

CHAPTER 69

ELECTRICAL CODE

1. **APPLICABILITY.** This Chapter shall have, along with the Code adopted hereby, the scope and applicability set out in said Code, except as modified by the provisions of this Chapter.

2. **ELECTRICAL CODE.** The same having been duly placed and remained on file as required by law, and subject to the additions, modifications, changes or deletions set out in this Chapter, the National Electrical Code, 2011 Edition of the National Fire Protection Association, the same being found and declared by the Council to be regulations as defined by applicable statute, is hereby adopted by reference and the same to be known, and which may be cited, as "The Electrical Code" of the City, and which shall have the scope and applicability as therein set out, except as modified by the provisions of this Chapter.

(Amended, Ordinance No. 2011-51, August 15, 2011)

(Amended, Ordinance No. 2008-09, March 17, 2008)

(Amended, Ordinance No. 2005-81, September 6, 2005)

(Amended, Ordinance No. 2002-16, April 1, 2002)

(Amended, Ordinance No. 2000-96, November 6, 2000)

(Amended, Ordinance No. 99-33, April 5, 1999)

3. **SUBSTITUTIONS.** Whenever in said Code the jurisdiction or governmental body having jurisdiction is referred to, such reference shall mean the City of Decatur, Illinois, and whenever the state is referred to it shall mean the State of Illinois and said Code shall be taken and construed as if the same were expressly set out therein.

4. **BUILDING INSPECTIONS.** Whenever in said Code reference is made to the authority having jurisdiction such shall be taken to mean and shall be construed to refer to the

Building Inspection Manager as fully as if said designation was set out therein.

(Amended, Ordinance No. 2010-03, February 1, 2010)

5. **BOARD OF APPEALS.** Whenever in said Code reference is made to the board of appeals such shall be taken to mean and shall be construed to refer to the Construction and Housing Board of Appeals of the City to which appeals of orders, decisions or determinations of the Superintendent may be taken.

6. **PERMIT REQUIRED.** It shall be unlawful to do electrical work, including all raceway systems and all conductor installations, in the city unless and until permit for the same has been obtained when required by and issued in accordance with the provisions of the Building Code, with the following exceptions: (Amended, Ordinance No. 2002-16, April 1, 2002)

A. Minor maintenance such as changing a switch, receptacle, light fixture, ballasts, and bulbs.

B. Replacing a grounded receptacle with GFCI receptacle.

C. Low voltage wiring for thermostats and other related controls for heating and air conditioning units in existing buildings. (Amended, Ordinance No. 2002-42, May 20, 2002)

D. Low voltage wiring for T.V., sound systems, alarm systems, computer data and telephones in existing buildings. (Amended, Ordinance No. 2002-16, April 1, 2002)

E. Coax cable for antenna or computers in existing buildings.

(Amended, Ordinance No. 2005-81, September 6, 2005)

(Amended, Ordinance No. 2002-16, April 1, 2002)

F. Wiring replacement furnace or air conditioning equipment from the existing switch or disconnect where circuit wires are of adequate size.

G. Wiring required for installation of industrial machinery from the existing switch or disconnect where circuit wires are of adequate size.

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(Amended, Ordinance No. 2002-16, April 1, 2002)

H. Wiring for replacement signs from existing switch or disconnect where circuit wires are of adequate size.

I. Service related work such as replacing fuses, circuit breakers, motors, or controls in existing buildings or appliances. This would include heating elements of ranges, furnaces, water heaters, etc.

J. Replacing broken meter sockets or masts on services where no new conduit or conductors are changed, enlarged, or replaced.

K. Permits are valid for a period of six (6) months for new construction and ninety (90) days for renovation; or with an approved extension.

(Amended, Ordinance No. 2008-09, March 17, 2008)

(Amended, Ordinance No. 2002-16, April 1, 2002)

(Amended, Ordinance No. 99-33, April 5, 1999)

7. **WORK DONE WITHOUT PERMIT.** Except for work performed in response to an unanticipated emergency at a time other than the regular business hours of the building official and for which a permit is later obtained during the next succeeding regular business day of said official, should any work for which a permit is required be commenced or done before such permit is issued and obtained the required permit may nonetheless be issued for such and subsequent work; however, the amount of the required fee as provided herein for all work, both that commenced before and that proposed to be done after said permit is issued, shall be double that otherwise so provided, and issuance of such permit shall not, and shall not be construed to be, an excuse from, or waiver of, or defense to or absolution from any liability or action otherwise provided for in said Code or this Chapter but shall be cumulative of and in addition thereto.

8. **FEES REQUIRED.** The amount of the fee required to accompany the application for a permit and to be paid to the City Treasurer shall be determined by the building official as follows:

A. For all permits other than those specified herein said amount shall be based upon the value of the proposed work in amounts as follows:

| <u>WORK VALUE</u> | <u>FEE</u> |
|---------------------|---|
| \$ 0 - \$2,000 | \$35 |
| \$2,001 - \$3,000 | \$45 |
| \$3,001 - \$5,000 | \$50 |
| \$5,001 - 1,000,000 | \$50 plus \$5 for each \$1,000 or fraction thereof over \$5,000 |
| Over \$1,000,000 | \$5,025 plus \$4 for each \$10,000 or fraction thereof over \$1,000,000 |

(Amended, Ordinance No. 2011-51, August 15, 2011)

(Amended, Ordinance No. 96-38, June 17, 1996).

B. For permits to alter or repair one or two family residential structures or residential accessory buildings, the amount shall be as follows:

| | |
|--|---------------|
| Adding up to two (2) new circuits, installing or replacing, outlets, performing minor repairs to damaged wiring..... | \$35 per unit |
| Changing or upgrading electrical service or adding more than (2) new circuits or installing wiring for more than two (2) new circuits..... | \$45 per unit |
| Electrical wiring for new/add on furnace or air conditioning | \$35 per unit |

(Amended, Ordinance No. 96-38, June 17, 1996)

C. For permits to install new electrical work in one and two family residential structures, room additions to such structures, or accessory buildings to such structures, the amount shall be

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included as part of a combined permit for building, electrical, mechanical, and plumbing and shall be included in the total fee as set forth in Chapter 67, Section 9 (c).

D. For permits to erect or install swimming pools with electrical work, the amount shall be as follows:

| | |
|---|------|
| Inground swimming pool with electric work | \$70 |
| Above-ground swimming pool with electric work | \$50 |

(Amended, Ordinance No. 96-38, June 17, 1996).

9. SERVICE SPECIFICATIONS.

A. All newly installed electrical services shall be in conformance with the 2011 edition of the National Electrical Code and with the following:

(Amended, Ordinance No. 2011-51, August 15, 2011)

(Amended, Ordinance No. 2008-09, March 17, 2008)

(Amended, Ordinance No. 2005-81, September 6, 2005)

(1) N.E.C. 230.2 Number of services - only one service drop or lateral shall be permitted unless written approval by the Inspection Division is obtained for the conditions (a) through (d) of said Article 230.2. (Amended, Ordinance No. 2005-81, September 6, 2005)

(2) N.E.C. 230.43 Service - entrance conductors shall be installed in accordance with the applicable requirements of this code covering the type of wiring method used and shall be limited to the following methods:

- (a) Rigid metal conduit;
- (b) Intermediate metal conduit;
- (c) Rigid nonmetal conduit.

Any other method described shall have written consent of the Inspection Division and local utility company.

(Amended, Ordinance No. 2005-81, September 6, 2005)

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(3) N.E.C. 230.70 (a) Location. The service disconnecting means shall be installed at a readily accessible location either outside of a building or structure, or inside nearest point of entrance of the service conductors, but not to exceed ten feet.

(Amended, Ordinance No. 2005-81, September 6, 2005)

(4) Where city water is available, the electrical service shall be bonded to the cold water piping with a jumper around the water meter.

(Amended, Ordinance No. 2005-81, September 6, 2005)

(Amended, Ordinance No. 2002-16, April 1, 2002)

(Amended, Ordinance No. 2000-96, November 6, 2000)

(5) Sizing of service entrance conductors shall be one of the following: (a) to main breaker with no reduction of ampere rating; (b) to approved calculated load where multiple disconnects are used, with no reduction of ampere rating; (c) to rated buss of equipment when no calculated load is provided with no reduction of ampere rating.

(Amended, Ordinance No. 2008-09, March 17, 2008)

(Amended, Ordinance No. 2005-81, September 6, 2005)

(Amended, Ordinance No. 2002-42, May 20, 2002)

(6) PVC risers up utility poles shall be Schedule 80.

(Amended, Ordinance No. 2008-09, March 17, 2008)

(7) Metal elbows and conduits at utility poles and building service shall be connected to an effective grounding path, by the electrical contractor and installed as per N.E.C. 250.80.

(Amended, Ordinance No. 2008-09, March 17, 2008)

10. CODE APPLICATIONS - SPECIFIC.

A. New buildings of all types:

1) The 2011 edition of the National Fire Protection Association will be the accepted code for all electrical wiring installations.

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(Amended, Ordinance No. 2011-51, August 15, 2011)

(Amended, Ordinance No. 2008-09, March 17, 2008)

(Amended, Ordinance No. 2005-81, September 6, 2005)

(Amended, Ordinance No. 2002-16, April 1, 2002)

(Amended, Ordinance No. 2000-96, November 6, 2000)

(Amended, Ordinance No. 99-33, April 5, 1999)

2) Where emergency lighting is required, an adequate numbers of battery back-up type fixtures shall be used to provide lighting for exiting. This shall be required in all installations including buildings supplied with alternate power supply such as generators or separate services.

(Amended, Ordinance No. 2011-51, August 15, 2011)

3) Smoke detectors shall be as per 907.2.10 of the International Fire Code - 2006 Edition. (Amended, Ordinance No. 2011-51, August 15, 2011)

B. Existing buildings:

1) Other than dwelling:

(a) All new wiring shall be installed as per this Electrical Code;

(b) When it is found that the electrical system in a structure constitutes a hazard to the occupants or the structure by reason of inadequate service, improper fusing, insufficient outlets, improper wiring or installation, deterioration or damage or for similar reasons, such defects shall be corrected.

(c) Whenever construction remodeling calls for walls or ceilings (including suspended ceilings) to be opened up, all wiring, boxes, conduit, etc. exposed by this work shall be in accordance with the code at the time of installation or brought up to current code standards.

(Amended, Ordinance No. 2011-51, August 15, 2011)

(Amended, Ordinance No. 2002-16, April 1, 2002)

2) Buildings or part of buildings used as human dwellings:

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(Amended, Ordinance No. 2002-16, April 1, 2002)

(Amended, Ordinance No. 95-15, April 3, 1995)

(a) Whenever a new electrical service or wiring of new building additions or rewiring with three (3) or more additional circuits, the following shall also apply:

1. Service: The size and usage of appliance and equipment shall be used as the basis for determining the need for additional facilities in accordance with the latest adopted edition of this Electrical Code. (Amended, Ordinance No. 2005-81, September 6, 2005)

2. Receptacles: Every habitable space in a dwelling shall contain at least two separate and remote receptacle outlets. Every laundry area shall contain at least one grounded type receptacle. Every bathroom shall contain at least one duplex wall receptacle and be protected by a GFCI. Any new receptacle must be of the grounded type and installed as per the NEC. Existing 3-wire grounded type receptacles, wired to a 2-wire system, shall either be grounded as per the NEC, protected by a GFCI, or replaced by a 2-wire receptacle.

3. Lighting fixtures: Every public hall, interior stairway, bathroom, laundry room, furnace room, basements, and attics or utility rooms used for storage or contain equipment requiring servicing shall contain at least one electric lighting fixture controlled by a wall switch at the usual point of entry. (Amended, Ordinance No. 2005-81, September 6, 2005)

4. Electrical system hazards: The following items are declared to be hazardous and it shall be unlawful to create, maintain or permit the same to exist.

a. Conductors or devices carrying electrical energy in excess of the approved rated capacity;

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b. Electrical wiring, of all types, not supported in an approved manner (existing wiring will be allowed on bottom of joists in basements if secured at intervals to eliminate sagging);

c. Splices unenclosed in approved boxes other than knob and tube wiring inside walls and attics;

d. Absence of or use of unapproved connectors for splices and termination into boxes or cabinets;

e. Exposed fuse blocks or cleat type light fixtures;

f. Wiring with insulation deterioration or other damaged conditions;g.

Flexible cords, commonly known as lamp or extension cords, used as a substitute for fixed wiring; or where run through walls, ceilings, floors, doorways, windows, or where attached to, or run behind building surfaces such as walls, ceilings, baseboard, and floors;

h. The use of the grounded circuit conductor used for grounding, except as provided by NEC 250.140, Exception, for such listed appliances;

(Amended, Ordinance No. 2005-81, September 6, 2005)

(Amended, Ordinance No. 2000-96, November 6, 2000)

i. Broken porcelain fixtures in basements or cord type fixtures with frayed or deteriorated insulation;

j. Electrical wiring with metal outer covering in contact with dissimilar metals such as copper water piping, etc.;

k. Boxes or conduits with excessive number of conductors;

l. Knob and tube wiring in areas other than inside walls or attics.

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In keeping with safe electrical installations, all unsafe conditions other than specifically noted above, should be disclosed to the owner by the electrical contractor and corrected before inspection.

C. Swimming Pools

(Amended, Ordinance No. 2011-51; Ordinance No. 2010-48)

N.E.C. 680.23. Underwater Luminaries. This section covers all luminaries (lighting fixtures) installed below the normal water of the pool. (a) Voltage Limitation. No luminaries (lighting fixtures) shall be installed for operation on supply circuits over 15 volts between conductors.

11. **SERVICE CONNECTIONS.** The local utility company may connect the electrical service to the structure when the service is installed permanently on the structure and upon order of the Inspection Division. Where services have been damaged due to weather conditions, a permit and inspection will be necessary only when new conductors are being installed. Such inspections will be of the electrical service only.

During severe weather conditions the Building Inspection Manager may waive all permits and inspections. Under such conditions the repaired services must remain the same size and materials must be used accordingly. If a larger size service is requested by the owner, then all such provisions of this code shall apply.

(Amended, Ordinance No. 2010-03, February 1, 2010)

(Amended, Ordinance No. 2002-16, April 1, 2002)

(Amended, Ordinance No. 95-15, April 3, 1995)

12. **INSPECTIONS:** All electrical wiring installed under a permit issued as herein provided must be inspected before being concealed and must have a final approved inspection before the Certificate of Occupancy is eligible for issuance. It is the responsibility of the

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electrical contractor, or those making electrical installations or alterations, to give such timely notice requesting inspections. It may be necessary at various times to lengthen the time before inspections can be made and shall be at the discretion of the Building Inspection Manager. Failures to call for final electrical inspections before structures are occupied or after job completion, will be cause for the Inspection Division to submit the case before the Electrical Commission for possible license suspension or revocation. The Inspection Division may revoke a permit or withhold approval of work in case there has been a false statement or representation as to a material fact in the application, the plans, or specifications upon which such approval of such permit was based.

(Amended, Ordinance No. 2010-03, February 1, 2010)

(Amended, Ordinance No. 95-15, April 3, 1995)

13. **PENALTY.** It shall be unlawful for any person, firm or corporation to erect, construct, alter, repair, remove, demolish, install or operate electrical equipment regulated by said Building Code or said Electrical Code or this Chapter or cause the same to be done, contrary to or in conflict with or in violation of any of the provisions thereof. It shall be unlawful to continue work after a stop order has been issued, served or posted under said provisions. Any person, firm or corporation violating or found to be in violation of any of said provisions shall be fined not less than One Hundred Fifty Dollars (\$150.00) nor more than Five Hundred Dollars (\$500.00) for each offense, and each day upon which a violation occurs or is allowed to continue, or a condition is not brought into compliance after notice, shall be viewed and may be prosecuted as a separate and distinct offense. (Amended, Ordinance No. 2011-75)

14. **OTHER REMEDIES.** The imposition of the penalties herein prescribed shall not preclude the institution of appropriate action to prevent unlawful construction or to restrain,

correct or abate a violation, or to stop an illegal act, conduct, business or operation of electrical equipment or systems in or about any premises.

15. **RE-INSPECTION FEES.** A re-inspection fee of \$30.00 shall be assessed against the applicant for a construction permit who has requested an inspection which cannot be completed and/or approved by the Inspection Division for any of the following reasons:

(1) the work for which the inspection has been requested is not installed or completed to the extent that an inspection can be made,

(2) the inspection reveals that the electrical system has more than three code violations due to: equipment not installed per instructions included in the listing or labeling; equipment installed without correct polarity; components not properly grounded; wiring not installed as to be free from short circuits; equipment installed with improper ratings; devices and fixtures not energized because of loose connections or broken wires,

(3) the Inspector is unable to gain entry at the time requested by the contractor,

(4) when previously noted violations have not been corrected.

Fees assessed as herein provided may be appealed to the Construction and Housing Board of Appeals by filing a notice of such appeal with the City Clerk within fourteen (14) days of the mailing of notice of such assessment. An appeal shall stay the due date for payment until the date of the final order of the Board.

Such fees shall be assessed by mailing notice of same to the owner or other person by certified mail, return receipt requested. Payment thereof shall be due fourteen (14) days after mailing of such notice, which notice must contain a statement of the right of the owner or other person to appeal the same to the Board and the time limitation thereon.

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In any judicial proceeding brought by the City to collect fees which have not been paid as required by the provisions hereof, failure to receive notice of the assessment of such fee may be a defense thereto, but only if such notice was not sent to the proper mailing address of the defendant or was received thereat by someone other than a person upon whom substituted service may be made pursuant to the Illinois Code of Civil Procedure.

Any fee or fees assessed as herein provided, and any judgment entered for same, shall be in addition to any fine imposed by the Circuit Court under this Chapter.

No certificate of occupancy shall be issued for any building for which re-inspection fees are unpaid.

16. **WITHHOLDING OF PERMITS.** Building permits may be withheld from permit applicants, or in the case of combined permits from the licensed subcontractor, who is in violation of Chapters 67, 68, 69, or 70.1 of the City Code at a location other than that for which a permit is being sought. Such violation may include, but shall not be limited to the following:

A. Failure to arrange for inspections required under Chapters 67, 68, 69, and/or 70.1 of the City Code within a reasonable time frame.

B. Failure to take reasonable requested action to uncover work which requires inspection but has been hidden from view of the inspector.

C. Failure to pay required permit or re-inspection fees.

D. Failure to obtain a building permit for work which required a building permit.

E. Failure to take reasonable action to notify and obtain approval from Inspection Division of changes made to approved building permits.

F. Falsifying information on building permit applications.

G. Performance of building permit work under an invalid or voided building permit.

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H. Failure to obtain a required certificate of occupancy before occupying or allowing occupancy of new construction or change in use.

Permit applicants from which permits are to be withheld must be notified by mailing notice of same to the permit applicant or licensed subcontractor by certified mail, return receipt requested. Said notice shall inform the permit applicant or licensed subcontractor of the violations, which if corrected, will allow the City to issue to the permit applicant or licensed subcontractor additional permits. Corrections shall be made within fourteen (14) days after mailing of such notice, which notice must contain a statement of the right of the permit applicant or licensed subcontractor to appeal the same to the Construction and Housing Board of Appeals and the time limitation thereon.

Permits withheld as herein provided may be appealed to the Construction and Housing Board of Appeals by filing a notice of such appeal with the City Clerk within fourteen (14) days of the mailing of notice of such withholding. An appeal shall stay the due date for corrections required until the date of the final order of the Board.

Any action to withhold permits as herein provided and/or any judgment entered for same, shall be in addition to any fine imposed by the Circuit Court under section of this Chapter.

17. **SEVERABILITY.** The provisions hereof are, and shall be construed to be severable and invalidity of any section or provisions of this Chapter or of the codes and standards hereby adopted shall not invalidate other sections or provisions hereof.