

2002 NC Residential Code

030909 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 retard 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 through or into walls or into interior spaces".

Petition Granted: September 2003
Public Hearing Date: September 2004
Final Adoption Date: September 2004
Rules Review Date: November 2004
Status: Adopted, Approved

020611 ITEM 11 - PROPOSAL BY NANETTE McELMAN OF IBHS TO INCLUDE WINDBORNE DEBRIS PROTECTION IN RESIDENTIAL CODE AS PRINTED IN SECTION R301.2.1.2, TABLE R301.2.1.2 AND SECTIONS R613.4 AND R613.7 OF THE 2000 INTERNATIONAL RESIDENTIAL CODE

Include windborne debris protection for structures within 1500 feet of the mean high water mark of the Atlantic Ocean, as printed in Section R301.2.1.2, Table R301.2.1.2 and Sections R613.4 and R613.7 of the 2000 International Residential Code.

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.

Petition Granted: June 2002
Public Hearing Date: September 2002
Final Adoption Date: September 2002
Rules Review Date: October 2002
Status: Adopted, No Legislative Action

031209 ITEM 5A - REQUEST BY JOSEPH R HETZEL WITH DASMA TO INCLUDE REFERENCE TO THE DASMA GARAGE DOOR WIND LOAD GUIDE IN THE NORTH CAROLINA RESIDENTIAL CODE:

The Committee recommends for the following change to **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 155h (for garage doors), or the 2000 International Building Code.

Petition Granted: December 2003
Public Hearing Date: September 2004
Final Adoption Date: September 2004
Rules Review Date: November 2004
Status: Adopted, Approved

030909 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 providing egress from habitable rooms shall be nominal 2'-6" x 6'-8".

Petition Granted: September 2003
Public Hearing Date: June 2004
Final Adoption Date: June 2004
Rules Review Date: September 2004
Status: Adopted, Approved

040914 Item B-2 Section R318.3, Specific approval

R318.3 Specific approval. Plastic foam not meeting the requirements of Sections R318.1 and R318.2 may be approved 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.

Petition Granted: September 2004
Public Hearing Date: December 2004
Final Adoption Date: March 2005
Rules Review Date: May 2005
Status: Adopted, Approved

050308 Item B-2 - Request by Cyrus Dastur, Advanced Energy, to modify the Residential Code, Sections R318 and R409 related to foam plastic flamespread.

R318.2.3 Attics and crawl spaces. Within attics and crawl spaces where entry is made only for service of utilities, foam plastic shall be protected against ignition by 1 ½ inch-thick (38mm) mineral fiber insulation, ¼-inch thick (6.4mm) wood structural panels, 3/8-inch (9.5mm) particleboard, ¼-inch (6.4mm) hardboard, 3/8-inch (9.5mm) gypsum board, or corrosion-resistant steel having a base metal thickness of 0.016 inch (0.406mm).

~~Within crawl spaces, foam plastic use is governed by R409.8.2.~~

R409.8.2 Foam plastic fire safety. Foam plastic insulation may be installed inside crawl spaces without a thermal ~~cover~~ barrier or ignition barrier when the insulation product has been tested in accordance with ~~ASTM E 84 have a flame spread rating of not more than 25 and a smoke developed rating of not more than 450~~ section R318.3. foam plastic tested in accordance with section R318.3 shall be installed according to the limitations stated in the ICC Evaluation Service Evaluation Report (ICC-ES) for the product. Foam plastics that have not been tested to meet these ratings shall be protected against ignition ~~by covering them with a thermal barrier. Acceptable thermal barriers~~

~~include but are not limited to ½ inch cement board, metal foil sheets, metal foil tape, steel or aluminum metal sheets or other approved materials installed in such a manner that the foam is not exposed per section R318.2.3.~~

Exception: Foam plastic insulation located in closed crawl spaces ~~used as conditioned spaces~~ as defined in section R409.5.5 Conditioned Space or section R409.6 Plenums shall be protected against ignition by an approved thermal barrier.

Petition Granted: March 2005
Public Hearing Date: June 2005
Final Adoption Date: September 2005
Rules Review Date: October 2005
Status: Adopted, Approved

040721 Item B-4 Section R322.1, Moisture control

Delete section R322.1 and substitute the following:

R322.1 Moisture Control. In Zone 11 counties identified in Table N1101.2, above grade frame walls, floors and ceilings that are not ventilated to allow moisture to escape shall 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:

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

Petition Granted: July 2004
Public Hearing Date: December 2004
Final Adoption Date: March 2005
Rules Review Date: May 2005
Status: Adopted, Approved

031209 Item 12 - Request by Residential/Structural Committee to revise section R403.1 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...

Petition Granted: December 2003
Public Hearing Date: September 2004

Final Adoption Date: September 2004
 Rules Review Date: November 2004
 Status: Adopted, Approved

040721 Item B-1 Section R406.2, Waterproofing requirements

R406.2 Concrete and masonry basement waterproofing.

Exterior 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 asphalt shall conform to type C of ASTM D449. Hot asphalt shall be applied at a temperature of less than 200 degrees.

Petition Granted: July 2004
 Public Hearing Date: December 2004
 Final Adoption Date: March 2005
 Rules Review Date: May 2005
 Status: Adopted, Approved

031209 ITEM 10 - REQUEST BY JEFF GRIFFIN, MECKLENBURG COUNTY, TO ADD TO TABLE 602.3. (1) OF THE NORTH CAROLINA RESIDENTIAL CODE AS FOLLOWS:

**TABLE 602.3(1)
 FASTENER SCHEDULE FOR STRUCTURAL MEMBERS**

DESCRIPTION OF BUILDING ELEMENTS	NUMBERS AND TYPE OF FASTENERS	SPACING OF FASTENERS
Ledger Strip	3-16d common 4 - 3" x 0.131" nail 4 - 3" 14 gage staple	Face nail at 4" on center under each joist

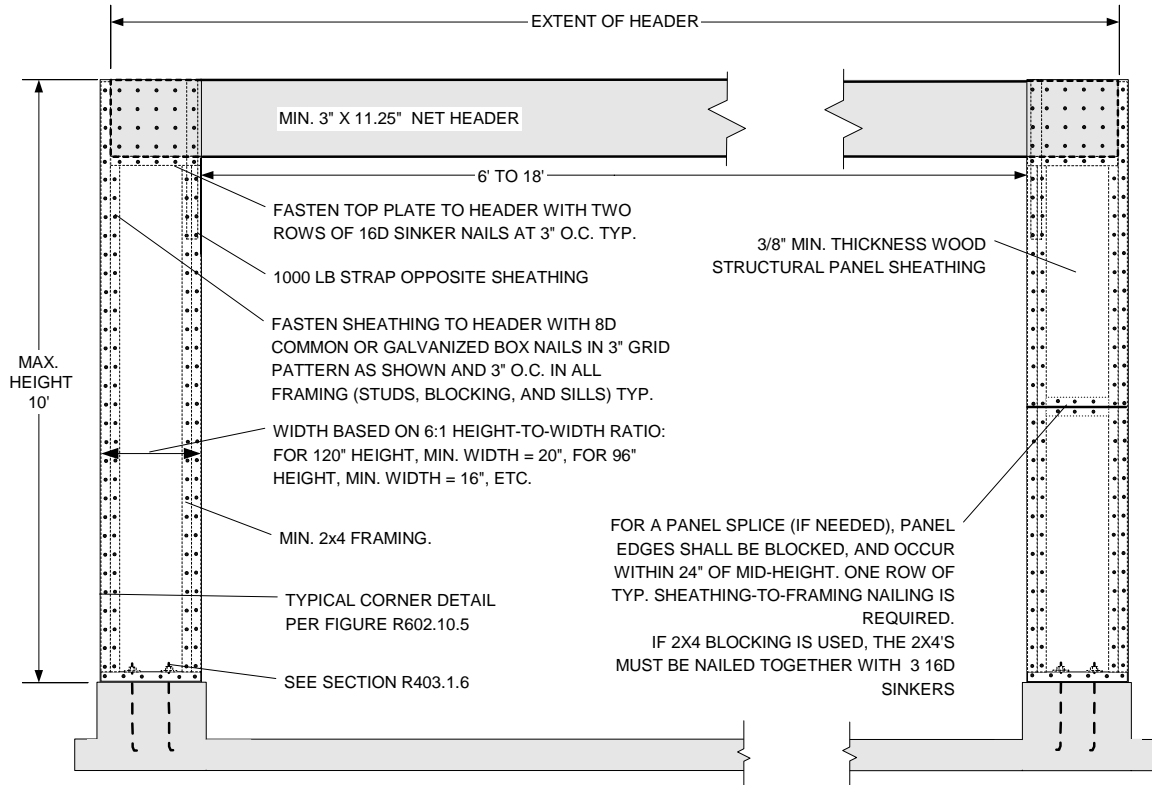
Petition Granted: December 2003
 Public Hearing Date: June 2004
 Final Adoption Date: June 2004
 Rules Review Date: September 2004
 Status: Adopted, Approved

031209 ITEM 9 - REQUEST BY THE RESIDENTIAL COMMITTEE TO ADD THE FOLLOWING TO SECTION R 602.10.5 AND FIGURE R602.10.5 (2) OF THE NORTH CAROLINA RESIDENTIAL CODE:

R602.10.5

(Add the following after the first paragraph.)

Exception: Vertical wall segments in one story or first story of two story buildings next to garage openings shall be permitted to have a 6:1 height-to-width ratio (with height being measured from top of header to sill plate) when constructed in accordance with the following provisions. Each panel shall have a length of not less than 16 inches (406 mm) and a height of not more than 10 feet (3048 mm). Each panel shall be sheathed on one face with a single layer of 3/8-inch-minimum-thickness (9.5 mm) wood structural panel sheathing nailed with 8d common or galvanized box nails in accordance with Figure R602.10.5 (2). The wood structural panel sheathing shall extend up over the solid sawn or glued-laminated header and shall be nailed in accordance with Figure R602.10.5 (2). The header shall extend between the inside faces of the first full-length outer studs of each panel. The clear span of the header between the inner studs of each panel shall be not less than six feet (1829 mm) and not more than 18 feet (5486 mm) in length. A strap with an uplift capacity of not less than 1000 pounds (454 kg) shall fasten the header to the side of the inner studs opposite the sheathing. Two anchor bolts shall be installed in accordance with Section R403.1.6, and plate washers shall be a minimum of 2 inches by 2 inches by 3/16 inch (51 mm by 51 mm by 4.8 mm) thick and shall be used on



**FIGURE R602.10.5(2)
GARAGE DOOR BRACED WALL PANEL FOR USE WITH CONTINUOUSLY SHEATHED WALLS**

each bolt. This exception is only permitted in Seismic Design Categories A-C.

Petition Granted: December 2003
Public Hearing Date: June 2004
Final Adoption Date: June 2004
Rules Review Date: July 2004
Status: Adopted, Approved

031209 ITEM 9A - REQUEST BY CHAIRMAN DAN TINGEN TO REDUCE PANEL LENGTH BY 50% AS SHOWN IN TABLE R602.10.5 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%.

Petition Granted: December 2003
Public Hearing Date: September 2004
Final Adoption Date: September 2004
Rules Review Date: November 2004
Status: Adopted, Approved

020909 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.

Petition Granted: September 2003
Public Hearing Date: June 2004
Final Adoption Date: June 2004
Rules Review Date: July 2004
Status: Adopted, Approved

030909 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 ^a (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 ^h
Concrete	2		(m)	
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.~~

Petition Granted: September 2003
Public Hearing Date: June 2004
Final Adoption Date: July 2004
Rules Review Date: September 2004
Status: Adopted, Approved

030909 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.~~

Petition Granted: September 2003
Public Hearing Date: June 2004
Final Adoption Date: July 2004
Rules Review Date: September 2004
Status: Adopted, Approved

031209 ITEM 8 - REQUEST BY THE RESIDENTIAL COMMITTEE TO REVISE SECTION R703.8 OF THE NORTH CAROLINA RESIDENTIAL CODE AS FOLLOWS:

R 703.8 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 supplied written 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.)

Petition Granted: December 2003
Public Hearing Date: June 2004
Final Adoption Date: June 2004
Rules Review Date: September 2004
Status: Adopted, Approved

041214 Item B-6 - Request by Icynene, Inc. to adopt section R806.4, Conditioned Attic Assemblies of the 2004 supplement to the International Residential Code. The Residential Code and Energy Conservation Code Ad Hoc Committees met on February 7, 2005 and recommended approval.

R806.4 Conditioned attic assemblies. Unvented conditioned attic

assemblies (spaces between the ceiling joists of the top story and the roof rafters) are permitted under the following conditions:

1. No interior vapor retarders are installed on the ceiling side (attic floor) of the unvented attic assembly.
2. An air-impermeable insulation is applied in direct contact to the underside/interior of the structural roof deck. "Air-impermeable" is defined by ASTM E 283.

Exception: In zones 2B and 3B, insulation is not required to be air-impermeable.
3. In the warm humid locations as defined in Section N1101.1:
 - a. For asphalt roofing shingles: A 1-perm (57.4 mg/s · m² · Pa) or less vapor retarder (determined using Procedure B of ASTM E 96) is placed to the exterior of the structural roof deck; i.e., just above the roof structural sheathing.
 - b. For wood shingles and shakes; a minimum continuous ¼-inch (6 mm) vented air space separated the shingles/shakes and the roofing felt placed over the structural sheathing.
4. In zones 3 through 8 as defined in Section N1101.2, sufficient insulation is installed to maintain the monthly average temperature of the condensing surface above 45° F (7° C). the condensing surface is defined as either the structural roof deck or the interior surface of an air-impermeable insulation applied in direct contact to the underside/interior of the structural roof deck. "Air-impermeable" is quantitatively defined by ASTM E 283. for calculation purposes, as interior temperature of 68° F (20° C) is assumed. The exterior temperature is assumed to be the monthly average outside temperature.

Petition Granted: December 2004
Public Hearing Date: March 2005
Final Adoption Date: June 2005
Rules Review Date: August 2005
Status: Adopted, Approved

031209 ITEM 7 - 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.

Petition Granted: December 2003
Public Hearing Date: June 2004
Final Adoption Date: June 2004
Rules Review Date: July 2004
Status: Adopted, Approved

030909 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.

Petition Granted: September 2003
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Final Adoption Date: June 2004
Rules Review Date: July 2004
Status: Adopted, Approved

031209 ITEM 11A - REQUEST BY CHAIRMAN DAN TINGEN (PRESENTED BYADVANCED ENERGY CORPORATION) TO ADD NEW SECTIONS REGARDING CLOSED CRAWL SPACES IN THE NORTH CAROLINA RESIDENTIAL CODE.

See Minutes,
September 14, 2004 (Item D-2, Closed Crawl Spaces) - document

Petition Granted: December 2003
Public Hearing Date: September 2004
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Rules Review Date: November 2004
Status: Adopted, Approved