

(O-84-85)

ORDINANCE NUMBER O- 16164 (NEW SERIES)

Adopted on FEB 21 1984

AN ORDINANCE AMENDING CHAPTER V, ARTICLE 5, OF THE SAN DIEGO MUNICIPAL CODE BY REPEALING, AMENDING, REVISING OR ADDING SECTIONS TO THE UNIFORM FIRE CODE, ALL RELATING TO FIRE PROTECTION AND PREVENTION.

BE IT ORDAINED, by the Council of The City of San Diego, as follows:

Section 1. That Chapter V, Article 5, of the San Diego Municipal Code be and the same is hereby amended by repealing Sections 55.02.107, 55.02.303, 55.10.306, 55.10.314, 55.11.201, 55.11.207, 55.11.208, 55.11.414, 55.25.115, 55.27.501, 55.45.202, 55.45.206, 55.61.103, 55.79.213, 55.81.105, 55.81.106, 55.81.107 and Appendices J, K and L of Chapter V, Article 5 of the San Diego Municipal Code.

Section 2. That Chapter V, Article 5 of the San Diego Municipal Code be and the same is hereby amended by amending Section 55.01 to read as follows:

SEC. 55.01 ADOPTION OF THE UNIFORM FIRE CODE

There is hereby adopted by the Council of the City of San Diego, for the purpose of prescribing regulations governing conditions hazardous to life and property from fire or explosion, that certain code known as the Uniform Fire Code, recommended by the California Fire Chief's Association, being particularly the 1982 edition thereof and the whole thereof, including all appendices, save and except such portions as are hereinafter deleted, added,

amended or revised. Said Code, one (1) copy of which has been and is now on file in the Office of the City Clerk, is hereby adopted and incorporated as if fully set out at length herein, and from the date on which the ordinance shall take effect, the provisions thereof shall be controlling within the limits of the City of San Diego. Wherever reference is made to the Uniform Fire Code in this article, such reference shall mean the 1982 Uniform Fire Code.

Section 3. That Chapter V, Article 5 of the San Diego Municipal Code be and the same is hereby amended by deleting, adding, amending or revising the Uniform Fire Code, as adopted herein, Sections 55.02.302, 55.04.101, 55.09.104, 55.09.106, 55.09.110, 55.09.121, 55.09.124, 55.10.207, 55.10.208, 55.10.305, 55.10.307, 55.10.316, 55.10.401, 55.11.210, 55.11.412, 55.11.416, 55.12.104, 55.25.115, 55.25.116, 55.25.117, 55.25.118, 55.26.103, 55.32.110, 55.32.114, 55.32.121, 55.45.205, 55.61.105, 55.77.102, 55.79.111, 55.79.508, 55.79.601, 55.79.604, 55.79.708, 55.79.804, 55.79.806, 55.79.807, 55.79.902, 55.79.1007, 55.79 (Division XIV), 55.80.103, 55.80.109; Tables 55.10.301 and 55.10.312; Articles 74, 81 and 87; and Appendices I-A and V-A of Chapter V, Article 5 of the San Diego Municipal Code, to read as follows:

SEC. 55.02.302 SEC. 02.302 OF THE UNIFORM FIRE CODE IS AMENDED

Sec. 2.302 BOARD OF APPEALS

(a) When a question involving the interpretation of the intent and purpose of any provisions of this Code or the suitability of alternate materials and types of construction is presented to the Chief, he may request the Board of Appeals and Advisors to investigate such matters under the procedures established in Section 91.02.0204 of the San Diego Municipal Code. The request for Board action may come from any citizen that is affected by this Code.

(b) General Provisions. There shall be a Board of Appeals ~~and Advisors~~ consisting of ten (10) members who are qualified by experience and training to pass upon matters pertaining to design and construction of buildings, fire prevention, and fire protection. The members of the Board shall be appointed in accordance with Section 43 of the Charter of The City of San Diego for two-year terms and until their successors have been appointed and qualified. However, appointments shall be scheduled so as to provide that no more than five terms shall expire in any year. The Director of Building Inspection, the Chief of the Fire Department and the City Attorney shall be ex officio members of the Board but they shall have no vote. The Director of Building Inspection or his appointed representative shall act as Secretary to the Board. The Board shall select a chairman from its membership annually, unless a chairman is appointed by the Mayor. Five members shall constitute a quorum for the transaction of business and a majority vote, but not less than four affirmative votes shall be necessary to pass any recommendation.

The Board shall adopt rules to govern its meetings and shall render its findings and recommendations in writing to the City Manager and to applicant for Board action. All officers and department heads of the City shall cooperate with the Board and render all reasonable assistance to it.

(c) Duties of Board. On its own motion, or at the request of an applicant for Board action, or when requested by the Building Inspection Director, the Fire Chief, the Planning Director, or the Historical Site Board, the Board shall investigate and advise as to the suitability of alternate materials and types of construction and shall recommend reasonable interpretations of the provisions of Parts 2, 3, 4, and 5, of Title 24, California Administrative Code, this Chapter, or when otherwise authorized to do so in this Code. The Board may also conduct public hearings upon, and recommend to the City Council, the passage of new legislation pertaining to the design and construction of buildings.

(1) That strict application, operation or enforcement thereof would result, in practical difficulty or unnecessary hardship; and

(2) The alternate materials or type of construction proposed is, for the purpose intended, at least equivalent to the requirements of this Chapter in quality, strength, effectiveness, fire resistance and durability, and also in providing for the public health and safety.

The Board may also conduct public hearings and make findings regarding unsafe structures.

Discretionary decisions by the Board pertaining to the interpretation and application of the historical building provisions of this Code, and findings by the Board regarding hardship in connection with application of requirements for accessibility to the physically handicapped in Part 2, of Title 24, California Administrative Code, may be appealed to the City Council. Appeals must be submitted in writing to the Consultant of the Committee on Rules, Legislation, and Intergovernmental Relations of the City Council within 10 days after the date of the Board's action.

SEC. 55.04.101 SEC. 4.101 OF THE UNIFORM FIRE CODE AMENDED

Sec. 4.101. 1 - 9 (No Change).

10. COMPRESSED GASES, FLAMMABLE

To store, handle or use at normal temperature and pressures more than 2500 cubic feet of flammable compressed gas or 6,000 cubic of non-flammable compressed. See Article 74. Also see permits for "Cryogenics" and "Hazardous Chemicals."

Sec. 4.101. 11 - 46 (No Change).

47. COMBUSTIBLE MATERIALS. To store in excess of 2500 cubic feet gross volume or combustible as defined in Sec. 11.203 a permit is required.

48. HYDRANTS. To use a fire hydrant for other than its intended purpose, a permit is required - Sec. 10.203.

49. TRADE SHOWS. To hold a trade show, exhibit, fair, concert, convention or vehicle show, a permit is required - Sec. 25.118.

SEC. 55.09.104 SEC. 9.104 OF THE UNIFORM FIRE CODE IS AMENDED

Sec. 9.104. Revise the definition of "BULK PLANT" to read as follows:

BULK PLANT is that portion of a property where flammable or combustible liquids are received by tank vessel, pipeline, tank car or tank vehicle and are stored or blended in bulk for the purpose of distributing such liquids in tank vessel, pipeline, tank car, tank vehicle or container.

SEC. 55.09.106 SEC. 9.106 OF THE UNIFORM FIRE CODE IS AMENDED TO ADD
THE FOLLOWING:

DESIGNATED STORAGE AREA

Designated storage area is that area within a building which is
designed, intended, proposed or actually used for purposes of high-piled
combustible storage.

SEC. 55.09.110 SEC. 9.110 OF THE UNIFORM FIRE CODE IS AMENDED TO ADD

THE FOLLOWING:

HIGH-RACK STORAGE SYSTEMS

High-Rack Storage Systems are those systems that have storage over 40 feet in height, the placement of racks is such that aisles are not provided as required by Sec. 81.108, stock handling is automated, and the rack storage area has no occupant load.

SEC. 55.09.121 SEC. 9.121 OF THE UNIFORM FIRE CODE AMENDED

Sec. 9.121. The definition of "SERVICE STATION, AIRCRAFT" is revised to read as follows:

SERVICE STATION, AIRCRAFT, is that portion of an airport or heliport where flammable or combustible liquids used as aircraft fuel are stored and dispensed from fixed automotive-type dispensing equipment into fuel tanks of an aircraft and shall include all facilities essential thereto.

The definition of "SERVICE STATION, AUTOMOTIVE" is revised to read as follows:

SERVICE STATION, AUTOMOTIVE is that portion of property where flammable or combustible liquids or gases used as motor fuels are stored and dispensed from fixed equipment and other approved containers, into the fuel tanks of motor vehicles and shall include the sale and service of tires, batteries and accessories and minor automotive maintenance work.

The definition of "SERVICE STATION, MARINE" is revised to read as follows:

SERVICE STATION, MARINE, is that portion of a property where flammable, combustible liquids or gases used as fuel for watercraft are stored and dispensed from fixed equipment on shore, piers, wharfs, floats or barges into the fuel tanks of watercraft and shall include all other facilities used in connection therewith.

SEC. 55.09.124

SEC. 9.124 OF THE UNIFORM FIRE CODE AMENDED

Sec. 9.124. The following definitions are revised to read as follows:

VAPOR-PROCESSING SYSTEM is a system designed to capture and process vapors displaced during filling operations at service stations, bulk plants or terminals by use of mechanical and/or chemical means. Examples are systems using blower-assist for capturing vapors and refrigeration absorption and combustion systems for processing vapors.

VAPOR-RECOVERY SYSTEM is a system designed to capture and retain, without processing, vapors displaced during filling operations at service stations, bulk plants or terminals. Examples are balanced-pressure vapor displacement systems and vacuum-assist systems without vapor processing.

SEC. 55.10.207 SEC. 10.207 OF THE UNIFORM FIRE CODE AMENDED

Sec. 10.207 FIRE APPARATUS ACCESS ROADS

(a) General. Fire apparatus access roads shall be provided and maintained in accordance with the provisions of this section.

(b) Where Required. Fire apparatus access roads shall be required for every building hereafter constructed where any portion of an exterior wall of the first story is located more than 150 feet from fire department vehicle access.

EXCEPTIONS:

(1) Where conditions prevent the installation of an approved fire apparatus road, the chief may permit the installation of a fire-protection system or systems in lieu of a road, provided the system or systems are not otherwise required by this or any other code.

(2) When there are not more than two Group R, Division 3 or M occupancies as defined in the Building Code.

(c) Permissible Modifications. The requirements of this section may be modified when, in the opinion of the chief, fire-fighting or rescue operations would not be impaired. Clearances or widths required by this section may be increased when, in the opinion of the chief, minimum clearances or widths are not adequate to provide fire apparatus access.

NOTE: For High-Piled Combustible Storage, See Sec. 81.109.

(d) Surface. Fire apparatus roads shall be designed and maintained to support the imposed loads of fire apparatus and shall be provided with a surface so as to provide all-weather driving capabilities.

(e) Width. The minimum unobstructed width of a fire apparatus road shall be not less than 20 feet.

(f) Vertical Clearance. All fire apparatus roads shall have an unobstructed vertical clearance of not less than 13 feet 6 inches.

EXCEPTION: Upon approval of the chief, a reduced vertical clearance may be permitted, provided such reduced clearance does not impair access by fire apparatus and approved signs are installed and maintained indicating the established vertical clearance.

(g) Turning Radius. The turning radius of a fire apparatus access road shall be as approved by the chief.

(h) Turn-around Provisions. All fire apparatus roads in excess of 150 feet long shall be provided with approved provisions for the turning around of fire apparatus.

(i) Bridges. Where a bridge is required to be used as access under this section, it shall be constructed and maintained in accordance with the applicable sections of the Building Code and using designed live loading sufficient to carry the imposed loads of fire apparatus.

(j) Grade. The maximum permitted gradient for a fire apparatus road shall be as approved by the chief.

(k) Obstruction. No portion of any fire apparatus road shall be obstructed in any manner, including parking of vehicles. Minimum required widths and clearances established under this section shall be maintained at all times.

(l) Signs and Marking. When required by the chief, approved signs and/or other approved notices shall be provided, and maintained, for fire apparatus access roads to identify such roads and/or prohibit the obstruction thereof.

SEC. 55.10.208 SEC. 10.208 OF THE UNIFORM FIRE CODE AMENDED

Sec. 10.208 PREMISES IDENTIFICATION

Approved numbers, or addresses, shall be placed on all new and existing buildings adjacent to the principal entrance. Where the numbers posted at the entrance are not easily visible from the street, additional numbers shall be posted on the building or at a point that is plainly visible and legible from the street on which is addressed. If necessary, directional signs shall be posted showing proper access to a given address, from the point where the Fire Department access roadway leaves the dedicated street, to the entrance of each addressed building. All such numbers shall be placed on a contrasting background.

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SEC. 55.10.305 SEC. 10.305 OF THE UNIFORM FIRE CODE DELETED

Sec. 10.305 of the Uniform Fire Code is hereby deleted.

SEC. 55.10.307 SEC. 10.307(e) OF THE UNIFORM FIRE CODE IS ADDED

Sec. 10.307

(a) thru (d). No Change.

(e) Automatic telephone dialing devices to transmit an emergency alarm shall not be connected to the fire department emergency telephone number.

TABLE NO. 10.312 - STANDPIPE REQUIREMENTS

	NONSPRINKLERED BUILDING 2		SPRINKLERED BUILDING 3 4	
	STANDPIPE CLASS	HOSE REQUIREMENT	STANDPIPE CLASS	HOSE REQUIREMENT
1. Occupancies exceeding 75 ft. height and more than one story	N/A	N/A	III Combined System	No
2. Occupancies 4 stories or more but less than 75 ft. in height, except, Group R, Div. 3	[I and II 5] (or III)	6 No	Combined System	No
3. Group A Occupancies with occupant load exceeding 1000	II	Yes	No re- quirement	No
4. Group A, Div. 2.1 Occupancies over 5000 square feet in area used for exhibition	II	Yes	II	Yes
5. Groups I,H,B, Div. 1,2 or 3 Occupancies less than 4 stories in height but greater than 20,000 square feet per floor	II 5	Yes	No re- quirement	No

Notes - No Changes

SEC. 55.10.316 SEC. 10.316 OF THE UNIFORM FIRE CODE IS ADDED

Sec. 10.316 PRE-FIRE AND EMERGENCY PLANNING

Owners, operators, tenants, administrators and managers of: educational and institutional occupancies; hotel and apartment occupancies containing 15 or more units; and all high-rise buildings, shall when required by the Fire Chief or his designated representative, establish pre-fire and emergency procedures and plans which shall include but not necessarily be limited to the following:

(1) Designation of a responsible person as Safety Director who shall work with the Fire Chief in the establishment, implementation and maintenance of pre-fire and emergency plans.

(2) Preparation of pre-fire and emergency plans which shall be designed and implemented in accordance with the approval of the Fire Department.

SEC. 55.10.401 SEC. 10.401 OF THE UNIFORM FIRE CODE AMENDED

Sec. 10.401 FIRE-RESISTIVE CONSTRUCTION

All required fire-resistive construction, including occupancy separations, area separation walls, exterior walls due to location on property, fire-resistive requirements based on type of construction, draft-stop partitions and roof coverings shall be maintained as specified in the Building Code, and the Fire Code, and shall be properly repaired, restored or replaced when damaged, altered, breached, penetrated, removed or improperly installed.

SEC. 55.11.210 SEC. 11.210 OF THE UNIFORM FIRE CODE ADDED

Sec. 11.210 VEHICLES LEAKING GASOLINE

When any vehicle is leaking gasoline, and it is impracticable to stop such leaking, and such leaking creates a fire hazard as defined in this Code, the Chief may order the removal of the vehicle from a highway or from public or private property.

SEC. 55.11.412 SEC. 11.412 OF THE UNIFORM FIRE CODE AMENDED

Sec. 11.412 VACANT BUILDINGS

(a) Every person owning or in charge or control of any vacant building shall remove therefrom all accumulations of flammable or combustible waste or rubbish and shall securely lock, barricade or otherwise secure all doors, windows and other openings thereof.

(b) Right to Secure. In the event the owner shall fail, neglect, or refuse to remedy any condition which renders a structure unsecured, the Chief may order the owner of such structure prosecuted as a violator of the provisions of these Sections and/or may proceed to cause the accomplishment of the necessary remedial work or demolition. A record of the cost of all such work performed shall be transmitted to the City Council, who shall cause the same to be paid and levied as a special assessment against the property.

SEC. 55.11.416 SEC. 11.416 OF THE UNIFORM FIRE CODE IS ADDED

Sec. 11.416 PORTABLE UNVENTED OIL-BURNING HEATING APPLIANCES

(a) General. The design, construction and use of portable unvented oil-burning heating appliances shall comply with the provisions of this section.

(b) Approved Equipment. All portable unvented oil-burning heating appliances shall be listed and limited to a fuel tank capacity of not more than 2 gallons.

EXCEPTION: Appliances approved for temporary use during construction processes may have a greater fuel tank capacity, provided such capacity does not exceed the terms of the listing of the appliance.

(c) Where Permitted. The use of listed portable unvented oil-burning heating appliances shall be limited to supplemental heating in Group B, Division 2, and M Occupancies.

EXCEPTION: Upon approval of the chief, portable unvented oil-burning heating appliances may be permitted in any occupancy during the construction process when such use is necessary for the construction and the use does not represent a hazard to life or property.

(d) Fuel. The grade and type of fuel shall be limited to that which the appliance is listed to operate under. All storage and handling of fuel shall be in accordance with the provisions of Article 79 of this code.

SEC. 55.12.104 SEC. 12.104 OF THE UNIFORM FIRE CODE AMENDED

Sec. 12.104

(a) No Change.

(b) Type of Lock or Latch. Exit doors shall be openable from the inside without the use of a key or any special knowledge or effort.

EXCEPTIONS: 1. This requirement shall not apply to exterior exit doors in a Group B Occupancy if there is a readily visible, durable sign on or adjacent to the door, stating THIS DOOR TO REMAIN UNLOCKED DURING BUSINESS HOURS. The sign shall be in letters not less than 1 inch high on a contrasting background. The locking device must be of a type that will be readily distinguishable as locked. The use of this exception may be revoked by the enforcing authority for due cause.

2. Exit doors from buildings or rooms having an occupant load of 10 or less may be provided with a nightlatch, dead bolt or security chain, provided such devices are openable from the inside without the use of a key, special knowledge or effort and mounted at a height not to exceed 48 inches above the finished floor.

Manually operated edge- or surfaced-mounted flush bolts and surface bolts are prohibited. When exit doors are used in pairs and approved automatic flush bolts are used, the door leaf having the automatic flush bolts shall have no door knob or surface-mounted hardware. The unlatching of any leaf shall not require more than one operation.

EXCEPTION: Group R, Division 3 Occupancies.

(c) No Change.

(d) No Change.

(e) No Change.

SEC. 55.25.115

SEC. 25.115 OF THE UNIFORM FIRE CODE DELETED

Sec. 25.115 of the Uniform Fire Code is hereby deleted.

SEC. 55.25.116 SEC. 25.116 OF THE UNIFORM FIRE CODE AMENDED

Sec. 25.116 STANDBY FIRE PERSONNEL

(a) Whenever, in the opinion of the chief, it is essential for public safety in any place of public assembly or any other place where people congregate, due to the number of persons or the nature of the performance, exhibition, display, contest or activity, the owner, agent or lessess shall employ one or more qualified persons as required and approved by the Chief to be on duty at such place. Such individuals shall be subject to the Chiefs orders at all times when so employed and remain on duty during the times such places are open to the public, or when such activity is being conducted. Such individuals shall keep diligent watch for fires during the time such place is open to public or such activity is being conducted and take prompt measures for extinguishment of fires that may occur. Such individuals shall inspect the occupancy for compliance with the Code and shall insure that reasonable compliance is maintained during the time such place is open to the public. Such individuals shall not be required or permitted, while on duty, to perform any other duties than those herein specified.

(b) Standby Fire Personnel - Charges

Permittees having required the services of standby fire personnel assigned pursuant to this section will be charged by the City for the cost of such services rendered. The cost of such services will be computed by the Fire Department using accepted cost accounting methods including but not limited to the cost of salary, fringe benefits and general overhaul. Time cards for the assigned personnel shall be submitted by the Chief to the Auditor and Comptroller and shall be prima facie evidence of the expended manhours. In no event shall a permittee be charged less than the cost of two manhours for each standby qualified person qualified.

SEC. 55.25.117 SEC. 25.117 OF THE UNIFORM FIRE CODE AMENDED

Sec. 25.117 REQUIREMENTS FOR USE OF OPEN-FLAME DEVICES

(a) Permits. For permits to use candles or open flames in assembly areas, see Section 4.101.

(b) General. The use of candles and open-flame devices shall comply with the following:

1. Open-flame food preparation. The preparation of flaming foods or beverages shall be in accordance with the following:

A. Flammable liquids may be used in the preparation of flaming foods and beverages only when dispensed from one of the following:

(i) A 1-ounce container.

(ii) A container not to exceed 1 quart with a controlled pouring device that will limit the flow to 1 ounce.

B. Flaming foods or beverages shall be prepared only in the immediate vicinity of the table being served. They shall not be transported or carried while burning.

C. The person preparing the flaming foods or beverages shall have a wet cloth towel immediately available for use in smothering the flames in the event of emergency.

D. The serving of flaming foods or beverages shall be done in a safe manner and shall not create high flames. The pouring, ladling or spooning of liquids is restricted to a maximum height of 8 inches above the receiving receptable.

E. All containers, when not in use, shall be secured to prevent spillage.

2. Candles and Open-flame decorative lighting. Candles and other open-flame decorative lighting shall comply with the following:

A. Class I and II liquids and liquefied petroleum gases shall not be used.

B. Liquid or solid-fueled lighting devices containing more than 8 ounces must self-extinguish and not leak fuel at a rate of more than one-fourth teaspoon per minute if tipped over.

C. The devices or holders shall be constructed to prevent the spilling of liquid fuel or wax at the rate of more than one-fourth teaspoon per minute when the device or holder is not in an upright position.

D. The device or holder shall be designed so that it will return to the upright position after being tilted to an angle of 45 degrees from vertical.

EXCEPTION. Units that self-extinguish if tipped over and that do not spill fuel or wax at the rate of more than one-fourth teaspoon per minute if tipped over.

E. The flame shall be enclosed, except as follows:

(i) Openings on the sides shall not be more than 3/8 inch in diameter.

(ii) Openings on the top and the distance to the top shall be such that a single layer of tissue paper placed on top will not ignite in 10 seconds.

F. Chimneys shall be made of non-combustible materials. Such chimneys shall be securely attached to the open-flame device.

EXCEPTION: The chimney need not be attached to any open-flame device that will self-extinguish if the device is tipped over.

G. Fuel canisters must be safely sealed for storage.

H. Storage and handling of combustible liquids shall be in accordance with Section 79.201 (e) 1.

I. Shades if used shall be made of non-combustible materials and shall be securely attached to the open-flame device holder or chimney.

J. Candelabra with flame-lighted candles that are securely fastened in place to prevent overturning shall be located away from occupants using the area and away from possible contact of drapes, curtains or other combustibles.

EXCEPTION: When in the opinion of the Chief, adequate safeguards have been taken candles may be permitted. Hand-held candles shall not be passed from one person to another while lighted.

SEC. 55.25.118 SEC. 25.118 OF THE UNIFORM FIRE CODE AMENDED

Sec. 25.118 EXHIBITS, FAIRS, TRADE SHOWS, CONCERT, CONVENTION OR VEHICLE SHOW; PERMIT REQUIRED.

(a) No exhibit, fair, trade shows, concert, convention or vehicle show shall be held, without a permit.

(b) Permit-Security Required.

Before a permit required under this section may be issued, the applicant must deposit with the permit application a surety bond approved by the City Manager in favor of the City of San Diego, or cash, in an amount sufficient to guarantee reimbursement by the applicant to the City for the cost of furnishing standby fire personnel whenever required under Section 55.25.116 of this code and assigned pursuant thereto.

In computing the amount of the surety bond, or cash, to be so deposited, the Chief or his designated representative will estimate both the number of personnel required to be assigned as standby fire personnel and the total manhours to be expended.

The amount of the required bond, or cash, will be equal to the total manhours thus estimated, times the cost per manhour of the personnel to be assigned pursuant to Section 55.25.116 of this code.

The City Auditor and Comptroller shall provide the Chief with the cost-per-manhour estimates based upon accepted cost accounting methods including but not limited to salaries, fringe benefits and general overhead.

(c) Waiver of Security and Charges

The requirements of this section for the deposit of a surety bond or cash and the reimbursement to the City shall not apply to governmental agencies or nonprofit organizations whose nonprofit status is listed and declared by the State of California.

SEC. 55.26.103 SEC. 26.103 OF THE UNIFORM FIRE CODE AMENDED

Sec. 26.103 ALLEY RESURFACING AND REFINISHING

Resurfacing and refinishing operations shall not be carried on while the establishment is open for business. The fire department shall be notified when alleys are to be resurfaced or refinished. Approved ventilation shall be provided. Heating, ventilating or cooling systems employing recirculation of air shall not be operated during resurfacing and refinishing operations or within one hour following the application of flammable finishes. All electric motors or other equipment in the area which might be a source of ignition shall be shut down, and all smoking and use of open flames prohibited during the application of flammable finishes and for 4 hours thereafter.

SEC. 55.32.110 SEC. 32.110 OF THE UNIFORM FIRE CODE AMENDED

Sec. 32.110 STANDBY FIRE PERSONNEL

Standby Fire Personnel shall be provided in accordance with Section
25.116.

SEC. 55.32.114 SEC. 32.114 OF THE UNIFORM FIRE CODE AMENDED

Sec. 32.114 MARKING OF EXITS

At every exit and wherever otherwise required to clearly indicate the direction of egress, an exit sign with letters at least 6 inches in height shall be provided.

SEC. 55.32.121 SEC. 32.121 OF THE UNIFORM FIRE CODE ADDED

Sec. 32.121 Use Periods

Tents and air supported structures shall be used for a period of time not to exceed fifteen (15) days. The Bureau of Fire Prevention may extend the period of time for tents' or air-supported structures' use not to exceed a total of (90) days, provided all provisions of these sections have been and continue to be complied with.

SEC. 55.45.205 SEC. 45.205 OF THE UNIFORM FIRE CODE AMENDED

(a) - (e) No Change.

EXCEPTION: Electrical wiring, motors, and other equipment in the immediate vicinity of the front of open face spray booths shall comply with NFPA Pamphlet No. 33, Spray Application, 1980, Chapter 4, Sections 7.2 and 7.3.

(f) - (h) No Change.

SEC. 55.61.105

SEC. 61.105 OF THE UNIFORM FIRE CODE AMENDED

Sec. 61.105 (No Change).

EXCEPTION: Commercial or industrial occupancies using burners designed to burn crankcase oil or waste oil containing gasoline.

SEC. 55.74 ARTICLE 74 OF THE UNIFORM FIRE CODE AMENDED

ARTICLE 74
COMPRESSED GASES
DIVISION I
GENERAL PROVISIONS

Sec. 74.101 SCOPE

This division applies to oxygen systems and to the storage, handling and use of compressed gases. Liquefied petroleum gases which are covered in Article 82 are exempt from these provisions. See Articles 49, 75 and 80 for additional requirements.

Wherever the term "oxygen" occurs in this article, the requirements shall apply to systems for nitrous oxide.

Sec. 74.102 DEFINITIONS

For definitions of BULK OXYGEN SYSTEM and COMPRESSED GAS, see Article 9.

Sec. 74.103 PERMITS

For a permit to store, handle or use flammable compressed gas or nonflammable compressed gas, see Section 4.101.

Sec. 74.104 STORAGE CONTAINERS

Cylinders shall be designed, constructed, tested and maintained in accordance with U.S. Department of Transportation (DOT) specifications and regulations. Other type pressure vessels and cylinders shall be designed, constructed, tested and maintained in accordance with nationally recognized good practice.

Each cylinder, pressure vessel or group of containers shall be marked with the name of the gas contained in accordance with nationally recognized good practice.

Sec. 74.105 CYLINDER SYSTEMS FOR COMPRESSED GASES

Cylinders containing flammable and nonflammable gases shall be stored, handled and used in accordance with nationally recognized good practice.

Sec. 74.106 BULK OXYGEN SYSTEMS AT CONSUMER SITES

Bulk oxygen systems located at industrial and institutional consumer sites shall be installed in accordance with U.F.C. Standard No. 74-1.

Sec. 74.107 STORAGE AND USE OF CYLINDERS

(a) General. All compressed gas cylinders in service or in storage shall be stored standing upright where they are not likely to be knocked over, or the cylinders shall be secured.

EXCEPTIONS:

1. Compressed gas cylinders in the process of examination, servicing and refilling are exempt from this section.

2. Medical gas cylinders may be stored and used in the horizontal position in accordance with nationally recognized standards.

At cylinder filling plant operations and sellers' warehouses, the nesting of tightly stacked cylinders is considered an equivalent safe method of storage.

(b) Nitrous Oxide. Nitrous oxide cylinders shall be stored in a secured area.

Sec. 74.108 GENERAL SAFETY REGULATIONS

Legible operating instructions shall be maintained at the operating location for any installation that requires any operation of equipment by user.

Smoking shall be prohibited in or around supply system enclosures. "NO SMOKING - OXYGEN" or similar warning signs shall be posted in the enclosure.

DIVISION II
COMPRESSED GASES - MEDICAL

Sec. 74.201 SCOPE

This division shall apply to flammable anesthetic gases and to fixed installations of nonflammable medical gases intended for sedation wherein the patient is not rendered unconscious, such as, but not limited to, analgesia systems used for dentistry, podiatry, veterinary and such other similar uses.

Sec. 74.202 DEFINITIONS

For definitions of CENTRAL SUPPLY, D.I.S.S. DIAMETER-INDEX SAFETY SYSTEM, FLAMMABLE ANESTHETIC, NONFLAMMABLE MEDICAL GAS and PIPED DISTRIBUTION SYSTEM, See Article 9.

Sec. 74.203 FLAMMABLE ANESTHETICS AND NONFLAMMABLE MEDICAL GASES

Cylinders containing flammable anesthetics and nonflammable medical gases in hospitals and similar facilities shall be stored, handled and used in accordance with nationally recognized good practice.

Sec. 74.204 NONFLAMMABLE MEDICAL GAS SYSTEM

(a) Location. It is the intent of this section to locate the supply system in a secure room or enclosure with no communicating openings to the interior of the building other than the nonflammable gas supply lines.

Supply cylinders shall be kept or stored outdoors within a secure enclosure. When outdoor storage is not practical, they shall be enclosed in a separate room or enclosure of not less than one-hour fire-resistive construction. Every door opening into such enclosures shall be protected by a tight-fitting smoke-and-draft-control door assembly having a fire-protection rating of not less than 20 minutes. The door and frame shall bear an approved label or other identification showing the rating thereof. Doors shall be maintained self-closing. Adequate ventilation shall be provided. There shall be not less than two vents, each not less than 36 square inches in area so located that one required vent will be located within 6 inches of the floor and the other vent within 6 inches of the ceiling. Enclosures shall be located away from exits.

(b) Use Within and Security of Enclosures. Rooms or enclosures for storage or use of nonflammable medical gases shall not be used for the storage of any other materials. No electrical or gas apparatus other than an approved heating device to keep the enclosure warm so the gases will flow shall be permitted therein. Enclosures of supply systems shall be provided with doors or gates. Locking devices shall conform to Section 3303 (c) of the Building Code.

(c) Heating and Electrical Equipment in Enclosures. When enclosures (interior or exterior) for supply systems are located near sources of heat, such as furnaces, incinerators or boiler rooms, they shall be of construction so as to protect cylinders from reaching temperatures exceeding 130°F. Open electrical conductors and transformers shall not be located within 20 feet of openings of enclosures. Such enclosures shall not be located within 25 feet of oil storage tanks.

Ordinary electrical wall fixtures in supply rooms shall be installed in fixed locations not less than 5 feet above the floor to avoid physical damage.

(d) Manifolds. Manifolds shall be of substantial construction and of a design and material suitable for the service pressure involved. Mechanical means shall be provided to assure the connection of cylinders containing the proper gas to the manifold. Cylinder outlets shall comply with nationally recognized standards.

(e) Hose and Fittings. All flexible hose and D.I.S.S. fittings used to connect the pressure regulator to the fixed piping on the low-pressure side and also used to connect the dispensing unit to the outlet stations shall be of a type approved by the fire chief; the hose and fittings shall have a bursting pressure of not less than four times the maximum working pressure. The hose shall be a maximum length of 5 feet and shall not penetrate walls, floors, etc.

(f) Connections to Regulators, Manifold or Piping. Threaded connections between the regulator and either the low-pressure manifold or piping system shall be noninterchangeable connections complying with nationally recognized standards.

(g) Sizing of Piping. The pipeline system shall be capable of delivering a minimum of 50 psig to all outlets at the maximum flow rate.

(h) Pressure Regulators. Pressure-regulating equipment capable of maintaining the minimum flow rate of the pipeline system shall be installed on each cylinder upstream of the final pressure-relief valve as shown in Figure No. 1.

EXCEPTION: Systems using approved manifold-type installations.

(i) Check Valves. When acting as a reserve supply, a check valve shall be installed between each cylinder lead and the manifold header as shown in Figure No. 2, or the system shall be supplied with an actuating switch which shall operate an alarm when the reserve supply drops to one-day supply.

(j) Shutoff Valves. A shutoff valve or check valve shall be installed downstream of each pressure-regulator as shown in Figure No. 2.

(k) Pressure-relief Valves. A pressure-relief valve set at 50 percent above normal pipeline pressure shall be installed in the main line downstream of the pressure-regulating valve as shown in Figure Nos. 1 and 2. All pressure-relief valves shall close automatically when excess pressure has been released. Piping relief valves shall be vented to the outside or a safe area if the total capacity of the piping system is 2,500 cubic feet or greater. Pressure-relief valves shall be of brass or bronze and especially designed for oxygen service.

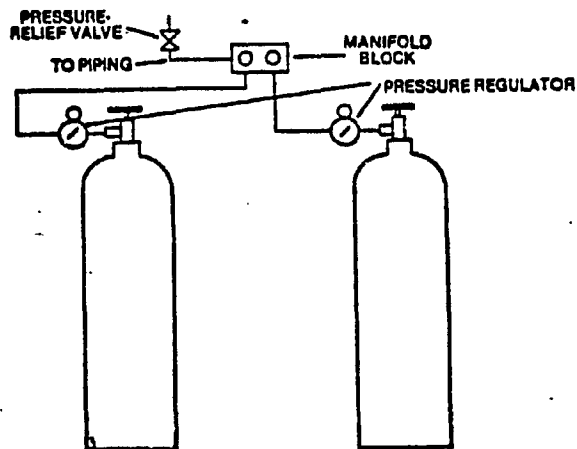


FIGURE NO. 1

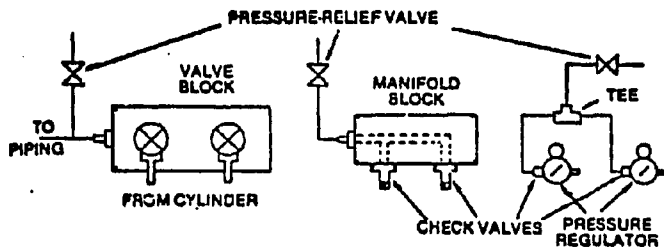


FIGURE NO. 2

Sec. 74.205 PIPE DISTRIBUTION

(a) General. Pipelines shall be constructed of materials in accordance with nationally recognized standards. Soft temper copper tubing used as pipeline shall be continuously supported in exposed locations. Pipe sizes shall be in conformity with good engineering practice for proper delivery of maximum volume specified. Gas piping shall not be supported by other piping but shall be supported with pipe hooks, metal pipe straps, bands or handers suitable for the size of pipe and of proper strength and quality at proper intervals so that piping cannot be moved accidentally from the installed position, as follows:

1/4-inch pipe or tubing	6 feet
3/8-inch pipe or tubing	6 feet
1/2-inch pipe or tubing	6 feet
3/8-inch or 1-inch pipe or tubing	8 feet
1-1/4-inch or larger (horizontal)	10 feet
1-1/4-inch or larger (vertical)	Every floor level

(b) Copper and Brass Fittings. All fittings used for connecting copper tubing shall be wrought-copper, brass or bronze fittings made especially for solder or brazed connection, except as provided in the paragraph below. Brass pipe shall be assembled with screw-type brass fittings or with bronze or copper brazing-type fittings.

Approved gas-tubing fittings may be used on gas-distribution lines when pipe sizes are 1/2-inch nominal or less if the fitting is so installed as to be visible in the room. Such fittings also may be used in connecting copper tubing of 3/4-inch nominal or less to shutoff valves described in Section 74.206, provided the fittings are readily accessible.

(c) Installation Underground and in Tunnels or Ducts. Buried piping shall be protected against frost, corrosion and physical damage. Ducts or casings shall be used whenever buried piping traverses a roadway, driveway, parking lot or other areas subject to surface loads. Oxygen-gas piping may be placed in the same tunnel, trench or duct with fuel-gas piping, electrical lines or steam lines, if separated, provided there is natural or forced ventilation. Oxygen-gas piping shall not be placed in a tunnel, trench or duct where exposed oil may occur.

(d) Installation in Partitions or Concealed Spaces. Oxygen pipelines installed in combustible partitions shall be protected against physical damage by installation within pipe or conduit. Openings for pipelines installed in concealed spaces shall be fire-stopped with construction having a fire resistance equal to or greater than the original construction. Oxygen risers may be installed in pipe shafts if suitable protection against physical damage, effects of excessive heat, corrosion or contact with oil is provided. Oxygen risers shall not be located in elevator shafts.

(e) Installation in Rooms. Oxygen pipelines installed in storage rooms for combustible materials, kitchens, laundries or other hazardous areas shall be protected by an enclosure that will prevent the liberation of oxygen within the area.

(f) Physical Protection. Pipelines exposed to physical damage such as might be sustained from the movement of portable equipment such as carts, stretchers or trucks in corridors and other locations shall be provided with suitable protection.

(g) Identification of Piping. The gas content of pipelines shall be readily identifiable by appropriate labeling with the name of the gas contained. Such labeling shall be by means of metal tags, stenciling, stamping or with adhesive markers in a manner that is not readily removable. Labeling shall appear on the pipe at intervals of not more than 20 feet and at least once in each room and each story traversed by the pipeline.

Where supplementary color identification of piping is used, it shall be in accordance with the gases and color indicated in nationally recognized standards.

(h) Use of Piping for Grounding. Piping systems for gases shall not be used as a grounding electrode.

(i) Cleaning of Piping. Before erection, all piping, valves and fittings, except those supplied especially prepared for oxygen service by the manufacturer and received sealed on the job, shall be thoroughly cleaned of oil, grease and other readily oxidizable materials by washing in a hot solution of sodium carbonate or trisodium phosphate (proportion of 1 pound to 3 gallons of water). The use of organic solvents, for example, carbon tetrachloride, is prohibited. Scrubbing shall be employed where necessary to ensure complete cleaning. After washing, the material shall be rinsed thoroughly in clean hot

water. After cleaning, particular care shall be exercised in the storage and handling of all pipe fittings. Pipe and fittings shall be temporarily capped or plugged to prevent recontamination before final assembly. Tools used in cutting or reaming shall be kept free from oil or grease. Where such contamination has occurred, the items affected shall be rewashed and rinsed.

All cleaned piping, valves and fittings should be visually inspected prior to installation.

(j) Joints and Fittings. All joints in the piping, except those permitted to be approved brass flared-type gas-tubing fittings and those at valves or at equipment requiring screw connections, shall be made with silver brazing alloy or similar high-melting-point (at least 1000°F.) brazing metal. Particular care shall be exercised in applying the flux to avoid leaving any excess inside the completed joints. The outside of the tube and fittings shall be cleaned by washing with hot water after assembly.

Threaded joints in piping systems shall be tinned or made up with polytetrafluorethylene (such as Teflon) tape or other thread sealants suitable for oxygen service. Sealants shall be applied to male threads only.

(k) Purging. After installation of the piping but before installation of the outlet valves, the line shall be blown clear by means of oil-free, dry air or nitrogen.

Sec. 74.206 SHUTOFF VALVES

(a) Enclosure and Identification. Shutoff valves accessible to other than authorized personnel shall be installed in valve boxes with frangible or removable windows large enough to permit manual operation of valves and labeled in substance as follows: "CAUTION - (NAME OF GAS) VALVE. DO NOT CLOSE EXCEPT IN EMERGENCY. THIS VALVE CONTROLS SUPPLY TO..."

(b) Where Required. 1. Main supply. The main oxygen supply line shall be provided with a shutoff valve so located as to be accessible in an emergency.

EXCEPTION: When one or two cylinders are used, the cylinder valve will suffice as a shutoff valve.

2. Risers. Each riser supplied from the main line shall be provided with a shutoff valve adjacent to the riser connection.

3. Between risers and outlets. Patient outlet stations shall not be supplied directly from a riser unless a manual shutoff valve located in the same story is installed between the riser and the outlet with a corridor wall intervening between the valve and the outlets. This valve shall be readily operable from a standing position in the corridor on the same floor which it serves. Each lateral branch line serving patient rooms shall be provided with a shutoff valve that controls the flow of medical gas to the patient rooms. Branch line shutoff valves shall be so arranged that shutting off the supply of medical gas to one branch will not affect the supply of medical gas to the rest of the system. A pressure gauge shall be provided downstream of each lateral branch line shutoff valve.

(c) Anesthetizing System. Anesthetizing locations shall be supplied directly from the riser without intervening valves, except as provided in this section.

A shutoff valve shall be located outside or inside each anesthetizing location in each medical gas line, so located as to be readily accessible at all times for use in an emergency. These valves shall be so arranged that shutting off the supply of gas to any one operating room or anesthetizing location will not affect the others. Valves shall be mounted on a pedestal or

otherwise properly safeguarded against physical damage and marked to prohibit tampering or inadvertent closing, such as "(NAME OF MEDICAL GAS)-DO NOT CLOSE."

EXCEPTION: The shutoff valve may be omitted when service valves for oxygen, nitrous oxide and medical compressed air that is located within anesthetizing locations are equipped with piping extending at least 6 feet horizontally to the outlet location.

Sec. 74.207 STATION OUTLETS

(a) Shutoff. Each station outlet for oxygen shall be equipped with either a manually operated or automatic shutoff valve and shall be legibly labeled with the name of the gas.

(b) Connection to Valves. Manually operated valves shall be equipped with noninterchangeable connections in accordance with nationally recognized standards.

(c) Quick Couplers. Each station outlet equipped with a female end of an approved quick coupler of the noninterchangeable type for oxygen service, and so identified, shall be provided with an automatic shutoff valve incorporated in such a manner that when the quick-coupler is removed from the pipeline for repair, the flow of oxygen shall be shut off until the female end of the quick-coupler is reattached.

EXCEPTION: Oxygen and nitrous oxide couplers and outlet connections shall not be interchangeable.

Female ends of the quick-couplers of the noninterchangeable types may be attached to the manually operated male end of the noninterchangeable station shutoff valves for the same gas service.

(d) Oxygen Gauges and Manometers. Pressure gauges and manometers for oxygen, including gauges applied temporarily for testing purposes, shall be manufactured expressly for that gas and labeled "OXYGEN-USE NO OIL."

Sec. 74.208 TESTING OF PIPING

After installation of station outlet valves, each section of the pipeline systems shall be subjected to a test pressure of one and one-half times the maximum working pressure but not less than 150 psig with oil-free, dry air or nitrogen. This test pressure shall be maintained until each joint has been examined for leakage by means of soapy water or other equally effective means of leak detection safe for use with oxygen.

A visual inspection of each brazed joint is recommended to make sure that the alloy has flowed completely in and around the joint and that hardened flux has not formed a temporary seal which holds test pressure. Remove all excess flux for clear visual inspection of brazed connections. All leaks shall be repaired and the section retested.

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After completing the testing of each individual pipeline, the system shall be subjected to a 24-hour standing pressure test at one and one-half times the maximum working pressure but not less than 150 psig. The test gas shall be oil-free, dry air or nitrogen.

After the pipeline systems are filled with test gas, the supply valve and all outlet valves shall be closed and the source of test gas disconnected. The systems shall remain leak free for 24 hours.

Sec. 74.209 CROSS-CONNECTION TESTING

To determine that no cross-connection to other pipeline systems exists, reduce all systems to atmospheric pressure. Disconnect all sources of testing from all of the systems, except the one system to be checked. Pressure this systems with oil-free, dry air or nitrogen to a pressure of 50 psig and with

appropriate adaptors matching the outlets of the system to be tested. Determine that the dry air or nitrogen is being dispensed from only the outlets of the system under pressure. Reduce the system being tested to atmospheric pressure and proceed to test each additional system.

Sec. 74.210 PURGING

When all medical gas-piping systems have been tested in accordance with Section 74.208 and 74.209, disconnect the source of the test and connect the proper gas source of supply to each respective system.

Following this connection and pressurization, all outlets shall be opened in a progressive order, starting nearest the source and completing the process of purge flushing at the outlet farthest from each outlet until each system is completely purged.

Sec. 74.211 WARNING SYSTEMS

Warning systems shall be installed, maintained and tested in accordance with nationally recognized standards.

SEC. 55.77.102 SEC. 77.102 OF THE UNIFORM FIRE CODE AMENDED

Sec. 77.102 EXCEPTIONS

1 through 7. No change.

8. Any person engaged in the transportation of explosives regulated by, and when subject to, the provisions of Division 14, commencing with Section 31600 of the California Vehicle Code.

SEC. 55. 79.111 SEC. 79.111 OF THE UNIFORM FIRE CODE AMENDED

Sec. 79.111 WASTE PETROLEUM PRODUCTS AND FLAMMABLE OR COMBUSTIBLE LIQUIDS

Flammable or combustible liquids or any waste liquid containing crude petroleum or its products shall not be discharged into or upon any street, highway, drainage canal or ditch, storm drain, sewer or flood-control channel, lake or tidal waterway, or upon the ground. No spilled material shall be allowed to accumulate on floors or shelves.

SEC. 55.79.508 SEC. 79.508 OF THE UNIFORM FIRE CODE AMENDED

(a) and (b) No Change.

(c) Diked Areas. Where protection of adjacent tanks, adjoining property or waterways is accomplished by retaining the liquid around the tank by means of a diked area, such diked area shall comply with the following:

1. The volumetric capacity of the diked area shall be not less than the greatest amount of liquid that can be released from the largest tank within the diked area. The capacity of the diked area enclosing more than one tank shall be calculated by deducting the volume of the tanks other than the largest tank below the height of the dike.

2. Walls of the diked area shall be of earth, steel, concrete or solid masonry designed to be liquid tight and to withstand a full hydrostatic head. Earthen walls 3 feet or more in height shall have a flat section at the top not less than 2 feet wide. The slope shall be consistent with the angle of repose of the material of which the walls are constructed.

3. The walls of the diked area shall be restricted to a average height of 6 feet above the interior grade, except as provided in Item No. 4 below.

4. Dikes may be higher than an average of 6 feet above interior grade where provisions are made for normal and necessary emergency access to tanks, valves and other equipment and safe egress from the diked enclosure.

A. Where the average height of the dike containing Class I liquids is over 12 feet measured from interior grade or where the distance between any tank and the top inside edge of the dike wall is less than the height of the dike wall, provisions shall be made for normal operation of valves and for access to tank roof(s) without entering below the top of the dike. These provisions may be met through the use of remote operated valves, elevated walkways or similar arrangements.

B. Piping passing through dike walls shall be designed to prevent excessive stressed ^S ^{SHS} as a result of settlement or fire exposure.

C. The minimum distance between tanks and the toe of the interior dike walls shall be 5 feet.

5. Each diked area containing two or more tanks shall be subdivided preferably by drainage channels leading to an impounding basin or by intermediate curbs or spill dikes in order to prevent spills from endangering adjacent tanks within the diked area as follows:

A. When storing normally stable liquids in vertical cone roof tanks constructed with weak roof-to-shell seam or approved floating roof tanks or when storing crude petroleum in producing areas in any type of tank, one subdivision for each tank in excess of 10,000 barrels and one subdivision for each group of tanks (no tank exceeding 10,000-barrel capacity) having an aggregate capacity not exceeding 15,000 barrels.

B. When storing ^{SHS} normally stable, flammable or combustible liquids in tanks not covered in Item A, one subdivision for each tank in excess of 100,000 gallons (2500 barrels) and one subdivision for each group of tanks (no tank exceeding 100,000-gallon capacity) having an aggregate capacity not exceeding 150,000 gallons (3570 barrels).

C. When storing unstable liquids in any type of tank, one subdivision for each tank, except that tanks installed in accordance with the drainage requirements of U.F.C. Standard No. 79-2 for Water Spray Systems for Fire Protection shall require no additional subdivision.

NOTE: Since unstable liquids will react more rapidly when heated than when at ambient temperatures, subdivision by drainage channels is the preferred method.

D. The drainage channels or intermediate curbs shall be located between tanks so as to take full advantage of the available space with due regard for the individual tank capacities. Intermediate curbs, where used, shall be not less than 18 inches in height.

(d) No Change.

(e) No Change.

SEC. 55.79.601 SEC. 79.601 OF THE UNIFORM FIRE CODE AMENDED

Sec. 79.601

(a) No Change.

(b) Depth and Cover. Excavation for underground storage tanks shall be made with due care to avoid undermining of foundations of existing structures. Underground tanks shall be set on firm foundation and surrounded with at least 6 inches of noncorrosive inert material such as clean sand or gravel well tamped in place or in accordance with the manufacturer's installation instructions. Tanks shall be covered with a minimum of 2 feet of earth or shall be covered by not less than 1 foot of earth, on top of which shall be placed a slab of reinforced concrete not less than 4 inches thick. When underground tanks are or are likely to be subjected to traffic, they shall be protected against damage from vehicles passing over them by at least 3 feet of earth cover, or 18 inches of well-tamped earth plus 6 inches of reinforced concrete, or 8 inches of asphaltic concrete. When asphaltic or reinforced concrete paving is used as part of the protection, it shall extend at least 1 foot horizontally beyond the outline of the tank in all directions.

For tanks ⁺built ^{SMS} in accordance with Section 79.105, the burial depth and the height of the vent line shall be such that the static head imposed at the bottom of the tank will not exceed 10 psig if the fill or vent pipe are filled with liquid.

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If the depth of cover exceeds 7 feet or the manufacturer's specifications, the tank manufacturer shall be consulted to determine if reinforcements are required.

Nonmetallic underground tanks shall be installed in accordance with the manufacturer's instructions. The minimum depth of cover shall be as specified in this subsection.

(c) No Change.

(d) Leaking Tanks. Leaking tanks shall be promptly emptied and removed from the ground or abandoned in accordance with Section 79.113, or the chief may permit the tank to be repaired in accordance with the recommendation of a qualified engineer or in an approved manner.

(e) No Change.

SEC. 55.79.604 SEC. 79.604 OF THE UNIFORM FIRE CODE AMENDED

(a) 1. and (a) 3. No Change.

(a) 4. Installation of vent piping. Vent piping shall be constructed in accordance with Division VII, "Piping, Valves and Fittings." Vent pipes and vapor-return piping shall be so laid as to drain toward the tank without sags or traps in which liquid can collect. Condensate tanks, if utilized, shall be installed and maintained so as to preclude the blocking of the vapor-return piping by liquid. The vent pipes and condensate tanks shall be so located so that they will not be subjected to physical damage. The tank end of the vent pipe shall enter the tank through the top. The lower end of vent pipes shall not extend into the tank more than 1 inch.

(a) 5. Manifolding. When tank vent piping is manifolded, pipe sizes shall be such as to discharge, within the pressure limitations of the system, the vapors they can be required to handle when manifolded tanks are filled simultaneously. Float-type check valves installed in tank openings connected to manifolded vent piping to prevent product contamination may be used, provided that the static head imposed at the bottom of the tank will not exceed 10 psig if the fill or vent pipe are filled with liquid when the valves are closed.

EXCEPTION: For service stations, the capacity of manifolded vent piping shall be sufficient to discharge vapors generated when two manifolded tanks are simultaneously filled.

Vent piping for tanks storing Class I liquids shall not be manifolded with vent piping for tanks storing Class II or Class III liquids unless positive means are provided to prevent the vapors from Class I liquids from entering tanks storing Class II or Class III liquids to prevent contamination and possible change in classification of the less volatile liquid.

(b) 1. and (b) 2. No Change.

(b) 3. Fill pipe and discharge lines. Fill pipe and discharge lines shall enter tanks only through the top. Fill lines shall be sloped toward the tank.

Underground tanks for Class I liquids having a capacity of more than 1,000 gallons shall be equipped with a tight fill device for connecting the fill hose to the tank.

For Class I liquids other than crude oils, gasolines and asphalts, the fill pipe shall be so designed and installed as to minimize the possibility of generating static electricity by terminating within 6 inches of the bottom of the tank.

(b) 4. and (b) 5. No Change.

SEC. 55.79.708 SEC. 79.708 OF THE UNIFORM FIRE CODE AMENDED

TESTING

Sec. 79.708. Unless tested in accordance with the applicable sections of nationally recognized standards for pressure piping [See Section 2.303 (b)], all piping, before being covered, enclosed or placed in use, shall be hydrostatically tested to 150 percent of the maximum anticipated pressure of the system or pneumatically tested to 110 percent of the maximum anticipated pressure of the system but not less than 5-pound-per-square-inch gage at the highest point of the system. This test shall be maintained for a sufficient time period to complete visual inspection of all joints and connections but for at least 10 minutes there shall be no leakage or permanent distortion. Care should be exercised to ensure that these pressures are not applied to vented aboveground, underground or inside storage tanks, as they should be tested independently from piping.

Existing piping shall be tested as described above when the chief has reasonable cause to believe that a leak exists. Piping that may contain flammable or combustible liquids shall not be tested pneumatically. Such tests shall be at the expense of the owner or operator. See Section 79.605 (c).

SEC. 55.79.804 SEC. 79.804 OF THE UNIFORM FIRE CODE AMENDED

DESIGN AND CONSTRUCTION OF INSIDE USE, DISPENSING AND MIXING ROOM

Sec. 79.804. An inside use, dispensing and mixing room shall be constructed in accordance with the Building Code for a Group H, Division 2 Occupancy and the following:

(1) thru (8). No Change.

9. Open flames, smoking and other sources of ignition shall not be permitted inside the room.

10. Materials which will react with water or other liquids to produce a hazard shall not be stored in the same room with flammable or combustible liquids.

(a). No Change.

(b) Dispensing. Dispensing of Class I liquids shall be from only (1) original shipping containers with a capacity of 5 gallons or less, (2) from safety cans, (3) through closed piping system or (4) from a portable tank or container by means of a listed pump or device drawing through an opening in the top of the tank or container. Class II or III-A liquids may be dispensed from a container by gravity through a listed self-closing valve or self-closing faucet.

Class II or III liquids may also be dispensed using inert gas or water, provided the tank or container has been approved as a vessel for the use to which it is subjected. Dispensing of liquids by water pressure or inert gas is permitted only if controls, including pressure-relief devices, are provided to limit the pressure so it cannot exceed the design pressure of the vessel, tank or container. Air or oxygen shall not be used to pressurize any container for dispensing.

Dispensing from underground storage tanks shall be in accordance with Division IX, Service Stations.

(c) and (d). No Change.

SEC. 55.79.807 (a) SEC. 79.807 (a) OF THE UNIFORM FIRE CODE AMENDED

(1) and (2). No Change.

3. Static protection. Loading racks shall be equipped with protection against the accumulation of static charges during truck-filling operations. Bonding facilities shall be provided during the loading of tank vehicles through open domes (1) where Class I liquids are loaded or (2) where Classes II and III liquids are loaded into vehicles which may contain vapors from previous cargos of Class I liquids.

Protection shall consist of a metallic bond wire permanently electrically connected to the fill stem. Fill stem pipe assembly must form a continual electrically conductive path downstream from the point of bonding. The free end of such bond wire shall be provided with a clamp or equivalent device for convenient attachment to some metallic part in electrical contact with the cargo tank of the tank vehicle. Unless otherwise approved by the chief, protection shall consist of a bare-braided metallic bond wire not less than 8 AWG in size permanently electrically connected to the fill stem or some part of the fill-stem piping.

Such bonding connection shall be fastened to the vehicle or tank before dome covers are raised and shall remain in place until filling is completed and all dome covers have been closed and secured.

EXCEPTIONS: 1. Where vehicles are loaded exclusively with products not having a static-accumulating tendency, such as asphalts, including cutback asphalts, most crude oils, residual oils and water-soluble liquids.

2. Where Class I liquids are handled at the loading facility and the tank vehicles loaded are used exclusively for Class II and Class III liquids.

3. Where vehicles are loaded or unloaded through closed top or bottom connections whether the hose or pipe is conductive or nonconductive.

Filling through open domes into the tanks of tank vehicles that contain vapor-air mixtures within the flammable range or where the liquid being filled can form such a mixture shall be by means of a downspout which extends near the bottom of the tank.

(4) thru (10). No Change.

(a) - (f). No Change.

(g) Inventory Control. Accurate daily inventory records shall be maintained and reconciled on all Classes I, II and III-A liquid storage tanks for indication of possible leakage from tank and piping. The records shall be kept at the premises and available to the chief upon request and shall include, as a minimum, records showing, by product, daily reconciliation between sales, use, receipts and inventory on hand. If there is more than one system consisting of tanks service separate pumps or dispenser for any product, the reconciliation shall be ascertained separately for each tank system. A consistent or ^{SHS}accidental loss of Class I, II or III-A liquids shall be immediately reported to the local fire department.

(h). No Change.

accidental

(a). No Change.

(b) Fill Opening Security. Fill opening shall be equipped with a closure designed so that it may be locked. The fill opening shall be separate from the vent opening.

(c) Vents. Each tank shall be provided with a free-opening vent of the following minimum nominal pipe size to relieve vacuum or pressure which may develop in normal operation or from fire exposure.

TANK CAPACITY (Gallons)	VENT SIZE (Diameter in Inches)
Up to 275	1-1/2
276-660	2
661-900	2-1/2
901-1100	3
1101-10,000	See Subsections 79.510 (a) and (b)

Vents shall be arranged to discharge in such a way as to prevent localized overheating of or flame impingement on any part of the tank in the event vapors from such vents are ignited.

(d) thru (h). No Change.

SEC. 55.79, DIVISION XIV
IS AMENDED

SEC. 79, DIVISION XIV OF THE UNIFORM FIRE CODE

DIVISION XIV
BULK PLANTS AND TERMINALS
(No change in text)

SEC. 55. 80.103

SEC. 80.103 OF THE UNIFORM FIRE CODE AMENDED

GENERAL REQUIREMENTS

(a) and (b) No Change.

(c) Defective containers which permit leakage or spillage shall be disposed of or repaired in accordance with recognized safe practices; no spilled material shall be allowed to accumulate on floors or shelves. Hazardous materials or hazardous waste products shall not be discharged into or upon any street, highway, drainage canal or ditch, storm drain, sewer or flood control channel, lake or tidal waterway, or upon the ground.

SEC. 55.80.109 SEC 80.109 OF THE UNIFORM FIRE CODE AMENDED

Sec. 80. 109 STORAGE CABINETS FOR HAZARDOUS MATERIALS

(a) General. When provisions of this code require that hazardous materials be stored in storage cabinets, such cabinets shall be in accordance with this section. Cabinets shall be conspicuously labeled in red letters on contrasting background "HAZARDOUS-KEEP FIRE AWAY."

(b) Construction. Cabinets may be constructed of wood or metal. Cabinets shall be listed or constructed in accordance with the following:

1. Unlisted metal cabinets. Metal cabinets shall be of steel having a thickness of not less than 0.043 inch. Doors shall be well-fitted, self-closing and equipped with a latching device. Joints shall be ⁱ riveted or welded and shall be tight fitting. The bottom of a cabinet designed for the containment of liquids shall be liquid tight to a height of at least 2 inches.

2. Wooden cabinets. Wooden cabinets, including the doors, shall be of not less than 1-inch Exterior grade plywood, or equivalent, which is compatible with the material being stored. Doors shall be well fitted, self-closing and equipped with a latch. The bottom of a cabinet designed for the containment of liquid shall be liquid tight to a height of at least 2 inches. Cabinets shall be painted with an intumescent-type paint.

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SEC. 55.81 ARTICLE 81 OF THE UNIFORM FIRE CODE AMENDED

ARTICLE 81

HIGH-PILED COMBUSTIBLE STORAGE

Sec. 81.101 SCOPE

This article shall apply to the storage of high-piled combustible material and high-rack storage systems. Factors such as method and height of stock piling, combustibility of materials, fuel load and rate of heat release, areas and size of piles, aisles, automatic fire-extinguishing systems, smoke-removal systems, fire protection and fire separations are considered in setting forth the provisions of this Article. In the absence of specific provisions in the Article, UFC Standard No. 81-1 will apply.

Sec. 81.102 DEFINITIONS

For definitions of commodity, designated storage area, high-piled combustible storage, and high-rack storage systems, see Article 9.

Sec. 81.103 PERMITS

For permits to use buildings for high-piled combustible storage, see Section 4.101.

For High-Pile Combustible Storage Permit application form, see Appendix VI-E.

Sec. 81.104 CLASSIFICATION OF CONTENTS

Commodity classifications shall be as defined and in accordance with the following:

Class I commodity is a commodity which is essentially noncombustible products on wooden or nonexpanded polyethylene solid deck pallets, in ordinary corrugated cartons, with or without single-thickness dividers, or in ordinary paper wrappings with or without pallets. Examples of Class I commodities include but are not limited to the following:

Appliances, electrical

Beer or wine, up to 20% alcohol

Cement in bags

Ceramics

Dairy products in nonwax-coated containers

Dry insecticides

Foods in noncombustible containers

Frozen foods

Fresh fruits and vegetables in nonplastic trays or containers

Glass

Glycol in cans

Gypsum board

Inert materials, bagged

Insulation, noncombustible

Metal products

Class II commodity is Class I products in slatted wooden crates, solid wooden boxes, multiple thickness paperboard cartons or equivalent combustible packaging material with or without pallets. Examples of Class II commodities would include but are not limited to the following:

Beer or wine up to 20% alcohol in combustible containers

Incandescent or fluorescent light bulbs in cartons

Thinly coated fine wire on reels or in cartons

Class III commodity is a commodity of wood, paper, natural fiber cloth, or Group C plastics or products thereof, with or without pallets. Products may contain a limited amount of Group A or B plastics. (Metal bicycles with plastic handles, pedals, seats and tires are an example of a commodity with a limited amount of plastics). See UFC Standard No. 81-1, for classification of Group A, B, and C plastics. Examples of Class III commodities would include but are not limited to the following:

Combustible fiberboard

Cork, baled

Feed, bagged

Fertilizers, bagged

Furniture (wood, natural fiber, upholstered, nonplastic or wood or metal with plastic-padded and covered arm rests)

Lubricating or hydraulic fluid in metal cans

Lumber (stored flat)

Mattresses (excluding foamed rubber and foamed plastics)

Nonflammable liquids in plastic containers

Paints, oil base, in cans

Paper and pulp, horizontal storage

Paper, waste, baled

Pillows (excluding foamed rubber and foamed plastics)

Plastic-coated paper food containers

Plywood

Rags, baled

Rugs (no foamed backing)

Sugar, bagged

Wood, baled

Wood doors, frames and cabinets

Yarns (natural fiber and viscose)

Class IV commodity is Class I, II or III products containing an appreciable amount of Group A plastics in ordinary corrugated cartons and Class I, II and III products in corrugated cartons with Group A plastic packaging, with or without pallets. Group B plastics and free-flowing Group A plastics are also included in this class. Examples of Class IV commodities would include but not be limited to the following:

Alcohol (over 20% but under 80%) in cans, or bottles in cartons

Clothing, synthetic or nonviscose

Furniture, plastic upholstered

Furniture, wood or metal with plastic covering and/or padding

Linoleum products

Lubricating or hydraulic fluid in combustible container

Lumber (stored vertical)

Pharmaceuticals, alcoholic elixirs, tonics, etc.

Rubber goods

Rugs, foamed back

Shingles, asphalt

Thread or yarn, synthetic or nonviscose

Class V commodities are high-hazard products presenting special fire hazards beyond those of Class I, II, III or IV. Examples of Class V commodities would include but are not limited to the following:

Aerosol (flammable)

Alcohol, 80% or higher in bottles in cartons

Lacquers (which dry by solvent evaporation) in cans or cartons

Mattresses, foam rubber or foam plastics

Pallets and flats (idle combustible)

Paper, asphalt, rolled, horizontal storage

Paper, asphalt, rolled, vertical storage (unbanded)

Pillows, foam rubber and foam plastics

Plastic products in cartons (ABS, styrene polyethylene)

Plastic, foamed urethane and styrene

Pyroxylin

Rubber tires

Sec. 81.105 FIRE PROTECTION

Fire protection for buildings used for high-piled combustible storage shall be in accordance with Table 81.105, of the Code and the Building Code. Nationally recognized standards or guidelines as applicable may be used when approved by the Chief.

TABLE 81.105

COMMODITY	DESIGNATED STORAGE AREA (SQ. FT.) [7]	BUILDING ACCESS (SEC. 81.109)	AISLE WIDTH (MIN. FT.)	PILE DIMENSION PERMITTED (MAX. FT.) [9]	USABLE STRGE. (MAX. HT./FT.) [6]	CUBIC FEET PER PILE (MAX.)	MECHANICAL SMOKE REMOVAL		SMOKE AND HEAT VENTS		FIRSTAID HOSE CONNECTION		AUTOMATIC FIRE EXTINGUISHING SYSTEMS	SMOKE DETECTION SYSTEMS [1]
								-- OR --			1/2 VALVES	ADDITIONAL EQUIP		
I - V	0 - 500	N/R	N/R	N/R	N/R	N/R	N/R		N/R	N/R	N/R	N/R	N/R	N/R
I - IV	501 - 2,500	N/R	8	100	40	100,000	N/R		N/R	N/R	N/R	N/R	N/R	YES
V [7]	501 - 2,500	N/R	8	50	20	50,000	N/R		N/R	YES	[3]	N/R	N/R	YES
I - IV	2,501 - 12,000	N/R	[1]	100	40	400,000	N/R		N/R	N/R	N/R	YES	N/R	N/R
I - IV	2,501 - 12,000	YES	[1]	100	40	200,000	NO		YES	YES	[3]	N/R	N/R	YES
I - IV	12,001 - 20,000	YES	[7]	100	40	400,000	[5]		[5]	N/R	N/R	YES	N/R	N/R
I - IV	20,001 - 300,000	YES	[1]	100	40	400,000	[5]		[5]	YES	[3]	YES	N/R	N/R
I - IV	STORAGE EXCEEDING 40 FEET IN HEIGHT OR STORAGE IN EXCESS OF 300,000 [2]	YES	[1]	100	UN-LIMITED	UN-LIMITED	[5]		[5]	[5]	[3]	YES	N/R	[5]
V [7]	2,501 - 50,000	YES	[8] [1]	50	30 [7]	75,000	[5]		[5] [7]	YES	[3] [7]	YES	[7]	[5] [7]

FOOTNOTES

- [1] ACCESS AISLES SHALL BE PROVIDED AS SPECIFIED IN 81.108 OR WHERE PRECLUDED BY HIGH RACK STORAGE SYSTEMS, ALTERNATE METHODS OF ACCESS AND/OR ALTERNATE APPROVED METHODS OF PROTECTION MAY BE PROVIDED AS APPROVED BY THE CHIEF.
- [2] SPECIAL FIRE PROTECTION EQUIPMENT, SUCH AS BUT NOT LIMITED TO, AREA SEPARATION WALLS, FIRE PROTECTION OF EXPOSED STEEL, IN-RACK SMOKE DETECTION, INCREASED SPRINKLER DENSITY OR ADDITIONAL IN-RACK SPRINKLERS MAY BE REQUIRED BY THE CHIEF.
- [3] HOSE, NOZZLES, AND CABINETS OR COVERS MAY BE REQUIRED BY THE CHIEF.
- [4] HIGH PILED STOCK AREA MAY BE TREATED AS A SEPARATE AREA IF IT IS SEPARATED FROM OTHER AREAS OF THE BUILDING WITH A TWO (2) HOUR AREA SEPARATION WALL OR INDIVIDUAL AREAS ARE A MINIMUM 60 FT. APART MEASURED HORIZONTALLY IN A DIRECT LINE AND WITH NO COMBUSTIBLE STORAGE BETWEEN PILES.
- [5] AS APPROVED BY THE CHIEF.
- [6] USEABLE STORAGE HEIGHT IS THE DISTANCE FROM THE FLOOR TO A POINT NOT LESS THAN EIGHTEEN (18) INCHES BELOW THE CEILING SPRINKLER HEAD DEFLECTOR.
- [7] NATIONALLY RECOGNIZED STANDARDS OR GUIDELINES AS APPLICABLE TO ALL COMMODITIES MAY BE USED WHEN APPROVED BY THE CHIEF.
- [8] ALL SMOKE DETECTION SYSTEMS SHALL BE SUPERVISED AND INSTALLED THROUGHOUT THE BUILDING.
- [9] NOT APPLICABLE TO DOUBLE OR SINGLE ROW RACK STORAGE WITH ADJACENT AISLES.

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Sec. 81.106 AUTOMATIC FIRE-EXTINGUISHING SYSTEMS DESIGN

(a) The design and installation of automatic fire-extinguishing systems shall conform to requirements in the Building Code and UFC Standard No.

81.1.

(b) The fire-extinguishing systems shall be designed by a registered engineer or approved designer.

(c) The design of automatic fire-extinguishing systems shall be approved by the Chief. The Chief shall be guided by the standards and recommendations of the National Fire Protection Association, Factory Mutual Engineering or other nationally recognized fire protection authorities.

Sec. 81.107 SMOKE VENTING AND REMOVAL

(a) When required by Table 81.105, smoke and heat vents or mechanical smoke removal systems shall confirm ^{SHS} to the requirements of this section.

(b) Smoke and heat vents.

1. When provided, the design and installation of smoke and heat vents and curtain boards shall be as specified in Sec. 3206 of the Building Code, except as modified by this Section.

2. Smoke and heat vents shall be approved and shall be operated automatically by actuation of a heat responsive device rated at between 100° and 200°F. above ambient. Approved smoke and heat vents shall activate fully when the vent cavity is exposed to a simulated fire or a time-temperature gradient that reaches an air temperature of 500°F. within five minutes. Smoke and heat vents shall have the capability of being opened by an approved manual operation.

Conform

3. The minimum dimension of any smoke and heat vent opening shall be not less than four feet.

4. Smoke and heat vents and curtain boards shall be installed in accordance with Table 81.107.

(c) Mechanical Smoke Removal.

1. When provided, mechanical smoke removal capability shall provide the amount of ventilation as specified below:

$$V = A \times 300$$

V = Volume of mechanical ventilation required in CFM.

A = Area of roof vents provided in square feet per Table 81.107.

2. Curtain boards shall be provided as specified in Table 81.107.

3. Supply air shall be provided at the floor level and shall be sized to provide a minimum of 50% of required exhaust. Openings for supply air shall be distributed to provide fresh air for exhaust fans.

4. Fan requirements:

(i) The maximum individual capacity of a fan shall be 30,000 CFM.

(ii) Exhaust fans shall be uniformly spaced and the maximum distance between fans shall not be greater than 100 feet.

(iii) Thermal protection of wiring and smoke-removal fan units, shall be based upon a 1000°F. exposure for not less than 15 minutes.

5. Control Requirements:

(i) On combination comfort air handling/smoke-removal systems or independent comfort air handling systems, fans shall be controlled to shut down in accordance with the automatic shut-off requirements of the mechanical code or by activation of automatic extinguishing or detection systems.

(ii) The smoke removal system control panel shall be in an approved location and shall be clearly identified. The control panel room shall be protected by not less than a one-hour occupancy separation as defined in the Building Code. The room shall be accessible from the exterior of the building. Automatic sprinkler protection shall be required.

(iv) Controls shall be designed for selective control of each smoke-removal unit.

Sec. 81.108 AISLES

(a) Aisles shall be established in accordance with the following:

(1) Aisles of not less than 44 inches in width shall be established to provide access to exits and fire department access doors.

(2) Aisles shall extend from floor to ceiling unless otherwise approved by the Chief.

(3) For aisles separating storage piles see UFC Standard No. 81-1.

(4) Rack structural support may be permitted across aisles above the 6'8" level if it does not interfere with hose streams or accessibility.

(b) Aisles in High-Rack Storage System see Table 81.105, Footnote 1.

TABLE 81.107

Hazard Classification	Designated Storage Height	Curtain Board Depth	Maximum Area Formed by Curtain Boards	Vent Area to Floor Area Ratio	Maximum Spacing of Vent Centers	Maximum Distance from Wall or Curtain Boards
I thru IV	20 ft. or less	6 ft.	10,000 sq. ft.	1:100	100 ft.	60 ft.
I thru IV	over 20 ft. to 40 ft.	6 ft.	8,000 sq. ft.	1:75	100 ft.	55 ft.
I thru IV	20 ft. or less	4 ft.	3,000 sq. ft.	1:75	100 ft.	55 ft.
I thru IV	over 20 ft. to 40 ft.	4 ft.	3,000 sq. ft.	1:50	100 ft.	50 ft.
V	20 ft. or less	6 ft.	6,000 sq. ft.	1:50	100 ft.	50 ft.
V	over 20 ft. to 30 ft.	6 ft.	6,000 sq. ft.	1:40	90 ft.	45 ft.
V	30 ft. or less	4 ft.	2,000 sq. ft.	1:30	75 ft.	40 ft.

Note: For storage heights in excess of those indicated, an engineered design shall be submitted for approval.

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Sec. 81.109 ACCESS TO BUILDING

(a) Access roadways shall be provided to within 150 feet of the exterior walls of any buildings used for high-piled combustible storage in excess of 12,000 square feet, regardless of the provisions of Sec. 10.207 (c).

(b) For firefighting purposes, there shall be at least one access door accessible without the use of a ladder and not less than three feet in width and not less than six feet eight inches in height in each 100 lineal feet or major fraction thereof of the exterior walls which face the access roadways required by Section 10.207 (c). Metal roll-up doors are not acceptable for such purposes unless approved by the Chief.

EXCEPTION: In buildings protected with an automatic fire-extinguishing system throughout and having less than 12,000 square feet of high-piled stock of Class I thru Class IV commodity, access doors are not required.

Sec. 81.110 HAND HOSE CONNECTIONS

(a) Hand hose connections complying with UFC Standard No. 81-1 shall be provided as set forth in Table 81.105.

(b) Hose and nozzles may be omitted when approved by the Fire Chief.

(c) Where provided, nozzles shall be selected for proper operation based on the hydraulic characteristics of the automatic sprinkler system.

(d) Hand hose connections shall be protected from damage by physical impact.

Sec. 81.111 HIGH-RACK STORAGE SYSTEMS

(a) Buildings housing high-rack storage systems shall be approved by the Fire Chief.

(b) Special separation from other buildings, built-in fire protection, and fire department access shall be as specified by the Chief.

SEC. 55.87 ARTICLE 87 OF THE UNIFORM FIRE CODE IS ADDED

ARTICLE 87

CONSTRUCTION, REMODEL OR DEMOLITION

OF A BUILDING

Sec. 87.101 SCOPE

Any building subject to construction, remodel or demolition shall comply with the provisions of this article. The provisions contained herein shall be in addition to any other requirement of this code or any other adopted code, ordinance, rule or regulation of a jurisdiction.

Sec. 87.102 APPROVAL OF PLANS

Plans for the construction or remodeling of a building shall be approved by the fire chief. Schedules and procedures for the demolition of buildings are subject to the approval of the fire chief. Such approval shall be in addition to any other approval required by the jurisdiction.

EXCEPTION: Group R, Division 3 and Group M, Divisions 1 and 2 Occupancies.

Sec. 87.103 BUILDINGS UNDER CONSTRUCTION

(a) General. Buildings under construction shall comply with the provisions of this section.

(b) Access Roads. Fire department access roads shall be established and maintained in accordance with Section 10.207 of this code.

EXCEPTION: When approved by the fire chief, temporary access roads of a width, vertical clearance and surface such as to permit access by fire department apparatus may be permitted until permanent roads are installed.

(c) Water Supply. Prior to arrival of combustible material on site, fire-protection water mains and hydrants shall be installed and operational. Such water mains and hydrants shall be capable of supplying the required fire flow for the building or structure.

EXCEPTION: When approved by the fire chief, temporary water supply for fire protection may be permitted, pending installation of permanent fire-protection systems.

(d) Fire-protection Systems. Fire-protection systems and fire extinguishers shall be provided in accordance with the following:

1. The fire chief shall designate the number and type of portable fire extinguishers and shall designate their location in accordance with the hazards of the operation involved in the construction process.

2. Temporary standpipes shall be installed in accordance with Section 10.313 of this code.

3. If automatic sprinkler systems are to be installed, such systems shall be placed in service as soon as practicable.

(e) Combustible Debris. Combustible debris shall not be allowed to accumulate within any building. Combustible debris, rubbish and waste material shall be removed from the building as often as practical. The burning of any combustible debris, waste material or trash is prohibited except upon approval of the fire chief.

(f) Motor Equipment. Internal-combustion-powered construction equipment shall be used in accordance with the following:

1. Equipment shall be located so that exhausts do not discharge against combustible material.

2. Whenever possible, exhausts shall be piped to the outside of the building.

3. Equipment shall not be refueled while in operation.

4. Fuel for equipment shall be stored in an approved area outside of the building.

(g) Heating Devices. Temporary heating devices shall be of a type approved by the fire chief, located away from combustible materials and attended and maintained by competent personnel.

(h) Smoking. Smoking shall be prohibited except in those areas approved by the fire chief. When required by the fire chief, a suitable number and type of "no smoking" signs shall be posted.

(i) Cutting and Welding. Cutting and welding operations shall be in accordance with the provisions of Article 49 of this code.

(j) Flame-producing Equipment. The use of torches or flame-producing devices for the sweating of pipe joints shall be in accordance with Section 11.408 of this code.

(k) Flammable Liquids. The storage, handling and use of flammable liquids shall be in accordance with Article 79 of this code. Ventilation shall be provided for operations utilizing the application of materials containing flammable solvents. No open-flame devices or other sources of ignition shall be located in an area where flammable materials are being used.

(l) Asphalt and Tar Kettles. Asphalt and tar kettles shall be located and operated in accordance with the provisions of Section 11.403 of this code.

(m) Temporary Electrical Wiring. Temporary electrical wiring shall comply with the provisions of Article 85 of this code. Where required, temporary electrical wiring shall be approved by the fire chief or other authority having jurisdiction.

(n) Fire Walls and Exit Stairways. Fire walls and exit stairways, if required for the completed building, shall be given construction priority. When required by the fire chief, temporary exit facilities shall be provided and maintained for use of construction personnel.

(o) Building Access. When required by the fire chief, access to the building for the purpose of fire fighting shall be provided. Construction material shall not block access to the building, hydrants or other fire appliances.

(p) Emergency Telephone. When required by the fire chief, telephone facilities shall be provided at the construction site for the purpose of emergency notification of the fire department. The street address of the construction site shall be posted adjacent to the telephone together with the fire department number.

(q) Fire-protection Plan. When required by the fire chief, a fire-protection plan shall be established.

REMODELING OF BUILDINGS

Sec. 87.104

(a) General. Remodeling of buildings shall be in accordance with the applicable provisions of Section 87.103 and this section.

(b) Fire-protection Systems. Where the building is protected by fire-protection systems, such systems shall be maintained operational at all times during remodeling phases.

When remodeling requires alteration or modification of a portion of a system, the remainder of the system shall be kept in service. Where it is necessary to shut down the entire system, a fire watch shall be kept on site until the system is returned to service.

(c) Exits. All required exit components shall be maintained operable and accessible at all times.

(d) Fire Separation. Interior fire walls and required fire separations shall be maintained intact at all times.

(e) Vacation of Building. When in the opinion of the fire chief remodeling is of the extent to create a hazard to occupants of a building, such building shall be vacated during remodeling operations.

Sec. 87.105 DEMOLITION

(a) General. Demolition of buildings shall comply with the provisions of this section and, where applicable, Sections 87.103 and 87.104.

(b) Automatic Sprinkler System. When a building to be demolished contains a sprinkler system, such system shall be retained in operation as long as practical.

(c) Fire Hose. Suitable fire hose as required by the fire chief shall be maintained at the demolition site. Such hose shall be connected to an approved source of water and in a manner so as not to impede fire department use of hydrants.

(d) Cutting and Welding. Demolition operations involving the use of cutting and welding shall be done in accordance with Section 49.107 of this code.

(e) Burning of Combustible Waste. Combustible waste material, trash or rubbish shall not be burned at the demolition site except upon approval of the fire chief. Accumulations of such material shall be removed from the site as often as necessary to reduce the hazards thereof.

(f) Fire Guards. When in the opinion of the fire chief the demolition of a building is of a hazardous nature, the chief may require the hiring of qualified personnel to serve as on-site fire guards. The sole duty of such fire guards shall be to watch for the occurrence of fire.

SEC. 55. APPENDIX I-A APPENDIX I-A OF THE UNIFORM FIRE CODE AMENDED

1. GENERAL

(a) Purpose. The purpose of this Appendix is to provide a reasonable degree of safety to persons occupying existing buildings that do not conform with the minimum requirements of this code by providing for alterations to such existing buildings. Such alterations shall comply with the requirements of this section or to the minimum exit and fire safety requirements of the Building Code in effect when the building was constructed, whichever is the more restrictive.

(b) Application and Effective Date. When an inspection of a building by the Fire Department shows nonconformance with this section, the building owner shall within 18 months of being notified of such nonconformance make application to the Building Official for building permits for the remedial work. If no such application is made, the building shall be vacated until it is made to conform to this section. Within 18 months after the plans are submitted for permit the work shall be completed or the building shall be vacated until made to conform.

(c) No Change.

2. EXITS

(a) No Change.

(b) No Change.

(c) Corridors. Corridors of Groups A, B, E, H and R, Division I Occupancies serving as an exit for an occupant load of 30 or more shall have walls and ceilings of not less than one-hour fire-resistive construction as required by the Building Code. Existing walls surfaced with wood lath and plaster in good condition or 1/2-inch gypsum wallboard or openings with fixed and occupancy separations when approved. Doors opening into such corridors

shall be protected by 20-minute fire assemblies or solid wood doors not less than 1-3/4 inches thick. Where the existing frame will not accommodate the 1-3/4-inch-thick door, a 1-3/8-inch-thick solid bonded wood core door or equivalent insulated steel door shall be permitted. Transoms and openings other than doors from corridors to rooms shall comply with Section 3305(h) of the Building Code or shall be covered with a minimum of 3/4-inch plywood or 1/2-inch gypsum wallboard or equivalent material on the room side.

EXCEPTION: Existing corridor walls, ceilings and opening protection not in compliance with the above may be continued when such buildings are protected with an approved automatic sprinkler system throughout. Such sprinkler system may be supplied from the domestic water system if it is of adequate volume and pressure.

3. ENCLOSURE OF VERTICAL SHAFTS

No Change.

4. BASEMENT ACCESS OR SPRINKLER PROTECTION

No Change.

5. STANDPIPES

No Change.

6. SMOKE DETECTORS

Every dwelling unit and every guest room in a Group R, Division 1, Occupancy or lodging house used for sleeping purposes shall be provided with smoke detectors installed in accordance with the Building Code.

7. SEPARATION OF OCCUPANCIES

SEC. 55. APPENDIX V-A APPENDIX V-A OF THE UNIFORM FIRE
CODE AMENDED

DIVISION V
STANDARDS
APPENDIX V-A
NATIONALLY RECOGNIZED
STANDARDS OF GOOD PRACTICE

The following standards and publications are intended for use as a guide to attain a reasonable level of safety where specific requirements are not stated or specific standards are not adopted or referenced in the body of the code.

Also:

List each standard or publication date and standards or publications no longer available shall be deleted.

Section 4. This ordinance shall take effect and be in force on the thirtieth day from and after its passage.

APPROVED: John W. Witt, City Attorney

By


Leslie J. Girard
Deputy City Attorney

LJG:js:511
11/23/83
Or.Dept:Fire
Form=0.none

FEB 21 1984

Passed and adopted by the Council of The City of San Diego on _____, by the following vote:

Councilmen	Yeas	Nays	Not Present	Ineligible
Bill Mitchell	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Bill Cleator	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Gloria McColl	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
William Jones	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Ed Struiksmas	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Mike Gotch	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Dick Murphy	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Uvaldo Martinez	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Mayor Roger Hedgecock	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

AUTHENTICATED BY:

ROGER HEDGECOCK

Mayor of The City of San Diego, California.

CHARLES G. ABDELNOUR

City Clerk of The City of San Diego, California.

(Seal)

By *June A. Blackwell*, Deputy.

I HEREBY CERTIFY that the foregoing ordinance was not finally passed until twelve calendar days had elapsed between the day of its introduction and the day of its final passage, to wit, on

FEB 6 1984

FEB 21 1984

and on _____.

~~I FURTHER CERTIFY that said ordinance was read in full prior to its final passage.~~

I FURTHER CERTIFY that the reading of said ordinance in full was dispensed with by a vote of not less than a majority of the members elected to the Council, and that there was available for the consideration of each member of the Council and the public prior to the day of its passage a written or printed copy of said ordinance.

CHARLES G. ABDELNOUR

City Clerk of The City of San Diego, California.

(Seal)

By *June A. Blackwell*, Deputy.

Office of the City Clerk, San Diego, California

Ordinance Number

0-16164

Adopted

FEB 21 1984

RECEIVED
CITY CLERK'S OFFICE

CERTIFICATE OF PUBLICATION

1984 MAR -6 PM 2:29

SAN DIEGO, CALIF.

CITY OF SAN DIEGO
ATTN: JUNE A. BLACKNELL
202 C St., 12th Floor
SAN DIEGO, CA 92101

IN THE MATTER OF

NO.

ORDINANCE NO. O-16164

**ORDINANCE NO. O-16164
(NEW SERIES)**
AN ORDINANCE AMENDING CHAPTER V, ARTICLE 5,
OF THE SAN DIEGO MUNICIPAL CODE BY REPEALING,
AMENDING, REVISING OR ADDING SECTIONS TO THE
UNIFORM FIRE CODE, ALL RELATING TO FIRE PROTEC-
TION AND PREVENTION.
This ordinance repeals, amends, revises or adds certain provi-
sions of the San Diego Municipal Code to adopt, with modifica-
tions, the 1983 Uniform Fire Code. The modifications are portions
of the Uniform Code, and other new provisions, developed by the
San Diego Fire Department to implement new and/or stricter stan-
dards for fire prevention.
A complete copy of the ordinance is available for inspection in
the office of the City Clerk of the City of San Diego, 12th floor, City
Administration Building, 202 "C" Street, San Diego, CA 92101.
Introduced on FEBRUARY 6, 1984.
Passed and adopted by the Council of The City of San Diego
on FEBRUARY 21, 1984.
AUTHENTICATED BY:
ROGER HEDGECOCK,
Mayor of The City of San Diego, California.
CHARLES G. ABDELNOUR,
City Clerk of The City of San Diego, California.
(SEAL)
By JUNE A. BLACKNELL, Deputy.
Publish Mar. 5, 1984 80-3112

I, Carrie Gedeon, am a citizen
of the United States and a resident of the County aforesaid; I am over the
age of eighteen years, and not a party to or interested in the above-entitled
matter. I am the principal clerk of the San Diego Daily Transcript, a
newspaper of general circulation, printed and published daily, except
Saturdays and Sundays, in the City of San Diego, County of San Diego, and
which newspaper has been adjudged a newspaper of general circulation by
the Superior Court of the County of San Diego, State of California, under
the date of January 23, 1909, Decree No. 14894; and the

ORDINANCE NO. O-16164
(NEW SERIES)

is a true and correct copy of which the annexed is a printed copy and was
published in said newspaper on the following date(s), to wit:

March 5, 1984

I certify under penalty of perjury that the foregoing is true and correct.

Dated at San Diego, California this 5th day of Mar., 19 84.

5" X 8.87 = 44.35

Carrie Gedeon
00552 (Signature)