

ORDINANCE NO. 49788

An Ordinance to be known as the Electrical Code for safeguarding life and property by regulating the installation and operation of electric wires, appliances, apparatus and devices in or about buildings and on private or public property (with certain exceptions) in the City of Portland, defining approved electrical materials and appliances, prohibiting the sale or use of unapproved appliances and materials, providing a penalty for violation hereof, repealing Ordinance No. 44018, as amended by Ordinance No. 46554, and all ordinances or parts of ordinances in conflict herewith, and declaring an emergency.

PART 1**ARTICLE 1.****ADMINISTRATIVE.****101 - The Electrical Code.**

a. This ordinance shall be known as the electrical code.

102 - Enforcement of Code.

a. The Electrical Division of the Bureau of Buildings shall be responsible for the enforcement of this code.

103 - Inspection of New Electrical Work.

a. Electrical wiring shall not be inspected until the structural frame work and piping to be concealed have been approved.

b. The Inspector shall be notified in writing by the person doing work, first when roughing in work is completed, and again when the entire work is completed in both cases within forty-eight (48) hours after the completion of said work. The Inspector, or his deputy, shall inspect the same within forty-eight (48) hours, not including Sundays or holidays, after receipt of such notice, and if said work conforms in all respects with the provisions of this ordinance, he shall attach a notice of approval.

(Fine print note.) All permits must be taken out and inspection called for before 9 A. M., in order to have inspection made the same day. If telephone order is sent in, confirmation in writing must immediately follow. The Electrical Division will not be held responsible for delay in inspection on telephone order.

c. No electrical wiring shall be covered or concealed until the said forty-eight hours have expired after notice to inspect has been received, or until the Inspector has given approval. Should the inspector condemn any of said work or equipment as not being in accordance with the provisions of this ordinance, notice in writing shall be given by him to the person engaged in the work. Within 15 days after notification thereof, or within such further reasonable time as may, upon request, be prescribed such work or equipment

shall be altered or removed as the case may require, and necessary changes shall be made so that all such work and equipment shall fully comply with the provisions of this ordinance. In default, said electrical contractor shall be liable to the penalties of this Code, and any and every owner, contractor or other person engaged in the construction of the building or structure, or otherwise, covering or allowing to be covered such portion of work or equipment, or removing any notice not to cover same placed thereon by the Inspector, shall likewise be liable to the penalties of this Code. Failure of the Inspector to make inspection as prescribed above, within forty-eight (48) hours, may be construed to mean permission to the owner, contractor or other person engaged in the construction of the building or structure, or otherwise, to proceed with the construction of the building.

104 - Inspection of Existing Installations.

a. The Inspector is hereby empowered to re-inspect all wiring, appliances, devices, and equipment coming within the scope of this code as set forth in Section 701 hereof. When the installation of any such wiring, appliances, devices and equipment is found to be in a dangerous or unsafe condition, the person, firm or corporation owning, using or operating the same shall be notified and shall make the necessary repairs or changes required to place such wiring, appliances, devices and equipment in a safe condition and have such work completed within 15 days after notification thereof, or within such further reasonable time as may, upon request, be prescribed.

b. The Inspector is hereby empowered to disconnect or order the discontinuance of electrical service to such conductors or apparatus found to be in a dangerous or unsafe condition, or to have been installed without a permit, or not in accordance with the provisions of this Code. He shall thereupon attach a notice which states that such conductors or apparatus have been disconnected because of their having been found unsafe to life or property, and it shall be unlawful for any person to remove said notice of disconnection or to re-connect such defective conductors or apparatus until the same have been placed in a safe and secure condition and have been approved by the Inspector.

c. All buildings within the fire limits of the City of Portland shall be systematically re-inspected at least every two years.

105 - Certificate of Final Inspection and Approval for Service.

a. The Inspector shall, upon request, issue a certificate of final inspection when the electrical installation is completed and found to comply with this code. No certificate shall be issued on any incomplete work. (See Section 706.)

b. It shall be unlawful for any person to make any electrical connection to any electrical equipment until approval has been given by the Inspector. The Inspector is hereby authorized to disconnect any electrical installation or equipment which has been connected before the approval for service has been given. He shall thereupon attach a notice which shall state that the wiring or apparatus has been disconnected by the Electrical Inspector, and any person removing said notice or reconnecting said wiring or apparatus before the same has been approved by the Inspector shall be liable to the penalties of this Code.

106 - Temporary Use of Electric Current.

a. Where an urgent necessity for the use of electric current in any installation is shown to exist, the Inspector may grant permission for the temporary use of electric current through any wiring or apparatus or fixtures, for a period not exceeding thirty (30) days, if such wiring and apparatus or fixtures are in such condition that electric current may safely be used therein without danger to life or property. Permission may be obtained for the temporary use of electric current during the construction or alteration of any building.

107 - Right of Access to Buildings.

a. The Inspector shall have the right during reasonable hours to enter any building in the discharge of his official duties, or for the purpose of making any inspection or test of the installation of electric wiring, electric devices and/or electric material contained therein.

108 - Non-Liability of City for Damages.

a. This ordinance shall not be construed to relieve from or lessen the responsibility of any person owning, operating or installing any electrical wires, appliances, apparatus, construction or equipment for

damages to any one injured by any defect therein; nor shall the City, or any Agent thereof, be held as assuming any such liability by reason of the inspection authorized herein or the Certificate of Inspection issued by the Electrical Division.

109 - Penalty for Violation of this Code.

a. Any person, firm, company or corporation that violates, disobeys, omits, neglects or refuses to comply with, or resists, or opposes the execution of, or violates any of the provisions of, or who occupies or maintains any building or structure in which the electrical wiring and appliances are in violation of this ordinance, shall be punished by a fine not exceeding Five Hundred (\$500.00) Dollars, or by imprisonment of not more than six (6) months, or by both such fine and imprisonment, and every person, firm, company or corporation shall be deemed guilty of a separate offense for every day such violation, disobedience, neglect or refusal shall continue, and shall be subject to the penalty of this section for each and every separate offense, and so much of any building or structure as may be erected or altered in violation of this ordinance shall be condemned and torn down at the expense of the person, firm, company or corporation erecting or altering the same.

110 - Code Not to Be Affected by Invalidity of Any Part.

a. If any provision of this Code shall be held void and unconstitutional, it is hereby provided that all other parts of the same which are not expressly held to be void or unconstitutional shall continue in full force and effect.

ARTICLE 2.PERMITS AND PERMIT FEES.201 - Permit Required.

a. Before any electrical work covered in this Code (except maintenance work noted in paragraph (b), and except the installation of meters and service wires noted in paragraph (c)), may be installed, altered or repaired, a permit shall be secured from the Electrical Division.

b. Persons or corporations holding an Electrical Maintenance License, as noted in sub-division (2), Section 201(a) hereof, shall keep a written record of all electrical work performed in or about their property and shall, at the end of every sixty (60) days, or oftener, take out permits to cover any and all such extensions or alterations made to their electrical systems; provided, however, that where electrical wiring is to be concealed, the electrical division shall be notified for inspection before such work is covered up.

c. Permits shall not be required for the installation of meters and service wires owned and maintained by a serving agency operating under franchise but such serving agency shall, however, notify the Electrical Division of any such work immediately upon completion of the same.

(Fine print note.) Permits will not ordinarily be required for minor repair work, such as repairing flush and snap switches, replacing fuses, changing lamp sockets and receptacles, taping bare joints and repairing drop cords, nor for experimental electrical work of a temporary nature in testing laboratories of electrical shops, educational institutions, and the like.

202 - Permit Applications.

a. Applications for permits shall state the name of the owner and the location, and extent of work to be done thereunder. Applications for permits shall be countersigned by Supervising electricians except for maintenance work and except for work performed by an owner.

b. If any work authorized by any permit is not commenced within 60 days after the date thereof, such permit shall thereupon become void and of no effect.

- c. A permit shall be valid only for the location stated in the application.

(Fine print note) Location must be given by street and number wherever practicable. This is obtainable in most cases for new as well as old buildings. Inspectors cannot waste time hunting the location of a job, with consequent delay in making inspections. Careful compliance with this rule will materially assist the Electrical Division in giving prompt service to contractors and the public and will avoid unnecessary delay and inconvenience to the electrical contractor, general contractor, occupant of building, and power company.

203 - Permit to Owner.

a. A permit to perform electrical work in or about his own building may be issued to an owner, provided that all work thereunder shall be performed by such person or by husband, brother, or son of such owner. The Electrical Inspector, however, shall not issue such permit unless the person who is to perform the work be named in the permit and appear before the Inspector and show by answering such questions as may be asked by the Inspector or otherwise, that he has sufficient knowledge of the matter to properly perform such work.

b. If it is apparent, from the character of the work performed, that an owner is not competent nor qualified to do the work under any permit issued to him the Inspector may require such portion of the work that is in violation of this Code to be changed, altered or repaired by a licensed contractor, at the expense of the owner. A permit shall be issued (without fee) to such contractor and the permit to the owner shall be canceled. (See also Section 705)

204 - Permits for Outdoor Decorative Lighting.

a. Permits for temporary installations of outdoor decorative lighting as prescribed in Section 1605 of this Code shall be issued only when permission therefor has been granted as set forth in this section:

1. During festivals, fairs, conventions and the like, the Electrical Division may grant a special permit for a period not exceeding 90 days for the installation of approved systems of decorative lighting over sidewalk areas. If an extension of time is desired such permit may be renewed at the discretion of the inspector. A special permit from the Council is required for any such installation maintained for a period of more than 90 days.

2. A special permit shall be obtained from the City council for the installation of any system of decorative lighting over roadway areas, and for installations over sidewalk areas when installed at a time when no festival, fair or convention is in progress.

3. For exhibitions or celebrations of a temporary nature, the Electrical Division may grant a special permit, for a period not exceeding 30 days, for the installation of approved systems of decorative lighting upon private property. Such permit may be renewed as provided in paragraph 1.

205 - Filing of Drawings and Specifications.

a. Every person making application for any permit to do electrical work under the provisions of this Code, may be required by the Electrical Division to file a set of plans and/or specifications (see section 705) in sufficient detail to enable the Inspector to determine if the work will be in compliance with the rules and regulations of this Code.

b. A key to the symbols used shall accompany all plans. If mains, feeders, branches and distribution panel are shown on the plans, it is desirable that they be designated by letters or numbers.

206 - Permit Fees - General.

a. For inspection of electrical apparatus for which no fee is herein prescribed, payment shall be made for the time actually consumed by the inspector in making such inspection at the rate of \$2.00 per hour for the first hour, or part thereof, and \$1.00 for each additional hour, or part thereof.

b. No permit fee shall be less than \$1.00; provided, however, that the minimum fee shall be 50 cents for the following installations:

1. For the installation of light, switch and receptacle outlets when added to existing wiring.

2. For installation of fixtures or cord drops on old wiring or on extensions to old wiring.

3. For installations where the cost of installation (including labor and materials) does not exceed \$5.00.

4. For permits additional or supplementary to partial or working permits.

c. In estimating the fees for permits in all cases, the same shall be taken to the nearest five cents.

d. Fees shall be paid prior to the issuance of any permit to do electrical work. Permits shall be obtained within 48 hours (holidays and Sundays not included) from the time work is started; otherwise, fees shall be increased 50 per cent. Exception is allowed as noted in Section 201(b) hereof.

e. When the exact amount of work to be done under any permit cannot be definitely determined at the time application for permit is made, the Electrical Division may issue a partial or working permit.

(Fine Print note) As a general rule no partial or working permit will be issued for less than 25% of the estimated total installation.

207 - Permit Fees - Lighting Installations.

a. For lighting outlets of 1000 watts capacity or less, also switch and receptacle outlets on branch lighting circuits (including cord drops and lamp receptacles on exposed work where both wiring and drops or receptacles may be inspected at one time), the fee for each outlet shall be:

First 100 outlets.....	10¢
Additional outlets.....	5¢

b. For the installation, alteration or extension of fixtures or cord drops, the fee for each receptacle shall be:

First 200 receptacles.....	5¢
Additional receptacles.....	2¢

For special group installation permit covering not less than ten separate fixture installations of not more than one receptacle each, the fee per installation shall be.....25¢

c. For motion picture projection machine outlets using arc lamps.....1.00
Other light outlets over 100 watts capacity50

d. For each electric sign (except as noted in paragraph (e) below), decorative lighting, marquee, and footlights, borders and strips in theatres where sockets are installed within 24 inches of each other:

First 50 sockets or fraction thereof.....	1.50
Additional sockets, each.....	.02

- e. For signs bearing the Underwriters' inspection label, or inspected at shop prior to installation, the fee for installing service to sign shall be:

First 50 sockets or fraction thereof.....	\$1.00
Each succeeding 50 sockets or fraction.....	.50
Connecting sign only, where service to sign has been previously installed.....	.50

- f. Inspection for temporary installations for exhibitions, shows, fairs, conventions and the like shall be paid for at the following rate:

First 100 sockets or fraction thereof.....	\$1.50
Each succeeding 100 sockets or fraction.....	.50

208 - Permit Fees - Heating Installations.

- a. For heating outlets grouped on a branch circuit, the fees indicated in paragraph (a) of Section 207 shall be paid.

- b. For heating outlets not grouped on a branch circuit, including ranges, welding outfits, furnaces and the like (and their connections) the following fees shall be paid:

Kilowatt Capacity of Heater	Permit fee
Not more than 2.....	\$.50*
Not more than 5.....	.75*
Not more than 10.....	1.00
Not more than 15.....	1.50
Not more than 20.....	2.00
Not more than 25.....	3.00
Not more than 50.....	4.00
Not more than 100.....	6.00
Not more than 200.....	8.00
Over 200.....	10.00

*Minimum fee \$1.00 (See section 206(b)).

- c. For connecting range only, where range outlet has been previously wired, inspected and passed the fee shall be \$.50

209 - Permit Fees - Power Installations.

- a. For each generator, primary or secondary battery set, rectifier or motor, including controlling and distributing apparatus, the fee shall be in accordance with the following table:

Generator, Transformer, Etc., or Motor	Kilowatts or Horse Power	Permit fee
Not more than $\frac{1}{4}$		\$.25 *
Not more than $\frac{1}{2}$		.50 *
Not more than 3		.75 *
Not more than 6		1.00
Not more than 10		1.50
Not more than 15		2.00
Not more than 20		2.50
Not more than 25		3.00
Not more than 50		4.00
Not more than 100		6.00
Not more than 200		8.00
Over 200		10.00

*Minimum fee \$1.00 (See section 206(b)).

b. Where motors and their control equipment are re-located in such a manner as to require no change or alteration at the distribution center or service switch, then $\frac{1}{2}$ of the fee indicated in paragraph (a) of this section shall be charged; provided, however, that, where the motor only is re-located, the maximum fee in any case shall not exceed \$1.00.

210 - Permit Fees - Radio Installations.

a. For radio receiving stations equipped with outdoor antenna, the minimum fee (see section 206(b)) shall be charged.

b. For transmitting or broadcasting stations (including also the receiving equipment in such stations) the fee shall be determined on the basis of the electrical equipment installed but in no case shall such fee be less than \$1.00.

ARTICLE 3.LICENSE REQUIREMENTS.301 - Classification of Licenses.

a. There shall be four classes of licenses as follows:

1. Any person (other than noted in sub-division (2) of this section) who engages in the installation, alteration, maintenance, or repair of electrical wiring, equipment, apparatus or fixtures, in or about buildings in the City of Portland, is required to have an Electrical Construction License. Such person is required to have a separate license for each store or place of business conducted by him.

2. Any person who regularly maintains a competent electrical maintenance man doing maintenance work only (as defined by Section 601 of this Ordinance) in 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 licenses need not have the license provided for in sub-division (1) or sub-division (3) of this section.

3. Any person who directs, supervises or controls, the installation, alteration, repair or maintenance of electrical equipment, wires or apparatus, except as noted in sub-division (2) of this section, is required to have a Supervising Electrician's License.

4. Any person who sells or offers or exposes for sale any electrical device, apparatus or equipment designed for attachment to or installation on any electrical circuit or system, for light, heat or power, shall have an Electrical Dealer's License for each place of business conducted by such person, provided that such licensee may make a temporary demonstration of such articles elsewhere than at his licensed place of business without being required to have a license for such place of temporary demonstration.

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

c. Any licensee in any of the foregoing classes shall display or post such license in a conspicuous place in his place of business.

d. Persons holding a license of one class at the time of passage of this ordinance may renew such license upon the payment of the renewal fee required by Section 306.

e. Licenses issued under the provisions of this Code shall be non-transferable.

302 - Application for License.

a. Any person who desires to procure a license as required by Section 301 shall make application to the Electrical Division for the class or kind of license desired, giving his name, address and the location of his place of business. Such application shall be made on a form provided by the Electrical Division. Upon the filing of such application with the Electrical Division and the payment to the Treasurer of the City of Portland of the license fee provided for by Section 306 of this Code for the class of license applied for, the Electrical Division shall issue a license to such applicant to do the things pertaining to the class of license for which application was made; provided that before a Supervising Electrician's License is issued to any person, he must first have successfully passed the examination provided for by Section 305 of this Code.

305 - Requirements for Supervising Electrician's License.

a. Applicants for license as supervising electrician shall file with the electrical division 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 touching upon their fitness and qualifications pertaining to the installation of electrical wiring and apparatus. Applicants shall be required to receive an average of not less than seventy percent (70%) 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 4 years experience.

b. The Supervising Electrician shall receive from the Electrical Division a license empowering him to countersign applications for electrical permits and to perform or direct electrical work authorized by such permits for the current calendar year. The name of the person, firm or corporation 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, firm or corporation.

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 Electrical Division.

d. Each Supervising Electrician shall renew his license on or before the second day of January each year. If more than one calendar year shall elapse between application for renewal of license and the expiration of his last license, he shall submit to a re-examination. No fee shall be charged for such re-examination and it may be either written or oral, at the discretion of the Board of Examiners.

304 - Revocation of Licenses.

a. If any licensed applicant refuse or neglect to comply with the provisions of this Code within a reasonable time after having received written notice of any violation discovered by the Electrical Division, the license may be revoked. In addition thereto, the penalty provided in Section 109 of this Code may be enforced, and all work shall be corrected and made to comply therewith. A new license shall not be issued until all violations, theretofore committed, shall have been corrected.

b. The license of a Supervising Electrician may be revoked if, at any time, the affidavit filed is shown to be false or if the person licensed refuse or neglect to comply with any of the provisions of this ordinance. If such license has been revoked, no renewal of said license shall be allowed for a period of six months thereafter.

305 - Suspension of License.

a. Failure on the part of any licensee to correct any defect, error, or deficiency, in any work within 15 calendar days after notification thereof, or within such further reasonable time as may, upon request, be prescribed, shall automatically, and without further notice, stop the issuance of permits to such licensee until such corrections have been made, inspected, and approved. The Electrical Division shall be promptly notified upon correction of any defect, error or deficiency.

(Fine print note) The Electrical Division is without discretion in the application of the above rule unless request is made for further time within 15 days after notification of any defect, error or deficiency. An extension of time may be granted only for good and sufficient reasons. It is unlawful to perform any electrical work during the period of license suspension.

b. The Commissioner of Public Works, upon complaint being made respecting the character of the work done by any licensee, shall have the power to suspend the license of such licensee for a period of 30 days.

306 - License Fees.

a. License fees shall be paid as follows:

Classification of licenses	Fee for 1st yr.	Fee for Renewal
Electrical Construction.....	\$50.00	\$10.00
Maintenance.....	5.00	5.00
Electrical Dealer.....	5.00	5.00
*Supervising Electrician.....	1.00	1.00
*See section 403 for examination fee.		

b. All licenses shall be for the calendar year or fraction thereof, and shall be obtained on or before January 2nd of each year, and shall expire at midnight on December 31st. Where a license is obtained after July 1st, the respective license fees shall be half the amount noted in paragraph (a) of this section; provided, however, that as to Supervising Electrician and Electrical Construction licenses no such deduction shall be made.

c. Where a license is permitted to lapse by failure on the part of the licensee to renew same on or before the date of expiration, the renewal shall date back to the date of expiration of the expired license, and no license shall be renewed after a period of one year from date of expiration.

ARTICLE 4.**BOARD OF EXAMINERS.****401 - Personnel of Board.**

a. The Board of Examiners shall consist of three members appointed by the Mayor who, by experience and training, shall be qualified to pass upon the fitness of applicants for registration as Supervising Electricians. Members shall hold office for three years unless removed for cause. One member of this Board shall be a competent electrical mechanic, one member shall be a bona fide electrical contractor, and one member at large. Each member of this board shall be thoroughly familiar with electrical matters, both theoretical and practical, and competent to pass judgment upon the same. In case of the necessary absence of any member of the Board of Examiners, the Mayor shall make temporary appointment of a substitute. All vacancies occurring on the Board of Examiners for whatever cause shall be filled by the Mayor.

b. Any member or members of the Board of Examiners may be removed by the Mayor for malfeasance in office, incapacity or neglect of duty.

402 - Duties of the Board of Examiners.

a. The duties of the Board of Examiners shall be to hold examinations at a stated time quarterly for the benefit of all applicants who desire to be licensed as Supervising Electricians; to correct such examination papers and to return a certified list of all applicants, together with their respective examination ratings, to the Electrical Division within thirty (30) days from the date upon which the examination is held.

403 - 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 quarterly meeting of the Board of Examiners.

b. Each person taking an examination shall pay to the City Treasurer a fee of Ten (\$10.00) Dollars at the time of filing his application. This fee shall entitle him to a license as Supervising Electrician until the first day of January of the year following the date of examination, providing that he also secures the required rating upon his examination papers.

404 - Compensation of Board Members.

a. Each member of the Board of Examiners shall receive from the City Treasurer Twenty (\$20.00) Dollars for each regular examination held. This shall cover examination and grading of papers. The members of the Board shall receive no pay for any meeting at which no examination is held, and no member of the Board shall receive pay for any examination he fails to attend.

ARTICLE 5BOARD OF APPEAL501 - Personnel of Board.

a. The Board of Appeal shall consist of three members appointed by the Mayor, who, by experience and training, shall be qualified to pass upon the safety of installations and apparatus regulated by this Code. Members of the Board shall hold office for three years, unless removed for cause. No member of the Board of Appeal shall sit in a case in which he is directly or indirectly interested, and, in case of disqualification for such cause, or in case of his necessary absence, the Mayor shall make temporary appointment of a substitute. All vacancies occurring on the Board of Appeal for whatever cause shall be filled by the Mayor.

b. Any member or members of the Board of Appeal may be removed by the Mayor for malfeasance in office, incapacity or neglect of duty.

502 - Duties of Board of Appeal.

a. The Board of Appeal shall meet once a month on stated days, or oftener at the call of the Chairman or notice from the Inspector of any special appeal.

b. Any applicant for an electrical permit, whose application has been rejected by the Inspector, or a person who has been ordered by the Inspector to incur an expense in the alteration, repair or construction of the electrical installation of any building, may, within fifteen days thereafter, appeal therefrom by giving to the Inspector notice in writing of such an appeal; such notice or a certified copy thereof shall at once be transmitted by the Inspector to the Board of Appeal. After notice to such parties as the Board may direct, a hearing shall be had, and the Board may by a majority vote affirm, annul or modify said action of the Inspector. If the action of the Inspector is affirmed, such action shall have full force and effect. If the action of the Inspector is modified or annulled, a permit shall issue accordingly.

c. Any requirements deemed by the Inspector necessary for safe-guarding the hazard from fire and to life in connection with any electrical installation not specifically covered by this ordinance, shall be determined by the Inspector, subject to the Board of Appeal in the manner prescribed by paragraph (b) of this section.

d. Materials and methods equivalent to those required by the provisions of this ordinance relating to electrical installations in or on buildings may, with the written approval of the Board of Appeal, be permitted by the Inspector. A record of the required and equivalent material for method allowed shall be kept in the office of the Chief Inspector. (See also Section 707.)

e. It shall be the duty of the Board of Appeal to submit to the Council on or before the first of January of each year, a report giving a summary of all the decisions of the Board, a list of equivalents consented to and a record of such other business as may have come before them, together with such recommendations as to desirable legislation pertaining to electrical installations in or about buildings, as may to them seem advisable.

503 - Certified Check to Accompany Appeal.

a. Any person appealing from the decision of the Inspector shall attach to the written appeal a certified check for Five (\$5.00) Dollars, made out in favor of the City Treasurer, and in case the appeal is lost the check shall be turned over to the City Treasurer as a fee, but if the appeal is granted the check shall be returned to the applicant.

PART II.**ARTICLE 6.****DEFINITIONS.****601 - Definitions.**

2. 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: Means not permanently closed in by the structure or finish of the building (see also readily accessible).

Approved: When applying to materials and appliances shall mean that such material and appliances conform to the standards of the Underwriters' Laboratories, or to the specifications and requirements of the United States Bureau of Standards, and to the requirements of this Code. Whenever applying to workmanship, it shall mean workmanship that complies in all particulars with the provisions of this Code. (See sections 702 and 704).

Authorized Person: Means one who is properly authorized to perform specific duties under the conditions existing.

Automatic: Means self-acting; operating by its own mechanism when actuated by some impersonal influence, as for example, by a change in temperature, current strength, or by a change of water level in a tank.

Auto-starter: Means any starting device for A. C. motors which employs a transformer winding whereby the potential impressed upon the motor terminals during the process of starting may be made less than full line voltage, and which has a switching device for accomplishing this result.

Branch Circuit: Means 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, motors and current consuming devices generally.

Building: Means a structure which stands alone or which is cut off from adjoining structures by fire walls.

Cabinet: Means 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 (See cutout box).

Cable: Means ⁸stranded conductor (single-conductor cable) or a combination of conductors insulated from one another (multiple conductor cable).

Concealed: Means rendered permanently inaccessible by the structure or finish of the building.

Conductor: Means a wire or cable utilized and suitable for carrying an electric current.

Cutout: Means 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.

Cutout Box: Means an enclosure for electrical apparatus and devices designed for surface mounting and having swinging doors or covers secured directly to and telescoping with the walls of the box proper (See cabinet).

Disconnecting Switch or Disconnecter: Means a switch which is intended to open a circuit only after the load has been thrown off by some other means.

Dustproof: Means so constructed or protected that an accumulation of dust will not interfere with its successful operation.

Dust-tight: Means so constructed that dust will not enter the enclosing case.

Electrical Equipment: Means any electrical wires, appliances, apparatus or electrical construction of any kind whatsoever, installed in or used in or about any buildings or other structures in the City of Portland.

Elevator: Means a hoisting mechanism equipped with a car which moves in guide rails in a substantially vertical direction. Dumb waiters, endless belts, conveyers, chains, buckets, etc., used for the purpose of conveying and elevating materials, tiering or piling machines, and ramps are not included by the term "elevator".

Extra High Potential: Means any voltage above 5000.

Guarded: Covered, shielded, fenced, enclosed or otherwise protected by means of suitable covers or encasings, barriers, walls or screens, mats or platforms, to remove the liability of dangerous contact or approach by persons or objects to a point of danger.

High Potential: Means any voltage between 601 and 5000 volts.

Inspector: Means the Chief Electrical Inspector of the City of Portland, or any of his duly authorized assistants.

Isolated: Means not readily accessible to persons unless special means of access is used.

Low Potential: Means any voltage not over 600, including light, heat or power systems and also signal systems having either continuous or momentary direct connection with any light, heat or power circuit.

Maintenance Work: Means the keeping in repair and operation of any and all existing electrical installations, apparatus and equipment, and extensions to same, not to exceed one branch circuit capacity for each specific extension.

Maker's Name: When applying to the identification of devices and materials, shall mean either the name or trade mark of the actual manufacturer, or that of a responsible jobber or other distributor.

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 material and apparatus.

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

Outline Lighting: Means all lighting (other than signs) on the exterior of buildings.

Owner: Means the owner of any building. If a building be owned by a corporation, by a partnership, or by tenants in common, any person owning ten per cent or more of the capital stock of such corporation, and any partner or tenant in common shall be deemed to be an owner.

Panelboard: Means a panel containing buses and fuses with or without switches for the control of light, heat or power circuits of small individual as well as aggregate capacity, and usually placed in or against the wall or partition and accessible only from the front. They are not used for the direct control of energy derived from generators or transforming apparatus (See Switchboard).

Person: Means natural persons of either sex, associations, co-partnerships, corporations, whether acting by themselves or by a servant, agent or employee; the singular number shall be held to include the plural and the masculine pronoun to include the feminine.

Practicable: Means capable of being reasonably applied under the conditions of construction or installation employed.

Qualified person: Means one familiar with the construction and operation of the apparatus and the hazards involved.

Readily Accessible: Means able to be reached quickly without climbing over or removing obstructions or resorting to chair, box or portable ladder (See accessible).

Service: Means that portion of the supply conductors which extends from the street main to the service switch of the building supplied.

Size of Wire: All wire sizes are given in the Brown and Sharpe (American) gage.

Special Permission: Means the express permission in writing from the Chief Electrical Inspector to do something which is not in accordance with the provisions of this Code in connection with which the term is used.

Sub-station: Means a building, room or enclosure, in which is installed transformers or generating equipment or other substation apparatus. The term substation, as used in this Code, includes isolated generating stations on the premises of the consumer.

Switchboards: Means a large, single panel, frame or assembly of panels, on which are mounted on the face or back, or both, switches, fuses, or other automatic protective devices, busses and usually instruments. Switchboards are not installed in cabinets. (See Panelboard).

Totally Enclosed Motor: Means a motor which is so completely enclosed by integral or auxiliary covers as to practically prevent the circulation of air through the interior. Such a motor is not necessarily air tight.

Ventilated: Means provided with a means to permit circulation of the air sufficiently to remove an excess of heat, fumes or vapors.

Waterproof: Means so constructed or protected that moisture will not interfere with its successful operation.

Watertight: Means so constructed that moisture will not enter the enclosing case.

ARTICLE 7SCOPE AND GENERAL PROVISIONS OF CODE.701 - Object and Scope of Code.

a. The object of this Code is to reduce the personal hazard and the fire hazard from electrical causes. To accomplish this, the requirements set forth herein are intended to provide a minimum standard for electrical installations in the City of Portland.

b. The regulations of this Code shall apply to all electrical wiring and equipment installed, used, maintained, or offered for sale in the City of Portland except the wiring and equipment of public utility companies that is used for the generation, control or distribution of the utility and except such wiring and equipment as is necessary for the operation of the City Fire Alarm and Police Telegraph systems; provided, however, that these regulations shall apply to the installation of all wiring and equipment installed in or on the consumers premises. Electrical wiring and equipment in Federal Buildings are exempted from the requirements of this Code.

(Fine print note) It is not the intent of this Code to regulate any wiring, appliances, apparatus, and devices which properly come under the jurisdiction of the Oregon Public Service Commission.

702 - Materials and Appliances.

a. All materials and appliances used in the installations which are covered by this Code shall be approved. [See definition of "Approved", Section 501]. Unless otherwise specified in this code, materials and appliances listed in the copyrighted lists of inspected appliances and supplements published and distributed by the Underwriter's Laboratories, shall be regarded as conforming to the requirements of this Section. It is not the intent of this rule to require that motors, meters, and other devices which are not included in the list of inspected appliances issued by the Underwriters' Laboratories, shall be approved as defined by Section 501; but it is the intent to require that wiring, materials and devices, such as those included in the list of inspected appliances issued by the Underwriters' Laboratories shall be approved.

b. No materials or appliances which do not conform to the provisions of paragraph (a) of this section shall be sold or offered for sale, either in person or by agent, clerk or employee. (See also Section 301(a), paragraph 4.)

c. The maker's name, trademark or other identification symbol shall be placed on fittings and materials, together with such other markings giving voltage, current, wattage or other appropriate ratings as are prescribed elsewhere in this Code.

d. The requirements of this Code relating to materials, appliances and apparatus shall apply on all new electrical work whether the apparatus being installed is new or used. Where apparatus is moved from one location to another within the same building and for the same owner, these requirements may be waived or modified provided such apparatus has been examined by the Electrical Inspector, and found to be in good safe condition. Used apparatus, with the exception noted herein, shall be remodeled to comply with the requirements of this Code before again being placed in use.

703 - Bases and Terminal Parts of Apparatus and Appliances.

a. Bases for the mounting of live parts shall be composed of approved non-combustible, non-absorptive insulating material, and the design shall be such that, considering the material used, the base will withstand the most severe conditions liable to arise in service. Holes for supporting screws shall be so located or countersunk that there will be at least 1/2 inch, measured over the surface, between the screw head or washer and the nearest live metal part, and in all cases, where between parts of opposite polarity, the screw head or washer shall be countersunk. Holes for supporting screws in link fuse outlet bases shall be kept outside the area included by the outside edges of the fuse terminals. Nuts or screw heads on the under side of the base shall be countersunk and sealed with a waterproof compound.

b. Terminal parts by which wire connections are made shall insure thoroughly good connections even under hard usage. For currents above 30 amperes, lugs into which the connecting wires may be soldered, or approved solderless connectors, shall be provided. For currents of 30 amperes or less the parts to which wiring connections are made shall securely grip the conductors. Heavy clamps or screws with terminal plates having upturned lugs, or solderless connectors, may be used.

(Fine print note) Lugs or clamps are not required when leads are provided as part of the device.

c. The set screw form of contact shall not be used.

d. All devices provided with terminals for the attachment of wires and intended for connection to more than one side of the circuit shall, unless specifically excepted, have a pair of connecting terminals properly marked for identification, unless the electrical connection between the pair of terminals intended to be connected to the grounded conductor is clearly evident.

e. The terminals of devices having a normal current rating of over 30 amperes need not be marked for identification.

f. The terminals of utilization devices need not be marked to indicate the proper connection to the grounded conductor. If the terminals on utilization devices, including single-pole switches are marked, the switch shall not be placed in the identified side of the circuit.

g. The terminals of portable devices need not be marked for identification.

h. Devices, to the terminals of which only one side of the line is connected, need not have terminals marked for identification.

i. Rosettes, attachment plug receptacles without screw shells, and attachment plug caps need not have their terminals marked for identification. When terminals of polarized receptacles for attachment plugs and attachment plug caps are marked for identification, the terminal intended for connection to the grounded wire shall be the marked terminal.

j. Three-wire attachment plug receptacles and three-wire attachment plug caps in which one terminal may be used for the connection of a grounding conductor, shall have such terminal identified in a manner differing from that specified in paragraph (1) of this section.

k. In the case of devices with Edison screw shells, the identified terminal shall be the one connected to the screw shell. This does not apply to screw shells which serve as plug fuse receptacles.

l. The marking of terminals shall be done by means of a metallic plated coating substantially white in color, as nickel or zinc, or the terminals may be of material substantially white in color. The other terminals shall be of a readily distinguishable difference in color.

m. In the case of screw shell devices with attached leads, the wire attached to the screw shell shall have white or natural gray finish. The finish of the braid on the other conductor shall be of a solid color that will not be confused with the white or natural gray finish which is to indicate the grounded conductor.