

City of St. Charles, Illinois

Ordinance No. 2003-M-79

**An Ordinance Amending Chapter 15.04 "Building Code"
of the St. Charles Municipal Code (Adoption of the 2002
National Electrical Code NFPA 70)**

**Adopted by the
City Council
of the
City of St. Charles
September 2, 2003**

**Published in pamphlet form by
authority of the City Council
of the City of St. Charles,
Kane and Du Page Counties,
Illinois, September 5, 2003**



City Clerk

(SEAL)

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Presented and passed by the
City Council on September 2, 2003

AN ORDINANCE AMENDING CHAPTER 15.04 "BUILDING CODE"
OF THE ST. CHARLES MUNICIPAL CODE
(Adoption of the 2002 National Electrical Code NFPA 70)

Whereas, the standard code known as NFPA 70, the National Electrical Code, has been updated by the National Fire Protection Association, Inc.; and

Whereas, the Building and Zoning Commissioner has provided notice to the Illinois Building Commission regarding proposed changes to regulations regarding construction related activities within the City of St. Charles, as provided by 20 ILCS 3918/55; and

Whereas, the City Council finds it to be in the interest of City of St. Charles to periodically update codes regulating buildings and structures.

Now therefore, be it ordained by the City Council of the City of St. Charles, Kane and DuPage Counties, Illinois as follows:

Section 1: That Title 15, "Buildings and Construction", Chapter 15.04 "Building Code" of the St. Charles Municipal Code be and is hereby amended by deleting the provisions of Section 15.04.040 entitled "1996 National Electrical Code – Regulations adopted and modified" and by substituting the following therefore:

"15.04.040 National Electrical Code 2002 – Regulations Adopted and modified

The provisions of the 2002 Edition of the National Electrical Code, NFPA 70 issued by the National Fire Protection Association, Inc., One Batterymarch Park, Quincy, Massachusetts, 02269 (hereinafter sometimes referred to as "The NEC") not less than three (3) copies of which have been and are on file in the Office of the Clerk of the City of St. Charles, Illinois for more than thirty days, together with the amendments listed herein, are hereby adopted."

Section 2: That Chapter 15.04 "Building Code" be and is hereby amended by inserting the following Section 15.04.050.

"15.04.050 Amendments to the 2002 National Electric Code NFPA 70:

- A. Amend the provisions of **Section 110.13 (A) "Mounting"** by adding the following paragraph:

All single family dwellings with electric panels to be mounted on concrete or masonry shall have a minimum of half (1/2) inch thick plywood installed behind electric panels, for the purpose of support and to prevent moisture from entering. This shall be mounted in a way that would allow replacement if necessary.

- B. Amend **Section 210.70 "Lighting Outlets Required"** by adding Paragraph (D) **"Illumination of Mechanical Equipment"**:

(D) Illumination of Mechanical Equipment. All single family dwellings shall have luminaries installed within four (4) feet in front of electric panels and heating equipment, in order to service.

- C. 1 Delete the provisions of **Section 230.3 "One Building or Other Structures Not To Be Supplied Through Another"** and substitute the following therefore:

230.3 One Building or Other Structure Not to Be Supplied Through Another. Service conductors, feeders, or branch circuits of one building or other structure shall not pass through the interior of another building or structure.

- 2 Amend **Section 230.6 "Conductors Considered Outside the Building"** by adding Paragraph (5) as follows:

(5) Installed in any "common area" (hallway, corridor, or common space accessible to multiple premises) that meets the construction requirements of a one hour fire rating. Conductors shall be in schedule 40 steel pipe within "common areas." When a "common area" is used for the installation of service conductors external main buildings disconnect shall be required.

3. Delete the provisions of **Section 230.70 "General" (A) Location (1) "Readily Accessible Location"** and substitute the following therefore:

(1) Readily Accessible Location. The service disconnecting means shall be installed at a readily accessible location either outside of the building or structure or inside nearest point of entrance of the service conductors. Within multi-tenant buildings each tenant shall have a single means of de-energizing their main distribution panel from inside their space, unless otherwise approved.

4. Amend the provisions of **Section 230.70 "General"** by adding Paragraph (A) "**Location**" (4) "**Maximum Distance**" as follows:

(4) Maximum Distance. The maximum distance of the service entrance conductors from the metering device to the panel board disconnect shall not exceed five (5) feet in length. Any distance greater than five (5) feet shall have an additional rated disconnect means at the electrical meter for the purpose of over current protection.

5. Amend the provisions of Section 230.70 "General" by adding Paragraph (A) "**Location**" (5) "**Multi-tenant Commercial**" as follows:

(5) Multi-tenant Commercial Buildings. Multi-tenant commercial buildings shall have a means to de-energize each service from the outside of the building unless given exemption in writing by the City of St. Charles Municipal Electric Utility.

6. Delete the provisions of **Section 230.79 (C) "One or Two Family Dwelling"** (D) "**All Others**" (E) "**Rating of Service Disconnecting Means**" and substitute the following therefore:

(C) One or Two Family Dwelling. All panel board installations for new single-family detached dwellings shall be a minimum of 200-ampere rated. The main service disconnecting means (circuit breaker or fused switch) shall be 200-ampere rated.

(D) All Others. All panel board installations for new multi-family dwellings and new single-family attached [three (3) units or more] dwelling units shall be a minimum of 100-ampere rated. The main service disconnecting means (circuit breaker or fused switch) shall be a minimum 100-ampere rated.

- (E) For all other installations, the service disconnecting means shall have a rating of not less than 60-ampere, unless approved for special circumstances requiring small disconnects.

7. Amend the provisions of **Section 230.95 "Ground-Fault Protection of Equipment"** and by adding the following paragraph:

Ground-fault protection of equipment, including a remote key operated shunt trip switch, shall be provided for any service 800-ampere or above. The key switch location shall be as determined by the St. Charles Fire Department.

- D. 1. Amend the provisions of **Section 300.1 "Scope" (A) "All Wiring Installations"** by adding Paragraph (1) as follows:
- (1) With the exception of one and two family dwellings, all current carrying conductors exceeding 50 volts shall be installed in rigid metal conduit, intermediate metallic conduit, electrical metallic tubing, and flexible metallic tubing.
2. Delete the provisions of **Section 300.5 "Underground Installations" (D) "Protection from Damage" (3) "Service Conductors"** and substitute the following therefore:
- (3) Service Conductors – Customer installed underground service conductors shall be installed in conduit that is encased in concrete unless given exemption by the Director of the City of St. Charles Municipal Electric Utility or his designee.
3. Amend the provisions of **Section 300.5 "Underground Installations" by adding to (D) "Protection from Damage" (4) "Enclosure or Raceway Damage"** as follows:
- (4) Service wire raceways shall be in concrete encased conduit for multi-family, commercial, and industrial buildings, unless given exemption by the Director of the City of St. Charles Municipal Electric Utility or his designee.
- E. 1. Delete in its entirety **Section 314.3 "Nonmetallic Boxes", 314.43 "Nonmetallic Boxes and Conduit Boxes", 314.17 (C) "Nonmetallic Boxes", 334.40 (A) "Boxes of Insulating Material."**
- F. 1. Amend the provisions of **Section 700.16 "Emergency Illumination"** by adding Paragraph (1) as follows:
- (1) Additional spaces that require emergency lighting shall include all restrooms and mechanical rooms.

- G. 1 Amend the provisions of **Article 701 “Legally Required Standby System” Section 701.7 “Transfer Equipment Scope”** by adding the following paragraph:

(D) Transfer Equipment Requirements: All transfer switch connections shall be “break before make” to insure the complete separation from the utility system and the generator supply. No parallel operation with the utility system shall be allowed. A minimum time delay of three (3) seconds and a maximum of ten (10) seconds after loss of utility power should be established before starting the generator.

2. Amend the provisions of **Article 701.11 “Legally Required Standby Systems”** by adding Paragraph **(G) “Generator Noise Output”** as follows:

(G) Generator Noise Output. The maximum noise level allowable within ten (10’) feet of transformer, switchgear, or other specified equipment operated by the City of St. Charles Municipal Electric Utility is 80dBA. Sound enclosures or sound barrier walls or other sound mitigation may be required if the noise level near SCMEU equipment exceeds 80dBA. Analysis of the need for sound abatement equipment will be performed by the City of St. Charles Municipal Electric Utility personnel after the generator is installed and tested.

Section 3. That after the adoption and approval hereof this Ordinance shall (a) be printed or published in book or pamphlet form, published by the authority of the City Council, or (b) within thirty (30) days after the adoption and approval hereof, be published in a newspaper published in an with a general circulation within the City of St. Charles; however, this Ordinance shall not become effective before Sept. 2, 2003.

Presented to the City Council of the City of St. Charles, Illinois this 2nd day of Sept, 2003

Passed by the City Council of the City of St. Charles, Illinois this 2nd day of Sept, 2003.

Approved by the Mayor of the City of St. Charles, Illinois this 2nd day of Sept 2003.

Susan Klunkhain
Mayor

Attest:

Kristie C. Nephew
City Clerk

Council Vote:

Ayes: 10

Nays: 0

Abstain: 0

Absent: 0

Approved as to Form:

Timothy D. O'Neil
City Attorney

Date: September 2, 2003

State of Illinois)
)
) ss.
Counties of Kane and DuPage)

Certificate

I, KRISTIE A. NEPHEW, certify that I am the duly elected and acting Municipal Clerk of the City of St. Charles, Kane and DuPage Counties, Illinois.

I further certify that on September 2, 2003, the Corporate Authorities of such municipality passed and approved Ordinance No. 2003-M-79, entitled

"An Ordinance Amending Chapter 15.04 "Building Code" of the St. Charles Municipal Code (Adoption of the 2002 National Electrical Code NFPA 70),"

which provided by its terms that it should be published in pamphlet form.

The pamphlet form of Ordinance No. 2003-M-79, including the Ordinance and a cover sheet thereof was prepared, and a copy of such Ordinance was posted in the municipal building, commencing on September 1, 2003, and continuing for at least ten days thereafter. Copies of such Ordinance were also available for public inspection upon request in the office of the municipal clerk.

DATED at St. Charles, Illinois, this 2nd day of September, 2003.



Municipal Clerk

(S E A L)