

CITY OF ROCK FALLS

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ORDINANCE NO. 2018-2366

**ORDINANCE AMENDING THE ROCK FALLS MUNICIPAL CODE  
BY AMENDING CHAPTER 6, ARTICLE VI, SECTION 6-308  
TO ADOPT THE NATIONAL ELECTRICAL CODE OF 2014**

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ADOPTED BY THE  
COUNCIL  
OF THE  
CITY OF ROCK FALLS

THIS 1st DAY OF May, 2018

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Published in pamphlet form by authority of the Council of the City of Rock Falls, this 2nd  
day of May, 2018.

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**ORDINANCE AMENDING THE ROCK FALLS MUNICIPAL CODE  
BY AMENDING CHAPTER 6, ARTICLE VI, SECTION 6-308  
TO ADOPT THE NATIONAL ELECTRICAL CODE OF 2014**

**Be it Ordained** by the City Council of the City of Rock Falls, Whiteside County, Illinois, as follows:

**SECTION 1.** That Chapter 6, Article VI, Section 6-308 of the Rock Falls Municipal Code, as amended, is hereby further amended to read as follows:

*"Section 6-308. National Electrical Code; adopted; modified.*

(a) That document published by the National Fire Protection Association and known as NFPA 70 National Electrical Code, 2014 Edition ("the code") and as otherwise modified by the terms and provisions of this article are hereby adopted as the code governing and controlling all requirements for installation and use, examination and approval, access to and spaces about electrical conductors and equipment within the city and within the service and franchise area of the electric utility department of the city. Two copies of the code shall be on file in the office of the building official of the city. Each of the regulations, provisions, conditions and terms of the code are hereby referred to, adopted and made a part hereof, as if fully set out in this article, except for the additions, insertions, deletions and changes described in subsections (b), (c) and (d) of this section.

(b) The following provisions shall govern instead of the provisions and conditions of the National Electrical Code, 2014 Edition:

1. *Disconnecting means.* Whenever a service entrance or a meter base is installed, an external disconnect shall be installed. Except in commercial service installations exceeding a rating of 200 amperes, an additional interior disconnect shall not be required, unless otherwise specified by the National Electrical Code, 2014 Edition.
2. *Conduit wiring.* All electrical installations within or upon any commercial, industrial or public buildings shall be installed in approved rigid metal conduit, metal moldings, electric metallic tubing, or flexible metallic and nonmetallic conduit, provided that flexible conduit may only be installed as concealed work in hollow spaces of walls and ceilings in finished buildings where the construction is such that the concealed lengths between outlets may be withdrawn and new lengths drawn in without injury to the branch circuit conductors. Flexible conduit shall not extend more than two feet into the basement, nor shall it be imbedded in plastic or masonry walls.

3. *Underground wiring.* All underground service cable shall be of approved type and suitably protected from mechanical injury by metal conduit or otherwise and shall meet other installation requirements as specified by the superintendent of the electric utility of the city.
4. *Communications circuit.* The use of electrical nonmetallic tubing shall be prohibited for other than communications circuits.
5. *Roof brackets.* Roof brackets for the attachment of electrical services are prohibited.
6. *100 amp service required.* 100 ampere electrical service or greater shall be installed whenever major remodeling is performed on a building (50 percent or more of fair market home value), whenever major fire repairs are being performed, or upon the installation of additional electrical appliances that would overload existing service. All services of less than 100 amps capacity shall be removed from all buildings within the electric service and franchise area of the city upon sale, transfer or conveyance of that building, and such service shall be replaced with electrical service in accordance with the National Electrical Code, 2014 Edition (or such later edition as may be in force at the time the work is performed) before the date of the sale, transfer or conveyance of the building. All service panels installed pursuant to this subsection (b)(6) shall be of the circuit breaker type, and shall have a minimum 20-circuit capacity. The capacity shall be measured without the use of tandem ("split") circuit breakers. All buildings shall have a minimum service panel of at least a 100 amp capacity and a minimum of a 20 circuit breaker panel, and a 200 amp service must have a minimum of a 40 circuit breaker panel with the exception that an existing 200 amp service may have less than a 40 place circuit breaker panel as long as the panel has 25% open circuit breaker slots for expansion.
7. *Requirements for grounding electrodes systems.* Number four copper wire (minimum) shall be used at the grounding electrode conductor on 100- or 200-amp services, and shall be connected to the grounding electrode by an approved means. All ground wires to outside grounding electrodes above grade shall be enclosed in conduit. A concrete encased electrode shall be required to be installed in the footings of all commercial and industrial buildings.
8. *Grounded (neutral) conductor.* The grounded conductor on all residential services shall be of a size equal to the ungrounded conductors.
9. *Branch circuit wires.* All branch circuit wires to electrical switches and receptacles shall be securely fastened or connected to said switches or receptacles by binding screws or stud and nut. Push type connections shall not be used on switches or duplex outlets.

10. *Receptacle orientation.* Where dedicated or general purpose receptacles are installed in a horizontal position they shall be oriented so that the ungrounded receiver is positioned lower than the grounded receiver of the receptacle.
11. *Ground fault circuit interrupters.* Where ground fault circuit interrupters are required for outlets located on the exterior of a building, and the conductors of those receptacles extend beyond the perimeter of the building from which they are being fed, the conductors shall be protected by a ground fault circuit interrupter located on the side of the building from which it is being fed or from the panel from which it originates.
12. *Bedroom and closet circuits.* Article 210.12 of the National Electrical Code, 2014 Edition, shall be amended to read: All 120-volt single phase, 15- and 20-ampere branch circuits supplying outlets installed in dwelling unit bedrooms and closets shall be protected by a listed arc-fault circuit interrupter, combination-type, installed to provide protection of the branch circuit.
13. *Photovoltaic systems.* All photovoltaic systems shall have a disconnecting means located within sight and readily accessible from the arrays. An additional disconnecting means shall be located at ground level on the exterior of the building. Where installed on a rooftop of buildings, photovoltaic systems must provide a minimum four foot clearance around all edges, peaks, valleys and other obstructions. When the disconnecting means is not located within sight of the utility disconnecting means, a label shall be placed at the disconnect location for the utility serving the premises to indicate the presence of a photovoltaic system and the location of the disconnect.
14. *Residences.* The maximum number of outlets permitted on each 20-amp circuit shall be as follows:
  - a. Lighting outlets: Ten.
  - b. Convenience outlets: Seven.
  - c. Mixed lighting and (not to exceed convenience outlets): Nine.
  - d. Kitchen countertop outlets: Two.
15. Article 210.19(A) (5) shall be added as follows:

210.19 Conductors—Minimum Ampacity and Size. (A) Branch Circuits Not More Than 600 Volts. (5) Microwave Circuits. The wiring used to supply power to a permanently installed microwave oven shall consist of a dedicated circuit installed with 12 AWG or larger conductors.

16. Article 210.70(A) (1) shall be amended as follows:

210.70 Lighting Outlets Required. (A) Dwelling Units. (1) Habitable rooms. At least one wall switch-controlled lighting outlet shall be installed in every habitable room and bathroom. The switch shall be installed at a point of entry to the room. The main lighting outlet in each room may not be fed from the load side of a GFCI device. Unless 210.70(A)(1) Exception No. 1 is applied, provision shall be made in the wiring of each ceiling box of all habitable rooms (excluding dining rooms) for a luminaire to operate independently from a fan.

17. Article 210.70(A) (3) shall be deleted and replaced as follows:

210.70 Lighting Outlets Required. (A) Dwelling Units. (3) Storage or Equipment Spaces. For accessible attics, underfloor spaces, utility rooms, each area of an unfinished basement, and equipment spaces, at least one lighting outlet containing a switch or controlled by a wall switch shall be installed in such spaces. At least one point of control shall be at the usual point of entry to these spaces. A lighting outlet shall be provided within six feet of any equipment requiring servicing.

18. Article 210.70(C) shall be amended as follows:

210.70 Lighting Outlets Required. (C) Other Than Dwelling Units. For accessible attics and underfloor spaces, at least one lighting outlet containing a switch or controlled by a wall switch shall be installed in such spaces. At least one point of control shall be at the usual point of entry to these spaces. A lighting outlet shall be provided within six feet of any equipment requiring servicing.

19. Article 230.11 shall be added as follows:

230.11 Service Modifications. When any part of the service entrance equipment, branch circuit panel, or service conductor is replaced, modified, or required to be repaired, the service in its entirety must be installed to comply with the current codes. The main branch circuit panel shall be at least 20 spaces.

Exception: Replacement or addition of a branch-circuit overcurrent protective device.

20. Article 230.43 shall be deleted and replaced as follows:

230.43 Wiring Methods for 1000 Volts, Nominal, or Less. Service-entrance conductors and service laterals overhead shall be installed in accordance with the applicable requirements of this *Code* covering the type of wiring method used and shall be limited to rigid metal conduit (RMC) or intermediate metal

conduit (IMC). Electrical metallic tubing (EMT) may be used inside a building or structure.

21. Article 230.70 (A) (1) shall be deleted and replaced as follows:

230.70 General. (A) Location. (1) Readily Accessible Location. The service disconnecting means shall be installed at a readily accessible location, outside of a building.

22. Article 250.52 shall be amended as follows:

Article 250.52 Grounding electrodes. A concrete-encased electrode that complies with 250.52(A) (3) will be required in all new construction.

23. Article 300.1(D) shall be added as follows:

300.1 Scope. (D) Mixed Use and Occupancy Buildings. The entire mixed use and occupancy building shall be wired by the most restrictive code.

24. Article 300.11(A) (3) shall be added as follows:

300.11 Securing and Supporting. (A) Secured in Place. (3) Tie Wire. Tie wire shall not be allowed as a sole means of supporting or securing conduit or cable in above ground applications.

25. Article 300.13(C) shall be added as follows:

300.13 Mechanical and Electrical Continuity--Conductors. (C) Multiple Conductors. A device designed to be used for switching or as a receptacle may not be used to provide electrical continuity to any circuit conductor.

26. Article 300.13(D) shall be added as follows:

300.13 Mechanical and Electrical Continuity-Conductors. (D) Push-Type Clamping Devices. No push-type or clamp-type connections for splices or for terminating to devices will be allowed unless the wire connection is secured with a screw or crimping tool.

Exception 1: Disconnecting means for ballasts. Exception 2: Factory installed terminations in luminaires.

27. Article 310.106(B) shall be deleted and replaced as follows:

310.106 Conductors. (B) Conductor Material. Conductors in this article shall be aluminum, copper-clad aluminum, or copper unless otherwise specified.

Aluminum and copper-clad aluminum conductors shall be prohibited to be installed in sizes smaller than 4 AWG. Stranded aluminum conductors 4 AWG through 1000 kcmil marked as Type RHH, RHW, XHHW, THW, THHW, THWN, THHN, service-entrance Type SE Style U and SE Style R shall be made of an AA-8000 series electrical grade aluminum alloy conductor material.

28. Article 314.27 (A) (2) shall be amended as follows:

314.27 Outlet Boxes. (A) Boxes at Luminaire or Lampholder Outlets. (2) Ceiling Outlets. At every outlet used exclusively for lighting, the box shall be designed or installed so that a luminaire or lampholder may be attached. Boxes shall be required to support a luminaire weighing a minimum of 23 kg (50lb). A luminaire that weighs more than 23 kg (50lb) shall be supported independently of the outlet box, unless the outlet box is listed and marked on the interior of the box to indicate the maximum weight the box shall be permitted to support. In all habitable rooms with a ceiling fixture (other than recessed fixtures) in a location acceptable for a ceiling-suspended (paddle) fan in single-family, two-family or multi-family dwellings, a box rated for ceiling fan support shall be installed.

29. Article 334.10 including (1) through (5) shall be deleted and replaced as follows:

334.10 Uses Permitted. Type NM, Type NMC, and Type NMS cables shall be permitted to be used only in the following: R-2, R-3, and R-4 structures (as defined by the International Building Code) not exceeding three floors above grade.

30. Article 334.15(D) shall be added as follows:

334.15 Exposed Work. (D) All Unfinished Areas. Any exposed cable 7 feet (213.36cm) or closer to the floor must be protected with a durable building material or sleeved in an approved manner.

31. Article 334.40 (B) shall be deleted in part:

334.40 Boxes and Fittings. (B) Devices of Insulating Material. Delete "and for repair wiring in existing buildings where the cable is concealed."

32. (19) Article 410.36(B) shall be amended as follows:

410.36 Means of Support. (B) Suspended Ceilings. Framing members of suspended ceiling systems used to support luminaires shall be securely fastened to each other and shall be securely attached to the building structure at appropriate intervals. Luminaires smaller than 610 mm by 610 mm (24 inches by 24 inches) shall be securely fastened to the ceiling framing member by mechanical means such as bolts, screws, or rivets. Listed clips identified for

the use with the type of ceiling framing member(s) and luminaire(s) shall also be permitted. Fluorescent fixtures 610 mm by 610 mm (24 inches by 24 inches) or larger shall be supported independently of the ceiling grid by at least two wires on opposite corners of the fixture. The same size (or larger) wire used to support the ceiling system shall be used to support the fixture, but in no case shall the wire size be smaller than size No. 12 AWG steel.

(c) Section 80.15 of the National Electrical Code, 2014 Edition, is hereby revised as follows:

(A), (B), (C), (D) and (E) are deleted, and in lieu thereof the following language is inserted:

"The city council of the City of Rock Falls shall serve as the electrical board of the City of Rock Falls, hereinafter designated as the board. The board shall, acting in its capacity as the board, exercise the duties and have the authority as provided in section 80.15(F), (G), and (H)."

(d) Section 80.23 of the National Electrical Code, 2014 Edition is hereby deleted, and in lieu thereof, the following is adopted:

"Any person who violates any provisions of the National Electrical Code, 2014 Edition, or any person who fails to carry out an order made pursuant to the code or who violates any condition attached to a permit, approval or certificate, shall be guilty of a Class C violation, punishable as provided in section 1-41."


**SECTION 2.** The provisions and sections of this ordinance shall be deemed to be separable, and the invalidity of any portion of this ordinance shall not affect the validity of the remainder.


**SECTION 3.** All ordinances and parts of ordinances in conflict herewith are, to the extent of such conflict, hereby repealed.

**SECTION 4.** The City Clerk is hereby directed to publish this ordinance in pamphlet form.

**SECTION 5.** This ordinance shall be in full force and effect on May 15, 2018 following its passage, approval, and publication as required by law.

Passed by the Mayor and the City Council of the City of Rock Falls on the \_\_\_\_1st\_\_\_\_ day of \_\_\_\_May\_\_\_\_, 2018.

  
\_\_\_\_\_  
Mayor

  
\_\_\_\_\_  
ATTEST: City Clerk





**Aldermen Voting Aye**

Reitzel

Logan

Snow

Kuhlemier

Schuneman

Kleckler

Folsom

Sobottka

**Aldermen Voting Nay**

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