

*Repealed by 3946*

AN ORDINANCE OF THE CITY OF KIRKLAND RELATING TO BUILDINGS AND CONSTRUCTION, ADOPTING THE 1991 EDITIONS OF THE UNIFORM CODES CONSTITUTING THE STATE BUILDING CODE AND AMENDING PORTIONS OF TITLE 21 OF THE KIRKLAND MUNICIPAL CODE.

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

Section 1. Section 21.04.010 of the Kirkland Municipal Code is hereby amended to read as follows:

21.04.010 Copies of codes on file.

Pursuant to State law (RCW Chapter 19.27) the Kirkland Building Code is the Washington State Building Code as modified in this title. The Washington State Building Code is composed of the following elements; and the City shall at all times keep on file with the Director of Administration and Finance, for reference by the general public, not less than three copies of the codes and resolutions, or parts thereof, as herein adopted by reference, together with the amendments and supplements thereto herein made a part of this chapter and Chapters 21.08 through 21.32:

(1) Uniform Building Code and Standards, issued by the International Conference of Building Officials, ~~1988~~ 1991 Edition

(2) Uniform Housing Code, issued by the International Conference of Building Officials, ~~1988~~1991 Edition

(3) Uniform Sign Code, issued by the International Conference of Building Officials, ~~1988~~1991 Edition

(4) Uniform Plumbing Code, issued by the International Association of Plumbing and Mechanical Officials, ~~1988~~ 1991 Edition

(5) Uniform Mechanical Code, issued by the International Conference of Building Officials, ~~1988~~ 1991 Edition

(6) Uniform Code for the Abatement of Dangerous Buildings, issued by the International

Conference of Building Officials, ~~1988~~ 1991  
Edition

(7) Uniform Fire Code and Standards issued  
by The International Fire Code Institute 1991  
edition.

~~(7)~~(8) All amendments, supplements,  
modifications, exclusions, exemptions, and  
additions to the codes identified in  
subparagraphs (1) through ~~(6)~~(7) above adopted  
by the Washington State Building Code Council  
and published in Title 51 Washington  
Administrative Code, including, but not by way  
of limitation WAC Chapters ~~51-10~~ 51-11, 51-13,  
~~51-16, and 51-19~~ and 51-20.

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

Section 2. KMC 21.04.020 is hereby amended  
as follows:

21.04.020 Interpretation.

Whenever the following underlined words  
appear in the codes adopted by reference in this  
chapter and Chapters 21.08 through 21.32, they  
are to be interpreted as follows:

(1) "Administrative Authority" as  
"Building Official";

(2) "Chief, Director of Fire Services, or  
Chief of the Bureau of Fire Prevention" as  
"Director of Fire Services";

(3) "Corporation Council" as "Attorney for  
the City";

(4) "City Treasurer" as "Director of  
Administration and Finance";

(5) "Local Zoning Code" as the "City of  
Kirkland Zoning Code";

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

Whenever reference is made to local authority, codes, jurisdiction, and similar concepts, within the codes adopted by reference ~~is in~~ this chapter and Chapters 21.08 through 21.32, ~~interpretation interpretations shall rendered such by such reference shall apply applicable~~ to the City designation, jurisdiction and authority.

Section 3. Section 21.04.030 of the Kirkland Municipal Code is hereby repealed.

Section 4. There is hereby created a new section to be known as Section 21.04.030, entitled Penalty for violation, and to read as follows:

21.04.030 Penalty for violation.

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

Section 5. KMC 21.08.010 is hereby amended to read as follows:

21.08.010 Building code adopted.

The Uniform Building Code and Standards, issued by the International Conference of Building Officials, ~~1988~~ 1991 Edition, together with amendments and/or additions thereto, is adopted in its entirety, including Appendix Chapter No's 11 (Agriculture Building), 32 (Reroofing), 49 (Patio Covers), 55 (Membrane Structures), ~~57 (Regulations Governing Fallout Shelters)~~ 70 (Excavating and Grading), by this reference as part of the Building Code for the City.

Section 6. KMC 21.08.025 is hereby repealed.

Section 7. There is hereby created a new section to be known as Section 21.08.035, entitled UBC Section 304(b) amended, and to read as follows:

21.08.035 UBC Section 304(b) amended.

Section 304(b) of the Uniform Building Code is amended and supplemented by the addition of new subparagraphs as follows:

1. Determination of Value: The determination of the value or valuation under any of the provisions of this ordinance will be made on the basis of the Building Valuation Data published quarterly in the International Conference of Building Officials' Building Standards. The valuation to be used in computing the plan review and permit fees will be the total fair market value of all construction work for which the permit is issued, as well as all finish work, painting, roofing, electrical, plumbing, heating, air conditioning, elevators, fire-extinguishing systems, or any other permanent work or permanent equipment. The "gross area" used in conjunction with the ICBO building valuation, means the total areas of all floors - measured from the exterior face, outside dimensions, or exterior column line of a building - including basements, cellars, and balconies but not including unexcavated areas. Where walls and columns are omitted in the construction of a building, such as an open shed or marquee, the exterior wall of the open side or sides will be the edge of the roof.

2. Energy/Indoor Air Quality Code (WAC 51-11, WAC 51-13) Fees: In addition to the fees established here, a fee will be levied and collected for the Building Division to defray costs of plan review, and inspections related to those State Codes. This fee is payable whenever a plan review fee is required by the Kirkland Building Code for proposed construction of new buildings and additions other than those structures or areas which are neither heated, cooled or supplied with artificially illuminated floor space. This fee is \$20.00 plus \$.01 per square foot of conditioned or artificially illuminated space and is due at issuance.

3. State Building Council Surcharge: The State Building Code fee is collected for the state on all building, spa, and satellite dish permits at the rate of \$4.50 each. The fee for new multifamily building permits is \$4.50 for the 1st unit and \$2.00 for each additional unit.

Section 8. Section 21.08.051 is hereby repealed.

Section 9. KMC 21.08.055 is hereby amended as follows:

21.08.055 Table 3-A Amended.

Table 3-A of the Uniform Building Code is amended and supplemented to read:

TABLE 3-A BUILDING PERMIT FEES

Total Valuation Fee

\$1.00 to \$500.00     ~~\$11.00~~ \$15.00

\$501.00 to \$2,000.00     ~~\$11.00~~ \$15.00 for the first \$500.00 plus ~~\$1.65~~ \$2.00 for each additional \$100.00 or fraction thereof, to and including \$2000.00

\$2,001.00 to \$25,000.00 ~~\$35.75~~ \$45.00 for the first \$2,000.00 plus ~~\$6.60~~ \$9.00 for each additional \$1,000.00 or fraction thereof, to and including \$25,000.00

\$25,001.00 to \$50,000.00     ~~\$187.55~~ \$252.00 for the first \$25,000.00 plus ~~\$4.95~~ \$6.50 for each additional \$1,000.00 or fraction thereof, to and including \$50,000.00

\$50,001.00 to \$100,000.00     ~~\$311.30~~ \$414.50 for the first \$50,000.00 plus ~~\$3.30~~ \$4.50 of each additional \$1,000.00 or fraction thereof, to and including \$100,000.00

~~\$100,001.00 and up to \$500,000.00~~ ~~\$476.30~~ \$639.50 for the first \$100,000.00 plus ~~\$2.75~~ \$3.50 for each additional \$1,000.00 or fraction thereof to and including \$500,000.00

~~\$500,001 and up to 1,000,000.00~~ ~~\$2,039.50~~ \$2,039.50 for the first \$500,000.00 plus \$3.00 for each additional \$1,000.00 or fraction thereof ~~to and including \$1,000,000.00~~

~~\$1,000,001.00 and up~~ ~~\$3,539.50~~ for the first ~~\$1,000,000.00~~ plus ~~\$2.00~~ for each additional ~~\$1,000.00~~ or fraction thereof

Section 10. Section 21.08.070 is hereby repealed.

Section 11. KMC 21.08.080 is hereby amended as follows:

21.08.080 UBC Section 1202(b) Amended.  
Section 1202(b) of the Uniform Building Code is amended to read:

(b) *Special Provisions.* Notwithstanding other provisions of this code, Group R, Division 1 occupancies, shall be not less than one-hour fire-resistive construction throughout. Exterior balconies extending beyond the floor area as defined in Section 407 shall be constructed of noncombustible materials or of combustible one-hour fire-resistive construction.

EXCEPTION: Group R, Division 1 occupancies that consist of four or fewer units, that do not exceed two stories in height, that are less than five thousand square feet total area, and that have a one-hour fire-resistive occupancy separation between units.

Storage or laundry rooms that are within Group R, Division 1 Occupancies that are used in common by tenants shall be separated from the rest of the building by not less than one-hour fire-resistive occupancy separation.

For Group R, Division 1 occupancies with a Group B, Division 1 parking garage in the basement or first floor, see Section 702(a)(b).

For attic space partitions and draft stops, see Section 2516(f).

~~Exterior and interior doors and windows opening onto a common corridor, stairway, or similar area serving 5 or more dwelling units shall be protected as specified in Section 3305(h).~~

Section 12. Sections 21.08.140, 21.08.141, 21.08.142, 21.08.145 and 21.08.150 are hereby repealed.

Section 13. Section 21.08.155 is hereby amended to read as follows:

21.08.155 UBC Section 2905(f) amended.  
Section 2905(f) of the Uniform Building Code is hereby amended to read:

(f) *Drainage.* Provisions shall be made for the control and drainage of surface water around buildings.

Adequate provisions shall be made to insure that under-floor spaces remain free of running or standing water by the installation of drains. As a minimum, such drains shall be installed around the perimeter of the building at the footings. Additional drains may be required in the under-floor space. The drain pipes shall be of sufficient size to adequately convey water to an approved location, but shall be a minimum size of 4 inches. Provisions shall be made to prevent the drainage system from becoming blocked with soil. The Building Official may waive the provisions of this section when soils appear to adequately drain the site and no water will stand or run under the building.

Section 14. Sections 21.08.160 and 21.08.170 are hereby repealed.

Section 15. KMC 21.08.177 is hereby amended as follows:

21.08.177 UBC Section 3802-~~(b)~~(h)  
Amended.

Section 3802-~~(b)~~ is amended and supplemented by the addition of another item or subsection to be known as Subsection 3802-~~(b)~~(h) 51 to read:

51. All buildings four or more stories in height. For the purposes of this section, a story shall be defined as "that portion of a building included between the upper surface of any floor and the surface of next floor or roof above.

Section 16. There is hereby created a new section to be known as Section 21.08.190, entitled UBC Chapter 47 amended, and to read as follows:

21.08.190 UBC Chapter 47 amended.

Chapter 47 of the Uniform Building Code is amended and supplemented by the addition of a new section to be known as Section 4718 and to read:

Section 4718. Metal ceiling suspension systems used primarily to support acoustical tile or acoustical lay-in panels shall conform to this section. This section establishes as a part of the building code for Kirkland the content of Standard 47-18 of the Uniform Building Code Standards, 1988 Edition, providing as follows:

#### **Scope**

**Sec. 47.1801** This standard covers metal ceiling suspension systems used primarily to support acoustical tile or acoustical lay-in panels.

#### **Classification**

**Sec. 47.1802** The structural performance required from a ceiling suspension system shall be defined in terms of a suspension system structural classification. The load-carrying capacity shall be the maximum uniformly distributed load (pounds per linear foot) that a simply supported main runner section having a span length of 4 feet 0 inch is capable of supporting without a mid-span deflection exceeding 0.133 inch or 1/360 of the 4-foot 0 inch span length. The structural classification listed in Table No.47-18-A shall be determined by the capability of main runners or nailing bars to support a uniformly distributed load. These classifications shall be:

1. **Light-duty systems.** Used primarily for residential and light commercial structures where ceiling loads other than acoustical tile or lay-in panels are not anticipated.

2. **Intermediate-duty systems.** Used primarily for ordinary commercial structures where some ceiling loads, due to light fixtures and air diffusers, are anticipated.

3. **Heavy-duty systems.** Used primarily for commercial structures in which the quantities and weights of ceiling fixtures (lights, air diffusers, etc.) are greater than those for an ordinary commercial structure. Cross runners shall be capable of carrying the design load as dictated by job conditions without exceeding the maximum allowable deflection equal to 1/360 of its span. A cross



runner that supports another cross runner is a main runner for the purpose of structural classification and shall be capable of supporting a uniformly distributed load at least equal to the "Intermediate" classification.

TABLE NO. 47-18-A - MINIMUM LOAD-CARRYING CAPABILITIES OF MAIN RUNNER MEMBERS

Main Runner Members	Suspension System		
	lb/linear ft		
	Direct Hung	Indirect Hung	Furring Bar
Light-duty	5.0	2.0	4.5
Intermediate-duty	12.0	3.5	6.5
Heavy-duty	16.0	8.0	-

TABLE NO.47-18-B- STRAIGHTNESS TOLERANCES OF STRUCTURAL MEMBERS OF SUSPENSION SYSTEMS

Deformation	Straightness Tolerances						
Bow	1/32 in.	in any 2 ft.,	or	1/32 in	x	(total length, ft.)/2	
Camber	1/32 in.	in any 2 ft.,	or	1/32 in.	x	(total length, ft.)/2	
Twist	1 deg in any 2 ft., or 1 deg x (total length,ft.)/2						

**Dimensional Tolerance**

**Sec. 47.1803. (a) Straightness.** The amount of bow, camber or twist in main runners, cross runners, wall molding, splines or nailing bars of various lengths shall not exceed the values shown in Table No. 47-18-B. Main runners, cross runners, wall moldings, splines or nailing bars of ceiling suspension systems shall not contain local kinks or bends. Straightness of structural members shall be measured with the members suspended vertically from one end.

(b) **Length.** The variation in the specified length of main runner sections or cross runner sections that are part of an interlocking grid system shall not exceed +0.010 inch/4 feet. The variation in the specified spacing of slots or other cutouts in the webs of main runners or cross runners that are employed in assembling a ceiling suspension grid system shall not exceed +0.010 inch.

(c) **Overall Cross-section Dimensions.** For steel systems, the overall height of the cross section of main runners, cross runners, wall

molding or nailing bar shall be the specified dimensions +0.030 inch. The width of the cross section of exposed main runners or cross runners shall be the specified dimensions +0.008 inch.

(d) **Section Squareness.** Intersecting webs and flanges of structural members ("I", "T", "Z" sections) shall form angles between them of 90 degrees +2 degrees. If deviations from squareness at more than one such intersection are additive with respect to their use in a ceiling, the total angle shall not be greater than 2 degrees. The ends of structural members that abut or intersect other members in exposed grid systems shall be cut perpendicular to the exposed face, 90 degrees +0, -2 degrees.

(e) **Suspensions System Devices.** Suspension system assembly devices shall satisfy the following requirements and tolerances. A joint connection shall be judged suitable both before and after ceiling loads are imposed if the joint provides sufficient alignment so that: The horizontal and the vertical displacement of the exposed surfaces of two abutting main runners does not exceed 0.015 inch. There shall be no visually apparent angular displacement of the longitudinal axis of one runner with respect to the other. Assembly devices shall provide sufficient spacing control so that horizontal gaps between exposed surfaces of either abutting or intersecting members shall not exceed 0.020 inch. Spring wire clips used for supporting main runners shall maintain tight contact between the main runners and the carrying channels when the ceiling loads are imposed on the runners.

#### **Coatings and Finishes for Suspension System Components**

**Sec. 47.1804. (a) Protective Coatings.** Component materials that oxidize or corrode when exposed to normal use environments shall be provided with protective coatings as selected by the manufacturer except for cut or punched edges fabricated after the coating is applied. Components fabricated from sheet steel shall be given an electrogalvanized, hot dipped galvanized, cadmium or equal protective coating. Components fabricated from aluminum alloys shall be anodized or protected by other approved techniques. Components formed from other

candidate materials shall be provided with an approved protective coating.

(b) **Adhesion and Resilience.** Finishes shall exhibit good adhesion properties and resilience so that chipping or flaking does not occur as a result of the manufacturing process.

(c) **Coating Classification for Severe Environment Performance.** Protected components for acoustical ceilings that are subject to the severe environmental conditions of high humidity and salt spray (fog), or both, shall be ranked according to their ability to protect the components of suspension systems from deterioration. A salt spray (fog) test conducted in accordance with the following test conditions shall be performed:

1. **Salt solution.** Five parts by weight NaCl to 95 parts distilled water.

2. **Humidity in chamber.** Ninety percent relative humidity.

3. **Temperature in chamber.** Ninety degrees F.

4. **Exposure period.** Ninety-six hours continuous.

5. **Report.** Upon request the manufacturer shall provide photographs showing worst corrosion conditions on components and shall provide comments regarding corrosion that occurs on cut metal edges, on galvanized surfaces without paint, on galvanized and painted surfaces, at edges rolled after being painted, and on any change of paint color or gloss that is apparent at the conclusion of the test. Color and gloss inspection of the component shall be made after washing in mild soap solution.

(d) **High-humidity Test.** The test and inspection shall be identical to that of the salt spray test, except that distilled water instead of salt solution shall be used.

#### **Structural Members**

**Sec. 47.1805.** The manufacturer shall determine the load-deflection performance. The structural members tested shall be identical to the sections used in the final system design. All cutouts, slots, etc., as exist in the system component shall be included in the sections evaluated. Load-deflection studies of

structural members shall utilize sections fabricated in accordance with the system manufacturers' published metal thickness and dimensions.

#### **Section Performance**

**Sec. 47.1806.** The performance of structural members of suspension systems shall be represented by individual load-deflection plots obtained from tests performed at each different span length used in service. The results of replicate tests of three individual sections, each tested on the same span length, shall be plotted and averaged to obtain a characteristic load-deflection curve for the structural member. The average load-deflection curve shall be used to establish the maximum uniformly distributed load that the structural member can successfully sustain prior to reaching the deflection limit of 1/360 of the span length in inches. The load-deflection curve shall be used to establish the maximum loading intensity beyond which the structural member begins to yield.

#### **Suspension System Performance**

**Sec. 47.1807.** Published performance data for individual suspensions systems shall be developed by the manufacturer upon the basis of results obtained from load-deflection tests of its principal structural members. Where a ceiling design incorporated a number of components, each of which experiences some deflection as used in the system, the additive nature of these displacements shall be recognized in setting an allowable system deflection criteria.

### **INSTALLATION**

#### **Scope**

**Sec. 47.1808.** This standard describes procedures for the installation of suspension systems for acoustical tile and lay-in panels.

#### **Installation of Components**

**Sec. 47.1808.** (a) **Hangers.** Hangers shall be attached to the bottom edge of the wood joists or to the vertical face of the wood joists near the bottom edge. Bottom edge attachment devices shall be an approved type. In concrete construction mount hangers using cast-in-place

hanger wires, hanger inserts, or other hanger attachment devices shall be an approved type. If greater center-to-center distances than 4 feet 0 inch are used for the hangers, reduce the load-carrying capacity of the ceiling suspension system commensurate with the actual center-to-center hanger distances used. Hangers shall be plumb and shall not press against insulation covering ducts or pipes. If some hangers must be splayed, offset the resulting horizontal force by bracing, countersplaying or other acceptable means. Hangers formed from galvanized sheet metal stock shall be suitable for suspending carrying channels or main runners from an existing structure provided that the hangers do not yield, twist or undergo other objectionable movement. Wire hangers for suspending carrying channels or main runners from an existing structure shall be prepared from a minimum of No. 12-gage, galvanized, soft-annealed, mild steel wire. Special attachment devices that support the carrying channels or main runners shall be approved to support five times the design load.

(b) **Carrying Channels.** The carrying channels shall be installed so that they are all level to within 1/8 inch in 12 feet. Leveling shall be performed with the supporting hangers taut. Local kinks or bends shall not be made in hanger wires as a means of leveling carrying channels. In installation where hanger wires are wrapped around carrying channels, the wire loops shall be tightly formed to prevent any vertical movement or rotation of the member within the loop.

(c) **Main Runners.** Main runners shall be installed so that they are all level to within 1/8 inch in 12 feet. Where main runners are supported directly by hangers, leveling shall be performed with the supporting hanger taut. Local kinks or bends shall not be made in hanger wires as a means of leveling main runners. In installations where hanger wires are wrapped through or around main runners, the wire loops shall be tightly wrapped and sharply bent.

(d) **Cross Runners.** Cross runners shall be supported by either main runners or by other cross runners to within 1/32 inch of the required center distances. This tolerance shall be noncumulative beyond 12 feet. Intersecting runners shall form a right angle. The exposed

surfaces of two intersecting runners shall lie within a vertical distance of 0.015 inch or each other with the abutting (cross) member always above the continuous (main) member.

(e) **Splines.** Splines used to form a concealed mechanical joint seal between adjacent tiles shall be compatible with the tile kerf design so that the adjacent tile will be horizontal when installed. Where splines are longer than the dimension between edges of supporting members running perpendicular to the splines, place the splines so that they rest either all above or all below the main running members.

(f) **Assembly Devices.** Abutting sections of main runner shall be joined by means of suitable connections such as splices, interlocking ends, tab locks, pin locks, etc. A joint connection shall be judged suitable both before and after ceiling loads are imposed if the joint provides sufficient alignment so that the exposed surfaces of two abutting main runners lie within a vertical distance of 0.015 inch of each other and within a horizontal distance of 0.05 inch of each other. There shall be no visually apparent angular displacement of the longitudinal axis of one runner with respect to the other. Assembly devices shall provide sufficient spacing control so that horizontal gaps between exposed surfaces of either abutting or intersecting members shall not exceed 0.020 inch. Spring wire clips used for supporting main runners shall maintain tight contact between the main runners and the carrying channels when the ceiling loads are imposed on the runners.

(g) **Ceiling Fixtures.** Fixtures installed in acoustical tile or lay-in panel ceilings shall be mounted in a manner that will not compromise ceiling performance. Fixtures shall not be supported from main runners or cross runners if the weight of the fixtures causes the total dead load to exceed the deflection capability of the ceiling suspension system. In such cases, the fixture load shall be supported by supplemental hangers within 6 inches of each corner, or the fixture shall be separately supported. Fixtures shall not be installed so that main runners or cross runners will be eccentrically loaded except where provisions is inherent in the system (or is separately

provided for) to prevent undesirable section rotation or displacement, or both. In any case, runners supporting ceiling fixtures shall not rotate more than 2 degrees after the fixture loads are imposed. Where fixture installation would produce rotation of runners in excess of 2 degrees, install fixtures with the use of suitable accessory devices. These devices shall support the fixture in such a manner that the main runners and cross runners will be loaded symmetrically rather than eccentrically.

## **LATERAL DESIGN REQUIREMENTS**

### **Scope**

**Sec. 47.1810.** Suspended ceiling which are designed and constructed to support ceiling panels or tiles, with or without lighting fixtures, ceiling mounted air terminals or other ceiling mounted services shall comply with the requirements of this standard. EXCEPTIONS: 1) Ceiling area of 144 square feet or less surrounded by walls which connect directly to the structure above shall be exempt from the lateral load design requirements of these standards; and 2) Ceilings constructed of lath and plaster or gypsum board, screw or nail attached to suspended members that support a ceiling on one level extending from wall to wall.

### **Minimum Design Loads**

**Sec. 47.1811. (a) Lateral Forces.** Such ceiling systems and their connections to the building structure shall be designed and constructed to resist a lateral force specified in Chapter 23 of the Uniform Building Code. Where the ceiling system provides lateral support for nonbearing partitions, it shall be designed for the prescribed lateral force reaction from the partitions as specified in Section 47.1815. Connection of lighting fixtures to the ceiling system shall be designed for a lateral force of 100 percent of the weight of the fixture in addition to the prescribed vertical loading as specified in Section 47.1813.

(b) **Grid Members, Connectors and Expansion Devices.** The main runners and cross runners of the ceiling system and their splices,

intersection connectors and expansion devices shall be designed and constructed to carry a mean ultimate test load of not less than 180 pounds or twice the actual load, whichever is greater, in tension with a 5-degree misalignment of the members in any direction, and in compression. In lieu of 5-degree misalignment, the load may be applied with a 1-inch eccentricity on a sample not more than 24 inches long each side of the splice. The connections at splices and intersections all shall be of the mechanical interlocking type. Where the composition or configuration of ceiling systems members or assemblies and their connections are such that calculations of their allowable load-carrying capacity cannot be made in accordance with established methods of analysis, their performance shall be established by test. Evaluation of test results shall be made on the basis of the mean values resulting from tests of not fewer than three identical specimens, provided the deviation of any individual test result from the mean value does not exceed plus or minus 10 percent. The allowable load-carrying capacity as determined by test shall not exceed one half of the mean ultimate test value.

(c) **Substantiation.** Each ceiling system manufacturer shall furnish lateral loading capacity and displacement or elongation characteristics for his systems, indicating the following:

1. Maximum bracing pattern and minimum wire sizes.
2. Tension and compression force capabilities of main runner splices, cross runner connections and expansion devices.

All tests shall be conducted by an approved testing agency.

## **Installation**

### **Sec. 47.1812. (a) Vertical Hangers.**

Suspension wires shall be not smaller than No. 12 gage spaced at 4 feet on center or No. 10 gage at 5 feet on center along each main runner unless calculations justifying the increased spacing are provided. Each vertical wire shall



be attached to the ceiling suspension member and to the support above with a minimum of three turns. Any connection device at the supporting construction shall be capable of carrying not less than 100 pounds. Suspension wires shall not hang more than 1 in 6 out-of-plumb unless countersloping wires are provided. Wires shall not attach to or bend around interfering material or equipment. A trapeze or equivalent device shall be used where obstructions preclude direct suspension. Trapeze suspensions shall be a minimum of back-to-back 1 1/4 inch cold-rolled channels for spans exceeding 48 inches.

(b) **Perimeter Hangers.** The terminal ends of each cross runner and main runner shall be supported independently a maximum of 8 inches from each wall or ceiling discontinuity with No. 12 gage wire or approved wall support.

(c) **Lateral Force Bracing.** Where substantiating design calculations are not provided, horizontal restraints shall be effected by four No. 12 gauge wires secured to the main runner within 2 inches of the cross runner intersection and splayed 90 degrees from each other at an angle not exceeding 45 degrees from the plane of the ceiling. A strut fastened to the main runner shall be extended to and fastened to the structural members supporting the roof or floor above. The strut shall be adequate to resist the vertical component induced by the bracing wires. These horizontal restraint points shall be placed 12 feet on center in both directions with the first point within 6 feet from each wall. Attachment of the restraint wires to the structure above shall be adequate for the load imposed. Lateral force bracing members shall be spaced a minimum of 6 inches from all horizontal piping or duct work that is not provided with bracing restraints for horizontal forces. Bracing wires shall be attached to the grid and to the structure in such a manner that they can support a design load of not less than 200 pounds or the actual design load, whichever is greater, with a safety factor of 2.

(d) **Perimeter Members.** Unless perimeter members are a structural part of the approved system, wall angles or channels shall be considered as aesthetic closers and shall have

no structural value assessed to themselves or their method of attachment to the walls. For tile ceilings, ends of main runners and cross members shall be tied together to prevent their spreading.

(e) **Attachment of Members to the Perimeter.** To facilitate installation, main runners and cross runners may be attached to the perimeter member at two adjacent walls with clearance between the wall and the runners maintained at the other two walls or as otherwise shown or described for the approved system.

### **Lighting Fixtures**

**Sec.47.1813** Only "intermediate" and "heavy duty" ceiling systems as defined in Section 47.1802 may be used for the support of lighting fixtures. All lighting fixtures shall be positively attached to the suspended ceiling system. The attachment device shall have a capacity of 100 percent of the lighting fixture weight acting in any direction. When "intermediate" systems are used, No. 12 gage hangers shall be attached to the grid members within 3 inches of each corner of each fixture. Tandem fixtures may utilize common wires. Where "heavy duty" systems are used, supplemental hangers are not required if a 48-inch modular hangar pattern is followed. When cross runners are used without supplemental hangers to support lighting fixtures, these cross runners must provide the same carrying capacity as the main runner. Lighting fixtures weighing less than 56 pounds shall have, in addition to the requirements outlined above, two No. 12 gage hangers connected from the fixture housing to the structure above. These wires may be slack. Lighting fixtures weighing 56 pounds or more shall be supported directly from the structure above by approved hangers. Pendant-hung lighting fixtures shall be supported directly from the structure above using No. 9 gage wire or approved alternate support without using the ceiling suspension system for direct support.

### **Mechanical Services**

**Sec. 47.1814.** Ceiling mounted air terminals or services weighing less than 20

pounds shall be positively attached to the ceiling suspension main runners or to cross runners with the same carrying capacity as the main runners. Terminals or services weighing 20 pounds but not more than 56 pounds, in addition to the above, shall have two No. 12 gage hangers connected from the terminal or service to the ceiling system hangers or to the structure above. These wires may be slack. Terminals or services weighing more than 56 pounds shall be supported directly from the structure above by approved hangers.

### Partitions

**Sec. 47.1815.** The drawings shall clearly identify all systems and shall define or show all supporting details, lighting fixture attachment, lateral force bracing, partition bracing, etc. Such definition may be by reference to this standard, or approved system, in whole or in part. Deviations or variations must be shown or defined in detail.

Section 17. Section 21.08.200 is hereby repealed.

Section 18. KMC 21.08.220 is hereby amended as follows:

21.08.220 UBC Chapter ~~56~~ 59 added.

Part XI of the Uniform Building Code is amended and supplemented thereto by the addition of a new chapter to read:

CHAPTER ~~56~~ 59: OVERWATER  
STRUCTURES PIERS, WHARVES, AND  
BUILDINGS.

Section 19. KMC 21.08.222 is hereby amended as follows:

21.08.222 UBC Section ~~5602~~ 5902 Definitions.

(a) 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.

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

(c) 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.

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

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

(f) 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.

Section 20. Section 21.08.225 is hereby repealed.

Section 21. There is hereby created a new section to be known as Section 21.08.225, entitled UBC Section 5905 Substructure, and to read as follows:

21.08.225 UBC Section 5905 Substructure.

(a) 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.

(b) *Automatic Sprinklers.* Automatic sprinklers shall be installed under the substructure of every overwater structure in accordance with the requirements of Chapter 38.

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

i. Combustible substructures having no superstructures.

ii. Noncombustible substructures with or without superstructures.

iii. Substructures resulting from walkways or finger piers when width does not exceed 10 feet.

(c) *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 ) inch outlets as 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.

Section 22. Section 21.08.230 is hereby amended in its establishment of Section 7003(10) as follows:

21.08.230 UBC Section 7003 amended.

(10) Correction of drainage problems when supervised by the Department of Public Works; and the installation of approved preliminary plat and short plat improvements as permitted by Section 7006~~(A)~~ (a)(1).

Section 23. Section 21.08.232 is hereby amended as follows:

21.08.232 UBC Section 7006 amended.  
Subsection 7006(a) of the Uniform Building Code is amended and supplemented to read:

Section 7006 ~~(A)~~(a). PERMITS REQUIRED.  
Except as exempted in Section 7003 of this code, no person shall do any land surface modification

or grading without first obtaining a grading permit from the building official or the department of public works as to activities described in subsection (1) below. No land surface modification or grading permit shall be issued:

(1) Prior to the approval of a preliminary plat or short plat. After the approval of a preliminary plat or short plat, a land surface modification or grading permit may be issued for land surface modification or grading work to be done within rights-of-way, utility easements or access easements as designated on the approved preliminary plat drawings. A limited amount of grading may be permitted and stockpiling of materials on individual lots with the concurrence of the departments that normally review development permit applications. Permits to be issued for activities covered by this subparagraph shall be issued by the department of public works who shall with respect to such activities, have full authority to administer and enforce the provisions of Appendix Chapter 70 of the Uniform Building Code as herein amended and supplemented.

(2) Prior to the issuance of a building permit. After the issuance receipt of a complete application for a building permit, a land surface modification or grading permit may be issued only for the minimum land surface modification or grading necessary to locate structures or other associated improvements designated on the approved submitted building permit plans.

(3) In areas served by inadequate water, sewer, storm drainage or transportation systems as determined by the Public Works Department, unless such action proposes the improvement of any deficient system to minimum City standards and at the expense of the private sponsor and such improvements are associated with the issuance of a valid building permit.

(4) Prior to the approval specified in Section ~~1115.75~~ 115.75, Kirkland Zoning Code, where no Building Permit is required.

(5) Prior to the approval of a preliminary Planned Unit Development. After the approval of a preliminary Planned Unit Development, a Land Surface Modification or Grading Permit may be

issued for land surface modification or grading work to be done within rights-of-way, utility easements, access easements or other major components of the internal vehicular circulation system so designated in the approved Preliminary Planned Unit Development.

Section 24. Section 21.16.010 is hereby amended as follows:

21.16.010 Sign code adopted.

The Sign Code issued by the International Conference of Building Officials, ~~1988~~ 1991 Edition together with amendments and/or additions thereto, is adopted in its entirety by this reference as the sign code for the city.

Section 25. Chapter 21.16 of the Kirkland Municipal Code is hereby amended by adding new sections to be known as Section 21.16.012, entitled Permit Required, and Section 21.16.013, entitled Exemptions, and to read as follows:

21.16.012 Permit Required.

A sign shall not hereafter be erected, re-erected, constructed, altered or maintained, except as provided by this code and after a permit has been issued by the building official. A separate permit shall be required for a sign or signs for each business entity, and a separate permit shall be required for each group of signs on a single supporting structure.

21.16.013 Exemptions.

A permit is not required for the following signs. These exemptions shall not be construed as relieving the owner of the sign from the responsibility for its erection, maintenance and compliance with the provisions of this code or other laws or ordinances regulating signs.

(1) Changing of the advertising copy or message on a painted or printed sign only. Except for theater marquees and similar signs specifically designed for the use of replaceable copy, electric signs shall not be included in this exception; and

(2) Painting, repainting or cleaning of an advertising structure or changing the copy or message thereon shall not be considered an erection or alteration which requires a sign permit unless a structural change is made.

Section 26. Section 21.20.010 is hereby amended as follows:

21.20.010 Plumbing Code Adopted.

The Uniform Plumbing Code issued by the International Association of Plumbing and Mechanical Officials, ~~1988~~1991 Edition, together with amendments, and/or additions thereto, is adopted in part as listed herein by this reference as part of the plumbing code for the city. The following listed chapters are adopted:

- Chapter 1 - Definitions
- Chapter 2 - Materials and Alternates
- Chapter 3 - General Regulations
- Chapter 4 - Drainage Systems
- Chapter 5 - Vents and Venting
- Chapter 6 - Indirect and Special Wastes
- Chapter 7 - Traps and Interceptors
- Chapter 8 - Joints and Connections
- Chapter 9 - Plumbing Fixtures
- Chapter 10 - Water Distribution
- Chapter 13 - Water Heaters and Vents

Provided, that notwithstanding any wording in this code, nothing in this code shall apply to the installation of any gas piping, or vents for water heaters.

Section 27. Section 21.20.034 is hereby amended as follows:

21.20.034 Violations and Penalties.

Any person, firm, or corporation violating any provision of this Code shall be deemed guilty of a misdemeanor and upon conviction thereof shall be punishable by a fine or imprisonment or both by fine and imprisonment. Each separate day or any portion thereof during which any violation of this Code occurs or continues shall be deemed to constitute a separate offense.

The issuance or granting of a permit or approval of plans and specifications shall not be deemed or construed to be a permit for, or an approval of, any violation of any of the provisions of this code. No permit presuming to give authority to violate or cancel the provisions of this code shall be valid, except insofar as the work or use which it authorized is lawful.

The issuance or granting of a permit or approval of plans shall not prevent the Building Official from thereafter requiring the



correction of errors in the plans and specifications or from preventing construction operations from being carried on when in violation of this or any other ordinance or from revoking any certificate of approval when issued in error.

Every permit issued by the Building Official under the provisions of the code shall expire by limitation and become null and void if the work authorized by such permit is not commenced within ~~one hundred and twenty (120)~~ one hundred and eighty (180) days. Before such work can be recommenced, a new permit shall be first obtained and the fee therefor shall be one half the amount required for a new permit for such work provided no changes have been made, or will be made in the original plans and specifications for such work; and provided, further, that such suspension or abandonment has not exceeded one (1) year. Plumbing permits for R-3 and M occupancies shall expire one (1) year from the date of issue. Plumbing permits may be renewed for one half (1/2) of the amount of the original permit fee for the first permit issued for such work.

Section 28. Subsection 21.20.035(d) and section 21.20.039 are hereby repealed.

Section 29. Chapter 21.20 of the Kirkland Municipal Code is hereby amended by adding a new section to be known as Section 21.20.039, entitled Fees, and to read as follows:

21.20.039 Fees

(a) Permit Fees: The fees for each permit shall be as set forth in Table No.3-A.

(b) Plan Review Fees: When a plan or other data is required to be submitted by Subsection (b) of Section 30.2, a plan review fee shall be paid at the time of submitting plans and specifications for review. The plan review fees for plumbing work shall be equal to 65 percent of the total permit fee as set forth in Table No. 3-A. When plans are incomplete or changed so as to require additional review, a fee shall be charged at the rate shown in Table No. 3-A.

(c) Expiration of Plan Review. Applications for which no permit is issued within 180 days following the date of application shall expire by limitation and plans and other data submitted for review may thereafter be returned to the applicant or

destroyed by the Administrative Authority. The Administrative Authority may exceed the time for action by the applicant for a period not to exceed 180 days upon request by the applicant showing that circumstances beyond the control of the applicant have prevented action from being taken. No application shall be extended more than once. In order to renew action on an application after expiration, the applicant shall resubmit plans and pay a new plan review fee.

(d) Investigation Fees: Work Without a Permit

1) Whenever any work for which a permit is required by this Code has been commenced without first obtaining said permit, a special investigation shall be made before a permit may be issued for such work.

2) An investigation fee, in addition to the permit fee, shall be collected whether or not a permit is then or subsequently issued. The investigation fee shall be equal to the amount of the permit fee that would be required by this Code if a permit were to be issued. The payment of such investigation fee shall not exempt any person from compliance with all other provisions of this Code, nor from any penalty prescribed by law.

(e) Fee Refunds

1) The Administrative Authority may authorize the refunding of any fee paid hereunder which was erroneously paid or collected;

2) The Administrative Authority may authorize the refunding of not more than 80 percent of the permit fee paid when no work has been done under a permit issued in accordance with this Code;

3) The Administrative Authority may authorize the refunding of not more than 80 percent of the plan review fee paid when an application for a permit for which a plan review fee has been paid is withdrawn or cancelled before any plan review effort has been expended.

The Administrative Authority shall not authorize the refunding of any fee paid except upon written application filed by the applicant or permittee not later than 180 days after the date of fee payment.

**PERMIT ISSUANCE**

For issuing each permit (when not a part of a Building Permit) \$20.00

For issuing each permit (when part of a Building Permit) N/C

**UNIT SCHEDULE (in addition to Items 1 & 2 above)**

For each plumbing fixture on one trap or a set of fixtures on one trap (including water, drainage piping and backflow protection therefor) 7.00

**Rainwater systems - per drain (inside building) 7.00**

For each heater and/or vent 7.00

For each industrial waste pretreatment interceptor including its trap and vent, excepting kitchen-type grease interceptors functioning as fixture traps 7.00

For each installation, alteration or repair of water piping and/or water treating equipment, each 7.00

For each repair or alteration of drainage or vent piping, each fixture 7.00

For each lawn sprinkler system on any one meter including backflow protection devices therefor 7.00

For atmospheric-type vacuum breakers not included in above item:

2 inch diameter and smaller 7.00

over 2 inch diameter 15.00

**Other Inspections and Fees**

Inspections outside of normal business hours 30.00

Reinspection fee 30.00

Inspections for which no fee is specifically indicated 30.00

For each hour of additional plan review required by changes, additions or revisions to

approved plans, (minimum charge - one-half hour)  
60.00 per hour

Section 30. Sections 21.20.040, 21.20.050, 21.20.060, 21.20.070, and 21.20.200 are hereby repealed.

Section 31. Chapter 21.20 of the Kirkland Municipal Code is hereby amended by adding a new section to be known as Section 21.20.200, entitled Definitions, and to read as follows:

21.20.200 Definitions.

(1) Backflow. "Backflow" means the reverse from normal flow direction in a plumbing system or public water distribution system. It is caused by backpressure or backsiphonage. Backflow within a potable water piping system can cause contaminants to enter the drinking water through unprotected cross connections.

(2) Backflow Prevention Assembly. "Backflow prevention assembly" means a device approved by the Washington State Department of Health or such other state department as shall have jurisdiction over the subject matter, and by the American Water Works Association, used to counteract back pressure or prevent back siphonage into the distribution system of a public water supply.

(3) Cross-connection. "Cross-connection" means any actual or potential physical connection between a potable water line and any pipe, vessel, or machine containing a non-potable fluid, such that it is possible for the non-potable fluid to enter the potable water system by backflow.

Section 32. Section 21.20.210 is hereby amended as follows:

21.20.210 Cross-Connections declared unlawful.

The installation or maintenance of a cross-connection, which in the opinion of the director of public works, ~~or building official~~, or any ~~staff member~~ official that he or she shall designate ~~who is~~ as qualified in protection of municipal water quality, ~~such as the building official or water purveyor~~, will endanger the water quality of the potable water supply of the city, is declared to be unlawful.

Section 33. Section 21.20.220 is hereby amended as follows:

21.20.220 Back-flow Prevention devices assemblies to be installed.

Backflow prevention ~~devices~~ assemblies, when required to be installed in the opinion of the director of public works, or building official or his designated representative, shall be installed and maintained by the service customer on any service connection to the ~~city~~ water municipal supply system where said backflow prevention devices are necessary for the protection of the ~~city~~ municipal water supply.

Section 34. Section 21.20.240 is hereby amended as follows:

21.20.240 Adoption of state regulations.

Rules and regulations of the ~~State Board of Health~~ Washington State Department of Health regarding public water supplies, entitled "Cross Connection Control Regulation in Washington State" ~~WAC 248-54-250 through WAC 248-54-500~~ WAC 246-290-490, and the American Water Works Association, Pacific Northwest Section's ~~Second~~ Fifth Edition of "Accepted Procedure and Practice in Cross-Connection Manual" as they presently exist and as they may, from time to time, be amended in the future, are hereby adopted by this reference as if set forth in full.

Section 35. Section 21.20.250 is hereby amended as follows:

21.20.250 Abatement of Unlawful cross-connections and installations of backflow prevention devices-- Procedures.

Cross connections declared in this chapter to be unlawful whether presently existing or hereinafter installed and/or services requiring backflow prevention devices and/or lawful use or operation of a private water supply system served by the ~~city~~ public municipal water supply system are hereby declared to be public nuisances, and in addition to any other provisions of the city code or the ordinances of the city regarding the abatement of public nuisances, shall be subject to abatement in accordance with the following procedure:

(1) In the event that the director of public works, or building official or his designee determines that a nuisance as provided in this section does exist, written notice shall be sent to the person in whose name the water service is established under the records of the city municipal water department, or alternatively, a copy of such written notice shall be posted on the premises served.

(2) The notice shall provide that the nuisance described in this section shall be corrected within thirty days of the date said notice is mailed or posted on the premises.

(3) In the event said nuisance is not abated within the prescribed time, water service to said premises shall be discontinued.

(4) In the event that the nuisance, in the opinion of the director of public works, or building official or his designated representative, presents an immediate danger of contamination to the public water supply, service from the city municipal water supply system to the premises may be terminated without prior notice, provided, however, notice will be posted on the premises in the manner heretofore provided at the time said service is terminated

Section 36. Section 21.24.010 is hereby amended as follows:

21.24.010 Mechanical Code adopted.

The Uniform Mechanical Code, issued by the International Conference of Building Officials, ~~1988~~ 1991 Edition, together with amendments and/or additions thereto, is adopted in its entirety by this reference as the mechanical code for the City, including Appendix Chapter 22 relating to gas fuel piping.

Section 37. Section 21.24.020 and 21.24.030 are hereby repealed.

Section 38. Chapter 21.24 of the Kirkland Municipal Code is hereby amended by adding a new section to be known as section 21.24.020, entitled UMC Table 3-A Amended--Mechanical Permit Fees, and to read as follows:

21.24.020 UMC Table No. 3-A amended --  
Mechanical permit fees.

Table 3-A of the Uniform Mechanical Code is amended as to the following items only:

Permit Issuance

1. For the issuance of each permit  
(when not part of a building permit) \$20.  
00
2. For the issuance of each permit  
(when part of a building permit) N/C

Unit Fee Schedule

21. When Chapter 22 is applicable (see  
Section 103), permit fees for fuel-gas piping  
shall be as follows:

<u>Less than 100 feet</u>	<u>5.00</u>
<u>101' to 300 feet</u>	<u>10.00</u>
<u>Over 300 feet</u>	<u>\$5.00 per each 100 feet over</u>

23. For the installation or relocation  
of each oil storage tank, including vent and  
flammable or combustible liquid tank, or LP gas  
tank \$50.00

24. For the installation or relocation of  
each Conversion burner 9.00

25. For the installation or relocation of  
each Gas log lighter 6.50

26. For the installation or relocation of  
each Spa Heater 6.50

27. For the installation or relocation of  
each Gas range 3.00

28. For the installation or relocation of  
each Gas BBO 3.00

29. For the installation or relocation of  
each Gas or Electric Dryer 6.50

30. For the installation or relocation of  
each Wood burning stove, insert masonry  
fireplace, or factory-built "Zero Clearance"  
fireplace 10.00

Section 39. Section 21.28.010 is hereby amended as follows:

21.28.010 Adoption.

The Uniform Code for the Abatement of Dangerous Buildings issued by the International Conference of Building Officials, ~~1988 Edition~~ 1991 Edition, together with amendments and/or additions thereto, is adopted in its entirety by this reference as the dangerous building code for the City.

Section 40. Section 21.32.010 is hereby amended as follows:

21.32.010 Fire Code adopted.

The Uniform Fire Code, issued by the International Conference of Building Officials and the Western Fire Chiefs Association, ~~1988~~ 1991 Edition, together with amendments and/or additions thereto, is adopted in its entirety including Appendix Chapter Nos. II B (Protection of Flammable or Combustible Liquids in Tanks in Locations that may be Flooded), ~~H-C (Marinas)~~ and ~~II-D (Rifle Ranges)~~ by this reference as part of the fire code for the city; provided, however Article 78 - Fire Works is not adopted.

Section 41. Section 21.32.045 is hereby amended as follows:

21.32.045 UFC Section ~~10.207~~ 10.201 amended.

Section ~~10.207~~ 10.201 Fire Apparatus Access Roads. Fire apparatus access roads shall be provided and maintained in accordance with ~~the provisions of this section. Fire apparatus access roads shall be required for every building hereafter constructed as provided by operating policies of the Director of Fire Services. The Director of Fire Services is directed to develop and publish rules and regulations for fire access roads. The rules and regulations shall include provisions so that access roads of not less than 20 feet wide will be available to serve apartment or light industrial buildings.~~ this division. Exception: The Director of Fire Services is authorized to modify these requirements, provided, in the opinion of the Director of Fire Services, fire fighting or medical and/or rescue operations would not be impaired.



Section 42. Section 21.32.050 is hereby amended as follows:

21.32.050 UFC Section ~~10.309(d)~~ 10.510(d) amended.  
Section ~~10.309(d)~~ 10.510(d) of the Uniform Fire Code is amended and supplemented thereto by the addition of a new paragraph to read:

In lieu of Class II standpipes, the Director of Fire Services may, in writing, require the use of Class I standpipes. The size, location, number of inlets and outlets, and the direction of piping and fittings shall be approved by the Director of Fire Services.

Section 43. Sections 21.32.060 and 21.32.062 are hereby repealed.

Section 44. Chapter 21.32 of the Kirkland Municipal Code is hereby amended by adding a new section to be known as Section 21.32.060, entitled Open Burning Prohibited--UFC Section 11.203 deleted, and to read as follows:

21.32.060 Open Burning Prohibited--UFC Section 11.203 deleted.

Open burning is prohibited year round within the City of Kirkland. In turn, Section 11.203 of the Uniform Fire Code relating to outdoor burning permits is deleted.

Section 45. Chapter 21.32 of the Kirkland Municipal Code is hereby amended by adding a new section to be known as Section 21.32.062, entitled Recreational Fires-- UFC Section 11.204 amended, and to read as follows:

21.32.062 Recreational Fires--UFC Section 11.204 amended.

Section 11.204 of the Uniform Fire Code is amended and supplemented by the addition of a new first paragraph to read:

As an exception to KMC 21.32.060, recreational fires may be conducted, but only if a permit is first obtained and if there is compliance with all

provisions of this section. A recreational fire permit will be issued upon request, without charge, when the issuing officer deems it safe to do so. The permit shall designate the premises and the exact location thereon where the fire may be started and continued; the nature of the material to be burned; the time limit of the permit; and may contain any special requirements pertaining to the fire and the control thereof as the issuing officer or the Director of Fire Services deem necessary for safety. The Director of Fire Services is authorized to require that recreational fires be immediately discontinued if the Director of Fire Services determines that smoke emissions are offensive to occupants of surrounding property.

Section 46. Section 21.32.065 is hereby amended as follows:

21.32.065 UFC Section ~~13.103~~ 2.205(a)  
amended.

Section ~~13.103~~ 2.205(a) of the Uniform Fire Code is amended and supplemented thereto by the addition of a new paragraph to read:

The Director of Fire Services is empowered and authorized to order the owner or occupant in writing, to designate smoking and nonsmoking areas and to post those areas with appropriate signs as defined and required in Title 70 RCW as it relates to the Washington Clean Indoor Air Act.

Section 47. Section 21.32.070 is hereby repealed.

Section 48. Section 21.32.090 is hereby amended as follows:

21.32.090 UFC Section ~~77.106(b)~~ 107(a)  
amended.

Section ~~77.106(b)~~ 107(a) of the Uniform Fire Code is amended to read as follows:

~~The storage of explosives and blasting agents within the City is prohibited.~~

Explosive materials shall not be stored within the City of Kirkland.

EXCEPTION: The Director of Fire Services may issue a special permit for such storage where it appears in his judgment there will be no undue danger to persons or property.

Section 49. Section 21.32.100 and 21.32.120 are hereby repealed.

Section 50. Subsection 21.33.030(a)(3) is hereby amended as follows:

21.33.030 Scope.

(a) General

(3) In buildings used for high-piled combustible storage, fire protection shall be in accordance with the fire code Article 81, Uniform Fire Code, 1991 Edition.

Section 51. Section 21.33.050 is hereby amended as follows:

Section 21.33.050 Standards.

Fire extinguishing systems shall comply with UBC Standards No's 38-1 and 38-2 as adopted by the building code for the city. The use of a combined system must receive special written approval of the director of fire services.

EXCEPTIONS: (1) Automatic fire-extinguishing systems not covered by UBC Standard No. 38-1 or 38-2 shall be approved and installed in accordance with the fire code.

(2) Automatic sprinkler systems may be connected to the domestic water supply main when approved by the director of fire services, provided the domestic water supply system is of adequate pressure, capacity and sizing for the combined domestic and sprinkler requirements. In such case the connection shall be made between the public water main or meter and the building shutoff valve, and there shall not be intervening valves or connections.

(3) The fire department connection may be omitted when approved by the director of fire services.

(4) Automatic sprinkler systems in Group R occupancies, four stories or less may comply with UBC Standard 38-3. When residential

sprinkler systems as set forth in UBC Standard 38-3 are provided, exceptions to or reductions in code requirements based on the installation of an automatic fire-extinguishing system are not allowed.

Section 52. Section 21.33.060 is hereby repealed.

Section 53. Chapter 21.33 of the Kirkland Municipal Code is hereby amended by adding a new section to be known as Section 21.33.060, entitled Automatic Fire-Extinguishing Systems, and to read as follows:

21.33.060 Automatic Fire-Extinguishing Systems.

(a) *Where Required.* An automatic fire-extinguishing system shall be installed in all structures as set forth in this section and Section 10.506 through Section 10.509 of the Uniform Fire Code and 1991 Uniform Building Code Section 3802 as amended and adopted by the State of Washington. For the purposes of this section an area separation or occupancy separation wall shall not constitute a separation between two structures.

For special provisions on hazardous chemicals and magnesium, and calcium carbide, see the fire code.

(b) *All Occupancies.* An automatic sprinkler system shall be installed in the following buildings or structures:

(1) In all buildings where the aggregate area of all floors and basements is greater than twelve thousand square feet except as otherwise specified in this chapter;

(2) In all buildings four or more stories in height. For the purpose of this section, a story shall be defined as that portion of a building included between the upper surface of any floor and the surface of the next floor or roof above;

(3) When it is determined by the Director of Fire Services that access for fire department emergency apparatus is not adequate;

(4) Throughout every apartment house three or more stories in height or containing more

than fifteen dwelling units and every hotel three or more stories in height or containing twenty or more guest rooms and in congregate residences 3 or more stories in height and having an occupant load of 50 or more. Residential sprinkler heads shall be used in the dwelling unit and guest room portions of the building. For the purposes of this section condominiums shall be treated as apartments. For the purpose of this section, a story shall be defined as that portion of a building included between the upper surface of any floor and the surface of the next floor or roof above;

(5) In Group E-1 occupancies as required by WAC 51-24-10507(c).

(6) All buildings or structures supported by piers or pilings which extend over water or where any portion of the building is more than two hundred fifty feet from an improved public street or alley giving access thereto for fire-fighting equipment.

EXCEPTION: Any one-story structure used solely for the moorage of boats or having Type I FR or II FR construction though need not have a sprinkler system installed unless otherwise required by other provisions of this chapter;

Section 54. Section 21.33.080 is hereby repealed.

Section 55. Chapter 21.33 of the Kirkland Municipal Code is hereby amended by adding a new section to be known as Section 21.33.080, entitled Permissible sprinkler omissions, and to read as follows:

21.33.080 Permissible sprinkler omissions

Subject to the approval of the director of fire services, sprinklers may be omitted in rooms or areas as indicated in Section 10.509 of the Uniform Fire Code, 1991 Edition.

Except as otherwise required by this Chapter, areas of existing buildings in excess of twelve thousand square feet may be increased by ten percent, not to exceed twelve thousand additional square feet, and not be required to

install fire-extinguishing systems. This exception may be used one time only.

Section 56. Section 21.35.020 is hereby amended as follows:

21.35.020 Scope

The provisions of this chapter shall apply to every apartment house three or more stories in height or containing fifteen sixteen or more dwelling units and every hotel three or more stories in height or containing twenty or more guest rooms, and to congregate residences three or more stories in height or having an occupant load of 20 or more; to Group A Division 1, 2, and 2.1 Occupancies; to Group E Division 1 Occupancies, and to Group E Division 3 Occupancies having an occupant load of 50 or more; to Group H Division 6 Occupancies; to Group I Occupancies; and to all other buildings having a total floor area of six thousand square feet or more. A fire alarm system shall be installed in these buildings.

~~Exception:--(1)--Group-B-and-H-occupancies that have automatic fire-extinguishing systems installed throughout;--provided,--that the director of fire services may required the installation of a complete or partial fire alarm system when undue hazard from fire to the occupants could occur.~~

~~----Exception:--(2)--In Group A occupancies, the director of fire services may, in writing allow the exclusion or modification of an alarm system where there are practical difficulties; provided that the spirit of the code is complied with and public safety is not compromised.~~

Section 57. Section 21.35.040 is hereby amended as follows:

21.35.040 Approval required.

Prior to the installation of a fire alarm system, or modification of a previously approved system, plans shall be submitted to the director of fire services for approval. The plans shall indicate the layout of all equipment to be used in the installation. The manufacturer and the model number of each component in the system shall be indicated.

The application, plans and specifications, and other data filed by an applicant for a fire

alarm system permit, shall be reviewed by the director of fire services or authorized representative. If the director of fire services finds that the work described in the application for a fire alarm system permit and the plans, specifications, and other data filed therewith conform to the requirements of this chapter and the rules and regulations as specified herein, he shall collect the permit fee and issue a fire alarm system permit.

The permit fee shall be:

For issuing each permit  
~~F~~for a new installation      ~~\$20.00~~\$50.00

Plus For each zone      ~~\$10.00~~\$20.00

For issuing a permit for a tenant  
 improvement or modification to a  
 previously approved  
 fire alarm system      20.00

Section 58. Chapter 21.08 of the Kirkland Municipal Code is hereby amended by adding a new section to be known as Section 21.08.021, entitled Complete Application Defined, and to read as follows:

21.08.021 Complete Application Defined.

The requirements for a fully complete building permit application include compliance with Sections 21.08.020 through 21.08.021 and with RCW 19.27.097 (which relates to water supply); provided that, for any construction project costing more than \$5,000 the following shall also be required:

(a) The legal description, or the tax parcel number assigned pursuant to RCW 84.40.160, and the street address if available, and may include any other identification of the construction site by the prime contractor;

(b) The property owner's name, address, and phone number;

(c) The prime contractor's business name, address, phone number, current state contractor registration number; and

(d) Either:

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

(ii) The name and address of the firm that has issued a payment bond, if any, on behalf of


the prime contractor for the protection of the owner, if the bond is for an amount not less than fifty percent of the total amount of the construction project; provided that if any of this information is not available at the time the application is submitted, the applicant shall so state and the lack of said information shall not cause the application to be deemed incomplete for the purposes of this section. However, the applicant shall provide the remaining information as soon as the applicant can reasonably obtain such information.

Section 59. 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 effected.

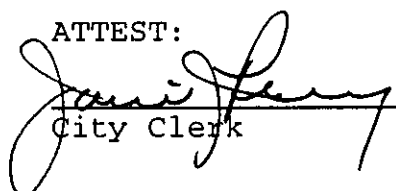
Section 60. This Ordinance shall be in force and effect five days from and after its passage by the Kirkland City Council and publication pursuant to Section 1.08.017, Kirkland Municipal Code in the summary form attached to the original of this ordinance and by this reference approved by the City Council.

PASSED by majority vote of the Kirkland City Council in regular, open meeting this 19th day of January, 1993.

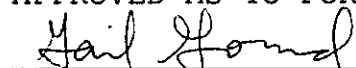
SIGNED IN AUTHENTICATION thereof this 19th day of January, 1993.

  
 \_\_\_\_\_  
 MAYOR

ATTEST:

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

APPROVED AS TO FORM:

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

BLGCODE4\GG:bb



PUBLICATION SUMMARY OF ORDINANCE NO. 3353

AN ORDINANCE OF THE CITY OF KIRKLAND RELATING TO BUILDINGS AND CONSTRUCTION, ADOPTING THE 1991 EDITIONS OF THE UNIFORM CODES CONSTITUTING THE STATE BUILDING CODE AND AMENDING PORTIONS OF TITLE 21 OF THE KIRKLAND MUNICIPAL CODE.

Section 1 - 4. Revise KMC Chapter 21.04, consistent with the 1991 edition of the Uniform Building Code.

Sections 5 - 23. Revise KMC Chapter 21.08, including such provisions as applicable fees and that which establishes standards for metal ceiling suspension systems based on the 1988 edition of the Uniform Building Code Standards.

Sections 24 - 25. Revise KMC Chapter 21.16 relating to permits for signs.

Sections 26 - 35. Revise KMC Chapter 21.20, the Plumbing Code, including such provisions as fees.

Sections 36 - 38. Revise KMC Chapter 21.24, including such provisions as mechanical permit fees.

Section 39. Revise KMC Section 21.28.010 by adopting the 1991 edition of the Uniform Code for the Abatement of Dangerous Buildings.

Sections 40 - 49. Revise KMC Chapter 21.32, including such provisions as outdoor burning.

Sections 50 - 55. Revise Chapter 21.33 of the Kirkland Municipal Code, including such provisions as automatic fire-extinguishing system requirements.

Section 56-57. Revise KMC Chapter 21.35, including such provisions as requirements for fire alarm systems and their permit fees.

Section 58. Creates a new Section 21.08.021 relating to requirements for a fully complete building permit application.

Section 59. Provides a savings clause for the ordinance.

Section 60. Authorizes publication of the Ordinance by summary, which summary is approved by the City Council pursuant to Section 1.08.017 Kirkland Municipal Code and establishes the effective date as five days 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 regular meeting on the 19th day of January, 1993.

I certify that the foregoing is a summary of Ordinance 3353 approved by the Kirkland City Council for summary publication.

City Clerk  
city92\builddord\gg:nmw