

ORDINANCE O-4410

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 Section 21.06.020 is amended to read as follows:

**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) ~~2009~~2012 International Building Code—Chapter 51-50 WAC;
- (2) ~~2009~~2012 International Residential Code—Chapter 51-51 WAC;
- (3) ~~2009~~2012 International Mechanical Code—Chapter 51-52 WAC;
- (4) ~~2009~~2012 National Fuel Gas Code (NFPA 54)—Chapter 51-52 WAC;
- (5) Kirkland Electrical Code;
- (6) 2008 Liquefied Petroleum Gas Code (NFPA 58)—Chapter 51-52 WAC;
- (7) ~~2009~~2012 International Fuel Gas Code—Chapter 51-52 WAC;
- (8) ~~2009~~2012 Uniform Plumbing Code—Chapters 51-56 and 51-57 WAC;
- (9) 2012 International Energy Conservation Code – Chapter 51-11C and 51-11R WAC.

Section 2. Kirkland Municipal Code Section 21.06.025 is amended to read as follows:

**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, fire fighting, 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.~~

~~(56) "Energy code" means the Washington State Energy Code International Energy Conservation Code promulgated by the Washington State Building Code International 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.~~

(68) "IBC" means the latest edition of the International Building Code promulgated by the International Code Council as adopted by the city.

(79) "IMC" means the latest edition of the International Mechanical Code promulgated by the International Code Council as adopted by the city.

~~(810) "IRC" means the latest edition of the International Residential Code promulgated by the International Code Council as adopted by the city.~~

~~(911) "KMC" means the Kirkland Municipal Code.~~

~~(1011) "NEC" means the latest edition of the National Electrical Code promulgated by the National Fire Protection Association as amended by the Washington Cities Electrical Code as adopted by the city.~~

~~(1112) "Occupancy" means the purpose for which a building, or part thereof, is used or intended to be used.~~

~~(1213) "Shall," as used in this chapter, is mandatory.~~

~~(1314) "Technical codes" are the codes, appendices and referenced code standards adopted by the jurisdiction.~~

~~(1415) "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.~~

(1516) "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.

Section 3. Kirkland Municipal Code Section 21.06.075 is amended to read as follows:

**21.06.075 Energy—Scope.**

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

Section 4. Kirkland Municipal Code Section 21.06.215 is amended to read as follows:

**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 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 twenty square feet.~~

(A) Accessory structures.

1. IRC accessory structures used as tool and storage sheds, one-story tree-supported play structures, playhouses and similar uses, but not including vehicle storage, provided the floor area does not exceed two hundred square feet, and, except one-story tree-supported play structures, the height does not exceed 12 feet from the grade plane to the highest point of the roof.

2. IBC accessory structures used as tool and storage sheds, one-story tree-supported play structures, playhouses and similar uses, but not including vehicle storage, provided the floor area does not exceed one hundred twenty square feet and except one-story tree-supported play structures, the height does not exceed 12 feet from the grade plane to the highest point of the roof.

(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 not more than thirty inches above grade and not over any basement or story below and which are not part of an accessible route.

(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, countertops 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) 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~~ International Energy Conservation 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) 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.

(T) Flag and light poles that do not exceed 20 feet in height. (An electrical permit may still be required.)

(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;~~

(I) All wiring for low voltage installations within a one-family dwelling unit or its accessory structure except wired security, fire or smoke alarm systems, provided the power is supplied by a listed Class 2 power supply and none of the wiring penetrates the wall or ceiling between the dwelling unit and an attached garage or wall separating two dwelling units;

(JK) 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;

~~(KL) Portable generators serving only cord- and plug-connected loads supplied through receptacles on the generator;~~

~~(LM) Travel trailers;~~

~~(MN) Like-in-kind replacement of a one or more of the following: 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 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.

Section 5. Kirkland Municipal Code Section 21.06.275 is amended to read as follows:

**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 deemed necessary by the building official.

(1) Building.

(A) 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.

(B) 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.

(C) 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-resistant 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.

(D) Building Enclosure Design Requirements of Chapter 64.55 RCW (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, weatherproofing 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.

(E) 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.

(2) Electrical.

(A) 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~~ 392-344, 246B-320, and 388-97 WAC. All electrical plans must bear the engineer's stamp and signature.

(i) All educational facilities, hospitals and nursing homes;

(ii) All services or feeders rated one thousand six hundred amperes or larger;

(iii) All installations identified in the National Electrical Code requiring engineering supervision;

(iv) As required by the building official for installations which by their nature are complex, hazardous or pose unique design problems.

(B) 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.

(C) 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.

(D) 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.

(E) 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 and distances from lot lines.



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

(i) Educational, institutional, or health care facilities/buildings as follows:

- a. Hospital;
- b. Nursing home unit or long-term care unit;
- c. Boarding home;
- d. Assisted living facility;
- e. Private alcoholism hospital;
- f. Alcoholism treatment facility;
- g. Private psychiatric hospital;
- h. Maternity home;
- i. Ambulatory surgery facility;
- j. Renal hemodialysis clinic;
- k. Residential treatment facility for psychiatrically impaired children and youth;
- l. Adult residential rehabilitation center;
- m. Educational facilities;
- n. 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:
  - 1. Service or distribution equipment involved is rated less than one hundred amperes and does not exceed two hundred fifty volts;
  - 2. Does not involve emergency systems other than listed unit equipment per NEC 700.12(F);
  - 3. Does not involve branch circuits or feeders of an essential electrical system as defined in NEC 517.2; and
  - 4. Service and feeder load calculations are increased by five percent or less;
- d. Stand-alone utility fed services that do not exceed two hundred fifty volts and less than one hundred amperes where the project's distribution system does not include:
  - 1. Emergency systems other than listed unit equipment per NEC 700.12(F);
  - 2. Critical branch circuits or feeders as defined in NEC 517.2; or
  - 3. A required fire pump system.

(ii) Alterations in nonresidential occupancies two thousand five hundred square feet and greater.

(iii) Installations in occupancies, except one- and two-family dwellings, where a service or feeder rated one hundred amperes or greater is installed or altered or if more than one hundred amperes are added to the service or feeder.

(iv) All work on electrical systems operating at/over six hundred volts.

(v) All commercial generator installations or alterations.

(vi) All work in areas determined to be hazardous (classified) locations by the NEC.

(vii) If sixty percent or more of luminaires change.

(viii) Installations of switches or circuit breakers rated four hundred amperes or over except for one- and two-family dwellings.

(ix) Wind-driven generators.

(x) Solar photovoltaic systems.

(xi) Any proposed installation which cannot be adequately described in the application form.

(xii) Temporary electrical services exceeding 400 amps.

(3) Plumbing. Plans must be submitted for review and approval whenever the work exceeds the thresholds shown on the MyBuildingPermit.com tipsheet. scope of the work is too complex for inspection alone as determined by the building official.

(4) Mechanical. Plans must be submitted for review and approval whenever the work exceeds the thresholds shown on the MyBuildingPermit.com tipsheet. scope of the work is too complex for inspection alone as determined by the building official.

Section 6. Kirkland Municipal Code Section Chapter 21.08.010 is amended to read as follows:

**21.08.010 International Building Code adopted.**

The ~~2009~~2012 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.

Section 7. Kirkland Municipal Code Section 21.10.010 is amended to read as follows:

**21.10.010 International Residential Code adopted.**

The ~~2009~~2012 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.

Section 8. Kirkland Municipal Code Section 21.10.020 is amended to read as follows:

**21.10.020 IRC Table R301.2(1) amended.**

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

**IRC Table R301.2(1)**

**Climatic and Geographic Design Criteria**

<u>Roof Snow Load<sup>a</sup></u>	<u>Wind Speed<sup>b</sup></u>	<u>Seismic Design Category<sup>c</sup></u>	<u>Subject to Damage From:</u>			<u>Outside Design Temp —Heat /Cool</u>	<u>Ice Barrier Under Layment Required</u>	<u>Flood Hazards<sup>e</sup></u>	<u>Air Freezing Index</u>	<u>Mean Annual Temp</u>
			<u>Weathering<sup>d</sup></u>	<u>Frost Line Depth</u>	<u>Termite Decay</u>					
<u>25 psf</u>	<u>85 mph</u>	<u>D2</u>	<u>Moderate</u>	<u>12"</u>	<u>Slight to Moderate</u>	<u>17F / 83°F</u>	<u>No</u>	<u>Per Kirkland Municipal Code 21.56</u>	<u>144</u>	<u>49F°</u>

~~<sup>a</sup>—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.~~

~~<sup>b</sup>—Wind exposure category and Wind Speed up (Kzt) factor shall be determined on a site specific basis by the Engineer of Record.~~

~~<sup>c</sup>—From IRC Table 301.2 (1).~~

~~<sup>d</sup>—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.~~

~~<sup>e</sup>—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 FHM Identified 06/28/74, Initial FIRM Identified 05/16/95, Current Effective Map Date (NSFHA), Reg Emer Date 06/30/97.~~

Ground Snow Load (PSE)	Wind Design		Seismic Design Category <sup>f</sup>	Subject to Damage From			Winter Design Temp <sup>e</sup>	Ice Barrier Under-layment Required <sup>h</sup>	Flood Hazards <sup>g</sup>	Air Freezing Index <sup>i</sup>	Mean Annual Temp <sup>j</sup>
	Speed <sup>d</sup> (mph)	Topographic Effects <sup>k</sup>		Weathering <sup>a</sup>	Frost Line Depth <sup>b</sup>	Termite <sup>c</sup>					
25	85	No	D2	Moderate	12 inches	Slight to Moderate	17	No	See KMC 21.56	144	49

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)A]. 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 Flood Insurance Study and (c) the panel numbers and dates of all currently effective FIRMs and FBFMs or other flood hazard map adopted by the authority having jurisdiction, as 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 percent) value on the National Climatic Data Center data table "Air Freezing Index-USA Method (Base 32°F)" at [www.ncdc.noaa.gov/fpsf.html](http://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°F)" at [www.ncdc.noaa.gov/fpsf.html](http://www.ncdc.noaa.gov/fpsf.html).

k. In accordance with Section R301.2.1.5, where there is local historical data documenting structural damage to buildings due to topographic wind speed-up effects, the jurisdiction shall fill in this part of the table with "YES." Otherwise, the jurisdiction shall indicate "NO" in this part of the table.

Section 9. Kirkland Municipal Code Section Chapter 21.16.010 is amended to read as follows:

**21.16.010 International Mechanical Code adopted.**

The ~~2009~~2012 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 10. Kirkland Municipal Code Section 21.20.010 is amended to read as follows:

**21.20.010 International Fire Code adopted.**

The~~2009~~ 2012 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. 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).

Section 11. Kirkland Municipal Code Section 21.20.015 is amended to read as follows:

**21.20.015 IFC Section 102.7 amended.**

102.7 Referenced codes and standards. The codes and standards referenced in this code shall be those that are listed in Chapter 45 80. 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. When allowed by the Fire Code Official, editions of standards not herein referenced may be used provided the entire standard is utilized.

Section 12. Kirkland Municipal Code Section 21.20.037 is amended to read as follows:

**21.20.037 IFC Section 109.34 is amended.**

109.34. 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.

Section 13. Kirkland Municipal Code Chapter 21.20 is amended to include a new section 21.20.045 to read as follows:

**21.20.045 IFC Section 307 is amended**

**IFC Section 307 OPEN BURNING, RECREATIONAL FIRES AND PORTABLE OUTDOOR FIREPLACES**

**307.1 General.**

A person shall not kindle or maintain or authorize to be kindled or maintained any open burning unless conducted and approved in accordance with Sections 307.1.1 through 307.5.

**307.1.1 Prohibited open burning.**

Open burning shall be prohibited—at all times in compliance with a permanent ban on open burning established by the Puget Sound Clean Air Agency in September of 1992.

**Exceptions:**

1. Bonfires
2. Recreational Fires

### 3. Portable outdoor fireplaces

#### 307.2 Permit required.

A permit shall be obtained from the fire code official in accordance with Section 105.6 prior to conducting a bonfire. Application for such approval shall only be presented by and permit issued to the owner of the land upon which the bonfire is to be conducted.

A permit is not required for a recreational fire or portable outdoor fireplace.

#### 307.2. Bans on fires due to air quality or fire danger.

If the Puget Sound Clean Air Agency issues a burn ban due to air quality, or if a fire safety burn ban is issued by the Kirkland Fire Department or King County Fire Marshal's Office, all fires are prohibited. It is the responsibility of the property owner where the fire is to be conducted to ensure no such ban exists prior to starting any fire.

#### 307.3 Extinguishment authority.

When any fire creates or adds to a hazardous situation, or a required permit has not been obtained, the fire code official is authorized to order the extinguishment of the fire.

#### 307.4 Location.

The location for fires shall be as follows:

##### 307.4.1 Bonfires.

A bonfire shall not be conducted within 50 feet (15 240 mm) of a structure or combustible material unless the fire is contained in a barbecue pit. Conditions which could cause a fire to spread within 50 feet (15 240 mm) of a structure shall be eliminated prior to ignition.

##### 307.4.2 Recreational fires.

Recreational fires shall not be conducted within 25 feet (7620 mm) of a structure or combustible material. Conditions which could cause a fire to spread within 25 feet (7620 mm) of a structure shall be eliminated prior to ignition.

##### 307.4.3 Portable outdoor fireplaces.

Portable outdoor fireplaces shall be used in accordance with the manufacturer's instructions and shall not be operated within 15 feet (3048 mm) of a structure or combustible material.

Exception: Portable outdoor fireplaces used at one- and two-family dwellings.

#### 307.5 Attendance.

Bonfires, recreational fires and use of portable outdoor fireplaces shall be constantly attended until the fire is extinguished. A minimum of one portable fire extinguisher complying with Section 906 with a minimum 4-A rating or other approved on-site fire-extinguishing equipment, such as dirt, sand, water barrel, garden hose or water truck, shall be available for immediate utilization.

Section 14. Kirkland Municipal Code Section 21.20.055 is repealed.

Section 15. Kirkland Municipal Code Section 21.20.065 is amended to read as follows:

**21.20.065 IFC Section 510 is amended.**

Section 510.1 Emergency Responder Radio Coverage in Buildings

~~510.1 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. All new buildings shall have approved radio coverage for emergency responders within the building installed in accordance with Section 510 of this code and with applicable provisions of NFPA 72, National Fire Alarm Signaling Code. This section shall not require improvement of the existing public safety communication system.~~

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. 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 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.~~

1. Buildings and area of buildings that have minimum radio coverage signal strength levels of the King County Regional 800 MHz Radio System within the building in accordance with Section 510.4.1



2. Buildings constructed primarily of wood frame that do not have storage or parking areas that extend more than one level below grade.

3. Buildings thirty-five (35) feet high (As defined by International Building Code Section 502) or less that do not have below grade storage or parking areas that extend more than one level below grade. If a building is thirty-five (35) feet high or less, but includes subterranean storage or parking, then the requirement for radio coverage shall apply only to the subterranean areas.

4. One and two family dwellings and townhouses

~~510.1.1 Adequate Radio Coverage. A minimum signal strength of 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.~~

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

~~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. 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](http://www.FCC.gov) for additional information.)~~

~~510.2 Permits~~

510.2 Emergency responder radio coverage in existing buildings. Existing buildings shall be provided with approved radio coverage for emergency responders as required in Chapter 11.

~~510.2.13 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.

510.4 Criteria for Installation and Maintenance of Emergency Radio Systems is provided in Kirkland Fire Department Operating Policy #12 which is available on the Internet and at City Hall.

~~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.

**510.5 Testing and Proof of Compliance.**

**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.~~

~~510.5.5 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.~~

~~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.~~

~~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."~~

Section 16. Kirkland Municipal Code Chapter 21.20 is amended to include a new section 21.20.100 to read as follows:

**21.20.100 IFC Section 905.4 is amended**

905.4 Location of Class I standpipe hose connections.

Class I standpipe hose connections shall be provided in all of the following locations:

1. In every required stairway, a hose connection shall be provided for each floor level above or below grade. Hose connections shall be located at an intermediate floor level landing between floors, unless otherwise approved by the fire code official.

2. On each side of the wall adjacent to the exit opening of a horizontal exit.

Exception 1:

Where floor areas adjacent to a horizontal exit are reachable from exit stairway hose connections by a 30-foot (9144 mm) hose stream from a nozzle attached to 100 feet (30 480 mm) of hose, a hose connection shall not be required at the horizontal exit.

Exception 2:

When the Fire Code Official determines that a standpipe connection is not needed.

3. In every exit passageway, at the entrance from the exit passageway to other areas of a building.

Exception: Where floor areas adjacent to an exit passageway are reachable from exit stairway hose connections by a 30-foot (9144 mm) hose stream from a nozzle attached to 100 feet (30 480 mm) of hose, a hose connection shall not be required at the entrance from the exit passageway to other areas of the building.

4. In covered mall buildings, adjacent to each exterior public entrance to the mall and adjacent to each entrance from an exit passageway or exit corridor to the mall. In open mall buildings, adjacent to each public entrance to the mall at the perimeter line and adjacent to each entrance from an exit passageway or exit corridor to the mall.

5. Where the roof has a slope less than four units vertical in 12 units horizontal (33.3-percent slope), a hose connection shall be located to serve the roof or at the highest landing of a stairway with stair access to the roof provided in accordance with Section 1009.16.

6. Where the most remote portion of a nonsprinklered floor or story is more than 150 feet (45 720 mm) from a hose connection or the most remote portion of a sprinklered floor or story is more than 200 feet (60 960 mm) from a hose connection, the fire code official is authorized to require that additional hose connections be provided in approved locations.

#### 905.4.1 Protection.

Risers and laterals of Class I standpipe systems not located within an enclosed stairway or pressurized enclosure shall be protected by a degree of fire resistance equal to that required for vertical enclosures in the building in which they are located.

Exception: In buildings equipped throughout with an approved automatic sprinkler system, laterals that are not located within an

enclosed stairway or pressurized enclosure are not required to be enclosed within fire-resistance-rated construction.

#### 905.4.2 Interconnection.

In buildings where more than one standpipe is provided, the standpipes shall be interconnected in accordance with NFPA 14.

Section 17. Kirkland Municipal Code Section 21.20.105 is repealed.

Section 18. Kirkland Municipal Code Section 21.20.110 is amended to read as follows:

#### **21.20.110 IFC Section 907,~~15,6,5~~ is amended**

Section 907-~~15,6,5~~ 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.

Section 19. Kirkland Municipal Code Section 21.20.115 is amended to read as follows:

#### **21.20.115 IFC Section 1103.2 is 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.~~

#### 1103.2 Emergency responder radio coverage in existing buildings.

Buildings constructed prior to the implementation of this code shall not be required to comply with the emergency responder radio coverage provisions except as follows:

1. Whenever an existing wired communication system cannot be repaired or is being replaced.
2. Buildings identified in Section 510.1 undergoing substantial alteration as determined by the Fire Code Official

3. When buildings, classes of buildings or specific occupancies do not have minimum radio coverage signal strength as identified in Section 510.4.1 and the Fire or Police Chief determines that lack of minimum signal strength poses an undue risk to emergency responders or occupants that cannot be reasonably mitigated by other means.

Section 20. Kirkland Municipal Code Chapter 21.20 is amended to include a new section 21.20.116 to read as follows:

**21.20.116 IFC Section 1103.8.1 is amended**

1103.8.1 Where required

Existing Group I-1 and R occupancies shall be provided with single-station smoke alarms in accordance with Section 907.2.11, except as provided in Sections 1103.8.2 and 1103.8.3.

Exception:

Where smoke detectors connected to a fire alarm system have been installed as a substitute for smoke alarms.

Section 21. Kirkland Municipal Code Section 21.24.010 is amended to read as follows:

**21.24.010 Uniform Plumbing Code adopted.**

The ~~2009~~2012 Edition of the Uniform Plumbing Code, as adopted by the State Building Code Council in Chapters 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," C "Alternate Plumbing Systems" excluding Sections C5 through C7 of Appendix C, and I "Installation Standards," H "Grease Interceptors," and ~~L "Alternate Plumbing Systems" excluding Sections L5 through L7 of Appendix L.~~

Section 22. Kirkland Municipal Code Section 21.24.020 is amended to read as follows:

**21.24.020 UPC Section 1101.11.2.2.2 amended.**

Section 1101.11.2.2.2 of the UPC is amended to read:

1101.11.2.2-2(B) Combined System. The secondary roof drains shall connect to the vertical piping of the primary storm drainage conductor downstream of any horizontal offset below the roof. The primary storm drainage system shall connect to the building storm water that connects to an underground public storm sewer. The combined secondary and primary roof drain systems shall be sized in accordance with Section 1106.0

based on double the rainfall for the local area. A relief drain shall be connected to the vertical drain piping using a wye type fitting piped to daylight on the exterior of the building. The piping shall be sized as required for a secondary drain with a 4" maximum.

Section 23. Kirkland Municipal Code Section 21.28.010 is amended to read as follows:

**21.28.010 National Fuel Gas Code (NFPA 54) adopted.**

The ~~2009~~2012 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 24. Kirkland Municipal Code Section 21.33.050 is amended to read as follows:

**21.33.050 Existing buildings.**

(a) Existing buildings that would be required to install an automatic sprinkler system, if new, shall comply with this section when an addition is made to the building.

Exception: Buildings classified as single family, duplex, or townhouse under the International Residential Code, which would be required to be sprinklered due to inadequate fire flow or fire department access, are allowed to add up to 500 square feet without being required to install fire sprinklers. This exception shall be used one time only, and acknowledgement of its use shall be recorded to run with the property title prior to building permit issuance.

(b) Any existing building required to install an automatic sprinkler system under the provisions of this section shall install such system throughout the entire building. Subject to the approval of the fire chief, a phasing plan of up to five years is permitted.

Section 25. Kirkland Municipal Code Section 21.36.010 is amended to read as follows:

**21.36.010 International Fuel Gas Code adopted.**

The ~~2009~~2012 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 26. Kirkland Municipal Code Chapter 21.37 is amended to read as follows:



**Chapter 21.37**  
**WASHINGTON STATE ENERGY INTERNATIONAL ENERGY**  
**CONSERVATION CODE**

**21.37.010 Washington State Energy International Energy Conservation Code adopted.**

The ~~Washington State Energy International Energy Conservation Code~~, as adopted by the State Building Code Council in Chapter 51-11C and Chapter 51-11R WAC, and hereafter amended, is adopted.

**21.37.020 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 ~~Washington State Energy International Energy Conservation Code~~.

Section 27. Kirkland Municipal Code Section 21.41.201 is amended to read as follows:

**21.41.201 General.**

(a) Scope. Unless otherwise expressly stated, the following terms shall, for the purposes of this code, have the meanings shown in this chapter.

(b) Interchangeability. Words stated in the present tense include the future; words stated in the masculine gender include the feminine and neuter; the singular number includes the plural and the plural, the singular.

(c) Terms Defined in Other Codes. Where terms are not defined in this code and are defined in the International Building Code, International Existing Building Code, International Residential Code, International Fire Code, Kirkland Zoning Code, Uniform Plumbing Code, International Mechanical Code or NFPA 70, such terms shall have the meanings ascribed to them as stated in those codes.

(d) Terms Not Defined. Where terms are not defined through the methods authorized by this section, such terms shall have ordinarily accepted meanings such as the context implies.

(e) Parts. Whenever the words "dwelling unit," "dwelling," "premises," "building," "rooming house," "rooming unit," "housekeeping unit" or "story" are stated in this code, they shall be construed as though they were followed by the words "or any part thereof."

Section 28. Kirkland Municipal Code Section 21.41.303 is amended to read as follows:

### **21.41.303 Swimming pools, spas and hot tubs.**

(a) **Swimming Pools.** Swimming pools shall be maintained in a clean and sanitary condition, and in good repair.

(b) **Enclosures.** Private swimming pools, hot tubs and spas, containing water more than twenty-four inches (six hundred ten millimeters) in depth shall be completely surrounded by a fence or barrier at least forty-eight inches (one thousand two hundred nineteen millimeters) in height above the finished ground level measured on the side of the barrier away from the pool. Openings in the fence or barrier shall not allow the passage of a 4-inch diameter sphere. Gates and doors in such barriers shall be self-closing and self-latching. Where the self-latching device is less than fifty-four inches (one thousand three hundred seventy-two millimeters) above the bottom of the gate, the release mechanism shall be located on the pool side of the gate. Self-closing and self-latching gates shall be maintained such that the gate will positively close and latch when released from an open position of six inches (one hundred fifty-two millimeters) from the gatepost. No existing pool enclosure shall be removed, replaced or changed in a manner that reduces its effectiveness as a safety barrier.

Exception: Spas or hot tubs with a safety cover that complies with ASTM F1346 shall be exempt from the provisions of this section.

Section 29. Kirkland Municipal Code Section 21.41.304 is amended to read as follows:

### **21.41.304 Exterior structure.**

(a) **General.** The exterior of a structure shall be maintained in good repair, structurally sound and sanitary so as not to pose a threat to the public health, safety or welfare.

(1) **Unsafe Conditions.** The following conditions shall be determined as unsafe and shall be repaired or replaced to comply with the International Building Code or the International Existing Building Code as required for existing buildings:

(A) The nominal strength of any structural member is exceeded by nominal loads, the load effects or the required strength;

(B) The anchorage of the floor or roof to walls or columns, and of walls and columns to foundations, is not capable of resisting all nominal loads or load effects;

(C) Structures or components thereof that have reached their limit state;

(D) Siding and masonry joints including joints between the building envelope and the perimeter of windows, doors and skylights are not maintained, weather resistant or water tight;

(E) Structural members that have evidence of deterioration or that are not capable of safely supporting all nominal loads and load effects;

(F) Foundation systems that are not firmly supported by footings, are not plumb and free from open cracks and breaks, are not properly anchored or are not capable of supporting all nominal loads and resisting all load effects;

(G) Exterior walls that are not anchored to supporting and supported elements or are not plumb and free of holes, cracks or breaks and loose or rotting materials, are not properly anchored or are not capable of supporting all nominal loads and resisting all load effects;

(H) Roofing or roofing components that have defects that admit rain, roof surfaces with inadequate drainage, or any portion of the roof framing that is not in good repair with signs of deterioration or fatigue or without proper anchorage and incapable of supporting all nominal loads and resisting all load effects;

(I) Flooring and flooring components with defects that affect serviceability or flooring components that show signs of deterioration or fatigue, are not properly anchored or are incapable of supporting all nominal loads and resisting all load effects;

(J) Veneer, cornices, belt courses, corbels, trim, wall facings and similar decorative features not properly anchored or that are anchored with connections not capable of supporting all nominal loads and resisting all load effects;

(K) Overhang extensions or projections including, but not limited to, trash chutes, canopies, marquees, signs, awnings, fire escapes, standpipes and exhaust ducts not properly anchored or that are anchored with connections not capable of supporting all nominal loads and resisting all load effects;

(L) Exterior stairs, decks, porches, balconies and all similar appurtenances attached thereto, including guards and handrails, are not structurally sound, not properly anchored or that are anchored with connections not capable of supporting all nominal loads and resisting all load effects; or

(M) Chimneys, cooling towers, smokestacks and similar appurtenances not structurally sound or not properly anchored, or that are anchored with connections not capable of supporting all nominal loads and resisting all load effects.

**Exceptions:**

(i) When substantiated otherwise by an approved method.

(ii) Demolition of unsafe conditions shall be permitted when approved by the code official.

(b) **Protective Treatment.** All exterior surfaces, including but not limited to doors, door and window frames, cornices, porches, trim, and balconies, shall be maintained in good condition. Exterior wood surfaces, other than decay resistant woods, shall be protected from the elements and decay by painting or other protective covering or treatment. Peeling, flaking and chipped paint shall be eliminated and surfaces repainted. All siding and masonry joints, as well as those between the building envelope and the perimeter of windows, doors and skylights, shall be maintained weather resistant and water tight. All metal surfaces subject to rust or corrosion shall be coated to inhibit such rust and corrosion, and all surfaces with rust or corrosion shall be stabilized and coated to inhibit future rust and corrosion.

(c) **Premises Identification.** Buildings shall have approved address numbers placed in a position to be plainly legible and visible from the street or road fronting the property. These numbers shall contrast with their background. Address numbers shall be Arabic numerals or alphabet letters. Numbers shall be a minimum of four inches (one hundred two millimeters) high with a minimum stroke width of one-half inch (12.7 millimeters).

**Exception:** Buildings constructed under the International Residential Code, prior to July 1, 2010, are permitted to have the address number size be a minimum of three inches high.

(d) **Structural Members.** All structural members shall be maintained free from deterioration, and shall be capable of safely supporting the imposed dead and live loads.

(e) **Foundation Walls.** All foundation walls shall be maintained plumb and free from open cracks and breaks and shall be kept in such condition so as to prevent the entry of rodents and other pests.

(f) **Exterior Walls.** All exterior walls shall be free from holes, breaks, and loose or rotting materials; and maintained weatherproof and properly surface coated where required to prevent deterioration.

(g) **Roofs and Drainage.** The roof and flashing shall be sound, tight and not have defects that admit rain. Roof drainage shall be adequate to prevent dampness or deterioration in the walls or interior portion of the structure. Roof drains, gutters and downspouts shall be maintained in good repair and free from obstructions. Roof water shall not be discharged directly onto any other private property, public right-of-way or in a manner that creates a public nuisance.

(h) Decorative Features. All cornices, belt courses, corbels, terra cotta trim, wall facings and similar decorative features shall be maintained in good repair with proper anchorage and in a safe condition.

(i) Overhang Extensions. All overhang extensions including, but not limited to, canopies, marquees, signs, metal awnings, fire escapes, standpipes and exhaust ducts shall be maintained in good repair and be properly anchored so as to be kept in a sound condition. When required, all exposed surfaces of metal or wood shall be protected from the elements and against decay or rust by periodic application of weather-coating materials, such as paint or similar surface treatment.

(j) Stairways, Decks, Porches and Balconies. Every exterior stairway, deck, porch and balcony, and all appurtenances attached thereto, shall be maintained structurally sound, in good repair, with proper anchorage and capable of supporting the imposed loads.

(k) Chimneys and Towers. All chimneys, cooling towers, smokestacks, and similar appurtenances shall be maintained structurally safe and sound, and in good repair. All exposed surfaces of metal or wood shall be protected from the elements and against decay or rust by periodic application of weather-coating materials, such as paint or similar surface treatment.

(l) Handrails and Guards. Every handrail and guard shall be firmly fastened and capable of supporting normally imposed loads and shall be maintained in good condition.

(m) Window, Skylight and Door Frames. Every window, skylight, door and frame shall be kept in sound condition, good repair and weather tight.

(1) Glazing. All glazing materials shall be maintained free from cracks and holes.

(2) Openable Windows. Every window, other than a fixed window, shall be easily openable and capable of being held in position by window hardware.

(n) Doors. All exterior doors, door assemblies, operator systems if provided and hardware shall be maintained in good condition. Locks at all entrances to dwelling units and sleeping units shall tightly secure the door. Locks on means of egress doors shall be in accordance with Section 21.41.702(c).

Section 30. Kirkland Municipal Code Section 21.41.404 is amended to read as follows:

**21.41.404 Occupancy limitations.**

(a) Privacy. Dwelling units, hotel units, housekeeping units, rooming units and dormitory units shall be arranged to provide privacy and be separate from other adjoining spaces.

(b) Minimum Room Widths. A habitable room, other than a kitchen, shall not be less than seven feet (two thousand one hundred thirty-four millimeters) in any plan dimension. Kitchens shall have a clear passageway of not less than three feet (nine hundred fourteen millimeters) between counter fronts and appliances or counter fronts and walls.

(c) Minimum Ceiling Heights. Habitable spaces, hallways, corridors, laundry areas, bathrooms, toilet rooms and habitable basement areas shall have a clear ceiling height of not less than seven feet (two thousand one hundred thirty-four millimeters).

**Exceptions:**

(1) In one- and two-family dwellings, beams or girders spaced not less than four feet (one thousand two hundred nineteen millimeters) on center and projecting not more than six inches (one hundred fifty-two millimeters) below the required ceiling height.

(2) Basement rooms in one- and two-family dwellings occupied exclusively for laundry, study or recreation purposes, having a ceiling height of not less than six feet eight inches (two thousand thirty-three millimeters) with not less than six feet four inches (one thousand nine hundred thirty-two millimeters) of clear height under beams, girders, ducts and similar obstructions.

(3) Rooms occupied exclusively for sleeping, study or similar purposes and having a sloped ceiling over all or part of the room, with a clear ceiling height of at least seven feet (two thousand one hundred thirty-four millimeters) over not less than one-third of the required minimum floor area. In calculating the floor area of such rooms, only those portions of the floor area with a clear ceiling height of five feet (one thousand five hundred twenty-four millimeters) or more shall be included.

(d) Bedroom and Living Room Requirements. Every bedroom and living room shall comply with the requirements of subsections (d)(1) through (d)(5) of this section.

(1) Room Area. Every living room shall contain at least one hundred twenty square feet (11.2 square meters) and every bedroom shall contain at least seventy square feet (6.5 square meters) and every bedroom occupied by more than one person shall contain a minimum of 50 square feet of floor area for each occupant thereof.

(2) Access from Bedrooms. Bedrooms shall not constitute the only means of access to other bedrooms or habitable spaces and shall not serve as the only means of egress from other habitable spaces.

Exception: Units that contain fewer than two bedrooms.

(3) Water Closet Accessibility. Every bedroom shall have access to at least one water closet and one lavatory without passing through another bedroom. Every bedroom in a dwelling unit shall have access to at least one water closet and lavatory located in the same story as the bedroom or an adjacent story.

(4) Prohibited Occupancy. Kitchens and non-habitable spaces shall not be used for sleeping purposes.

(5) Other Requirements. Bedrooms shall comply with the applicable provisions of this code including, but not limited to, the light, ventilation, room area, ceiling height and room width requirements of this chapter; the plumbing facilities and water-heating facilities requirements of Article V; the heating facilities and electrical receptacle requirements of Article VI; and the smoke detector and emergency escape requirements of Article VII of this code.

~~(e) Overcrowding. The number of persons occupying a dwelling unit shall not create conditions that, in the opinion of the code official, endanger the life, health, safety or welfare of the occupants.~~

(e) Overcrowding. Dwelling units shall not be occupied by more occupants than permitted by the minimum area requirements of Table 21.404(e).

**TABLE 404(e)**

**MINIMUM AREA REQUIREMENTS**

<b><u>Space</u></b>	<b><u>Minimum Area in Square Feet</u></b>		
	<u>1 – 2 occupants</u>	<u>3 – 5 occupants</u>	<u>6 or more occupants</u>
<u>Living room<sup>a, b</sup></u>	<u>120</u>	<u>120</u>	<u>150</u>
<u>Dining room<sup>a, b</sup></u>	<u>No requirement</u>	<u>80</u>	<u>100</u>

<u>Bedrooms</u>	<u>Shall comply with Section 21.41.401.(d)(1)</u>		
-----------------	---	--	--

a. See Section 21.41.404(e)(2) for combined living room/dining room spaces.

b. See Section 21.41.404(e)(1) for limitations on determining the minimum occupancy area for sleeping purposes.

(1) Sleeping area. The minimum occupancy area required by Table 404(e) shall not be included as a sleeping area in determining the minimum occupancy area for

sleeping purposes. All sleeping areas shall comply with Section 404(d).

(2) Combined spaces. Combined living room and dining room spaces shall comply with the requirements of Table 404(e) if the total area is equal to that required for

separate rooms and if the space is located so as to function as a combination living room/dining room.

(f) Efficiency Unit. Nothing in this section shall prohibit an efficiency living unit from meeting the following requirements:

(1) A unit occupied by not more than one occupant shall have a clear floor area of not less than 120 square feet A unit occupied by not more than two occupants shall have a clear floor area of not less than two hundred twenty square feet (20.4 square meters). A unit occupied by three occupants shall have a clear floor area of not less than three hundred twenty square feet (29.7 square meters). These required areas shall be exclusive of the areas required by subsections (f)(2) and (3) of this section.

(2) The unit shall be provided with a kitchen sink, cooking appliance and refrigeration facilities, each having a clear working space of not less than thirty inches (seven hundred sixty-two millimeters) in front. Light and ventilation conforming to this code shall be provided.

(3) The unit shall be provided with a separate bathroom containing a water closet, lavatory and bathtub or shower.

(4) The maximum number of occupants shall be three.

(g) Food Preparation. All spaces to be occupied for food preparation purposes shall contain suitable space and equipment to store, prepare and serve foods in a sanitary manner. There shall be



adequate facilities and services for the sanitary disposal of food wastes and refuse, including facilities for temporary storage.

Section 31. Kirkland Municipal Code Section 21.41.506 is amended to read as follows:

**21.41.506 Sanitary drainage system.**

(a) General. All plumbing fixtures shall be properly connected to either a public sewer system or to an approved private sewage disposal system.

(b) Maintenance. Every plumbing stack, vent, waste and sewer line shall function properly and be kept free from obstructions, leaks and defects.

~~(c) Grease Interceptors. Where it has been determined that a grease interceptor is not being maintained and serviced as intended by this code and the manufacturer's instructions, an approved interceptor monitoring system shall be provided or a maintenance program shall be established with documentation submitted to the code official.~~

(c) Grease interceptors. Grease interceptors and automatic grease removal devices shall be maintained in accordance with this code and the manufacturer's installation

instructions. Grease interceptors and automatic grease removal devices shall be regularly serviced and cleaned to prevent the discharge of oil, grease, and other substances harmful or hazardous to the building drainage system, the public sewer, the private sewage disposal system or the sewage treatment plant or processes. All records of maintenance, cleaning and repairs shall be available for inspection by the code official.

Section 32. Kirkland Municipal Code Section 21.41.602 is amended to read as follows:

**21.41.602 Heating facilities.**

(a) Facilities Required. Heating facilities shall be provided in structures as required by this section.

(b) Residential Occupancies. Dwellings shall be provided with heating facilities capable of maintaining a room temperature of sixty-eight degrees Fahrenheit (twenty degrees Celsius) in all habitable rooms, bathrooms and toilet rooms. Cooking appliances shall not be used nor shall portable unvented fuel-burning space heaters be used, to provide space heating to meet the requirements of this section.

(c) Heat Supply. Every owner and operator of any building who rents, leases or lets one or more dwelling units or sleeping units on terms, either expressed or implied, to furnish heat to the occupants thereof shall supply heat to maintain a temperature of not less than sixty-eight degrees Fahrenheit (twenty degrees Celsius) in all habitable rooms, bathrooms and toilet rooms.

(d) Room Temperature Measurement. The required room temperatures shall be measured three feet (nine hundred fourteen millimeters) above the floor near the center of the room and two feet (six hundred ten millimeters) inward from the center of each exterior wall.

Section 33. Kirkland Municipal Code Section 21.41.605 is amended to read as follows:

**21.41.605 Electrical equipment.**

(a) Installation. All electrical equipment, wiring and appliances shall be properly installed and maintained in a safe and approved manner.

(b) Receptacles. Every habitable space in a dwelling shall contain at least two separate and remote receptacle outlets. Every laundry area shall contain at least one grounded-type receptacle or a receptacle with a ground fault circuit interrupter. Every bathroom shall contain at least one receptacle. Any new bathroom receptacle outlet shall have ground fault circuit interrupter protection. All receptacle outlets shall have the appropriate faceplate cover for the location.

(c) Luminaires. Every public hall, interior stairway, toilet room, kitchen, bathroom, laundry room, boiler room and furnace room shall contain at least one electric luminaire. Pool and spa luminaries over 15 V shall have ground fault circuit interrupter protection.

(d) Extension Cords. Extension cords shall not be used for permanent wiring. Extension cords shall not extend from one room to another; be placed across a doorway; extend through a wall or partition; or be used in any area where such cord may be subject to physical damage.

Section 34. Kirkland Municipal Code Section 21.44.040 is amended to read as follows:

**21.44.040 Special requirements.**

(a) Escort. For Class I, II, III and IV moves, the housemover shall provide at least two off-duty police officers or other appropriate agency employees which provide an escort service for the purpose of regulating traffic along the route such building is being moved; provided, that any such police or special agency escort shall be at the expense of the housemover in addition to any other fees or deposits

heretofore required. No variances of the provisions of the permit shall be permitted by the escort.

(b) Time. Time of the movement shall be designated by the city. Every such permit shall become and be void unless such removal shall be completed and the building removed from the public right-of-way within the time specified in the application for such permit; provided, however, that the city may extend such time when the moving of any building is rendered impractical by reason of inclemency of the weather, strikes, or other causes not within the control of the housemover.

(c) Lights. No person moving any building over, upon, along or across any public street shall fail, neglect or refuse to keep a red light (or such other devices as the city may require) at all times at each corner of such building and at the end of any projection thereon while the same is located in or upon any public street.

(d) Notice to Utilities. Before any building shall be moved the housemover shall give written notice to the public utilities or agencies designated in the application not less than three days in advance of the proposed move.

(e) Condition of Lot. After the completion of any Class II or III move the area or lot upon which the structure was formerly located shall be cleaned up and satisfactorily graded; the sanitary sewer connection, if one exists, shall be plugged and marked; the water meter shall be removed and the line satisfactorily capped and marked; the electrical and telephone lines removed; and all trash removed therefrom to the satisfaction of the building official.

~~(f) Waterfront Restrictions. No building shall be moved over, upon, along or across any public right of way or other public lands fronting on or directly adjacent to the waterfront of Lake Washington within the corporate limits of the city.~~

Section 35. Kirkland Municipal Code Chapter 21.70 is amended to read as follows:

**21.70.010 Washington Cities Electrical Code adopted.**

The ~~June 22, 2009~~ November 12, 2009 Edition of the Washington Cities Electrical Code, Parts one and three, as published by the Washington Association of Building Officials, is adopted and shall be known as the Kirkland Electrical Code.

**21.70.020 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 Washington Cities Electrical Code.

**21.70.030 Administration.**

The administrative provisions for the enforcement of the Kirkland Electrical Code are located in Chapter 21.06.

Section 36. 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 37. This ordinance shall be in force and effect five days from 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 21st day of May, 2013.

Signed in authentication thereof this 21st day of May, 2013.

  
\_\_\_\_\_  
MAYOR

Attest:

  
\_\_\_\_\_  
City Clerk

Approved as to Form:

  
\_\_\_\_\_  
City Attorney