

VILLAGE OF LOMBARD  
REQUEST FOR BOARD OF TRUSTEES ACTION  
For Inclusion on Board Agenda

Resolution or Ordinance (Blue)   X   *Waiver of First Requested*  
  X   Recommendations of Boards, Commissions & Committees (Green)  
Other Business (Pink)

TO: PRESIDENT AND BOARD OF TRUSTEES  
FROM: David A. Hulseberg, Village Manager *DAH*  
DATE: September 8, 2010 (B of T) Date: September 16, 2010  
TITLE: Text Amendments to the Lombard Village Code – National Electric Code  
SUBMITTED BY: Department of Community Development *UNO*

BACKGROUND/POLICY IMPLICATIONS:

The Department of Community Development transmits for your consideration an ordinance granting approval of text amendments to Chapter 150 of the Village Code to provide for the adoption of the 2008 National Electrical Code, with local amendments.

The Electrical Commission recommended approval of these amendments and is requesting a waiver of first reading.

Please place this item on the September 16, 2010 Board of Trustees agenda.

Fiscal Impact/Funding Source:

Review (as necessary):

Village Attorney X \_\_\_\_\_ Date \_\_\_\_\_  
Finance Director X \_\_\_\_\_ Date \_\_\_\_\_  
Village Manager X *DAH* \_\_\_\_\_ Date   9/8/10  

NOTE: All materials must be submitted to and approved by the Village Manager's Office by 12:00 noon, Wednesday, prior to the Agenda Distribution.





## MEMORANDUM

**TO:** David A. Hulseberg, Village Manager

**FROM:** William Heniff, AICP  
Director of Community Development *WH*

**DATE:** September 16, 2010

**SUBJECT:** **Text Amendments to the Electrical Code (Chapter 150 of the Building Code)**

Attached please find the following items for Village Board consideration as part of the September 16, 2010 Village Board meeting:

1. Electrical Commission referral letter;
2. A redlined version of the proposed amendments; and
3. An Ordinance granting approval of text amendments to Chapter 150 of the Village Code to provide for the adoption of the 2008 National Electrical Code, with local amendments.

The Electrical Commission discussed the amendments at their August 26, 2010 meeting and unanimously recommended approval of the amendments herein. The Commission also recommended a waiver of first reading of the amendments.





## VILLAGE OF LOMBARD

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Lombard, Illinois 60148-3926  
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www.villageoflombard.org

**Village President**  
William J. Mueller

**Village Clerk**  
Brigitte O'Brien

**Trustees**  
Greg Alan Gron, Dist. 1  
Richard J. Tross, Dist. 2  
Zachary C. Wilson, Dist. 3  
Dana L. Moreau, Dist. 4  
Laura A. Fitzpatrick, Dist. 5  
William "Bill" Ware, Dist. 6

**Village Manager**  
David A. Hulseberg

*"Our shared Vision for Lombard is a community of excellence exemplified by its government working together with residents and businesses to create a distinctive sense of spirit and an outstanding quality of life."*

*"The Mission of the Village of Lombard is to provide superior and responsive governmental services to the people of Lombard."*

September 16, 2010

Mr. William J. Mueller,  
Village President, and  
Board of Trustees  
Village of Lombard

### **Subject: Text Amendments to the Electrical Code**

Dear President and Trustees:

Your Plan Commission transmits for your consideration its recommendation regarding the above-referenced petition. The Electrical Commission requests amendments to Chapter 150 of the Code of Ordinances (i.e., the Building Code) to incorporate the provisions of the current (2008) version of the National Electrical Code (NEC).

The Electrical Commission met on August 26, 2010. Len Farina, Staff Liaison, went over proposed changes to the Village Electrical Ordinance based on the 2008 National Electrical Code, with the intention of adopting that as the code for the Village of Lombard. He noted that staff had completed initial review of the relevant sections of the code from time to time, but the last comprehensive review related to the 1990 NEC version. The proposed amendments are intended to be adopted comprehensively and are meant to supersede the previously adopted references to the 1990 NEC and its subsequent amendments in its entirety. The edits are also intended to clean up scrivener's errors and policy issues. He then reviewed line by line the proposed amendments to code and was seeking Commission concurrence on each of the proposed amendments. Discussion on each of the items was offered by the members.

When Len Farina reviewed Article 230.1, John Foulkes suggested that aluminum be included in the prohibition of aluminum on Bus Ways. Len Farina explained why it was not prohibited.

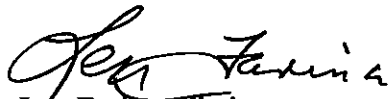
Keith Steiskal requested that Len Farina explain that the requirement for low voltage fire alarm wire to be in conduit has been removed. Len Farina gave an explanation of why that change has occurred. Battalion Chief/EC Member Mike Torrence (Fire Department) agreed with the change.

The Commission discussed licensing provisions. John Foulkes requested to review Section 150.062, stating that electricians must furnish a copy of current registration or license issued by any City, Village or Town in State of Illinois that was obtained only after the passage of a recognized written test. Mr. Foulkes stated at this time that he believes that some of the tests in the past were too easy. Mr. Farina explained that there is no State license, and as such, the system in place was the best available.

Upon completion of the review, Len Farina asked the Electrical Commission if they agreed with the proposed amendments and would like to send the proposed changes to the Board of Trustees. On a motion by Russell Schroeder and a second by John Foulkes, the Electrical Commission, by a 4-0 vote, recommend that the Village Board approve the proposed amendments to Chapter 150 of the Village Code. Per the direction of the Commission, a waiver of first reading of the proposed Ordinance amendments is requested.

Respectfully,

**VILLAGE OF LOMBARD**

A handwritten signature in black ink, appearing to read "Len Farina". The signature is fluid and cursive, with the first name "Len" being particularly prominent.

Len Farina, Chairperson  
Lombard Electrical Commission

NATIONAL ELECTRICAL CODE

§ 150.060 ESTABLISHMENT OF RULES AND REGULATIONS OF ELECTRICAL INSTALLATION.

The National Electrical Code (2008 Edition), as hereby amended and as modified by this Chapter, shall establish the rules and regulations of electrical installations in the Village.

§ 150.061 DEFINITIONS

For the purpose of this Chapter the following definitions shall apply unless the context clearly indicates or requires a different meaning.

Electrical Contractor, as used in this Chapter means any person, firm or corporation engaged in the business of installing or altering, by contract or otherwise, electrical equipment for the utilization of electricity supplied for light, heat or power or other installations covered in Article 90.2, Scope of the National Electrical Code (2008 Edition); but "electrical contractor" does not include employees of such contractor who perform or supervise such work.

Communications Contractor, is one that installs only Class 2 or Class 3 type wiring as defined in 725.1 and 725.2 of the National Electrical Code (2008 Edition) (NEC), and only that portion of the wiring system between the load side of a Class 2 or Class 3 power source and the connected equipment.

§ 150.062 ELECTRICAL CONTRACTORS AND COMMUNICATIONS CONTRACTORS MUST BE REGISTERED; CERTIFICATE OF INSURANCE.

It is unlawful for any person, firm or corporation to engage in the business of Electrical Contractor or Communications Contractor within the Village of Lombard, without being registered in the manner hereinafter set forth.

(A) Registration. Any person, firm or corporation desiring to engage in the business of an Electrical Contractor or Communications Contractor shall:

(1) Furnish a copy of current registration or license issued by any City, Village or Town in the State of Illinois that was obtained only after the passage of a recognized written test.

(2) Homeowner. A homeowner shall be registered by application to the Village. Said registration shall be restricted to allow work only on the homeowners' personal and primary residence. A qualification test shall be passed in order to secure this registration and permits. No electrical work shall be allowed under this provision in commercial, industrial or multifamily residential occupancies. Work done on these type occupancies shall be performed only by a registered Electrical Contractor.

(B) Use of Permit Issued to Another. It shall be unlawful for any person to install, alter or repair any electrical wires or apparatus by authority of a permit issued to and for the use of some other person.

(C) Permit for Person Not Entitled to One. It shall be unlawful for any registered Electrical or Communications Contractor to secure or furnish a permit for the installation, alteration, and repair of electrical wires and apparatus to any person not entitled to such permit under the regulations of this Chapter.

(D) Revocation of Permits. The Community Development Director or his/her designee is authorized to revoke any permit or certificate obtained by fraud, misrepresentation, or in any way contrary to the provisions of the electrical regulations of this Chapter, for installation, alteration, repair and use of any

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(3) . Communication contractor shall be registered by application to the Village
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~~electrical conductors, electrical equipment, signaling & communications conductors and equipment, and fiber optic cables and raceways.~~

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~~(E) Certificate of Insurance. Any person, firm or corporation desiring to engage in the business of an Electrical Contractor or Communications Contractor shall furnish a \$300,000 single limit liability manufacturers and contractors liability certificate naming the Village of Lombard as Certificate Holder and Additional Insured.~~

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**§ 150.063 PERMIT REQUIRED**

~~No person shall install any electrical conduits, electrical wires, electrical equipment, apparatus or communications, data, computer or fiber optics cables, conduits, equipment or apparatus in any building or structure, for which a permit is required, until such permit shall have been secured. In case any work is begun without a permit authorizing said work, the Community Development Director or his/her designee shall have the power to stop said work and order all persons engaged therein to stop and desist until the proper permit is secured.~~

Deleted: PENALTY¶

~~(a) Any person, firm or corporation who is registered under this Chapter, and so violates any provision of this Chapter, shall be considered to be in violation of the Chapter and, upon conviction, shall be fined not less than fifty dollars (\$50.00) nor more than five hundred dollars (\$500.00) for each violation. If in the opinion of the code authority further punitive action shall be deemed necessary to enforce compliance, such code authority shall have the right to rescind the certificate of the violator for such period of time as appears justified. ¶~~

~~Underground installations in the parkway area require an additional permit (Right-of-Way Permit) from the Village of Lombard Public Works Department.~~

**§150.064 DISCONNECTION OF ELECTRICAL SERVICES**

~~(A) If any person violates the provisions of this Chapter or maintains any electrical wiring or apparatus or communication, data, computer, or fiber optic cable or equipment found to be dangerous to life and property, the Community Development Director of his/her designee is hereby empowered to cut-off or otherwise disconnect current to said electrical wires or apparatus.~~

¶

~~(b) Any person having been stopped from installing electrical work as outlined in 150.063 (j) shall, when securing the permit to continue pay double the permit fees as a penalty.¶~~

~~(B) Any person having been stopped from installing electrical work as outlined in Section 150.063 shall, when securing the permit to continue, pay double the permit fees as a penalty.~~

¶

~~(c) Any person who violates the provisions of the Electrical Code 150.060 of the Village of Lombard or who maintains any electrical wiring or apparatus found to be dangerous to life and property, the Fire Chief or his designee is hereby empowered to cut-off or otherwise disconnect current to said electrical wires or apparatus.¶~~

**§ 150.065 PERMIT FEES**

~~All fees for inspection shall be in accordance with schedules under Section 150.140.~~

**§ 150.066 ADOPTION BY REFERENCE, AMENDMENTS, ADDITIONS AND DELETIONS.**

~~(A) The National Electrical Code (2008 Edition), as amended, is adopted by reference as modified by this Chapter.~~

Deleted: , setting forth fees, except for those registration fees set forth in ... [1]

~~In the event any provisions, articles, wording, and the like, of the National Electrical Code (2008 Edition), as amended, are in conflict with any ordinances, amendments, and/or addendums, as recognized and approved by the Electrical Commission of the Village of Lombard and/or as adopted by the Village of Lombard, or in conflict with the state law, the most restrictive provisions, articles, wording, and the like, shall prevail.~~

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~~Wiring methods and/or materials listed by the National Electrical Code (2008 Edition), but amended, deleted, prohibited or requiring Special Expressed Written Permission (SEWP) by this Chapter as noted in Subsections (B), (C), (D) below shall be considered to be amended, deleted, prohibited or requiring Special Expressed Written Permission (SEWP) where ever and there after mentioned or referenced in the National Electrical Code (2008 Edition).~~

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~~(B) The following articles, or portions thereof, of the National Electric Code (2008 Edition) shall be deleted for the purpose of this Chapter:~~

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~~Article 230.40, Ex.3~~

Deleted: Article 320¶  
... Article 324¶ ... [2]



Delete Exception No. 3

Article 230.41, Ex.(4)  
Aluminum wire not allowed.

Article 320  
Armored Cable: Type AC

Article 322  
Flat Cable Assemblies: Type FC

Article 324  
Flat Conductor Cable: Type FCC

Article 328  
Medium Voltage Cable :Type MV

Article 334  
Nonmetallic Sheathed Cable: Type NM, NMC, & NMS

Article 338  
Service Entrance Cable: Type SE & USE

Article 362  
Electrical Nonmetallic Tubing: Type ENT

Article 378  
Nonmetallic Wireways

Article 382  
Nonmetallic Extensions

Article 388  
Surface Nonmetallic Raceways

Article 394  
Concealed Knob & Tube

Article 396  
Messenger Supported Wiring

Article 398  
Open Wiring on Insulators

Table 310.15 (B) (6)  
120/240 Volt, 3 wire, Single-Phase Dwelling Services and Feeders  
Delete entire table.

(C) Special Expressed Written Permission.. Construction allowed by the following Articles of the National Electrical Code (2008 Edition) shall be permitted with the Special Expressed Written Permission (SEWP) of the Chief Electrical Inspector of the Building Division, and only in those instances where the conditions and standards that may be applicable to such construction are safe and existent, as determined by the Chief Electrical Inspector.

Article 330  
Metal Clad Cable: Type MC

**Deleted: ¶**  
**Article 356 ¶**  
**Liquidtight Flexible Nonmetallic**  
**Conduit: Type LFNC¶**

Article 340  
Type UF

Article 352  
Type RNC (See also Subsection (D).)

Article 388  
Surface Nonmetallic Raceways

Article 392  
Cable Trays

(D) The following Articles of the National Electric Code (2008 Edition) are amended as follows:

Article 110.14 Electrical Connections. (Add the following.)

(A) Terminals. The use of stab type screwless pressure terminals of the conductor push-in type is prohibited.

(B) Splices. The use of device terminals for splicing is strictly prohibited.

Article 110.26 Spaces About Electric Equipment. (Add the following.)

(A) Dead Front Assemblies – When in the judgment of the Chief Electrical Inspector or his/her designee, the conditions of the installation or the equipment being installed or modified require additional clearances at front, sides or rear of electrical equipment, such additional clearances shall be provided.

Article 210.6 Branch Circuit Voltage Limitations (Add the following.)

(C) 277 volts to ground. Luminaires shall be mounted not less than 8' above the finished floor, measured at their lowest point.

Wall switching shall not exceed 150 volts to ground. All switching mechanisms shall be in listed enclosures. Wiring in concealed spaces shall be in conduit (in listed enclosures). All wall switching shall be installed only in one of the following methods:

Low voltage relay switches, panel board switches, SWD rated circuit breakers or approved 277 volt switching mechanisms shall be installed in listed enclosures. All wiring shall be in conduit unless Class 2, accessible and approved by the Electrical Inspector.

Article 210.19 Conductors – Minimum Ampacity and Size (Add the following.)

(1) General. All branch circuits shall be wired with copper conductors only.

Article 230.1 Scope (Add the following.)

Whenever a service is revised or replaced, all current pertinent provisions of this Chapter shall apply.

In residential occupancies, the laundry circuit required by Article 210.11 (C)(2) of the National Electrical Code (2008 Edition) shall be provided.

All service and feeder conductors shall be copper. It is intended that all electrical conductors be copper.

Article 230.42 Size and Rating (Add the following.)

(A) General. Service conductors shall be all copper. 100 ampere services requires AWG 3 copper conductors, 200 ampere service requires AWG 3/0 copper conductors.

Article 230.43 Wiring Methods for 600 Volts, Nominal, or Less (Delete the following methods.)

(1) Open Wiring on insulators; (2) TYPE IGS Cable; (5) Electrical metallic tubing; (6) Electrical Nonmetallic Tubing; (7) Service-entrance cables; (13) Type MC cable; (14) Mineral-insulated, metal-

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Deleted: Working Clearances – Exception No. 1 is amended to read as follows: Working space shall not be required in back of assemblies such as all dead-front switch boards one section in size (maximum 42" wide) need ha ... [3]
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~~sheathed cable; (15) Flexible metal conduit and LFMC. Liquidtight flexible metal conduit; (16) Liquid tight flexible nonmetallic conduit.~~

Article 230.70 General.

~~(A) Location. (1) Readily Accessible Location. (Amend to read as follows:) The service disconnecting means shall be installed at a readily accessible location either outside of a building or structure, or inside nearest the point of entrance of the service conductors, in any case within five (5) feet of conduit and conductor entrance to the building.~~

Article 230.71 Maximum Number of Disconnects. (Replace NEC text with the following:)

~~(A) General. The service disconnecting means for each service permitted by Section 230.2, or for each set of service-entrance conductors permitted by Section 230.40, Exception Nos. 1, 4 or 5, shall consist of one main switch or circuit breaker. There shall be no more than six (6) main disconnects grouped in any one location. For the purpose of this section, disconnecting means installed as part of listed equipment and used solely for the following shall not be considered a service disconnecting means:~~

- ~~\_\_\_\_\_ (1) Power monitoring equipment~~
- ~~\_\_\_\_\_ (2) Surge-protective device(s)~~
- ~~\_\_\_\_\_ (3) Control circuit of the ground-fault protection system~~
- ~~\_\_\_\_\_ (4) Power-operable service disconnecting means~~

Article 250.64 Grounding Electrode Conductor Installation. (Delete (A) and (B) and replace with the following:)

- ~~\_\_\_\_\_ (A) Only Copper grounding and bonding conductors are allowed.~~
- ~~\_\_\_\_\_ (B) Securing and Protection from Physical Damage. 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 in an approved raceway. The following raceways shall be approved: rigid metal conduit, intermediate metal conduit, rigid nonmetallic conduit (Schedule 80) for exterior use; electrical metallic tubing or cable armor for interior use. (C), (D), (E), & (F), (Retain NEC text.)~~

Article 340 (Add the following:)  
UF & BC Cable: Type UF  
Approved for use only in exterior underground installations without Special Expressed Written Permission (SEWP); all other uses require SEWP. Article 340 otherwise applies entirely.

Article 348 (Add the following:)  
Flexible Metal Conduit: Type FMC  
Not approved for use as a general wiring method. Article 348 otherwise applies entirely.

Article 350 (Add the following:)  
Liquidtight Flexible Metal Conduit: Type LFMC  
Not approved for use as a general wiring method. Article 350 otherwise applies entirely.

Article 352 (Add the following:)  
Rigid Nonmetallic conduit: Type RNC  
Not approved for use as a general wiring method. Approved for use only in exterior underground installations without Special Expressed Written Permission (SEWP); all other uses require SEWP. Article 352 otherwise applies entirely.

Article 356 (Add the following:)  
Liquidtight Flexible Nonmetallic conduit: Type LFNC  
Not approved as a general wiring method. Approved for use only in exterior installations and as listed and marked as suitable for the purpose. Article 356 otherwise applies entirely.

Article 366 (Add the following:)

- Deleted: 3**
- Deleted:** not over 6 feet (1.83) long between raceways, or between raceway and service equipment, with equipment bonding jumper routed with the flexible metal conduit according to provisions of Section 250-79 (a), (c), (d) and (f); and
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Auxiliary gutters: Metal only are allowed. Article 366 otherwise applies entirely.

Article 392 (Add the following):

Cable Trays

Article 392.3 Uses Permitted. (Amend first sentence to read):

Cable trays shall be permitted to be used as a support system for (Delete: Service conductors, feeders, branch circuits) communications circuits, and signaling circuits unless conductors are installed in conduit. Article 392.3 otherwise applies entirely.

Article 410.2 Definitions.

Closet Storage Space: (Add the following):

In residential occupancies, all clothes closets over six (6) square feet shall have an approved (listed for use) luminaire installed.

Article 545.4 Manufactured Building – Wiring methods

(Replace (A) and (B) with the following):

Only wiring methods and materials previously approved by this Chapter shall be authorized for use in manufactured buildings, except that those constructions which require Special Expressed Written Permission for use may be considered on a case by case basis.

Article 600.21 Ballasts, Transformers and Electronic Power Supplies.

(A) Accessibility. (Add the following:) A code approved enclosure designed for that purpose including a self contained disconnecting means or a disconnecting means installed within (3) three feet and in sight is required.

Article 605.3 (Add after code text:) The separation of tele-communications, data, video and other Class 1, Class 2 or Class 3 wiring systems from electric light, power and other wiring formats as listed in Article 800: 800.133 (A) (1) (C) and elsewhere throughout National Electrical Code (2008 Edition) shall be maintained.

Optional components or alternate methods may be required.

**Deleted:** switches or six circuit breakers mounted in a single enclosure, in a group of separate enclosures, or in or on a switchboard. There shall be no more than six disconnects per service grouped in any one location. Each service more than 250 volts to ground and in excess of 800 AMPS shall have a single main to open all ungrounded conductors. ¶

¶ It is the intent of this Section to require no more than six (6) operations of switches, buttons, breaker, etc. to disconnect all power entering the service location. ¶

**Article 230-202 Service Entrance Conductors.¶**

-. (a) - Conductor Size. Amended to read as follows: Service-entrance conductors shall not be smaller than No. 6; (b) Wiring methods. Amended by deleting the following methods: (4) as multiconductor cable identified as service cable, and (5) as open conductor. ... [10]

**Deleted:** Article 250-92 Installation.¶  
-. (a) Grounding Electrode Conductor. Is deleted in its entirety and rewritten as follows: The grounding electrode conductor for the service shall terminate at the street side of the domestic water service and shall be protected by rigid metal conduit, intermediate metal conduit, electrical metallic tubing, or approved ground conductor cable. The grounding electrode shall be copper and the water meter shall be provided with an adequate jumper.

**Deleted:** Article 410-8 Fixtures in Clothes Closets.¶

-. (a) - Definition. Storage Space: Is amended by adding the following: In residential occupancies, all clothes closets over six (6) square feet shall have an approved light fixture installed.¶

¶ **Article 450-3 Overcurrent Protection.** Amend to read as follows: Overcurrent protection of transformers shall comply with (a), (b) or (c) below. As used in this Section, the word "transformer" shall mean a transformer or polyphase bank of two or more single-phase transformers operating as a unit and shall have ... [11]

**Deleted:** Article 760-28 Wiring Methods and Materials on Load Size. Is amended to read as follows: circuits on the load size of overcurrent protection, transformers and current limiting devices shall be permitted to use wiring methods and materials in accordance with the appropriate Articles in Chapter 3 for all required systems. ¶

¶ Paragraphs (a) Nonpower-Limited Wiring Methods and Materials and (b) Power-Limited Wiring Methods and Materials, should also be deleted in conjunction with this amendment.

ORDINANCE NO. \_\_\_\_\_

**AN ORDINANCE GRANTING APPROVAL OF TEXT AMENDMENTS TO  
TITLE 15, CHAPTER 150, SECTIONS 150.060 THROUGH 150.066  
OF THE LOMBARD VILLAGE CODE TO PROVIDE FOR THE ADOPTION OF THE  
2008 NATIONAL ELECTRIC CODE (NEC), WITH LOCAL AMENDMENTS**

BE IT ORDAINED BY THE PRESIDENT AND BOARD OF TRUSTEES OF THE  
VILLAGE OF LOMBARD, DU PAGE COUNTY, ILLINOIS, as follows:

**SECTION 1:** That Title 15, Chapter 150, Sections 150.060 through 150.066 of the  
Lombard Village Code is hereby amended to read in its entirety as follows:

**“§ 150.060 ESTABLISHMENT OF RULES AND REGULATIONS OF ELECTRICAL  
INSTALLATION**

The National Electrical Code (2008 Edition), as hereby amended and as modified by this  
Chapter, shall establish the rules and regulations of electrical installations in the Village.

**§ 150.061 DEFINITIONS**

For the purpose of this Chapter the following definitions shall apply unless the context  
clearly indicates or requires a different meaning.

Electrical Contractor as used in this Chapter means any person, firm or corporation engaged  
in the business of installing or altering, by contract or otherwise, electrical equipment for the  
utilization of electricity supplied for light, heat or power or other installations covered in Article  
90.2, Scope of the National Electrical Code (2008 Edition); but “electrical contractor” does not  
include employees of such contractor who perform or supervise such work.

Communications Contractor is one that installs only Class 2 or Class 3 type wiring as  
defined in Articles 725.1 and 725.2 of the National Electrical Code (2008 Edition) (NEC), and  
only that portion of the wiring system between the load side of a Class 2 or Class 3 power source  
and the connected equipment.

**§ 150.062 ELECTRICAL CONTRACTORS AND COMMUNICATIONS  
CONTRACTORS MUST BE REGISTERED; CERTIFICATE OF  
INSURANCE**

It is unlawful for any person, firm or corporation to engage in the business of Electrical  
Contractor or Communications Contractor within the Village of Lombard, without being  
registered in the manner hereinafter set forth.

(A) Registration. Any person, firm or corporation desiring to engage in the business of an  
Electrical Contractor or Communications Contractor shall:

(1) Furnish a copy of current registration or license issued by any City, Village or Town in the State of Illinois that was obtained only after the passage of a recognized written test.

(2) Homeowner. A homeowner shall be registered by application to the Village. Said registration shall be restricted to allow work only on the homeowners' personal and primary residence. A qualification test shall be passed in order to secure this registration and permits. No electrical work shall be allowed under this provision in commercial, industrial or multifamily residential occupancies. Work done on these type occupancies shall be performed only by a registered Electrical Contractor.

(B) Use of Permit Issued to Another. It shall be unlawful for any person to install, alter or repair any electrical wires or apparatus by authority of a permit issued to and for the use of some other person.

(C) Permit for Person Not Entitled to One. It shall be unlawful for any registered Electrical or Communications Contractor to secure or furnish a permit for the installation, alteration, and repair of electrical wires and apparatus to any person not entitled to such permit under the regulations of this Chapter.

(D) Revocation of Permits. The Community Development Director or his/her designee is authorized to revoke any permit or certificate obtained by fraud, misrepresentation, or in any way contrary to the provisions of the electrical regulations of this Chapter, for installation, alteration, repair and use of any electrical conductors, electrical equipment, signaling & communications conductors and equipment, and fiber optic cables and raceways.

(E) Certificate of Insurance. Any person, firm or corporation desiring to engage in the business of an Electrical Contractor or Communications Contractor shall furnish a \$300,000 single limit liability manufacturers and contractors liability certificate naming the Village of Lombard as Certificate Holder and Additional Insured.

### **§ 150.063 PERMIT REQUIRED**

No person shall install any electrical conduits, electrical wires, electrical equipment, apparatus or communications, data, computer or fiber optics cables, conduits, equipment or apparatus in any building or structure, for which a permit is required, until such permit shall have been secured. In case any work is begun without a permit authorizing said work, the Community Development Director or his/her designee shall have the power to stop said work and order all persons engaged therein to stop and desist until the proper permit is secured.

Underground installations in the parkway area require an additional permit (Right-of-Way Permit) from the Village of Lombard Public Works Department.

#### **§150.064 DISCONNECTION OF ELECTRICAL SERVICES**

(A) If any person violates the provisions of this Chapter or maintains any electrical wiring or apparatus or communication, data, computer, or fiber optic cable or equipment found to be dangerous to life and property, the Community Development Director of his/her designee is hereby empowered to cut-off or otherwise disconnect current to said electrical wires or apparatus.

(B) Any person having been stopped from installing electrical work as outlined in Section 150.063 shall, when securing the permit to continue, pay double the permit fees as a penalty.

#### **§ 150.065 PERMIT FEES**

All fees for inspection shall be in accordance with schedules under Section 150.140.

#### **§ 150.066 ADOPTION BY REFERENCE, AMENDMENTS, ADDITIONS AND DELETIONS**

(A) The National Electrical Code (2008 Edition), as amended, is adopted by reference as modified by this Chapter.

In the event any provisions, articles, wording, and the like, of the National Electrical Code (2008 Edition), as amended, are in conflict with any ordinances, amendments, and/or addendums, as recognized and approved by the Electrical Commission of the Village of Lombard and/or as adopted by the Village of Lombard, or in conflict with the state law, the most restrictive provisions, articles, wording, and the like, shall prevail.

Wiring methods and/or materials listed by the National Electrical Code (2008 Edition), but amended, deleted, prohibited or requiring Special Expressed Written Permission (SEWP) by this Chapter as noted in Subsections (B), (C), (D) below shall be considered to be amended, deleted, prohibited or requiring Special Expressed Written Permission (SEWP) where ever and there after mentioned or referenced in the National Electrical Code (2008 Edition).

(B) The following articles, or portions thereof, of the National Electric Code (2008 Edition) shall be deleted for the purpose of this Chapter:

Article 230.40, Ex.3

Delete Exception No. 3

Article 230.41, Ex.(4)

Aluminum wire not allowed

Article 320

Armored Cable: Type AC

Article 322

Flat Cable Assemblies: Type FC

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Article 324

Flat Conductor Cable: Type FCC

Article 328

Medium Voltage Cable: Type MV

Article 334

Nonmetallic Sheathed Cable: Type NM, NMC, & NMS

Article 338

Service Entrance Cable: Type SE & USE

Article 362

Electrical Nonmetallic Tubing: Type ENT

Article 378

Nonmetallic Wireways

Article 382

Nonmetallic Extensions

Article 388

Surface Nonmetallic Raceways

Article 394

Concealed Knob & Tube

Article 396

Messenger Supported Wiring

Article 398

Open Wiring on Insulators

Table 310.15 (B) (6)

120/240 Volt, 3 wire, Single-Phase Dwelling Services and Feeders

Delete entire table

(C) Special Expressed Written Permission. Construction allowed by the following Articles of the National Electrical Code (2008 Edition) shall be permitted with the Special Expressed Written Permission (SEWP) of the Chief Electrical Inspector of the Building Division, and only in those instances where the conditions and standards that may be applicable to such construction are safe and existent, as determined by the Chief Electrical Inspector.



Article 330

Metal Clad Cable: Type MC

Article 340

Type UF

Article 352

Type RNC (See also Subsection (D))

Article 388

Surface Nonmetallic Raceways

Article 392

Cable Trays (See also Subsection (D))

(D) The following Articles of the National Electric Code (2008 Edition) are amended as follows:

Article 110.14 Electrical Connections. (Add the following:)

(A) Terminals. The use of stab type screwless pressure terminals of the conductor push-in type is prohibited.

(B) Splices. The use of device terminals for splicing is strictly prohibited.

Article 110.26 Spaces About Electric Equipment. (Add the following:)

(A) Dead Front Assemblies – When in the judgment of the Chief Electrical Inspector or his/her designee, the conditions of the installation or the equipment being installed or modified require additional clearances at front, sides or rear of electrical equipment, such additional clearances shall be provided.

Article 210.6 Branch Circuit Voltage Limitations. (Add the following:)

(C) 277 volts to ground. Luminaires shall be mounted not less than 8' above the finished floor, measured at their lowest point.

Wall switching shall not exceed 150 volts to ground. All switching mechanisms shall be in listed enclosures. Wiring in concealed spaces shall be in conduit (in listed enclosures). All wall switching shall be installed only in one of the following methods:

Low voltage relay switches, panel board switches, SWD rated circuit breakers or approved 277 volt switching mechanisms shall be installed in listed enclosures. All wiring shall be in conduit unless Class 2, accessible and approved by the Electrical Inspector.

Article 210.19 Conductors – Minimum Ampacity and Size. (Add the following:)

(1) General. All branch circuits shall be wired with copper conductors only.

Article 230.1 Scope. (Add the following:)

Whenever a service is revised or replaced, all current pertinent provisions of this Chapter shall apply.

In residential occupancies, the laundry circuit required by Article 210.11 (C)(2) of the National Electrical Code (2008 Edition) shall be provided.

All service and feeder conductors shall be copper. It is intended that all electrical conductors be copper.

Article 230.42 Size and Rating. (Add the following:)

(A) General. Service conductors shall be all copper. 100 ampere services requires AWG 3 copper conductors, 200 ampere service requires AWG 3/0 copper conductors.

Article 230.43 Wiring Methods for 600 Volts, Nominal, or Less. (Delete the following methods:)

(1) Open Wiring on insulators; (2) TYPE IGS Cable; (5) Electrical metallic tubing; (6) Electrical Nonmetallic Tubing; (7) Service-entrance cables; (13) Type MC cable; (14) Mineral-insulated, metal-sheathed cable; (15) Flexible metal conduit and LFMC, Liquidtight flexible metal conduit; (16) Liquid tight flexible nonmetallic conduit.

Article 230.70 General.

(A) Location. (1) Readily Accessible Location. (Amend to read as follows:) The service disconnecting means shall be installed at a readily accessible location either outside of a building or structure, or inside nearest the point of entrance of the service conductors, in any case within five (5) feet of conduit and conductor entrance to the building.

Article 230.71 Maximum Number of Disconnects. (Replace NEC text with the following:)

(A) General. The service disconnecting means for each service permitted by Section 230.2, or for each set of service-entrance conductors permitted by Section 230.40, Exception Nos. 1, 4 or 5, shall consist of one main switch or circuit breaker. There shall be no more than six (6) main disconnects grouped in any one location. For the purpose of this section, disconnecting means installed as part of listed equipment and used solely for the following shall not be considered a service disconnecting means:

- (1) Power monitoring equipment
- (2) Surge-protective device(s)
- (3) Control circuit of the ground-fault protection system
- (4) Power-operable service disconnecting means

Article 250.64 Grounding Electrode Conductor Installation. (Delete (A) and (B) and replace with the following:)

(A) Only Copper grounding and bonding conductors are allowed.

(B) Securing and Protection from Physical Damage. 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 in an approved raceway. The following raceways shall be approved: rigid metal conduit, intermediate metal conduit, rigid nonmetallic conduit (Schedule 80) for exterior use; electrical metallic tubing or cable armor for interior use. (C), (D), (E), & (F), (Retain NEC text.)

Article 340 (Add the following:)

UF & BC Cable: Type UF

Approved for use only in exterior underground installations without Special Expressed Written Permission (SEWP); all other uses require SEWP. Article 340 otherwise applies entirely.

Article 348 (Add the following:)

Flexible Metal Conduit: Type FMC

Not approved for use as a general wiring method. Article 348 otherwise applies entirely.

Article 350 (Add the following:)

Liquidtight Flexible Metal Conduit: Type LFMC

Not approved for use as a general wiring method. Article 350 otherwise applies entirely.

Article 352 (Add the following:)

Rigid Nonmetallic conduit: Type RNC

Not approved for use as a general wiring method. Approved for use only in exterior underground installations without Special Expressed Written Permission (SEWP); all other uses require SEWP. Article 352 otherwise applies entirely.

Article 356 (Add the following:)

Liquidtight Flexible Nonmetallic conduit: Type LFNC

Not approved as a general wiring method. Approved for use only in exterior installations and as listed and marked as suitable for the purpose. Article 356 otherwise applies entirely.

Article 366 (Add the following:)

Auxiliary gutters: Metal only are allowed. Article 366 otherwise applies entirely.

Article 392 (Add the following:)

Cable Trays

Section 392.3 Uses Permitted. (Amend first sentence to read:)

Cable trays shall be permitted to be used as a support system for (Delete: Service conductors, feeders, branch circuits) communications circuits, and signaling circuits unless conductors are installed in conduit. Article 392. otherwise applies entirely.

Article 410.2 Definitions.

Closet Storage Space: (Add the following:)

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In residential occupancies, all clothes closets over six (6) square feet shall have an approved (listed for use) luminaire installed.

Article 545.4 Manufactured Building – Wiring methods.

(Replace (A) and (B) with the following):

Only wiring methods and materials previously approved by this Chapter shall be authorized for use in manufactured buildings, except that those constructions which require Special Expressed Written Permission for use may be considered on a case by case basis.

Article 600.21 Ballasts, Transformers and Electronic Power Supplies.

(A) Accessibility. (Add the following:)

A code approved enclosure designed for that purpose including a self contained disconnecting means or a disconnecting means installed within (3) three feet and in sight is required.

Article 605.3 (Add after code text:)

The separation of tele-communications, data, video and other Class 1, Class 2 or Class 3 wiring systems from electric light, power and other wiring formats as listed in Article 800; 800.133 (A) (1) (C) and elsewhere throughout National Electrical Code (2008 Edition) shall be maintained.

Optional components or alternate methods may be required.

**SECTION 2:** That this ordinance shall be in full force and effect from and after its passage, approval and publication in pamphlet form as provided by law.

Passed on first reading this \_\_\_\_ day of \_\_\_\_\_, 2010.

First reading waived by action of the Board of Trustees this \_\_\_\_ day of \_\_\_\_\_, 2010.

Passed on second reading this \_\_\_\_ day of \_\_\_\_\_, 2010, pursuant to a roll call vote as follows:

Ayes: \_\_\_\_\_

Nays: \_\_\_\_\_

Absent: \_\_\_\_\_

Approved by me this \_\_\_\_ day of \_\_\_\_\_, 2010.

\_\_\_\_\_  
William J. Mueller, Village President

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ATTEST:

\_\_\_\_\_  
Brigitte O'Brien, Village Clerk

Published by me in pamphlet form this \_\_\_\_ day of \_\_\_\_\_, 2010.

\_\_\_\_\_  
Brigitte O'Brien, Village Clerk