

**Minutes of the North Carolina Building Code Council**  
**March 8<sup>th</sup>, 2011**  
**Raleigh, NC**

All members of the North Carolina Building Code Council were present for the Public Hearing with the exception of Cindy Browning, Paula Strickland, and Jack Neel. All members were present for the Council Meeting with the exception of Paula Strickland, Jack Neel, and Ed Moore.

The following are summary minutes. The official minutes of this meeting are recorded on CD. Anyone desiring verbatim CDs or excerpts from these CDs should contact the Engineering Division of the NC Department of Insurance for information and reproduction costs. The next scheduled NC Building Code Council meeting will be held June 13-14, 2011 at the North Carolina Department of Insurance, 322 Chapanoke Road, Raleigh, NC 27603, in the downstairs classroom.

**Part A - Administrative Items**

**Item A - 1 Ethics Statement: Inquire upon conflicts of interest or appearance of conflicts of interest that exist within the Council.**

There were no actual or potential conflicts of interest noted.

**Item A - 2 Approval of minutes of the October 5, 2010 NC Building Code Council Meeting.**

A motion to accept the October 5<sup>th</sup> meeting minutes was made and the minutes were approved as revised.

**Item A - 3 Approval of minutes of the December 14, 2010 NC Building Code Council Meeting.**

A motion to accept the December 14<sup>th</sup> meeting minutes was made and the minutes were approved as revised.

**Item A - 4 NC Rehabilitation Code Advisory Committee**

The chair identified that he received a request for members to be appointed to the NC Rehab Code Committee. The chair identified as follows:

-Bucky Frye, Winston-Salem, Forsyth County, will remain on the committee.

-Richard Lang, Carolina Beach, New Hanover County, will remain on the committee.

-Suzanne Taylor, DOI, will be replaced by Carl Martin.

-Recommendations will be given from Mecklenburg County, City of Raleigh, and City of Greensboro.

### **Item A – 5 Rules Review Commission Meeting Report**

The Rules Review Commission and Staff Energy Conservation Code comments and objections were addressed at their February meeting. The Residential Code comments and objections will be addressed at the RRC March meeting. Ten Legislative review request letters have been received for each of the Energy Conservation and Residential Codes. This will delay the effective date for both Codes well into the 2012 Legislative session unless a Bill is introduced in the current session. S22 may also affect the Electrical, Energy Conservation and Residential Code effective dates.

### **Item A – 6 Public Comments**

There were no comments from the public.

### **Part B – New Petitions for Rulemaking**

The following Petitions for Rulemaking have been received since the last Council meeting. The Council will vote either to deny or grant these Petitions. The Council will give no further consideration to Petitions that are denied. Petitions that are granted may proceed through the Rulemaking process. The Council may send any Petition to the appropriate committee. The hearing will take place during or after the June 2011 meeting.

### **Item B – 1 Request by James Bartl, AIA and Jim Tschupp, AIA, to amend the 2012 NC Administrative Code and Policies, Section 106. The proposed amendment is as follows:**

#### **Add Exception to 106.2.1 Requirements;**

- Except projects using BIM-IPD process see 106.2.3.1

#### **Add Exception to 106.2.2 Additional data;**

- Except projects using BIM-IPD process see 106.2.3.1

#### **106.2.3.1 Building Information Modeling – Integrated Project Delivery Projects.**

BIM: model based technology linked with a data base of project information, using three dimensional, real time dynamic modeling software, to plan all building construction. The model encompasses building geometry, spatial relationships, geographic information, and quantities and properties of building components.

IPD: a project delivery method that integrates key participants (owner, Architect, Engineer, contractor, code official, et al), systems, business structures and practices into a process that collaboratively plans and constructs facilities. The collaborative process begins in early design and continues through all phases of design, fabrication and construction.

*Commentary: this applies to any project delivery method employing three dimensional modeling software, to virtually construct all building components, by a collaborative team based process from design start to construction completion.*

Projects employing a Building Information Modeling - Integrated Project Delivery (BIM-IPD) process will replace the requirements of 106.2.3, with the following permitting and inspection steps.

- a). At the project start, the owner's project team (Architect, Engineer, Contractor, et al) will reach agreement with the Code Enforcement Official (CEO) on the prevailing code compliance strategy for the full scope of the project, to be documented in an electronic Appendix B format or an equivalent format, acceptable to the CEO.
- b). The CEO may issue a single project master permit, based on the initial project description and code compliance strategy agreement.
- c). The CEO shall work collaboratively to review building components or details as scheduled by the owner's project team.
- d). The CEO shall inspect built work, as described in Section 107 of this code.
  - (1). Concurrence on compliance with the code, with respect to both the model and built product, will be gained before inspections are approved.
- e). The owner's project team will submit a validation document, at project substantial completion, documenting the building as constructed and compliance with the NC State Building Code, for records retention by the AHJ.

Validation document: may be a three dimensional model, two dimensional electronic drawings and records, or a combination of both, accurately reflecting the completed building as approved by the code official in the field, and verified with respect to same.

- Where the validation document varies from the approved virtual model regarding building code compliance, the related Architect/Engineer must approve the change.
- Receipt of the validation document will be a condition on issuance of Certificate of Occupancy.

Motion – Mack Nixon/Second – Kim Reitterer/Granted – The request was granted unanimously and was referred to the Administrative Committee for review.

**Item B – 2 Request by Vicky L. Moody, Project Manager, and Charles Knapp, Owner of Rooster Ridge Stairlifts, to amend the 2012 NC Building Code, Section 1109.7. The proposed amendment is as follows: [Note; the item approved was substitute language presented at the meeting and is different from the agenda]**

**1109.7 Lifts.** Platform (wheelchair) lifts are permitted to be a part of a required accessible route in new construction where indicated in Items 1 through 10. Platform (wheelchair) lifts shall be installed in accordance with ASME A18.1.

1. An accessible route to a performing area and speaker platforms in Group A occupancies.
2. An accessible route to wheelchair spaces required to comply with the wheelchair space dispersion requirements of Sections 1108.2.2 through 1108.2.6.
3. An accessible route to spaces that are not open to the general public with an occupant load of not more than five.
4. An accessible route within a dwelling or sleeping unit.
5. An accessible route to wheelchair seating spaces located in outdoor dining terraces in Group A-5 occupancies where the means of egress from the dining terraces to a public way are open to the outdoors.
6. An accessible route to jury boxes and witness stands; raised courtrooms stations including judges' benches, clerks' stations, bailiffs' stations, deputy clerks' stations and court reporters' stations; and to depressed areas such as the well of the court.
7. An accessible route to load and unload areas serving amusement rides.
8. An accessible route to play components or soft contained play structures.

9. An accessible route to team or player seating areas serving areas of sport activity.
10. An accessible route where existing exterior site constraints make use of a ramp or elevator infeasible.

**Exception:** A chairlift that complies with ASME A18.1 shall be permitted to be a part of a required accessible route in new construction and in alterations of existing occupancies:

1. Religious organizations or entities controlled by religious organizations, including places of worship.
2. Private clubs or establishments exempted under Title II of the Civil Rights Act of 1964.

**3409.8.3 Platform lifts.** Platform (wheelchair) lifts complying with ICC A117.1 and installed in accordance with ASME A18.1 shall be permitted as a component of an accessible route.

Exception: A chairlift that complies with ASME A18.1 shall be permitted to be a part of a required accessible route in alterations of existing occupancies in :

1. Religious organizations or entities controlled by religious organizations, including places of worship.
2. Private clubs or establishments exempted under Title II of the Civil Rights Act of 1964.

Motion – John Hitch/Second – Mack Nixon/Granted – The request was granted unanimously and was referred to the Building Committee for review.

**Item B-3(a) Request by Jerry Tannery and Leon Skinner with the City of Raleigh, to amend the 2009 NC Fuel Gas Code, Section 311. The proposed amendment is as follows: [Note; the original item B-3 was modified at the meeting into B-3(a), B-3(b) and B-3(b) and is different from the agenda]**

### **2009 North Carolina Fuel Gas Code, Section 311 Carbon Monoxide Alarms**

**311.1 Carbon monoxide alarms.** In new construction, dwelling units shall be provided with an approved carbon monoxide alarm installed outside of each separate sleeping area in the immediate vicinity of the bedroom(s) as directed by the alarm manufacturer.

**311.2 Where required-existing dwellings.** In existing dwellings, where interior alterations, repairs, or additions requiring a building

permit occur, or where one or more sleeping rooms are added or created, or where fuel-fired appliances are added or replaced, Carbon Monoxide Alarms shall be provided in accordance with Section 313.1.1.

**Exception:** Work involving the exterior surfaces of dwellings, such as the replacement of roofing or siding, or the addition or replacement of windows or doors, or the addition of a porch or deck, or the installation of a fuel-fire appliance that cannot introduce Carbon Monoxide to the interior of the dwelling, are exempt from the requirements of this section.

**311.3 Alarm requirements.** The required Carbon Monoxide Alarms shall be audible in all bedrooms over background noise levels with all intervening doors closed. Single station Carbon Monoxide Alarms shall be listed as complying with UL 2034 and shall be installed in accordance with this code and the manufacturer's installation instructions. Battery powered, plug-in, or hard-wired alarms are acceptable for use.

Motion – David Smith/Second – Kim Reitterer/Granted – The request was granted unanimously and was referred to the Fuel Gas Committee for review.

**Item B-3(b) Request by Jerry Tannery and Leon Skinner with the City of Raleigh, to amend the 2009 Mechanical Code, Section 313. The proposed amendment is as follows:**

**2009 North Carolina Mechanical Code, Section 313 Carbon Monoxide Alarms**

**313.1 Carbon monoxide alarms.** In new construction, dwelling units shall be provided with an approved carbon monoxide alarm installed outside of each separate sleeping area in the immediate vicinity of the bedroom(s) as directed by the alarm manufacturer.

**313.2 Where required-existing dwellings.** In existing dwellings, where interior alterations, repairs, or additions requiring a building permit occur, or where one or more sleeping rooms are added or created, or where fuel-fired appliances are added or replaced, Carbon Monoxide Alarms shall be provided in accordance with Section 313.1.1.

**Exception:** Work involving the exterior surfaces of dwellings, such as the replacement of roofing or siding, or the addition or replacement of windows or doors, or the addition of a porch or deck, or the installation of a fuel-fire appliance that

cannot introduce Carbon Monoxide to the interior of the dwelling, are exempt from the requirements of this section.

**313.3 Alarm requirements.** The required Carbon Monoxide Alarms shall be audible in all bedrooms over background noise levels with all intervening doors closed. Single station Carbon Monoxide Alarms shall be listed as complying with UL 2034 and shall be installed in accordance with this code and the manufacturer's installation instructions. Battery powered, plug-in, or hard-wired alarms are acceptable for use.

Motion - David Smith/Second - Kim Reitterer/Granted - The request was granted unanimously and was referred to the Mechanical Committee for review.

**Item B-3(c) Request by Jerry Tannery and Leon Skinner with the City of Raleigh, to amend the 2009 NC Plumbing Code, Section 315. The proposed amendment is as follows:**

**2009 North Carolina Plumbing Code, Section 315 Carbon Monoxide Alarms**

**315.1 Carbon monoxide alarms.** In new construction, dwelling units shall be provided with an approved carbon monoxide alarm installed outside of each separate sleeping area in the immediate vicinity of the bedroom(s) as directed by the alarm manufacturer.

**315.2 Where required-existing dwellings.** In existing dwellings, where interior alterations, repairs, or additions requiring a building permit occur, or where one or more sleeping rooms are added or created, or where fuel-fired appliances are added or replaced, Carbon Monoxide Alarms shall be provided in accordance with Section 313.1.1.

**Exception:** Work involving the exterior surfaces of dwellings, such as the replacement of roofing or siding, or the addition or replacement of windows or doors, or the addition of a porch or deck, or the installation of a fuel-fire appliance that cannot introduce Carbon Monoxide to the interior of the dwelling, are exempt from the requirements of this section.

**315.3 Alarm requirements.** The required Carbon Monoxide Alarms shall be audible in all bedrooms over background noise levels with all intervening doors closed. Single station Carbon Monoxide Alarms shall be listed as complying with UL 2034 and shall be installed in accordance with this code and the

manufacturer's installation instructions. Battery powered, plug-in, or hard-wired alarms are acceptable for use.

Motion – David Smith/Second – Kim Reitterer/Granted – The request was granted unanimously and was referred to the Plumbing Committee for review.

**Item B – 4 Request by Luke Hirst, to amend the 2012 NC Plumbing Code, Section 403.2. The proposed amendment is as follows:**

**403.2 Separate facilities.** Where plumbing fixtures are required, separate facilities shall be provided for each sex.

**Exceptions:**

1. Separate facilities shall not be required for dwelling units and sleeping units.
2. Separate facilities shall not be required in structures or tenant spaces with a total occupant load, including both employees and customers, of 25 or less.
3. Separate facilities shall not be required in mercantile occupancies in which the maximum occupant load is 100 or less.
4. Where the code requires only one toilet facility for each sex, two unisex facilities may be substituted for separate sex facilities.

Motion – Tom Turner/Second – Al Bass/Granted – The request was granted with one no vote and was referred to the Plumbing Committee for review.

**Item B – 5 Request by Kenny Muse, to amend the 2012 NC Residential Code, Appendix G, Section AG102. The proposed amendment is as follows:**

**SWIMMING POOL.** Any structure intended for swimming or recreational bathing that may contains water over 24 inches (610 mm) deep. This includes in-ground, above-ground and on-ground swimming pools, hot tubs and spas.

Motion – David Smith/Second/Denied – The request was denied unanimously.



**Item B – 6 Request by David Smith, NC Building Code Council, to amend Section R313 of the 2009 NC Residential Code and Section R315 of the 2012 NC Residential Code. The proposed amendment is as follows:**

**2009 NC Residential Code**

**R313.1.1 Carbon monoxide alarms.** In new construction, dwelling units shall be provided with an approved carbon monoxide alarm installed outside of each separate sleeping area in the immediate vicinity of the bedroom(s) as directed by the alarm manufacturer.

**R313.1.2 Where required-existing dwellings.** For ~~In~~ existing dwellings, where interior alterations, repairs, or additions ~~fuel-fired appliance replacements, or additions~~ requiring a building permit occurs, or where one or more sleeping rooms are added or created, or where fuel-fired appliances are added or replaced, carbon monoxide alarms shall be provided in accordance with Section 313.1.1.

**Exception:** Work involving the exterior surfaces of dwellings, such as the replacement of roofing or siding, or the addition or replacement of windows or doors, or the addition of a porch or deck, or the installation of a fuel-fire appliance that cannot introduce carbon monoxide to the interior of the dwelling, are exempt from the requirements of this section.

**R313.1.3 Alarm requirements.** The required carbon monoxide alarms shall be audible in all bedrooms over background noise levels with all intervening doors closed. Single station carbon monoxide alarms shall be listed as complying with UL 2034 and shall be installed in accordance with this code and the manufacturer's installation instructions. Battery powered, plug-in, or hard-wired alarms are acceptable for use.

**2012 NC Residential Code**

**R315.1 Carbon monoxide alarms.** In new construction, dwelling units shall be provided with an approved carbon monoxide alarm installed outside of each separate sleeping area in the immediate vicinity of the bedroom(s) as directed by the alarm manufacturer.

**R315.2 Where required-existing dwellings.** For ~~In~~ existing dwellings, where interior alterations, repairs, or additions ~~fuel-fired appliance replacements, or additions~~ requiring a building permit

occurs, or where one or more sleeping rooms are added or created, or where fuel-fired appliances are added or replaced, carbon monoxide alarms shall be provided in accordance with Section 313.1.1.

**Exception:**

Work involving the exterior surfaces of dwellings, such as the replacement of roofing or siding, or the addition or replacement of windows or doors, or the addition of a porch or deck, or the installation of a fuel-fire appliance that cannot introduce carbon monoxide to the interior of the dwelling, are exempt from the requirements of this section.

**R315.3 Alarm requirements.** The required carbon monoxide alarms shall be audible in all bedrooms over background noise levels with all intervening doors closed. Single station carbon monoxide alarms shall be listed as complying with UL 2034 and shall be installed in accordance with this code and the manufacturer's installation instructions. Battery powered, plug-in, or hard-wired alarms are acceptable for use.

Motion - David Smith/Second - Hawley Truax/Passed - The request was granted unanimously and was referred to the Residential Committee for review.

**Item B - 7 Request by Angela Wooten, AIA, to amend the 2012 NC Building Code, Section 1210.1. The proposed amendment is as follows:**

**1210.1 Floors.** In other than dwelling units, toilet and bathing room floors shall have a smooth, hard, nonabsorbent surface that extends upward onto the walls at least ~~6 inches (152mm)~~ 3 inches.

Motion - John Hitch/Second - Bob Ruffner/Passed - The request was granted unanimously and was referred to the Building Committee for review.

**Item B - 8 Request by Wayne Hamilton, NC Fire Service Code Revision Committee, to amend the 2009 and 2012 NC Fire Code, Section 106. The proposed amendment is as follows:**

**SECTION 106  
INSPECTION SCHEDULES**

(Preceding text unchanged - Delete and substitute the last paragraph only)

~~On unattended or abandoned structures, the Fire Official shall affix a letter on the premises in a conspicuous place at or near the entrance to such premises requesting an inspection in accordance with Section 107 of this code. This order of notice shall be mailed by registered or certified mail, with return receipt requested, to the last known address of the owner, occupant or both. If the owner, occupant or both shall fail to respond to said notice within ten (10) calendar days, these actions by the Fire Official shall be deemed to constitute an inspection in accordance with this section.~~

On vacant structures, the Fire Code Official shall affix a notice on the premises in a conspicuous place at or near the entrance to such premises requesting an inspection in accordance with Section 106.1 of this code. If the owner, occupant or both shall fail to respond to said notice within ten (10) calendar days, this action by the Fire Code Official shall be deemed to constitute compliance with the inspection schedule.

Motion – Alan Perdue/Second/Passed – The request was granted unanimously and was referred to the Fire Committee for review.

**Item B – 9 Request by Robert Privott, NCHBA, to amend the 2009 Administrative Code and Policies, Section 107. The proposed amendment is as follows:**

## **SECTION 107 INSPECTIONS**

**107.1 General.** The inspection department shall perform the following inspections:

1. Footing inspection;
2. Under slab inspection, as appropriate;
3. Foundation inspection, wood-frame construction;
4. Rough-in inspection;
5. Building framing;
6. Insulation inspection;
7. Fire protection inspection; and
8. Final inspection

Footnote:

1. For residential construction, inspections shall be limited to the comprehensive list above. Requirements for additional inspections must be approved by the

North Carolina Building Code Council before being required by local jurisdictions except where unforeseen or unique circumstances exist. In the absence of approval by the Building Code Council the requirements for additional inspection shall have no force and effect.

Motion/Second/Granted – The request was granted unanimously and was referred to the Administrative Committee for review.

Staff noted that this code change may not be within the statutory authority of the Building Code Council, but instead was the statutory authority of the jurisdiction.

**Part C – Notice of Rulemaking Proceedings and Public Hearing**

The following Petitions for Rulemaking have been granted by the Council. Notice of Rulemaking proceedings has been made. The Public Hearing was held March 7, 2011 and the Final Adoption meeting may take place on or after April 21, 2011. The written public comment period expires on April 18, 2011. Contact the Engineering Division for copies of written public comment or recordings of the Item C testimony.

**Item C – 1 Request by Andy Davis, with The Marwin Company, Inc., to amend the 2012 NC Residential Code, Section N1102.2.3. The proposed amendment is as follows:**

**N1102.2.3 Access hatches and doors.**

**Exceptions:**

1. Pull down stair systems shall be weatherstripped and insulated to ~~an R-5 insulation~~ a maximum U-factor of U-0.17 with a minimum of R-5 insulation value. Non-rigid insulation materials are not allowed. Additional insulation systems that enclose the stair system from above are allowed. Exposed foam plastic ~~must~~ shall meet the provisions of the North Carolina Residential Code.

**The Residential Committee met on February 2, 2011 and recommends the following modified language:**

**Exceptions:**

1. Pull down stair systems shall be weatherstripped and insulated ~~to~~ with a minimum of an R-5 insulation value such that ~~t~~ The insulation ~~does~~ shall not interfere with proper operation of the stair. Non-rigid insulation materials are not allowed. Additional insulation systems that enclose the stair system from above are allowed. Exposed foam plastic must meet the provisions of the *North Carolina Residential Code*.

There were no comments from the public on this item.

**Item C - 2 Request by Johnny C. Clark, PE, with the North Carolina Department of Public Instruction, to amend the 2012 NC Mechanical Code, Table 403.3. The proposed amendment is as follows:**

**TABLE 403.3  
REQUIRED OUTDOOR VENTILATION AIR  
Education; Delete** footnote "g" from Art Classroom and Science Laboratories.

There were no comments from the public on this item.

**Item C - 3 Request by Johnny C. Clark, PE, with the North Carolina Department of Public Instruction, to amend the 2012 NC Mechanical Code, Section 403.3.1.3. The proposed amendment is as follows:**

**Add the following to paragraph 403.3.1.3:**  
Exception: K-12 schools shall be exempt from use of this effectiveness factor ( $V_{oz}=V_{bz}$ )

There were no comments from the public on this item.

**Item C - 4 Request by Johnny C. Clark, PE, with the North Carolina Department of Public Instruction, to amend the 2012 NC Mechanical Code, Section 403.3.2.3.4. The proposed amendment is as follows:**

**Add the following to paragraph 403.3.2.3.4:**

**Exception:** K-12 schools shall be exempt from use of this efficiency factor ( $V_{ot}=V_{ou}$ )

There were no comments from the public on this item.

**Item C - 5 Request by David Smith, NC Building Code Council, to amend the 2009 NC Residential Code, Section R313.2 and the 2012 NC Residential Code, Section R314.3. The proposed amendment is as follows:**

**2009 NC Residential Code**

**R313.2 Location.** Smoke alarms shall be installed in the following locations:

1. In each sleeping room.
2. Outside each separate sleeping area in the immediate vicinity of the bedrooms.
3. On each additional story of the dwelling, including basements and habitable attics (finished) but not including crawl spaces, or uninhabitable (unfinished) attic stories ~~and uninhabitable attics~~. In dwellings or dwelling units with split levels and without an intervening door between the adjacent levels, a smoke alarm installed on the upper level shall suffice for the adjacent lower level provided that the lower level is less than one full story below the upper level.

When more than one smoke alarm is required to be installed within an individual dwelling unit the alarm devices shall be interconnected in such a manner that the actuation of one alarm will activate all of the alarms in the individual unit.

**2012 NC Residential Code**

**R314.3 Location.** Smoke alarms shall be installed in the following locations:

1. In each sleeping room.
2. Outside each separate sleeping area in the immediate vicinity of the bedrooms.
3. On each additional story of the dwelling, including basements and habitable attics (finished) but not including crawl spaces, or uninhabitable (unfinished) attic stories ~~and~~

~~uninhabitable attics.~~ In dwellings or dwelling units with split levels and without an intervening door between the adjacent levels, a smoke alarm installed on the upper level shall suffice for the adjacent lower level provided that the lower level is less than one full story below the upper level.

When more than one smoke alarm is required to be installed within an individual dwelling unit the alarm devices shall be interconnected in such a manner that the actuation of one alarm will activate all of the alarms in the individual unit.

**David Smith identified that the Residential Committee met on February 2, 2011 and noted that the words “attics, and uninhabitable (unfinished)” were omitted. The following corrected petition language was approved by the committee:**

**2009 NC Residential Code**

**R313.2 Location.** Smoke alarms shall be installed in the following locations:

1. In each sleeping room.
2. Outside each separate sleeping area in the immediate vicinity of the bedrooms.
3. On each additional story of the dwelling, including basements and habitable attics (finished) but not including crawl spaces, or uninhabitable (unfinished) attics, and uninhabitable (unfinished) attic-stories and uninhabitable attics. In dwellings or dwelling units with split levels and without an intervening door between the adjacent levels, a smoke alarm installed on the upper level shall suffice for the adjacent lower level provided that the lower level is less than one full story below the upper level.

When more than one smoke alarm is required to be installed within an individual dwelling unit the alarm devices shall be interconnected in such a manner that the actuation of one alarm will activate all of the alarms in the individual unit.

**2012 NC Residential Code**

**R314.3 Location.** Smoke alarms shall be installed in the following locations:

1. In each sleeping room.

2. Outside each separate sleeping area in the immediate vicinity of the bedrooms.
3. On each additional story of the dwelling, including basements and habitable attics (finished) but not including crawl spaces, or uninhabitable (unfinished) attics, and uninhabitable (unfinished) attic-stories and uninhabitable attics. In dwellings or dwelling units with split levels and without an intervening door between the adjacent levels, a smoke alarm installed on the upper level shall suffice for the adjacent lower level provided that the lower level is less than one full story below the upper level.

When more than one smoke alarm is required to be installed within an individual dwelling unit the alarm devices shall be interconnected in such a manner that the actuation of one alarm will activate all of the alarms in the individual unit.

There were no comments from the public on this item.

**Item C - 6 Request by David Smith, NC Building Code Council, to amend the 2009 and 2012 NC Residential Code, Section R807.1. The proposed amendment is as follows:**

**R807.1 Attic access.** An attic access opening shall be provided to attic areas that exceed 100 square feet (9.29 m<sup>2</sup>) and have a vertical height of 60 inches (1524 mm) or greater. The net clear opening shall not be less than 20 inches by 30 inches (508 mm by 762 mm) and shall be located in a hallway or other readily accessible location. A 30-inch (762 mm) minimum unobstructed headroom in the attic space shall be provided at some point above the access opening. See Section M1305.1.3 for access requirements where mechanical equipment is located in attics.

**Exceptions:**

1. Concealed areas not located over the main structure including porches, areas behind knee walls, dormers, bay windows, etc. are not required to have access.
2. Pull down stair treads, stringers, handrails, and hardware may protrude into the net clear opening.

There were no comments from the public on this item.



**Item C – 7 Request by the Electrical Standing Committee to adopt the 2011 NEC with NC Amendments.**

The proposed NC amendments to the 2011 NEC are posted at the following link:

[http://www.ncdoi.com/OSFM/Engineering/BCC/engineering\\_bcc\\_ah\\_minutes.asp](http://www.ncdoi.com/OSFM/Engineering/BCC/engineering_bcc_ah_minutes.asp)

There were no comments from the public on this item.

**Item C – 8 Request by Roger Ballard representing NC Department of Public Instruction to amend the 2009 NC Building Code, Table 715.4. The proposed amendment is as follows:**

**TABLE 715.4 Fire Door and Fire Shutter Fire Protection Ratings**

***(add footnote “c” in Table, to “Fire partitions, corridor walls)***

c. Fire-rated bathroom/restroom doors are not required when opening onto fire-rated halls, corridors, exit access provided:

- (1) no other rooms open off of the bathroom/restroom, and
- (2) no gas or electric appliances other than electric hand dryers are located in the bathroom/restroom, and
- (3) the walls, partitions, floor and ceiling of the bathroom/restroom have a fire rating at least equal to the rating of the hall, corridor or exit access, and
- (4) the bathroom/restroom is not used for any other purpose than it is designed.

Wayne Hamilton, City of Asheville Fire Department, opposes this code change.

Rob Kinniburgh, City of Charlotte Fire Department, opposes this code change.

**Item C-8(a) Request by Roger Ballard representing NC Department of Public Instruction to amend the 2012 NC Building Code, Table 715.4. The proposed amendment is as follows:**

**TABLE 715.4 Fire Door and Fire Shutter Fire Protection Ratings**

***(add footnote “c” in Table, to “Fire partitions, corridor walls)***

c. Fire-rated bathroom/restroom doors are not required when opening onto fire-rated halls, corridors, exit access provided:

- (1) no other rooms open off of the bathroom/restroom, and
- (2) no gas or electric appliances other than electric hand dryers are located in the bathroom/restroom, and
- (3) the walls, partitions, floor and ceiling of the bathroom/restroom have a fire rating at least equal to the rating of the hall, corridor or exit access, and
- (4) the bathroom/restroom is not used for any other purpose than it is designed.

Wayne Hamilton, City of Asheville Fire Department, opposes this code change.

Rob Kinniburgh, City of Charlotte Fire Department, opposed this code change.

**Item C - 9 Request by Roger Ballard representing NC Department of Public Instruction to amend the 2009 NC Building Code, Section 715.4.7. The proposed amendment is as follows:**

**715.4.7 Door closing.** Fire doors shall be self-closing or automatic-closing in accordance with this section.

**Exceptions:**

1. Fire doors located in common walls separating sleeping units in Group R-1 shall be permitted without automatic-closing or self-closing devices.
2. The elevator car doors and the associated hoistway enclosure doors at the floor level designated for recall in accordance with Section 3003.2 shall be permitted to remain open during Phase I emergency recall operation.
3. Doors from classrooms, with less than 1200 net square feet, in Group E occupancies opening directly onto a 1-hour rated corridor shall be permitted to be installed without self-closing devices.

Wayne Hamilton, City of Asheville Fire Department, opposes this code change.

**Item C-9(a) Request by Roger Ballard representing NC Department of Public Instruction to amend the 2012 NC Building Code, Section 715.4.7. The proposed amendment is as follows:**

**715.4.7 Door closing.** Fire doors shall be self-closing or automatic-closing in accordance with this section.

**Exceptions:**

1. Fire doors located in common walls separating sleeping units in Group R-1 shall be permitted without automatic-closing or self-closing devices.
2. The elevator car doors and the associated hoistway enclosure doors at the floor level designated for recall in accordance with Section 3003.2 shall be permitted to remain open during Phase I emergency recall operation.
3. Doors from classrooms, with less than 1200 net square feet, in Group E occupancies opening directly onto a 1-hour rated corridor shall be permitted to be installed without self-closing devices.

Wayne Hamilton, City of Asheville Fire Department, opposes this code change.

**Item C-10 Request by Ralph Euchner representing the Plumbing Ad-Hoc Committee to adopt the Rainwater Collection and Distribution Systems code language.**

The proposed Appendix C-1, Rainwater Collection and Distribution Systems, is posted at the following link:

[http://www.ncdoi.com/OSFM/Engineering/BCC/engineering\\_bcc\\_minutes.asp](http://www.ncdoi.com/OSFM/Engineering/BCC/engineering_bcc_minutes.asp)

Eddie van Giesen, with BRAE Rainwater Technologies, also on the Plumbing Ad-Hoc Committee, recommends the Council adopt this code change.

Sally Hoyt, UNC Chapel Hill Stormwater Engineer, also on the Plumbing Ad-Hoc Committee, recommends the Council adopt this code change.

Mike Ruck, with Rainwater Solutions, also on the Plumbing Ad-Hoc Committee, recommends the Council adopt this code change.

Kevin Cochran, with FreeRain, also on the Plumbing Ad-Hoc Committee, recommends the Council adopt this code change.

**[Items C-11 through C-32 were identified by the Chairman as being cost offsets to balance the adoption of the 2012 Energy Conservation Code. These code changes were accompanied with a letter from Governor Perdue.]**

**Item C-11 Request by Robert Privott representing NC Home Builders Associations and Governor Beverly Perdue to amend the 2012 NC Residential Code, Section 202. The proposed amendment is as follows:**

### **202 Definitions**

~~**STORY, ATTIC.** Any story situated wholly or partly in the roof so designated arranged or built as to be used for storage or habitation If an attic which is accessible by a fixed stairway has a 7 foot (2134 mm) clear height for greater than 50 percent of the floor area of the story below then the space shall be considered as a story.~~

Robert Privott, NCHBA, reported that this item was not supported by the Residential Standing Committee and that other provisions will achieve offsets.

**Item C-12 Request by Robert Privott representing NC Home Builders Associations and Governor Beverly Perdue to amend the 2012 NC Residential Code, Section 202. The proposed amendment is as follows:**

~~**WIND BORNE DEBRIS REGION.** Areas within hurricane-prone regions defined as that area east of the inland waterway from the NC/SC state line north to Beaufort Inlet and from that point to include the harrier islands to the NC/VA state line within 1500 feet (0.452km) of the mean high water line of the Atlantic Ocean.~~

Robert Privott, NCHBA, reported that this item was not supported by the Residential Standing Committee and that other provisions will achieve offsets.

**Item C-13 Request by Robert Privott representing NC Home Builders Associations and Governor Beverly Perdue to amend the 2012 NC Residential Code, Section R302.2.5. The proposed amendment is as follows:**

**R302.2.5 Townhouse eave protection** In townhouse construction (with three or more attached dwellings) Projections extending into the fire separation distance shall have not less than 1 hour fire

resistive construction on the underside. Soffit material beyond the fire separation distance shall be securely attached to framing members. ~~and shall be constructed using either noncombustible soffit material; fire retardant treated soffit material; vinyl soffit installed over 3/4 inch (19 mm) wood sheathing or 5/8 inch (16 mm) gypsum board; or aluminum soffit installed over 3/4 inch (19 mm) wood sheathing or 5/8 inch (16 mm) gypsum board.~~ Venting requirements shall be provided in both soffit and underlayments. Vents shall be either nominal 12 inch (51 mm) continuous or equivalent intermittent and shall not exceed the minimum net free air requirements established in Section R806.2 by more than 50 percent.

Vents in soffit are not allowed within 4 feet (1219 mm) of fire walls or property lines.

Robert Privott, NCHBA, reported that this item was not supported by the Residential Standing Committee and that other provisions will achieve offsets.

Rick Frady, with the Town of Apex, opposes this code change.

**Item C-14 Request by Robert Privott representing NC Home Builders Associations and Governor Beverly Perdue to amend the 2012 NC Residential Code, Section R314.3.1. The proposed amendment is as follows:**

**R314.3.1 Alterations, repairs and additions.** When alterations, repairs and additions requiring a building permit occur, or when one or more sleeping rooms are added or created in existing dwellings, the individual dwelling unit shall be equipped with smoke alarms. ~~located as required for new dwellings; the smoke alarms shall be interconnected and hard-wired.~~ which may be battery powered and shall be designed to emit a recurring signal when batteries are low and need to be replaced.

Robert Privott, NCHBA, reported that this item was not supported by the Residential Standing Committee and that other provisions will achieve offsets.

Wayne Hamilton, City of Asheville Fire Department, opposes this code change.

Erin Wynia, with the NC League of Municipalities, opposes this code change.

**Item C-15 Request by Robert Privott representing NC Home Builders Associations and Governor Beverly Perdue to amend the 2012 NC Residential Code, Section R404.4. The proposed amendment is as follows:**

**R404.4 Retaining walls** Retaining walls that are ~~not laterally supported at the top and that retain in excess of 48~~ of ~~unbalanced fill support buildings and their accessory structures~~ shall be designed to ensure stability against overturning, sliding, excessive foundation pressure and water uplift. ~~In addition any retaining wall which meets the following:~~

- ~~1. Any retaining wall systems on a residential site that cross over adjacent property lines regardless of vertical height, and~~
- ~~2. Retaining walls that support buildings and their accessory structures.~~

~~Retaining walls shall be designed for a safety factor of 1.5 against lateral sliding and overturning~~

Robert Privott, NCHBA, reported that this item was not supported by the Residential Standing Committee and that other provisions will achieve offsets.

Rick Frady, with the Town of Apex, opposes this code change.

**Item C-16 Request by Robert Privott representing NC Home Builders Associations and Governor Beverly Perdue to amend the 2012 NC Residential Code, Section R4403.1. The proposed amendment is as follows:**

**R4403.1 Foundation Wall Footings.** Foundation wall footings in the 120 and 130 mph wind zones shall be a minimum of 8" x ~~24"~~ 15" for houses 2-1/2 stories and less. The footing for a three story building shall be 10" x ~~24"~~ 18". ~~Footings shall be reinforced with three #4 (or two #5 bars) at 3 inches above the bottom of the footing. The bars shall be continuous or lapped 25 inches at all splices.~~

Robert Privott, NCHBA, reported that this item was not supported by the Residential Standing Committee and that other provisions will achieve offsets.

**Item C-17 Request by Robert Privott representing NC Home Builders Associations and Governor Beverly Perdue to amend the 2012 NC Residential Code, Section R311.2. The proposed amendment is as follows:**

**R311.2 Egress door.** At least one exterior egress door shall be provided for each *dwelling* unit. The egress door shall be side-hinged, and shall provide a minimum clear width of 32 inches (813mm) when measured between the face of the door and the stop, with the door open 90 degrees (1.57 rad). The minimum clear height of the door opening shall not be less than 78 inches (1981 mm) in height measured from the top of the threshold to the bottom of the stop. Other exterior doors shall not be required to comply with these minimum dimensions. All interior ~~and~~ egress doors and a minimum of one exterior egress doors shall be readily openable from the side from which egress is to be made without the use of a key or special knowledge or effort.

Robert Privott, NCHBA, reported that this item was supported by the Residential Standing Committee.

Dennis Bordeaux, with New Hanover County, opposes this code change.

**Item C-18 Request by Robert Privott representing NC Home Builders Associations and Governor Beverly Perdue to amend the 2012 NC Residential Code, Section R313.1.1. The proposed amendment is as follows:**

**R313.1.1 Carbon monoxide alarms.** In new construction, dwelling units within which fuel-fired appliances are installed or have attached garages shall be provided with an approved carbon monoxide alarm installed outside of each separate sleeping area in the immediate vicinity of the bedroom(s) as directed by the alarm manufacturer

Robert Privott, NCHBA, reported that this item was not supported by the Residential Standing Committee and that other provisions will achieve offsets.

Rob Kinniburgh, City of Charlotte Fire Department, opposes this code change.

Don Worsley, NCPGA, opposes this code change.

Erin Wynia, with the NC League of Municipalities, opposed this code change.

Bob Harvell, NCBA, opposes this code change.

**Item C-19 Request by Robert Privott representing NC Home Builders Associations and Governor Beverly Perdue to amend the 2012 NC Residential Code, Table R403. The proposed amendment is as follows:**

**TABLE R403.  
MINIMUM WIDTH OF CONCRETE OR MASONRY FOOTINGS  
(inches)<sup>a</sup>**

	<b>LOAD BEARING VALUE OF SOIL (psf)</b>			
	1,500	2,000	3,000	4,000
<b>Conventional Wood Frame Construction</b>				
1-story	<del>16</del> 12 <sup>b</sup>	<del>16</del> 12 <sup>b</sup>	12	12
2-story	<del>16</del> 15 <sup>b</sup>	<del>16</del> 15 <sup>b</sup>	12	12
3-story	23	17	12	12
<b>4-Inch Brick Veneer Over Wood Frame or 8-Inch Hollow Concrete Masonry</b>				
1-story	<del>16</del> 12 <sup>b</sup>	<del>16</del> 12 <sup>b</sup>	12	12
2-story	<del>16</del> 15 <sup>b</sup>	<del>16</del> 15 <sup>b</sup>	12	12
3-story	32	24	16	12
<b>8-Inch Solid or Fully Grouted Masonry</b>				
1-story	16	16	12	12
2-story	29	21	14	12
3-story	42	32	21	16

For SI: 1 inch = 25.4 mm, 1 pound per square foot = 0.0479 kPa.

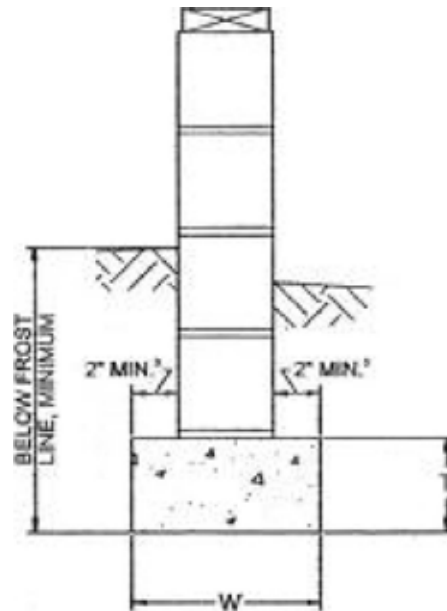
- a. Where minimum footing width is 12 inches, use a single with of solid or fully grouted 12-inch nominal concrete masonry units is permitted.
- b. A minimum footing width of 12" is acceptable for monolithic slab foundations.

Robert Privott, NCHBA, reported that this item was not supported by the Residential Standing Committee and that other provisions will achieve offsets.



**Item C-20 Request by Robert Privott representing NC Home Builders Associations and Governor Beverly Perdue to amend the 2012 NC Residential Code, Table R403.3(1). The proposed amendment is as follows:**

**FIGURE R403.3 (1)  
CONCRETE AND MASONRY FOUNDATION DETAILS**



1. Foundations shall extend not less than 12 inches below ~~the natural grade or engineered fill~~ finished grade and in no case less than the frost line depth.  
REMAINING NOTES TO REMAIN THE SAME

Robert Privott, NCHBA, reported that this item was supported by the Residential Standing Committee and will be referred back to the committee for review.

**Item C-21 Request by Robert Privott representing NC Home Builders Associations and Governor Beverly Perdue to amend the 2012 NC Residential Code, Table R408.1.1. The proposed amendment is as follows:**

**R408.1.1 Foundation vent sizing.** The minimum net area of ventilation openings shall be not less than 1 square foot (0.0929 m<sup>2</sup>) for each 150 square feet (13.9 m<sup>2</sup>) of crawl space ground area

**Exception:** The total area of ventilation openings may be reduced to 1/1,500 of the of the ~~crawl space ground area~~ under-floor area where the ground surface is treated with an approved vapor retarder material and the required openings

are placed so as to provide cross-ventilation of the space. The installation of operable louvers shall not be prohibited.

Robert Privott, NCHBA, reported that this item was supported by the Residential Standing Committee.

**Item C-22 Request by Robert Privott representing NC Home Builders Associations and Governor Beverly Perdue to amend the 2012 NC Residential Code, Table R408.2. The proposed amendment is as follows:**

~~**R408.2 Ground vapor retarder.** Requires full coverage ground vapor retarders for all wall-vented ground spaces. Wall-vented crawl spaces shall be protected from water entry by the evaporation of water from the ground surface. A minimum 6 mil (0.15 mm) polyethylene vapor retarder or equivalent shall be installed to nominally cover all exposed earth in the crawl space with joints lapped not less than 12 inches (305 mm). Where there is no evidence that the ground water table can rise to within 6 inches (152 mm) of the floor of the crawl space it is acceptable to puncture the ground vapor retarder at low spots to prevent water puddles from forming on top of the vapor retarder due to condensation. The floor of the crawl space shall be graded so that it drains to one or more low spots. Install a drain to daylight or sump pump at each low spot. Crawl space drains shall be kept separate from roof gutter drain systems and foundation perimeter drains.~~

Robert Privott, NCHBA, reported that this item was supported by the Residential Standing Committee.

Rick Frady, with the Town of Apex, opposes this code change.

**Item C-23 Request by Robert Privott representing NC Home Builders Associations and Governor Beverly Perdue to amend the 2012 NC Residential Code, Table R703.2. The proposed amendment is as follows:**

~~**R703.2 Water-resistive barrier** **Weather-resistant sheathing paper.** One layer of No. 15 asphalt felt, free from holes and breaks, complying with ASTM D 226 for Type 1 felt or other approved water-resistive barrier shall be applied over studs or sheathing of all exterior walls as required by Table 703.4. Such felt or material shall be applied horizontally, with the upper layer lapped over the lower layer not less than 2 inches (51 mm). Where joints occur, felt shall be lapped not less than 6 inches (152 mm). The felt or other approved material shall be continuous to the top of walls and~~

terminated at penetrations and building appendages in a manner to meet the requirements of the exterior wall envelope as described in Section R703.1.

**Exception:** Omission of the water-resistive barrier is permitted in the following situations:

1. In detached accessory buildings.
2. Under exterior wall finish materials as permitted in Table R703.4.
3. Under paperbacked stucco lath when the paper backing is an approved weather-resistive sheathing paper.
4. Under panel siding with shiplap joints or battens.

**TABLE R703.4**  
**WEATHER-RESISTANT SIDING ATTACHMENT AND MINIMUM THICKNESS**  
(reprint from 2006 NCRC)

WALL COVERING

**TABLE R703.4**  
**WEATHER-RESISTANT SIDING ATTACHMENT AND MINIMUM THICKNESS**

SIDING MATERIAL		NOMINAL THICKNESS* (inches)	JOINT TREATMENT	SHEATHING PAPER REQUIRED	TYPE OF SUPPORTS FOR THE SIDING MATERIAL AND FASTENERS <sup>b,c,d</sup>					
					Wood or wood structural panel sheathing	Fiberboard sheathing into stud	Gypsum sheathing into stud	Foam plastic sheathing into stud	Direct to studs	Number or spacing of fasteners
Horizontal aluminum <sup>f</sup>	Without insulation	0.019 <sup>f</sup>	Lap	Yes Note m	0.120 nail 1 1/2" long	0.120 nail 2" long	0.120 nail 2" long	0.120 nail <sup>f</sup>	Not allowed	Same as stud spacing
		0.024	Lap	Yes Note m	0.120 nail 1 1/2" long	0.120 nail 2" long	0.120 nail 2" long	0.120 nail <sup>f</sup>	Not allowed	
	With insulation	0.019	Lap	Yes Note m	0.120 nail 1 1/2" long	0.120 nail 2 1/2" long	0.120 nail 2 1/2" long	0.120 nail <sup>f</sup>	0.120 nail 1 1/2" long	
Brick veneer Concrete masonry veneer	2 2	Section R703	Yes	See Section R703 and Figure R703.7 <sup>g</sup>						
Hardboard <sup>i</sup> Panel siding-vertical	7/16	Note r	Yes Note y	Note o	Note o	Note o	Note o	Note o	Note o	6" panel edges 12" inter. sup. <sup>2</sup>
Hardboard <sup>i</sup> Lap-siding-horizontal	7/16	Lap Note r	Yes	Note q	Note q	Note q	Note q	Note q	Note q	Same as stud spacing 2 per bearing
Steel <sup>i</sup>	29 ga.	Lap	Yes	0.113 nail 1 3/4" Staple-1 3/4"	0.113 nail 2 3/4" Staple-2 3/4"	0.113 nail 2 1/2" Staple-2 1/2"	0.113 nail <sup>f</sup> Staple <sup>2</sup>	Not allowed	Same as stud spacing	
Stone veneer	2	Section R703	Yes	See Section R703 and Figure R703.7 <sup>g</sup>						
Particleboard panels	3/8-1/2	Note r	Yes	6d box nail	6d box nail	6d box nail	box nail <sup>f</sup>	6d box nail, 3/8 not allowed	6" panel edge 12" inter. sup.	
	5/8	Note r	Yes	6d box nail	8d box nail	8d box nail	box nail <sup>f</sup>	6d box nail		
Plywood panel <sup>i</sup> (exterior grade)	3/8	Note r	Yes	0.099 nail-2"	0.113 nail-2 1/2"	0.099 nail-2"	0.113 nail <sup>f</sup>	0.099 nail-2"	6" on edges	
Vinyl siding <sup>a</sup>	0.035	Lap	Yes Note m	0.120 nail 1 1/2" Staple-1 3/4"	0.120 nail 2" Staple-2 1/2"	0.120 nail 2" Staple-2 1/2"	0.120 nail <sup>f</sup> Staple <sup>2</sup>	Not allowed	Same as stud spacing	
Wood <sup>d</sup> Rustic, drop Shiplap	3/8 Min 19/32 Average	Lap	Yes	Fastener penetration into stud-1"				0.113 nail-2 1/2" Staple-2"	Face nailing up to 6" widths, 1 nail per bearing; 8" widths and over, 2 nails per bearing	
Bevel	7/16	Lap	Yes							
Butt tip	3/16	Lap	Yes							
Fiber cement panel siding <sup>g</sup>	5/16	Note t	Yes Note y	6d corrosion resistant nail <sup>h</sup>	6d corrosion resistant nail <sup>f</sup>	6d corrosion resistant nail <sup>f</sup>	—	4d corrosion resistant nail <sup>f</sup>	6" oc on edges, 12" oc on intermed. studs	
Fiber cement lap siding <sup>a</sup>	5/16	Lap Note w	Yes Note y	6d corrosion resistant nail <sup>h</sup>	6d corrosion resistant nail <sup>f</sup>	6d corrosion resistant nail <sup>f</sup>	—	6d corrosion resistant nail <sup>x</sup>	Note x	

For SI: 1 inch = 25.4 mm.

- a. Based on stud spacing of 16 inches on center. Where studs are spaced 24 inches, siding shall be applied to sheathing approved for that spacing.
- b. Nail is a general description and shall be T-head, modified round head, or round head with smooth or deformed shanks.
- c. Staples shall have a minimum crown width of 7/16-inch outside diameter and be manufactured of minimum No. 16 gage wire.
- d. Nails or staples shall be aluminum, galvanized, or rust-preventive coated and shall be driven into the studs for fiberboard or gypsum backing.
- e. Aluminum nails shall be used to attach aluminum siding.
- f. Aluminum (0.019 inch) shall be unbacked only when the maximum panel width is 10 inches and the maximum flat area is 8 inches. The tolerance for aluminum siding shall be +0.002 inch of the nominal dimension.
- g. Deleted.
- h. All attachments shall be coated with a corrosion-resistant coating.
- i. Shall be of approved type.
- j. Three-eighths-inch plywood shall not be applied directly to studs spaced greater than 16 inches on center when long dimension is parallel to studs. One-half-inch plywood shall not be applied directly to studs spaced greater than 24 inches on center. The stud spacing shall not exceed the panel span rating provided by the manufacturer unless the panels are installed with the face grain perpendicular to studs or over sheathing approved for that stud spacing.

(continued)

**Footnotes to Table R703.4—continued**

- k. Woodboard sidings applied vertically shall be nailed to horizontal nailing strips or blocking set 24 inches on center. Nails shall penetrate 1.5 inches into studs, studs and wood sheathing combined, or blocking. A weather-resistant membrane shall be installed weatherboard fashion under the vertical siding unless the siding boards are lapped or battens are used.
- l. Hardboard siding shall comply with AHA A135.6.
- m. A weather-resistant sheathing paper is not required if all of the following conditions are met:
  - 1. Design wind speed is 110 mph (48 m/s) or less.
  - 2. All horizontal sheathing joints are flashed with an approved corrosion-resistive material or draped with a minimum 6 mil polyethylene.
- n. Vinyl siding shall comply with ASTM D 3679.
- o. Minimum shank diameter of 0.092 inch, minimum head diameter of 0.225 inch, and nail length must accommodate sheathing and penetrate framing 1.5 inches.
- p. When used to resist shear forces, the spacing must be 4 inches at panel edges and 8 inches on interior supports.
- q. Minimum shank diameter of 0.099 inch, minimum head diameter of 0.240 inch, and nail length must accommodate sheathing and penetrate framing 1.5 inches.
- r. Vertical end joints shall occur at studs and shall be covered with a joint cover or shall be caulked.
- s. Fiber cement siding shall comply with the requirements of ASTM C 1186.
- t. See Section R703.10.1.
- u. Minimum 0.102 inch smooth shank, 0.255 inch round head.
- v. Minimum 0.099 inch smooth shank, 0.250 inch round head.
- w. See Section R703.10.2.
- x. Face nailing: 2 nails at each stud. Concealed nailing: one 11 gage 1<sup>1</sup>/<sub>2</sub> galv. roofing nail (0.371 inch head diameter, 0.120 inch shank) or 6d galv. box nail at each stud.
- y. See Section R703.2, Exceptions.
- z. Minimum nail length must accommodate sheathing and penetrate framing 1.5 inches.

Robert Privott, NCHBA, reported that this item was not supported by the Residential Standing Committee and that other provisions will achieve offsets.

**Item C-24 Request by Robert Privott representing NC Home Builders Associations and Governor Beverly Perdue to amend the 2012 NC Residential Code, Table R703.7.4.2. The proposed amendment is as follows:**

**R703.7.4.2 Air space.** The veneer shall be separated from the sheathing by an air space of a minimum of nominal 1 inch (25.4 mm) air space but not more than 4.5 inches (114 mm). The weather-resistant membrane or asphalt saturated felt required by Section R703.2 is not required over water repellant sheathing materials.

Robert Privott, NCHBA, reported that this item was not supported by the Residential Standing Committee and that other provisions will achieve offsets.

**Item C-25 Request by Robert Privott representing NC Home Builders Associations and Governor Beverly Perdue to amend the 2012 NC Residential Code, Table R802.3. The proposed amendment is as follows:**

**R802.3 Framing details.** Rafters shall be framed to ridge board or to each other with a gusset plate as a tie. Ridge board shall be at least 1-inch (25.4 mm) nominal thickness and not less in depth than the cut end of the rafter. Opposing rafters at the ridge must align within the thickness of the ridge member. Regularly spaced hip and valley rafters need not align. At all valleys and hips there shall be a valley or hip rafter not less than 2-inch (51 mm) nominal

thickness and not less in depth than the cut end of the rafter. Hip and valley rafters shall be supported at the ridge by a brace to a bearing partition or be designed to carry and distribute the specific load at that point. Where the roof pitch is less than three units vertical in 12 units horizontal (25-percent slope), structural members that support rafters and ceiling joists, such as ridge beams, hips and valleys, shall be designed as beams.

Robert Privott, NCHBA, reported that this item was supported by the Residential Standing Committee.

**Item C-26 Request by Robert Privott representing NC Home Builders Associations and Governor Beverly Perdue to amend the 2012 NC Residential Code, Table R807.1. The proposed amendment is as follows:**

**R807.1 Attic access.** An attic access opening shall be provided to attic areas that exceed ~~100~~ 400 square feet (9.29 m<sup>2</sup>) and have a vertical height of 60 inches (1524 mm) or greater. The net clear opening shall not be less than 20 inches by 30 inches (508 mm) by 762 mm) and shall be located in a hallway or other readily accessible location. A 30-inch (762 mm) minimum unobstructed headroom in the attic space shall be provided at some point above the access opening. See Section MI305.1.3 for access requirements where mechanical equipment is located in attics.

**Exception:** Concealed areas not located over the main structure including porches areas behind knee walls, dormers, bay windows etc. are not required to have access.

Robert Privott, NCHBA, reported that this item was supported by the Residential Standing Committee.

**Item C-27 Request by Robert Privott representing NC Home Builders Associations and Governor Beverly Perdue to amend the 2012 NC Residential Code, Appendix M. The proposed amendment is as follows:**

**Appendix M:**

**Section AM111- Figure AM111**

Rail Posts – Remove bolting requirement

Riser Openings – remove solid riser/opening restrictions

Robert Privott, NCHBA, reported that this item was not supported by the Residential Standing Committee but he asked that the Council adopt this code change.

**Item C-28 Request by Robert Privott representing NC Home Builders Associations and Governor Beverly Perdue to amend the 2012 NC Administrative Code and Policies, Section 107.2. The proposed amendment is as follows:**

**107.2 Inspection requests.** It shall be the duty of the permit holder or his or her agent to notify the code enforcement official when work is ready for inspection and to provide access to and means for inspection of the work for any inspections that are required by this code.

Robert Privott, NCHBA, reported that this item was not discussed by the Residential Standing Committee and that other provisions will achieve offsets.

Wayne Hamilton, with the City of Asheville Fire Department, opposes this code change.

Bob Harvell, NCBA, opposes this code change.

Jim Bartl, with Mecklenburg County, opposes this code change.

Rick Frady, with the Town of Apex, opposes this code change.

Erin Wynia, with the NC League of Municipalities, opposes this code change.

**Item C-29 Request by Robert Privott representing NC Home Builders Associations and Governor Beverly Perdue to amend the 2008 NC Electrical Code, Section 338.10(B) (4)(a). The proposed amendment is as follows:**

**Section 338.10(B) (4) (a)**

**(4) Installation Methods for Branch Circuits and Feeders.**

**(a) Interior installations.** In addition to the provisions of this article, Type SE service-entrance cable used for interior wiring shall comply with the installation requirements of Part II of Article 334, excluding 334.80.

Robert Privott, NCHBA, reported that this item was not discussed by the Residential Standing Committee and that other provisions will achieve offsets.

**Item C-30 Request by Robert Privott representing NC Home Builders Associations and Governor Beverly Perdue to amend the 2012 NC Fire Code, Section 101.2.1. The proposed amendment is as follows:**

**101.2.1 Appendices.** Provisions in the appendices shall not apply unless specifically referenced in the code text adopted by the local governing authority having jurisdiction.

Wayne Hamilton, with the City of Asheville Fire Department, commented on this proposal.

Robert Privott, NCHBA, reported that this item was discussed by the Residential Standing Committee.

Rick Frady, with the Town of Apex, opposes this code change.

Rob Kinniburgh, City of Charlotte Fire Department, opposes this code change.

Mark Brown, Concord Fire Marshal and President of NCFMA, opposes this code change.

**Item C-31 Request by Robert Privott representing NC Home Builders Associations and Governor Beverly Perdue to amend the 2012 NC Plumbing Code, Section 502.5. The proposed amendment is as follows:**

**502.5 Water heaters installed in garages.** Water heaters having an ignition source shall be elevated such that the source of ignition is not less than 18 inches (457 mm) above the garage floor. Appliances shall be located or protected so that they are not subject to physical damage by a moving vehicle.

**Exception(s):**

1. Elevation of the ignition source is not required for appliances that are listed as flammable vapor ignition.
2. Electric water heaters.

Robert Privott, NCHBA, reported that this item was discussed by the Residential Standing Committee.

Bob Harvell, NCBA, opposes this code change.

Rick Frady, with the Town of Apex, commented on this proposal.



**Item C-32 Request by Robert Privott representing NC Home Builders Associations and Governor Beverly Perdue to amend the 2012 NC Building Code, Section 903.2.7. The proposed amendment is as follows:**

**903.2.7 Group R.** An automatic sprinkler system installed in accordance with Section 903.3 shall be provided throughout all buildings with a Group R fire area.

**Exceptions:**

1. An automatic sprinkler system is not required in new adult and child care facilities in existing Groups R-3 and R-4 occupancies.
2. An automatic sprinkler system is not required throughout all buildings with a Group R-2 fire area where two stories or less in height, including basements, or where having 16 or less dwelling units.

Robert Privott, NCHBA, reported that this item was not discussed by the Residential Standing Committee and that other provisions will achieve offsets.

John Porter, with the Apartment Association of North Carolina, opposes this code change.

Wayne Hamilton, with the City of Asheville Fire Department, opposes this code change.

Rob Kinniburgh, City of Charlotte Fire Marshal, opposes this code change.

Mark Brown, Concord Fire Marshal and President of NCFMA, opposes this code change.

Bob Harvell, NCBA, opposes this code change.

Erin Wynia, with the NC League of Municipalities, opposes this code change.

**Part D – Final Adoption**

The following Petitions for Rulemaking have been granted by the Council. Notice of Rulemaking proceedings and Public Hearing has been made. The Public Hearings were held December 13, 2010. The Final Adoption meeting took place on March 8, 2011. The Council will give no further consideration to Petitions that are disapproved. Petitions that are approved will proceed through the Rulemaking process.

**Item D – 1 Request by Curt Willis and Rusty Styons, to amend the 2009 NC Residential Code, Sections R703.11.2 and R703.11.3. The proposed amendment is as follows:**

**R703.11.2 Soffit.** In One- and Two-Family Dwelling construction using vinyl or aluminum as a soffit material, the soffit material shall be securely attached to framing members and use an underlayment material of either: fire retardant treated wood, 23/32 inch wood sheathing or 5/8 inch gypsum board. Venting requirements shall apply to both soffit and underlayment and shall be per section R806 of the North Carolina Residential Code. Where the property line is 10 feet or more from the building face, the provisions of this code section shall not apply.

**R703.11.3 Flame Spread.** Vinyl siding and vinyl soffit materials when used in One- and Two-Family Dwelling construction shall have a Flame Spread Index of 25 or less as tested in accordance with ASTM E-84.

Motion to amend “ $\frac{3}{4}$ ” to read “minimum of 23/32” – David Smith/Second – Hawley Truax/Passed

Motion to amend to include both the 2009 and 2012 codes – David Smith/Second – John Hitch/Passed

Motion to approve the petition as amended with an effective date of January 1, 2012 – David Smith/Second – Kim Reitterer/Approved. Motion was approved unanimously.

**Item D – 2 Request by David Smith, NC Building Code Council, to amend the 2012 NC Residential Code, Section N1101.5. The proposed amendment is as follows:**

**N1101.5 Fenestration product rating and glass deflection.** U-factors of fenestration products (windows, doors and skylights) shall be determined in accordance with NFRC 100 by an accredited, independent laboratory, and labeled and certified by the manufacturer. Products lacking such a labeled U-factor shall be assigned a default U-factor from Tables N1101.5(1) and N1101.5(2). The solar heat gain coefficient (SHGC) of glazed fenestration products (windows, glazed doors and skylights) shall be determined in accordance with NFRC 200 by an accredited, independent laboratory, and labeled and certified by the manufacturer. Products lacking such a labeled SHGC shall be assigned a default SHGC from Table N1101.5(3).

Glass collapse/gap width reduction shall not exceed the limits set by the During Plant Inspection Checklist, of the NFRC, Certification and Inspection Agency (IA) Operations Manual (First Edition). Compliance shall be determined by an accredited, independent laboratory, and labeled and certified by the manufacturer.

Motion to hold item and send back to committee – David Smith/Second – Mack Nixon/Passed

**Item D – 3 Request by David Smith, NC Building Code Council, to amend the 2012 NC Energy Conservation Code, Section 303.1.3. The proposed amendment is as follows:**

**303.1.3 Fenestration product rating and glass deflection.** U-factors of fenestration products (windows, doors and skylights) shall be determined in accordance with NFRC 100 by an accredited, independent laboratory, and labeled and certified by the manufacturer. Products lacking such a labeled U-factor shall be assigned a default U-factor from Table 303.1.3(1) or 303.1.3(2). The solar heat gain coefficient (SHGC) of glazed fenestration products (windows, glazed doors and skylights) shall be determined in accordance with NFRC 200 by an accredited, independent laboratory, and labeled and certified by the manufacturer. Products lacking such a labeled SHGC shall be assigned a default SHGC from Table 303.1.3(3).

Glass collapse/gap width reduction shall not exceed the limits set by the During Plant Inspection Checklist, of the NFRC, Certification and Inspection Agency (IA) Operations Manual (First Edition). Compliance shall be determined by an accredited, independent laboratory, and labeled and certified by the manufacturer.

Motion to hold item and send back to committee – David Smith/Second – Mack Nixon/Passed

## **Part E – Reports**

### **Chairman’s Report**

- Dan Tingen identified the date that the public comment period ended and asked for a Special Called meeting to be held to finalize the C-Items. A motion to have the meeting Thursday, April 21<sup>st</sup> at 10:00am was made by Tom Turner and seconded by David Smith. The motion passed by the majority.

- Mr. Tingen also praised the local fire ordinance procedures from NC DOI website.

### **Ad Hoc Committee Reports**

There were none.

### **Standing Committee Reports**

- David Smith reported that the Residential Standing Committee met February 2, 2011 to discuss the C-Items (offsets). He also reported that the same committee also met February 23, 2011 to discuss Low-E glass and Vinyl Siding.

### **Staff Reports**

- Chris Noles reported that Staff has only four of the Council members' Ethics training forms. He reminded the Council that they have to update their Ethics training every two years. Staff will contact the Ethics Commission for training status of all Council members.

- Chris Noles reminded the Council that SEI forms are due April 15, 2011 and asked that the forms are completed and returned by this date.

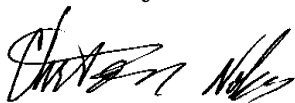
### **Public Comments**

There were no comments from the Public

### **Part F - Appeals**

There were no appeals heard at this meeting.

Sincerely,



Christian Noles, P.E.  
Secretary, NC Building Code Council