

*Repealed by 3917*

AN ORDINANCE OF THE CITY OF KIRKLAND ADDING A CHAPTER TO KIRKLAND MUNICIPAL CODE (KMC) TITLE 21, AND ADOPTING THE NATIONAL ELECTRICAL CODE AND THE UNIFORM ADMINISTRATIVE CODE PROVISIONS, AS MODIFIED.

Be it ordained by the City Council of the City of Kirkland as follows:

Section 1. A new chapter 70 entitled "Electric Code" is hereby added to Title 21 of the KMC to read as follows:

Chapter 21.70

ELECTRIC CODE

**21.70.010 Copies of codes on file.**

The City shall at all times keep on file with the Director of Administration and Finance, for reference by the general public, not less than three copies of the codes and resolutions, or parts thereof, as herein adopted by reference, together with the amendments and supplements thereto herein made a part of this chapter.

The copies of codes on file may be placed by the Director of Administration and Finance in the custody of the office of the Building Official in order to make them more readily available for inspection and use by the general public.

**21.70.020 Purpose.**

Chapter 21.70 is enacted as an exercise of the police power of the City for the benefit of the public at large. It is not intended to create a special relationship with any individual, or individuals, or to identify and protect any particular class of persons. The purpose of this chapter is to provide minimum standards to safeguard persons and property from hazards arising from the use of electricity.

**21.70.030 Interpretation.**

Whenever the following words appear in the codes adopted by reference in this title they are to be interpreted as follows:

- (a) "Administrative Authority" as "Building Official";
- (b) "Chief, or Director of Fire Services" as "Fire Chief";
- (c) "Corporation Counsel" as "City Attorney or designee";
- (d) "City Treasurer" as "Director of Administration and Finance";

(e) "Local Zoning Code" as the "City of Kirkland Zoning Code (Ordinance 2740, as amended)";

(f) "Municipality," and "the Jurisdiction" as "The City of Kirkland."

(g) Whenever reference is made to local authority, codes, jurisdiction, and similar concepts within the codes adopted by reference in this chapter, such reference shall apply to the City of Kirkland.

#### **21.70.040 Penalty for violation.**

In addition to the administrative remedies provided for in this chapter, any person found by a court of competent jurisdiction to be in violation of or to have violated any mandatory provision of this title shall be guilty of a misdemeanor. Each day that a violation is found to exist shall be deemed a separate offense.

A person who has previously been convicted of a crime for violation of this chapter shall be guilty of a gross misdemeanor for any subsequent violation.

#### **21.70.050 Electrical Codes Adopted.**

The National Electrical Code issued by the National Fire Protection Association 1993 Edition, together with amendments and/or additions thereto, is adopted in its entirety.

The Uniform Administrative Code Provisions, 1993 Edition, as published by the International Conference of Building Officials, together with amendments and/or additions thereto, is hereby adopted in its entirety.

#### **21.70.060 Permits.**

Section 301 of the Uniform Administrative Code Provisions is amended and supplemented to read as follows:

**Sec. 301. (a) Permits Required.** Except as specified in Subsection (b) of this section, no electrical system regulated by this code shall be installed, altered, repaired, replaced or remodeled unless a separate electrical permit for each building or structure has first been obtained from the building official.

A separate permit is required for each building of an apartment or condominium complex.

The electrical permit shall be posted on the job site at the service switch or other conspicuous place and shall remain so posted during the entire course of work.

**(b) Exempt Work.** An electrical permit shall not be required for the following:

1. Portable motors or other portable appliances energized by means of a cord or cable having an attachment plug end to be connected to an approved receptacle when that cord or cable is permitted by the National Electrical Code;

2. Repair or replacement of fixed motors, transformers or fixed approved appliances or devices rated 50 amps or less with the same type and rating in the same location;
3. Temporary decorative lighting;
4. Repair or replacement of current-carrying parts of any switch, conductor or control device of up to 100 amperes capacity;
5. Reinstallation of attachment plug receptacles, but not the outlets therefor;
6. Repair or replacement of any over current device of the required capacity in the same location;
7. Repair or replacement of electrodes or transformers of the same size and capacity for signs or gas tube systems;
8. Taping joints;
9. Removal of electrical wiring;
10. Temporary wiring for experimental purposes in suitable experimental laboratories;
11. Electrical wiring, devices, appliances, apparatus or equipment operating at less than 25 volts and not capable of supplying more than 50 watts of energy.

Exceptions; Permits shall be required for the following:

- a. Electrical systems required (by the Uniform Building , Fire or Mechanical Codes or Kirkland Municipal Ordinance 21.35 regarding Fire Alarms) for fire protection and building occupant safety (fire alarms, nurse call, public address systems, etc.)
  - b. Electrical systems installed in hazardous locations as defined in the National Electrical Code.
12. Low-energy power, control and signal circuits of Classes II and III as defined in the National Electrical Code;
  13. Replacing flush or snap switches, fuses, lamp sockets, receptacles, or ballasts.

(c) **Violations Prohibited.** Exemption from the permit requirements of subsection (b) of this Section shall not be deemed to grant authorization for work to be done in violation of the provisions of the National Electrical Code or other laws or ordinances of the city.

## 21.70.070 Application for Permits.

Section 302 of the Uniform Administrative Code Provisions is amended and supplemented to read as follows:

(a) **Application.** Application for an electrical permit shall be made on a form provided by the building official. Each application shall state the name and address of the owner, vendee or occupant in possession of the building or premises where the work is to be done, the name of the licensed contractor, if any, making the application, and such other information as the building official may require. The building official may refuse to issue or revoke a permit if any statement in permit application is found to be untrue.

### (b) Plans and Specifications.

1. **General.** In addition to the requirements of Section 302 (a), two sets of plans and specifications shall be submitted with each application for an electrical permit for and installation of: services or feeders of 400 amperes or over, all switches or circuit breakers rated 400 amperes or over, any proposed installation which cannot be adequately described on the application form, and installation of emergency generators.

Exception: Plans and specifications shall not be required for installations for one and two family dwellings.

All electrical plans for new or altered electrical installations in educational, institutional, and health or personal care occupancies classified or defined in WAC 296-46-130 and as indicated in WAC 296-46-150, Table 1 or 2 shall be reviewed and approved by the Washington State Department of Labor and Industries Electrical Division before a permit is issued and/or the electrical installation or alteration is begun.

2. **Clarity of Plans.** Plans shall be drawn to a clearly indicated an commonly accepted scale of not less than 1/8 inch to 1 foot upon substantial paper such as blueprint quality or standard drafting paper. Plans shall indicate the nature and extent of the work proposed and shall show in detail that it will conform to the provisions of this code. All electrical work shall be readily distinguishable from other mechanical work. If plans are incomplete, unintelligible or indefinite, the building official may require that the plans be prepared by a licensed electrical engineer, or may reject or refuse to examine such plans, even though a plan examination fee has been paid.
3. **Information on Plans and Specifications.** Plans and specification shall indicate the following:
  - a. The proposed use or occupancy of the various portions of the building in which the installation is to be made.
  - b. A complete riser diagram.

- c. The calculated load schedule and demand factor selected for each branch circuit, feeder, subfeeder, main feeder and service. Panel and circuit schedules shall be shown.
- d. Fault current calculations and the listed interrupting rating for feeder or service installation or alteration.
- e. A key to any symbols used.
- f. Letters and numbers designating mains, feeders, branch circuits and distribution panels.
- g. Wattage, number of sockets and type of lighting fixture.
- h. Wattage and purpose of all other outlets.
- i. Voltage at which any equipment will operate.
- j. Identification of size of wires, type of insulation and all conduit sizes.
- k. Any other information as may be required by the plans examiner.

**21.70.080 Plan Review Fees**

Section 304(b) of the Uniform Administrative Code Provisions is amended and supplemented to read as follows:

**(b) Plan Review Fee.** When submittal documents are required by 21.70.070 (b), a plan review fee shall be collected prior to issuance of the electrical permit. Said plan review fee shall be 20% of the electrical permit fee. The plan review fees specified in this subsection are separate fees from the permit fees shown in Table 3-A. When submittal documents are incomplete or changed so as to require additional plan review or when the project involves deferred submittal items, an additional plan review fee shall be charged at the rate of \$42.00 per hour.

**21.70.090 Electrical Permit Fees**

Table No. 3A of the Uniform Administrative Code Provisions is amended and supplemented to read as follows:

**TABLE 3-A -- ELECTRICAL PERMIT FEES:**

**One- and Two-Family Dwellings:**

New Construction:	
200-amp service and circuits .....	\$55
Larger than 200-amp service and circuits .....	\$75
Service Change:	
200-amp (includes added circuits) .....	\$55
Larger than 200 amps .....	\$75

**Installation of New Circuits Only:**

1-5 circuits .....	\$30
6 or more circuits.....	\$55

**Commercial, and Multi-Family:**

The fee is based on the Contract Price/Time and Materials of the installation and calculated according to the following schedule. A separate permit is required for each building:

up to \$1,000 .....	\$30
\$1,001 to \$5,000 .....	\$45 plus 1.5% of the cost over \$1,000
\$5,001 to \$20,000.....	\$105 plus 1% of the cost over \$5,000
\$20,001 to \$50,000.....	\$290 plus 0.9% of the cost over \$20,000
\$50,001 to \$250,000.....	\$560 plus 0.8% of the cost over \$50,000
\$250,001 to \$1,000,000.....	\$2,155 plus 0.6% of the cost over \$250,000
\$1,000,001 and above.....	\$6,655 plus 0.4% of the cost over \$1,000,000

**Low Voltage Electrical for Security, Telephone, and Computer Wiring:**

Per linear foot	Permit Fee
Up to 1,000 Linear Feet (LF) .....	\$30
1,001 LF up to 10,000 LF.....	\$30 plus \$5 for each additional 1,000 LF over 1,001 LF
10,001 LF up to 50,000 LF.....	\$75 plus \$3 for each additional 1,000 LF over 10,001 LF
50,001 LF up to 200,000 LF.....	\$195 plus \$2 for each additional 1,000 LF over 50,001 LF
200,001 LF up to 1 million LF...	\$495 plus \$1 for each additional 1,000 LF over 200,001 LF
1 million LF and up .....	\$1,295 plus \$.50 for each additional 1,000 LF over 1 million LF

**Temporary Power for Construction Sites:**

1 to 200 amp .....	\$30
201 to 400 amp.....	\$60
401 amps or more .....	Based on total valuation of installation and calculated according to Commercial and Multi-Family schedule above.

**Temporary Power for Carnivals:**

(Carnivals include art and street fairs, haunted houses, amusement rides, and similar temporary events.)

Base fee:.....	\$ 50
Per concession: .....	\$ 10
Maximum fee: .....	\$250

**Swimming Pools, Hot Tubs, Spas, and Saunas:**

(Applicants must also get a Building Permit for pool, hot tub, or spa.) .....

Portable Classrooms and Mobile Home Service..... \$30

**Sign Installations:**

The Permit Fee for electrical hook-ups required on a sign is \$30.  
(Applicant must also get a Sign Permit.)

Emergency inspections requested outside normal work hours. Regular fee plus surcharge of..... \$ 75

Requests to inspect existing installation .....

Request for inspection when work is not ready .....

Work started Without Permit, Except Emergency Work ..... Double fee:

**21.70.100 Temporary installation.**

If the building official finds that the safety of life and property will not be jeopardized, permits may be issued for temporary electrical installations for use during the construction of buildings or for carnivals, conventions, festivals, fairs, the holding of religious services, temporary lighting of streets, or other approved uses. Permission to use such temporary installation shall not be granted for a greater length of time than 45 days, except that a permit for a temporary installation to be used for construction of a building may be issued for the period of construction. Should such temporary lighting be over the street area, the proper authorization for such use of the street must first be obtained. All such temporary installations shall be made in a manner as nearly as practicable in conformance with the requirements of this code for permanent work; provided that the building official may permit deviations which will not permit hazards to life or property; and further provided that whenever such hazards are deemed by the building official to exist, the building official may at once rescind or cancel the permit covering such installation and disconnect, or order the disconnection of all energy to such equipment.

**21.70.110 Wiring and circuit specifications - New Work**

Minimum size of conductors:

- (a) In commercial installations, #12 American Wire Gauge copper; control wiring and voltages of 24 or less are excepted.
- (b) In residential installation, #14 American Wire Gauge copper.
- (c) In all installations, no aluminum wire shall be used.

Exceptions:

- 1. Service entrance conductors
- 2. Branch circuits of 50 amperes or greater

**21.70.120 Effect of chapter on existing wiring.**

- (a) The provisions of this chapter are not intended to apply to electrical installations in existence at the time of its adoption, except in those cases which, in the opinion of the building official, are found to be dangerous to life or property, and except as is otherwise specifically provided in this chapter.
- (b) When more than 50% of the wiring of any circuit, as measured in lineal feet, is changed, then the entire circuit must be rewired to bring it into conformance with this chapter.
- (c) Whenever an existing electrical service is to be moved, altered or enlarged, the service equipment must be reinstalled in conformance with this chapter.
- (d) Additions or alterations to existing electrical systems shall be done using materials and methods equivalent to, or exceeding the materials and methods used in the existing system.

**21.70.130 Service Entrance Conductors.**

Service entrance conductors shall be installed in the following manner:

- (a) Minimum coverage shall be 24 inches below finished grade.
- (b) Distribution equipment and conductor shall be of the same rating.
- (c) Where current limiters are permitted, they shall be installed in an approved enclosure, and labeled "current limiters".
- (d) Where Section 230-95 (c) of the National Electrical Code applies, tests shall be performed by an approved testing agency.
- (e) In other than single family dwellings the capacity of installed conductors shall be labeled on service distribution equipment when not of the same rating.
- (f) Single family dwellings may be served with approved direct burial cable provided such cable shall be sleeved under paving, and installed to conform to Sections 230 (d) and 300-5 of the National Electrical Code.

**21.70.140 Grounding Procedures.**

Electrical systems shall be grounded by one or all of the following means:

- (a) An approved conductor sized in accordance with Table 250-94 of the National Electrical Code attached by approved means to the concrete foundation reinforcing steel;
- (b) Two electrodes, rod or pipe that are eight feet in length, installed in the following manner and series-connected:
  1. Electrodes of pipe or conduit shall be no smaller than three-quarter inch trade size and where iron or steel, shall have the outer surface galvanized or otherwise metal-coated for corrosion protection.
  2. Electrodes of rods of steel or iron shall be at least five-eighths of an inch in diameter. Nonferrous rods or their equivalent shall be listed and shall not be less than one-half inch in diameter.
  3. The two electrodes shall be installed no less than 16 feet apart, concrete encased electrodes per National Electrical Code 250-81 (c), shall be accepted only if inspected and approved prior to placing of concrete, electrodes placed horizontally in a trench, and plate electrodes, shall not be approved without written approval from the building official. The upper end of the electrodes shall be flush or below ground level unless the above-ground end and the grounding



electrode conductor attachment are protected against physical damage as specified in Section 250-117 of the National Electrical Code.

- 4. Section 250-83 of the National Electrical Code shall apply where none of the above are applicable.

(c) All required grounding shall be fully installed and visible at rough in inspection.

(d) Flexible metal conduit shall contain an equipment grounding conductor sized per National Electrical Code Section 250-95.

**21.70.150 Raceways.**

Metal clad (M.C.) cable shall not be smaller than #14 AWG National Electrical Code copper, with a grounding conductor contained within the outer jacket, approved per National Electrical Code for use only with approved fittings.

**21.70.160 Pool installations**

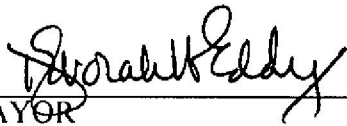
All electric equipment installed in the water, walls or deck of any pool or fountain shall comply in full with the provisions of Article 680 of the National Electrical Code, without distinguishing between "storable" and "permanently installed" pools and fountains.

Section 2. Severability. If any section, subsection, sentence, clause, phrase, part or portion of this ordinance is for any reason held to be invalid or unconstitutional by any court of competent jurisdiction, such decision shall not affect the validity of the remaining portions of this ordinance.


Section 3. Effective date. This Ordinance shall be in force and effect on July 1, 1996 after its passage by the Kirkland City Council and publication pursuant to Section 1.08.017 Kirkland Municipal Code in the summary form attached to the original of this ordinance and by this reference approved by the City Council.

Passed by majority vote of the Kirkland City Council in regular, open meeting this 18th day of June, 1996.

Signed in authentication thereof this 18th day of June, 1996.

  
MAYOR

Attest:

  
City Clerk

Approved as to Form:



A handwritten signature in cursive script, appearing to read "Paul Bond", is written over a horizontal line.

City Attorney

ord/eoord1

PUBLICATION SUMMARY  
OF ORDINANCE NO. 3545

AN ORDINANCE OF THE CITY OF KIRKLAND ADDING A CHAPTER TO THE KIRKLAND MUNICIPAL CODE (KMC) TITLE 21, AND ADOPTING THE NATIONAL ELECTRICAL CODE AND THE UNIFORM ADMINISTRATIVE CODE PROVISIONS, AS MODIFIED.

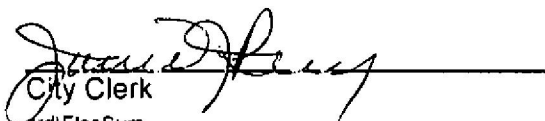
SECTION 1. Adds new Kirkland Municipal Code Chapter 21.70, "Electric Code," which adopts the National Electric Code, 1993 Edition, and the Uniform Administrative Code Provisions for the National Electric Code, 1993 Edition, as published by the International Conference of Building Officials.

SECTION 2. Contains a savings clause.

SECTION 3. Authorizes publication of the ordinance by summary, which summary is approved by the City Council pursuant to Section 1.08.017 of the Kirkland Municipal Code and establishes the effective date as July 1, 1996.

The full text of this Ordinance will be mailed without charge to any person upon request made to the City Clerk for the City of Kirkland. The Ordinance was passed by the Kirkland City Council at its regular meeting on the 18th day of June, 1996.

I certify that the foregoing is a summary of Ordinance 3545 approved by the Kirkland City Council for summary publication.

  
City Clerk  
ordElecSum