



City of Grand Island

Tuesday, October 28, 2014

Council Session

Item F-2

#9508 – Consideration of Amending Chapter 15 of the Grand Island City Code Regarding the 2014 National Electric Codes

Staff Contact: Craig Lewis

Council Agenda Memo

From: Craig A. Lewis, Building Department Director

Meeting: October 28, 2014

Subject: City Code Amendments to Chapter 15, Electricity
Adoptions of the 2014 National Electrical Code

Item #'s: F-2

Presenter(s): Craig Lewis, Building Department Director

Background

This request is for City Council approval to modify the City Code by adopting the 2014 edition of the National Electric Code. The City has for several decades adopted and enforced electrical codes to safeguard persons and property from the hazards arising from the use of electricity. The 2014 National Electric Code (NEC) is the current edition of the national standard for the installation of electrical wiring systems. Typically the State of Nebraska adopts the current edition of the NEC and requires local inspection programs to adopt and enforce the current regulations as part of the State approval of local programs.

Discussion

The proposed amendment to chapter 15 of the Grand Island City Code will adopt the current edition of the National Electric Code. The City's electrical board has reviewed the 2014 NEC and recommends approval with the local amendments as outlined in the proposed ordinance. The local amendments basically provide some restrictions and clarifications in the installation of required wiring.

Local amendments:

1. Removes requirement for feeders in apartment building to be in conduit.
2. References the International Residential Code for the installation of smoke and carbon monoxide alarms.
3. Refers to Mechanical code for bonding requirements of CSST gas piping.
4. Prohibits the use of non-grounded receptacles for new or replacement devices after December 31, 2014.

Alternatives

It appears that the Council has the following alternatives concerning the issue at hand. The Council may:

1. Approve the ordinance.
2. Disapprove or /Deny the adoption of the ordinance.
3. Modify the ordinance to meet the wishes of the Council
4. Table the issue

Recommendation

The City Electrical Board and City Staff recommend that the City Council approve Ordinance No. 9508, adopting the 2014 NEC, with the local amendments identified and begin enforcement on December 30, 2014.

Sample Motion

Move to approve Ordinance No. 9508.

ORDINANCE NO. 9508

An ordinance to amend Chapter 15 of the Grand Island City Code; to amend Sections 15-2; 15-3; 15-8; and 15-11 pertaining to electricity; to repeal Sections 15-2; 15-3; 15-8; and 15-11 as now existing, and any ordinance or parts of ordinances in conflict herewith; and to provide for publication and the effective date of this ordinance.

BE IT ORDAINED BY THE MAYOR AND COUNCIL OF THE CITY OF GRAND ISLAND, NEBRASKA:

SECTION 1. Sections 15-2; 15-3; 15-8; and 15-11 of the Grand Island City Code are hereby amended to read as follows:

§15-2. National Electrical Code Adopted

(A) There is hereby adopted by the City of Grand Island for the purpose of safeguarding persons and buildings from hazards arising from the use of electricity for light, heat, power, radio, signaling, and other purposes, that certain code known as the National Electrical Code, 201~~4~~¹⁴ Edition, recommended by the National Fire Protection Association, except as modified by this section.

(B) The National Electrical Code adopted by subsection (A) above is modified by deleting Article 362, Article 210-52C Subsection 2 and 3, which are not adopted and shall have no force or effect. Articles 320, 330, 334, 348, and 352 are amended by §15-3 of the Grand Island City Code.

(C) One copy of the National Electrical Code, 201~~4~~¹⁴ Edition, shall be on file in the city clerk's office for public use and inspection as provided by law.

Amended by Ordinance No. 8990, effective 8-10-2005

Amended by Ordinance No. 9194, effective 11-1-2008

Amended by Ordinance No. 9366, effective 03-30-2012

§15-3. Amendments to National Electrical Code, 201~~4~~¹⁴ Edition

The following sections are adopted as amendments to the same numbered sections of the National Electrical Code, 201~~4~~¹⁴ Edition:

Article 320 – Armored cable (type AC)

320.10. Uses permitted. Armored cable may be used for indoor branch circuits when installed with a grounding conductor in the cable with the branch circuit conductors and sized to the overcurrent protective device. Anti short bushings shall be used.

320.12. Uses not permitted. Armored cable shall not be used in hazardous locations, where buried or in direct contact with the earth, concrete, cinder fill or where exposed to chemicals or acids.

Article 330 - Metal-Clad Cable (Type MC)

330.10. Uses Permitted. Metal-clad cable may be used for indoor branch circuit use only when installed with a grounding conductor in the cable with the circuit conductors and sized to the overcurrent protective device. Anti short bushing shall be used.

330.12. Uses Not Permitted. Metal-clad cable shall not be used in hazardous locations where subject to physical damage, buried in direct contact with the earth, concrete, cinder fill, or where exposed to chemicals or acids.

Article 334 – Nonmetallic-Sheathed Cable (Types NM, NMC, and NMS)

334.12. Uses Not Permitted. In any multifamily dwelling or structure exceeding three floors above grade. For the purpose of this article, the floor of a building shall be that floor that has fifty percent (50%) or more of the exterior wall surface area level with or above finished grade. One additional level that is the first level and not designed for human habitation and only for vehicle parking, storage or similar use shall be permitted.

Approved as to Form	☐ _____
October 22, 2014	☐ City Attorney

ORDINANCE NO. 9508 (Cont.)

Article 352 - Rigid Nonmetallic Conduit (PVC)

352.10. Uses Permitted

- (A) Where encased in concrete
- (B) Underground installations
- (C) For service entrances on the outside of buildings where not subject to physical damage
- (D) For raceways to feed subpanels
- (E) In wet locations where used with proper connections and fittings
- (F) For physical protection of ground wires

352.12. Uses Not Permitted

- (A) In alleys or utility easements, the first section of conduit out of the ground
- (B) For branch circuits

Article 348 - Flexible Metal Conduit

348.10. Uses Permitted.

Flexible metal conduit may be used for fish work in old buildings or other places where rigid conduit is impractical to install. Special permission shall be obtained from the electrical inspector before it is used in lengths longer than six feet.

Amended by Ordinance No. 8990, effective 8-10-2005

Amended by Ordinance No. 9194, effective 11-1-2008

Amended by Ordinance No. 9366, effective 03-30-2012

§15-8. Wiring In Single and Multiple-Family Units

(A) Multiple family units may have branch circuits in individual units wired with nonmetallic sheathed cable if construction complies with Chapter 8 of the Grand Island City Code.

(B) Existing residential buildings containing more than six family units not having a two-hour fire wall rating separation as provided in Chapter 8 of the Grand Island City Code shall be wired with Electrical Metallic Tubing (EMT type) in compliance with the provisions of this chapter.

(C) All wiring in basements below the floor joist on exterior walls shall be wired with metallic tubing (EMT type). All electrical wiring in unfinished basements below the floor joist level on interior and exterior walls shall be guarded. ~~All feeders from the main panel to the individual apartments in multiple family units shall be in conduit.~~ The electrical panels shall be the circuit breaker type.

(D) Smoke alarms shall be installed to comply with Section R314 of the 2012 International Residential Code.

(E) Carbon monoxide alarms shall be installed to comply with Section R315 of the 2012 International Residential Code.

Amended by Ordinance No. 9366, effective 03-30-2012

§15-11. Requirements for Electrical Installations

(A) Aluminum Conductors – aluminum conductors may be used for service entrance and feeders only.

(B) Equipment grounding conductors – an equipment grounding conductor will be required in all conduit systems except for rigid metal conduit systems with threaded hubs, couplings or fittings.

(C) CSST gas piping shall be bonded to comply with section 1311.14.2 of the 2012 Uniform Mechanical Code.

(D) Non-grounding receptacles shall not be installed, either in new work or for replacement, after December 31, 2014.

Amended by Ordinance No. 9194, effective 11-1-2008

SECTION 2. Sections 15-2; 15-3; 15-8; and 15-11 as existing prior to this amendment, and any ordinances or parts of ordinances in conflict herewith be, and hereby are, repealed.

ORDINANCE NO. 9508 (Cont.)

SECTION 3. The validity of any section, subsection, sentence, clause, or phrase of this ordinance shall not affect the validity or enforceability of any other section, subsection, sentence, clause, or phrase thereof.

SECTION 4. That this ordinance shall be in force and take effect from and after its passage and publication, on December 31, 2014.

Enacted: October 28, 2014.

Jay Vavricek, Mayor

Attest:

RaNae Edwards, City Clerk