



# APPENDIX C CODE CHANGE PROPOSAL NORTH CAROLINA BUILDING CODE COUNCIL

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Petition for Rule Making

Item Number \_\_\_\_\_

Granted by BCC \_\_\_\_\_  
Denied by BCC \_\_\_\_\_

Adopted by BCC \_\_\_\_\_  
Disapproved by BCC \_\_\_\_\_

Approved by RRC \_\_\_\_\_  
Objection by RRC \_\_\_\_\_

PROPONENT: Colin Triming \_\_\_\_\_ PHONE: (704) 562 -5286  
REPRESENTING: North Carolina Fire Code Revision Committee \_\_\_\_\_  
ADDRESS: 500 Dalton Ave \_\_\_\_\_  
CITY: Charlotte \_\_\_\_\_ STATE: NC \_\_\_\_\_ ZIP: 28206 \_\_\_\_\_  
E-MAIL: colin.triming@charlottenc.gov \_\_\_\_\_ FAX: ( ) - \_\_\_\_\_

North Carolina State Building Code, Volume Fire Code- Section 510.4.2, 510.5, 510.5.4, Ch80 \_\_\_\_\_

**CHECK ONE:** [ X ] Revise section to read as follows: [ ] Delete section and substitute the following:  
[ ] Add new section to read as follows: [ ] Delete section without substitution:

~~LINE THROUGH MATERIAL TO BE DELETED~~

UNDERLINE MATERIAL TO BE ADDED

Please type. Continue proposal or reason on plain paper attached to this form. See reverse side for instructions.

Will this proposal change the cost of construction? Decrease [ ] Increase [ ] No [ ]  
Will this proposal increase to the cost of a dwelling by \$80 or more? Yes [ ] No [ ]  
Will this proposal affect the Local or State funds? Local [ ] State [ ] No [ ]  
Will this proposal cause a substantial economic impact (≥\$1,000,000)? Yes [ ] No [ ]

- Non-Substantial – Provide an economic analysis including benefit/cost estimates.
- Substantial – The economic analysis must also include 2-alternatives, time value of money and risk analysis.
- Pursuant to §143-138(a1)(2) a cost-benefit analysis is required for all proposed amendments to the NC Energy Conservation Code. The Building Code Council shall also require same for the NC Residential Code, Chapter 11.

**REASON:** Changing the NFPA referenced standard from NFPA 1221 to NFPA1225. This makes it clearer for installers of Emergency Responder Communications systems as to what is required.

BCC CODE CHANGES

Signature:

Date: \_\_\_\_\_

FORM 11/26/19

**510.4.2 System design.** The in-building 2- way emergency responder communication coverage system shall be designed in accordance with Sections 510.4.2.1 through 510.4.2.8 and NFPA ~~1224~~.1225

**510.5 Installation requirements.** The installation of the in-building 2- way emergency responder communication coverage system shall be in accordance with NFPA ~~1224~~ 1225 and Sections 510.5.1 through 510.5.5.

**510.5.4 Acceptance test procedure.** Where an in-building 2- way emergency responder communication coverage system is required, and upon completion of installation, the building owner shall have the radio system tested to verify that two-way coverage on each floor of the building is not less than 95 percent. The test procedure shall be conducted as follows:

1. Each floor of the building shall be divided into a grid of 20 approximately equal test areas. Where a floor exceeds 128,000 ft<sup>2</sup> (11,900 m<sup>2</sup>), which is the floor area that can be covered by the maximum grid dimension of 80 ft. (24.4m), the floor shall be subdivided into sectors each having an area less than or equal to 128,000 ft<sup>2</sup> (11,900 m<sup>2</sup>), and each sector be tested individually with 20 grid cells in each sector. Signal strength measurements should be taken at the center of each grid and should be performed using standardized parameters as specified by NFPA ~~1224~~ 1225

Rest of section unchanged.

## Chapter 80 Referenced Standards

### NFPA

~~NFPA 1221-19 Standard for the Installation, Maintenance, and Use of Emergency Services Communications Systems.....510.4.2, 510.5, 510.5.4.~~

NFPA 1225 – 22 Standard for Emergency Services Communications.....510.4.2, 510.5, 510.5.4.