

Fire Marshal's Office



Plan Review

Emergency Communications System(s) IFC 2018, NFPA 1221-2019

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

GENERAL INFORMATION:

Area of Building: _____ Number of Stories _____
 Occupancy Type: _____ Construction Type _____
 System Type: BDA N DAS N Class A Amp #of channels _____
 Donor Site/Azimuth _____ Number of Remote Amplifiers _____

✓ = Pass, X = Fail, NA = Not applicable

Status

DRAWING REQUIREMENTS: provide documentation or note for all the following

- | | |
|---|--|
| 1) Plans shall be clearly labeled and legible [IFC 510.3] | |
| 2) Plans shall include a single line wiring diagram including cable type [IFC 510.4.2.7, 510.5.1] | |
| 3) Plans shall include a title sheet with full specifications and system operational description | |
| 4) Mfg. specifications and cut sheets shall be included with plans [IFC 510.4.2.7, 510.5.1] | |
| 5) Plans shall include a vicinity map showing Cobb towers and building latitude and longitude | |
| 6) Plans shall include details of system supervision and central station monitoring per [IFC 510.4.2.5] . Monitoring by the FACP is the preferred method. All 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 grid layout of a maximum 40-ft x 40-ft grid [IFC 510.5.3] | |
| 8) Plans for every level must show anticipated signal levels in dBm for each grid [IFC 510.4.1] | |
| 9) Plans shall indicate the location of all system component [IFC 510.4.2.7, 510.5.1] | |
| 10) Plans shall identify critical areas as and signal levels defined in [NFPA 1221, 9.6.7.3] | |
| 11) Tower location and design talk-in/talk-out signal level at the Cobb tower site (-95dBm required) [IFC 510.4.1] Refer to technical documents for design details | |
| 12) All critical areas as defined in NFPA 1221 SHALL BE COVERED WITH A MINIMUM OF -95dBm, show anticipated signal coverage in each area for talk-in and talk-out, AND DAQ of 3.0 or higher | |
| 13) Shall be capable of transmitting all Cobb 7/800 MHz frequencies and modulation technologies and shall be expandable to accommodate future Cobb freq. (Min. 24 filter/channels) | |
| 14) All system electronics shall be enclosed in NEMA 4 cabinet, batteries must be separate, and cabinets are required to be NEMA 3R compliant [IFC 510.4.2] | |
| 15) AC Power to be from dedicated circuit and 12-hour auxiliary supply. OR 2-hour battery supply and 12 hours of emergency generator run time [IFC 510.4.2, NFPA 1221, 9.6.12.1] | |
| 16) Dedicated monitoring panel provided in fire command center (If there is a command center) | |
| 17) All submissions shall include an acknowledgement by the building owners of the necessity for annual testing by means of a written statement scanned onto the plan set [IFC 510.5.10.6.1] | |
| 18) Add note: System acceptance and testing shall be witnessed by FMO [IFC 510.5.3] | |
| 19) System certification shall be provided and shall include a complete catalog of all tests and signal levels achieved after installation [IFC 510.4.2.7] (Copy to FMO at inspection) | |
| 20) Complete system acceptance testing documentation shall be kept on site in a document box located at the BDA cabinet. (Copy on site) [IFC 510.5.3(6)] | |
| 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 of the designer of record [IFC 510.5.2] | |
| 24) Provide the FCC General Radio License for the lead installation technician [IFC 510.5.2] | |
| 25) Donor antenna to DAS isolation shall be not less than 20dBm, [IFC 510.4.2.4(4)] | |
| 26) Class A amplifiers with per channel AGC/ALC controls are exempt from [IFC 510.4.2.8] provide evidence of compliance. Class B amps must comply with [IFC 510.5.3(8)] | |

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

Reviewer: _____ Date: _____