

ORDINANCE NO. 357, FOURTH SERIES.

AN ORDINANCE FOR THE SAFEGUARDING OF LIFE AND PROPERTY BY REGULATING THE INSTALLATION, CONSTRUCTION, ALTERATION, MAINTENANCE, OPERATION AND INSPECTION OF ELECTRICAL WIRES, FIXTURES, APPLIANCES, APPARATUS AND EQUIPMENT IN ON OR ABOUT BUILDINGS OR OTHER STRUCTURES IN THE CITY OF SACRAMENTO; DEFINING APPROVED ELECTRICAL MATERIALS AND APPLIANCES, PROHIBITING THE SALE OR USE OF UNAPPROVED MATERIALS AND APPLIANCES, PROVIDING FOR THE LICENSING OF ELECTRICAL CONTRACTORS, MAINTENANCE MEN AND SUPERVISING ELECTRICIANS AND FOR THE SUSPENSION AND REVOCATION THEREOF; PROVIDING FOR THE GRANTING OF PERMITS FOR ELECTRICAL WORK; PROVIDING FOR THE INSPECTION OF ELECTRICAL WORK AND ESTABLISHING THE FEES TO BE PAID FOR SUCH INSPECTIONS AND THE METHOD OF PAYMENT; PROVIDING FOR A SPECIAL OWNER'S PERMIT; PROVIDING FOR A BOARD OF EXAMINERS; PROVIDING SPECIAL RULES AND REGULATIONS FOR ELECTRICAL WORK; PROVIDING FOR PENALTIES FOR VIOLATIONS OF THE ORDINANCE; PROVIDING FOR THE NON-LIABILITY OF THE CITY OF SACRAMENTO; AND REPEALING ORDINANCE NO. 13, FOURTH SERIES, PASSED SEPTEMBER 18, 1921 AND OTHER ORDINANCES OR PARTS OF ORDINANCES IN CONFLICT HEREWITH.

BE IT ORDAINED BY THE COUNCIL OF THE CITY OF SACRAMENTO, AS FOLLOWS:

ARTICLE 1.
DEFINITIONS.

SECTION 101. DEFINITIONS:

In this ordinance the following terms ~~shall be interpreted in~~ the sense herein defined. Other words or terms used, ~~which are not~~ specifically defined, shall be interpreted in their usually accepted sense.

ACCESSIBLE: Not permanently closed in by the structure or finish of the building. (See "readily accessible")

APARTMENT HOUSE: A building as defined under "Apartment House" in the State Housing Act of the State of California.

APPLIANCES: Current consuming devices for domestic or general commercial use, such as heating, cooking and small motor operated devices suitable for use on 15 ampere branch circuits.

APPROVED: Approved in writing by the City Electrician, except when referring to materials and appliances, in which case it shall mean that such materials or appliances conform to the standards of the Underwriter's Laboratories.

BRANCH CIRCUIT: That portion of the wiring system extending beyond the final set of fuses or circuit breakers protecting it, and at points on which current is taken to supply fixtures, lamps, heaters, ranges, motors, and current devices generally.

BUILDING: An edifice, structure or enclosure, whether roofed or unroofed, temporary or permanent, public, quasi-public or private, and also includes any sign-board, billboard, and similar structure.

CABINET: An enclosure for electrical apparatus and devices designed either for surface or flush mounting and provided with a frame, matt or trim, in which swinging doors are hung.

CITY ELECTRICIAN: The person under the supervision of the City Engineer, in charge of enforcement of all the provisions of this ordinance and all other ordinances, laws, lawful orders, rules and regu-

lations that are now or may hereafter be in effect with respect to the performances of electrical work. He also has charge of, and is responsible for, the maintenance and efficient operation of the fire alarm and police signal systems and all electric light, power and communication systems or equipment now owned or hereafter constructed or acquired by the City of Sacramento.

CONCEALED: Rendered permanently inaccessible by the structure or finish of the building.

CONDUCTOR: A wire or cable utilized and suitable for carrying an electric current.

CORPORATIONS: Electrical, telephone, telegraph, railroad and street railroad corporations are used in this ordinance as said terms are defined in the Public Utilities Act of the State of California.

CUTOUT: Any device such as a fuse, circuit breaker or thermal cutout, by which the electrical continuity of a circuit may be automatically broken by changes in current or voltage.

DWELLING: A building as defined under "dwelling" in the State Housing Act of the State of California.

ELECTRICAL EQUIPMENT: Any electrical wires, appliances, apparatus or electrical construction of any kind whatsoever, installed or used in, on or about any building or other structure in the City of Sacramento.

ELECTRICAL WORK: The installation, construction, erection, connection, alteration and or repair of any and all electrical equipment and the term shall be broadly construed to include also the electrical equipment in respect to which the term is used.

FRAME BUILDING: Any frame building as defined and intended in the Building Code of the City of Sacramento.

HOLDER: When used with reference to any license or permit means the person to whom the license or permit is lawfully issued.

IN, ON OR ABOUT: As applied to any building means in, on, under, over, attached to, connected to, or supported by or from.

INSPECTED: Means inspected by a duly authorized representative of the City Electrician's Office.

INSPECTOR: Any representative of the City Electrician's Office who has been duly authorized to make inspections.

MAINTENANCE WORK: Means keeping in repair and operation any and all existing electrical installations, apparatus and equipment, and new extensions of less than one new circuit.

NEW ELECTRICAL WORK: Means all new electrical equipment unless removed and replaced in the identical same manner and location as originally installed. All new electrical work shall be installed with approved materials and apparatus.

OUTLET: A point on the wiring system at which current is taken to supply fixtures, lamps, heaters, motors, and other current consuming devices.

OUTLINE LIGHTING: All lighting (other than signs) on the exterior of buildings.

PERSON: Natural persons of either sex, firms, associations, co-partnerships, corporations, whether acting by themselves or by a servant, agent or employee; the singular number shall be held to in-

clude the plural and the masculine pronoun to include the feminine.

QUALIFIED PERSON: A person familiar with the construction and operation of the apparatus and the hazards involved.

READILY ACCESSIBLE: Capable of being reached quickly by persons to whom the object should be readily accessible without climbing over or removing obstructions or resorting to chair, box or portable ladder.

SERVICE: That portion of the supply conductors which extends from the street main to the service switch of the building supplies and may consist of two portions (a) that portion owned by the serving agency and (b) that portion owned by the consumer.

SUBSTATION: A building, room or structure, enclosure in or on which is installed transformers or generating equipment or other substation apparatus.

WIRING: All fixed wiring for light, heat, or power purposes and all fixed wiring for other purposes which is in direct electrical connection with any light, heat or power circuits, excepting wiring in or on a power station or substation controlled and operated by and located on the premises of a power or railway company. The term shall also include wiring for communication, signal and radio systems.

PART II. ADMINISTRATIVE.

ARTICLE 2. LICENSE REQUIREMENTS.

SECTION 201. CLASSIFICATION OF LICENSES.

a. It shall be unlawful for any person to engage in or carry on any electrical business or activity coming within the scope or definition of any of the following three classes of licenses without having a license so to do as required by this section.

1. **ELECTRICAL CONSTRUCTION LICENSE.** Any person (other than noted in subdivision (2) of this section) who engages in the installation, alteration, maintenance or repair of electrical wiring, equipment, apparatus, or fixtures in, on or about buildings in the City of Sacramento, is required to have an Electrical Construction License.

No person shall be permitted to solicit contracts for installing electrical wiring, appliances, apparatus, fixtures or construction within the City of Sacramento unless he shall possess and be prepared to show proper credentials as the accredited representative of some person holding an Electrical Construction License and such credentials must be countersigned by the City Electrician, with the exception of accredited Power Company representatives.

2. **ELECTRICAL MAINTENANCE LICENSE.** Any person who regularly maintains an electrical maintenance man doing maintenance work only (as defined in Article 1 of this ordinance) in, on or about his (the employer's) own buildings or property for such employer's own purposes and use only, is required to have an Electrical Maintenance License. Such licensee need not have the license provided for in subdivision (1) of this section.

3. **SUPERVISING ELECTRICIAN'S LICENSE.** Any person who directs, supervises or controls the installation, alteration, repair or maintenance of electrical equipment, wires or apparatus, except as noted in subdivision (2) of this section, is required to have a Supervising Electrician's

License. This shall not be construed to mean that the person in charge of each individual job shall be required to have a license, but that each applicant under sub-section A-1 of this section shall have at least one representative holding such license.

SECTION 202. LICENSE NOT REQUIRED FOR CERTAIN WORK.

See Article 9 for the provisions of this Article not applying to certain work.

SECTION 203. APPLICATION FOR LICENSE.

a. Any person desiring to procure a license as required by this Article, shall make application, in writing, on a form provided, to the City Controller for the class or kind of license desired setting forth the following, in addition to any further information that may be required.

1. The complete name under which the business is to be conducted.
2. If a corporation, the names of the president, vice-president, secretary and or manager thereof.
3. If a firm, the name of every member thereof.
4. That the applicant has an established place of residence in the State of California.
5. If the applicant has an established place of business elsewhere, the location and address of main office or principal place of business shall be given.
6. The name and business address of duly authorized agent or representative, if any, in the City of Sacramento.
7. That in the case of a Supervising Electrician's License, the applicant has successfully passed the examination provided for by Section 204.
8. That the applicant agrees that, in the conduct of the business and in the performance of all electrical work undertaken by him, he will be subject to and will faithfully comply with all provisions and requirements of all ordinances, rules, and regulations of the City of Sacramento, pertaining to such business and such electrical work.
9. That the person signing said application is a lawful representative of the applicant and is authorized and empowered to act for him.
10. The applicant shall make affidavit that all the facts and matter set forth in his application are true and correct.

SECTION 204. REQUIREMENTS FOR SUPERVISING ELECTRICIAN'S LICENSE.

a. Applicants for license as supervising electrician shall file with the City Electrician an application containing an affidavit setting forth that such applicant is not less than twenty-one (21) years of age, and has had not less than four (4) years experience in the installation, alteration, repair and or maintenance of electrical equipment, wires and apparatus and shall submit to an examination before the Board of Examiners (See Article 5) touching upon his fitness and qualifications pertaining to the installation of electrical wiring and apparatus. Applicants shall be required to receive an average of not less than sixty-five (65) percent on such examination. A certificate of graduation from, or an affidavit of attendance at, a recognized technical school or college may, at the discretion of the Board of Examiners be credited as part of the required four (4) years experience.

b. The Supervising Electrician shall receive from the Controller a license empowering him to countersign applications for electrical permits and to perform or direct electrical work authorized by such permits for the period covered by his license. The name of the person for whom permit applications are to be countersigned shall be set forth in the

license, and it shall be unlawful for any Supervising Electrician to countersign permit applications for more than one person. Supervising Electricians must sign all requests for final inspection.

c. The Supervising Electrician may be relieved from further responsibility under any permit countersigned by him, if notice in writing to that effect be at once filed with the City Electrician.

d. Each Supervising Electrician shall renew his license each year as required in Section 205. If more than one year shall elapse between application for renewal of license and the expiration of his last license, he shall submit to a re-examination and it may be either written or oral, at the discretion of the Board of Examiners.

SECTION 205. LICENSE FEES.

a. The following license fees shall be paid in advance to the City Controller for every license issued hereunder:

CLASSIFICATION OF LICENSES:	FEES:
Electrical Construction-----	\$ 50.00
Electrical Maintenance-----	10.00
Supervising Electrician-----	1.00

b. Any person applying for more than one license under the above classification shall pay only the highest fee required.

c. All licenses shall be for a period of one (1) year of twelve (12) months, dating from the time of issuance of the license or from the date of expiration of the next preceding license to such applicant. Under no circumstances shall the license fee or any portion thereof be remitted or refunded.

SECTION 206. CERTIFICATE OF REGISTRATION.

a. Every person obtaining a license hereunder shall immediately present the same at the office of the City Electrician for registration and shall thereafter immediately notify said City Electrician in writing of any and every change of his business address.

SECTION 207. REVOCATION OF LICENSES.

a. Every license issued hereunder shall be subject to revocation by the City Council for violation by the holder of such license or by his agent or employee, of any provision or requirement of this ordinance or of the rules and regulations hereunder established, or of any ordinance rule or regulation of the City of Sacramento pertaining to electrical work, or for the making of any false statement in the application for such license, or for any other cause which the City Council shall deem to be good and sufficient. In addition thereto, the penalty as provided for in Section 1302 of this ordinance may be enforced and all work not complying with the provisions of this ordinance shall be corrected and made to comply therewith.

b. When the license of any person shall have been revoked, no succeeding license shall be issued to such person without the approval and consent of the City Council.

SECTION 208. SUSPENSION OF LICENSES.

a. The failure, neglect or refusal of any licensee after notification by the City Electrician, to correct, obviate or remove any fault, error or deficiency in making, placing or installing or operating any electrical wires, appliances, apparatus, fixtures, or construction under any permit granted to said licensee under the provisions of this ordinance, shall be deemed sufficient cause for the temporary suspension of the certificate of registration and license of said licensee and the City Manager is hereby authorized to suspend said certificate of Registration and license for a period of not exceeding thirty (30) days for each offense.

b. When any license shall have been suspended, no permit shall be

issued to the holder of such license and no new work for which a permit is required shall be undertaken by such holder during the period of such suspension; but this shall not be construed to prohibit the performance of any work duly authorized under permits issued under such license prior to the date of suspension thereof. In addition thereto the penalty as prescribed for in Section 1302 of this ordinance may be enforced.

SECTION 209. LENDING OF LICENSES.

a. It shall be unlawful for any person licensed under the provisions of this ordinance to lend his license to any other person; or knowingly to allow any person, other than his immediate and bonafide employee working for him and under his supervision and direction, to do any electrical work under any permit issued to him; or to authorize, give consent to, or knowingly allow any other person in any manner to use his license or his name for the purpose of aiding such or any other person in evading, directly or indirectly, any provision requirement of this, or of any other ordinance, or of any rule or regulation of the City of Sacramento pertaining to electrical work. In addition to the penalty prescribed in Section 1302 of this Ordinance, the City Council shall revoke the license of the person violating this section.

SECTION 210. TRANSFER OF LICENSES.

a. All licenses issued under the provisions of this ordinance shall be non-transferable

ARTICLE III. PERMIT REQUIREMENTS.

SECTION 301. PERMIT REQUIRED.

a. It shall be unlawful for any person to install, alter, repair, add to, or change any electrical equipment in, on or about any building in the City of Sacramento, without first having obtained from the City Electrician a permit authorizing said person to do such work with the following exceptions:

1. EMERGENCY WORK. In cases where an emergency or urgent necessity can be shown to exist such work may be begun prior to the issuance of a permit by a person who is licensed hereunder, provided said person shall give notification thereof by telephone or otherwise to the City Electrician immediately upon beginning said emergency work or as soon thereafter as the office of the City Electrician is open for business, and further provided that in every such case a permit shall be obtained within twenty-four (24) hours (exclusive of Sundays and Holidays) after such emergency work shall have been begun; and if the person doing such work shall fail to give such notification or to obtain a permit within the time above specified, then the fees to be charged under the permit subsequently issued for said work shall be increased as provided in Section 304 hereof.

2. MAINTENANCE LICENSE HOLDERS. Any person holding an Electrical Maintenance License as noted in subdivision 2, Section 201 hereof, shall keep a written record of all electrical work performed in, on or about his property and shall, at least every ninety (90) days, take out permits to cover any and all such extensions or alterations made to his electrical systems; provided, however, that where electrical wiring is to be concealed, the City Electrician shall be notified for inspection before such work is covered up.

3. MISCELLANEOUS EXCEPTIONS. For further exceptions of permit requirements, see Article 9.

SECTION 302. APPLICATION FOR PERMITS.

a. All applications for permits shall be made in writing and

shall be in such form and detail and shall give such relevant information, as shall be prescribed by the City Electrician. Plans and specifications giving such details of the proposed installation as may be required by the City Electrician shall be filed with the application. The City Electrician may, in any case, refuse to issue a permit if it shall for any reason appear that the proposed work will not be done in compliance with or that the work when completed will not comply with all provisions of the ordinances, rules and regulations pertaining thereto.

SECTION 303. PERMIT PROVISIONS.

a. Every permit shall be issued in such form and detail as shall be prescribed by the City Electrician shall specify the geographical location of the premises whereon the work authorized thereby is to be done, shall be valid only for the location so specified, and shall be conspicuously posted by the holder thereof on said premises. If the work authorized by any permit shall be continuously suspended for a period of ninety (90) days, such permit shall thereupon and thereafter be null and void.

b. No permit shall be assignable or transferable except under and in accordance with such restrictions and rules as shall be prescribed by the City Electrician.

c. It shall be unlawful for any person to lend his permit to any other person, or knowingly allow any person other than his bonafide employee working under his supervision and direction, to do any work under any permit issued him.

SECTION 304. PERMIT FEES.

a. Every person to whom any permit is issued hereunder shall be charged and shall pay to the City of Sacramento fees therefor and for inspection of work performed thereunder in accordance with the schedule hereinafter fixed and prescribed; provided, however, that if any electrical work for which a permit is herein required shall be commenced by any person before such permit has been issued, then fees for permit and inspections greater in amount by one hundred percent than the fees hereinafter prescribed shall be charged to and shall be paid by such person for any inspection thereof, unless the same shall have been commenced under stress of emergency and notice thereof shall have been given the City Electrician and permit shall have been applied for and issued within twenty-four (24) hours exclusive of Sundays and Holidays, as provided in Section 301 hereof; but the payment of any such greater fees shall not be construed as being in lieu of or as relieving any person of, the penalty hereinafter prescribed for a violation of this ordinance.

b. The fees above mentioned shall be as follows:

For each of the first one hundred (100) lighting outlets at which current is controlled or used-----	\$.10
For each additional outlet-----	.05
For each of the first one hundred (100) fixtures connected to lighting outlets-----	.10
For each additional fixtures-----	.05
For each outlet for a range, water heater or air heater-----	.25
For the first range, water heater or air heater connected-----	1.00
For each additional range, water heater or air heater connected-----	.25
For each motor and generator outlet-----	.50
For each motor of one horsepower or less-----	.50
For each motor of more than one horsepower-----	1.00
For each motor of more than ten (10) horsepower----	2.00
For each generator of one kilowatt or less-----	.50
For each generator of more than one kilowatt up to and including ten (10) kilowatt-----	1.00
For each generator of more than ten (10)kilowatt---	2.00

The minimum fee for any inspection shall be-----\$1.00

The inspection fee for motor-generator sets shall be that for the motor only, provided both the motor and the generator are ready for inspection at the same time.

Fees for the installation and connection of lighting fixtures, ranges, water heaters, air heaters, motors and generators shall not be charged when such equipment is installed and connected by the same person and under the same permit as the general wiring of the building and the inspection is made at or before the final inspection. In such cases the fee charged for the outlets shall cover all inspections.

c. For the inspection of any electrical wires, appliances, apparatus, fixtures, construction or equipment for which no fee is prescribed in this ordinance and for the inspection of installations for decorative advertising, for theatrical or similar purposes, including electrical sign devices, signs, transparencies or advertising, the City Electrician shall issue to the person doing such work a partial or working permit. The fee to be paid for such permit shall be one and 50/100 (\$1.50) dollars per hour for the time consumed by each inspector making such inspection including the time actually occupied in going from the office of the City Electrician and returning to said office.

SECTION 305. PAYMENT OF FEES.

a. All fees for permits shall be paid to the City Controller prior to the issuance of any permit, provided, however, that in cases where partial or working permits, (See subdivision "C" of Section 304) are issued, the City Electrician shall render to the person doing such work, before the Certificate of Final Inspection is issued, a bill or statement specifying the amount of the fees then due by and charged to said person and said person shall make payment in full of such fees before the Certificate of Final Inspection is issued; and provided further, that any person holding an Electrical Maintenance License (See Section 201, subdivision a-2) shall be rendered with a statement of fees then due and make payment thereon at least once every ninety (90) days.

ARTICLE 4. SPECIAL OWNER'S PERMIT.

SECTION 401. TO WHOM ISSUED.

a. The City Electrician may issue to a person not licensed hereunder a Special Owner's Permit authorizing said person to install, alter, change, and or repair electrical equipment in, on, or about a building of which said person is owner, but not elsewhere; provided, however, that no electrical work authorized under any such Special Owner's Permit shall be done, nor shall the owner holding any such permit allow any such work to be done, except personally by the owner to whom the permit is issued, or by a member of his immediate family living and residing with him; and if this or any other provision hereof shall be violated by the holder of such Special Owner's Permit, such permit shall be subject to immediate cancellation by the City Electrician, and the holder thereof shall be liable to the penalty hereinafter provided for violation of this ordinance.

SECTION 402. APPLICATION FOR PERMIT.

a. Every person desiring to obtain a Special Owner's Permit under the provisions of this Section shall first file an application for registration, which application shall set forth the location of the building where the work is proposed to be done, and that the applicant is the owner of said building, and such other information as may be required by the City Electrician. The City Electrician, however, shall not issue such permit unless the person who is to perform the work be named in the permit and appear before the City Electrician and show by answering such questions as may be asked by the City Electrician or otherwise, that he has sufficient knowledge of the matter to properly perform such work.

SECTION 403. CASH DEPOSIT.

a. After approval of said application by the City Electrician and before issuance of any permit, the applicant shall deposit with the City Controller the sum of Ten (10.00) Dollars in cash, as a guaranty for the payment of fees for permits and inspections and as a further guaranty that all electrical work done under the authority of any permit issued to the applicant will be done in compliance with all provisions of this ordinance and of the rules and regulations hereunder established.

b. After the Certificate of Final Inspection has been issued by the City Electrician covering the work performed under said permit, the City Controller shall return said deposit to the applicant less any charges for extra inspections or for partial or working permits as provided for in Section 304, subdivision "c".

SECTION 404. PERMIT FEES.

a. Fees to be charged for Special Owner's Permit issued hereunder, and for inspection of work performed under such special permits, and the payment of such fees, shall be determined in accordance with and be subject to all conditions and provisions contained in Article 3 of this ordinance.

ARTICLE 5.
BOARD OF EXAMINERS.

SECTION 501. PERSONNEL OF THE BOARD.

a. The Board of Examiners shall consist of three (3) members appointed by the City Manager. Members shall hold office for a term of three (3) years unless removed for cause. The first members appointed to this board shall classify themselves by lot so that the term of one of them shall expire each year. One member of the Board shall be a certified electrical mechanic, one member shall be a bonafide electrical contractor and one member at large. Each member of the Board shall be thoroughly familiar with electrical matters and competent by experience and training to pass upon the fitness of applicants for examination. Any member of the Board may be removed from office by the City Manager for malfeasance in office, incapacity or neglect of duty.

SECTION 502. DUTIES OF THE BOARD.

a. The duties of the Board of Examiners shall be (1) to hold examinations under such rules and regulations as may be adopted by the said board at a stated time quarterly or at special meetings to be called when necessary for the benefit of all applicants as set forth in Section 204; (2) to correct the papers for the written portion of the examination; and (3) within thirty (30) days from the date upon which the examination is held to furnish the Department of Engineering through the City Electrician with a report giving a certified list of all applicants with their respective examination ratings and its advice as to whether the Supervising Electrician's License as applied for, should be, or should not be, granted, stating the reasons upon which such advice is given.

SECTION 503. APPLICATION FOR EXAMINATION.

a. Each person desiring to take the examination shall make application upon a standard application blank at least five days prior to the regular meeting of the Board of Examiners.

SECTION 504. COMPENSATION OF BOARD MEMBERS.

a. The Board of Examiners or any member thereof shall receive no compensation for any meeting it may be called upon to hold or any work it may do.

ARTICLE 6.
INSPECTION OF NEW ELECTRICAL WORK.

SECTION 601. INSPECTION OF WORK.

a. Within 24 hours, exclusive of Sundays and holidays, after completion of the installation or other work covered by any permit issued hereunder, and also at such other times and as often during the progress of the work as may be necessary for proper inspection thereof, the person to whom a permit was issued shall give notice to the City

Electrician in manner and form as prescribed that the said installation or other work is ready for inspection.

b. As soon after receipt of any such notice in due form as is reasonably practicable, and also at such other times and as often during the progress of the work as may, in the discretion of the City Electrician, be advisable, the City Electrician shall cause an inspection to be made of the said installation or other work. If the City Electrician shall find that said work has not been done in compliance with, or that said installation or other work does not then conform to, the provisions of the ordinances, rules and regulations thereto pertaining, or that said installation or other work is not ready or in condition for inspection as herein required, said City Electrician shall condemn the same or withhold approval thereof, as the case may require, and shall give notice of such action to the holder of the permit, which notice shall state the nature of the violation.

SECTION 602. CORRECTION OF DEFECTS IN WORK.

a. Within ten days after such notice, or within such further reasonable length of time thereafter as may be prescribed by the City Electrician, said holder of the permit shall correct the said installation or other work in all particulars wherein or with respect to which it shall have been found unsatisfactory and he shall immediately notify the City Electrician when such corrections shall have been made.

b. If any person shall fail, neglect, or refuse to correct, within ten days after notification by the City Electrician or within such further reasonable length of time thereafter as may be prescribed by the City Electrician, any defect, error, or deficiency in any electrical work performed by or under the control of said persons, such failure, neglect, or refusal shall be deemed sufficient cause for the City Electrician to refuse, and said City Electrician is hereby authorized and empowered to refuse to issue any further permit to said person until said electrical work shall have been corrected and inspected and found to conform in all particulars with the provisions of all ordinances, rules and regulations thereto pertaining.

SECTION 603. COMPLETION OF OTHER WORK BEFORE INSPECTION.

a. Before the electric wiring in any building is inspected and approved, and before any such wiring shall be deemed ready for inspection, all gas, steam, water, sewer, furnace and other piping and tubing, which are to be located in any portion of the building in which any of said wiring is located, shall be installed in place; the building shall be roofed; and, wherever any of said wiring is to be concealed, all lathing strips, furring, bridging, backing and headers shall be in place.

SECTION 604. CONCEALING OF WIRING OR EQUIPMENT BEFORE INSPECTION.

a. It shall be unlawful for any person to lath over, seal, or in any manner cover or conceal, or to cause to be lathed over, sealed, or in any manner covered or concealed, any wiring, conduit, or other electrical equipment, for installation of which a permit is herein required, until such wiring or other electrical equipment shall have been inspected and approved by the City Electrician. The City Electrician shall have the power to remove or require the removal of, any obstruction that prevents proper inspection of any electrical equipment.

SECTION 605. INTERFERENCE WITH WIRING OR EQUIPMENT AFTER INSPECTION.

a. Whenever, any electrical wiring or other electrical equipment shall have been inspected and approved, it shall thereafter be unlawful for any person to damage or interfere with the same without authority; and it shall likewise thereafter be unlawful for any person whether working under authority of the original or of any new permit, in any manner to change or alter such wiring or other electrical equipment without reporting such changes or alterations to the City Electrician for re-inspection.

b. Whenever the electric wiring in, on or about any building shall have been inspected and approved, it shall thereafter be unlawful for

any person to place any sheet metal, pipe, or other metal work within five inches of any electrical conductor of any so called concealed knob and tube system or wiring, without having been authorized so to do by the City Electrician and then only when such conductors are protected in such manner as shall be prescribed by said City Electrician.

SECTION 606. SERVICE CONNECTION BEFORE APPROVAL.

a. It shall be unlawful for any person to make any electrical connection of any distribution system or of any live supply or service conductor from said distribution system to any electrical wiring or equipment in, on or about any building or to cause or allow any such connection to be made until the City Electrician shall have inspected said electrical wiring or equipment and shall have authorized such connection to be made thereto.

b. Whenever the City Electrician shall find any electrical distribution system, or any live supply or service conductor therefrom, to have been connected to any electrical wiring or equipment in, on or about any building without authority therefor, the City Electrician is authorized and empowered to cause such system or conductor to be disconnected from said electrical equipment, or to order and require the same to be disconnected by the person connecting same.

c. Every person engaged in the distribution or sale of electrical energy and owning or operating any electrical distribution system shall be held responsible for all supply or service connections from such distribution systems owned or operated by him.

SECTION 607. CERTIFICATE OF FINAL INSPECTION.

a. When the electrical work covered by any permit shall have been completed, inspected and approved, the City Electrician shall leave a written notice at the service switch or other suitable place stating that the electrical work has been inspected and accepted by the City Electrician and shall upon request therefor, issue to the holder of the permit a Certificate of Final Inspection. Such certificate shall specify the installation or other ~~other~~ work covered thereby and the date of last inspection thereof.

SECTION 608. TEMPORARY SERVICE CONNECTION.

a. The City Electrician may, at his discretion, previous to final inspection and approval of any electrical equipment or at other times, grant permission for temporary supply of electrical energy to and temporary use of said electrical equipment if, in his judgment, said electrical equipment is in such condition that current may be used therein without danger to life or property and if there exists a reasonably urgent necessity for such temporary use. Such permission shall be subject to revocation at any time and shall automatically expire at the termination of the period of time for which it was granted.

ARTICLE 7.

INSPECTION OF EXISTING ELECTRICAL EQUIPMENT.

SECTION 701. REGULAR INSPECTIONS OF EXISTING INSTALLATIONS.

a. The City Electrician is hereby authorized and empowered to re-inspect at any time he deems such re-inspection necessary all electrical wiring, appliances, devices and equipment coming within the scope of this ordinance.

SECTION 702. CONDEMNATION AND DISCONNECTION OF ELECTRICAL EQUIPMENT.

a. Whenever the installation of any such electrical wiring, appliances, devices and equipment is found to be defective, unsafe or dangerous to persons or property or to have been installed, changed or altered, or to be operated or used in a manner or under conditions contrary to the provisions of any ordinance, rule or regulation thereto pertaining, the City Electrician shall have the authority and power and he is hereby authorized and empowered, to condemn such defective, unsafe or dangerous and such unlawfully installed, changed or altered and such unlawfully operated or used wiring, appliances, devices or equipment and to prohibit the further use thereof until such conditions are corrected.

b. The City Electrician is further authorized and empowered to disconnect any such electrical wiring, appliances, devices and equipment from its source of current supply and to place a seal upon any such disconnected electrical equipment, or to disconnect the supply or service wires to the building or premises wherein or whereon such electrical equipment is located and to place a seal thereon or to order the person supplying electrical energy thereto to disconnect his supply or service wires and to discontinue the supply of electrical energy to such electrical equipment.

SECTION 703. NOTICE OF CONDEMNATION OR DISCONNECTION.

a. Whenever the City Electrician, pursuant to the provisions of this Article, shall condemn any wiring, appliances, devices and equipment and disconnect or order the same to be disconnected, a notice in writing stating the reason for such disconnection and the time within which such defective, unsafe, dangerous or unlawful conditions shall be remedied, shall be given to the person owning or in charge or in control of such equipment or shall be conspicuously posted on the premises whereon said equipment is located; and whenever the City Electrician shall disconnect or order the disconnection of any supply or service wires, notice in writing, stating the reason for such disconnection, shall also be given to the person supplying electrical energy through such supply or service wires.

SECTION 704. UNLAWFUL TO REFUSE TO DISCONNECT.

a. It shall be unlawful for any person supplying electrical energy to any electrical equipment to fail, neglect, or refuse immediately to disconnect his supply or service wires and discontinue the supply of electrical energy to such electrical equipment when notified and directed so to do under and in accordance with the foregoing provisions of this Article.

SECTION 705. UNLAWFUL TO RECONNECT UNTIL APPROVED.

a. When any electrical equipment shall have been condemned and disconnected in accordance with the foregoing provisions of this Article, it shall thereafter be unlawful for any person to re-connect such electrical equipment to any source of electrical energy, or to cause it to be so re-connected, or to supply an electrical energy thereto, or to remove or break any seal thereon, until the defective, unsafe, dangerous, or unlawful conditions with respect to such electrical equipment shall have been remedied and the City Electrician shall have inspected and approved the same.

ARTICLE 8.

RIGHTS OF AND INTERFERENCE WITH INSPECTORS.

SECTION 801. RIGHTS OF ENTRY.

a. Officials and Inspectors of the office of City Electrician shall have the right, and they are hereby authorized and empowered to enter or go upon any building or premises at any reasonable hour for the purpose of inspecting or witnessing the operation or use of any electrical equipment in, on, or about such building or premises, or for any other purpose in furtherance of the provisions of this ordinance; and they shall be given prompt access to any and all such electrical equipment upon application to the person owning or in charge or control of the same; provided, however, that the Inspector shall, upon request, exhibit a badge or other reasonable evidence of his identity and authority.

SECTION 802. INTERFERENCE WITH INSPECTORS.

a. It shall be unlawful for any person in charge or control of any electrical equipment to refuse any Inspector access to such equipment; and it shall be unlawful for any person in any manner to hinder, molest, or interfere with any Inspector or other duly authorized representative of the City Electrician in the performance of his lawful duties.

ARTICLE 9.

PROVISIONS NOT APPLYING TO CERTAIN WORK.

SECTION 901. WATER CRAFT AND MOTOR VEHICLES.

a. Nothing contained in this ordinance shall apply to the electrical

equipment of any steam vessel or other water craft operated, or intended to be operated, under the navigation or inspection laws of the United States or of any foreign country. Nothing contained in this ordinance shall apply to electrical equipment on any motor vehicle.

SECTION 902. PUBLIC UTILITIES.

a. The provisions of Articles 2 and 3 of this ordinance shall not apply to any electrical work performed by any electrical corporation, telephone corporation, telegraph corporation, railroad corporation, or street railroad corporation on or with electrical equipment owned or controlled and operated or used by, and for the exclusive benefit of such corporation in the conduct of its business as a public utility, or to any other work which any such corporation may be entitled, under the Constitution or any law of the State of California, to perform without payment of any municipal tax; but all other provisions of this ordinance, shall apply, in so far as they may consistently with the above be applicable, to all electrical work performed by all such corporations: provided, however, that nothing herein shall be construed to allow any such corporation to perform electrical work for the public, or to engage in the business of electrical contracting as described in Article 3 hereof, except under and in compliance with all provisions and requirements of this ordinance.

SECTION 903. MISCELLANEOUS.

a. The provisions of Articles 2 and 3 of this ordinance regarding licenses and permits shall not apply to the following classes of electrical work; (1) for the manufacture or repair of electrical equipment by a person regularly engaged in, conducting, or carrying on the business of such manufacture or repair, provided all electrical work incident thereto shall be confined to the particular building or premises wherein or whereon such business is regularly established and conducted; or (2) for the attachment of portable devices which together with their portable cables and appurtenances, are approved for attachment to appropriate fixed parts of permanently installed wiring or other electrical equipment, provided such permanent wiring or other electrical equipment shall have been inspected and approved for the attachment of such portable devices thereto; or (3) for experimental electrical work in laboratories of recognized educational institutions; or (4) for the installation, repair or maintenance of electrical equipment for messenger call, watchman's clock, or fire or burglar alarm systems, or similar systems provided such work be performed by a person operating such system under authority of a general permit or franchise granted by the City of Sacramento; or (5) for the installation, alteration, or repair of amateur radio communication equipment, except that no work shall be done on the light or power systems of any buildings for outlets for power socket devices such as amplifiers, battery eliminators, battery chargers, etc., without obtaining a license; provided, however, that all provisions and requirements of this ordinance other than those of Articles 2 and 3 shall so far as applicable and not inconsistent with the provisions of Article 2 and 3 apply to all electrical work and all electrical equipment above mentioned in this section. x

ARTICLE 10.

POWER COMPANIES TO NOTIFY CITY ELECTRICIAN OF SERVICE CHANGES.

SECTION 1001. POWER COMPANIES TO NOTIFY THE CITY ELECTRICIAN OF SERVICE CHANGES.

a. Before any person engaged in the distribution and/or sale of electrical energy shall change the nominal voltage of supply or service to any installation of electrical equipment in, on or about any building, or shall change any such supply or service from two (2) wire to three (3) wire or vice versa, or from single phase to polyphase, or vice versa, or from direct current to alternating current or vice versa, said person shall give written notice to the City Electrician of such change of supply or service, which notice shall specify the location and address of the installation affected; provided, however, that said notice need not be given with respect to any such change of supply or service, which shall have been expressly approved and authorized by the City Electrician within thirty (30) days previous to the date on which said change of supply or service was made.

PART III.
REQUIREMENTS FOR INSTALLATION OF WIRING AND APPLIANCES
ARTICLE II.
CODE REQUIREMENTS, ORDERS, RULES AND REGULATIONS.

SECTION 1101. GENERAL CONSTRUCTION REQUIREMENTS.

a. Except as provided otherwise herein, all installations whereby electrical energy is to be dissipated or utilized shall be in strict conformity with the provisions of statutes of the State of California; the rules and regulations of the Industrial Accident Commission of the State of California under authority of the State statutes governing industrial installations; with the rules and regulations of the Commission of Immigration and Housing of the State of California; and with the most approved methods of construction for safety of life and property. The regulation as laid down in the National Electrical Code, as approved by the American Electrical Code, as approved by the American Engineering Standards Committee, and the rules and regulations of the Board of Fire Underwriters of the Pacific may be prima facie evidence of such most approved methods.

SECTION 1102. APPROVED MATERIALS.

a. When there are obtainable for any given purpose, materials, fittings, devices or appliances that have been examined by a properly qualified and authorized body approved, listed and or labeled as conforming to the standards of the United States Bureau of Standards, or other similar institution of recognized standing, then only such shall be sold and or used. Such approval is always for a particular use and such approval and label does not mean that the materials, et cetera, may be used indiscriminately but only for the purpose for which approved.

b. Old or used material shall not be used in any work without the written approval obtained in advance from the City Electrician.

ARTICLE 12.
SPECIAL RULES AND REGULATIONS.

SECTION 1201. SERVICES.

a. CHARACTER OF SERVICE. Residential and apartment lighting installations in excess of 3300 watts shall be supplied with energy through a three (3) wire service at a nominal voltage of 110-220 volts. All other lighting installations may be supplied through a two (2) wire service at a nominal voltage of 110 volts.

Heating or cooking installations, X-ray apparatus, etc., in excess of 2000 watts or where the maximum current exceeds thirty (30) amperes shall be supplied with energy through a three (3) or a four (4) wire service at a nominal voltage of 110-220 volts. All other heating or cooking installations, X-ray apparatus, etc., may be supplied through a two (2) wire service at a nominal voltage of 110 volts. Any combination lighting and heating installation having any individual heating appliance in excess of 1000 watts shall be supplied through a three (3) wire service at a nominal voltage of 110-220 volts.

Business lighting installations in excess of 2000 watts shall be supplied with energy through a three (3) or four (4) wire service at a nominal voltage of 110-220 volts. All other business lighting installations may be supplied through a two (2) wire service at a nominal voltage of 110 volts.

All single phase motor installations in excess of one-half horse-power shall be supplied with energy at a nominal voltage of 220 volts. A combination load of lighting and motors, providing the motor load is not in excess of one-half horse-power and the total lighting load is not in excess of three (3) lighting circuits, may be served through a two (2) wire service at a nominal voltage of 110 volts. No 600 volt direct current installations shall be served in any new building within the City of Sacramento.

b. UNDERGROUND SERVICE FROM OVERHEAD SOURCE. When service conduit is installed on a pole the conduit shall extend up the pole and terminate with a suitable conduit or pothead within six (6) inches of the cross arm from which service is supplied. Conduit shall be covered with wooden moulding at least one and one-half ($1\frac{1}{2}$) inches thick from the top of the conduit to a point eight (8) feet below the lowest conductor on the pole, and shall comply with all other requirements of General Order #64.

All services operating at more than 600 volts between wires shall be run underground from the supply line to the building, except buildings used only as power stations or substations. All conductors of an underground service from an overhead source shall be lead sheathed terminating in an approved fitting.

c. SERVICES ON PRIVATE PROPERTY. No electric power company shall be allowed to install any secondary underground service from an underground source inside the property lines within the City of Sacramento, except where the sidewalk area is not excavated in which case the service shall terminate on the inside of the property line wall bordering on the street or alley where there is an underground source of supply. Provisions of this subsection shall not be construed to prevent the serving agency from extending its mains inside property lines to serve other consumers.

d. LOCATION OF SERVICE OUTLET. Service outlets supplied from an overhead source shall be located on that part of the building nearest and facing the serving agency's line at a minimum height of eighteen (18) feet above the ground, provided however, that the service outlet may be located at a minimum height of ten (10) feet if the serving agency can maintain the proper clearance with its service in accordance with G.O. #64 of the California State Railroad Commission.

Note: It is suggested that in stucco, brick and concrete buildings, wires or other suitable means of attaching the serving agency's service bobs be provided when the building is under construction. The serving agencies are willing to furnish bolts for such purpose.

e. SERVICE CONDUCTORS, CONDUITS & SWITCHES. Conductors of low potential services shall be installed in a continuous length of rigid galvanized or sheradized metal conduit from the point of entrance to the building, which shall be as near the service switch as practicable, into the service switch case, except where the service switch is installed on a switchboard which has exposed bus bars on the back; in this case the service conduit may terminate at the back of the switchboard. Not more than one set of service conductors shall be installed in the same service conduit except in the underground district where the services are installed and maintained by the serving agency. If two or more such services are placed in the same conduit, they must be of the same potential, supplied from the same street mains and same transformers. Conductors other than service conductors shall not be installed in service conduits.

The outer end of an overhead service conduit shall project not more than 16 inches beyond the wall of the building and shall be fitted with an approved service conduit entrance fitting. The conductors shall be left projecting from the fitting not less than 24 inches and in any case sufficient length to provide for drip loops and for splicing to service drops.

Where various types of service are supplied from one main entrance switch, such as lighting, heating, etc., each type of service shall be provided with a disconnecting switch and fuse of approved type and ample capacity.

Note: The term "continuous" as applied in the above rule to service conduit shall not be construed to prohibit the use of suitable approved threaded fittings as a substitute for bends. No splices or taps, however, shall be made in any service conductor between the service switch terminals and the point of connection of the supply wires of the serving agency.

It is suggested that wherever practicable, the first installation of service conduit be made at least $1\frac{1}{4}$ " and conductors three No. 4 to take care of future heating and cooking installations without having to reconstruct any portion of the building.

SECTION 1202. METER EQUIPMENT.

a. METER LOCATIONS. All meters shall be installed by the serving agency in safe and readily accessible places provided for that purpose by the contractor or owner of the building. Porches are not readily accessible within the meaning of this section. Meters and metering equipment shall not be located in elevator or ventilator shafts, in or over stairways, or over doorways, sinks, wash tubs or lavatories.

Meters installed in residences or in any one to four, inclusive, family dwelling shall be installed in weatherproof cabinets in or on the outer wall of the building. Electric and gas meters shall not be installed in the same cabinet.

All other residential installations shall be provided with a meter room which shall be accessible at all times to the serving agency and the inspectors.

Meters installed in stores, offices, factories and other similar buildings shall be installed in cabinets unless installed on an approved switchboard or in a separate meter room provided for that purpose. Such meter locations must be readily accessible to the serving agency and the inspectors during the regular business hours.

b. METER CABINETS. Meter cabinets which are exposed to the weather shall be thoroughly substantial. If of wood, they shall be made of well seasoned, surfaced lumber not less than 3/4 inches thick, the backing and doors to be made of tongue and grooved material, and shall have at least one coat of paint inside and out. Make-shift boxes or other make-shift arrangements will not be approved for this purpose. Cabinets installed within the outer wall of the building shall be so constructed as to be entirely inaccessible from within the building. Cabinets shall be totally closed with a door hinged at the top and proper catch for keeping same closed.

Meter cabinets made of metal shall be at least #16 gauge galvanized iron and be of weather-proof construction when exposed to the weather.

Conduits shall enter the meter cabinet from the rear or side and as close to the bottom as possible.

Cabinet shall be so installed that the bottom will not be less than six inches above the ground or floor or more than six feet above the ground or floor.

c. SPACE FOR METERING EQUIPMENT IN DWELLINGS. A minimum clear space shall be provided in all meter cabinets and on switchboards in meter rooms in all dwellings, flats and apartments as shown in the following table:

MINIMUM SPACE FOR METERS

Size of Meter Switch		Size of Cabinet for Meter & Switch, 2 & 3 Wire Single Phase.			Additional Width in Cabinet For each Meter and Switch for Multiple Family Dwellings.		Size of Space on Board in Meter Rooms for each Meter, 2 & 3 Wire Single Phase.		
Amps.	Volts	Width	Hgt.	Depth			Width	Hgt.	Depth
30	110-220	18"	24"	7"	12"		12"	16"	7"
60	110-220	20"	32"	8"	18"		14"	20"	8"
100	110-220	20"	38"	9"	18"		16"	20"	9"

The serving agency shall be consulted regarding meter space in all installations not covered by the above table.

No branch fuse blocks will be permitted in any meter cabinet except where a combination switch containing both the main and branch fuses is used, such as a universal service switch. Branch blocks when not con-

tained in a combination switch as noted above shall be installed in a metal can.

Note: It is suggested that meter cabinets for lighting installations be made the largest size shown in the above table in order that heating and cooking equipment may be installed at a later date without having to reconstruct the building.

d. SPACE FOR METERING EQUIPMENT IN COMMERCIAL AND INDUSTRIAL BUILDINGS: All installations in commercial and industrial buildings, where approved switchboards are not used for the mounting of metering equipment shall be provided with a metal cabinet for such equipment of a minimum size as shown in the following table; provided, however, that where a totally enclosed switch with meter trim is installed in a place free of moisture, dust, etc., the meter need not be enclosed in a metal cabinet.

MINIMUM SIZE OF METER EQUIPMENT CABINET.

: Size of Meter :	Kind of Service	: Width: Hgt.: Depth :
: Amperes: Volts :		
: 0-50 : 110-220 :	2 & 3 wire single phase:	15" : 15" : 8" :
: 0-50 : 220 :	Polyphase	20" : 20" : 9" :
: 0-50 : 440 :	Polyphase	24" : 36" : 9" :
: Over 50: 110-220 :	3 wire single phase	20" : 24" : 9" :
: Over 50: 220 :	Polyphase	30" : 36" : 9" :
: Over 50: 440 :	Polyphase	30" : 42" : 9" :

The serving agency shall be consulted regarding meter space on approved switchboards and in all installations not covered by the above table.

a. WIRING AT METER LOCATIONS. A meter loop shall be provided for each and every electric service whether for light or power, and the length of the wires shall be at least 18 inches. When meter loops are installed without protective trims, suitable outlet fittings shall be provided and arranged so that the length of exposed leads required for meter connection will be as short as practicable. The serving agency shall be consulted regarding the proper location of meter outlet fittings for other than single phase installations where the outlet fittings shall be located at the top of the switch cabinet if practicable.

Where more than one metered or sub-fed circuit is installed in one or more cabinets, each such circuit must be plainly marked, lettered or numbered to indicate definitely what it serves.

SECTION 1203. WATTAGE REQUIREMENTS.

a. WATTAGE REQUIREMENTS IN DWELLINGS. The minimum total wattage, the minimum number of branch circuits required, and the distribution of outlets on the branch circuits in all dwellings, flats and apartments, shall be determined by computing the various outlets as requiring not less than the following wattages:

1. CEILING OUTLETS. The following wattage requirements apply to the first ceiling outlet in the rooms specified. Additional ceiling outlets in the same room may be rated at 50 watts each. In no case shall the requirements be based on a minimum of less than one watt per square foot of floor area.

Parlors-----	200	watts
Living rooms-----	200	"
Dining rooms-----	200	"
Libraries-----	150	"
Dens-----	150	"
Sun rooms-----	150	"
Billiard rooms-----	100	"
Bed rooms-----	100	"
Bath rooms-----	100	"
Kitchens-----	100	"
Breakfast rooms-----	100	"

Breakfast nooks-----	50 Watts.
Reception halls-----	50 "
All other locations-----	50 "

2. BRACKET OUTLETS. In any room which is equipped with bracket outlets only, such outlets shall be rated at and wired for a total wattage at least equal to that required by the above table for ceiling outlets in each room, but in no case for less than 50 watts per outlet.

b. WATTAGE REQUIREMENTS IN COMMERCIAL AND INDUSTRIAL ESTABLISHMENTS.

A sufficient number of lighting circuits shall be installed in commercial and industrial establishments to permit the use of not less than one watt per square foot of floor area with the following exceptions:

1. For storage rooms and similar places, and in toilets, closets, dressing rooms, etc., the capacity shall be based on a minimum of three-tenths (0.3) watts per square foot of floor area.
2. For halls and passage ways the capacity shall be based on a minimum of five-tenths (0.5) watts per square foot of floor area.
3. For general lighting of working spaces in factories, work shops, etc., the capacity shall be based on a minimum of seventy-five hundredths (0.75) watts per square foot of floor area.
4. For store window lighting the capacity shall be based on a minimum of 100 watts per lineal foot of window exposure measured horizontally along the base of the window.
5. No outlet shall be wired for less than 50 watts, irrespective of the floor area of any room.

c. NUMBER OF LIGHTING CIRCUITS REQUIRED IN DWELLINGS. The number of branch circuits which must be installed for lighting outlets in dwellings, apartment houses and flats shall be determined from the wattage requirements prescribed in subsection "a" and "b" of this section, on the basis of a maximum load of 1200 watts on a two-wire circuit or on each side of a three-wire circuit except that in no case shall the total number of outlets exceed twelve.

d. NUMBER OF LIGHTING CIRCUITS REQUIRED IN COMMERCIAL AND INDUSTRIAL BUILDINGS. The number of branch circuits which must be installed for lighting outlets in commercial and industrial buildings shall be based on a maximum load of 1200 watts on a two wire circuit or on each side of a three-wire circuit, except that the total number of outlets shall not exceed eight (8) provided, however, that by special permission obtained in advance a maximum load of 1500 watts in medium base sockets, not exceeding sixteen (16) outlets, or 4000 watts in mogul base sockets may be installed on a two-wire branch circuit or on each side of a three-wire branch circuit subject to the following limitations and requirements:

1. All sockets and receptacles shall be of the keyless type and shall be so located or installed that they are not easily nor conveniently accessible for the attachment thereto of flexible cords.
2. No plug receptacles shall be connected to such high-wattage circuits.
3. The circuit shall supply only sockets or receptacles of the same type, that is, all medium base type or all mogul type. The number of the mogul type sockets on a two-wire circuit or on each side of a three-wire circuit shall not exceed eight except by special permission.
4. The circuit conductors shall be of proper size to carry the total connected load without over-fusing but in no case shall they be smaller than No. 12 B&S Gauge.

5. All sockets and receptacles shall be wired with not smaller than No. 14 B & S Gauge rubber covered wire or No. 16 B & S Gauge slow burning insulated wire.

6. In no case shall any outlet on such high-wattage circuits be located in any office, living room, bedroom, guest room or suite, dormitory or ward in any building.

e. SPECIAL APPLIANCE OUTLETS IN ALL BUILDINGS. A total of eight (8) appliance outlets (plug receptacles) may be installed in any building on one two-wire branch circuit provided all of the following requirements are complied with:

1. The nominal voltage of the circuit shall not exceed 125 volts.

2. The conductors of the circuit shall not be smaller in size than No. 12 B & S Gauge and No. 12 B & S Gauge wire shall be carried into each receptacle. Circuit conductors may be larger than No. 12 if desired or necessary to reduce the voltage drop, but in such cases taps not smaller than No. 12 B & S Gauge must be carried into the receptacles.

3. The circuit shall be protected by standard enclosed fuses rated at not more than 20 amperes. Size of fuses must not be increased even though wire larger than No. 12 B & S Gauge is used.

4. The receptacles shall be of the type and rating specified in Section 1205-b hereof.

5. No lighting fixtures or other equipment except attachment plug receptacles of the above specified type and rating shall be installed on such circuit; provided, however, that switches and pilot lights, or other approved signal or protective devices, may be installed with the individual receptacles if so desired.

6. For the purpose of determining the sizes of services, feeders and sub-feeders supplying such circuits, the first such circuit shall be figured as requiring not less than 1500 watts and each additional circuit supplied by the same service, feeder, or sub-feeder, as requiring not less than 750 watts.

f. DEVICES CONSUMING OVER 1000 WATTS. Nothing contained in any section of these rules shall be construed as authorizing or permitting the installation or use of any individual appliance or device consuming over 1000 watts on the same branch circuit with any additional load. Each such individual appliance or device consuming over 1000 watts shall be on a separate circuit protected by a separate cutout.

g. SPECIAL SHOW WINDOW CIRCUITS. For show window lighting not over 1200 watts with not more than 12 outlets may be installed on a circuit without special permission, provided all of the following requirements are complied with:

1. No outlet except show window and vestibule lighting outlets shall be installed on the circuit.

2. The window lighting outlets shall be equipped with keyless box lamp receptacles.

3. Wire at least equal in size and insulation to approved No. 14 B & S Gauge wire shall be carried into each lamp receptacle.

4. There shall be installed within the show window an average of not less than one plug receptacle per 50 square feet, or fraction thereof, of floor or platform area of the window enclosure. Such plug receptacles shall not be connected to any 1200 watt lighting circuit.

Unless all of the above conditions are complied with, not more than 660 watts, and not more than 6 outlets, shall be installed on any circuit which has one or more show window lighting outlets connected to it.

SECTION 1204. WIRING METHODS - GENERAL.

a. CONDUIT REQUIREMENTS. All electric wiring hereafter installed in any building within the fire district of the City of Sacramento and in any building outside of said fire district, except those buildings used or intended to be used only as dwellings where the occupancy of which will not permit of the housing of more than four (4) families, shall be installed in approved rigid metal conduit. Where it is impracticable to install rigid metal conduit, approved flexible metal conduit may be substituted, provided that no single run shall exceed five (5) feet in the wiring of new buildings nor be any longer than absolutely necessary in the wiring of completed buildings. (See Section 1206 for sign wiring).

All electric wiring in any building in the City of Sacramento where the conductors are larger than #8 Brown & Sharpe Gauge or where the voltage between any two wires of the circuit is in excess of three hundred (300) volts shall be installed in rigid metal conduit with the exception noted in the preceding paragraph.

All wiring for permanently located motors rated at one-half horsepower or more shall be installed in rigid metal conduit in any building in the City of Sacramento, with the exception noted in the first paragraph of this subsection.

Outlet boxes for conduit construction shall be at least 1½" in depth and where two or more conduits enter shall be at least 4" in diameter. All 4" boxes shall be equipped with plaster rings.

b. WIRING IN KITCHENS, BATHROOMS, ETC. All lighting outlets installed in kitchens, bathrooms, laundry porches, or in other rooms containing grounded water pipe and plumbing fixtures, or where dampness is prevalent at any or all times, shall be provided with keyless sockets and be controlled by approved wall switches.

All porch lights to be controlled by wall switch or switches located inside of house.

c. WIRING IN BASEMENTS, FURNACE ROOMS, ETC. No live wires or parts shall be exposed in any basement or other room having concrete, tile, brick or stone floors or where there exists any material that is an electrical conductor, or which will readily absorb moisture.

Porcelain or weather-proof sockets shall be used in any basement, in all damp places and in all places exposed to the weather.

All wires installed in unfinished basements where the floor above is four feet or more above the ground, shall be concealed in an approved manner to prevent mechanical injury.

All wiring in furnace and boiler rooms must be concealed in an approved manner to prevent mechanical injury, and there must be a remote control or emergency switch placed on the outside of the room adjacent to the door so that the current can be turned off at any time without it being necessary to enter the room.

d. LIGHTING FOR HALLS, ENTRANCES, EXITS, ETC.. All wiring for lights for halls, entrances, lobbies, public toilets, public baths, exits or fire escapes in all buildings except those used or intended to be used for four (4) families or less shall be run to the location of the main cut-out on the house side of the meter and shall be installed as required for emergency lighting. The fuses protecting the lights shall be located at this point.

e. RECEPTACLES FOR ELECTRIC IRONS. In dwellings, flats and apartments, if only one outlet is installed within a distance of four feet from an ironing board, such outlet shall be considered as being intended for attachment of an electric iron and shall be equipped with plug receptacle of the type and rating specified in Section 1205-b, and if two or more outlets are installed within said distance of four feet from an ironing board, at least one of such outlets shall be equipped with such plug receptacle. In no case shall any outlet be installed inside of any

ironing board cabinet.

f. LIGHTING OUTLETS IN CLOTHES CLOSETS. When lights are installed in clothes closets, they shall be installed on the ceiling or on the wall above the door. Such lights shall be controlled by suitable approved wall, door, or pendant switches or pull chain sockets. No drop cord light shall be installed in any clothes closet.

g. FIXTURES IN ROOMS NOT PROVIDED WITH APPLIANCE OUTLETS. Every lighting fixture installed in any room of dwellings, flats and apartments where no appliance outlets are provided shall be wired with not less than No. 14 B & S Gauge wire and every lamp socket installed in such room shall have an approved rating of not less than 660 watts. ⁶⁰⁰

h. SIZE OF CONDUCTORS & FUSE PROTECTION FOR HEATING & COOKING LOADS.

A minimum of three No. 8 B & S Gauge wires shall be used for loads of less than 8 kilowatts; a minimum of three No. 6 B & S Gauge wires shall be used for loads from 8 to 10 kilowatts inclusive; and for all loads over 10 kilowatts the size of the wire to be used shall be obtained from the table of carrying capacities of wires of the "National Electric Code", provided, however, that in no case of special electrical air heating circuits shall the connected load be computed at less than 2 watts per cubic foot of room content to be heated. The minimum size wire permissible for any special circuit for a heating load shall be #12 B & S Gauge.

When computing the connected load on installation of more than one range the load factor shall be taken as one hundred (100) percent on the first range and fifty (50) percent on each additional range.

The minimum size of fused cutouts for any range load shall be 60 amperes.

SECTION 1205. FIXTURES, RECEPTACLES, ETC.

a. INSTALLATION OF FIXTURES. All fixtures which are installed in places having grounded floors or other grounded conductors shall be grounded.

Fixture studs shall be provided by the wiring contractor in all conduit boxes to afford a proper means for hanging the fixtures. They shall be properly secured if wood backing is used and the conduit boxes shall be fastened to the wood backing with 3/4" No. 8 wood screws.

All unused outlets shall be capped by the person installing the fixtures.

b. APPLIANCE OUTLET RECEPTACLES. Appliance receptacles installed on lighting circuits and on special outlet circuits shall have an approved rating of not less than 6 amperes and of not more than 10 amperes and they shall be of approved concealed contact type, so designed and constructed that the plug may be removed without leaving any live parts exposed to accidental contact. No screw base receptacle shall be used for attachment plugs, and no screw base receptacle shall be installed within five feet of the floor.

c. FLOOR OUTLET RECEPTACLES. When installed in the wood floors of such rooms as dining rooms, living rooms and libraries of dwellings, flats, and apartments, and when installed in the elevated floors or platforms of show windows in stores, plug receptacles may be installed in the ordinary standard type of flush receptacle box; but such flush receptacles in floors shall be equipped with solid (as distinguished from stamped) cover plates approximately 1/8" in thickness. In other locations, floor receptacles shall be installed in floor outlet boxes specially designed and approved for the purpose; provided, however, that by special permission obtained in advance, floor receptacles may be installed in standard flush boxes, equipped with solid cover plates as above specified, in cases where the plug and receptacle will not be subject to mechanical injury and the presence of moisture is not probable.

Note: As a general rule, receptacles which are installed in wood floors that are varnished, waxed, or carpeted will not be con-

sidered as being subject to exposure to moisture. Receptacles installed in tile, concrete, or similar floors will be considered subject to moisture.

SECTION 1206. SIGNS AND OUTLINE LIGHTING.

a. TO COMPLY WITH ORDINANCES. All electric signs and electrical wiring and equipment of all sign boards and other electrically equipped advertising structures, including signs equipped with gas filled tubes, shall in addition to the requirements of other articles and sections of this ordinance be constructed, installed and maintained in compliance with other ordinances of the City of Sacramento including the Sign and Billboard Ordinance No. 383, Third Series.

b. WIRING OF SIGNS. All wire shall be approved for the voltage required. No open wiring shall be installed on the outside of any electric sign or other advertising structure except for sign connections as noted under subsection "c" hereof. All wiring shall be installed in approved rigid metal conduit or in approved lead-sheathed and steel armored cable or in approved weather-proof metal gutters except in the body of signs using gas filled tubes, where the wiring may be installed openly on glass hooks or other properly insulated material.

c. CONNECTION TO SIGNS. The conduit to swinging or movable signs shall terminate in an approved fitting which shall be placed as close as practicable to the sign axis; from this point the conductors shall be well taped and enter the sign through approved bushings. Drip loops shall be provided in the conductors between the conduit terminal fitting and the sign. The length of open conductors between the conduit terminal fitting and the sign shall not exceed three feet. The conduit shall enter all stationary signs and be properly secured thereto.

d. GAS FILLED TUBES USED FOR LIGHTING SIGNS, ETC. The glass tube elements shall be insulated from ground by approved insulation or not less than one-half inch of air space.

Electrodes shall be separated from a grounded surface by not less than two inches of air space and suitably supported or be enclosed in an insulating tube approved for the voltage required. Back of electrodes shall be totally enclosed in metal of 16 gauge thickness. Connections to electrodes shall be made by an approved mechanical connector.

No live metal parts will be approved exposed to contact on the external part of sign.

Where tubing is within reach, it shall be covered by plate glass, rigidly fastened into place.

Transformers and inductive controllers shall be installed in a weather-proof metal box of at least 16 gauge metal. The box shall be at least one inch from any combustible material. The primary circuit of each transformer shall be protected by its individual fuse not to exceed ten amperes.

The open circuit voltage permitted on the secondary shall not exceed 15000 volts.

e. GROUNDING. The metal of all signs and transformers shall be grounded in an approved manner. The ground shall have a capacity equal, at least, to #10 B & S Gauge copper or an approved ground strap.

f. OUTLINE AND MARQUISE LIGHTING. Wiring for outline lighting on any building shall be installed in rigid metal conduit. Marquise wiring shall be installed in conduit or armored cable or in metal wire-ways inside of the marquise structure.

g. SMALL DISPLAY DEVICES. When shall transparencies, display devices, etc., which consume not over 660 watts are installed inside of buildings, they shall be considered as electric fixtures or portable devices rather than as electric signs. They shall, however, be of approved type and construction.

SECTION 1207. RADIO EQUIPMENT.

a. RULES AND REGULATIONS REGARDING. Radio wiring and equipment shall in addition to the special rules herein given, comply with all other applicable requirements of this ordinance.

b. ANTENNA CROSSING STREETS. Antenna or counter poise shall not cross any street or public way, and any such antenna or counter poise now crossing any street or public way shall be removed within ninety (90) days after passage of this ordinance.

c. ANTENNA CROSSING ELECTRIC LIGHT AND POWER WIRES. No antenna or counter poise shall be constructed over a street, alley or other public property over or under any electric light or power wires of any circuit of more than 600 volts, or any railway, trolley or feeder wires, and any antenna or counter poise now crossing such wires shall be removed within ninety (90) days after passage of this ordinance.

d. ANTENNA ATTACHED TO POLES. No antenna or counter poise shall be attached to any pole or other structure of any public utility carrying light, power or signal wires, and any antenna or counter poise now attached to such pole or other structure of any public utility shall be removed within ninety (90) days after passage of this ordinance.

e. ANTENNA POLES IN HAZARDOUS LOCATIONS. No poles of wood or other inflammable material for the attachment of an antenna or counter poise shall be located within six (6) feet of a chimney on any building.

SECTION 1208. TRANSFORMERS.

a. HIGH VOLTAGE TRANSFORMERS. No transformer operating at more than 600 volts shall be installed on the roof of any building (other than power stations and substations) unless installed in an approved transformer vault or fire proof trough. No such transformer vault shall be constructed on the roof of any building until the Building Inspector shall have approved the structure of the building as being of sufficient strength to carry the additional weight of such vault and the equipment contained therein.

b. LOW VOLTAGE TRANSFORMERS. Transformers operating at less than 600 volts for power or lighting placed within buildings can only be attached to fire-proofed walls, or within an approved transformer vault. The transformer case shall be properly grounded. A suitable drip pan for the collection of all oil shall be placed beneath the transformer. The primary side shall be protected with an approved externally operated switch which will disconnect all wires.

c. EXCEPTIONS. This section shall not be construed to apply to air cooled booster transformers or to bell ringing and other signalling transformers, which operate at a primary voltage not exceeding 250 volts.

PART IV.
LEGISLATIVE.

ARTICLE 13
MISCELLANEOUS PROVISIONS.

SECTION 1301. VIOLATION OF ORDINANCE, RULES OR REGULATIONS.

a. It shall be unlawful for any person either as owner, lessee, occupant, tenant, manager, agent, contractor, architect, engineer, electrician, or otherwise to cause any electrical work to be unlawfully done without a permit or otherwise in any manner contrary to any provision of this ordinance or of the rules and regulations hereunder established; or knowingly to allow to be so unlawfully done, any electrical work of which he shall be in charge or control, either as owner, lessee, occupant, tenant, manager, agent, contractor, architect, engineer, electrician or otherwise.

SECTION 1302. PENALTIES.

a. Any person, whether acting as principal, agent, officer, manager, superintendent, or in any other capacity, violating, disobeying, or refusing to comply with any provision or requirement of the ordinance or the rules and regulations hereunder established, or knowingly inducing

another so to do, shall be deemed guilty of a misdemeanor and, upon conviction thereof, shall be punishable by a fine of not less than Five (\$5.00) Dollars nor more than Five Hundred (\$500.00) Dollars or by imprisonment in the City Prison for a period of not less than two (2) days nor more than six (6) months, or by both such fine and imprisonment.

b. Every violation of the provisions or requirements of this ordinance, or of the rules and regulations hereunder established, is a separate and distinct offense, and in case of a continuing violation each day's continuance thereof shall constitute a separate and distinct offense and shall be punishable as such.

SECTION 1303. NOTICES GIVEN HEREUNDER.

a. Any notice which may, pursuant to any provision of this ordinance, be given by the City Electrician, or his authorized representative, to any person holding any license or permit, issued hereunder, or to any person engaged in the distribution or sale of electrical energy, or to any other person, shall be deemed duly given when deposited in the U. S. Mail, postage prepaid, directed to the person for whom intended at the last known address of said person or at the address, if any, last registered by him with the City Electrician.

SECTION 1304. CITY NOT LIABLE.

a. Nothing contained in this ordinance shall be construed to relieve from or lessen the responsibility or liability of any person for injury or damage to person or property caused by or resulting from any defect of any nature in any electrical work performed by said person or in any electrical equipment owned, controlled, installed, operated, or used by him; nor shall the City of Sacramento or any officer, agent, or employee thereof, incur or be held as assuming any liability by person or in consequence of any license, permit, permission, certificate of inspection, inspection, or approval authorized herein or issued or given as herein provided, or by reason or in consequence of any thing done or acts performed pursuant to any provision of this ordinance.

SECTION 1305. SAVING CLAUSE.

a. If any Article, Section, Subsection, sentence, clause, or phrase of this ordinance is for any reason held to be unconstitutional or otherwise invalid, such decision shall not affect the validity of the remaining portions of this ordinance. The Council of the City of Sacramento hereby declares that it would have passed this ordinance, and each article, section, subsection, sentence, clause, and phrase thereof, irrespective of the fact that any one or more other articles, sections, subsections, sentences, clauses or phrases be declared unconstitutional or otherwise invalid.

SECTION 1306. REPEAL OF CONFLICTING ORDINANCES.

a. Ordinance No. 13, Fourth Series, is hereby repealed, and all other ordinances, and parts of ordinances in conflict herewith are hereby repealed to the extent of such conflict: Provided, however, that the repeal of Ordinance No. 13, Fourth Series, shall not automatically release any person from responsibility or liability for fees or charges fixed therein and remaining unpaid, or for work authorized thereunder and not completed or not approved on the date this ordinance takes effect: Provided, further, that any permit issued under the provisions of Ordinance No. 13, Fourth Series, and covering work not completed or not approved on the date this ordinance takes effect, may continue in effect, subject to all applicable provisions of this ordinance as valid authority for the person who obtained such permit to complete the work covered thereby, provided said work be completed within 90 days from and after the date this ordinance takes effect; but every such permit shall become null and void at the expiration of said period of 90 days unless sooner transferred, as hereinafter provided to a person duly licensed under the provisions of this ordinance; Provided further, that any permit issued under the provisions of Ordinance No. 13, Fourth Series, to any person who does not obtain license under the provisions of this Ordinance, and covering work not completed or not approved on the date this ordinance takes effect, may be transferred to any person licensed under the provisions of this ordinance provided said person shall first file with the City Electrician his acceptance, which shall

be in writing and in form as prescribed by the City Attorney, of all responsibility and liability to the City of Sacramento, as imposed by the provisions of this ordinance upon the holder of a like permit, with respect to the work covered by said permit and not completed or not approved on the date of such transfer and with respect to all unpaid fees or charges due, or to become due, under said permit; Provided further, that any person who is registered under the provisions of Ordinance No. 13, Fourth Series, and who obtains license under the provisions of this ordinance, shall be held responsible and liable, under and in accordance with all applicable provisions of this ordinance, for all work commenced by him under said registration, and not completed or not approved on the date of issuance of said license and for all unpaid fees or charges due, or to become due, by him under said registration: Provided, further, that the fees charged or to be charged against permits issued under the provisions of Ordinance No. 13, Fourth Series, shall be determined in accordance with the schedule contained in Section 10 of said Ordinance No. 13, Fourth Series, without regard to date of completion of the work or inspection thereof; Provided further, that the repeal of Ordinance No. 13, Fourth Series and of other ordinances and parts of ordinances in conflict herewith shall not affect or prevent the prosecution and punishment of any person for any act heretofore done or committed in violation of any ordinance which may be repealed hereby and shall not affect any prosecution or action which may be pending in any court for the violation of any ordinance repealed by this ordinance.

SECTION 1307. DATE EFFECTIVE.

a. This ordinance shall take effect thirty (30) days after passage by the Council of the City of Sacramento.

PASSED: NOVEMBER 25, 1927
EFFECTIVE: December 25, 1927.

Al. Goddard

ATTEST:

H. G. Denton
City Clerk.