

## CHAPTER 4

### ELECTRICAL CODE

#### 7-4-1: Adopted

A certain document, three copies of which are on file in the office of the Village Clerk of the Village, and which have been on file therein for a period in excess of thirty (30) days prior to the adoption of this Chapter, said document being marked and designated as “National Electrical Code, 1990 Edition”, as published by the National Fire Protection Association, be and is adopted as Chapter 4 of this Title, for the control of buildings and structures as provided in this Chapter; and each and all of the regulations, provisions, penalties, conditions and terms of the “National Electrical Code, 1990 Edition” are referred to, adopted and made a part hereof, as if fully set out in this Chapter, with the following additions, deletions, insertions and changes, if any:

1. Delete the words “aluminum” and “copper-clad aluminum” from Sections 310-2 (b), 310-5 and 337-8.
2. Delete the entire Article 336, entitled “Non-Metallic Sheathed Cable”.

#### 7-4-2: Electrical Equipment Defined

“Electrical equipment” as used in this Chapter means and includes conductors and equipment installed for the utilization of electricity supplied for light, heat or power, but does not include radio apparatus or equipment for the wireless reception of sounds and signals, nor ordinary household equipment of appliances such as toasters, vacuum cleaners, washing machines, and does not include apparatus, conductors and other equipment installed for and by the public utilities, including common carriers, which are under the jurisdiction of the state commerce commission for use in their operation as public utilities.

#### 7-4-3: Permit Required

No person shall install or alter any electrical equipment, including gasoline dispensers in the Village without first obtaining a permit. Any person desiring to install or alter any electrical equipment shall apply to the building inspector for the necessary permit. The Building Official shall issue permits for installations or alterations of electrical equipment in all cases where the application shall have been made in accordance with the rules and regulations established as above provided. The Building Official shall inspect all such electrical equipment installed or altered in the Village and shall require that it conform to standards and specifications as provided by this Chapter.

7-4-4: Inspections—Tests

The Building Official shall have the right during reasonable hours to enter any building in the discharge of his official duties, or for the purpose of making any inspection or test of the installation or alteration of electrical equipment contained therein. He shall have the authority to cause the turning off of all electrical current and to cut or disconnect in cases of emergency any electrical current if dangerous to life or property or may interfere with the work of the fire district.

7-4-5: Certificate of Inspection—Issuance

Upon the completion of the installation or alteration of any electrical equipment, the person installing or altering same shall notify the Building Official, who shall inspect the work within a reasonable time after such notice is given. If the electrical equipment is found in compliance with this Chapter and does not constitute a hazard to life and property, he shall issue to Commonwealth Edison a certificate of inspection, or verbal acknowledgement, authorizing connection to the electrical service and the turning on of current. All wires which are to be hidden from view shall be inspected before concealment.

7-4-6: Certification of Inspection—Code Conformance

No certificate of inspection shall be issued unless the electrical equipment is in strict conformity with the provision of this Chapter. Compliance with the regulations of the National Electrical Code, unless in conflict with this Chapter, shall be prima facie evidence of proper installation or alteration.

7-4-7: Additional Inspection for Public Safety

The provisions for inspection work authorized by the permits issued in accordance with this Chapter shall not be construed as prohibiting the inspection of any electrical equipment whenever the Building Official shall determine that the public safety requires it. No inspection fee shall be charged for such extra or additional inspection, but in case it becomes necessary to replace such electrical equipment on account of defects disclosed by such inspection, a permit shall be obtained in accordance with the provisions of this Chapter.

7-4-8: Temporary Service for Construction

No temporary service for construction uses shall exist in any location for more than a period of one year. Such service must be installed by a registered electrical contractor.

7-4-9: Responsibility for Permits

The general contractor on a job, or the owner, if he is acting as a general contractor, shall be responsible for securing all electrical permits required in this Chapter.

7-4-10: Certificate of Approval

- A. The Building Official shall issue a certificate of approval after each such inspection in which the wiring or apparatus is found to be in compliance with the terms of this Chapter and with the rules adopted.
- B. It is unlawful to use or to turn on power into any wires or apparatus hereinafter installed for which such certificate has not been issued because the permit was not secured for installation or because the work was not completed according to the provisions of this Chapter.

7-4-11: Romex Cable

The use of the material commonly called Romex or Loom wire is not permitted within the Village except in the extension of an existing circuit of the same material.

7-4-12: Conduits

- A. Any basement wiring below the first floor joists shall be in conduit and firmly secured.
- B. All new wiring or remodeling, construction extension or alteration in or on any building within the fire district, shall be included in Greenfield, flexible thinwall, or wiremold conduit. The conductors are to be pulled in after conduits are in place. Old wiring must be inspected and approved before connections to new installations. Conductors must not be pulled in until plastering is finished.
- C. Electrical installations in any building hereafter erected or remodeled outside of the fire district as a grocery store, church, schoolhouse, hotel, thereafter, opera house, gas or oil station, store building, warehouse, manufacturing place or public building shall be contained in rigid, flexible, thinwall or wiremold conduit, in accordance with the rules set forth in subsection (B) of this section.
- D. Any motor with a rating in excess of one-half horsepower must be connected to a separate two hundred twenty V. circuit.
- E. Outlet boxes shall be used installed of plates on all outlets. All wiring where BX is used, and material of its same class, must be at least one inch from all water, furnace, steam and hot water piping and also, one inch from all gas piping except at outlets, where it shall be securely fastened to the pipe with suitable clamps or set screws.

- F. All underground conductors must be trench wire or other suitable underground conductors. Conductors for direct burial shall be type USE. No conduit smaller than 3/4" shall be installed. All fittings installed on underground and outdoor installations must be waterproof.
  
- G. Galvanized rigid or thinwall service conduit must be installed to a height of not less than ten (10) feet from the ground. A clearance of eighteen (18) feet must be maintained when crossing a roadway. It is required to leave at least three feet of wire on each conductor at the service head to allow for proper connections to outside lines. Service run conductors shall be two No. 3 R.H. and one No. 5 or No. 4, or three No. 2 R.H. copper, to be consistent with one hundred amperes requirements. Galvanized heavy wall or thinwall service must continue from top of service connection to service switch, which shall be a minimum of one hundred amperes eight circuit. Type S fuses or breakers must be installed. Fixtures and brackets must not be installed over wall plates or shallow boxes. Boxes must be not less than 1 1/2" inches deep.

7-4-13: Circuit Breakers

The main electrical service panel board shall contain a minimum of four unused circuit breakers. Use of piggy back breakers in new construction is prohibited.

7-4-14: Records

The Building Official shall keep complete records of all permits and inspections made and other official work performed under the provisions of this Chapter.