

A BILL TO CREATE AN ORDINANCE ENTITLED:

“AN ORDINANCE AMENDING ARTICLE V OF CHAPTER FIVE OF THE CENTRALIA CITY CODE TO ADOPT THE 2014 EDITION OF THE INTERNATIONAL ELECTRICAL CODE, GOVERNING THE DESIGN, INSTALLATION AND CONSTRUCTION OF ELECTRICAL SYSTEMS, BY PROVIDING REASONABLE SAFEGUARDS TO PROTECT THE PUBLIC HEALTH AGAINST THE HAZARDS OF INADEQUATE, DEFECTIVE OR UNSAFE ELECTRICAL INSTALLATIONS; KNOWN AS THE ELECTRICAL CODE OF THE CITY OF CENTRALIA, MISSOURI.”

WHEREAS, one copy of “The National Electrical Code/2014 Edition” was filed in the office of the City Clerk of the City of Centralia, Missouri beginning January 13, 2018, as announced by public notice in the January 17, 2018 issue of the Centralia Fireside Guard newspaper, and kept available for public use, inspection, and examination in the office of said City Clerk for more than thirty (30) days from and after January 13, 2018; and

WHEREAS, notice of public hearing regarding the proposed adoption of “The National Electrical Code/2014 Edition” was given that a public hearing would be held on February 20, 2018 at the hour of 7:00 p.m. in the City Hall Council Chambers in Centralia, Missouri, said notice have been published in the January 17, 2018 issue of the Centralia Fireside Guard, a weekly newspaper of general circulation in Centralia, Missouri; and

WHEREAS, a public hearing was held at 7:00 p.m. on February 20, 2018 in the City Hall Council Chambers in Centralia, Missouri, by the Board of Aldermen, at which hearing citizens were given an opportunity to be heard in relation to the said proposed adoption of said electrical code.

NOW, THEREFORE, BE IT ORDAINED BY THE BOARD OF ALDERMEN OF THE CITY OF CENTRALIA, MISSOURI, as follows:

SECTION 1. Article V of Chapter 5 of the Centralia City Code shall be changed, altered and amended to read as follows:

Section 5-28 Adoption of the Electrical Code

That a certain document, one (1) copy of which is on file in the office of the City Clerk of the City of Centralia, Missouri, being marked and designated as “The National Electrical Code/2014 Edition”, approved by the National Fire Protection Association, be and the same is hereby adopted as the Electrical Code of the City of Centralia, Missouri, for the control of buildings and structures as provided herein; and each and all of the regulations, provisions, penalties, conditions and terms of “The National Electrical Code/2014 Edition” are hereby referred to, adopted and made a part hereof as if fully set out in this Chapter, with the additions, insertions, deletions and changes as hereinafter prescribed in Section 5-29.

Section 5-29. Amendments to the National Electrical Code/2014 Edition

The National Electrical Code/2014 Edition is amended by additions, deletions, and changes including the changing of Articles, Sections, Subsections, Subsection Titles, and the addition of new Sections and new Subsections to read as follows:

1. *Add Article 90-10:*
Plans and Specifications: Plans and specifications shall be required on all work involving commercial, industrial, multiple family and buildings used for purposes of public assembly, or as determined by the code official.
2. *Add Article 90-11:*
Violations Penalties: Any person who shall violate a provision of this code or shall fail to comply with any of the requirements thereof or who shall install, alter or repair electrical wiring in violation of this Code or without a proper permit shall be guilty of an ordinance violation, and upon, conviction, shall be punished by a fine of from one dollar (\$1.00) to not more than five hundred dollars (\$500.00). Each day that a violation continues shall be deemed a separate offense.
3. *Add Article 90-12:*
Means of Appeal: The owner of a building or structure or any other person may appeal a decision of the code official. Application for appeal may be filed in the office of the Resource Management Department of Boone County, Missouri.
4. *Add Article 90-13:*
Membership of the Board of Appeals: For the purposes of the Electrical Code, the Board of Appeals appointed under Section 113 of the International Building Code – 2012 Edition as adopted by Section 5-27 of the Centralia City Code shall serve as the Board of Appeals for matters referred to it for

consideration under the Electrical Code. Provisions in the International Building Code – 2012 Edition shall apply for all appeals filed under the National Electrical Code/2014 Edition.

5. *Add Article 90-14:*

Code Official: The City Administrator shall be the code official for the City of Centralia, Missouri. The administration and enforcement of this Chapter shall be the duty of said Code Official, who is authorized to take such action as, may be reasonably necessary to enforce this Chapter, and who may designate such City employees as are necessary to assist him in enforcing this Chapter. The City Administrator may designate one (1) or more employees of the City of Centralia, Missouri to perform a part of the duties of the Code Official to enforce this Chapter. He further may, with the approval of the Board of Aldermen by ordinance, contract for all or part of the duties of Code Official under this Chapter to be performed by the Resource Management Department of Boone County, Missouri.

6. *Add Article 90-15:*

Fee Schedule: The fees for electrical work shall be as set forth in Section 5-27 of the Centralia City Code.

7. *Add Article 90-16:*

Refunds: In the case of a revocation of a permit or abandonment or discontinuance of a building project, the portion of the work actually completed shall be computed and any excess fee for the incomplete work shall be returned to the permit holder upon written request. All plan examination and permit processing fees and all penalties that have been imposed on the permit holder under the requirements of the code shall first be collected. The code official shall authorize the refunding of fees according to the policies of the under the following additional circumstances:

- a. The full amount of any fee paid hereunder which was erroneously paid or collected.
- b. When no work has been done, the permit fee, less a processing fee of 25% of the original fee, may be refunded to the original permittee.

The code official shall not authorize the refunding of any fee paid, except upon written application filed by the original permittee not later than 180 days after the fee was paid.

8. *In Article 100, add in the list of definitions:*

Agriculture or Farming Activity: An agricultural activity shall be defined as the cultivating of the soil, producing of crops and the raising of animals for food or fiber and including horticulture, beekeeping, aquaculture, silviculture and forestry. Concentrated animal feeding operations must conform to the Missouri Department of Natural Resources' regulations pertaining to waste water management and odor control. The raising and keeping of horses for any purpose other than the production of food and fiber is not considered agricultural activity.

9. *In Article 100, delete the definition of Switch, Transfer and add:*

Switch, Transfer: An automatic or non-automatic device for transferring one or more load conductor connections from one power source to another. The transfer switch on activation shall disconnect all current carrying conductors to include the neutral to prevent back-feed to the utility.

10. *Delete 110.5 and add:*

Conductors: Conductors normally used to carry current shall be of copper unless otherwise provided for in this code. Where the conductor material is not specified, the sized given in this code shall apply to copper conductors. Where other materials are used, the size shall be changed accordingly. Aluminum and copper aluminum will be approved as outside feeders of 100 amperes or larger and must terminate nearest the point of entrance of the feeder; or as designed and recommended by a registered professional engineer or a registered architect.

(FPN) For aluminum and copper-clad aluminum conductors, see Sections 250.120 (B), 310-14.

11. *Article 201.8 Ground-Fault Circuit-Interrupter Protection for Personnel (A) Dwelling Units. (2).* Add the following to Exception (2): Outlet receptacles serving sewage/septic/sump pumps should have ground fault circuit interrupter protection for personnel.

12. *Article 201.8 Ground-Fault Circuit-Interrupter Protection for Personnel (A) Dwelling Units (3).* Add the following to Exception to (3): Outlet receptacles in an exterior soffit that are used for seasonal decorative lighting shall have ground fault circuit interrupter protection for personnel; must be accessible, but are not required to be readily accessible.

13. *Article 201.8 Ground-Fault Circuit-Interrupter Protection for Personnel (A) Dwelling Units (4).* Add the following to Exception to (4): Outlet receptacles serving sewage/septic/sump pumps should have ground fault circuit interrupter protection for personnel.

14. *Delete Article 210.8 (A) (5) Exception in its entirety and insert:*
Exception No. 1 to (2) Garages and accessory buildings. Receptacles in locations that are not readily accessible. (e.9., on the ceiling of a garage).

Exception No. 2 to (2) Garages and (5) Unfinished basements. A single receptacle or a duplex receptacle for two appliances located within dedicated space for each appliance that, in normal use, is not easily moved from one place to another and that is cord-and-plug connected in accordance with 400.7(AX6), (47), or (48).

Add the following Exception to (3) Outdoors. GFCI receptacles located in exterior soffits and used for seasonal decorative lighting are not required to be readily accessible.

Exception No. 4 to (5): Outlet receptacles serving sewage/septic/sump pumps should have ground fault circuit interrupter protection for personnel.

Exception to (7) Sinks. Where the receptacles are installed within 1.8 m (6 feet) of the outside edge of the sink.

(a) Receptacles installed for appliances such as clothes washers, refrigerators, garbage disposals, dishwashers, and microwave ovens shall not be required to be GFCI protected where located within 6 feet of laundry, utility, kitchen or wet bar sink in a dwelling.

(b) A duplex receptacle may be used for a single appliance provided the duplex receptacle is located behind the appliance which, in normal use, is not easily moved and the receptacle is not readily accessible for the use of power tools. This receptacle must be marked "not GFCI protected". Receptacles installed under the exceptions to 210.8 (AX7) shall not be considered as meeting the requirements of 210.52 (G).

15. *Delete 210.8(D) in its entirety*

16. *Article 210.12 Arc-Fault Circuit-Interrupter Protection*

Article 210.12 (A). Dwelling Units. All 120-volt, single phase, 15 – and 20 – ampere branch circuits supplying outlets installed in dwelling unit bedrooms and for smoke detectors shall be protected by a listed arc-fault circuit interrupter, combination-type installed to provide protection of the branch circuit. The rest of 210.12 (A) remains as stated.

Add the following Exception No. 4: Arc-Fault Circuit Interrupter Protection is not required in one and two-family dwellings which are regulated by the International Residential Code.

17. *In Article 210.52 Dwelling unit receptacle outlets (C) Countertops (5) Receptacle outlet location. Exception to (5): Delete the second sentence to the first paragraph that reads; “Receptacles mounted below a countertop in accordance with this exception shall not be located where the countertop extends more than 150mm (6 inches) beyond its support base.” The rest of the section remains as stated. This definition is to allow the placement of the receptacle no more than 12 inches below the countertop, and anywhere the countertop extends beyond its support base.*

Add the following Exception to (E). (3): A receptacle is not required at an existing structure

18. *Article 210.52(G)(1): Receptacles in Garages. Delete first sentence, as follows: In each attached garage, and in each detached garage with electric power, the branch circuit supplying receptacles shall not supply outlets outside the garage." Retain second sentence: "At least one duplex receptacle shall be installed for each car space."*

19. *Article 210.63 Heating, Air-conditioning, and Refrigeration Equipment Outlet: In Article 201.63: Existing exception to be shown as Exception No. 1 and add Exception No. 2: Rooftop and exterior equipment on one- and two-family dwellings.*

20. *Article 220.14 (J) Dwelling Occupancies: Delete “one-family, two-family”; add the following paragraph at end: One- and two family dwellings*

(1) *In one- and two-family dwellings, a 15-amp rated general purpose circuit shall be limited to a maximum of eight receptacle outlets or openings, or eight lighting outlets or openings, or any combination of receptacle outlets and lighting outlets totaling not more than eight.*

(2) *In one- and two-family dwellings, a 20-amp rated general purpose circuit shall be limited to a maximum of ten receptacle outlets or openings, or ten lighting outlets or openings, or any combination of receptacle outlets and lighting outlets totaling not more than ten.*

(3) *In one- and two-family dwellings, the small appliance circuits serving the kitchen countertop and similar areas, shall be limited to not more than two receptacle outlets or openings for the first two such circuits; the third and succeeding small appliance circuits shall be limited to not more than three receptacle outlets or openings per circuit.*

(4) *In one- and two-family dwellings, the microwave receptacle outlet shall be a dedicated 20-amp rated circuit, and shall share with no other outlets.*

21. *Article 230.50 Protection Against Physical Damage. Replace B) (1) with: Service Entrance Cables and (3) with Schedule 40 rigid nonmetallic conduit or equivalent.*

22. *Article 230.70(A)(1): Add: Inside the nearest point of entrance is defined as the first full stud space inside structure.*

23. *Delete Article 250.50 and add: Grounding Electrode System.* All grounding electrodes as described in 250.52(A)(1) through (A)(7) that are present at each building or structure served shall be bonded together to form the grounding electrode system. Where none of these grounding electrodes exist, one or more of the grounding electrodes specified in 250.52(A)(4) through (A)(8) shall be installed and used, except where there exists a metal water pipe in contact with earth for 10 feet or more, for one- and two-family dwellings, a single grounding electrode as required by the serving electrical utility shall be permitted to fill the requirements of Article 250.50.
24. *Delete Article 250.94 in its entirety.*
25. *Delete Article 300.5 (D)(3) in its entirety and add: Article 300.5 (D)(3) Service Conductors.* Warning tape shall be installed a minimum of six (6) inches below grade not less than twelve (12) inches above the electrical cables or conduit in all underground installations of 50 volts.
26. *Delete Article 300.5 (D)(4) in its entirety and add:*
 (4) Enclosure and Raceway Damage: Where the enclosure or raceway is subject to physical damage, the conductors shall be installed in rigid metal conduit, intermediate metal conduit, Schedule 40 rigid nonmetallic conduit, or equivalent.
27. *Article 300.9 Raceways in Wet Locations Above Grade: Delete in its entirety:*
28. *Article 300.11(A)(2) Non-Fire Rated Assemblies: Add exception:*
 Exception: One 3/4 inch raceway or smaller, with maximum conductor fill (for example, twelve #12 AWG), shall be permitted to be supported by the ceiling support wire.
29. *Article 314.23 (B)(1) Nails and Screws: Add last sentence to paragraph:* Screws may be installed through the interior sides of a nonmetallic box to mount or fasten the box in place regardless of its listing and labeling, provided the heads of the screws are covered or coated with a nonmetallic material.
30. *Article 334.12 Uses Not Permitted. (A) Types NM, NMC, and NMS.* Delete the following in its entirety: “(2) Exposed in dropped or suspended ceilings in other than one- and two-family and multi-family dwellings.”
31. *Article 334.12 Uses Not Permitted (B) NM and NMS.* Add:
 Exception: Type NMS cable shall be permitted in wet or damp locations.
32. *Article 334.15 (B) Protection from Physical Damage:* Where schedule 80 PVC is stated in first paragraph, replace with schedule 40 PVC or better to read. “Cable shall be protected from physical damage where necessary by rigid metal conduit, electrical metallic tubing, Schedule 40 PVC conduit or better or other approved means. Where passing through a floor, the cable shall be enclosed in rigid metal conduit, intermediate metal conduit, electrical metal tubing, Schedule 40 PVC conduit or better or other approved means extending at least 150 mm (6 inches) above the floor.”
33. *Delete Article 334.80 Ampacity in its entirety and add:*
Article 334.80 Ampacity. The ampacity of Types NM, NMC, and NMS cable shall be determined in accordance with 310.15. The ampacity shall be in accordance with the 60 degrees C (143 degrees F) conductor temperature rating. The 90 degree C (194 degree F) rating shall be permitted to be used for ampacity derating purposes, provided the final de-rated ampacity does not exceed that for a 60 degree C (140 degree F) rated conductor. The ampacity of Types NM, NMC, NMS cable installed in cable tray shall be determined in accordance with the 392.11.

 Where more than two NM cable containing two or more current-carrying conductors are installed, without maintaining spacing between the cables, through the same opening in wood framing that is to be fire- or draft-stopped using thermal insulation, caulk or sealing foam. The allowable ampacity of each conductor shall be adjusted in accordance with Table 310.15(B)(2)(a). The rest of 334.80 is deleted in its entirety.
34. *Article 404.2(C) Switches Controlling Lighting Loads: Delete in its entirety.*
35. *Delete Article 406.9 Receptacles in Damp or Wet Locations*
 (A) Damp locations. A receptacle installed outdoors in a location protected from the weather or in other damp locations shall have an enclosure for the receptacle that is weatherproof when the receptacle is covered (attachment plug cap not inserted and receptacle covers closed)

 An installation suitable for wet locations shall also be considered suitable for damp locations.

 A receptacle shall be considered to be in a location protected from weather where located under roofed open porches, canopies, marquees and the like, and will not be subjected to a beating rain or water run-off.
- (B) Wet Location.
 (1) 15- and 20- ampere receptacles in wet locations. 15- and 20-ampere, 125- and 250- volt receptacles installed

in a wet location shall have an enclosure that is weather-proof, whether or not the attachment plug cap is inserted. Weatherproof "in use or bubble" covers not required. The rest of 406.8 (A) is deleted in its entirety.

36. *Delete Article 406.12 Tamper-Resistant Receptacles for Dwelling Units. in its entirety*

37. *Delete Article 410.24(B) Access to Boxes.*

38. *Add Article 422.16(B) Specific Appliances (5) Storage-type Water Heaters: Storage type water heaters shall be permitted to be cord and plug connected with a flexible cord rated at 30 amperes. Cord with not be required to be listed for this use.*

39. *Article 440.9 Grounding and Bonding of Air Conditioning and Refrigerating Equipment. Where air conditioning and refrigeration equipment are installed outdoors with wiring methods consisting of liquid-tight flexible metal conduit or electrical metallic tubing, a wire-type equipment grounding conductor, as specified in 250.118(1), shall be provided in the outdoor portion of the raceway.*

Note; This proposed change was erroneously omitted from the printing of the 2014 NEC.

40. *Article 440.14 Location. Add Exception No. 3: Exception No. 3. Cord and plug connected appliances.*

41. *Add Article 545.14: Release from liability: Due to the fact that the Boone County Resource Management Department is unable to properly inspect wiring, outlets, junction boxes, etc. in manufactured buildings, the owner is responsible for insuring that all electrical components are in compliance with this code.*

42. *Article 550 (H)(2). Change Schedule 80 PVC to Schedule 40 PVC.*

43. *Add Article 550.34. Release from liability: Due to the fact that the Boone County Resource Management is unable to properly inspect wiring, outlets, junction boxes, etc. in manufactured buildings, the owner is responsible for insuring that all electrical components are in compliance with this code.*

44. *Article 600.6 Disconnects. (A)(1): Change the wording of the first sentence as follows: "Disconnects for signs and for outline lighting systems shall be located at the point where the feeder or branch circuits(s) enters the sign enclosure or pole, and shall disconnect all ungrounded conductors where they enter the sign enclosure or pole."*

45. *Article 680.43 Indoor Installations: Delete Exception No. 2.*

46. *Article 680.74 Bonding: Delete the last sentence.*

SECTION 2. All ordinances or parts of ordinances in conflict herewith are hereby repealed.

SECTION 3. This ordinance shall take effect and be in full force and effect from and after the date of its passage and approval.

PASSED by the Board of Aldermen this 19th day of March, 2018.

Alderman Wilkins – yes Alderman Vollrath - yes
Alderman Hudson – yes Alderman Rodgers - yes
Alderman Lee – yes Alderman Magley - yes

Presiding Officer

ATTEST:

City Clerk, Heather Russell

This ordinance approved by the Mayor this 19th day of March, 2018.

Mayor, Tim Grenke

ATTEST:

City Clerk, Heather Russell