

Article 111. Electricity

DIVISION 1. Generally

Section 8-86. Short Title.

This article may be cited as the "**Electrical Code**".

Section 8-87. Penalty.

Any person convicted of a violation of any of the provisions of this article shall be punished as provided in Section 1-9.

Section 8-88. Civil liability.

The article shall not be construed to relieve from or lessen the responsibilities of any person owing, operating or installing electrical wires, appliances, apparatus, construction or equipment, for the damage to property or persons injured by any defect therein, nor shall the city or any agent thereof be deemed to assume any such liability by reason of any inspection authorized by this article or be reason of the certificate inspection issued by the Electrical Inspection Supervisor.

Section 8-89-Reserved.

DIVISION 2. ADMINISTRATION AND ENFORCEMENT

Part A. General Provisions

Section 8-101. Disconnection of service.

The Electrical Inspection Supervisor or his authorized representative may cause the turning off of all electrical current from all conductors or apparatus which are deemed by him to be in an unsafe condition or which have not been installed in conformity with the provisions of this article. No person shall supply or cause to be supplied any electric current to conductors or apparatus which have been deemed by the Electrical Inspection Supervisor to be in unsafe condition or which have not been installed in conformity with the provisions of this article and from which the Electrical Inspection Supervisor has caused the electrical current to be turned off.

Section 8-102. Duties of the Electrical Inspectors

It shall be the duty of the Electrical Inspectors to inspect all electrical systems for compliance with this Code and all other Codes having jurisdiction in all buildings, old and new, to include underground and overhead service lines, private or public, where such buildings the underground or overhead service lines are located within the inspection limits of the City of Little Rock Arkansas.

Section 8-103. Inspector’s Right of Entry

Should the inspectors be denied entry to any building that they have reason to believe an unsafe or hazardous situation may exist; the inspector shall have the authority to call upon the Little of Little Rock Police Department for aid and assistance in securing warrants for the right to enter and inspect such buildings.

Section 8-104. Limitations of the Electrical Inspectors

The Electrical Inspectors shall not be interested in any business engaged in electrical systems or the sale of same or any part thereof either directly or indirectly in the City of Little Rock.

Section 8-105-120. **Reserved.**

Part B. Electrical Code Appeals

Section 8-121. **Appeals.**

Electrical code appeals refer to Section 8-30.1 of the city code.

Section 8- 122 – 145 . **Reserved.**

Part C. Permits and Inspections

Section 8-146. **Permits Generally**

[a] No person shall install or perform any electrical work without an electrical permit issued by the Building Codes Manager.

[b] Electrical permits must be secured by the master Electrician or his authorized representative prior to the commencement of such work.

[c] Notwithstanding subsection (b) of this section a building contractor shall be permitted to secure electrical permits and to request inspections on temporary power centers for use during construction of one and two-family dwellings. The permit may be taken and scheduled for inspection the following workday or it may be placed in a special [will call] file to be held until being requested. A licensed electrical contractor shall do the actual construction and maintenance of temporary construction meters. When a reinspection fee is required as a result of an improper installation, the electrical contractor making the correction shall secure it.

[d] Applications for permits shall give the exact address by street and number, if it is ready for inspection or if it should be placed in a ‘ will call ‘ file to be held until being requested, the type of inspection being requested, the name of the master electrician in charge and a complete description of the extent of the installation.

Section 8-147. **Person's eligible for permits**

[a] Except as provided in subsection [b] of this section, electrical permits shall be issued only to persons licensed under this article unless the person has a permanent employee who is a licensed journeyman electrical to install or maintain electrical wires or apparatus in or upon the premises.

[b] A permit may be issued to a property owner to do work on their own home provided they have a current State of Arkansas master or journeyman electrician's license or be accessed a thirty-five dollar (\$35.00) consultation fee. A homeowner desiring to be eligible for a permit must show proof that they own the home, and resides or will reside in the structure after completion. Prior to being issued an electrical permit and without an electrical license, a homeowner must consult with the Electrical Inspections Supervisor or his agent, regarding the proposed project and the applicant's level of competency before the electrical permit will be issued. The applicant will sign a statement of agreement to comply with all applicable electrical codes. The consultation fee is not refundable if the applicant is deemed not competent for the work intended. If two consecutive inspections for the same work is rejected or the Electrical Inspections Supervisor or his designated inspector determines in their professional expertise that the homeowner is not competent to satisfy the electrical code they may require that a licensed electrician be obtained to complete the proposed electrical work.

Section 8-148. **Rough inspection**

Before any electrical wiring shall be concealed from view, or in case the wiring is in conduit, before the conduits shall be concealed from view, the person installing same shall give notice to the Electrical Inspection Supervisor, or his authorized assistant, who shall as soon as possible after the receipt of such notice, inspect the work. No such work shall be concealed from view before the expiration of forty-eight [48] hours from the receipt of the notice unless the Electrical Inspection Supervisor or his authorized designate shall make his inspection and approve the work before the expiration of the forty-eight [48] hours. No job shall be considered as being completely roughed in until all joints have been made with approved connections and pigtails provided for hanging of fixtures.

Section 8-149. **Final inspection**

[a] Before any electrical current shall be used upon any electrical wiring of any character, the electrical contractor or his master electrician shall notify the Electrical Inspection Supervisor or his assistants that the job is ready for final inspection. The Electrical Inspection Supervisor or his assistant shall schedule the inspection for the following workday or as soon as conditions permit. If the Electrical Inspection Supervisor or his assistants finds the installation has been constructed in accordance with the provisions of this article, he shall record approval of inspection on the appropriate form provided by the central codes enforcement division. The approval shall state the name of the inspector and the date of inspection.

[b] When final inspections are requested, it will be necessary for the electrical contractor to arrange for the structure or structures to be inspected to be open in order that the inspection can be made and the structure shall be supplied with temporary power by the owner or electrical contractor so that all electrical components can be tested. Occupied structures or structures containing personal property will not be entered by inspector unless accompanied by the owner or the owner's representative.

Section 8-150. Final clearance

It shall be unlawful for any electrical utility company or any person to furnish current to any new building, tent, structure or outdoor wiring of any kind, nature or description, without first obtaining a clearance from the Electrical Inspection Supervisor or his authorized designate.

Section 8-151. Permit and Inspection Fees

The fee schedules for electrical permits and inspections shall be assessed as set forth by the City of Little Rock Board of Directors.

Section 8-152. Temporary Power Requirements:

Before any power supplied to the permanent distribution system of a building under construction, written notice must be submitted to this office noting the length of time the temporary power will be needed before the final electrical inspection is made, the understanding that the structure will not be occupied until after the final inspection, and that the party submitting the request will assume liability of any damage incurred as a result of disconnection of power from the building as a result of a violation of this article. The time limit on temporary power being furnished to the building will be determined on the basis of need, not to exceed thirty (30) days. An extension of time may be granted only by special permission.

Section 8-153. Work with no permit:

In case it shall be discovered that any electrical work has been installed or put into use for which no permit has been issued, the violator shall pay a fee equal to three (3) times the permit fee which shall have been paid for work done in violation thereof and no additional permits shall be granted until all fees have been paid.

Section 8-154. Bond required:

Prior to issuance of an electrical permit, a surety bond shall be required in the amount of \$10,000 to the City of Little Rock per ordinance #17,777.

Section 8-155. Installations Where Several Persons are Concerned:

On installations where several persons are concerned with the installation of electric conductors or appliances, each party shall be required to pay the fees established for such work

Section 8-156. Projects Consisting of More Than One Structure:

When a project consists of more than one [1] structure, each separate structure shall have a separate electrical permit. For purposes of determining whether separate permits are needed, buildings not having common attic space connected only by a canopy walkway or similar connections shall be deemed to be a separate building.

Section 8-157 – 8-170. Reserved

DIVISION 3. TECHNICAL STANDARDS

Section 8-171. Generally

[a] All electrical work for light, heat, power or other purposes placed in or on any building, structure or premises within the City of Little Rock shall be installed in conformity with the rules and regulations as outlined in the current adopted edition of the National Electrical Code and the 2006 International Residential Code, whichever code is the most stringent, as approved by the National Fire Protection Association and in conformity with the additional rules and regulations as set forth in this chapter. Where local rules and regulations are set forth in this chapter, they shall take preference over any rules conflicting therewith.

[b] All electrical work of any kind and all systems shall satisfactorily fulfill the purpose for which it is installed and all work shall be executed in a neat and workman like manner. Substandard work or work not in keeping with good electrical practice shall be classified as defective and shall be immediately corrected by persons causing the same.

Section 8-172. National Electrical Code-Adopted

The current adopted edition of the “National Electrical Code” and the “2006 International Residential Code” is adopted by reference. In the event of a conflict between such publication and the provisions of this article, the provisions of this article shall take preference.

Section 8-173. Reserved

Section 8-174. **“UL”, etc., approval**

All electrical materials, devices, equipment and any items necessary for the installation of electrical systems shall bear the label of the Underwriters’ Laboratories, Inc., or the independent testing laboratories specifically approved by the authority enforcing this article and/or be approved by the City’s Electrical Inspection Supervisor.

Section 8-175. **Hazardous materials or apparatus**

No electrical apparatus or materials shall be used or placed on sale when the Electrical Inspection Supervisor shall consider it a fire hazard or hazardous to life and property.

Section 8-176. **Electrical conductor**

[a] Communication systems, low voltage fire alarm systems, signal circuits and all electrical current carrying conductors operating at a difference of potential of thirty [30] volts or less shall be governed by the National Electrical Code. All others shall be installed by one [1] of the following approved methods, i.e., rigid metal conduit, intermediate metal conduit, flexible conduit, metal molding, steel tube, approved metal duct, approved electrical nonmetallic tubing, approved nonmetallic conduit, flexible steel armored cable, nonmetallic sheathed cable, or other wiring methods as approved by the Electrical Inspection Supervisor.

[b] All current carrying conductors with potential difference in gasoline filling stations, hotels, motels, office buildings, schools and other buildings normally used for public purposes wherever located shall be installed in rigid metal conduit, intermediate metal conduit, electrical metallic tubing, approved rigid nonmetallic conduit, approved electrical nonmetallic tubing or flexible conduit, commonly known as Greenfield. Approved metal ducts may be used where not in conflict with building codes.

[c] All wiring in non-residential buildings shall be done with wire having a minimum ampacity of twenty [20] amperes. The load on receptacle circuits and/or circuits that include receptacle outlets shall not be greater than sixty percent [60%] of the circuit rating or twelve [12] amps on a twenty-[20] amp circuit. Lighting loads shall not exceed seventy percent [70%] of the circuit rating or fourteen [14] amperes on a twenty-[20] amp circuit. These restrictions refer to general receptacle and lighting loads only. All other loads shall be governed by the National Electrical Code.

[d] All wiring for dwellings as defined by the National Electrical Code shall be wired throughout with wire having a minimum ampacity of twenty [20] amperes and a minimum conductor size of number twelve [12] gauge wire. A maximum of seventy-five percent [75%] load factor per circuit shall be allowed.

EXCEPTION: Fourteen [14] gauge wire can be utilized for general lighting circuits only and shall be fused with a fifteen [15] amp breaker and in strict accordance with the guidelines of the National Electrical Code; furthermore, no more than eight [8] luminaries

per circuit with a maximum of seventy-five percent [75%] load factor per circuit shall be allowed. All fifteen hundred [1500] watt circuits required by the National Electrical Code in kitchens, laundry rooms and breakfast areas [in the absence of a breakfast area-the dining room] shall not exceed fifty percent [50%] of the circuit rating.

[e]

[1] Circuit breakers installed on multi-wire circuits that are designed to operate all poles simultaneously shall be factory designed as one assembly.

[2] All the electrical ranges, in dwellings, other than split type units, shall be supplied with conductors with a minimum ampacity of fifty [50] amperes and shall terminate in approved receptacles. These ranges shall be equipped with an approved pigtail of the proper ampacity for the range to be installed. A 120-volt receptacle shall be installed behind, but not above, gas ranges.

[3] The circuit supplying a refrigerator must be a separate circuit.

[4] Motors of gas fired central heating systems and attic fans shall be connected on circuits separate from other outlets; however, they can both be connected on the same circuit as each must have a separate manually operated switch and would not be operated at the same time.

[5] The circuit supplying a hydro massage bathtub shall be a separate circuit that is protected by a readily accessible GFCI protection device.

[6] The circuit supplying heat in a dwelling bathroom must be a separate circuit.

[f] Grounding electrode conductors in dwellings shall be installed by one of the following means: securely supported until they are connected to the nearest point of ground, installed in approved nonmetallic conduit, installed in rigid metal conduit or steel tube with an approved bonding connection that bonds the metal pipe to the grounding electrode conductor at the end nearest the point of ground. In all other buildings the grounding electrode conductors shall be installed in rigid metal conduit or steel tube from the main line switch to the point of ground with an approved bonding connection that bonds the metal pipe to the grounding electrode conductor at the end nearest the point of ground.

[g] Aluminum conduit shall not be installed in concrete or in contact with earth. EMT shall not be used in contact with earth. Conduit installations for underground or slab shall be inspected before covered or concrete is poured.

[h] All bell transformers must be fused with three [3] ampere fuses and located in accessible places. They shall not be located in attics or other areas subject to above normal heat.

[I]

[1] Two or more subsets of service entrance conductors shall be permitted to be tapped from a single set of main service entrance conductors provided individual units are separated by two hour fire rated construction as defined by the applicable building code of the City of Little rock and that all electrical circuitry served by the individual meter is confined within the unit supplied by that meter.

[2] All building construction will require the size of the service wire and the service entrance switch to be calculated according to the provisions found in Article 220 of the National Electrical Code. For one and two family construction, the calculations shall be submitted in writing at the time the electrical permit is issued. For other types of construction calculations must be included as part of the plan submittal and reviewed prior to the issuance of permits.

[3] Neutrals **shall not** be derated.

[j] [1] Before adding an additional meter to an existing service on a residence, the proper zoning must be verified before the installation.

[2] Service masts shall not be smaller than two-inch [2'] rigid metal conduit.

[k]

[1] Service entrance switches shall be marked with name, address and telephone number of the electrical contractor installing such work. Apartment houses or other multiple meter installations shall also have plainly marked the number of the apartment or sufficient load designation. Marking shall be permanent.

[2] One and two family dwelling service entrance switches and meter loops shall be located in readily accessible places on the exterior of the structure or other approved outside location. The height of the meter sockets shall not be less than five feet [5'] or more than six and one half feet [6 1/2'] to the bottom of the socket. Special permission may be granted for stacked meters. When services for commercial or industrial buildings are located immediately inside the building, there shall be an outside personnel door with signage on the outside that indicates the location of the main switch.

[3] Service from the meter to the point of service entrance shall be installed in rigid metal conduit, intermediate metal conduit or rigid nonmetallic conduit. In one and two family dwellings only, SE cable with approved cable seals, weatherheads and lock-over clips may be installed as service risers. The feeders from the main disconnect to the branch circuit panels shall be installed in rigid metal conduit, intermediate metal conduit, electrical metallic tubing, flexible metal conduit, rigid nonmetallic conduit or approved nonmetallic cable. Busways installed horizontally inside buildings must be identified for outdoor, wet locations or

protection must be provided to avoid damage to the busway from condensation, leaks, or breaks in foreign systems. Where nonmetallic rigid conduit is exposed on the outside of commercial buildings as service laterals, and is subject to damage, schedule 80 (minimum) shall be installed. On multi-unit structures, nonmetallic cable shall not cross apartments or units other than the one in which it terminates unless the cable is readily accessible for its entire length where it crosses units other than the one in which it terminates.

[l] In existing structures, where new wiring is being installed, any existing hazardous wiring must be corrected and open knife switches, open fuse blocks, etc., removed before new wiring will be approved. When framing members are exposed while rehabilitating any structure, any portion or portions, shall be wired according to current code.

[m] In one and two family dwellings, for new construction, smoke detectors shall be hard-wired [AC] type with a battery [DC] back-up installed on each level of the structure, in each bedroom, the outside hallway and be interconnected. In existing homes, when a rewire of the electrical system is require, smoke detectors shall be installed in accordance with the standards for new construction.

[n] All buildings shall have provisions for illumination on the exterior side of outdoor entrances or exits. Overhead doors shall not be considered as an outdoors entrance or exit.

[o] All outdoor convenience receptacle outlets shall be GFCI protected.

{p} Metal piping in one and two family dwellings shall be bonded with a bonding conductor installed from the service enclosure to the water heater with a jumper from the cold water side to the hot water side. The gas house piping shall be bonded from the service enclosure to the house side of the gas meter on the outside of the house. The connections to the piping shall be accessible. Each installation may be separate or continuous from the service enclosure to the water and gas piping. A minimum size conductor of #6 copper shall be required. All other bonding shall be done in strict compliance with the National Electrical Code.

Section 8-177-195. **Reserved**

DIVISION 4. LICENSING OF ELECTRICIANS

Part A. General Provisions

Section 8-196. **Required**

No persons shall engage in the business of installing, altering or repairing any electrical wiring, fixtures, devices or equipment without a valid license approved by the Electrical Inspection Supervisor.

Section 8-197. **Reserved**

Section 8-198. Examinations and license; issuance

[a] Every person desiring to engage in the electrical business in the City of Little Rock shall before engaging in such business successfully pass an examination held by the Board of Electrical Examiners of the State of Arkansas. Every person must present a valid license when requested by the Electrical Inspection Supervisor, or his assistant, while in the performance of such work.

EXCEPTION. HAVCR work

Any individual licensed or registered to perform HVACR work by the HVACR Licensing Board of the State of Arkansas may perform electrical connections to heating and air-conditioning units without obtaining any other license to perform the work, so long as the connection is made to a disconnecting means suitable in capacity for the equipment to be served and is provided by others within ten [10] feet of the unit.

Section 8-199. Reserved

Section 8-200. Recognition of out-of-state

The Board of Electrical Examiners of the State of Arkansas regulates the approval or disapproval of out-of-state electrical license.

Section 8-201. Fraud in connection with license

It shall be unlawful for any person to alter, transfer, lend or rent his license or use a license not their own. It shall be unlawful for any person to falsely represent himself to be licensed or to wrongfully use a license.

Section 8-202. Display of license and company name

[a] Every person licensed under this division shall display such license in their place of business.

[b] All vehicles operated within the city by the various types of electrical contractors shall have the company name stenciled, painted or suitably attached on each side of the vehicle. The company shall be in letters of at least two [2] inches in height.

Section 8-203. Reserved

Section 8-204. Suspension or revocation

The Electrical Inspections Supervisor may suspend or revoke the privileges of anyone, licensed by the State Board of Electrical Examiners of the State of Arkansas, to be issued electrical permits or do electrical work in the City of Little Rock for any violation of the terms of this article or any ordinance governing the installation or inspection of electric work.

Section 8-205-229. **Reserved**

Section 8-230. **Apprentices**

[a] The definition of “Electrical Apprentice”, the requirements of supervision and the licensing of apprentices shall be regulated and is the same as that set forth by the Board of Electrical Examiners of the State of Arkansas.

[b] During investigation or inspection, an electrical company that is found not to be in compliance with state regulations for apprentices; the Electrical Inspection Supervisor, or his authorized designate shall issue a verbal and/or written stop work order. Inspection and work may resume only when the company is found to be in compliance and a reinspection fee is paid.

Section 8-231. **Electrical contractor**

[a] The definition of “Electrical contractor”, the requirements of supervision and the licensing of electrical contractors shall be regulated by and the same as that set forth by the Contractors Licensing Board of the State of Arkansas.

[b] Before any person, firm, partnership or corporation shall engage in the business of electrical contracting, the name, residence and place of business of such person shall be registered with the Building Codes Division permit section. Registration shall include the name of the master electrician managing or supervising the business of such person as superintendent or manager and the date on which such person qualified as a master electrician. Every removal of place of business or change in the name of the organization or change in the licensed master electrician in charge of the business shall require immediate notice thereof to the Building Codes Division permit section. Every electrical contractor shall promptly report the death, resignation or discharge of his master electrician, and if another master electrician is not secured within three [3] days after the license of such contractor shall be suspended until a new licensed master electrician is employed.

[c] A licensed master electrician may not represent more than one [1] firm at a time. The master electrician will be responsible for the layout and supervision of all electrical installations performed by the company he represents. A qualified master or journeyman electrician shall do the actual work.

Section 8-232-255. **Reserved**