

**ELECTRICAL  
CODE  
OF THE  
VILLAGE  
OF  
FLOSSMOOR**

**Adopted June 17, 1996**

**ELECTRICAL CODE**  
**OF THE**  
**VILLAGE OF FLOSSMOOR**  
**Revised Edition - 1996**

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**ELECTRICAL CODE  
OF THE  
VILLAGE OF FLOSSMOOR  
BEING  
AN ORDINANCE  
ESTABLISHING REGULATIONS FOR THE INSTALLATION,  
ALTERATION AND USE OF ELECTRICAL EQUIPMENT IN  
THE VILLAGE OF FLOSSMOOR, COOK COUNTY, ILLINOIS**

BE IT ORDAINED by the President (designated as Mayor) and Board of Trustees of the Village of Flossmoor, Cook County, Illinois, that an ordinance entitled: "An Ordinance to provide safe and practical standards and specifications for installation, alteration and use of electrical equipment, and to provide reasonable rules and regulations governing the issuance of permits by the Electrical Inspection Department and reasonable fees to be paid for the inspection by the Department of all electrical equipment installed or altered within the Village of Flossmoor", as amended, be and it hereby is amended in its entirety to read as follows:

SECTION 1. Permits and Inspection Required

Hereafter no electrical wiring for light, heat or power shall be started or installed in any building or structure or on any premises within the Village of Flossmoor, nor shall any alteration or extension of any existing wiring system be made, nor shall any electrical equipment or fixtures hereinafter described be installed, changed, moved, relocated or altered until a permit therefore has first been obtained as provided herein, and no such wiring, installation or equipment shall be used or operated until finally inspected and approved by the Chief Electrical Inspector for the Village of Flossmoor or his duly authorized deputy.

All such wiring, equipment and the installation thereof shall conform to all the specifications, rules and regulations contained in this ordinance, and no permit shall be issued unless plans showing conformity with all provisions of this ordinance have been submitted and approved as hereinafter provided.

SECTION 2. Registered Electrical Contractor Required

All electrical work coming under the scope of this ordinance shall be performed or installed only by a qualified electrical contractor who is registered and/or licensed under the State of Illinois statutes. Any contractor doing business in this Village as an electrical contractor shall show a certificate of registration from a municipality in the state of Illinois that has an Electrical Commission and gives a test.

SECTION 3. Underwriters Laboratories, Inc. Approval

All materials, devices, conductors, enclosures, conduits, major household appliances, lighting fixtures or any other electrical current consuming device to be permitted, shall bear the seal of approval or the listing of the Underwriters Laboratories, Inc., or equal agency.

SECTION 4. Service Requirements (Ord. 593, 5/3/76)

All utility entry services from a public service source of supply shall be underground into the meter, regardless of whether the main distribution line of the public service source of supply is underground or aboveground. This includes electrical, telephone, telegraph, television and other utility services, all to be underground.

Where any utility entry service and main distribution line exist aboveground, the utility entry service shall be placed underground if and when the main distribution line is placed underground by the public service utility company. The use of aluminum conductors is prohibited in the Village, with the exception of the Electric Utility Company.

SECTION 5. Service Entrance Capacity and Equipment Requirement

The minimum service capacity approved for any new or existing dwelling occupancy shall be a 3-wire, 120/240 volt solid neutral, 200 amp. service with 200 amp. service switch. Service entrance panels shall have a minimum of thirty (30) circuit positions. Where the property owner is required to place an existing aboveground electrical entry service underground because the main distribution line is being placed underground by the public service utility company, the minimum service capacity may be 100 amp., rather than 200 amp. as required above; provided, the Chief Electrical Inspector finds that 100 amp. service is adequate to serve the dwelling, giving consideration to circuitry and appliance conditions existing therein. (Ord. 674, 10/15/79) If the meter is over five (5) feet from the point of entry to the building, a disconnect must be placed outside next to the meter and the main panel must have a main breaker also.

SECTION 6. Major Individual Appliance Circuits Required

- |                          |                                      |
|--------------------------|--------------------------------------|
| Range (Electric)         | Clothes Dryer                        |
| Built-in Oven (Electric) | 2 No. 12 Kitchen Appliance (minimum) |
| Water Heater (Electric)  | 2 No. 12 Laundry Appliance           |
| Dishwasher               | Heating Plant                        |
| Disposal                 | Bathroom Heater                      |
| Sump Pump                | Fixed Air Conditioner                |
| Attic Fan                | Window Air Conditioner               |
| Microwave Ovens          |                                      |

**ELECTRICAL HEATING CIRCUITS**

Separate circuits required for:

- |                 |                           |
|-----------------|---------------------------|
| Cable Heating   | Furnaces                  |
| Baseboard Units | Etc.                      |
| Wallboard Units | Wiring per current N.E.C. |

Note: No lighting or other current consuming device shall be connected to the 2 No. 12 Kitchen Appliance, the 2 No. 12 Laundry Appliance, Heating Plant, Sump Pump, Disposal, or Air Conditioner, or Electrical Heating circuits. The kitchen, dining room, dinette and breakfast room outlets must be on appliance circuits with #12 wire and 20 amp. breakers. Island and peninsula counters require outlets to comply with Section 210-52 of the National Electrical Code.

## SECTION 7. General Purpose Circuits

Lighting and small appliance circuits shall be calculated on the basis of five (5) watts per square foot and shall be limited to one thousand (1,000) watts per circuit for #14 wire, one thousand six hundred (1,600) watts per circuit for #12 wire. Square foot area of building shall be calculated on overall outside dimension, excluding garage or basement.

## SECTION 8. Additional Minimum Requirements

1. Permanent lighting fixtures, wall switch controlled, shall be installed in kitchens, bath rooms, powder rooms, halls and other applicable locations.
2. Where there is more than one entrance to the above indicated rooms and/or hallways, permanent lighting fixtures shall be multiple switch controlled at both entrances.
3. Lighting outlets shall be installed in all closets except linen closets. They shall be installed only on the ceiling or on the wall space above the doors. They must be globe or recessed cans with thermo cut outs. No pendant fixtures shall be installed. All closet lights shall be switched. (Ord. 1588, 7/17/06)
4. Lighting outlets, with a switch control at the entrance, shall be installed in all attic or crawl spaces accessible by door or scuttle.
5. A minimum of two weatherproof receptacle outlets with in use covers, one in the front and one in the rear, shall be installed on the outside of all dwelling type occupancies. Such receptacle outlet shall be equipped with approved ground-fault circuit protection for personnel.
6. Any sub feeding panel that is not in sight of a main disconnect or has more than six (6) breakers or fuses must have a main breaker or disconnect.

## SECTION 9. Raceways or Conduits

New Work. For all new work, wiring shall be installed in rigid conduit, electrical metallic tubing, or surface metal raceways, except that it shall be permissible to use a section of flexible Greenfield metal conduit, where flexible connections are necessary, not exceeding three (3) feet in length. The use of armored flexible cable (BX) is prohibited on new work. IMC cannot be used underground outside. Thinwall conduit cannot be used in concrete or exposed to outside weather.

Old Work. Metallic armored cable (BX) may be used for extensions to existing wiring from a metal clad or full metallic system only when approved by the Chief Electrical Inspector.

## SECTION 10. Conduit Boxes and Covers

The use of octagonal boxes for installation in any wall or ceiling material is not permitted. Four-inch square, nineteen hundred (1900) boxes shall be used with standard covers, plaster rings of proper depth to be flush with surface of wall or ceiling. Covers to be Raco or any other manufacturer of equal or comparable make. All wiring installed in plenum ceilings must be in conduit. Also, any non-combustible ceiling must have wiring of any kind in conduit.

The Chief Electrical Inspector shall have the authority to cause any drywall or wood paneling sections removed so that approved depth covers can replace those in violation of this section.

## SECTION 11. Prefabricated Buildings or Structures

All provisions of this Code shall apply both to the type of wiring methods and the type of construction employed.

## SECTION 12. Gas Engines - Gas Appliances

Fixed mounted gas-fired air conditioners and appliances having any electric motors or electrical control devices are subject to inspection and fees.

## SECTION 13. Air Conditioner Set Back Requirement

Electrical or gas air conditioners for outdoor installation or any auxiliary equipment shall be installed in accordance with Zoning Ordinance Section 21-100.4.5. Air conditioners shall be mounted on a concrete slab and not on cement blocks. Dead front disconnects and weatherproof flexible conduit shall be used for connection to air conditioning units, and proper grounding provisions made. (Ord. 672, 9/17/79) Any air conditioner with sealtite must have a third green grounding wire. (Ord. 1588, 7/17/06)

## SECTION 14. Electrical Signs - Permit Fees

Permit Fee for Electrical Sign will be as stated in Chapter 25, Section 25.212 of the Flossmoor Municipal Code. (Ord. 688, 8/18/80) (FMC-307, 7/17/95)

## SECTION 15. Plans and Specifications

Where construction or alteration work is required for single family occupancies, the applicants shall submit a wiring layout showing:

1. Number, location and type of outlets.
2. Size of wire and conduit to be used.
3. Number of circuits and their ampere rating.
4. Location of service entrance equipment.
5. Location of major appliances.
6. Size of existing old service.

Where construction or alteration work is to be done in other than single family dwelling occupancies, the applicant shall submit with the application for permit, a complete wiring plan for approval. This plan shall indicate:

1. Size of service conductors.
2. The type and location of all outlets.
3. Sizes of all motors and power consuming equipment, i.e., all current consuming devices which shall make up the total connected load.
4. Sizes of conductors for branch circuits and feeders to be installed.
5. The location of all panel boards and cabinets.
6. The number and ampere rating of the circuits shall be indicated.

Any plans required to be submitted pursuant to this section shall be accompanied by a plan review fee at a cost as stated in Chapter 25, Section 25.201 of the Flossmoor Municipal Code. (Ord. 688, 8/18/80) (FMC-307, 7/17/95)

## SECTION 16. Inspection

It shall be the responsibility of the person, firm or corporation doing the installation work to notify the Village Electrical Inspection Department who shall make a roughing-in, trim and final inspection to assure compliance with the provisions of this ordinance.

Reinspection or Additional Inspections. Whenever reinspections are required because of inaccurate or incorrect information on the plan or face of the application for permit, or because of code violations, or because of faulty construction, a charge as stated in Chapter 25, Section 25.203 of the Flossmoor Municipal Code shall be made by the Electrical Inspection Department for the time consumed in making such reinspection. (Ord. No. 731, 6/20/83) (FMC-307, 7/17/95)

#### SECTION 17. Permit Fee Schedule

Permit fees shall be charged as stated in Chapter 25, Section 25.213 of the Flossmoor Municipal Code. (FMC-307, 7/17/95)

#### SECTION 18. Permit Schedule for Air Conditioners, Fixed Mounting, Electric or Gas Operated (Existing Residential and New or Existing Non-Residential)

Permit fees shall be charged as stated in Chapter 25, Section 25.213 of the Flossmoor Municipal Code. (FMC-307, 7/17/95)

#### SECTION 19. Permit Fee Schedule for Elevators (New Installations)

Permit fees shall be charged as stated in Chapter 25, Section 25.214 of the Flossmoor Municipal Code. (FMC-307, 7/17/95)

#### SECTION 20. Permit Fees for Change of Electrical Contractor

Fees shall be charged as stated in Chapter 25, Section 25.204 of the Flossmoor Municipal Code. (Ord. 666, 7/16/79) (FMC-307, 7/17/95)

#### SECTION 21. Commercial and Industrial Inspection Fees

Fees shall be charged as stated in Chapter 25, Section 25.215 of the Flossmoor Municipal Code. (FMC-307, 7/17/95)

#### SECTION 22. Exit and Emergency Lighting

##### Definition of Terms:

1. Exit: An exit is a means of egress from a building or structure including outside exits, vertical exits, horizontal exits and exit connections as here defined.
2. Vertical Exit: A vertical exit is a means of exit used for ascension or descension between two or more levels including stairways, smoke proof towers, ramps, escalators and fire escapes.
3. Horizontal Exit: A horizontal exit is a protected opening through or around a fire wall or a bridge connecting two buildings.
4. Outside Exit: An outside exit is an exit from the building to a public way, to an open area leading to a public way, or to an enclosed fire-resistive passage leading to a public way.



SECTION 22. Exit and Emergency Lighting (cont.)

5. Exit Connections: Exit connections shall include doorways, aisles, corridors, foyers, lobbies and other horizontal means of exit leading to a vertical exit or an outside exit.
  - A. In every apartment dwelling now existing or hereafter erected, the owner, lessee, or person, firm or corporation having control of the stairs, vestibules, passageways and common ways in said premises, shall provide and maintain illumination in and upon said stairs, vestibules, passageways and common ways every night during the year from sunset to sunrise. The intensity of such illumination shall be such as to provide not less than one foot candle on every floor or stair tread.
  - B. In a multiple dwelling of the corridor type, there shall be a standard exit sign over every doorway which leads from a public corridor to a vertical means of exit. In a multiple dwelling of any type, there shall be a standard exit sign over every doorway which serves as a required exit from a lobby, dining room or other assembly room which has a floor area of more than 500 square feet.
  - C. The following sections relating to Exit Lighting and Directional Signs are hereby added, reading as follows:
    1. Exit Lighting
      - a. All exit areas shall be adequately lighted by electricity in all types of occupancies. Except in single family dwellings, such lighting shall be continuous during the time that conditions of occupancy require that the exit ways be open or available and the intensity of lighting required is not provided by means of natural light.
      - b. Normal intensity of lighting shall be not less than one foot candle per square foot on the floor surfaces of vertical exits and not less than one-half foot candle per square foot on the floors of other exits.
      - c. Lighting During Performances. Lighting on the floor of exit aisles in places of assembly, where theatrical, motion picture or other use requires darkened conditions, may be reduced to not less than one-tenth candle per square foot during the time of performance.
      - d. Emergency Lighting. Emergency lighting shall be provided in accordance with the requirements of Article 700 of the National Electrical Code. Whenever Exit and Emergency Lighting are required under Section 22 of this Code, a complete layout of such systems shall be submitted with the application for electrical permit as required under Section 15.

SECTION 22. Exit and Emergency Lighting (cont.)

2. Exit Stairway, Fire Escape and Directional Signs

- a. Exit, stairway, fire escape and directional signs, illuminated by electricity, shall be installed and maintained in all existing buildings and buildings hereafter erected, altered or converted, in accordance with the provisions of N.F.P.A. 101, the National Fire Protection Association Life Safety Code.
- b. Where required, exit, stairway, fire escape and directional signs shall be installed to mark all ways of egress in the following buildings:
  - 1) Multiple dwellings of the corridor type.
  - 2) Institutional buildings, two stories or more in height.
  - 3) Assembly units.
  - 4) Schools.
  - 5) Business units, mercantile units, industrial units, storage units and hazardous use units over two stories in height; business units, mercantile units, industrial units, storage units and hazardous use units two stories or less in height having a ground area of ten thousand square feet or more.
  - 6) Theatres.
  - 7) Churches.
- c. Fixture requirements. Every such sign shall consist of a flat-sided glass globe, a rectangular 20 U.S. gauge sheet metal box provided with channels to hold a glass sign or a plastic edge glow type of sign bearing the lettering hereinafter required.
- d. Illumination. Every such sign shall be internally illuminated by a ten watt or larger incandescent electric lamp.

SECTION 22. Exit and Emergency Lighting (cont.)

- e. Location. Exit signs shall be located over or immediately adjoining every opening to a horizontal means of egress or ramp leading out of a building; also over every opening leading from a public assembly room to a mezzanine floor, corridor or hallway.

Stairway or exit signs shall be located at every stairway on every floor in existing buildings. In buildings hereafter erected, stairway signs only shall be located at every stairway on every floor.

Fire escape signs shall be located over or immediately adjoining every doorway or opening to a fire escape.

All such signs shall be clearly visible from all means of approach to such ways of egress.

Directional signs shall be located where the path of exit travel or the location of the exit, stairway or fire escape is not clear and unmistakable due to bridges, tunnels, intersections of hallways, intervening partitions or turns in corridors. Such signs shall be located at every yard, court, passageway or other exterior space leading from any exit to a space serving as a way of departure from every theatre, public assembly building, hotel, school or church.

- f. Lettering. Every exit, stairway and fire escape sign shall bear the words "EXIT", "STAIRWAY", and "FIRE ESCAPE" respectively, in block letters at least 4-1/2 inches high with 9/16 stroke.

Every directional sign shall bear the word "EXIT" to indicate the direction of an exit, stairway or fire escape and shall bear a horizontal arrow pointed in the direction of travel. Lettering shall be in block letters at least 3-3/8 inches high with 9/16 stroke. The arrow shall be 1/2 inch wide and as long as the lettering.

All such letters and arrows shall be red on a white translucent field.

- g. Luminous Phosphorescent Signs. Luminous phosphorescent material signs must be approved by the Chief Electrical Inspector in each case. No such sign shall be installed without advance approval.

SECTION 23. Authority of the Electrical Inspector

The Chief Electrical Inspector or his deputy shall have the right within reasonable daytime hours, to enter any building or premises in the discharge of his official duties, or test of electrical equipment therein, or its installation.

When any electrical equipment is found by the Chief Electrical Inspector or his deputy to be dangerous to persons or property, because it is defective or improperly installed, the person, firm or corporation responsible for the electrical equipment shall be notified by him in writing, and shall make any changes or repairs required by the Chief Electrical Inspector or his deputy, to place such equipment in safe condition. If such work is not completed within ten days, or any longer period that may be specified in said notice, the Chief Electrical Inspector shall have the authority to disconnect or order the discontinuance of electrical service to said electrical equipment. In cases of emergency, where necessary for safety to persons or functions of the Village Fire Department, the Chief of the Fire Department or the Chief Electrical Inspector shall have the authority to disconnect or cause the disconnection of any electrical equipment or installation immediately.

SECTION 24. Condemnation

The Chief Electrical Inspector shall have the power to condemn any electrical installation which, in his opinion, is unsafe or hazardous to life and property and in such cases shall serve notice upon the person, firm or corporation owning, using or installing the same to place the same in a safe and secure condition. Any interested person aggrieved by the action of the Chief Electrical Inspector under this paragraph may, by written request, have the determination of the Chief Electrical Inspector reviewed by the Electrical Commission for the Village, which Commission may either reverse or concur in the action of the Inspector.

SECTION 25. Elevators

All elevators shall be mechanically and electrically inspected semi-annually. Certificate of Inspection shall be prominently displayed in elevator car, per Section 34.1 of the Flossmoor Building Code.

SECTION 26. Standards of Good Practice by Electrical Contractors

All electrical work shall be performed in a neat and workmanlike manner, and shall comply with all code requirements. Failure on the part of any registered electrical contractor to correct any defect, error or deficiency in any work installed under the authority of a permit issued to him by the Department of Electrical Inspection within ten calendar days after written notification thereof by said Department, or within such further reasonable time as may, upon request, be prescribed, the Chief Electrical Inspector shall, without further notice, stop the issuance of permits to such registered electrical contractor until such corrections have been made, inspected and approved.

SECTION 27. Penalty □ □

Any person, firm or corporation violating any of the provisions of this ordinance, upon conviction thereof, shall be fined as stated in Chapter 25, Section 25.283 of the Flossmoor Municipal Code. (FMC-307, 7/17/95)

SECTION 28. Enforcement □

The Electrical Inspection Department of the Village of Flossmoor shall be charged with the enforcement of this ordinance. Violations of this ordinance may be prosecuted in the manner provided by law for prosecution of violations of Village ordinances.

SECTION 29. Deputy Inspector

Wherever in this Ordinance, authority is delegated to, or duties imposed upon the Chief Electrical Inspector, such authority may be exercised, and such duties may be performed by a Deputy Inspector, when authorized by the Chief Electrical Inspector or the Village Mayor.

SECTION 30. Validity □

In the event any court of competent jurisdiction shall declare any of the provisions of this ordinance invalid, illegal or void, then such invalidity, illegality or voidance on order of such court shall in no way affect the validity or legality of the remaining portions of this ordinance, and such remaining portions in all respects shall remain in full force and effect as if such portion or portions had not been declared invalid, illegal or void.

SECTION 31. Effective Date of Ordinance □

This Ordinance shall be published in pamphlet form, and shall take effect from and after its passage, approval and publication as provided by law.

SECTION 32. Adoption of National Electrical Code

The National Electrical Code of the National Fire Protection Association, current edition and as amended from time to time, copies of which have been placed on file with the Village Clerk of the Village of Flossmoor, is hereby incorporated by reference and adopted as to all matters therein covered which are not specifically covered by this ordinance.

SECTION 33. Electric Utility Company Regulations □ □

The "Information and Requirements for Supply of Electrical Services" as last adopted by the Commonwealth Edison Company and as last published and filed with the Illinois Commerce Commission, copies of which have been placed on file with the Village Clerk of the Village of Flossmoor, is hereby incorporated by reference and adopted as to all matters not specifically covered by this ordinance or by the National Electrical Code, as amended from time to time.

SECTION 34. Repeals □ □

All other ordinances or parts of ordinances in conflict with this ordinance are hereby repealed.

PASSED and deposited in my office this 17<sup>th</sup> day of June, 1996.

AYES            Adams, Gummerson, Hoag, Langenderfer, Mitros  
NOES            None  
ABSENT        Lambert

Approved this 17<sup>th</sup> day of June, 1996

(Signed) □ □ \_\_\_\_\_  
Mayor  
Village of Flossmoor, Illinois

ATTEST:

(Signed) \_\_\_\_\_  
Village Clerk  
Village of Flossmoor, Illinois