



**APPENDIX C  
CODE CHANGE PROPOSAL  
NORTH CAROLINA  
BUILDING CODE COUNCIL**

325North Salisbury Street, Room 5\_44  
Raleigh, North Carolina 27603  
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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: Phillip Ray Gibson PHONE: (828) 712-0972  
REPRESENTING: NC Radiation Protection Section, NC Radon Program, NC DHHS  
ADDRESS: 5505 Creedmoor Drive, Suite 100  
CITY: Raleigh STATE: NC ZIP: 27612  
E-MAIL: phillip.gibson@dhhs.nc.gov FAX: ( \_\_\_\_\_ ) \_\_\_\_\_ - \_\_\_\_\_

North Carolina State Building Code, Volume 2018 NC Building Code: Building Code

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

UNDERLINE MATERIAL TO BE ADDED

**Chapter 37 – See attached**

- Will this proposal change the cost of construction? Decrease [ ] Increase [ ] No [ x ]
- Will this proposal increase to the cost of a dwelling by \$80 or more? Yes [ ] No [ x ]
- Will this proposal affect the Local or State funds? Local [ ] State [ ] No [ x ]
- Will this proposal cause a substantial economic impact (≥\$1,000,000)? Yes [ ] No [ x ]
- 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:** Radon is the leading environmental cause of lung cancer. Builders throughout North Carolina are voluntarily installing radon mitigation systems in both new construction and existing single family and multi-family dwellings. North Carolina codes do not provide guidance on the design or installation of radon mitigation systems or their activation. Evidence shows that some systems are improperly installed exposing homeowners to increased levels of radon than prior to their installation. Additionally, affordable housing organizations in North Carolina are experiencing increased costs due to state rules not existing. Local governments are not reviewing the installation of radon mitigation systems. At least one has started requiring an engineering design, stamp and a third-party verification of the installed radon mitigation system due to no standards in the NC Codes. This results in an additional cost.

BCC CODE CHANGES. Signature: \_\_\_\_\_ Date: \_\_\_\_\_ FORM 11/26/19

## CHAPTER 12

### INTERIOR ENVIRONMENT

#### SECTION 1203 VENTILATION

##### 1203.6 Soil gas control systems.

The construction of soil gas control systems shall be in accordance with this section.

##### 1203.6.1 New buildings.

Where a soil gas control system is provided for new construction, soil gas control systems shall comply with ANSI-AARST CC1000.

Exception: Soil gas control systems in new one and two-family home construction shall comply with ANSI-AARST CCAH.

##### 1203.6.2 Existing apartment buildings.

Where a soil gas control system is provided in an existing multi-family residential structure, the system shall comply with ANSI-AARST RMS-MF.

## CHAPTER 35

### REFERENCED STANDARDS

AARST

AARST Consortium on National Radon Standards

527 N. Justice Street

Hendersonville NC 28739

USA

ANSI/AARST RMS-CC1000 Soil Gas Control Systems in New Construction of Buildings

ANSI-AARST CCAH Reducing Radon in New Construction (Homes)

ANSI/AARST RMS-MF Radon Mitigation Standards for Multifamily Buildings