



City of Chicago



O2017-7061

Office of the City Clerk

Document Tracking Sheet

Meeting Date:	10/11/2017
Sponsor(s):	Emanuel (Mayor)
Type:	Ordinance
Title:	Amendment of Municipal Code Titles 2, 13, 14E and 18 regarding electrical code
Committee(s) Assignment:	Committee on Zoning, Landmarks and Building Standards



OFFICE OF THE MAYOR
CITY OF CHICAGO

RAHM EMANUEL
MAYOR

October 11, 2017

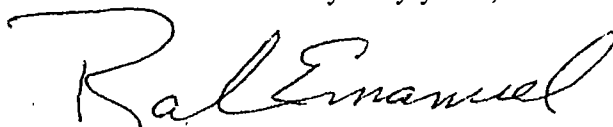
TO THE HONORABLE, THE CITY COUNCIL
OF THE CITY OF CHICAGO

Ladies and Gentlemen:

At the request of the Commissioner of Buildings, I transmit herewith an ordinance amending provisions of the Electrical Code.

Your favorable consideration of this ordinance will be appreciated.

Very truly yours,

A handwritten signature in cursive script that reads "Rahm Emanuel".

Mayor

ORDINANCE

BE IT ORDAINED BY THE CITY COUNCIL OF THE CITY OF CHICAGO:

SECTION 1. Section 2-120-050 of the Municipal Code of Chicago is hereby amended by deleting the language stricken through and by inserting the language underscored, as follows:

2-120-050 Establishment – Composition.

There is hereby established a commission which shall be known as the electrical commission of the City of Chicago, and which shall consist of ~~six~~ seven members. The building commissioner ~~or the chief electrical inspector of the electrical inspection section of the bureau of field inspections of the department of buildings~~ shall be a member, and the ex officio chairman of such commission; the chief electrical inspector of the department of buildings and the fire commissioner or the fire commissioner's designee shall also be ex officio members; of the other ~~five~~ four members, one shall be a registered professional engineer, one an electrical contractor, one a journeyman electrician, ~~one a representative of an inspection bureau maintained by the fire underwriters, or director of fire prevention,~~ and one a representative of an electrical utility supply company, all of whom shall be appointed by the mayor and confirmed by the city council.

~~The building commissioner or the chief electrical inspector shall serve on such commission without additional compensation therefor. The other members shall receive such compensation as may be fixed by the city council.~~

SECTION 2. Section 2-120-060 of the Municipal Code of Chicago is hereby amended by deleting the language stricken through and by inserting the language underscored, as follows:

2-120-060 Powers and duties.

It shall be the duty of the said electrical commission to: (1) formulate and recommend safe and practical standards and specifications for the installation, alteration and use of electrical equipment designed to meet the necessities and conditions that prevail in the City of Chicago, ~~to (2)~~ recommend reasonable rules and regulations governing the issuance of electrical permits by the electrical inspection section of the bureau of field inspections city, and ~~to (3)~~ recommend reasonable fees to be paid for electrical inspections made by the electrical inspection section of the bureau of field inspections city. The standards and specifications, and rules, ~~and regulations~~ governing the issuance of such recommended permits and fees ~~so recommended,~~ shall become effective upon the passage by the city council of an ordinance adopting the same ~~by the city council~~. All such fees shall be paid to the city comptroller. The commission may also hold hearings contesting the suspension, revocation or reinstatement of a license, certificate or registration issued pursuant to ~~Chapter 13-12~~ Chapters 4-290 and 4-292 of this Code in the same manner as the procedure utilized by boards of examiners under Section 2-116-280 of this Code for license suspension or revocation and under Section 2-116-290 of this Code for license reinstatement.

SECTION 3. Section 13-12-370 of the Municipal Code of Chicago is hereby amended by deleting the language stricken through and by inserting the language underscored, as follows:

13-12-370 Permits – Issuance conditions.

The building commissioner shall issue permits for the installation and alteration of electrical equipment in all cases where an application for such permit has been made in accordance with the rules and regulations applicable thereto. Provided, however, that no permit shall be issued for installing or altering by contract, electrical equipment, unless: (1) the person applying for such permit is registered as an electrical contractor as required by Section 13-12-230 Chapter 4-290 of this Code; and (2) the permit fee set forth in Section 13-32-310 is paid before such permit is issued.

SECTION 4. Section 13-12-430 of the Municipal Code of Chicago is hereby amended by deleting the language stricken through and by inserting the language underscored, as follows:

13-12-430 Suspension of permit privileges.

The commissioner of buildings may suspend the ability of any person licensed, registered or certified, or required to be licensed, registered or certified, under this Chapter Chapters 4-290 or 4-292 of this Code to submit new applications or complete pending applications for a building permit or other permit issued by the department of buildings for cause as set forth in Section 13-8-130 of this Code.

SECTION 5. Section 13-12-480 of the Municipal Code of Chicago is hereby amended by deleting the language stricken through and by inserting the language underscored, as follows:

13-12-480 Revocation of permit or certificate of inspection; and suspension, revocation or reinstatement of a certificate of registration.

Any person violating any of Sections 13-12-420 through 13-12-470, inclusive, shall be subject to the penalties provided for in Section 13-12-040, and in addition thereto, the permit, certificate of inspection, or any printed form issued to a registered electrical contractor shall be revoked by the building commissioner. Notice of revocation shall be in writing to the person violating any of those sections. A certificate of registration issued pursuant to Sections 13-12-280 through 13-12-530 Chapters 4-290 or 4-292 of this Code may be suspended or revoked by the commissioner as provided in Section 13-8-140 of this Code.

SECTION 6. Section 13-12-490 of the Municipal Code of Chicago is hereby amended by deleting the language stricken through and by inserting the language underscored, as follows:

13-12-490 When issued.

Where, due to the nature of ~~their a~~ a business, it is necessary for the business to make frequent alterations and changes to ~~their its~~ its electrical equipment, a monthly permit may be obtained each ~~and every~~ month of the year to cover all of the electrical work installed, altered or repaired during the previous month by persons who have a valid maintenance supervising electrician license and are appointed as per ~~Section 13-12-280~~ Chapter 4-292 of this article Code.

SECTION 7. Section 13-12-510 of the Municipal Code of Chicago is hereby amended by deleting the language stricken through and by inserting the language underscored, as follows:

13-12-510 Appointment of supervising electrician.

Before any monthly permit shall be issued to any person, ~~he~~ such person shall appoint or employ a licensed supervising electrician in conformity with ~~the provisions of Article IV~~ Chapter 4-292 of this ~~chapter~~ Code.

SECTION 8. Section 13-12-520 of the Municipal Code of Chicago is hereby amended by deleting the language stricken through and by inserting the language underscored, as follows:

13-12-520 Certification of supervising electrician.

When the person employed or appointed to perform the work or supervise the installation, alteration, maintenance and repair of electrical wires and apparatus installed or altered under the authority of monthly permits, ~~shall have~~ has complied with ~~Article IV~~ Chapter 4-292 of this Code, the building commissioner shall certify ~~him~~ such person as a supervising electrician by placing his such supervising electrician's name on the affidavit form filed by ~~the~~ person desiring to secure permits to perform electrical work. Such supervising electrician shall comply with ~~Sections 13-12-320 and 13-12-330~~ Chapter 4-292 of this Code.

SECTION 9. Section 13-12-600 of the Municipal Code of Chicago is hereby amended by deleting the language stricken through and by inserting the language underscored, as follows:

13-12-600 Appointment of supervising electrician.

No permit for the installation, alteration, repair, and maintenance of electrical wires and apparatus, shall be issued to any person under the provisions of ~~Part G of this article~~ Article II dealing with maintenance permits, until such person ~~shall have~~ has appointed or employed a licensed supervising electrician as provided for in ~~Article IV~~ Chapter 4-292 of this Code.

SECTION 10. Section 13-12-610 of the Municipal Code of Chicago is hereby amended by deleting the language stricken through and by inserting the language underscored, as follows:

13-12-610 Certification of supervising electrician.

When the person employed or appointed to supervise the installation, alteration, repair, and maintenance of electrical wires and apparatus installed, altered, or maintained under the authority of permits issued in conformity with ~~this part~~ Part G of this article Article II dealing with maintenance permits, ~~shall have~~ has complied with ~~Article IV Chapter 4-292 of this Code~~, the building commissioner shall certify ~~him~~ such person as a supervising electrician by placing his such supervising electrician's name on the affidavit form filed by the person desiring to secure permits to perform electrical work. Such supervising electrician shall comply with ~~Sections 13-12-320 and 13-12-330~~ Chapter 4-292 of this chapter Code.

It shall be the responsibility of such supervising electricians electrician to apply for an electrical permit each ~~and every~~ calendar month to cover all electrical installations, alterations, maintenance and repair work done on the premises under his such supervising electrician's jurisdiction during that month. ~~Where~~ If such permits are not obtained on a regular basis, the building department shall consider ~~that~~ the registrant is inactive and his such registrant's name shall be removed from the registration file.

SECTION 11. Section 14E-2-210 of the Municipal Code of Chicago is hereby amended by deleting the language stricken through and by inserting the language underscored, as follows:

14E-2-210 Branch Circuits

(Omitted text is unaffected by this ordinance)

6. Revise subsection 210.19(A) to read, with no changes to subsections (A)(2) to (A)(4):

"Branch Circuits Not More Than 600 Volts.

Informational Note No. 1: See 310.15 for ampacity ratings of conductors.

Informational Note No. 2: See Part II of Article 430 for minimum rating of motor branch-circuit conductors.

Informational Note No. 3: See 310.15(A)(3) for temperature limitation of conductors.

Informational Note No. 4: See 215.2(A)(1) for voltage drop requirements on feeder conductors.

(1) General. Branch-circuit conductors shall have an ampacity not less than the maximum load to be served. Conductors shall be sized to carry not less than the larger of 210.19(A)(1)(a) or (b).

(a) Where a branch circuit supplies continuous loads or any combination of continuous and noncontinuous loads, the minimum branch-circuit conductor size shall have an allowable ampacity not less than the noncontinuous load plus 125 percent of the continuous load.

(b) The minimum branch-circuit conductor size shall have an allowable ampacity not less than the maximum load to be served after the application of any adjustment or correction factors.

Exception: If the assembly, including the overcurrent devices protecting the branch circuit(s), is listed for operation at 100 percent of its rating, the allowable ampacity of the branch-circuit conductors shall be permitted to be not less than the sum of the continuous load plus the noncontinuous load.

Conductors for branch circuits, as defined in Article 100, shall be sized to prevent a voltage drop not to exceed 3 percent at the farthest outlet of power, heating, and lighting loads, or combinations of such loads, and so that the maximum total voltage drop on both feeders and branch circuits to the farthest outlet does not exceed 5 percent."

7. Revise subsection 210.19(B) to read:

"Branch Circuits Over 600 Volts. The ampacity of conductors shall be in accordance with 310.15 and 310.60 as applicable. Branch-circuit conductors over 600 volts shall be sized in accordance with 210.19(B)(1).

(1) General. The ampacity of branch-circuit conductors shall not be less than 125 percent of the designed potential load of utilization equipment that will be operated simultaneously."

8. Revise section 210.50 by deleting the informational note.

79. Insert new subsections 210.70(A)(2)(5) and (A)(2)(6) to read:

(Omitted text is unaffected by this ordinance)

SECTION 12. Section 14E-2-215 of the Municipal Code of Chicago is hereby amended by deleting the language stricken through and by inserting the language underscored, as follows:

14E-2-215 Feeders

The provisions of Article 215 of NFPA 70 are adopted by reference with the following modifications:

1. Revise subsection 215.2(A)(1)(b) to read:

"(b) The minimum feeder conductor size shall have an allowable ampacity not less than the maximum load to be served after the application of any adjustment or correction factors.

Informational Note No. 1: See Examples D1 through D11 in Informative Annex D.

Informational Note No. 2: See 210.19(A) for voltage drop requirements for branch circuits.

Conductors for feeders, as defined in Article 100, shall be sized to prevent a voltage drop not to exceed 3 percent at the farthest outlet of power, heating, and lighting loads,

or combinations of such loads, and so that the maximum total voltage drop on both feeders and branch circuits to the farthest outlet does not exceed 5 percent."

2. Revise subsection 215.5 to read:

(Omitted text is unaffected by this ordinance)

23. Revise subsection 215.12(C)(1) to read:

(Omitted text is unaffected by this ordinance)

SECTION 13. Section 14E-2-240 of the Municipal Code of Chicago is hereby amended by deleting the language stricken through and by inserting the language underscored, as follows:

14E-2-240 Overcurrent Protection

The provisions of Article 240 of NFPA 70 are adopted by reference with the following modifications:

1. ~~Insert the following language at the end of section 240.85 and before informational note:~~

~~"Circuit breakers and their enclosures shall be of such design that it will be impossible to substitute two or more circuit breakers in a space previously occupied by a lesser number of circuit breakers. Tandem circuit breakers shall not be permitted to be used as overcurrent devices."~~

Revise section 240.2 by deleting the definition of "Supervised Industrial Installation."

2. Revise subsection 240.24(B) to read:

"Occupancy. Each occupant shall have ready access to all overcurrent devices protecting the conductors supplying that occupancy, unless otherwise permitted in 240.24(B)(1) and (B)(2). In a building with multiple occupancies, overcurrent devices may be located at a central location within the building, provided that each occupancy has access to the overcurrent devices for that occupancy, and the overcurrent device for each occupancy is clearly marked with a permanent label identifying the occupancy served."

3. Insert new subsection 240.24(G) to read:

"Not Located Outdoors. Branch circuit overcurrent devices, other than supplementary overcurrent protective devices, shall not be located outdoors or where exposed to the weather unless granted special permission."

4. Insert the following language at the end of section 240.85 and before the informational note:

"Circuit breakers and their enclosures shall be of such design that it will be impossible to substitute two or more circuit breakers in a space previously occupied by a lesser number of circuit breakers. Tandem circuit breakers shall not be permitted to be used as

overcurrent devices.”

5. Revise Part VIII to read:

“Part VIII. Reserved.”

SECTION 14. Section 14E-2-250 of the Municipal Code of Chicago is hereby amended by deleting the language stricken through and by inserting the language underscored, as follows:

14E-2-250 Grounding and Bonding

(Omitted text is unaffected by this ordinance)

3. Revise subsection 250.64(B) to read, ~~with no revisions to (B)(1) through B(4):~~

“Securing and Protection Against Physical Damage. Where exposed, a grounding electrode conductor or its enclosure shall be securely fastened to the surface on which it is carried. All grounding electrode conductors shall be installed in rigid metal conduit (RMC), intermediate metal conduit (IMC), or electrical metallic tubing (EMT) in accordance with Table 250.66. Raceways for grounding electrode conductors shall not contain other conductors.

Grounding electrode conductors and grounding electrode bonding jumpers in contact with the earth shall not be required to comply with 300.5, but shall be buried or otherwise protected if subject to physical damage.”

(Omitted text is unaffected by this ordinance)

SECTION 15. Section 14E-3-336 of the Municipal Code of Chicago is hereby amended by deleting the language stricken through and by inserting the language underscored, as follows:

14E-3-336 Power and Control Tray Cable: Type TC

The provisions of Article 336 of NFPA 70 are adopted by reference with the following modifications:

1. Revise subsection 336.10, item (1) to read:

“For control and signal circuits.”

2. Delete subsections 336.10, items (6) and through (10).

23. Revise section 336.12 to read:

(Omitted text is unaffected by this ordinance)

SECTION 16. Section 14E-3-338 of the Municipal Code of Chicago is hereby amended by deleting the language stricken through and by inserting the language underscored, as follows:

14E-3-338 Service-Entrance Cable: Type SE and USE

The provisions of Article 338 of NFPA 70 are adopted by reference with the following modifications:

1. Revise section 338.10 to read:

"Uses Permitted. For existing buildings of non-transient residential occupancy containing not more than three dwelling units:

(A) Service-Entrance Conductors. Service-entrance cable shall be permitted to be used as service-entrance conductors for existing buildings of non-transient residential occupancy containing not more than three dwelling units.

(Omitted text is unaffected by this ordinance)

SECTION 17. Section 14E-3-352 of the Municipal Code of Chicago is hereby amended by deleting the language stricken through and by inserting the language underscored, as follows:

14E-3-352 Rigid Polyvinyl Chloride Conduit: Type PVC

The provisions of Article 352 of NFPA 70 are adopted by reference ~~without~~ with the following modification:

1. Revise section 352.10 to read:

"Uses Permitted. The use of PVC conduit shall be permitted in accordance with 352.10(A) through (F).

Informational Note: Extreme cold may cause some nonmetallic conduits to become brittle and, therefore, more susceptible to damage from physical contact.

(A) Corrosive Influences. PVC conduit shall be permitted in locations subject to severe corrosive influences as covered in 300.6 and where subject to chemicals for which the materials are specifically approved.

(B) Cinders. PVC conduit shall be permitted in cinder fill.

(C) Wet Locations. PVC conduit shall be permitted in portions of dairies, laundries, canneries, or other wet locations, and in locations where walls are frequently washed, the entire conduit system, including boxes and fittings used therewith, shall be installed and equipped so as to prevent water from entering the conduit. All supports, bolts, straps, screws, and so forth, shall be of corrosion-resistant materials or be protected against corrosion by approved corrosion-resistant materials.

(D) Underground Installations. For underground installations, PVC conduit shall be

permitted for direct burial and underground encased in concrete. See 300.5 and 300.50.

(E) Support of Conduit Bodies. PVC conduit shall be permitted to support nonmetallic conduit bodies not larger than the largest trade size of an entering raceway. These conduit bodies shall not support luminaires or other equipment and shall not contain devices other than splicing devices as permitted by 110.14(B) and 314.16(C)(2).

(F) Insulation Temperature Limitations. Conductors or cables rated at a temperature higher than the listed temperature rating of PVC conduit shall be permitted to be installed in PVC conduit, provided the conductors or cables are not operated at a temperature higher than the listed temperature rating of the PVC conduit."

SECTION 18. Section 14E-3-355 of the Municipal Code of Chicago is hereby amended by deleting the language stricken through and by inserting the language underscored, as follows:

14E-3-355 Reinforced Thermosetting Resin Conduit: Type RTRC

The provisions of Article 355 of NFPA 70 are adopted by reference ~~without~~ with the following modification:

1. Revise section 355.10 to read:

"Uses Permitted. The use of RTRC shall be permitted in accordance with 355.10(A) through (F).

(A) Corrosive Influences. RTRC shall be permitted in locations subject to severe corrosive influences as covered in 300.6 and where subject to chemicals for which the materials are specifically approved.

(B) Cinders. RTRC shall be permitted in cinder fill.

(C) Wet Locations. RTRC shall be permitted in portions of dairies, laundries, canneries, or other wet locations, and in locations where walls are frequently washed, the entire conduit system, including boxes and fittings used therewith, shall be installed and equipped so as to prevent water from entering the conduit. All supports, bolts, straps screws, and so forth, shall be of corrosion-resistant materials or be protected against corrosion by approved corrosion-resistant materials.

(D) Underground Installations. For underground installations, see 300.5 and 300.50.

(E) Support of Conduit Bodies. RTRC shall be permitted to support nonmetallic conduit bodies not larger than the largest trade size of an entering raceway. These conduit bodies shall not support luminaires or other equipment and shall not contain devices other than splicing devices as permitted by 110.14(B) and 314.16(C)(2).

(F) Insulation Temperature Limitations. Conductors or cables rated at a temperature higher than the listed temperature rating of RTRC conduit shall be permitted to be installed in PVC conduit, provided the conductors or cables are not operated at a temperature higher than the listed temperature rating of the RTRC conduit."

SECTION 19. Section 14E-3-368 of the Municipal Code of Chicago is hereby amended by deleting the language stricken through and by inserting the language underscored, as follows:

14E-3-368 Busways

The provisions of Article 368 of NFPA 70 are adopted by reference ~~without~~ with the following modifications:-

1. Revise section 368.12, by adding a new subsection (F) to read:

"(F) Sprinklers. In rooms or areas where an automatic sprinkler system is installed which, when activated, would cause water to come into contact with the busway.

Exception: Busway that is listed as weatherproof or raintight shall be permitted in locations with sprinkler protection."

2. Revise subsection 368.56, by deleting items 1, 2, 8, 9, 10, 12, 14, and 16.

SECTION 20. Section 14E-4-406 of the Municipal Code of Chicago is hereby amended by deleting the language stricken through and by inserting the language underscored, as follows:

14E-4-406 Receptacles, Cord Connectors, and Attachment Plugs (Caps)

The provisions of Article 406 of NFPA 70 are adopted by reference ~~without~~ with the following modification:-

1. Revise section 406.3, by deleting subsection (D)(2) and the subsequent exception.

SECTION 21. Section 14E-4-410 of the Municipal Code of Chicago is hereby amended by deleting the language stricken through and by inserting the language underscored, as follows:

14E-4-410 Luminaires, Lampholders, and Lamps

The provisions of Article 410 of NFPA 70 are adopted by reference ~~without~~ with the following modifications:-

1. Revise subsection 410.24(A) to read:

"Independent of the Outlet Box. Electric-discharge and LED luminaires supported independently of the outlet box shall be connected to the branch circuit through metal raceway, Type MC cable, Type AC cable, Type MI cable, or by flexible cord as permitted in 410.62(B) or 410.62(C)."

2. Revise subsection 410.62(C)(1) to read:

"Cord-Connected Installation. A luminaire or a listed assembly in compliance with either condition (a) or (b) shall be permitted to be cord connected provided the luminaire is located directly below the outlet or busway, the cord is not subject to strain or physical damage, and the cord is visible over its entire length except at terminations.

(a) A luminaire shall be permitted to be connected with a cord terminating in a grounding-type attachment plug or busway plug.

(b) A luminaire assembly equipped with a strain relief and canopy shall be permitted to use a cord connection between the luminaire assembly and the canopy. The canopy shall be permitted to include a section of raceway not over 150 mm (6 in.) in length and intended to facilitate the connection to an outlet box mounted above a suspended ceiling."

SECTION 22. Section 14E-5-560 of the Municipal Code of Chicago is hereby amended by deleting the language stricken through and by inserting the language underscored, as follows:

14E-5-560 Residential Occupancies

(Omitted text is unaffected by this ordinance)

560.6 Receptacle Outlet Requirements. This section provides requirements for 125-volt, 15- and 20-ampere receptacle outlets. The receptacles required by this section shall be in addition to any receptacle that is:

- (1) Part of a luminaire or appliance, or
- (2) Controlled by a wall switch in accordance with 210.70(A)(1), Exception No. 1, or
- (3) Located within cabinets or cupboards, or
- (4) Located more than 1.7 m (5½ ft) above the floor

Permanently installed electric baseboard heaters equipped with factory-installed receptacle outlets or outlets provided as a separate assembly by the manufacturer shall be permitted as the required outlet or outlets for the wall space utilized by such permanently installed heaters. Such receptacle outlets shall not be connected to the heater circuits.

~~Informational note: listed~~ Note No. 1: Listed baseboard heaters include instructions that may not permit their installation below receptacle outlets.

Informational Note No. 2: See 210.8(A) for ground-fault circuit-interrupter (GFCI) protection requirements.

(Omitted text is unaffected by this ordinance)

SECTION 23. Section 14E-7-728 of the Municipal Code of Chicago is hereby amended by deleting the language stricken through and by inserting the language underscored, as follows:

14E-7-728 Fire-Resistive Cable Systems

The provisions of Article 728 of NFPA 70 are not adopted by reference without modification.

SECTION 24. Section 18-32-170 of the Municipal Code of Chicago is hereby amended by deleting the language stricken through and by inserting the language underscored, as follows:

18-32-170 Qualified personnel – Requirements.

(Omitted text is unaffected by this ordinance)

(2) No person shall construct, install, alter, repair, test, maintain or otherwise work on the electrical components connecting ~~the~~ any equipment to ~~the~~ any electrical service unless the person holds a valid certificate of registration, issued under ~~Section 13-12-240~~ Chapter 4-290 of this Code, authorizing the person to engage in the business of electrical contractor.

(Omitted text is unaffected by this ordinance)

SECTION 25. SECTIONS 3, 4, 5, 6, 7, 8, 9, 10 and 24 of this ordinance shall take full force and effect on January 1, 2018. The remainder of this ordinance shall take full force and effect upon its passage and approval.