Repealed By 2132 on Date:

ORDINANCE NO. 2065

AN ORDINANCE OF THE CITY OF KIRKLAND, WASHINGTON, RELATING TO FIRE PROTECTION AND PREVENTION, HIGH-RISE BUILDINGS, ELEVATOR OVER-RIDE CONTROLS IN HIGH-RISE BUILDINGS, FIRE ALARM SYSTEMS IN HIGH-RISE BUILDINGS, AND AMENDING SECTION 6.11 OF CHAPTER VI OF KIRKLAND ORDINANCE NO. 1140 AS HERETOFORE AMENDED BY ORDINANCE NO. 2046.

BE IT ORDAINED by the City Council of the City of Kirkland as follows:

Section 1. Section 6.11 of Chapter VI of Ordinance No. 1140 as heretofore amended by Ordinance No. 2046, be and it hereby is amended to read as follows:

Section 6.11 Additions to the Fire Prevention Code.

(a) No portion of any building or other structure supported by piers or piling and extending over water shall be more than 250 feet from an improved public street or alley giving access thereto for fire engines and other fire fighting equipment.

(b) A high-rise building shall be a building of five stories or more.

(c) Requirements of emergency over-ride controls for elevators. In all buildings, where the building permit is applied for after August 4, 1969, and is defined as a high-rise building, and which are equipped with automatic elevators, there shall be a least one elevator equipped to by-pass all car and corridor calls and return to the main floor. The return to the main floor shall be initiated by the operation of a keyed switch. The key shall be kept in an appropriate enclosure adjacent to the elevator and readily accessible to qualified emergency services personnel, but not available to the public. If an elevator must stop and reverse in order to return to the main floor, the doors at the floor of reversal shall not open. Upon return to the main floor, the elevator car and doors shall remain under the individual operation and control of emergency services personnel until released for restoration to its operating functions.

(d) Switch for power-operated elevator doors. In all buildings, where the building permit is applied for after August 4, 1969, all elevators equipped with photoelectric tube devices, which control the closing of automatic, power-operated elevator doors, shall have a switch in the elevator car which when actuated, will render the photoelectric tube ineffective. This switch shall be constant pressure type requiring not less than ten, nor more than fifteen, pounds pressure to actuate. Said switch shall be located not less than five feet nor more than six feet six inches, above the car floor and shall be in or adjacent to the operating panel. The switch shall be clearly labeled "To be used in case of fire only."

(e) Fire alarm systems for high-rise buildings are required and shall be installed to meet the following requirements:

1. a. Every alarm system and its equipment shall be of a standard approved type suitable for the purpose for which it is installed.

b. All power supply equipment (batteries, battery chargers, rectifies, switching facilities, transformers, etc.) and wiring shall be installed in conformity with the requirements of the National Electrical Code, and of the regulations of the State Electrical Inspection Division, for such equipment.

c. Only one main power supply source is required for system operation; however, where there is provided in the protected premises an emergency power supply, separate from the main building supply and available for operation of essential services, this emergency supply shall be used as a secondary power supply for the alarm system.

d. The conductors of the signalling system power supply circuit shall be connected on the line side of the main service of a commercial light or power supply circuit, or to the main bus bars of an isolated power plant located on the premises. Such systems shall be independent of any other signalling system within an occupancy.

e. All circuits for operating alarm sounding devices and appliances shall be electrically supervised. Exception:

(1) Alarm signal sounding applicances when (a) alternately connected to two or more circuits and approximately equally distributed throughout the building, or (b) connected to a return loop circuit so that a break or ground fault does not prevent the operation of any sounding appliance and with means provided for testing the continuity of the circuit.

(2) A circuit employed to produce a supplementary local alarm signal to indicate the operation of an automatically operated alarm transmitter or a manual fire alarm box, provided that an open or ground fault of the signal circuit conductor results only in the loss of the supplementary signal.

(3) The circuit of an alarm bell installed in the same room with a system control unit, provided the bell circuit conductors are installed in conduit or equivalently protected against mechanical injury and tampering.

(4) A trouble signal circuit.

2. Each manually operated sending station and alarm sounding device in a single system shall be of the same general type.

A fire alarm system shall be electrically supervised so that the occurrence of a break, or a ground fault of its installation wiring circuits which prevents the required operation of the system, or failure of its main power supply source, will be indicated by a distinctive trouble signal.

3. A manually operated sending station shall be provided at each main exit and in the natural path of escape from fire, at readily accessible and visible points which are not likely to be obstructed.

4. Each manual sending station shall be securely mounted. The bottom of the box shall not be less then 4 1/2 feet, and not more than 6 feet above the floor level.

5. Each sending station shall not be more than 200 feet distant from another station on the same floor, or more than 100 feet and one flight of stairs to reach a sending station upon another floor, and located in the natural path of escape from fire.

6. The arrangement of sending stations, and the manner of their connection with sounding devices, shall be such that there will be no difference between the sounding of actual alarms and drill signals.

7. A required sounding device shall be used for fire alarm and drill purposes only.

8. Alarm sounding devices shall be provided, of such character and so distributed, as to be effectively heard regardless of the maximum noise level obtained from machinery or other equipment, or vocal sounds produced under normal conditions of occupancy. Visible signals shall be provided to augment the alarm system for areas housing deaf persons.

9. Every alarm sounding device shall be distinctive in pitch and quality from all other sounding devices and may be march-time oscillating.

10. Each system shall be so arranged that no manual intervention will be required following the actuation of a sending station or automatic detector for causing the effective response of all required sounding devices. No facilities shall be provided whereby such response can be controlled or modified except where specifically permitted by the authority having jurisdiction.

11. An automatic, ionization type, or equally efficient smoke detector system, shall be installed as an integral part of a heating system or air conditioning system, when in the opinion of the City Fire Chief a hazard has been created by the

installation of the heating or air conditioning system. Such installations shall not reduce the requirements for one-hour, fire-resistive construction provisions in the Building Code. The smoke detectors shall be installed and connected to automatically energize the fire alarm circuit, and simultaneously de-energize the electrical power to the mechanical equipment of the circulation system.

12. An automatic fire detection system, where installed, shall be of standard UL listed type, and shall be so installed as to provide effective warning of incipient fire in any part of the premises. Automatic detectors shall be installed in boiler rooms, furnace or incinerator rooms, laundries, repair shops, handicraft shops, laboratories, kitchens, storage closets and areas, stages, chemistry storage rooms, janitors' closets, and attic areas, or other hazardous areas, to augment the required manual alarm system, but not limited to those areas, when in the opinion of the City Fire Chief a hazard is inherent.

13. In any occupancy where a fire alarm system is required, the electric power for such systems shall be connected on the line side of the electrical entrance switch, unless in the opinion of the City Fire Chief the electrical power may be of local source.

14. Where variable floor plan arrangements, using movable temporary partitions or furnishings or other construction features, or the placing of portable or temporary structures, which will affect existing exit lighting and consequent manual fire alarm signal sending and sound station locations, and/or other conditions which may be contemplated, floor and/or building diagrams shall be approved in advance by referral to the Kirkland Fire Department for approval.

15. An annunciator system or panel with fully supervised wiring as a part of the alarm system will be required to alert supervisory personnel and the direct emergency equipment and personnel to the area of alarm transmission with the least possible delay.

Annunciator panels shall be installed at the main entrance of a multi-story building or at the entrance of the administration building of a complex.

Such panel shall be located in a prominent position, either on the exterior of the building or immediately inside of a glazed opening of the building to be clearly visible to personnel responding to an emergency and reporting the location of the alarm transmitted from the building or complex.

16. If the required fire alarm system is not in fact directly connected with the public fire department or other outside assistance provided in case of fire or emergency, arrangements shall be made for prompt and positive notification of such assistance as may be available. (For example such as an outside siren connected to building fire alarm system).

17. Every alarm system shall be under the supervision of a responsible person who shall cause proper tests to be made at specified intervals and have general charge of all alterations and additions. No changes may be made in the system without written approval of the Kirkland Fire Department.

18. Each system shall be tested at not less than semi-annual intervals, and records kept showing such tests were performed.

19. Fire alarm signalling equipment shall be restored to service as promptly as possible after each test or alarm, and shall be kept in normal condition for operation. Equipment requiring winding or replenishing shall be rewound or replenished as promptly as possible after each test or alarm.

20. Fire alarm control panels shall be installed in the staff office or immediate area of personnel charged with the responsibility of the facility; or in a room, or area which is continually staffed during the hours the building is occupied. When there are practical difficulties encountered in the location of such equipment, then at the direction of the City Fire Cheif, a trouble bell or signal may be located in the main corridor, where its operation will be obvious. Fire

alarm panels will have a constantly visible supervisory meter showing that the system is normal. Any derangement of the system circuits will be indicated by means of a trouble bell or buzzer. When such trouble bell or buzzer is silenced, a supervisory lamp will indicate that the system is not in normal condition and shall be corrected immediately.

21. A manually or automatically operated fire alarm system may be arranged for the accomplishment of incidental functions, such as the release of self-opening or self-closing doors, cutting off supplies of gas, fuel oil, or electric power, switching on emergency lights, stopping of air supply ventilating fans, inso-far as the accomplishment of such functions does not impair the effectiveness or reliability of the required sounding devices in response to the required sending stations.

22. Circuit diagrams shall be supplied by the company installing the system and shall be conspicuously posted, with directions on how to reset the system or de-energize the circuit after an alarm has been sounded for drill or other cause. Keys for signal stations and cabinets housing control panels are to be supplied by the installer and shall be kept in locations readily accessible for use when required. Facilities shall be provided for testing and fire drills, to be conducted without breaking the glass on the manual station on all required fire alarm systems.

23. Supervised circuit wiring of fire alarm systems shall be classified as Class I signal systems and all wiring, including the wiring of combination signal systems, shall be in conformity with requirements of the National Electrical Code and the Washington State Electrical Division's Rules and regulations for Class I signal systems.

24. Miscellaneous.

a. In any existing occupancy where a fire alarm system is required and where speakers of an inter-communication system are used to produce audible signals for local fire alarms, the audio amplifiers for powering the speaker circuits shall be in duplicate and be

so arranged that failure of one amplifier will not prevent the transmission of audible signals to all circuits; and will be accompanied by an audible trouble signal.

b. In any occupancy in which an approved automatic sprinkler system or a partial sprinkler system is required, provision shall be made through a water-flow device which will electrically energize the fire alarm system, and will be a part of any required fire alarm system protecting such building.

Section 2. This ordinance shall be in force and take effect 5 days from and after its passage by the Council and publication as required by law.

PASSED by the City Council in regular meeting on the 4th day of August, 1969.

SIGNED in authentication thereof on the 4th day of August, 1969.

William L. Woods
Mayor

Attest:

Director of Administration and Finance
(ex officio City Clerk)

Approved as to form:

City Attorney

Ordinance No. 2065