

ORDINANCE NO. \_\_\_\_\_

**AN ORDINANCE REPEALING AND REPLACING ARTICLE 4 OF  
CHAPTER 25-12 (THE ELECTRICAL CODE) OF THE CITY CODE TO  
ADOPT THE 2017 2020 NATIONAL ELECTRICAL CODE AND LOCAL  
AMENDMENTS TO THE ELECTRICAL CODE.**

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

**PART 1.** Article 4 of City Code Chapter 25-12 (Technical Codes) of the City Code is repealed and replaced with a new Article 4 to read:

**ARTICLE 4. ELECTRICAL CODE.**

**§ 25-12-111 ELECTRICAL CODE.**

(A) The National Electrical Code, 2017 2020 edition, of the National Fire Protection Association (2017 2020 Electrical Code) and Annex H are adopted and incorporated by reference into this section with the deletions in Subsection (B) and amendments in Sections 25-12-113 (*Local Amendments to the 2017 2020 Electrical Code - Administration*) and 25-12-114 (*Local Amendments to the 2017 2020 Electrical Code - Technical*).

(B) The following provisions of the 2017 2020 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
<del>Section 80.29</del>	<del>Section 80.31</del>
<del>Section 80.33</del>	Section 80.35
Section 110.12	<del>Section 200.6(A)</del>
<del>Section 200.6(B)</del>	<del>Section 225.32</del>
Section 230.70(A)-(1)	<del>Section 230.70(A)(3)</del>
<del>Section 250.52(A) (3)</del>	<del>Section 250.119(A)</del>
<del>Section 300.3(C)-(1)</del>	Section 310.110
Article 320	<del>Section 330.30(A)</del>
<del>Section 330.30(B)</del>	<del>Section 330.30(C)</del>
<del>Section 334.10(1)</del>	<del>Section 334.10. (2)</del>

1 Section 334.10(3)  
2 Article 394  
3 Section 680.23(A) (4)

Section 338.10(A)  
Section 410.36(B)  
Section 680.41

4  
5 (C) The city clerk shall file a copy of the 2017-2020 Electrical Code with the  
6 official ordinances of the City.

7  
8 **§ 25-12-112 CITATIONS TO THE ELECTRICAL CODE.**

9  
10 In the City Code, "Electrical Code" means the 2017-2020 Electrical Code adopted  
11 and amended by Section 25-12-111 (*National Electrical Code*) and as amended by  
12 Sections 25-12-113 (*Local Amendments to the 2017-2020 Electrical Code -*  
13 *Administration*) and 25-12-114 (*Local Amendments to the 2017-2020 Electrical*  
14 *Code - Technical*).

15  
16 **§ 25-12-113 LOCAL AMENDMENTS TO THE ELECTRICAL CODE-**  
17 **ADMINISTRATION AND ENFORCEMENT.**

18  
19 The following provisions are local amendments to the 2017-2020 National  
20 Electrical Code. Each provision in this section is a substitute for any identically  
21 numbered provision of the 2017-2020 Electrical Code deleted by Section 25-12-  
22 111(B) (*National Electrical Code*) or is an addition to the 2017-2020 Electrical  
23 Code:

24  
25 **80.2 Definitions.** The following definitions apply to the Electrical Code:

26  
27 **Agent.** A person designated by an electrical contractor to obtain an electric permit  
28 on behalf of the electrical contractor. An agent shall be the owner or an employee  
29 of the electrical contractor.

30  
31 **Chief Electrical Inspector.** An electrical inspector who meets the requirements of  
32 Section 80.27 of the Electrical Code and is responsible for administering and  
33 implementing the Electrical Code.

34  
35 **Citation.** A document described in Chapter 1-3 (*Citation Program*) issued by the  
36 director or the building official.

37  
38 **Contractor.** A person who is an electrical contractor.  
39

1 **Electrical Contractor.** A person engaged in electrical contracting consistent with  
2 Chapter 1305 of the Texas Occupations Code.

3  
4 **Electrical Contracting.** The business of designating, installing, erecting, repairing, maintaining,  
5 or altering electrical wires or conductors to be used for light, heat, power, or signaling purposes.  
6 The term includes the installation or repair of ducts, raceways, or conduits for the reception or  
7 protection of wires or conductors and the installation or repair of any electrical machinery,  
8 apparatus, or system used for electrical light, heat, power, or signaling.

9 **Electrical Inspector.** An individual who meets the requirements of Section 80.27  
10 of the Electrical Code and performs inspections as required by the City.

11  
12 **Electrical Work.** The installing, altering, repairing or erecting of any electrical  
13 wiring apparatus, raceways, or equipment used in connection therewith, whether  
14 inside or outside of any building or structure, lot or premises, under the  
15 requirements of the Electrical Code.

16  
17 ~~**Habitable Space.** A space in a building or structure used for living, sleeping,  
18 eating, or cooking. A bathroom, toilet room, closet, hall, storage or utility space, or  
19 similar space is not a habitable space.~~

20  
21 **License.** An electrical license issued by the Texas Department of Licensing and  
22 Regulation (TDLR).

23  
24 **Offer to Perform.** A written or verbal communication, proposal, or advertisement  
25 that indicates or implies a person is available to contract for or perform electrical  
26 work.

27  
28 **Replacement.** The act or process to replace something of like design.

29  
30 **Residential Building or Structure.** Single-family, two-family, and multi-family  
31 dwelling units of five stories or less in height and located in a residential zone.

32  
33 **Texas Department of Licensing and Regulation:** A state agency responsible for  
34 the administrating and enforcing Title 8, Chapter 1305 of the Texas Occupations  
35 Code and 16 Texas Administrative Code, Chapter 73.

36  
37 **Workmanlike Manner.** The standard established in Section 110.12 (*Mechanical  
38 Execution of Work*).

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

3  
4 **80.19(C) Issuance of Permits.**

5  
6 **(1) Standard Permits.**

- 7  
8 (a) Except as provided in Section 80.19(C)(5) (*Homestead Permit*), the  
9 building official may issue an electrical permit only to an electrical  
10 contractor who has a current electrical contractors license pursuant to  
11 Chapter 1305 of the Texas Occupations Code and the 16 Texas  
12 Administrative Code, Chapter 73.
- 13  
14 (b) The building official is responsible for reviewing applications, plan  
15 specifications, and other data submitted by an application for a permit.  
16 Other departments may review the plans as necessary to verify  
17 compliance with applicable laws.
- 18  
19 (c) The building official shall issue a permit to an applicant if the building  
20 official finds that the work described in the application for a permit and  
21 in the plans, specifications, and other support data submitted with the  
22 application conform to the requirements of the Electrical Code and other  
23 applicable laws and ordinances and that the required fees have been  
24 paid.
- 25  
26 (d) A permit issued by the building official will include a written  
27 endorsement of the plans and specifications in writing or a  
28 "REVIEWED" stamp on the plans and specifications. After the permit is  
29 issued, a person may not change, modify, or alter plans and  
30 specifications without the approval of the building official. Work  
31 regulated by the Electrical Code shall be done consistent with reviewed  
32 plans and specifications.
- 33  
34 (e) A building, structure, or tenant finish out that will exceed 5,000 square  
35 feet requires a drawing sealed by a Professional Electrical Engineer  
36 licensed by the State of Texas. A building, structure, or tenant finish out  
37 of 5,000 square feet or less requires a drawing with the signature and  
38 license number of the qualifying master electrician of record for a State  
39 of Texas licensed electrical contractor or be sealed by a Professional  
40 Electrical Engineer licensed by the State of Texas.

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(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 wiring operating at less than 25 volts and not capable of supplying more than 50 watts of energy;
- (m) to install or repair a low-energy power, control, and signal circuit of Class II or Class III as defined in the 2017 2020 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;

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- (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 is 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 is located in a mobile home park, mobile home community, or other commercial premises.

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

32  
33 **80.19(D) Annual permit.** Electrical work may be performed in a facility operating  
34 under the registered industrial plan program under an annual permit issued  
35 pursuant to Section 105.1.1 (*Annual Permit*) of the Building Code.

36  
37 **80.19(E) Permit fees.** The fee for the permit is set by separate ordinance.

38  
39 **80.19(H) Time limitation on application; permit expiration and reactivation.**  
40 The time limits for applications and the requirements for permit expiration and

1 reactivation, including a fee for expired permits, are established in Chapter 25-12,  
2 Article 13 ( *Administration of Technical Codes* ).

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

5  
6 **80.19(I) Special inspections program.** Electrical work may be performed under  
7 this program in occupied residential and commercial buildings or structures within  
8 the zoning jurisdiction of the City. The program requirements and scope are:

9  
10 (1) a contractor who participates in this program shall:

- 11  
12 (a) for each permit, submit a completed compliance form to the building  
13 official no later than one business day after the permitted electrical work  
14 is complete; and  
15  
16 (b) obtain a permit as required by Section 80.19(C)(2) no later than one  
17 business day from the work start date.

18  
19 (2) the scope of work may not:

- 20  
21 (a) include the disconnection, reconnection, or repair of an electrical  
22 service;  
23  
24 (b) involve the penetration of a fire rated wall or component;  
25  
26 (c) require an electrical rough inspection; or  
27  
28 (d) include more than one stand-alone electrical or other permit.

29  
30 The building official may inspect the electrical work performed for one out of five  
31 residential permits and one out of ten commercial permits. As a condition of the  
32 program, the electrical contractor shall provide access to the permitted work.

33  
34 **80.21 Plan Review Fees.** The fee for plan review is set by separate ordinance.

35  
36 **80.27 Inspector's Qualifications.** All electrical inspectors shall be certified by a  
37 nationally recognized certification program and approved job description  
38 acceptable to the City's Electrical Board.

39 **80.35 Effective Date.** The National Electric Code as published by the National  
40 Fire Protection Association shall be adopted in accordance with Title 8, Chapter



1 1305 of the Texas Occupations Code Sec. 1305.101(a) (2), and Administrative  
2 Rule 73.100 and shall be effective as of the date adopted by the State.

3 **80.36 Licenses.**

4  
5 **80.36(A) License required.** Except as allowed in Subsection 80.19(C)(5) (  
6 *Homestead Permit*), a person shall hold a current electrical license issued by the  
7 State of Texas to perform electrical work within the City.

8  
9 **80.36(B) License display.** When performing electrical work, a licensee shall keep  
10 his or her license in possession and shall display the license upon request of the  
11 building official or the owner of the premises or property where the licensee is  
12 working, offering to work, or has worked. A licensee shall also present a picture  
13 identification to verify identity.

14  
15 **80.36(C) Contractor.** The master electrician of record shall appear in person to  
16 establish the contracting business for the jurisdiction of the City.

17  
18 **80.36(D) Temporary staffing companies.** An employee who is licensed,  
19 registered, or certified by the State of Texas and is assigned to a client company by  
20 a professional temporary staffing company is considered an employee of the client  
21 company for the purpose of complying with the requirement to hold an electrical  
22 contracting license.

23  
24 **80.37 Licenses and Registration.**

25  
26 **(A) Registration Required.**

- 27  
28 (1) Before a person may perform or offer to perform electrical contracting  
29 within the City, the person shall register with the City.  
30  
31 (2) A term defined in Article 4 (*Electrical Code*) of Chapter 25-12  
32 (*Technical Codes*) has the same meaning in this article.  
33  
34 (3) In this article, registrant means a person who registers with the City to  
35 perform or offer to perform electrical contracting.  
36

37  
38 **(B) Minimum Requirements to Register.**

1 (1) A registrant must be licensed as an electrical contractor pursuant to  
2 Chapter 130517 of the Texas Occupations Code and Chapter 73 in Title  
3 16 of the Texas18 Administrative Code to register.

4  
5 (2) A registrant shall designate an electrician of record who must be a  
6 licensed master electrician.

7  
8 (3) The electrician of record:

9  
10 (a) may be the same as the registrant;

11  
12 (b) may not be designated as the electrician of record for more than one  
13 electrical contractor business; and

14  
15 (c) shall appear in person when the electrical contractor business is  
16 registered.

17  
18 (4) Not more than six agents may obtain electric permits on behalf of a  
19 registrant.

20  
21 **(C) Employees of Registrant**

22  
23 A registrant's employees may perform electrical work that is associated with  
24 an electrical permit issued to the registrant.

25  
26 **(D) Vehicle Display Requirements.**

27  
28 (1) A registrant shall display its name and license number on each vehicle  
29 owned or operated by the business that is used in the conduct of  
30 electrical work.

31  
32 (2) Each display must comply with Section 1305.166 of the Texas  
33 Occupations Code 7 and Section 73.51 in Title 16 of the Texas  
34 Administrative Code.

35  
36 (3) A vehicle described in Subsection (A) may not be used for more than  
37 one business.

38  
39 **(E) Offense and Penalty**

- 1 (1) A person commits an offense if the person engages in electrical  
2 contracting without a registration required by this article.  
3  
4 (2) An offense under this article is a Class C misdemeanor punishable by a  
5 fine not to exceed \$500. A culpable mental state is not required for the  
6 commission of an offense under this article, and need not be proved.  
7

### 8 **80.38 Suspension of Registration**

- 9  
10 (A) Except as provided in Subsection (B), the building official may suspend a  
11 registration if the registrant violates Section 80.39 of Chapter 25-12, Article 4  
12 (Electrical Code) three or more times within a 12-month period.  
13  
14 (B) The building official may suspend a registration if the registrant violates  
15 Section 80.39(A) (2), (A) (9), (A) (15) or (A) (19) of Chapter 25-12, Article 4  
16 (Electrical Code).  
17  
18 (C) Except as provided in Subsection (D), the suspension period is six months  
19 from the date the registration is suspended.  
20  
21 (D) If the building official suspends the same registration two or more times, the  
22 suspension period is 12 months from the date the registration is suspended.  
23  
24 (E) If the building official suspends a registration, the registrant may appeal the  
25 suspension to the Electrical Board.  
26  
27 (F) A suspension under this section is not an exclusive remedy for a violation of  
28 Chapter 25-12, Article 4 (Electrical Code).  
29

### 30 **80.39 Offenses.**

- 31  
32 (A) A person may not:  
33  
34 (1) allow another to use an electrical permit in an unlawful or fraudulent  
35 manner;  
36  
37 (2) perform, or cause to be performed, electrical work that causes injury to  
38 a person or property;  
39  
40 (3) supervise, perform, or cause to be performed electrical work that does  
not comply with the supervision requirements in the Electrical Code;

- 1  
2 (4) perform electrical work without the required license or permit  
3 classification;
- 4  
5 (5) display, cause to be displayed, allow to be displayed, or possess an  
6 document that purports to be a license to perform electrical work that is  
7 false, expired, suspended, or altered;
- 8  
9 (6) fail or refuse to display a license or permit to perform electrical work  
10 when requested by the building official;
- 11  
12 (7) allow a license to perform electrical work by a person other than the  
13 person to whom the license was issued;
- 14  
15 (8) contract for, or cause to be performed, electrical work that requires a  
16 permit by a person who lacks a license required by the Electrical Code;
- 17  
18 (9) employ a person who is not licensed as a master electrician or  
19 contractor, journeyman electrician, residential wireman, or apprentice  
20 electrician to perform electrical work that requires an electrical license;
- 21  
22 (10) request the building official to perform inspections of work that is  
23 incomplete or work that has not been properly reviewed by the permit  
24 holder or the designated supervisor three or more times during a 12  
25 month period;
- 26  
27 (11) employ a person to perform electrical work for which the person is not  
28 qualified;
- 29  
30 (12) supervise a person who is performing electrical work for which the  
31 person performing the work is not qualified to perform;
- 32  
33 (13) obtain a permit for a business or person other than the business or  
34 person identified on the person's State of Texas electrical contractor's  
35 license;
- 36  
37 (14) perform electrical work under a permit for a business other than the  
38 business identified on the permit authorizing the electrical work;
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- (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 10<sup>th</sup> 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.
  - (19) allow more than five permits to expire.

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- (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.

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#### **80.40 Supervision.**

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- (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.

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4 **80.41 Special Requirements for Installations below Regulatory Flood Datum.**  
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6 (A) For the purpose of this Section, regulatory flood datum (RFD) has the  
7 meaning assigned in Section 1612 (*Flood Loads*) of the Building Code.  
8

9 (B) If a circuit can be de-energized by automatic operating electrical  
10 disconnection equipment, then a lighting circuit, switch, receptacle, or  
11 luminaire that operates at no more than 120 volts to ground may be installed  
12 below the RFD. The electrical circuit shall be de-energized before water is  
13 present on the floor of the affected areas. If any equipment is flooded, its  
14 particular circuit may not be re-energized until the circuit and the equipment  
15 are:  
16

17 (1) approved by the wiring and equipment manufacturer for reuse after  
18 being submerged in water; or  
19

20 (2) replaced and approved for use by the building official.  
21

22 (C) Except for a switch, receptacle, and luminaire, all other electrical equipment  
23 permanently installed below the RFD must be of the submersible type rated  
24 by the equipment manufacturer for submergence for not less than 72 hours  
25 for a head of water above the equipment to the RFD.  
26

27 (D) An electrical wiring system installed below the RFD must be suitable for  
28 continuous submergence in water. Only a submersible type splice will be  
29 permitted below the RFD. A conduit located below the RFD must be  
30 installed so that it will be self-draining if subject to flooding.  
31

32 (E) Electrical power equipment and components of elevator systems must be  
33 located above the RFD. An automatic type elevator must be provided with a  
34 home station located above the RFD to which the elevator will automatically  
35 return after use.

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

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

10 (H) A control center, privately owned transformer, distribution and main lighting  
11 panel, and switchgear, in addition to other stationary equipment, must be  
12 located above the RFD. Portable or moveable electrical equipment may be  
13 located below the RFD if the equipment can be disconnected by a single plug  
14 or socket assembly of the submersible type and rated for not less than 72  
15 hours for the head of water above the assembly to the RFD.

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

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

28  
29 **80.42 Other Applicable Ordinances.**

31 Electrical installations shall comply with the applicable provisions of the following  
32 City Codes, but not limited to:

34 (A) **Land Development Code Title 25 Article 13 Docks, Bulkheads, and**  
35 **Shoreline Access**

36  
37 (B) **Building Criteria Manual Section 5.2.4 Wiring Over and Under**  
38 **Navigable Water**

1 (C) **Building Criteria Manual Section 5.2.10 - Subchapter E, Section 2.5,**  
2 **Exterior Lighting Rules for Alternate Equivalent Compliance (AEC)**

3  
4 (D) **Building Criteria Manual Section 4.4.7 - Visitability**

5  
6 **PART 2.** City Code Section 25-12-114 (*Local Amendments to the Electrical Code*  
7 *Technical*) is repealed and replaced with a new Section 25-12-114 to read as  
8 follows:

9  
10 **§ 25-12-114 LOCAL AMENDMENTS TO THE ELECTRICAL CODE**  
11 **TECHNICAL.**

12  
13 The following provisions are local amendments to the 2017 2020 National  
14 Electrical Code. Each provision in this Section is a substitute for the identically  
15 numbered provision of the 2017 2020 Electrical Code deleted by Section 25-12-  
16 111(B) (*National Electrical Code*) or is an addition to the 2017 2020 Electrical  
17 Code:

18  
19 **110.12 Mechanical Execution of Work.** Neat and workmanlike. All electrical  
20 work shall be installed in a neat and workmanlike manner. In the Electrical Code,  
21 workmanlike manner means, but is not limited to, the following:

- 22  
23 1. work that is skillfully installed consistent with the Electrical Code's  
24 requirements;
- 25  
26 2. equipment, raceways, and cables are installed parallel or perpendicular to the  
27 building or structure's structural members;
- 28  
29 3. when raceways or cables are grouped, the raceways and cables remain  
30 straight, parallel, or perpendicular to the building or structure's structural  
31 members;
- 32  
33 4. each cable is cut to a length that prevents sagging or looping, except when  
34 flexibility requires moderate sagging; and
- 35  
36 5. each box, cabinet, enclosure, and device is installed level, parallel, or  
37 perpendicular to the building or structure's structural members.

38  
39 **~~200.6 Means of Identifying Grounded Conductors.~~**



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

- 3  
4 — (1) — A continuous white outer finish.  
5  
6 — (2) — A continuous gray outer finish.  
7  
8 — (3) — Three continuous white stripes along the conductor's entire length on  
9 other than green insulation.  
10  
11 — (4) — a wire that has an outer covering finished to show white or gray color  
12 but have colored tracer threads in the braid that identify the source of  
13 the manufacturer complies;  
14  
15 — (5) — The grounded conductor of a mineral-insulated, metal-sheathed cable  
16 shall be identified at the time of installation by distinctive marking at  
17 its terminations.  
18  
19 — (6) — A single conductor, sunlight resistant, outdoor-rated cable used as a  
20 grounded conductor in photovoltaic power systems, as permitted by  
21 690.31, shall be identified at the time of installation by distinctive  
22 white marking at all terminations.  
23  
24 — (7) — Fixture wire shall comply with the requirements for grounded  
25 conductor identification as specified in 402.8.  
26  
27 — (8) — For aerial cable, the identification shall be as above, or by means of a  
28 ridge located on the exterior of the cable so as to identify it.  
29

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

- 32  
33 — (1) — A continuous white outer finish.  
34  
35 — (2) — A continuous gray outer finish.  
36  
37 — (3) — Three continuous white or gray stripes along the conductor's entire  
38 length on other than green insulation.  
39 — (4) — At the time of installation, by a distinctive white or gray marking at its  
40 terminations. This marking shall encircle the conductor or insulation.

2 **225.32 Location.** Subsection 230.70(A)(1) of the Electrical Code provides  
3 disconnect requirements for outside feeder and branch circuits.

4  
5 *Exception No. 1: For towers or poles used as lighting standards, the disconnecting*  
6 *means shall be permitted to be located elsewhere on the premises.*

7  
8 *Exception No. 2: For poles or similar structures used only for support of signs*  
9 *installed in accordance with Article 600, the disconnecting means shall be*  
10 *permitted to be located elsewhere on the premises.*

11  
12 **230.54(H) Identification of Conductors at Weather Head.** All service entrance  
13 conductors shall be identified within 12 inches of a rain-tight service head.

14  
15 **230.70(A)(1) Readily Accessible Location.**

16 The service disconnecting means shall be installed at a readily accessible location  
17 outside of the building or structure.

18  
19 *Exception: Commercial Buildings and Structures. Where the customer is the only*  
20 *customer served by the utility transformer, the service disconnecting*  
21 *means shall be located on the first floor of the building or structure*  
22 *nearest the point of entrance of the service conductors. The*  
23 *disconnecting means shall be accessible from an exterior entrance and*  
24 *not exceeding 25 feet inside the building or structure.*

25  
26 **230.70(A) Service Disconnecting Means Location**

27 The service disconnecting means shall be installed at a readily accessible location  
28 in accordance with either 230.70(A)(1) or (A)(2) and shall be installed in  
29 accordance with 230.70(A)(3)

- 30  
31 (1) Outside of a building or structure.  
32  
33 (2) Inside of a building or structure nearest the point of entrance of the  
34 service conductors and located on the first floor accessible from an  
35 exterior entrance not traveling more than 25-feet.  
36  
37 (3) Service disconnecting means shall not be installed in bathrooms

38  
39 **250.68(A)(1) Concrete Encased Electrode Accessibility.** Concrete encased  
40 electrode accessibility for the electric utility district (EUD) locations (having no

1 wall rough-in inspection) shall require a grounding inspection port for termination  
2 of the grounding electrode conductor. The inspection port enclosure shall be  
3 accessible from the exterior wall of the building or structure and a minimum size  
4 of 4 inches X 4 inches X 2 ½ inches and identified as "Ground Port" on the cover  
5 plate or door of the port.  
6

### 7 **250.119 Identification of Equipment Grounding Conductors.**

8  
9 **(A) Conductors Sizes 8 AWG and Larger.** A conductor size 8 AWG or larger  
10 may be marked at each accessible point. An equipment grounding conductor size 8  
11 AWG or larger shall comply with Section 250.119(A)(1) and (A)(2).  
12

13 (1) An insulated or covered conductor size 8 AWG or larger may, at the time of  
14 installation, be permanently identified as an equipment grounding conductor at  
15 each end and at every point where the conductor is accessible.  
16

17 *Exception: Conductors 8 AWG and larger shall not be required to be marked in*  
18 *conduit bodies that contain no splices or unused hubs.*  
19

20 (2) Identification shall encircle the conductor and shall be accomplished by one of  
21 the following:  
22

- 23 a. Stripping the insulation or covering from the entire exposed length.
- 24 b. Coloring the insulation or covering green at the termination.
- 25 c. Marking the insulation or covering with green tape or green adhesive labels at  
26 the termination.  
27  
28

29  
30 **300.3(C)(1) Conductors of Different Systems.** Feeders and branch circuits of  
31 solidly grounded wye electric systems that operate at less than 150 volts to the  
32 ground may not occupy the same wireway, raceway, junction box, pull box, outlet  
33 box, or enclosure with feeders or branch circuits of solidly grounded wye electric  
34 systems that operate at more than 150 volts to the ground.  
35

36 **300.11(E) Suspended ceilings.** A cable, raceway, or box may not be supported or  
37 attached to the framing members (grid) of a suspended ceiling system.  
38

39 **310.106(A)(1) Minimum size of conductors.** No. 14 AWG copper is allowed for  
40 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 systems.

(A)	(B)	(N)
RED-----	BLACK-----	WHITE

(2) Three phase four wire 120/208 volt wiring systems.

(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.

1  
2 **(B) Securing.** Type MC cable shall be supported and secured at intervals that do  
3 not exceed 6 feet (1.83 m) when concealed, 3 feet (0.915 m) when exposed, and  
4 within 12 inches (305 mm) of a connection to every panelboard or terminal/box.  
5

6 **(C) Supporting.** No more than three cables may be bundled for each support ring.  
7 If more than three cables are required in an exposed location, the cable shall be  
8 racked together and uniformly spaced in parallel runs supported by a steel channel.  
9 The steel channel shall be designed and listed for the application. Cables shall be  
10 fastened to the channel with metal cable clamps designed for the channel used.  
11

12 **334.10 Uses permitted.** Type NM, Type NMC, and Type NMS cables may be  
13 used for systems that operate at a maximum of 150 volts to ground in:  
14

- 15 (1) ~~one and two family dwellings and their attached or detached~~  
16 ~~garages, and their accessory buildings; or~~  
17  
18 (2) ~~except as prohibited in Section 334.12, multifamily dwellings~~  
19 ~~and their associated uses that are Types III, IV, and V construction; or~~  
20  
21 (3) ~~dwelling units, sleeping units, guest rooms, and guest suites in~~  
22 ~~Group R, as that term is used in the Building Code, facilities of Types III,~~  
23 ~~IV, and V construction.~~  
24

25 *Exception: In an existing structure that was legally constructed with non-*  
26 *metallic sheathed cable, the non-metallic sheathed cable may remain as the*  
27 *wiring method for the existing structure when:*  
28

- 29 *a. it is a remodel of a Type III, IV, or V construction;*  
30  
31 *b. it is two stories or less in height;*  
32  
33 *c. it is supplied by a 120/240 volt single phase electrical service; and*  
34  
35 *d. it is not used for areas or equipment regulated by Chapters 5, 6, and 7*  
36 *of the Electrical Code.*  
37

38 **680.13(1) Emergency switch for swimming pools.** A clearly labeled emergency  
39 shutoff switch shall be installed to disconnect all ungrounded conductors for  
40 swimming pool equipment and underwater lighting systems. The switch shall be

1 installed in a place that is readily accessible, within sight, and not less than five  
2 feet from the water's edge. The sign for the shut-off switch shall be ~~in red with~~  
3 ~~letters~~ capable of being read from a distance of 50 feet; shall be made of plastic,  
4 metal, or other durable material; and shall read "Emergency Shut Off". ~~The switch~~  
5 ~~shall be red and of the mushroom type, push to de-energize.~~

6  
7 *Exception: One- and two-family dwellings.*

8  
9 ~~680.23(A)(4) Voltage Limitation. An underwater luminaire or other underwater~~  
10 ~~lighting system that is permanently installed in a swimming pool, spa, hot tub,~~  
11 ~~fountain or similar installation shall be a listed as a lighting system of 16 volt or~~  
12 ~~less.~~

### 13 14 **680.41 Emergency Switch for Spas and Hot Tubs.**

15  
16 (A) A clearly labeled emergency shutoff switch shall be installed to disconnect all  
17 ungrounded conductors for spa or hot tub equipment and underwater lighting  
18 systems. The switch shall be installed in a place that is readily accessible,  
19 within sight, and not less than five feet from the waters edge.

20  
21 (B) The sign for the shut-off switch shall be ~~red with letters~~ capable of being read  
22 from a distance of 50 feet; shall be made of plastic, metal or other durable  
23 material; and sign shall read "Emergency Shut Off."

24  
25 (C) ~~The switch shall be red in color and of the mushroom type, push to de-~~  
26 ~~energize.~~

27  
28 *Exception: One- and two-family dwellings.*

29  
30 ~~700.10(A)(3) Emergency systems shall be permanently identified red in color.~~

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16

**PART 2.** This ordinance takes effect on \_\_\_\_\_.

**PASSED AND APPROVED**

\_\_\_\_\_

§  
§  
§

\_\_\_\_\_  
Mayor

**APPROVED:** \_\_\_\_\_

**ATTEST:** \_\_\_\_\_

City Attorney

City Clerk

DRAFT