(3) The amount of leakage in buried piping shall be measured at the test pressure specified by pumping from a calibrated container.

iii. Add new Section 15.9 as follows: 15.9 Flushing of Piping: Lead-in connections to system risers and fire service mains from the water supply to the system riser (excluding limited systems) shall be flushed completely before connection is made to sprinkler piping. The flushing operation shall be continued for a sufficient amount of time to ensure that the system is thoroughly cleaned. The minimum rate of flow shall be not less than one of the following:

(1) The hydraulically calculated water demand rate of the system, including any hose requirements.

(2) The flow that is necessary to provide a velocity of 10 ft/sec (3.1 m/sec).

(3) The maximum flow rate available to the system under fire conditions.

15. Chapter 16 of the plumbing subcode, entitled "Regulations Governing Individual Sewage Disposal Systems for Homes and Other Establishments Where Public Sewer Systems Are Not Available," shall be amended as follows:

i. Except as otherwise indicated in (b)15ii below, Sections 16.1 through 16.12.1.13 shall be deleted in their entirety.

ii. In Section 16.1.7, Abandoned disposal systems, insert "When an existing building is being demolished and the existing sewage disposal system is abandoned or an existing sewage disposal system is being abandoned and a connection is being made to the public sewer disposal system or new sewage disposal system, the plumbing subcode official shall ensure that the existing abandoned tank is disconnected from the building, pumped out, and filled with gravel, stones, or soil material."

Note: Existing standards of the Department of Environmental Protection and boards of health with respect to individual on-site sewage disposal systems remain in effect."

16. Chapter 17 of the plumbing subcode entitled, "Potable Water Supply Systems," shall be deleted in its entirety.

Note: Existing standards of the Department of Environmental Protection and boards of health with respect to individual on-site water supply systems remain in effect.

17. Chapter 18 of the plumbing subcode, entitled "Mobile Home and Travel Trailer Park Plumbing Standards," shall be amended as follows:

i. In Section 18.2.1, General, the last sentence beginning with "Trailer home park" shall be deleted. ii. Section 18.2.2 is amended to delete the words "or sewerage disposal" on line 1.

iii. Section 18.5.8 is amended to add the phrase "and as provided by the authority having jurisdiction" after the words "chapter 10 of this code."

iv. Section 18.8.1.2 is deleted.

v. Section 18.8.3 is amended to add the phrase "for dependent trailers" after the word "park" on line 1.

vi. Section 18.8.4 is amended to add the phrase "for dependent trailers" after the word "park" on line 1.

vii. Section 18.9 is deleted.

viii. Section 18.10 is deleted.

18. Appendix A, entitled "Sizing Storm Drainage Systems," shall be deleted in its entirety.

19. Appendix E of the plumbing subcode, entitled "Special Design Plumbing Systems," shall be amended as follows:

i. Section E.9.3, Rainfall Rates, shall be deleted and the following shall be inserted: "Rainfall rates shall be applied so that the applicable rainfall rates for Burlington and Ocean counties and all counties south, shall be six (6) inches per hour; for Mercer and Monmouth counties and all counties north, the applicable rainfall rate shall be five (5) inches per hour."

ii. Section E.9.4, Secondary Roof Drainage, shall be deleted.

Amended by R.1981 d.132, effective May 7, 1981.

See: 13 N.J.R. 121(a), 13 N.J.R. 258(d).

Amended by R.1983 d.12, eff. February 7, 1983, operative February 22, 1983.

See: 14 N.J.R. 1326(a), 15 N.J.R. 141(c).

Added (a) 3 and (c). Amended by R.1984 d.314, eff. August 6, 1984.

See: 16 N.J.R. 1139(a), 16 N.J.R. 2084(b).

Section substantially amended.

Amended by R.1986 d.12, effective February 3, 1986.

See: 17 N.J.R. 2714(a), 18 N.J.R. 267(a).

(a)1i had a change of address; (a)3 and (c) added.

Amended by R.1987 d.81, effective February 2, 1987.

See: 18 N.J.R. 2237(b), 19 N.J.R. 289(d).

Amended by R.1987 d.374, effective September 21, 1987.

See: 19 N.J.R. 1024(a), 19 N.J.R. 1720(b).

Model subcode revisions.

Amended by R.1989 d.66, effective February 6, 1989.

See: 20 N.J.R. 2846(a), 21 N.J.R. 288(a). Added (c).

Amended by R.1990 d.58, effective February 5, 1990.

See: 21 N.J.R. 3346(a), 22 N.J.R. 351(a).

Added (d) adopting the 1989 Supplement to the 1987 National Standard Plumbing Code.

Amended by R.1990 d.253, effective May 21, 1990.

See: 22 N.J.R. 909(b), 22 N.J.R. 1554(a).

Text added at (a)3; (d)3ii amended.

Amended by R.1990 d.507, effective October 15, 1990.

See: 22 N.J.R. 2208(a), 22 N.J.R. 3214(a).

Text conformed to BOCA National Code/1990.

Amended by R.1991 d.326, effective July 1, 1991.

See: 23 N.J.R. 804(a), 23 N.J.R. 2044(a).

GPF set at 1.6; gravity water closets not permitted in commercial uses.

- Amended by R.1991 d.571, effective November 18, 1991.
- See: 23 N.J.R. 2619(a), 23 N.J.R. 3444(b).
- Added new (c).
- Amended by R.1992 d.67, effective February 3, 1992.
- See: 23 N.J.R. 3602(a), 24 N.J.R. 404(b).
- Low volume water closet exception added at (b)18i(1).
- Amended by R.1993 d.662, effective December 20, 1993.
- See: 25 N.J.R. 3891(a), 25 N.J.R. 5918(a).
- Amended by R.1995 d.122, effective March 6, 1995 (operative July 1, 1995).
- See: 26 N.J.R. 4874(a), 27 N.J.R. 894(a).
- Amended by R.1998 d.136, effective March 16, 1998.
- See: 30 N.J.R. 4(a), 30 N.J.R. 1038(a).
- In (b)9, added xii.
- Amended by R.1998 d.332, effective July 6, 1998.
- See: 30 N.J.R. 1377(a), 30 N.J.R. 2421(b).
- Rewrote the section.
- Amended by R.2001 d.340, effective September 17, 2001.
- See: 33 N.J.R. 1245(a), 33 N.J.R. 3308(b).
- Rewrote the section.
- Amended by R.2002 d.393, effective December 16, 2002.
- See: 34 N.J.R. 2914(a), 34 N.J.R. 4428(a).
- In (b)8, deleted former (ii) and recodified existing (iii) to (ix) as (ii) to (viii).
- Amended by R.2005 d.35, effective January 18, 2005.
- See: 36 N.J.R. 3329(b), 37 N.J.R. 267(a).
- Rewrote the section.
- Administrative correction.
- See: 37 N.J.R. 885(a).
- Amended by R.2005 d.341, effective October 17, 2005.
- See: 37 N.J.R. 164(a), 37 N.J.R. 3974(b).
- In (b)3iv, added "and add the following sentence at the end: 'Minimum earth cover for building sewers connected to a private sewage disposal system shall be 6 inches.' " at the end of the paragraph. Amended by R.2007 d.65, effective February 20, 2007.
- See: 38 N.J.R. 3348(a), 39 N.J.R. 633(a).
- Rewrote the section.
- Amended by R.2008 d.274, effective September 15, 2008.
- See: 40 N.J.R. 2629(a), 40 N.J.R. 5195(b).
- In paragraph 7.23 of (b)8vi, substituted "Spas and Hot Tubs" for "spas and hot tubs"; in subparagraph 2 of paragraph 7.23.3 of (b)8vi, inserted a period at the end; in paragraph 7.23.4.1 of (b)8vi, added the second paragraph; and in paragraph 7.23.5 of (b)8vi, inserted the closing quotation mark at the end.
- Amended by R.2008 d.346, effective November 17, 2008.
- See: 40 N.J.R. 3778(a), 40 N.J.R. 6540(a).
- In (b)4iv, inserted "the" preceding "Construction" and substituted "2004" for "1998"; added (b)10vi; recodified former (b)10vi and (b)10vii as (b)10vii and (b)10viii; and in (b)10viii, substituted "2004" for "1999".
- Amended by R.2009 d.48, effective February 2, 2009.
- See: 40 N.J.R. 5319(a), 41 N.J.R. 733(b).
- Amended by R.2010 d.195, effective September 7, 2010.
- See: 41 N.J.R. 3140(a), 42 N.J.R. 2043(a).
  - Rewrote the section.

## **Case Notes**

Statute providing that only licensed master plumbers could be plumbing contractors was unconstitutional. Mechanical Contractors Ass'n of New Jersey, Inc. v. State, 255 N.J.Super. 488, 605 A.2d 743 (A.D.1992).

## 5:23-3.16 Electrical subcode

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

1. Pursuant to authority of P.L. 1975, c. 217, as modified by P.L. 1996, c. 53, the Commissioner hereby adopts the model code of the National Fire Protection Association, known as "The National Electrical Code 2008" as the electrical subcode for New Jersey.

i. Copies of this code may be obtained from the sponsors at NFPA, One Batterymarch Park, Quincy, Massachusetts 02269.

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 2008) shall be considered adopted by reference to the extent prescribed by each related section. These codes and standards also are printed in DCA Bulletin #09-1, which contains a list of adopted codes and standards that are applicable to the enforcement of the electrical subcode.

3. The Commissioner hereby adopts the National Electrical Safety Code (ANSI C2-2007) for the installation of area lighting facilities by an electric utility on private property on metal poles with an underground electric feed.

i. Copies of the National Electrical Safety Code may be obtained from the Institute of Electrical and Electronic Engineers, Inc., PO Box 1331, 445 Hoes Lane, Piscataway, New Jersey 08855-1331.

(b) The following chapters or articles of the electrical subcode are amended as follows:

1. Article 90 of the electrical subcode, entitled "Introduction," is amended as follows:

Section 90.4, entitled "Enforcement," is amended i. to delete in the first paragraph the phrase, "authority having jurisdiction for enforcement of the code" and substitute in lieu thereof, the term "electrical subcode official." And add a new last sentence in the first paragraph: "Approval shall be in accordance with N.J.A.C. 5:23-2.9." Delete in the second paragraph the phrase "authority having jurisdiction" and substitute in lieu thereof the term "electrical subcode official" and add after "effective safety" the phrase "as provided in N.J.A.C. 5:23-2.9." Delete in the third paragraph the phrase "authority having jurisdiction" and substitute in lieu thereof the term "electrical subcode official" and delete the phrase "by the jurisdiction" after the word "adopted."

ii. Section 90.5, entitled "Mandatory Rules, Permissive Rules, and Explanatory Material," is amended to add "except as outlined under N.J.A.C. 5:23-3.16(a)2i" after the word "Code" in line 6 under paragraph (C).

2. Chapter 1 of the electrical subcode, Article 100, entitled "Definitions," is amended as follows:

i. The definition of the term "approved" is amended to delete the phrase "the authority having jurisdiction" and substitute in lieu thereof, the phrase "elec-

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trical subcode official. Approval shall be in accordance with N.J.A.C. 5:23-3.7, 3.8 and 3.8A."

ii. The definition of "Authority having jurisdiction" is replaced with "Unless otherwise specifically noted, the authority having jurisdiction for the Electrical Subcode shall be the Electrical Subcode Official."

iii. The definition of the term "building" is deleted and in lieu thereof, substitute the definition of the term "building" found in N.J.A.C. 5:23-1.4".

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 a 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) – Unfinished basements: For purposes of this section, unfinished basements are defined as portions or areas of the basement not intended as habitable rooms and limited to storage areas, work areas, and the like.

Exception No. 1 to (5) – Receptacles that are not readily accessible.

Exception No. 2 to (5) – A single receptacle or a 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).

Exception No. 3 to (5) – A receptacle supplying only a permanently installed fire alarm or burglar alarm system shall not be required to have groundfault circuit-interrupter protection."

4. Chapter 3 of the electrical subcode, entitled "Wiring Methods and Materials," is amended as follows:

i. Section 300.4(A)(1) is amended to delete the words from "so that the edge..." on line four through "... cannot be maintained" on line six and in lieu thereof

substitute "as required by the building subcode. Where the distance from the edge of the hole to the nearest edge of the wood member is less than  $32 \text{ mm} (1\frac{1}{4} \text{ inches})$ ."

ii. Section 334.10(1) is amended to add "and accessory buildings or structures" after the word dwellings.

iii. Section 334.12(A)(2) is deleted in its entirety.

iv. In Section 342.30, Intermediate Metal Conduit, "or permitted to be unsupported in accordance with 342.30.(C)" shall be deleted; in Section 344.30, Rigid Metal Conduit, "or permitted to be unsupported in accordance with 344.30.(C)" shall be deleted; in Section 352.30, Rigid Polyvinyl Chloride Conduit, "or permitted to be unsupported in accordance with 352.30.(C)" shall be deleted; in Section 355.30, Metallic Tubing Reinforced Thermosetting Resin Conduit, "or permitted to be unsupported in accordance with 355.30.(C)" shall be deleted; and in Section 358.30, Electrical Metallic Tubing, "or permitted to be unsupported in accordance with 358.30.(C)" shall be deleted.

v. Subsection (C) shall be deleted from each of the following sections: Section 342.30, Intermediate Metal Conduit, Section 344.30, Rigid Metal Conduit, Section 352.30, Rigid Polyvinyl Chloride Conduit, Section 355.30, Metallic Tubing Reinforced Thermosetting Resin Conduit, and Section 358.30, Electrical Metallic Tubing.

5. Chapter 5 of the electrical subcode, entitled "Special Occupancies," is amended as follows:

i. Sections 514.11(B) and 514.11(C) are amended to delete the phrase "authority having jurisdiction" and substitute in lieu thereof the phrase "fire protection subcode official."

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."

iii. Part II of Article 550, entitled "Mobile Homes, Manufactured Homes, and Mobile Home Parks" comprising sections 550.11 through 550.25 is deleted. Section 550.10 shall be retained.

(1) Exception—Part II is retained in its entirety in the case of mobile/manufactured homes undergoing repair, renovation, or alteration.

iv. In Article 551, entitled "Recreation Vehicles and Recreation Vehicle Parks," delete from the title the words "Recreational Vehicles and."

(1) Parts II, III, IV, and V, comprising sections 551.20 through 551.60, are deleted in their entirety, with the exception of Figure 551.46(C), which shall be retained.

Article 552 shall be applicable to structures covv. ered by the recreational park trailers subcode, N.J.A.C. 5:23-4D, provided that:

(1) The structure is restricted to seasonal use as per Section 552.4. For purposes of applying this requirement, the park in which the structure is located shall be open for six months or less each year or access to the structures shall be otherwise restricted to a period of six months or less each year; and

(2) No additions, alterations, or extensions of any kind shall be made to the electrical system or structure unless the entire electrical system shall be made to conform to the electrical requirements of this code applicable to single family dwellings.

6. Chapter 6 of the electrical subcode, entitled "Special Equipment," is amended as follows:

Section 645.17, Power Distribution Units, is i. amended to delete the words "each panelboard has no more than 42 overcurrent devices and".

7. Chapter 8 of the electrical subcode, entitled "Communication Systems," is amended as follows:

Section 800.156, entitled "Dwelling Unit Comi. munications Outlet," is deleted in its entirety.

8. Annex H of the electrical subcode, entitled "Administration and Enforcement," is deleted in its entirety.

(c) A newly installed automatic lawn sprinkler system, where such systems are not prohibited by local ordinance, shall be equipped with an automatic rain sensor device or switch that will override the irrigation cycle of the automatic lawn sprinkler system when rainfall of more than one-half inch has occurred.

- Amended by R.1981 d.132, effective May 7, 1981.
- See: 13 N.J.R. 121(a), 13 N.J.R. 258(d).
- Amended by R.1984 d.314, effective August 6, 1984.
- See: 16 N.J.R. 1139(a), 16 N.J.R. 2084(b).
- Section substantially amended.
- Amended by R.1987 d.374, effective September 21, 1987.
- See: 19 N.J.R. 1024(a), 19 N.J.R. 1720(b).
- Model subcode revisions.
- Amended by R.1990 d.253, effective May 21, 1990. See: 22 N.J.R. 909(b), 22 N.J.R. 1554(a).
- Amendments to (b)4i(2), ii(2)
- Administrative Correction to (b)4i(2).
- See: 22 N.J.R. 2503(b).
- Amended by R.1990 d.507, effective October 15, 1990. See: 22 N.J.R. 2208(a), 22 N.J.R. 3214(a).
- Text conformed to BOCA National Code/1990.
- Amended by R.1993 d.662, effective December 20, 1993. See: 25 N.J.R. 3891(a), 25 N.J.R. 5918(a).

Amended by R.1998 d.332, effective July 6, 1998. See: 30 N.J.R. 1377(a), 30 N.J.R. 2421(b).

- Rewrote the section. Amended by R.1998 d.362, effective July 20, 1998.
- See: 30 N.J.R. 1122(a), 30 N.J.R. 2644(b).
  - In (a), inserted a new 3.
- Amended by R.2000 d.48, effective February 7, 2000. See: 31 N.J.R. 2317(a), 32 N.J.R. 445(a).

In (a), substituted references to 1999 for references to 1996 throughout, substituted a reference to One Batterymarch Park for a reference to Batterymarch Park in 1i, and inserted 2i; and in (b), inserted 1ii, inserted a new 3, recodified former 3 and 4 as 4 and 5, substituted a reference to line four for a reference to line three and substituted a reference to line six for a reference to line five in the new 4i, and substituted a reference to section 500-5(a)(4) for a reference to section 500-3(a)4 in the new 5i. Amended by R.2003 d.187, effective May 5, 2003.

- See: 34 N.J.R. 4248(a), 35 N.J.R. 1939(c).
  - Rewrote the section.
- Amended by R.2003 d.240, effective June 16, 2003.
- See: 34 N.J.R. 3045(a), 35 N.J.R. 2637(c).
  - Added (c).
- Amended by R.2006 d.158, effective May 1, 2006.
- See: 37 N.J.R. 4105(a), 38 N.J.R. 1827(a).

In (a)1, (a)2 and (a)2.i, substituted "2005" for "2002"; also in (a)2.i, substituted "#06-2" for "#03-1"; in (a)3, substituted "C2-2002" for "C2-1997"; deleted (b)1 and recodified (b)2 through (b)6 as (b)1 through (b)5; in (b)4.ii, substituted "(2)" for "(1)", in (b)5iii(1), substituted "4" for "2"; in (b)5iii(2), substituted "V" for "VI" and "551.20" for "551.10"; and inserted (b)6.

- Amended by R.2007 d.310, effective October 1, 2007.
- See: 39 N.J.R. 135(a), 39 N.J.R. 4113(b).
  - Added (b)7.
- Amended by R.2007, d.384, effective December 17, 2007.
- See: 39 N.J.R. 2684(a), 39 N.J.R. 5211(a).
- Added new (b)4ii; recodified former (b)4ii as (b)4iii; and in (b)4iii, substituted "(2)" for "(1)"
- Amended by R.2008 d.213, effective August 4, 2008.
- See: 39 N.J.R. 2411(a), 40 N.J.R. 4523(b).
  - Rewrote (b)5iv.
- Amended by R.2009 d.100, effective April 6, 2009.
- See: 40 N.J.R. 5900(a), 41 N.J.R. 1397(a).
- In the introductory paragraphs of (a)1 and (a)2 and in (a)2i, substituted "2008" for "2005"; in (a)2i, substituted "#09-1" for "#06-2" rewrote (b)3i; added (b)4iv and (b)4v; added new(b)5ii; recodified former (b)5ii through (b)5iv as (b)5iii through (b)5v; deleted (b)5iii(1)(A) and former (b)5iv(1); recodified former (b)5iv(2) as new (b)5iv(1); in (b)6, substituted "H" for "G"; and rewrote (b)7.
- Amended by R.2010 d.291, effective December 20, 2010.
- See: 42 N.J.R. 1943(a), 42 N.J.R. 3053(a).
  - Rewrote (b)6; and added (b)8.

## **Case Notes**

Former N.J.A.C. 5:23-3.6 designated "National Electrical code of 1975" as controlling code; statute of limitations. Brown v. Jersey Central Power and Light Co., 163 N.J.Super. 179 394 A.2d 397 (App.Div.1978) certification denied 79 N.J. 489 401 A.2d 244.

## 5:23-3.17 Fire protection subcode

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

1. Pursuant to the authority of P.L. 1975, c. 217 as modified by P.L. 1996, c. 53, the Commissioner hereby adopts the following portions of the building, electrical, mechanical and fuel gas subcodes, to the extent delineated in N.J.A.C. 5:23-3.4, as the fire protection subcode for New Jersey.

i. International Building Code/2009 of the International Code Council, Inc. (N.J.A.C. 5:23-3.14):

(1) Chapter 3—Use and Occupancy Classification;