

Chapter 16

ELECTRICAL CODE

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16.01 National Electrical Code Adopted¹

There is hereby adopted the Electrical Code for One- and Two-Family Dwellings as published by the National Fire Protection Association, being NFPA 70A-1978, and as the same may be revised from time to time, a copy of which is on file in the office of the City Clerk, which said Code is adopted by reference as if fully set forth herein. Failure to comply with any provision of said Code shall constitute a violation of this section.

16.02 Electrical Inspector

(1) Office Created -

There is hereby created the office of Electrical Inspector. The person chosen to fill such office shall have such qualifications as set by the City Council.

(2) Appointment and Term -

The Electrical Inspector shall be appointed by the Mayor and confirmed by the Council. He shall be appointed for a term of two (2) years from May 1st.

(3) Duties -

The Electrical Inspector shall enforce the provisions of this chapter, keep records of all permits issued and inspections made and perform all other official work performed under the provisions of this chapter.

(4) Deputy Inspectors -

The Electrical Inspector may appoint, subject to the approval of the Council, deputies vested with the authority of the Electrical Inspector when the latter is not acting.

(5) Right of Entry -

The Electrical Inspector or his assistants shall have the right, during reasonable hours, to enter any public or private building or premises in the discharge of their official duties.

(6) Authority to Discontinue Service -

The Electrical Inspector shall have the authority to discontinue all electrical currents to any equipment which is found to be in an unsafe condition, and to discontinue electrical service in case of emergency where such electrical currents are dangerous to life, property or interfere with the work of the Fire Department. No person shall reconnect any equipment thus discontinued until written permission is given by the Electrical Inspector.

(7) Inspections -

The Electrical Inspector or his deputy may periodically inspect all the electrical installations and apparatus in any factory, commercial building, mill or shop within the City and when

¹Repealed and Recreated by Ordinance No. 19-1980-81, Adopted March 2, 1981.

such installation or apparatus is found to be in defective or dangerous condition, the Inspector shall notify the person owning, using, operating or installing the same to place them in a safe condition within fifteen (15) days. Any noncompliance shall be subject to the penalties hereinafter provided. Inspections may be made after a tenant moves from a property and all electrical wiring approved before another occupancy.

16.03 Definitions

(1) Electrical Work -

The installation, supervision or inspection of electrical wiring and equipment for the production, modification, regulation, control, distribution, utilization or safeguarding of electrical energy for mechanical, chemical, heating, lighting or similar purposes.

(2) Electrical Contractor -

Any person who is skilled in the installation, planning, designing, supervision or inspection of electrical wiring and equipment and has served at least two (2) years as a licensed Journeyman Electrician.

(3) Journeyman Electrician -

Any person, other than an Electrical Contractor, who is skilled in the installation of electrical wiring and equipment for the production of power, heating and lighting and who is engaged in this work as his principal occupation. He shall have at least four (4) years practical experience. Two (2) or more years in an accredited trade school shall be accredited for the first two (2) years of an apprenticeship. He shall be at least twenty-one (21). No licensed Journeyman Electrician shall do electric work in the City unless under the supervision of a licensed Electrical Contractor, who shall be responsible in accordance with the provisions of this chapter.

(4) Plant Electrician -

A licensed "Journeyman Electrician" regularly employed and whose electrical work for such employer is limited exclusively to the plant, shop or yards of his employer.

16.04 Electrical Licenses

(1) Required -

No person shall supervise, inspect, alter, install or repair electrical wires and apparatus for the utilization of electrical current for light, heat or power in the City except in the usual operations of the public utility company without first having procured a license from the Electrical Inspector as herein provided.

(2) Electrical Contractor's License -

(a) Required -

No person shall contract or undertake to install or repair electrical wires or apparatus within the City, except as otherwise provided, without first having obtained from the City Clerk an Electrical Contractor's license. The Electrical Contractor shall give a surety bond to the City in the sum of \$1,000.00. Such bond shall be approved by the

City Council and conditioned upon the faithful compliance with the ordinances and laws relating to safe electrical construction and agreement to pay all damages, costs and expenses that may be caused by the negligence of such person or failure to comply with the provisions of this chapter.

(b) Insurance -

Each Electrical Contractor shall carry public liability insurance with an insurance company licensed to do business in this state for the amount of \$10,000.00 for property damage and \$10,000.00 for death or personal injury, such policies shall be approved by the City Council.

(3) Journeyman Electrician's License -

No person shall alter, install, repair or supervise the altering, installing or repairing of electrical wires or apparatus for the utilization of electric current without first having procured a Journeyman's license as hereinafter provided in this section, except in the case of indentured apprentices serving under the continuous and personal supervision of and being directly responsible to a licensed Journeyman Electrician, who shall be constantly on the premises where an indentured apprentice is performing such electrical work.

(4) Electrician's Apprentice -

No person employed as an Electrician Apprentice shall work as such apprentice unless under the direct supervision of a Journeyman Electrician or Electrical Contractor.

(5) Plant Electrician's License -

No person shall alter, install or repair electrical wires or apparatus for a firm or corporation without first having obtained a Plant Electrician's license.

(6) Application for Electrical License -

Application for a license shall be made to the Electrical Inspector on forms furnished by him and shall contain a record of the applicant's training and experience in the installation and repairing of electrical wires and apparatus. Applications shall be accompanied by the fee for class of license for which application is made. If applicant fails to pass the examination, the fee shall be returned, except a charge of one dollar for examination and incidentals.

(7) Terms, Fees and Renewals -

All licenses shall be for a term of one (1) year or fraction thereof and shall expire on the 30th day of June after the date of issuance or unless sooner revoked. Licenses may be renewed on or before the 15th day of June upon the filing of an application for such renewal with the City Clerk accompanied by the usual fee, on forms furnished by him, subject to the approval of the Electrical Inspector. If a license is permitted to expire, the former holder shall have the same status as a person not previously licensed and the Electrical Board may set up such rules in its discretion for the renewal of such license. License fees shall be:

(a) Electrical Contractor's License - \$25.00.

(b) Journeyman Electrician's License - \$10.00.

(c) Plant Electrician's License - \$10.00.

(8) Examinations -

Regular written or oral examinations shall be held during the month of June of each year, but special written examinations may be held at any time designated by the Board. Contractors, Journeymen and Plant Electricians are limited to three (3) examinations in any five (5) year period. The initial fee shall remain the same regardless of when an examination is taken. Applications shall be made on or before May 1st.

(9) Issuance of Licenses -

Upon receipt of applications for electrical licenses, duly approved by the examining committee and with payment of fee duly acknowledged, the City Council may authorize the City Clerk to issue the proper licenses in due forms.

(10) Board of Electrical Examiners -

The Board of Electrical Examiners shall be appointed by the Mayor and confirmed by the City Council. The Board shall consist of three (3) to five (5) members chosen from the following:

- (a) A member of the Fire Department.
- (b) One licensed Electrical Contractor.
- (c) Superintendent of City Utility.
- (d) Electrical Inspector.
- (e) One member of the City Council.

The Mayor and the President of the Utility Board shall be ex-officio members of the Board. The Mayor may choose a member of the City Council to represent him.

(11) Board Appointments -

The Electrical Inspector shall act as the Secretary for the Board. The member of the Council and the Electrical Contractor are to be appointed in the month of April of the even-numbered years, and the remaining members are to be appointed in the month of April in the odd-numbered years. All members shall hold office until the 30th day of April in the year their term expires or until their successors have been appointed and qualified. Vacancies on the Board of Electrical Examiners shall be filled by a person appointed by the Mayor and confirmed by the City Council to complete the unexpired term.

(12) Duties of the Examiners -

Three members shall constitute a quorum for the transaction of business. All applications for examinations shall be referred by the Electrical Inspector to the Board of Electrical Examiners, who shall properly investigate and report as to the qualifications and competency of the applicants in the installation of electrical wiring and equipment.

(13) Revocation of License -

Any license granted under the provisions in this chapter may be revoked by the City Council upon the recommendation of the Electrical Inspector and the Board of Electrical Examiners for violation of any law or ordinance relating to electrical work or for installation of electrical wires or apparatus in such a manner as to cause hazard to life or property. When a license has been so revoked, the former holder thereof shall have the same status as a person not previously licensed.

16.05 Electrical Permits

(1) Permits -

The Electrical Inspector shall issue permits for the execution of electrical installations for light, heat or power upon the filing of proper applications, which shall be made on forms furnished by the Inspector and shall prescribe the nature of the work as well as such other information as may be required for inspection. Permits shall be issued only to licensed Electrical Contractors or a property owner who desires to do his work himself. No electrical work shall be done unless the permit has been obtained, except as provided in sub. (2) hereof.

(2) Exemptions -

No permit shall be required for the following:

- (a) The usual operations of the local utility company or the City.
- (b) The manufacturing, assembling, repairing or testing of electrical equipment for which no license is required.
- (c) Minor repair work such as repairing cords, switches, replacing fuses or changing lamp sockets.
- (d) Repairs made necessary for the proper maintenance or correction of an existing installation.
- (e) Machine installation and repair in any industry employing more than fifteen (15) employees.

(3) Permit Fees -

(a)² One percent (1%) for work in excess of \$200.00, subject to a minimum fee of \$5.00.

(b) Re-inspections -

Where additional inspections are made necessary by some reason of neglect to make corrections in work found faulty, defective or incomplete at the expiration of the time limit set for re-inspection as specified in notice duly served, the inspection fee shall be \$1.00 for each re-inspection.

²Amended by Ordinance No. 12-1981/82, Adopted _____, 198_.

- (c) All permit fees shall be paid to the City Treasurer and credited to the General City Fund, and no permit shall be issued or held valid unless approved by the Electrical Inspector and fee paid to the City Treasurer in the amount required for such permit.
- (d) If the licensee shall fail to obtain a permit before an electrical installation has been started, except in emergencies, and then only after notifying the Electrical Inspector verbally or in writing not later than the next working day, the total fees for such permit shall be double the regular fee provided for in this subsection.
- (e) No further permits shall be issued unless all lawful orders of the Electrical Inspector have been complied with.

(4) Temporary Work -

On applying for a permit for temporary electrical work, a specified period of time for which such wiring is to remain in service shall be stated. Service shall be cut off at the end of this period and shall not again be connected without written permission from the Electrical Inspector.

(5) Emergency Work -

In emergency work, the person doing or causing work to be done shall report the same to the Electrical Inspector immediately after beginning work on forms furnished by the Electrical Inspector and such work shall be in accordance with the provisions of this chapter.

(6) Non-Inspected Work; How Marked -

Red tags furnished by the City, bearing the Electrical Contractor's name and permit number and stating that the job has not been inspected shall be attached to all jobs that require a permit by the Contractor when the job is begun and remain there until the work is completed and approved by the Electrical Inspector, whereupon such tags shall be removed by the Inspector and replaced with a white tag indicating his approval. Red tags shall not be removed without the Electrical Inspector's consent.

16.06 Electrical Inspection

Upon completion of the wiring of any buildings or before any wiring is hidden from view, the person performing the work shall notify the Electrical Inspector, who shall inspect the installation within twenty-four (24) hours of the time such notice is received. If it is found that such installation is fully in compliance with this chapter and does not constitute a hazard to life or property, the Electrical Inspector shall approve the work and authorize concealment of such wiring or connection for electrical service. If the installation is incomplete or not strictly in accordance with the provisions of this chapter, the Electrical Inspector shall issue orders to the person making such installation to remove all hazards and make the necessary changes or additions within ten (10) days. Concealment of electrical work before inspection or failure to comply with the orders of the Electrical Inspector shall constitute a violation punishable in accordance with the provisions of this chapter.

16.07 Certificate of Inspection**(1) General Requirements -**

Any person who shall install electric wires or appliances shall be responsible for such installation. Any person who shall make any additions, corrections, alterations or connections to the installation thereafter shall be responsible for the correct functioning of such installation.

(2) Approved Material and Fittings -

All material and appliances used or designated to be used in connection with the utilization of electricity for light, heat or power shall be Underwriters Laboratories approved.

(3) Unsafe Equipment -

No person shall keep or offer for sale or sell within the City any appliances, equipment or fixtures designed or intended to be used for the production, transmission or utilization of electric current or power, unless such appliances, equipment or fixtures are approved by the Electrical Inspector in accordance with the requirements set forth in the Wisconsin State Electrical Code.

(4) Rigid Conduit or Electrical Metallic Tubing for Wiring Required -

Electrical wires for light, heat or power shall be installed in rigid conduit or electrical metallic tubing under the following conditions and locations:

- (a) When concealed, in all buildings, except in residences containing four (4) families or less, or other small buildings that do not require more than one circuit.
- (b) In basements.
- (c) For service wiring and meter loops.
- (d) For stationary signs, continuous from cabinet to within the signs. In case of roof signs, the cabinet may be placed on the roof but not higher than five (5) feet therefrom.
- (e) Outline lighting from output to within metal trough.
- (f) Attached along the outside of any roof.
- (g) Motors, from controlling switch to motor. Where the motor is belted or is otherwise adjustable or movable to some extent a short portion of the conduit or electrical metallic tubing at the motor may be flexible metallic conduit, or in dry places armored cable not exceeding in size No. 14 B. & S. Gauge.
- (h) In the Fire Zone: Here it is impractical to use rigid conduit or electrical metallic tubing. Flexible conduit or armored cable will be permitted by written permission from the Inspector.
- (i) In all commercial buildings or industrial buildings.
- (j) In all residences connected with all commercial and industrial buildings.

(5) Ends and Outlets -

When part of an installation is to be connected to service, the ends of the wires in the outlets not in use shall be separated, taped and where necessary, paired before service shall be permitted. Where outlets are not to be used or are provided for future use, approved covers shall be provided to close such outlets. Such covers are to be supplied and installed by the person installing the lighting fixtures or other current-consuming devices.

(6) Lights In Bathrooms -

The main lights in the bathrooms or toilet rooms shall be controlled by a wall switch located next to the door. Switches shall not be installed behind doors. In existing installations, when the replacement of light fixtures is necessary and they are not controlled by a wall switch, an insulating link shall be installed in the pull chain.

(7) Separate Circuits -

Each floor of a house is to be on an entirely separate circuit. All floors or stories of residences, flats, apartments or other premises that can be used for separate living quarters shall be wired on separate circuits from other floors so that they may be metered separately. No outlets of circuits for separate floors shall be connected to other circuits.

(8) Amperes -

All the electrical services for new installations shall be of at least 100 ampere capacity. On change-overs from a two (2) to a three (3) wire service, sixty (60) ampere service shall be allowed, although a 100 ampere service is still recommended.

16.08 Arbitration

When the Electrical Inspector shall condemn all or part of an electrical installation in any building, the owner within five (5) days after receiving notice from the Electrical Inspector, may file a petition in writing for review of the actions of the Electrical Inspector to the Chairman of the Electrical Examining Board. Upon receipt of such petition, the Board shall proceed to determine whether such electrical construction complies with this chapter and within three (3) days shall make a decision in accordance with its findings.

16.09 License Renewals

All electricians who presently hold a City license shall be permitted to renew their licenses annually at the fee set under this classification, unless they allow such license to expire, in which case re-examination shall follow.

16.15 Penalty

Any person who shall to comply with any provisions of this chapter shall, upon conviction, forfeit a sum of not less than \$1.00, nor more than \$100.00, for each violation, together with the costs of prosecution, and in default of the payment of such forfeiture, shall be imprisoned in the County Jail not less than ten (10) days or more than sixty (60) days, or until such forfeiture and costs are paid.