

**Minutes of the North Carolina Building Code Council
July 21, 2004
Raleigh, North Carolina**

The following Council Members attended the meeting: Tom Avery, PE, Al Bass, PE, John Hitch, AIA, Marshall Knight, Brad Lail, Barry Maness, Dan Murray, PE, Bob Ruffner, Dan Tingen (Chairman), and Tom Turner

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.

Executive Order 1 – Conflicts of Interest

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 in the regular meeting of the Building Code Council. However, Council member Dan Murray dismissed himself from the scheduled appeal hearing due to a potential conflict of interest.

Part A Administrative Items

No Administrative Items have been received since the last Council meeting. These items require Council action but are not subject to the Rule-making process.

Part B New Petitions for Rule-making

The following Petitions for Rule-making have been received since the last Council meeting. The Council will vote to either 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 Rule-making process. 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 and the Final Adoption meeting will take place on December 14, 2004.

Item B-1 Request by Residential Committee to clarify the current code language dealing with waterproofing that is required for habitable basements as detailed in the Residential Code.

R406.2 Concrete and masonry ~~foundation~~ basement waterproofing.

~~In areas where a high water table or other severe soil water conditions are known to exist, Exterior foundation~~ basement walls that retain earth and enclose habitable or usable spaces located below grade shall be waterproofed with a membrane extending from the top of the footing to the finished grade.

Exception: Exterior basement walls that retain earth and enclose usable spaces located below grade may be dampproofed where a subsurface soil investigation is performed to determine that the existing ground-water table is not within 5 feet (1524 mm) below the lowest floor level.

The membrane shall consist of 2-ply hot-mopped felts, 55 pound (25 kg) roll roofing, 6-mil (0.15 mm) polyvinyl chloride, 6-mil (0.15 mm) polyethylene or 40-mil (1 mm)

polymer-modified asphalt. The joints in the membrane shall be lapped and sealed with an adhesive compatible with the waterproofing membrane.

Exception: Organic solvent based products such as hydrocarbons, chlorinated hydrocarbons, ketones, and esters shall not be used for ICF walls with expanded polystyrene form material. Plastic roofing cements, acrylic coatings, latex coatings, mortars and parings are permitted to be used to seal ICF walls. Cold setting asphalt or hot setting asphalt shall conform to type C of ASTM D449. Hot asphalt shall be applied at a temperature of less than 200 degrees.

A motion was made by Marshall Knight to grant this petition. The motion was seconded. The motion carried.

Item B-2 Request by the Residential Code and Energy Conservation Code Committees to revise the requirements for vapor retarder to be consistent with the requirements in the International Energy Code.

1403.3 Vapor retarder. ~~An approved interior noncorrodible vapor retarder shall be provided. Vapor retarders shall be tested in accordance with ASTM E 96. Vapor retarder requirements shall comply with the *International Energy Code*.~~

Exceptions:

- ~~1. Where other approved means to avoid condensation and leakage of moisture are approved.~~
- ~~2. Plain and reinforced concrete or masonry exterior walls designed and constructed in accordance with Chapter 19 and Chapter 21, respectively.~~

Marshall Knight made a motion to grant this petition. The motion was seconded by Barry Maness. The motion carried.

Item B-3 Request by the Residential Code and Energy Conservation Code Committees to revise the requirements for moisture control requirements to be consistent with the requirements in the International Energy Code.

Delete section 502.1.1 and substitute the following:

502.1.1 Moisture Control. The building design shall not create conditions of accelerated deterioration from moisture condensation. Only in Zone 11, above grade shall frame walls, floors, and ceilings not ventilated to allow moisture to escape be required to have an approved vapor retarder. The vapor retarder shall be installed on the warm-in-winter side of the thermal insulation.

Exceptions:

1. In construction where moisture or its freezing will not damage the materials.
2. Where other approved means to avoid condensation are provided.

Delete section 802.1.2 and substitute the following:

802.1.2 Moisture Control. Only in Zone 11, shall all frame walls, floors, and ceilings not ventilated to allow moisture to escape be required to have an approved vapor retarder having maximum permeance rating of 1.0 perm (5.72×10^{-8} g/Pa-s-m²) when tested in accordance with Procedure A of ASTM E96, on the warm-in-winter side of the thermal insulation.

Exceptions:

1. In construction where moisture or its freezing will not damage the materials.
2. Where other approved means to avoid condensation in unventilated frame wall, floor, roof, and ceiling cavities are provided.

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

Item B-4 Request by the Residential Code and Energy Code Committees to revise section R322.1 dealing with Moisture Control in the Residential Code.

Delete section R322.1 and substitute the following:

R322.1 Moisture Control. Only in Zone 11 counties identified in Table N1101.2, above grade shall frame walls, floors and ceilings not ventilated to allow moisture to escape be required to have an approved vapor retarder. The vapor retarder shall be installed on the warm-in-winter side of the thermal insulation.

Exceptions:

1. In construction where moisture or its freezing will not damage the materials.
2. Where the framed cavity or space is ventilated to allow moisture to escape.

Delete the following without replacement:

1. Note "a" in Table N1101.2 without replacement.
2. Superscript "a" that appears beside certain counties in Table N1101.2 for the state of North Carolina.

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

Part C Notice of Rule-making Proceedings and Public Hearing

The attached Petitions for Rule-making have been granted by the Council. Notice of Rule Making proceedings and Public Hearing has been made. The Public Hearing will

be held on September 13, 2004. No further action is required by the Council at this time.

Item C-1 Notice Given for adoption of the 2005 National Electrical Code

Notice has been given and posted in regards to adopting the 2005 NEC. The Electrical Committee will meet to discuss this item further. The current document is in a final draft stage; Ron Chilton with NCDOT has received a draft. A hearing for this item will take place at the next NCBC meeting in September. The item will then become effective as of January 1, 2005. The Council decided to defer to Lon Culbertson, Chair of the Electrical Code Committee.

Part D Final Adoption

The following Petitions for Rule-making have been granted by the Council. Notice of Rule-making proceedings and Public Hearing has been made. The Public Hearing was held on June 7, 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”.

Marshall Knight made a motion to table this item. The motion was seconded and carried.

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

This code change is proposed to allow for alternate systems of crawl spaces without natural ventilation. This item was referred to the Residential Committee for further study. The committee recommends the attached wording.

Marshall Knight made a motion to table this item. The motion was seconded and carried.

Item D-3 Revise table R703.4 of the North Carolina Residential Code as follows:

**Table R703.4
Weather-Resistant Siding Attachment and Minimum Thickness**

Siding Material	Nominal thickness ^a (inches)	Joint treatment	Sheathing Paper Required	Type of supports for the Siding Material & Fasteners
Brick Veneer Concrete Masonry veneer	2 2	Section R703	Yes (m)	See section R703 and Figure R703.7 ^h

~~Delete footnote m: for masonry veneer, a weather-resistant membrane or building paper is not required over water-repellent sheathing materials when a 1-inch air space is provided between the veneer and the sheathing. When the 1-inch space is filled with mortar, a weather-resistant membrane or building paper is required over studs or sheathing.~~

This code change is proposed to improve brick veneer drainage. This item was referred to the Residential Committee for further study. The Committee recommends approval.

Marshall Knight made a motion to approve this item. The motion was seconded by Tom Avery. The motion carried.

Item D-4 Revise Section R703.7.4.2 of the North Carolina Residential Code as follows:

R703.7.4.2 Air Space. The veneer shall be separated from the sheathing by an air space of a minimum of normal 1 inch (25.4 mm) air space but not more than 4.5 inches (114 mm). ~~The weather-resistant membrane or asphalt-saturated felt required by Section R703.2 is not required over water-repellent sheathing materials.~~

Marshall Knight made a motion to approve this item. The motion was seconded by Barry Maness. The motion carried.

Item D-5 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.

After a brief address to the Council, Marshall Knight made a motion to move this item to the September NCBCC meeting. The motion was seconded and carried.

Item D-6 Motion to adopt June 2004 agenda items D-1, D-9, D-11, D-16, and D-17 approved on June 8, 2004.

This request is to meet the procedural requirements of OAH and RRC for Adoption by the Agency at least 60-days after notice of hearing. The items were previously approved at the June 8, 2004 NC Building Code Council Meeting.

Marshall Knight made a motion to grant this item. Tom Avery seconded the motion. The motion carried.

Item D-7 Motion to adopt June 2004 agenda items D-2, D-4, D-5, D-7, D-8, and D-14 as amended and approved on June 8, 2004.

This request is to meet the procedural requirements of OAH and RRC for Adoption by the Agency at least 60-days after notice of hearing.

Marshall Knight made a motion to accept this item. Al Bass seconded the motion. The motion carried.

Part E Reports

Administrative Code Committee Report

Diane Miller addressed the Council in regard to the Administrative Code Committee. Ms. Miller announced that she has condensed the NC Administrative Code to 11 pages and that the new code also includes commentary.

Chairman Dan Tingen commended the work of Diane Miller and the staff of the NC Department of Insurance (NCDI) for their efforts to complete the Administrative Code commentary in a timely and effective manner.

International Existing Building Code Committee

John Hitch, chair of the IEBC committee, addressed the Council regarding the status of the work of his committee. Mr. Hitch told the Council that Volume Nine should be retained along with Chapter 34 of the NC Building Code. Code change proposals are in preparation to be presented to the International Code Council. The IEBC committee has decided to wait until the next code cycle to adopt a new Existing Building Code.

Other Committee Reports/Comments

Wanda Edwards, staff member of NCDI, was questioned about the availability of code commentaries on the internet. Ms. Edwards agreed to seek advice on how best to publish the commentaries electronically.

The Council expressed a desire to have a published commentary to accompany all codes. The Council also discussed the sale of codes and commentaries separately.

Commentaries include the code, plus additional information. The Council needs to consider and further discuss this issue.

Al Bass questioned the fees for each book if it were to be accompanied by a commentary. Wanda Edwards replied that ICC would have to be contacted to find out exact costs and the feasibility of having both a hard and soft copy of the commentaries and codes printed together.

Council members expressed a desire to have the work their code committees completed on the commentaries to be published and to be made aware of the commentaries that are currently available.

It was reported that the 2006 codes will need to be finished/approved either by March 2005 or June 2005.

Staff Reports

Barry Gupton, staff member of NCDOT, reminded Council to review within 48 hours to make corrections to Minutes of NCBCC meetings that are sent to them by Melissa Lentz, NCBCC Administrative Assistant, via email for review. If Mrs. Lentz receives no response within this time frame, she will have the minutes posted on the website.

Other Reports/Comments

Melissa Lentz was requested by the Council to call each member the working day before NCBCC meetings are to take place to confirm time, date, location, and attendance. Mrs. Lentz was also requested to email a list of all the Ad-Hoc Committee members to the NCBCC.

Part F Appeals

Item F-1 North Carolina State University versus the North Carolina Department of Insurance

An appeal hearing was held by the NCBCC. Diane Miller was presiding counsel for the hearing. The findings of the Fact, Conclusions of Law, and Order will be served by Diane Miller.