

Article 10 - ADMINISTRATIVE SECTION

10.1 TITLE

These Administrative Regulations along with the requirements included in the 2008 Edition of the National Electrical Code (NFPA-70 - 2008) as approved by the North Carolina Building Code Council on March 11, 2008, to be effective June 1, 2008, with the following amendments:

(1) 90.2(B)(5)(b) Scope, Not Covered

(2) 210.8(a)(3) (Exception No. 2)

(3) 210.12 Are-Fault Circuit-Interrupter Protection. (AFCI)

(4) 250.50

(5) 334.15 Exposed Work

(6) 406.8 Receptacles in Damp or Wet Locations.

shall be known as the North Carolina Electrical Code, and may be cited as such or as the State Electrical Code; and will be referred to herein as “the code” or “this code”.

10.2 SCOPE

Article 80 Administration and Enforcement of the code is hereby not adopted and does not apply for this code. For Scope and Exceptions to Applicability of Technical Codes, refer to the North Carolina Administrative Code and Policies.

10.3 PURPOSE

The purpose of the code is to provide minimum standards, provisions and requirements of safe and stable design, methods of construction and uses of materials in buildings or structures hereafter erected, constructed, enlarged, altered, repaired, moved, converted to other uses of demolished and to regulate the electrical systems, equipment, maintenance, use and occupancy of all buildings or structures. All regulations contained in this code have a reasonable and substantial connection with the public health, safety, morals, or general welfare, and their provisions shall be construed liberally to those ends.

10.4 ADMINISTRATION

For administrative regulations pertaining to inspection (rough-ins and finals), permits and Certificates of Electrical Compliance, see local ordinances and the North Carolina

Administrative Code and Policies. When the provisions of other codes are determined to be contrary to the requirements of this code, this code shall prevail.

10.5 DEFINITION

Unless the context indicates otherwise, whenever the word “building” is used in this chapter, it shall be deemed to include the word “structure” and all installations such as plumbing systems, heating systems, cooling systems, electrical systems, elevators and other installations which are parts of, or permanently affixed to, the building or structure.

10.6 APPLICATION OF CODE TO EXISTING BUILDINGS

For requirements of existing structures, refer to the North Carolina Administrative Code and Policies.

10.7 Service Utilities

10.7.1 Connection of Service Utilities – No person shall make connections from a utility, source of energy, fuel or power to any building or system which is regulated by the technical codes until approved by the Inspection Department and a Certificate of Compliance is issued (General Statute 143-143.2)

10.7.2 Authority to disconnect Service Utilities – The Inspection Department shall have the authority to require disconnecting a utility service to the building, structure or system regulated by the technical codes, in case of emergency or where necessary to eliminate an imminent hazard to life or property. The Inspection Department shall have the authority to disconnect a utility service when a building has been occupied prior to Certificate of Compliance or entry into the building for purposes of making inspections cannot be readily granted. The Inspection Department shall notify the serving utility, and whenever possible the owner or occupant of the building, structure or service system of the decision to disconnect prior to taking such action. If not notified prior to disconnecting, the owner or occupant shall be notified in writing within eight (8) working hours (General Statutes 143-143.2, 153A-365, 153A-366, 160A-425 and 160A-426).

10.8 Temporary Power

10.8.1 Scope. The provisions of this section apply to the utilization of portions of the wiring system within a building to facilitate construction.

10.8.2 Provisions for Temporary Power. The Code enforcement official shall give permission and issue a permit to energize the electrical service when the provisions of 10.8 and the following requirements have been met:

- 1) The service wiring and equipment, including the meter socket enclosure, shall be installed, the service wiring terminated, and the service equipment covers installed.
- 2) The portions of the electrical system that are to be energized shall be complete and physically protected.
- 3) The grounding electrode system shall be complete.
- 4) The grounding and the grounded conductors shall be terminated in the service equipment.
- 5) At least one receptacle outlet with ground fault circuit interrupter protection for personnel shall be installed with the circuit wiring terminated.
- 6) The applicable requirements of the North Carolina Electrical Code apply.

10.8.3 Uses Prohibited. In no case shall any portion of the permanent wiring be energized until the portions have been inspected and approved by an electrical Code Enforcement Official. Failure to comply with this section may result in disconnection of power or revocation of permit.

10.8.4 Application for Temporary Power. Application for temporary power shall be made by and in the name of the applicant. The application shall explicitly state the portions of the energized electrical system, mechanical system, or plumbing system for which application is made, its intended use and duration.

10.8.5 Security and Notification. The applicant shall maintain the energized electrical system or that portion of the building containing the energized electrical system in a secured and locked manner or under constant supervision to exclude unauthorized personnel. The applicant shall alert personnel working in the vicinity of the energized electrical system to its presence.

10.9 Requirements of Other State Agencies, Occupational Licensing Boards, or Commissions

The North Carolina State Building Codes do not include all additional requirements for buildings and structures that may be imposed by other State agencies, occupational licensing boards, and commissions. It shall be the responsibility of a permit holder, design professional, contractor, or occupational license holder to determine whether any additional requirements exist.

AMENDMENT 90.2(B)(5)(b)

Retain NEC 2005:

90.2(B)(5)(b) Scope, Not Covered.

(5) Installations under the exclusive control of an electric utility where such installations

(a) Consist of service drops or service laterals, and associated metering, or

(b) are located in legally established easements, rights-of-way, or by other agreements either designated by or recognized by public service commissions, utility commissions or other regulatory agencies having jurisdiction for such installations, or

(c) Are on property owned and leased by the electric utility for the purpose of communications, metering, generation, control, transformation, transmission, or distribution of electric energy.

AMENDMENT 210.8(A)(3)

Amend NEC 2008:

(3) Outdoors

Exception No. 1 to (3): Receptacles that are not readily accessible and are supplied by a dedicated branch circuit for electric snow-melting or deicing equipment shall be permitted to be installed in accordance with the applicable provisions of Article 426.

Exception No. 2 to (3): A single outlet receptacle supplied by dedicated branch circuit which is located and identified for specific use by a sewage lift pump.

AMENDMENT 210.12

Delay effective date for NEC 2008:

**210.12 Arc-Fault Circuit-Interrupter Protection.
(AFCI)**

(B) Dwelling Units: All 125-volt, single-phase, 15- and 20- ampere branch circuits supplying outlets installed in dwelling unit family rooms, dining rooms, living rooms, parlors, libraries, dens, bedrooms, sunrooms, recreation rooms, closets, hallways, or similar rooms or areas shall be protected by a listed arc-fault circuit interrupter, combination-type, installed to provide protection of the branch circuit.

Note: *This requirement for AFCI protection shall become **effective January 1, 2009**. It shall be permitted to meet the 2005 NC Electrical Code Article 210.12 for bedrooms until that date.*

AMENDMENT 250.50

Delete NEC 2008 text and replace with:

250.50 Grounding Electrode System. If available on premises at each building or structure served, each item in 250.52(A)(1) through (A)(6) shall be bonded together to form the grounding electrode system. Where none of these electrodes are available, one or more of the electrodes specified in 250.52(A)(4) through (A)(7) shall be installed and used.

AMENDMENT 334.15(C)

Amend NEC 2008:

(C) In Unfinished Basements ~~and Crawl~~

~~Spaces:~~ Where cable is run at angles with joist in unfinished basements ~~and crawl spaces~~ it shall be permissible to secure cables not smaller than two 6 AWG or three 8 AWG conductors directly to the lower edges of the joist. Smaller cables shall be run either through bored holes in joists or on running boards. NM cable installed on the wall of an unfinished basements shall be permitted to be installed in a listed conduit or tubing or shall be protected in accordance with 300.4. Conduit or tubing shall be provided with an insulating bushing or adapter at the point the cable enters the raceway. The NM cable sheath shall extend through the conduit or tubing and into the outlet or device box not less than 6 mm (1/4 in.). The cable shall be secured within 300 mm (12 in.) of the point where the cable enters the conduit or tubing. Metal conduit, tubing, and metal outlet boxes shall be connected to an equipment grounding conductor.

AMENDMENT 406.8

Delay effective date for NEC 2008:

406.8 Receptacles in Damp or Wet Locations.

(A) **Damp Locations:** A receptacle installed outdoors in a location protected from the weather or in other damp locations shall have an enclosure for the receptacle that is weatherproof when the receptacle is covered (attachment plug cap not inserted and receptacle covers closed).

An installation suitable for wet locations shall also be considered suitable for damp locations.

A receptacle shall be considered to be in a location protected from the weather where located under roofed open porches, canopies, marquees, and the like, and will not be subjected to a beating rain or water runoff. All 15- and 20-ampere, 125- and 250-volt non-locking receptacles shall be a listed weather-resistant type.

NOTE: The effective date for listed weather-resistant type receptacles is January 1, 2009.

(B) Wet Locations.

(1) 15- and 20- ampere Receptacle in Wet Location.

15- and 20- ampere, 125- and 250- volt receptacle installed in a wet location shall have an enclosure that is weatherproof whether or not the attachment plug cap is inserted. All 15- and 20-ampere, 125- and 250-volt non-locking receptacles shall be a listed weather-resistant type.

NOTE: The effective date for listed weather-resistant type receptacles is January 1, 2009.

ARTICLE 338.10(B)(4)(a)

Delay effective date for NEC 2008:

338.10(B)(4)(a) Installation Methods for Branch Circuits and Feeders.

(a) Interior Installations. In addition to the provisions of this article, Type SE service-entrance cable used for interior wiring shall comply with the installation requirements of Part II of Article 334.

FPN: See 310.10 for temperature limitation of conductors.

Note: The Rules Review Commission received 10-written requests for Legislative review of this rule. The rule became effective on July 3, 2008.

ARTICLE 406.11

Delay effective date for NEC 2008:

406.11 Tamper-Resistant Receptacles in Dwelling Units. In all areas specified in 210.52, all 125-volt, 15-and 20-ampere receptacles shall be listed tamper-resistant receptacles.

Note: The Rules Review Commission received 10-written requests for Legislative review of this rule. The rule became effective on July 3, 2008.