

**Minutes of the North Carolina Building Code Council  
September 10-11, 2007  
Raleigh, NC**

All members of the North Carolina Building Code Council were present with the exception of Mack Nixon and Terry Greene.

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 December 10-11, 2007 at the NC Legislative Building, Third Floor Auditorium, 16 West Jones Street, Raleigh, NC 27603.

**Part A – Administrative Items**

**Item A – 1 Executive Order: 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 June 12, 2007 NC Building Code Council Meeting.**

Motion – Barry Maness/Second – Al Bass/Passed – The June 12, 2007 minutes were approved with no amendments.

**Item A – 3 Election of Chair and Vice-Chair to a two year term.**

Bob Ruffner made a motion to elect Dan Tingen as the Chairman. Al Bass seconded. Jack Neel moved that the nomination be closed. Walter Simmons seconded. Dan Tingen will serve another two year term as Chairman.

Tom Turner nominated John Hitch as the Vice-Chair. Bob Ruffner seconded. Jack Neel moved that the nomination be closed. Barry Maness seconded. John Hitch will serve another two year term as the Vice-Chair.

**Item A – 4 Atlantic Beach request for adoption of the current fire code with additional ordinances.**

Barry Gupton reported on staff approval of this item. There is no action required on this item.

**Item A – 5 Rules Review Commission meeting report - 6/28/07 and 8/23/07**

**SECTION 902 DEFINITIONS**

**NIGHTCLUB.** An establishment meeting all of the following:

1. Has a posted capacity or occupant load that exceeds one occupant per 15 square feet net;
2. Provides live or recorded entertainment by performing artists; and
3. Serves alcoholic beverages.

Barry Gupton gave the Rules Review Commission report. The Rules Review Commission requested a clear definition of a “Nightclub” in order to change 903.2.1.2(2). The Building Code Standing Committee has created a definition of “Nightclub”. John Hitch read the definition that was created. A motion was made to accept the definition. The motion was seconded. All were in favor except Alan Perdue.

**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 on or after December 10, 2007.

**Item B – 1 Request by David Smith, Chairman of the Residential Standing Committee, to amend the 2006 NC Residential Code for One and Two Family Dwellings, Section R311.5.6.3. The proposed amendment is as follows:**

**R311.5.6.3 Handrail grip size.** All required handrails shall be of one of the following types or provide equivalent graspability.

1. Type I. Handrails with a circular cross section shall have an outside diameter of at least  $1\frac{1}{4}$  inches (32 mm) and not greater than 2 inches (51 mm). If the handrail is not circular it shall have a perimeter dimension of at least 4 inches (102 mm) and not greater than  $6\frac{1}{4}$  inches (160 mm) with a maximum cross section of dimension of  $2\frac{1}{4}$  inches (57 mm).
2. Type II. Handrails with a perimeter greater than  $6\frac{1}{4}$  inches (160 mm) shall provide a graspable finger recess area on both sides of the profile. The finger recess shall begin within a distance of  $\frac{3}{4}$  inch (19 mm) measured vertically from the tallest portion of the profile and achieve a depth of at least  $\frac{5}{16}$  inch (8 mm) within  $\frac{7}{8}$  inch (22 mm) below the widest portion of the profile. This required depth shall continue for at least  $\frac{3}{8}$  inch (10 mm) to a level that is not less than  $1\frac{3}{4}$  inches (45 mm) below the tallest

portion of the profile. The minimum width of the handrail above the recess shall be 1<sup>1</sup>/<sub>4</sub> inches (32 mm) to a maximum of 2<sup>3</sup>/<sub>4</sub> inches (70 mm). Edges shall have a minimum radius of 0.01 inch (0.25 mm).

**Exception:** Exterior handrails (garages and areas exposed to the weather) shall not be more than 3-1/2 inches in cross-section dimension.

Motion – David Smith/Second – Al Bass/Passed – The Petition was Granted Unanimously.

**Item B – 2 Request by David Smith, Chairman of the Residential Standing Committee, to amend the 2006 NC Residential Code for One and Two Family Dwellings, Section R302.1. The proposed amendment is as follows:**

**R302.1 Exterior walls.** Exterior walls with a fire separation distance less than 3 feet (914 mm) shall have not less than a one-hour fire-resistive rating with exposure from both sides. Projections shall not extend to a point closer than 2 feet (610 mm) from the line used to determine the fire separation distance.

**Exception:** Detached garages accessory to a dwelling located within 2 feet of a lot line shall be permitted to have roof eave projections not exceeding 4 inches.

Projections extending into the fire separation distance shall have not less than one-hour fire-resistive construction on the underside. The above provisions shall not apply to walls which are perpendicular to the line used to determine the fire separation distance.

**Exceptions:**

1. Tool and storage sheds, playhouses and similar structures exempted from permits by Chapter 1 are not required to provide wall protection based on location on the lot. Projections beyond the exterior wall shall not extend over the lot line.
2. In Townhouse construction (with 3 or more attached dwellings) the soffit material shall be securely attached to framing members and shall be constructed using either non-combustible soffit material; fire retardant treated soffit material; vinyl soffit installed over 3/4 inch wood sheathing or 5/8 inch gypsum board; or aluminum soffit installed over 3/4 inch wood sheathing or 5/8 inch gypsum board. Venting requirements shall be provided in both soffit and underlayments. Vents shall be either nominal 2-inch continuous or equivalent intermittent and shall not exceed the minimum net free air requirements established in section R806.2 by more than 50%. Vents in soffit are not allowed within four feet of fire walls or property lines.

Motion – David Smith/Second – Butch Simmons/Passed – The Petition was Granted Unanimously.

**Item B – 3 Request by the Staff of the NC Department of Insurance to adopt the following codes with the NC Amendments:**

- A. 2006 International Building Code, with 2009 NC Amendments
- B. 2006 International Energy Conservation Code, with 2009 NC Amendments
- C. 2006 International Fire Code, with 2009 NC Amendments
- D. 2006 International Fuel Gas Code, with 2009 NC Amendments
- E. 2006 International Mechanical Code, with 2009 NC Amendments
- F. 2006 International Plumbing Code, with 2009 NC Amendments
- G. 2006 International Residential Code, with 2009 NC Amendments
- H. 2008 National Electrical Code, with 2008 NC Amendments

Barry Gupton gave a report on the status of the Code Amendments.

2008 NC/NEC 2008 - The Base Document for the 2008 NC Electrical Code is the 2008 NEC.

2009 NC/ICC 2006 – The Base Documents for the 2009 NC State Building Codes are the 2006 I-Codes.

The NC Amendments are proposed replacements to the Sections printed in the Base Documents.

Proposed amendments may be viewed at the following links:

[http://www.ncdoi.com/OSFM/Engineering/engineering\\_home.asp](http://www.ncdoi.com/OSFM/Engineering/engineering_home.asp)

-STATE BUILDING CODES

-BUILDING CODES - 2009 EDITION - PROPOSED AMENDMENTS

**OR**

<http://www.ncbuildingcodes.com/OSFM/Engineering/BCC/ncbuildingcodes.asp>

-ADOPTED CODE INFORMATION

-NC STATE BUILDING CODES

-BUILDING CODES - 2009 EDITION - PROPOSED AMENDMENTS

The 2006 I-Codes are available at [www.iccsafe.org](http://www.iccsafe.org) for purchase.

The 2008 NEC is available at [www.nfpa.org](http://www.nfpa.org) for purchase.

Single copies are available by November 1, 2007 for **REVIEW ONLY** at the following locations:

Asheville Inspections	828-259-5846
Davie County Inspections, Mocksville	336-753-6050
NC Department of Insurance, Raleigh	919-661-5880 x 254
Greenville Inspections	252-329-4466

The anticipated adoption date of the 2008 NC Electrical Code and the 2009 NC State Building Codes is March 11, 2008.

The proposed effective date for the 2008 NC Electrical Code is **June 1, 2008**.

The proposed effective date for the 2009 NC State Building Codes is **January 1, 2009**.

**Item B – 4 Request by John Hitch, Chairman of the General Construction Standing Committee, to amend the 2006 International Building Code, Table 1017.1 in conjunction with Item 3A above. The Council granted a petition on 9/11/07 to add the following Footnote “f” to Table 1017.1, to “Occupancy B”, unsprinklered. The proposed amendment is as follows:**

**Table 1017.1 Corridor Fire-Resistance Rating.**

f. Exit access corridors are not required to be rated on any single tenant floor or in any single tenant space, when 1-hour rated tenant demising walls are provided between all tenant spaces and 1-hour rated floor/ceiling assemblies are provided in multi-story buildings.

**Item B – 5 Other Requests**

During the June 2007 Meeting the Council decided to table items B – 2 and B - 3 until Curt Willis could give a report on the Pine Knolls Townhouse fires. Curt Willis presented a copy of the report to Dan Tingen. Dan Tingen is going to refer the report to the Residential Committee for their recommendations. Lisa Bossert, with Schirmer Engineering, conducted the Fire Protection Study and gave a report on her findings.

**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 September 10, 2007 and the Final Adoption meeting will take place on or after December 11, 2007.

**Item C – 1 Request by David Smith, Chairman of the Residential Standing Committee, to amend the 2006 NC Residential Code for One and Two Family Dwellings, Section R202. The proposed amendment is as follows:**

R202 Definitions. WINDBORNE DEBRIS REGION. Areas within hurricane-prone regions ~~within 1500 feet (0.452 km) of the mean high water line of the Atlantic Ocean~~ defined as that area east of the inland waterway from the NC/SC State line north to Beaufort Inlet; from that point to include the barrier islands to the NC/VA State line.

Wanda Edwards with IBHS recommended that the Council deny this proposal and support the International Code Council definition for wind borne debris.

Dave Unnewehr of the AI Association, AICP opposed the change and supports the International Code Council definition for wind borne debris.

Ziggy Valemtn with the AAMA opposed the change and supports the International Code Council definition for wind borne debris.

Patricia Robinson of Simonton Windows recommends the Council deny this proposal and support the International Code Council definition for wind borne debris.

Frank Browning of Wayne Dalton Doors recommends the Council deny the proposal and support the International Code Council definition for wind borne debris.

John Ingargiola of FEMA opposes this change and supports the International Code Council definition for wind borne debris.

Amy Burchman with Coastal Awnings and Hurricane Shutters opposes this change and supports the International Code Council definition for wind borne debris.

Roland Temple with PGT Industries opposes the change and supports the International Code Council definition for wind borne debris.

Bruce Fitzsimmons opposes the change and supports the International Code Council definition for wind borne debris.

Jim Long, the Commissioner of Insurance recommends the Council adopt the International Code Council wind borne debris region. He opposes this change.

Joe Stewart opposes the change and supports the International Code Council definition for wind borne debris.

Jay Graham with New Hanover County opposes this change and supports the International Code Council definition for wind borne debris.

A single proponent, Duke Garity, Dare County Homebuilder, recommends the Council approve this item.

**Item C – 2 Request by Bryan Readling, APA – The Engineered Wood Association, to amend the 2006 NC Residential Code for One and Two Family Dwellings, Sections R4404.3.4, R4406.3 and R4408.4. The proposed amendments are as follows:**

**4404.3.4 Exterior Concrete Slab-on-grade Footings.** Vertical reinforcement shall be installed at intervals not to exceed Table 4404.1.1 and shall terminate in a double sole plate.

**Exception:** Vertical reinforcement (anchorage) shall be installed at intervals not to exceed Table 4404.1a where the bars terminate in

a single sole plate. Approved strap anchors or wood structural panels shall be installed to provide a continuous load-path from the single sole plate to the wall.

**4406.3 Gable endwalls.** Gable endwalls in the 110, 120, and 130 mph wind zones shall either be supported by lateral bracing at the ceiling or have continuous studs from the floor to the roof. 2 x 4 studs at 16 inches on center are limited to 10 feet in length between supports. Non bearing 2 x 6 SPR#2 studs at 16 inches on center with 3/8" wood structural panel sheathing are limited to unsupported lengths of 18 feet in 110 mph, 16 feet in 120 mph and 14 feet in 130 mph wind zones. ~~Wood structural panel sheathing shall extend 12 inches beyond construction joints.~~

**4408.4 Anchorage using wood structural panels.** Wood structural panel sheathing may be used to resist both lateral load and uplift simultaneously. Panels shall be installed as follows:

- ~~5. Panels shall extend 12 inches beyond construction joints and shall overlap girders their full depth.~~

Wanda Edwards with IBHS spoke in favor of this code change.

**Item C – 3 Request by David Smith/Barry Gupton, Residential Ad Hoc Committee, to amend the 2006 NC Residential Code, Figure R403.1(1), Section R403.1.4, Table R403.1. The proposed amendment is as follows:**

Figure R403.1(1), Note 1 – Foundation shall extend not less than 12 inches below the finished ~~natural~~ grade or engineered fill and in no case less than the frost line depth. The bottom of the footing shall be supported on natural soil or engineered fill.

Section R403.1.4 Minimum depth. All exterior footings and foundation systems shall extend below the frost line specified in Table R301.2(1). In no case shall the bottom of the exterior footings be less than 12 inches (305 mm) below finished grade or engineered fill.

Exception: Frost protected footings constructed in accordance with Section R403.3 and foots and foundations erected on solid rock shall not be required to extend below the frost line.

In Seismic Design Categories D<sub>1</sub> and D<sub>2</sub>, interior foots supporting bearing walls or bracing walls and cast monolithically with a slab on grade shall extend to a depth of not less than 18 inches (457 mm) below the top of the slab.

Table R403.1 – In 1,500 and 2,000-psf columns, change all values 12 and 15-inch widths to 16-inch.

Add footnote: A minimum footing width of 12 inches is acceptable for monolithic slab foundations.

There were no comments from the public on this item.

### **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 June 11, 2007. The Final Adoption meeting took place on September 11, 2007. 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 Wayne Hamilton, to amend the 2006 NC Building and Fire Codes, Section 905.2. The proposed amendment is as follows:**

**905.2 Installation standards.** Standpipe systems shall be installed in accordance with this section and NFPA 14.

~~**Exception:** In other than high rise buildings, where buildings are sprinklered in accordance with Section 903.3.1.1, the water supply is not required to meet the higher pressures required for a standpipe system.~~

Motion – Alan Perdue/Second – Tim Reynolds/Passed – This motion was passed unanimously.

### **Part E – Reports**

#### **Chairman’s Report**

- Dan Tingen reported that there was interest in reclaimed water (rain water). Considering the drought, Dan felt a discussion was warranted. He recommended an Ad-Hoc Committee to discuss this topic. Al Bass agreed to Chair this Committee. Jack Neel also volunteered to serve.
- Dan requested the contact information of all members serving on the Ad-Hoc Committees to send thank you notes.
- Dan asked that new Council members be given more assistance in how to obtain the State rate when booking travel for Council meetings.

#### **Ad Hoc Committee Reports**

- No reports were given.

#### **Standing Committee Reports**

- Steve Knight reported that the Structural Committee met on September 10 to discuss their final changes for the 2009 Code. Their work is complete.
- David Smith reported that the Residential Committee will schedule a meeting soon to discuss Townhouse Soffit.

### **Staff Reports**

- Chris Noles announced that ReBecca Williams will start as the Administrative Assistant for the Building Code Council on September 17, 2007.

### **Other Report**

- Brandon Truman reported that Senate Bill 490 – Industrial Machinery was ratified.
- The ZF Lemforder Case has been dismissed.
- Brandon Truman reported that there was one member on the Council that had not received ethics training. The deadline for him to receive that training is January 1, 2008.

### **Part F – Appeals**

No appeals were heard at this meeting.

Sincerely,

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