 Number of BDA's _____ Number of DAS antennas _____ **BDA CLASS A ONLY**
 Location of head end _____ Donor Site Azimuth _____

. / = Pass, X = Fail, NA = Not applicable Status

DRAWING SUBMITTAL REQUIREMENTS

- 1) Plans shall be clearly labeled and legible.
- 2) Plans shall include a single line wiring diagram including cable type.
- 3) Plans shall include a title sheet with full specifications and system operational
- 4) Manufacturers specifications and cut sheets shall be included with plans.
- 5) Plans shall include a vicinity map which includes The AHJ system towers and building latitude and longitude.
- 6) Plans shall include details of system supervision and central station monitoring per IFC 510.4.2.4(3). Monitoring by the FACP is the preferred method. Signals shall be supervisory.
- 7) Plans shall show a grid pattern for each level, not less than 20 grids per floor. Floors greater than 32,000 sf shall utilize a maximum 40-ft x 40-ft grid.
- 8) Floor plans for each level (basement included) must show anticipated signal levels in each grid.
- 9) Plans shall indicate the location of all system components.
- 10) Plans shall identify critical areas as defined in NFPA 72, 24.5.2.2.1
- 11) Location and anticipated talk-in signal level at the closest AHJ tower site (-95dBm required)
- 12) All critical areas -as defined in NFPA 72- SHALL BE COVERED WITH A MINIMUM OF -95dBm, show anticipated signal coverage in each area for talk-in and talk-out.
- 13) Shall be capable of transmitting all The AHJ 7/800 MHz frequencies and modulation technologies with the utilization of an FCC approved "CLASS A" Bi-directional amplifier
- 14) All system electronics shall be enclosed in NEMA 4 cabinet, batteries must be separate or utilize a sound engineered design. Separate battery cabinets -when using sealed batteries- are not required to be NEMA 4 compliant.
- 15) Two independent power supplies shall be provided; secondary supply must provide a 24-hr supply at 100% of maximum current draw (show calculations). When using an NFPA 110 emergency generator a minimum of 8-hours run-time is required.
- 16) Dedicated monitoring panel provided in fire command center (If there is a command center)
- 17) Annual testing is required per IFC 510. All submissions shall include a proposal between the owner and an approved testing agency for annual testing, inspection, and re-certification. Building owners must acknowledge the necessity of annual testing by means of a written statement scanned onto the plan set.

18) System acceptance and testing criteria shall be provided for review and approval.	
19) System certification plan shall be provided and shall include a complete catalog of all tests and signal levels to be documented after installation. (Quote from Certified Testing Vendors Only)	
20) Complete system acceptance testing documentation shall be kept on-site in a document box located at the BDA cabinet.	
21) Adequate means to protect all fire-rated penetrations shall be detailed in the plan set	
22) All cables shall be documented to be rated for their respective use, plenum, riser, etc.	
23) ERRC Designs shall bear both an FCC General Radio License and Low Voltage License credentials and signatures. Original signatures are required on the cover page of all plan sets.	
24) Provide the FCC General Radio License for the lead installation technician. All ERRC Installations require a Low-Voltage Permit through the applicable permit office.	
25) Provide Proof of Professional Liability (Errors and Omissions) with a minimum combined coverage limit per single occurrence of 1,000,000.00 for the contractor is performing design, engineering or other professional services.	

The above is not an all-inclusive list; all applicable fire and life safety provisions must be met.

The AHJ reserves the right to order the disconnection and/or disconsolation of any system that fails to perform or causes interference, harmful or otherwise to any City of Atlanta P25 Communications system.

Reviewer: _

Date: _