

1 **ORDINANCE NO.**

2 **AN ORDINANCE REPEALING AND REPLACING ARTICLE 4 OF CITY CODE**  
3 **CHAPTER 25-12 TO ADOPT THE 2020 NATIONAL ELECTRICAL CODE AND**  
4 **LOCAL AMENDMENTS; AND CREATING OFFENSES AND PENALTIES.**

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

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

8 ***ARTICLE 4. ELECTRICAL CODE***

9 **§ 25-12-111 NATIONAL ELECTRICAL CODE.**

10 (A) The National Electrical Code, 2020 Edition and Annex H (collectively “2020  
11 Electrical Code”), published by the National Fire Protection Association are  
12 adopted and incorporated by reference into this section with the deletions in  
13 Subsection (B) and amendments in Section 25-12-113 (*Local Amendments to the*  
14 *2020 Electrical Code – Administration and Enforcement*) and Section 25-12-114  
15 (*Local Amendments to the 2020 Electrical Code – Technical*).

16 (B) The following sections of the 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	Section 80.35
Section 110.12	Section 230.70(A)	Section 310.110
Section 680.41		

17 (C) The city clerk shall retain a copy of the 2020 Electrical Code with the official  
18 ordinances of the City of Austin.

19 **§ 25-12-112 CITATIONS TO THE ELECTRICAL CODE.**

20 In the City Code, “Electrical Code” means the 2020 Electrical Code adopted and  
21 amended by Section 25-12-111 (*Electrical Code*), as amended by Section 25-12-113  
22 (*Local Amendments to the 2020 Electrical Code - Administration and Enforcement*) and  
23 Section 25-12-114 (*Local Amendments to the 2020 Electrical Code – Technical*).

24 § 25-12-113 LOCAL AMENDMENTS TO THE 2020 ELECTRICAL CODE –  
25 ADMINISTRATION AND ENFORCEMENT.

26 The following provisions are local amendments to the 2020 Electrical Code. Each  
27 provision of this section is a substitute for any identically numbered provision of the 2020  
28 Electrical Code deleted by Section 25-12-111(B) (*Electrical Code*) or is an addition to  
29 the 2020 Electrical Code:

30 **80.2 Definitions.** The following definitions apply to the Electrical Code.

31 **AGENT.** A person designated by an electrical contractor to obtain an electric permit on  
32 behalf of the electrical contractor. An agent must be the owner or an employee of the  
33 electrical contracting business.

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

37 **CITATION.** A document described in City Code Chapter 1-3 (*Citation Program*).

38 **CONTRACTOR.** A person who is an electrical contractor.

39 **ELECTRICAL CONTRACTOR.** A person licensed as an electrical contractor by the  
40 Texas Department of Licensing and Regulation (TDLR), engaged in electrical  
41 contracting, and registered with the City.

42 **ELECTRICAL CONTRACTING.** The business of designing, installing, erecting,  
43 repairing, maintaining, or altering electrical wires or conductors to be used for light, heat,  
44 power, or signaling purposes. The term includes the installation or repair of ducts,  
45 raceways, or conduits for the reception or protection of wires or conductors and the  
46 installation or repair of any electrical machinery, apparatus, or system used for electrical  
47 light, heat, power, or signaling.

48 **ELECTRICAL INSPECTOR.** An individual who meets the requirements of Section  
49 80.27 and performs electrical inspections as required by the City.

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

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

57 **REGISTRANT.** A person required to register with the City as set forth in Section 80.37  
58 (*Registration*).

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

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

62 **STATE ELECTRICAL CODE.** The National Electrical Code adopted by the Texas  
63 Department of Licensing and Regulation.

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

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

69 **80.15. Electric Board.** The Electric Board shall comply with City Code Chapter 2-1  
70 (*Boards and Commissions*).

71 **80.19(C) Issuance of Permits.**

72 **(1) Standard Permits.**

73 (a) Except as provided in Section 80.19(C)(5) (*Homestead Permit*), an applicant  
74 for an electrical permit must be an electrical contractor.

75 (b) The building official is responsible for reviewing applications, plan  
76 specifications, and other data submitted by an applicant. Other departments  
77 may review the plans as necessary to verify compliance with applicable  
78 laws.

79 (c) The building official must issue a permit to an applicant if:

80 (i) the building official finds that the work described in the permit  
81 application and in the plans, specifications, and other support data  
82 submitted with the application conform to the requirements of the  
83 Electrical Code and other applicable laws and ordinances; and

84 (ii) the required fees have been paid.

85 (d) A permit issued by the building official is not effective unless it includes a  
86 written statement that the plans and specifications were reviewed. In this  
87 section, a written statement means a stamp that reads “REVIEWED FOR  
88 CODE COMPLIANCE” and is placed on the plans and specifications.

- 89 (e) After the permit is issued, a person may not change, modify, or alter plans  
90 and specifications without the approval of the building official.
- 91 (f) Work regulated by the Electrical Code shall be done consistent with  
92 reviewed plans and specifications.
- 93 (g) If a building, structure, or tenant finish out will exceed 5,000 square feet, a  
94 Professional Electrical Engineer licensed by the State of Texas must seal the  
95 required drawing.
- 96 (h) If a building, structure, or tenant finish out is 5,000 square feet or less, a  
97 master electrician licensed by the Texas Department of Licensing and  
98 Regulation must sign the required drawing and include the master  
99 electrician's license number or a Professional Electrical Engineer licensed  
100 by the State of Texas may seal the required drawing.
- 101 (i) The building official may issue a permit for the construction of part of an  
102 electrical system before the plans and specifications for the entire system  
103 have been submitted or approved if the applicant provides adequate  
104 information and detailed statements that comply with the requirements of the  
105 Electrical Code. The electrical permit holder may proceed at the permit  
106 holder's own risk, without assurance that the permit for the entire building,  
107 structure, or building service will be approved. The issuance of a permit for  
108 part of an electrical system does not obligate the building official to approve  
109 the remaining electrical permits.

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

113 **(3) Exempt work.** Work that may be performed without an electrical permit must  
114 comply with all applicable federal, state, and local requirements. An electrical  
115 permit is not required:

- 116 (a) to replace an approved cable or cord and plug connected to a motor or  
117 portable appliance;
- 118 (b) to replace components of approved equipment or a fixed approved appliance  
119 of same type and rating, in the same location;
- 120 (c) to install temporary holiday decorative lighting;
- 121 (d) when the maximum voltage is 480 and the maximum ampacity is 30, to  
122 replace a snap, single, three-way, or four-way or dimmer switch, receptacle,  
123 ceiling paddle fan, or luminaire;

- 124 (e) to reinstall a receptacle with a ground-fault circuit interrupter receptacle, a  
125 tamper-resistance receptacle, an arc-fault circuit interrupter receptacle, or  
126 weather-resistance receptacle;
- 127 (f) when the service will not be de-energized, to replace an overcurrent  
128 protection device or fuse of same voltage and amperage and in the same  
129 location;
- 130 (g) to repair or replace an electrode or transformer of the same size and capacity  
131 for a sign or gas tube system;
- 132 (h) to replace insulating material to a splice;
- 133 (i) to remove electrical and communication wiring;
- 134 (j) to install temporary wiring for experimental purposes in a suitable  
135 experimental laboratory;
- 136 (k) to install wiring for a temporary theater, motion picture, or television stage  
137 set;
- 138 (l) to install or repair an electrical device, appliance, apparatus, equipment, or  
139 electrical wiring operating at less than 25 volts and not capable of supplying  
140 more than 50 watts of energy;
- 141 (m) to install or repair a low-energy power, control and signal circuit of Class II  
142 or Class III as defined in the 2020 Electrical Code;
- 143 (n) for the following activities, if performed in connection with the transmission  
144 of electrical energy: to install, alter, or repair electrical wiring, apparatus,  
145 equipment, or the generation, transmission, distribution, or metering of  
146 electrical energy;
- 147 (o) to operate signals or to transmit intelligence by a public or private utility in  
148 the exercise of its function as a serving utility; or
- 149 (p) except for activities related to electrical service, for electrical work in a  
150 building or structure owned and occupied by the State of Texas or the  
151 federal government.

152 **(4) Emergency repair permits.** An applicant who seeks a permit to make emergency  
153 electrical repairs on non-exempt work must identify the emergency on the permit  
154 application.

155 **(5) Homestead permit.**

156 (a) A person who is not licensed to perform electrical work may perform  
157 electrical work under a homestead permit if:

- 158 (i) the residence is the person's homestead and principal residence;
- 159 (ii) the electrical work does not include the main electric system;
- 160 (iii) the person has not secured a homestead permit for another  
161 residence within the prior 12 month period;
- 162 (iv) the person has owned and occupied the property as of January 1  
163 of the tax year in which the person applies for a homestead  
164 permit;
- 165 (v) the person applies for a homestead permit in person and files an  
166 affidavit stating that the location where the work will be done is  
167 the person's homestead;
- 168 (vi) the person obtains a homestead permit and pays any required  
169 permit fees before electrical, mechanical, or plumbing work  
170 begins;
- 171 (vii) the person does not allow or cause another person to perform  
172 electrical work under the permit;
- 173 (viii) the person does not transfer the homestead permit to another  
174 person;
- 175 (ix) the person will present a picture identification to the building  
176 official to verify that the person is authorized to perform the  
177 work under the homestead permit; and
- 178 (x) the work that will be done is not for a mobile, modular, or  
179 manufactured home unless the person owns the land on which  
180 the mobile, modular, or manufactured home is located.

181 (b) A homestead permit cannot be issued for a mobile, modular, or  
182 manufactured home located in a mobile home park, mobile home  
183 community, or other commercial premises.

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

187 **80.19(D) Annual permit.** Electrical work may be performed in a facility participating in  
188 the registered industrial plan program under an annual permit issued pursuant to Section  
189 105.1.1 (*Annual Permit*) of the Building Code.

190 **80.19(E) Permit fees.** The fee for a permit is set by separate ordinance.

191 **80.19(H) Time limitation on application; permit expiration and reactivation.** The  
192 time limits for applications and the requirements for permit expiration and reactivation,  
193 including a fee for expired permits, are established in Chapter 25-12, Article 13  
194 (*Administration of Technical Codes*).

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

197 **80.19(I) Special inspections program.** Electrical work may be performed under this  
198 program in occupied residential and commercial buildings or structures within the zoning  
199 jurisdiction of the City. The program requirements and scope are:

200 (1) A contractor who participates in this program must:

- 201 (a) for each permit, submit a completed compliance form to the building official  
202 no later than one business day after the permitted electrical work is  
203 complete; and
- 204 (b) obtain a permit as required by Section 80.19(C)(2) no later than one business  
205 day from the work start date.

206 (2) The scope of work may not:

- 207 (a) include the disconnection, reconnection, or repair of an electrical service;
- 208 (b) involve the penetration of a fire rated wall or component;
- 209 (c) require an electrical rough inspection; or
- 210 (d) include more than one stand-alone electrical or other permit.

211 (3) As part of the program, the building official may inspect the electrical work  
212 performed for one out of five residential permits and one out of ten commercial  
213 permits. As a condition of the program, the electrical contractor must provide  
214 access to the permitted work.

215 (4) Nothing in this section limits the building official's authority to inspect electrical  
216 work when the building official deems necessary to determine that the electrical  
217 work performed under this program complies with the Electrical Code.

218 **80.21 Plan review fees.** The fee for plan review is set by separate ordinance.

219 **80.27 Inspector's Qualifications.** An electrical inspector must be certified by a  
220 nationally recognized certification program and meet the qualifications set forth in a city-  
221 job description that is acceptable to the Electrical Board.

222 **80.35 Authority to Enforce State Electrical Code.** The building official may enforce  
223 the state electrical code when necessary.

224 **80.36 Licenses.**

225 **80.36(A) License required.** Except as allowed in Subsection 80.19(C)(5) (*Homestead*  
226 *Permit*), a person must be licensed by the Texas Department of Licensing and  
227 Regulations to perform electrical work within the City or at a site that receives electric  
228 utility services from the City.

229 **80.36(B) License display.** When performing electrical work, a licensee shall keep his or  
230 her license in possession and shall display the license upon request of the building official  
231 or the owner of the premises or property where the licensee is working, offering to work,  
232 or has worked. A licensee shall also present a picture identification to verify identity.

233 **80.36(C) Contractor.** To establish an electrical contracting business within the City's  
234 full purpose jurisdiction, a person must be licensed as an electrical contractor and comply  
235 with Section 80.37 (*Registration*).

236 **80.36(D) Temporary staffing companies.** An employee who is licensed, registered, or  
237 certified by the Texas Department of Licensing and Regulations and is assigned to a  
238 client company by a professional temporary staffing company is considered an employee  
239 of the client company for the purpose of complying with the requirement to hold an  
240 electrical contracting license.

241 **80.37 Registration.**

242 (A) **Registration Required.** Before a person may perform or offer to perform  
243 electrical contracting services within the City, the person must register with the  
244 City.

245 (B) **Eligibility Requirements.** A person is eligible to register with the City if:

246 (1) the person is licensed as an electrical contractor;

247 (2) the person designates an electrician of record; and

248 (3) the electrician of record appears in person when the electrical contracting  
249 business is registered.

250 (C) **Electrician of Record.**

251 (1) The electrician of record may be the same as the registrant.

252 (2) The electrician of record must be licensed by the Texas Department of  
253 Licensing and Regulations as a master electrician.

254 (3) The electrician of record may not be designated as the electrician of record  
255 for more than one electrical contractor business.

256 **(D) Employees and Agents of Registrant.**

257 (1) An employee of a registrant may perform electrical work that is associated  
258 with an electrical permit issued to the registrant.

259 (2) The maximum number of agents who may obtain electrical permits on  
260 behalf of the registrant is six.

261 **(E) Vehicle Display Requirements.**

262 (1) A registrant shall display its name and license number on each vehicle  
263 owned or operated by the registrant's business and used to perform electrical  
264 contracting services.

265 (2) Each display shall satisfy the requirements set forth in Section 1305.166 of  
266 the Texas Occupations Code and Section 73.51 of Title 16 of the Texas  
267 Administrative Code.

268 (3) A vehicle described in Subsection (E)(1) may not be used for more than one  
269 electrical contracting business.

270 **(F) Offense.** A person commits an offense if the person engages in electrical  
271 contracting without a registration required by this section.

272 **80.38 Suspension of Registration.**

273 (A) Except as provided in Subsection (B), the building official may suspend a  
274 registration after three substantiated violations of Section 80.39 (*Offenses*)  
275 within a 12-month period.

276 (B) The building official may suspend a registration after one substantiated  
277 violation of Section 80.39(A)(2), (A)(9), (A)(15), or (A)(19) by the registrant or  
278 its employees

279 (C) The suspension period ends:

280 (1) six months from the date the suspension begins for the first suspension; or

281 (2) 12 months from the date the suspension begins for a suspension that is not  
282 the first suspension.

283 (D) A registrant may appeal a suspension as set forth in Section 25-1-461 (*Appeal*).

- 284 (E) A suspension under this section is not an exclusive remedy for a violation of  
285 Section 80.39.

286 **80.39 Offenses.**

- 287 (A) A person may not:

- 288 (1) allow another to use an electrical permit in an unlawful or fraudulent  
289 manner;
- 290 (2) perform, or cause to be performed, electrical work that causes injury to a  
291 person or property;
- 292 (3) supervise, perform, or cause to be performed electrical work that does not  
293 comply with the supervision requirements in the Electrical Code;
- 294 (4) perform electrical work without the required license or permit  
295 classification;
- 296 (5) display, cause to be displayed, allow to be displayed, or possess a  
297 document that purports to be a license to perform electrical work that is  
298 false, expired, suspended, or altered;
- 299 (6) fail or refuse to display a license or permit to perform electrical work  
300 when requested by the building official;
- 301 (7) allow a person, other than the person to whom the license was issued, to  
302 perform electrical work;
- 303 (8) contract for, or cause to be performed, electrical work that requires a  
304 permit by a person who lacks a license required by the Electrical Code;
- 305 (9) employ a person who is not licensed as a master electrician or electrical  
306 contractor, journeyman electrician, residential wireman, or apprentice  
307 electrician to perform electrical work that requires an electrical license;
- 308 (10) request the building official to perform inspections of work that is  
309 incomplete or work that has not been properly reviewed by the permit  
310 holder or the designated supervisor three or more times during a 12  
311 month period;
- 312 (11) employ a person to perform electrical work for which the person is not  
313 qualified;
- 314 (12) supervise a person who is performing electrical work for which the  
315 person performing the work is not qualified to perform;

- 316 (13) obtain a permit for a business or person other than the business or person  
317 identified on the person's electrical contractor's license;
- 318 (14) perform electrical work under a permit for a business other than the  
319 business identified on the permit authorizing the electrical work;
- 320 (15) perform, or cause to be performed, electrical work in a manner that  
321 endangers a person or property;
- 322 (16) fail to provide notification for a change of business address, qualifying  
323 master electrician, or contact information included on the electrical  
324 contractor's license on or before the 10<sup>th</sup> day after the change occurs;
- 325 (17) refuse to provide picture identification when requested by the building  
326 official;
- 327 (18) fail to comply with the requirements of the Electrical Code; or
- 328 (19) allow more than five electrical permits to expire.
- 329 (B) The building official may report offenses to the Texas Department of Licensing  
330 and Regulation.

331 **80.40 Supervision.**

- 332 (A) At least one licensed journeyman electrician, licensed master electrician, or  
333 licensed residential wireman shall be present on a site to supervise the electrical  
334 work being performed.
- 335 (B) A contractor who is responsible for the electrical work being performed shall  
336 provide fulltime supervision, management, direction, and control. A residential  
337 wireman may only supervise residential projects.
- 338 (C) The ratio of licensed master electrician, licensed journeyman electrician, or  
339 residential wireman to licensed apprentice electricians may not exceed one  
340 licensed master electrician, licensed journeyman electrician, or residential  
341 wireman to five licensed apprentice electricians.
- 342 (D) The designated supervisor shall review the electrical work before submitting a  
343 request for the building official to inspect.

344 **Section 80.41 Special Requirements for Installations Below Regulatory Flood**  
345 **Datum.**

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

- 348 (B) If a circuit can be de-energized by automatic operating electrical disconnection  
349 equipment, then a lighting circuit, switch, receptacle, or luminaire that operates  
350 at no more than 120 volts to ground may be installed below the RFD. The  
351 electrical circuit shall be de-energized before water is present on the floor of the  
352 affected areas. If any equipment is flooded, its particular circuit may not be re-  
353 energized until the circuit and the equipment are:
- 354 (1) approved by the wiring and equipment manufacturer for reuse after being  
355 submerged in water; or
- 356 (2) replaced and approved for use by the building official.
- 357 (C) Except for a switch, receptacle, and luminaire, all other electrical equipment  
358 permanently installed below the RFD shall be rated by the equipment  
359 manufacturer for submergence for at least 72 hours for a head of water above  
360 the equipment to the RFD.
- 361 (D) An electrical wiring system installed below the RFD shall be suitable for  
362 continuous submergence in water. Only a submersible splice is allowed below  
363 the RFD. A conduit located below the RFD shall be installed so that it can be  
364 self-draining if subject to flooding.
- 365 (E) The electrical power equipment and components of an elevator system shall be  
366 located above the RFD. An automatic type elevator shall be provided with a  
367 home station located above the RFD to which the elevator will automatically  
368 return after use.
- 369 (F) An electrical unit heater installed below the RFD shall be capable of being  
370 disconnected as outlined in Subsection (B). An electrical control on a gas or oil  
371 furnace located below the RFD may not exceed 120 volts to ground and the  
372 control circuits shall be automatically de-energized before water is present on  
373 the floor of the affected area.
- 374 (G) Sump pumping equipment of any type shall be provided with a float operated  
375 warning alarm that acts independently of any other float actuating device used  
376 to start and stop pumping equipment. A building or structure that utilizes sump  
377 pumping equipment shall have automatic starting standby electrical generating  
378 equipment located above the RFD. The standby generating equipment shall be  
379 capable of remaining in continuous operation at 125 percent of the anticipated  
380 duration of the design flood.
- 381 (H) A control center, privately owned transformer, distribution and main lighting  
382 panel, and switchgear, in addition to other stationary equipment, shall be  
383 located above the RFD. Portable or moveable electrical equipment may be

384 located below the RFD if the equipment can be disconnected by a single plug or  
385 socket assembly of the submersible type and rated for a minimum of 72 hours  
386 for the head of water above the assembly to the RFD.

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

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

#### 397 **80.42 Other Applicable City Code and Criteria Manual Requirements.**

398 When applicable, an electrical installation shall also comply with:

- 399 (1) Chapter 25-2, Subchapter C, Article 13 (*Docks, Bulkheads, and Shoreline*  
400 *Access*);
- 401 (2) Building Criteria Manual, Section 5.2.4 (*Wiring Over and Under Navigable*  
402 *Water*);
- 403 (3) Building Criteria Manual, Section 5.2.10 (*Subchapter E, Section 2.5,*  
404 *Exterior Lighting Rules for Alternative Equivalent Compliance*); and
- 405 (4) Building Criteria Manual, Section 4.4.7 (*Visitability*).

#### 406 **§ 25-12-114 LOCAL AMENDMENTS TO THE 2020 ELECTRICAL CODE –** 407 **TECHNICAL.**

408 The following provisions are local amendments to the 2020 Electrical Code. Each  
409 provision of this section is a substitute for any identically numbered provision of the 2020  
410 Electrical Code deleted by Section 25-12-111(B) (*Electrical Code*) or is an addition to  
411 the 2020 Electrical Code:

412 **110.12 Mechanical Execution of Work.** Neat and workmanlike. All electrical work  
413 shall be installed in a neat and workmanlike manner. In the Electrical Code, workmanlike  
414 manner means, but is not limited to, the following:

- 415 1. work that is skillfully installed consistent with the Electrical Code's requirements;

- 416 2. equipment, raceways, and cables are installed parallel or perpendicular to the building  
417 or structure's structural members;
- 418 3. when raceways or cables are grouped, the raceways and cables remain straight,  
419 parallel, or perpendicular to the building or structure's structural members;
- 420 4. each cable is cut to a length that prevents sagging or looping, except when flexibility  
421 requires moderate sagging; and
- 422 5. each box, cabinet, enclosure, and device is installed level, parallel, or perpendicular to  
423 the building or structure's structural members.

424 **230.70(A) Service Disconnecting Means Location.**

425 (1) Except as provided in Subsection (A)(2), the service disconnecting means shall be  
426 installed at a readily accessible location that is located outside of a building or structure.

427 (2) The service disconnecting means may be installed at a readily accessible location that  
428 is located:

429 (a) inside of a building or structure that is not a one- or two-family dwelling;

430 (b) at the nearest point of entrance to the service conductors;

431 (c) on a direct path that 25-feet or less from an exterior entrance; and

432 (d) is first floor accessible from an exterior entrance inside of a building or structure.

433 (3) A service disconnecting means may not be installed in a bathroom.

434 **250.68(A)(1) Concrete encased electrode accessibility.** Concrete encased electrode  
435 accessibility for the electric utility district (EUD) locations (having no wall rough-in  
436 inspection) shall require a grounding inspection port for termination of the grounding  
437 electrode conductor.

438 **310.110(C)(1) Conductor Identification.**

439 Color coding of conductors shall be consistent throughout each system and identified as  
440 follows:

441 (1) single phase 120/240 volt wiring system

442 (A) (B) (N)

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

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

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

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

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

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

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

450 (4) 277/480 wye or 480 volt delta wiring systems.

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

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

453 **680.13(1) Emergency switch for swimming pools.** A clearly labeled emergency shutoff  
454 switch shall be installed to disconnect all ungrounded conductors for swimming pool  
455 equipment and underwater lighting systems. The switch shall be installed in a place that  
456 is readily accessible, within sight, and not less than five feet from the water's edge. The  
457 sign for the shut-off switch shall be capable of being read from a distance of 50 feet; shall  
458 be made of plastic, metal, or other durable material; and shall read "Emergency Shut  
459 Off".

460 **Exception:** One- and two-family dwellings.

461 **680.41 Emergency shut-off for spas and hot tubs.**

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

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

469 **Exception:** One- and two-family dwellings.

470 **PART 2.** This ordinance takes effect on September 1, 2020.

**PASSED AND APPROVED**

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\_\_\_\_\_, 2020

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Steve Adler  
Mayor

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

Anne L. Morgan  
City Attorney

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

Jannette S. Goodall  
City Clerk

DRAFT