ORDINANCE NO.

AN ORDINANCE REPEALING AND REPLACING ARTICLE 4 OF CITY CODE CHAPTER 25-12 TO ADOPT THE 2017 NATIONAL ELECTRICAL CODE AND LOCAL AMENDMENTS; AND CREATING OFFENSES.

BE IT ORDAINED BY THE CITY COUNCIL OF THE CITY OF AUSTIN:

PART 1. City Code Chapter 25-12 is amended to repeal Article 4 (*Electrical Code*) and replace it with a new Article 4 to read as follows:

ARTICLE 4. ELECTRICAL CODE

§ 25-12-111 NATIONAL ELECTRICAL CODE.

(A) The National Electrical Code, 2017 Edition, published by the National Fire Protection Association ("2017 Electrical Code") and Appendix H are adopted and incorporated by reference into this section with the deletions in Subsection (B) and amendments in Section 25-12-113 (*Local Amendments to the 2017 Electrical Code – Administration and Enforcement*) and Section 25-12-114 (*Local Amendments to the 2017 Electrical Code – Technical*).

(B) The following sections of the 2017 Electrical Code are deleted:

Section 80.2	Section 80.15	Section 80.19(C)
Section 80.19(D)	Section 80.19(E)	Section 80.21
Section 80.23(B)	Section 80.27	Section 80.29
Section 80.31	Section 80.33	Section 80.35
Section 110.12	Section 200.6(A)	Section 200.6(B)
Section 225.32	Section 230.70(A)(1)	Section 230.70(A)(3)
Section 250.52(A)(3)	Section 250.119(A)	Section 300.3(C)(1)
Section 310.110	Article 320	Section 330.30(A)
Section 330.30(B)	Section 330.30(C)	Section 334.10(1)
Section 334.10(2)	Section 334.10(3)	Section 338.10(A)

Article 394	Section 410.36(B)	Section 680.23(A)(4)
Section 680.41		

(C) The city clerk shall retain a copy of the 2017 Electrical Code with the official ordinances of the City of Austin.

§ 25-12-112 CITATIONS TO THE BUILDING CODE.

In the City Code, "Electrical Code" means the 2017 Electrical Code adopted and amended by Section 25-12-111 (*National Electrical Code*), as amended by Section 25-12-113 (*Local Amendments to the 2017 Electrical Code*) and Section 25-12-114 (*Local Amendments to the 2017 Electrical Code – Technical*).

§ 25-12-113 LOCAL AMENDMENTS TO THE ELECTRICAL CODE - ADMINISTRATION AND ENFORCEMENT.

The following provisions are local amendments to the 2017 Electrical Code. Each provision of this section is a substitute for any identically numbered provision of the 2017 Electrical Code deleted by Section 25-12-111(B) (*National Electrical Code*) or is an addition to the 2017 Electrical Code:

80.2 Definitions. The following definitions apply to the Electrical Code.

AGENT. A person designated by an electrical contractor to obtain an electric permit on behalf of the electrical contractor. An agent shall be the owner or an employee of the electrical contractor.

CHIEF ELECTRICAL INSPECTOR. An electrical inspector who meets the requirements of Section 80.27 of the Electrical Code and is responsible for administering and implementing the Electrical Code.

CITATION. A document described in Chapter 1-3 (*Citation Program*) issued by the director or the building official.

CONTRACTOR. A person who is an electrical contractor.

ELECTRICAL CONTRACTOR. A person engaged in electrical contracting consistent with Chapter 1305 of the Texas Occupations Code.

ELECTRICAL CONTRACTING. The business of designating, installing, erecting, repairing, maintaining, or altering electrical wires or conductors to be used for light, heat, power, or signaling purposes. The term includes the installation or repair of ducts,

raceways, or conduits for the reception or protection of wires or conductors and the installation or repair of any electrical machinery, apparatus, or system used for electrical light, heat, power, or signaling.

ELECTRICAL INSPECTOR. An individual who meets the requirements of Section 80.27 of the Electrical Code and performs electrical inspections as required by the City.

ELECTRICAL WORK. Installing, altering, repairing, or erecting any electrical wiring apparatus, raceways, or equipment used in connection therewith, whether inside or outside of a building or structure, lot or premises, under the requirements of the Electrical Code.

HABITABLE SPACE. A space in a building or structure used for living, sleeping, eating, or cooking. A bathroom, toilet room, closet, hall, storage or utility space, or similar space is not a habitable space.

LICENSE. An electrical license issued by the Texas Department of Licensing and Regulation (TDLR).

OFFER TO PERFORM. A written or verbal communication, proposal, or advertisement that indicates or implies a person is available to contract for or perform electrical work

REPLACEMENT. The act or process to replace something of like design.

RESIDENTIAL BUILDING OR STRUCTURE. Single-family, two-family, and multi-family dwelling units of five stories or less in height and located in a residential zone.

TEXAS DEPARTMENT OF LICENSING AND REGULATION. A state agency responsible for administering and enforcing Title 8, Chapter 1305 of the Texas Occupations Code and 16 Texas Administrative Code Chapter 73.

WORKMANLIKE MANNER. The standard established in Section 110.12 (*Mechanical Execution of Work*).

80.15. Electric Board. The Electric Board shall comply with Chapter 2-1 (*Boards and Commissions*).

80.19(C) Issuance of Permits.

1. Standard Permits.

    a. Except as provided in Section 80.19(C)(5) (*Homestead Permit*), the building official may issue an electrical permit only to an electrical contractor who has a current electrical contactors license pursuant to Chapter 1305 of the Texas Occupations Code and the 16 Texas Administrative Code, Chapter 73.

b. The building official is responsible for reviewing applications, plan specifications, and other data submitted by an application for a permit. Other departments may review the plans as necessary to verify compliance with applicable laws.

c. The building official shall issue a permit to an applicant if the building official finds that the work described in the application for a permit and in the plans, specifications, and other support data submitted with the application conform to the requirements of the Electrical Code and other applicable laws and ordinances and that the required fees have been paid.

d. A permit issued by the building official will include a written endorsement of the plans and specifications in writing or a "REVIEWED" stamp on the plans and specifications. After the permit is issued, a person may not change, modify, or alter plans and specifications without the approval of the building official. Work regulated by the Electrical Code shall be done consistent with reviewed plans and specifications.

e. A building, structure, or tenant finish out that will exceed 5,000 square feet require a drawing sealed by a Professional Electrical Engineer licensed by the State of Texas A building, structure, or tenant finish 5,000 square feet or less require a drawing with the signature and license number of the qualifying master electrician of record for a State of Texas licensed electrical contractor or sealed by a Professional Electrical Engineer licensed by the State of Texas.

f. If adequate information and detailed statements are filed that comply with the requirements of the Electrical Code, the building official may issue a permit for the construction of part of an electrical system before the plans and specifications for the entire system have been submitted or approved. The electrical permit holder may proceed at the permit holder's own risk, without assurance that the permit for the entire building, structure, or building service will be approved.

2. Permit required. Except as specified in Section 80.19(C)(3), a person who intends to install, alter, repair, replace, or remodel an electrical system shall apply and obtain a permit before the activity commences.

3. Exempt work. Work that may be performed without an electrical permit shall comply with all applicable federal, state, and local requirements. An electrical permit is not required:

a. to replace an approved cable or cord and plug connected motor or portable appliance;

b. to replace components of approved equipment or to a fixed approved appliance of same type and rating, in the same location;

c. to install temporary holiday decorative lighting;

d. when the maximum voltage is 480 and the maximum ampacity is 30, to replace a snap, single, three-way, or four-way or dimmer switch, receptacle, ceiling paddle fan, or luminaire;

e. to reinstall a receptacle with a ground-fault circuit interrupter receptacle, a tamper-resistance receptacle, an arc-fault circuit interrupter receptacle, or weather-resistance receptacle;

f. when the service will not be de-energized, to replace an overcurrent protection device or fuse of same voltage and amperage and in the same location;

g. to repair or replace an electrode or transformer of the same size and capacity for a sign or gas tube system;

h. to replace insulating material to a splice;

i. to remove electrical and communication wiring;

j. to install temporary wiring for experimental purposes in a suitable experimental laboratory;

k. to install wiring for a temporary theater, motion picture, or television stage set;

l. to install or repair an electrical device, appliance, apparatus, equipment, or electrical writing operating at less than 25 volts and not capable of supplying more than 50 watts of energy;

m. m. to install or repair a low-energy power, control and signal circuit of Class II or Class III as defined in the 2017 Electrical Code;

n. for the following activities, if performed in connection with the transmission of electrical energy: to install, alter, or repair electrical wiring, apparatus, equipment, or the generation, transmission, distribution, or metering of electrical energy;

o. to operate signals or to transmit intelligence by a public or private utility in the exercise of its function as a serving utility; or

p. except for activities related to electrical service, for electrical work in a building or structure owned and occupied by the State of Texas or the federal government.

4. Emergency repair permits. An applicant who seeks a permit to make emergency electrical repairs on non-exempt work shall identify the emergency on the permit application.

5. Homestead permit. A person who is not licensed to perform electrical work may perform electrical work under a homestead permit if:

   a. the residence is the person's homestead and principal residence;

   b. the electrical work does not include the main electric system;

   c. the person has not secured a homestead permit for another residence within the prior 12 month period;

   d. the person has owned and occupied the property as of January 1 of the tax year in which the person applies for a homestead permit;

   e. the person applies for a homestead permit in person and files an affidavit stating that the location where the work will be done is the person's homestead;

   f. the person obtains a homestead permit and pays any required permit fees before electrical, mechanical, or plumbing work begins;

   g. the person does not allow or cause another person to perform electrical work under the permit;

   h. the person does not transfer the homestead permit to another person;

   i. the person will present a picture identification to the building official to verify that the person authorized to perform the work under the homestead permit; and

   j. the work that will be done is not for a mobile, modular, or manufactured home unless the person owns the land on which the mobile, modular, or manufactured home is located. A homestead permit cannot be issued if the mobile, modular, or manufactured home that is located in a mobile home park, mobile home community, or other commercial premises.

The building official may suspend or revoke a homestead permit if the work done under the homestead permit is performed by anyone other than the person who obtained the homestead permit.

80.19(D) Annual permit. Electrical work may be performed in a facility operating under the registered industrial plan program under an annual permit issued pursuant to Section 105.1.1 (*Annual Permit*) of the Building Code.

80.19(E) Permit fees. The fee for the permit is set by separate ordinance.

80.19(H) Time limitation on application; permit expiration and reactivation. The time limits for applications and the requirements for permit expiration and reactivation, including a fee for expired permits, are established in Chapter 25-12, Article 13 (*Administration of Technical Codes*).

> **Exception**. An annual permit is valid for 360 consecutive days from the date the permit is issued and may not be extended.

80.19(I) Special inspections program. Electrical work may be performed under this program in occupied residential and commercial buildings or structures within the zoning jurisdiction of the City. The program requirements and scope are:

1. a contractor who participates in this program shall
    a. for each permit, submit a completed compliance form to the building official no later than one business day after the permitted electrical work is complete; and
    b. obtain a permit as required by Section 80.19(C)(2) no later than one business day from the work start date.
2. the scope of work may not
    a. include the disconnection, reconnection, or repair of an electrical service;
    b. involve the penetration of a fire rated wall or component;
    c. require an electrical rough inspection; or
    d. include more than one stand-alone electrical or other permit.

The building official may inspect the electrical work performed for one out of five residential permits and one out of ten commercial permits. As a condition of the program, the electrical contractor shall provide access to the permitted work.

80.21 Plan review fees. The fee for plan review is set by separate ordinance.

80.27 Inspector's Qualifications. All electrical inspectors shall be certified by a nationally recognized certification program and approved job description acceptable to the City's Electrical Board.

80.36 LICENSES.

80.36(A) License required. Except as allowed in Subsection 80.19(C)(5) (*Homestead Permit*), a person shall hold a current electrical license issued by the State of Texas to perform electrical work within the City.

80.36(B) License display. When performing electrical work, a licensee shall keep in his or her license in possession and shall display the license upon request of the building official or the owner of the premises or property where the licensee is working, offering to work, or has worked. A licensee shall also present a picture identification to verify identity.

80.36(C) Contractor. The master electrician of record shall appear in person to establish the contracting business for the jurisdiction of the City.

80.36(D) Temporary staffing companies. An employee who is licensed, registered, or certified by the State of Texas and is assigned to a client company by a professional temporary staffing company is considered an employee of the client company for the purpose of complying with the requirement to hold an electrical contracting license.

80.39 OFFENSES.

(A) A person may not

(1) allow another to use an electrical permit in an unlawful or fraudulent manner;

(2) perform, or cause to be performed, electrical work that causes injury to a person or property;

(3) supervise, perform, or cause to be performed electrical work that does not comply with the supervision requirements in the Electrical Code;

(4) perform electrical work without the required license or permit classification;

(5) display, cause to be displayed, allow to be displayed, or possess an document that purports to be a license to perform electrical work that is false, expired, suspended, or altered;

(6) fail or refuse to display a license or permit to perform electrical work when requested by the building official;

(7) allow a license to perform electrical work by a person other than the person to whom the license was issued;

(8) contract for, or cause to be performed, electrical work that requires a permit by a person who lacks a license required by the Electrical Code;

(9) employ a person who is not licensed as a master electrician or contractor, journeyman electrician, residential wireman, or apprentice electrician to perform electrical work that requires an electrical license;

(10) request the building official to perform inspections of work that is incomplete or work that has not been properly reviewed by the permit holder or the designated supervisor three or more times during a 12 month period;

(11) employ a person to perform electrical work for which the person is not qualified;

(12) supervise a person who is performing electrical work for which the person performing the work is not qualified to perform;

(13) obtain a permit for a business or person other than the business or person identified on the person's State of Texas electrical contractor's license;

(14) perform electrical work under a permit for a business other than the business identified on the permit authorizing the electrical work;

(15) perform, or cause to be performed, electrical work in a manner that endangers a person or property;

(16) fail to provide notification for a change of business address, qualifying master, or contact information included on a State of Texas electrical contractors license on or before the 10th day after the change occurs;

(17) refuse to provide picture identification when requested by the building official; or

(18) fail to comply with the requirements of the Electrical Code.

(B) A person who violates the requirements of this section commits an offense, which is a Class C misdemeanor punishable by a fine not to exceed $500 for each offense. Each day a person commits an offense or remains in violation of this section is an offense.

(C) The building official may report offenses to the Texas Department of Licenses and Regulation.

80.40 Supervision.

(A) At least one licensed journeyman electrician, licensed master electrician, or licensed residential wireman shall be present on a site to supervise the electrical work being performed.

(B) A contractor who is responsible for the electrical work being performed shall provide fulltime supervision, management, direction, and control. A residential wireman may only supervise residential projects.

(C) The ratio of licensed master electrician, licensed journeyman electrician, or residential wireman to licensed apprentice electricians may not exceed one licensed master electrician, licensed journeyman electrician, or residential wireman to five licensed apprentice electricians.

(D) The designated supervisor shall review the electrical work before submitting a request for the building official to inspect.

80.41 Special requirements for the installations below regulatory flood datum.

(A) For purposes of this section, regulatory flood datum (RFD) has the meaning assigned in Section 1612 (*Flood loads*) of the Building Code.

(B) If a circuit can be de-energized by automatic operating electrical disconnection equipment, then a lighting circuit, switch, receptacle, or luminaire that operates at no more than 120 volts to ground may be installed below the RFD. The electrical circuit shall be de-energized before water is present on the floor of the affected areas. If any equipment is flooded, its particular circuit may not be re-energized until the circuit and the equipment are

(1) approved by the wiring and equipment manufacturer for reuse after being submerged in water; or

(2) replaced and approved for use by the building official.

(C) Except for a switch, receptacle, and luminaire, all other electrical equipment permanently installed below the RFD shall be rated by the equipment manufacturer for submergence for at least 72 hours for a head of water above the equipment to the RFD.

(D) An electrical wiring system installed below the RFD shall be suitable for continuous submergence in water. Only a submersible splice is allowed below the RFD. A conduit located below the RFD shall be installed so that it can be self-draining if subject to flooding.

(E) The electrical power equipment and components of an elevator system shall be located above the RFD. An automatic type elevator shall be provided with a home station located above the RFD to which the elevator will automatically return after use.

(F) An electrical unit heater installed below the RFD shall be capable of being disconnected as outlined in Subsection (B). An electrical control on a gas or oil furnace located below the RFD may not exceed 120 volts to ground and the control circuits shall be automatically de-energized before water is present on the floor of the affected area.

(G) Sump pumping equipment of any type shall be provided with a float operated warning alarm that acts independently of any other float actuating device used to start and stop pumping equipment. A building or structure that utilizes sump pumping equipment shall have automatic starting standby electrical generating equipment located above the RFD. The standby generating equipment shall be capable of remaining in continuous operation at 125 percent of the anticipated duration of the design flood.

(H) A control center, privately owned transformer, distribution and main lighting panel, and switchgear, in addition to other stationary equipment, shall be located above the RFD. Portable or moveable electrical equipment may be located below the RFD if the equipment can be disconnected by a single plug or socket assembly of the submersible type and rated for a minimum of 72 hours for the head of water above the assembly to the RFD.

(I) All components of emergency lighting systems installed below the RFD shall be located so that a component of the emergency lighting system is not within reach of personnel working at floor level in the area where an emergency lighting system is used unless the emergency lighting circuit(s) are provided with ground-fault circuit interrupters having a maximum leakage current to ground sensitivity of 5 milliamperes.

(J) Before the building official can release electrical utilities or issue a certificate of occupancy, the building official shall verify that all incoming main city power service equipment, including all metering equipment, is located two feet above RFD.

§ 25-12-114 LOCAL AMENDMENTS TO THE ELECTRICAL CODE - TECHNICAL.

The following provisions are local amendments to the 2017 Electrical Code. Each provision of this section is a substitute for any identically numbered provision of the 2017 Electrical Code deleted by Section 25-12-111(B) (*National Electrical Code*) or is an addition to the 2017 Electrical Code:

110.12 Mechanical Execution of Work. Neat and workmanlike. All electrical work shall be installed in a neat and workmanlike manner. In the Electrical Code, workmanlike manner means, but is not limited to, the following:

1. work that is skillfully installed consistent with the Electrical Code's requirements;
2. equipment, raceways, and cables are installed parallel or perpendicular to the building or structure's structural members;
3. when raceways or cables are grouped, the raceways and cables remain straight, parallel, or perpendicular to the building or structure's structural members;
4. each cable is cut to a length that prevents sagging or looping, except when flexibility requires moderate sagging; and
5. each box, cabinet, enclosure, and device is installed level, parallel, or perpendicular to the building or structure's structural members.

200.6 Means of Identifying Grounded Conductors.

(A) Sizes smaller than 8 AWG. An insulated grounded conductor smaller than 8 AWG shall be identified by one of the following means:

1. a continuous white outer finish;
2. a continuous gray outer finish;
3. three continuous white strips along the conductor's entire length on other than green insulation;
4. a wire that has an outer covering finished to show white or gray color but have colored tracer threads in the braid that identify the source of the manufacturer complies;
5. the grounded conductor of a mineral-insulated, metal-sheathed cable shall be identified at the time of installation by a distinctive marking at its terminations;
6. a single-conductor, sunlight-resistant, outdoor-rated cable used as a grounded conductor in photovoltaic power systems, as authorized in Section 690.31, shall be identified at the time of installation by distinctive white marking at all terminations;
7. a fixture wire shall comply with the requirements for grounded conductor identification required in Section 402.8; and

8. for an aerial cable, the identification shall comply with the means described above or by means of a ridge located on the exterior of the cable so as to identify it.

(B) Sizes 8 AWG and larger. An insulated grounded conductor of 8 AWG or larger shall be identified by one of the following means:

1. a continuous white outer finish;

2. a continuous gray outer finish;

3. three continuous white or gray strips along the conductors entire length on other than green insulation; or

4. at the time of installation, by a distinctive white or gray marking at its termination, which shall encircle the conductor or insulation.

225.32 Location. Subsection 230.70(A)(1) of the Electrical Code provides disconnect requirements for outside feeder and branch circuits.

Exception. For a tower or pole used as a lighting standard, the disconnecting means may be located elsewhere on the premises.

Exception. For a pole or other similar structure used only for support of signs installed consistent with Article 600, the disconnecting means may be located elsewhere on the premises.

230.54(H) Identification of conductors at weather head. All service entrance conductors shall be identified within 12 inches of a rain-tight service head.

230.70(A)(1) Readily accessible location. The service disconnecting means shall be installed at a readily accessible location outside of the building or structure.

Exception: Commercial Buildings and Structures. When the customer is the only customer served by the utility transformer, the service disconnecting means shall be located on the first floor of the building or structure nearest the point of entrance of the service conductors. The disconnecting means shall be accessible from an exterior entrance and may not exceed 25 feet inside the building or structure.

250.68(A)(1) Concrete encased electrode accessibility. Concrete encased electrode accessibility for the electric utility district (EUD) locations (having no wall rough-in inspection) shall require a grounding inspection port for termination of the grounding electrode conductor. The inspection port enclosure shall be accessible from the exterior wall of the building or structure and a minimum size of 4 inches by 4 inches by 2 ½ inches and identified as "ground port" on the cover plate or door of the port.

250.119 Identification of equipment grounding conductors.

(A) Conductors sizes 8 AWG and larger. A conductor size 8 AWG or larger may be marked at each accessible point. An equipment grounding conductor size 8 AWG or larger shall comply with Section 250.119(A)(1) and (A)(2).

(1) An insulated or covered conductor size 8 AWG or larger may, at the time of installation, be permanently identified as an equipment grounding conductor at each end and at every point where the conductor is accessible.

Exception. A conductor size 8 AWG or larger is not required to be marked in conduit bodies that contain no splices or unused hubs.

(2) Identification shall encircle the conductor and shall be accomplished by one of the following:

a. stripping the insulation or covering from the entire exposed length;

b. coloring the insulation or covering green at the termination; or

c. marking the insulation or covering with green tape or green adhesive labels at the termination.

300.3(C)(1) Conductors of different systems. Feeders and branch circuits of solidly grounded wye electric systems that operate at less than 150 volts to the ground may not occupy the same wireway, raceway, junction box, pull box, outlet box, or enclosure with feeders or branch circuits of solidly grounded wye electric systems that operate at more than 150 volts to the ground.

300.11(E) Suspended ceilings. A cable, raceway, or box may not be supported or attached to the framing members (grid) of a suspended ceiling system.

310.106(A)(1) Minimum size of conductors. No. 14 AWG copper is allowed for residential use only. Aluminum or copper-clad aluminum may not be smaller than No. 8 AWG.

Exception. Unless allowed by another provision of the Electrical Code.

310.110(C)(1) Conductor Identification.

(A) Color coding of conductors shall be consistent throughout each system and identified as follows:

(1) single phase 120/240 volt wiring system

(A) (B) (N)

RED--------BLACK-----WHITE

(2) three phase four wire 120/208 volt wiring system

(A) (B) (C) (N)

RED------BLACK---BLUE---WHITE

(3) Three phase three, and four wire 120/240 volt delta wiring systems.

(A) (B) (C) (N)

RED------ORANGE---BLACK---WHITE

(4) 277/480 wye or 480 volt delta wiring systems.

(A) (B) (C) (N)

BROWN------YELLOW---PURPLE----------GRAY

The identification requirements for equipment grounding conductors are established in Section 250.119(A) of the Electrical Code.

The identification requirements for grounded conductors are established in Subsections 200.6(A) and (B) of the Electrical Code.

330.12(3) Uses not permitted. Type MC cable may not be used as a service or feeder entering a surface mounted electrical cabinet or panelboard for MC cable smaller than No. 8 AWG.

330.30 Securing and supporting.

(A) **General.** Type MC cable shall be installed in a workmanlike manner and consistent with the Electrical Code. When installed in a surface mounted panel, the type MC cable shall be No. 8 AWG or larger.

(B) **Securing.** Type MC cable shall be supported and secured at intervals that do not exceed 6 feet (1.83 m) when concealed, 3 feet (0.915 m) when exposed, and within 12 inches (305 mm) of a connection to every panelboard or terminal/box.

(C) **Supporting.** No more than three cables may be bundled for each support ring. If more than three cables are required in an exposed location, the cable shall be racked together and uniformly spaced in parallel runs supported by a steel channel. The steel channel shall be designed and listed for the application. Cables shall be fastened to the channel with metal cable clamps designed for the channel used.

334.10 Uses permitted. Type NM, Type NMC, and Type NMS cables may be used for systems that operate at a maximum of 150 volts to ground in

(1) one- and two-family dwellings and their attached or detached garages, and their accessory buildings; or

(2) except as prohibited in Section 334.12, multifamily dwellings and their associated uses that are Types III, IV, and V construction; or

(3) dwelling units, sleeping units, guest rooms, and guest suites in Group R, as that term is used in the Building Code, facilities of Types III, IV, and V construction.

Exception: An existing structure that was legally constructed with non-metallic sheathed cable, the non-metallic sheathed cable may remain as the wiring method for the existing structure when

a. it is a remodel of a Type III, IV, or V construction;

b. it is two stories or less in height;

c. it is supplied by a 120/240 volt single-phase electrical service; and

d. it is not used for areas or equipment regulated by Chapters 5, 6, and 7 of the Electrical Code.

680.13(1) Emergency switch for swimming pools. A clearly labeled emergency shutoff switch shall be installed to disconnect all ungrounded conductors for swimming pool equipment and underwater lighting systems. The switch shall be installed in a place that is readily accessible, within sight, and not less than five from the water's edge. The sign for the shut-off switch shall be in red with letters capable of being read from a distance of 50 feet; shall be made of plastic, metal, or other durable material; and shall read "Emergency Shut Off". The switch shall be red and of the mushroom type, push to de-energize.

Exception: One- and two-family dwellings.

680.23(A)(4) Voltage limitation. An underwater luminaire or other underwater lighting system that is permanently installed in a swimming pool, spa, hot tub, fountain, or similar installation shall be listed as a lighting system of 16 volts or less.

680.41 Emergency shut-off for spas and hot tubs.

(A) A clearly labeled emergency shutoff switch shall be installed to disconnect all ungrounded conductors for spa or hot tub equipment and underwater lighting systems. The switch shall be installed in a place that is readily accessible, within sight, and not less than five from the water's edge.

(B) The sign for the shut-off switch shall be in red with letters capable of being read from a distance of 50 feet; shall be made of plastic, metal, or other durable material; and shall read "Emergency Shut Off".

(C) The switch shall be red and of the mushroom type, push to de-energize.

Exception: One- and two-family dwellings.

700.10(A)(3) Emergency systems shall be permanently identified red in color.

PART 2. This ordinance takes effect on January 1, 2018.

PASSED AND APPROVED

§
§
_____, 2017 §

Steve Adler
Mayor

APPROVED: _____ **ATTEST:** _____

Anne L. Morgan
City Attorney

Jannette S. Goodall
City Clerk