

August 11, 2003

Mr. Barry Gardner  
Shelco, Inc.  
3120 Highwoods Blvd./Ste 100  
Raleigh, NC 27604

RE: Agenda for the September 9, 2003 Building Code Council Meeting

Dear Barry:

This is to officially notify you and other interested parties of a regularly scheduled meeting of the Building Code Council.

1. The work session will begin at 9:00AM on Monday, September 8, 2003. The work session is open to the public on a non-contributing basis.
2. A joint meeting of the Residential and Structural Committees is scheduled following the work session. The agenda for the meeting is attached to this letter.
3. **A PUBLIC HEARING IS NOT SCHEDULED FOR THIS MEETING. THE PUBLIC HEARING IS SCHEDULED FOR DECEMBER 8, 2003.**
4. The Building Code Council meeting will begin at 9:00AM on Tuesday, September 9, 2003.

All meetings will be held at the Wake County Commons located at 4011 Cary Drive, Raleigh, NC 27610. Persons requiring auxiliary aid or service should notify the Council at least (10) working days prior to the meeting.

**ITEM 1 - APPROVAL OF MINUTES OF THE JUNE 10, 2003, BUILDING CODE COUNCIL MEETING**

**ITEM 2 - APPEAL BY THE MONTESSORI SCHOOL OF RALEIGH OF INTERPRETATION BY LAUREL WRIGHT FOR THE REQUIREMENT FOR HANDRAILS ON SIDEWALK**

**ITEM 3 - REQUEST BY CATAWBA COUNTY BUILDING SERVICES DIVISION FOR PERMISSION TO PERFORM LOCAL PLANS REVIEW**

**ITEM 4 - REQUEST BY HARRY WATKINS, AIA FOR THE NORTH CAROLINA RESIDENTIAL CODE TO PROVIDE DESIGN PRESSURE REQUIREMENTS FOR 140 MPH WIND VELOCITY IN TABLE 4402 (a)**

**ITEM 5 - LETTERS OF RESPONSE FROM LICENSING BOARDS TO REQUEST FOR CONTINUING EDUCATION CREDITS FOR SERVING ON THE COUNCIL AND ITS COMMITTEES**

**ITEM 6 - EVALUATION OF STATEMENT OF ECONOMIC INTEREST FILED BY GORDON T. REYNOLDS.**

**PETITIONS FOR RULEMAKING**

The Secretary has received the following petitions for rulemaking. The Council will vote to grant or deny the petitions. Petitions that are granted may proceed through the rulemaking process. The Council will give no further consideration to petitions that are denied. The Council may send any petition to the appropriate committee for review. Committee meetings are scheduled for December 8, 2003, if needed. The public hearing for petitions granted at the September meeting will be held on March 9, 2004.

**ITEM 7 - REQUEST BY THE RESIDENTIAL COMMITTEE TO ADD DEFINITIONS TO SECTION R202 OF THE NORTH CAROLINA RESIDENTIAL CODE AS FOLLOWS:**

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

**ITEM 8 - REQUEST BY THE RESIDENTIAL COMMITTEE TO REVISE SECTION R613.1 OF THE NORTH CAROLINA RESIDENTIAL CODE AS FOLLOWS:**

**General.** This section prescribes performance and construction requirements for exterior window systems installed in wall systems. Waterproofing, sealing and flashing systems are not included in the scope of this section. See section 703.8 for flashing requirements.

**ITEM 9 – REQUEST BY THE RESIDENTIAL COMMITTEE TO 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 <sup>a</sup> (inches)	Joint treatment	Sheathing Paper Required	Type of supports for the Siding Material & Fasteners
Brick Veneer	2	Section R703	Yes	See section R703 and Figure R703.7 <sup>h</sup>
Concrete	2		<del>(m)</del>	
Masonry veneer				

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.~~

**ITEM 10 – REQUEST BY THE RESIDENTIAL COMMITTEE TO 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 nominal 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.~~

**ITEM 11 – REQUEST BY THE RESIDENTIAL COMMITTEE TO REVISE SECTION R703.8 OF THE NORTH CAROLINA RESIDENTIAL CODE AS FOLLOWS:**

**Flashing.** Approved corrosion-resistive flashing shall be provided in the exterior wall envelope in such a manner as to prevent the entry of water into the wall cavity or penetration of water to the building structural framing components. Install flashing per ASTM E 2112 *Standard Practice for Installation of Exterior Windows, Doors and Skylights*, or in accordance with manufacturer's instructions. Aluminum flashing may not be used in contact with cementitious material, except at counter flashing. The flashing shall extend to the surface . . .

(Include a reference to the standard in Chapter 43 – References.)

**ITEM 12 – REQUEST BY THE RESIDENTIAL COMMITTEE TO REVISE SECTION R903.3 OF THE NORTH CAROLINA RESIDENTIAL CODE AS FOLLOWS:**

**R903.3 Coping.** Parapet walls shall be properly coped with noncombustible, weatherproof materials of a width no less than the thickness of the parapet wall. Parapet coping shall extend 2 inches minimum down the faces of the parapet.

**ITEM 13 – REQUEST BY THE RESIDENTIAL COMMITTEE TO REVISE SECTION R905.2.8.3 OF THE NORTH CAROLINA RESIDENTIAL CODE AS FOLLOWS:**

**R905.2.8.3 Crickets and saddles.** A cricket or saddle shall be installed on the ridge side of any chimney greater than 30 inches (762 mm) wide. Cricket or saddle covering shall be sheet metal or of the same material as the roof covering. Provide flashing at the intersection of the cricket or saddle and the chimney. See Section 703.8.

**ITEM 14 – REQUEST BY THE RESIDENTIAL COMMITTEE TO REVISE SECTION R307.2.2 OF THE NORTH CAROLINA MECHANICAL CODE AS FOLLOWS:**

**307.2.2 Drain pipe materials and sizes.** Components of the condensate disposal system shall be cast iron, galvanized steel, copper, polybutylene, polyethylene, ABS, CPVC or PVC pipe or tubing. All components shall be selected for the pressure and temperature rating of the installation. Condensate waste and drain line sizes shall not be less than 3/4-inch (19 mm) internal diameter and shall not decrease in size from the drain pan connection to the place of condensate disposal, except that condensate drain lines in attics and under-floor spaces of one- and two-family dwellings shall be at least 1 inch inside diameter. Where the drain pipes from more than one unit are manifolded together . . .

**ITEM 15 – REQUEST BY MARTIN PETCHUL, PE WITH PIEDMONT NATURAL GAS TO REVISE SECTION 305.2 OF THE NORTH CAROLINA FUEL GAS CODE AS FOLLOWS:**

**305.2 Elevation of ignition source.** Equipment and appliances having an ignition source shall be elevated such that the source of ignition is not less than 18 inches (457 mm) above the floor in hazardous locations and public garages, private garages, repair garages, motor fuel-dispensing facilities and parking garages. For the purpose of this section, rooms or spaces that are not part of the living space of a dwelling unit and that communicate directly with a private garage through openings shall be considered to be part of the private garage.

**Exception:** Elevation of the ignition source is not required for appliances that are listed as flammable vapor resistant and for installation without elevation.

**ITEM 16 – REQUEST BY JEFF GRIFFIN TO REVISE SECTION R311.4 OF THE NORTH CAROLINA RESIDENTIAL CODE AS FOLLOWS:**

**R311.4 Hallways and Interior Doors.** The minimum width of a hallway shall not be less than 3 feet (914 mm). All doors from habitable rooms shall be nominal 2'-6" x 6'-8".

**ITEM 17 - REQUEST BY STAFF FOR REVISIONS TO THE NORTH CAROLINA  
ACCESSIBILITY CODE REQUIRED FOR CERTIFICATION - SEE ATTACHMENT  
FOR PROPOSED CHANGES**

**ITEM 18 - COMMITTEE REPORTS**

**BUILDING CODE COUNCIL COMMITTEES**

1. JOINT RESIDENTIAL AND STRUCTURAL COMMITTEE MEETING

**AD HOC COMMITTEES**

1. INTERNATIONAL EXISTING BUILDING COMMITTEE

**COMMENTARY COMMITTEES**

1. PLUMBING CODE COMMENTARY
2. MECHANICAL CODE COMMENTARY
3. BUILDING CODE COMMENTARY

**ITEM 19 - OTHER ITEMS**

1. REPORT BY STAFF ON THE STATUS OF TEMPORARY RULE FOR SECTION 1616.3 OF THE NORTH CAROLINA BUILDING CODE
2. REVIEW OF RULES APPROVED BY RULES REVIEW COMMISSION AND NC LEGISLATURE

Sincerely,

Wanda D. Edwards, PE  
Secretary

**AGENDA  
RESIDENTIAL COMMITTEE MEETING  
RALEIGH, NORTH CAROLINA  
SEPTEMBER 8, 2003**

**ITEM 1 - DISCUSSION OF BRACED WALL REQUIREMENTS FOR GARAGE WALLS**

**ITEM 2 - INTERPRETATION OF USE OF SWIMMING POOL APPENDIX**

**ITEM 3 - REVISE SECTION 703.7.5 AS FOLLOWS:**

Flashing of ~~6~~ 40 mil polyethylene or other corrosion-resistive material shall be located beneath the first course of masonry above finished ground level above the foundation wall or slab and at other points of support, including ....

**ITEM 4 - REVISE SECTION 905.2.8.1 AS FOLLOWS:**

Base and cap flashing shall be installed in accordance with manufacturer's installation instructions. Base flashing shall be of either corrosion-resistant metal of minimum nominal ~~0.019-inch (0.483 mm)~~ 0.0239-inch (0.607 mm) thickness or mineral surface roofing weighing a minimum of 77 pounds per 100 square feet (3.76 kg/m<sup>2</sup>). Cap flashing shall be corrosion-resistant metal of minimum nominal ~~0.019 inch (0.483 mm)~~ 0.0239-inch (0.607 mm) thickness.

**ITEM 5 - REVISE SECTION R408 TO THE 2002 NORTH CAROLINA RESIDENTIAL CODE TO READ AS FOLLOWS:**

**SECTION R408  
UNDER-FLOOR SPACE**

**R408.1 Under-floor space moisture control.** The under-floor space between the bottom of the floor joists and the earth under the building (except space occupied by a basement or cellar) shall be provided with ventilation openings through the foundation walls or exterior walls or shall be provided with other means of under-floor space moisture control. ~~The minimum net area of ventilation openings shall be not less than 1 square foot (0.0929 m<sup>2</sup>) for each 150 square feet (100 m<sup>2</sup>) of under floor space area. One such ventilating opening shall be within 3 feet (914mm) of each corner of the building.~~

**R408.2** ?????? (add introductory statement or renumber)

**R408.2.1 Openings for under-floor ventilation.** The minimum net area of ventilation openings shall be not less than 1 square foot (0.0929 m<sup>2</sup>) for each 150 square feet (100 m<sup>2</sup>) of

under-floor space area. One such ventilating opening shall be within 3 feet (914mm) of each corner of the building.

**Exceptions:**

1. Where warranted by climatic conditions, ventilation openings to the outdoors are not required if ventilation openings to the interior are provided.
2. The total area of ventilation openings may be reduced to 1/1,500 of the under-floor area where the ground surface is treated with an approved vapor retarder material and the required openings are placed so as to provide cross-ventilation of the space. The installation of operable louvers shall not be prohibited.
3. Under-floor spaces used as supply plenums for distribution of ~~heated and cooled~~ conditioned air shall comply with the requirements of the North Carolina Mechanical Code.
4. Ventilation openings are not required where continuously operated mechanical ventilation is provided at a rate of 1.0 cfm (1.02 L/s) for each 50 square feet (10 m<sup>2</sup>) of under-floor space floor area and the ground surface is covered with an approved vapor retarder material.
5. Ventilation openings are not required when the ground surface is covered with an approved vapor retarder material, the space is supplied with conditioned air and the perimeter walls are insulated in accordance with Section N1102.1.7.

**R408.2.1.1 Covering material.** Ventilation openings shall be covered for their height and width with any of the following materials provided that the least dimension of the covering shall not exceed ¼ inch (6.4 mm):

1. Perforated sheet metal plates not less than 0.070 inch (1.8 mm) thick.
2. Expanded sheet metal plates not less than 0.047 inch (1.2 mm) thick.
3. Cast iron grills or grating.
4. Extruded load-bearing brick vents.
5. Hardware cloth of 0.035 inch (0.89 mm) wire or heavier.
6. Corrosion-resistant wire mesh, with the least dimension being 1/8 inch (3.2 mm).

**R408.2.2 Closed under-floor systems.** Other means of under-floor space moisture control shall be provided in accordance with this Section where openings for under-floor ventilation are not provided.

**R408.2.2.1 Vapor retarder.** A 6-mil (0.15 mm) polyethylene vapor retarder shall be installed with 12-inch lap at edges and joints. Where the under-floor space is conditioned, the edges and joints shall be sealed and drainage to the exterior shall be provided.

**R408.2.2.2 Moisture control.** Moisture control shall be provided by either dehumidifier, continuous exhaust or concrete slab-on-grade.

**R408.2.2.2.1 Dehumidifier.** A permanent dehumidifier shall be installed to control the air moisture level in the closed crawl space.

**R408.2.2.2.2 Continuous exhaust.** Continuously operated mechanical ventilation shall be provided at a rate of 1.0 cfm (1.02 L/s) for each 50 square feet (10 m<sup>2</sup>) of under-floor space floor area. Make-up for the mechanical ventilation shall be furnished from conditioned supply air and shall be exhausted to the exterior.

**R408.2.2.2.3 Concrete slab-on-grade.** A thin concrete slab shall be installed to protect the continuous vapor retarder.

**R408.2.2.3 Clearance.** Floor joists shall be 48 inches minimum above the under-floor space grade or concrete slab-on-grade. Girders shall be 40 inches minimum above the under-floor space grade or concrete slab-on-grade.

**R408.2.2.4 Caulking and sealants.** Caulking and sealants shall be applied to areas such as joints around access door and frame, between foundation and sill plate, at penetrations for plumbing, mechanical, electrical and gas lines and at duct penetrations.