

Title 748: UNIFORM BUILDING CODE COMMISSION Chapter 20 - Adopted Codes - Subchapter 10

National Electrical Code®, 2020 Edition (NEC®, 2020) 748:20-10-1 through 748:20-10-15

NOTICES:

- Section headers within this document marked "Revoked" do not revoke the
 current chapter in the 2020 Edition of the National Electrical Code® (NEC®, 2020),
 associated with this revocation language. This language simply means the
 modifications made in a previous adoption have been "revoked" and the language
 reverts to the published content of the currently adopted code without
 amendment.
- 2. Section headers within this document marked "Reserved" does not omit the chapter in the 2020 Edition of the National Electrical Code® (NEC® 2020), associated with this reserved language. This language simply means no modifications were made to the Chapter in the current adoption of the NEC® 2020 and the Chapter stands, as published, as part of the statewide minimum code the section title is merely a space holder for future rulemaking modifications. if needed.
- 3. The rules of the Oklahoma Uniform Building Code found on this website are **unofficial.** The official rules are published in The Oklahoma Administrative Code and The Oklahoma Register, as required by 75 O.S. § 250 et seq. To order an official copy of these rules, contact the Office of Administrative Rules at: (405) 521-4911.

CHAPTER 20. ADOPTED CODES

SUBCHAPTER 10. NEC® 2020

748:20-10-1. Adoption of the National Electrical Code®, 2020 Edition (NEC® 2020)

- (a) The Oklahoma Uniform Building Code Commission (the "OUBCC") hereby adopts the National Electrical Code®, 2020 Edition NFPA 70® (NEC® 2020), as amended and modified in this subchapter as the statewide minimum code for commercial electrical construction in the State of Oklahoma pursuant to 59 O.S. § 1000.23.
- (b) The OUBCC through formal action expressly chose to adopt the NEC® 2020 as amended and modified in this subchapter as the statewide minimum code for commercial electrical construction in the State of Oklahoma.
- (c) The OUBCC has pulled from the National Fire Protection Association (NFPA) website, published errata and Temporary Interim Amendments (TIA's) to the NEC® 2020 through July 31, 2019. Any errata or TIA's published after that date have not been reviewed or incorporated into these rules.
- (d) This material contains information which is proprietary to and copyrighted by the National Fire Protection Association. The acronym "NFPA" and the NFPA logo are trademarks and service marks of NFPA. ALL RIGHTS RESERVED.

[Source: Amended and renumbered from 748:20-9-1 at 38 Ok Reg 2693, eff 9-14-21; Amended at 39 Ok Reg 2370, eff 9-14-22]

748:20-10-2. Effect of adoption

The NEC® 2020 as amended and revised by these rules, is hereby established and adopted as the statewide minimum code for commercial electrical construction in Oklahoma pursuant to 59 O.S. § 1000.23, and may only be amended or altered by other jurisdictions pursuant to Oklahoma law.

Source: Amended and renumbered from 748:20-9-2 at 38 Ok Reg 2693, eff 9-14-21; Amended at 39 Ok Reg 2370, eff 9-14-22]

748:20-10-3. NEC® 2020 Informative Annexes

- (a) None of the informative annexes of the NEC® 2020 have been adopted by the OUBCC for inclusion in the statewide minimum code for commercial electrical construction in the State of Oklahoma.
- (b) Informative Annexes A through J are not adopted as the statewide minimum code for commercial electrical construction within the State of Oklahoma. However, other jurisdictions within the State of Oklahoma may adopt any or all of said annexes in accordance with 59 O.S. § 1000.29.
- (c) Issuance of annual permits. Annual permit requirements are located in Informative Annex H, Section 80.19 (D) and while the OUBCC is not adopting the informative annexes, issuance of annual permits has been authorized and the annual permits section modified to provide the following requirements:
 - (1) 80.19 (D) Annual permit. This section has been modified to clarify an annual permit is a yearly permit which represents a group of individual permits for each alteration to an already approved electric, gas, mechanical or plumbing installation. This section has been modified to read: 80.19(D) Annual permit. An annual permit is a yearly permit which represents a group of individual permits for each alteration to an already approved electrical, gas, mechanical or plumbing installation. The building official is authorized to issue an annual permit upon application therefor to any person, firm or corporation regularly employing one or more qualified tradespersons in the building, structure or on the premises owned or operated by the applicant for the permit.

(2) 80.19 (D)(1) Annual permit records. This section has been added to require the building official to collect the OUBCC permit fee for each individual permit that is part of the annual permit at the completion of the annual permit term. This section has been added to read: 80.19 (D)(1) Annual permit records. The person to whom an annual permit is issued shall keep a detailed record of alterations made under such annual permit. The building official shall have access to such detailed records of alterations at all times. At the completion of the entity's annual permit term, the applicant shall file such detailed records of alterations with the building official. Pursuant to the authority of 59 O.S. § 1000.25, the building official shall collect fees for each individual permit which is part of the annual permit once the detailed records are submitted and remit such fees to the OUBCC.

[Source: Amended and renumbered from 748:20-9-3 at 38 Ok Reg 2693, eff 9-14-21; Amended at 39 Ok Reg 2370, eff 9-14-22]

748:20-10-4. NEC® 2020 Provisions Adopted and Modified

All chapters and provisions within chapters, including exceptions, of the NEC® 2020 not specifically addressed within these rules as being modified, deleted, moved or removed are hereby adopted without modification as the statewide minimum code for commercial electrical construction within the State of Oklahoma pursuant to 59 O.S. § 1000.23. Chapters and provisions within chapters, including exceptions adopted with modifications are specifically addressed in these rules.

[Source: Amended and renumbered from 748:20-9-4 at 38 Ok Reg 2693, eff 9-14-21; Amended at 39 Ok Reg 2370, eff 9-14-22]

748:20-10-5. Participation in Federal programs and/or Federally funded or financed projects

In order to maximize federal financial aid, assistance, participation, financing and/or funding in any public project(s) and/or federal financial aid, participation, funding for and participation in any federal program(s) by the State of Oklahoma, its agencies, public trusts and instrumentalities, or by any Oklahoma municipalities and other political subdivisions, that receive financial aid, assistance, participation, financing and/or funding for and participate in any federal program(s), the State of Oklahoma, its agencies and instrumentalities, and any Oklahoma municipalities and other political subdivisions, may cooperate with the United States Government and any agency or instrumentality thereof, in the manner authorized and provided by federal law and regulation and in doing so may perform all necessary functions and take all necessary actions for accomplishing such federal purposes and programs, including but not limited to, following and/or complying with federal laws, regulations and/or requirements arising from or related to federal financial aid, assistance, participation, financing and/or funding, in the construction, alteration, movement, enlargement, replacement, repair, equipment, use and occupancy, location, improvement, expansion, operation, maintenance, removal, and demolition of buildings and structures or any appurtenances attached to such buildings or structures, notwithstanding any provisions of any and all uniform building codes and standards adopted by the OUBCC to the contrary. [Source: Amended and renumbered from 748:20-9-5 at 38 Ok Reg 2693, eff 9-14-21]

748:20-10-6. NEC® 2020 Article 90 Introduction

Article 90 of the Oklahoma adopted NEC® 2020, includes the following Preamble at the very beginning of the chapter:

(1) Pursuant to 59 O.S. § 1000.23, the OUBCC has adopted the NEC® 2020 as amended and revised by the OUBCC, as the minimum code to be used by all entities for commercial electrical construction in jurisdictions throughout the State of

Oklahoma. However, the OUBCC's adoption of Article 90 "Introduction" of the NEC ® 2020 is for continuity purposes and the OUBCC's adoption of Article 90 recognizes the methods of best practice in fully implementing the statewide minimum code for commercial electrical construction.

- (2) All provisions of the adopted NEC® 2020, including Article 90, as amended and revised by the OUBCC, are hereby established and adopted as the statewide minimum code for commercial electrical construction in Oklahoma pursuant to 59 O.S. § 1000.23, which may only be amended or altered pursuant to Oklahoma law. However, the provisions of Article 90 adopted herein are only intended to be in force and effect to the extent that the respective provisions do not conflict with State law or the lawful exercise of code administration and enforcement jurisdiction by entities empowered to do so pursuant to applicable law.
- (3) The OUBCC's adoption of Article 90 in this manner is made with the recognition that the legal authority granting state and local code administration and enforcement jurisdictions the power and discretion to administer and enforce codes arises from Oklahoma laws governing those jurisdictions. Furthermore, the OUBCC also recognizes that many state and local code administration and enforcement jurisdictions have already created, or have the lawful authority to create, departments, offices and administrative policies pursuant to various applicable laws and other adopted model codes with "Introduction" provisions similar to Article 90 of the adopted NEC® 2020.
- (4) This limited adoption of Article 90 is made in recognition of the authority and discretion possessed by jurisdictions to administer and enforce building codes. Exercising such authority and jurisdiction in a manner inconsistent with Article 90 must be supported by Oklahoma law. Code administration and enforcement jurisdictions shall not use the OUBCC's limited adoption of Article 90 to circumvent the remainder of the requirements established by the Oklahoma adopted NEC® 2020 and the OUBCC will strongly oppose any such practice.

[Source: Amended and renumbered from 748:20-9-6 at 38 Ok Reg 2693, eff 9-14-21; Amended at 39 Ok Reg 2370, eff 9-14-22]

748:20-10-7. NEC® 2020 Chapter 1 General

Chapter 1 of the Oklahoma adopted NEC® 2020 is adopted with the following modifications:

- (1) Article 100 Definitions. This section has been modified to include a definition of a nationally recognized testing laboratory and a definition of a plaque. This section has been modified to read:
 - (A) Nationally Recognized Testing Laboratory. A testing facility given this designation from the United States Occupational Safety and Health Administration (OSHA) that provides product safety testing and certification services to manufacturers.
 - (B) Plaque. A flat, thin piece of metal, wood, or non-conductive, UV, rain, corrosion, and ice resistant material with a sustainable temperature rating from negative 20 degrees Fahrenheit to 130 degrees Fahrenheit or better. For the ambient temperature of the environment to which it is installed, with engraved writing on it that is used especially as a reminder or warning of something. A plaque shall be designed to be installed by adhesive means or mechanical fasteners, as determined by the environment where to be permanently installed. A plaque shall also be known as a Permanent Plaque, Directory, or substitute for a label, excluding circuit directories.

(2) Section 110.12 (B) Integrity of Electrical Equipment and Connections. This section has been modified to allow for the reuse of existing electrical equipment, rather than requiring new replacements when certain conditions are met. This section has been modified to read: 110.12 (B) Integrity of Electrical Equipment and Connections. Internal parts of electrical equipment, including busbars, wiring terminals, insulators, and other surfaces, shall not be damaged or contaminated by foreign materials such as paint, plaster, cleaners, abrasives, or corrosive residues. There shall be no damaged parts that may adversely affect safe operation or mechanical strength of the equipment such as parts that are broken; bent; cut; or deteriorated by corrosion, chemical action or overheating. Damaged materials, equipment, appliances, and devices shall not be reused unless such elements have been reconditioned, tested, and placed in good and proper working condition and approved by a nationally recognized testing laboratory, or by the manufacturer of the equipment. Electrical equipment damaged by natural or man-made events shall be reused only as recommended by the manufacturer of such equipment.

[Source: Amended and renumbered from 748:20-9-6.1 at 38 Ok Reg 2693, eff 9-14-21; Amended at 39 Ok Reg 2370, eff 9-14-22]

748:20-10-8. NEC® 2020 Chapter 2 Wiring and Protection

Chapter 2 of the Oklahoma adopted NEC® 2020 is adopted with the following modification: Section 210.08 (F) Outdoor Outlets. This section has been modified to include mini-split-type heating/ventilating/air-conditioning equipment and other HVAC units employing power conversion equipment as a means to control compressor speed. This section has been modified to read: 210.08 (F) Outdoor Outlets. All outdoor outlets for dwellings, other than those covered in 210.8 (A) (3), Exception to (3), and for mini-splittype heating/ventilating/air-conditioning (HVAC) equipment and other HVAC units employing power conversion equipment as a means to control compressor speed, that are supplied by single-phase branch circuits rated 150 volts to ground or less, 50 amperes or less, shall have ground-fault circuit-interrupter protection for personnel. Informational Note: Power conversion equipment is the term used to describe the components used in HVAC equipment that is commonly referred to as a variable speed drive. The use of power conversion equipment to control compressor speed differs from multistage compressor speed control. Exception: Ground-fault circuit-interrupter protection shall not be required on lighting outlets other than those covered in 210.8 (C). [Source: Amended and renumbered from 748:20-9-6.2 at 38 Ok Reg 2693, eff 9-14-21; Amended at 39 Ok Reg 2370, eff 9-14-22]

748:20-10-9. NEC® 2020 Chapter 3 Wiring Methods and Materials [REVOKED]

[Source: Added at 38 Ok Reg 2693, eff 9-14-21; Revoked at 39 Ok Reg 2370, eff 9-14-22]

748:20-10-10. NEC® 2020 Chapter 4 Equipment for General Use

Chapter 4 of the Oklahoma adopted NEC® 2020 is adopted with the following modification: Section 422.16(B)(5) Gas-fired central furnaces. This section has been added to allow flexible cord-and-plug connections in dwelling units as an alternative means of temporarily supplying the gas-fired furnace by a portable generator for heating purposes. This section has been added to read: 422.16(B)(5) Gas-fired central furnaces. Gas-fired furnaces supplying dwelling units shall be permitted to be connected by a flexible cord-and-plug. The cord and attachment plug shall have sufficient ampacity for the load, and shall be routed or otherwise protected to prevent physical damage to the cord or attachment plug.

[Source: Added at 38 Ok Reg 2693, eff 9-14-21; Amended at 39 Ok Reg 2370, eff 9-14-22]

748:20-10-11. NEC® 2020 Chapter 5 Special Occupancies

Chapter 5 of the Oklahoma adopted NEC® 2020 is adopted with the following modifications:

- (1) Section 505.7 (A) Implementation of zone classification system. This section has been modified to require a registered professional engineer to engineer and design, and select the equipment and wiring methods for classification areas. It allows for the installation of the equipment, wiring methods and inspections to be performed by qualified persons. This section has been modified to read: 505.7 (A) Implementation of zone classification system. Classification of areas, engineering and design, selection of equipment and wiring methods shall be performed by a Registered Professional Engineer with expertise in Hazardous (Classified) Locations and Zone Systems. The installation of equipment and wiring methods, and inspections shall be performed by qualified persons.
- (2) Section 506.7 (A) Implementation of zone classification system. This section has been modified to require a registered professional engineer to engineer and design, and select the equipment and wiring methods for classification areas. It allows for the installation of the equipment, wiring methods and inspections to be performed by qualified persons. This section has been modified to read: 506.7 (A) Implementation of zone classification system. Classification of areas, engineering and design, selection of equipment and wiring methods, shall be performed by a Registered Professional Engineer with expertise in Hazardous (Classified) Locations and Zone Systems. The installation of equipment and wiring methods and inspection shall be performed by qualified persons.
- (3) Section 555.30 (D) Luminaires and other electrical equipment. This section has been added to require the location of luminaires and other electrical equipment to be located not less than 5 feet horizontally from the nearest normal edge of the water. However, if the luminaire or other electrical equipment is within the 5 feet horizontal zone it must be 12 feet vertically from the nearest normal edge of the water. This section has been added to read: 555.30 (D) Luminaires and other electrical equipment. Luminaires and electrical connections to luminaires or other electrical equipment shall be located not less than 5 feet horizontally from the nearest normal edge of the water. If a luminaire is within the 5 foot horizontal zone it must be 12 feet vertically.

[Source: Amended and renumbered from 748:20-9-7 at 38 Ok Reg 2693, eff 9-14-21; Amended at 39 Ok Reg 2370, eff 9-14-22]

748:20-10-12. NEC® 2020 Chapter 6 Special Equipment

Chapter 6 of the Oklahoma adopted NEC® 2020 is adopted with the following modifications:

(1) Section 680.23 (A)(4) Voltage Limitations. This section has been modified to prohibit the use of underwater luminaries if they operate above the low voltage contact limit as defined in Section 680.2 and limit the use of luminaires or other electrical connections while standing in either a natural or man-made body of water. This section has been modified to read: 680.23 (A)(4) Voltage Limitations. No luminaries shall operate above the low voltage contact limit as defined in Section 680.2. This requirement shall apply to new installations, repair, replacement and modification of underwater luminaires. This section shall not apply to relamping if the line-voltage luminaire is protected by a Class A ground-fault circuit-interrupter. (2) Section 682.10 Electrical Equipment and Transformers. This section has been modified to require luminaires or other electrical connections to be located at least 5

feet horizontally from the nearest normal edge of the water. This section has been modified to read: 682.10 Electrical Equipment and Transformers. Electrical equipment and transformers, including their enclosures, shall be specifically approved for the intended location. No portion of an enclosure for electrical equipment not identified for operation while submerged shall be located below the electrical datum plane. Luminaires or other electrical connections shall be located at least 5 feet (1524 mm) horizontally from the nearest edge of the water.

[Source: Amended and renumbered from 748:20-9-8 at 38 Ok Reg 2693, eff 9-14-21; Amended at 39 Ok Reg 2370, eff 9-14-22]

748:20-10-13. NEC® 2020 Chapter 7 Special Conditions

Chapter 7 of the Oklahoma adopted NEC® 2020 is adopted with the following modification: Section 700.16 (B) System Reliability. This section has been modified to address errata to change the reference for listed equipment to be in accordance with 700.12(F) to 700.12(I). This section has been modified to read: 700.16 (B) System Reliability. Emergency lighting systems shall be designed and installed so that the failure of any illumination source cannot leave in total darkness any space that requires emergency illumination. Control devices in the emergency lighting system shall be listed for use in emergency systems. Listed unit equipment in accordance with 700.12(I) shall be considered as meeting the provisions of this section.

[Source: Added at 38 Ok Reg 2693, eff 9-14-21; Amended at 39 Ok Reg 2370, eff 9-14-22]

748:20-10-14. NEC® 2020 Chapter 8 Communication Systems [REVOKED]

[Source: Added at 38 Ok Reg 2693, eff 9-14-21; Revoked at 39 Ok Reg 2370, eff 9-14-22]

748:20-10-15. NEC® [RESERVED]

[Source: Reserved at 38 Ok Reg 2693, eff 9-14-21]