

Minutes of the North Carolina Building Code Council
March 8-9, 2010
Raleigh, NC

All members of the North Carolina Building Code Council were present for the Meeting with the exception of Paula Strickland. All members were present for the Work Session and Hearing except Paula Strickland.

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 14-15, 2010 at the NC Department of Insurance, OSFM, 322 Chapanoke Road, Raleigh, North Carolina, 27603 in the classroom downstairs.

At the start of the meeting, Lon McSwain was introduced as replacing Butch Simmons as the Building Inspector Representative. Prior to the meeting Mr. McSwain was sworn in.

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 8, 2009 NC Building Code Council Meeting.

Motion – Al Bass/Second – Hawley Truax/Passed – The December 8, 2009 minutes were approved.

Item A – 3 Rules Review Commission Meeting Report

Barry Gupton reports on the last items that were submitted to the Office of Administrative Hearing. Of the submitted items, the OAH lawyers were concerned for the Carbon Monoxide code change due to ambiguity. The OAH lawyer had requested that the language be changed in R313.1.1 of the Residential Code from the ICC code language "...located in the immediate vicinity of the bedrooms ..." to "...as directed by the alarm manufacturer...". David Smith made a motion to accept the modified language, and Al Bass seconded the motion. The motion passed unanimously. This modification will be presented to OAH again at their next meeting.

Item A – 4 Public Comments

Vaughn Wicker, with ICC, introduced Shawn Martin. Shawn will be an additional ICC contact located in the Charlotte area.

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 2010 meeting.

Item B – 1 Request by Robert Kinniburgh, to amend the 2009 NC Fire Prevention Code, Section 2403. The proposed amendment is as follows:

SECTION 2403 – TEMPORARY TENTS, CANOPIES AND MEMBRANE STRUCTURES

2403.5 Use Period. Temporary tents, air-supported, air inflated or tensioned membrane structures and canopies ~~shall not be erected for period more than 180 days within a 12 month period on a single premise~~ shall be erected for a period of less than 180 consecutive days or a maximum of 179 days in any 12 month period.

2403.8.2 Location. Tents and canopies or membrane structures shall not be located within 20 feet (6096 mm) of lot lines, buildings, other tents, canopies or membrane structures, parked vehicles or internal combustion engines. For the purpose of determining required distances, support ropes and guy wires shall be considered part of the temporary membrane structure, tent or canopy.

Exceptions:

1. Separation distance between membrane structures, tents and canopies not used for cooking, is not required when the aggregate floor area does not exceed 15,000 square feet (1394 m²).
2. Membrane structures, tents and canopies need not be separated from buildings when all of the following conditions are met:
 - 2.1 The aggregate floor area of the membrane structure, tent or canopy shall not exceed 10,000 square feet (929 m²).

- ~~2.2 The aggregate floor area of the building and membrane structure, tent or canopy shall not exceed the allowable floor area including increases as indicated in the *International Building Code*.~~
- 2.3 Required means of egress provisions are provided for both the building and the membrane structure, tent or canopy, including travel distance.
- 2.4 Fire apparatus access roads are provided in accordance with Section 503.

Staff Note:

During the Monday business meeting, Chief Kinniburgh explained that this change was to correlate the language in the fire code to the language in the building code.

Motion – Alan Perdue/Second – Kim Reitterer/Passed – The Petition was granted unanimously.

Item B – 2 Request by Art Weirauch, with Omega Flex, Inc., to amend the 2009 NC Fuel Gas Code, Section 310.2. The proposed amendment is as follows:

Add to Section 310.2

Exception: CSST which has been tested and shown to be resistant to lightning energy shall be bonded in accordance with the National Electrical Code NFPA 70 and the CSST manufacturer's installation instructions.

Staff Note:

Art Weirauch identified during the Tuesday meeting that the December 2009 code change addressing an increased ground in CSST is not consistent with the instructions for the Omega Flex CSST.

Motion – John Hitch/Second – Al Bass/Passed – The Petition was granted unanimously and was referred to the Joint Fuel Gas/Electrical Committee.

Item B – 3 Request by David Smith, Building Code Council, to amend the 2009 NC Residential Code, FIGURE R301.2(4). The proposed amendment is as follows:

BASIC DESIGN WIND VELOCITIES FOR MOUNTAIN REGIONS

FIRST FLOOR FINISH CONTROLLING ELEVATION IN FEET^{1,2,3,4,5}	DESIGN WIND (MPH)
Less than 2,700 or less	90
2,700 to less than 3,000 feet	100
3,000 to less than 3,500 feet	110
3,500 to less than 4,500 feet	120
4,500 feet or greater and above	130

For SI: 1 foot = 304.8, 1 mile per hour = 0.44 m/s.

- ~~1. Wind velocities are to apply to all mountain tops, crests, knobs, or peaks as named on the USGS Quadrangle maps.~~
- ~~2. Effect of the 130 mph wind is to extend downward from crest for 200 feet or to the controlling elevation for 120 mph wind, whichever is the lesser.~~
- ~~3. Effect of the 120 mph wind is to extend downward from crest for 100 feet or to the controlling elevation for 110 mph wind, whichever is the lesser.~~
- ~~4. Effect of the 110 mph wind is to extend downward from crest for 70 feet or to the controlling elevation for 100 mph wind, whichever is the lesser.~~
- ~~5. Effect of the 100 mph wind is to extend downward from crest for 50 feet or to the controlling elevation for 90 mph wind, whichever is the lesser.~~

FIGURE R301.2(4)—continued BASIC DESIGN WIND SPEEDS FOR 50-YEAR MEAN RECURRENCE INTERVAL – Delete the Mountain Peak DIAGRAM

Staff Note:

David Smith, the Chair of the Residential Committee brought this change forward as a result of requests made by the members within the Residential Ad-Hoc committee and the subsequent conversation with the Residential standing committee members.

Motion – David Smith/Second – Mack Nixon/Passed – The Petition was granted unanimously. No referral to committee was made.

Item B – 4 Request by David Smith, Building Code Council, to amend the 2009 NC Residential Code, Section R202 Definitions. The proposed amendment is as follows:

ATTIC STORAGE. A floored area, regardless of size, within an attic space that is served by an attic access.

Exception: A floor walkway not less than 24 inches wide or greater than 48 inches wide that serves as an access for the service of utilities and/or equipment, and a level service space not less than 30 inches deep or greater than 48 inches deep and not less than 30 inches wide or greater than 48 inches wide at the front or service side of the appliance, shall not be considered as attic storage. Such floored area shall be labeled at the attic access opening, “NOT FOR STORAGE”. The lettering shall be a minimum of 2 inches in height.

Staff Note:

David Smith, the Chair of the Residential Committee brought this change forward as a result of discussions with the Residential Standing Committee members.

Motion – David Smith/Second – Al Bass/Passed – The Petition was granted unanimously. This change was not referred to committee.

Item B – 5 Request by Kevin Cochran, with Free Rain, to amend the 2009 NC Plumbing Code, APPENDIX I. The proposed amendment is as follows:

SECTION I101 GENERAL

I101.1 Scope. The provisions of this appendix shall govern the materials, design, construction and installation of rain water systems for automatic clothes washers, flushing of water closets, flushing of urinals, and cooling tower make up water, and cleaning applications (i.e. equipment washing, floor washing, indoor/outdoor spigots). Nothing in this appendix shall be construed to restrict the use of rain water for outdoor irrigation.

I101.3 Definition. The following terms shall have the meaning shown herein.

CONDENSATE. Condensed water collected from the surfaces of an air conditioning unit's evaporator coils or a dehumidifier unit's evaporator coils.

RAIN WATER. Water collected from runoff of roofs or other structures after a rain event. Rain water may also include condensate.

I101.4 Permits. Check with the local authority having jurisdiction for permit requirements.

I101.5 Installation. In addition to the provisions of Section I101, systems for flushing of water closets, flushing of urinals, and cooling tower make up water shall comply with Section I102. Except as provided for in Appendix I, all systems shall comply with the provisions of the 2006 North Carolina State Plumbing Code.

I101.6 Materials. Above-ground drain, waste and vent piping for rain water systems shall conform to one of the standards listed in Table 702.1. Rain water underground building drainage and vent pipe shall conform to one of the standards listed in Table 702.2.

I101.7 Tests. Drain, waste and vent piping for rain water systems shall be tested in accordance with Section 312.

I101.8 Inspections. Check with the local authority having jurisdiction for inspection requirements.

I101.9 Potable water connections. Only connections in accordance with Section I102.3 shall be made between a rain water harvesting system and a potable water system.

I101.10 Collection reservoir. Rain water shall be collected in an approved reservoir constructed of durable, nonabsorbent and corrosion-resistant materials. The reservoir shall be a closed vessel. Access openings shall be provided to allow inspection and cleaning of the reservoir interior.

I101.11 Filtration. Rain water shall pass through filter system suitable for intended use prior to distribution.

I101.12 Overflow. The overflow pipe discharge shall indirectly flow to the normal storm water drainage system and shall be sized equal to or larger than the influent pipe.

I101.13 Drain. A method for draining the collection reservoir shall be provided and shall not be connected to the sanitary drainage.

I101.14 Venting required. The reservoir shall be provided with venting to allow for the induction and release of air to allow for the proper operation of the reservoir.

SECTION I102 SYSTEMS FOR FLUSHING WATER CLOSETS AND URINALS

I102.2 Disinfection. Rain water shall be disinfected by an approved method that employs one or more disinfectants, such as chlorine, iodine, ozone, UV, or other approved disinfectants.

I102.3 Makeup water. Potable water shall be supplied as a source of makeup water for the rain water system. The potable water supply shall be protected against backflow by the installation of an air gap device or in accordance with Section 608.

I102.4 Materials. Distribution piping shall conform to one of the standards listed in Table 605.4.

I102.5 Identification. Distribution plumbing fixtures and reservoirs shall be identified as containing non-potable water. Piping shall be purple and identified in accordance with Section 608.8.

Motion – Mack Nixon/Second – David Smith/Passed – The Petition was granted unanimously and was referred to the plumbing and mechanical committee to coordinate with Item C-7.

Staff Note:

Items B-6 through B-13 are the amendment packages for the 2012 codes. The amendments will be posted in code format on the DOI/OSFM website before May18th, 2010.

Item B – 6 2012 NC Building Code Amendments

A petition put forward by John Hitch to adopt the ad-hoc committee amendments to the 2009 ICC Building Code for publication as the 2012 NC Building Code.

Motion – Bob Ruffner/Second – Steve Knight/Passed – The Petition was granted unanimously.

Item B – 7 2012 NC Fire Code Amendments

A petition put forward by Alan Perdue to adopt ad-hoc committee amendments to the 2009 ICC Fire Code for publication as the 2012 NC Fire Code.

Motion – Alan Perdue/Second – Lon McSwain/Passed – The Petition was granted unanimously.

Item B – 8 2012 NC Fuel Gas Code Amendments

A petition put forward by Ralph Euchner to adopt ad-hoc committee amendments to the 2009 ICC Fuel Gas Code for publication as the 2012 NC Fuel Gas Code.

Motion – Ralph Euchner/Second – Mack Nixon/Passed – The Petition was granted unanimously.

Item B – 9 2012 Mechanical Code Amendments

A petition put forward by Al Bass to adopt ad-hoc committee amendments to the 2009 ICC Mechanical Code for publication as the 2012 NC Mechanical Code.

Motion – Al Bass/Second – Ralph Euchner/Passed – The Petition was granted unanimously.

Item B – 10 2012 Plumbing Code Amendments

A petition put forward by Al Bass to adopt ad-hoc committee amendments to the 2009 ICC Plumbing Code for publication as the 2012 NC Plumbing Code.

Motion – Al Bass/Second – Jack Neel/Passed – The Petition was granted unanimously.

Item B – 11 2012 Residential Code Amendments

A petition put forward by David Smith to adopt ad-hoc committee amendments to the 2009 ICC Residential Code for publication as the 2012 NC Residential Code.

Motion – Jack Neel/Second – Alan Perdue/Passed – The petition was granted unanimously.

Staff Note:

The Chairman has asked that the Residential Code contained abridged portions of the Electrical, Mechanical and Plumbing Code. The Residential Code will not be completed until the 2011 NC Electrical Code has been adopted and the appropriate portions have been inserted.

Item B-11(A) 2012 Residential Code Amendments (without sprinklers)

The Chairman identified that a parallel code change for the Residential Code be prepared without sprinklers so that this controversial item does not slow the adoption of the overall code.

Staff Note:

The staff has been asked to prepare a code change petition to delete Section 313.1 for sprinklers while amending the other portions of the code that has been changed to accommodate sprinklers.

Motion – David Smith/Second – Tom Turner. Amended by David Smith and seconded by Kim Reitterer. The amendment and motion was approved unanimously.

Item B – 12 2012 Energy Conservation Code

A petition put forward by Tom Turner to adopt ad-hoc committee amendments to the 2009 ICC Energy Conservation Code for publication as the 2012 NC Energy Conservation Code.

Motion – Tom Turner/Second – Jack Neel/Passed – The Petition was granted unanimously.

Item B – 13 Energy System Verification

A petition put forward by Tom Turner to address HVAC verification in parallel to the adoption of the Energy Conservation code. This was taken out of the adoption for the Energy Conservation Code with concern that questions of this section would slow adoption of the overall code.

Motion – Tom Turner/Second – Jack Neel/Passed – The Petition was granted unanimously.

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 on March 8, 2010 and the Final Adoption meeting may take place on or after June 15, 2010. The end of the public comment period for written submissions is July 16, 2010.

Item C – 1 Item C – 1 Request by Bryan Readling, PE, to amend the 2009 NC Building Code, Table 503. The proposed amendment is as follows:

Add the following footnote (e) to table 503, Allowable Height and Building Areas

e. For group B, Group R-1 and Group R-2 Occupancies of Type V-A construction, the permitted increase of one story allowed by Section 504.2 may be increased to two stories and the maximum building height may be increased by 20 feet when all of the following conditions are met:

1. An automatic fire-extinguishing system complying with Section 903.3.1.1 (NFPA 13) is installed throughout with the installation of quick-response sprinkler heads in all areas where the use of these heads is allowed by NFPA 13.
2. Vertical exit enclosures are constructed as Smoke proof enclosures in accordance with Section 909.20.

Add footnote “e” to three cells in table 503

Type V-A, group B, R-1 and R-2

Bryan Readling, PE, with APA, recommends the Council adopt this code change.

Rob Kinniburgh, with the Charlotte Fire Department, opposed the code change and recommends it to be sent back to committee.

Item C – 2 Request by Louie Mullikin, with ALM Investments d.b.a Bath Fitter, to amend the 2009 NC Plumbing Code, Section 417.3 and Table 709.1. The proposed amendment is as follows:

417.3 Shower waste outlet.

Exception: Retaining pre-existing 1 ½ inch in diameter waste outlets shall be permitted when removing an existing bathtub and installing in its place a shower.

Table 709.1 shall be correspondingly amended to reduce the minimum size of trap for a shower from ~~2 inches~~ to 1 ½ inches.

James Merrill, City of Raleigh Inspector, opposed the code change.

Joe Vetter, City of Raleigh Inspector, opposed the code change.

Item C – 3 Request by Staff, on behalf of the NC Building Code Council, to adopt the 2009 International Codes with NC Amendments as the 2012 NC State Building Codes.

- 2012 NC Building Code
- 2012 NC Energy Conservation Code
- 2012 NC Fire Code
- 2012 NC Fuel Gas Code
- 2012 NC Mechanical Code
- 2012 NC Plumbing Code
- 2012 NC Residential Code

The NC Amendment packages, produced by the Ad-Hoc Committees, will be posted online prior to 5/17/2010 for public review and comment. The written public comment period expires on July 16, 2010.

There were no comments from the public. This item will be readvertised for public comment for the June meeting.

Item C – 4 Request by William Rakatansky, FAIA, to amend the 2009 NC Fire Code, Section 3405.5.1. The proposed amendment is as follows:

3405.5.1 Corridor installations. Where wall-mounted dispensers containing alcohol-based hand rubs are installed in *corridors*, they shall be in accordance with all of the following:

1. ~~Aerosol containers shall not be allowed in corridors.~~ Level 2 and Level 3 aerosol containers shall not be allowed in corridors.
2. The maximum capacity of each Class I or II liquids dispenser shall be 41 ounces (1.21 L) and the maximum capacity of each Level 1 aerosol dispenser shall be 18 ounces (0.51 kg).
3. The maximum quantity allowed in a *corridor* within a *control area* shall be 10 gallons (37.85 L) of Class I or II liquids or 1135 ounces (32.2 kg) of Level 1 aerosols, or a combination of Class I or II liquids and Level 1 aerosols not to exceed, in total, the equivalent of 10 gallons (37.85 L) or 1135 ounces (32.2 kg) such that the sum of the ratios of the liquid and aerosol quantities divided by the allowable quantity of liquids and aerosols, respectively, shall not exceed one.
4. The minimum *corridor* width shall be 72 inches (1829 mm).

5. Projections into a *corridor* shall be in accordance with Section 1003.3.3.

William Rakatansky, FAIA, recommends the Council adopt this code change.

Item C – 5 Request by David Smith, NC Building Code Council, to amend the 2009 NC Residential Code, Section R802.3.1. The proposed amendment is as follows:

R802.3.1 Ceiling joist rafter connections. Ceiling joists and rafters shall be nailed to each other in accordance with Table R802.5.1(9), and the rafter shall be nailed to the top wall plate in accordance with Table R602.3(1). Ceiling joists shall be continuous or securely joined in accordance with Table R802.5.1(9) where they meet over interior partitions and are nailed to adjacent rafters to provide a continuous tie across the building when such joists are parallel to the rafters.

Where ceiling joists are not connected to the rafters at the top wall plate, joists connected higher in the attic shall be installed as rafter ties, or rafter shall be installed to provide a continuous tie. Where ceiling joists are not parallel to rafters, rafter ties shall be installed. Rafter ties shall be a minimum of 2-inch by 4-inch (51 mm by 102 mm) (nominal), installed in accordance with the connection requirements in Table R802.5.1(9), or connections of equivalent capacities shall be provided. Where ceiling joists or rafter ties are not provided, the ridge formed by these rafters shall be supported by a wall or girder designed in accordance with accepted engineering practice.

Rafter ties shall be spaced not more than 4 feet (1219 mm) on center.

Collar ties or ridge straps to resist win uplift shall be connected in the upper third of the attic space in accordance with Table R602.3(1).

A 1-inch by 6-inch or 2-inch by 4-inch (25 mm by 153 mm or 51 mm by 102 mm) collar tie shall be nailed in the upper third of the roof to every third pair of rafters not to exceed 4-feet (1219 mm) on centers. Collar ties shall be connected to the rafters as specified in Table R602.3(1) for rafter ties.

There were no comments from the public.

Item C – 6 Request by Alan Perdue, NC Building Code Council, to amend the 2009 NC Fire Code, Sections 3301.2.4, 3302, 3308.2, and 3308.3. The proposed amendment is as follows:

Section 3301.2.4 Financial responsibility. Before a permit is issued, as required by Section 3301.2, the applicant shall file with the jurisdiction a corporate surety bond in the principal sum of \$100,000 500,000 or a public liability insurance policy for the same amount.

Section 3302 DEFINITIONS

DISPLAY OPERATOR. An individual who exhibits, uses, handles, manufactures, or discharges pyrotechnics at a concert or public exhibition in this State and possesses a Display Operator's Permit issued by the Office of State Fire Marshal.

DISPLAY OPERATOR'S PERMIT. A permit issued by the Office of State Fire Marshal to an individual in accordance with North Carolina General Statutes, Chapter 58, Article 82A.

3308.2 Permit application. *Add the following to the end of the section.* Prior to issuing any fireworks permits regulated by this code, the fire code official shall verify that permission has been granted to conduct a fireworks display by the board of county commissioners in accordance with NC G.S. 14-410.

3308.3 Approved fireworks displays. Approved displays shall include only the approved Division 1.1G, 1.3G, 1.4G and 1.4S fireworks. Approved Division 1.1G, 1.3G and 1.4G displays shall be handled by a display operator possessing a Display Operator's Permit issued by the Office of State Fire Marshal. Prior to granting approval to any fireworks display, the fire code official shall verify that the display operator and the display operator's assistants are properly permitted in accordance with the NC Fireworks Display Operator's rules regulated by the Office of State Fire Marshal.

There were no comments from the public.

Item C – 7 Request by Kim Reitterer and Al Bass, NC Building Code Council, to add Appendix H, Rainwater Harvesting, to the 2009 NC Plumbing Code. The proposed amendment is as follows:

The text has been posted on the NCDOI website at the following link.

September 15, 2009 (Item B-7, Rainwater Harvesting)

http://www.ncdoi.com/OSFM/Engineering/BCC/engineering_bcc_minutes.asp

Sally Hoyt, with UNC Chapel Hill, opposed the code change.

Kevin Cochran, with Free Rain, opposed the code change.

Mike Ruck, with Rainwater Solutions, opposed the code change.

Eddie Van Giesen, opposed the code change.

Gene Smelik, with Kinetico Advanced Water Systems, opposed the code change.

Jim Bartl, AIA, opposed the code change and recommends sending back to committee.

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 7, 2009. The Final Adoption meeting took place on March 9, 2010. The Council will give no further consideration to Petitions that are disapproved. Petitions that are approved will proceed through the Rulemaking process with an effective date of January 1, 2012, unless otherwise noted.

Item D – 1 Request by Jeff Griffin, Mecklenburg County, to amend the 2009 NC Building Code. The proposed amendment is as follows:

Section 3103 Temporary Structures

3103.1 General. The provisions of this section apply to structures erected for a period of less than 180 days. ~~Tents and other membrane structures erected for a period of less than 180 days shall comply with the International Fire Code.~~ Those erected for a longer period of time shall comply with ~~the~~ all applicable sections of ~~this~~ the Building Code.

Exception: Tents, canopies and membrane structures erected for a period of less than 180 days shall comply with Chapter 24 of the International Fire Code.

Motion – Tom Turner/Second – Cindy Browning/Granted – The motion was adopted unanimously.

Item D - 2 Request by Victor Hines, Jr., to amend the 2009 NC Plumbing Code.

The following substitute modification was introduced to amend the 2009 NC Plumbing Code with the 2009 IPC language.

608.8 Identification of nonpotable water. In ~~all~~ buildings where ~~two or more water distribution systems, one potable water and the other nonpotable water~~ systems are installed, ~~each system~~ the piping conveying the nonpotable water shall be identified either by color marking or metal tags in accordance with Sections 608.8.1 through 608.8.3. All nonpotable water outlets such as hose connections, open ended pipes, and faucets shall be identified at the point of use for each outlet with the words, “Nonpotable – not safe for drinking.” The words shall be indelibly printed on a tag or sign constructed of corrosion-resistant waterproof material or shall be indelibly printed on the fixture. The letters of the words shall be not less than 0.5 inches in height and color in contrast with the background on which they are applied.

608.8.1 Information. Pipe identification shall include the contents of the piping system and an arrow indicating the direction of flow. Hazardous piping systems shall also contain information addressing the nature of the hazard. Pipe identification shall be repeated at maximum intervals of 25 feet (7620 mm) and at each point where the piping passes through a wall, floor or roof. Lettering shall be readily observable within the room or space where the piping is located.

608.8.2 Color. The color of the pipe identification shall be discernable and consistent throughout the building. See Table 608.8.2 for color identification. The color purple shall be used to identify reclaimed, rain and gray water distribution systems.

Table 608.8.2 Identification Color – Deleted.

Motion – Al Bass/Second – David Smith/Granted – The motion was adopted unanimously.

Item D – 3 Request by Victor Hines, Jr., to amend the 2009 NC Plumbing Code.

The following substitute modification was introduced to amend the 2009 NC Plumbing Code with the 2009 IPC language.

702.1 Above-ground sanitary drainage and vent pipe. Above-ground soil, waste and vent pipe shall conform to one of the standards listed in Table 702.1.

Exception: Plastic pipe shall not be used for drain, waste and vents in buildings in which the top occupied floor exceeds 75 feet in height.

702.4 Fittings. Pipe fittings shall be approved for installation with the piping material installed and shall conform to the respective pipe standards or one of the standards listed in Table 702.4.

Exception: Plastic pipe shall not be used for drain, waste and vents in buildings in which the top occupied floor exceeds 75 feet in height.

1102.2 Inside storm drainage conductors. Inside storm drainage conductors installed above ground shall conform to one of the standards listed in Table 702.1.

Exception: Plastic pipe shall not be used for storm drainage conductors in buildings in which the top occupied floor exceeds 75 feet in height.

1102.7 Fittings. Pipe fittings shall be approved for installation with the piping material installed, and shall conform to the respective pipe standards or one of the standards listed in Table 1102.7. The fittings

shall not have ledges, shoulders or reductions capable of retarding or obstructing flow in the piping. Threaded drainage pipe fittings shall be of the recessed drainage type.

Exception: Plastic pipe shall not be used for storm drainage conductors in buildings in which the top occupied floor exceeds 75 feet in height.

Motion – Al Bass/Second – Mack Nixon/Granted – The motion was adopted unanimously.

Item D – 4 Request by Jeff Griffin, Mecklenburg County, to amend the 2009 NC Residential Code. The proposed amendment is as follows:

Section R404.1 Concrete and Masonry Foundation Walls. Concrete and masonry foundation walls shall be selected and constructed in accordance with the provisions of Section R404 or in accordance with ACI 318, ACI 332, NCMA TR68-A or ACI 530/ASCE 5/TMS 402 or other approved structural standards. When ACI 318, ACI 332 or ACI 530/ASCE 5/TMS 402 or the provisions of Section R404 are used to design concrete or masonry foundation walls, project drawings, typical details and specifications are not required to bear the seal of the architect or engineer responsible for design, unless otherwise required by the state law of the jurisdiction having authority.

Delete the second paragraph without substitution:

~~Foundation walls that meet all of the following shall be considered laterally supported:~~

- ~~1. Full basement floor shall be 3.5 inches (89mm) thick concrete slab poured tight against the bottom of the foundation wall.~~
- ~~2. Deleted.~~
- ~~3. Bolt spacing for the sill plate shall be no greater than 36 inches (914mm).~~
- ~~4. Deleted.~~
- ~~5. Where foundation walls support unbalanced load on opposite sides of the building, such as a daylight basement, the building aspect ratio, L/W, shall not exceed the value specified in Table R404.1(3). For such foundation walls, the rim board shall be attached to the sill with a 20 gage metal angle clip at 24" on center, with five 8d nails per leg, or an approved connector supplying 230 pounds per linear foot (3.336kN/m) capacity.~~

Also Delete Table R404.1(3) referenced above.

Motion – David Smith/Second – Mack Nixon/Granted – The motion was adopted unanimously.

Item D – 5 Request by Robert Wydra, with A Safe Child, to amend the 2009 NC Residential Code. The proposed amendment is as follows:

Add a new AG105.2 Item 9.3:

9.3 Mesh pool fencing that complies with ASTM F2286-05.

Change current ~~9.3~~ to 9.4 and last line to “9.1, 9.2 or 9.3 described above”.

Motion – David Smith/Second – Tom Turner/Denied – The motion was disapproved unanimously.

Item D – 6 Request by Alan Perdue, NCBC, to amend the 2009 Fuel Gas Code, Section 406.7. The proposed amendment is as follows:

406.7 Purging. Purging of piping shall comply with Sections 406.7.1 through 406.7.4.

406.7.1 Removal from service. Where gas piping is to be opened for servicing, addition, or modification, the section to be worked on shall be turned off from the gas supply at the nearest convenient point, and the line pressure vented to the outdoors, ~~or to ventilated areas of sufficient size to prevent accumulation of flammable mixtures.~~ The remaining gas in this section of pipe shall be displaced with an inert gas as required by Table 406.7.1.

Exception: If the line pressure cannot be vented to the outdoors; the building and all effected spaces shall be evacuated of personnel not purging the gas lines, quantities of flammable gas shall not exceed 25% of the lower explosive limit as measured by a combustible gas detector, eliminate all ignition sources and provide adequate ventilation to prevent accumulation of flammable gases.

**TABLE 406.7.1
LENGTH OF PIPING REQUIRING PURGING WITH
INERT GAS FOR SERVICING OR MODIFICATION**

NOMINAL PIPE SIZE (inches)	LENGTH OF PIPING REQUIRING PURGING
2 ¹ / ₂	> 50 feet
3	> 30 feet
4	> 15 feet
6	> 10 feet
8 or larger	Any length

For SI: 1 inch = 25.4 mm, 1 foot = 304.8 mm.

406.7.2 Placing in operation. Where piping full of air is placed in operation, the air in the piping shall be displaced with fuel gas, except where such piping is required by Table 406.7.2 to be purged with an inert gas prior to introduction of fuel gas. The fuel gas flow shall be continued without interruption until the vented gas is free of air. After purging, the vent shall then be closed. Where required by Table 406.7.2, the air in the piping shall first be displaced with an inert gas, and the inert gas shall then be displaced with fuel gas.

**TABLE 406.7.2
LENGTH OF PIPING REQUIRING PURGING WITH
INERT GAS BEFORE PLACING IN OPERATION**

NOMINAL PIPE SIZE (inches)	LENGTH OF PIPING REQUIRING PURGING
3	> 30 feet
4	> 15 feet
6	> 10 feet
8 or larger	Any length

For SI: 1 inch = 25.4 mm, 1 foot = 304.8 mm.

406.7.3 Discharge of purged gases. The open end of piping systems being purged shall not discharge into confined spaces or areas where quantities of flammable gas can exceed 25% of the lower explosive limit as measured by a combustible gas detector. All potential sources of ignition shall be identified and eliminated or controlled. Precautions shall be taken to maintain the concentration of the flammable gas below 25% of the lower explosive limits, such as adequate ventilation, control of the purging rate and other measures, as appropriate.

406.7.4 Placing appliances and equipment in operation. After the piping system has been placed in operation, all appliances and equipment shall be purged and then placed in operation, as necessary.

406.7.5 Personnel Training. Personnel performing purging operation shall be trained to the hazards associated with purging and shall not rely on odor when monitoring the concentration of combustible gas.

This Petition for Rulemaking was adopted as an Emergency Rule to be effective 10/15/09. The notice and text has been posted on the NCDOT website at the following link.

http://www.ncdot.com/OSFM/Engineering/BCC/engineering_bcc_temp_rules.asp

Motion – Al Bass/Second – Ralph Euchner/Approved – The motion was to approve as amended.

The amendment was as follows:

406.7 Purging. Purging of 2 ½ inch nominal pipe size or larger piping shall comply with Sections 406.7.1 through 406.7.4.

406.7.1 Removal from service. Where gas piping is to be opened for servicing, addition, or modification, the section to be worked on shall be

turned off from the gas supply at the nearest convenient point, and the line pressure vented to the outdoors, ~~or to ventilated areas of sufficient size to prevent accumulation of flammable mixtures.~~ The remaining gas in this section of pipe shall be displaced with an inert gas as required by Table 406.7.1.

Exception: If the line pressure cannot be vented to the outdoors; the building and all effected spaces shall be evacuated of personnel not involved with purging the gas lines, quantities of flammable gas shall not exceed 25% of the lower explosive limit (1.0% fuel / air mixture for natural gas or 0.6% fuel / air mixture for LP gas) as measured by a combustibile gas detector, eliminate all ignition sources and provide adequate ventilation to prevent accumulation of flammable gases.

TABLE 406.7.1
SIZE AND LENGTH OF PIPING REQUIRING PURGING WITH INERT GAS FOR SERVICING OR MODIFICATION

NOMINAL PIPE SIZE (Inches)	LENGTH OF PIPING REQUIRING PURGING
2½	> 50 feet
3	> 30 feet
4	> 15 feet
6	> 10 feet
8 or larger	Any length

For SI: 1 inch = 25.4 mm, 1 foot = 304.8 mm.

406.7.2 Placing in operation. Where piping full of air is placed in operation, the air in the piping shall be displaced with fuel gas, except where such piping is required by Table 406.7.2 to be purged with an inert gas prior to introduction of fuel gas. The air can be safely displaced with fuel gas provided that a moderately rapid and continuous flow of fuel gas is introduced at one end of the line and air is vented out at the other end. The fuel gas flow shall be continued without interruption until the vented gas is free of air. The point of discharge shall not be left unattended during purging. After purging, the vent shall then be closed. Where required by Table 406.7.2, the air in the piping shall first be displaced with an inert gas, and the inert gas shall then be displaced with fuel gas.

TABLE 406.7.2
SIZE AND LENGTH OF PIPING REQUIRING PURGING WITH INERT GAS BEFORE PLACING IN OPERATION

NOMINAL PIPE SIZE (Inches)	LENGTH OF PIPING REQUIRING PURGING
3	> 30 feet
4	> 15 feet
6	> 10 feet
8 or larger	Any length

For SI: 1 inch = 25.4 mm, 1 foot = 304.8 mm.

406.7.3 Discharge of purged gases. The open end of piping systems being purged shall not discharge into confined spaces or areas where ~~quantities of flammable gas can exceed 25% of the lower explosive limit as measured by a combustible gas detector.~~ there are sources of ignition unless precautions are taken to perform this operation in a safe manner, by ventilation of the space, control of purging rate and elimination of hazardous conditions All potential sources of ignition shall be identified and eliminated or controlled. Precautions shall be taken to maintain the concentration of the flammable gas below 25% of the lower explosive limits (1.0% fuel / air mixture for natural gas or 0.6% fuel / air mixture for LP gas) such as adequate ventilation and control of purging rate, and other measures as appropriate for the elimination of all hazardous conditions. The point of discharge shall not be left unattended during purging.

406.7.4 Placing appliances and equipment in operation. After the piping system has been placed in operation, all appliances and equipment shall be purged and then placed in operation, as necessary.

406.7.5 Personnel Training. Personnel performing purging operation shall be trained to the hazards associated with purging and shall not rely on odor when monitoring the concentration of combustible gas.

Motion – Alan Perdue/Second – Ralph Euchner/Approved – The motion was made to readvertise as a C-Item at the June meeting due to the substantive change.

Item D – 7 Request by Tom Turner, NC Building Code Council, to amend the 2009 NC Administrative Code, 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.

Motion – Tom Turner/Second – David Smith /Denied – The motion was disapproved unanimously.

Item D – 8 Request by Tom Turner, NC Building Code Council, to amend the 2009 NC Administrative Code, Section 107.3. The proposed amendment is as follows:

107.3 Approval required. Work shall not be done beyond the point indicated in each successive inspection without first obtaining the approval of the code enforcement official. The code enforcement official, upon notification, shall make the requested inspections and shall either indicate the portion of the construction that is satisfactory as completed, or shall notify the permit holder or an agent of the permit holder that the work fails to comply with the technical codes. In the event code violations exist the CEO shall specifically identify the provisions of the technical code found to be inconsistent with the inspection. Any work

that does not comply shall be corrected and shall not be covered or concealed until authorized by the code enforcement official.

Motion – Tom Turner/Second – David Smith/Granted – The substitute petition was approved unanimously.

Item D – 9 Request by Laurel Wright, on behalf of the Residential Committee, to amend the 2009 NC Residential Code, Section R311.6.1. The proposed amendment is as follows:

R311.6.1 Maximum slope. Ramps shall have a maximum slope of one unit vertical in ~~eight units horizontal (12.5 percent slope)~~ twelve units horizontal (8.3-percent slope).

Exception: Where it is technically infeasible to comply because of site constraints, ramps may have a maximum slope of one unit vertical in eight horizontal (12.5-percent slope).

Motion – David Smith/Second – Steve Knight/Granted – The motion was adopted unanimously.

Item D–10 Request by Tom Hunter, Jr., to amend the 2009 NC Building Code and the 2009 NC Fire Code. The proposed amendment is as follows:

Amend the 2009 NC State Building Code as follows:

Section 202. Add the following definition:

Cooperative Innovative High School Program. A program in excess of the required curriculum for high school students in attendance at a college, community college or university.

Section 304.1. Add the following to the list of Group B occupancies:

Education occupancies for high school students participating in Cooperative Innovative High School Programs taught at colleges, community colleges or universities.

Section 305.1. Amend by adding the following underlined text:

305.1 Educational Group E. Educational Group E occupancy includes, among others, the use of a building or structure, or a portion thereof, by six or more persons at any one time for educational purposes through the 12th grade. Religious educational rooms and religious auditoriums, which are accessory to places of religious worship in accordance with Section 508.3.1 and have occupant loads of less than 100, shall be classified as A-3 occupancies. **Education occupancies for high school students participating in Cooperative Innovative High School Programs**

taught at colleges, community colleges or universities shall be classified as Group B occupancies.

Amend the 2009 NC State Fire Code as follows:

**Amend Ch. 2 definitions by including the first two changes above.
Section 202. Add the following definition:**

Cooperative Innovative High School Program. A program in excess of the required curriculum for high school students in attendance at a college, community college or university.

Section 304.1. Add the following to the list of Group B occupancies: Education occupancies for high school students participating in Cooperative Innovative High School Programs taught at colleges, community colleges or universities.

Amend Table 405.2 as follows:

**TABLE 405.2
FIRE AND EVACUATION DRILL
FREQUENCY AND PARTICIPATION**

GROUP OR OCCUPANCY	FREQUENCY	PARTICIPATION
Group A	Quarterly	Employees
Group B ^c	Annually	Employees
Group B ^e	Quarterly	All occupants
Group E	Monthly	All occupants
Group I	Quarterly on each shift	Employees
Group R-1	Quarterly on each shift	Employees
Group R-2d	Four annually	All occupants
Group R-4	Quarterly on each shift	Employees
High-rise buildings	Annually	Employees

a. The frequency shall be allowed to be modified in accordance with Section 408.3.2.

b. Fire and evacuation drills in residential care assisted living facilities shall include complete evacuation of the premises in accordance with Section 408.10.5. Where occupants receive habilitation or rehabilitation training, fire prevention and fire safety practices shall be included as part of the training program.

c. Group B buildings having an occupant load of 500 or more persons or more than 100 persons above or below the lowest level of exit discharge.

d. Applicable to Group R-2 college and university buildings in accordance with Section 408.3.

e. Cooperative Innovative High School Programs taught at colleges, community colleges or universities when required to have a fire alarm system in accordance with Section 907.2.2 or as required in accordance with Section 404.2.

At the request of the Council, Mr. Hunter provided a clarification to the code change as follows:

Amend definition for “Cooperative Innovative High School Program” as follows:

Cooperative Innovative High School Program. A program to supplement the required curriculum for high school students that may require attendance at a college.

Motion – Cindy Browning/Second – Al Bass/Granted – The substitute language was approved unanimously as amended, with an immediate effective date, expected to be May 1.

Part E – Reports

Chairman’s Report

- Dan Tingen asked Staff if the list had been prepared regarding any local modifications that the Council had approved in prior Council meetings. Chris Noles reported that Staff came across eight instances of where the board reviewed and approved local modifications for local jurisdictions. Mr. Tingen asked if Staff could maintain a list of all future instances. Mr. Noles stated that Staff maintains a list on the website dating back to 1999 through the meeting minutes.

- Dan Tingen raised the question of what was required for local code appendices adoptions and that there has been some confusion on what is required in order for those appendices to become enforceable. He asked Brandon Truman to report on his findings of this item. Mr. Truman provided his preliminary opinion based on the information provided to him.

By action of the Building Code Council, Mr. Truman’s responses were amended in the June 15th 2010 Building Code Council meeting to the following: “The impact of the Pinehurst decision (by the Council) is that, for when the local jurisdiction adopts an appendices, that it has to bring that adoption before the council in order for that adoption to be enforceable.”

- Hawley Truax made a motion for the Chair to appoint a Task Force with the parties suggested and to give the Chair the authority to balance the Task Force/Second/Passed.

- The Chair asked that the Task Force meet and have a report ready by the June Council meeting.

- Dan Tingen announced that for the June Council meeting, the Appeal will begin on Monday at 9:00 AM, the Public Hearing will begin on Tuesday at 9:00 AM and the Council meeting will begin at 3:00 PM on Tuesday.

- Dan Tingen discussed the Rehabilitation Code and Jim Bartl reported on how the Code is kept up to date and loaded onto the website. Mr. Bartl also discussed the training and putting together something along with NCBA that would be available both to Code Officials and to Architects and Engineers across the State.

Ad hoc Committee Reports

No Ad Hoc Committee reports

Standing Committee Reports

No Standing Committee reports

Staff Reports

- Chris Noles reported the re-organization of OSFM. He announced that Billy Hinton was moved over to Evaluation Services and asked Mr. Hinton to address the Council on the new section. Mr. Hinton reported that this was a new opportunity to focus on a Green Code for sustainable Energy efficient buildings.

- Tom Turner made a motion for the Chair to appoint a Green Code Ad Hoc Committee/Second – Hawley Truax/Passed

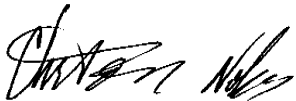
Public Comments

There were no additional comments from the public.

Part F – Appeals

No appeals were heard during this meeting.

Sincerely,



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