

**Minutes of the North Carolina Building Code Council
September 14, 2004
Hickory, North Carolina**

All North Carolina Building Code Council members were present with the exception of Tom Avery, Jack Neel, and Mack Nixon.

The following are summary minutes. The official minutes of this meeting are recorded on tape. Anyone desiring verbatim tapes or excerpts from these tapes should contact the Engineering Division of the North Carolina Department of Insurance for information and reproduction costs. The next scheduled NC Building Code Council meeting will be held on December 13 – 14, 2004 at the NC Department of Insurance, 322 Chapanoke Road, Suite 200, Raleigh, NC 27603.

Executive Order 1

Chairman Tingen inquired upon any conflicts of interest or appearance of conflicts of interest that existed within the Council. No conflicts of interest were noted.

Part A – Administrative Items

Item A – 1 Approval of minutes from the June 8, 2004 Building Code Council Meeting.

The minutes were accepted with amendments.

Item A – 2 Approval of minutes from the July 21, 2004 Building Code Council Meeting.

The minutes were accepted with amendments.

Item A – 3 Request by City of High Point for authority to review plans and specifications for buildings as listed in section 502.2.3 of the North Carolina Administration and Enforcement Code.

Al Bass made a motion to grant permission for plan review to the City of High Point. John Hitch seconded the motion. The motion carried.

Item A – 4 Request by Wilkes County to approve an amendment to the local Fire Code concerning Explosive Materials.

A motion was made to grant permission. Barry Maness seconded the motion. The motion carried.

Part B – New Petitions for Rulemaking

The following petitions for rulemaking have been received since the last Council meeting. The Council votes to grant or deny petitions. Petitions that are granted may proceed through the rulemaking process. The Council will give no further consideration to petitions that are denied. Denied petitions may be appealed to the Superior Court. The Council may send any petition to the appropriate committee for review. The Public Hearing for petitions granted will be held on December 13, 2004.

Item B – 1 Request by NCBIA to modify the NC Building Code as follows:

1003.3.1.8 Locks and Latches. Egress doors shall be readily openable from the egress side without the use of a key or special knowledge or effort.

Exceptions

1. Places of detention or restraint

2. In buildings in occupancy Group A having an occupant load ~~300~~ less than 100, Groups B, F, M and S, ~~and in churches~~ the main exterior door or doors are permitted to be equipped with key operated locking devices from the egress side provided:

2.1 The locking device is readily distinguishable as locked and provided with a key that cannot be removed when the door is locked from the inside.

This brings the section in line with the requirements for panic hardware in section 1003.3.1.9.

Lon McSwain with NCBA spoke on behalf of this item. Mr. McSwain will take this item through the International Code Council (ICC) process. Brad Lail made a motion to grant this petition. Butch Simmons seconded the motion. The motion carried.

Item B-2 Request by NCBA to modify the NC Residential Code as follows:

R318.3 Specific approval. Plastic foam not meeting the requirements of Sections R318.1 and R318.2 may be specifically on the basis of one of the following approved tests: ~~ASTM E 84~~, FM 4880, UL 1040, ASTM E 152, or UL 1715, or fire tests related to actual end-use configurations. The specific approval may be based on the end use, quantity, location and similar considerations where such tests would not be applicable or practical.

Ray Adams with NCBA gave each of the Council members a packet of information regarding this item. After review of the information Al Bass made a motion to grant this petition. John Hitch seconded the motion. The motion carried.

Item B-3 Request by NC Fire Service Code Revision Committee to modify the NC Fire Prevention Code as follows:

804.1.1 Restricted occupancies. Natural cut trees shall be prohibited in Group A, E, I-1, I-2, I-3, I-4, M, R-1, R-2, and R-4 occupancies.

Exceptions

1. Trees located in areas protected by an approved automatic sprinkler system installed in accordance with Section 903.3.1.1 or 903.3.1.2 shall not be prohibited in Groups A, E, M, R-1 and R-2.
2. *In religious assembly occupancies when in the opinion of the Fire Official adequate safeguards have been taken treated natural cut Christmas trees are permitted. The tree shall be treated and maintained flame resistant in accordance with the test protocol listed in Appendix H.*
3. Trees shall be permitted within dwelling units in Group R-2 occupancies.

Wayne Hamilton of the NC Fire Service Review Committee spoke on behalf of this item. Marshall Knight asked for clarification of occupancy classification. Wanda Edwards, NC Department of Insurance (NCDI) staff member, clarified the R2 occupancy was being referenced. Alan Perdue made a motion to grant this petition. The motion was seconded. The motion carried.

Item B-4 Request by Tim McLaughlin to modify the NC Mechanical Code as follows:

1301.2 Permits. Fuel-oil storage systems shall comply with the International Fire Code. Fuel-oil piping systems shall comply with the requirements of this code.

Exception: Fuel-oil storage tanks for one- and two-family dwellings and townhouses shall comply with Section 1309.

Section 1309 Oil tanks for one- and two-family dwellings and townhouses.

1309.1 Materials. Supply tanks shall be listed and labeled and shall conform to UL 142 for aboveground tanks, UL 58 for underground tanks, and UL 80 for inside tanks.

1309.2 Above-ground tanks. The maximum amount of fuel oil stored above ground or inside of a building shall be 660 gallons (2498 L). The supply tank shall be supported on rigid noncombustible supports to prevent settling or shifting.

1309.2.1 Tanks with buildings. Supply tanks for use inside of buildings shall be of such size and shape to permit installation and removal from dwellings as whole units. Supply tanks larger than 10 gallons (38 L) shall be placed not less than 5 feet (1524 mm) from any fire or flame either within or external to any fuel-burning appliance.

1309.2.2 Outside above-ground tanks. Tanks installed outside above ground shall be a minimum of 5 feet (1524 mm) from an adjoining property line. Such tanks shall be suitably protected from the weather and from physical damage.

1309.3 Underground Tanks. Excavations for underground tanks shall not undermine the foundations of existing structures. The clearance from the tank to the nearest wall of a basement, pit or property line shall not be less than 1 foot (305 mm). Tanks shall be set on and surrounded with noncorrosive inert materials such as clean earth, sand or gravel well tamped in place. Tanks shall be covered with not less than 1 foot (305mm) of earth. Corrosion protection shall be provided in accordance with section 1309.8.

1309.4 Multiple tanks. Cross connection of two supply tanks shall be permitted in accordance with Section 1309.7.

1309.5 Oil Gauges. Inside tanks shall be provided with a device to indicate when the oil in the tank has reached a predetermined safe level. Glass gauges or a gauge subject to breakage that could result in the escape of oil from the tank shall not be used.

1309.6 Flood-resistant installation. In areas prone to flooding as established by Table R301.2(1) of the International Residential Code, tanks shall be installed at or above the design flood elevation established in Section R327 of the International Residential Code or shall be anchored to prevent flotation, collapse and lateral movement under conditions of the design flood.

1309.7 Cross connection of tanks. Cross connection of supply tanks, not exceeding 660 gallons (2498 L) aggregate capacity, with gravity flow from one tank to another, shall be acceptable provided that the two tanks are on the same horizontal plane.

1309.8 Corrosion protection. Underground tanks and buried piping shall be protected by corrosion resistant coatings or special alloys or fiberglass-reinforced plastic.

Barry Gupton, NCDOL staff member, spoke on behalf of this item. Wanda Edwards asked for clarification in regard to addressing One and Two Family Dwellings. Al Bass made a motion to grant this petition. Barry Maness seconded the motion. The motion carried.

Item B-5 Request by NCBA to modify the 2003 International Building Code as follows:

707.14.1 Elevator lobby. An elevators opening into a fire-resistance-rated corridor as required by Section 1016.1 lobby shall be provided with an elevator lobby at each floor containing such a corridor where an elevator shaft enclosure connects more than three stories. The lobby shall separate the elevators shaft

enclosure doors from the corridor each floor by fire partitions and the required opening protection. Elevator lobbies shall have at least one means of egress complying with Chapter 10 and other provisions within this code.

Exceptions:

1. (No change to current text)
2. Elevators not required to be located in a shaft enclosure in accordance with Section 707.2.
3. (No change to current text)
4. In other than Group I-3, and buildings having occupied floors located more than ~~four stories~~ 75 feet above the lowest level of fire department vehicle access, lobby separation is not required where the building, ~~including the lobby and corridors leading to the lobby,~~ is protected by an automatic sprinkler system installed ~~throughout~~ in accordance with Section 903.3.1.1 or 903.3.1.2.
5. Smoke partitions shall be permitted to separate the elevator lobby at each floor where the building is protected by an automatic sprinkler system installed in accordance with Section 903.3.1.1 or 903.3.1.2.
6. Elevator lobbies are not required provided that the elevator shaft enclosure is pressurized in accordance with Section 909.20.5.

Barry Gupton, NCDOT staff, informed the Council that this item had been approved by ICC. Brad Lail asked for further clarification. The Building Code Ad Hoc Committee will further examine this item. Alan Perdue made a motion to grant this petition. Butch Simmons seconded the motion. The motion carried.

Part C – Notice of Rulemaking Proceedings and Public Hearing

The attached Petitions for Rulemaking have been granted by the Council. Notice of Rulemaking proceedings and Public Hearing has been made. The Public Hearing will be held December 13, 2004 and the Final Adoption meeting will take place on or after December 14, 2004. No further action is required by the Council at this time.

Part D – Hearing and Final Adoption

The following Petitions for Rulemaking have been granted by the Council. Notice of Rule Making proceedings and Public Hearing has been made. The Public Hearing was held September 13, 2004 and the Final Adoption meeting took place on September 14, 2004. The Council will give no further consideration to Petitions that are disapproved. Petitions that are approved will proceed through the Rule Making process.

Item D-1 Add definitions to section R202 of the North Carolina Residential Code as follows:

“**Dampproofing.** A coating or the application of coatings applied that is intended to prevent the penetration of water vapor and moisture through or into wall or into interior spaces”.

“**Waterproofing.** A coating or application of coatings applied that is intended to prevent the penetration of water under hydrostatic pressure through or into walls or into interior spaces”.

This code change is proposed for clarification. This item was referred to the Residential Committee for further study. The Committee recommends for the following wording:

“**Dampproofing.** A coating or the application of coatings applied ~~that is intended~~ to prevent the penetration of water vapor and moisture through or into walls or into interior spaces”.

“**Waterproofing.** A coating or application of coatings applied ~~that is intended~~ to prevent the penetration of water under hydrostatic pressure through or into interior spaces”.

The Residential Committee decided on 6/30/04 to eliminate the words “that is intended” from both definitions above. This is consistent with the original proposal. In light of the new proposed revisions to Section R406.2, the following amendment was proposed by Barry Gupton:

Dampproofing. A coating or the application of coatings applied to ~~prevent~~ retard the penetration of water vapor and moisture through or into walls or into interior spaces.

Waterproofing. A coating or the application of coatings applied to prevent the penetration of water under hydrostatic pressure through or into walls or into interior spaces.

Marshall Knight made a motion to adopt this petition as amended. Barry Maness seconded the motion. The motion carried.

Item D-2 Add new sections regarding closed crawl spaces in the North Carolina Residential Code.

Butch Simmons stated that clear guidelines need to be set in regards to this item. Tom Turner made a motion to adopt this petition. Marshall Knight seconded the motion. Brad Lail was the only Council member to oppose the decision. The motion carried. Please see the attachment for more information regarding this petition.

Item D-3 Include reference to the DASMA garage door wind load guide in the North Carolina Residential Code:

This code change is proposed for cross reference. This item was referred to the Residential Committee for further study. The Committee recommends for the following change Table 301.2(4), note 1 and Table 4402(b), note 2:

Alternate design pressures may be determined by using the North Carolina State Building Code General Construction, ASCE 7-98, DASMA Technical Data Sheet 115h (for garage doors), or the 2000 International Building Code.

Marshall Knight made a motion to adopt this petition. Brad Lail seconded the motion. The motion carried.

Item D-4 Request by NCDOT staff to adopt the 2005 NEC, including the amendments from the 2002 NC Electrical Code. [Hearing only]

A letter and package were delivered to OSBM on August 6, 2004 to request a fiscal note.

This item has been referred to the Electrical Code Ad Hoc Committee. This petition will see final action at the December meeting of the NCBC. Lon Culbertson, chair of the Electrical Code Ad Hoc Committee, informed the Council of changes being made to the NEC. Ron Chilton, NCDOT staff member, also fielded questions in regards to the 2005 NEC. Please see the attachment for more information regarding this petition.

Item D-5 Request to add a new Section 102.5 in the Administrative Code and in the scoping provisions of all other codes to notify owners, designers, contractors, and licensees that other agencies, boards, and commissions may have additional minimum construction requirements for licensure. [Hearing only]

102.5 Requirements of other State agencies, occupational licensing boards, or commissions. The North Carolina State Building Codes do not include all additional requirements for buildings and structures that may be imposed by other State agencies, occupational licensing boards, and commissions. It shall be the responsibility of a permit holder, design professional, contractor, or occupational license holder to determine whether any additional requirements exist.

This petition will see final action at the December meeting of the NC Building Code Council.

Item D-6 Request to revise Table 403.1 in the North Carolina Plumbing Code as follows:

Table 403.1 Minimum number of plumbing facilities.

Footnote #26:

26. For health clubs, dance studios, and similar facilities, the number of persons equals the activity floor area divided by 30 ~~50~~ with the female-male ratio 50%-50%. Drinking fountains 1 per 75 persons.

This petition has been referred to the Plumbing Code Ad Hoc Committee for further review.

Item D-7 Request to revise table 403.1 in the North Carolina Plumbing Code as follows:

Table 403.1 Minimum number of plumbing facilities.

Footnote #26:

26. For health clubs, dance studios, college recreational gymnasiums exclusive of seating areas, and similar facilities, the number of persons equals the activity floor area divided by 30 with the female-male ratio 50%-50%. Drinking fountains 1 per 75 persons.

This petition has been referred to the Plumbing Code Ad Hoc Committee for further review.

Item D-8 Revise Section 503.3.3.4.2 in the NC Energy Conservation Code as follows:

503.3.4.3 Low-Pressure Duct Systems

Low pressure return ducts, located in unheated crawl space, shall be leak tested in accordance with SMACNA HVAC Air Duct Leakage Test Manual with the rate of air leakage not to exceed the maximum rate specified in the standard. All longitudinal and transverse...

This petition has been referred to the Energy Code Ad Hoc Committee for further review.

Item D-9 Add a new section R403.1.6 in the North Carolina Residential Code as follows:

R403.1.6 (in part) The wood sole plate at exterior walls on monolithic slabs and wood sill plates shall be anchored to the foundation with anchor bolts spaced a maximum of 6 feet on center and not more than 12 inches from the corners. Anchor bolts shall also be located within 12 inches from the ends of each plate section. In Seismic Design Categories D1 and D2, anchor bolts...

Marshall Knight made a motion to adopt this petition. Barry Maness seconded the motion. The motion carried.

Item D-10 Add the following to table R602.10.3 of the North Carolina Residential Code:

Footnote: c Braced wall panels, assembled in accordance with Section R602.10.3, Method 3, with wood structural panel sheathing on both sides, may be used to reduce the panel lengths shown by 50%.

Marshall Knight made a motion to adopt this petition. The motion was seconded. The motion carried.

Item D-11 Add new item (5) to section 700.9 (B) of the North Carolina Electrical Code as follows:

(B) Wiring. Wiring of two or more emergency circuits supplied from the same source shall be permitted in the same raceway, cable box, cabinet. Wiring from an emergency source or emergency source distribution overcurrent protection emergency loads shall be kept entirely independent of all other wiring and equipment, unless otherwise permitted in (1 through 4 5):

- (1) Wiring from the normal power source located in transfer equipment enclosure
- (2) Wiring from two sources in exit or emergency luminaries (lighting fixtures)
- (3) Wiring from two sources in common junction box, attached to exit or emergency luminaries (light fixtures)
- (4) Wiring within a common junction box attached to unit equipment, containing only the branch circuit supplying the unit equipment and the emergency circuit supplied by the unit equipment.
- (5) Wiring consisting of feeders from one or more alternate power source(s) supplying an alternate power source distribution board with overcurrent protective devices, feeding separate transfer equipment for each type of load served (emergency, legally required standby and optional standby), provided the feeder wiring from alternate power source distribution board to each load's transfer equipment is kept entirely independent of all other wiring.

Lon Culbertson stated that there is no reason to go forward with the change. Mr. Culbertson made a motion to deny the petition. Al Bass seconded the motion. The motion carried.

Part E – Reports

Item E -1 Administrative Committee

Diane Miller informed the Council of her creation of notebooks to keep the Council informed of updated statutes, instructions, and rules. She also reported that Superior Walls had filed a petition for review with Davidson County. Ms. Miller also acknowledged the request of Chairman Dan Tingen and the NCBCC to be provided with a handbook.

Item E – 2 Ad Hoc Committee Reports and Meeting Dates.

Building Code Ad Hoc Committee (Chapters 1 – 15)

Butch Simmons, Chair of the committee, informed the Council on his new method of electronic changes. Mr. Simmons also announced the next meeting date, Thursday, October 14, 2004.

Building Code Ad Hoc Committee (Chapters 16 – end)

Tom Avery, Chair of the committee, was not in attendance at the NCBCC meeting. No meeting has been scheduled at this time.

Electrical Code Ad Hoc Committee

Lon Culbertson, Chair of the committee, gave the committee update earlier in the meeting (refer to Item D – 4).

Energy Code Ad Hoc Committee

Tom Turner, Chair of the committee, informed the Council that he has delayed the review of the code due to the fact that the commentaries are not available at this time.

International Existing Building Code Council

John Hitch, Chair of the committee, gave the final report to the NCBCC. Mr. Hitch and his committee recommends the following:

1. Retain 1995 Volume IX, Existing Buildings Code for use along with Chapter 34
2. Submit recommended changes through the IBC process.

3. Postpone adoption of IEBC until 2008.
4. Make interim changes to the 1995 Existing Building Code
5. Clarify that retroactive application of building codes is not legal. This should be dealt with in a statement released by Wanda Edwards.

Mr. Hitch also recommended that the information he and his committee worked on be forwarded to Butch Simmons and the Building Code Ad Hoc Committee (Chapters 1 – 15).

Fire Prevention Ad Hoc Committee

Alan Perdue, Chair of the committee, informed the Council that he was in anticipation of a final draft. No meeting for the committee has been scheduled at this time.

Fuel Gas Code Ad Hoc Committee

Terry Greene, Chair of the committee, reported of the progress of the committee. The first meeting was held Thursday, August 19, 2004. The following are the dates that have been scheduled for future meetings: October 6th, November 10th, December 1st, January 12, 2005, January 26, 2005, and February 9, 2005. All dates are for Wednesdays.

Mechanical Code Ad Hoc Committee

Al Bass, chair of the committee, will suspend review of the code if the commentary is not available by the scheduled October 13, 2004 meeting.

Plumbing Code Ad Hoc Committee

Al Bass, chair of the committee, informed the Council that the progress of the committee is going well. The following dates have been scheduled for future meetings: Thursday, October 7th; Wednesday, November 3rd; Tuesday, December 2nd; Wednesday, January 5, 2005; Wednesday, February 2, 2005.

Residential Code Ad Hoc Committee

Marshall Knight, Chair of the committee, informed the Council that no meeting has been scheduled at this time.

NOTE: All Ad Hoc Committee meetings will be held at 9:00AM at the NC Department of Insurance located at 322 Chapanoke Road, Suite 200, Raleigh, NC 27603.

Part F – Appeals

The following Appeals have been scheduled since the last Council meeting. These Appeals require Council hearing and action but are not subject to the Rulemaking process.

Item F1 Quality Built Homes vs. Village of Pinehurst

This appeal questions whether the Fire Code, Appendix B is adopted properly.

Alan Perdue made a motion to continue this appeal. Al Bass seconded the motion. The motion carried. An appeal for the item will be held on September 28, 2004 at 9:00AM at the NC Department of Insurance located at 322 Chapanoke Road, Suite 200, Room # 239 Raleigh, NC 27603.

Item F2 Glaze Construction vs. NCDOT and Catawba County

This appeal is over the applicability of Section R301.2.2, seismic provisions, to a Townhouse building that only contains 2-dwellings.

This appeal was resolved at an earlier date. No discussion was needed during this meeting.

Item F3 Bald Head Island Limited vs. NCDOT and Bald Head Island

This appeal is over the applicability of the fire separation distance in Section R302, Location on Lot, to a boardwalk that connects 2-or-more dwellings.

Jim Henry and Vanessa Reese of Bald Head Island Limited represented themselves in this appeal hearing. They provided as evidence a Microsoft Power Point presentation that included pictures of the project in question as well as pictures of similar projects throughout North Carolina. Jim Bruce, along with Barry Gupton, NCDOT staff member, represented the Village of Bald Head Island. Mr. Bruce also used a Microsoft Power Point presentation showing evidence of fires and safety issues on the island. Mr. Gupton presented information to the Council in regards to his interpretation of the code and how it should be applied and enforced in regards to this appeal. The Findings of Fact, Conclusions of Law, and Order will be served by Diane Miller.

Sincerely,

Barry N. Gupton, PE
Secretary NC Building Code Council