

**MINUTES OF THE BUILDING CODE COUNCIL
JUNE 10, 2003
RALEIGH, NORTH CAROLINA**

All Council members were present with the exception of Gary York and Richard Strickland.

THESE ARE SUMMARY MINUTES AND THE OFFICIAL MINUTES OF THIS MEETING ARE RECORDED ON TAPE. ANYONE DESIRING VERBATIM OR EXCERPTS FROM THESE TAPES SHOULD CONTACT THE ENGINEERING DIVISION OF THE NC DEPARTMENT OF INSURANCE FOR INFORMATION ON REPRODUCTION COSTS.

Chairman Barry Gardner called the meeting to order. Mr. Gardner announced there would be a work session at 9:00 am on September 8, 2003, followed by the public hearing at 1:00pm. The Council meeting will be at 9:00 am on September 9, 2003. All meetings will be held at the Wake County Commons located at 4011 Cary Drive, Raleigh, NC 27610.

ITEM 1 - APPROVAL OF THE MINUTES OF THE MARCH 11, 2003, BUILDING CODE COUNCIL MEETING

Chairman Gardner noted a correction to Item 10 (a) of the minutes. The first sentence should read: "John Hitch stated the Council has received a letter from Insurance Services Office, Inc., stating that the Robeson County Effectiveness Grading has been down graded from a 5 to a 7. The Council requested the following sentence be added to this section: "Every jurisdiction that is down graded has the potential for increases in insurance rates, but is not currently affected."

Chairman Gardner noted in Item 10(c), the following change: "Items that have been approved by the Rules Review Commission and have passed the 31 Legislative days with no amendments or changes, shall be used at the Owner's request in accordance with the North Carolina Administrative and Enforcement Requirements Code.

Dan Tingen also requested a clarification to Item 10(d). The Council requested the following sentence be added to this section: "The Council did not give approval for Underwriters Laboratories to use the name of the North Carolina Building Code Council in the proclamation submitted by John Wiggins of Underwriters Laboratories."

Dan Tingen made a motion to approve the minutes. Terry Green seconded the motion. The motion carried.

ITEM 2 - REQUEST BY THE TOWN OF OAK ISLAND FOR AUTHORITY TO REVIEW PLANS AND SPECIFICATIONS FOR BUILDINGS AS LISTED IN TABLE 502 OF THE NORTH CAROLINA ADMINISTRATION AND ENFORCEMENT REQUIREMENTS CODE

Brad Lail made a motion to approve the Town of Oak Island's request for authority to review plans and specifications as listed in Table 502 of the North Carolina Administration and Enforcement Requirements Code. Terry Green seconded the motion. The motion carried.

ITEM 3 - REQUEST BY GUILFORD COUNTY FOR AUTHORITY TO REVIEW PLANS AND SPECIFICATIONS FOR BUILDING AS LISTED IN TABLE 502 OF THE NORTH CAROLINA ADMINISTRATION AND ENFORCEMENT REQUIREMENTS CODE

Aubrey Smith made a motion to approve the request by Guilford County for authority to review plans and specifications as listed in Table 502 of the North Carolina Administration and Enforcement Requirements Code. Terry Green seconded the motion. The motion carried.

ITEM 4 - EVALUATION OF STATEMENT OF ECONOMIC INTEREST FILED BY LON CULBERTSON

Wanda Edwards read a letter from George F. Bason, Chairman of the North Carolina Board of Ethics, concerning the evaluation of statement of economic interest filed by Lon Culbertson. The letter stated that Mr. Culbertson did not have any actual conflicts of interest, but he is an Electrical Engineer and therefore has the potential for a conflict of interest.

ITEM 5 - APPEAL BY LINDA LAVIS, AIA, OF DECISION BY MECKLENBURG COUNTY TO REQUIRE THE USE OF METAL CABLE IN THREE STORY WOOD-FRAME APARTMENT BUILDING CONSTRUCTED OVER CONCRETE PARKING GARAGE

This item was withdrawn.

ITEM 6 - REQUEST BY MICHAEL GILLESPIE, DIRECTOR OF TECHNICAL SERVICES, VIEGA, INC. TO APPROVE THE USE OF RIDGID/VIEGA PROPRESS COPPER JOINING SYSTEM

Mr. Michael Gillespie, Director of Technical Services, Viega, Inc., addressed the Council and requested approval of the use of Ridgid/Viega ProPress copper joining system, a mechanical joining system. Mr. Gillespie stated there is an SBCCI Evaluation Report and a UL listing. Grover Sawyer, Deputy Commissioner, Engineering Division, has written a letter stating that the Department of Insurance recommends the use of ProPress.

Tom Turner made the motion to support Mr. Sawyer's letter. Al Bass seconded the motion. The motion carried.

The Council directed Mr. Sawyer to prepare a letter for Barry Gardner's signature, stating the Building Code Council allows the use of ProPress as an alternate material. Staff was directed to include a copy of the letter with the minutes of the meeting.

ITEM 8 - REQUEST BY THE NORTH CAROLINA GOVERNOR'S ADVOCACY COUNCIL FOR PERSONS WITH DISABILITIES TO ADDRESS THE COUNCIL ABOUT THE ACCESSIBILITY CODE

Allison Bowen and Cynthia Temoshenko with the Governor's Advocacy Council for Persons with Disabilities addressed the Council. Ms. Temoshenko stated the Advocacy Council requests the Building Code Council proceed with certification of the 1999 Edition North Carolina Accessibility Code with Revisions for 2002. Leslie Young, Center for Universal Design at NCSU, also spoke in favor of the certification. Ms Temoshenko also requested that the Building Code Council have two representatives of the accessibility community on the Building, Administration, Mechanical, Fire and Accessibility Committees.

Barry Maness made a motion to continue the certification process of the Accessibility Code. Brad Lail seconded the motion. The motion carried.

Aubrey Smith made a motion to start the rule making process with the changes the Department of Justice requested. Brad Lail seconded the motion. The motion carried. Grover Sawyer, Deputy Commissioner stated the staff will prepare the proposed changes and have them ready for the next Council meeting in September.

PETITIONS FOR RULE MAKING

- Petitions that are granted proceed through the rulemaking process.
- The Council gives no further consideration to petitions that are denied.
- The Council may send any petitions to the appropriate committee for review
- Committee meetings are scheduled for September 8, 2003 if needed.
- The public hearing for petitions granted at the June meeting will be held on December 8, 2003.

ITEM 7 - REQUEST BY RICHARD FREDENBURG, LP GAS ENGINEER WITH THE NC DEPARTMENT OF AGRICULTURE, TO ADDRESS THE COUNCIL ABOUT CONFLICTS IN THE CODES AND DEPARTMENT OF AGRICULTURE REGULATIONS

Richard Fredenburg with the NC Department of Agriculture addressed the Council and stated that there are conflicts between the North Carolina Fire Prevention Code and the General Statutes. The General Statutes give the Department of Agriculture responsibility for the regulation of LP gas. Fredenburg stated the Fire Prevention Code contains some references that fire inspectors are enforcing, and those references are in conflict with the Department of Agriculture regulations.

Mike Boggs with the Propane Gas Association stated he prepared petitions for rulemaking that would resolve the issue. Chairman Gardner stated the Council would vote on each item to grant or deny the petition for rulemaking.

ITEM 7A - Add new Section 911.5 to the NC Fire Prevention Code

Section 911.5 Liquefied petroleum gas distribution facilities.
Liquefied petroleum gas distribution facilities shall comply with Chapter 119, Article 5 of the General Statutes of North Carolina, and the North Carolina Administrative Code, Title 2, Chapter 38, Section 0.700, as enforced by the N. C. Department of Agriculture and Consumer Services through the provisions of NFPA 58.

Marshall Knight made a motion to approve the petition for rulemaking. Barry Maness seconded the motion. The motion carried.

ITEM 7B - Delete references to Liquefied petroleum gas in Table 911.1

TABLE 911.1
EXPLOSION CONTROL REQUIREMENTS

MATERIAL	CLASS	Barricade construction	Explosion (deflagration) venting or explosion (deflagration) prevention systems
Liquefied petroleum gas distribution facilities	-----	Not required	Required

Dan Tingen made a motion to grant the petition for rulemaking. Terry Green seconded the motion. The motion carried.

ITEM 7C - REVISE TABLE 911.1 AS FOLLOWS:

TABLE 911.1
EXPLOSION CONTROL REQUIREMENTS

MATERIAL	CLASS	Barricade construction	Explosion (deflagration) venting Or explosion (deflagration) prevention systems
Flammable gas, <u>not including Liquefied petroleum gas</u>	Gaseous Liquefied	Not required Not required	Required Required

Dan Tingen made a motion to grant the petition for rulemaking. Terry Green seconded the motion. The motion carried.

ITEM 7D - DELETE SECTION 2207 OF THE NC FIRE PREVENTION CODE AND REPLACE WITH THE FOLLOWING:

2207.1 General. Service stations for LP-gas fuel shall comply with Chapter 119, Article 5 of the General Statutes of North Carolina, and the North Carolina Administrative Code, Title 2, Chapter 38, Section 0.700, as enforced by the NC Department of Agriculture and Consumer Services through the provisions of NFPA 58.

2207.2 Attendants. Motor vehicle fueling operations shall be conducted by qualified attendants or in accordance with Section 2207.3 by persons trained in the proper handling of LP-gas.

2207.3 Private fueling of motor vehicles. Self-service LP-gas dispensing systems, including key, code, and card lock dispensing systems shall not be open to the public and shall be limited to the filling of permanently mounted fuel containers on LP-gas powered vehicles.

Self-service LP-gas dispensing systems shall be in accordance with the following:

1. The system shall be provided with an emergency shutoff switch located within 100 feet (30.480 meter) of, but not less than 20 feet (6.096 meters) from dispensers.
2. The owner of the dispensing facility shall provide for the safe operation of the system and the training of the users.

Dan Tingen made a motion to grant the petition for rulemaking. Terry Green seconded the motion. The motion carried.

Grover Sawyer, Deputy Commissioner, NC Department of Insurance, stated he would distribute a letter clarifying the conflicts between the Department of Agriculture regulations and the NC Fire Prevention Code.

ITEM 9 – REQUEST BY SPECIAL POPULATION COMMITTEE TO REVISE THE NORTH CAROLINA ADMINISTRATION AND ENFORCEMENT REQUIREMENTS CODE TO REQUIRE THE USE OF AUTOMATED DOORS IN NEWLY CONSTRUCTED BUILDINGS OF PUBLIC ACCOMODATION

Holly Lemieux, of the Special Populations Committee stated her proposal concerned providing automatic doors on newly constructed buildings. She stated it is very difficult for many disabled persons to open doors manually and this code change would allow many disabled persons to enter buildings they could not get in otherwise. Jeff Hill spoke on the importance of making buildings accessible to the persons with disabilities.

Marshall Knight stated this proposal would cause a hardship on small businesses. Mr. Knight made a motion to deny. Al Bass seconded the motion. The motion carried.

Dan Tingen made a motion to deny the proposal and consider the proposal for inclusion in the next edition of the Codes. Tom Turner seconded the motion. The motion carried.

ITEM 10 – REQUEST BY TRAVIS CRABTREE TO REVISE SECTION 1003.2.2.5 OF THE NORTH CAROLINA FIRE PREVENTION AND NORTH CAROLINA BUILDING CODE TO READ AS FOLLOWS:

Posting of occupant load. Every room or space that is an assembly occupancy shall have the occupant load of the room or space posted in a conspicuous place, near the main exit or exit access doorway from the room or space. Posted signs shall be of an approved legible permanent design and shall be maintained by the owner or authorized agent. The number of occupants of any building or portion thereof shall not be permitted to exceed the allowed or posted capacity, determined in accordance with the building code.

This item was withdrawn.

ITEM 11 – REQUEST BY TRAVIS TO REVISE SECTION 404.2 OF THE FIRE PREVENTION CODE AS FOLLOWS:

404.2 Where required. An approved fire safety and evacuation plan shall be prepared and maintained for the following occupancies and buildings:

1. Group A other than Group A occupancies used exclusively for purposes of religious worship that have an occupant load less than 2,000.
2. 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.
3. Group E.
4. Group F.
5. Group H.
6. Group I.
7. Group R-1.
8. Group R-2.
9. Group R-4.
10. High-rise buildings.
11. Group M buildings having an occupant load of 500 or more persons or more than 100 persons above or below the lowest level of exit discharge.

12. Covered malls exceeding 50,000 square feet (4645 m²) in aggregate floor area.
13. Underground buildings.
14. Building with an atrium and having an occupancy in Group A, B, E or M.

This item was withdrawn.

ITEM 12 - REQUEST BY TRAVIS CRABTREE TO REVISE SECTION 405.2 OF THE NORTH CAROLINA FIRE PREVENTION CODE AS FOLLOWS:

Frequency. Required emergency evacuation drills shall be held annually when fire alarm facilities are provided as required by the North Carolina Building Code or at intervals specified in Table 405.2 or more frequently where necessary to familiarize all occupants with the drill procedure.

This item was withdrawn.

ITEM 13 - REQUEST BY TRAVIS CRABTREE TO ADD A NEW SECTION 1011.5 TO THE NORTH CAROLINA FIRE PREVENTION CODE AND THE NORTH CAROLINA BUILDING CODE AS FOLLOWS:

1011.5 Separate means of egress illumination. A separate or emergency source of illumination deemed necessary by the code official shall be required in existing occupancies or occupiable portions of existing occupancies such as, but not limited to, windowless buildings, subterranean buildings, interior corridor arrangements without natural illumination or existing occupancies operating during the hours of darkness.

This item was withdrawn.

ITEM 14 - REQUEST BY TRAVIS CRABTREE TO REVISE SECTION 1003.2.10.5 OF THE NORTH CAROLINA FIRE PREVENTION CODE AND THE NORTH CAROLINA BUILDING CODE AS FOLLOWS:

405.2 Power Source. Exit signs shall be illuminated at all times. To ensure continued illumination for a duration of not less than 90 minutes in case of primary power loss; the exit signs shall be connected to an emergency electrical system provided from storage batteries, unit equipment or an on-site generator. The installation of the emergency power system shall be in accordance with Section 604.

A functional test shall be conducted on every exit light at 30-day intervals for a minimum of 30 seconds. An annual test shall be conducted for 90 minutes in duration. Equipment shall be fully operational for the duration of the test. Written records of testing shall be kept by the owner and made available to the code official upon request.

This item was withdrawn.

ITEM 15 - REQUEST BY TRAVIS CRABTREE TO REVISE SECTION 1003.2.11.2 OF THE NORTH CAROLINA FIRE PREVENTION CODE AND THE NORTH CAROLINA BUILDING CODE AS FOLLOWS:

1003.2.11.2 Illumination emergency power. The power supply for means of egress illumination shall normally be provided by the premise's electrical supply.

In the event of power supply failure, an emergency system shall automatically illuminate all of the following areas:

1. Exit access corridors, passageways, and aisles in rooms and spaces which require two or more means of egress.
2. Exit access corridors and exit stairways located in buildings required to have two or more exits.
3. Interior exit discharge elements, as permitted in Section 1006.1, in buildings required to have two or more exits.
4. The portion of the exterior exit discharge immediately adjacent to exit discharge doorways in buildings required to have two or more exits.

The emergency power system shall provide power for a duration of not less than 90 minutes in case of primary power loss and shall consist of storage batteries, unit equipment or an on-site generator. The installation of the emergency power system shall be in accordance with Section 604.

A functional test shall be conducted on every emergency light at 30-day intervals for a minimum of 30 seconds. An annual test shall be conducted for 90 minutes in duration. Equipment shall be fully operational for the duration of the test. Written records of testing shall be kept by the owner and made available to the code official upon request.

This item was withdrawn.

ITEM 16 - REQUEST BY JOHN WIGGINS, PE TO REVISE SECTION 705. 3 OF THE NORTH CAROLINA BUILDING CODE AS FOLLOWS:

OPTION 1

705.3 Materials. Fire walls shall be constructed of masonry, concrete, or any approved non-combustible material. The fire resistance of concrete or masonry firewalls shall be calculated in accordance with Section 720 or determined by test in accordance with ASTM E-119. All other firewalls shall be tested in accordance with ASTM E-119. Firewall tests in accordance with ASTM E-119 shall be conducted using the alternative hose stream test procedure described in Section 11.3 of ASTM E-119.

Exception: Deleted.

OPTION 2

705.3 Materials. Fire walls shall be constructed of masonry, concrete, or any approved non-combustible material. ~~The fire resistance of concrete or masonry firewalls shall be calculated in accordance with Section 720 or determined by test in accordance with ASTM E-119.~~ All other firewalls shall be tested in accordance with ASTM E-119. Firewalls rated 3 or more hours tests in accordance with ASTM E-119 shall be conducted using shall use the alternative hose stream test procedure described in Section 11.3 of ASTM E-119.

Exception: Deleted.

John Hitch made a motion to deny this request. Brad Lail seconded the motion. The motion carried.

ITEM 17 – REQUEST BY REED JARVIS OF THE NC FIRE SERVICE CODE REVISION COMMITTEE TO REVISE SECTION 507.2.2 OF THE NORTH CAROLINA MECHANICAL CODE AS FOLLOWS:

507.2.2 Domestic cooking appliances used for commercial purposes. Domestic cooking appliances utilized for commercial purposes shall be provided with Type I or Type II hoods as required for the type of appliances and processes in accordance with Section 507.2 and 507.2.1.

Exception: A maximum of two (2) residential ranges (4 burner) installed in dwelling units, ~~churches, schools, day care centers, break areas, and similar installations.~~

Al Bass made a motion to deny. Brad Lail seconded the motion. The motion carried.

ITEM 18 – REQUEST BY AMERICAN FIRE DOOR MANUFACTURER’S ASSOCIATION TO ADD A NEW SECTION 403.9.1 TO THE NORTH CAROLINA BUILDING CODE AS FOLLOWS:

403.9.1 Elevator Lobby. Elevators on all floors shall open into elevator lobbies that are separated from the remainder of the building, including corridors and other means of egress, by construction capable of resisting the passage of smoke. Elevator lobbies shall have at least one means of egress complying with Chapter 10 and other provisions within the code. Elevator lobbies separated from a fire resistance rated corridor shall have walls of not less than one-hour fire resistance rating and openings shall conform to Section 714.

Exceptions:

1. Separations are not required from a street floor elevator lobby.
2. In atria complying with the provisions of Section 404 elevator lobbies are not required.

Brad Lail made a motion to deny this petition. Al Bass seconded the motion. The motion carried.

ITEM 19 – REQUEST BY REED JARVIS, FIRE SERVICE CODE REVISION COMMITTEE, TO DELETE SECTION 907.2.9 AND SUBSTITUTE AS FOLLOWS:

907.2.9 GROUP R-2 AND ADULT AND CHILD DAY CARE IN GROUP R-4

907.2.9.1 GROUP R-2 A fire alarm system shall be installed in Group R-2 occupancies where:

- any dwelling unit is located three or more stories above the lowest level of exit discharge;
- any dwelling unit is located more than one story below the highest level of exit discharge of exits serving the dwelling unit; or
- the building contains more than 16 dwelling units.

Exceptions:

1. A fire alarm system is not required in buildings not over two stories in height where all dwelling units and contiguous attic and crawl spaces are separated from each other and public or common areas by at least 1-hour fire partitions and each dwelling unit has an exit directly to a public way, exit court or yard.

2. A separate fire alarm system is not required in buildings that are equipped throughout with an approved supervised automatic sprinkler system installed in accordance with Section 903.3.1.1 or 903.3.1.2 and which have a local alarm that meets the notification requirements of Section 907.10.2.

907.2.9.2 Adult and Child Day Care in Group R-4. A manual fire alarm system listed for residential use shall be installed in R-4 occupancies used for adult or child day care.

Exception:

A separate fire alarm system is not required in buildings that are equipped throughout with an approved supervised automatic sprinkler system installed in accordance with Section 903.3.1.1 or 903.3.1.2 and which have a local alarm that meets the notification requirements of Section 907.10.2.

Bart Massey, representing the Fire Services Code Revision Committee, stated the current wording in the Building Code and Fire Code is confusing, and this proposal is intended to clarify the code requirements. Dan Tingen made a motion to deny the petition. Barry Maness seconded the motion. The motion carried. The Council directed Grover Sawyer to write a letter of interpretation to clarify the code requirements. Also, this item will be sent to the ad hoc committees to consider inclusion in the next edition of the Building Codes.

ITEM 20 - COMMITTEE REPORTS

BUILDING CODE COUNCIL COMMITTEES

Residential

The Residential Committee reviewed the petitions for rulemaking proposed by the Moisture Ad Hoc Committee. The Committee decided which proposals they would send forward at the next Council meeting.

Structural Committee

Tom Avery stated the Structural Committee met and reviewed a proposal by Eric Johnson of the Brick Association. The proposal concerned Section 1616.3 of the NC Building Code entitled "Determination of seismic design category". Mr. Avery stated the 2003 International Building Code had incorporated exceptions for determining the seismic design category that would have tremendous impact on projects constructed in North Carolina. The current code requires that the design category be assigned by using the most severe category determined by the short period response acceleration and the 1-second response acceleration. The exceptions allow the seismic design category to be determined from the short period table when certain criteria are met.

The petition for rulemaking is as follows:

Section 1616.3 Determination of seismic design category. All structures shall be assigned to a seismic design category based on their seismic use group and the design spectral response acceleration coefficients, S_{DS} and S_{D1} , determined in accordance with Section 1615.1.3 or 1615.2.5. Each building and structure shall be assigned to the most severe seismic design category in accordance with Table 1616.3(1) or 1616.3(2) irrespective of the fundamental period of vibration of the structure, T .

Exception: The seismic design category is permitted to be determined from Table 1616.3(1) alone when all of the following apply:

1. the approximate fundamental period of the structure T_a , in each of the two orthogonal directions determined in accordance with Section 1617.4.2.1 is less than $0.8T_s$, determined in accordance with Section 1615.1.4, and
2. equation 16-35 is used to determine the seismic response coefficient, C_s and
3. the diaphragms are rigid as defined in Section 1602.

Mr. Avery stated the Committee requests the Council proceed with obtaining a temporary rule. Grover Sawyer, Deputy Commissioner, DOI, stated the staff will proceed with the temporary rule making process, the permanent rule process and a letter from the Chairman of the Council notifying local jurisdictions of the status of the temporary rule.

Barry Maness made a motion to proceed with the temporary rule making and the permanent rule making. Jack Neel seconded the motion. The motion carried.

COMMENTARY COMMITTEES

1. PLUMBING CODE COMMENTARY

Chairman Al Bass stated the committee met several times, is making good progress, and will continue to meet until the commentary is completed.

2. MECHANICAL CODE COMMENTARY

Chairman Al Bass stated the committee is continuing work on the commentary until it is completed.

3. RESIDENTIAL CODE COMMENTARY

4.

Dan Tingen said the committee is having difficulty writing the commentary, and suggests that in the future the commentary and the amendments to the code should be written at the same time. Mr. Tingen stated he would like the ad hoc committee to cease work on the commentary and wait for the 2003 Residential Code and the commentary to be published and work on both books at the same time. Mr. Tingen made a motion that all committees wait to start work on the 2003 codes until the commentaries are available. Marshall Knight seconded the motion. The motion carried.

5. BUILDING CODE COMMENTARY

Chairman Aubrey Smith stated the committee has completed its work and will meet once more to review their work.

ITEM 21- OTHER ITEMS

Mec-Check Program for the North Carolina Residential Code.

Dan Tingen stated the International Residential and International Energy Codes allow the use of the Mec-Check Program in calculating insulation requirements for homes. The program does not work with the North Carolina Residential and North Carolina Energy Codes. Mr. Tingen made a motion that the Building Code Council request the Department of Energy prepare a Mec-Check program compatible with the North Carolina Residential and Energy Codes. Marshall seconded the motion. The motion carried.

Plumbing Ad Hoc Committee on Fixture Counts

John Hitch requested that the Plumbing Ad Hoc Committee that worked on fixture counts meet again and review the table before sending the table to the full Council. The staff was directed to schedule the meeting.

There being no further business, the meeting was adjourned.

Sincerely,

Wanda D. Edwards, PE
Secretary