

CHAPTER 23. UNIFORM CONSTRUCTION CODE
SUBCHAPTER 6. REHABILITATION SUBCODE
N.J.A.C. 5:23-6

[Electrical Excerpts]

5:23-6.3 Definitions

"Addition" means an increase in the footprint area of a building or an increase in the average height of the highest roof surface or the number of stories of a building.

"Alteration" means the rearrangement of any space by the construction of walls or partitions or by a change in ceiling height, the addition or elimination of any door or window, the extension or rearrangement of any system, the installation of any additional equipment or fixtures and any work which reduces the load bearing capacity of or which imposes additional loads on a primary structural component.

"Reconstruction" means any project where the extent and nature of the work is such that the work area cannot be occupied while the work is in progress and where a new certificate of occupancy is required before the work area can be reoccupied. Reconstruction may include repair, renovation, alteration or any combination thereof. Reconstruction shall not include projects comprised only of floor finish replacement, painting or wallpapering, or the replacement of equipment or furnishings. Asbestos hazard abatement and lead hazard abatement projects shall not be classified as reconstruction solely because occupancy of the work area is not permitted.

"Rehabilitation" means the repair, renovation, alteration or reconstruction of any building or structure.

"Renovation" means the removal and replacement or covering of existing interior or exterior finish, trim, doors, windows, or other materials with new materials that serve the same purpose and do not change the configuration of space. Renovation shall include the replacement of equipment or fixtures.

"Repair" means the restoration to a good or sound condition of materials, systems and/or components that are worn, deteriorated or broken using materials or components identical to or closely similar to the existing.

5:23-6.4 Repairs

(a) Repairs, as defined in *N.J.A.C. 5:23-6.3*, shall comply with the requirements of this section. There is no limit to the amount of repair work which may be undertaken.

1. The following work shall be considered renovation, alteration, or reconstruction, as appropriate, and not repair work:

iv. Addition to, alteration or relocation of:

(3) Electrical wiring, other than wiring for a low voltage communication system in a one or two family dwelling;

(d) The following products and practices shall not be used:

3. Electrical materials/supplies: Unlisted or unapproved electrical products. As stated in the National Electrical Code (sections 90.7, 110.2, 110.3, and article 100), only electrical products listed, labeled, approved, and identified are acceptable. Approval is to be based on tests and listings of testing laboratories such as Underwriters Laboratories Inc. (UL), Factory Mutual (FM) or Canadian Standards Association/Nationally Recognized Testing Laboratory (CSA/NRTL), etc.

(e) The following products and practices shall be required, when applicable:

2. Existing electrical wiring and equipment undergoing repair or replacement shall be allowed to be replaced with like material except for the following:

i. Replacement of electrical receptacles shall comply with the requirements contained in Section 406.3(D) of the electrical subcode;

ii. Plug fuses of the Edison-base type shall be used only for replacements where there is no evidence of over fusing or tampering per Section 240.51(B) of the electrical subcode;

iii. For replacement of nongrounding-type receptacles with grounding-type receptacles, the equipment grounding conductor of a grounding type receptacle outlet shall be permitted to be connected, in accordance with Section 250.130(C) of the electrical subcode;

iv. Non-"hospital grade" receptacles in patient bed locations of health care facilities, Group I-2, shall be replaced with "hospital grade" receptacles; and

v. Frames of electric ranges, wall-mounted ovens, counter-mounted cooking units, clothes dryers, and outlet or junction boxes that are part of the existing branch circuit for these appliances, except for mobile homes and recreational vehicles, shall be permitted to be grounded to the grounded circuit conductor if all the conditions of Section 250.140 of the electrical subcode are met.

5:23-6.5 Renovations

(d) The following products and practices shall not be used:

3. Electrical materials/supplies: Unlisted or unapproved electrical products. As stated in the National Electrical Code (sections 90.7, 110.2, 110.3, and article 100), only electrical products listed, labeled, approved, and identified are acceptable. Approval is to be based on tests and listings of testing laboratories such as Underwriters Laboratories, Inc. (UL), Factory Mutual (FM) or Canadian Standards Association/Nationally Recognized Testing Laboratory (CSA/NRTL), etc.

(e) The following products and practices shall be required, when applicable:

6. Existing electrical wiring and equipment undergoing repair or replacement shall be allowed to be replaced with like material except for the following:

- i. Replacement of electrical receptacles shall comply with the requirements contained in Section 406.3(D) of the electrical subcode;
- ii. Plug fuses of the Edison-base type shall be used only for replacements where there is no evidence of over fusing or tampering per Section 240.51(B) of the electrical subcode;
- iii. For replacement of nongrounding-type receptacles with grounding-type receptacles, the equipment grounding conductor of a grounding type receptacle outlet shall be permitted to be connected, in accordance with Section 250.130(C) of the electrical subcode;
- iv. Non-"hospital grade" receptacles in patient bed locations of health care facilities, Group I-2, shall be replaced with "hospital grade" receptacles; and
- v. Frames of electric ranges, wall-mounted ovens, counter-mounted cooking units, clothes dryers, and outlet or junction boxes that are part of the existing branch circuit for these appliances, except for mobile homes and recreational vehicles, shall be permitted to be grounded to the grounded circuit conductor if all the conditions of Section 250.140 of the electrical subcode are met.

5:23-6.6 Alterations

(d) The following products and practices shall not be used:

3. Electrical materials/supplies: Unlisted or unapproved electrical products. As stated in the National Electrical Code (sections 90.7, 110.2, 110.3, and article 100), only electrical products listed, labeled, approved, and identified are acceptable. Approval is to be based on tests and listings of testing laboratories such as Underwriters Laboratories, Inc. (UL), Factory Mutual (FM) or Canadian Standards Association/Nationally Recognized Testing Laboratory (CSA/NRTL), etc.

(e) The following products and practices shall be required, when applicable:

8. Existing electrical wiring and equipment undergoing repair or replacement shall be allowed to be replaced with like material except for the following:

i. Replacement of electrical receptacles shall comply with the requirements contained in Section 406.3(d) of the electrical subcode;

ii. Plug fuses of the Edison-base type shall be used only for replacements where there is no evidence of over fusing or tampering per Section 240.51(B) of the electrical subcode;

iii. For replacement of nongrounding-type receptacles with grounding-type receptacles, the equipment grounding conductor of a grounding type receptacle outlet shall be permitted to be connected, in accordance with Section 250.130(C) of the electrical subcode;

iv. Non-"hospital grade" receptacles in patient bed locations of health care facilities, Group I-2, shall be replaced with "hospital grade" receptacles; and

v. Frames of electric ranges, wall-mounted ovens, counter-mounted cooking units, clothes dryers, and outlet or junction boxes that are part of the existing branch circuit for these appliances, except for mobile homes and recreational vehicles, shall be permitted to be grounded to the grounded circuit conductor if all the conditions of Section 250.140 of the electrical subcode are met.

12. In buildings of Groups R-1 and R-2:

ii. Group R-2 only: When finished space is created in previously unfinished space, receptacle and lighting outlets shall comply with Section 210.52 and 210.70, respectively, of the electrical subcode.

18. Unless exempted by Section 9.2.2.3 of the commercial energy code, the total replacement of a building lighting system or a newly installed building lighting system shall meet the following sections of the commercial energy code, as applicable: Section 9.4.1 for controls and Sections 9.5 and 9.6 for lighting power densities. (A "lighting system" is defined by the commercial energy code as "a group of luminaires circuited or controlled to perform a specific function.")

i. Exception: The replacement of a lighting system within a room, space or tenancy shall be required to meet only Sections 9.4.1.2 and 9.4.1.4a, b, e, and f for controls and Section 9.6 for lighting power densities.

5:23-6.7 Reconstruction

(d) The following products and practices shall not be used:

2. Electrical materials/supplies: Unlisted or unapproved electrical products. As stated in the National Electric Code (sections 90.7, 110.2, 110.3, and article 100), only electrical products listed, labeled, approved, and identified are acceptable. Approval is to be based on tests and listings of testing laboratories such as Underwriters Laboratories Inc. (UL), Factory Mutual (FM) or Canadian Standards Association/Nationally Recognized Testing Laboratory (CSA/NRTL), etc.

(e) The following products and practices shall be required, when applicable:

8. Existing electrical wiring and equipment undergoing repair or replacement shall be allowed to be replaced with like material except for the following:

- i. Replacement of electrical receptacles shall comply with the requirements contained in Section 406.3(D) of the electrical subcode;
- ii. Plug fuses of the Edison-base type shall be used only for replacements where there is no evidence of over fusing or tampering per Section 240.51(B) of the electrical subcode;
- iii. For replacement of nongrounding-type receptacles with grounding-type receptacles, the equipment grounding conductor of a grounding-type receptacle outlet shall be permitted to be connected, in accordance with Section 250.130(C) of the electrical subcode;
- iv. Non-"hospital grade" receptacles in patient bed locations of health care facilities, Group I-2, shall be replaced with "hospital grade" receptacles; and
- v. Frames of electric ranges, wall-mounted ovens, counter-mounted cooking units, clothes dryers, and outlet or junction boxes that are part of the existing branch circuit for these appliances, except for mobile homes and recreational vehicles, shall be permitted to be grounded to the grounded circuit conductor if all the conditions of Section 250.140 of the electrical subcode are met.

5:23-6.8 Materials and methods

(d) Electrical Materials and Methods. The following sections of the electrical subcode (*N.J.A.C. 5:23-3.16*) shall constitute the electrical materials and methods requirements for this subchapter:

1. Section 90.7, entitled "Examination of Equipment for Safety" of the Introduction, Article 90;
2. All of Chapter 1 entitled "General" except Sections 110.8 Wiring Methods, 110.26 Spaces About Electrical Equipment (600 Volts, Nominal, or less), 110.32 Work Space About Equipment (over 600 Volts, Nominal) and 110.33 Entrance to Enclosures and Access to Working Space;
 - i. Section 110.32 shall be required for upgrading the complete system or where the voltage is increased;
3. All of Chapter 2 entitled "Wiring and Protection" except Sections 210.11 Branch Circuits Required, 210.12 Arc-Fault Circuit-Interrupter Protection, 210.52 Dwelling Unit Receptacle Outlets, 210.60 Guest Rooms or Guest Suites Dormitories and Similar Occupancies, 210.62 Show Windows, 210.63 Heating, Air Conditioning, and Refrigeration Equipment Outlet and 210.70 Lighting Outlets Required;
4. All of Chapter 3 entitled "Wiring Methods and Materials";
5. All of Chapter 4, entitled "Equipment for General Use" except Section 404.8 Accessibility and Grouping (switches) and Section 408.18 Clearances (switchboards and panelboards);
6. All of Chapter 5, entitled "Special Occupancies;"
7. All of Chapter 6, entitled "Special Equipment;"
 - i. Section 680.26(B)(2) shall not apply to existing paved surfaces or decks when installing a spa or hot tub.
8. All of Chapter 7, entitled "Special Conditions;" and
9. All of Chapter 8 entitled "Communications Systems."
10. Existing working clearances, clear space, access and entrance dimensions to working spaces, illumination, headroom clearances, and location of overcurrent protection devices shall be allowed to remain without modification.

5:23-6.9 New building elements

(a) When the rehabilitation of an existing building creates or includes any building element of a type listed in this section, then the new element shall comply with the requirements for such an element established by this section.

24. Newly installed (not replacing an existing device) electrical service equipment, switchboards, panelboards, motor control centers and other electrical equipment containing overcurrent, switching or control devices likely to require examination, adjustment, servicing or maintenance while energized shall conform with the requirements specified in *N.J.A.C. 5:23-6.8*, Materials and methods, and, in addition, shall conform with Sections 110.26 (Space About Electrical Equipment--600 Volts, Nominal or Less), 110.32 (Work Space About Equipment--Over 600 Volts, Nominal), 110.33 (Entrance and Access to Work Space), 404.8 (Accessibility and Grouping) and 408.18 (Clearances), as applicable, of the electrical subcode.

i. In buildings required to comply with the barrier free subcode, newly installed panelboards (not replacement) shall comply with Sections 309.2 and 309.3 of the ICC/ANSI A117.1.

25. Newly installed (not replacing an existing device) heating, air conditioning or refrigeration equipment likely to require examination, adjustment, servicing or maintenance shall conform with the requirements of *N.J.A.C. 5:23-6.8*, Materials and methods, and, in addition, shall conform with Section 210.63 Heating, Air Conditioning, and Refrigeration Equipment Outlet and, if newly installed in an attic, underfloor space, utility room or basement, 210.70 Lighting Outlets Required, as applicable, of the electrical subcode.

26. As specified in Section 210.12 of the electrical subcode, Arc-Fault Circuit-Interrupter (AFCI) Protection shall be required for all newly installed (not replacement) branch circuits in dwelling units provided a listed combination type arc fault circuit interrupter breaker is available.

5:23-6.26 Basic requirements--Groups R-2 and R-4

(g) Means of Egress Lighting: Artificial lighting with an intensity of not less than one foot candle at floor level shall be required during all times that the conditions of occupancy of the building require that the exits be available. Lighting shall also be required to illuminate the exit discharge. In all buildings, rooms or spaces required to have more than one exit or exit access, means of egress lighting shall be connected to an emergency electrical system conforming to NFPA 70 (NEC) except that continued illumination shall be required to be provided for not less than one hour in the case of primary power loss.

1. Means of egress lighting shall be wired on a circuit independent of circuits within any dwelling unit. The disconnecting means and over current protection device shall not be located within a dwelling unit or such that access must

(o) Electrical Equipment and Wiring:

1. All enclosed areas, other than kitchens, basements, garages, hallways, closets, laundry areas and bathrooms shall have a minimum of two duplex receptacle outlets.

2. Kitchen areas shall have a minimum of two duplex receptacle outlets or equivalent and a switch-controlled lighting outlet. At least one of the required duplex receptacles shall be provided to serve counter space.

3. Laundry areas shall have a minimum of one duplex receptacle outlet or equivalent located near the laundry equipment and installed on an independent circuit.

4. At least one switch controlled lighting outlet shall be provided in every bathroom, hallway, stairway, attached garage, detached garage with electric power, and to illuminate outdoor entrances and exits.

5. At least one switch controlled lighting outlet shall be provided in utility rooms and basements where these spaces are used for storage or contain equipment requiring service.

6. Electrical service equipment (overcurrent devices) shall be located where they will not be subject to physical damage and shall not be located in the vicinity of easily ignitable material.

7. All 125 volt, single-phase, 15 and 20 ampere receptacles in locations specified in Section 210.8(A) of the electrical subcode shall have ground-fault circuit protection for personnel.

8. When finished space is created in previously unfinished space, receptacle and lighting outlets shall comply with Section 210.52 and 210.70, respectively, of the electrical subcode.

5:23-6.27 Basic requirements--Groups R-3 and R-5

(f) Electrical Equipment and Wiring:

1. All enclosed areas, other than kitchens, basements, garages, hallways, closets, laundry areas and bathrooms shall have a minimum of two duplex receptacle outlets.

2. Kitchen areas shall have a minimum of two duplex receptacle outlets or equivalent and one switch controlled lighting outlet. At least one of the required duplex receptacles shall be provided to serve counter space.

3. Laundry areas shall have a minimum of one duplex receptacle outlet or equivalent located near the laundry equipment and installed on an independent circuit.

4. At least one switch controlled lighting outlet shall be provided in every bathroom, hallway, stairway, attached garage, detached garage with electric power, and to illuminate outdoor entrances and exits.
5. At least one switch controlled lighting outlet shall be provided in utility rooms and basements where these spaces are used for storage or contain equipment requiring service.
6. Electrical service equipment (overcurrent devices) shall be located where they will not be subject to physical damage and shall not be located in the vicinity of easily ignitable material.
7. All 125 volt, single-phase, 15 and 20 ampere receptacles in locations specified in Section 210.8(A) of the electrical subcode shall have ground-fault circuit protection for personnel.
8. When finished space is created in previously unfinished space, receptacle and lighting outlets shall comply with Section 210.52 and 210.70, respectively, of the electrical subcode.