2014 NC Electrical Code
300.3 Conductors. (170314 Item B-3)

300.3 Conductors

(B) Conductors of the Same Circuit. All conductors of the same circuit and, where used, the grounded conductor and all equipment grounding conductors and bonding conductors shall be contained within the same raceway, auxiliary gutter, cable tray, cable bus assembly, trench, cable, or cord, unless otherwise permitted in accordance with 300.3(B) (1) through (B) (5).

(1) Paralleled Installations. Conductors shall be permitted to be run in parallel in accordance with the provisions of 310.10(H). The requirement to run all circuit conductors within the same raceway, auxiliary gutter, cable tray, trench, cable, or cord shall apply separately to each portion of the paralleled installation, and the equipment grounding conductors shall comply with the provisions of 250.122. Parallel runs in cable tray shall comply with the provisions of 392.20(C).
Exception: Conductors installed in nonmetallic raceways run underground shall be permitted to be arranged as isolated phase installations. The raceways shall be installed in close proximity, and the conductors shall comply with the provisions of 300.20(B).

(2) Grounding and Bonding Conductors. Equipment grounding conductors shall be permitted to be installed outside a raceway or cable assembly where in accordance with the provisions of 250.130(C) for certain existing installations or in accordance with 250.134(B), Exception No. 2, for dc circuits. Equipment bonding conductors shall be permitted to be installed on the outside of raceways in accordance with 250.102(E).

(3) Nonferrous Wiring Methods. Conductors in wiring methods with a nonmetallic or other nonmagnetic sheath, where run in different raceways, auxiliary gutters, cable trays, trenches, cables, or cords, shall comply with the provisions of
300.20(B). Conductors in single-conductor Type MI cable with a nonmagnetic sheath shall comply with the provisions of
332.31. Conductors of single-conductor Type MC cable with a nonmagnetic sheath shall comply with the provisions of
330.31, 330.116, and 300.20(B).

(4) Enclosures. Where an auxiliary gutter runs between a column-width panelboard and a pull box, and the pull box includes neutral terminations, the neutral conductors of circuits supplied from the panelboard shall be permitted to originate in the pull box.

(5) Existing Dwelling Panelboards. An equipment grounding conductor for an existing one-family or two-family dwelling shall be permitted to be installed separately and outside of the raceway or cable assembly where all the following conditions apply:
(a) When relocating or installing an additional service disconnecting means;
(b) Enacting 300.3(B)(5)(a) redefines the existing service entrance conductors as a feeder in Article 100; and
(c) Replacement of the existing service entrance conductors requires the removal of the building finish or is deemed impractical by the AHJ.

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

250.140 Frames of Ranges and Clothes Dryers. Frames of electric ranges, wall-mounted ovens, counter-mounted cooking units, clothes dryers, and outlet or junction boxes that are part of the circuit for these appliances shall be connected to the equipment grounding conductor in the manner specified by 250.134 or 250.138.

Exception No. 1: For existing branch-circuit installations only where an equipment grounding conductor is not present in the outlet or junction box, the frames of electric ranges, wall-mounted ovens, counter mounted cooking units, clothes dryers, and outlet or junction boxes that are part of the circuit for these appliances shall be permitted to be connected to the grounded circuit conductor if all the following conditions are met.

(1) The supply circuit is 120/240-volt, single phase, 3 wire; or 208Y / 120-volt derived from a 3-phase, 4 wire, wye-connected system.

(2) The grounded conductor is not smaller than 10 AWG copper or 8 AWG aluminum.

(3) Any of the following:

(a) The grounded conductor is insulated;

(b) The grounded conductor is uninsulated and part of a Type SE service-entrance cable and the branch circuit originates at the service equipment;

(c) The grounded conductor is uninsulated and part of a cable assembly and all current-carrying conductors are protected by a ground fault circuit interrupter at the origination of the branch circuit; or

(d) A new 3-wire cable assembly not smaller than the existing conductors shall be permitted to be extended from the service to an enclosure where the existing conductors shall be spliced together and the grounded conductors are insulated by tape, heat-shrink or other approved means inside the enclosure.

(4) Grounding contacts of receptacles furnished as part of the equipment are bonded to the equipment.

Exception No. 2: For existing branch-circuit installations only where an equipment grounding conductor is not present in the outlet or junction box, an equipment grounding conductor sized in accordance with 250.122 shall be permitted to be run separately from the circuit conductors.

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

250.142 Use of Grounded Circuit Conductor for Grounding Equipment.
(B) Load-Site Equipment. Except as permitted in 250.30(A)(1) and 250.32(B) Exception, a grounded circuit conductor shall not be used for grounding non–current carrying metal parts of equipment on the load side of the service disconnecting means or on the load side of a separately derived system disconnecting means or the overcurrent devices for a separately derived system not having a main disconnecting means.

Exception No. 1: The frames of ranges, wall-mounted ovens, counter-mounted cooking units, and clothes dryers under the conditions permitted for existing installations by 250.140 shall be permitted to be connected to the grounded circuit conductor.

Exception No. 2: It shall be permissible to ground meter enclosures by connection to the grounded circuit conductor on the load side of the service disconnect where all of the following conditions apply:
(1) No service ground-fault protection is installed.
(2) All meter enclosures are located immediately adjacent to the service disconnecting means.
(3) The size of the grounded circuit conductor is not smaller than the size specified in Table 250.122 for equipment grounding conductors.

Exception No. 3: Direct-current systems shall be permitted to be grounded on the load side of the disconnecting means or overcurrent device in accordance with 250.164.

Exception No. 4: Electrode-type boilers operating at over 1000 volts shall be grounded as required in 490.72(E)(1) and 490.74.

Exception No. 5: It shall be permissible to ground an existing panelboard enclosure by connection to the grounded circuit conductor for a one-family or two-family dwelling where all the following conditions apply:
(1) When relocating or installing an additional main disconnecting means;
(2) Enacting 250.142(B) Exception No. 5 (1) redefines the existing service entrance conductors as a feeder in Article 100;
(3) An equipment grounding conductor in the existing panelboard is not present;
(4) Replacement of the existing service entrance conductors requires either the removal of the building finish or deemed impractical by the AHJ.
(5) All grounding electrode conductors are removed from the existing panelboard; and
(6) The grounded conductors are insulated by tape, heat-shrink, or other approved means except where covered by the sheathing of a cable assembly or as needed for joints, splices, and termination purposes.

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

250.53(A)(2) Supplemental Electrode Required.

Exception No. 1: If a single rod, pipe, or plate grounding electrode has a resistance to earth of 25 ohms or less, the supplemental electrode shall not be required.

Exception No. 2: The supplemental ground electrode shall not be required at temporary electrical service installation (saw service pole) at a construction site ~~for one and two-family residences, provided the temporary electrical service does not exceed 150 volts to ground or 100A.~~ provided all ungrounded circuits do not exceed 150 volts to ground, and the rating of the single disconnecting means or the summation of the ratings of multiple overcurrent devices that serve together as the disconnecting means, does not exceed 100 amperes.

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

300.9 Raceways in Wet Locations Above Grade.
Where raceways are in wet locations above grade, the interior of these raceways shall be considered to be a wet location. Insulated conductors and cables installed in raceway in wet locations above grade shall comply with 310.10(C).

Exception: The raceway shall not be considered a wet location if:
(1) The section of raceway routed in a wet location above grade does not exceed ~~1500 mm (5 ft)~~ 1.8 m (6 ft) in length;
(2) Any fittings or conduit bodies are watertight and listed for use in wet locations; and
~~(3) Raceway is open at its termination point in a dry location.~~
(3) All termination points of the raceway are only open in any of the following:
(a) a dry location;
(b) equipment suitable for outdoor use; or
(c) equipment listed for use in a wet location.

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

2012 NC Fire Prevention Code
2018 NC Fire Prevention Code
901.1 Scope. (161213 Item B-6)

901.1 Scope. ~~The provisions of this chapter shall specify where fire protection systems are required and shall apply to the design, installation, inspection, operation, testing and maintenance of all *fire protection systems.*~~

901.1 Scope. The provisions of the *International Building Code* shall specify where *fire protection systems* are required. The provisions of the *International Fire Code* shall determine the design, installation, inspection, operation, testing and maintenance of all *fire protection systems.*

The effective date of this Rule for the 2012 NC Fire Prevention Code is December 1, 2017.
The delayed effective date of this Rule for the 2018 NC Fire Prevention Code is January 1, 2019.
The Statutory authority for Rule-making is G. S. 143-136; 143-138.

(Note: Also printed in 2012 and 2018 Building Code, Section 901.1.)

As published in the NC Register:

901.1 Scope. The provisions of the *International Building Code* shall specify where *fire protection systems* are required and shall apply to the design, installation, inspection, operation, testing of all fire protection systems. Fire protection systems shall be repaired, operated and maintained in accordance to the *International Fire Code.*