

## COMMUNITY AFFAIRS

### Division Of Codes And Standards

### Uniform Construction Code

### Electrical Subcode

### Adopted Amendments: N.J.A.C. 5:23-2.18C and 3.16

Proposed: October 20, 2008 at 40 N.J.R. 5900(a).

Adopted: January 22, 2009 by Joseph V. Doria, Jr., Commissioner,  
Department of Community Affairs

Filed:, 2009 as R. d., **with technical changes** not requiring additional public notice or comment  
(see N.J.A.C. 1:30-6.3).

Authority: N.J.S.A. 52:27D-124.

Effective Date:, 2009

Expiration Date: June 13, 2013.

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**JOSEPH V. DORIA, JR.**  
**COMMISSIONER**

#### **Summary** of Public Comments and Agency Responses:

The Department received comments from Harold Endean, Electrical Subcode Official; Anthony S. Giampetro, Electrical Inspector; Thomas A. Rorro, Electrical Inspector; Michael Dempsey, Municipal Code Inspections; Larry Logan, President, IAEI South Jersey Chapter; George Spais, New Jersey Builders Association; Bob Mahan, Electrical Subcode Official and Vincent Speranza, President, Turnpike Electric Inc.

**COMMENT:** The proposed amendments in section 210.12 require arc-fault circuit-interrupters, which would create a cost increase in new home construction. The commenter does not see any benefits to new construction as a result of this change, since improved wiring methods already reduce the risk. However, such a requirement would be beneficial in existing dwelling units.

**RESPONSE:** The Department disagrees with the commenter. The Department believes that requiring arc-fault circuit-interrupters would not increase construction costs significantly, since circuit breakers are readily available and the technology of the circuit breakers has advanced to recognize faults without nuisance tripping. The protection the arc-fault circuit interrupter affords outweighs the cost.

**COMMENT:** The proposed amendments in section 406.11 requiring tamper-resistant receptacles in dwelling units would increase new home construction costs without any commensurate benefit, since products are available for homeowners to purchase and install to reduce the risk of children accessing the receptacles. Elderly people would have difficulties inserting plugs in to these receptacles. Tamper-resistant receptacles should not be covered by the New Home Warranty, since the device may malfunction prematurely.

**RESPONSE:** The Department disagrees with the commenter. The Department believes that requiring tamper-resistant receptacles would not increase costs significantly, since the receptacles are readily available. There have been studies that show that the elderly persons do not have any more difficulty inserting plugs in to these receptacles than they do with standard receptacles already in use. Tamper-

resistant receptacles are tested, listed and labeled for their use. The Department is not aware of instances where these devices have prematurely malfunctioned.

**COMMENT:** The proposed amendments in section 210.8(A)(2) and (5) to retain the exceptions as per the NEC/2005 would indeed avoid nuisance tripping of equipment that could cause property damage and this proposal reduces the cost of new home construction. The following sections of the NEC/2005: 210.8(A)(2) Exception No. 2 to (2) should read as follows: "Receptacles installed under the exceptions to 210.8(A)(2) shall *not* be considered as meeting the requirements of 210.52(G)".

**RESPONSE:** The Department thanks the commenter. The word "not" is being inserted after "shall" to be consistent with the language from the NEC/2005.

**COMMENT:** Section 250.94(1) of the NEC/2008 should be deleted due to the utility not permitting any equipment being attached to their metering equipment.

**RESPONSE:** Not all utility companies prohibit the installation of intersystem bonding terminations on their metering equipment, so the inclusion of this method is appropriate. However, for those companies that prohibit this practice, there are two other methods of achieving compliance with the NEC/2008.

**COMMENT:** Sections 342.30 and (C), 344.30 and (C), 352.30 and (C), 355.30 and (C), and 358.30 and (C) of the NEC/2008 should be retained so that only an 18-inch piece of conduit that complies with (C) is allowed to go unsupported between two enclosures.

**RESPONSE:** The Department disagrees with the commenter. The NEC requirement for unsupported conduit has been three-feet and there is no documentation that the distance to run conduit unsupported has created any safety hazards that would justify reduction of the distance to 18-inches.

**COMMENT:** Section 210.52(E) of the NEC/2008 should be deleted, since it is only for convenience, and not a life safety issue, and will increase the cost of construction.

**RESPONSE:** The Department disagrees with the commenter. The receptacle required outdoors for porches, decks and balconies is a safety issue, since it is intended to eliminate the use of extension cords and it will not significantly increase the cost of construction.

**COMMENT:** Section 525.5(B) of the NEC/2008 would place restrictions on the locations of all carnival amusement structures that would be technically infeasible to meet, given the area in which the rides would be located. It would place a hardship on the sponsor that would, in most case, result in cancelation of the event. Section 525.5(B) of the NEC/2005 should be retained.

**RESPONSE:** The Department agrees with the commenter. The language as per NEC/2005 section 525.5(B) shall be retained.

**COMMENT:** The proposal to adopt the NEC/2008 as written should be approved, since it provides additional safety with up to date technology.

**RESPONSE:** The Department thanks the commenter.

**Summary of Department Initiated Changes:** N.J.A.C. 5:23-3.16(a) 2.i. provides a reference to the codes and standards that are referenced in the Fine Print Notes (FPNs) of the electrical subcode (NEC/2008). The DCA Bulletin number that contains a list of adopted codes and standards that are applicable to the enforcement of the electrical subcode has changed. The new number is included in this adoption.

**Full text** of the adoption follows (additions indicated in boldface with asterisks **\*thus\***; deletions indicated with brackets with asterisks \*[thus]\*).

### **5:23-3.16 Electrical subcode**

(a) Rules concerning the subcode adopted are as follows:

1. (No change.)

- i. (No change.)
- 2. The National Electrical Code 2008 may be known and cited as "the electrical subcode."
  - i. Codes and standards referenced in the Fine Print Notes (FPNs) of the electrical subcode (NEC 2005) shall be considered adopted by reference to the extent prescribed by each related section. These codes and standards also are printed in DCA Bulletin \*[#06-2]\* **\*#09-1\***, which contains a list of adopted codes and standards that are applicable to the enforcement of the electrical subcode.
- 3. (No change.)
  - i. (No change.)
- (b) (No change.)
  - 1. – 2. (No Change.)
  - 3. Chapter 2 of the electrical subcode, entitled “Wiring and Protection,” is amended as follows:
    - i. Section 210.8(A)(2) and (5) of Article 210, entitled Branch Circuits, is deleted; it is replaced by Section 210.8(A)(2) and (5) and the exceptions in the National Electrical Code 2005 as follows:
      - 210.8(A)(2) – Garages, and also accessory buildings that have a floor located at or below grade level not intended as habitable rooms and limited to storage areas, work areas, and areas of similar use.
        - Exception No. 1 to (2) – Receptacles that are not readily accessible.
        - Exception No. 2 to (2) – A single receptacle or duplex receptacle for two appliances located within dedicated space for each appliance that, in normal use, is not easily moved from one place to another and that is cord-and-plug connected in accordance with 400.7(A)(6), (A)(7), or (A)(8).
      - Receptacles installed under the exceptions to 210.8(A)(2) shall **\*not\*** be considered as meeting the requirements of 210.52(G).
    - 210.8(A)(5) – (No change.)
  - 4. (No change.)
  - 5. (No change.)
    - i. (No change.)
    - ii. **\*Section 525.5(B) of Article 525, entitled Carnivals, Circuses, Fairs and Similar Events, is deleted; it is replaced by Section 525.5(B) in the National Electrical Code 2005 as follows:**
      - 525.5(B) Clearances to Rides and Attractions. Amusement rides and amusement attractions shall be maintained not less than 4.5 m (15 ft) in any direction from overhead conductors operating at 600 volts or less, except for the conductors supplying the amusement ride or attraction. Amusement rides or attractions shall not be located under or within 4.5 m (15 ft) horizontally of conductors operating in excess of 600 volts. \***
        - \*Recodify ii. – iv. as iii. – v. (No change in text.)\*
  - 6. – 7. (No change.)
- (c) (No change.)

### Federal Standards Statement

No Federal standards analysis is required because these amendments are not being proposed in order to implement, comply with, or participate in any program established under Federal law or under a State law that incorporates or refers to Federal law, standards, or requirements.