Minutes of the North Carolina Building Code Council
March 11, 2014
Raleigh, NC

All members of the North Carolina Building Code Council were present for the Council Meeting with the exception of Leah Faile.

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 **Tuesday, June 10, 2014**. The location will be announced 30 days before the meeting.

Before the meeting, nominations were taken to elect a new Chairman and Vice-Chairman of the NC Building Code Council.

- Dan Tingen was **nominated** by Ralph Euchner/**Second** – Al Bass/Dan Tingen was elected Chairman of the NC BCC.

- John Hitch was **nominated** by David Smith/**Second** – Al Bass/John Hitch was elected Vice-Chairman of the NC BCC.

Dan Tingen announced that Barry Gupton would be the new Secretary of the NC BCC.

Dan Tingen introduced Rick McIntyre, Senior Deputy Commissioner of NC OSFM.

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 December 10, 2014 NC Building Code Council Meeting.

A **motion** to accept the December 10th meeting minutes with modifications, was made by Cindy Browning, **seconded** by Ralph Euchner, and **approved**.

Item A – 3 Proposed Cellular Communications Tower site – 195 Sams Place in Vass, NC.

Motion – Cindy Register/**Second** – Mack Nixon/**Approved**. All documents pursuant to GS 143-151.75(c) were submitted to the BCC and were approved for construction.

Item A – 4 Town of Morrisville Fire Code Ordinance. (Tabled from December meeting)

Motion – Alan Perdue/**Second** – Lon McSwain/**Approved**. The request was approved.

Item A – 5 Town of Apex Fire Code Ordinance. (Tabled from December meeting)

Motion – Alan Perdue/**Second** – Al Bass/**Approved**. The request was approved.

Item A – 6 Town of Kitty Hawk Fire Code Ordinance.

Motion – Alan Perdue/**Second** – Al Bass/**Approved**. The request was approved.

Item A – 7 Request by Joseph A. Furman, Director of Watauga County Planning & Inspections Department, to amend the 2012 NC Administrative Code and Policies, Section 107.1. The proposed amendment is as follows:

Add to approved inspection list:
1. Temporary Electrical Service Inspection
2. High Wind Zone Inspection
3. Log Cabin Structural Inspection

Motion – John Hitch/**Second**/**Accepted**. The request was accepted and sent to the Residential Ad-Hoc Committee for review.

Item A – 8 Request by Michael Rettie, representing the Orange County Inspections Department, to amend the 2012 NC Administrative Code and Policies, Section 107.1. The proposed amendment is as follows:

Add to approved inspection list:
(1)

SECTION 107
INSPECTIONS

107.1 General. The inspection department shall perform the following inspections and subcategory inspections as indicated, by AHJ, for a particular project:

1. Footing inspection (conventional trench footing);
   - 1a. Deck footing;
   - 1b. Monolithic Slab;
   - 1c. Structural Column;

2. Under slab trade inspection~~, as appropriate~~ for system(s) provided (plumbing, mechanical, electrical);
   - 2a. Structure slab preparation;
   - 2b. Garage slab preparation;

3. Foundation inspection~~, wood frame construction~~ masonry, to include isolated masonry piers);
   - 3a. Pile construction;
   - 3b. Concrete form and reinforcement;
   - 3c. Foundation projection;
   - 3d. Water proofing/damp proofing;
   - 3e. Pier/tie-down, manufactured and modular construction;

4. Rough-in inspection;
   - 4a. Trade system in trench;
   - 4b. Gas pipe;
   - 4c. Above suspended ceiling;
   - 4d. Fire protection system testing;
   - 4e. Temporary construction electrical service;
   - 4f. Swimming pool bonding;
   - 4g. Commercial hood system;
   - 4h. Factory fireplace (if installed by a separate installer);

5. Building framing (wood or light gage steel);
   - 5a. Pre-siding or brick/sheathing;
   - 5b. Open-floor framing;
   - 5c. Structural frame (steel/concrete);

5d. Fire rated assembly installation;
5e. Masonry fireplace;
5f. Consultation inspection (may be for any trade);
5g. Post and beam or log construction;
5h. Concrete or masonry walls;

6. Insulation inspection;
   6a. Pre-insulation;
   6b. Duct insulation;

7. Fire protection inspection; ~~and~~
   7a. Automatic sprinkler;
   7b. Fire alarm systems;
   7c. Mechanical duct fire protection system(s);

8. Final inspection~~.~~;
   8a. Daycare inspection;
   8b. ABC inspection;
   8c. School inspection;
   8d. Restore power;
   8e. Temporary electrical final;
   8f. Temporary mechanical final;
   8g. Fire section 106 inspections;
   8h. Change of use/occupancy.

107.1.1 Footing inspection. Footing inspection shall be made after the trenches are excavated, all grade stakes are installed, all reinforcing steel and supports are in place and appropriately tied, all necessary forms are in place and braced, all debris and water is removed and before any concrete is placed.

107.1.2 Under-slab inspection. Under-slab inspection, as appropriate, shall be made after all materials and equipment to be concealed by the concrete slab are completed.

107.1.3 Foundation inspection, crawl space. Foundation projection ~~and crawl space~~ inspections shall be made after all foundation supports are installed on the footing. Masonry foundation walls are constructed with approved materials and joist systems, cast-in-place foundation elements are to have forms and all specified reinforcement in place. ~~This inspection is to check foundation supports, crawl space leveling, ground clearances and positive drainage when required.~~ Required damp proofing/water proofing materials are to be installed only after foundation wall installation is approved. Pier/tie-down systems to be installed per manufacture or designer's requirements (or NC Manufactured Home Code).

107.1.4 Rough-in inspection. Rough-in inspection shall be made when all building framing and parts of the electrical, ~~plumbing,~~ fire protection, ~~or~~ heating-ventilation or cooling system, that will be hidden from view in the finished building have been ~~placed~~ installed, but before any wall, ceiling finish or building insulation is installed. Plumbing systems that are subject to testing must be installed to facilitate these tests as specified in section 312, NC Plumbing Code and Residential Code.

107.1.5 Building framing inspection. Open floor framing inspection to be made before the floor sheathing is installed. Masonry fireplace inspection to be made to the first flue liner and include the hearth and extension supports. Structural steel and concrete to be inspected per designer's schedule. Fire rated assemblies to be

inspected as specified by AHJ for type of assembly. Framing inspections shall be made after the roof is dried-in, ~~excluding permanent roof covering,~~ wall, ceiling and floor framing is complete with appropriate blocking, bracing, draft stopping and firestopping in place. Interior nonstructural wood or light gage steel framing may be inspected per jurisdiction's approved schedule. The exterior wall sheathing material to be verified prior to exterior wall finishes are installed (may be after windows, exterior doors and weather barriers are installed where allowed by jurisdiction). The following items shall be in place and visible for inspection:

1. ~~Pipes~~ Plumbing vent pipes;
2. Chimneys and vents;
3. Flashing for roofs, chimneys and wall openings;
4. Insulation baffles (that will not be visible at insulation inspection, such as in a vaulted roof); and
5. All lintels that are required to be bolted to the framing for support ~~shall not be covered by any exterior or interior wall or ceiling finish material before approval. Work may continue without approval for lintels supported on masonry or concrete.~~

107.1.6 Insulation inspection. Insulation inspection shall be made after ~~an~~ the approved building framing and rough-in inspection and after the permanent roof covering is installed, with all insulation and vapor retarders in place, but before any wall or ceiling covering is applied. Pre-insulation inspections may be schedule based upon need for concealed spaces requiring insulation, prior to installing equipment, appliances or appurtenances. Heating and Cooling Ducts requiring insulation are to be inspected after all seams are properly sealed but before covered by insulation material (unless approved by AHJ).

107.1.7 Fire protection inspection. Fire protection inspections shall be made in all buildings where any material is used for fire protection purposes. The permit holder or his agent shall notify the inspection department after all fire protection materials are in place. Fire dampers and fire detectors installed in duct systems to be tested and inspected per SOP of code enforcement official. Fire protection materials shall not be concealed until inspected and approved by the code enforcement official.

107.1.8 Final inspection. Final inspections shall be made for each trade after completion of the work authorized under the technical codes. Final inspections, for approvals of occupancies are to be made when requirements necessitating the inspection have been completed. Restore power approvals are made when the systems have been determined to be safe to be re-energized. Temporary electrical and mechanical inspections are made for testing and limited utilization of building systems under the direct supervision of the Electrical Contractor when the systems and devices to be energized are ready for service when authorized by jurisdiction's standard protocol. Fire inspections specified by Section 106 NC Fire Code are to be performed per scheduling protocol of fire code official. School inspections are to be performed per SOP of fire code official and code enforcement official.

107.2 Inspection requests. It is the duty of the local jurisdiction to make known to the permit holder all required inspections relating to their project, at the time the permit is issued. 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.

Motion /Second/Accepted. The request was accepted unanimously and sent to the Residential Ad-Hoc Committee for review.

Item A – 9 Rules Review Commission Meeting Report

Barry Gupton reported that the standard December D-Items have been reviewed by the Rules Review Committee. There were two objections (Farm Buildings and Nightclubs) by the Rules Review Committee staff.

Item A-10 Public Comments

Leon Skinner – Existing Buildings Code – Committee to continue and develop commentary.

Motion – David Smith/**Second** – Steve Knight/**Approved**. The request was approved.

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 2014 meeting.

Item B – 1 Request by Jerry Imhoff, representing the North Carolina Department of Public Safety, to amend the 2012 NC Building Code, Section 408.9. The proposed amendment is as follows:

408.9 Windowless buildings. For the purposes of this section, a windowless building or portion of a building is one with nonopenable windows, windows not readily breakable or without windows. Windowless buildings shall be provided with an engineered smoke control system to provide a tenable environment for exiting the smoke compartment in the area of fire origin in accordance with Section 909.8 for each windowless compartment or when approved by the Fire Code Official an engineered smoke control system shall be provided in accordance with 909.6 or 909.7.

Motion – Alan Perdue/**Second** – Robbie Davis/**Denied**. The request was denied.

Item B – 2 Request by Lalitha Krishnasami, with NC DPS Central Engineering, to amend the 2012 NC Building Code, Section 907. The proposed amendment is as follows:

[F] 907.2.6.3.3 Automatic smoke detection system. An automatic smoke detection system shall be installed throughout resident housing areas, including *sleeping units* and contiguous day rooms, group activity spaces and other common spaces normally accessible to residents.

Exceptions:

1. Other *approved* smoke detection arrangements providing equivalent protection, including, but not limited to, placing detectors in exhaust ducts from cells or behind protective guards *listed* for the purpose, are allowed when necessary to prevent damage or tampering.

2. *Sleeping units* in Occupancy Conditions 2 and 3 as described in Section 308.

3. Smoke detectors are not required in *sleeping units* with four or fewer occupants in smoke compartments that are equipped throughout with an *automatic sprinkler system* installed in accordance with Section 903.3.1.1.

4. In existing Group I3 construction, Occupancy Condition 4, individual smoke detection or other approved smoke detection arrangement providing equivalent protection is not required, if such protection was not installed during original construction.

Motion – Alan Perdue/**Second** – John Hitch/**Denied**. The request was denied.

Item B – 3 Request by Jerry Gentle, with Schneider Electric, to amend the 2011 NEC. The proposed amendment is as follows:

Revise the state electrical code from the 2011 National Electrical Code to the 2014 NEC.

Motion – David Smith/**Second** – Frankie Meads/**Denied**. The request was denied. This was reviewed as part of the Item D-7 discussion.

Item B – 4 Request by Terry Cromer, representing the NC Association of Electrical Contractors, to amend the 2012 NC NEC, Section 406.4. The proposed amendment is as follows:

406.4(D)(4) Arc-Fault Circuit-Interrupter Protection. Where a receptacle outlet is supplied by a branch circuit that requires arc-fault circuit interrupter protection as specified elsewhere in this *Code*, a replacement receptacle at this outlet shall be one of the following:

(1) A listed outlet branch circuit type arc-fault circuit interrupter receptacle

(2) A receptacle protected by a listed outlet branch circuit type arc-fault circuit interrupter type receptacle

(3) A receptacle protected by a listed combination type arc-fault circuit interrupter type circuit breaker

This requirement becomes effective January 1, 2014.

Exception: Non-grounding type receptacle(s)

Motion – Cindy Register/**Second** – Robbie Davis/**Approved**. The request was granted.

Item B – 5 Request by Terry Cromer, representing the NC Association of Electrical Contractors, to amend the 2012 NC NEC, Section 680.42. The proposed amendment is as follows:

680.42(B) Bonding. Bonding by metal-to-metal mounting on a common frame or base shall be permitted. The metal bands or hoops used to secure wooden staves shall not be required to be bonded as required in 680.26.

Equipotential bonding of perimeter surfaces in accordance with 680.26(B)(2) shall not be required to be provided for spas and hot tubs where all of the following conditions apply:

(1) The spa or hot tub shall be listed as a self-contained spa for aboveground use.
(2) The spa or hot tub shall not be identified as suitable only for indoor use.

(3) The installation shall be in accordance with the manufacturer's instructions and shall be located on or above grade.

(4) The top rim of the spa or hot tub shall be at least 710 mm (28 in.) above all perimeter surfaces that are within 760 mm (30 in.), measured horizontally from the spa or hot tub. The height of nonconductive external steps for entry to or exit from the self-contained spa shall not be used to reduce or increase this rim height measurement.

Motion – Cindy Register/**Second** – Robbie Davis/**Approved**. The request was granted.

Item B – 6 Request by Jerry Imhoff, representing the North Carolina Department of Public Safety, to amend the 2012 NC Fire Prevention Code, Section 903.2.6. The proposed amendment is as follows:

903.2.6 Group I. An *automatic sprinkler system* shall be provided throughout buildings with a Group I *fire area.*

Exceptions:

1. An *automatic sprinkler system* installed in accordance with Section 903.1.2 or 903.3.1.3 shall be allowed in Group I-1 facilities.

2. In Group I-3 sprinklers are not required in cells housing two or fewer inmates and the building shall be considered sprinklered throughout.

Motion – Alan Perdue/**Second** – Robbie Davis/**Denied**. The request was denied.

Item B – 7 Request by Jerry Imhoff, representing the North Carolina Department of Public Safety, to amend the 2012 NC Fire Prevention Code, Section 909.10.4. The proposed amendment is as follows:

909.10.4 Automatic dampers. Automatic dampers, regardless of the purpose for which they are installed within the smoke control system, shall be *listed* and conform to the requirements of *approved* recognized standards.

Exceptions:

1. UL 555S smoke rated dampers which normally close to prevent smoke from passing through smoke barriers can be modified to be normally open for smoke control for the purpose of smoke removal and fresh air entry.
2. Dampers with stainless steel shafts, stainless steel bearings and silicon seals that are suitable for the probable temperatures that they will be exposed to while letting fresh air in or smoke out can be used with UL listed smoke damper operators.
3. Exterior doors with electric operators can be opened and monitored by the smoke controls to provide fresh air or pressure relief.
4. Barometric type back draft dampers with stainless steel shafts, stainless steel bearings and silicon seals can be used to relieve excessive pressure differences.

These exceptions do not affect the requirements for smoke and/or fire rated dampers in interior or exterior rated barrier walls or ceilings where they are required for separation purposes.

Motion – Alan Perdue/**Second** – Lon McSwain/**Denied**. The request was denied.

Item B – 8 Request by Sean Gerolimatos, with Schluter Systems L.P., to amend the 2012 NC Plumbing Code, Section 417.4. The proposed amendment is as follows:

417.4 Shower compartments. Shower compartments shall conform to Table 417.4 and shall have approved shower pan material or the equivalent thereof as determined by the plumbing official. The pan shall turn up on three sides at least 2 inches (51 mm) above the finished curb level. The remaining side shall wrap over the curb. Shower drains shall be constructed with a clamping device so that the pan may be securely fastened to the shower drain thereby making a watertight joint. Shower drains shall have an approved weephole device system to ensure constant drainage of water from the shower pan to the sanitary drainage system. There shall be a watertight joint between the shower and drain and trap. Shower receptacle waste outlets shall be not less than 2 inches (51 mm) and shall have a removable strainer.

Exceptions:

1. Shower compartments with prefabricated receptors conforming to the standards listed in Table 417.4.

2. Where load-bearing, bonded waterproof membranes meeting ANSI A118.10 are used, integrated bonding flange drains shall be approved. Clamping devices and weepholes are not required where shower drains include an integrated bonding flange. Manufacturer's installation instructions shall be followed to achieve a watertight seal between the bonded waterproof membrane and the integrated bonding flange drain. Integrated bonding flange drains shall conform to ASME A112.6.3, ASME A112.18.2/CSA B125.2, or CSA B79.

Motion – David Smith/**Second** – Al Bass/**Approved**. The request was granted and sent to the Plumbing Committee for review.

Item B – 9 Request by Kevin Huber, with SureSeal MFG, to amend the 2012 NC Plumbing Code, Section 1002.4. The proposed amendment is as follows:

1002.4 Trap seals. Each fixture trap shall have a liquid seal of not less than 2 inches (51 mm) and not more than 4 inches (102 mm), or deeper for special designs relating to accessible fixtures. Where a trap seal is subject to loss by evaporation, a trap seal primer valve or trap seal protection device shall be installed. Trap seal primer valves shall connect to the trap at a point above the level of the trap seal. A trap seal primer valve shall conform to ASSE 1018 or ASSE 1044. A trap seal protection device shall conform to ASSE 1072.

Motion – Al Bass/**Second** – Ralph Euchner/**Approved**. The request was granted and sent to the Plumbing Committee for review.

Item B-10 Request by Michael Rettie, representing the Orange County Inspections Department, to amend the 2012 NC Residential Code, Section R302.6 and Table R302.6 and the 2012 NC Residential(Mechanical) Code, Section 603.7. The proposed amendment is as follows:

(1) R302.6 ~~Dwelling~~ Habitable space/garage fire separation. The garage shall be separated as required by Table R302.6. Openings in garage walls shall comply with Section R302.5. This provision does not apply to garage walls that are perpendicular to the adjacent *dwelling unit* wall.

(2) **TABLE R302.6**
~~DWELLING~~ HABITABLE SPACE/GARAGE SEPARATION

(3) **603.7 Rigid duct penetrations.** Ducts in a private garage and ducts penetrating the walls or ceilings separating a ~~*dwelling*~~ habitable space from a private garage shall be continuous and constructed of a minimum 26 gage [0.0187 inch (0.4712 mm)] galvanized sheet metal or other approved noncombustible material and shall not have openings into the garage. Fire and smoke dampers are not required in such ducts passing through the wall or ceiling separating a *dwelling* from a private garage.

Motion – Frankie Meads/**Second** – Al Bass/**Denied**. The request was denied.

Item B-11 **Request by Michael Rettie, representing the Orange County Inspections Department, to amend the 2012 NC Residential Code, Section R308.4 #8. The proposed amendment is as follows:**

R308.4 Hazardous locations. The following shall be considered specific hazardous locations for the purposes of glazing:

8. Glazing adjacent to stairways within 60 inches (1524 mm) horizontally of the bottom tread of a stairway in any direction when the exposed surface of the glazing is less than 60 inches (1524 mm) above the nose of the tread.
~~Exceptions:~~

~~1. The side of the stairway has a guardrail or handrail, including balusters or in-fill panels, complying with Sections R311.7.7 and R312 and the plane of the glass is more than 18 inches (457 mm) from the railing; or~~

~~2. When a solid wall or panel extends from the plane of the adjacent walking surface to 34 inches (864 mm) to 36 inches (914 mm) above the walking surface and the construction at the top of that wall or panel is capable of withstanding the same horizontal load as a *guard.*~~

Motion – David Smith/**Second** – Al Bass/**Denied**. The request was denied. This will be reviewed as part of Item D-13.

Item B-12 **Request by Michael Rettie, representing the Orange County Inspections Department, to amend the 2012 NC Fire Prevention Code, Section 1004.10. The proposed amendment is as follows:**

~~427.3~~ 1004.10[B] Group E in churches, private schools and public schools. Rooms used for first grade children and younger shall be located on the level of exit discharge. Rooms used for second grade children shall not be located more than one story above the level of exit discharge.

Motion – Alan Perdue/**Second** – Lon McSwain/**Approved**. The request was granted and sent to the Fire Committee for review.

Item B-13 Request by Al Bass, representing the NC Building Code Council, to amend the 2012 NC Plumbing Code, Section 504.6.1. The proposed amendment is as follows:

504.6.1 Support. The discharge pipe shall be clamped or otherwise supported per Table 308.5 with not less than one clamp or support within 12-inches of the point of discharge.

Motion/Second/Approved. The request was granted and sent to the Plumbing Committee for review.

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 11, 2014 and the Final Adoption meeting may take place on or after June 10, 2014. The written public comment period expires on April 21, 2014.

Item C – 1 Request by Ken Szymanski, with the Apartment Association of North Carolina, to amend the 2012 NC Building Code, Section 901.6.1. The proposed amendment is as follows:

901.6.1 Automatic sprinkler systems. Automatic sprinkler systems shall be monitored by an *approved* supervising station.

Exceptions:

1. A supervising station is not required for *automatic sprinkler systems* protecting one- and two-family dwellings.

2. Limited area systems serving fewer than 20 sprinklers.
3. A group R-2 building less than 4-stories in height sprinklered in accordance with NFPA 13R where sprinklers are provided for porches, balconies, corridors and stairs that are open and attached and installed in accordance with Section 903.4. At a minimum an approved audible alarm device shall be provided on every sprinklered R-2 building in accordance with Section 903.4.2 of the NC Fire Code. No on-site supervision is required at a constantly attended location.

Ken Szymanski, with the Apartment Association of North Carolina, recommends that the Council adopt this code change.

Doug Maples, City of Fayetteville, does not recommend that the Council adopt this code change.

Item C – 2 Request by Ken Szymanski, with the Apartment Association of North Carolina, to amend the 2012 NC Building Code, Section 2902.1.1. The proposed amendment is as follows:

2902.1.1 Fixture calculations. To determine the *occupant load* of each sex, the total *occupant load* shall be divided in half. To determine the required number of fixtures, the fixture ratio or ratios for each fixture type shall be applied to the *occupant load* of each sex in accordance with Table 2902.1. Fractional numbers resulting from applying the fixture ratios of Table 2902.1 shall be rounded up to the next whole number. For calculations involving multiple occupancies, such fractional numbers for each occupancy shall first be summed and then rounded up to the next whole number.

Exceptions:

1. The total *occupant load* shall not be required to be divided in half where *approved* statistical data indicate a distribution of the sexes of other than 50 percent of each sex.
2. In buildings that contain dwellings or sleeping units that have a pool dedicated to the residents, a percentage reduction of the total required fixtures provided for a pool & pool deck without bleachers and grandstands may be taken equal to the percentage of total residential units whose entries fall within 500 feet walking distance of the pool deck.

Ken Szymanski, with the Apartment Association of North Carolina, recommends that the Council adopt this code change.

Mike Everson, Housing Studio, P.A., recommends that the Council adopt this code change.

Rick Frady, Catawba County Building Inspections, was neither for nor against this item. He would propose that the language be clarified that a specific pool be dedicated to a specific building.

Mark Matheny, NCBIA, was neither for nor against this item. He spoke in concern of the 500 feet walking distance.

Item C – 3 Request by Ken Szymanski , with the Apartment Association of North Carolina, to amend the 2012 NC Plumbing Code, Section 403.1.1. The proposed amendment is as follows:

403.1.1 Fixture calculations. To determine the occupant load of each sex, the total occupant load shall be divided in half. To determine the required number of fixtures, the fixture ratio or ratios for each fixture type shall be applied to the occupant load of each sex in accordance with Table 403.1. Fractional numbers resulting from applying the fixture ratios of Table 403.1 shall be rounded up to the next whole number. For calculations involving multiple *occupancies*, such fractional numbers for each *occupancy* shall first be summed and then rounded up to the next whole number.

Exceptions:

1. The total occupant load shall not be required to be divided in half where *approved* statistical data indicates a distribution of the sexes of other than 50 percent of each sex.
2. In buildings that contain dwellings or sleeping units that have a pool dedicated to the residents, a percentage reduction of the total required fixtures provided for a pool & pool deck without bleachers and grandstands may be taken equal to the percentage of total residential units whose entries fall within 500 feet walking distance of the pool deck.

Ken Szymanski, with the Apartment Association of North Carolina, recommends that the Council adopt this code change.

Clint Latham, representing the NC PIA, recommends that the Plumbing Committee take into consideration that the 500 feet should be more along the lines of 300 feet and in the horizontal distance only.

Item C – 4 Request by Robert Hall, representing Viega, LLC, to amend the 2012 NC Fuel Gas Code, Section 403.10.1. The proposed amendment is as follows:

403.10.1 Pipe joints. Pipe joints shall be threaded, flanged, brazed, ~~or~~ welded, or made with press-connect fittings complying with ANSI LC-4. Where nonferrous pipe is brazed, the brazing materials shall have a melting point in excess of 1,000°F (538°C). Brazing alloys shall not contain more than 0.05-percent phosphorous.

There were no comments on this item.

Item C – 5 Request by Randall Shackelford, representing Simpson Strong-Tie Co., to amend the 2012 NC Residential Code, Appendix M, Section AM104. The proposed amendment is as follows:

SECTION AM104
DECK ATTACHMENT

AM104.1 Deck attachment to wood. When a deck is supported at the structure by attaching the deck ledger to the wood band of the structure~~, the following attachment schedules shall apply for attaching~~ the deck ~~band~~ ledger shall be attached to the structure in accordance with either Section AM104.1.1 or Section AM104.1.2.

AM104.1.1 Attachment to wood. When the deck is attached to a wood band joist, fastening shall be in accordance with Table AM104.1.1.

TABLE AM104.1.1 ~~All structures except brick veneer structures~~ LEDGER ATTACHMENT TO WOOD

AM104.1.1 All structures except brick veneer structures.

FASTENERS	8′ MAX JOIST SPAN[a]	16′ MAX JOIST SPAN[a]
$^5/_8$″ Hot dipped galv. bolts with nut and washer[b] and 12d Common hot dipped galv. nails[c]	1 @ 3′-6″ o.c. and 2 @ 8″ o.c.	1 @ 1′-8″ o.c. and 3 @ 6″ o.c.

a. Attachment interpolation between 8 foot and 16 foot joists span is allowed.
b. Minimum edge distance for bolts is $2^1/_2$ inches.
c. Nails must penetrate the supporting structure band a minimum of $1^1/_2$ inches.

AM104.1.2 Alternate deck ledger attachment to band joist. For decks supporting a total design load of 50 pounds per square foot [40 pounds per square foot live load plus 10 pounds per square foot dead load], the connection between a deck ledger of pressure-preservative-treated Southern Pine, incised pressure-preservative-treated Hem-Fir or approved decay-resistant species, and a 2-inch nominal lumber band joist bearing on a sill plate or wall plate shall be constructed with 1/2-inch lag screws or bolts with washers in accordance with Table AM104.1.2(1). Lag screws, bolts and washers shall be hot-dipped galvanized or stainless steel. The lag screws or bolts in deck ledgers and band joists shall be placed in accordance with Table AM104.1.2(2) and Figures AM104.1.2(1) and AM104.1.2(2).

TABLE AM104.1.2(1)

FASTENER SPACING FOR A SOUTHERN PINE OR HEM-FIR DECK LEDGER AND A 2-INCH-NOMINAL SOLID-SAWN SPRUCE-PINE-FIR BAND JOIST[c, f, g]
(Deck live load = 40 psf, deck dead load = 10 psf)

JOIST SPAN	6′ and less	6′1″ to 8′	8′1″ to 10′	10′1″ to 12′	12′1″ to 14′	14′1″ to 16′	16′1″ to 18′
Connection details	On-center spacing of fasteners[d, e]						
1/2 inch diameter lag screw with 15/32 inch maximum sheathing[a]	30	23	18	15	13	11	10
1/2 inch diameter bolt with 15/32 inch maximum sheathing	36	36	34	29	24	21	19
1/2 inch diameter bolt with 15/32 inch maximum sheathing and 1/2 inch stacked washers[b, h]	36	36	29	24	21	18	16

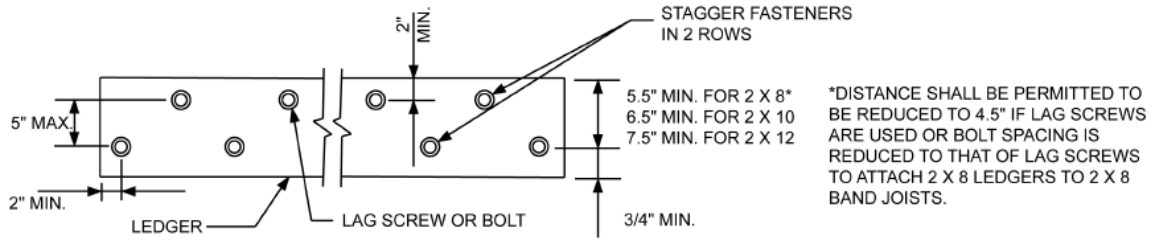
a. The tip of the lag screw shall fully extend beyond the inside face of the band joist.
b. The maximum gap between the face of the ledger board and face of the wall sheathing shall be 1/2 inch.
c. Ledgers shall be flashed to prevent water from contacting the house band joist.
d. Lag screws and bolts shall be staggered in accordance with Section R507.2.1.
e. Deck ledger shall be minimum 2 × 8 pressure-preservative-treated No. 2 grade lumber, or other approved materials as established by standard engineering practice.
f. When solid-sawn pressure-preservative-treated deck ledgers are attached to a minimum 1-inch-thick engineered wood product (structural composite lumber, laminated veneer lumber or wood structural panel band joist), the ledger attachment shall be designed in accordance with accepted engineering practice.
g. A minimum 1 × 9½ Douglas Fir laminated veneer lumber rimboard shall be permitted in lieu of the 2-inch nominal band joist.
h. Wood structural panel sheathing, gypsum board sheathing or foam sheathing not exceeding 1 inch in thickness shall be permitted. Washers are permitted to be used only with wood structural panel sheathing. The maximum distance between the face of the ledger board and the face of the band joist shall be 1 inch.

TABLE AM104.1.2(2)

PLACEMENT OF LAG SCREWS AND BOLTS IN DECK LEDGERS AND BAND JOISTS

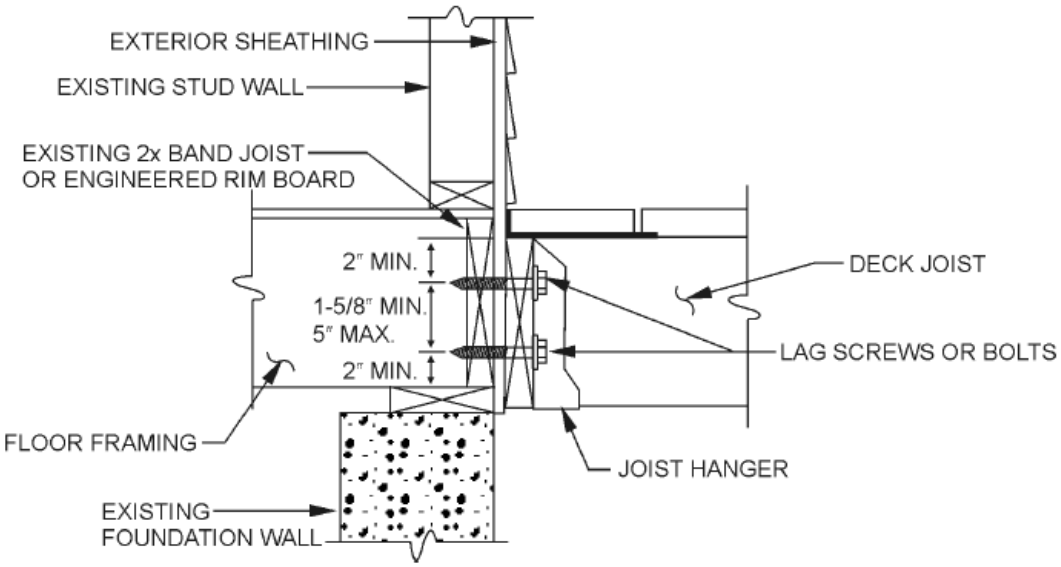
MINIMUM END AND EDGE DISTANCES AND SPACING BETWEEN ROWS				
	TOP EDGE	BOTTOM EDGE	ENDS	ROW SPACING
Ledger[a]	2 inches[d]	1/4 inch	2 inches[b]	1 5/8 inches[b]
Band Joist[c]	3/4 inch	2 inches	2 inches[b]	1 5/8 inches[b]

a. Lag screws or bolts shall be staggered from the top to the bottom along the horizontal run of the deck ledger in accordance with Figure AM104.1.2(1).
b. Maximum 5 inches.
c. For engineered rim joists, the manufacturer's recommendations shall govern.
d. The minimum distance from bottom row of lag screws or bolts to the top edge of the ledger shall be in accordance with Figure AM104.1.2(1).



For SI: 1 inch = 25.4 mm.

FIGURE AM104.1.2(1)
PLACEMENT OF LAG SCREWS AND BOLTS IN LEDGERS



For SI: 1 inch = 25.4 mm.

FIGURE AM104.1.2(2)
PLACEMENT OF LAG SCREWS AND BOLTS IN BAND JOISTS

AM104.2 Deck attachment to brick veneer. When a deck is supported at the structure by attaching the wood ledger to brick veneer, fastening shall be as specified in Table AM104.2.

TABLE AM104.~~1.~~2 BRICK VENEER STRUCTURES

FASTENERS	8′ MAX JOIST SPAN[a]	16′ MAX JOIST SPAN[a]
$^5/_8$″ Hot dipped galv. bolts with nut and washer[b]	1@ 2′-4″ o.c.	1@ 1′-4″ o.c.

a. Attachment interpolation between 8 foot and 16 foot joist span is allowed.
b. Minimum edge distance for bolts is $2^1/_2$ inches.

AM104.~~1.~~3 Masonry ledge support. If the deck band is supported by a minimum of ½ inch masonry ledge along the foundation wall, 5/8 inch hot dipped galvanized bolts with washers spaced at 48 inches o.c. may be used for support.

AM104.~~1.~~4 Other means of support. Joist hangers or other means of attachment may be connected to house band and shall be properly flashed

Randy Shackelford, representing Simpson Strong-Tie Co., recommends that the Council adopt this code change. A proposed substitute was submitted and printed below.

Mark Guthrie, with DMG, Inc./FastenMaster, recommends that the Council adopt this code change.

Duke Geraghty, with Outer Banks Home Builders Association, recommends that the Council adopt this code change.

Michael Rettie, representing the Orange County Inspections Department, recommends that the Council adopt this code change.

PROPOSED SUBSTITUTE

AM104.1 Deck attachment. When a deck is supported at the structure by attaching the deck to the structure, the following attachment schedules shall apply for attaching the deck band to the structure.

AM104.1.1 All structures except brick veneer structures

METHOD	FASTENERS	8' MAX JOIST SPAN	16' MAX JOIST SPAN
1	5/8" Hot dipped galv. bolts with nut and washer[b] and 12d Common hot dipped galv. nails[c]	1@3'-6" o.c. and 2@8" o.c.	1@1'-8" o.c. and 3@6" o.c.
OR			
2	Approved Alternate Screw Fastener[d]	12" o.c. staggered	6" o.c. staggered

a. Attachment interpolation between 8 foot and 16 foot joists span is allowed.
b. Minimum edge distance for bolts is 2½ inches.
c. Nails must penetrate the supporting structure band a minimum of 1½ inches.
d. Alternate screw fastener shall be an approved screw having a minimum shank diameter of 0.195" and a length long enough to penetrate through the supporting structure band. Screw shall have an evaluated allowable shear load for Southern Pine to Southern Pine lumber of 250 pounds and shall have a corrosion resistant finish equivalent to hot dipped galvanized. Minimum edge distance for screws is 1-7/16". A maximum of ½" thick wood structural panel is permitted to be located between the deck ledger and the structure band.

Item C – 6 Request by Robert Privott, representing NCHBA, to amend the 2012 NC Mechanical Code/Abridged Residential Code Edition, Section 505.2. The proposed amendment is as follows:

505.2 Makeup air required. Exhaust hood systems capable of exhausting in excess of 400 cubic feet per minute (0.19 m^3/s) shall be provided with makeup air at a rate approximately equal to the exhaust air rate that is in excess of 400 cubic feet per minute (0.19 m^3/s). Such makeup air systems shall be equipped with a means of closure and shall be automatically controlled to start and operate simultaneously with the exhaust system.

Exception: Where all appliances in the house are direct-vent, power-vent, unvented, or electric, makeup air shall be provided where exhaust fans are capable of exhausting more than 600 cubic feet per minute (0.28 m^3/s). Exhaust hood systems capable of exhausting more than 600 cubic feet per minute shall be provided with makeup air at a rate approximately equal to the exhaust air rate that is in excess of 600 cubic feet per minute.

Robert Privott, NCHBA, recommends that the Council adopt this code change.

Mark Matheny, NCBIA, does not recommend that the Council adopt this code change.

Item C – 7 Request by Marvin Strzyzewski, representing MiTek USA, Inc./Truss Engineering Company, to amend the 2012 NC Residential Code, Section R4605.5 and Table R4605.5. The proposed amendment is as follows:

R4605.5 In the coastal hazard area and the ocean hazard area, all metal connectors and fasteners outside conditioned spaces shall be hot-dip galvanized steel after fabrication and meet ASTM A 153. Exposed metal connectors, such as tie-down straps on porches, decks, and areas under the structure, shall be a minimum 3/16-inch (5mm) thick, and shall be hot-dip galvanized after fabrication and meet ASTM A 123 or ASTM A 153. Stainless steel light-gage metal connectors shall be permitted in exposed locations. Metal connectors of approved equivalent corrosion-resistant material may be accepted. See Table R4605.5.

TABLE R4605.5[a]
CORRISION RESISTANCE
(Applies only to Structures Located in Coastal High-Hazard Areas and Ocean Hazard Areas)

	OPEN (exterior, porches, under house)	**EXPOSURE LEVEL VENTED/ENCLOSED** (attic, floor trusses, enclosed crawl spaces and stud cavity)	**CONDITIONED** (heated/cooled living areas)
Nails, staples, screws	Hot-dip galvanized	Hot-dip galvanized	____
Nuts, bolts, washers, tie rods	Hot-dipped galvanized	Hot-dip galvanized	____
Steel connection plates and straps (3/16" minimum thickness)	Hot-dip galvanized after fabrication	Hot-dip galvanized	____
Sheet metal connectors, wind anchors, joist hangers, steel joists and beams	Stainless steel or hot-dipped galvanized after fabrication	Hot-dip galvanized after plate fabrication or triple galvanized[b]	Hot-dip galvanized or triple galvanized[b]
Truss plates	Stainless steel or hot-dipped galvanized ~~-~~after fabrication	Hot-dip galvanized after fabrication, ~~or~~ stainless steel, triple galvanized[b] or in-accordance with TPI-1 of the Truss Plate Institute within 6'-0" of a gable louver, ridge or soffit vent. Otherwise ~~in accordance with TPI-1 of the Truss Plate Institute~~ Standard galvanized[b].	Standard galvanized[b]

a. Applies only to structures located in Coastal High-Hazard Areas and Ocean High Hazard Areas
b. Triple galvanizing – G185, standard galvanizing – G60 both per ASTM A 653 / A 653M

Marvin Strzyzewski, representing MiTek USA, Inc./Truss Engineering Company, recommends that the Council adopt 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 10, 2013. The Final Adoption meeting took place on March 11, 2014. 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 John Hitch, Raleigh, NC, to amend the 2012 NC Building Code, Table 1004.1.1. The proposed amendment is as follows:

Reference Table 1004.1.1 Minimum Floor Area Allowances per Occupant. Add the following footnote to "Assembly – unconcentrated (tables and chairs)" and to "Business areas":

a. An assembly occupancy conference room that is accessory to a Group B office occupancy and meeting the requirements of Section 303.1, exception 2, shall be calculated at 100 square feet per occupant for determining the overall occupant load of the associated floor. The Assembly occupancy will be calculated at 15 square feet per occupant for the purpose of determining egress from the room containing the assembly occupancy.

Motion – John Hitch/**Second** – Lon McSwain/**Adopted** with an effective date of January 1, 2015.

Item D – 2 Request by Steve Knight, representing the NCBCC Structural Committee, to amend the 2012 NC Building Code, Chapter 23. The proposed amendment is as follows:

Change the following tables in Chapter 23 as indicated in the link below:

2308.8.8(1), 2308.8(2),
2308.9.5, 2308.9.6,
2308.10.2(1), 2308.10.2(2),
2308.10.3(1), 2308.10.3(2), 2308.10.3(3), 2308.10.3(4), 2308.10.3(5), 2308.10.3(6)
http://www.ncdoi.com/OSFM/Engineering_and_Codes/Default.aspx?field1=BCC_-_Agendas&user=Building_Code_Council&sub=BCC_Meeting

Motion – Steve Knight/**Second** – Ralph Euchner/**Adopted** with an effective date of January 1, 2015.

Item D – 3 Request by Steve Knight, representing the NCBCC Structural Committee, to amend the 2012 NC Residential Code, Chapters 5 and 8. The proposed amendment is as follows:

Change the following tables in Chapter 5 as indicated in the link below:
R502.3.1(1), R502.3.1(2),
R502.3.3(1), R502.3.3(2),
R502.5(1), R502.5(2)

Change the following tables in Chapter 8 as indicated in the link below:
R802.4(1), R802.4(2),
R802.5.1(1), R802.5.1(2), R802.5.1(3), R802.5.1(4), R802.5.1(5), R802.5.1(6)
http://www.ncdoi.com/OSFM/Engineering_and_Codes/Default.aspx?field1=BCC_-_Agendas&user=Building_Code_Council&sub=BCC_Meeting

Motion – Steve Knight/**Second** – Al Bass/**Adopted** with an effective date of January 1, 2015.

Item D – 4 Request by Stuart Laney, representing New Hanover Division – NC Association of Electrical Contractors, to amend the 2011 NEC, Section 250-50 & Code Council Amendment. The proposed amendment is as follows:

Exception: Supplemental Ground Electrodes shall not be required for a temporary service installed on a construction site. Supplemental Ground Electrode shall be provided by the Grounded service-entrance conductor specified in 250-53(A)(2)(3).

Motion to delay item until the June 2014 Council meeting – Cindy Register/**Second** – Tim Fowler/**Granted** and sent to the Electrical Committee for review.

Item D – 5 Request by Gerry Mancuso, Wilmington, NC, to amend the 2012 NC Plumbing Code, Section 412.5. The proposed amendment is as follows:

412.5 Location. Floor drains shall be located to drain the entire floor area and installed flush with the finished floor surface as to prevent a trip hazard.

Motion – Paula Strickland/**Second** – Wade White/**Disapproved.**

Item D – 6 Request by Leah C. Faile, representing NCBCC Building Committee, to amend the 2012 NC Building Code, Section 3404.6. The proposed amendment is as follows:

3404.6 Means of egress capacity factors. Alterations to any existing building or structure shall not be affected by the egress width factors in Section 1005.1 for new construction in determining the minimum egress widths or the minimum number of exits in an existing building or structure. The minimum egress widths for the components of the *means of egress* shall be based on the *means of egress* width factors in the building code under which the building was constructed, and shall be considered as complying *means of egress* for any *alteration* if, ~~in the opinion of the *building official,*~~ they do not constitute a distinct hazard to life.

Motion to delay item until the June 2014 Council meeting – Alan Perdue/**Second** – Lon McSwain/Sent to the Building Committee for review.

Item D – 7 Proposed Change to a 6-Year Code Cycle for all codes.

[NOTE]: This is not a petition for rulemaking. This following motion was tabled from the December 2013 BCC meeting.

Robbie Davis made a **Motion** to adopt all codes, except the Electrical Code, on a Six-year Code Cycle to match the Residential Code/**Second** – Steve Knight/**Adopted**.

Cindy Register made a **Motion** to adopt the Electrical Code on a Three-year Code Cycle/**Second** – Wade White/**Adopted**.

Item D – 8 Request by Wayne Hamilton, representing the NC Fire Service Code Revision Committee, to amend the 2012 NC Fire Code, Sections 908.7 and 908.7.1. The proposed amendment is as follows:

908.7 Carbon monoxide alarms. Group I-1, I-2, I-4 or R occupancies located in a building containing a fuel-burning heater, appliance, or fireplace or in a building which has an attached garage shall be equipped with single-station carbon monoxide alarms. The carbon monoxide alarms shall be listed as complying with UL 2034 and be installed and maintained in accordance with NFPA 720 and the manufacturer's instructions. An open parking garage, as defined in Chapter 2 of the International Building Code, or an

enclosed parking garage ventilated in accordance with Section 404 of the International Mechanical Code shall not be considered an attached garage.

Exception: *Sleeping units* or *dwelling units* which do not themselves contain a fuel-burning heater, appliance, fireplace or have an attached garage, but which are located in a building with a fuel-burning heater, appliance, fireplace or an attached garage, need not be equipped with single-station carbon monoxide alarms provided that:

1. The *sleeping unit* or *dwelling unit* is located more than one story above or below any story which contains a fuel-burning heater, appliance, fireplace or attached garage.
2. The *sleeping unit* or *dwelling unit* is not connected by duct work or ventilation shafts to any room containing a fuel-burning heater, appliance, fireplace or to an attached garage; and

3. The building is equipped with a common area carbon monoxide alarm system.

908.7.1 Carbon monoxide detection systems. Carbon monoxide detection systems, which include carbon monoxide detectors and audible notification appliances installed and maintained in accordance with NFPA 720 shall be permitted. The carbon monoxide detectors shall be listed as complying with UL 2075.

Amend Chapter 47 as follows:

Add NFPA Standard:

720-09 Standard for the Installation of Carbon Monoxide(CO) Detection……908.7, 908.7.1 and Warning Equipment, 2009 Edition

Motion – Alan Perdue/**Second** – Lon McSwain/**Adopted** with an immediate effective date of June 1, 2014.

Item D – 9 Request by Wayne Hamilton, representing the NC Fire Service Code Revision Committee, to amend the 2012 NC Fire Code, Section 2206.2.3. The proposed amendment is as follows:

Add Exception # 5 to 2206.2.3:

2206.2.3 Above-ground tanks located outside, above grade. Above-ground tanks shall not be used for the storage of Class I, II, or IIIA liquid motor fuels except as provided by this section.

1. Above-ground tanks used for outside, above-grade storage of Class I liquids shall be *listed* and *labeled* as protected above-ground tanks and be in accordance with Chapter 34. Such tanks shall be located in accordance with Table 2206.2.3.

2. Above-ground tanks used for above-grade storage of Class II or IIIA liquids are allowed to be protected above-ground tanks or, when *approved* by the *fire code official*, other above-ground tanks that comply with Chapter 34. Tank locations shall be in accordance with Table 2206.2.3.
3. Tanks containing fuels shall not exceed 12,000 gallons (45 420 L) in individual capacity or 48,000 gallons (181 680 L) in aggregate capacity. Installations with the maximum allowable aggregate capacity shall be

separated from other such installations by not less than 100 feet (30 380 mm).

4. Tanks located at farms, construction projects, or rural areas shall comply with Section 3406.2.

5. Fleet service stations. Listed UL 142 above ground storage tanks with spill control, 1,100 gallons (4164L) or less in capacity, may be used to store Class I liquids at fleet service stations.

Motion – Alan Perdue/**Second** – Lon McSwain/**Adopted** with an effective date of January 1, 2015.

Item D-10 Request by Tom Brown and Jeff Griffin, representing the NCBIA, to amend the 2012 NC Residential Code, Section R101.2. The proposed amendment is as follows:

R101.2 Scope. The provisions of the *North Carolina Residential Code for One- and Two-family Dwellings* shall apply to the construction, *alteration*, movement, enlargement, replacement, repair, equipment, use and occupancy, location, removal and demolition of detached one- and two-family dwellings and townhouses not more than three stories above *grade plane* in height with a separate means of egress and their *accessory buildings* and *structures*.

Exception: Live/work units complying with the requirements of Section 419 of the *North Carolina Building Code* shall be permitted to be built as one- and two-family *dwellings* or townhouses. Fire suppression required by Section 419.5 of the *North Carolina Building Code* when constructed under the *North Carolina Residential Code for One- and Two-family Dwellings* shall conform to Section 903.3.1.3 of the *International Building Code*.

R101.2.1 Accessory buildings. Accessory buildings with any dimension greater than 12 feet (3658mm) must meet the provisions of this code. Accessory buildings may be constructed without a masonry or concrete foundation, except in coastal high hazard or ocean hazard areas, provided all of the following conditions are met:

1. The accessory building shall not exceed 400 square feet (37m2) or one story in height; and
2. The building is supported on a wood foundation of minimum 2x6 or 3x4 mudsill of approved wood in accordance with Section R317; and

3. The building is anchored to resist overturning and sliding by installing a minimum of one ground anchor at each corner of the building. The total resisting force of the anchors shall be equal to 20 psf (958 Pa) times the plan area of the building.

R101.2.2 Accessory structures. Accessory structures are not required to meet the provisions of this code except decks, gazebos, retaining walls as required by Section R404.4, detached masonry chimneys built less than 10' from other buildings, pools or spas per appendix G, detached carports.

Exception: Portable lightweight aluminum or canvas type carports not exceeding 400 sq ft or 12' mean roof height and tree houses supported solely by a tree are exempt from the provisions of this code.

Motion – David Smith/**Second** – Ralph Euchner/**Adopted** with an effective date of January 1, 2015.

Item D-11 Request by Tom Brown and Jeff Griffin, representing the NCBIA, to amend the 2012 NC Residential Code, Chapter 2 DEFINITIONS. The proposed amendment is as follows:

ACCESSORY BUILDING. In one- and two-family dwellings not more than three stories high with separate means of egress, a building, the use of which is incidental to that of the main building and which is detached and located on the same lot. An accessory building is a building that is roofed over and more than 50% of its exterior walls are enclosed. Examples of accessory buildings are garages, storage buildings, workshops, boat houses, etc…

ACCESSORY STRUCTURE. Accessory structure is any structure not roofed over and enclosed more than 50% of its perimeter walls, ~~that is not considered an accessory building~~ located on one- and two-family dwelling sites which is incidental to that of the main building. Examples of accessory structures are, but not limited to; fencing, decks, gazebos, arbors, retaining walls, barbecue pits, detached chimneys, tree houses (supported by tree only), playground equipment, yard art, etc. Accessory structures are not required to meet the provisions of this code except; decks, gazebos, retaining walls as required by Section R404.4, detached masonry chimneys built less than 10' from other buildings, pools or spas per appendix G, detached carports. ~~are not required to meet the provisions of this code.~~

Motion – David Smith/**Second** – Ralph Euchner/**Adopted** with an effective date of January 1, 2015.

Item D-12 Request by Tom Brown and Jeff Griffin, representing the NCBIA, to amend the 2012 NC Residential Code, TABLE R302.1. The proposed amendment is as follows:

TABLE R302.1
EXTERIOR WALLS

EXTERIOR WALL ELEMENT		MINIMUM FIRE-RESISTANCE RATING	MINIMUM FIRE SEPARATION DISTANCE
Walls	(Fire-resistance rated)	1 hour-tested in accordance with ASTM E 119 or UL 263 with exposure to both sides	< 3 feet
	(Not fire-resistance rated)	0-Hours	≥ 3 feet
Projections	(Fire-resistance rated)	1-Hour on the underside	~~< 2 feet~~ < 3 feet
	(Not fire-resistance rated)	0-Hours	~~≥ 2 feet~~ ≥ 3 feet
Openings	Not Allowed	N/A	< 3 feet
	Unlimited	0-Hours	≥ 3 feet
Penetrations	All	Comply with Section R302.4	< 3 feet
		None Required	≥ 3 feet

For SI: 1 foot=304.8 mm.

Motion – David Smith/**Second** – Ralph Euchner/**Adopted** with an effective date of January 1, 2015.

Item D-13 Request by David Smith, representing the NC BCC Residential Ad-Hoc Committee, to amend the 2012 NC Residential Code, Section R308.4. The proposed amendment is as follows:

R308.4 Hazardous locations. The following shall be considered specific hazardous locations for the purposes of glazing:

1. Glazing in all fixed operable panels of swinging, sliding and bifold doors.

   Exceptions:

   1. Glazed openings of a size through which a 3-inch diameter (76 mm) sphere is unable to pass.
   2. Decorative glazing.

2. Glazing in an individual fixed or operable panel ~~adjacent to a~~ in the same plane as the door where the nearest vertical edge is within 24-inches (610 mm) of the door in a closed position and whose bottom edge is less than 60 inches (1524 mm) above the floor or walking surface.

   Exceptions:

   1. Decorative glazing.

   2. When there is an intervening wall or other permanent barrier between the door and the glazing.

   3. Glazing in walls on the latch side of and perpendicular to the plane of the door in a closed position.

   4. Glazing adjacent to a door where access through the door is to a closet or storage area 3 feet (914 mm) or less in depth.

   5. Glazing that is adjacent to the fixed panel of patio doors.

3. Glazing in an individual fixed or operable panel that meets all of the following conditions:

   3.1. The exposed area of an individual pane is larger than 9 square feet (0.836 m^2); and

   3.2 The bottom edge of the glazing is less than 18 inches (457 mm) above the floor; and

   3.3 The top edge of the glazing is more than 36 inches (914 mm) above the floor; and

   3.4 One or more walking surfaces are within 36 inches (914 mm), measured horizontally and in a straight line, of the glazing.

   Exceptions:

   1. Decorative glazing.

   2. When a horizontal rail is installed on the accessible side(s) of the glazing 34 to 38 inches (864 to 965) above

the walking surface. The rail shall be capable of withstanding a horizontal load of 50 pounds per linear foot (730 N/m) without contacting the glass and be a minimum of 1½ inches (38 mm) in cross sectional height.

3. Outboard panes in insulating glass units and other multiple glazed panels when the bottom edge of the glass is 25 feet (7620 mm) or more above *grade*, a roof, walking surfaces or other horizontal [within 45 degrees (0.79 rad) of horizontal] surface adjacent to the glass exterior.

4. All glazing in railings regardless of area or height above a walking surface. Included are structural baluster panels and nonstructural infill panels.

5. Glazing in doors and enclosures for ~~or walls facing~~ hot tubs, whirlpools, saunas, steam rooms, bathtubs and showers. Glazing enclosing these compartments where the bottom exposed edge of the glazing is less than 60 inches (1524 mm) measured vertically above any standing or walking surface.

   ~~**Exception:** Glazing that is more than 60 inches (1524 mm), measured horizontally and in a straight line, from the water's edge of a hot tub, whirlpool or bathtub.~~

6. Glazing in walls and fences adjacent to indoor and outdoor swimming pools, hot tubs and spas where the bottom edge of the glazing is less than 60 inches (1525 mm) above a walking surface and within 60 inches (1524 mm), measured horizontally and in a straight line, of the water's edge. This shall apply to single glazing and all panes in multiple glazing.

7. Glazing adjacent to stairways, landings and ramps within 36 inches (914 mm) horizontally of a walking surface when the exposed surface of the glazing is less than 60 inches (1524 mm) above the plane of the adjacent walking surface.

   Exceptions:

   1. When a rail is installed on the accessible side(s) of the glazing 34 to 38 inches (864 to 965 mm) above the walking surface. The rail shall be capable of withstanding a horizontal load of 50 pounds per linear (730 N/m) without contacting the glass and be a minimum of 1½ inches (38 mm) in cross sectional height.

   2. The side of the stairway has a guardrail or handrail, including balusters or in-fill panels, complying with Sections R311.7.7 and R312 and the plane of the glazing is more than 18 inches (457 mm) from the railing; or

   3. When a solid wall or panel extends from the plane of the adjacent walking surface to 34 inches (863 mm) to 36 inches (914 mm) above the walking surface and the construction at the top of that wall or panel is capable of withstanding the same horizontal load as a *guard*.

8. Glazing adjacent to stairways within 60 inches (1524 mm) horizontally of the bottom tread of a stairway in any direction when the exposed surface of the glazing is less than 60 inches (1524 mm) above the nose of the tread.

Exceptions:

1. The side of the stairway has a guardrail or handrail, including balusters or in-fill panels, complying with Sections R311.7.7 and R312 and the plane of the glass is more than 18 inches (457 mm) from the railing; or

2. When a solid wall or panel extends from the plane of the adjacent walking surface to 34 inches (864 mm) to 36 inches (914 mm) above the walking surface and the construction at the top of that wall or panel is capable of withstanding the same horizontal load as a *guard*.

Motion to delay item until the June 2014 Council meeting – David Smith/**Second** – Ralph Euchner/Sent to the Residential Committee for review.

Item D-14 Request by David Smith, representing the NC BCC Residential Ad-Hoc Committee, to amend the 2012 NC Residential Code, Section R310.1.1. The proposed amendment is as follows:

R310.1.1 Minimum opening area. All emergency escape and rescue openings shall have a minimum net clear openable area of 4 square feet (0.372 m^2) The minimum net clear opening height shall be 22 inches (558 mm). The minimum net clear opening width shall be 20 inches (508 mm). Emergency escape and rescue openings must have a minimum total glazing area of not less than 5 square feet (0.465 m^2) in the case of a ground floor level window and not less than 5.7 square feet (0.530 $m^{2)}$ in the case of an upper story window.

~~**Exception:** *Grade* floor openings shall have a minimum net clear opening of 5 square feet (0.465 m^2).~~

Motion – David Smith/**Second** – Ralph Euchner/**Adopted** with an effective date of January 1, 2015.

Item D-15 Request by Al Bass, representing the NC BCC Mechanical Committee, to amend the 2012 NC Plumbing Code, Sections 202 & 605.2. The proposed amendment is as follows:

SECTION 202
GENERAL DEFINITIONS

LEAD-FREE PIPE AND FITTINGS. Containing not more than a weighted average of ~~8.0~~ 0.25-percent lead when used with respect to the wetted surfaces of pipes, pipe fittings, plumbing fittings, and fixtures.

WEIGHTED AVERAGE LEAD CONTENT. The weighted average lead content of a pipe, pipe fitting, plumbing fitting, or fixture shall be calculated by using the following formula: For each wetted component, the percentage of lead in the component shall be multiplied by the ratio of the wetted surface area of that component to the total wetted surface area of the entire product to arrive at the weighted percentage of lead of the component. The weighted percentage of lead of each wetted component shall be added together, and the sum of these wetted percentages shall constitute the weighted average lead content of the product. For lead content of materials that are provided as a range, the maximum content of the range shall be used.

605.2 Lead content of water supply pipe and fittings. Pipe and pipe fittings, including valves and faucets, utilized in the water supply system shall have a maximum weighted average of ~~8~~ 0.25-percent lead content when used with respect to the wetted surfaces of pipes, pipe fittings, plumbing fittings, and fixtures.

Exceptions:

1. Pipes, pipe fittings, plumbing fittings, or fixtures, including backflow preventers, that are used exclusively for non-potable services such as manufacturing, industrial processing, irrigation, outdoor watering, or any other uses where the water is not anticipated to be used for human consumption; or

2. Toilets, bidets, urinals, fill valves, flushometer valves, tub fillers, shower valves, service saddles, or water distribution main gate valves that are 2-inches in diameter or larger.

Motion – Al Bass/**Second** – Ralph Euchner/**Adopted as Modified** with an immediate effective date of June 1, 2014.

Part E – Reports

Chairman's Report

-Dan Tingen discussed the future NC BCC scheduling.

-Dan Tingen discussed developing code book commentary.

Ad Hoc Committee Reports

There were none.

Standing Committee Reports

-Cindy Register reported that the Electrical Committee met and she will set up another meeting at the State Construction office prior to the June BCC meeting.

-Steve Knight reported that the Chapter 36 Committee met.

Staff Reports

There were none.

Public Comments

-Doug Maples, City of Fayetteville, asked when the Six-year Code Cycle would happen. Dan Tingen stated that he would appoint an ad-hoc committee, with the proper lead time, to schedule it so that it will happen by January 2019.

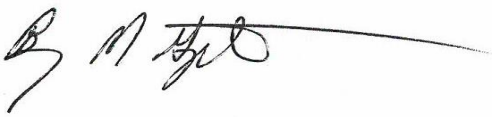
-Jerry Gentle, with Schneider Electric, discussed whether the entire NEC would be on the three-year code cycle.

-Mark Matheny, representing the NCBIA, asked how the 2015 NC Existing Building Code would fit into the new code cycles. Dan Tingen stated that the BCC had already adopted it as a stand-alone volume and therefore would not be part of the cycle.

Part F – Appeals

- **Ham's – NCDOI** – Monday, March 10, 2014 at 2:00pm. **Discontinued.**
- **Robertson – NCDOI** – Monday, March 10, 2014 was held at 9:00am.

Sincerely,



Barry Gupton, P.E.
Secretary, NC Building Code Council