

ORDINANCE NO. 7879-21

ELECTRICAL ORDINANCE OF
THE CITY OF URBANA, ILLINOIS

AN ORDINANCE PROVIDING FOR THE INSPECTION AND REGULATION
OF ELECTRICAL INSTALLATION IN THE CITY OF URBANA, ILLINOIS

WHEREAS, an Electrical Commission has been established in the City of Urbana, Illinois by ordinance adopted and approved on March 19, 1928 by the City Council of the City of Urbana, Illinois as per Chapter 24, paragraph 11-37-2 of City and Village Municipal Code of the State of Illinois. Also that an Electrical Inspection Department has been established.

WHEREAS, the Commission shall consist of five (5) members and the Electrical Inspector, ex-officio. Three members shall constitute a quorum for any regular or special meeting.

WHEREAS, the statutory law of the State of Illinois provides that the Electrical Commission shall recommend:

1. Safe and practical standards and specifications for the installation, alteration and use of electrical equipment designed to meet the necessities and conditions of the City of Urbana: and
2. Reasonable fees to be paid for the inspection by the Electrical Inspection Division of all electrical equipment installed or altered within the City, and
3. Reasonable rules and regulations governing the issuance of permits by the Electrical Inspection Division:

It shall be one of the duties of the Electrical Commission to periodically study and recommend amendments of the electrical installation regulations as may be required due to changes in materials and practices.

The Electrical Commission shall hear appeals from any decision of the Electrical Inspector and requests for variance from the regulations of electrical installation in the City. An appeal may be registered by the owner of any building or structure, or his duly authorized agent from any decision of the Electrical Inspector or requesting a variance from the requirements of this ordinance, and such appeal shall be perfected by filing a written notice of appeal with the Chairman of the Electrical Commission stating briefly the decision complained of or the variance requested and request for a hearing of the same by the Electrical Commission.

The Electrical Commission may grant a variance where a strict or literal application of the provisions of the National Electric Code or the provisions of the electrical ordinance would place an unnecessary or undue hardship on the applicant and where such variance would result in no substantial reduction in the safety factor intended by the provisions from which a variance is sought.

The Commission shall meet upon notice of the Chairman within reasonable time of the filings of an appeal. The Commission shall establish reasonable rules and regulations as to the time of regular meetings and as to procedure before the Commission, not inconsistent with the terms of this ordinance. Hearings on appeals shall be open to the public. Three members of the Electrical Commission shall constitute a quorum.

The concurring vote of three members of the Electrical Commission shall be necessary for reversal of the decision of the Electrical Inspector, or any other decision or determination favorable to the appellant. The failure of such concurring vote shall be deemed to be confirmation of the judgement of the Electrical Inspector. Every action of the Electrical Commission shall be by resolution, copies of which shall be certified to the Electrical Inspector and the appellant. No member of the Commission shall participate in any cases in which he is personally interested.

WHEREAS, after investigation and study, and on the basis of the recommendation of the Electrical Commission, the Council of the City of Urbana finds that the National Electrical Code, 1978 Edition, as sponsored by the National Fire Protection Association, is a standard with reference to the installation and use of electrical equipment in public and private premises which the National Board of Fire Underwriters has adopted, represents the consensus of expert opinion as to the practical methods of installing electrical equipment to provide for the safety of persons and property, and is generally recognized by authorities in the electrical industry, and

WHEREAS, the Electrical Commission of the City of Urbana has recommended this ordinance to the Council of the City of Urbana, and has further recommended the National Electrical Code and Standards established by the Board of Fire Underwriters as establishing standards which are adequate to safeguard persons and property from electrical hazards arising from the installation and use of electrical equipment and devices in the City of Urbana, Illinois except as herein provided: and

WHEREAS, Sections 1-2-4 and 1-3-2 of the Illinois Municipal Code and Section 1002, of Chapter 85, Illinois Revised Statutes, 1967, provide that, where rules and regulations for the construction of buildings or any part thereof have been printed in book or pamphlet form, such rules and regulations or portions thereof may be adopted by reference; and

WHEREAS, Three (3) copies of each of the pamphlets containing the rules and regulations hereinafter adopted have been filed in the office of the City Clerk for use and examination by the public at least thirty (30) days prior to their adoption, as provided by said Statute:

NOW THEREFORE, BE IT ORDAINED BY THE COUNCIL OF THE CITY OF URBANA, ILLINOIS, as follows:

ARTICLE 10

That the National Electrical Code, 1978 Edition, as sponsored by the National Fire Protection Association, of which not less than three (3) copies have been and are now filed in the office of the City Clerk, be and the same is hereby adopted by reference, subject to changes in certain portions thereof as herinafter set forth:

ARTICLE 20

DEFINITIONS

20-1. ELECTRICAL EQUIPMENT The term "Electrical Equipment", as used in this ordinance, means conductors and equipment installed for the utilization of electricity supplied for light, heat or power, but does not include radio apparatus or equipment for wireless reception of sounds or signals and does not include apparatus, conductors and other equipment installed for or by public utilities, including common carriers, which are under the jurisdiction of the Illinois Commerce Commission for use in their operation as public utilities.

20-2. ELECTRICAL CONTRACTOR The term "Electrical Contractor" as used in this ordinance shall mean any person engaged in the business of installing or altering by contract electrical equipment for the utilization of electricity supplied for light, heat, or power, not including radio apparatus or equipment for wireless reception of sounds or signals, conductors and other equipment installed for or by public utilities including common carriers, which are under the jurisdiction of the Illinois Commerce Commission for their use in their operation as public utilities; the term "Electrical Contractor" does not include employees employed by such contractor to do or supervise such work.

20-3. ELECTRICAL INSPECTOR The term "Electrical Inspector" as used in this ordinance, shall mean the electrical inspector of the City, or any of his duly authorized agents.

20-4. WORK, WIRING, APPARATUS, DEVICES The words "Work, Wiring, Apparatus, Devices" and similar words and terms shall mean and refer to and include all details in connection with any attachment or any part thereof of any and all similar things used in connection with electricity either directly or indirectly.

ARTICLE 30

ELECTRICAL INSPECTION SECTION
PERMITS-REGISTRATIONS

30-1. ELECTRICAL INSPECTION SECTION-ESTABLISHED An electrical inspection section within the Electrical and Lighting Division and the position of Electrical Inspector have heretofore been established for the regulation of the installation, alteration and use of all electrical equipment as herein provided and as may be provided by ordinance.

30-2. SAME - DUTIES GENERALLY The electrical inspection section shall enforce safe and practical standards and specifications for the installation, alteration and use of electrical equipment designed to meet the necessities and conditions of the particular locality, and shall enforce reasonable rules and regulations governing the issuance of permits by the electrical inspector, and shall recommend reasonable fees to be paid for the inspection of all electrical equipment installed or altered within the City.

30-3. SAME - ANNUAL INSPECTION OF BUSINESS BUILDINGS AND FACTORIES There shall be an annual inspection of all business buildings and factories by the electrical inspector.

30-4. SAME - ISSUANCE OF PERMITS AND INSPECTION OF EQUIPMENT No electrical equipment shall be installed or altered in the City except upon a permit first issued by the electrical inspector. Such electrical inspector shall issue permits for the installation and alteration of electrical equipment in all cases where application shall be made in accordance with the rules and regulations applicable thereto. Such electrical inspector shall inspect all electrical equipment altered or installed in the City.

EXCEPTION: A permit shall not be required for minor electrical repairs (involving no new work, alterations or change whatever) that are necessary and incident to the maintenance only in good condition of an established plant, installation or system of wiring. However, this exception does not permit the installation of any new circuits or the extension of any circuits already installed.

Every person performing any electrical work or installing any electrical apparatus, material or device whatsoever, for use in connection with electricity, shall as provided in this ordinance secure from the electrical inspector a permit for such work.

Each permit shall designate to whom it is issued, the location of the place where work is to be done, the class of such work, and a reasonable description of same.

The holder of a wiring permit may install all wiring and fixtures on such permit. However, if any of the wiring or fixtures are installed by other than the party to whom the permit is issued, or his bona fide employees working under his supervision and permits, a separate permit must be taken out by the parties doing the work.

30-5. SAME - SUSPENSION OF PERMIT PRIVILEGES Should any registered electrical contractor, or any company, firm or corporation, operating on annual permits fail to correct any defect, error or deficiency in any work installed under the authority of a permit issued by the electrical inspector within ten (10) calendar days after mailing written notification thereof by the electrical inspector, or within such reasonable times as may, upon request, be prescribed, the electrical inspector shall, until further notice, stop the issuance of permits to such electrical contractor or to any company, firm or corporation, operating on annual permits until such corrections have been made, inspected and approved.

The electrical inspector is hereby empowered to suspend the permit privileges of any registered electrical contractor or any company, firm or corporation, operating on annual permits who shall fail to pay any just indebtedness to the City Municipal Collectors Office for inspection fees for electrical wiring or apparatus, as fixed in this ordinance, until such indebtedness is paid in full.

30-6. REGISTRATION OF ELECTRICAL CONTRACTORS Any person desiring to engage in the business of installing or altering electrical equipment in the City shall apply for registration to the Electrical Inspector. The Electrical Inspector shall register the applicant as an Electrical Contractor and shall issue to the Applicant a certificate of registration which will authorize the Applicant to engage in such business during the fiscal period for which it is issued upon the satisfactory compliance with the following:

A. Completion of the application upon the form required by the Electrical Commission, and

B. The posting of a \$10,000 (ten thousand dollars) bond conditioned upon the contractor restoring the City's streets, alleys, sidewalks, parking and all other City property to as good condition as the same were before such contractor disturbed such for work to be performed under a permit, which said bond shall be upon a form provided by the City, and

C. The posting of a Certificate of Insurance demonstrating that the applicant has good and adequate insurance to protect the City of Urbana from any and all liability for damages to persons or property caused or asserted to have been caused on account of anything growing out of the doing of any work for which said permit was issued, and the payment of the fee fixed herein.

If in the opinion of the Electrical Inspector any electrical Contractor so registered shall have willfully or repeatedly violated any of the provisions of this Ordinance, the Electrical Inspector shall prefer written charges against such offending registered electrical contractor to the Electrical Commission. Upon the receipt of such written charges, the Electrical Commission shall within ten (10) calendar days after receiving same, conduct a full and fair hearing, after which, by majority vote of those present, determine whether or not such registered electrical contractor's license shall be suspended or revoked by the City. In no event may a suspension exceed six (6) months. The Electrical Inspector shall keep a suitable record of all registrations issued by him and a suitable record of all suspensions or revocations by the Electrical Commission.

The fee for registration as an electrical contractor shall be twenty-five dollars (\$25.00) per annum in advance, which sum shall be paid by the applicant to the City Municipal Collector's Office. The certificate of registration issued by the Electrical Inspector shall expire on the 30th day of June following its issuance. The Electrical Inspector shall not issue any such certificate of registration until the payment of such fee shall be made.

EXCEPTION; Any permit required by this Code may be issued to any person to do any work regulated by this Code in a single family dwelling used exclusively for living purposes, including the usual accessory buildings and quarters in connection with such buildings, provided the person is the bonafide owner of such dwelling and that the same will be occupied by said owner and said owner shall personally purchase all material and perform all labor in connection therewith, and provided that all workmanship, methods, and materials shall meet the requirement of this Code.

30-7. APPOINTMENT OF SUPERVISING ELECTRICIAN Before any permit to install or alter electrical work shall be issued to any person entitled to secure permits under the preceding regulations, he shall appoint or employ a person, who may be himself, or some other person, for the purpose of the electrical regulations of this ordinance, who shall be known as supervising electrician.

The supervising electrician shall have had at least four (4) years or eight thousand (8,000) hours experience in the installation alteration, repair and maintenance of electrical wires, equipment, and apparatus, or an experience equivalent thereto. Applicants shall furnish the names and addresses of former employers, periods of time employed, and in what capacity. Proof of such service shall be furnished in a manner satisfactory to the Electrical Inspector. Every applicant provided for in this section shall be required to answer a reasonable number of questions in writing as determined by the Electrical Inspector to show that he has sufficient knowledge and technical training to supervise the installation, alteration, repair and maintenance of electrical wires and apparatus authorized by permits issued by the Electrical Inspection Department. Applicants shall be required to answer to the satisfaction of the Electrical Inspector

at least seventy percent (70%) of the questions prepared by the Electrical Inspector. Any person denied status as a supervising electrician by the Electrical Inspector may appeal said denial to the Electrical Commission. The Commission, following a hearing of evidence, shall confirm or reverse the Electrical Inspector's decision by a majority of those members present.

Should an applicant fail to achieve a seventy percent (70%) score on the first examination, a thirty (30) day waiting period will be required before re-examination. Should the applicant fail to achieve a seventy percent (70%) score on the second examination or on an examination taken in another municipality a sixty (60) day waiting period will be required before re-examination. Any false statements on the application for registration shall constitute fraud, and cause said registration to be null and void.

Failure of the electrical contractor to maintain continuous registration and bond will void permit privileges and re-examination of supervising electrician will be required.

ARTICLE 40

GENERAL RULES GOVERNING
ELECTRICAL INSTALLATIONS

40-1. PURPOSE The purpose of this ordinance is the practical safeguarding of persons and of buildings and their contents, from electrical hazards arising from the use of electricity for light, heat, power, radio and/or television transmission, signaling and for other purposes. It covers the electrical conductors and equipment installed within or on public and private buildings and other premises, including yards, carnival and parking lots, and private industrial and commercial sub-stations.

The provisions of this ordinance constitute a minimum standard. Compliance therewith and proper maintenance will result in an installation reasonably free from hazard, but not necessarily as a design, specification, nor an instruction manual for untrained persons. Good service and satisfactory results will often require larger sizes of wire, more branch circuits, and better types of equipment than the minimum which is here specified.

40-2. WIRING LAYOUT Provisions should be made for ample raceways for wiring, spaces for equipment, and allowances for future increases in the use of electricity. In laying out an installation for constant-potential systems, provisions should be made for distribution centers located in easily accessible places for convenience and safety of operation.

Attention is called to the restrictive provisions of the number of wires and circuits confined in a single enclosure. Engineers and architects should be aware of these restrictions so that there will be no conflict between the plans and specifications and what the electrical inspector finds on the job.

Sufficient drawing and/or details shall accompany the application for permit to verify compliance with this ordinance. Such plans shall be approved by the Electrical Inspector prior to issuance of a permit. The Electrical Inspector shall be advised of any revisions to the original plans and shall approve the same in writing.

ARTICLE 50

AUTHORITY OF THE ELECTRICAL INSPECTOR

50-1. GENERAL The Electrical Inspector of the City of Urbana, shall administer the electrical regulations of this ordinance. The Electrical Inspector supervising such enforcement of this ordinance has the responsibility for making interpretations of the rules, for deciding upon the approval of equipment and materials, and for granting special permission contemplated in a number of the rules.

50-2. WAIVER OF PROVISIONS The Electrical regulations of this ordinance may be modified or waived by special permission in particular cases where such modification or waiver is permitted by "special permission" in those regulations. Such permission shall in all cases be obtained from the Electrical Inspector in writing prior to the commencement of the work.

50-3. INSPECTIONS

a. The electrical inspector shall have the authority to enter any building or premises for which a permit to do electrical work has been issued, at any reasonable hour in the discharge of his duty and it shall be permissible for him when necessary to order at the owners expense, the removal of any existing obstructions such as, but not limited to, laths, plastering, boarding, or partitions, which may prevent reasonable inspection of the electrical equipment; he shall also have the authority to enter any building at any time when occupied by the public in order to examine electrical equipment in such building, and it shall be unlawful for any person to interfere with him in the performance of his official duties.

b. The electrical inspector is hereby authorized to inspect or cause to be inspected or re-inspected all electrical work in or on any building, structure or area within the corporate limits of the City, previous to or after completion of such work, and require that all such work be performed in the manner herein specified.

c. No wiring shall be concealed prior to inspection and approval. It shall be the responsibility of the contractor to request inspection as required, also to arrange for entrance to a building and provide for removal of covers, devices, etc. as is necessary for inspection.

50-4. IMPROPER INSTALLATION - PROCEDURE When any electrical equipment is found by the Electrical Inspector to be dangerous to persons or property because it is defective or improperly installed, the person, firm or corporation responsible for said electrical equipment shall be notified by the Electrical Inspector in writing, and required to make the necessary correction within the time specified in such written notice, and if said person, firm, or corporation shall fail to make these required corrections, the Electrical Inspector shall have the power and authority to disconnect or order the discontinuance of electrical service to said electrical equipment; provided, upon receipt of such written notice from the Electrical Inspector, the person named as responsible therein shall have the right to appeal to the Electrical Commission of the City within three (3) calendar days from receipt of such written notice. The decision of the Electrical Commission shall be final in all cases by majority vote of the members present.

50-5. OFFICIAL NOTICE OR SEAL The Electrical Inspector is hereby empowered to attach to electrical cabinets and equipment, any official notice or seal to prevent or permit use of electricity, and it shall be unlawful for any other person to put or attach such seal or notice, or to break, change, destroy, tear, mutilate, cover, relocate, or otherwise deface or injure any such official notice or seal posted and/or duly signed by the Electrical Inspector.

50-6. MATTERS NOT COVERED BY ORDINANCE

a. The Electrical Inspector shall decide all questions not otherwise provided for in the Electrical Regulations of this ordinance pertaining to the installations of electrical apparatus, wire, fixtures, devices, appliances, and attachments and shall have the power and authority to make and enforce such rules and regulations as herein provided, of a technical nature, in connection therewith as he may deem necessary and desirable to make all electrical installations and work of the maximum degree of safety to public life and property.

b. Any person, firm or corporation not in agreement with the decision of the Electrical Inspector shall have the right to appeal to the Electrical Commission of the City within forty-eight (48) hours and the decision of the Electrical Commission shall be final in all cases by majority vote of the members present.

50-7. RECORDS It shall be the duty of the Electrical Inspector to keep or cause to be kept, a full and complete record of his business and have such records concise and definite in form.

NOTE: Items in Urbana Ordinance Article 60 will supercede Articles 210 and 220 of the National Electrical Code, 1978 Edition.

ARTICLE 60

RULES GOVERNING ELECTRICAL INSTALLATIONS

60-1. GENERAL It shall be unlawful for any person in any way to knowingly cut, disturb, alter, or change any electrical wiring, or to knowingly permit such electrical wiring to be cut disturbed, altered, or changed unless done in conformity with this ordinance.

60-2. CLASSIFICATION OF WIRING All wiring above 50 volts used for light, heat, or power shall be classed as "A" or "B".

a. CLASS "A" In factories, public buildings and commercial establishments electrical wiring shall be Class "A". New apartment buildings with over two (2) apartments which require that the interior walls have a fire resistant rating of 3/4 hour or more shall have Class "A" electrical wiring installed. Class "A" wiring shall be installed in all metallic raceways in all cases except: by "special permission" in re-wiring of existing apartments and residences of multiple occupancy, branch circuit conductors may be installed with non-mettalic sheathed cable with a grounding conductor as an integral part of the cable assemblage.

b. CLASS "B" RESIDENTIAL WIRING Residential branch circuit conductors may be installed in non-metallic sheathed cable with a grounding conductor. In basements the cable shall be installed no less than two (2) inches above bottom of joists. Below bottom of joists all wiring shall be installed in metallic raceways. (See exception in Section 60-3)

c. Manufactured buildings and building components not inspected and certified by an approved independent inspection agency, shall be wired in metallic raceway. Conductors, fixtures and devices to be installed on the job site.

EXCEPTION 1. Where chases are provided, wiring may be installed on the job site.

EXCEPTION 2. Where the complete wiring system is visible for inspection on the job site the wiring system may be factory installed with the applicable wiring method.

60-3. WIRING IN CRAWL SPACES - EXCEPTION Wiring in crawl spaces that are provided with access after completion of finished building shall be installed the same as basements, according to class of wiring. Wiring installed in crawl spaces that are not provided with access after completion of builidng shall be installed in metallic raceways in all cases.

EXCEPTION: DRYER, OR HOUSEHOLD ELECTRIC RANGES. Branch circuit conductors supplying a household electric range or dryer may be installed vertically below the bottom of joists when type ASE service entrance cable is used, and such cable is properly secured by approved clamps or straps every eight (8) inches from bottom of joist line to the appliance served.

60-4. NON-METALLIC SHEATHED CABLE

a. All non-metallic sheathed cable installed in the City of Urbana, shall contain in addition to any other conductors, a bare grounding conductor as an integral part of the cable assemblage, to facilitate the proper grounding of equipment and apparatus as required by the National Electric Code, 1978 Edition. Such bare grounding conductor shall be permanently and effectively spliced and/or bonded to each and every metal outlet box throughout the entire installation by special clamps designed for that purpose or other approved means, to insure a continuous unbroken equipment and/or apparatus grounding system.

b. Non-metallic sheathed cable that is installed in hollow spaces or finished walls, or walls which are to be finished, shall not be stapled.

c. All terminations of non-metallic cable shall be provided with approved squeeze connectors.

60-5. HEATING UNITS A separate circuit shall be installed for each furnace or combustion heating unit with a means of disconnect provided for same at or near the unit, in addition to any disconnecting means provided at the service entrance equipment. All low voltage circuits must have an outer covering of flame-resistant material.

60-6. OVERCURRENT PROTECTION It shall be unlawful to provide over-current protection in excess of the maximum permitted by the National Electric Code, 1978 Edition, for any conductor, motor or apparatus or to install any substitution in lieu of any approved overcurrent device so as to remove or reduce the factor of safety of same.

60-7. APPARATUS INSTALLATIONS It shall be unlawful for any person, firm or corporation to sell, exchange, or offer for sale within the corporate limits of the City of Urbana, any equipment or apparatus that requires special or additional electrical wiring, such as, but not limited to, stokers, blowers, air conditioning units, refrigerators, (over nineteen cubic feet), signs, coin operated devices, etc., without listing such apparatus and/or equipment, complete with description of same, name, and address of buyer, or used, and the locations where the equipment and/or device is to be installed. It shall be unlawful for any person, firm, or corporation to fail, neglect, or refuse to have this file at all times available for inspection by the Electrical inspector.

60-8. SIGNS All signs, either prefabricated or custom made, shall contain only electrical materials and/or apparatus approved for the type and/or class of the locations where said sign is to be located and installed. All wiring both internal and otherwise in conjunction with said sign shall be installed in full compliance with all applicable rules of this ordinance.

60-9. ISOLATED RACEWAY SECTIONS When short sections of metallic raceway are required for mechanical protection or other reasons and the branch circuit overcurrent protection does not exceed 30 amperes, they may be so installed. Isolated raceway sections shall not be installed for circuits in excess of 30 ampere capacity.

60-10. GROUNDING TYPE RECEPTACLES WHERE REQUIRED Only grounding type outlets shall be installed where required by the National Electric Code 1978 Edition.

a. The enclosures of dishwashers, clothes dryers, ironers, freezers, sump pumps, power tools, dehumidifiers, air conditioners and the like, shall be grounded in an approved manner.

b. At least two weather-proof duplex receptacles, properly grounded, GFI protected, shall be installed on each new single family residence, or rewired existing residence, on opposite sides of the house as near as possible front and rear. And for each unit of a multi-family dwelling where provided with a porch, patio, balcony or other open space.

c. At least one (1) wall receptacle outlet shall be installed in each bathroom adjacent to the basin location, in all residential occupancies. The total bathroom circuit in each bathroom shall be on a 20 ampere Ground Fault Circuit.

60-11. MINIMUM SIZE CONDUCTORS No conductor rated at less than twenty (20) amperes shall be installed except:

a. Exception No. 1. Where a part of an approved cable assemblage, the grounding conductor may be sized as required by the National Electric Code, 1978 Edition.

b. Exception No. 2. Where adequate mechanical protection is provided, any adequate ground conductor.

c. Exception No. 3. For installation as low voltage conductors where the voltage does not exceed 50 volts between conductor or to ground.

d. Exception No. 4. For control wiring only, as permitted by the National Electric Code, 1978 Edition; however, this exception is not to be construed to include switch legs on circuits over 50 volts.

e. Exception No. 5. No conductor rated at less than sixty (60) amperes shall be installed for domestic range circuits in one and two family dwellings. Conductors for range circuits, in apartments, may be of a less ampacity rating if approval is obtained from the Electrical Commission prior to installation.

60-12. REQUIREMENTS FOR REWIRING EXISTING RESIDENCES For the purpose of this section, installation of a new service, the addition of two (2) or more 120 volt circuits or the addition of one (1) or more 240 volt circuits shall constitute rewiring.

a. Receptacles and Appliance Circuits shall be installed per Article 210 - Section 210-25 (b) dwelling occupancies, 1978 Edition of the National Electric Code.

b. Other circuits: the minimum number of other branch circuits shall be in accordance with the National Electric Code, 1978 Edition.

60-13. ADDITIONAL LOAD ON EXISTING SERVICE It shall be the responsibility of the contractor or other authorized person adding additional circuits and/or equipment to existing services to determine beforehand if said service is of sufficient size and capacity to carry such additional load according to the rules established under other sections of this ordinance, and if not, it shall be unlawful to make said addition until the service has been increased to required size.

60-14. TRANSFORMERS INSTALLED ON ROOFS OF BUILDINGS

a. Oil filled transformers shall be installed within a curbed basin with a floor of a minimum of 2-1/2 hour fire resistant material. The basin shall be of such size to contain the oil of the transformers therein. The floor shall extend a minimum of thirty (30) inches outside the basin and it shall be enclosed in an approved manner, to prevent the accumulation of water, snow, ice etc.

b. Dry type and askeral-insulated transformers shall be enclosed in approved weatherproof enclosures.

c. A fixed dry chemical system, automatically activated and with an easily accessible device for manual operation, shall be installed with a sufficient quantity and rate of application to create a fire extinguishing concentration over the curbed basin area of oil filled transformers.

60-15. CONNECTION OF EMERGENCY SYSTEMS The source of power for emergency systems in multi-metered building shall be connected to the supply side of the main service disconnect by one of the following methods:

a. Separate meter installation supplying only the emergency systems

b. Separate meter installation supplying only the emergency system panel and the house panel with the emergency panel connected to the supply side of the house panel overcurrent protective device.

c. Where emergency lighting for means of egress are required by the Building Code emergency power shall be supplied by one of the following:

- (a) Maintenance free storage battery
- (b) Generator Set
- (c) Unit Equipment

60-16. This ordinance will be in accordance with Article 680, Section 680-1 of the National Electric Code 1978 Edition.

60-17. Article 680, Section 680-8 of the National Electrical Code, 1978 Edition, with additional amendment "Underground service entrance conductors, feeder and branch circuit conductors shall be installed in rigid metallic conduit when within ten (10) feet of the swimming pool wall. Grounding and installation of rigid metallic conduit shall be in accordance with Articles 250 and 346 of the National Electrical Code, 1978 Edition. If it is impracticable to install or relocate existing service entrance conductors, feeders and branch circuit conductors in accordance with this Section, the swimming pool shall be located a minimum of ten (10) feet from such conductors.

ARTICLE 70

SERVICES

70-1. WORKMANSHIP

a. Services shall be installed in a neat and workmanlike manner, securely anchored, with the least amount of bends or fittings that the particular installation will permit and all holes cut for installation of conduits through walls or foundations shall be securely patched with mortar or other suitable material as compatible with the finish of the walls or foundation as possible so as to prevent the entrance of air currents and moisture.

70-2. ENTRANCE FITTINGS Service conductors shall be installed in rigid metal conduit only, with approved fittings, from point of attachment at the service drops, to the service entrance equipment within the building, structure, enclosure or area to be served. (For purposes of interpretation, approved fittings as used in this section means, fittings approved for use in electrical installation of rigid metal conduit, by the Underwriters Laboratories for specific locations and/or conditions of the specific locations in which they are to be used, such as explosion-proof, watertight, and any other specific conditions that may be encountered).

70-3. EXTENSIONS Services shall be so installed that the maximum extension within a building or structure of the service run shall not exceed eighteen (18) feet before providing overcurrent protection, and a means of disconnecting service from the internal wiring, except dispensation may be obtained from the Electrical Commission of this provision, in advance of installations where building design, or other conditions would prevent execution of same; however, dispensation must be obtained in advance, in writing from the Electrical Commission. No claims for dispensation will be considered after installation as herein provided.

70-4. SERVICE ENTRANCE AND FEEDER CONDUCTORS

a. Service entrance conductors shall have an ampacity rating equal to or greater than the rating of the main service disconnect, less not in excess of five percent (5%).

b. Feeder conductors shall have an ampacity rating equal to or greater than the rating of the fused disconnect switch supplying the feeder. Feeders employing circuit breakers, as overcurrent protection, shall have an ampacity equal to or greater than the rating of the device, not excluding the requirements of Section 240-3 (a), Exception No. 1 and Article 430, National Electrical Code, 1978 Edition.

70-5. SERVICE DISCONNECTS

a. A main disconnect switch shall be required for four (4) or more meters from the same service riser for residential services and all multi-metered services in excess of 400 amperes and all single metered services.

b. All commercial services as defined in Section 70-11, and all services with capacities in excess of two hundred (200) amperes, shall have one (1) main disconnect only, with proper overcurrent protection.

Exception No. 1. For fire pumps where a separate service is required.

Exception No. 2. For emergency electrical systems where a separate service is required.

Exception No. 3. Where ampacity requirements exceed the standards of a recognized testing laboratory, for labeling as suitable for use as a service equipment.

Exception No. 4. Building of large area: by special permission for a single building or other structure sufficiently large to make two (2) or more services necessary.

Exception No. 5. For different characteristics, such as for different voltages or phases.

c. By prior written permission of the Urbana Electrical Commission, dispensation of sub-section (b) may be granted in specific cases where the total service size is such that equipment of the required size is not available.

d. Service equipment, panelboards, and switchboards shall not be located in bathrooms, restrooms, shower rooms, clothes closets nor above washers and plumbed in fixtures.

70-6. MULTIPLE METERS IN 120/208 AREAS Multiple metered single phase services supplied from a 120/208 volt, four (4) wire WYE source shall have a three (3) phase, four (4) wire service, consisting of four equal current carrying conductors, meters to be connected in such a manner as to provide as near equal balance as possible.

70-7. RESIDENTIAL SERVICE DEFINITION Residential service shall mean a service to a building, structure, enclosure or area used for domestic purposes.

70-8. RESIDENTIAL SERVICE

a. Residential service capacity shall not be less than 100 ampere, 8 circuit, 3 wire, 120/240 volt for residences less than 625 square feet of floor space; 100 ampere, 12 circuit, 3 wire, 120/240 volt for residences 625 to 2000 square feet of floor space; 200 ampere, 16 circuit, 3 wire, 120/240 volt for residences 2000 square feet or more of floor space.

Existing 60 ampere services serving single family residences shall be replaced if the load is in excess of 10 KW as computed in accordance with Article 220 of the National Electrical Code, 1978 Edition.

EXCEPTION: Subject to advance approval by the Electrical Commission, existing residences of 2000 square feet or more may have 100 ampere, 8 circuit, 3 wire, 120/240 volt service where the majority of major appliances are not electric, and the proposed connected load would justify such dispensation.

b. For the purpose of applying Section 70-8. (a): Basements are not included in square footage area of floor space, unless occupied by one or more sleeping rooms, apartments, or places of business, in which case they are to be figured at one-half (1/2) area per square foot. (For purposes of interpretation, square footage is to be calculated from outside dimensions of building or structure, less garages, open porches, and breezeways, except as herein provided).

70-9. NEUTRALS - RESIDENTIAL Neutrals shall not be rated at less than seventy percent (70%) of the current carrying capacity of the associated phase conductors for single phase services supplied from a 120/208 volt source.

70-10. NEUTRALS This also applies to feeders to panels from grouped service equipment in multi-family dwellings.

70-11. COMMERCIAL SERVICE DEFINITION Commercial service shall mean a service to a building, structure, enclosure or area that is not defined as a residential service.

A commercial service shall be calculated to carry the proposed load and any future known loads, in addition to a reasonable safety factor.

70-12. NEUTRALS - COMMERCIAL Neutrals shall have the same current carrying capacity as the phase conductors where the load consists of 50% or more of electric discharge lamps.

In a service consisting of single phase and three phase loads, the neutral shall be calculated to carry only the unbalance of the single phase load.

70-13. INSPECTION FEES Inspection fees for various classes of work are as follows:

Annual Permit.....	\$ 50.00
Temporary Service Permit.....	6.00
Minimum Permanent Service.....	10.00
Outlets and/or fixtures 1 to 10 inclusive.....	4.00
Over 10 outlets and/or fixtures, each.....	.40
Motor and/or Heating up to 10 HP.....	4.00
Each additional 10 HP or fraction thereof.....	2.00

Each KW of electric heating shall be considered 1 HP for fee purposes.

Any permit which requires a fee shall have a minimum fee of \$10.00

All fees shall be charged at double the rates listed in this Section and Section 70-15 if work is started before application for permit is made or prior permission is granted, in writing by the Electrical Inspector.

70-14. ADDITIONAL WORK RESIDENTIAL ONLY Where a residence is already in use and has a meter or meters previously installed, a permit for up to three (3) additional outlets and/or fixtures shall be secured with no charge for the inspection. (See 60-13).

70-15. INSPECTION FEES FOR NEW SERVICES For new and existing building wiring, where a new service is to be installed, the following fees shall apply; these fees shall cover all wiring complete with fixtures, devices, and all associated equipment installed by permit holder for the wiring of the building or premises, but does not cover the fees for installation of devices and/or equipment furnished and installed by others.

SERVICE AMPERE RATING:

60 ampere service.....	\$ 10.00
Each additional meter thereof.....	6.00
100 ampere service.....	10.00
Each additional meter thereof.....	6.00

200 ampere service.....	\$ 25.00
Each additional meter thereof.....	10.00
400 ampere service	
120/240 volts or 120/208.....	40.00
240/480 volts or 277/480.....	80.00
Each additional meter thereof.....	10.00
600 ampere service	
120/240 volts or 120/208.....	50.00
240/480 volts or 277/480.....	100.00
Each additional meter thereof.....	10.00
800 ampere service	
120/240 volts or 120/208.....	60.00
240/480 volts or 277/480.....	120.00
Each additional meter thereof.....	10.00
1,000 ampere service	
120/240 volts or 120/208.....	70.00
240/480 volts or 277/480.....	140.00
Each additional meter thereof.....	10.00
1,200 ampere service	
120/240 volts or 120/208.....	80.00
240/480 volts or 277/480.....	160.00
Each additional meter thereof.....	10.00
1,600 ampere service	
120/240 volts or 120/208.....	100.00
240/480 volts or 277/480.....	200.00
Each additional meter thereof.....	10.00
2,000 ampere service	
120/240 volts or 120/208.....	150.00
240/480 volts or 277/480.....	300.00
Each additional meter thereof.....	10.00
2,500 ampere service	
120/240 volts or 120/208.....	200.00
240/480 volts or 277/480.....	400.00
Each additional meter thereof.....	10.00
3,000 ampere service	
120/240 volts or 120/208.....	250.00
240/480 volts or 277/480.....	500.00
Each additional meter thereof.....	10.00
4,000 ampere service	
120/240 volts or 120/208.....	300.00
240/480 volts or 277/480.....	600.00
Each additional meter thereof.....	10.00

5,000 ampere service	
120/240 volts or 120/208.....	\$ 350.00
240/480 volts or 277/480.....	700.00
Each additional meter thereof.....	10.00

6,000 ampere service	
120/240 volts or 120/208.....	400.00
240/480 volts or 277/480.....	800.00
Each additional meter thereof.....	10.00

For service ratings other than those listed, fee is to be charged for nearest larger size.

70-16. COMBINATION SERVICES Combination and multiple services to be computed as individual services, according to the capacity of each separate service.

70-17. NEW WIRES Changing, moving or altering any wiring apparatus, machinery or device in any way where new wires of a different size, or of greater or lesser length are installed shall be classed as new work, a fee and permit covering such work shall apply.

70-18. TIME OF PAYMENT OF INSPECTION FEES All inspection fees provided for in this ordinance shall be paid at the time of issuance of the permit or permits required by the provisions of this ordinance.

70-19. SERVICE PERMITS A service permit shall serve as an order from the electrical inspector authorizing the connection of service or other wires, for the setting and connection of meters, and for supplying current in buildings covered by this ordinance.

a. Connections covering all electrical appliances, apparatus or wire to become charged with electricity, either in buildings or outside of buildings, shall not be made until a service permit shall have been procured from the office of the Electrical Inspector authorizing such connection.

b. Connection having been made, inspected and approved, if broken or disconnected other than the mere replacing and removal of meters, must be inspected and approved before again being connected.

c. Before a service permit is issued, the Electrical Inspector shall make an inspection and approve wiring and apparatus in connection therewith in accordance with this ordinance.

d. Any person giving service, and supplying the electricity under a service permit as herein provided for, shall upon written notice from the Electircal Inspector disconnect such service wires and discontinue such service until a new permit has been secured.

70-20. REFUNDS In case of abandonment or discontinuance, the cost of work performed under a permit may be estimated, an adjustment of the fee made and the portion of the fee for uncompleted work returned to the permit holder, provided that no refund of a prescribed minimum fee shall be made. If such discontinuance is due to revocation of a permit, a similar adjustment and return may be made; provided that no refund shall be made until all penalties incurred or imposed by due authority have been collected. After such a refund has been made no work shall be resumed until a new application has been made and a new permit has been issued.

ARTICLE 80

ANNUAL ELECTRICAL MAINTENANCE CERTIFICATE

80-1. LISTING Listing for annual electrical maintenance certificate may be extended to a person, firm or corporation for the installation, alteration, repair, and maintenance of electrical wires and equipment under the conditions in Section 80-2 through Section 80-8 inclusive of this ordinance.

80-2. LIMITATIONS

a. A maintenance certificate for the installation, alteration, repair and maintenance of electric wires and apparatus shall be issued under the authority of this Article, to a person, firm or corporation, only where such electrical work is performed in or on the premises or property owned or controlled by the said person, firm or corporation, and used exclusively by them to conduct their business.

b. It shall be unlawful to obtain an annual electrical maintenance certificate under the provisions of this Article for the installation, alteration, repair, or maintenance of electrical wires or apparatus, where such electrical work is performed under or by contract, either verbal or written.

80-3. APPLICATION Application for annual electrical maintenance certificate shall be made in writing, on the form to be furnished by the electrical inspector.

80-4. RECORD OF LOCATION The location of all buildings, premises, or property where electrical work is to be installed, altered, repaired, or maintained, under authority of a valid annual electrical maintenance certificate shall be recorded with the Electrical Inspector.

80-5. SUPERVISING ELECTRICIAN No annual electrical maintenance certificate shall be issued to any person, firm or corporation under the provisions of this Article, until such person, firm or corporation shall have appointed or employed a supervising electrician as provided in Section 30-7 of this ordinance.

80-6. REVOCATION OF CERTIFICATE Any person, firm or corporation violating any of the provisions of this ordinance applicable to annual electrical maintenance certificates shall be subject to the penalties provided in this ordinance and in addition thereto, the annual electrical maintenance certificate issued to such person, firm or corporation shall be revoked by the Electrical Inspector in writing to the party or parties involved, and any unexpired fee therein shall be retained by the City Municipal Collector's Office, provided however, that revocation by the Electrical Inspector shall be subject to appeal to the Electrical Commission, within forty-eight (48) hours, and their decision shall be final upon the majority vote by those present.

80-7. NO OTHER PERMIT NECESSARY Possession of a valid annual electrical maintenance certificate shall automatically entitle the holder to perform the prescribed maintenance operations and no other written permit shall be necessary.

80-8. INSPECTIONS The Electrical Inspector shall make periodic inspections of sites where work is authorized by the annual electrical certificate and issue a certificate of inspection for all work found to be in conformity with the electrical ordinance, after the fees as prescribed elsewhere in this ordinance has been paid for all work performed since his last previous inspection.

The possessor of a valid annual electrical maintenance certificate shall be responsible for assisting the Electrical Inspector in determining the annual work performed between periodic inspections, within reasonable limits.

ARTICLE 90

GENERAL PROVISIONS

90-1. ENFORCEMENT AND INTERPRETATION This ordinance shall be enforced by the office of electrical inspection in exercising its jurisdiction over electrical installations.

The standards and specifications provided herein by the Electrical Commission of the City of Urbana, are to meet the necessities and conditions that prevail in the City of Urbana, and are practical and of minimum requirement to assure reasonable safety to life and property.

All wiring not covered by this ordinance shall be installed in accordance with the rules of the National Electric Code, 1975 Edition. However, when the two are in conflict, this ordinance shall govern.

It shall be unlawful for any person to use within the corporate limits of the City any electrical device, apparatus, wiring material, or current limiting device of any kind that does not meet the standards of the Underwriters Laboratories, or other approved testing laboratory as to safety and adequacy.

90-2. EMERGENCY DISCONNECTIONS Any person owning or controlling electric wires or apparatus for the transmission of light, heat, or power shall in case of emergency, upon the request of the Chief of the Fire Department or any official of the Fire Department or the Electrical Inspector, disconnect such wires and/or apparatus as may be designated by such official.

90-3. LIABILITY FOR DAMAGE This ordinance shall not be construed to affect the responsibility or liability of any party owning, operating, controlling or installing any electrical equipment, for damaged to persons or property caused by any defect therein, nor shall the City be held as assuming such liability by reason of the inspection or reinspection authorized herein or the certificate of approval issued as herein provided, or by reason of the approval or disapproval of any equipment authorized herein.

90-4. FAILURE TO OBTAIN PERMIT OR COMPLY WITH ORDINANCE

No person shall do any work or perform any of the operations prescribed in any section of this ordinance without procuring and having in force the permit required by the office of the Electrical Inspector.

90-5. SAVING CLAUSE Nothing in this ordinance or in the National Electrical Code, 1973 Edition, hereby adopted, shall be construed to affect any suit or proceeding now pending in any court, or any rights acquired, or liability incurred, nor any cause or causes of action accrued or existing, under any act or ordinance repealed hereby. Nor shall any right or remedy of any character be lost, impaired or affected by this ordinance.

90-6. INCONSISTENT ORDINANCE REPEALED Ordinance or parts thereof in force at the time that this ordinance shall take effect and inconsistent herewith, are hereby repealed.

90-7. PENALTIES Any person, firm or corporation violating any of the provisions hereof shall be fined not less than \$5.00 nor more than \$500.00 for each offense and a separate offense shall be deemed to have been committed for each day such violation continues.

90-8. EFFECTIVE DATE This ordinance shall be in full force and effect ten days after its passage and publication as required by law.

90-9. PRINTING AND PUBLICATION IN PAMPHLET FORM The City Clerk shall certify to the passage and approval of this ordinance and cause it to be printed and published in pamphlet form.

Be it hereby resolved by the City of Urbana Electrical Commission this 31 day of May, 1978.

[Signature]
Donald C. Witt
John L. Treger
Howard A. Smith

[Signature]
Nate L. Hubert
 Electrical Inspector

This Ordinance is hereby passed by the affirmative vote, the "ayes" and "nays" being called, of a majority of the members of the Council of the City of Urbana, Illinois, at a regular meeting of said Council on the 21st day of August, 1978.

PASSED by the City Council this 21st day of August, 1978.

Beverly Umbarger
Beverly Umbarger, Acting City Clerk

APPROVED by the Mayor this 29th day of August, 1978.

Jeffrey T. Markland
Jeffrey T. Markland, Mayor

CERTIFICATE OF PUBLICATION

I, Beverly Umbarger, Acting City Clerk of the City of Urbana, Illinois, do herewith certify that on the 30th day of August, 1978, I caused the attached Ordinance to be duly published in pamphlet form.

Beverly Umbarger
Beverly Umbarger, Acting City Clerk

