

ORDINANCE NO. 4246

AN ORDINANCE OF THE CITY OF KIRKLAND RELATING TO MODIFICATIONS TO TITLE 21 OF THE KIRKLAND MUNICIPAL CODE REGARDING BUILDING AND CONSTRUCTION.

The City Council of the City of Kirkland do ordain as follows:

Section 1. Kirkland Municipal Code Chapter 21.06 is hereby amended to read as follows:

Article I. General

21.06.010 Title.

These regulations shall be known as the construction administrative code of the city of Kirkland, hereinafter referred to as “this chapter.”

21.06.015 Purpose.

The purpose of this chapter is to provide for the administration, organization and enforcement of the technical codes adopted by the city.

21.06.020 Scope.

(a) This chapter establishes the administrative, organizational and enforcement rules and regulations for the technical codes which regulate site preparation and construction, alteration, moving, demolition, repair, use and occupancy of buildings, structures and building service equipment within the corporate limits of the city. The provisions of this chapter shall apply to the administration of the following technical codes:

- (1) ~~20069~~ International Building Code—Chapter 51-50 WAC;
- (2) ~~20069~~ International Residential Code—Chapter 51-51 WAC;
- (3) ~~20069~~ International Mechanical Code—Chapter 51-52 WAC;
- (4) ~~20069~~ National Fuel Gas Code (NFPA 54)—Chapter 51-52 WAC;
- (5) Kirkland Electrical Code;
- (6) ~~20048~~ Liquefied Petroleum Gas Code (NFPA 58)—Chapter 51-52 WAC;
- (7) ~~20069~~ International Fuel Gas Code—Chapter 51-52 WAC;
- (8) ~~20069~~ Uniform Plumbing Code—Chapters 51-56 and 51-57 WAC.

21.06.025 Definitions.

For the purpose of this chapter, certain terms, phrases, words and their derivatives shall have the meanings set forth in this section or in the definitions provisions of the technical codes. Where terms are not defined, they shall have their ordinary accepted meanings within the context with which they are used. Webster’s Third International Dictionary of the English Language, Unabridged, latest edition, shall be considered as providing ordinary accepted meanings. Words used in the singular include the plural and the plural the singular. Words used in the masculine gender include the feminine and the feminine the masculine.

- (1) "Action" means a specific response complying fully with a specific request by the jurisdiction.
- (2) "Existing building" means a building erected prior to the adoption of the current building code, or one for which a legal building permit has been issued and finalized.
- (3) "Building service equipment" means and refers to the plumbing, mechanical and electrical equipment including piping, wiring, fixtures, and other accessories which provide sanitation, lighting, heating, ventilation, cooling, refrigeration, firefighting, and transportation facilities essential to the occupancy of the building or structure for its designated use.
- (4) "Complete response" means an adequate response to all requests from city staff in sufficient detail to allow the application to be processed.
- (5) "Dangerous building code" means the 1997 Uniform Code for the Abatement of Dangerous Buildings promulgated by the International Council of Building Officials as adopted by the jurisdiction.
- (6) "Energy code" means the Washington State Energy Code promulgated by the Washington State Building Code Council as adopted by the city.
- (7) "Housing code" means the 1997 Uniform Housing Code promulgated by the International Council of Building Officials as adopted by the city.
- (8) "IBC" means the latest edition of the International Building Code promulgated by the International Code Council as adopted by the city.
- (9) "IMC" means the latest edition of the International Mechanical Code promulgated by the International Code Council as adopted by the city.
- (10) "IRC" means the latest edition of the International Residential Code promulgated by the International Code Council as adopted by the city.
- (11) "NEC" means the latest edition of the National Electrical Code promulgated by the National Fire Protection Association as adopted by the city.
- (12) "Occupancy" means the purpose for which a building, or part thereof, is used or intended to be used.
- (13) "Shall," as used in this chapter, is mandatory.
- (14) "Technical codes" are the codes, appendices and referenced code standards adopted by the jurisdiction.
- (15) "UPC" means the latest edition of the Uniform Plumbing Code promulgated by the International Association of Plumbing and Mechanical Officials as adopted by the jurisdiction.
- (16) "Valuation" or "value," used in computing the plan review and permit (inspection) fees, means the total value of all construction work, including labor and materials, for which the permit is issued, as well as all finish work, painting, roofing, electrical, plumbing, heating, air conditioning, elevators, fire-extinguishing systems, or any other permanent work or permanent equipment.
- ~~(17) "VIAQ" means the Washington State Ventilation and Indoor Air Quality Code promulgated by the Washington State Building Code Council, as adopted by the jurisdiction.~~

21.06.030 Appendices.

Provisions in the appendices of the technical codes shall not apply unless specifically adopted.

21.06.035 Intent.

The purpose of this chapter and the technical codes is to establish the minimum requirements to safeguard the public health, safety and general welfare through structural strength, means of

egress facilities, stability, sanitation, adequate light and ventilation, energy conservation, and safety to life and property from fire and other hazards attributed to the built environment and to provide safety to firefighters and emergency responders during emergency operations.

21.06.040 Referenced codes.

The codes listed in Sections 21.06.045 through 21.06.085 and referenced elsewhere in this chapter shall be considered part of the requirements of this chapter to the prescribed extent of each such reference.

21.06.045 International Building Code - Scope.

The provisions of the International Building Code shall apply to the construction, alteration, movement, enlargement, replacement, repair, equipment, use and occupancy, location, maintenance, removal, and demolition of every building or structure or any appurtenances connected or attached to such buildings or structures.

Exceptions:

(1) Detached one- and two-family dwellings and multiple single-family dwellings (townhouses) not more than three stories above grade plane in height with separate means of egress and their accessory structures shall comply with the International Residential Code.

(2) Roads, bridges, sidewalks, drainage structures, retaining walls and similar structures regulated, approved and inspected by the City's Public Works Department.

(3) Electrical transmission towers and telephone poles (not including cell towers) under the control of a utility.

21.06.050 International Residential Code - Scope.

The provisions of the International Residential Code for One- and Two-Family Dwellings shall apply to the construction, alteration, movement, enlargement, replacement, repair, equipment, use and occupancy, location, maintenance, removal, and demolition of detached one- and two-family dwellings and multiple single-family dwellings (townhouses) not more than three stories in height with separate means of egress and their accessory structures.

Exception: Live/work units complying with the requirements of Section 419 of the *International Building Code* shall be permitted to be built as one- and two-family *dwellings* or townhouses. Fire suppression required by Section 419.5 of the *International Building Code* when constructed under the *International Residential Code for One- and Two-family Dwellings* shall conform to Section 903.3.1.3 of the *International Building Code*.

21.06.055 Mechanical - Scope.

These provisions of the International Mechanical Code shall apply to the installation, alterations, repairs and replacement of mechanical systems, including equipment, appliances, fixtures, fittings and/or appurtenances, including ventilating, heating, cooling, air-conditioning and refrigeration systems, incinerators and other energy-related systems.

Exceptions:

(1) The International Fuel Gas Code—for all installations utilizing natural gas and gaseous hydrogen except those regulated by the IRC and those utilizing LPG.

(2) International Residential Code—for all structures regulated by the IRC except LPG installations.

(3) NFPA 54 and 58—for all LPG installations.

21.06.060 Liquid propane gas - Scope.

The provisions of the National Fuel Gas Code and Liquid Petroleum Gas Code (NFPA 54 and 58) shall apply to the installation of all materials and equipment utilizing liquid propane gas.

21.06.065 Natural gas - Scope.

The provisions of the International Fuel Gas Code shall apply to the installation of all materials and equipment utilizing natural gas except those regulated by the International Residential Code.

21.06.070 Plumbing - Scope.

The provisions of the Uniform Plumbing Code shall apply to the erection, installation, alteration, repair, relocation, replacement, addition to, use or maintenance of plumbing and medical gas systems within the city.

21.06.075 Energy - Scope.

The provisions of the Washington State Energy Code shall apply to all matters governing the design and construction of buildings for energy efficiency.

~~21.06.080 Ventilation and indoor air quality~~

~~The provisions of the Washington State Ventilation and Indoor Air Quality Code shall apply to all matters governing the design and construction of buildings for ventilation and indoor air quality.~~

21.06.085 Electrical - Scope.

The provisions of the Kirkland Electrical Code applies to the installation of electric conductors, electric equipment and additions, alterations, modifications, or repairs to existing electrical installations for the following:

- (A) Electric conductors, electric equipment, and electrical raceways installed within or on public and private buildings, property or other structures.
- (B) Signaling and communications conductors and equipment, telecommunications conductors and equipment, fiber optic cables, and raceways installed within or on public and private buildings, property or other structures.
- (C) Yards, lots, parking lots, and industrial substations.
- (D) Temporary electrical installations for use during the construction of buildings.
- (E) Temporary electrical installations for carnivals, conventions, festivals, fairs, traveling shows, the holding of religious services, temporary lighting of streets, or other approved uses.
- (F) Installations of conductors and equipment that connect to a supply of electricity.
- (G) All other outside electrical conductors on the premises.
- (H) Optional standby systems derived from portable generators.

Exception: Installations under the exclusive control of electric utilities for the purpose of communication, transmission, and distribution of electric energy located in buildings used

exclusively by utilities for such purposes or located outdoors on property owned or leased by the utilities or on public highways, streets, roads, etc., or outdoors by established rights on private property.

It is the intent of this section that this code covers all premises' wiring or wiring other than utility owned metering equipment, on the load side of the service point of buildings, structures, or any other premises not owned or leased by the utility. Also, it is the intent that this code covers installations in buildings used by the utility for purposes other than listed in above, such as offices buildings, warehouses, garages, machine shops, and recreational buildings which are not an integral part of a generating plant, substation, or control center.

Article II. Applicability

21.06.090 Applicability.

(A) General. Where, in any specific case, different sections of this chapter specify different materials, methods of construction or other requirements, the most restrictive shall govern except that the hierarchy of the codes named in Chapter 19.27 RCW shall govern. Where there is a conflict between a general requirement and a specific requirement, the specific requirement shall be applicable.

(B) New Installations. This chapter applies to new installations.

Exception: If an electrical, plumbing or mechanical permit application is received after this chapter has taken effect, but is associated with a building permit application received prior to the effective date of the ordinance codified in this chapter, all applicable codes adopted and in force at the time of a complete building permit application will apply.

(C) Existing installations. Lawfully installed existing installations that do not comply with the provisions of this chapter shall be permitted to be continued without change, except as is specifically covered in this chapter, the International Fire Code or as is deemed necessary by the building official for the general safety and welfare of the occupants and the public. Where changes are required for correction of hazards, a reasonable amount of time shall be given for compliance, depending on the degree of the hazard.

(D) Maintenance. Building and structures, including their electrical, plumbing and mechanical systems, equipment, materials and appurtenances, both existing and new, and parts thereof shall be maintained in proper operating condition in accordance with the original design and in a safe, hazard-free condition. Devices or safeguards that are required by this chapter shall be maintained in compliance with the code edition under which installed. The owner or the owner's designated agent shall be responsible for the maintenance of the systems and equipment. To determine compliance with this provision, the code official shall have the authority to require that the systems and equipment be re-inspected.

(E) Additions, alterations, modifications or repairs. Additions, alterations, modifications or repairs to a building or structure or to the electrical, plumbing or mechanical system(s) of any building, structure, or premises shall conform to the requirements of this chapter without requiring those portions of the existing building or system not being altered or modified to comply with all the requirements of this chapter. Installations, additions, alterations, modifications, or repairs shall not cause an existing building to become unsafe or to adversely affect the performance of the building

as determined by the building official or designated representative. Electrical wiring added to an existing service, feeder, or branch circuit shall not result in an installation that violates the provisions of the code in force at the time the additions were made.

21.06.095 Other laws.

The provisions of this chapter shall not be deemed to nullify any provisions of local, state or federal law.

21.06.100 Application of references.

References to chapter or section numbers, or to provisions not specifically identified by number, shall be construed to refer to such chapter, section or provision of this chapter.

21.06.105 Referenced codes and standards.

The codes and standards referenced in the technical codes shall be considered part of the requirements of those codes to the prescribed extent of each such reference. Where differences occur between provisions of the technical codes and referenced codes and standards, the provisions of the technical codes shall apply.

21.06.110 Partial invalidity.

In the event that any part or provision of this chapter or a technical code is held to be illegal or void, this shall not have the effect of making void or illegal any of the other parts or provisions.

21.06.115 Existing structures.

The legal occupancy of any structure existing on the date of adoption of the technical codes shall be permitted to continue without change, except as is specifically covered in this chapter, the International Fire Code, or as is deemed necessary by the building official or fire official for the general safety and welfare of the occupants and the public. Modifications to existing structures shall be permitted to be performed in accordance with WAC 51-50-480000 (International Existing Building code).

21.06.117 Moved Buildings, Electrical

(A) Nonresidential buildings or structures moved into or within the jurisdiction must be inspected to ensure compliance with current requirements of this chapter.

(B) Residential buildings or structures wired in the U.S., to NEC requirements, and moved into the jurisdiction must be inspected to ensure compliance with the NEC requirements in effect at the time and place the original wiring was made. The building or structure must be inspected to ensure compliance with all current requirements of chapter 19.28 RCW and the rules developed by the department if:

- (1) The original occupancy classification of the building or structure is changed as a result of the move; or
- (2) The building or structure has been substantially remodeled or rehabilitated as a result of the move.

- (D) Residential buildings or structures wired in Canada to Canadian Electrical Code (CEC) standards and moved into the jurisdiction must be inspected to ensure compliance with the following minimum safety requirements:
- (1) Service, service grounding, and service bonding must comply with this Code.
 - (2) Canadian Standards Association (CSA) listed Type NMD cable is allowed with the following qualifications:
 - (a) CSA listed Type NMD cable, American Wire Gauge #10 and smaller installed after 1964 utilizing an equipment grounding conductor smaller than the phase conductors, must be:
 - (i) Replaced with a cable utilizing a full-size equipment grounding conductor; or
 - (ii) Protected by a ground fault circuit interrupter protection device.
 - (b) CSA listed Type NMD cable, #8 AWG and larger, must:
 - (i) Utilize an equipment grounding conductor sized according to the requirements of the NEC in effect at the time of the installation;
 - (ii) Be protected by a ground fault circuit interrupter protection device; or
 - (iii) Be replaced.
 - (3) Other types of wiring and cable must be:
 - (a) Replaced with wiring listed or field evaluated in accordance with U.S. standards by a laboratory approved by the department; or
 - (b) Protected by a ground fault circuit interrupter protection device and arc fault circuit protection device.
 - (4) Equipment, other than wiring or panelboards, manufactured and installed prior to 1997 must be listed and identified by laboratory labels approved by the department or CSA labels.
 - (5) All panelboards must be listed and identified by testing laboratory labels approved by the department with the following qualifications:
 - (a) CSA listed panelboards labeled "Suitable for Use as Service Equipment" will be considered to be approved as "Suitable for Use only as Service Equipment."
 - (b) CSA listed panelboards must be limited to a maximum of 42 circuits.
 - (c) CSA listed panelboards used as lighting and appliance panelboards as described in the NEC, must meet all current requirements of the NEC and this chapter.
 - (6) Any wiring or panelboards replaced or changed as a result of the move must meet current requirements of chapter 19.28 RCW and this chapter.
 - (7) The location, type, and ground fault circuit interrupter protection of receptacles and equipment in a bathroom, kitchen, basement, garage, or outdoor area must meet the Washington requirements in effect at the time the wiring was installed.
 - (8) 4, 15-ampere, kitchen small appliance circuits will be accepted in lieu of 2, 20-ampere, kitchen small appliance circuits. Receptacles will not be required to be added on kitchen peninsular or island counters.
 - (9) Spacing requirements for all other receptacles must meet the Washington requirements in effect at the time the wiring was installed.
 - (10) Receptacles installed above baseboard or fixed wall space heaters must be removed and the outlet box covered with a blank cover. The receptacle is required to be relocated as closely as possible to the existing location.
 - (11) Lighting outlet and switch locations must meet the Washington requirements in effect at the time the wiring was installed.

- (12) Dedicated 20-ampere small appliance circuits are not required in dining rooms.
- (13) Electric water heater branch circuits must be adequate for the load.
- (14) The location, type, and circuit protection of feeders must meet the Washington State requirements in effect at the time the wiring was installed.

Article III. Building Department

21.06.120 Creation of enforcement agency.

The building department is hereby created and the official in charge thereof shall be known as the building official.

21.06.125 Appointment.

The building official shall be appointed by the chief appointing authority of the jurisdiction.

21.06.130 Deputies.

In accordance with the prescribed procedures of this jurisdiction and with the concurrence of the appointing authority, the building official shall have the authority to appoint a deputy building official, the related technical officers, inspectors, plan examiners and other employees. Such employees shall have powers as delegated by the building official.

Article IV. Duties and Powers of Building Official

21.06.135 General.

The building official is hereby authorized and directed to enforce the provisions of this chapter and the technical codes. The building official shall have the authority to render interpretations of this chapter and the technical codes and to adopt policies and procedures in order to clarify the application of their provisions. Such interpretations, policies and procedures shall be in compliance with the intent and purpose of this chapter and the technical codes. Such policies and procedures shall not have the effect of waiving requirements specifically provided.

21.06.140 Applications and permits.

The building official shall receive applications, review construction documents and issue permits for the erection, alteration, demolition and moving of buildings, structures and building service systems and equipment, inspect the premises for which such permits have been issued and enforce compliance with the provisions of this chapter and the technical codes.

21.06.145 Notices and orders.

The building official shall issue all necessary notices or orders to ensure compliance with this chapter and the technical codes.

21.06.147 Tagging of Buildings.

Following a City of Kirkland issued formal declaration of emergency, the building official shall be authorized to evaluate and provide building safety evaluations. Evaluations shall generally follow standards from the Applied Technology Council ATC 20, ATC 20-1, or ATC 45 manuals. The

procedure shall allow for the tagging of buildings as “Inspected”, “Limited Entry” or “Unsafe” along with any associated penalties per section 114.1 of this code for removal of building tags. Notice of orders pertaining to dangerous buildings and appeal procedures established under adopted building codes shall not apply under official declarations of emergency.

21.06.150 Inspections.

The building official shall make all of the required inspections, or the building official shall have the authority to accept reports of inspection by approved agencies or individuals. Reports of such inspections shall be in writing and be certified by a responsible officer of such approved agency or by the responsible individual. The building official is authorized to engage such expert opinion as deemed necessary to report upon unusual technical issues that arise at the applicant's expense.

21.06.155 Identification.

The building official shall carry proper identification when inspecting structures or premises in the performance of duties under this chapter and the technical codes.

21.06.160 Right of entry.

Where it is necessary to make an inspection to enforce the provisions of this chapter and the technical codes, or where the building official has reasonable cause to believe that there exists in a structure or upon a premises a condition which is contrary to or in violation of this chapter and the technical codes which makes the structure or premises unsafe, dangerous or hazardous, the building official is authorized to enter the structure or premises at reasonable times to inspect or to perform the duties imposed by this chapter and the technical codes; provided, that if such structure or premises be occupied that credentials be presented to the occupant and entry requested. If such structure or premises is unoccupied, the building official shall first make a reasonable effort to locate the owner or other person having charge or control of the structure or premises and request entry. If entry is refused, the building official shall have recourse to the remedies provided by law to secure entry.

21.06.165 Department records.

The building official shall keep official records of applications received, permits and certificates issued, fees collected, reports of inspections, and notices and orders issued. Such records shall be retained in the official records for the period required for retention of public records.

21.06.170 Liability.

The building official or employee charged with the enforcement of this chapter and the technical codes, while acting for the jurisdiction in good faith and without malice in the discharge of the duties required by this chapter or other pertinent law or ordinance, shall not thereby be rendered liable personally and is hereby relieved from personal liability for any damage accruing to persons or property as a result of any act or by reason of an act or omission in the discharge of official duties. Any suit instituted against an officer or employee because of an act performed by that officer or employee in the lawful discharge of duties and under the provisions of this chapter shall be defended by legal representative of the jurisdiction until the final termination of the proceedings.

The building official or any subordinate shall not be liable for cost in any action, suit or proceeding that is instituted in pursuance of the provisions of this chapter and the technical codes.

21.06.175 Approved materials and equipment.

Materials, equipment and devices approved by the building official shall be constructed and installed in accordance with such approval.

21.06.180 Used materials and equipment.

The use of used materials and building service equipment which meet the requirements of this code for new materials is permitted. Used equipment and devices shall not be reused unless prior approval is obtained ~~is permitted when approved by~~ from the building official.

21.06.185 Modifications.

Wherever there are practical difficulties involved in carrying out the provisions of this chapter and the technical codes, the building official shall have the authority to grant modifications for individual cases, upon application of the owner or owner's representative, provided the building official shall first find that special individual reason makes the strict letter of the code impractical and the modification is in compliance with the intent and purpose of this chapter and the technical codes and that such modification does not lessen health, accessibility, life and fire safety, or structural requirements. The details of action granting modifications shall be recorded and entered in the files of the department. The building official is authorized to charge an additional fee to evaluate any proposed modification under the provisions of this section.

21.06.190 Alternative materials, design and methods of construction and equipment.

The provisions of this chapter and the technical codes are not intended to prevent the installation of any material or to prohibit any design or method of construction not specifically prescribed by this chapter and the technical codes; provided, that any such alternative has been approved. An alternative material, design or method of construction shall be approved where the building official finds that the proposed design is satisfactory and complies with the intent of the provisions of this chapter and the technical codes, and that the material, method or work offered is, for the purpose intended, at least the equivalent of that prescribed in the technical codes in quality, strength, effectiveness, fire resistance, durability and safety. The building official is authorized to charge an additional fee to evaluate any proposed alternate under the provisions of this section.

21.06.195 Research reports.

Supporting data, where necessary to assist in the approval of materials or assemblies not specifically provided for in technical codes, shall consist of valid research reports from approved sources.

21.06.200 Tests.

Whenever there is insufficient evidence of compliance with the provisions of this chapter and the technical codes, or evidence that a material or method does not conform to the requirements of the technical codes, or in order to substantiate claims for alternative materials or methods, the building official shall have the authority to require tests as evidence of compliance to be made at

no expense to the jurisdiction. Test methods shall be as specified in technical codes or by other recognized test standards. In the absence of recognized and accepted test methods, the building official shall approve the testing procedures. Tests shall be performed by an approved agency. Reports of such tests shall be retained by the building official for the period required for retention of public records.

Article V. Permits

21.06.205 Required.

Any owner or authorized agent who intends to construct, enlarge, alter, repair, move, demolish, or change the occupancy of a building or structure, or to erect, install, enlarge, alter, repair, remove, convert or replace any electrical, gas, mechanical or plumbing system, the installation of which is regulated by this chapter or one of the technical codes, or to cause any such work to be done, shall first make application to the building official and obtain the required permit. A separate permit is required for each building or structure.

Exception: when deemed appropriate by the building official, accessory buildings and structures may be included under the permit of the main building or structure.

21.06.210 Electrical permit required.

In accordance with Chapter 19.28 RCW, an electrical permit is required for the following installations:

- (1) The installation, alteration, repair, replacement, modification or maintenance of all electrical systems, wire and electrical equipment regardless of voltage.
- (2) The installation and/or alteration of low voltage systems defined as:
 - (A) NEC, Class 1 power limited circuits at thirty volts maximum.
 - (B) NEC, Class 2 circuits powered by a Class 2 power supply as defined in NEC 725.41(A).
 - (C) NEC, Class 3 circuits powered by a Class 3 power supply as defined in NEC 725.41(A).
- (3) Telecommunications Systems.
 - (A) Installation of telecommunications systems on the customer side of the network demarcation point for projects greater than ten telecommunications outlets.
 - (B) All backbone installations, regardless of size, and all telecommunications cable or equipment installations involving penetrations of fire barriers or passing through hazardous locations.
 - (C) The installation of greater than ten outlets and the associated cables along any horizontal pathway from a telecommunications closet to work areas during any continuous ninety-day period requires a permit and inspection.
 - (D) Backbone installations in multifamily residential dwellings which require penetration of fire barriers, or installation of more than ten outlets in common areas.
 - (E) Definitions of telecommunications technical terms will come from Chapter 19.28 RCW, the currently adopted WAC rules, EIA/TIA standards, and the National Electrical Code.

21.06.215 Work exempt from permit.

Exemptions from permit requirements of this chapter shall not be deemed to grant authorization for any work to be done in any manner in violation of the provisions of the technical codes or any

other laws or ordinances of this jurisdiction. Permit exemptions shall not apply to areas of flood hazard or city land use critical areas. Permits shall not be required for the following:

(1) Building.

(A) One-story detached accessory structures constructed under the provisions of the IRC used as tool and storage sheds, tree-supported play structures, playhouses and similar uses, but not including vehicle storage, provided the floor area does not exceed ~~one hundred and twenty two~~ two hundred square feet. and one-story detached accessory structures constructed under the provisions of the IBC used as tool and storage sheds and similar uses, provided the floor area does not exceed one hundred and twenty square feet.

(B) Fences not over six feet high.

(C) Oil derricks.

(D) Retaining walls which are not over four feet in height measured from the bottom of the footing to the top of the wall, unless supporting a surcharge or impounding Class I, II or III-A liquids.

(E) Water tanks supported directly on grade if the capacity does not exceed five thousand gallons and the ratio of height to diameter or width does not exceed two to one.

(F) Sidewalks, decks and driveways ~~associated with residential buildings constructed under the provisions of the IRC~~ not more than 30 inches above grade and not over any basement or story below and which are not part of an accessible route.

~~(G) Decks, associated platforms and steps accessory to residential buildings constructed under the provisions of the IRC which are not more than thirty inches above adjacent grade and not over any basement or story below.~~

(G) Replacement of nonstructural siding on IRC structures except for veneer, stucco or exterior finish and insulation systems (EFIS).

(H) In-kind re-roofing of one- and two-family dwellings, provided the roof sheathing is not removed or replaced.

(I) Painting, papering, tiling, carpeting, cabinets, counter tops and similar finish work- provided that existing accessibility features are not altered.

(J) Temporary motion picture, television and theater stage sets and scenery.

(K) Prefabricated swimming pools accessory to a one- and two-family dwelling, which are less than twenty-four inches deep, do not exceed five thousand gallons and are installed entirely above ground.

(L) Swings, slides and other similar playground equipment.

(M) Window awnings supported by an exterior wall of one- and two-family dwellings which do not project more than fifty-four inches from the exterior wall and do not require additional support.

(N) ~~Like-for-like replacement of windows in an IRC structure.~~ In-kind window replacement for IRC structures where no alteration of structural members is required and when the window U-values meet the current prescriptive requirements of the Washington State Energy Code.

(O) Nonfixed and movable cases, counters and partitions not over five feet, nine inches in height.

(P) Satellite earth station antennas six and one-half feet or less in diameter or diagonal in zones other than residential zones.

(Q) Satellite earth station antennas three and one-quarter feet or less in diameter in residential zones.

(R) Video programming service antennas three and one-quarter feet or less in diameter or diagonal dimension, regardless of zone.

(S) ~~Removal or installation of nonstructural wood or vinyl siding on IRC structures.~~ Job shacks that are placed at a permitted job site during construction may be allowed on a temporary basis and shall be removed upon final approval of construction. A job shack is a portable structure for which the primary purpose is to house equipment and supplies, and which may serve as a temporary office during construction for the purposes of the construction activity.

(2) Electrical.

(A) 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;

(B) Repair or replacement of fixed motors, transformers or fixed approved appliances or devices rated fifty amps or less which are like-in-kind in the same location;

(C) Temporary decorative lighting; when used for a period not to exceed ninety days and removed at the conclusion of the ninety-day period;

(D) Repair or replacement of current-carrying parts of any switch, conductor or control device which are like-in-kind in the same location;

(E) Repair or replacement of attachment plug(s) and associated receptacle(s) rated fifty amperes or less which are like-in-kind in the same location;

(F) Repair or replacement of any over current device which is like-in-kind in the same location;

(G) Repair or replacement of electrodes or transformers of the same size and capacity for signs or gas tube systems;

(H) Removal of electrical wiring;

(I) Telecommunication outlet installations within individual dwelling units;

(J) Listed wireless security systems where power is supplied by a listed Class 2 plug-in transformer installed within dwelling units;

(K) The installation, alteration or repair of electrical wiring, apparatus or equipment or the generation, transmission, distribution or metering of electrical energy or in the operation of signals or the transmission of intelligence by a public or private utility in the exercise of its function as a serving utility;

(L) Portable generators serving only cord and plug connected loads supplied through receptacles on the generator rated at four thousand watts or less;

(M) Travel trailers;

(N) Like-in-kind replacement of a: contactor, relay, timer, starter, circuit board, or similar control component; household appliance; circuit breaker; fuse; residential luminaire; lamp; snap switch; dimmer; receptacle outlet; thermostat; heating element; luminaire ballast with an exact same ballast; component(s) of electric signs, outline lighting, skeleton neon tubing when replaced on-site by an appropriate electrical contractor and when the sign, outline lighting or skeleton neon tubing electrical system is not modified; ten horsepower or smaller motor; and induction detection loops described in WAC 296-46B-300(2) and used to control gate access devices.

(3) Mechanical.

(A) Portable heating, cooking, or clothes drying appliances.

(B) Portable ventilation equipment.

(C) Portable cooling unit.

- (D) Steam, hot or chilled water piping within any heating or cooling equipment regulated by this chapter.
- (E) Replacement of any part which does not alter its approval or make it unsafe.
- (F) Portable evaporative cooler.
- (G) Self-contained refrigeration system containing ten pounds or less of refrigerant and actuated by motors of one horsepower or less.
- (H) Portable fuel cell appliances that are not connected to a fixed piping system and are not interconnected.

(4) Plumbing.

- (A) The stopping and/or repairing of leaks in drains, water, soil, waste or vent pipe; provided, however, that should any concealed trap, drain pipe, water, soil, waste or vent pipe become defective and it becomes necessary to remove and replace the same with new material, the same shall be considered as new work and a permit shall be obtained ~~procured~~ and inspection made as provided in this chapter.
- (B) The clearing of stoppages, or the repairing of leaks in pipes, valves or fixtures and the removal and reinstallation of water closets, provided such repairs do not involve or require replacement or rearrangement of valves, pipes or fixtures.
- (C) Reinstallation or replacement of prefabricated fixtures that do not involve or require the replacement or rearrangement of valves or pipes.

21.06.220 Emergency repairs.

Where equipment replacements and equipment repairs must be performed in an emergency situation, the permit application shall be submitted within the next working business day to the building official.

21.06.225 Repairs.

Application or notice to the building official is not required for ordinary repairs to structures. Such repairs shall not include the cutting away of any wall, partition or portion thereof, the removal or cutting of any structural beam or load-bearing support, or the removal or change of any required means of egress, or rearrangement of parts of a structure affecting the egress requirements; nor shall ordinary repairs include addition to, alteration of, replacement or relocation of any standpipe, water supply, sewer, drainage, drain leader, gas, soil, waste, vent or similar piping, electric wiring or mechanical or other work affecting public health or general safety.

21.06.230 Application for permit.

For other than on-line permits, to obtain a permit, the applicant shall first submit a complete application in writing on a form furnished by the building department for that purpose. Such application shall include:

- (1) A description of the work to be covered by the permit for which application is made.
- (2) The use and occupancy for which the proposed work is intended.
- (3) A legal description of the property upon which the project is located.
- (4) The street address of the property.
- (5) The tax parcel number.
- (6) The property owner's name, address, and phone number.

(7) The prime contractor's business name, address, phone number, current state contractor registration number.

(8) The valuation of the proposed work.

(9) Proof of a potable water supply for buildings requiring potable water.

(10) Construction documents and other information as required in Article VI.

Exception: The above information is required for building permits, but may not be required for other types of permits such as plumbing, electrical, mechanical, sign, LSM and roofing.

(11) For building projects valued at over five thousand dollars, either:

(A) The name, address and phone number of the office of the lender administering the interim construction financing, if any; or

(B) The name, address and phone number of the office of the lender administering the interim construction financing, if any; or the name and address of the firm that has issued a payment bond, if any, on behalf of the prime contractor for the protection of the owner, if the bond is for an amount not less than fifty percent of the total amount of the construction project; provided, that if any of this information is not available at the time the application is submitted, the applicant shall so state and the lack of said information shall not cause the application to be deemed incomplete for the purposes of this section. However, the applicant shall provide the remaining information prior to the permit being issued.

21.06.240 Action on application.

(a) The building official shall examine or cause to be examined applications for permits and amendments thereto within a reasonable time after filing. If the application or the construction documents do not conform to the requirements of pertinent laws, the building official shall reject such application in writing, stating the reasons therefor. If the building official is satisfied that the proposed work conforms to the requirements of this chapter and laws and ordinances applicable thereto, the building official shall issue a permit therefor as soon as practicable.

(b) Revisions to the submittal documents, not requested by the city, may be accepted by the city, however the revisions may result in additional fees being assessed. Substantial revisions may require a new permit application be submitted as determined by the building official.

(c) Before a permit is issued, the code official is authorized to inspect and approve the systems, equipment, buildings, devices, premises and spaces or areas to be used.

21.06.245 Time limitation of application.

An application for a permit for any proposed work shall expire eighteen months after the date of filing. The building official may extend the life of an application if any of the following conditions exist:

(a) Any other city review is in progress; provided the applicant has submitted a complete, timely, response to city requests or the building official determines that unique or unusual circumstances exist that warrant additional time for such response, and the building official determines that the review is proceeding in a timely manner toward final city decision; or

(b) Litigation against the city or applicant is in progress, the outcome of which may affect the validity or the provisions of any permit issued pursuant to such application.

21.06.250 Validity of permit.

The issuance or granting of a permit shall not be construed to be a permit for, or an approval of, any violation of any of the provisions of this chapter or of any other ordinance of the jurisdiction. Permits presuming to give authority to violate or cancel the provisions of this chapter or other ordinances of the jurisdiction shall not be valid. The issuance of a permit based on construction documents and other data shall not prevent the building official from requiring the correction of errors in the construction documents and other data. The building official is also authorized to prevent occupancy or use of a structure where in violation of this chapter or of any other ordinances of this jurisdiction.

21.06.255 Permit expiration.

(a) Every building permit and its associated ancillary permits issued for an IRC permitted structure or for a tenant space within an existing building shall expire in two years from the date of issuance.

(b) Every LSM permit and every building permit and its associated ancillary permits issued for a commercial, educational, institutional, multifamily, public, industrial or similar structure shall expire in three years from the date of issuance.

(c) Sign permits and electrical, mechanical, and plumbing permits not associated with a building permit shall expire one year from the date of issuance.

(d) The building official may grant a thirty-day extension of time for permits when only the final inspection is remaining and all other work has been approved.

(e) It is a violation of this chapter to allow a permit to expire without first obtaining an approved final inspection.

Exception 1: A new building permit issued for an IRC structure to complete the work covered by a previous, expired permit, shall expire in:

1. one year if the framing inspection was not approved on the previous permit or;
2. six months if the framing inspection was approved on the previous permit and the exterior of the structure is not completed per item #3 below or,
3. Two years if the outside of the structure is complete including roofing, siding, windows, exterior doors and applicable site and right-of-way improvements.

Exception 2: For permits resulting from work without a permit or other code enforcement action(s), the expiration date will be determined by the building official.

21.06.256 Permit Renewals.

An existing building permit may be renewed one time for a fee of one-half the original permit fee, provided the permit has not been expired for more than one year and the framing inspection has been approved. Permit renewals shall expire in:

1. six months if the exterior of the structure is not completed per item #2 below or,
2. Two years if the outside of the structure is complete including roofing, siding, windows, exterior doors and applicable site and right-of-way improvements.

21.06.257 Special provisions for permit and application extensions.

Except as provided below, building and land surface modification (LSM) permits applied for between September 1, 2007, and January 1, 2011, and building and LSM permits issued between

January 1, 2006, and January 1, 2011, will be granted a one-year extension to their original expiration date upon request by the applicant. The one-year extension will start on the original expiration date. The extension may be applied to either the application prior to issuance or the permit after issuance, but not to both. All electrical, plumbing and mechanical permits associated with the building or LSM permit will also be extended for the same amount of time if requested by the applicant. This extension does not apply to any issued building or LSM permit associated with a single-family residence or accessory dwelling unit if the construction has already begun. Extensions will not be granted for demolition work.

21.06.260 Suspension or revocation.

The building official is authorized to suspend or revoke a permit issued under the provisions of this chapter wherever the permit is issued in error or on the basis of incorrect, inaccurate or incomplete information, or in violation of any ordinance or regulation or any of the provisions of this chapter.

21.06.265 Placement of permit.

The building permit or copy shall be kept on the site of the work until the completion of the project.

21.06.267 Floor and Roof Design Loads.

(a) Live Loads Posted. Where the live load for which each floor or portion thereof of a commercial or industrial building is or has been designed to exceed 50 psf (2.40kN/m²), such design live load shall be conspicuously posted by the owner in that part of each story in which they apply, using durable signs. It shall be unlawful to remove or deface such notices.

(b) Issuance of certificate of occupancy. A certificate of occupancy required by Section 111 shall not be issued until the floor load signs, required by Section 106.1 have been installed.

(c) Restrictions on loading. It shall be unlawful to place, cause or permit to be placed, on any floor or room of a building structure or portion thereof, a load greater than is permitted by this code.

Article VI. Construction Submittal Documents

21.06.270 General.

Submittal documents consisting of construction documents, statement of special inspection and structural observation programs, and other data shall be submitted in one or more sets with each application for a permit. The construction documents shall be prepared by a registered design professional where required by the state of Washington. Where special conditions exist, the building official is authorized to require additional construction documents to be prepared by a registered design professional.

Exception: The building official is authorized to waive the submission of construction documents and other data if it is found that the nature of the work applied for is such that review of construction documents is not necessary to obtain compliance with this chapter.

21.06.275 Information on construction documents.

Construction documents shall be dimensioned and drawn upon suitable material. Electronic media documents are permitted to be submitted when approved by the building official. Construction

documents shall be of sufficient clarity to indicate the location, nature and extent of the work proposed and show in detail that it will conform to the provisions of this chapter and relevant laws, ordinances, rules and regulations. The plans must include the relevant items listed in this section and any other information or documents as deemed necessary by the building official.

(A) Building.

(1) Fire protection system shop drawings.

Shop drawings for the fire protection system(s) shall be submitted to indicate conformance with this chapter and the construction documents and shall be approved prior to the start of system installation. Shop drawings shall contain all information as required by the referenced installation standards in Chapter 9 of the IBC. Shop drawings shall be prepared by a certified individual as required by the state of Washington.

(2) Means of egress.

The construction documents shall show in sufficient detail the location, construction, size and character of all portions of the means of egress in compliance with the provisions of this chapter. In occupancies within the scope of the International Building Code, the construction documents shall designate the number of occupants to be accommodated on every floor, and in all rooms and spaces.

(3) Exterior wall envelope.

Construction documents for all buildings shall describe the exterior wall envelope in sufficient detail to determine compliance with this chapter. The construction documents shall provide details of the exterior wall envelope as required, including flashing, intersections with dissimilar materials, corners, end details, control joints, intersections at roof, eaves or parapets, means of drainage, water-resistive membrane and details around openings. The construction documents shall include manufacturer's installation instructions that provide supporting documentation that the proposed penetration and opening details described in the construction documents maintain the weather resistance of the exterior wall envelope. The supporting documentation shall fully describe the exterior wall system which was tested, where applicable, as well as the test procedure used. Exception: Subject to the approval of the building official, one- and two-family dwellings and private garages may be exempt from the detailing requirements of this section.

(4) Building enclosure design requirements of Revised Code of Washington (RCW) 64.55 (otherwise known as Engrossed House Bill (EHB) 1848).

Building enclosure design documents of new or rehabilitated multifamily buildings that are subject to regulations of Engrossed House Bill 1848 must be submitted at the time of permit application. All applications for building construction or rehabilitation shall include design documents prepared and stamped by an architect or engineer that identify the building enclosure (building enclosure documents), including but not limited to, waterproofing, weather proofing and/or otherwise protected from water or moisture intrusion, unless a recorded irrevocable sale prohibition covenant is submitted to the City.

The city is prohibited from issuing a permit for construction or rehabilitative construction unless the building enclosure documents contain a stamped statement by the person stamping the building enclosure design documents in substantially the following form, "The undersigned has provided building enclosure documents that in my professional judgment are appropriate to satisfy the requirements of sections 1 through 10 of EHB 1848". The city is not responsible for determining

whether the building enclosure design documents or the inspections performed are adequate or appropriate to satisfy the requirements of the act.

(5) Site plan.

The construction documents submitted with the application for permit shall be accompanied by a site plan showing to scale the size and location of new construction and existing structures on the site, significant trees, distances from lot lines, easements, the established street grades and the proposed finished grades and, as applicable, flood hazard areas, floodways, and design flood elevations; and it shall be drawn in accordance with an accurate boundary line survey. Where design flood elevations are not specified, they shall be established in accordance with Section 1612.3.1 of the IBC, ~~in the case of demolition, the site plan shall show construction to be demolished and the location and size of existing structures and construction that are to remain on the site or plot.~~ The building official is authorized to waive or modify the requirement for a site plan when the application for permit is for alteration or repair or when otherwise warranted.

(B) Electrical.

(1) Electrical Engineer. Electrical plans for the following installations shall be prepared by, or under the direction of, a consulting electrical engineer registered under Chapter 18.43 RCW, and Chapters 180-29, 246B-320, and 388-97 WAC. All electrical plans must bear the engineer's stamp and signature.

- (a) All educational facilities, hospitals and nursing homes;
- (b) All services or feeders rated 1,600 amperes or larger;
- (c) All installations identified in the National Electrical Code requiring engineering supervision;
- (d) As required by the building official for installations which by their nature are complex, hazardous or pose unique design problems.

(2) Information on construction documents.

Construction documents shall identify the name and classification of the facility and clearly show the electrical installation or alteration in floor plan view, include all switchboard and panelboard schedules and when a service or feeder is to be installed or altered, must include a riser diagram, load calculation, fault current calculation, and interrupting rating of equipment.

(3) Penetrations. Construction documents shall indicate where penetrations will be made for electrical systems and shall indicate the materials and methods for maintaining required structural safety, fire-resistance rating and fireblocking.

(4) Load calculations. Where an addition or alteration is made to an existing electrical system, an electrical load calculation shall be prepared to determine if the existing electrical service has the capacity to serve the added load.

(5) Site plan. The construction documents submitted with the application for permit shall be accompanied by a site plan showing to scale the size and location of new construction and existing structures and equipment on the site, and distances from lot lines, ~~the established street grades and the proposed finished grades;~~ and it shall be drawn in accordance with an accurate boundary line survey. ~~In the case of demolition, the site plan shall show construction to be demolished and the location and size of existing structures and construction that are to remain on the site or plot.~~ The code official is permitted to waive or modify the requirement for a site plan where the application for permit is for alteration or repair or where otherwise warranted.

(6) Plan review required. Electrical plan review is required for all new or altered electrical projects in the following occupancies and/or installations:

- (a) Educational, institutional, or health care facilities/buildings as follows:
- 1) Hospital
 - 2) Nursing home unit or long-term care unit
 - 3) Boarding home
 - 4) Assisted living facility
 - 5) Private alcoholism hospital
 - 6) Alcoholism treatment facility
 - 7) Private psychiatric hospital
 - 8) Maternity home
 - 9) Ambulatory surgery facility
 - 10) Renal hemodialysis clinic
 - 11) Residential treatment facility for psychiatrically impaired children and youth
 - 12) Adult residential rehabilitation center
 - 13) Educational facilities
 - 14) Institutional facilities

Exception: Electrical Plan review is not required for the above educational, institutional, or health care facilities buildings where:

- (a) Lighting specific projects that result in an electrical load reduction on each feeder involved in the project;
- (b) Low voltage systems;
- (c) Modification to existing electrical installations where all of the following conditions are met:
 - i. Service or distribution equipment involved is rated less than 100 amperes and does not exceed 250 volts;
 - ii. Does not involve emergency systems other than listed unit equipment per NEC 700.12(F);
 - iii. Does not involve branch circuits or feeders of an essential electrical system as defined in NEC 517.2; and
 - iv. Service and feeder load calculations are increased by 5% or less.
- (d) Stand-alone utility fed services that do not exceed 250 volts and less than 100 amperes where the project's distribution system does not include:
 - i. Emergency systems other than listed unit equipment per NEC 700.12(F);
 - ii. Critical branch circuits or feeders as defined in NEC 517.2, or
 - iii. A required fire pump system.
- (b) Alterations in non-residential occupancies 2,500 square feet and greater.
- (c) Installations in occupancies, except one and two family dwellings, where a service or feeder rated 100 amperes or greater is installed or altered or if more than 100 amperes is added to the service or feeder.
- (d) All work on electrical systems operating at/over 600 Volts
- (e) All commercial generator installations or alterations
- (f) All work in areas determined to be hazardous (classified) location by the NEC.
- (g) If 60% or more of luminaires change.

- (h) Installations of switches or circuit breakers rated four hundred amperes or over except for one and two family dwellings.
- (i) Wind driven generators.
- (j) Solar photovoltaic systems.
- (k) Any proposed installation which cannot be adequately described in the application form.

(C) Plumbing.

Plans must be submitted for review and approval whenever the scope of the work is too complex for inspection alone as determined by the building official.

(D) Mechanical.

Plans must be submitted for review and approval whenever the scope of the work is too complex for inspection alone as determined by the building official.

21.06.330 Use of consultants.

Whenever review of a building permit application requires retention by the jurisdiction for professional consulting services, the applicant may be required to reimburse the jurisdiction the cost of such professional consulting services. This fee shall be in addition to the normal plan review and building permit fees. The jurisdiction may require the applicant to deposit an amount with the jurisdiction estimated in the discretion of the building official to be sufficient to cover anticipated costs to retaining professional consultant services and to ensure reimbursement for such costs.

21.06.333 Examination of Documents.

The code official shall examine or cause to be examined the accompanying ~~construction~~ submittal documents and shall ascertain by such examinations whether the construction indicated and described is in accordance with the requirements of this chapter and other pertinent laws or ordinances.

21.06.335 Approval of construction documents.

When the building official issues a permit, the construction documents shall be approved, in writing, label or by stamp, as "Reviewed By" or other similar words. One set of construction documents so reviewed shall be retained by the building official. The other set shall be returned to the applicant, shall be kept at the site of work and shall be available for inspection by the building official or a duly authorized representative.

21.06.345 Design professional in responsible charge—General.

When it is required that documents be prepared by a qualified registered design professional, the building official shall be authorized to require the owner to engage and designate on the building permit application a registered design professional who shall act as the registered design professional in responsible charge. If the circumstances require, the owner shall designate a substitute registered design professional in responsible charge who shall perform the duties required of the original registered design professional in responsible charge. The building official shall be notified in writing by the owner if the registered design professional in responsible charge is changed or is unable to continue to perform the duties. The registered design professional in responsible charge shall be responsible for reviewing and coordinating submittal documents

prepared by others, including phased and deferred submittal items, for compatibility with the design of the building. Where structural observation is required by Chapter 17 of the IBC, the inspection program shall name the individual or firms who are to perform structural observation and describe the stages of construction at which structural observation is to occur.

21.06.350 Deferred submittals.

For the purposes of this section, “deferred submittals” are defined as those portions of the design that are not submitted at the time of the application and that are to be submitted to the building official within a specified period. Deferral of any submittal items shall have the prior approval of the building official. The registered design professional in responsible charge shall list the deferred submittals on the construction documents for review by the building official. Documents for deferred submittal items shall be submitted to the registered design professional in responsible charge who shall review them and forward them to the building official with a notation indicating that the deferred submittal documents have been reviewed and been found to be in general conformance to the design of the building. The deferred submittal items shall not be installed until the design and submittal documents have been approved by the building official. The building official is authorized to charge an additional plan review fee to evaluate deferred submittals under the provisions of this section.

21.06.355 Amended construction documents.

Work shall be installed in accordance with the approved construction documents, and any changes made during construction that are not in compliance with the approved construction documents shall be resubmitted for approval as an amended set of construction documents. The building official may authorize minor field changes subject to the approval of the field inspector. Substantial changes may require a new permit be applied for and obtained as determined by the building official.

21.06.360 Retention of construction documents.

One set of approved construction documents shall be retained by the building official for a period of not less than one hundred eighty days from date of completion of the permitted work, or as required by state or local laws.

Article VII. Temporary Structures and Uses

21.06.365 General.

The building official is authorized to issue a permit for temporary structures and temporary uses. Such permits shall be limited as to time of service, but shall not be permitted for more than one hundred eighty days. The building official is authorized to grant extensions for demonstrated cause

21.06.370 Electrical.

(a) 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 length of time greater than ninety days, except that a permit for a temporary installation to be

used for constructing 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.

(b) All such temporary installations shall be made in accordance with the requirements of this chapter; 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.

21.06.375 Conformance.

Temporary structures and uses shall conform to the structural strength, fire safety, means of egress, accessibility, light, ventilation and sanitary requirements of this chapter as necessary to ensure the public health, safety and general welfare.

21.06.380 Termination of approval.

The building official is authorized to terminate such permit for a temporary structure or use and to order the temporary structure or use to be discontinued.

Article VIII. Fees

21.06.385 Payment of fees.

The fee for each permit shall be as set forth in Chapter 21.74, as now or hereafter amended. A permit shall not be valid until the fees have been paid, nor shall an amendment to a permit be released until the additional fee, if any, has been paid.

21.06.390 Schedule of permit fees.

On buildings, grading, structures, signs, electrical, gas, mechanical, and plumbing systems or alterations requiring a permit, a fee for each permit shall be paid as required, in accordance with the schedule as established by the Kirkland city council.

21.06.395 Plan review fees.

When submittal documents are required by Article VI of this chapter, a plan review fee shall be paid at the time of submitting the submittal documents for plan review. The building official may have the option to charge a deposit, in lieu of the full plan review fee, if the full amount is not known at the time. Any plan review deposit shall be applied toward the total plan review fee owed. The actual inspection fees and related plan review fee shall be determined upon completion of the plan review and the balance owing shall be paid at the time of permit issuance. The plan review fee shall be a separate fee from the permit fees specified in this section and are in addition to the permit fees. When submittal documents are incomplete or changed so as to require additional plan review or when the project involves deferred submittal items as defined in Article VI of this chapter, an additional plan review fee shall be charged at the rate shown in Chapter 21.74 established by the Kirkland city council. A new plan review fee may be charged if revisions to a plan are so extensive that a new plan review is required.

21.06.400 Building permit valuations.

The applicant for a permit shall provide an estimated permit value at time of application. The valuation for a permit issued to complete the work of an expired permit shall be based upon the value of all work not completed under the previous permit, with a minimum valuation of \$4,000 for each required remaining inspection. The determination of value or valuation under any of the provisions of this chapter shall be made by the building official.

21.06.405 Work commencing before permit issuance.

Any person who commences any work on a building, structure, gas, mechanical, electrical or plumbing system before obtaining the necessary permits, unless installed under Section 21.06.220, shall be subject to a special investigation fee established by the building official that shall be in addition to the required permit fees.

21.06.410 Related fees.

The payment of the fee for the construction, alteration, removal or demolition for work done in connection to or concurrently with the work authorized by a building permit shall not relieve the applicant or holder of the permit from the payment of other fees that are prescribed by law.

21.06.415 Refunds.

The building official may authorize refunding of not more than eighty percent of the inspection fee paid when no work has been done under a permit issued in accordance with this chapter. The building official may authorize refunding of not more than eighty percent of the plan review fee paid when an application for a permit for which a plan review fee has been paid is withdrawn or canceled before any plan reviewing is done. The building official shall not authorize a refund of any fee paid except on written application filed by the original permittee not later than one hundred eighty days after the date of payment of the fee.

Article IX. Inspections**21.06.420 General.**

Construction or work for which a permit is required shall be subject to inspection by the building official and such construction or work shall remain accessible and exposed for inspection purposes until approved. Approval as a result of an inspection shall not be construed to be an approval of a violation of the provisions of this chapter or of other ordinances of the jurisdiction. Inspections presuming to give authority to violate or cancel the provisions of this chapter or of other ordinances of the jurisdiction shall not be valid. It shall be the duty of the permit applicant to cause the work to remain accessible and exposed for inspection purposes. Neither the building official nor the jurisdiction shall be liable for expense entailed in the removal or replacement of any material required to allow inspection.

21.06.425 Preliminary inspections.

Before issuing a permit, the building official is authorized to examine or cause to be examined buildings, structures and sites for which an application has been filed.

21.06.430 Manufacturer's installation instructions.

Manufacturer's installation instructions, as required by this chapter, shall be available on the job site at the time of inspection.

21.06.435 Required inspections.

The building official, upon notification, shall make the inspections set forth in Sections 21.06.440 through 21.06.515.

21.06.440 Footing and foundation inspection.

Footing and foundation inspections shall be made after poles or piers are set or trenches or basement areas are excavated and all required hold-down anchor bolts, hold down straps, any forms erected, and any required reinforcing steel is in place and supported. The foundation inspection shall include excavations for thickened slabs intended for the support of bearing walls, partitions, structural supports, or equipment and special requirements for wood foundations.
~~Footing and foundation inspections shall be made after excavations for footings are complete and any required reinforcing steel is in place. For concrete foundations, any required forms shall be in place prior to inspection.~~

21.06.445 Concrete slab and under-floor inspection.

Concrete slab and under-floor inspections shall be made after in-slab or under-floor reinforcing steel and building service equipment, conduit, slab insulation, piping accessories and other ancillary equipment items are in place, but before any concrete is placed or floor sheathing installed, including the subfloor.

21.06.450 Lowest floor elevation.

In flood hazard areas, upon placement of the lowest floor, including the basement, and prior to further vertical construction, the elevation certification required in IBC Section 1612.5 or IRC Section R324 shall be submitted to the building official. FEMA Flood elevation certificates shall contain an original stamp and signature of the Surveyor, licensed by the State of Washington and shall document the elevation of the lowest floor, including basement, and other information required by the flood elevation certificate.

21.06.455 Exterior wall sheathing inspection.

Exterior wall sheathing shall be inspected after all wall framing is complete, strapping and nailing is properly installed but prior to being covered.

21.06.460 Roof sheathing inspection.

The roof sheathing shall be inspected after all roof framing is complete. No roof coverings shall be installed until inspections are made and approved.

21.06.465 IMC/UPC/GAS/NEC rough in inspection.

Rough in mechanical, gas piping, plumbing and electrical shall be inspected when the rough in work is complete and, if required, under test. No connections to primary utilities shall be made until the rough in work is inspected and approved.

21.06.470 Frame inspection.

Framing inspections shall be made after the roof deck or sheathing, all framing, fire blocking and bracing are in place and pipes, chimneys and vents to be concealed are complete and the rough electrical, plumbing, fire suppression piping, heating wires, pipes and ducts are approved and the building is substantially dry.

21.06.475 Flashing and exterior weather barrier inspection.

Flashing and exterior weather barrier inspections shall be made after flashing and weather barrier materials have been installed, but prior to any of the work being covered. Subject to the approval of the building official, periodic inspections may be made during the course of construction.

21.06.480 Exterior Finish and Insulation Systems (EFIS), Lath inspection and gypsum board inspection.

EFIS, Lath and gypsum board inspections shall be made after backing, lathing ~~and~~ or gypsum board, interior and exterior, is in place, but before any plastering is applied or gypsum board joints and fasteners are taped and finished.

Exception: Interior Gypsum board that is not part of a fire-resistance-rated assembly or a shear assembly.

21.06.485 Fire and Smoke resistant penetrations.

Protection of joints and penetrations in fire-resistance-rated assemblies, smoke barriers and smoke partitions shall not be concealed from view until inspected and approved.

21.06.490 Energy efficiency inspection.

(a) Envelope. In addition to the inspections required in WAC 51-11, the following inspections are also required:

- (1) Wall Insulation Inspection. To be made after all wall insulation and air vapor retarder sheet or film materials are in place, but before any wall covering is placed.
- (2) Glazing Inspection. To be made after glazing materials are installed in the building.
- (3) Exterior Roofing Insulation. To be made after the installation of the roof insulation, but before concealment.
- (4) Slab/Floor Insulation. To be made after the installation of the slab/floor insulation, but before concealment.

(b) Mechanical.

- (1) Mechanical Equipment Efficiency and Economizer. To be made after all equipment and controls required by this chapter are installed and prior to the concealment of such equipment or controls.
- (2) Mechanical Pipe and Duct Insulation. To be made after all pipe, fire suppression piping and duct insulation is in place, but before concealment.

(c) Lighting and Motors.

- (1) Lighting Equipment and Controls. To be made after the installation of all lighting equipment and controls required by this chapter, but before concealment of the lighting equipment.

(2) Motor Inspections. To be made after installation of all equipment covered by this chapter, but before concealment. (Ord. 4099 § 2 (part), 2007: Ord. 3946 § 1 (part), 2004)

21.06.495 Electrical Inspections.

(a) The installation, alteration or extension of any electrical system, fixtures or components for which a permit is required by this chapter shall be subject to inspection by the building official and such electrical systems, fixtures and components shall remain accessible and exposed for inspection purposes until approved by the building official. It shall be the duty of the permit applicant to cause the electrical systems to remain accessible and exposed for inspection purposes. The city shall not be liable for expense entailed in the removal or replacement of material required to permit inspection. When the installation of an electrical system is complete, an additional and final inspection shall be made. Electrical systems and equipment regulated by the National Electrical Code shall not be connected to the energy source until authorized by the building official.

(b) The building official may require special inspection of equipment or wiring methods where the installation requires special training, equipment, expertise, or knowledge. Where such special inspection is required, it shall be performed by an independent third party acceptable to the building official. The special inspection person/agency shall be designated and approved prior to beginning the installation of wiring or equipment. A written report from the designated special inspection agency indicating that the installation conforms to the appropriate codes and standards shall be received by the building official prior to that installation being approved. All costs for such testing and reporting shall be the responsibility of the permit holder.

(c) Approval as a result of an inspection shall not be construed to be an approval of a violation of the provisions of the National Electrical Code or of other ordinances of the city. Inspections presuming to give authority to violate or cancel the provisions of the National Electrical Code or other ordinances of the city shall not be valid.

(d) The ~~code~~ building official, upon notification, shall make the inspections set forth in this section:

- (1)** Underground. Underground inspection shall be made after trenches or ditches are excavated and bedded, piping and conductors are installed, and before backfill is put in place. Where excavated soil contains rocks, broken concrete, frozen chunks and other rubble that would damage or break the raceway, cable or conductors, or where corrosive action will occur, protection shall be provided in the form of granular or selected material, approved running boards, sleeves or other means.
- (2)** Rough-in. Rough-in inspection shall be made after the roof, framing, fireblocking and bracing are in place and all wiring and other components to be concealed are complete, and prior to the installation of wall or ceiling membranes. All required equipment grounding conductors installed in concealed cable or flexible conduit systems must be completely installed and made up at the time of the rough-in cover inspection.
- (3)** Other inspections. In addition to the inspections specified above, the code official is authorized to make or require other inspections of any construction work to ascertain compliance with the provisions of this code and other laws, which are enforced by the department of electrical inspection.

- (4) Final Inspection. The final inspection shall be made after all work required by the permit is completed.

21.06.500 Reinspection.

The building official may require a structure or portions of work to be reinspected. A reinspection fee may be assessed for each inspection or reinspection when such portion of work for which the inspection was requested is not complete; or when previous corrections called for are not made; or when the approved plans and permit are not on site in a conspicuous or preapproved location; or when the building is not accessible. In instances where reinspection fees have been assessed, no additional inspection of the work shall be provided by the city until the required fees are paid.

21.06.505 Other inspections.

In addition to the inspections specified above, the building official is authorized to make or require other inspections of any construction work to ascertain compliance with the provisions of this chapter and other laws that are enforced by the building department.

21.06.510 Special inspections.

In addition to the inspections specified above, the building official is authorized to make or require special inspections for any type of work related to the technical codes by an approved agency at no cost to the jurisdiction.

21.06.512 Building enclosure special inspection requirements of RCW 64.55 (otherwise known as Engrossed House Bill (EHB) 1848.

EHB 1848 requires affected multiunit residential buildings to provide a building enclosure inspection performed by a third party, independent, and qualified inspector during the course of initial construction and during rehabilitative construction. The city does not verify the qualifications of the inspector or determine whether the building enclosure inspection is adequate or appropriate. However, the City is prohibited from issuing a certificate of occupancy for the building until the inspector prepares a report and submits to the building department a signed letter certifying that the building enclosure has been inspected during the course of construction or rehabilitative construction and that the construction is in substantial compliance with the building enclosure design documents. See Section 107.2.4.1 Building enclosure design requirements of RCW 64.55 (EHB 1848), for additional requirements.

21.06.515 Final inspection.

The final inspection shall be made after all work required by the permit(s) is completed.

21.06.520 Inspection agencies.

The building official is authorized to accept reports of approved inspection agencies, provided such agencies satisfy the requirements as to qualifications and reliability.

21.06.525 Inspection requests.

It shall be the duty of the permit holder or their duly authorized agent to notify the building official when work is ready for inspection. It shall be the duty of the permit holder to provide access to and means for inspections of such work that is required by this chapter.

21.06.530 Approval required.

Work shall not be done beyond the point indicated in each successive inspection without first obtaining the approval of the building official. The building official, upon notification, shall make the requested inspections and shall either indicate the portion of the construction that is satisfactory as completed, or notify the permit holder or his or her agent wherein the same fails to comply with this chapter. Any portions that do not comply shall be corrected and such portion shall not be covered or concealed until authorized by the building official.

21.06.533 Traffic management systems.

- (1) The city will perform the electrical inspection and acceptance of traffic management systems within its jurisdiction. A traffic management system includes:
 - (a) Traffic illumination systems;
 - (b) Traffic signal systems;
 - (c) Traffic monitoring systems;
 - (d) The electrical service cabinet and all related components and equipment installed on the load side of the service cabinet supplying electrical power to the traffic management system; and
 - (e) Signalization system(s) necessary for the operation of a light rail system. A traffic management system can provide signalization for controlling vehicular traffic, pedestrian traffic, or rolling stock.
- (2) The city recognizes that traffic signal conductors, pole and bracket cables, signal displays, traffic signal controllers/cabinets, and associated components used in traffic management systems are acceptable for the purpose of meeting the requirements of chapter 19.28 RCW provided they conform with the following standards or are listed on the Washington state department of transportation (WSDOT) qualified products list.
 - (a) WSDOT/APWA Standard Specifications and Plans;
 - (b) WSDOT Design Manual;
 - (c) International Municipal Signal Association (IMSA);
 - (d) National Electrical Manufacturer's Association (NEMA);
 - (e) Federal Standards 170/Controller Cabinets;
 - (f) Manual for Uniform Road, Bridge, and Municipal Construction;
 - (g) Institute of Transportation Engineers (ITE); or
 - (h) Manual of Uniform Traffic Control Devices (MUTCD).
- (3) *Associated induction* detection loop or similar circuits will be accepted by the department or city authorized to do electrical inspections without inspection.
- (4) For the licensing requirements of chapter 19.28 RCW, jurisdictions will be considered owners of traffic management systems when doing electrical work for another jurisdiction(s) under a valid interlocal agreement, as permitted by chapter 39.34 RCW. Interlocal agreements for traffic management systems must be filed with the department

- or city authorized to do electrical inspections prior to work being performed for this provision to apply.
- (5) Jurisdictions, with an established electrical inspection authority, and WSDOT may perform electrical inspection on their rights of way for each other by interlocal agreement. They may not perform electrical inspection on other rights of way except as allowed in chapter 19.28 or 39.34 RCW.
 - (6) Underground installations.
 - (a) In other than open trenching, raceways will be considered "fished" according to the NEC and do not require visual inspection.
 - (b) The department or city authorized to do electrical inspections will conduct inspections in open trenching within its jurisdiction upon request.
 - (7) Identification of traffic management system components. Local government jurisdictions or WSDOT may act as the certifying authority for the safety evaluation of all components.
 - (a) An electrical service cabinet must contain only listed components. The electrical service cabinet enclosure is not required to be listed but will conform to the standards in subsection (h) of this section.
 - (b) The local government jurisdiction must identify, as acceptable, the controller cabinet or system component(s) with an identification plate. The identification plate must be located inside the cabinet and may be attached with adhesive.
 - (8) Conductors of different circuits in same cable, enclosure, or raceway. All traffic management system circuits will be permitted to occupy the same cable, enclosure, or raceway without regard to voltage characteristics, provided all conductors are insulated for the maximum voltage of any conductor in the cable, enclosure, or raceway.

Article X. Certificate of Occupancy

21.06.535 Use and occupancy.

No building or structure shall be used or occupied, and no change in the existing occupancy classification of a building or structure or portion thereof shall be made until the building official has issued a certificate of occupancy therefor as provided herein. Issuance of a certificate of occupancy shall not be construed as an approval of a violation of the provisions of this chapter or of other ordinances of the jurisdiction.

Exceptions:

1. Work exempt from permits per section 21.06.215.
2. For single family dwellings and their accessory structures, the City issued building permit inspection record may serve as the certificate of occupancy when the final inspection has been approved by the building official or the building official's designee

21.06.540 Certificate issued.

After the building official inspects the building or structure and finds no violations of the provisions of this chapter or other laws that are enforced by the building department, the building official shall issue a certificate of occupancy that contains the following:

- (1) The building permit number.
- (2) The address of the structure.

- (3) The name and address of the owner.
- (4) A description of that portion of the structure for which the certificate is issued.
- (5) A statement that the described portion of the structure has been inspected for compliance with the requirements of this chapter for the occupancy and division of occupancy and the use for which the proposed occupancy is classified.
- (6) The name of the building official.
- (7) The edition of the code under which the permit was issued.
- (8) The use and occupancy.
- (9) The type of construction.
- (10) The design occupant load where applicable.
- (11) If an automatic sprinkler system is provided, and whether the sprinkler system is required and for what reason.
- (12) Any special stipulations and conditions of the building permit.

~~Exception: For single family dwellings and type "U" occupancies, the sign off on the building permit inspection record by the city inspector shall serve as the certificate of occupancy.~~

21.06.545 Phased occupancy.

The building official is authorized to issue a phased certificate of occupancy before the completion of the entire work covered by the permit; provided, that such portion or portions shall be occupied safely. The building official is authorized to require, in addition to the completion of life safety building components, any or all accessibility components.

21.06.550 Revocation.

The building official is authorized to, in writing, suspend or revoke a certificate of occupancy issued under the provisions of this chapter wherever the certificate is issued in error, or on the basis of incorrect information supplied, or where it is determined that the building or structure or portion thereof is in violation of any ordinance or regulation or any of the provisions of this chapter.

Article XI. Service Utilities

21.06.555 Connection of service utilities.

No person shall make connections from a utility, source of energy, fuel or power to any building or system that is regulated by this chapter for which a permit is required, until approval is given by the building official.

21.06.560 Temporary connection.

The building official shall have the authority to authorize the temporary connection of the building or system to the utility source of energy, fuel or power.

21.06.565 Authority to disconnect service utilities.

The building official shall have the authority to authorize disconnection of utility service to the building, structure or system regulated by this chapter and the codes referenced in case of emergency where necessary to eliminate an immediate hazard to life or property, or when such utility connection has been made without the required approval. The building official shall notify the

serving utility, and wherever possible the owner and occupant of the building, structure or service system of the decision to disconnect prior to taking such action. If not notified prior to disconnecting, the owner or occupant of the building, structure or service system shall be notified in writing, as soon as practical thereafter.

Article XII. Appeals

21.06.570 Appeals to hearing examiner.

Appeals of orders, decisions and determinations of the building official shall be heard and decided by the city of Kirkland hearing examiner. To the extent the codes adopted by reference in this title refer to a "board of appeals" or a "building board of appeals," those references shall be deemed to refer to the city of Kirkland hearing examiner.

21.06.572 Limitations on appeals.

An appeal under this chapter shall be based on a claim that this chapter or the technical codes have been incorrectly interpreted, that the provisions of this chapter or the technical codes do not apply or that an equally good or better form of construction, method of protection or safety is proposed.

21.06.574 When to appeal and appeal fee.

An appellant shall file a written appeal of the order, decision or determination of the building official with the Kirkland fire and building department within thirty days of the date of the decision of the building official. There shall not be an appeal fee for appeals of stop work orders or code enforcement orders. For all other matters, the appeal fee shall be one hundred twenty-five dollars and shall accompany the written appeal. Failure to timely file the appeal or pay the appeal fee shall result in dismissal of the appeal.

21.06.576 Contents of notice of appeal.

The appeal shall contain a clear reference to the matter being appealed and a statement of the specific elements of the building official's order, decision or determination disputed by the appellant.

21.06.578 Notice of the appeal hearing.

- (a) The building official shall prepare a notice of the appeal hearing containing the following:
 - (1) The file number and a brief description of the matter being appealed;
 - (2) A statement of the scope of the appeal including a summary of the elements of the building official's order, decision or determination that are contested in the appeal;
 - (3) The time and place of the hearing on appeal before the hearing examiner; and
 - (4) A statement of who may participate in the appeal.
- (b) At least fourteen days before the hearing on the appeal, the building official shall send a copy of the notice of appeal hearing to each person who has appealed the building official's order, decision or determination.

21.06.580 Participation in the appeal.

Only those parties who have appealed the building official's order, decision or determination may participate in the appeal. Appellants may participate in either or both of the following ways:

- (1) By submitting written comments or testimony to the hearing examiner prior to the commencement of the hearing; or
- (2) By appearing in person, or through a representative, at the hearing. The hearing examiner may reasonably limit the extent of oral testimony or oral argument to facilitate the orderly and timely conduct of the hearing.

21.06.582 Scope of appeal.

The appeal will be an open record appeal hearing. The scope of the appeal is limited to the specific elements of the building official's order, decision or determination disputed by the appellant and the hearing examiner shall only consider comments, testimony and arguments on these specific elements.

21.06.584 Record of appeal hearing.

The city shall make an electronic sound recording of the hearing.

21.06.586 Decision on the appeal.

The hearing examiner shall consider all information and material within the scope of the appeal submitted by persons entitled to participate in the appeal. Based on the hearing examiner's findings and conclusions, the hearing examiner may affirm, reverse or modify the order, decision or determination being appealed. The hearing examiner shall issue his or her decision within fifteen days of the appeal hearing. Within four business days after it is issued, the hearing examiner's decision shall be mailed to the applicant and to each person who has requested notice of the decision. The decision by the hearing examiner is the final decision of the city.

21.06.588 Judicial review.

Any judicial appeal of the hearing examiner's decision shall be reviewed in King County superior court pursuant to Chapter 36.70C RCW, the Land Use Petition Act ("LUPA"). The land use petition must be filed within twenty-one calendar days of the issuance of the hearing examiner's decision.

Article XIII. Violations**21.06.590 Unlawful acts.**

It shall be unlawful for any person, firm or corporation to erect, construct, alter, extend, repair, move, remove, demolish or occupy any building, structure or equipment regulated by this chapter, or cause same to be done, in conflict with or in violation of any of the provisions of this chapter or the technical codes.

21.06.595 Notice of violation.

The building official is authorized to serve a notice of violation or order on the person responsible for the erection, construction, alteration, extension, repair, moving, removal, demolition or occupancy of a building or structure in violation of the provisions of this chapter or the technical

codes, or in violation of a permit or certificate issued under the provisions of this chapter. Such order shall direct the discontinuance of the illegal action or condition and the abatement of the violation.

21.06.600 Prosecution of violation.

If the notice of violation is not complied with in the time prescribed by such notice, the building official is authorized to request the legal counsel of the jurisdiction to institute the appropriate proceeding at law or in equity to restrain, correct or abate such violation, or to require the removal or termination of the unlawful occupancy of the building or structure in violation of the provisions of this chapter or the technical codes or of the order or direction made pursuant thereto.

21.06.605 Violation penalties.

Any person who violates a provision of this chapter or fails to comply with any of the requirements thereof or who erects, constructs, alters or repairs a building or structure in violation of the approved construction documents or directive of the building official, or of a permit or certificate issued under the provisions of this chapter or the technical codes, shall be subject to penalties as prescribed by law.

Article XIV. Stop Work Order

21.06.610 Authority.

Whenever the building official finds any work being performed in a manner either contrary to the provisions of this chapter, any of the technical codes or other pertinent laws or ordinances, the building official is authorized to issue a stop work order.

21.06.615 Issuance.

The stop work order shall be in writing and shall be given to the owner of the property involved, or to the owner's agent, or to the person doing the work. Upon issuance of a stop work order, the cited work shall immediately cease. The stop work order shall state the reason for the order, and the conditions under which the cited work will be permitted to resume.

21.06.620 Investigation fee.

The building official is authorized to assess a special investigation fee for the issuance of a stop work order.

21.06.625 Unlawful continuance.

Any person who shall continue any work in or about the structure after having been served with a stop work order, except such work as that person is directed to perform to remove a violation or unsafe condition, shall be subject to penalties as prescribed by law.

Article XV. Unsafe Structures and Equipment

21.06.630 Unsafe structures and equipment.

Structures or existing equipment that are or hereafter become unsafe, unsanitary or deficient because of inadequate means of egress facilities, inadequate light and ventilation, or which constitute a fire hazard, or are otherwise dangerous to human life or the public welfare, or that involve illegal or improper occupancy or inadequate maintenance, shall be deemed an unsafe condition. Unsafe structures shall be taken down and removed or made safe, as the building official deems necessary and as provided for in the 1997 Edition of the Uniform Code for the Abatement of Dangerous Buildings or the 1997 Edition of the Uniform Housing Code. A vacant structure that is not secured against entry shall be deemed unsafe

(9) Uniform Housing Code, issued by the International Conference of Building Officials, 1997 Edition;

(10) Uniform Code for the Abatement of Dangerous Buildings, issued by the International Conference of Building Officials, 1997 Edition;

(11) National Electrical Code, issued by the National Fire Protection Association, 2005 Edition;

(12) All amendments, supplements, modifications, exclusions, exemptions and additions to the codes identified in subsections (a)(1) through (8) of this section adopted by the Washington State Building Code Council and published in WAC Title 51, including, but not by way of limitation, Chapters 51-11, 51-13, 51-50, 51-51, 51-52, 51-54, 51-56 and 51-57 WAC.

(b) The copies of codes on file may be placed by the city clerk in the custody of the office of the building official in order to make them more readily available to inspection and use by the general public.

Section 2. Kirkland Municipal Code Chapter 21.08 is hereby amended to read as follows:

Chapter 21.08 INTERNATIONAL BUILDING CODE

21.08.010 International Building Code adopted.

The 2006~~9~~ Edition of the International Building Code, as adopted by the State Building Code Council in Chapter 51-50 WAC, as published by the International Code Council, excluding Chapter 1, "Administration," is adopted, together with the following amendments. ~~Further, Appendix Chapter M (Existing Buildings) is specifically adopted as part of the Kirkland Building Code.~~

21.08.013 Copies on file.

The city shall at all times keep on file with the city clerk, for reference by the general public, not less than one copy of the International Building Code.

21.08.016 Administration.

The administrative provisions for the enforcement of the International Building Code are located in chapter 21.06.

21.08.018 Special requirements for standby power systems

Section 403.4.7.1 of the IBC is amended to read:

Special requirements for standby power systems. If the standby system is a generator set inside a building, the system shall be located in a separate room enclosed with 2-hour fire barriers constructed in accordance with Section 403.4.7.1.1 and Section 707 or horizontal assemblies constructed in accordance with Section 712, or both. System supervision with manual start and transfer features shall be provided at the fire command center.

21.08.018 Penetrations.

A new Section 403.4.7.1.1 is added to the IBC to read:

Penetrations. Penetrations into and openings through a room containing a standby power system are prohibited except for required exit doors, equipment and ductwork necessary for heating, cooling or ventilation, sprinkler branch line piping, or electrical raceway serving the standby power system or being served by the standby power system. Such penetrations shall be protected in accordance with Section 713.

Exception: Metallic piping with no joints or openings where it passes through the standby power system room.

21.08.020 IBC Section ~~403.10.2~~ 403.4.7.2 amended.

Section ~~403.10.2~~ 403.4.7.2 of the IBC is amended to read:

~~403.10.2~~ 403.4.7.2 Standby power loads. The following are classified as standby power loads:

1. Power and lighting for the fire command center required by Section ~~403.8~~ 403.4.5;
2. Electrically powered fire pumps;
3. Ventilation and automatic fire detection equipment for smokeproof enclosures;
4. Smoke control systems.
5. Standby power shall be provided for elevators in accordance with Sections 1007.4, 3003, 3007 and 3008.

Fuel-fired emergency generator sets and associated fuel storage, including optional generator sets, located more than 75 feet above the lowest level of Fire Department vehicle access requires the approval of the Fire Code Official.

21.08.025 IBC Section 403.15 amended.

Section ~~403.15~~ Chapter 4 of the IBC is amended and supplemented by the addition of a new section 403.15 to read:

403.15 Smoke control. A smoke control system meeting the requirements of Section 909 shall be provided in buildings that exceed ten stories, or contain a use requiring defend-in-place firefighting operations in which occupants of some area cannot readily evacuate that area. This includes portions of facilities housing functions essential to continuity of public safety operations, and Group I and LC Occupancies where in the judgment of the Building Official and Fire Code Official, occupants having limited capacity for self-preservation are located on floors more than 75' above

the lowest level of Fire Department vehicle access. A smoke control system for a defend-in-place use may be a performance-based design to protect that use without providing smoke control throughout the entire building, but shall otherwise comply with Section 909.

Exception: Smoke control may be omitted when approved by the Building Official and Fire Code Official.

21.08.030 IBC Section 405.98 amended.

Section 405.98 of the IBC is amended to read:

405.98 Standby Power. A standby power system complying with Section 2702 shall be provided for standby power loads specified in Section 405.9.1.

Fuel-fired emergency generator sets and associated fuel storage, including optional generator sets, located more than 30 feet below the lowest level of exit discharge requires the approval of the Fire Code Official.

21.08.035 IBC Section 501.2 amended.

Section 501.2 of the International Building Code is hereby amended to read:

501.2 Premises Identification. Approved numbers or addresses shall be provided for new buildings in such a position as to be clearly visible and legible from the street or roadway fronting the property. Letters or numbers shall be a minimum 4 inches (76 mm) in height and stroke of minimum 0.5 inch (12.7 mm) of a contrasting color to the background itself.

21.08.040 IBC Section 7078.2 Exception 2.1 amended.

Section 7078.2 Exception 2.1 of the International Building Code is hereby amended to read:

2.1. Where the area of the floor opening between stories does not exceed twice the horizontal projected area of the escalator or stairway and the opening is protected by a draft curtain and closely spaced sprinklers in accordance with NFPA 13. This application is limited to openings that do not connect more than four stories in buildings not required to have smoke control systems. In buildings that are required to have smoke control systems, escalators are limited to openings that do not connect more than four stories and non-egress stairs are limited to openings that do not atmospherically connect more than two stories.

21.08.055 IBC Section 1608.1 amended.

Section 1608.1 of the International Building Code is hereby amended to read:

1608.1 General. Design snow loads shall not be less than 25 psf, but the design roof loads shall not be less than that determined by Section 1607.

21.08.060 IBC Section 1704.12 amended.

~~Section 1704.12 of the International Building Code is hereby amended to read:~~

~~1704.12 Exterior insulation and finish system (EIFS). All exterior insulation finish systems (EIFS) shall be certified by the manufacturer as having been installed per the manufacturer's installation recommendations or other agency approved by the building official.~~

~~Exception: Special inspections shall not be required for EIFS application installed over masonry or concrete walls.~~

21.08.070 Penetrations into Fire Command Centers.

Chapter 9 of the IBC is amended and supplemented with the addition of a new Section 911.2 to read as follows:

911.2 Penetrations. Penetrations into and openings through a fire command center are prohibited except for required exit doors, equipment and ductwork necessary for heating, cooling or ventilation, sprinkler branch line piping, electrical raceway for fire department communication and control and electrical raceway serving the fire command center or being controlled from the fire command center. Such penetrations shall be protected in accordance with Section 713.

Exception: Metallic piping with no joints or openings

21.08.075 IBC Chapter 31 amended.

Chapter 31 of the IBC is amended and supplemented with the addition of a new Section 31105 to read as follows:

Section 31105 OVERWATER STRUCTURES, PIERS, WHARVES, AND BUILDINGS

IBC 31105.1—General. Overwater structures, piers, wharves and buildings shall comply with the requirements of this section and other applicable sections of this code.

IBC 31105.2—Definitions.

OVERWATER STRUCTURES. For the purpose of this Chapter, overwater structures shall include all structures which have twenty percent (20%) or more of their area over water, or a structure which has 8,000 square feet over water.

DOCK. A dock is a natural open or artificially closed basin in which vessels may remain afloat when berthed at a wharf or pier.

PIER. A pier is a structure, usually of greater length than width, of timber, stone, concrete or other material having a deck, and projecting from the shore into navigable waters so that vessels may be moored alongside for loading and unloading or for storage or repairs.

SUBSTRUCTURE. The substructure is that portion of the construction below and including the deck.

SUPERSTRUCTURE. The superstructure is that portion of the construction above the deck.

WHARF OR QUAY. A wharf or quay is a structure of timber, stone, concrete or other material having a platform built along and parallel to navigable waters so that vessels may be moored alongside for loading and unloading, or for storage or repair.

IBC Section 31105.3—Structures over water.

No portion of any building or other structure supported by piers or piling and extending over water shall be more than two hundred fifty feet from an improved public street or alley giving access thereto for fire engines and other firefighting equipment; provided, however, that the foregoing limitation shall not apply to any one-story structure used solely for the moorage of boats and:

- (1) Of type 1 construction; or
- (2) Of type 2 construction; or
- (3) Having installed throughout the structure an approved automatic sprinkler system.

IBC Section 31105.4—Substructure.

1. Draft Stops. Draft stops shall be installed in all substructures constructed of combustible materials, exclusive of piling and pile bracing. They shall be placed not over one hundred feet (100') apart measured along the main axis of the pier or wharf. They shall fit tightly around all joists, beams, etc., and extend from the underside of the deck to low water with a maximum required depth of 6 feet.

EXCEPTION: Private docks which serve a single family dwelling unit.

Substructure draft stops shall be constructed of not less than two (2) thicknesses of 2" nominal thickness lumber laid with broken joints or materials of equal fire resistance.

2. Automatic Sprinklers. Automatic sprinklers shall be installed under the substructure of every overwater structure in accordance with the requirements of Chapter 9.

EXCEPTIONS: Automatic sprinklers are not required under the following categories of substructure:

- a. Combustible substructures having superstructures of 120 square feet or less in area.
- b. Noncombustible substructures with or without superstructures.
- c. Substructures resulting from walkways or finger piers when width does not exceed 10 feet.

3. Dry Standpipes. When a distance of travel to fire apparatus access exceeds two hundred fifty (250) feet, an approved minimum four (4) inch dry standpipe with two and one-half (2-1/2) inch outlets at a maximum of one hundred (100) feet on center shall be provided. There shall be a Siamese connection at the shore end and direct access for Fire Department pumping apparatus shall be provided. Standards for installation to be set by the Director of Fire Services.

Exception: Piers serving no more than one single-family dwelling.

21.08.105 IBC Section J102 amended.

Repealed by Ord. 4151.

21.08.110 IBC Section J103 amended.

Repealed by Ord. 4151

21.08.115 IBC Appendix Section J103.3 added.

Repealed by Ord. 4151.

Section 3. Kirkland Municipal Code Chapter 21.10 is hereby amended to read as follows:

Chapter 21.10

INTERNATIONAL RESIDENTIAL CODE

21.10.010 International Residential Code adopted.

The 2006~~9~~ Edition of the International Residential Code, as adopted by the State Building Code Council in Chapter 51-51 WAC, as published by the International Code Council, excluding Chapter 1, "Administration," is adopted together with Appendix Chapter G "Swimming Pools, Spas and Hot Tubs".

21.10.013 Copies on file.

The city shall at all times keep on file with the city clerk, for reference by the general public, not less than one copy of the International Residential Code.

21.10.016 Administration.

The administrative provisions for the enforcement of the International Residential Code are located in chapter 21.06.

21.10.020 IRC Table R301.2(1) amended.

IRC Table R301.2(1) is amended to read:

Climatic and Geographic Design Criteria—IRC Table R301.2(1)

Roof and Ground Snow Load	Wind Speed ^a (mph)	Seismic Design Category	Subject To Damage From			Winter Design Temp ^d	Ice Barrier Underlayment Required	Flood Hazards	Air Freezing Index	Mean Annual Temp
			Weathering ^a	Frost Line Depth ^b	Termite					
25	85	D2	Moderate	12"	Slight to Moderate	27	No	Per Kirkland Municipal Code 21.56	113	52.8

- a. ~~Weathering may require a higher strength concrete or grade of masonry than necessary to satisfy the structural requirements of this code. The weathering column shall be filled in with the weathering index (i.e., “negligible,” “moderate” or “severe”) for concrete as determined from the Weathering Probability Map [Figure R301.2(3)]. The grade of masonry units shall be determined from ASTM C 34, C 55, C 62, C 73, C 90, C 129, C 145, C 216 or C 652.~~
- b. ~~The frost line depth may require deeper footings than indicated in Figure R403.1(1). The jurisdiction shall fill in the frost line depth column with the minimum depth of footing below finish grade.~~
- c. ~~The jurisdiction shall fill in this part of the table to indicate the need for protection depending on whether there has been a history of local subterranean termite damage.~~
- d. ~~The jurisdiction shall fill in this part of the table with the wind speed from the basic wind speed map [Figure R301.2(4)]. Wind exposure category shall be determined on a site-specific basis in accordance with Section R301.2.1.4.~~
- e. ~~The outdoor design dry-bulb temperature shall be selected from the columns of 97 1/2-percent values for winter from Appendix D of the International Plumbing Code. Deviations from the Appendix D temperatures shall be permitted to reflect local climates or local weather experience as determined by the building official.~~
- f. ~~The jurisdiction shall fill in this part of the table with the seismic design category determined from Section R301.2.2.1.~~
- g. ~~The jurisdiction shall fill in this part of the table with (a) the date of the jurisdiction’s entry into the National Flood Insurance Program (date of adoption of the first code or ordinance for management of flood hazard areas), (b) the date(s) of the currently effective FIRM and FBFM, or other flood hazard map adopted by the community, as may be amended.~~

h. In accordance with Sections R905.2.7.1, R905.4.3.1, R905.5.3.1, R905.6.3.1, R905.7.3.1 and R905.8.3.1, where there has been a history of local damage from the effects of ice damming, the jurisdiction shall fill in this part of the table with “YES.” Otherwise, the jurisdiction shall fill in this part of the table with “NO.”

i. The jurisdiction shall fill in this part of the table with the 100-year return period air freezing index (BF-days) from Figure R403.3(2) or from the 100-year (99%) value on the National Climatic Data Center data table “Air Freezing Index-USA Method (Base 32° Fahrenheit)” at www.ncdc.noaa.gov/fpsf.html.

j. The jurisdiction shall fill in this part of the table with the mean annual temperature from the National Climatic Data Center data table “Air Freezing Index-USA Method (Base 32° Fahrenheit)” at www.ncdc.noaa.gov/fpsf.html.

IRC Table R301.2(1) Climatic and Geographic Design Criteria										
Roof Snow Load ^a	Wind Speed ^b	Seismic Design Category ^c	Subject to Damage From:			Outside Design Temp – Heat / Cool	Ice Barrier Under Layment Required	Flood Hazards ^e	Air Freezing Index	Mean Annual Temp
			Weathering ^d	Frost Line Depth	Termite Decay					
25 psf	85 mph	D2	Moderate	12”	Slight to Moderate	17°F / 83°F	No	Per Kirkland Municipal Code 21.56	144	49°F

^a When using this roof snow load it will be left to the engineer’s judgment whether to consider drift or sliding snow. However, rain on snow surcharge of 5 psf must be considered for roof slopes less than 5 degrees.

^b Wind exposure category and Wind Speed-up (Kzt) factor shall be determined on a site-specific basis by the Engineer of Record.

^c From IRC Table 301.2 (1).

^d Weathering may require a higher strength concrete or grade of masonry than necessary to satisfy the structural requirements of this code. The grade of masonry units shall be determined from ASTM C 34, C 55, C 62, C 73, C 90, C 129, C 145, C 216 or C 652.

^e The City of Kirkland participates in the National Flood Insurance Program (NFIP); Regular Program (No Special Flood Hazard Area). Further NFIP participation information: CID 530083, Initial FHBM Identified 06/28/74, Initial FIRM Identified 05/16/95, Current Effective Map Date (NSFHA), Reg-Emer Date 06/30/97.

Section 4. Kirkland Municipal Code Section 21.16.10 is hereby amended to read as follows:

21.16.010 International Mechanical Code adopted.

The 2006~~9~~ Edition of the International Mechanical Code, as adopted by the State Building Code Council in Chapter 51-52 WAC, as published by the International Code Council, excluding Chapter 1, "Administration," is adopted.

Section 5. Kirkland Municipal Code Chapter 21.20 is hereby amended to read as follows:

Chapter 21.20**INTERNATIONAL FIRE CODE****21.20.010 International Fire Code adopted.**

The 2006 2009 Edition of the International Fire Code, as adopted by the State Building Code Council in Chapter 51-54 WAC as published by the International Code Council, is adopted together with the following amendments. Further, the following Appendix chapters are specifically adopted as part of the Kirkland Fire Code: Appendix Chapter B (Fire Flow Requirements for Buildings) and Appendix Chapter C (Fire Hydrant Locations and Distribution).

FPN: WAC 51-44-0500 identifies that fire apparatus access roads shall be provided and maintained in accordance with locally adopted street, road, and access standards and further Sections 501.1.1 through 503.4 are not adopted. The city of Kirkland has established criteria for fire apparatus access roads in Operating Policy #6 which is available on the Internet and at City Hall.

21.20.015 IFC Section 102.67 amended.

Section 102.67 of the International Fire Code is amended to read as follows:

102.67 Referenced codes and standards. The codes and standards referenced in this code shall be those that are listed in Chapter 45. Such codes and standards shall be considered part of the requirements of this code to the prescribed extent of each such reference as determined or modified by the fire code official. Where differences occur between the provisions of this code and the referenced standards, the provisions of this code shall apply.

21.20.020 IFC Section 104.10.1 amended.

Section 104.10.1 of the International Fire Code is amended to read as follows:

104.10.1 Assistance from other agencies. Police and other enforcement agencies shall have authority to render necessary assistance in the investigation of fires or the enforcement of this code as requested by the fire code official.

21.20.025 IFC Section 104.11.2 amended.

Section 104.11.2 of the International Fire Code is amended to read as follows:

104.11.2 Obstructing operations. No person shall obstruct the operations of the fire department in connection with extinguishment, investigation, or control of any fire, or actions relative to other emergencies, or disobey any lawful command of the fire chief or officer of the fire department in charge of the emergency, or any part thereof, or any lawful order of a police officer assisting the fire department.

21.20.030 IFC Section 105.7.67 amended.

Section 105.7.5.67 of the International Fire Code is amended to read as follows:

Section 105.7.5.67 Flammable and combustible liquids.

A construction permit is required:

1. To repair or modify a pipeline for the transportation of flammable or combustible liquids.
2. To install, construct or alter tank vehicles, equipment, tanks, plants, terminals, wells, fuel-dispensing stations, refineries, distilleries and similar facilities where flammable and combustible liquids are produced, processed, transported, stored, dispensed or used.
3. To install, alter, remove, abandon or otherwise dispose of a flammable or combustible liquid tank.

Exception: A permit is not required for the abandonment or removal of underground storage tanks previously used to store fuel oil for residential heating. It is the property owner's responsibility to make the decision on how to proceed with abatement.

21.20.32 IFC Section 105.7.15 added

Chapter 1 of the International Fire Code is amended and supplemented with the addition of a new Section 105.7.15 to read as follows:

105.7.15 Emergency Responder Radio Coverage System. A construction permit is required for installation of or modification to Emergency Responder Radio Coverage Systems and related equipment as prescribed in Section 510.

21.20.035 IFC Section 108 amended.

Section 108 of the International Fire Code is amended to read as follows:

Section 108. Appeals. Whenever the Fire Chief disapproves an application or refuses to grant a permit, or when it is claimed that the provisions of the International Fire Code do not apply or that the true intent and meaning of the Code have been misconstrued or wrongly interpreted, the applicant may appeal the decision of the Fire Chief to the City of Kirkland Hearing Examiner, within thirty days from the date of the decision appealed.

21.20.037 IFC Section 109.3 amended.

Section 109.3 of the International Fire Code is amended to read as follows:

Section 109.3. Violation penalties. Persons who shall violate a provision of this code or shall fail to comply with any of the requirements thereof or who shall erect, install, alter, repair or do work in violation of the approved construction documents or directive of the fire code official, or of a permit or certificate used under provisions of this code, shall be guilty of a misdemeanor, punishable by a fine of not more than \$1,000 dollars or by imprisonment not exceeding 90 days, or both such fine and imprisonment. Each day that a violation continues after due notice has been served shall be deemed a separate offense.

21.20.040 IFC Section 202 amended.

Section 202 of the International Fire Code is amended by the addition of a definition to read as follows:

ICC Electrical Code. Means the most recent edition of the National Electrical Code as adopted and amended by the City of Kirkland.

21.20.050 IFC Section 308.3.7 amended.

Section 308.3.7 of the International Fire Code is amended to read as follows:

Section 308.3.7 Group A occupancies. Open-flame devices shall not be used in a Group A occupancy.

Exceptions:

1. Open-flame devices are allowed to be used in the following situations, provided approved precautions are taken to prevent ignition of a combustible material or injury to occupants:
 - 1.1. Where necessary for ceremonial or religious purposes in accordance with Section 308.3.51.7
 - 1.2. On stages and platforms as a necessary part of a performance in accordance with Section 308.3.62
 - 1.3. Where candles on tables are securely supported on substantial noncombustible bases and the candle flames are protected.
2. Heat-producing equipment complying with Chapter 6 and the International Mechanical Code.
3. Gas lights are allowed to be used provided adequate precautions satisfactory to the fire code official are taken to prevent ignition of combustible materials.
4. Except where approved by the fire code official (~~see also 308.3.1.2~~)

21.20.055 IFC Section 314.4 amended.

Section 314.4 of the International Fire Code is amended to read as follows:

Section 314.4. Vehicles. Liquid- or gas-fueled vehicles, fueled equipment, boats or other motorcraft shall not be located indoors except as follows:

1. Batteries are disconnected.
2. Fuel in fuel tanks does not exceed one-quarter tank or 5 gallons (19 L) (whichever is least).
3. Fuel tanks and fill openings are closed and sealed to prevent tampering.
4. Vehicles, boats or other motorcraft equipment are not fueled or defueled within the building.

21.20.060 IFC Section 5087.5 amended.

Section 5087.5 of the International Fire Code is amended to read as follows:

5087.5 Fire hydrant systems.

Fire hydrant systems shall comply with Sections 5087.5.1 through 5087.5.6.

5087.5.1 Where required.

Where a portion of the facility or building hereafter constructed or moved into or within the jurisdiction is more than 150 feet from a hydrant on a fire apparatus access road, as measured by an approved route around the exterior of the facility or building, on-site fire hydrants and mains shall be provided where required by the fire code official.

Exceptions:

1. For Group R-3 and Group U occupancies, the distance requirement shall be 300 feet (183 m).
2. For Group R-3 and Group U occupancies equipped throughout with an approved automatic sprinkler system installed in accordance with Section 903.3.1.1 or 903.3.1.2, the distance requirement shall be 600 feet (183 m).

21.20.065 IFC Section 511 510 amended.

A Section ~~511 510~~ of the International Fire Code is amended to read as follows:

Section ~~511 510~~ Building Emergency Responder Radio Coverage in Buildings

~~5110.1 -510.1~~ Building Emergency Responder Radio Coverage. Except as otherwise provided no person shall maintain, own, erect, or construct, any building or structure or any part thereof, or cause the same to be done which fails to support adequate radio coverage for City emergency services workers, including but not limited to firefighters and police officers.

Exceptions:

1. This section shall not apply to single family residential buildings; any building constructed primarily of wood frame without below grade storage or parking areas; any building thirty-five (35) feet high or less; as long as none of the aforementioned buildings make primary use of metal or concrete construction or contain below grade storage or parking areas. ~~For purposes of this section, parking structures are included in the definition of building, and stair shafts are included in the definition of all parts of a building, but elevators may be excluded. If construction that is thirty-five (35) feet high or less includes subterranean storage or parking, then the requirement for emergency responder radio coverage shall apply only to the subterranean areas. However, the fire code official may determine that emergency responder radio coverage is not needed because of the size or configuration of the subterranean areas.~~

2. Buildings constructed prior to the implementation of this section shall not be required to comply with ~~public safety emergency responder~~ radio coverage provisions of this section. However, should exempted structures undergo renovation, restoration, or significant modification to the original structure, exemption from the provisions of this Ordinance shall not apply.

~~511.1.1 510.1.1~~ Adequate Radio Coverage. A minimum signal strength of ~~three (3) micro volts - 95dBm~~ available in 95% of all areas of the building and 99% in elevators (measured at the primary recall floor), stair shafts and fire command centers when transmitted from the closest Regional 800 MHz. Radio System. ~~For purposes of this section 90% building coverage is considered to be all areas of the building.~~

~~511.1.2 510.1.2~~ Minimum Signal Strength. A minimum signal strength of ~~one-half (.5) micro volts -100dBm~~ shall be received by the Regional 800 MHz. Radio System when transmitted from ~~any area~~ 95% of all areas of the building and 99% in elevators (measured at the primary recall floor), stair shafts and fire command centers.

~~511.1.3 510.1.3~~ Frequency Range. The frequency range which must be supported shall be 806 MHz. to 824 MHz. and 851 MHz. to 869 MHz. and such other frequencies as determined by the Regional Radio System operator in all areas of the building. Measurements in buildings for the purpose of this ordinance shall be to a portable radio with a half wave antenna, worn on the belt. The City's Radio System Manager may designate alternate methods of measuring the signal level, which satisfy appropriate levels of public safety grade coverage. The building owner shall modify or expand the frequency range at his or her expense in the event frequency changes are required by the FCC or additional frequencies are made available by the FCC. Prior approval of an emergency responder radio system on previous frequencies does not exempt this requirement. (System designers should be aware that re-banding is currently being implemented, making available the entire 800 MHz spectrum as well as portions of the 700 MHz band for public safety and equipment must be capable of supporting these and other spectrum bands. See www.FCC.gov for additional information.)

510.2 Permits510.2.1 Construction permit.

A construction permit is required for installation of or modification to emergency responder radio coverage systems and related equipment. Maintenance performed in accordance with this code is not considered a modification and does not require a permit.

510.3 Power supply.

Power supplies shall conform with NFPA 72, Section 10.5 "Power Supplies."

510.4 Signal Booster Requirements

If used, signal boosters shall meet the following requirements:

1. All signal booster components shall be contained in a NEMA4-type waterproof cabinet.
2. The battery system shall be contained in a NEMA4-type waterproof cabinet.
3. The system shall include automatic alarming of malfunctions of the signal booster and battery system. Any resulting trouble alarm shall be automatically transmitted to an approved central station or proprietary supervision station as defined in NFPA 72 or, when approved by the fire code official, shall sound an audible signal at a constantly attended location.
4. Equipment shall have FCC certification prior to installation.

511.1.4 510.5 Testing and Proof of Compliance.

1. Prior to occupancy of any newly constructed building.
2. Whenever structural changes occur including additions to buildings that would materially change the original field performance tests.
3. Annually.
4. When repairs or alterations are made to amplification systems.

The performance test shall demonstrate that adequate radio coverage is available in all required areas of the building. At the conclusion of the testing a report shall be submitted to the Fire Code Official which shall verify compliance with Section 511.1 and must include a floor plan identifying the signal strength at various locations of the building. The testing shall be conducted by a consultant approved by the Fire Code Official and shall be done without expense to the City of Kirkland.

511.2 Annual Test. Each owner shall submit on an annual basis to the Fire Code Official required test data demonstrating that adequate radio coverage level is available and maintained in all required areas of the building, or that the installed amplification system functions properly. The annual submittal shall ensure that no structural changes have occurred to the building that would materially change the original field tests.

510.5.1 Proof of Compliance. Each owner shall submit at least one field test or as determined by the fire code official whenever structural changes occur to the building that would materially change the original field performance tests by a consultant approved by the fire code official. The performance test shall include at a minimum a floor plan and signal strength in various locations of the building.

501.5.2 Annual test. It shall be the building owner's responsibility to have all active components of the system, such as amplifiers, power supplies, and backup batteries tested a minimum of once every twelve (12) months.

Testing shall consist of the following:

1. Amplifiers shall be tested to ensure that the gain is the same as it was upon initial installation and acceptance

2. Backup batteries and power supplies shall be tested under load of a period of one hour to verify that they will properly operate during an actual power outage. If, within the one hour test period, and in the opinion of the testing technician, the battery exhibits symptoms of failure, the test shall be extended for additional one hour periods until the integrity of the battery can be determined.

3. All other active components shall be checked to determine that they are operating within the manufacturer's specification for the intended purpose.

A report shall be submitted to the fire code official upon conclusion of the testing and not later than January 30 of each year.

510.5.3 Five-year tests. In addition to the annual test, it shall be the building owner's responsibility to perform a radio coverage test a minimum of once every five (5) years to ensure that the radio system continues to meet the requirements of the original acceptance test. A report shall be submitted to the fire code official upon conclusion of the testing.

510.5.4 Qualification of testing personnel. The system designer, lead installation personnel, and personnel conducting radio system tests shall be qualified to perform the work. Design documents and all tests shall be documented and signed by a person in possession of a current FCC General Radio Telephone Operator License and a certificate or certification issued by the:

1. Associated Public Safety Communications Official International (APCO), or
2. The National Association of Business and Education Radio (NABER), or
3. The Personal Communications Industry Association (PCIA), or
4. The manufacturer of the equipment being installed

510.6 Inadequate Radio Coverage. Buildings and structures which cannot support the required level of radio coverage shall be equipped:

1. A radiating cable system and/or
2. An internal multiple antenna system with FCC certificated bi-directional 800 MHz amplifiers or
3. Systems otherwise approved by the city radio system manager in order to achieve the required adequate radio coverage In the event that a signal booster is employed, it shall be fully encased with a NEMA 4 (or equivalent) dust/waterproof rated enclosure, and filters that reject adjacent frequencies in addition to the multi-band pass filters.

510.7 Secondary Power. If any part of the installed system or systems contains an electrically powered component, the installed system or systems shall be provided with an independent battery system or an emergency generator capable of operating for a period of at least twenty four (24) hours without external power input. The battery system shall automatically charge in the presence of external power input.

~~511.3 Amplification Systems Allowed. Buildings and structures which cannot support the required level of radio coverage shall be equipped with a radiating cable system and/or an internal multiple antenna system with FCC type accepted bidirectional 800 MHz amplifiers, or systems otherwise approved by the City Radio System Manager in order to achieve the required adequate radio coverage. The installed system or systems shall be capable of operating on an independent battery system for a period of at least twelve (12) hours without external power input. The battery system shall automatically charge in the presence of external power input.~~

~~511.3.1~~ 510.8 Approval Prior to Installation. No amplification system capable of operating on frequencies used by the Regional 800 MHz. Radio System shall be installed without prior coordination and approval of the radio system licensee (The Eastside Public Safety

Communications Agency) and any such system must comply with any standards adopted by the King County Regional Communications Board.

510.9 Acceptance Tests. Acceptance testing for Emergency responder radio amplification system is required, upon completion of installation. It is the building owner's responsibility to have the radio system tested by qualified personnel to ensure a minimum of 95% two-way coverage on each floor of the building.

A certificate of occupancy will not be issued to any structure if the building fails to comply with these provisions.

Talk-back testing from a site to the Regional 800 MHz. Radio System shall use a two (2) watt, portable transceiver with speaker/microphone and flexible antenna (or any calibrated device which will produce signal levels useable by the prescribed portable radio). Field strength testing instruments must have been calibrated within one (1) year of the date of the acceptance test. Field strength testing instruments must be of the frequency selective type incorporating a flexible antenna similar to the ones used on the hand held transceivers. City Radio System Manager may designate alternate methods of measuring the signal level, which satisfy appropriate levels of public safety coverage.

A report shall be submitted to the Kirkland Fire Department at the conclusion of acceptance testing containing a floor plan and the signal strengths at each location tested and other relevant information. A representative of the Kirkland Fire Department may oversee the acceptance test. Acceptance testing is also required whenever changes occur to the building that would materially change the original field performance test.

510.10 Testing Criteria. Each floor of the building shall be divided into a grid of approximately forty (40) equal areas. A maximum of two (2) nonadjacent areas will be allowed to fail the test. In the event that three (3) of the areas fail the test, the floor may be divided into eighty (80) equal areas in order to be more statistically accurate. In such event, a maximum of four (4) nonadjacent areas will be allowed to fail the test. After the eighty (80) area tests, if the system continues to fail, the building owner shall have the system altered to meet the 95% coverage requirement.

A spot located approximately in the center of a grid area will be selected for the test, then the radio will be keyed to verify two-way communication to and from the outside of the building through the Regional 800 MHz. Radio System. Once the spot has been selected, prospecting for a better spot within the grid area is not permitted. The gain values of all amplifiers shall be measured and the results kept on file with the building owner so that the measurements can be verified each year during the annual tests. In the event that the measurement results become lost, the building owner will be required to rerun the acceptance test to reestablish the gain values.

While the foregoing implies manual measurement and recording, automated testing and recording is permitted so long as a report can be produced documenting the signal strength (or average) in each test square.

510.11 Identification. Buildings equipped with an Emergency Responder Radio Coverage system shall be identified by a sign located on or near the Fire Alarm Control Panel stating "This building is equipped with an Emergency Responder Radio Coverage System"

511.4 Field Testing. Police and Fire Personnel shall at any time have the right to enter onto the property to conduct its own field-testing to be certain that the required level of radio coverage is present.

21.20.070 IFC Section 602 amended.

Section 602 of the International Fire Code is amended to read as follows:

Section 602. Power Tap. A listed device for indoor use consisting of an attachment plug on one end of a flexible cord and two or more receptacles on the opposite end, and has overcurrent protection.

21.20.080 IFC Section 901.7 amended.

Section 901.7 of the International Fire Code is amended to read as follows:

Section 901.7. Systems out of service. Where a required fire protection system is out of service, the fire department and the fire code official shall be notified immediately and, where required by the fire code official, the building shall either be evacuated or an approved fire watch shall be provided for all occupants left unprotected by the shut down until the fire protection system has been returned to service. Where utilized, fire watches shall be provided with at least one approved means for notification of the fire department and their only duty shall be to perform constant patrols of the protected premises and keep watch for fires.

21.20.090 IFC Section 903.4 amended.

Section 903.4 of the International Fire Code is amended to read as follows:

Section 903.4.2 Alarms. Approved audible and visible alarm notification appliances shall be provided for every automatic sprinkler system in accordance with Section 907 and throughout areas designated by the Fire Code Official. Sprinkler water-flow alarm devices shall be activated by water flow equivalent to the flow of a single sprinkler of the smallest orifice size installed in the system. Alarm devices shall be provided on the exterior of the building in an approved location. Where a fire alarm system is installed, actuation of the automatic sprinkler system shall actuate the building fire alarm system.

Exception: With approval of the Fire Code Official, interior audible and visible alarm notification appliances may be omitted for approved residential sprinkler systems in 1 or 2 dwelling units if not otherwise specifically required.

Section 903.4.3 Floor control valves. Approved supervised indicating control valves shall be provided at the point of connection to the riser on each floor.

Exception: When approved by the Fire Code Official in NFPA 13D and NFPA 13R systems.

21.20.105 IFC Section 906.1 amended.

Section 906.1 of the International Fire Code is amended to read as follows:

Section 906.1. Where required. Portable fire extinguishers shall be installed in the following locations.

1. In all Group A, B, E, F, H, I, M, R-1, R-2, R-4 and S occupancies.
2. Within 30 feet (9,144 mm) of commercial cooking equipment.
3. In areas where flammable or combustible liquids are stored, used or dispensed.
4. On each floor of structures under construction, except Group R-3 occupancies, in accordance with Section 1415.1.
5. Where required by the sections indicated in Table 906.1.
6. Special-hazard areas, including but not limited to laboratories, computer rooms and generator rooms, where required by the fire code official.

21.20.110 IFC Section 907.15 amended.

Section 907.15 of the International Fire Code is amended to read as follows:

Section 907.15. Monitoring. All required fire alarm systems in new and existing buildings shall be monitored and supervised by a local central station, acceptable to the fire chief, or a proprietary or remote station and shall have a local alarm which will give an audible signal. As of July 1, 1997, all buildings with existing systems must meet the standards of this section, if not specifically required to do so earlier.

Exception: Supervisory service is not required for:

1. Single- and multiple-station smoke alarms required by Section 907.2.10.
2. Automatic sprinkler systems in one- and two-family dwellings.

21.20.115 IFC Section 1404.5 amended.

Section 1404.5 of the International Fire Code is amended to read as follows:

Section 1404.5. Fire watch. When required by the fire code official for building construction or demolition that is hazardous in nature, qualified personnel shall be provided to serve as an on-site fire watch. Fire watch personnel shall be provided with at least one approved means for notification of the fire department and their sole duty shall be to perform constant patrols and watch for the occurrence of fire.

Section 6. Kirkland Municipal Code Chapter 21.24 is hereby amended to read as follows:

Chapter 21.24**UNIFORM PLUMBING CODE****21.24.010 Uniform Plumbing Code adopted.**

The 2006~~9~~ Edition of the Uniform Plumbing Code, as adopted by the State Building Code Council in Chapter 51-56 and 51-57 WAC, as published by the International Association of Plumbing and Mechanical Officials, excluding Chapter 1, "Administration," is adopted, together with Appendix Chapters A "Recommended Rules for Sizing the Water Supply System," B "Explanatory Notes on Combination Waste and Vent Systems," I "Installation Standards," H "Grease Interceptors," and L "Alternate Plumbing Systems" excluding Sections L5 and ~~L6~~ through L7 of Appendix L and "Private Lawn Sprinkler Head" from Table 6-5.

21.24.013 Copies on file.

The city shall at all times keep on file with the city clerk, for reference by the general public, not less than one copy of the Uniform Plumbing Code.

21.24.016 Administration.

The administrative provisions for the enforcement of the Uniform Plumbing Code are located in chapter 21.06.

21.24.018 Table 6-5 amended.

Table 6-5 of Chapter 6 is amended to delete "Lawn Sprinkler, each head" from the table.

Section 7. Kirkland Municipal Code Section 21.28.010 is hereby amended to read as follows:

21.28.010 National Fuel Gas Code (NFPA 54) adopted.

The 2006⁹ Edition of the National Fuel Gas Code, as adopted by the State Building Code Council in Chapter 51-52 WAC, as published by NFPA, is adopted.

Section 8. Kirkland Municipal Code Section 21.32.010 is hereby amended to read as follows:

21.32.010 Liquefied Petroleum Gas Code (NFPA 58) adopted.

The 2004⁸ Edition of the Liquefied Petroleum Gas Code, as adopted by the State Building Code Council in Chapter 51-52 WAC, as published by NFPA, is adopted.

Section 9. Kirkland Municipal Code Section 21.36.010 is hereby amended to read as follows:

21.36.010 International Fuel Gas Code adopted.

The 2003⁹ Edition of the International Fuel Gas Code, as adopted by the State Building Code Council in Chapter 51-52 WAC, as published by the International Code Council, excluding Chapter 1, "Administration," is adopted.

Section 10. Kirkland Municipal Code Chapter 21.38 is hereby repealed.

Section 11. If any provision of this ordinance or its application to any person or circumstance is held invalid, the remainder of the ordinance, or the application of the provision to other persons or circumstances is not affected.

Section 12. This ordinance shall take effect and be in force on July 1, 2010, and 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 open meeting this 15th day of June, 2010.


MAYOR

Attest:


City Clerk

Approved as to Form:



City Attorney

PUBLICATION SUMMARY
OF ORDINANCE NO. 4246

AN ORDINANCE OF THE CITY OF KIRKLAND RELATING TO MODIFICATIONS TO TITLE 21 OF THE KIRKLAND MUNICIPAL CODE REGARDING BUILDING AND CONSTRUCTION.

SECTION 1. Amends Chapter 21.06 of the Kirkland Municipal Code regarding the Construction Administrative Code.

SECTION 2. Amends Chapter 21.08 of the Kirkland Municipal Code by updating the edition of the International Building Code to 2009 together with additional amendments.

SECTION 3. Amends Chapter 21.10 of the Kirkland Municipal Code by updating the edition of the International Residential Code to 2009 together with additional amendments.

SECTION 4. Amends Section 21.16.10 of the Kirkland Municipal Code by updating the edition of the International Mechanical Code to 2009.

SECTION 5. Amends Chapter 21.20 of the Kirkland Municipal Code by updating the edition of the International Fire Code to 2009 together with additional amendments.

SECTION 6. Amends Chapter 21.24 of the Kirkland Municipal Code by updating the edition of the Uniform Plumbing Code to 2009 together with additional amendments.

SECTION 7. Amends Section 21.28.010 of the Kirkland Municipal Code by updating the edition of the National Fuel Gas Code to 2009.

SECTION 8. Amends Section 21.32.010 of the Kirkland Municipal Code by updating the edition of the Liquefied Petroleum Gas Code to 2008.

SECTION 9. Amends Section 21.36.010 of the Kirkland Municipal Code by updating the edition of the International Fuel Gas Code to 2009.

SECTION 10. Repeals Chapter 21.38 of the Kirkland Municipal Code.

SECTION 11. Provides a severability clause for the ordinance.

SECTION 12. Authorizes publication of the ordinance by summary, which summary is approved by the City Council pursuant to Section 1.08.017 Kirkland Municipal Code and establishes the effective date as July 1, 2010.

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 meeting on the 15th day of June, 2010.

I certify that the foregoing is a summary of Ordinance 4246 approved by the Kirkland City Council for summary publication.



City Clerk