NC State Building Codes Amendments - Effective 1/1/2018

(adopted September 2016 through June 2017)

(Note: some amendments may indicate earlier effective dates)

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NC Department of Insurance, 322 Chapanoke Road, Suite 200, Raleigh, NC 27603 919-661-5880 x 240 (call for availability)

The following pages represent a summary of the Building Code Council adopted amendments that have been approved by the Rules Review Commission.

2012 NC Building, Energy Conservation, Fire, Fuel Gas, Mechanical, Plumbing, Residential Codes (based on the 2009 International Codes)

2014 NC Electrical Code (based on the 2014 NEC)

2015 NC Existing Building Code (based on the 2012 IEBC)

These amendments revise, delete or add to the adopted NC Code.
509.2 Horizontal building separation allowance. A building shall be considered as separate and distinct buildings for the purpose of determining area limitations, continuity of fire walls, limitation of number of stories and type of construction where all of the following conditions are met:

1. The buildings are separated with a horizontal assembly having a minimum 3-hour fire-resistance rating.
2. The building below the horizontal assembly is no more than one story above grade plane. Deleted.
3. The building below the horizontal assembly is of Type IA construction.
4. Shaft, stairway, ramp and escalator enclosures through the horizontal assembly shall have not less than a 2-hour fire-resistance rating with opening protectives in accordance with Section 715.4.

(there are no changes to the exception)

The delayed effective date of this Rule is January 1, 2018.
The Statutory authority for Rule-making is G. S. 143-136; 143-138.
2012 NC Building Code

1008.1.4.6 Locking arrangements in educational occupancies. (160614 Item B-9)

2012 NC Building Code

1008.1.4.6 Locking arrangements in educational occupancies. In Group E and Group B educational occupancies, egress doors from classrooms, offices and other occupied rooms shall be permitted to be provided with locking arrangements designed to keep intruders from entering the room where all of the following conditions are met:

1. The door shall be capable of being unlocked from outside the room with a key or other approved means.
2. The door shall be openable from within the room in accordance with Section 1008.1.9.
3. Modifications shall not be made to listed panic hardware, fire door hardware or door closers.
4. Modifications to fire door assemblies shall be in accordance with NFPA 80.

1008.1.4.6.1 Remote operation of locks. Remote operation of locks complying with Section 1008.1.4.6 shall be permitted.

The delayed effective date of this Rule is January 1, 2018.
The Statutory authority for Rule-making is G. S. 143-136; 143-138.
2014 NC Electrical Code
680.21(C) Pool Pump Motor Replacement. (161213 Item B-5)

680.21 Motors

(C) GFCI Protection. Outlets supplying pool pump motors connected to single-phase, 120-volt through 240-volt branch circuits, whether by receptacle or by direct connection, shall be provided with ground-fault circuit-interrupter protection for personnel.

(1) Pool Pump Motor Replacement. Whenever a pool pump motor requires replacing and the existing branch circuit or receptacle providing power to the pump motor does not provide ground-fault circuit-interrupter protection for personnel as required by 680.21(C), the branch circuit or receptacle shall be updated to provide ground-fault circuit-interrupter protection for personnel.

The delayed effective date of this Rule is January 1, 2018.
The Statutory authority for Rule-making is G. S. 143-136; 143-138.
680.25 Feeders. These provisions shall apply to any feeder on the supply side of panelboards supplying branch circuits for pool equipment covered in Part II of this article and on the load side of the service equipment or the source of a separately derived system.

(A) Wiring Methods.

(1) Feeders. Feeders shall be installed in rigid metal conduit or intermediate metal conduit. The following wiring methods shall be permitted if not subject to physical damage:

1. Liquidtight flexible nonmetallic conduit
2. Rigid polyvinyl chloride conduit
3. Reinforced thermosetting resin conduit
4. Electrical metallic tubing where installed on or within a building
5. Electrical nonmetallic tubing where installed within a building
6. Type MC cable where installed within a building and if not subject to corrosive environment

Exception: An existing feeder within a one-family dwelling unit or two-family dwelling unit between an existing remote panelboard and service equipment shall be permitted to run in flexible metal conduit or an approved cable assembly that includes an equipment grounding conductor within its outer sheath. The equipment grounding conductor shall comply with 250.24(A)(5).

The delayed effective date of this Rule is January 1, 2018.
The Statutory authority for Rule-making is G. S. 143-136; 143-138.
2012 NC Energy Conservation Code
402.4.3 Fireplaces. (160614 Item B-5)

2012 NC Energy Conservation Code

402.4.3 Fireplaces. Site-built masonry fireplaces shall have doors, dampers and comply with Section R1006 of the North Carolina Residential Code for combustion air.

The effective date of this Rule is March 1, 2017.
The Statutory authority for Rule-making is G. S. 143-136; 143-138.
2015 NC Existing Building Code

403.7, 704.2 Locking arrangements in educational occupancies. (160614 Item B-9)

2015 NC Existing Building Code

403.7 Locking arrangements in educational occupancies. In Group E and Group B educational occupancies, egress doors from classrooms, offices and other occupied rooms shall be permitted to be provided with locking arrangements designed to keep intruders from entering the room where all of the following conditions are met:
1. The door shall be capable of being unlocked from outside the room with a key or other approved means.
2. The door shall be openable from within the room in accordance with Section 1008.1.9 of the North Carolina Building Code.
3. Modifications shall not be made to listed panic hardware, fire door hardware or door closers.
4. Modifications to fire door assemblies shall be in accordance with NFPA 80.

704.2 Locking arrangements in educational occupancies. In Group E and Group B educational occupancies, egress doors from classrooms, offices and other occupied rooms shall be permitted to be provided with locking arrangements designed to keep intruders from entering the room where all of the following conditions are met:
1. The door shall be capable of being unlocked from outside the room with a key or other approved means.
2. The door shall be openable from within the room in accordance with Section 1008.1.9 of the North Carolina Building Code.
3. Modifications shall not be made to listed panic hardware, fire door hardware or door closers.
4. Modifications to fire door assemblies shall be in accordance with NFPA 80.

The delayed effective date of this Rule is January 1, 2018.
The Statutory authority for Rule-making is G. S. 143-136; 143-138.
1401.2.6 Occupant load increase. Where the existing occupant load is increased by more than 20 percent, or in Group A occupancies where the occupant load is greater than 300, compliance with Chapter 14 is not permitted. Compliance with other methods in this code shall be permitted.

The delayed effective date of this Rule is January 1, 2018.
The Statutory authority for Rule-making is G. S. 143-136; 143-138.
2015 NC Existing Building Code
609.4 Water Supply System Test. (160315 Item B-3)

**609.4 Water Supply System Test.** Existing water supply systems that are repaired or replaced shall be allowed to be tested and proven tight under a water pressure of normal operating pressure of the existing water supply system. The pressure shall be held at least 15 minutes.

The delayed effective date of this Rule is January 1, 2018.
The Statutory authority for Rule-making is G. S. 143-136; 143-138.
2012 NC Fire Code
1008.1.4.6 Locking arrangements in educational occupancies. (160614 Item B-9)

2012 NC Fire Code

1008.1.4.6 Locking arrangements in educational occupancies. In Group E and Group B educational occupancies, egress doors from classrooms, offices and other occupied rooms shall be permitted to be provided with locking arrangements designed to keep intruders from entering the room where all of the following conditions are met:
1. The door shall be capable of being unlocked from outside the room with a key or other approved means.
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4. Modifications to fire door assemblies shall be in accordance with NFPA 80.

The delayed effective date of this Rule is January 1, 2018.
The Statutory authority for Rule-making is G. S. 143-136; 143-138.
202 General Definitions.

**High Volume Low Speed Fan.** A ceiling fan that circulates high volumes of air at low rotational speeds. **These fans are greater than 7 feet in diameter.**

The effective date of this Rule is January 1, 2018. The Statutory authority for Rule-making is G. S. 143-136; 143-138.
931 High Volume Low Speed Fans.
931.1 General. Where provided, high volume low speed fans shall be tested and labeled in accordance with AMCA 230, listed and labeled in accordance with UL 507, and installed in accordance with the manufacturer’s instructions.

The effective date of this Rule is January 1, 2018.
The Statutory authority for Rule-making is G. S. 143-136; 143-138.
Chapter 15 Referenced Standards.

AMCA
Air Movement and Control Association International
30 West University Drive
Arlington Heights, IL 60004

<table>
<thead>
<tr>
<th>Standard Reference Number</th>
<th>Title</th>
<th>Referenced in Code Section Number</th>
</tr>
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<tbody>
<tr>
<td>230-15</td>
<td>Laboratory Methods of Testing Air Circulating Fans for Rating and Certification</td>
<td>931</td>
</tr>
</tbody>
</table>

UL
Underwriters Laboratories, Inc.
333 Pfingsten Road
Northbrook, IL 60062-2096

<table>
<thead>
<tr>
<th>Standard Reference Number</th>
<th>Title</th>
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</tr>
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The effective date of this Rule is January 1, 2018.
The Statutory authority for Rule-making is G. S. 143-136; 143-138.
Tracer wire. For plastic sewer piping, an insulated copper tracer wire or other approved conductor shall be installed adjacent to and over the full length of the piping. Access shall be provided to the tracer wire or the tracer wire shall terminate at the cleanout between the building drain and building sewer. The tracer wire size shall be not less than 14 AWG and the insulation type shall be listed for direct burial.

The effective date of this Rule is March 1, 2017. The Statutory authority for Rule-making is G. S. 143-136; 143-138.
TABLE 605.3
WATER SERVICE PIPE

(Add the following material and standard. There are no other changes to the table below)

Polyvinyl Chloride (PVC) Pressure Pipe AWWA C-900/NSF-61

The delayed effective date of this Rule is January 1, 2018.
The Statutory authority for Rule-making is G.S. 143-136; 143-138.

<table>
<thead>
<tr>
<th>MATERIAL</th>
<th>STANDARD</th>
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<tbody>
<tr>
<td>Acrylonitrile butadiene styrene (ABS) plastic pipe</td>
<td>ASTM D 1527; ASTM D 2242</td>
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<tr>
<td>Arteriosclerosis pipe</td>
<td>ASTM C 296</td>
</tr>
<tr>
<td>Brass pipe</td>
<td>ASTM E 43</td>
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<tr>
<td>Chlorinated polyvinyl chloride (CPVC) plastic pipe</td>
<td>ASTM D 2846; ASTM F 441; ASTM F 442; CSA B 137.6</td>
</tr>
<tr>
<td>Copper or copper-alloy pipe</td>
<td>ASTM B 42; ASTM B 302</td>
</tr>
<tr>
<td>Copper or copper-alloy tubing (Type K, WK, L, WL)</td>
<td>ASTM B 75; ASTM B 58; ASTM B 251; ASTM B 447</td>
</tr>
<tr>
<td>Cross-linked polyethylene (PEX) plastic tubing</td>
<td>ASTM F 876; ASTM F 877; CSA B 137.5</td>
</tr>
<tr>
<td>Cross-linked polyethylene/aluminum/cross-linked polyethylene (PEX-AL-PEX)</td>
<td>ASTM F 1281; ASTM F 2362; CAN/CSA B 137.10M</td>
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<tr>
<td>Ductile iron water pipe</td>
<td>AWWA C 151; AWWA C 115</td>
</tr>
<tr>
<td>Galvanized steel pipe</td>
<td>ASTM A 53</td>
</tr>
<tr>
<td>Polyethylene (PE) plastic pipe</td>
<td>ASTM D 2239; ASTM D 3055; CSA B 137.1</td>
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<tr>
<td>Polyethylene (PE) plastic tubing</td>
<td>ASTM D 2737; CSA B 137.1</td>
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<td>Polyethylene/aluminum/polyethylene (PE-AL-PE)</td>
<td>ASTM F 1282; CAN/CSA B 137.9</td>
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<tr>
<td>Polypropylene (PP) plastic pipe or tubing</td>
<td>ASTM F 2359; CSA B 137.1</td>
</tr>
<tr>
<td>Polyvinyl chloride (PVC) plastic pipe</td>
<td>ASTM D 1755; ASTM D 2241; ASTM D 2672; CSA B 137.3</td>
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<tr>
<td>Stainless steel pipe (Type 304/304L)</td>
<td>ASTM A 312; ASTM A 778</td>
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<tr>
<td>Stainless steel pipe (Type 316/316L)</td>
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<td>Polyvinyl Chloride (PVC) Pressure Pipe</td>
<td>AWWA C-900/NSF-61</td>
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2012 NC Residential Code
N1102.4.3 Fireplaces. (160614 Item B-5)

2012 NC Residential Code

N1102.4.3 Fireplaces. Site-built masonry fireplaces shall have doors, dampers, and comply with Section R1006 of the North Carolina Residential Code for combustion air.

The effective date of this Rule is March 1, 2017.
The Statutory authority for Rule-making is G. S. 143-136; 143-138.
AG105.2 Outdoor swimming pool. An outdoor swimming pool, including an in-ground, above-ground or on-ground pool, hot tub or spa shall be surrounded by a barrier which shall comply with the following:

1. The top of the barrier shall be at least 48 inches (1219 mm) above grade measured on the side of the barrier which faces away from the swimming pool. The maximum vertical clearance between grade and the bottom of the barrier shall be 2 inches (51 mm) or 4 inches (102 mm) where concrete or fixed solid material is used measured on the side of the barrier which faces away from the swimming pool. Where the top of the pool structure is above grade, such as an above-ground pool, the barrier may be at ground level, such as the pool structure, or mounted on top of the pool structure. Where the barrier is mounted on top of the pool structure, the maximum vertical clearance between the top of the pool structure and the bottom of the barrier shall be 4 inches (102 mm).

(there are no changes to items 2 through 10)

The delayed effective date of this Rule is January 1, 2018.
The Statutory authority for Rule-making is G. S. 143-136; 143-138.