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## Wichita-Sedgwick County Metropolitan Area Building and Construction Department

### **Attention Contractors:**

There are several important changes that we all need to be aware of with the adoption of the 2017 National Electrical Code (NEC) along with the Wichita-Sedgwick County Unified Building & Trade Code (UBTC).

There are over 1,200 changes, most of which are minor, in the 2017 NEC. I have listed below the changes that will affect the most people.

**Chapter 1 (NEC): Article 110.14(D) Electrical Connections:** This new requirement calls for the implementation of tightening torque tools where torquing is specified on the equipment or in installation instructions provided by the manufacturer.

**Chapter 1 (NEC): Article 110.21(A)(2) Marking, Equipment Markings:** New rules were added to require refurbished, reconditioned, or remanufactured equipment to be marked with the name, trademark, or other descriptive marking. Prior to this addition, refurbished equipment was not allowed.

**Chapter 2 (NEC): Article 210.8(B) Ground-Fault Circuit-Interrupter Protection for Personnel:** The GFCI requirements for receptacles at commercial/industrial applications have been expanded to recognize ground faults other than 15 and 20A 125-volt applications only.

**Chapter 2 (NEC): Article 210.8(B)(9) Ground-Fault Circuit-Interrupter Protection for Personnel:** GFCI protection for receptacles in non-dwelling unit crawl spaces has been added.

**Chapter 2 (NEC): Article 210.8(B)(10) Ground-Fault Circuit-Interrupter Protection for Personnel:** GFCI protection has been added for receptacles installed in non-dwelling unit basements.

**Chapter 2 (NEC): Article 210.8(E) Ground-Fault Circuit-Interrupter Protection for Personnel:** GFCI protection for lighting outlets in crawl spaces has been added.

**Chapter 2 (NEC): Article 210.11(C) Garage Branch Circuits:** New requirement added for a minimum of at least one (1) 120-volt, 20-ampere branch circuit for dwelling unit garage receptacles.

**Chapter 2 (NEC): Article 210.12 Arc-Fault Circuit-Interrupter Protection:** The requirements of this section will allow the installation of AFCI listed receptacles and provide many options to the installations of AFCI's throughout dwellings.

**Chapter 2 (NEC): Article 210.12(C) Arc-Fault Circuit-Interrupter Protection:** New provisions added requiring AFCI protection for guest rooms/guest suites of hotels/motels.

**Chapter 3 (NEC): Article 310.15(B)(7) Ampacities for conductors rated 0-2000 Volts:** The sizing of dwelling unit service and certain feeder conductors was expanded to include single-phase, 208Y/120-volt systems as well.

**Chapter 4 (NEC): Article 406.4(D)(4), Ex. 1 & 2 Replacement Receptacles:** This exception clarifies that AFCI protection is not required when replacing an existing receptacle if the wiring is not modified, replaced, or extended at existing dwelling units.

**Chapter 4 (NEC): Article 406.9(B)(1) Extra Duty Outlet Box Hoods:** The revision in this requirement makes it clear that other listed products, enclosures, or assemblies providing weatherproof protection that do not utilize an outlet box hood need not be marked “extra duty.”

**Chapter 4 (NEC): Article 406.12 Tamper-Resistant Receptacles:** The revision of this requirement expands the types of occupancies where tamper-resistant receptacles are required, and their locations.

**Chapter 6 (NEC): Article 605.9(C) Freestanding-Type Office Furnishings, Cord- and Plug- Connected:** This revision clarifies that thirteen duplex receptacles are the maximum number of receptacles permitted in office furnishings.

**Article IV (UBTC): Section 4.2.070 Conductor Requirements (Commercial and Industrial):** The exception to “acceptable for control wiring” was removed and replaced with: Minimum Size. Branch circuit wiring conductor size shall be No. 12 AWG copper.

**Article IV (UBTC): Section 4.2.150 Ceiling Grid Support Wires:** This requirement was added to clarify that electrical raceways shall not be supported by a fire rated ceiling assembly but shall have their own independent support.

**Article IV (UBTC): Section 4.2.165 Sewage ejector pumps and sump pumps:** This section was revised to indicate that it is required in all locations not just in dwellings.

**Article IV (UBTC): Section 4.2.170 Conduit Bodies:** This section was removed and will be enforced per the latest edition of the NEC.

**Article IV (UBTC): Section 4.2.175 Arc-Fault Circuit Interrupter Protection:** This section was removed and will be enforced per the latest edition of the NEC, which will allow more options regarding AFCI installations.

**Article IV (UBTC): Section 4.2.210 Temporary Construction Service Requirements:** This requirement was revised to include GFCI protection for all receptacles and to lessen the restriction of in use covers.

**This is not a complete list of all the changes, but a list of highlights that will affect the Electrical industry.**