ORDINANCE O-4848

AN ORDINANCE OF THE CITY OF KIRKLAND RELATING TO THE CITY'S BUILDING AND CONSTRUCTION CODES AND AMENDING TITLE 21 OF THE KIRKLAND MUNICIPAL CODE.

WHEREAS, the City Council of the City of Kirkland has adopted by reference numerous building codes for the health, safety, and welfare of its residents as set forth in Title 21 of the Kirkland Municipal Code; and

WHEREAS, the State of Washington established the State Building Code as set forth in RCW 19.27.031; and

WHEREAS, a new version of the State Building Code will go into effect on March 15, 2024; and

WHEREAS, adoption of the amendments made within Title 21 KMC, entitled "Buildings and Construction," conforms to SEPA requirements set forth in WAC 167-800-19; and

WHEREAS, the City Council wishes to provide consistency in the administration of the construction codes; and

WHEREAS, the City Council wishes to provide standards for the maintenance of buildings and property within the City to protect the public health, safety, and welfare.

NOW, THEREFORE, the City Council of the City of Kirkland do ordain as follows:

Section 1. Section 21.06.020 of the Kirkland Municipal Code (KMC) is amended to read as follows, with new text shown in underline and deleted text shown in ~~strikethrough~~:

21.06.020 Scope and General Requirements.

(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) ~~2018~~ 2021 International Building Code—Chapter 51-50 WAC;

(2) ~~2018~~ 2021 International Residential Code—Chapter 51-51 WAC;

(3) ~~2018~~ 2021 International Mechanical Code—Chapter 51-52 WAC;

(4) ~~2018~~ 2021 National Fuel Gas Code (NFPA 54)—Chapter 51-52 WAC;

(5) Kirkland Electrical Code;

(6) ~~2017~~ 2020 Liquefied Petroleum Gas Code (NFPA 58)—Chapter 51-52 WAC;

(7) ~~2018~~ 2021 International Fuel Gas Code—Chapter 51-52 WAC;

(8) ~~2018~~ 2021 Uniform Plumbing Code—Chapters 51-56 and 51-57 WAC~~.~~;

(9) ~~2018~~ 2021 Washington State Energy Code, Commercial and Residential Provisions—Chapters 51-11C and 51-11R WAC~~.~~;

(10) ~~2018~~ 2021 International Existing Building Code—WAC 51-50-48000~~.~~;

(11) 2021 International Wildland-Urban Interface Code – Chapter 51-55 WAC; and

(~~11~~12) 2018 International Swimming Pool and Spa Code—WAC 51-50-3109 and 51-51-0329.

Section 2. KMC 21.06.030 is amended to read as follows:

21.06.030 Appendices.

Provisions in the appendices of the technical codes shall not apply unless specifically ~~adopted~~ referenced in the adopting ordinance. An appendix adopted by a local jurisdiction that affects single-family or multifamily residential buildings as defined in RCW 19.27.015 shall not be effective unless approved by the state building code council pursuant to RCW 19.27.060(1)(a).

Exceptions:

(1) The state building code council has determined that a local ordinance providing specifications for light straw-clay or strawbale construction, or requiring a solar-ready zone, or requiring fire sprinklers in accordance with Appendix AR, AS, or V of this chapter may be adopted by any local government upon notification of the council.

(2) Appendix AF, Radon Control Methods, Appendix AQ, Tiny Homes, and Appendix U, Dwelling Unit Fire Sprinkler Systems, are included in adoption of the International Residential Code.

Section 3. KMC 21.06.035 is amended to read as follows:

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 affordability, structural strength, means of egress ~~facilities~~, stability, sanitation, ~~adequate~~ light and ventilation, energy conservation, and ~~safety to life and property from fire~~ for providing a reasonable level of life safety and property protection from fire, explosion ~~and other hazards~~ or other dangerous conditions and to provide a reasonable level of safety to firefighters and emergency responders during emergency operations.

Section 4. KMC 21.06.050 is amended to read as follows:

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, adult family homes, and townhouses not more than three stories in height with separate means of egress and their accessory structures not more than three stories above grade plane in height.

Exceptions:

(1) Live/work units located in townhouses and complying with the requirements of Section ~~419~~ 508.5 of the International Building Code shall be permitted to be constructed in accordance with the International Residential Code for One- and Two-Family Dwellings. ~~Fire suppression~~ An automatic sprinkler system required by Section ~~419.5~~ 508.7 of the International Building Code where constructed under the International Residential Code for One- and Two-Family Dwellings shall conform to Appendix U.

(2) Owner-occupied lodging houses with one or two guestrooms shall be permitted to be constructed in accordance with the International Residential Code for One- and Two-Family Dwellings.

(3) Owner-occupied lodging homes with three to five guestrooms shall be permitted to be constructed in accordance with the International Residential Code for One- and Two-Family Dwellings where equipped with a fire sprinkler system in accordance with Appendix U.

(4) A care facility with five or fewer persons receiving custodial care within a dwelling unit shall be permitted to be constructed

in accordance with the International Residential Code for One- and Two-Family Dwellings where equipped with an automatic fire sprinkler system in accordance with Appendix U.

(5) A care facility with five or fewer persons receiving medical care within a dwelling unit shall be permitted to be constructed in accordance with the International Residential Code for One- and Two-Family Dwellings where equipped with an automatic fire sprinkler system in accordance with Appendix U.

(6) A care facility with five or fewer persons receiving care that are within a single-family dwelling shall be permitted to be constructed in accordance with the International Residential Code for One- and Two-Family Dwellings where equipped with an automatic fire sprinkler system in accordance with Appendix U.

Section 5. KMC 21.06.075 is amended to read as follows:

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. ~~References in the commercial energy code to Group R shall include Group I-1, Condition 2 assisted living facilities licensed by Washington State under Chapter 388-78A WAC and Group I-1, Condition 2 residential treatment facilities licensed by Washington State under Chapter 246-337 WAC.~~ The WSEC Residential WAC Chapter 51-11R applies to residential buildings, building sites, associated systems and equipment, and the WSEC Commercial WAC Chapter 51-11C applies to commercial buildings, building sites, associated systems and equipment. Residential sleeping units, Group I-1, Condition 2 assisted living facilities licensed by Washington state under chapter 388-78A WAC and Group I-1, Condition 2 residential treatment facilities licensed by Washington state under chapter 246-337 WAC shall utilize the commercial building sections of the energy code regardless of the number of stories of height above grade plane. Building areas that contain Group R sleeping units, regardless of the number of stories in height, are required to comply with the commercial sections of the energy code. Where a building includes both residential building and commercial building portions, each portion shall be separately considered and meet the applicable provisions of the WSEC - Commercial or WSEC - Residential Provisions.

Section 6. KMC 21.06.076 is amended to read as follows:

21.06.076 Existing structures—Scope.

The provisions of the International Existing Building Code shall apply to matters governing the repair, alteration, change of occupancy, addition to and relocation of existing structures. Provided, that the Washington State Energy Code and the International Wildland-Urban Interface Code shall be regulated by their respective provisions for existing buildings.

Provided, that work regulated by this code is also regulated by the construction requirements for existing buildings within Chapter 11 of the International Fire Code, and such work shall comply with applicable requirements in both codes.

Exception:

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

Section 7. A new section shall be added to chapter 21.06 KMC, to be codified as KMC 21.06.080, to read as follows:

21.06.080 International Wildland-Urban Interface Code — Scope.

The provisions of this code shall apply to the construction, alteration, movement, repair, maintenance, and use of any building, structure, or premises within the wildland-urban interface areas in this jurisdiction.

Section 8. KMC 21.06.090 is amended to read as follows:

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:

(1) 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. Buildings 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 reinspected.

(e) Additions, Alterations, Modifications or Repairs for other than IRC buildings. 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.

(f) Additions, alterations, change of use, repairs, or relocations to IRC buildings. Additions, alterations, repairs, or relocations shall be permitted to conform to the requirements of the provisions of IRC Chapter 45 or shall conform to the requirements for a new structure without requiring the existing structure to comply with the requirements of this code, unless otherwise stated. Additions, alterations, repairs, and relocations shall not cause an existing structure to become less compliant with the provisions of this code than the existing building or structure was prior to the addition, alteration, repair, or relocation. Where additions, alterations, or changes of use to an existing structure result in a use or occupancy, height, or means of egress outside the scope of this code, the building shall comply with the International Existing Building Code.

Section 9. KMC 21.06.120 is amended to read as follows:

21.06.120 Creation of enforcement agency.

The planning and building department ~~shall be responsible for~~ is hereby created for the implementation, administration, and enforcement of the construction codes, ~~under the administrative and operational control of the~~ and the official in charge thereof shall be known as the building official, who shall be designated by the director; provided, the fire

marshal or his or her designee shall be responsible for enforcement of the International Fire Code.

Section 10. KMC 21.06.190 is amended to read as follows:

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. The building official shall have the authority to approve an alternative material, design or method of construction upon application of the owner or the owner's authorized agent. The building official shall first find 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, not less than the equivalent of that prescribed in the technical codes in quality, strength, effectiveness, fire resistance, durability, energy efficiency, and safety. Compliance with the specific performance-based provisions of the construction codes shall be an alternative to the specific requirements of the construction codes. Where the alternative material, design or method of construction is not approved, the building official shall respond in writing, stating the reasons why the alternative was not approved. The building official is authorized to charge an additional fee to evaluate any proposed alternate under the provisions of this section.

Section 11. KMC 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 and their required buffers, or locations subject to the construction requirements of the International Wildland-Urban Interface Code. Permits shall not be required for the following:

(1) Building.

(A) Accessory structures.

(i) One-story detached IRC accessory structures used ~~as tool and storage sheds~~ for tools or storage, one-story tree-supported play structures, children's playhouses and similar uses, but not including vehicle storage or heated or unheated office/studio's and similar uses, provided the floor area does not exceed two hundred square feet, and, except one-story tree-supported play structures, the height does not exceed

twelve feet from the grade plane to the highest point of the roof.

(ii) One-story detached 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 twelve 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 constructed under the provisions of the IRC, which are not more than thirty inches above 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). This exemption shall not apply to structures regulated under Chapter 64.55 RCW.

(H) In-kind reroofing 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- or two-family dwelling or a Group R-3 occupancy 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, safety glazing is provided where required, window fall protection is provided where required, emergency egress requirements are provided and when the window U-values meet the current prescriptive requirements of the 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 twenty feet in height. (An electrical permit may still be required.)

(U) Decking replacement on decks without changing or adding any other structural members or removing guardrails.

(V) Photovoltaic (PV) panels meeting all of the following criteria:

(i) PV system is designed and proposed for a detached one- or two-family dwelling or townhouse not more than three stories above grade or detached accessory structure.

(ii) PV system is being installed by a licensed contractor.

(iii) Mounting system is engineered and designed for PV.

(iv) Rooftop is made from lightweight material such as a single layer of composition shingles, metal roofing, or cedar shingles.

(v) Panels are mounted no higher than eighteen inches above the surface of the roofing to which they are affixed.

Except for flat roofs, no portion of the system may exceed the highest point of the roof (or ridge).

(vi) Total dead load of panels, supports, mountings, raceways, and all other appurtenances weigh no more than three and one-half pounds per square foot.

(vii) Supports for solar panels are installed to spread the dead load across as many roof-framing members as needed to ensure that at no point loads in excess of fifty pounds are created.

(viii) The installation will comply with the manufacturer's instructions.

(ix) Roof and wall penetrations will be flashed and sealed to prevent entry of water, rodents, and insects.

(x) Home is code compliant to setbacks and height, or code allows expansion of nonconformity for solar panels.

(xi) System complies with International Residential Code Chapter 23 for solar thermal energy systems.

(xii) Roof-mounted collectors and supporting structure are constructed of noncombustible materials or fire-retardant-treated wood equivalent to that required for the roof construction.

(xiii) Roof access points and pathways for firefighters will be provided per IFC 605.11.

(xiv) The PV system has an approved and issued electrical permit.

(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) 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;

(J) 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;

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

(L) Travel trailers;

(M) Like-in-kind replacement of one or more of the following: contactor, relay, timer, starter, circuit board, panel(s) 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 12. KMC 21.06.245 is amended to read as follows:

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:

(1) 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

(2) 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.

(3) At the sole discretion of the building official provided that there have not been newly adopted codes, fees, ordinances, or laws that affect the application.

Section 13. KMC 21.06.248 is amended to read as follows:

21.06.248 Vesting of construction codes.

The construction codes and construction administrative code that are in effect when the building permit application is deemed complete by the building official shall apply. The city has the authority to establish policies and procedures for establishing the requirements of a complete application. For mechanical, electrical or plumbing permit applications submitted after the ordinance codified in this title has taken effect, but related to the scope of work identified in a building permit application that was complete prior to the effective date of the ordinance codified in this chapter, all applicable construction codes adopted and in force at the time of filing of the complete building permit application will apply. An expired permit may lose its code vesting under Section 21.06.250 of this code.

Section 14. KMC 21.06.255 is amended to read as follows:

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. Within two years of the issuance of the permit for an IRC structure, the outside must be complete including roofing, siding, windows, exterior doors and applicable site and right-of-way improvements. The two years to complete the IRC structure may not be extended.

(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. LSM permits supporting approved subdivisions, short subdivisions or binding site plans shall expire upon the expiration of the preliminary subdivision, preliminary short subdivision or binding site plan; however, an LSM permit for a recorded subdivision, short subdivision or binding site plan shall not expire until the LSM permit is finaled.

(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 ~~approved to current code and~~ issued for an IRC structure to complete the work covered by a previous, expired permit shall expire in:

(1) ~~One year~~ Six months if the ~~framing~~ insulation inspection was not approved on the previous building permit~~; or~~. The project will lose its original code vesting and will be vested to the codes that are in force at the time the new building permit application is deemed complete. The fees for the new building permit will be based on the valuation of the work remaining to complete the project; or

(2) Six months if the ~~framing~~ insulation inspection was approved on the previous building permit and the exterior of the structure is not completed ~~per subsection (e)(3) of this section; or~~ including: roofing, siding, windows, exterior doors, and applicable site and right-of-way improvements. The project will retain its original code vesting. The fees for the new building permit will be based on the valuation of the work remaining to complete the project; or

(3) Two years if the insulation inspection was approved and the outside of the structure is complete including roofing, siding, windows, exterior doors and applicable site and right-of-way improvements. The project will retain its original code vesting. The fees for the new building permit will be based on the valuation of the work remaining to complete the project.

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.

(f) During or after a declared emergency covered under Chapter 38.52 RCW, the building official may authorize a six-month extension to an unexpired permit if the building official finds that the state of emergency resulted in a stoppage of work or substantial construction delays.

(g) The provisions of this Section 21.06.255 go into effect immediately upon passage by the City Council and retroactively apply to all permits regulated by this Section.

Section 15. KMC 21.06.275 is amended to read as follows:

21.06.275 Information on construction documents.

Construction documents shall be dimensioned and submitted electronically through the city's permitting portal. ~~Construction documents printed on suitable material 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~~ barrier 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 that 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. Building enclosure design documents of new or rehabilitated multifamily buildings that are subject to regulations of Chapter 64.55 RCW 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 RCW 64.55.005 through 64.55.090." 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 where the application for permit is for alteration or repair or where otherwise warranted.

(F) Structural Information. For structures designed to the IBC, the construction documents shall provide the information specified in Section 1603. For structures designed to the IRC, buildings and structures utilizing braced wall design, and where required by the building official, braced wall lines shall be identified on the construction documents. Pertinent information including, but not limited to, bracing methods, location and length of braced wall panels and foundation requirements of braced wall panels at top and bottom shall be provided.

(G) Information for structures located in wildland-urban interface areas. In addition to the above requirements, site plans shall include topography, width, and percent of grade of access roads, landscape and vegetation details, locations of structures or building envelopes, existing or proposed overhead utilities, occupancy classification of buildings, types of ignition-resistant construction of buildings, structures, and their appendages, roof classification of buildings, and site water supply systems. The code official is authorized to waive or modify the requirement for

a site plan where the application for permit is for alteration or repair or where 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 392-344, 246-320, 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.

Exception: Subject to the approval of the building official, electrical plan review is not required for the occupancies and/or installations listed below when the scope of work is for conduit(s)

only and electrical plans for the project have been submitted for review.

(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;

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 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) 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.

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

(iv) All commercial generator installations or alterations.

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

(vi) If fifty percent or more of luminaires change in a space enclosed by walls or ceiling-height partitions.

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

(viii) Wind-driven generators.

(ix) Solar photovoltaic systems.

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

(xi) Temporary electrical services exceeding four hundred amps.

(3) Plumbing. Plans must be submitted for review and approval whenever the work exceeds the thresholds shown on the MyBuildingPermit.com tipsheet.

(4) Mechanical. Plans must be submitted for review and approval whenever the work exceeds the thresholds shown on the MyBuildingPermit.com tipsheet.

(5) Relocatable Buildings. Construction documents for relocatable buildings shall comply with Section IBC 3113.

(6) Storm Shelters. Construction documents for storm shelters shall include the information required in ICC 500.

Section 16. A new section shall be added to chapter 21.06 KMC, to be codified as KMC 21.06.487, to read as follows:

21.06.487 Types IV-A, IV-B and IV- C connection protection inspection.

In buildings of Types IV-A, IV-B and IV- C construction, where connection fire resistance ratings are provided by wood cover calculated to meet the requirements of Section 2304.10.1, inspection of wood cover shall be made after the cover is installed, but before any other coverings or finishes are installed.

Section 17. KMC 21.06.490 is amended to read as follows:

21.06.490 Energy ~~efficiency~~ Code inspection.

~~(a) Envelope.~~ In addition to the inspections required in ~~Chapter 51-11 WAC~~ WAC Chapters 51-11C and 51-11R, 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.~~

(a) Footing and foundation insulation. Inspections shall verify footing and/or foundation insulation R-value, location, thickness, depth of burial and protection of insulation as required by the code, approved plans and specifications.

(b) Thermal envelope. Inspections shall be made before application of interior finish and shall verify that envelope components with the correct type of insulation, the R-values, the correct location of insulation, the correct fenestration, the U-factor, SHGC, VT, and air leakage controls are properly installed as required by the code, approved plans and specifications, including envelope components in future tenant spaces of multitenant buildings.

(c) Plumbing system. Inspections shall verify the type of insulation, the R-values, the protection required, controls, and heat traps as required by the code, approved plans and specifications.

(d) Mechanical system. Inspections shall verify the installed HVAC equipment for the correct type and size, controls, duct and piping insulation R-values, duct system and damper air leakage, minimum fan efficiency, energy recovery and economizer as required by the code, approved plans and specifications.

(e) Electrical system. Inspections shall verify lighting system controls, components, meters, motors and installation of an electric meter for each dwelling unit as required by the code, approved plans and specifications.

Section 18. KMC 21.06.535 is amended to read as follows:

21.06.535 Use and change of occupancy.

A building or structure shall not be used or occupied, and a change in the existing use or occupancy classification of a building or structure or portion thereof shall not 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. Certificates presuming to give authority to violate or cancel the provisions of this code or other ordinances of the jurisdiction shall not be valid.

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.

Section 19. A new section shall be added to chapter 21.06 KMC, to be codified as KMC 21.06.537, to read as follows:

21.06.537 Change in use.

Changes in the character or use of an existing structure shall not be made except as specified in Section 506 and 507 of the International Existing Building Code.

Section 20. KMC 21.06.540 is amended to read as follows:

21.06.540 Certificate issued.

After the building official inspects the building or structure and does not find violations of the provisions of this chapter or other laws that are enforced by the planning and 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 or the owner's authorized agent.

(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~~ Where 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.

Section 21. KMC 21.06.555 is amended to read as follows:

21.06.555 Connection of service utilities.

A person shall not make connections from a utility, source of energy, fuel or power, or a water system or sewer system 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.

Section 22. KMC 21.06.565 is amended to read as follows:

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 where such utility connection has been made without the required approval. The building official shall notify the serving utility, and wherever possible the owner or the owner's authorized agent 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 the owner's authorized agent or occupant of the building, structure or service system shall be notified in writing, as soon as practical thereafter.

Section 23. KMC 21.06.610 is amended to read as follows:

21.06.610 Authority.

Whenever the building official finds any work being performed in either a dangerous or unsafe manner or in a manner contrary ~~either~~ 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.

Section 24. KMC 21.06.615 is amended to read as follows:

21.06.615 Issuance.

The stop work order shall be in writing and shall be given to the owner of the property involved, the owner's authorized agent or to the person performing 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~~ is authorized to resume.

Section 25. KMC 21.06.625 is amended to read as follows:

21.06.625 ~~Unlawful continuance~~ Failure to comply.

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.

Section 26. KMC 21.08.010 is amended to read as follows:

21.08.010 International Building Code adopted.

The ~~2018~~ 2021 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. The Construction Administrative Code, as set forth in Chapter 21.06, shall be used in place of IBC Chapter 1, Administration.

Section 27. KMC 21.08.016 is amended to read as follows:

21.08.016 IBC Section 202 amended.

Section 202 of the IBC is amended to read:

~~**High-rise Building.** Buildings having occupied floors or occupied roof located more than 75 feet (22,860 mm) above the lowest level of fire department vehicle access.~~

[F] STANDBY POWER SYSTEM. All references to Standby Power Systems shall be considered to indicate Legally Required Power in accordance with the Washington Cities Electrical, and NFPA 70 (National Electrical Code), and shall be in accordance with Chapter 27 Legally Required Standby Power, as a source of automatic electric power of a required capacity and duration to operate requiring building, hazardous material or ventilation systems in the event of a failure of the primary power. Standby Power Systems are required for electrical loads where interruption of the primary power could create hazards or hamper rescue or fire-fighting operations.

Section 28. KMC 21.08.072 is amended to read as follows:

21.08.072 IBC Chapter 27 amended.

User note:

About this chapter: Electrical systems and components are integral to most structures; therefore it is necessary for the code to address their installation and protection. Structures depend on electricity for the operation of many life safety systems including fire alarm, smoke control and exhaust, fire suppression, fire command and communication systems. Since power supply to these systems is essential, Chapter 27 addresses where standby and emergency power must be provided.

Chapter 27 of the IBC is amended to read as follows:

2701.1 Scope.

The provisions of this chapter and the Washington Cities Electrical Code shall govern the design, construction, erection and installation of the electrical components, appliances, equipment and systems used in buildings and structures covered by this code. The International Fire Code, International Building Code, and the Washington Cities Electrical Code shall govern the use and maintenance of electrical components, appliances, equipment and systems. The International Existing Building Code and the Washington Cities Electrical Code shall govern the alteration, repair, relocation, replacement and addition of electrical components, appliances, or equipment and systems.

SECTION 2702

EMERGENCY AND LEGALLY REQUIRED STANDBY POWER SYSTEMS

[F] 2702.1 General.

Emergency power systems and legally required standby power systems shall comply with Sections 2702.1.1 through 2702.1.7 and Table 2702.

[F] 2702.1.1 Stationary generators.

Stationary emergency and legally required standby power generators required by this code shall be listed in accordance with UL 2200.

[F] 2702.1.2 Fuel-line piping protection.

Fuel lines supplying a generator set inside a high-rise building shall be separated from areas of the building other than the room the generator is located in by ~~an~~ approved methods~~:, or an assembly that has a fire-resistance rating of not less than 2 hours. Where the building is protected throughout with an automatic sprinkler system installed in accordance with Section 903.3.1.1, the required fire-resistance rating shall be reduced to 1 hour.~~

1. A fire-resistant pipe-protection system that has been tested in accordance with UL 1489. The system shall be installed as tested and in accordance with the manufacturer's installation instructions and shall have a rating of not less than 2 hours. Where the building is protected throughout with an automatic sprinkler system installed in accordance with Section 903.3.1.1, the required rating shall be reduced to 1 hour.
2. An assembly that has a fire-resistance rating of not less than 2 hours. Where the building is protected throughout with an automatic sprinkler system installed in accordance

with Section 903.3.1.1, the required fire-resistance rating shall be reduced to 1 hour.

3. Other approved methods.

[F] 2702.1.3 Installation.

Emergency power systems and legally required standby power systems required by this code or the International Fire Code, systems required by this code or the International Fire Code shall be installed in accordance with the International Fire Code, Washington Cities Electrical Code, NFPA 110 and NFPA 111.

[F] 2702.1.4 Load transfer.

Emergency power systems shall automatically provide secondary power within 10 seconds after primary power is lost, unless specified otherwise in this code. Legally required standby power systems shall automatically provide secondary power within 60 seconds after primary power is lost, unless specified otherwise in this code. Transfer to full emergency or legally required standby power shall take place within the maximum time to energize loads specified in Table 2702.

[F] 2702.1.5 Load duration.

Emergency power systems and legally required standby power systems shall be designed to provide the required power for a minimum duration of 8 hours for fire pumps serving high rise buildings in accordance with NFPA 20, and 2 hours for other systems without being refueled or recharged, unless specified otherwise in this code.

Exception: The minimum duration of all required power loads may be reduced to 2 hours for all systems except for fire pumps that require a minimum duration of 8 hours in accordance with NFPA 20.

[F] 2702.1.6 Uninterruptable power source.

An uninterrupted source of power shall be provided for equipment when required by the manufacturer's instructions, the listing, this code or applicable referenced standards.

[F] 2702.1.7 Interchangeability.

Emergency power systems shall be an acceptable alternative for installations that require legally required standby power systems.

[F] 2702.1.8 Group I-2 occupancies.

In Group I-2 occupancies, occupancies located in flood hazard areas established in 1612.3, where new essential electrical

systems are installed, and where new essential electrical system generators are installed, the systems and generators shall be located and installed in accordance with ASCE 24. Where connections for hookup of temporary generators are provided, the connections shall be located at or above the elevation required in ASCE 24.

[F] 2702.1.9 Equipment room.

If a legally required standby or emergency power system includes a generator set inside or serving a building, the generator set shall be located in a separate room enclosed with 2-hour fire barriers constructed in accordance with Section 707 or horizontal assemblies constructed in accordance with Section 711, or both, to separate it from the remainder of the building, the transfer switches, and from the normal power source including transformers and distribution equipment. The transfer switches shall also be located in a separate room enclosed with 2-hour fire barriers constructed in accordance with Section 707 or horizontal assemblies constructed in accordance with Section 711, or both, to separate it from the remainder of the building. Power distribution from the emergency source to the emergency transfer switch shall be by an independent route from the normal power source. Independent routes shall mean either a physical separation distance of not less than 50 feet, or a minimum of 1-hour fire-resistance rated separation. System supervision with manual start and transfer features shall be provided at the fire command center or an approved location when a fire command center is not required. Such equipment rooms shall be ventilated directly to the exterior for generator combustion air and radiator cooling air. Any ducts required for such ventilation shall not be dampered and shall be fire-resistance rated to the same level of protection as that required for the equipment room. The requirements of this subsection shall not apply to optional tenant-owned or landlord-owned generator sets.

Exception: Transfer switches shall be permitted to be in the same room as the legally required standby or emergency power system generator sets when inside or serving other than: 1) a high-rise building in accordance with Section 403; 2) an underground building in accordance with Section 405; and 3) a hospital in accordance with Section 407.

[F] 2702.1.10 Smoke control power systems.

Smoke control equipment and systems requiring legally required standby or emergency power shall be supplied with two sources of power. Primary power shall be from the normal building power system. Legally required standby power or emergency power shall be from an approved source complying with the Washington Cities Electrical Code. The legally required

standby power or emergency power source and its transfer switches shall be in separate rooms from the normal power transformers and switchgears and ventilated directly to and from the exterior. The room shall be completely enclosed in not less than 1-hour fire barriers constructed in accordance with Section 707, or 1-hour horizontal assemblies constructed in accordance with Section 711, or both, except 2-hour fire-resistance construction shall be required for high-rise and underground buildings per Sections 403 and 405 respectively. Power distribution from the two sources shall be by independent routes to the room containing the automatic transfer switch(s). Independent routes shall mean a physical distance of 50 feet or a minimum 1-hour fire-resistance rated separation. Transfer to full emergency power shall be automatic and shall take place within the maximum time to energize loads. The systems shall comply with the Washington Cities Electrical Code.

Exception: Ventilation is not required for rooms containing only transfer switches.

[F] 2702.1.11 Fuel-fired generator sets and fuel storage location.

Fuel fired generator sets and associated fuel storage, including optional landlord-owned or tenant-owned generator sets, located more than 75 feet above the lowest level of Fire Department vehicle access, or located at a floor level more than 30 feet below the lowest level of exit discharge, require the approval of the fire code official.

[F] 2702.2 Where required.

Emergency and legally required standby power systems shall be provided where required by Sections 2702.2.1 through 2702.2.18 and other sections of this code.

[F] 2702.2.1 Ambulatory care facilities.

Essential electrical systems for ambulatory care facilities shall comply with Section 422.6.

[F] 2702.2.2 Elevators and platform lifts.

Legally required standby power shall be provided for elevators and platform lifts used as accessible means of egress as required in Sections 1009.4.1, 1009.5. Emergency power shall be provided for elevators in high-rise buildings as required by Table 2702.

[F] 2702.2.3 Emergency responder radio coverage systems.

Legally Required standby power shall be provided for in-building 2-way emergency responder ~~radio~~ communication coverage systems required in Section 918 and the International Fire Code. The standby power supply shall be capable of operating the in-building 2-way emergency responder ~~radio~~ communication coverage system for a duration of not less than 12 hours at 100-percent system operation capacity.

[F] 2702.2.4 Emergency voice/alarm communication systems.

Emergency power shall be provided for emergency voice/alarm communication systems as required in Section 907.5.2.2.5. The system shall be capable of powering the required load for a duration of not less than 24 hours, as required in NFPA 72.

[F] 2702.2.5 Exhaust systems.

Legally required standby power shall be provided for common exhaust systems for domestic kitchens located in multistory structures as required in Section 505.5 of the International Mechanical Code. Legally required standby power shall be provided for common exhaust systems for clothes dryers located in multistory structures as required in Section 504.1~~0~~1 of the International Mechanical Code and Section 614.1~~0~~1 of the International Fuel Gas Code.

[F] 2702.2.6 Exit signs.

Emergency power shall be provided for exit signs as required in Section 1013.6.3. The system shall be capable of powering the required load for a duration of not less than 90 minutes.

[F] 2702.2.7 Gas detection system.

Emergency or legally required standby power shall be provided for gas detection systems in accordance with the International Fire Code.

[F] 2702.2.8 Group I-2 occupancies.

Essential electrical systems for Group I-2 occupancies shall be in accordance with Section 407.11.

[F] 2702.2.9 Group I-3 occupancies.

Emergency power shall be provided for power-operated doors and locks in Group I-3 occupancies as required in Section 408.4.2.

[F] 2702.2.10 Hazardous materials.

Emergency or legally required standby power shall be provided in occupancies with hazardous materials where required by the International Fire Code.

[F] 2702.2.11 High-rise buildings.

Emergency and legally required standby power shall be provided in high-rise buildings as required in Table 2702.

[F] 2702.2.12 Hydrogen fuel gas rooms.

Standby power shall be provided for hydrogen fuel gas rooms as required by the International Fire Code.

[F] 2702.2.123 Laboratory suites.

Legally required standby or emergency power shall be provided in accordance with Section 5004.7 of the International Fire Code where laboratory suites are located above the sixth story above grade plane or located in a story below grade plane.

[F] 2702.2.134 Means of egress illumination.

Emergency power shall be provided for means of egress illumination as required in Section 1008.3. The system shall be capable of powering the required load for a duration of not less than 90 minutes.

[F] 2702.2.145 Membrane structures.

Legally required standby power shall be provided for auxiliary inflation systems in permanent membrane structures as required in Section 3102.8.2. Legally required standby power shall be provided for a duration of not less than 4 hours. Auxiliary inflation systems in temporary air-supported and air-inflated membrane structures shall be provided in accordance with Section 3103.10.4 of the International Fire Code.

[F] 2702.2.156 Semiconductor fabrication facilities.

Emergency power shall be provided for semiconductor fabrication facilities as required in Section 415.11.10.

[F] 2702.2.167 Smoke control systems.

Emergency power shall be provided for smoke control systems as required in Sections 404.7, 909.11, 909.20.6.2 and 909.21.5. Legally required standby power systems shall be provided for pressurization systems in low-rise buildings in accordance with Washington State Building Code Section 504.4.1 and International Building Code Sections 909.20.6 and 909.21.5.

[F] 2702.2.178 Special purpose horizontal sliding, accordion or folding doors.

Legally required standby power shall be provided for special purpose horizontal sliding, accordion or folding doors as required in Section 1010.1.4.3. The standby power supply shall have a capacity to operate not fewer than 50 closing cycles of the door.

[F] 2702.2.189 Underground buildings.

Emergency and legally required power shall be provided in underground buildings as required in Section 405.

[F] 2702.3 Critical circuits.

Critical circuits. Required critical circuits shall be protected using one of the following methods:

1. Cables, used for survivability of required critical circuits, that are listed in accordance with UL 2196 and have a fire-resistance rating of not less than 1 hour.

2. Electrical circuit protective systems having a fire-resistance rating of not less than 1 hour. Electrical circuit protective systems are installed in accordance with their listing requirements.

3. Construction having a fire-resistance rating of not less than 1 hour.

[F] 2702.4 Maintenance.

Emergency and legally required standby power systems shall be maintained and tested in accordance with the International Fire Code.

TABLE 2702

LEGALLY REQUIRED STANDBY AND EMERGENCY POWER

Type of Equipment	Maximum Time to Energize Loads	Maximum Run Time (Duration)	IBC Section	IFC or NFPA Section
Emergency Power Systems[1]				
Exit illumination	10 seconds	2 hours	1013.6.3	604.2.9 High rises 604.2.16 Underground buildings 1013.6.3 Exit signs 3.4.2.13 Temporary tents, canopies, membrane structures NFPA 70

Type of Equipment	Maximum Time to Energize Loads	Maximum Run Time (Duration)	IBC Section	IFC or NFPA Section
Exit illumination	10 seconds	2 hours	1008.3	1008.3 604.2.9 High rises
				604.2.16 Underground buildings
Any emergency voice/alarm communication including area of refuge communication systems (barrier-free and horizontal exits)	Per NFPA 72	24 hours (battery) 4 hours (generator)	402.7.3, 402.7.4, and 907.5.2.2 Covered mall buildings 403.4.8 and 907.5.2.2 High rises 405.8, and 907.5.2.2 Underground buildings 907.2.1, and 907.5.2.2 Assembly occupancies	907.2.19 Covered mall buildings 604.2.9 High rises 604.2.16 Underground buildings 907.2.1.1 Assembly occupancies 907.2.11 Special amusement building NFPA 72
Fire detection and fire alarms	Per NFPA 72	24 hours (battery) 4 hours (generator)	403.4.8 High rises 405.8 Underground buildings 909.20.6.2 Smokeproof enclosures 907	604.2.9 High rises 604.2.16 Underground buildings 907.6.2 907.2.11 Special amusement building NFPA 72
Smoke control systems in high-rise buildings, underground buildings and covered mall buildings including energy management systems if used for smoke control or smoke removal	60 seconds	2 hours	403.4.8 High rises	909.11
			404.7 Atriums 405.8 Underground buildings 909.11 Smoke control	Emergency power
Fire pumps in high-rise buildings and underground buildings	10 seconds	8 hours (NFPA 20)	403.4.8 High rises 405.8 Underground buildings	604.2.9 High rises and NFPA 20 604.2.16 Underground buildings 913.2 All Fire Pumps
Smokeproof enclosures and elevator shaft pressurization	60 seconds for pressurization	4 hours	403.4.8 High rises 909 and 909.20.6.2	
Any shaft exhaust fans required to run continuously in lieu of	60 seconds	4 hours	717.5.3	

Type of Equipment	Maximum Time to Energize Loads	Maximum Run Time (Duration)	IBC Section	IFC or NFPA Section
dampers in high-rise and underground buildings.				
Fire service or occupant evacuation elevator car operation in high-rise and underground buildings (including control system, motor controller, operation control, signal equipment, machine room cooling-heating, etc.)			3003, 3007, and 3008	604.2.16 Underground buildings
Elevator car lighting and communications in high-rise and underground buildings	10 seconds	4 hours	3003, 3007, and 3008	604.2.9 High rises 304.2.16 Underground Buildings 604.2.1 Elevators
Lights, heating and cooling for building fire command center and mechanical equipment rooms serving the fire command center	60 seconds	24 hours		604.2.9 High rises
Power (other than lights, heating and cooling) for building fire command center	60 seconds	4 hours		
Mechanical and electrical systems required by IFC 27 (hazardous materials including UPS rooms)	60 seconds	4 hours		Chapter 27
Legally Required Standby[1]				
Exhaust fans for any loading dock located interior to a building	60 seconds	4 hours		
Transfer vault ventilation equipment	60 seconds	4 hours		
Heat tape for sprinkler lines and heating in sprinkler riser rooms	60 seconds	24 hours		
Fuel pump system for any legally required system	60 seconds	4 hours		
Elevators ~~in high-rise or underground buildings~~ used for accessible means of egress <u>in other than high-rise and underground buildings)</u>	60 seconds	2 hours		
<u>Elevators (other than fire service or occupant evacuation elevators) in high-rise and underground</u>	<u>60 seconds</u>	<u>60 seconds</u>		

Type of Equipment	Maximum Time to Energize Loads	Maximum Run Time (Duration)	IBC Section	IFC or NFPA Section
buildings				
Any shaft exhaust fans required to run continuously in lieu of dampers (in other than high-rise and underground buildings)	60 seconds	4 hours	717.5.3	
Auxiliary inflation systems	60 seconds	2 hours	3102.8.2	3103.10.4
Special purpose horizontal sliding, accordion or folding doors	60 seconds	2 hours	1010.1.4.3	1010.1.4.3
Hydrogen fuel gas rooms	60 seconds	2 hours	2702.2.12	5808.7 & 1203
Firefighter air replenishment systems (FARS)	60 seconds	2 hours	919.7.2	919.7.2

TABLE 2702 FOOTNOTE

(1) The fuel pump and associated systems for the emergency or legally required generator shall be provided with power from the generator to maintain fuel supply.

Section 29. KMC 21.08.075 is amended to read as follows:

21.08.075 IBC Chapter 31 amended.

Chapter 31 of the IBC is amended and supplemented with the addition of a new Section 3115~~5~~6 to read as follows:

Section 3115~~5~~6 OVERWATER STRUCTURES, PIERS, WHARVES, AND BUILDINGS

IBC 3115~~5~~6.1—General. Overwater structures, piers, wharves and buildings shall comply with the requirements of this section and other applicable sections of this code.

IBC 3115~~5~~6.2—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 3115~~6~~.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 3115~~6~~.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.

Section 30. KMC 21.10.010 is amended to read as follows:

21.10.010 International Residential Code adopted.

The ~~2018~~ 2021 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 the following amendments. The Construction Administrative Code, as set forth in Chapter 21.06, shall be used in place of IRC Chapter 1, Administration.

Section 31. KMC 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:

TABLE R301.2(1)

CLIMATIC AND GEOGRAPHIC DESIGN CRITERIA

ROOF SNOW LOAD[a] (psf)	WIND DESIGN				SEISMIC DESIGN CATEGORY	SUBJECT TO DAMAGE FROM			OUTDOOR DESIGN TEMP (F) - Heat/ Cool	ICE BARRIER UNDERLAYMENT REQUIRED	FLOOD HAZARD[e]	AIR FREEZING INDEX	MEAN ANNUAL TEMP
	Speed[b] (mph)	Topographic effects[c]	Special wind region	Windborne debris zone		Weathering[d]	Frost line depth	Termite					
25	110	Yes	No	No	D2	Moderate	12"	Slight to Moderate	83/17	No	N.A.	113	53

MANUAL J DESIGN CRITERIA							
Elevation	Latitude	Winter heating	Summer cooling	Altitude correction factor	Indoor design temperature	Design temperature cooling	Heating temperature difference
154 feet	47°39'26''	72°F max	75°F min	0.99	72°F	75°F	45°F
Cooling temperature difference	Wind velocity heating	Wind velocity cooling	Coincident wet bulb	Daily range	Winter humidity	Summer humidity	
8°F	N.A.	N.A.	66	Medium	75%	68%	

a. This is the minimum roof snow load. When using this 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 Topographic effects (Wind Speed-up Kzt factor) shall be determined on a site-specific basis by the Engineer of Record (components and cladding need not consider topographic effects unless otherwise determined by the engineer of record).

c. 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.

d. The City of Kirkland participates in the National Flood Insurance Program (NFIP); Regular Program (No Special Flood Hazard Area).

TABLE R301.2

CLIMATIC AND GEOGRAPHIC DESIGN CRITERIA

GROUND SNOW LOAD[a] (psf)	WIND DESIGN				SEISMIC DESIGN CATEGORY	SUBJECT TO DAMAGE FROM			ICE BARRIER UNDERLAYMENT REQUIRED	FLOOD HAZARD[e]	AIR FREEZING INDEX	MEAN ANNUAL TEMP
	Speed[b] (mph)	Topographic effects[c]	Special wind region	Windborne debris zone		Weathering[d]	Frost line depth	Termite				
25	98	Yes	No	No	D2	Moderate	12"	Slight to Moderate	No	NA	113	53 °F

MANUAL J DESIGN CRITERIA

Elevation	Altitude correction factor	Coincident wet bulb	Indoor winter design dry-bulb temperature	Indoor winter design dry-bulb temperature	Outdoor winter design dry-bulb temperature	Heating temperature difference
338 feet	0.99	66 °F	72 °F	72 °F	24 °F	48 °F
Latitude	**Daily Range**	**Indoor summer design relative humidity**	**Summer design gains 50% RH**	**Indoor summer design dry-bulb temperature**	**Outdoor summer design dry-bulb temperature**	**Cooling temperature difference**
47°39'26"	M	50%	5	75 °F	83 °F	8 °F

a. This is the minimum roof snow load. When using this 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. The basic wind speed is determined from the basic wind speed map in Figure R301.2(2). Wind exposure category shall be determined on a site-specific basis in accordance with Section R301.2.1.4.

c. Topographic effects (Wind Speed-up Kzt factor) shall be determined on a site-specific basis in accordance with Section R301.2.1.5.

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 C34, C55, C62, C73, C90, C129, C145, C216 or C652.

Section 32. KMC 21.10.025 is hereby repealed.

Section 33. KMC 21.16.010 is amended to read as follows:

21.16.010 International Mechanical Code adopted.

The ~~2018~~ 2021Edition 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. The Construction Administrative Code, as set forth in Chapter 21.06, shall be used in place of IMC Chapter 1, Administration. References in this code to Group R shall include Group I-1, Condition 2 assisted living facilities licensed by Washington State under Chapter 388-78A WAC and Group I-1, Condition 2 residential treatment facilities licensed by Washington State under Chapter 246-337 WAC.

Section 34. KMC 21.24.010 is amended to read as follows:

21.24.010 Uniform Plumbing Code adopted.

The ~~2018~~ 2021 Edition of the Uniform Plumbing Code, as adopted and amended 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, is adopted by reference with the following additions, deletions, and exceptions. Provided that ~~excluding~~ Chapter 1, "Administration," of the Uniform Plumbing Code is not adopted. Provided, that Chapters 12 and 14 of the Uniform Plumbing Code are not adopted. Provided, that those requirements of the Uniform Plumbing Code relating to venting and combustion air of fuel-fired appliances as found in Chapter 5 and those portions of the code addressing building sewers are not adopted. ~~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."~~ The following appendices of the 2021 Edition of the Uniform Plumbing Code as adopted and amended by the State Building Code Council, as published by the International Association of Plumbing and Mechanical Officials, are also adopted by reference: Appendix A — Recommended Rules for Sizing the Water Supply System; Appendix B — Explanatory Notes on Combination Waste and Vent Systems; Appendix C — Alternate Plumbing Systems, excluding Sections C303.3, C304.0 through C601.9; Appendix I — Installation Standards.

Conflicts. Where a conflict exists between the provisions of Appendix I and the manufacturer's installation instructions, the conditions of the listing and the manufacturer's installation instructions shall apply.

Section 35. KMC 21.28.010 is amended to read as follows:

21.28.010 National Fuel Gas Code (NFPA 54) adopted.

The ~~2018~~ 2021 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 36. KMC 21.32.010 is amended to read as follows:

21.32.010 Liquefied Petroleum Gas Code (NFPA 58) adopted.

The ~~2017~~ 2020 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 37. KMC 21.34.015 is amended to read as follows:

21.34.015 Duty to establish.

It shall be the duty of the owner, or designated agent, of any ~~commercial~~ property to designate and maintain at all times any required fire lanes appurtenant to structures. Designation and maintenance shall include the installation and maintenance of signs, curb, and pavement markings identifying the fire lane as required by the fire code official. The signs, curb, and pavement markings shall be in a format approved by the fire department.

(1) Designated fire lanes serving single-family residences shall be maintained at all times.

(2) Any duties imposed upon "owner" within this chapter shall be imposed upon each owner, in reference to single-family residences serviced by a designated fire lane. Likewise, any charge or lien authorized against an owner in this chapter shall be authorized against each such owner on an apportioned basis.

Section 38. KMC 21.36.010 is amended to read as follows:

21.36.010 International Fuel Gas Code adopted.

The ~~2018~~ 2021 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 39. KMC 21.37.010 is amended to read as follows:

21.37.010 Washington State Energy Code adopted.

The 2021 Washington State Energy Code (WSEC), as adopted by the State Building Code Council in Chapters 51-11C and 51-11R WAC, and hereafter amended, is adopted. The Construction Administrative Code, as set forth in Chapter 21.06, shall be used for the administration of the Washington State Energy Code.

~~(1) Sections R107, Fees; R108, Stop work order; R109, Board of appeals; R110, Violations; and R111, Liability, are not adopted.~~

~~(2) Sections C104, C106, C107, Fees; C108, Stop work order; C109, Board of appeals; C110, Violations; and C111, Liability, are not adopted.~~

Section 40. KMC 21.37.020 is amended to read as follows:

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 International Energy Conservation Code.~~ The codes, appendices, and standards set forth in this chapter shall be filed with the city clerk and a copy made available for use and examination by the public.

Section 41. KMC 21.41.102 is amended to read as follows:

21.41.102 Applicability.

(a) General. Where there is a conflict between a general requirement and a specific requirement, the specific requirement shall govern. Where differences occur between provisions of this code and the referenced standards, the provisions of this code shall apply. Where, in a specific case, different sections of this code specify different requirements, the most restrictive shall govern.

(b) Maintenance. Equipment, systems, devices and safeguards required by this code or a previous regulation or code under which the structure or premises was constructed, altered or repaired shall be maintained in good working order. No owner, owner's authorized agent, operator or occupant shall cause any service, facility, equipment or utility that is required under this section to be removed from, shut off from or discontinued for any occupied dwelling, except for such temporary interruption as necessary while repairs or alterations are in progress. The requirements of this code are not intended to provide the basis for removal or abrogation of fire protection and safety systems and devices in existing structures. Except as otherwise specified herein, the owner or the owner's authorized agent shall be responsible for the maintenance of buildings, structures and premises.

(c) Application of Other Codes. Repairs, additions or alterations to a structure, or changes of occupancy, shall be done in accordance with the procedures and provisions of the Kirkland Municipal Code and the Kirkland Zoning Code.

(d) Existing Remedies. The provisions in this code shall not be construed to abolish or impair existing remedies of the jurisdiction or its officers or agencies relating to the removal or demolition of any structure that is dangerous, unsafe and insanitary.

(e) Workmanship. Repairs, maintenance work, alterations or installations that are caused directly or indirectly by the enforcement of this code shall be executed and installed in a workmanlike manner and installed in accordance with the manufacturer's installation instructions.

(f) Historic Buildings. The provisions of this code shall not be mandatory for existing buildings or structures designated as historic buildings, as

defined in the International Existing Building Code, where such buildings or structures are judged by the code official to be safe and in the public interest of health, safety and welfare.

(g) Referenced Codes and Standards. The codes and standards referenced in this code shall be those that are listed in Article VIII of this chapter and amended by the State and the City and considered part of the requirements of this code to the prescribed extent of each such reference. Where differences occur between provisions of this code and the referenced standards, the provisions of this code shall apply.

Exception: Where enforcement of a code provision would violate the conditions of the listing of the equipment or appliance, the conditions of the listing shall apply.

(h) Requirements Not Covered by Code. Requirements necessary for the strength, stability or proper operation of an existing fixture, structure or equipment, or for the public safety, health and general welfare, not specifically covered by this code, shall be determined by the code official.

(i) 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 code.

(j) Other Laws. The provisions of this code shall not be deemed to nullify any provisions of local, state or federal law.

Section 42. KMC 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 not less than 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 barrier shall not allow 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 43. KMC 21.41.402 is amended to read as follows:

21.41.402 Light.

(a) Habitable Spaces. Every habitable space shall have not less than one window of approved size facing directly to the outdoors or to a court. The minimum total glazed area for every habitable space shall be eight percent of the floor area of such room. Wherever walls or other portions of a structure face a window of any room and such obstructions are located less than three feet (nine hundred fourteen millimeters) from the window and extend to a level above that of the ceiling of the room, such window shall not be deemed to face directly to the outdoors nor to a court and shall not be included as contributing to the required minimum total window area for the room.

Exceptions

(1) Where natural light for rooms or spaces without exterior glazing areas is provided through an adjoining room, the unobstructed opening to the adjoining room shall be not less than eight percent of the floor area of the interior room or space, but not less than twenty-five square feet (2.33 square meters). The exterior glazing area shall be based on the total floor area being served.

(2) The glazed areas need not be installed in rooms where artificial light is provided capable of producing an average illumination of 6 footcandles (65 lux) over the area of the room at a height of 30 inches above the floor level.

(b) Common Halls and Stairways. Every common hall and stairway in residential occupancies, other than in one- and two-family dwellings, shall be lighted at all times with not less than a sixty-watt standard incandescent light bulb for each two hundred square feet (nineteen square meters) of floor area or equivalent illumination; provided, that the spacing between lights shall not be greater than thirty feet (nine thousand one hundred forty-four millimeters). In other than residential occupancies, means of egress, including exterior means of egress, and stairways shall be illuminated at all times the building space served by the means of egress is occupied with not less than one foot candle (eleven lux) at floors, landings and treads.

(c) Other Spaces. All other spaces shall be provided with natural or artificial light sufficient to permit the maintenance of sanitary conditions, and the safe occupancy of the space and utilization of the appliances, equipment and fixtures.

Section 44. Kirkland Municipal Code Section 21.41.403 is amended to read as follows:

21.41.403 Ventilation.

(a) Habitable Spaces. Every habitable space shall have not less than one openable window. The total openable area of the window in every room shall be equal to not less than forty-five percent of the minimum glazed area required in Section 21.41.402(a).

Exceptions:

(1) Where rooms and spaces without openings to the outdoors are ventilated through an adjoining room, the unobstructed opening to the adjoining room shall be not less than eight percent of the floor area of the interior room or space, but not less than twenty-five square feet (2.33 square meters). The ventilation openings to the outdoors shall be based on a total floor area being ventilated.

(2) Dwelling units equipped with local exhaust and whole house ventilation systems designed and installed as specified in Section M1505 of the International Residential Code or equivalent.

(b) Bathrooms and Toilet Rooms. Every bathroom and toilet room shall comply with the ventilation requirements for habitable spaces as required by subsection (a) of this section, except that a window shall not be required in such spaces equipped with a mechanical ventilation system. Air exhausted by a mechanical ventilation system from a bathroom or toilet room shall discharge to the outdoors and shall not be recirculated.

(c) Cooking Facilities. Unless approved through the certificate of occupancy, cooking shall not be permitted in any rooming unit or dormitory unit, and a cooking facility or appliance shall not be permitted to be present in the rooming unit or dormitory unit.

Exceptions:

(1) Where specifically approved in writing by the code official.

(2) Devices such as coffee pots and microwave ovens shall not be considered cooking appliances.

(d) Process Ventilation. Where injurious, toxic, irritating or noxious fumes, gases, dusts or mists are generated, a local exhaust ventilation system shall be provided to remove the contaminating agent at the source. Air shall be exhausted to the exterior and not be recirculated to any space.

(e) Clothes Dryer Exhaust. Clothes dryer exhaust systems shall be independent of all other systems and shall be exhausted outside the structure in accordance with the manufacturer's instructions.

Exception: Listed and labeled condensing (ductless) clothes dryers.

Section 45. KMC 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).~~ Every habitable room except kitchens shall contain at least 70 square feet.

(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 not less than one water closet and one lavatory without passing through another bedroom. Every bedroom in a dwelling unit shall have access to not less than one water closet and lavatory located in the same story as the bedroom or an adjacent story.

(4) Prohibited Occupancy. Kitchens and nonhabitable 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 article; 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 chapter.

(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.

(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 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 46. KMC 21.41.502 is amended to read as follows:

21.41.502 Required facilities.

(a) Dwelling Units. Every dwelling unit shall contain its own bathtub or shower, lavatory, water closet and kitchen sink that shall be maintained in a sanitary, safe working condition. The lavatory shall be placed in the same room as the water closet or located in close proximity to the door leading directly into the room in which such water closet is located. A kitchen sink shall not be used as a substitute for the required lavatory.

(b) Rooming Houses. Not less than one water closet, lavatory and bathtub or shower shall be supplied for each four rooming units.

(c) Hotels. Where private water closets, lavatories and baths are not provided, one water closet, one lavatory and one bathtub or shower having access from a public hallway shall be provided for each ten occupants.

~~(d) Employees' Facilities. Not less than one water closet, one lavatory and one drinking facility shall be available to employees.~~

~~(1) Drinking Facilities. Drinking facilities shall be a drinking fountain, water cooler, bottled water cooler or disposable cups next to a sink or water dispenser. Drinking facilities shall not be located in toilet rooms or bathrooms.~~

(de) Public Toilet Facilities. Public toilet facilities shall be maintained in a safe, sanitary and working condition in accordance with Chapter 21.24. Except for periodic maintenance or cleaning, public access and use shall be provided to the toilet facilities at all times during occupancy of the premises.

Section 47. KMC 21.41.504 is amended to read as follows:

21.41.504 Plumbing systems and fixtures.

(a) General. Plumbing fixtures shall be properly installed and maintained in working order, and shall be kept free from obstructions, leaks and defects and be capable of performing the function for which such plumbing fixtures are designed. Plumbing shall be maintained in a safe, sanitary and functional condition.

(b) Fixture Clearances. Plumbing fixtures shall have adequate clearances for usage and cleaning.

(c) Plumbing System Hazards. Where it is found that a plumbing system in a structure constitutes a hazard to the occupants or the structure by reason of inadequate service, inadequate venting, cross connection, back_siphonage, improper installation, deterioration or damage or for similar reasons, the code official ~~shall~~ is authorized to require the defects to be corrected to eliminate the hazard.

Section 48. KMC 21.41.604 is amended to read as follows:

21.41.604 Electrical facilities.

(a) Facilities Required. Every occupied building shall be provided with an electrical system in compliance with the requirements of this section and Section 21.41.605.

(b) Service. The size and usage of appliances and equipment shall serve as a basis for determining the need for additional facilities in accordance with Chapter 21.70. Dwelling units shall be served by a three-wire, one-hundred-twenty/two-hundred-forty volt, single-phase electrical service having a rating of not less than sixty amperes.

(c) Electrical System Hazards. Where it is found that the electrical system in a structure constitutes a hazard to the occupants or the structure by reason of inadequate service, improper fusing, insufficient receptacle and lighting outlets, improper wiring or installation, deterioration or damage, or for similar reasons, the code official shall require the defects to be corrected ~~to eliminate the hazard~~ in compliance with the latest edition of the Washington Cities Electrical Code or the State Electrical Code.

(1) Abatement of Electrical Hazards Associated with Water Exposure. Electrical equipment and wiring that have been submerged or exposed to water shall comply with the provisions of Chapter 21.70.

(2) Abatement of Electrical Hazards Associated with Fire Exposure. Electrical equipment and wiring that have been submerged or exposed to fire shall comply with the provisions of Chapter 21.70.

Exception: Electrical switches, receptacles and fixtures that shall be allowed to be repaired where an inspection report from the equipment manufacturer or approved manufacturer's representative indicates that the equipment has not sustained damage that requires replacement.

Section 49. KMC 21.46.010 is amended to read as follows:

21.46.010 International Existing Building Code adopted.

The ~~2018~~ 2021 International Existing Building Code (IEBC) is included in the adoption of the International Building Code as provided by IBC Section 101.4.7 and amended in WAC 51-50-480000, including Appendix A, Guidelines for the Seismic Retrofit of Existing Buildings, excluding Chapter 1, Part 2—Administration. Provided the Washington State Energy Code and the International Wildland-Urban Interface Code shall be regulated by their respective provisions for existing buildings. Provided, that work regulated by this code is also regulated by the construction requirements for existing buildings within Chapter 11 of the International Fire Code, and such work shall comply with applicable requirements in both codes.

Section 50. KMC 21.48.010 is amended to read as follows:

21.48.010 International Swimming Pool and Spa Code adopted.

~~The 2018 Edition of the International Swimming Pool and Spa Code (ISPSC), as published by ICC, is adopted. Sections 103, Department of Building Safety; 104, Duties and Powers of the Code Official; 105, Permits; 106, Inspections; 107, Violations; 108, Means of Appeal; 303, Energy; and 304, Flood Hazard Areas; are not adopted.~~ The 2021 Edition of the International Swimming Pool and Spa Code, as adopted by the State Building Code Council in Chapter 51-50 WAC as included in the adoption of the International Building Code as provided by International Building Code Section 3109 and amended in WAC 51-50-3109 and as provided by International Residential Code Section R327 and amended in WAC 51-51-0327, as published by the International Code Council, excluding Chapter 1, "Scope and Administration," is adopted.

Section 51. A new chapter, entitled "International Wildland-Urban Interface Code," shall be codified and added to Title 21 as chapter 21.50.

Section 52. A new section shall be added to chapter 21.50 KMC, to be codified as KMC 21.50.010, to read as follows:

21.50.010 Adoption.

The 2021 edition of the International Wildland-Urban-Interface Code (IWUIC), as adopted and amended by the State Building Code Council in Chapter 51-55 WAC, as published by the International Code Council, is adopted by reference, together with the following exceptions, amendments, and additions. Chapter 1, Scope and Administration, of the IWUIC is not adopted, and the Construction Administrative Code, as set forth in chapter 21.06 KMC, shall be used in its place, except as provisions of IWUIC Chapter 1 are expressly adopted in this chapter. The codes, appendices, and standards set forth in this chapter shall be

filed with the city clerk and a copy made available for use and examination by the public, pursuant to RCW 35A.12.140.

Section 53. A new section shall be added to chapter 21.50 KMC, to be codified as KMC 21.50.020, to read as follows:

21.50.020 Amendments and additions.

The following provisions of IWUIC Chapter 1 are expressly adopted:

(a) 101.2 Scope. The provisions of this code shall apply to the construction, alteration, movement, repair, maintenance and use of any building, structure, or premises within the wildland-urban interface areas in this jurisdiction. Buildings or conditions in existence at the time of the adoption of this code are allowed to have their use or occupancy continued, if such condition, use or occupancy was legal at the time of the adoption of this code, provided that such continued use does not constitute an egregious danger to life or property. Buildings or structures moved into or within the jurisdiction shall comply with the provisions of this code for new buildings or structures.

(b) 101.4 Retroactivity. The provisions of the code shall apply to conditions arising after the adoption thereof, conditions not legally in existence at the adoption of this code and conditions that, as determined by the code official, constitute an egregious hazard to life or property.

Exception: Provisions of this code that specifically apply to existing conditions are retroactive.

Section 54. 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 55. This ordinance shall be in force and effect on October 29, 2023, 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 6th day of February, 2024.

Signed in authentication thereof this 6th day of February, 2024.

Kelli Curtis, Mayor

Attest:

Kathi Anderson, City Clerk

Approved as to Form:

Kevin Raymond, City Attorney

PUBLICATION SUMMARY
OF ORDINANCE NO. 4848

AN ORDINANCE OF THE CITY OF KIRKLAND RELATING TO THE CITY'S BUILDING AND CONSTRUCTION CODES AND AMENDING TITLE 21 OF THE KIRKLAND MUNICIPAL CODE.

Sections 1 - 25. Amends and adds new sections to Chapter 21.06 of the Kirkland Municipal Code (KMC) relating to the Construction Administrative Code.

Sections 26 - 29. Amends sections of Chapter 21.08 of the KMC relating to the International Building Code.

Sections 30- 31. Amends sections of Chapter 21.10 of the KMC relating to the International Residential Code.

Section 32. Repeals Section 21.10.025 of the KMC.

Section 33. Amends Section 21.16.010 of the KMC relating to the International Mechanical Code.

Section 34. Amends Section 21.24.010 of the KMC relating to the Uniform Plumbing Code.

Section 35. Amends Section 21.28.010 of the KMC relating to the National Fuel Gas Code.

Section 36. Amends Section 21.32.010 of the KMC relating to the Liquefied Petroleum Gas Code.

Section 37. Amends Section 21.34.015 of the KMC relating to fire lanes.

Section 38. Amends Section 21.36.010 of the KMC relating to the International Fuel Gas Code.

Sections 39 - 40. Amends sections of Chapter 21.37 of the KMC relating to the Washington State Energy Code.

Sections 41 - 48. Amends sections of Chapter 21.41 of the KMC relating to the Kirkland Property Maintenance Code.

Section 49. Amends Section 21.46.010 of the KMC relating to the International Existing Building Code.

Section 50. Amends Section 21.48.010 of the KMC related to the International Swimming Pool and Spa Code.

Section 51-53. Adds a new Chapter 21.50 to the KMC relating to the International Wildland-Urban Interface Code.

Section 54. Provides a severability clause for the ordinance.

Section 55. Authorizes publication of the ordinance by summary pursuant to KMC 1.08.017 and establishes the effective date as October 29, 2023, after publication of summary.

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 6th day of February, 2024.

I certify that the foregoing is a summary of Ordinance 4848 approved by the Kirkland City Council for summary publication.

Kathi Anderson

Kathi Anderson, City Clerk