

**AN ORDINANCE TO ADOPT THE 2014 NATIONAL ELECTRICAL CODE BY
AMENDING THE RAPID CITY ELECTRICAL CODE
FOUND IN CHAPTER 15.16 OF THE RAPID CITY MUNICIPAL CODE**

WHEREAS, in Chapter 15.16 of the Rapid City Municipal Code, the City of Rapid City has adopted the 2011 edition of the National Electrical Code; and

WHEREAS, the State of South Dakota has adopted the 2014 edition of the National Electrical Code in S.D. Administrative Rules 20:44:14:01(11) to be effective July 1, 2014; and

WHEREAS, the City wishes to amend R.C.M.C. Chapter 15.16 to adopt the 2014 edition of the National Electrical Code; and

WHEREAS, pursuant to S.D.C.L. 36-16-35, municipalities may make and enforce more stringent requirements than those adopted by the South Dakota State Electrical Commission; and

WHEREAS, the City wishes to retain those more stringent requirements it had adopted with regard to the 2011 edition of the National Electrical Code and apply them to the 2014 edition of the National Electrical Code; and

WHEREAS, the Common Council desires to amend R.C.M.C. Chapter 15.16 to adopt the 2014 edition of the National Electrical Code and to incorporate the additional requirements that the City had applied to the previous edition of the National Electrical Code.

NOW THEREFORE, BE IT ORDAINED by the City of Rapid City, that Chapter 15.16 of the Rapid City Municipal Code is hereby amended to read in its entirety as follows:

CHAPTER 15.16: ELECTRICAL CODE

Section

15.16.010 Adoption.

15.16.020 Administration and Enforcement—Added.

~~15.16.030 NEC Article 200, Section 200.7(C)(2) Deleted.~~

~~15.16.040 NEC Article 210, Section 210.8(A) Amended.~~

~~15.16.050 NEC Article 210, Section 210.8(B) Repealed.~~

~~15.16.060 NEC Article 210, Section 210.12(B) Repealed.~~

15.16.070030 NEC Article 210, Section 210.52(C)(2)—Amended.

~~15.16.080 NEC Article 210, Section 210.52(H) Amended.~~

15.16.090040 NEC Article 230, Division VI, Section 230.70(A)(1)—Amended.

15.16.100050 NEC Article 320, Section 320.10—Amended.

15.16.110060 NEC Article 330, Section 330.1—Amended.

~~15.16.120 NEC Article 330, Section 330.40 Amended.~~

15.16.130070 NEC Article 334, Section 334.12— Amended.

15.16.140080 NEC Article 338—Amended.

- ~~15.16.150090~~ NEC Article 340, Section 340.12–Amended.
- ~~15.16.160100~~ NEC Article 352, Section 352.12–Amended.
- ~~15.16.170110~~ NEC Article 356, Section 356.12–Amended.
- ~~15.16.180120~~ NEC Article 358, Section 358.12–Amended.
- ~~15.16.190130~~ NEC Article 362, Section 362.12– Amended.
- ~~15.16.200140~~ NEC Article 378, Section 378.12–Amended.
- ~~15.16.210150~~ NEC Article 388, Section 388.12–Amended.
- ~~15.16.220~~ ~~NEC Article 410, Section 410.16– Amended.~~
- 15.16.160 Limits On Permanent Installation of Wiring Methods in Certain Structures.

15.16.010 Adoption.

There is adopted by the City of Rapid City, for the purpose of prescribing regulations for the practical safeguarding of persons and property from hazards arising from the use of electricity, that certain code known as the National Electrical Code (NEC), as recommended by the National Fire Protection Association (NFPA), specifically the ~~2011~~2014 edition thereof, also known as NFPA 70, and NFPA 73, Residential Electrical Maintenance Code for One and Two Family Dwellings, ~~2006~~ 2011 Edition, for the inspection of existing commercial and residential buildings and services; and these are adopted by reference as though fully set forth herein.

15.16.020 Administration and Enforcement–Added.

Administration and Enforcement, is added to read as follows:

Administration and Enforcement

80.1 Definitions.

“Apprentice Electrician” means a person learning the trade under the immediate supervision of a master electrician, journeyman electrician or class B electrician. An apprentice electrician who has more than forty-two consecutive months of experience may work on a residential project without immediate supervision for a period not to exceed eight hours, provided no such apprentice shall work more than eight hours without immediate supervision on any one project.

“Chief Electrical Inspector” means the person authorized under this chapter to make inspections of electrical installations and work, and to provide expertise for the Building Official in the area of electrical regulations. For the purposes of this ordinance, the designated Chief Electrical Inspector/Building Inspector ~~IV~~ shall be called the Chief Electrical Inspector.

“City of Rapid City or City” means City of Rapid City Building Inspection Department or the Building Official or his designee.

“Class B Electrician” means a person who has the necessary qualifications, which shall include training, experience and technical knowledge to contract, install, lay out, alter or repair installations of electrical wiring in residential dwellings and farmsteads.

“Electrical Contractor” means a person, firm or corporation that engages in the business of or contracts for installing, altering, removing, repairing or maintaining any kind of electrical wiring or equipment. The electrical contractor must hold a master electrician license or have a responsible managing employee who holds a master electrician license.

“Electrical wiring” means a system of conductors to carry electrical energy and includes conduit when included as part of the system.

“Electrical work” means installing, altering, repairing or removing electrical wiring.

“Homeowner wiring” means any electrical wiring done by a person, on ~~that person’s premises~~ real property that is owned by the person and, that a structure that is presently occupied by the person, or intended to be occupied when completed, providing the premises is a single-family dwelling or accessory building.

“Journeyman Electrician” means a person who has the necessary qualifications, which shall include training, experience and technical knowledge to wire in accordance with local ordinances or other adopted rules and regulations, who shall perform such work under the supervision of the designated master electrician.

“Master Electrician” means a person who has the necessary qualifications, which shall include training, experience and technical knowledge; to plan, lay out, supervise, install, add, alter, and repair installations of wiring or equipment for electrical light, heat or power in an approved manner, without supervision. Each electrical contractor shall designate a master electrician under whose supervision electrical work shall be done. The City of Rapid City shall be notified of such designation.

“RME” means responsible managing employee. He or she must be a bona fide employee of the firm. This means that the RME must be regularly employed by the firm and actively involved in the operation of the business at least 32 hours per week or 80 percent of the total business operating hours per week, whichever is less. The RME must hold a valid master electrician license, issued by the Rapid City Finance Department. The RME shall be responsible for any violations of this chapter.

“Supervision” of any kind thereof, means to look over, inspect, oversee, coordinate, direct and critically evaluate the work of a journeyman electrician or an apprentice electrician. The electrical inspector may request the presence of the supervising master electrician on the job site on twenty-four hours notice. Notice of such request is considered accomplished if left with the business, or with the master electrician as listed on the latest license application on record in the city finance office. In the case of immediate on-site supervision of an apprentice electrician, no journeyman electrician shall supervise more than two apprentice electricians at a time.

“Wiring permit” means electrical wiring permit.

80.2 Application.

A. In order to safeguard life and property from electrical hazards, every person engaged in doing electrical work shall comply with the terms of this chapter and with the provisions in Chapter 15.04.

B. When any new building structure or alteration of a building violates the requirements of this chapter for electrical wiring, the wiring shall be brought into compliance with this code unless an exception found in this code or in Chapter 15.04 applies.

C. This chapter shall apply to the installation of all electrical equipment within or on public and private buildings and premises, unless an exception found in this code or in Chapter 15.04 applies.

80.3 Chief Electrical Inspector/~~Building Inspector IV~~ and Electrical Inspector/ Building Inspector I, II, or III Qualifications.

A. Qualifications shall be as stated in the job descriptions on file at the City of Rapid City.

B. Duties.

1. The City Building Official shall designate the Chief Electrical Inspector to examine applicants for licenses under this chapter as to their knowledge of the rules and regulations for the installation of electrical wiring devices and equipment as provided by this chapter, the National Electrical Code, and Chapter 15.04. The Chief Electrical Inspector shall grant licenses as applied for those applicants who show proper qualifications and renewals of licenses to those applicants who maintain their qualifications and who are in compliance with this chapter and Chapter 15.04. ~~Applicants with outstanding corrections older than 180 days shall not be issued a license so as the corrections may be completed by the State Electrical Commission with monies available through the Commission undertaking fund per SDCL 36-16-20.~~ The Chief Electrical Inspector shall determine the general qualifications of such applicants for executing the class of work covered by this license applied for and their ability to properly carry on the work authorized under the license applied for in such manner as to regulations and ordinances governing such work.
2. Before a license is issued to an applicant, the Chief Electrical Inspector shall have evidence that the applicant is licensed by the State of South Dakota.

80.4 License.

A. Homeowner Permits.

1. A homeowner may install electrical wiring, ~~only~~ in a residence, accessory structure or mobile home ~~which only when he owns and occupies both the structure and the real property or will occupy as his home~~, subject to the following:

- a. All electrical wiring installed pursuant to this section shall be installed only by the owner, without compensation or pay to any other person for such labor or installation. Such installation shall comply with the requirements of this code. The homeowner shall file plans, demonstrate to the satisfaction of the City of Rapid City that he possesses sufficient knowledge of code requirements and the ability to make such installation properly, apply for and secure a permit, pay the required permit fees, and call for all inspections in the manner provided in this code. Homeowner permits shall be valid for a period of six months from the date of the last inspection.
 - b. No portion of the wiring installed under a permit issued pursuant to this section shall be energized until a final certificate of approval is issued by the City of Rapid City.
2. If a homeowner refuses to make corrections for life or safety violations, the inspector shall give the homeowner a correction notice that requires compliance with the wiring requirements within a specified number of days, but not more than 30. The inspector shall check the installation at the end of the time specified and either approve the corrections, final void the installation with notice of non-compliance to installer, or order the service disconnected under the authority of SDCL 36-16-31. The correction notice may be hand delivered, mailed, emailed, left at the structure, or delivered by phone or message.

B. License Required. No person shall engage in the business of electrical installation, or perform any electrical work, or offer or agree to perform any electrical work within the City without a current license issued in accordance with Chapter 15.04.

C. License Application.

1. Any person desiring to engage in the business of electrical installation, as an electrical contractor, Class B electrician, master electrician, or journeyman electrician shall make application for a license pursuant to Chapter 15.04.
2. The electrical contractor and class B electrical contractors shall complete and submit license applications and license renewals for all employees (other than apprentices) prior to their presence on any job site.

D. License Type and Qualifications.

1. Master Electrician. A person must have at least two years experience as a journeyman electrician and possess a current state electrical contractor's license or journeyman electrician's license before making an applicant for a master electrician's license. The Building Official will requires an examination of all applicants.

Exception: A person may put his master's license under inactive status, per state law; however, during that time, he may not be employed as an electrician within the City.

2. Journeyman Electrician. A person must have at least four years experience as an apprentice electrician under the employment and supervision of a licensed master electrician or class B electrician, and possess a current state journeyman electrician's license before making application for a City journeyman electrician's license. Training, by on-the-job employment or post secondary schooling, shall include, but not be limited to, familiarization and study of the National Electrical Code, commercial wiring, residential or farmstead working, electrical motor installation and controls, and blueprint reading.
3. Class B Electrician. A person must have at least two years experience as a journeymen wiring, installing and repairing electrical apparatus and equipment under the supervision of a master electrician or class B electrician before making application for a class B electrical license. A minimum of one year of that experience shall be in residential or farmstead wiring. The Building Official will requires an examination of all applicants.
4. Apprentice Electrician. An apprentice electrician's experience while employed in South Dakota starts on the date the application is received in the State Electrical Commission Office. Type of work and length of experience claimed outside of South Dakota shall be listed on a form provided by the Commission and shall be verified by the Commission. Such verification of experience may be accepted by the Building Official, including units of time allowed for schooling or other experience pursuant to South Dakota State Electrical Commission Rules and Regulations, Section 20:44:03:07.
5. Electrical Inspector to Electrical Contractor. Any qualified electrical inspector may obtain a City electrical contractor's license upon the approval of the Building Official.
6. Maintenance Electrician's License. Electrical maintenance to comply with South Dakota State Electrical Commission Rules and Regulations, Section 20:44:16:21 and 20:44:16:22.

E. Examination. If an examination is required prior to the issuance of a license under this chapter or Chapter 15.04, the City of Rapid City shall notify the applicant of the time, place and date thereof. If a journeyman has a current South Dakota State journeyman license, received by examination, no additional examination shall be required.

80.5 Electrical Work.

A. General Responsibilities. Electrical contractors, class B electricians, and individuals wiring their own residence or farmstead, shall secure all required licenses and wiring permits before commencing to do any electrical work not exempt by this title or Chapter 15.04.

B. Contractors to Make Personnel Reports. Each electrical contractor shall report to the chief electrical inspector all new personnel who are required to hold an electrical license or permit and any new employee who is not properly licensed for the type of work he is to do.

80.6 Permits.

A. Permit Required. Before commencing any electrical work within the purview of this chapter, the person intending to do such work must first make application to the City of Rapid City for a permit pursuant to Chapter 15.04; provided, however, no permit shall be required for the installation, alteration or removal of a single thirty-amp circuit or less, if such circuit is installed, altered or removed by an Electrical Contractor holding the appropriate license issued pursuant to this chapter. A permit is required for fees equal to or greater than \$10.00 or as otherwise provided by resolution of the Common Council.

80.7 Inspection.

A. When the installation or portion being inspected in accordance with Chapter 15.04 complies with this chapter, the City shall place a tag of acceptance at the service or in a conspicuous place. When the entire installation complies with this chapter, the City shall place a tag of final acceptance at the service equipment as a certificate of approval authorizing the use of the installation and connection to the supply of electricity by the agency supplying the electrical power.

B. If an existing electrical service is disconnected, either for alteration, repair, accident, or by an act of nature, this same service shall meet the minimum standards of NFPA 73, Residential Electrical Maintenance Code for One and Two Family Dwellings, prior to permanent reconnection. A-frame meter bases shall not be reconnected, other than for temporary use.

C. A minimum electrical permit is required for the inspection of existing services.

D. In cases where the service is reconnected prior to electrical inspection, the electrical contractor shall notify the City of Rapid City by 8:30 a.m. the following workday.

E. If an owner refuses to make corrections, the inspector shall give the owner a correction order that requires compliance within a specified number of days, but not more than 30. The inspector shall check the installation at the end of the time specified and either approve the corrections, final void the installation with notice of non-compliance to installer, or order a disconnect under the authority of SDCL 36-16-31. The correction notice may be hand delivered, mailed, emailed, left at the structure, or delivered by phone or message.

80.8 Electrical Signs.

Permanently installed electrical signs, outline lighting and field assembled skeletal neon systems shall be listed and labeled by a nationally recognized testing laboratory. Branch circuit wiring and primary electrical connection of the above shall be completed by an electrical contractor, licensed by the City of Rapid City Finance Department. The electrical contractor will

be responsible for obtaining the electrical permit and scheduling an inspection when access will be made available to the City of Rapid City. These installations shall not be energized prior to approval by the City of Rapid City.

80.9 Unauthorized Connections.

No person shall make connection from a supply of electricity to any new electrical installation which has been ordered disconnected, or any electrical installation where the service entrance or service equipment has been disconnected, moved or otherwise altered, until authorized by the City; except in an emergency to safeguard life or property, when such connection is made in a safe manner by a person qualified under this chapter, who shall be responsible for the work and shall notify the City, as soon as possible, and pay any required fee. Prior to authorization, services shall comply with NFPA 73.

80.10 Disconnection.

When an alteration or addition is made or a condition is apparent which is in violation of this chapter or this title, the City of Rapid City may require that portion which is in violation to be corrected and/or disconnected from the supply, until correction has been effected. Any wiring that becomes hazardous after installation shall be required to be disconnected upon order of the City of Rapid City.

80.11 Temporary Installations.

Temporary electrical installations must be made so as to safeguard persons and property and shall be inspected and approved by the City of Rapid City. Such temporary installation shall not be allowed for more than one hundred eighty days without re-inspection and approval by the City. Such re-inspection may be had upon request and payment of the fee set out in this section.

80.12 Liability.

This chapter shall not be construed to relieve from or lessen the responsibility or liability of any person owning, operating, controlling or installing any electrical equipment for damages to persons or to property caused by any defect therein or negligence in handling thereof, nor shall the City of Rapid City be held as assuming any such liability by reason of the inspections or re-inspection authorized in this chapter, or the certificates of approval issued as herein provided, or by reason of the approval or disapproval of any equipment authorized herein.

~~15.16.030 NEC Article 200, Section 200.7(C)(2) Deleted.~~

~~—NEC Article 200 Use and Identification of Grounded Conductors, Section 200.7 Use of Insulation of a White or Gray Color or with Three Continuous White Stripes, (C) Circuits of 50 Volts or More, paragraph (2) is hereby deleted.~~

~~15.16.040 NEC Article 210, Section 210.8(A) Amended.~~

~~—NEC Article 210 Branch Circuits, Section 210.8 Ground Fault Circuit Interrupter Protection for Personnel is hereby amended to read as follows:~~

~~—(A) Dwelling Units. All 125 volt, single phase, 15 and 20 ampere receptacles installed in the locations specified in (1) through (8) shall have ground fault circuit interrupter protection for personnel.~~

~~—(1) Bathrooms.~~

~~—(2) Garages, and also accessory buildings that have a floor located at or below grade level not intended as habitable rooms and limited to storage areas, work areas, and areas of similar use.~~

~~—(3) Outdoors.~~

~~—Exception to (3): Receptacles that are not readily accessible and are supplied by a dedicated branch circuit for electric snow melting or deicing equipment shall be permitted to be installed in accordance with 426.28.~~

~~—(4) Crawl spaces at or below grade level.~~

~~—(5) Unfinished basements for purposes of this section, unfinished basements are defined as portions or areas of the basement not intended as habitable rooms and limited to storage areas, work areas, and the like.~~

~~—Exception to (5): A receptacle supplying only a permanently installed fire alarm or burglar alarm system shall not be required to have ground fault circuit interrupter protection.~~

~~—FPN: See 760.41(B) and 760.121(B) for power supply requirements for fire alarm systems.~~

~~—Receptacles installed under the exception to 210.8(A)(5) shall not be considered as meeting the requirements of 210.52(G).~~

~~—(6) Kitchens where the receptacles are installed to serve the countertop surfaces.~~

~~—(7) Laundry, utility, and wet bar sinks where the receptacles are installed within 1.8 m (6 ft) of the outside edge of the sink.~~

~~—(8) Boathouses.~~

~~—Exception to (1) through (8): A non-GFCI protected, single type receptacle may be installed for sewer lift pumps, sump pumps, garage door openers, or life support equipment.~~

~~15.16.050 NEC Article 210, Section 210.8(B) Repealed.~~

~~—NEC Article 210, Section 210.8(B) is hereby repealed in its entirety.~~

~~15.16.060 NEC Article 210, Section 210.12(B) Repealed.~~

~~—NEC Article 210, Section 210.12(B) is hereby repealed in its entirety.~~

15.16.070030 NEC Article 210, Section 210.52(C)(2)—Amended.

NEC Article 210, Branch Circuits, Section 210.52 Dwelling Unit Receptacle Outlets, (C) Countertops, (2) Island Countertop Spaces is hereby amended ~~by adding an exception,~~ to read as follows:

(2) Island Countertop Spaces. At least one receptacle outlet shall be installed at each island countertop space with a long dimension of 600 mm (24 in.) or greater and a short dimension of 300 mm (12 in.) or greater.

Exception: If the owner does not wish to have receptacle installed below countertop, receptacle may be omitted; however a GFCI protected small appliance circuit shall be extended into island cabinet and terminated into a box equipped with blank cover. NM cable shall be protected within cabinet.

~~15.16.080 NEC Article 210, Section 210.52(H) Amended.~~

~~—NEC Article 210, Branch Circuits, Section 210.52 Dwelling Unit Receptacle Outlets, (H) Hallways, is hereby amended to read as follows:~~

~~—(H) Hallways. In dwelling units, hallways of 3.0 m (10 ft) or more in length shall have at least one receptacle outlet. Hallways and foyers 5 feet or greater in width shall have receptacle space per 210.52(A).~~

~~—As used in this subsection, the hall length shall be considered the length along the centerline of the hall without passing through a doorway.~~

15.16.090040 NEC Article 230, Division VI, Section 230.70(A)(1)—Amended.

NEC Article 230, Services, Division VI, Service Equipment – Disconnecting Means, Section 230.70(A) Location, (1) Readily Accessible Location, is hereby amended to read as follows:

(1) Readily Accessible Location. The service disconnecting means shall be within 5 feet of the building or structure. Service conductors within rigid metallic conduit shall not exceed 15 feet within building or structure. Other service raceways or cable shall be limited to 5 feet within building or structure.

15.16.100050 NEC Article 320, Section 320.10—Amended.

NEC Article 320, Armored Cable: Type AC, Section 320.10 Uses Permitted, is hereby amended to read as follows:

320.10 Uses Permitted. Where not subject to physical damage, Type AC cable shall be permitted as follows: Hospital grade within patient care areas, for the purpose of redundant grounding.

~~15.16.110060~~ NEC Article 330, Section 330.1–Amended.

NEC Article 330 Metal-Clad Cable: Type MC, Section 330.1 Scope, is hereby amended to read as follows:

330.1 Scope. This article covers the use, installation, and construction specifications of metal-clad cable, Type MC. All MC cable must include a full-size equipment ground conductor.

~~15.16.120~~ NEC Article 330, Section 330.40–Amended.

~~—NEC Article 330 Metal-Clad Cable: Type MC, Section 330.40 Boxes and Fittings, is hereby amended to read as follows:~~

~~—**330.40 Boxes and Fittings.** Fittings used for connecting Type MC cable to boxes, cabinets, or other equipment shall be listed and identified for such use, and be equipped with an insulated throat.~~

~~15.16.130070~~ NEC Article 334, Section 334.12– Amended.

NEC Article 334 Nonmetallic-Sheathed Cable: Types NM, NMC, and NMS, Section 334.12 Uses Not Permitted, (1) Types NM, NMC, and NMS is hereby amended ~~by adding condition (11)~~, to read as follows:

334.12 Uses Not Permitted.

(A) Types NM, NMC, and NMS. Types NM, NMC, and NMS cables shall not be used as follows:

- (1) In any dwelling or structure not specifically permitted in 334.10(1), (2), (3), and (5).
- (12) Exposed As open runs in dropped or suspended ceilings in other than one- and two-family and multifamily dwellings.
- (23) As service-entrance cable.
- (34) In commercial garages having hazardous (classified) locations as defined in 511.3.
- (45) In theaters and similar locations, except where permitted in 518.4(B).
- (56) In motion picture studios.

(67) In storage battery rooms.

(78) In hoistways or on elevators or escalators.

(89) Embedded in poured cement, concrete, or aggregate.

(910) In hazardous (classified) locations, except where specifically permitted by other articles in this Code ~~the following:~~

—— a. ~~501.4(b), Exception~~

—— b. ~~502.4(b), Exception No. 1~~

—— c. ~~504.20~~

(4011) Types NM and NMS. Types NM and NMS cable shall not be used as follows:

a. Where exposed to corrosive fumes or vapors.

b. Where embedded in masonry, concrete, adobe, fill, or plaster.

c. In a shallow chase in masonry, concrete, or adobe and covered with plaster, adobe, or similar finish.

d. Where exposed or subject to excessive moisture or dampness.

(4112) In hotels, motels, commercial, mercantile, industrial, institutional, and public buildings.

15.16.140080 NEC Article 338—Amended.

NEC Article 338 Service-Entrance Cable: Type SE and USE is hereby amended by adding Section 338.15 Uses Not Permitted, to read as follows:

338.15 Uses Not Permitted.

(A) **Service-Entrance Cable.** Types SE and USE shall not be used as follows:

(1) In hotels, motel, commercial, mercantile, industrial, institutional, and public buildings.

15.16.150090 NEC Article 340, Section 340.12—Amended.

NEC Article 340, Underground Feeder and Branch-Circuit Cable: Type UF, Section 340.12 Uses Not Permitted, is hereby amended by ~~adding condition (12),~~ to read as follows:

340.12 Uses Not Permitted. Type UF cable shall not be used as follows:

- (1) As service-entrance cable.
- (2) In Commercial garages.
- (3) In theaters and similar locations.
- (4) In motion picture studios.
- (5) In storage battery rooms.
- (6) In hoistways, or on elevators or escalators.
- (7) In any hazardous (classified) location except as otherwise permitted in the Code.
- (8) Embedded in poured cement, concrete, or aggregate, except where embedded in plaster as non-heating leads where permitted in 424.43.
- (9) Where exposed to direct rays of the sun, unless identified as sunlight resistant.
- (10) Where subject to physical damage.
- (11) As overhead cable, except where installed as messenger-supported wiring in accordance with Article 396.
- (12) In hotels, motels, commercial, mercantile, industrial, institutional, and public buildings.

15.16.160100 NEC Article 352, Section 352.12–Amended.

NEC Article 352, Rigid Nonmetallic Polyvinyl Chloride Conduit: Type ~~RNC~~RNCPVC, Section 352.12 Uses Not Permitted, is hereby amended by adding paragraph (G), to read as follows:

352.12 Uses Not Permitted. RNCPVC conduit shall not be used ~~in the following locations~~ under the conditions specified below:

(A) Hazardous (Classified) Locations.

- (1) In hazardous (classified) locations, except as permitted by other articles of this Code in 503.3(A), 504.20, 514.8, and 515.8.
- (2) In Class I, Division 2 locations, except as permitted in 501.4(B), Exception.

(B) Support of Luminaires (Fixtures). For the support of luminaires (fixtures) or other equipment not described in 352.10(H).

(C) Physical Damage. Where subject to physical damage unless identified for such use.

(D) Ambient Temperatures. Where subject to ambient temperatures in excess of 50°C (122°F) unless listed otherwise.

(E) Insulation Temperature Limitations. For conductors whose insulation temperature limitations would exceed those for which the conduit is listed.

(F) Theaters and Similar Locations. In theaters and similar locations, except as provided in Articles 518.4 and 520.5.

(G) Hotels, Motels, Commercial, Mercantile, Industrial, Institutional, and Public Buildings. ~~RNCPVC~~ shall not be used in hotels, motels, commercial, mercantile, industrial, institutional, and public buildings.

15.16.170110 NEC Article 356, Section 356.12–Amended.

NEC Article 356, Liquidtight Flexible Nonmetallic Conduit: Type LFNC, Section 356.12 Uses Not Permitted, is hereby amended ~~by adding condition (5)~~, to read as follows:

356.12 Uses Not Permitted. LFNC shall not be used as follows:

- (1) Where subject to physical damage.
- (2) Where any combination of ambient and conductor temperatures is in excess of that for which the LFNC is approved.
- (3) In lengths longer than 1.8 m (6 ft), except as permitted by 356.100(5) or where a longer length is approved as essential for a required degree of flexibility.
- (4) ~~Where voltage of the contained conductors is in excess of 600 volts, nominal.~~ In any hazardous (classified) location, except as permitted by other articles in this Code.
- (5) In hotels, motels, commercial, mercantile, industrial, institutional, and public buildings.

15.16.180120 NEC Article 358, Section 358.12–Amended.

NEC Article 358, Electrical Metallic Tubing: Type EMT, Section 358.12 Uses Not Permitted, is hereby amended ~~by adding condition (7)~~, to read as follows:

358.12 Uses Not Permitted. EMT shall not be used under the following conditions:

- (1) Where, during installation or afterward, it will be subject to severe physical damage.
- (2) Where protected from corrosion solely by enamel.

- (3) In cinder concrete or cinder fill where subject to permanent moisture unless protected on all sides by a layer of non-cinder concrete at least 50 mm (2 in.) thick or unless the tubing is at least 450 mm (18 in.) under the fill.
- (4) In any hazardous (classified) location except as permitted by other articles in this Code by 502.4, 503.3, and 504.20.
- (5) For the support of luminaries (fixtures) or other equipment except conduit bodies no larger than the largest trade size of the tubing.
- (6) Where practicable, dissimilar metals in contact anywhere in the system shall be avoided to eliminate the possibility of galvanic action.
- (7) In concrete below grade or in concrete slab or masonry in direct contact with the earth, nor embedded in earth or fill.

Exception: Aluminum fittings and enclosures shall be permitted to be used with steel EMT where not subject to severe corrosive influences.

15.16.190130 NEC Article 362, Section 362.12– Amended.

NEC Article 362, Electrical Nonmetallic Tubing: Type ENT, Section 362.12 Uses Not Permitted, is hereby amended by ~~adding condition (11)~~, to read as follows:

362.12 Uses Not Permitted. ENT shall not be used in the following:

- (1) In hazardous (classified) locations, except as permitted by other articles in this Code 504.20 and 505.15(A)(1).
- (2) For the support of luminaries (fixtures) and other equipment.
- (3) Where subject to ambient temperatures in excess of 50°C (122°F) unless listed otherwise.
- ~~(4) For conductors whose insulation temperature limitations would exceed those for which the tubing is listed.~~
- ~~(5)~~ For direct earth burial.
- ~~(6)~~ Where the voltage is over 600 volts.
- ~~(7)~~ In exposed locations, except as permitted by 362.10(1), 367.10(5), and 362.10(7).
- ~~(8)~~ In theaters and similar locations, except as provided in ~~Articles 518.4 and 520.5.~~
- ~~(9)~~ Where exposed to the direct rays of the sun, unless identified as sunlight resistant.

(409) Where subject to physical damage.

(410) In hotels, motels, commercial, mercantile, industrial, institutional, and public buildings

15.16.200140 NEC Article 378, Section 378.12–Amended.

NEC Article 378, Nonmetallic Wireways, Section 378.12 Uses Not Permitted, is hereby amended by adding condition (6), to read as follows:

378.12 Uses Not Permitted. Nonmetallic wireways shall not be used in the following:

(1) Where subject to physical damage.

(2) In any hazardous (classified) location, except as permitted by other articles in this Code in 504.20.

(3) Where exposed to sunlight unless listed and marked as suitable for the purpose.

(4) Where subject to ambient temperatures other than those for which nonmetallic wireway is listed.

(5) For conductors whose insulation temperature limitations would exceed those for which the nonmetallic wireway is listed.

(6) In hotels, motels, commercial, mercantile, industrial, institutional, and public buildings.

15.16.210150 NEC Article 388, Section 388.12–Amended.

NEC Article 388 Surface Nonmetallic Raceways, Section 388.12 Uses Not Permitted, is hereby amended by adding condition (8), to read as follows:

388.12 Uses Not Permitted. Surface nonmetallic raceways shall not be used in the following:

(1) Where concealed, except as permitted in 388.10(2).

(2) Where subject to severe physical damage.

(3) Where the voltage is 300 volts or more between conductors, unless listed for higher voltage.

(4) In hoistways.

- (5) In any hazardous (classified) location except Class I, Division 2 locations as permitted by other articles in this Code ~~in 501.4(B)(3)~~.
- (6) Where subject to ambient temperatures exceeding those for which the nonmetallic raceway is listed.
- (7) For conductors whose insulation temperature limitations would exceed those for which the nonmetallic raceway is listed.
- (8) In hotels, motels, commercial, mercantile, industrial, institutional, and public buildings.

~~15.16.220 NEC Article 410, Section 410.16 Amended.~~

~~— NEC Article 410 Luminaires (Lighting Fixtures), Lampholders, and Lamps, Section 410.16 Luminaires (Fixtures) in Clothes Closet, Pantries and Storage Rooms, is hereby amended to read as follows:~~

~~— **410.16 Luminaires (Fixtures) in Clothes Closets, Pantries, and Storage Rooms.** All references in this section shall apply to clothes closets, pantries, and storage rooms.~~

15.16.160 Limits On Permanent Installation of Wiring Methods in Certain Structures.

A. The terms of this provision apply only to the following building types and conditions:

- (1) One and two family dwellings and their accessory structures;
- (2) Building Type R2 classification with a construction type of III, IV, V and their accessory structures; or
- (3) An area of a structure with an environment that is not suitable for a standard metallic wiring method.

B. The following wiring methods may be installed in a permanent manner in the structures in Section A above:

- (1) Article 334: Nonmetallic-Sheathed Cable: Types NM, NMC, and NMS;
- (2) Article 338: Service-Entrance Cable: Types SE and USE;
- (3) Article 340: Underground Feeder and Branch-Circuit Cable: Type UF;
- (4) Article 352: Rigid Polyvinyl Chloride Conduit: Type PVC;
- (5) Article 356: Liquidtight Flexible Nonmetallic Conduit: Type LFNC;
- (6) Article 362: Electrical Nonmetallic Tubing: Type ENT;

- (7) Article 378: Nonmetallic Wireways;
- (8) Article 382: Nonmetallic Extensions; and
- (9) Article 388: Surface Nonmetallic Raceways.

C. If using the wiring method found in Article 334 Nonmetallic-Sheathed Cable: Types NM, NMC, and NMS in Building Type R2 classification with a construction type of III, IV, V and their accessory structures, the cables shall be concealed within walls, floors, or ceiling that provide a thermal barrier of material with at least a 15-minute thermal finish rating as identified in listing of fire-rated assemblies.

CITY OF RAPID CITY

Mayor

ATTEST

Finance Officer

(seal)

First Reading:
Second Reading:
Published:
Effective: