

ORDINANCE NO. _____

AN ORDINANCE OF THE CITY COUNCIL OF THE CITY OF MESA, MARICOPA COUNTY, ARIZONA, RELATING TO PUBLIC HEALTH AND SAFETY, REPEALING TITLE 4, BUILDING REGULATION, CHAPTER 4, MESA ELECTRICAL CODE, SECTION 2 NATIONAL ELECTRICAL CODE ADOPTED AND SECTION 3 PENALTY CLAUSE OF THE MESA CITY CODE; ADOPTING THE 2017 NATIONAL ELECTRICAL CODE BY REFERENCE; ADOPTING AMENDMENTS TO CERTAIN PROVISIONS IN THE 2017 NATIONAL ELECTRICAL CODE; ADDING A NEW TITLE 4, CHAPTER 4, SECTION 2 MESA ELECTRICAL CODE AND 3 PENALTY CLAUSE; AND AN EFFECTIVE DATE OF FEBRUARY 10, 2019.

BE IT ORDAINED BY THE CITY COUNCIL OF THE CITY OF MESA, MARICOPA COUNTY, ARIZONA as follows:

Section One. **REPEAL.**

That Title 4, Chapter 4, Section 2 and Section 3 as amended, of the Mesa City Code is repealed.

Section Two. **ADOPTION BY REFERENCE.**

SECTION 4-4-2. That Title 4, Chapter 4, Section 2 of the Mesa City Code shall now read as follows:

The following publications are hereby adopted by reference as if set out at length in this Code, three copies of which shall be filed in the office of the City Clerk and kept available for public use and inspection:

Section Three.

AMENDMENTS TO THE 2017 NATIONAL ELECTRICAL CODE.

That Title 4, Chapter 4, Section 2 of the Mesa City Code shall now read as follows:

Note: Underlined indicates proposed addition and ~~Strikethrough~~ indicates deletions to the text.

(1) ARTICLE 80 TITLE AND ADMINISTRATION is amended to read as follows:

Article 80 Title and Administration.

80.1 Title. These regulations shall be known as the “Mesa Electrical Code”, may be cited as such and will be referred to herein as “this Code”. For administration of this Code, refer to Title 4, Chapter1, Mesa Administrative Code.

- (2) **Article 100 Definitions** is amended by revising the definition for Authority Having Jurisdiction (AHJ) to read as follows:

~~**Authority Having Jurisdiction (AHJ).** An organization, office, or individual responsible for enforcing the requirements of a code or standard, or for approving equipment, materials, an installation, or a procedure.~~ **Authority Having Jurisdiction (AHJ).** The Authority Having Jurisdiction shall be construed to be the Building Safety Director or designee who is responsible for administering and enforcing the Mesa Electrical Code.

- (3) **Article 230.70 (B) Marking** is amended to read as follows:

230.70 (B) Marking. Each service disconnect shall be permanently marked to identify it as a service disconnect. Markings shall be of sufficient durability to withstand the environment involved. Identifying labels required for disconnecting means shall have engraved or raised letters and be secured by screws or rivets (plastic tape shall not be considered durable material).

- (4) **Article 250.118 Types of Equipment Grounding Conductors** is amended to read as follows:

250.118 Types of Equipment Grounding Conductors. The equipment grounding conductor run with or enclosing the circuit conductors shall be one (1) or more or a combination of the following:

- ~~1. A copper, aluminum, or copper-clad aluminum conductor. This conductor shall be solid or stranded; insulated, covered, or bare; and in the form of a wire or a busbar of any shape.~~
2. Rigid metal conduit.
3. Intermediate metal conduit.
4. Electrical metallic tubing with an additional equipment grounding conductor.
5. Listed flexible metal conduit meeting all the following conditions:
 - a. The conduit is terminated in listed fittings.
 - b. The circuit conductors contained in the conduit are protected by overcurrent devices rated at 20 amperes or less.
 - c. The size of the conduit does not exceed metric designator 35 (trade size 1 ¼).
 - d. The combined length of flexible metal conduit and flexible metallic tubing and liquidtight flexible metal conduit in the same ground-fault current path does not exceed 1.8 m (6 ft).
 - e. If used to connect equipment where flexibility is necessary to minimize the transmission of vibration from equipment or to provide flexibility for equipment that required movement after installation, an equipment grounding conductor shall be installed.
6. Listed liquidtight flexible metal conduit meeting all the following conditions:
 - a. The conduit is terminated in listed fittings.
 - b. For metric designators 12 through 16 (trade sizes 3/8 through ½), the circuit conductors contained in the conduit are protected by overcurrent devices rated at 29 amperes or less.
 - c. For metric designators 21 through 35 (trade sizes ¾ through 1 ¼), the circuit conductors contained in the conduit are protected by overcurrent devices rated not more than 60 amperes

and there is no flexible metal conduit, flexible metallic tubing, or liquidtight flexible metal conduit in trade sizes metric designators 12 through 16 (trade sized 3/8 through 1/2) in the ground-fault path.

d. The combined length of flexible metal conduit and flexible metallic tubing and liquidtight flexible metal conduit in the same ground-fault current path does not exceed 1.8 m (6ft).

e. If used to connect equipment where flexibility is necessary to minimize the transmission of vibration from equipment or to provide flexibility for equipment that requires movement after installation, an equipment grounding conductor shall be installed.

7. Flexible metallic tubing where the tubing is terminated in listed fittings and meeting the following conditions:

a. The circuit conductors contained in the tubing are protected by overcurrent devices rated at 20 amperes or less.

b. The combined length of flexible metal conduit and flexible metallic tubing and liquidtight flexible metal conduit in the same ground-fault current path does not exceed 1.8 m (6 ft).

~~8. Armor of Type AC cable as provided in 320.108~~

~~9. The copper sheath of mineral insulated, metal sheathed cable.~~

~~10. Type MC cable where listed and identified for grounding in accordance with the following:~~

~~(a) The combined metallic sheath and grounding conductor of interlocked metal type Type MC cable.~~

~~(b) The metallic sheath or the combined metallic sheath and grounding conductors of the smooth or corrugated tube type MC cable.~~

~~11. Cable trays as permitted in 392.10 and 392.60.~~

~~12. Cablebus framework as permitted in 360.70 (1).~~

~~13. Other listed electrically continuous metal raceways and listed auxiliary gutters.~~

14. Surface metal raceways listed for grounding.

SECTION 4-4-3. PENALTY CLAUSE: Any person, firm, or corporation who shall violate any of the provisions of this Chapter of the Mesa City Code as amended shall be subject to all penalties and provisions of Section 4-1-9.

PASSED AND ADOPTED by the City Council of the City of Mesa, Maricopa County, Arizona, this 7th day of January, 2019.

APPROVED:

Mayor

ATTEST:

{00283376.1}

City Clerk