

**Section AH103  
Permitted Uses**

**AH103.1 General.** Patio covers shall be permitted to be detached from or attached to dwelling units. Patio covers shall be used only for recreational, outdoor living purposes and not as carports, garages, storage rooms or habitable rooms.

**Section AH104  
Design Loads**

**AH104.1 General.** Patio covers shall be designed and constructed to sustain, within the stress limits of this code, all dead loads plus a minimum vertical live load of 10 pounds per square foot (0.48 kN/m<sup>2</sup>) except that snow loads shall be used where such snow loads exceed this minimum. Such covers shall be designed to resist the minimum wind loads set forth in Table R301.2(1).

*Appendix J Existing Buildings and Structures* of the IRC is adopted in its entirety.

*Appendix K Sound Transmission* of the IRC is adopted in its entirety.

*Appendix Q Tiny Houses* of the IRC is adopted in its entirety.

**Secs. 5-103 – 5-110. Reserved.**

SECTION 7. That Article VII, “Electrical Code”, is hereby amended as follows:

**ARTICLE VII. ELECTRICAL CODE**

**DIVISION 1. GENERALLY**

Sec. 5-111. Definitions.

Except as specifically set forth in this article or any document referred to in this article, terms as used shall have the same definitions as the NFPA 70, National Electrical Code, 2017 Edition.

*Approved* means accepted or acceptable under the applicable specification stated or cited in this article and/or the NFPA 70, National Electrical Code- 2017 Edition, or as accepted as suitable for the proposed use under procedures and powers of the administrative authority. Upon written request a certificate of approval may be issued indicating satisfactory completion of the electrical work.

*Existing work* means any electrical system or any part thereof, which has been lawfully installed prior to adoption of this ~~article~~ ordinance.

**Sec. 5-112. Purpose.**

The purpose of this article is the practical safeguarding of persons and of buildings and their contents from electrical hazards arising from the use of electricity for light, heat, power, radio, signaling, and for other purposes.

**Sec. 5-113. Scope.**

- (a) This article applies to:
  - 1) The electrical conductors and equipment installed within or on public and private buildings or other structures, and other premises such as yards, carnivals, parking and other lots, and industrial substations;
  - 2) The conductors that connect the installations to the supply of electricity; and
  - 3) Other outside conductors on the premises.
- (b) This article does not apply to installations in cars, automotive equipment, or the installation of equipment employed by a railway, electrical or communication utility in the exercise of its function as a utility and located outdoors or in buildings used exclusively for that purpose.
- (c) All electrical work must also comply with relevant provisions of Article VIII, the Energy Conservation Code.

**Secs. 5-114 – 5-120. Reserved.****DIVISION 2. ADMINISTRATION AND ENFORCEMENT****Sec. 5-121. Electrical permit.**

- (a) No electrical work shall be undertaken prior to the issuance of an electrical permit therefore by the administrative authority. Such permit shall be issued to a licensed master electrician or licensed master electrician (limited), except as otherwise provided. No permit shall be required to repair portable electrical equipment or lighting fixtures, or to repair or replace sockets, or to repair motors, or to replace motors with motors of the same horsepower rating.
- (b) Any permit required may be issued to any person to do electrical work in a single-family dwelling used exclusively for living purposes, including the usual accessory buildings and quarters in connection with such building, provided the person is the bona fide owner of such dwelling and that the same will be occupied by the owner and that the owner shall personally purchase all material and perform all labor in connection therewith; however, the administrative authority may require the homeowner to show that he is qualified to perform such work in a capable manner so as not to endanger the life and property of himself, persons in the neighborhood or property belonging to public utility suppliers. This subsection does not apply to work involving heavy-up or replacement of

service equipment, or to any wiring associated with swimming pool and/or hot tub installations.

- (c) Applications for electrical permits shall be made on suitable forms provided by the administrative authority. The application shall be accompanied by the payment of a fee in accordance with the schedule of fees which has been established by resolution.
- (d) No electrical permit shall be issued until plans and specifications showing the proposed work in necessary detail have been submitted to the administrative authority and it has been determined from examination of such plans and specifications that they give assurance that the work will conform to the provisions of this article. If a permit is denied, the applicant may submit revised plans and specifications without payment of additional fee.
- (e) If, in the course of the work, it is found necessary to make any change from the plans and specifications on which a permit has been issued, amended plans and specifications shall be submitted and a supplemental permit, subject to the same conditions applicable to the original application for permit, shall be issued to cover the change.

**Sec. 5-122. Inspections.**

- (a) It shall be the duty of the administrative authority to make necessary inspections under this article. Upon completion of all electrical installations the person holding the permit therefor shall be required to notify the administrative authority and request inspection of such installation. However, if such installation, or any part of such installation, is to be hidden from view due to permanent placement of part of a building, the permit holder shall request that this segment of the work be inspected before it is covered over.
- (b) The administrative authority shall have the authority to require the removal of any structure that prevents proper inspection of any electrical installation.
- (c) If, when inspection is made, the inspector shall find the installation to be in violation, the permit holder shall be notified and given a reasonable time period as may be designated by the administrative authority, in which to correct such violation.

**Sec. 5-123. Cut-in certificate.**

- (a) The electric power company shall not supply electricity or power to any electrical equipment, for the installation of which a permit is required by this article, and no person shall connect any such electrical equipment to a supply of electricity or power except in accordance with a cut-in certificate issued by the administrative authority.
- (b) Temporary cut-in certificates shall be issued for temporary installation for construction or temporary pending final and such certificates shall be cancelled by the administrative authority at any time if the installation is not maintained or completed as required by this article.

- (c) If, after the inspection, the City's electrical inspector finds the installation to be in conformity with the provisions of this article, he shall issue a cut-in certificate therefor, authorizing the use of the installation and connection to the supply of electricity and power, and shall send such certificate to the electric power company. Such certificates may be issued for an entire installation or part thereof.

**Secs. 5-124 – 5-130. Reserved.**

### **DIVISION 3. TECHNICAL STANDARDS**

**Sec. 5-131. National Electrical Code -- Adopted.**

The National Fire Protection Association (NFPA) NFPA 70, National Electrical Code- 2017 Edition as modified herein, is hereby adopted as the electrical code for the City. One (1) copy of such publication as adopted shall be housed by the Inspection Services Division and made available for inspection by the public during regular office hours. Any amendment or change in such publication promulgated by the National Fire Protection Association shall not become a part of this article until adopted by ordinance. References to other ordinances and codes of the City shall be interpreted and applied in accordance with the terms and effect of such ordinances and codes at the time of such application and interpretation.

**Sec. 5-132. Same--Definition.**

In section 90-4 of the NFPA 70, National Electrical Code 2017 Edition, the phrase "authority having jurisdiction" shall mean the Chief of Inspection Services Division.

**Sec. 5-133. Same--Amendments.**

The NFPA 70, National Electrical Code, 2017 Edition (NEC), is amended in the following respects:

*Section 90.1 (D)* is added to the NEC to read as follows:

(D) Relation with the Rockville City Code, Article VIII. The requirements in this code address the fundamental principles of protection for safety. The energy conservation requirements are addressed in Article VIII and Article XIV of the Rockville City Code.

*Section 90.2* of the NEC is amended by adding the following:

(D) Homeowners.

Homeowner must take and pass an exam administered by the Inspection Services Division prior to allowing a homeowner to obtain an electrical permit for doing electrical wiring at their primary residence. This exam will be valid for two (2) years allowing the homeowner to apply for additional permits in that time frame for their primary residence. Homeowner obtained

electrical permits will allow electrical wiring at their primary residence, with the exclusion of the following work:

- Swimming pools, saunas, or hot tubs
- Service equipment installation such as heavy -ups, panel replacements, sub-panels
- Replacement of SEC cable.
- Overhead service mast replacements.

*Section 90.10* is added to the NEC to read as follows:

## **90.10 Appeals.**

### **90.10.1 Board of Adjustments and Appeals.**

Appeals of administrative interpretations or decisions made by the Code Official shall be administered in accordance with Chapter 5, Article I, Section 5-12 of the Rockville City Code.

*Section 110-14(a)* of the NEC is amended by adding the following:

In all cases, copper -clad aluminum wire must be terminated by means of wire binding screws. The use of any type of "quick-wire" terminals where the possibility of nicking the surface of copper-clad aluminum wire does exist shall not be permitted.

*Section 210-5* of the NEC is amended by rewriting subsection (C) to read as follows:

**(C) Ungrounded conductor.** Where installed in raceways, as open work, or as concealed knob-and-tube work, the ungrounded conductor shall be identified by any color other than as specified in (a) and (b) above. All ungrounded conductors of the same color shall be connected to the same ungrounded feeder conductor and the conductors for systems of different voltages shall be of different colors.

**Exception:** As permitted in section 200-7, it is required that all multicable conductors are to be color coded as follows:

For 120/208/240 Volts

2 conductors--1 white and 1 black;

3 conductors--1 white, 1 black and 1 red;

4 conductors--1 white, 1 black, 1 red, and 1 blue.

For 227/480 Volts; The colors gray, brown, orange, and yellow must be use in accordance with commonly accepted trade practices.

*Section 210.19(A) (1)* of the NEC is amended by adding the following:

(c)Branch circuits smaller than #4 shall be copper conductors.

*Section 210.52(A)* of the NEC is amended by adding the following:

**(5) Dwelling units.** General lighting branch circuits in dwelling occupancies served by a fifteen-ampere branch circuit shall not have more than twelve (12) power consuming outlets. A duplex receptacle is considered one (1) outlet.

A small appliance branch circuit in dwelling occupancies served by a twenty-ampere branch circuit shall have not more than eight (8) receptacle outlets.

*Section 230.2* of the NEC is amended by adding the following Exception:

**Exception:** Individual meters to measure electrical consumption shall be provided for each dwelling unit of a multi-family group when such dwelling units have separate heating and/or cooling systems whose primary energy source is electricity.

*Section 230.70* of the NEC is amended to read as follows:

**230.70 General.** Means shall be provided to disconnect all conductors in a building or other structure from the service-entrance conductors.

**(A) Location.** The service disconnecting means shall be installed in accordance with 230.70(A)(1), (A)(2), and (A)(3).

**(1) Readily Accessible Location.** The service disconnecting means shall be installed at a readily accessible location either outside of a building or structure or inside not to exceed 5 feet from the point of entrance of the service conductors.

**(2) Bathrooms.** Service disconnecting means shall not be installed in bathrooms.

**(3) Remote Control.** Where a remote-control device(s) is used to actuate the service disconnecting means, the service disconnecting means shall be located in accordance with 230.70(A)(1).

**(B) Marking.** Each service disconnect shall be permanently marked to identify it as a service disconnect.

**(C) Suitable for Use.** Each service disconnecting means shall be suitable for the prevailing conditions. Service equipment installed in hazardous (classified) locations shall comply with the requirements of Articles 500 through 517.

*Section 230.79, subsection (c)* of the NEC is amended by deleting the value of "one hundred (100) amperes" and substituting therefor the value of "one hundred fifty (150) amperes" as the minimum service disconnecting means rating for one and two-family dwelling.

*Section 410.36 (B)* of the NEC is amended to read as follows:

**(B) Suspended Ceilings.** All luminaries installed in suspended ceilings shall be supported directly from the building structure. A minimum of 2 wires of size No. 12 steel or larger shall be used. These wires must be tied to opposite corners of the luminaire and attached independently to the building structure.

**Exception:** Circular luminaries with a diameter 12 inches or less may be supported with one wire of No. 12 steel or larger.

*Section 424.11* of the NEC is amended to add the following:

Wiring for all fixed electric space heating equipment shall be copper wire only. Conductors shall terminate from the heating equipment terminals to the disconnect.

*Section 424.19* of the NEC is amended to add the following:

The disconnect serving the equipment shall not be secured or fastened to the heating equipment.

*Section 426.22* of the NEC is amended by adding subsection (F) to read as follows:

**(F) Non-heating leads.** Non-heating leads shall be of copper wire only.

*Section 426.23* of the NEC is amended by adding subsection (C) to read as follows:

**(C) Non-heating leads.** Non-heating leads shall be of copper wire only.

*Section 500.5 (D)*, of the NEC is amended by adding (Informational Note No. 3) to read as follows:

**(Informational Note No. 3):** such locations as trash or incinerator rooms.

*Section 503.10 (A)* of the NEC is amended by adding a new paragraph (5) to read as follows:

**(5) No conduits, busways, wireways, or feeder cables.** No conduits, busways, wireways, or feeder cables shall pass through trash or incinerator rooms. The only wiring permitted in such rooms may be circuit wiring with suitable insulation having to do with and terminating in such rooms. Conduit embedded in two (2) or more inches of concrete or masonry may be considered to be outside such rooms.

*Section 700.18* of the NEC is amended to read as follows:

**Circuits for Emergency Power.** For branch circuits that supply equipment classed as emergency, there shall be an emergency supply source to which the load will be transferred

automatically upon the failure of the normal supply. Any building in which standpipes are installed must have one 30-ampere, 120-volt circuit installed for each standpipe riser, supplied from the emergency panel. The wiring method for exposed work must be galvanized, threaded metal conduit. Boxes must be metal, weatherproof types with gasketed flap-door covers and threaded hubs. The wiring method for concealed work must be metal conduit with appropriate galvanized boxes having gasketed flap-door covers suitable for fire department use. The weatherproof cover must be suitable for receiving the L5-20R NEMA type twist-lock receptacle without damage.

Supply wiring must be at least 75 degrees C-type wire. One single 20-ampere three-wire twist lock receptacle (NEMA L5-20R) must be installed at least as high as, and with a 2-foot offset from each hose valve connection. Each outlet box must be painted "fire-alarm red" in color and be marked "Fire Department Use Only".

Note: This Section supersedes the requirements of Table 210.21(B) (2).

**Secs. 5-134 – 5-140. Reserved.**

#### **DIVISION 4. LICENSING OF ELECTRICIANS**

Sec. 5-141. Required; violation declared misdemeanor.

- (a) Any person wishing to install, maintain, and/or repair any electrical circuits, equipment, or apparatus, or who wishes to supervise such work, within the corporate limits of the City shall obtain a master electrician's license from the administrative authority.
- (b) Any person wishing to install, maintain, and/or repair, or supervise the installation, maintenance, and/or repair of a particular appliance, equipment, or apparatus, such as air conditioning equipment, oil and gas heating furnaces, electric signs, and similar specialties within the corporate limits of the City shall obtain a master electrician's (limited) license from the administrative authority.
- (c) Any person wishing to work under the supervision of a master electrician to install, maintain, and/or repair any electrical circuits, equipment or apparatus within the corporate limits of the City shall obtain a journeyman electrician's license by any county or municipality in the state approved by the administrative authority. All work done under this license shall be done under the supervision of a master electrician or master electrician (limited), who is licensed by the City.
- (d) Any person who shall perform any electrical work within the corporate limits of the City who is not by or under the supervision of a licensee as provided in this article or is not otherwise qualified as set forth in section 5-121, subsection (b), shall be guilty of a misdemeanor.

- (e) All company vehicles, shall have the City's license number conspicuously displayed.

**Sec. 5-142. Qualifications; examination.**

- (a) The administrative authority shall establish standards and procedures for the qualifications and licensing of master electricians and master electricians (limited). The administrative authority shall issue an appropriate license to each person who meets the qualifications and licensing requirements therefor.
- (b) No additional examination will required by the administrative authority when an applicant presents a valid license issued by the State or County or any other municipality or County within the State, provided such City or County administers examinations and has qualification procedures equivalent to those required for licensing by the City.
- (c) No license shall be granted to any person under the age of twenty-one (21) years.
- (d) The examination fee shall be as set by the agency approved by the administrative authority to give the examination.

**Sec. 5-143. Fee.**

A license shall be issued under this division to qualified applicants only upon payment of a fee in the amount established by resolution.

**Sec. 5-144. Term.**

Licenses required by this division shall expire at the end of odd numbered calendar years.

**Sec. 5-145. Bond or insurance.**

Any person who has been issued a master electrician's license or master electrician's (limited) license shall execute and deposit with the administrative authority a bond in the sum of five thousand dollars (\$5,000.00) or proof of insurance with a minimum of three hundred thousand dollars (\$300,000.00) general liability and one hundred thousand dollars (\$100,000.00) property damage coverage. Such bond shall be conditioned that all electrical work performed by the licensee or under his supervision shall be performed in accordance with this Code and that he will pay all fines and penalties properly imposed upon him for violation of the provisions of this article. A master electrician's license or a master electrician's (limited) license shall not be valid unless a bond is executed and deposited as herein stipulated, or proof of insurance submitted. No additional insurance or bond is required of persons who have a current, active and insured State Master Electrician License.

**Sec. 5-146. Use of licensee's name by another; change of address, etc.**

No person who has obtained a master electrician's license or master electrician's (limited) license shall allow his name to be used by another person either for the purpose of obtaining permits, or doing business or work under the license. Every person licensed shall notify the administrative

authority of the address of his place of business and the name under which such business is carried on and shall give immediate notice to the administrative authority of any change in either.

**Secs. 5-147 – 5-155. Reserved.**