

Ordinance No. 110299

AN ORDINANCE relating to the Seattle Fire Code; amending Chapter 22.606 of the Seattle Municipal Code by adding thereto a new section 22.606.140 (a new article 93 to the Uniform Fire Code) to establish minimum fire and life safety requirements and compliance procedures for high rise buildings.

9-18-81 PS & J Pass
 9-25-81 PS & J Hold until 10/7/81
 10-7-81 PS & J Hold until 10/21/81
 10-21-8 PS & J Pass as amended

COMPTROLLER

FILE NUMBER

ENGROSSED BILL

Council Bill No. 102463

INTRODUCED: Aug 10, 1981	BY:	
REFERRED: Aug 10, 1981	TO:	PS & J
REFERRED:		
REFERRED:		
REPORTED DEC 14 1981	SECOND READING:	DEC 14 1981
THIRD READING DEC 14 1981	SIGNED:	DEC 14 1981
PRESENTED TO MAYOR DEC 15 1981	APPROVED:	DEC 24 1981
RETD. TO CITY CLERK DEC 28 1981	PUBLISHED:	
VETOED BY MAYOR:	VETO PUBLISHED:	
PASSED OVER VETO:	VETO SUSTAINED:	

Unanimous Vote

YES NO

TMENT

SEE BACK COVER

Ord. 110301 -Re to Seattle Bldg. Code; adding cross references & establishing additional requirements for high rise bldgs to conform with the Seattle Fire Code.

Ord. 110871 -Amends ... to extend the exemption for low-income residential bldgs. from Jan. 1, 1983 to July 1, 1983.

Res. 26945 -Establishes City Council intent with respect to future funding of the City's Fire Code compliance Fund; & establishes general principles as to how the Fire Code Compliance Fund assistance shall be made available to eligible owners of low-income, high-rise, residential properties affected by the high-rise Fire Code.

Ord. 111221 -Amends ... (SMC 22.606.140) to establish minimum fire & life safety requirements & compliance procedures for low-income residential high-rise bldgs. & to clarify certain provisions.

ORDINANCE 110299

AN ORDINANCE relating to the Seattle Fire Code; amending Chapter 22.606 of the Seattle Municipal Code by adding thereto a new section 22.606.140 (a new article 93 to the Uniform Fire Code) to establish minimum fire and life safety requirements and compliance procedures for high rise buildings.

BE IT ORDAINED BY THE CITY OF SEATTLE AS FOLLOWS:

Section 1. Chapter 22.606 of the Seattle Municipal Code is amended by adding thereto a new section 22.606.140 as follows:

22.606.140 UFC Article 93 added - Minimum standards for high rise buildings.

The Uniform Fire Code is amended by adding thereto a new Article 93, to read as follows:

Section 93.101. Purpose. The main purpose of this article is to improve the fire and life safety of existing high rise buildings that do not conform to current City codes so that the health, safety and welfare of the general public is provided for and promoted. It is recognized that the application of present day fire protection techniques to some existing high rise buildings is difficult. For this reason, this article may permit the use of alternative methods and innovative approaches and techniques to achieve its purpose, when approved by the Chief and the building official.

Section 93.102. Scope. (a) This article shall apply to all high rise buildings in existence at the time of its adoption, as well as to all high rise buildings coming into existence after the adoption thereof.

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2 (b) Where there is a conflict between an ordinance or
3 code and the provisions of this article, this article shall
4 govern unless the ordinance or code establishes more stringent
5 fire and life safety requirements.

6 Section 93.103. Definitions. For the purpose of this
7 Article, certain words shall be construed as specified in
8 this section.

- 9 1. HIGH RISE BUILDING: Buildings having floors used
10 for human occupancy located more than 75 feet
11 above the lowest level of Fire Department vehicle
12 access.
- 13 2. CENTRAL STATION: A fire alarm reporting service
14 listed by the Underwriters Laboratories or authorized
15 by the Chief to report alarms to the Seattle Fire
16 Department Alarm Center. In lieu of connection to
17 a central station listed by Underwriters Laboratories,
18 the Chief shall approve building staff monitoring
19 of a fire alarm annunciator panel where:
- 20 A. Such staff is properly trained to monitor the
21 annunciator panel and report alarm signals to
22 the Fire Department Alarm Center via the 911
23 system.
- 24 B. One or more building staff is on duty 24
25 hours a day and remains in the direct vicinity
26 of the annunciator panel, e.g., a hotel desk
27 clerk where the panel is behind the registration
28 desk.

1 3. FLOOR USED FOR HUMAN OCCUPANCY: A floor designed
2 and intended for occupancy by one or more persons
3 for any part of a day, including a roof garden and
4 an active storage area. An area occupied for the
5 service of building equipment only is not included
6 in this definition.

7 4. DEAD-END CORRIDOR: A corridor which permits only
8 one direction of travel from a unit or room door
9 to an exit, or which intersects an exit corridor
10 on one end and does not provide an exit path on
11 the other end. A corridor which has fire escapes
12 directly accessible from it is not a dead-end
13 corridor.

14 Section 93.104. Exits. All exits in high rise buildings
15 shall be illuminated as required in Section 3312 of the
16 Building Code and enclosed with a minimum of one-hour fire
17 resistive construction. Every high rise building shall have
18 at least one such exit. Where existing exterior fire escapes
19 are used for additional exits, they shall be tested and
20 identified as required in Section 93.105. Where a high rise
21 building has a single enclosed exit, the enclosure shall be
22 continued to the exterior of the building and the exit shall
23 be smoke-proof by natural ventilation in accordance with
24 Section 3309 (g) of the Building Code, or shall be mechani-
25 cally pressurized with fresh air to 0.15 inches water column
26 and shall have a concurrent 2500 cubic feet per minute (CFM)
27 exhaust to atmosphere in an emergency, in accordance with
28 the provisions of the Building Code.

1 EXCEPTION: A single stair may exit through a building
2 lobby where the lobby is of non-combustible construction,
3 does not contain combustible furnishings, and is
4 separated from the rest of the building by one-hour
5 construction. Wire-glass protected by sprinklers on
6 both sides may be accepted as one-hour construction.
7 Where the lobby contains no combustible materials, wire-
8 glass need only be protected by sprinklers on the side
9 opposite the lobby.

10 Section 93.105. Fire Escapes. Exterior fire escapes
11 shall be accessible and structurally safe at all times.
12 Owners of high rise buildings shall load test fire escapes
13 at least once every five years with a weight of not less
14 than 100 lb/sq. foot. The results of such a load test shall
15 be submitted in writing to the Chief. In lieu of such a
16 test, the Chief may accept the opinion of a structural
17 engineer licensed by the State of Washington that the fire
18 escape is structurally safe and will support a load of 100
19 lb/sq. foot. There shall be signs approved by the Chief
20 clearly identifying the route of access to the fire escape
21 from every public corridor.

22 Locked doors or windows are prohibited between public
23 corridors and fire escapes.

24 EXCEPTION: Where all of the following criteria are met
25 and approved by the Chief:

- 26 1. An identified tool or device for opening the
27 locked door or window is permanently affixed in
28 close proximity to the locked point.
2. The area around the locked door or window is
 served by emergency illumination.

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3. Clearly understandable directions indicating the use of the tool and the route to the fire escape are posted at the locked door or window.

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Section 93.106. Dead-end Corridors. Dead-end corridors are limited to 75 feet in length in office occupancies and 30 feet in length in all other occupancies. Where such limits are exceeded, automatic sprinkler protection meeting the requirements of the Fire Code and the Building Code shall be provided for the entire dead-end corridor, with one head on the room side of each door opening onto the corridor. Domestic water systems may be used to supply such sprinklers when approved by the Chief.

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EXCEPTIONS:

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1. In high rise buildings, inactive doors leading from the dead-end corridor into spaces which are not in normal use may be covered with 5/8" type x gypsum board or its equivalent, in lieu of installing a sprinkler head over the door or smoke detector in the room.
 2. In office occupancies, sprinkler heads on the room side of each door opening onto the corridor need not be installed.
 3. In residential buildings, where corridors and each guest room are equipped with electrically supervised smoke detectors connected to the building fire alarm system, sprinkler heads, or any combination thereof. Where smoke detectors are used in rooms in lieu of sprinklers, doors must be rated at 20 minutes and must be self-closing.

1 4. In office occupancies, sprinkler systems are not
2 required in a dead-end corridor where the corridor
3 is equipped with smoke detectors and each room
4 opening onto the corridor is equipped with at
5 least one smoke detector. Such detector shall be
6 electrically supervised and connected to the
7 building fire alarm system.

8 5. Where there is a fire escape not directly accessible
9 from the corridor, and the exit route is protected
10 by electrically supervised smoke detection.

11 Section 93.107. Shaft Enclosures. All openings which
12 connect three or more floors shall be enclosed with a minimum
13 of one-hour fire resistive construction.

14 EXCEPTION: Openings complying with Section 1706(b) of
15 the Building Code.

16 Section 93.108. Heating, Ventilation and Air Condition-
17 ing System (HVAC) Shutdown. Air moving systems that serve
18 more than the floor on which they are located shall auto-
19 matically shut down on any high rise building fire alarm, or
20 shall be provided with a manual shutdown switch located at
21 the fire alarm panel in the main building lobby.

22 EXCEPTION: Air moving systems of:

- 23 1. Less than 2000 CFM.
- 24 2. Exhaust only systems of less than 15,000 CFM, such
25 as toilet, range hood, kitchen, fume hood, etc.
- 26 3. HVAC systems of less than 15,000 CFM with automatic
27 shut down on smoke detectors in the area served,
28 which are connected to the building fire alarm
system.

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2 4. Life safety pressurization systems as provided in
3 the Building Code.

4 5. Buildings with approved automatic smoke control
5 pursuant to Sections 1807(g) or 3309(m) of the
6 Building Code.

7 Section 93.109. Fire Alarm and Detection Systems.

8 Every high rise building, except a residential occupancy
9 with a system installed under Ordinance 106107 as now or
10 hereafter amended, shall have an electrically supervised
11 fire alarm and detection system approved by the Chief, as
12 follows:

- 13 1. A Manual pull station shall be located at every
14 floor exit door, except in office occupancies.
15 2. There shall be electrically supervised automatic
16 smoke detection in elevator landings, public
17 corridors, and on the corridor or floor side of
18 each exit stairway.

19 EXCEPTION: Where a corridor is sprinklered, smoke
20 detectors may be omitted from the corridor.

- 21 3. There shall be electrically supervised automatic
22 smoke detectors within 50 feet of building peri-
23 meter walls and at standard spacing (approximately
24 30 feet) to the center of the floor.

25 EXCEPTIONS:

- 26 A. Interior of residential units.
27 B. Sprinklered floors.
28 C. Parking garages.
D. Building Mechanical Spaces.
E. Any space above the top occupied floor.

1 4. There shall be electrically supervised automatic
2 heat or smoke detection in unsprinklered rooms
3 used for storage, shops, handicraft, janitor,
4 trash and similar purposes where the fuel load may
5 be significantly higher than the average floor
6 fuel load.

7 EXCEPTIONS:

- 8 A. Sprinklered rooms.
9 B. Rooms under 10 square feet opening onto exit
10 corridors.
11 C. Rooms under 100 square feet not opening onto
12 exit corridors.
13 D. Rooms within residential units.
14 E. Rooms where the storage is in closed metal
15 containers.
16 F. Rooms other than a corridor within 30 ft of
17 an electrically supervised automatic smoke
18 detector.

19 5. Alarm systems shall have audible devices producing
20 a slow "whoop" sound audible at 15 dba above
21 ambient sound levels with a minimum of 60 dba
22 throughout residential occupancies, and 10 dba
23 above ambient sound levels with a minimum of 55
24 dba throughout other occupancies, and shall have a
25 microphone capable of making voice announcements
26 simultaneously to all floors.

27 6. Fire alarm systems shall be zoned per floor.

28 7. There shall be an annunciator panel in the main
 lobby of a high rise building or in such other
 areas approved by the Chief as an emergency control
 center.

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8. The alarm shall sound at a minimum on the floor where the fire is occurring and the floor above, and the alarm system shall be capable of sounding a general alarm throughout the high rise building. The alarm system shall be designed so that a general alarm may be activated from two separate locations.
 9. Where an automatic sprinkler system has been installed for fire protection, the water flow alarm shall be connected to the building fire alarm.

EXCEPTION: Where automatic smoke detectors are installed in the area and zoned, a single water flow alarm may be used.
 10. The alarm system for the high rise building shall be monitored by a central station, or other such means approved by the Chief.
 11. The alarm systems shall be electrically supervised and have battery emergency power sufficient to operate for a period of 24 hours and sound the alarm for 10 minutes at the end of that period.
 12. For purposes of this section, wiring for fire alarm and fire detection systems may be installed in elevator shafts, provided that:
 - A. Such wiring shall not interfere with the safe operation of the elevator.
 - B. Such wiring shall be enclosed within metal conduit and all junction boxes shall be located outside the shaft.

1 C. All wiring work shall be done under applicable
2 permit obtained from the Department of
3 Construction and Land Use.

4 Section 93.110. Unlocking of doors. (a) Stairway
5 doors, including the doors between any stairway and the
6 roof, shall not have locks or shall unlock automatically
7 whenever a fire alarm is activated in the high rise building.
8 Such locks shall unlock automatically when power is off (fail
9 safe). Where the only locked door in a stair shaft is the
10 one that leads to the roof, it may be locked by panic hardware
11 or approved alarm lock paddle bars.

12 (b) Section 12.114 of the Fire Code also applies, and
13 is restated as follows:

14 "Section 12.114. Egress from stairways.
15 Enclosed stairways serving more than six (6)
16 floors shall have two means of egress from the
17 stairway. Enclosed stairways serving ten (10) or
18 more floors shall have re-entry into the building
19 at approximately 5-story intervals. Re-entry
20 signs shall be posted in the stair.

21 "EXCEPTION:

- 22 1. Jails.
23 2. Where telephones connected to a 24-hour
24 manned location are provided in the stairway
25 in each 5-floor increment that does not have
26 a means of egress.
27 3. Where any door serving as an entrance to the
28 stair does not automatically lock behind a
person entering the stair.

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2 4. Where alternate means of alerting building
3 management to persons trapped in a stairwell
4 are approved by the building official."

5 Section 93.111. Doors. All exit doors in the path of
6 exit travel shall be self-closing or automatic closing in
7 accordance with Section 4306(b) 2 of the Building Code.
8 Doors held open by fusible links, and sliding or vertical
9 doors are prohibited in exit ways. Stairway doors shall be
10 self-latching.

11 Section 93.112. Elevator Recall. A fire alarm origin-
12 ating on a floor other than the main lobby floor shall cause
13 all elevators to be returned to the main floor in accordance
14 with Section 5113(d) of the Building Code. Whenever new
15 elevator controllers are installed, they shall meet all
16 provisions of the then current Building and Elevator Codes.
17 Newly installed controllers shall have the capability of
18 selecting alternate recall floors.

19 EXCEPTION: Freight elevators with manually operated
20 doors.

21 Section 93.113. Emergency Power. High rise buildings
22 not meeting the Building Code in effect at the time of the
23 adoption of this article shall have, as a minimum, emergency
24 power as follows:

- 25 1. Stairway pressurization emergency power shall be
26 provided by an on-site diesel engine generator
27 set. Such power shall start automatically on fire
28 alarm and the generator set shall have a two-hour
fuel supply.

- 1 2. Exit signs and pathway illumination shall have
2 emergency power by trickle charged storage bat-
3 teries. Such batteries shall have a capacity to
4 provide required illumination for 90 minutes.
5 3. Fire alarm emergency power shall be provided as
6 required in Section 93.109.

7 Section 93.114. Signing.

- 8 (a) All signs in this section shall be approved by the
9 Chief and have graphic symbols where possible. In
10 hotels, signs must have graphic symbols. Sign
11 lettering shall follow Appendix H of the Fire
12 Code.
13 (b) Signing shall be provided on the stairway side of
14 every stair door indicating the number of the
15 stair, the floor that the door serves, the high
16 rise building re-entry points, and stair termination.
17 (c) A sign shall be posted in every elevator lobby
18 above each call switch noting that the elevators
19 will be recalled to the building lobby on fire
20 alarm. This sign shall warn persons not to use
21 the elevator in the event of fire.
22 (d) Where exit signs are not clearly visible from the
23 elevator lobby, signs shall be installed to indicate
24 the direction to stair and fire escape exits.
25 (e) Emergency illumination shall be provided at the
26 elevator lobby sign location.
27 (f) A sign shall be posted on the room side of every
28 hotel guest room indicating the relationship of
 that room to the exits and fire extinguishers, and
 giving basic information on what to do in the
 event of fire in the building.

1 (g) "NOT AN EXIT" signs shall be installed at all
2 doorways, passageways, or stairways which are not
3 exits, exit accesses or exit discharges, and which
4 may be mistaken for an exit. A sign indicating
5 the use of the doorway, passageway, or stairway,
6 such as "to basement," "storeroom," or "linen
7 closet, is permitted in lieu of the "NOT AN EXIT"
8 sign.

9 Section 93.115. Emergency Plan. Owners of high rise
10 buildings shall prepare an emergency operations plan in
11 accordance with Section 1807 of the Building Code. In
12 addition to the requirements of Section 1807 of the Building
13 Code, the emergency operations plan shall specify the duties
14 during a fire emergency of the building management and
15 staff, the building fire safety directors, the fire fighting
16 unit and floor wardens as identified in Section 93.116.

17 Section 93.116. Building Staff Training. Owners of
18 high rise buildings shall designate from existing staff a
19 building fire safety director, and a building fire fighting
20 unit who shall be responsible for the operation of the
21 building fire protection equipment and first aid firefighting.
22 Owners of high rise buildings and/or tenants employing over
23 100 persons shall designate a floor warden for each floor to
24 be responsible for evacuating the people on their respective
25 floor in emergencies. The names and work locations of the
26 director, the fire fighting unit, and the floor wardens
27 shall be maintained on a roster contained in the building
28 emergency operations plan.

EXCEPTION:

1. Residential condominiums and apartment occupancies not employing staff.

1 2. Office and retail occupancies after normal business
2 hours.

3 NOTE: In residential buildings employing staff, where
4 the staff is too small to appoint a floor warden for
5 each floor, wardens shall be appointed to the fire
6 floor, the floor above, and as many additional floors
7 as possible.

8 Section 93.117. Fire Drills. The staff of high rise
9 buildings shall conduct, and the occupants thereof shall
10 participate in, fire drills on a regular basis at intervals
11 not to exceed 120 days in accordance with the building's
12 emergency operations plan.

13 EXCEPTION: Jail inmates, hospital patients, hotel
14 guests and occupants of apartment or residential
15 condominium units, unless such occupant is also a
16 member of the high rise building staff.

17 Section 93.118. Fire Separation. Any space larger
18 than 1500 square feet shall be separated from building stair
19 shafts, elevator shafts and air handling shafts by non-
20 combustible smoke resistive separation (glass walls with
21 wood stops are acceptable), and equipped with smoke detectors
22 connected to the building fire alarm system.

23 EXCEPTIONS:

- 24 1. Spaces that are fully sprinklered.
25 2. Building lobbies or corridors which are equipped
26 with an approved smoke control system that includes
27 shaft pressurization and automatic smoke removal.
28 3. Building lobbies or corridors of any size that do
 not contain combustible furnishings (other than
 carpet) or commercial spaces, and have non-combustible
 interior finish throughout.

1 NOTE: To qualify for this exception 3, all spaces
2 adjacent to the building lobby must be separated
3 and equipped with smoke detectors as outlined in
4 this section, and all doors leading into the lobby
5 must be self closing or automatically closing upon
6 activation of the building fire alarm system.

- 7 4. Office areas above the main lobby, including open
8 space design areas.

9 NOTE: This exception does not apply to retail or
10 wholesale stores, display rooms, restaurants,
11 cocktail lounges and bars, banquet rooms, meeting
12 rooms, storage rooms, and spaces which because of
13 unusual fuel load or other conditions, pose an
unusual hazard in the opinion of the Chief.

- 14 5. Smoke detectors shall not be required in spaces
15 which are separated by one-hour construction, with
16 openings protected by one-hour self closing doors.

17 Domestic water systems may be used to supply the sprinkler
18 system referred to in this section when approved by the Chief.

19 Section 93.119. Hazards and Design Features Not Specifi-
20 cally Identified. Whenever the Chief shall find a condition
21 in a high rise building not specifically addressed in this
22 Article, which in his opinion makes fire escape or fire
23 fighting unusually difficult, he shall declare it to be a
24 hazard, notify the owner of such condition, and order its
25 correction in a manner consistent with these minimum safe-
26 guards.

27 Section 93.120. Exempt Buildings. The Chief and the
28 Director of the Department of Construction and Land Use may

1 exempt high rise buildings that meet the requirements of
2 Section 1807 of the Building Code from complying with
3 provisions of this Article.

4 Section 93.121. Compliance. All corrections that may
5 be necessary to provide the minimum fire safety requirements
6 established in this Article shall be completed by the owners
7 as follows:

- 8 (a) The Chief shall develop a procedure for surveying
9 high rise buildings to effect compliance with this
10 Article. The Chief shall send written and signed
11 notices to the owners of all non-complying buildings.
12 Within 120 days of the date of notification by the
13 Chief, the owner shall submit to the Chief a
14 concept design and firm schedule for complying
15 with the requirements of this Article.
- 16 (b) The Chief shall review the concept design and firm
17 schedule and respond in writing. The time schedule
18 for compliance shall be measured from the date of
19 the Chief's response to the concept design and
20 firm schedule for each building, and shall not
21 exceed the time limits set forth in paragraph (c)
22 of this section.

- 23 (c) The time limits for complying with the requirements
24 of this article are as follows:

25	93.104	Exits.....	3 years
26	93.105	Fire Escapes.....	1 year
27	93.106	Dead-end Corridors.....	2 years
28	93.107	Shaft Enclosures.....	3 years
	93.108	HVAC Shut Down.....	2 years
	93.109	Fire Alarm System.....	2 years

93.110	Unlocking of Doors	2 years
93.111	Doors.....	1 year
92.112	Elevator Recall.....	3 years
93.113	Emergency Power.....	3 years
93.114	Signing.....	1 year
93.115	Emergency Plan.....	4 years
93.116	Building Staff Training.....	1 1/2 years
93.117	Fire Drills.....	1 year
93.118	Fire Separation.....	3 years
93.119	Hazards.....	3 years

All items must be completed on or before July 1, 1987.

(d) Buildings will not be deemed to be in violation of this Article until the time limits set forth in subsection (c) above have expired.

Section 93.122. Appeals - Article 93. For the purpose of considering appeals from decisions or actions pertaining to the administration and enforcement of Article 93 of this Code, the Fire Code Advisory Board created by Section 2.302 of this Code shall consist of one representative from each of the following associations: The Association of General Contractors, The Apartment Operators Association, The Building Owners and Managers Association and The Seattle Hotel Association; and an owner of a low income residential hotel or building. Such representatives and owner shall be appointed by the mayor for five year non-renewable terms. Upon being advised by the Chief that an appeal pertaining to Article 93 has been filed, the Chairperson of such Board shall convene the following five persons to consider the appeal:

- 1 (a) The Chairperson of such Board or his alternate.
- 2 (b) A registered architect who is also a member of
- 3 such Board.
- 4 (c) A registered engineer who is also a member of such
- 5 Board.
- 6 (d) A licensed general contractor.
- 7 (e) A building owner member of the association whose
- 8 type of building is being considered in the appeal,
- 9 or an owner of a low income residential hotel or
- 10 building, if such a building is being considered
- in the appeal.

11 The decision of such Board shall be in writing and signed by

12 each member of the Board. A copy shall be delivered to the

13 Chief and the appellant.

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2 Section 93.123. Low Income Residential Buildings

3 (a) This Article shall not apply until January 1, 1983
4 to buildings in which

5 (1) at least fifty percent of the dwelling or
6 housing units as defined in the Housing Code (Seattle
7 Municipal Code Ch. 22.204) are rented to nontransient
8 persons at a rent at or below .9% of the current median
9 income for all families in the Seattle area as determined
10 by the United States Department of Housing and Urban
Development; and

11 (2) the average monthly rent for all dwelling or
12 housing units in the building does not exceed 1.4%
13 of the Median Income Limit.

14 (b) For purposes of calculating the average monthly
15 rent, a room which is rented on a hostel-style basis to
16 three or more nonrelated persons shall be considered as one
room rented for \$200 per month.

17 (c) Monthly rent shall include all charges for shelter
18 and provision of items normally associated with such use,
19 but shall not include board, health care, telephone charges
20 and other such items.

21 (d) Within 30 days of the approval of this amendatory
22 ordinance the City Council shall appoint a special committee
23 to study methods of increasing fire safety in high-rise low
24 income residential buildings in an effective manner at
25 minimum cost. The purpose of the study shall be to find
26 ways to provide an acceptable level of fire safety for such
27 buildings without requiring the closure or conversion of
28 buildings, displacing tenants.

1 The special committee shall have such membership as the
2 City Council shall determine, and shall include one represen-
3 tative of the Fire Department, one owner of a low income
4 high-rise building, one representative of a nonprofit group
5 involved in low-income housing, one representative from the
6 Department of Community Development, one representative from
7 the Department of Construction and Land Use and one fire safety
8 expert not a member of the Fire Department. Members of the
9 special committee shall serve without compensation.

10 The special committee shall make its recommendations to
11 the City Council not later than September 1, 1982.
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(To be used for all Ordinances except Emergency.)

Section 2. This ordinance shall take effect and be in force thirty days from and after its passage and approval, if approved by the Mayor; otherwise it shall take effect at the time it shall become a law under the provisions of the city charter.

Passed by the City Council the 14th day of December, 1981,
and signed by me in open session in authentication of its passage this 14th day of
December, 1981.

President _____ of the City Council.

Approved by me this 24th day of December, 1981.
Charles Roper
Mayor.

Filed by me this 28th day of December, 1981.

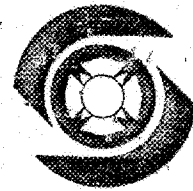
Attest:

Gina Hill
City Comptroller and City Clerk.

(SEAL)

Published _____

By Theresa J. Dunker
Deputy Clerk.



Date: September 21, 1981

TO: Councilman Sam Smith

FROM: Robert L. Swartout, Chief, Seattle Fire Department *RS*

SUBJECT: Amendments to Article 93

- I. Below are the two amendments to Article 93 we discussed last Friday.

Amendment 1

To be inserted on page 12 after line 15, adding an additional exception.

EXCEPTION:

3. Office areas, including open space design office areas.
NOTE: This exception does not apply to retail or whole-sale stores, display rooms, restaurants, cocktail lounges and bars, banquet rooms, meeting rooms, storage rooms and spaces which because of fuel load or other conditions pose an unusual hazard in the opinion of the Fire Chief.

Amendment 2

To be inserted on page 14 on line 11, extending final compliance date one year.

"before July 1, 1987."

RLS:sb
BLH

**Your
Seattle
Fire Department**

Robert L. Swartout, Chief
Charles Royer, Mayor



July 17, 1981

3049

Honorable Douglas N. Jewett,
City Attorney
Municipal Building
Seattle, Washington 98104

Dear Mr. Jewett:

Attached is a copy of a new Fire Code Ordinance Article 93,
which I am submitting for formal Law Department review.

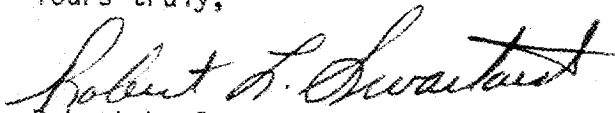
This Article would establish several retroactive requirements
for fire and life safety in high-rise buildings in Seattle.
The document has been formally reviewed and approved by both
the Fire Code and Building Code Advisory Boards.

This Ordinance is of urgent interest to the Fire Department,
and affects the safety of several thousand occupants of high-
rise buildings in this city. It is my desire to present this
Article to the City Council at the earliest possible date.
Because of the problems the Council must deal with regarding
the 1982 Budget, I feel we must present the Ordinance to the
Council early in August, in order to have their consideration
this year.

For these reasons, I am asking your cooperation in expediting
the Law Department's review, so that we can proceed to the
Council. The Fire Marshal stands ready to assist your review
in any way we can.

Thank you in advance.

Yours truly,


Robert L. Swartout,
Chief of Fire Department

RLS:ct
BLH

Attachment

Affidavit of Publication**STATE OF WASHINGTON
KING COUNTY—SS.**

The undersigned, on oath states that he is an authorized representative of The Daily Journal of Commerce, a daily newspaper, which newspaper is a legal newspaper of general circulation and it is now and has been for more than six months prior to the date of publication hereinafter referred to, published in the English language continuously as a daily newspaper in Seattle, King County, Washington, and it is now and during all of said time was printed in an office maintained at the aforesaid place of publication of this newspaper. The Daily Journal of Commerce was on the 12th day of June, 1941, approved as a legal newspaper by the Superior Court of King County.

The notice in the exact form annexed, was published in regular issues of The Daily Journal of Commerce, which was regularly distributed to its subscribers during the below stated period. The annexed notice, a

Ordinance No. 110299

was published on December 30, 1981

B. Blaw
.....
Subscribed and sworn to before me on
December 30, 1981

Richard A. Jones
.....
Notary Public for the State of Washington,
residing in Seattle.

ORDINANCE 119239

AN ORDINANCE relating to the Seattle Fire Code; amending Chapter 22.606 of the Seattle Municipal Code by adding thereto a new section 22.606.140 (a new article 93 to the Uniform Fire Code) to establish minimum fire and life safety requirements and compliance procedures for high rise buildings.

BE IT ORDAINED BY THE CITY OF SEATTLE AS FOLLOWS:

Section 1. Chapter 22.606 of the Seattle Municipal Code is amended by adding thereto a new section 22.606.140 as follows:

22.606.140 UFC Article 93 added - Minimum standards for high rise buildings.

The Uniform Fire Code is amended by adding thereto a new Article 93, to read as follows:

Section 93.101. Purpose. The main purpose of this article is to improve the fire and life safety of existing high rise buildings that do not conform to current City codes so that the health, safety and welfare of the general public is provided for and promoted. It is recognized that the application of present day fire protection techniques to some existing high rise buildings is difficult. For this reason, this article may permit the use of alternative methods and innovative approaches and techniques to achieve its purpose, when approved by the Chief and the building official.

Section 93.102. Scope. (a) This article shall apply to all high rise buildings in existence at the time of its adoption, as well as to all high rise buildings coming into existence after the adoption thereof.

(b) Where there is a conflict between an ordinance or code and the provisions of this article, this article shall govern unless the ordinance or code establishes more stringent fire and life safety requirements.

Section 93.103. Definitions. For the purpose of this Article, certain words shall be construed as specified in this section.

1. HIGH RISE BUILDING: Buildings having floors used for human occupancy located more than 75 feet above the lowest level of Fire Department vehicle access.
2. CENTRAL STATION: A fire alarm reporting service listed by the Underwriters Laboratories or authorized by the Chief to report alarms to the Seattle Fire Department Alarm Center. In lieu of connection to a central station listed by Underwriters Laboratories, the Chief shall approve building staff monitoring of a fire alarm annunciator panel where:
 - A. Such staff is properly trained to monitor the annunciator panel and report alarm signals to the Fire Department Alarm Center via the 911 system.
 - B. One or more building staff is on duty 24 hours a day and remains in the direct vicinity of the annunciator panel, e.g., a hotel desk clerk where the panel is behind the registration desk.
3. FLOOR USED FOR HUMAN OCCUPANCY: A floor designed and intended for occupancy by one or more persons for any part of a day, including a roof garden and an active storage area. An area occupied for the service of building equipment only is not included in this definition.
4. DEAD-END CORRIDOR: A corridor which permits only one direction of travel from a unit or room door to an exit, or which intersects an exit corridor on one end and does not provide an exit path on the other end. A corridor which has fire escapes directly accessible from it is not a dead-end corridor.

Section 93.104. Exits. All exits in high rise buildings shall be illuminated as required in Section 3312 of the Building Code and enclosed with a minimum of one-hour fire resistive construction. Every high rise building shall have

at least one such exit. Where existing exterior fire escapes are used for additional exits, they shall be tested and identified as required in Section 93.105. Where a high rise building has a single enclosed exit, the enclosure shall be continued to the exterior of the building and the exit shall be smoke-proof by natural ventilation in accordance with Section 3309 (g) of the Building Code, or shall be mechanically pressurized with fresh air to 0.15 inches water column and shall have a concurrent 2500 cubic feet per minute (CFM) exhaust to atmosphere in an emergency, in accordance with the provisions of the Building Code.

EXCEPTION: A single stair may exit through a building lobby where the lobby is of non-combustible construction, does not contain combustible furnishings, and is separated from the rest of the building by one-hour construction. Wire-glass protected by sprinklers on both sides may be accepted as one-hour construction. Where the lobby contains no combustible materials, wire-glass need only be protected by sprinklers on the side opposite the lobby.

Section 93.105. Fire Escapes. Exterior fire escapes shall be accessible and structurally safe at all times. Owners of high rise buildings shall load test fire escapes at least once every five years with a weight of not less than 100 lb/sq. foot. The results of such a load test shall be submitted in writing to the Chief. In lieu of such a test, the Chief may accept the opinion of a structural engineer licensed by the State of Washington that the fire escape is structurally safe and will support a load of 100 lb/sq. foot. There shall be signs approved by the Chief clearly identifying the route of access to the fire escape from every public corridor.

Locked doors or windows are prohibited between public corridors and fire escapes.

EXCEPTION: Where all of the following criteria are met and approved by the Chief:

1. An identified tool or device for opening the

locked door or window is permanently affixed in close proximity to the locked point.

2. The area around the locked door or window is served by emergency illumination.
3. Clearly understandable directions indicating the use of the tool and the route to the fire escape are posted at the locked door or window.

Section 93.106. Dead-end Corridors. Dead-end corridors are limited to 75 feet in length in office occupancies and 30 feet in length in all other occupancies. Where such limits are exceeded, automatic sprinkler protection meeting the requirements of the Fire Code and the Building Code shall be provided for the entire dead-end corridor, with one head on the room side of each door opening onto the corridor. Domestic water systems may be used to supply such sprinklers when approved by the Chief.

EXCEPTIONS:

1. In high rise buildings, inactive doors leading from the dead-end corridor into spaces which are not in normal use may be covered with 5/8" type x gypsum board or its equivalent, in lieu of installing a sprinkler head over the door or smoke detector in the room.
2. In office occupancies, sprinkler heads on the room side of each door opening onto the corridor need not be installed.
3. In residential buildings, where corridors and each guest room are equipped with electrically supervised smoke detectors connected to the building fire alarm system, sprinkler heads, or any combination thereof. Where smoke detectors are used in rooms in lieu of sprinklers, doors must be rated at 20 minutes and must be self-closing.
4. In office occupancies, sprinkler systems are not

required in a dead-end corridor where the corridor is equipped with smoke detectors and each room opening onto the corridor is equipped with at least one smoke detector. Such detector shall be electrically supervised and connected to the building fire alarm system.

5. Where there is a fire escape not directly accessible from the corridor, and the exit route is protected by electrically supervised smoke detection.

Section 93.107. Shaft Enclosures. All openings which connect three or more floors shall be enclosed with a minimum of one-hour fire resistive construction.

EXCEPTION: Openings complying with Section 1706(b) of the Building Code.

Section 93.108. Heating, Ventilation and Air Conditioning System (HVAC) Shutdown. Air moving systems that serve more than the floor on which they are located shall automatically shut down on any high rise building fire alarm, or shall be provided with a manual shutdown switch located at the fire alarm panel in the main building lobby.

EXCEPTION: Air moving systems of:

1. Less than 2000 CFM.
2. Exhaust only systems of less than 15,000 CFM, such as toilet, range hood, kitchen, fume hood, etc.
3. HVAC systems of less than 15,000 CFM with automatic shut down on smoke detectors in the area served, which are connected to the building fire alarm system.
4. Life safety pressurization systems as provided in the Building Code.
5. Buildings with approved automatic smoke control pursuant to Sections 1807(g) or 3309(m) of the Building Code.

Section 93.109. Fire Alarm and Detection Systems.

Every high rise building, except a residential occupancy with a system installed under Ordinance 106107 as now or hereafter amended, shall have an electrically supervised fire alarm and detection system approved by the Chief, as follows:

1. A Manual pull station shall be located at every floor exit door, except in office occupancies.
2. There shall be electrically supervised automatic smoke detection in elevator landings, public corridors, and on the corridor or floor side of each exit stairway.

EXCEPTION: Where a corridor is sprinklered, smoke detectors may be omitted from the corridor.

3. There shall be electrically supervised automatic smoke detectors within 50 feet of building perimeter walls and at standard spacing (approximately 30 feet) to the center of the floor.

EXCEPTIONS:

- A. Interior of residential units.
- B. Sprinklered floors.
- C. Parking garages.
- D. Building Mechanical Spaces.
- E. Any space above the top occupied floor.

4. There shall be electrically supervised automatic heat or smoke detection in unsprinklered rooms used for storage, shops, handicraft, janitor, trash and similar purposes where the fuel load may be significantly higher than the average floor fuel load.

EXCEPTIONS:

- A. Sprinklered rooms.
- B. Rooms under 10 square feet opening onto exit corridors.
- C. Rooms under 100 square feet not opening onto exit corridors.
- D. Rooms within residential units.
- E. Rooms where the storage is in closed metal containers.
- F. Rooms other than a corridor within 30 ft of

an electrically supervised automatic smoke detector.

5. Alarm systems shall have audible devices producing

a slow "whoop" sound audible at 15 dba above ambient sound levels with a minimum of 60 dba throughout residential occupancies, and 10 dba above ambient sound levels with a minimum of 55 dba throughout other occupancies, and shall have a microphone capable of making voice announcements simultaneously to all floors.

6. Fire alarm systems shall be zoned per floor.
7. There shall be an annunciator panel in the main lobby of a high rise building or in such other areas approved by the Chief as an emergency control center.
8. The alarm shall sound at a minimum on the floor where the fire is occurring and the floor above, and the alarm system shall be capable of sounding a general alarm throughout the high rise building. The alarm system shall be designed so that a general alarm may be activated from two separate locations.
9. Where an automatic sprinkler system has been installed for fire protection, the water flow alarm shall be connected to the building fire alarm.
10. The alarm system for the high rise building shall be monitored by a central station, or other such means approved by the Chief.
11. The alarm systems shall be electrically supervised and have battery emergency power sufficient to operate for a period of 24 hours and sound the alarm for 10 minutes at the end of that period.
12. For purposes of this section, wiring for fire alarm and fire detection systems may be installed in elevator shafts, provided that:

- EXCEPTION: Where automatic smoke detectors are installed in the area and zoned, a single water flow alarm may be used.
- A. Such wiring shall not interfere with the safe operation of the elevator.
 - B. Such wiring shall be enclosed within metal conduit and all junction boxes shall be located outside the shaft.
 - C. All wiring work shall be done under applicable permit obtained from the Department of Construction and Land Use.

Section 93.110. Unlocking of doors. (a) Stairway doors, including the doors between any stairway and the roof, shall not have locks or shall unlock automatically whenever a fire alarm is activated in the high rise building. Such locks shall unlock automatically when power is off (fail safe). Where the only locked door in a stair shaft is the one that leads to the roof, it may be locked by panic hardware or approved alarm lock paddle bars.

- (b) Section 12.114 of the Fire Code also applies, and is restated as follows:

"Section 12.114. Egress from stairways. Enclosed stairways serving more than six (6) floors shall have two means of egress from the stairway. Enclosed stairways serving ten (10) or more floors shall have re-entry into the building at approximately 5-story intervals. Re-entry signs shall be posted in the stair.

EXCEPTION:

1. Jails.
2. Where telephones connected to a 24-hour manned location are provided in the stairway in each 5-floor increment that does not have a means of egress.
3. Where any door serving as an entrance to the stair does not automatically lock behind a person entering the stair.

4. Where alternate means of alerting building management to persons trapped in a stairwell are approved by the building official."

Section 93.111. Doors. All exit doors in the path of exit travel shall be self-closing or automatic closing in accordance with Section 4306(b) 2 of the Building Code. Doors held open by fusible links, and sliding or vertical doors are prohibited in exit ways. Stairway doors shall be self-latching.

Section 93.112. Elevator Recall. A fire alarm originating on a floor other than the main lobby floor shall cause all elevators to be returned to the main floor in accordance with Section 5113(d) of the Building Code. Whenever new elevator controllers are installed, they shall meet all provisions of the then current Building and Elevator Codes. Newly installed controllers shall have the capability of selecting alternate recall floors.

EXCEPTION: Freight elevators with manually operated doors.

Section 93.113. Emergency Power. High rise buildings not meeting the Building Code in effect at the time of the adoption of this article shall have, as a minimum, emergency power as follows:

1. Stairway pressurization emergency power shall be provided by an on-site diesel engine generator set. Such power shall start automatically on fire alarm and the generator set shall have a two-hour fuel supply.
2. Exit signs and pathway illumination shall have emergency power by trickle charged storage batteries. Such batteries shall have a capacity to provide required illumination for 90 minutes.
3. Fire alarm emergency power shall be provided as required in Section 93.109.

Section 93.114. Signing.

- (a) All signs in this section shall be approved by the Chief and have graphic symbols where possible. In hotels, signs must have graphic symbols. Sign lettering shall follow Appendix B of the Fire Code.
- (b) Signing shall be provided on the stairway side of every stair door indicating the number of the stair, the floor that the door serves, the high rise building re-entry points, and stair termination.
- (c) A sign shall be posted in every elevator lobby above each call switch noting that the elevators will be recalled to the building lobby on fire alarm. This sign shall warn persons not to use the elevator in the event of fire.
- (d) Where exit signs are not clearly visible from the elevator lobby, signs shall be installed to indicate the direction to stair and fire escape exits.
- (e) Emergency illumination shall be provided at the elevator lobby sign location.
- (f) A sign shall be posted on the room side of every hotel guest room indicating the relationship of that room to the exits and fire extinguishers, and giving basic information on what to do in the event of fire in the building.
- (g) "NOT AN EXIT" signs shall be installed at all doorways, passageways, or stairways which are not exits, exit accesses or exit discharges, and which may be mistaken for an exit. A sign indicating the use of the doorway, passageway, or stairway, such as "to basement," "storeroom," or "linen closet, is permitted in lieu of the "NOT AN EXIT" sign.

Section 93.115. Emergency Plan. Owners of high rise buildings shall prepare an emergency operations plan in accordance with Section 1807 of the Building Code. In addition to the requirements of Section 1807 of the Building Code, the emergency operations plan shall specify the duties

during a fire emergency of the building management and staff, the building fire safety directors, the fire fighting unit and floor wardens as identified in Section 93.116.

Section 93.116. Building Staff Training. Owners of high rise buildings shall designate from existing staff a building fire safety director, and a building fire fighting unit who shall be responsible for the operation of the building fire protection equipment and first aid firefighting. Owners of high rise buildings and/or tenants employing over 100 persons shall designate a floor warden for each floor to be responsible for evacuating the people on their respective floor in emergencies. The names and work locations of the director, the fire fighting unit, and the floor wardens shall be maintained on a roster contained in the building emergency operations plan.

EXCEPTION:

1. Residential condominiums and apartment occupancies not employing staff.
2. Office and retail occupancies after normal business hours.

NOTE: In residential buildings employing staff, where the staff is too small to appoint a floor warden for each floor, wardens shall be appointed to the fire floor, the floor above, and as many additional floors as possible.

Section 93.117. Fire Drills. The staff of high rise buildings shall conduct, and the occupants thereof shall participate in, fire drills on a regular basis at intervals not to exceed 120 days in accordance with the building's emergency operations plan.

EXCEPTION: Jail inmates, hospital patients, hotel guests and occupants of apartment or residential condominium units, unless such occupant is also a member of the high rise building staff.

Section 93.118. Fire Separation. Any space larger than 1500 square feet shall be separated from building stair shafts, elevator shafts and air handling shafts by non-combustible smoke resistive separation (glass walls with wood stops are acceptable), and equipped with smoke detectors connected to the building fire alarm system.

EXCEPTIONS:

1. Spaces that are fully sprinklered.
2. Building lobbies or corridors which are equipped with an approved smoke control system that includes shaft pressurization and automatic smoke removal.
3. Building lobbies or corridors of any size that do not contain combustible furnishings (other than carpet) or commercial spaces, and have non-combustible interior finish throughout.

NOTE: To qualify for this exception 3, all spaces adjacent to the building lobby must be separated and equipped with smoke detectors as outlined in this section, and all doors leading into the lobby must be self closing or automatically closing upon activation of the building fire alarm system.

4. Office areas above the main lobby, including open space design areas.

NOTE: This exception does not apply to retail or wholesale stores, display rooms, restaurants, cocktail lounges and bars, banquet rooms, meeting rooms, storage rooms, and spaces which because of unusual fuel load or other conditions, pose an unusual hazard in the opinion of the Chief.

5. Smoke Detectors shall not be required in spaces which are separated by one-hour construction, with openings protected by one-hour self closing doors. Domestic water systems may be used to supply the sprinkler system referred to in this section when approved by the Chief.

Section 93.119. Hazards and Design Features Not Specifically Identified. Whenever the Chief shall find a condition in a high rise building not specifically addressed in this Article, which in his opinion makes fire escape or fire

hazard, notify the owner of such condition, and order its correction in a manner consistent with these minimum safeguards.

Section 93.120. Exempt Buildings. The Chief and the
ORDINANCE 114294--Continued on Page 10 Column 1

ORDINANCE 114294--Continued from Page 9

Director of the Department of Construction and Land Use may exempt high rise buildings that meet the requirements of Section 1807 of the Building Code from complying with provisions of this Article.

Section 93.121. Compliance. All corrections that may be necessary to provide the minimum fire safety requirements established in this Article shall be completed by the owners as follows:

- (a) The Chief shall develop a procedure for surveying high rise buildings to effect compliance with this Article. The Chief shall send written and signed notices to the owners of all non-complying buildings. Within 120 days of the date of notification by the Chief, the owner shall submit to the Chief a concept design and firm schedule for complying with the requirements of this Article.
- (b) The Chief shall review the concept design and firm schedule and respond in writing. The time schedule for compliance shall be measured from the date of the Chief's response to the concept design and firm schedule for each building, and shall not exceed the time limits set forth in paragraph (c) of this section.
- (c) The time limits for complying with the requirements of this article are as follows:

93.104 Exits.....	3 years
93.105 Fire Escapes.....	1 year
93.106 Dead-end Corridors.....	2 years
93.107 Shaft Enclosures.....	3 years
93.108 HVAC Shut Down.....	2 years
93.109 Fire Alarm System.....	2 years
93.110 Unlocking of Doors	2 years
93.111 Doors.....	1 year
93.112 Elevator Recall.....	3 years
93.113 Emergency Power.....	3 years
93.114 Signing.....	1 year
93.115 Emergency Plan.....	4 years
93.116 Building Staff Training.....	1 1/2 years
93.117 Fire Drills.....	1 year
93.118 Fire Separation.....	3 years
93.119 Hazards.....	3 years

All items must be completed on or before July 1, 1987.

- (d) Buildings will not be deemed to be in violation of this Article until the time limits set forth in subsection (c) above have expired.

Section 93.122. Appeals - Article 93. For the purpose of considering appeals from decisions or actions pertaining to the administration and enforcement of Article 93 of this Code, the Fire Code Advisory Board created by Section 2.302 of this Code shall consist of one representative from each of the following associations: The Association of General Contractors, The Apartment Operators Association, The Building Owners and Managers Association and The Seattle Hotel Association; and an owner of a low income residential hotel or building. Such representatives and owner shall be appointed by the mayor for five year non-renewable terms. Upon being advised by the Chief that an appeal pertaining to Article 93 has been filed, the Chairperson of such Board shall convene the following five persons to consider the appeal:

- (a) The Chairperson of such Board or his alternate.
- (b) A registered architect who is also a member of such Board.

- (c) A registered engineer who is also a member of such Board.
- (d) A licensed general contractor.
- (e) A building owner member of the association whose type of building is being considered in the appeal, or an owner of a low income residential hotel or building, if such a building is being considered in the appeal.

The decision of such Board shall be in writing and signed by each member of the Board. A copy shall be delivered to the Chief and the appellant.

Section 93.123. Low Income Residential Buildings

(a) This Article shall not apply until January 1, 1983 to buildings in which

(1) at least fifty percent of the dwelling or housing units as defined in the Housing Code (Seattle Municipal Code Ch. 22.204) are rented to nontransient persons at a rent at or below .9% of the current median income for all families in the Seattle area as determined by the United States Department of Housing and Urban Development; and

(2) the average monthly rent for all dwelling or housing units in the building does not exceed 1.44 of the Median Income Limit.

(b) For purposes of calculating the average monthly rent, a room which is rented on a hostel-style basis to three or more nonrelated persons shall be considered as one room rented for \$200 per month.

(c) Monthly rent shall include all charges for shelter and provision of items normally associated with such use, but shall not include board, health care, telephone charges and other such items.

(d) Within 30 days of the approval of this amendatory ordinance the City Council shall appoint a special committee to study methods of increasing fire safety in high-rise low income residential buildings in an effective manner at minimum cost. The purpose of the study shall be to find ways to provide an acceptable level of fire safety for such buildings without requiring the closure or conversion of buildings, displacing tenants.

The special committee shall have such membership as the City Council shall determine, and shall include one representative of the Fire Department, one owner of a low income

high-rise building, one representative of a nonprofit group involved in low-income housing, one representative from the Department of Community Development, one representative from the Department of Construction and Land Use and one fire safety expert not a member of the Fire Department. Members of the special committee shall serve without compensation.

The special committee shall make its recommendations to the City Council not later than September 1, 1987.

Section 2. This ordinance shall take effect and be in force thirty days from and after its passage and approval, if approved by the Mayor; otherwise it shall take effect at the time it shall become a law under the provisions of the city charter.

Passed by the City Council the 14th day of December, 1987,
and signed by me in open session in authentication of its passage this 14th day of December, 1987.

President of the City Council

Approved by me this 30th day of December, 1987.

Mayor

Filed by me this 25th day of December, 1987.

City Comptroller and City Clerk

(SEAL)

City Comptroller and City Clerk

By J. F. Hill, Deputy Clerk

Publication ordered by TIM HILL, Comptroller and City Clerk

Date of Official Publication in the Daily Journal of Commerce, Seattle, December 30, 1987. (C 938)

75-2577

Ordinance No. _____

AN ORDINANCE relating to the Seattle Fire Code; amending Chapter 22.606 of the Seattle Municipal Code by adding thereto a new section 22.606.140 (a new article 93 to the Uniform Fire Code) to establish minimum fire and life safety requirements and compliance procedures for high rise buildings.

9-18-81 PS&J PASS
9-25-81 PS&J held until 10/7/81
10-7-81 PS&J held until 10/21/81
10-21-81 PS&J Pass as amended

COMPTROLLER
FILE NUMBER

11/2/81 held until Dec. 3, 1981
12/7/81 held in Full Council (week

Council Bill No. 102463

INTRODUCED:	AUG 10 1981	BY:	TO: PS&J
REFERRED:	AUG 10 1981		
REFERRED:	NOV 2 - 1981		FULL COUNCIL - 12-2-81
REFERRED:	DEC 7 - 1981		
REPORTED:			SECOND READING:
THIRD READING:			SIGNED:
PRESENTED TO MAYOR:			APPROVED:
RETD. TO CITY CLERK:			PUBLISHED:
VETOED BY MAYOR:			VETO PUBLISHED:
RETD OVER VETO:			VETO SUSTAINED:

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3 high rise buildings shall load test fire escapes at least
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5 foot. The results of such a load test shall be submitted in
6 writing to the Chief. In lieu of such a test, the Chief may
7 accept the opinion of a structural engineer licensed by the
8 State of Washington that the fire escape is structurally
9 safe and will support a load of 100 lb/sq. foot. There
10 shall be signs approved by the Chief clearly identifying the
11 route of access to the fire escape from every public corridor.

12 Locked doors or windows are prohibited between public
13 corridors and fire escapes.

14 EXCEPTION: Where all of the following criteria are met
15 and approved by the Chief:

- 16 1. An identified tool or device for opening the
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18 close proximity to the locked point.
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Domestic water systems may be used to supply such sprinklers
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5 which are not in normal use may be covered with
6 5/8" type x gypsum board or its equivalent, in
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12 connect three or more floors shall be enclosed with a minimum
13 of one-hour fire resistive construction.

14 EXCEPTION: Openings complying with Section 1706(b) of
15 the Building Code.

16 Section 93.108. Heating, Ventilation and Air Condition-
17 ing System (HVAC) Shutdown. Air moving systems that serve
18 more than the floor on which they are located shall auto-
19 matically shut down on any high rise building fire alarm, or
20 shall be provided with a manual shutdown switch located at
21 the fire alarm panel in the main building lobby.

22 EXCEPTION: Air moving systems of:

- 23 1. Less than 2000 CFM.
24 2. Exhaust only systems of less than 15,000 CFM, such
25 as toilet, range hood, kitchen, fume hood, etc.
26 3. HVAC systems of less than 15,000 CFM with automatic
27 shut down on smoke detectors in the area served,
28 which are connected to the building fire alarm
system.

1
2 4. Life safety pressurization systems as provided in
3 the Building Code.

4 5. Buildings with approved automatic smoke control
5 pursuant to Sections 1807(g) or 3309(m) of the
6 Building Code.

7 Section 93.109. Fire Alarm and Detection Systems.

8 Every high rise building, except residential occupancies
9 with systems installed under Ordinance 106107 as now or
10 hereafter amended, shall have a fire alarm and detection
11 system approved by the Chief, as follows:

12 1. A Manual pull station shall be located at every
13 floor exit door, except in office occupancies.

14 2. There shall be smoke detection in the elevator
15 lobby and on the corridor side of each stairway on
16 each floor.

17 3. There shall be smoke detection in public corridors
18 and rooms or areas larger than 2,000 square feet.

19 EXCEPTION: High rise buildings equipped with
20 complete sprinkler protection.

21 4. There shall be heat detection in hazard areas
22 lacking sprinklers, such as storage rooms, janitor
23 closets, etc.

24 5. Alarm systems shall have audible devices producing
25 a slow "whoop" sound at a level of 60 DBA throughout
26 residential occupancies and 55 DBA throughout
27 other occupancies, and shall have a microphone
28 capable of making voice announcements to all
floors simultaneously.

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6. Fire alarm systems shall be zoned per floor.
 7. There shall be an annunciator panel in the main lobby of a high rise building or in such other areas approved by the Chief as an emergency control center.
 8. The alarm shall sound at a minimum on the floor where the fire is occurring and the floor above, and the alarm system shall sound a general alarm throughout the high rise building. The alarm system shall be designed so that a general alarm may be activated from two separate locations.
 9. Where an automatic sprinkler system has been installed for fire protection, the water flow alarm shall be connected to the building fire alarm.
 10. The alarm system for the high rise building shall be monitored by a central station, or other such means approved by the Chief.
 11. The alarm systems shall be continually supervised and have battery emergency power sufficient to operate for a period of 24 hours and sound the alarm for 10 minutes at the end of that period.
 12. For purposes of this section, wiring for fire alarm and fire detection systems may be installed in elevator shafts, provided that:
 - A. Such wiring shall not interfere with the safe operation of the elevator.
 - B. Such wiring shall be enclosed within metal conduit and all junction boxes shall be located outside the shaft.

1 C. All wiring work shall be done under applicable
2 permit obtained from the Department of
3 Construction and Land Use.

4 Section 93.110. Unlocking of doors. (a) Stairway
5 doors, including the doors between any stairway and the
6 roof, shall not have locks or shall unlock automatically
7 whenever a fire alarm is activated in the high rise building.
8 Such locks shall unlock automatically when power is off (fail
9 safe). Where the only locked door in a stair shaft is the
10 one that leads to the roof, it may be locked by panic hardware
or approved alarm lock paddle bars.

11 (b) Section 12.114 of the Fire Code also applies, and
12 is restated as follows:

13 "Section 12.114. Egress from stairways.
14 Enclosed stairways serving more than six (6)
15 floors shall have two means of egress from the
16 stairway. Enclosed stairways serving ten (10) or
17 more floors shall have re-entry into the building
18 at approximately 5-story intervals. Re-entry
signs shall be posted in the stair.

19 "EXCEPTION:

- 20 1. Jails.
21 2. Where telephones connected to a 24-hour
22 manned location are provided in the stairway
23 in each 5-floor increment that does not have
24 a means of egress.
25 3. Where any door serving as an entrance to the
26 stair does not automatically lock behind a
27 person entering the stair.
28

- 1 4. Where alternate means of alerting building
2 management to persons trapped in a stairwell
3 are approved by the building official."

4 Section 93.111. Doors. All exit doors in the path of
5 exit travel shall be self-closing or automatic closing in
6 accordance with Section 4306(b) 2 of the Building Code.
7 Doors held open by fusible links, and sliding or vertical
8 doors are prohibited in exit ways. Stairway doors shall be
9 self-latching.

10 Section 93.112. Elevator Recall. A fire alarm origin-
11 ating on a floor other than the main lobby floor shall cause
12 all elevators to be returned to the main floor in accordance
13 with Section 5113(d) of the Building Code. Whenever new
14 elevator controllers are installed, they shall meet all
15 provisions of the then current Building and Elevator Codes.
16 Newly installed controllers shall have the capability of
17 selecting alternate recall floors.

18 EXCEPTION: Freight elevators with manually operated
19 doors.

20 Section 93.113. Emergency Power. Fire alarm systems
21 shall have emergency power as defined in Section 93.109.
22 Emergency power for exit and pathway illumination, elevator
23 recall, emergency elevator operation, and stairwell pressuri-
24 zation where required, shall be provided as follows:

- 25 1. High rise buildings on which construction began in
26 1977 and thereafter shall have one or more emergency
27 generators.
28 2. High rise buildings on which construction began
 prior to 1977 shall have one or more emergency
 generators.

1 EXCEPTION TO 2: The Chief may accept an emergency
2 power system for any existing high rise building
3 where:

- 4 A. The building has a tap ahead of main (Electrical
5 Code 700-12d) power source.
- 6 B. The building has a standard exterior recepta-
7 cle, 480 volt, 3 phase, 4 wire, 60 Hz, and
8 internal provisions to accept portable generator
9 power for its emergency systems.
- 10 C. The receptacle, internal switching, trans-
11 formers, etc., are electrically remote (fire
12 separated) from the tap ahead of the main so
13 that a single panel malfunction or room fire
14 would not disable both sources.
- 15 D. The owner participates in a special assessment
16 district to fund portable emergency generators
17 that shall be operated by the Fire Department.

18 Section 93.114. Signing.

- 19 (a) All signs in this section shall be approved by the
20 Chief and have graphic symbols where possible. In
21 hotels, signs must have graphic symbols. Sign
22 lettering shall follow Appendix H of the Fire
23 Code.
- 24 (b) Signing shall be provided on the stairway side of
25 every stair door indicating the number of the
26 stair, the floor that the door serves, the high
27 rise building re-entry points, and stair termination.

- 1 (c) A sign shall be posted in every elevator lobby
2 above each call switch noting that the elevators
3 will be recalled to the building lobby on fire
4 alarm. This sign shall warn persons not to use
5 the elevator in the event of fire.
- 6 (d) Where exit signs are not clearly visible from the
7 elevator lobby, signs shall be installed to indicate
8 the direction to stair and fire escape exits.
- 9 (e) Emergency illumination shall be provided at the
10 elevator lobby sign location.
- 11 (f) A sign shall be posted on the room side of every
12 hotel guest room indicating the relationship of
13 that room to the exits and fire extinguishers, and
14 giving basic information on what to do in the
15 event of fire in the building.
- 16 (g) "NOT AN EXIT" signs shall be installed at all
17 doorways, passageways, or stairways which are not
18 exits, exit accesses or exit discharges, and which
19 may be mistaken for an exit. A sign indicating
20 the use of the doorway, passageway, or stairway,
21 such as "to basement," "storeroom," or "linen
22 closet, is permitted in lieu of the "NOT AN EXIT"
23 sign.

24 Section 93.115. Emergency Plan. Owners of high rise
25 buildings shall prepare an emergency operations plan in
26 accordance with Section 1807 of the Building Code. In
27 addition to the requirements of Section 1807 of the Building
28 Code, the emergency operations plan shall specify the duties
during a fire emergency of building management and staff,
building fire safety directors, fire brigades and floor
wardens as identified in Section 93.116.

1 Section 93.116. Building Staff Training. Owners of
2 high rise buildings shall designate a building fire safety
3 director, and a building fire brigade of not less than 2
4 persons, who shall be responsible for the operation of the
5 building fire protection equipment and first aid firefighting.
6 Owners of high rise buildings and/or tenants employing over
7 100 persons shall designate a floor warden for each floor to
8 be responsible for evacuating the people on their respective
9 floor in emergencies. The names and work locations of the
10 director, the brigade, and the wardens shall be maintained
11 on a roster contained in the building emergency operations
12 plan.

12 EXCEPTION: Residential condominiums and apartment
13 occupancies not employing staff.

14 Section 93.117. Fire Drills. The staff of high rise
15 buildings shall conduct, and the occupants thereof shall
16 participate in, fire drills on a regular basis at intervals
17 not to exceed 120 days in accordance with the building's
18 emergency operations plan. During the fire drills, the
19 occupants need not exit further than the exits on their
20 floor.

21 EXCEPTION: Jail inmates, hospital patients, hotel
22 guests and occupants of apartment or residential
23 condominium units, unless such occupant is also a
24 member of the high rise building staff.

25 Section 93.118. Fire Separation. Automatic sprinkler
26 systems shall be installed and maintained in any public
27 space larger than 1500 square feet which is not separated
28 from the building exits, exitways, elevator shafts, and air

1 handling systems by a non-combustible smoke resistive separation
2 (glass walls with wood stops are accepted) and equipped with
3 smoke detectors connected to the building's fire alarm
4 system.

5 EXCEPTION:

- 6 1. Building lobbies equipped with an approved smoke
7 control system, including shaft pressurization and
8 automatic smoke removal.
9 2. Building lobbies of any size that do not contain
10 combustible furnishings or commercial spaces, and
11 have non-combustible interior finish throughout.

12 Note: To qualify for exception 2, all spaces
13 adjacent to the building lobby must be separated
14 and equipped with smoke detectors as outlined in
15 this section, and all doors leading into the lobby
16 must be self closing or automatically closing upon
17 activation of the building fire alarm system.

18 Domestic water systems may be used to supply the sprinkler
19 system referred to in this section when approved by the
20 Chief.

21 Section 93.119. Hazards and Design Features Not Specifi-
22 cally Identified. Whenever the Fire Chief shall find a
23 condition in a high rise building not specifically addressed
24 in this Article, which in his opinion makes fire escape or
25 fire fighting unusually difficult, he shall declare it to be
26 a hazard, notify the owner of such condition, and order its
27 correction in a manner consistent with these minimum safeguards.

28 Section 93.120. Exempt Buildings. The Chief and the
Superintendent of the Department of Construction and Land

1 Use may exempt high rise buildings that meet the requirements
2 of Section 1807 of the Building Code from complying with
3 provisions of this Article.

4 Section 93.121. Compliance. All corrections that may
5 be necessary to provide the minimum fire safety requirements
6 established in this Article shall be completed by the owners
7 as follows:

- 8 (a) The Chief shall develop a procedure for surveying
9 high rise buildings to effect compliance with this Article.
10 The Chief shall send written and signed notices to
11 the owners of all non-complying buildings. Within
12 120 days of the date of the notification by the
13 Chief, the owner shall submit to the Chief a
14 concept design and firm schedule for complying
15 with the requirements of this Article. The schedule
16 for complying must be approved by the Chief, and
17 after approval, shall constitute the Schedule of
18 Compliance for that building. The Schedule of
19 Compliance shall in no event exceed the time
20 limits set forth in Paragraph (b) of this section.
- 21 (b) The time limits for complying with the requirements
22 of this article are as follows:

23	93.104	Exits.....	3 years
24	93.105	Fire Escapes.....	1 year
25	93.106	Dead-end Corridors.....	2 years
26	93.107	Shaft Enclosures.....	3 years
27	93.108	HVAC Shut Down.....	2 years
28	93.109	Fire Alarm System.....	2 years
	93.110	Unlocking of Doors	2 years
	93.111	Doors.....	1 year

1 92.112 Elevator Recall.....3 years
2 93.113 Emergency Power.....4 years
3 93.114 Signing.....1 year
4 93.115 Emergency Plan.....4 years
5 93.116 Building Staff Training.....1 1/2 years
6 93.117 Fire Drills.....1 year
7 93.118 Fire Separation.....3 years
8 93.119 Hazards.....3 years

9 All time periods shall commence on the date of the
10 notification provided by the Chief in subsection
11 (a) above. All items must be completed on or
before July 1, 1986.

12 (c) Buildings will not be deemed to be in violation of
13 this Article until the time limits set forth in
14 subsection (b) above have expired.