

AN ORDINANCE OF THE CITY OF KIRKLAND RELATING TO FIRE EXTINGUISHING SYSTEMS.

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

Section 1. There is hereby created a new chapter of the Kirkland Municipal Code to be known as Chapter 21.33, FIRE EXTINGUISHING SYSTEMS, and to read as follows:

Chapter 21.33 FIRE EXTINGUISHING SYSTEMS

21.33.010 Purpose. The purpose of this chapter is to promote the general public health, safety, and welfare by establishing the maximum fire compartment area within unsprinklered buildings and regulating the installation of automatic fire extinguishing systems. This ordinance is not intended to create or otherwise establish or designate any particular class or group of persons who will or should be especially protected or benefited by the terms of this ordinance.

21.33.020 Intent. It is the intent of this Chapter to require installation of fire extinguishing systems so as to protect against safety hazards. These requirements are reasonably related to the hazard posed, such as where local circumstances hinder access for emergency equipment or personnel. Notwithstanding any chapter, ordinance, legislation or other provisions concerning local requirements for fire extinguishing systems, this chapter shall determine the requirements for fire extinguishing systems within the City.

21.33.030 Scope. (a) General. The provisions of this chapter shall apply to new buildings and to existing buildings that are expanded beyond the limits set forth in this chapter. All fire extinguishing systems required by this chapter shall be installed in accordance with the requirements of this chapter.

Fire hose threads used for connection to fire extinguishing systems by the fire department shall be National Standard Hose Threads (NST).

In buildings used for high-piled combustible storage, fire protection shall be in accordance with the fire code.

The occupancy classifications used in this chapter are the same as those used in the building code adopted by reference in this title.

(b) Approvals. All fire extinguishing systems including automatic sprinkler systems, combined systems,

and special automatic extinguishing systems shall be approved and shall be subject to such periodic tests as may be required by the director of fire service or designee. The location of all fire department hose connections shall be approved by the director of fire services or designee. The connection to a public water supply and cross-connection control shall be approved by the appropriate water purveyor.

21.33.035 Appeals. Appeals from any ruling made under this Chapter may be made to the Building Code Board of Appeal. Procedural rules concerning appeals shall be as provided in the building code.

21.33.040 Definitions. For the purpose of this chapter certain terms are defined as follows:

- (1) AUTOMATIC FIRE-EXTINGUISHING SYSTEM is an approved system of devices and equipment which automatically detects a fire and discharges an approved fire-extinguishing agent onto or in the area of a fire.
- (2) COMBINED SYSTEM is a system of water piping which serves 2 1/2-inch hose outlets for use by the fire department and also supplies water for fire sprinklers.
- (3) FIRE DEPARTMENT HOSE CONNECTION is a connection through which the fire department can pump water.

21.33.050 Standards. Fire extinguishing systems shall comply with UBC Standards Nos. 38-1 and 38-2 as adopted by the building code for the City of Kirkland. 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.

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. 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 12,000 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 15 dwelling units and every hotel three or more stories in height or containing 20 or more guest rooms. Residential sprinklerheads 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 every story or basement of all buildings when the floor area exceeds 1500 square feet and there is not provided at least 20 square feet of opening entirely above adjoining ground level in each 50 lineal feet or fraction thereof of exterior wall in the story or basement on at least one side of the building. Openings shall have a minimum dimension of not less than 30 inches. Such openings shall be accessible to the fire department from the exterior and shall not be obstructed in a manner that fire-fighting or rescue cannot be accomplished from the exterior.

When openings in a story are provided on only one side and the opposite wall of such story is more than 75 feet from such openings, the story shall be provided with an approved automatic sprinkler system, or openings as specified above shall be provided on at least two sides of an exterior wall of the story.

If any portion of a basement is located more than 75 feet from openings required in this section, the basement shall be provided with an approved automatic sprinkler system.

(6) At the top of rubbish and linen chutes and in

their terminal rooms. Chutes extending through three or more floors shall have additional sprinkler heads installed within such chutes at alternate floors. Sprinkler heads shall be accessible for servicing.

(7) In rooms where nitrate film is stored or handled.

(8) In protected combustible fiber storage vaults as defined in the fire code.

(9) In all buildings or structures supported by piers or piling which extend over water and any portion of the building is more than 250 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 throughout need not have a sprinkler system installed unless otherwise required by other provisions of this chapter.

(10) In rooms used primarily for entertaining occupants who are drinking or dining and unseparated accessory uses where the total area of such unseparated rooms and assembly uses exceeds 5000 square feet. For uses to be considered separated, the separation shall be not less than as required for a one-hour occupancy separation. The area of other uses shall be included unless separated by at least a one-hour occupancy separation.

(11) Under the roof and gridiron, in the tie and fly galleries and in all places behind the proscenium wall of stages; over and within permanent platforms in excess of 500 square feet in area; and in dressing rooms, workshops and storerooms accessory to such stages or permanent platforms.

EXCEPTIONS: 1. Stages or platforms open to the auditorium room on three or more sides.

2. Altars, pulpits or similar platforms and their accessory rooms.

3. Stage gridirons when side-wall sprinklers with 135 degrees F. rated heads with heat-baffle plates are installed around the entire perimeter of the stage except for the proscenium opening not more than 30 inches below the gridiron nor more than 6 inches below the baffle plate.

4. Under stage or platform areas less than 4 feet in height used exclusively for chair or table storage and lined on the inside with materials approved for one-hour fire-resistive construction.

(c) Special provisions for group A or E occupancies.

(1) An automatic sprinkler system shall be installed in a basement classed as a group A or E occupancy when the basement is larger than 1500 square feet in floor area.

(2) An automatic sprinkler system shall be installed

in any enclosed usable space below or over a stairway in a group A or E occupancy.

(d) Special provisions for group H occupancies.

(1) Group H Division 1. An automatic fire-extinguishing system shall be installed in Group H Division 1 occupancies larger than 1500 square feet in floor area.

(2) Group H Division 2. An automatic fire-extinguishing system shall be installed in Group H Division 2 Occupancies larger than 1500 square feet in floor area.

An automatic fire-extinguishing system shall be installed in rooms of Group H Division 2 Occupancies when flammable or combustible liquids are stored or handled in excess of quantities set forth in Table No. 9-A of the building code, or any combination of flammable liquids exceeds 240 gallons.

An automatic fire-extinguishing system shall be installed in paint spray booths or rooms.

(3) Group H Division 3. An automatic fire-extinguishing system shall be installed in Group H Division 2 Occupancies larger than 3000 square feet in floor area.

(4) Group H Division 4. An automatic fire-extinguishing system shall be installed in Group H Division 4 Occupancies more than one story in height.

(5) Group H Division 6. An automatic fire-extinguishing system shall be installed throughout buildings containing Group H Division 6 Occupancies. The design of the sprinkler system shall, at a minimum, comply with Standard No. 38-1 of the building code for occupancy hazard classifications as follows:

LOCATION	OCCUPANCY HAZARD CLASSIFICATION
Fabrication areas	Ordinary Hazard Group 3
Service corridors	Ordinary Hazard Group 3
Storage rooms without dispensing	Ordinary Hazard Group 3
Storage rooms with dispensing	Extra Hazard Group 2
Exit corridors	Ordinary Hazard Group 3

(e) Special provisions for Group I occupancies

An automatic sprinkler system shall be installed in all Group I Occupancies.

EXCEPTION: Sprinklers shall be installed in jails and prisons in conformance with the rules set forth by the Corrections Standards Board pursuant to RCW 70.48.050.

21.33.070 Sprinkler System Supervision Alarms.

Automatic sprinkler systems shall be supervised by an approved central, proprietary or remote station service or a local alarm which will give an audible signal at a constantly attended location when the number of sprinklers is:

- (1) 20 or more in Group I Division 1 Occupancies
- (2) 100 or more in other occupancies.

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 follows:

(1) When sprinklers are considered undesirable because of the nature of the contents or in rooms or areas which are of noncombustible construction with wholly noncombustible contents and which are not exposed to other areas. Sprinklers shall not be omitted from any room merely because the room is damp or of fire-resistive construction.

(2) Sprinklers shall not be installed when the application of water or flame and water to contents may constitute a serious life or fire hazard, as in the manufacture or storage of quantities of aluminum powder, calcium carbide, calcium phosphate, metallic sodium and potassium, quicklime, magnesium powder and sodium peroxide.

(3) Safe deposit or other vaults of fire-resistive construction, when used for the storage of records, files and other documents when stored in metal cabinets.

(4) Communication equipment areas under the exclusive control of a public communication utility agency, provided:

- A. The equipment is separated from the remainder of the building by one-hour fire-resistive occupancy separation; and
  - B. Such areas are used exclusively for such equipment; and
  - C. An approved smoke detection system is installed in such areas and is supervised by an approved central, proprietary or remote station service or a local alarm which will give an audible signal at a constantly attended location.
  - D. Other approved fire-protection equipment such as portable fire-extinguishers or Class II standpipes are installed in such areas.
- (5) Other approved automatic fire-extinguishing

systems may be installed to protect special hazards or occupancies in lieu of automatic sprinklers.

(6) In elevator shafts and equipment rooms for elevator hoisting equipment.

(7) The areas of existing buildings in excess of 12,000 square feet may be increased by 10%, not to exceed 12,000 additional square feet. This exception may be used one time only.

21.33.090 Rules to be Developed. The director of fire services is directed to develop and publish rules and regulations for automatic fire-extinguishing systems. The rules and regulations shall indicate the type and configuration of systems based on occupancy and shall be developed from nationally recognized standards. No less than three copies shall be available for public inspection and review in the fire department office. The director of fire services may offer the rules and regulations for sale for a reasonable cost to cover printing and handling.

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

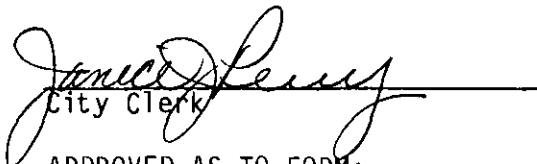
Section 3. This ordinance shall be in force and effect five days from and after its passage by the Kirkland City Council and publication pursuant to Section 1.08.017 Kirkland Municipal Code in the summary form attached to the original of this ordinance and by this reference approved by the City Council.

Passed by majority vote of the Kirkland City Council in regular, open meeting this 7th day of June, 1988.

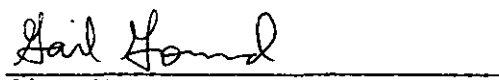
Signed in authentication thereof this 7th day of June, 1988.

  
MAYOR

ATTEST:

  
City Clerk

APPROVED AS TO FORM:

  
City Attorney

Acting

SUMMARY OF ORDINANCE 3090

AN ORDINANCE OF THE CITY OF KIRKLAND RELATING TO FIRE EXTINGUISHING SYSTEMS.

Section 1. Creates a new chapter, 21.33, in the Kirkland Municipal Code setting forth requirements for fire extinguishing systems.

Section 2. Provides for the validity of other provisions of this ordinance should any one part be invalid.

Section 3. Authorizes publication of the Ordinance by summary, which summary is approved by the City Council pursuant to Section 1.08.17 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 7th day of June 1988.

I certify that the foregoing is a summary of Ordinance 3090 approved by the Kirkland City Council for summary publication.

  
City Clerk