

Ordinance No. 22-059

An ordinance amending the "Electrical" Chapter of the Code of the City of Arlington, Texas, 1987, through the amendment of Article I, Administration, relative to adopting the 2020 Edition of the National Electrical Code; adopting local amendments and associated appendices; providing for a fine of up to \$2,000 for each violation; providing this ordinance be cumulative; and providing for severability, governmental immunity, injunctions, publication, and an effective date

WHEREAS, after receipt of public comment in accordance with Section 214.217 of the Texas Local Government Code, the City Council finds that it is in the public interest to adopt the 2020 Edition of the National Electrical Code for the preservation of public safety and the general welfare of its citizens; NOW THEREFORE

BE IT ORDAINED BY THE CITY COUNCIL OF THE CITY OF ARLINGTON, TEXAS:

1.

That the "Electrical" Chapter of the Code of the City of Arlington, Texas, 1987, as amended, **Article I, Administration, Sections 1.01 through 1.07**, are hereby repealed and replaced in their entirety and shall hereafter read as follows:

ARTICLE I
GENERAL PROVISIONS

Section 1.01 Title

This ordinance shall be known as the "Arlington Electrical Code", may be cited as such and will be referred to herein as "this Code".

Section 1.02 Purpose

The purpose of this Code is to provide minimum standards to safeguard life, limb, health, property and public welfare by regulating and controlling the design, construction, installation, quality of materials, location, operation, inspection, performance and maintenance of electrical equipment used for light, heat, power, radio, television, signaling and for other purposes.

Section 1.03 Scope

- A. **General**: The provisions of this Code apply to all installations of, and work done on, electrical conductors, fittings, devices, motors, appliances and fixtures, hereafter referred to as "electrical equipment", in or on public and private buildings and premises.
- B. **Compliance**: On all installations of electrical equipment hereafter made, and on all existing installations which are altered, all work must be done in a manner that conforms to the requirements for sufficient and safe electrical systems as provided in this Code.
- C. **Public Utilities**: The provisions of this Code do not apply to installations used by electricity supply, electric railway or communication agencies in the generation, transmission, or distribution of electricity or for the operation of street railways, signals or the transmission of intelligence when located within or on public thoroughfares, buildings or premises used exclusively by an agency operating under a franchise agreement with the City and under the jurisdiction of the Director of Utilities.
- D. **Radio and Television Stations**: The provisions of this Code shall apply to all electrical equipment used for power supply to radio and television transmitting equipment, but they shall not apply to other electrical equipment used for radio and television transmissions.

Section 1.04 Existing Equipment

- A. **Lawfully Installed**: Electrical equipment lawfully installed prior to the effective date of this Code may be continued in its existing use with maintenance and repair continued if the use, maintenance or repair is in accordance with the original design and location and is not a hazard to life, health or property, except where specifically required by the Code of the City of Arlington, Texas.
- B. **Maintained**: Electrical equipment, both existing and new, shall be maintained in a safe condition. The owner or his designated agent shall be responsible for the maintenance of electrical equipment.

Section 1.05 Other Laws and Ordinances

The provisions of this Code shall not waive or set aside any provisions of the City or laws of the State of Texas. To the extent of a conflict between the existing ordinances of the City and this Code, this Code prevails.

Section 1.06 Prima Facie Evidence of Safe Conditions

Conformity of electrical equipment and installations with provisions of this Code, the (NEC) National Electrical Code, and/or a (NRTL) Nationally Recognized Testing Laboratory shall be prima facie evidence that such equipment and installations are in safe condition.

Section 1.07 National Electrical Code

A. Adoption: The National Electrical Code, 2020 Edition, as published by the National Fire Protection Association, referred to herein as "NEC", is hereby adopted and designated as the Electrical Code of the City of Arlington, the same as though such Code were copied at length herein, subject, however, to the deletions, amendments and addenda provided in Section 1.07(B) hereof. A copy of the NEC is filed in the office of the Building Official of the City of Arlington, Texas.

B. Additions, Amendments and Deletions: The National Electrical Code, as adopted in Section 1.07(A) hereof, is hereby modified by the following deletions, amendments and addendums. These additions, amendments and deletions shall have precedence in any case where they are in conflict with the National Electrical Code adopted in Section 1.07(A) above.

1. The amendment of Article 100, entitled **Definition**, by adding the following term:

Engineering Supervision. Supervision by a Qualified State of Texas Licensed Professional Engineer engaged primarily in the design or maintenance of electrical installations.

2. The amendment of Article 110.2, entitled **Approval**, to hereafter read as follows:

110.2 Approval. The conductors and equipment required or permitted by this Code shall be acceptable only if approved. Approval of equipment may be evident by listing and labeling of equipment by a Nationally Recognized Testing Lab (NRTL) with a certification mark of that laboratory or a qualified third-party inspection agency or a field evaluation by a Field Evaluation Body accredited by either the International Code Council International Accreditation Service AC354 or ANSI National Accreditation Board programs and approved by the Authority Having Jurisdiction (AHJ).

Exception: Unlisted equipment that is relocated to another location within a jurisdiction or is field modified is subject to the approval by the AHJ. This approval may be by a field evaluation by a NRTL or qualified third-party

inspection agency or a field evaluation by a Field Evaluation Body accredited by either the ICC IAS AC354 or ANAB programs and approved by the AHJ.

Informational Note No. 1: See 90.7, Examination of Equipment for Safety, and 110.3, Examination, Identification, Installation, and Use of Equipment. See definitions of Approved, Identified, Labeled, and Listed.

Informational Note No. 2: Manufacturer's self-certification of equipment may not necessarily comply with U.S. product safety standards as certified by an NRTL.

Informational Note No. 3: National Fire Protection Association (NFPA) 790 and 791 provide an example of an approved method for qualifying a third-party inspection agency.

3. The amendment of Table 210.24, entitled **Summary of Branch-Circuit Requirements**, to hereafter read as follows:

Table 210.24 Summary of Branch-Circuit Requirements

Circuit Rating	15A	20A	30A	40A	50A
Conductors (min. size)					
Circuit wires ¹	12	12	10	8	6
Taps	12	12	12	12	12
Fixture wires & cords – see 240.5					
Overcurrent Protection	15 A	20 A	30 A	40 A	50A
Outlet devices:					
Lampholders Permitted	Any type	Any type	Heavy Duty	Heavy Duty	Heavy Duty
Receptacle Rating ²	15 max. A	15 or 20 A	30 A	40 or 50 A	50A
Maximum Load	15 A	20 A	30 A	40 A	50A
Permissible Load	See 210.23(A)	See 210.23(A)	See 210.23(B)	See 210.23(C)	See 210.23 (C)

¹ These gauges are for copper conductors

² For receptacle rating of cord-connected electric-discharge luminaires, see 410.30(C)

4. The amendment of Article 230.70(A)(1), entitled **Readily Accessible Location**, so that it shall hereafter read as follows:

(1) Readily Accessible Location. The service disconnecting means shall be installed at a readily accessible location either outside of a building or structure or inside nearest the point of entrance of the service conductors. Three-phase services to non-residential occupancies shall have the disconnecting means located on the exterior of the building or structure when the metering equipment is located on the exterior of the building or structure.

5. The amendment of Table 311.12(A), entitled **Minimum Size of Conductors**, to hereafter read as follows:

Table 311.12(A) Minimum Size of Conductors¹

Conductor Voltage Rating (Volts)	Minimum Conductor Size (AWG)	
	Copper	Aluminum or Copper-Clad Aluminum
0-2000	12	1/0
2001-8000	8	1/0
8001-15,000	2	1/0
15,001-28,000	1	1/0
28,001-35,000	1/0	1/0

¹ Exception: An equipment grounding conductor within a listed cable assembly.

6. The amendment of Article 410.118, entitled **Access to other boxes**, to hereafter read as follows:

410.118 Access to other boxes.

Luminaires recessed in the ceilings, floors, or walls shall not be used to access outlet, pull, or junction boxes or conduit bodies, unless the box or conduit body is an integral part of the listed luminaire.

Exception: removable luminaires with a minimum measurement of 22 in. X 22 in. shall be permitted to be used as access to outlet, pull, junction boxes or conduit bodies.

7. The amendment of Article 422.31(B), entitled **Appliances Rated over 300 Volt-Amperes**, to hereafter read as follows:

(B) Appliances Rated over 300 Volt-Amperes. For permanently connected appliances rated over 300 volt-amperes, the branch-circuit switch

or circuit breaker shall be permitted to serve as the disconnecting means where the switch or circuit breaker is within sight from and is readily accessible to the appliance it serves or is capable of being locked in the open position in accordance with 110.25 and is readily accessible to the appliance it serves.

Informational Note No. 1: For appliances employing unit switches, see 422.34.

Informational Note No 2: The following means of access are considered to constitute readily accessible for this code change when conforming to the additional access requirements of the I Codes:

- (1) A permanent stair.
- (2) A pull-down stair with a minimum 300 lb. (136 kg) capacity.
- (3) An access door from an upper floor level.

8. The amendment of Article 500.8(A), entitled **Suitability**, to hereafter read as follows:

(A) Suitability. Suitability of identified equipment shall be determined by one of the following:

- (1) Equipment listing or labeling;
- (2) Evidence of equipment evaluation from a qualified testing laboratory or inspection agency concerned with product evaluation; or,
- (3) Evidence acceptable to the authority having jurisdiction such as a manufacturer's self-evaluation or an engineering judgment signed and sealed by a qualified Registered licensed Professional Engineer in the State of Texas.

Informational Note: Additional documentation for equipment may include certificates demonstrating compliance with applicable equipment standards, indicating special conditions of use, and other pertinent information.

9. The amendment of Article 505.7(A), entitled **Implementation of Zone Classification System**, to hereafter read as follows:

(A) Implementation of Zone Classification System. Classification of areas, engineering and design, selection of equipment and wiring methods, installation, and inspection shall be performed by a Registered Professional Engineer licensed in the State of Texas.

10. The amendment of Article 695.6(A)(1), entitled **Services and On-Site Power Production Facilities**, to hereafter read as follows:

(1) Services and On-Site Power Production Facilities. Service conductors and conductors supplied by on-site power production facilities shall be physically routed outside a building(s) and shall be installed as service-entrance conductors in accordance with 230.6, 230.9, and Parts III and IV of Article 230. Where supply conductors cannot be physically routed outside of buildings, the conductors shall be permitted to be routed through the building(s) where installed in accordance with 230.6(1) or (2).

11. The amendment of Article 710.15(A), entitled **Supply Output**, to hereafter read as follows:

(A) Supply Output. Power supply to premises wiring systems fed by stand-alone or isolated microgrid power sources shall have adequate capacity to meet the calculated load in accordance with Article 220.

2.

Any person, firm, corporation, agent or employee thereof who violates any of the provisions of this ordinance shall be guilty of a misdemeanor and upon conviction thereof shall be fined an amount not to exceed Two Thousand Dollars and No Cents (\$2,000.00) for each offense. Each day that a violation is permitted to exist shall constitute a separate offense.

3.

This ordinance shall be and is hereby declared to be cumulative of all other ordinances of the City of Arlington; and this ordinance shall not operate to repeal or affect any of such other ordinances except insofar as the provisions thereof might be inconsistent or in conflict with the provisions of this ordinance, in which event such conflicting provisions, if any, in such other ordinance or ordinances are hereby repealed.

4.

If any section, subsection, sentence, clause or phrase of this ordinance is for any reason held to be unconstitutional, such holding shall not affect the validity of the remaining portions of this ordinance.

5.

All of the regulations provided in this ordinance are hereby declared to be governmental and for the health, safety and welfare of the general public. Any member of the City Council or any City official or employee charged with the enforcement of this ordinance, acting for the City of Arlington in the discharge of his/her duties, shall not thereby render himself/herself personally liable; and he/she is hereby relieved from all

personal liability for any damage that might accrue to persons or property as a result of any act required or permitted in the discharge of his/her said duties.

6.

Any violation of this ordinance can be enjoined by a suit filed in the name of the City of Arlington in a court of competent jurisdiction, and this remedy shall be in addition to any penal provision in this ordinance or in the Code of the City of Arlington.

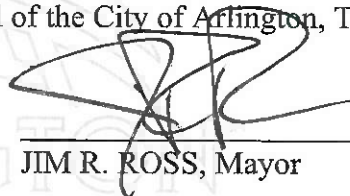
7.

The caption and penalty clause of this ordinance shall be published in a newspaper of general circulation in the City of Arlington, Texas, in compliance with the provisions of Article VII, Section 15, of the City Charter. Further, this ordinance may be published in pamphlet form and shall be admissible in such form in any court, as provided by law.

8.

This ordinance shall become effective on January 1, 2023.

PRESENTED AND GIVEN FIRST READING on the 25th day of October, 2022, at a regular meeting of the City Council of the City of Arlington, Texas; and GIVEN SECOND READING, passed and approved on the 1st day of November, 2022, by a vote of 8 ayes and 0 nays at a regular meeting of the City Council of the City of Arlington, Texas.



JIM R. ROSS, Mayor

ATTEST:



ALEX BUSKEN, City Secretary

APPROVED AS TO FORM:
MOLLY SHORTALL, City Attorney

BY 
