Chapter 17

ELECTRICAL CODE

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Article I. In General

Sec. 17-01. Purpose.

The purpose of the electrical code in this chapter is to safeguard life and property and to give assurance of all manner of electrical work being done in a workmanlike manner, by regulating and providing for the inspection of the installation and maintenance of electrical wiring, equipment and devices, and to enforce appropriate licensing of persons undertaking electrical work, and fixing a penalty for the violation thereof.

(Code 1982, § 16.01.ORD 1249 6/11/12)

Sec. 17-02. State electrical code adopted.

(1) *State code adopted by reference.* The provisions and regulations of the electrical code adopted by the Wisconsin Department of Safety and Professional Services as set forth in the Wisconsin Administrative Code are hereby made a part of this chapter in their entirety by reference; provided, that where the provisions of this chapter are more restrictive or require higher standards than the state code, not in conflict with the minimum requirements thereof, the provisions of this chapter shall apply. Failure to comply with any of the provisions of such regulations shall constitute a violation of this chapter, subject to the penalties provided in this chapter.

(2) *Utility.* Rules and regulations of the public service commission, the city electric utility and any additional requirements of the city and the state pertaining to electrical work shall be adhered to and shall be subject to inspection and enforcement by the city electrical inspector as part of this chapter.

(Code 1982, § 16.18(1))

Sec. 17-03. Definitions.

Repealed
(Code 1982, § 16.05; Ord. No. 947, § 1(16.05), 11-12-2001. ORD 1249 6/11/2013)

Sec. 17-04. Emergency electrical work.

When doing emergency electrical work, the person doing or causing work to be done shall report the action to the electrical inspector, on forms furnished by the city, the next business day after commencing such work. Such work shall be done in accordance with the provisions of this chapter.

(Code 1982, § 16.12)

Sec. 17-05. Approved appliances.

No person shall keep, offer for sale or sell within the city, any electrical appliance, equipment or fixtures designed for or intended to be used for the production, transmission or utilization of electrical current or power, unless such appliance, equipment or fixtures have been approved by a nationally recognized testing agency, the Department of Safety and Professional Services, or the electrical inspector. The electrical inspector may make periodic inspections to ensure compliance with this section.

(Code 1982, § 16.16; Ord. No. 1220, § 1, 2-28-2012)

Sec. 17-06. Appeal

Any person may appeal to the board of electrical examiners for a review of any decision of the electrical inspector or the deputy electrical inspector. Such appeal must be made in writing within five days after such person has been notified of such decision by the electrical inspector or the deputy electrical inspector. Upon receipt of such appeal, the board of electrical examiners shall determine whether the action of the electrical inspector or the deputy electrical inspector complies with this chapter, and shall make a decision in accordance with its findings within five days after such appeal is made. On an appeal, five members of the board of electrical examiners shall constitute a quorum, but a decision shall require the affirmative vote of at least four members. The chairman of the board shall have a vote in such matter.

(Code 1982, § 16.19)

Sec. 17-07. Penalty.

Any person found to be in violation of any provision of this chapter shall be subject to a penalty as provided at section 1-05 of this Code.

(Code 1982, § 16.25)

Secs. 17-8—17-35. Reserved.

Article II. Administration

Sec. 17-36. Board of electrical examiners.

(1) *Composition.* The board of electrical examiners shall consist of seven members as follows:

(a) One electrical contractor or master electrician.

(b) Three electricians.

(c) One alderperson.

(d) One citizen member.

(e) One employee from the electric department of the Marshfield Utilities .

(2) *Appointment.* The electrical inspector shall act as secretary for the electrical board without any vote. All members of the board shall be appointed by the mayor, subject to the confirmation of the council, at the organizational meeting of the council in each year, and shall hold office for three years, commencing May 1. The electrical contractor/master electrician member and the electrician members shall, if possible, be rotated each year from those electrical contracting firms or businesses that perform electrical work within the city.

(3) *Qualifications.* All members of the board of electrical examiners excepting the citizen member and the alderperson shall be qualified in accordance with the requirements governing their classification before their appointment and confirmation by the council.

(4) *Vacancy.* Vacancies on the board of electrical examiners shall be filled by appointment by the mayor and shall be confirmed by the council.

(5) *Quorum.* Four members of the board shall constitute a quorum for the transaction of business. ,

(6) *Meetings.* The board of electrical examiners shall meet at least quarterly for the consideration of applications and any other business coming before the board.

(7) *Role.* The role of the board of electrical examiners shall be to review the municipal electrical code in order to keep it up to date with changes in technology or the state electrical code; act in an advisory role to the electrical inspector; be an informational conduit to the electrical contractors, the general public, and the council; and recommend electrical permit fees, subject to approval by the council.

(Code 1982, § 16.03, ORD 1242 6/11/2013)

Sec. 17-37. Creation of offices, qualifications and duties.

(1) *Offices created.* There are hereby created the offices of electrical inspector and deputy electrical inspector.

(2) *How appointed.* The council shall appoint the electrical inspector, and may appoint a deputy electrical inspector, upon the recommendation of the board of electrical examiners.

(3) *Qualifications.* The persons chosen to fill the offices of electrical inspector and deputy electrical inspector shall be of good moral character, possessed of such executive ability requisite for the proper performance of their duties and shall have a thorough knowledge of the standard materials and methods used in the

installation of electrical equipment to provide safety to persons and property; the Wisconsin Statutes relating to electrical work; and any rules, ordinances and regulations issued by authority thereof and under the National Electrical Code. They shall meet the qualifications and be certified as a commercial electrical inspector by the State of Wisconsin within six months of being hired.

(4) *Duties.* It shall be the duty of the electrical inspector and the deputy electrical inspector to enforce the provisions of this chapter. Complete records of all permits issued and inspections made and other official work performed under the provisions of this chapter shall be kept by them and so arranged as to afford prompt information concerning electrical installations.

(5) *Inspection.* The electrical inspector and deputy electrical inspector and all assistants acting by their orders shall have the right, during reasonable hours, to enter any public or private building, structure, premises or subways in the discharge of their official duties, for the purpose of making any inspection or test of electrical wires, appliances, equipment and devices contained therein.

(a) They shall be given prompt access to any premises upon notification to the proper person in authority thereof. The electrical inspector or deputy electrical inspector may inspect all the electrical installations and apparatus in the factories, mills, shops, and other places of occupancy in the city and when such installations or apparatus are found to be in a dangerous condition, they shall notify the person owning, using, operating or installing the electrical installations and apparatus to place them in a safe condition.

(b) Any person failing or refusing to make the necessary repairs and failing to have the repairs completed within 15 calendar days after the receipt of such notice shall forfeit and pay into the city treasury the sum of $50.00 for each day which shall elapse after the expiration of such period.

(c) The electrical inspector shall be permitted to order the discontinuance of electrical service to such defective installations or apparatuses until they have been repaired, removed, or changed as directed by the electrical inspector, subject to the limitations of this chapter.

(d) An inspection shall be made as soon as is practical if a complaint is made by a tenant, the municipal electric utility, or other concerned citizen on problems of an electrical nature.

(6) *Authority.* The electrical inspector and/or deputy electrical inspector shall have the general management and control of all matters pertaining to electrical inspections and enforcement of relevant law, to include authority to cause the turning off of all electrical currents to any equipment which they find to be in an unsafe condition, and to cut off or discontinue electrical services in case of emergency and where such electrical currents are dangerous to life or where such currents may interfere with the work of the fire department. No person shall reconnect any equipment thus cut off until written permission is obtained from the electrical inspector or a designated representative. The electrical inspector or the deputy shall have the authority to enter all buildings and premises and all parts thereof, in order to make an inspection, or test the electrical apparatus or wiring therein or thereon in order to enforce the regulations of this chapter. The issuance of a valid electrical permit shall also constitute permission to inspect the premises where electrical work is being performed. Refusal to allow reasonable inspections shall constitute grounds for revocation of the permit and any electrical work shall no longer be continued. The electrical inspector and/or deputy electrical inspector or their authorized agent shall have the power to issue citations enforcing this chapter and nuisances under chapter 11 of this Code in the Marshfield Municipal Court.

(Code 1982, § 16.04; Ord. No. 1031, § 5, 10-12-2004)

Sec. 17-38. Licenses.

(1) *License requirements.* No person shall engage in or undertake to do any electrical work as defined in this chapter, within the City of Marshfield, except in the usual operation of public or private electrical utilities relating to those portions not covered by the State of Wisconsin electrical code, without first having procured a proper State of Wisconsin license. Except as provided elsewhere in this chapter, any electrical

components or devices installed by an unlicensed person shall be removed by the owner within 15 calendar days after notice is given. The owner of the property shall be responsible for any costs incurred for this removal if the electrical inspector orders this removal and the owner does not comply. All electrical work as outlined under 17-41(2) shall be performed under the supervision of a State of Wisconsin licensed electrical contractor.

(Code 1982, § 16.06; Ord. No. 947, § 1(16.06), 11-27-2001; Ord. No. 972, § 1, 2-25-2003; Ord. No. 984, § 1 (16.06(9)), 7-22-2003; Ord. No. 1024, § 1, 6-22-2004, Ord 1249 June 11, 2013)

Sec, 17-39 Repealed

(Code 1982, § 16.08, Ord 1249, June 11, 2103)

Sec. 17-40 Repealed

(Code 1982, § 16.09, Ord. 1249, June 11, 2013)

Sec. 17-41. Permits.

(1) *Permit applications.* Permits shall be required for all electrical work done or performed in the city by those homeowners who are allowed to wire by section 17-44 of this chapter. Any electrical work performed on electrical services, including repairs; or any wiring for fire alarm or asset protection systems, including changes to existing systems, shall require an electrical permit. All other electrical work performed in the city that has a minimum dollar value of $500.00 for parts and labor shall require a permit. All permits shall be issued by the electrical inspector upon the filing of a proper application by the person proposing to perform the work on forms furnished by the inspector. Applications shall describe the nature of the work to be performed, include an electrical wiring plan, and such other information as may be required by the inspector. No electrical work shall be done until such permit has been obtained. An elecrical permit form signed by a representative of a State of Wisconsin licensed electrical contracting firm that is sent to the electrical inspector's office shall be considered as proper application for a permit. Electrical wiring for all new buildings and additions to buildings shall require a permit no matter the value of the work. All electrical permit fees shall be paid for and wiring plan(s) approved before a permitapplication is considered to be valid and a permit issued for the work as described. An electrical permit shall expire one year after it is issued unless significant progress has been made toward completion of the project for which the permit was issued. The electrical inspector may grant extensions on this initial permit.

(2) *Required.* Permits shall be required for all electrical work and required inspections of existing facilities, including but not limited to:

(a) Wiring for light, heat or power in any building or structure.

(b) Installing fixtures in any building or structure.

(c) Installing any motors.

(d) Any service entrance and all electrical openings.

(e) The extension or alteration of any existing circuit.

(f) Primary and secondary wiring of electric signs, both indoor and outdoor.

(g) Electric billboards and signboards.

(h) Field-installed neon skeleton signs or field-installed neon outline lighting.

(i) Wiring of all elevators, both freight and passenger.

(j) Replacing or repairing an old or existing service.

(k) Temporary wiring, including temporary electrical services, on new or remodeled buildings. The application for this permit shall state the length of time for which such temporary work shall exist. Such permit shall be granted for not more than 60 days, but such period may be extended in writing by the electrical inspector. The permittee shall be responsible for any hazards or dangers that might exist during the period of this temporary wiring, and shall remove all such temporary wiring upon the expiration of the period.

(l) All fire alarm and asset protection system wiring including any changes to existing systems.

(3) *Not required.* No permit shall be required for the following:

(a) The manufacturing, assembling, repairing or testing of listed electrical equipment for which no license is required.

(b) Minor repairs of cords, flush snap switches, replacing fuses, or repairing luminaires.

(c) The installation of any plug-in appliances of less than 1,500 watts.

(d) Any electrical work not covered by the State of Wisconsin Electrical Code or the National Electrical Code, that is done or performed by the city electric department in the normal and ordinary course of utility business or operations.

(e) Direct replacement due to damage or defect of any existing individual receptacle, switch, lighting fixture, or motor on an existing branch circuit. This replacement shall not constitute changes to the branch circuit that supplies these devices other than small changes to permit this direct change.

(f) Rewinding or replacing electric motors.

(g) Connecting, disconnecting, reconnecting or repairing any cord-connected appliance which has been approved by a nationally recognized testing agency, the Department of Safety and Professional Services, or the electrical inspector.

(h) Electrical work completed by listed sign installers or HVAC/appliance installers under 17-38(3) or 17-38(4)(b). All new circuit wiring or new circuit extensions to these electrical items shall be subject to the licensing, permit, and inspection provisions of this chapter.

(4) *Fees.* Fees for the permits required to be obtained as set forth above shall be as follows, and they shall be paid to the City of Marshfield prior to the issuance of any such permits:

(a) All residential.

1. Minimum electrical permit fee = $30.00

2. New construction and additions five cents per square foot of building construction.

3. Remodeling and alterations 2.5% of electrical construction cost.

4. Residential (single-family, owner occupied) one bathroom, kitchen or laundry room remodel done by owner. See Section 15-03(2) e.

5. Residential service change, repair or temporary = $40.00

(b) New Commercial & Industrial (Based on developed dquare footage of new building, addition, or a level 2 or 3 alteration)

1. Minimum electrical permit fee = $70.00

2. Square Footage for group S & U construction = .40/sq. ft.
Group S (Storage) Group U (Utility and Miscellaneous)

3. Square Footage for Groups A, B, E, F, M, R and I = .080/sq. ft.
Group A(Assembly) Group B (Business) Group I (Institutional) Group R(Residential) Group E (Educational) Group F (Factory & Industrial) Group M (Mercantile)

(c) Commercial, industrial, institutional and miscellaneous (based on value of job).

1. Minimum electrical permit fee = $30.00

2. $0 - $500.00 = $30.00

3. $500.01 - $2,500.00 = $30.00 plus 1.25% over $500

4. $2,500.01 - $25,000.00 = $55.00 plus .75% over $2,500

5. $25,000.01 - $250,000.00 = $223.75 plus .5% over $25,000

6. Over $250,000.00 = $1,348.75 plus 0.3% over $250,000

(d) Low Voltage Work (Exclude cost of racking and equipment)

(e) Mobile home connection fees = $30.00

(f) All carnival or circus operations = $125.00 per event for the duration of the event as stated on the approved permit.

(g) Swimming pools = $40.00

(h) Failure to obtain an electrical permit prior to commencing work = $100.00 or double permit fee whichever is more, (except for emergency work) or any work that requires reinspections..

(5) *Work Halted*. The Electrical Inspector shall have the authority to order any work halted where no permit has been obtained, if required, except in cases of emergency, in which case the permit must be obtained the next business day.

(Code 1982, § 16.11; Ord. No. 947, § 1(16.10), 11-27-2001; Ord. No. 971, § 1, 1-28-2003; Ord. No. 1024, § 1, 6-22-2004; Ord. No. 1037, § 1, 1-11-2005; Ord. No. 1049, § 1, 5-24-2005; Ord. No. 1067, § 1, 3-28-2006; Ord. No. 1111, § 1, 9-25-2007; Ord. No. 1135, § 1, 8-12-2008; Ord. No. 1220, § 1, 2-28-2012, Ord No. 1249, June 11, 2013; Ord No. 1254 7/23/13)

Sec. 17-42. Withholding of permits.

If a licensed contractor or other person has installed or caused to be installed any wiring devices, apparatus or fittings constituting a hazard, and is notified by the electrical inspector of such hazard, such person shall be barred

from doing any more work on that job or any other job until such time as the hazard is eliminated or corrected and approval given to continue by the electrical inspector.

(Code 1982, § 16.14(2))

Sec. 17-43. Electrical inspection.

(1) *Notification.* Upon completion of the performance of any electrical work for which a permit is required under the terms of this chapter, and before any such work is hidden from view, the permittee shall notify the electrical inspector's office. The inspector shall inspect such work within two business days after such notice is received. If the inspector determines that such work fully complies with all applicable codes, and is otherwise safe, he or she shall approve the work. The work can then be covered and/or completed. If the inspector determines that the work is otherwise than in compliance with this subsection, he or she shall order the permittee to make such changes or additions as may be necessary, to be completed within a period of ten days. When such changes or additions have been made, the electrical inspector shall be notified, and shall reinspect the work. The inspector's office shall be notified at least two business days before covering any wiring or before occupancy takes place for work completed under provisions of this chapter.

(2) *Reinspection.* The electrical inspector shall have the authority to reinspect any electrical work wherever and whenever he or she deems it necessary.

(3) *Scheduling.* All requests for inspection shall be made to the inspector by 12:00 noon for inspection two business days prior to the requested inspection. No inspections shall be made on Sundays or legal holidays, unless the inspector deems it necessary.

(4) *Red tags.* Red tags, furnished by the city bearing the owner's name, address, and violation needing correction, shall be attached to all electrical work needing correction. These tags shall not be removed except by the electrical inspector, or some person authorized by the inspector, after approval of the work.

(5) *Red caution tape.* A red caution marking tape is required to be installed 12 inches above all buried electrical power cables or conduits buried for the purpose of containing electrical power wires. Other than telephone, cable TV and Class 2 protected wiring, all wiring methods installed using an open trench method of burial that are not totally encased in two inches or more of concrete shall have this warning tape. Code allowed wiring installations that are less than 18 inches deep shall have this warning tape placed six inches above the installation.

(6) Each separate electrical service on city owned property shall consist of a single main disconnect other than a service that supplies power to a fire pump or other system required to be separated for reasons of safety.

(7) All power wires installed below grade or exposed on public property in the City of Marshfield or going to City of Marshfield facilities shall be enclosed in a listed conduit system.

(8) A minimum electrical supply of 100 amps shall be installed for each individual dwelling unit.

(9) Two wire receptacles devices on two wire circuits, when changed, shall be replaced with GFCI protected and labeleld three wire receptacles.

(Code 1982, § 16.13; Ord. No. 984, § 1 (16.15), 7-22-2003; Ord. No. 1111, § 1, 9-25-2007)

Sec. 17-44. Homeowner's privilege.

(1) *Permits.* No person shall wire his or her home or any part thereof, or make any changes or additions to the wiring therein without first securing permission from the electrical inspector. The inspector shall determine whether such person has sufficient knowledge of the work contemplated in order to do such work in a

proper manner. The inspector may issue a permit for such work. The only type of person contemplated under this section is a property owner installing electrical wiring in a single-family residential dwelling which is owned and occupied by such person at the time the work is to be completed, is their legal residence, and is not for sale or for rent in whole or part. Only State licensed Electrical Constractors may install, repair, or do work on electrical services.

(2) *Affidavits.* Prior to receiving the permit for electrical work, and as a condition thereto, the homeowner shall execute an affidavit certifying that all of the electrical work shall be done by himself at the premises concerned and it will fully conform in all respects with the requirements of the state and city electrical codes and all pertinent ordinances of the city. The city and the electrical inspector are absolved from any liability because of a noncompliance of any such electrical work with the requirements of such codes and/or ordinances.

(3) *Inspections.* At least two business days before any electrical construction is concealed the owner must request an inspection of that part of the electrical construction. At the completion of all work this nonlicensed person must notify the electrical inspector for a final inspection at least two business days before this wiring is utilized. Any defects shall be corrected within 15 days after any notification. A refusal to do so in a timely matter shall constitute a violation of this chapter.

(Code 1982, § 16.09; Ord. No. 1111, § 1, 9-25-2007. Ord No. 1249 June 11, 2103)