

## CHAPTER 51: ELECTRICITY

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**GENERAL PROVISIONS**

**§ 51.01 “ELECTRICAL WORK” DEFINED.**

The term **ELECTRICAL WORK**, as used in this chapter, shall be construed to mean all erecting, altering, repairing, servicing, maintaining or installing of materials, devices, appliances, apparatus, motors, generators, fixtures and equipment used for the distribution, transmission or supply of electrical energy, including conduits, tubes, ducts, raceways, wires, cables, buses and similar materials used in the electrical industry for carrying and distributing electrical current, but not limited to the foregoing.

(Prior Code, § 5-1) (Ord. 459, § 5)

**§ 51.02 OFFICE OF ELECTRICAL INSPECTOR.**

(A) *Created; examination.* There is reaffirmed the creation of the Office of Electrical Inspector. The Electrical Inspector shall be appointed and may be removed at the discretion of the Mayor, but shall, during his or her term of office be, under the supervision of the Building Commissioner. The Electrical Inspector shall not be engaged or financially interested in the electrical business, shall be a licensed electrician and may be required by the Board of Public Works and Safety to demonstrate his or her fitness for the office by passing an appropriate examination.

(Prior Code, § 5-2) (Ord. 90-34, § 4)

(B) *Right of entry.* The Electrical Inspector shall have the right, during reasonable hours, to enter any building or premises in the discharge of his or her official duties, or for the purpose of making any inspection, reinspection or test of the electrical equipment contained therein or its installation.

(Prior Code, § 5-3)

(C) *Defective equipment; authority to disconnect.* When electrical work or wiring is found to have been installed in a manner conflicting with the provisions of this chapter or when any existing electrical work or wiring has, through fire, natural deterioration or any other cause whatsoever, in the opinion of the Electrical Inspector, become a fire, accident or life hazard, the Electrical Inspector is empowered to remove the fuse, cut the wires or otherwise render the system inoperative until the defects have been corrected and the Electrical Inspector notified, in writing, so that the work may be again inspected and approved.

(Prior Code, § 5-4)

(D) *Defective equipment; notice to correct.* When any electrical equipment is found by the Electrical Inspector to be dangerous to persons or property because it is defective or defectively installed, the person responsible for the electrical equipment shall be notified, in writing, and shall make any changes or repairs required in the judgment of the Electrical Inspector to place equipment in safe condition, and if the work is not completed within 15 days or any longer period that may be specified by the Electrical Inspector in the notice, the Electrical Inspector shall have the authority to disconnect or order the discontinuance of electric service to the electrical equipment.

(Prior Code, § 5-5)

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(E) *Defective equipment; emergencies.* In cases of emergency, where necessary for safety to persons or property or where electrical equipment may interfere with the work of the Fire Department, the Electrical Inspector shall have the authority to disconnect immediately or cause the disconnection of any electrical equipment.

(Prior Code, § 5-6)

(F) *Delegation of authority.* The Electrical Inspector may delegate any of his or her powers or duties to any of his or her assistants.

(Prior Code, § 5-7)

(G) *Enforcement of chapter.* The Electrical Inspector shall not approve the installation of any electrical wiring or electrical work until all the provisions of this chapter are complied with, including, but not limited to, the requirements as to permits and licenses.

(Prior Code, § 5-8)

(Ord. 459, § 5)

### § 51.03 CHAPTER APPLICATION.

(A) *Public utilities.* The provisions of this chapter shall not apply to electrical work done and materials used by or for a public service or communication utility with respect to plant, equipment, apparatus, material, property and appurtenances used in the generation, transmission, distribution, supply, utilization and metering of electrical energy and the adaptation of the utilization equipment of its customers to the electrical energy characteristics of the public service utility company and the servicing of the utilization equipment or in the operation of signals or the transmission of intelligence. A public service utility shall not install its customer's light or power service outlet, its distribution center or its switches or its meter boxes in or on their property; but, the public service utility may install and connect its services, meters and metering equipment on the customer's premises.

(Prior Code, § 5-9)

(B) *Certain industries exempt.* The provisions of this chapter shall not apply or be binding upon any industry located in buildings or fireproof construction used solely for manufacturing purposes and located at least 200 feet from any dwelling or residence and located in whole or in part within the corporate limits of the city, which industry exercises control through engineering, safety standards, competent electrical supervision and testing personnel in order to ensure that all electrical work performed for the industry by its own employees is carried out in accordance with the laws of the state, the rules of the Fire Marshal of the state and the rules of the Electrical Inspector of the city.

(Prior Code, § 5-10)

(Ord. 459, § 6)

### § 51.04 BOARD OF EXAMINERS.

(A) *Composition; appointment; term.* The Board of Examiners shall consist of 5 members: the city's Engineer, the Mayor of the city, the Electrical Inspector and an electrical contractor and a journeyman electrician; the 2 latter to be appointed by the Council of the city to serve a period of 1 year from date of appointment or until successors are appointed and qualified.

(Prior Code, § 5-11)

(B) *Organization; compensation.* The members of the Board of Examiners shall hold a meeting within 10 days from the date of qualification of all the members, at which meeting they shall organize and adopt the rules and regulations as are deemed necessary and expedient for the purpose of administering this chapter and duties herein prescribed and rules or regulations hereinafter set forth. The members of the Board of Examiners shall serve without compensation.

(Prior Code, § 5-12)

(Ord. 459, § 1)

#### **§ 51.05 PERMITS.**

(A) *Required; exceptions.* It is unlawful for any person to do any electrical work as a contractor without first having obtained an electrical permit from the city's Clerk-Treasurer, allowing such work and providing for the inspection of the same by the Electrical Inspector of the city. The provisions of this chapter shall not apply to minor repairs, which shall mean only the following: Replacing flush and snap switches, refusing cutouts, changing lamps, sockets and receptacles, taping bare joints and repairing drop cords.

(Prior Code, § 5-13)

(B) *Issuance; qualifications.* The city's Clerk-Treasurer shall not issue a permit to do any work within the corporate limits of the city to any person who has not qualified in accordance with the terms of this chapter.

(Prior Code, § 5-14)

(Ord. 459, § 6) Penalty, see [§ 10.99](#)

### **CONTRACTORS**

#### **§ 51.20 EXAMINATION BY BOARD.**

Before any person shall actually engage in the trade or business of electrical contracting, the person engaged in the active management of the person shall be required to pass an examination before the Board of Examiners as to his or her ability to conduct properly the electrical contracting business in accordance with the rules and regulations provided in this chapter.

(Prior Code, § 5-15) (Ord. 459, § 2)

#### **§ 51.21 LICENSE APPLICANT.**

(A) *Form; required.* An applicant for an electrical contractor's license, as contemplated by this chapter, shall file a written application on a form to be provided by the city's Clerk-Treasurer, with the Electrical Inspector of the city, stating the name of the person desiring the electrical contractor's license; also, the name of the person who is to actively manage the business, the person who is to take the examination, hereinafter called the "examinee", the relationship or authority and duty which he or she bears to the business conducted by the person applying for the electrical contractor's license, whether as owner, partner, officer or manager, and the business address of the person.

(Prior Code, § 5-16)

(B) *Fee; filing term.* Each examinee for an electrical contractor's license shall pay a fee as

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set out in the Fee Schedule of this code to the city's Clerk-Treasurer before or at the time of filing the application for an electrical contractor's license. This examination fee is not returnable. Each examinee having qualified for an electrical contractor's license must obtain the license within 30 days from the date of examination.

(Prior Code, § 5-17)

(C) *Notice of examination time.* Upon receipt of any application and proof of the payment of the prescribed fee, it shall be the duty of the city's Clerk-Treasurer to notify, in writing, each member of the Board of Examiners of the receipt of the application and the Board of Examiners, by its Secretary shall, within 15 days after receipt of notice, set a date for the examination of the person who is to take the examination for an electrical contractor's license.

(Prior Code, § 5-18)

(D) *Examination; duties of Board of Examiners.* The applicant for a license shall be notified, in writing, of the date of his or her examination at least 5 days before the date at the address given in his or her application and shall be examined by the Board of Examiners and the Board of Examiners shall, by its rules and regulations, establish the type and nature of the examination and the method and manner of determining the result of the examination and shall by its rules and regulations establish the standard of results of the examination which all applicants shall meet to entitle them to a license.

(Prior Code, § 5-19)

(E) *Examination results; certification.* The results of any examination conducted by the Board of Examiners shall be certified, in writing, to the city's Clerk-Treasurer by at least 4 members who were present at the time of examination.

(Prior Code, § 5-20)

(F) *Examination; waiting period for re-exam.* Any applicant failing to qualify for an electrical contractor's license shall not be eligible to file application for examination again for a period of 6 months and no other person of the same firm or corporation shall be entitled to an examination for an electrical contractor's license before the expiration of the 6-month period.

(Prior Code, § 5-21)

(G) *Bond required.* Any applicant, having qualified for an electrical contractor's license, shall file with the city's Clerk-Treasurer an indemnity bond, with good and sufficient surety, to be approved by the city's Clerk-Treasurer, payable to the city, in the penal sum of \$5,000. The bond shall be conditioned that the applicant will not violate any of the terms or conditions of this chapter. The applicant shall maintain the bond as long as he or she continues in business.

(Prior Code, § 5-22) (Ord. 1261, § 1)

(Ord. 439, § 3)

### § 51.22 LICENSES.

(A) *Issuance; fee.* It shall be the duty of the city's Clerk-Treasurer, upon receipt of an approved certificate that the examinee has passed the examination for an electrical contractor's license, issued by the Board of Examiners and, upon payment to the city of the sum as set out in the Fee Schedule of this code for the initial license, under this chapter, to issue the electrical contractor's license, signed by the Mayor and attested by the city's Clerk-Treasurer to the applicant.

(Prior Code, § 5-23)

(B) *Expiration.* All licenses issued under the provisions of this chapter shall lapse on December 31 of each year.  
(Prior Code, § 5-24)

(C) *Renewal; reapplication.* An application for a renewal of an electrical contractor's license shall be accompanied by a fee as set out in the Fee Schedule of this code and may be filed any time during the month of January immediately following the date of expiration. The application for renewal shall be granted; provided that, the other requirements of this chapter have been complied with. All applications for renewal of an electrical contractor's license shall be filed with the city's Clerk-Treasurer not later than January 31 of each year; otherwise, the electrical contractor's license must be obtained by a new application and a reexamination and upon payment of the license fee required for the initial license.  
(Prior Code, § 5-25) (Ord. 94-27, (part))

(D) *Non-transferable.* The license issued by the city's Clerk-Treasurer pursuant to this chapter shall not be transferable.  
(Prior Code, § 5-26)

(E) *Validity.* When the examinee of a licensee ceases to be actively connected with the electrical business of the licensee, the license issued to the business shall remain valid for 60 days in order to enable another person to take the examination for the electrical business. Upon the expiration of the period, no new permits will be issued to the business, but the work for which permits have been issued may be completed.  
(Prior Code, § 5-27)  
(Ord. 459, § 3)

### **§ 51.23 VIOLATION; FORFEITURE.**

Any contractor licensed by the city under this chapter who shall obtain a permit for doing electrical work in the city under the terms of this chapter and who permits any non-licensed contractor to use this permit to do electrical work in the city shall be in violation of the provisions of this chapter and shall forfeit his or her license.  
(Prior Code, § 5-28) (Ord. 459, § 3)

### **§ 51.24 CANCELLATION.**

If any person holding an electrical contractor's license under the provisions of this chapter shall be convicted 3 times for violating any of the provisions of this chapter his or her license shall be forfeited and the Mayor of the city shall order the license cancelled and the licensee shall then have no further rights under the license.  
(Prior Code, § 5-29) (Ord. 459, § 9)

### **§ 51.25 REAPPLICATION AFTER FORFEITURE.**

The person whose electrical contractor's license has been forfeited and cancelled may, after the expiration of 6 months from the forfeiture and cancellation, apply as provided in this chapter for a new license.  
(Prior Code, § 5-30) (Ord. 459, § 9)

**§ 51.26 EXCEPTION FROM LICENSING; VIOLATION.**

The provisions of this chapter regarding licenses shall not apply to any homeowner doing his or her own electrical work himself or herself in a 1-family residence for his or her own occupancy upon otherwise complying with this chapter as required of licensed contractors. However, the homeowner shall do the work himself or herself upon the premises and if the owner should not do the work on the premises and he or she uses the permit with the intention to nullify a provision of this chapter by himself or herself or in conspiracy with another or others, he or she shall be guilty of the offense of violating this chapter and shall be punishable as provided hereinafter. A permit taken out by a homeowner may be transferred without cost to any electrical contractor licensed by the city, the transfer to be effectuated by the city's Clerk-Treasurer. The permit issued to the homeowner shall have this section printed on it.

(Prior Code, § 5-31) (Ord. 439, § 6)

**§ 51.27 CESSATION OF BUSINESS.**

Should a licensee desire to cease the operation of business for a period of time, the license may be maintained by the payment of renewal fees and the filing of bond as, in this chapter, provided.

(Prior Code, § 5-32) (Ord. 439, § 3)

***INSPECTIONS***

**§ 51.40 REQUIRED PRIOR TO CONCEALMENT.**

No electrical wiring or electrical work of any nature shall be concealed or enclosed before it shall have been inspected by the Electrical Inspector.

(Prior Code, § 5-33) (Ord. 459, § 7)

**§ 51.41 FEES.**

At the time of obtaining a permit to do electrical work, the permits and fees as set out in the Fee Schedule of this code shall be collected by the Clerk-Treasurer.

(Prior Code, § 5-34) (Ord. 459 § 8; Ord. 892 § 1; Ord. 1260 § 1, 1976; Ord. 92-30 § 1; Ord. 2001-53, § 2)

***MINIMUM STANDARDS FOR ELECTRICAL INSTALLATIONS***

**§ 51.55 ESTABLISHED; MODIFICATIONS; CURRENT TURN-ON.**

(A) The provisions of this subchapter shall constitute the minimum requirements for the installation of electrical wiring in residences and apartment buildings.

(B) In a number of the provisions of this subchapter modifications may be allowed; provided that, a special written permit is obtained, previous to starting work. No notice of completion of work will be turned into the public utility for service, until all inspection fees are paid.

(C) No electrical current shall be turned on in any building until a certificate has been issued by the Electrical Inspector, showing that the electrical work has been completed according to the provisions of this subchapter.  
(Prior Code, § 5-35) (Ord. 583, § 2)

**§ 51.56 APPLICABLE CODES AND REGULATIONS.**

All electrical wiring in the city shall be installed in accordance with:

- (A) The National Electrical Code;
- (B) Rules and regulations of the state's Fire Marshal; and
- (C) The rules and regulations incorporated in this chapter.  
(Prior Code, § 5-36) (Ord. 583, § 2)

**§ 51.57 SERVICE WIRING AND METERS.**

(A) Meters and service wiring shall be installed on the outside of the buildings. Exceptions only by authorization from the Electrical Inspector and the Northern Indiana Public Service Company. Service entrance wires from the point of contact with the building and up to and including the switch meter connections and main cutout shall be completely enclosed in metal.

(B) Rigid galvanized conduit shall be used for all outside service entrance raceways.

(C) Solder lugs on service conductors shall not be approved. The service outlet shall extend at least 12 feet above grade. Service entrance conductors and disconnect means shall have a current-carrying capacity sufficient to supply the connected load.

(D) Single-family dwellings, of less than 1,500 square feet, shall be provided with a minimum of 100 ampere copper wire service. Single-family dwellings of 1,600 square feet or more shall be provided with a minimum of 200 ampere copper wire service.

(E) In residences having no basement, the entrance switch shall not be less than 5 feet from the floor.

(F) The minimum size of mast type service shall be 2-inch conduit and shall extend at least 24 inches above the roofline. An approved flashing is recommended to be installed where the conduit extends through the roof.

(G) The service in a multiple occupancy building may consist of not more than 6 fused disconnects or circuit breakers, located in a readily accessible point nearest the entrance of the service conductors. Installations of more than 6 circuits shall require a fusible main disconnect or circuit breaker.

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(H) In multiple-occupancy buildings, if metered separately, each occupant shall have access to his or her disconnecting means, which shall be 120/240 3-wire service.

(I) All temporary service shall be installed with galvanized conduit and approved weather head.

(J) The ground wire shall be installed in rigid or thin wall conduit and connected with an approved ground clamp to a driven ground rod 8 feet long or galvanized 3/4-inch pipe 10 feet long. All temporary services shall be inspected.

(K) All services in excess of 400 amperes the city's Inspection Department shall be consulted for requirements.

(L) Switch boxes or distribution panels shall not be installed in closets, bathrooms or over kitchen sinks.

(M) The main disconnect or main switch box shall not be placed over 6 feet from a point on the wall where the entrance run comes into the building.

(N) All emergency wiring must comply with the requirements of the state's Fire Marshal.

(O) All grounded 3-phase systems shall be marked or stenciled with 1 inch letters on each service switch and on all disconnects throughout the building.

(P) All four 3-phase systems shall be color coded as follows: 120/240 volt Phase A- Black, Phase B – Red, Phase C – Blue, Neutral – White, 480/277 volt Phase A – Brown, Phase B – Orange, Phase C – Yellow, Neutral – Gray.  
(Prior Code, § 5-37) (Ord. 583, § 2; Ord. 699, § 1; Ord. 2001-53, § 3)

### **§ 51.58 WIRING METHODS.**

(A) All outlet and junction boxes used on outside of building shall be approved weatherproof type. When practicable, multi-wire branch circuits will be allowed. When used, no 2 wires with a potential difference shall have the same color. A potential difference must exist between the ungrounded circuit wires that share a common neutral.

(B) Sockets, when not attached to fixtures or located under damp, concrete, tile or metal floors shall be of standard shockproof type, is suspended lower than 8 feet from the floor.

(C) All wires shall be copper.

(D) All neutral wires must have the same capacity as the other conductors of the same circuit, electric ranges circuits excepted.

(E) Wires for an electric range outlet shall not be smaller than number 6 wire; except, that the neutral wire may be number 8 gauge wired. Where range and oven are separate units, each shall have a separate 30 ampere 4 wire circuit.

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(F) All shall be galvanized with the exception of aluminum and P.V.C., which shall be used by approval of the Electrical Inspector only.

(G) Only galvanized rigid metal conduit shall be approved for all exterior work or overhead services. Only rigid conduit, I.M.C, Greenfield, EMT or N.M. Cable will be permitted in buildings. All furnaces or boilers, with or without circulating or vacuum pumps, shall be installed on a separate circuit.

(H) Each habitable room of all buildings shall have a minimum of 3 current consuming outlets. Residential wiring shall not exceed 10 outlets per circuit. No more than 6 outlets per circuit shall be permitted for show window lighting.

(I) Commercial basements, storage and stockroom wiring shall not exceed 6 outlets per circuit not to exceed 1,320 watts.

(J) All electrical equipment and raceways shall be securely bonded to assume the continuity of the entire system.

(K) Ball transformers shall be of the outlet type for box mounting; other types shall be mounted in metal cabinets.

(L) Garages shall be wired with conduit or metallic tubing. No current-consuming outlets in garages shall be located less than 4 feet from the floor unless of the explosion-proof type.

(M) Each single-family dwelling and each apartment shall be provided with at least four 20-ampere small appliance branch circuits for all receptacle outlets for the small appliance loads, including refrigeration equipment, in the kitchen, pantry, breakfast room and dining room. Two of the circuits shall be of opposite polarity as the other circuits. The circuits shall not be smaller than number 12 wire and shall no other outlets.

(Prior Code, § 5-38) (Ord. 583, § 2; Ord. 2001-53, § 4)

### **§ 51.59 GASOLINE STATIONS.**

(A) Gasoline pumps shall be connected with electrical explosion proof fittings only. Sealed fittings shall be used at distribution centers and pumps as required by the state's Fire Marshal.

(B) Each circuit supplying equipment in or on a dispensing pump shall be provided with a switch or other acceptable means to disconnect all conductors of the circuit from the source of supply.

(Prior Code, § 5-39) (Ord. 583, § 2)

### **§ 51.60 SIGNS.**

(A) Moisture resisting wire shall be used on flexible sign connections.

(B) All signs shall be provided with outlet or junction boxes or a compartment in the sign to facilitate the running of conduit to the sign and the making of the connection in the boxes or compartments.

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(C) For swinging signs, flexible metal conduit shall be used from the last support on the building to the sign.

(D) Signs shall be placed at least 10 feet above the surface of that part of the public walkway which any such sign overhangs, and the portion of any such sign nearest to the building against which it is placed shall not be a greater distance than 2 feet from the building.

(E) A minimum of 18 feet is required for signs hanging over roadways.

(F) No sign shall project beyond the curb line.

(G) Signs, fixtures and outline lighting shall be protected by their own cutouts.

(H) Only Underwriters' Laboratory approved fixtures shall be installed. Fixtures exposed to weather, moisture or corrosive vapors shall be of a weatherproof type.

(I) Recessed fixtures shall be of a type approved for that purpose.

(J) Fixtures shall be installed so that they may be removed without damage to the walls or ceilings.

(K) Not more than twenty 40-watt lamps shall be placed on any branch lighting circuit, nor more than ten 80 watt slim line lamps on 1 circuit.

(L) The fixtures shall not be in use as a splicing chamber for other circuits or a common raceway for other conductors.

(M) Exit and emergency lighting shall be provided in all public buildings regularly used by the general public for meetings and other similar activities.

(N) A separate service switch shall be provided and exit lighting shall be controlled only at some point near the main entrance and accessible to authorized persons only.  
(Prior Code, § 5-40) (Ord. 583, § 2)

### **§ 51.61 GROUNDING.**

(A) Grounds shall be connected to service equipment from the first meter box, the meter switch or service switch.

(B) Where city water is available in the building, it shall be used as the grounding electrode. Service conductor ground wires must be connected to the nearest point on the cold water system of a building and a bonding jumper must be installed around the water meter or pump.

(C) Conductors used for grounding shall be enclosed in conduit securely fastened and an approved conduit type fitting – J.P.S. 12, shall make connections.

(D) Installations of equipment of 220 volts or over shall be provided with an approved ground including portable equipment.

(E) In so called “unfinished basements” that are at least half above ground and studs have been placed for the future finishing all electrical work must be completed and must conform to the National Electrical Code concerning habitable areas, for placement of convenience outlets, switches and lighting.

(F) Wherever framing has been installed for future completion of habitable rooms all electrical work must be installed to meet these future needs at the time of the initial construction. (Prior Code, § 5-41) (Ord. 583, § 2; Ord. 2001-53, § 5)

**§ 51.62 TRAILER PARKS.**

(A) All disconnect boxes shall be weatherproof type when used on the outside.

(B) All trailer cords shall terminate in a distribution box and be fused at 15 amperes. When more than 15 amperes are required, another circuit shall be installed.

(C) All cords shall be approved weather-resisting type and kept in a good state of repair.

(D) Conduit or thin wall and TW wire not smaller than number 12 shall be used in washhouses and lavatories.

(E) In washhouses and laundry rooms, all receptacles shall be of the polarized type. All appliances used in washhouses and laundry rooms not permanently connected shall have 3 conductor cords. One conductor of the 3 shall be used as an equipment ground. (Prior Code, § 5-42) (Ord. 583, § 2)