Chapter 13.04
2013 EDITION OF THE CALIFORNIA FIRE CODE[1]

Sections:

13.04.005 Adoption of the 2013 Edition of the California Fire Code.
13.04.010 Chapter 1, Scope and Administration, amended.
13.04.020 Chapter 2, Definitions, amended.
13.04.030 Chapter 3, General Requirements, amended.
13.04.040 Chapter 4, Emergency Planning and Preparedness, amended.
13.04.050 Chapter 5, Fire Service Features, amended.
13.04.060 Chapter 6, Building Services and Systems, amended.
13.04.070 Chapter 9, Fire Protection Systems, amended.
13.04.080 Chapter 11, Construction Requirements for Existing Buildings, amended.
13.04.090 Chapter 20, Aviation Facilities, amended.
13.04.100 Chapter 28, Lumber Yards and Woodworking Facilities, amended.
13.04.110 Chapter 49, Requirements for Wildland-Urban Interface Fire Areas, amended.
13.04.120 Chapter 50, Hazardous Materials – General Provisions, amended.
13.04.130 Chapter 55, Cryogenic Fluids, amended.
13.04.140 Chapter 56, Explosives and Fireworks, amended.
13.04.150 Chapter 57, Flammable and Combustible Liquids, amended.
13.04.160 Chapter 60, Highly Toxic and Toxic Materials, amended.
13.04.170 Chapter 80, Referenced Standards, amended.

Prior legislation: Ord. 2002-041.

13.04.005 Adoption of the 2013 Edition of the California Fire Code.
Except as hereinafter provided, the 2013 Edition of the California Fire Code, including Chapter 1 and Appendices B, BB, C, CC, based on the 2012 Edition of the International Fire Code, as published by the International Code Council, is hereby adopted by the city of Aliso Viejo for the purpose of prescribing regulations governing conditions hazardous to life and property from fire and explosion hazards, save and except such portions as are hereinafter added, deleted, modified or amended. One copy of all the above is now on file in the office of the clerk for public inspection. This code is adopted with the same force and effect as though set out herein in full. [Ord. 2013-155 § 2 (Exh. A); Ord. 2010-130 § 2 (11-3-1); Ord. 2010-126 § 1 (Exh. A); Ord. 2007-092 § 3 (3-3-1). Formerly 13.04.010].

13.04.010 Chapter 1, Scope and Administration, amended.
Chapter 1, Scope and Administration, is hereby amended as follows:

Section 105.6, Required Operational Permits, is hereby revised as follows:

> Section 105.6.29 Miscellaneous Combustible Storage. An operational permit is required to store in any building or upon any premises in excess of 2500 cubic feet (71 m^3) gross volume of combustible empty packing cases, boxes, barrels or similar containers, rubber tires, rubber, cork, green waste, composting, yard waste, or similar combustible material.

Section 105.6.35, Private Fire Hydrants, is deleted without substitution.

Section 109.4, Violation penalties, is hereby revised as follows:

109.4 Violation penalties. Persons who shall violate a provision of this code or shall fail to comply with any of the requirements thereof or who shall erect, install, alter, repair or do work in violation of the approved construction documents or directive of the fire code official, or of a permit or certificate used under provisions of this code, shall be guilty of either a misdemeanor, infraction or both as prescribed in Section 109.4.2 and 109.4.3. Penalties shall be as prescribed in local ordinance. Each day that a violation continues after due notice has been served shall be deemed a separate offense.

Sections 109.4.2, Infraction, is hereby added as follows:

109.4.2 Infraction. Except as provided in Section 109.4.3, persons operating or maintaining any occupancy, premises or vehicle subject to this code that shall permit any fire or life safety hazard to exist on premises under their control shall be guilty of an infraction.

Sections 109.4.3, Misdemeanor, is hereby added as follows:

109.4.3 Misdemeanor. Persons who fail to take immediate action to abate a fire or life safety hazard when ordered or notified to do so by the chief or a duly authorized representative, or who violate the following sections of this code, shall be guilty of a misdemeanor:

104.11.2 Obstructing operations

104.11.3 Systems and Devices

107.5 Overcrowding

109.3.2 Compliance with Orders and Notices

111.4 Failure to comply

305.4 Deliberate or negligent burning

308.1.2 Throwing or placing sources of ignition

310.7 Burning Objects

3104.7 Open or exposed flames

[Ord. 2013-155 § 2 (Exh. A); Ord. 2010-130 § 2 (11-3-2); Ord. 2010-126 § 1 (Exh. A); Ord. 2007-092 § 3 (3-3-3). Formerly 13.04.020].

Cross-reference: violations and penalties generally, Chapter 1.06 AVMC.

13.04.020 Chapter 2, Definitions, amended.
Chapter 2, Definitions, is hereby amended as follows:

Section 202, General Definitions, is hereby revised by adding the following definitions:

202 General Definitions

APPROACH-DEPARTURE PATH. The flight path of the helicopter as it approaches or departs from the landing pad.

EMERGENCY HELICOPTER LANDING FACILITY (EHLF). A landing area on the roof of a high rise building that is not intended to function as a heliport or helistop but is capable of accommodating fire, police, or medical helicopters engaged in emergency operations.

FLOW-LINE. The lowest continuous elevation on a curb defined by the path traced by a particle in a moving body of water at the bottom of the rolled curb.

HAZARDOUS FIRE AREA. Includes all areas identified within Section 4906.2 and other areas as determined by the Fire Code Official as presenting a fire hazard due to the presence of combustible vegetation, or the proximity of the property to an area that contains combustible vegetation.

HIGH-RISE BUILDING. In other than Group I-2 occupancies, “high-rise buildings” as used in this Code:

Existing high-rise structure. A high-rise structure, the construction of which is commenced or completed prior to July 1, 1974.

High-rise structure. Every building of any type of construction or occupancy having floors used for human occupancy located more than 55 feet above the lowest floor level having building access, except buildings used as hospitals as defined in Health and Safety Code Section 1250.

New high-rise building. A high-rise structure, the construction of which is commenced on or after July 1, 1974. For the purpose of this section, construction shall be deemed to have commenced when plans and specifications are more than 50 percent complete and have been presented to the local jurisdiction prior to July 1, 1974. Unless all provisions of this section have been met, the construction of such buildings shall commence on or before January 1, 1976.

New high-rise structure. means a high-rise structure, the construction of which commenced on or after July 1, 1974.

SAFETY AREA. A defined area surrounding the landing pad that is free of obstructions.

SKY LANTERN. An airborne lantern typically made of paper, Mylar, or other lightweight material with a wood, plastic, or metal frame containing a candle, fuel cell, or other heat source that provides buoyancy.

TAKEOFF AND LANDING AREA. The combination of the landing pad centered within the surrounding safety area.

[Ord. 2013-155 § 2 (Exh. A); Ord. 2010-130 § 2 (11-3-3); Ord. 2010-126 § 1 (Exh. A); Ord. 2007-092 § 3 (3-3-4). Formerly 13.04.030].

13.04.030 Chapter 3, General Requirements, amended.

Chapter 3, General Requirements, is hereby amended as follows:

Section 304.1.2, Vegetation, Item (7), is hereby revised as follows:

304.1.2 Vegetation Item (7). Weeds, grass, vines or other growth that is capable of being ignited and endangering property, shall be cut down and removed by the owner or occupant of the premises. Vegetation clearance requirement in urban-wildland interface areas shall be in accordance with Chapter 49 and OCFA vegetation management guidelines.

Section 305.5, Chimney spark arresters, is hereby added as follows:

305.5 Chimney spark arresters. All chimneys attached to any appliance or fireplace that burns solid fuel shall be equipped with an approved spark arrester. Chimneys serving outdoor appliances or fireplaces shall be equipped with a spark arrester. The spark arrester shall meet the requirements of Section 2113.9.2 of the California Building Code.

Section 305.6, Outdoor fires, is hereby added as follows:

305.6 Outdoor fires. Outdoor fires shall be in accordance with Sections 305, 307, and 308 and with other applicable sections of this code.

305.6.1 Where prohibited. Outdoor fires shall not be built, ignited or maintained in fuel modification areas, Wildfire Risk Areas (WRA) and adopted Fire Hazard Severity Zones (FHSZ)

or Special Fire Protection Areas (SFPA) or other locations where conditions could cause the spread of fire to the WRA, SFPA or FHSZ, except by permit from the fire code official.

Exceptions: A permit is not required for the following:

1. Fires in approved outdoor or portable fireplaces, fire pits, fire rings and similar devices at Group R occupancies that are installed and used in accordance with this code.

2. Outdoor fires at inhabited premises or official organized campsites or parks when located in a permanent or portable barbeque or grill, incinerator, or outdoor fireplace located at least 30 feet from combustible vegetation.

3. Installations or uses approved by the fire code official.

305.6.1.1 Fuel Modification Areas. Outdoor fires using wood or other solid fuel shall not be built, ignited or maintained in a fuel modification area.

305.6.1.2 Supervision. Where a permit is issued or when allowed under the exceptions to Section 305.6.1, such fires shall be supervised by a person 18 years of age or older.

305.6.2 Hazardous conditions. Outdoor fires are not allowed when predicted sustained winds exceed 8 MPH during periods when relative humidity is less than 25%, or a red flag condition has been declared or public announcement is made, when an official sign was caused to be posted by the fire code official, or when such fires present a hazard as determined by the fire code official.

305.6.3 Disposal of rubbish. Rubbish, trash or combustible waste material shall be burned only within an approved incinerator and in accordance with Section 307.2.1.

Section 307, Open Burning, Recreational Fires and Portable Outdoor Fireplaces, is hereby amended as follows:

SECTION 307 OPEN BURNING, RECREATIONAL FIRES, FIRE PITS, FIRE RINGS, AND OUTDOOR FIREPLACES

307.6 Outdoor Fireplaces, Fire Pits, Fire Rings, or similar devices used at Group R Occupancies. Outdoor fireplaces, fire pits, fire rings, or similar exterior devices used at Group R shall comply with this section.

Exception: Barbeques, grills, and other portable devices intended for cooking.

307.6.1 Gas-fueled devices. Outdoor fireplaces, fire pits and similar devices fueled by natural gas or liquefied-petroleum gas are allowed when approved by the Building Department and the device is designed to only burn a gas flame and not wood or other solid fuel. At R-3 occupancies, combustible construction shall not be located within three feet of an atmospheric column that extends vertically from the perimeter of the device. At other R occupancies, the minimum distance shall be ten feet. Where a permanent Building Department approved hood and vent is installed, combustible construction may encroach upon this column between the bottom of the hood and the vent opening. Where chimneys or vents are installed, they shall have a spark arrester in accordance with Section 305.5.

307.6.2 Devices using wood or fuels other than natural gas or liquefied-petroleum gas. Fireplaces burning wood or other solid fuel shall be constructed in accordance with the California Building Code and Section 305.5. Fires in a fireplace shall be contained within a firebox with an attached chimney. The opening in the face of the firebox shall have an installed and maintained method of arresting sparks. The burning of wood or other solid fuel in a device is not allowed within 15 feet of combustible structures, unless within a permanent or portable fireplace. Conditions which could cause a fire to spread within 25 feet of a structure or to vegetation shall be eliminated prior to ignition. Fires in devices burning wood or solid fuel shall be managed per Section 307.5.

307.6.2.1 Where prohibited. The burning of wood and other solid fuels shall not be conducted within a fuel modification zone. Wood and other solid fuel burning fires in devices other than permanent fireplaces are not allowed within Wildfire Risk Areas (WRA) and adopted Fire Hazard Severity Zones (FHSZ) and Special Fire Protection Areas (SFPA) or in locations where conditions could cause the spread of fire to the WRA or FHSZ, unless determined by the Fire Code Official that the location or design of the device should reasonably prevent the start of a wildfire.

Section 319, Development on or Near Land Containing or Emitting Toxic, Combustible or Flammable Liquids, Gases or Vapors, is hereby added as follows:

319 Development On Or Near Land Containing Or Emitting Toxic, Combustible or Flammable Liquids, Gases or Vapors. The fire code official may require the submittal for approval of geological studies, evaluations, reports, remedial recommendations and/or similar documentation from a state-licensed and department-approved individual or firm, on any parcel of land to be developed which has, or is adjacent to, or within 1,000 feet (304.8 m) of a parcel of land that has an active, inactive, or abandoned oil or gas well operation, petroleum or chemical refining facility, petroleum or chemical storage, or may contain or give off toxic, combustible or flammable liquids, gases or vapors.

Section 320, Fuel Modification Requirements for New Construction, is hereby added as follows:

320 Fuel Modification Requirements for New Construction. All new buildings to be built or installed in areas with or adjacent to land having hazardous combustible vegetation shall comply with the requirements in the edition of OCFA Vegetation Management Guidelines currently in use at the time of plan submittal.

Section 321, Clearance of brush or vegetation growth from roadways, is hereby added as follows:

321 Clearance of brush or vegetation growth from roadways. The fire code official is authorized to cause areas within 10 feet (3048 mm) on each side of portions of highways and private streets which are improved, designed or ordinarily used for vehicular traffic, to be cleared of flammable vegetation and other combustible growth. Measurement shall be from the flow-line or the end of the improved edge of the roadway surfaces.

Exception: Single specimens of trees, ornamental shrubbery or cultivated ground cover such as green grass, ivy, succulents or similar plants used as ground covers, provided that they do not form a means of readily transmitting fire.

Section 322, Unusual Circumstances, is hereby added as follows:

322 Unusual circumstances. The fire code official may suspend enforcement of the vegetation management requirements and require reasonable alternative measures designed to advance the purpose of this code if determined that in any specific case that any of the following conditions exist:

1. Difficult terrain.

2. Danger of erosion.

3. Presence of plants included in any state and federal resources agencies, California Native Plant Society and county-approved list of wildlife, plants, rare, endangered and/or threatened species.

4. Stands or groves of trees or heritage trees.

5. Other unusual circumstances that make strict compliance with the clearance of vegetation provisions undesirable or impractical.

Section 323, Use of Equipment, is hereby added as follows:

323 Use of equipment. Except as otherwise provided in this section, no person shall use, operate, or cause to be operated in, upon or adjoining any hazardous fire area any internal combustion engine which uses hydrocarbon fuels, unless the engine is equipped with a spark arrester as defined in Section 323.1 maintained in effective working order, or the engine is constructed, equipped and maintained for the prevention of fire.

Exceptions:

1. Engines used to provide motor power for trucks, truck tractors, buses, and passenger vehicles, except motorcycles, are not subject to this section if the exhaust system is equipped with a muffler as defined in the Vehicle Code of the State of California.

2. Turbocharged engines are not subject to this section if all exhausted gases pass through the rotating turbine wheel, there is no exhaust bypass to the atmosphere, and the turbocharger is in good mechanical condition

Section 323.1, Spark Arresters, is hereby added as follows:

323.1 Spark arresters. Spark arresters shall comply with the following:

1. A spark arrester is a device constructed of nonflammable material specifically for the purpose of removing and retaining carbon and other flammable particles over 0.0232 of an inch (0.58 mm) in size from the exhaust flow of an internal combustion engine that uses hydrocarbon fuels or which is qualified and rated by the United States Forest Service.

2. Spark arresters affixed to the exhaust system of engines or vehicles subject to Section 322 shall not be placed or mounted in such a manner as to allow flames or heat from the exhaust system to ignite any flammable material.

Section 324, Restricted Entry, is hereby added as follows:

324 Restricted entry. The fire code official shall determine and publicly announce when hazardous fire areas shall be closed to entry and when such areas shall again be opened to entry. Entry on and occupation of hazardous fire areas, except public roadways, inhabited areas or established trails and camp sites which have not been closed during such time when the hazardous fire area is closed to entry, is prohibited.

Exceptions:

1. Residents and owners of private property within hazardous fire areas and their invitees and guests going to or being upon their lands.

2. Entry, in the course of duty, by peace or police officers, and other duly authorized public officers, members of a fire department and members of the United States Forest Service.

Section 325, Trespassing on posted property, is hereby added as follows:

325 Trespassing on posted property. When the fire code official determines that a specific area within a hazardous fire area presents an exceptional and continuing fire danger because of the density of natural growth, difficulty of terrain, proximity to structures or accessibility to the public, such areas shall be closed until changed conditions warrant termination of closure. Such areas shall be posted as hereinafter provided.

1. Signs. Approved signs prohibiting entry by unauthorized persons and referring to applicable fire code chapters shall be placed on every closed area.

2. Trespassing. Entering and remaining within areas closed and posted is prohibited.

Exception: Owners and occupiers of private or public property within closed and posted areas, their guests or invitees, and local, state and federal public officers and their authorized agents acting in the course of duty.

Section 326, Outdoor Fires, is hereby added as follows:

326 Outdoor fires. Outdoor fires shall not be built, ignited or maintained in or upon hazardous fire areas, except by permit from the fire code official.

Exception: Outdoor fires within habited premises or designated campsites where such fires are built in a permanent barbecue, portable barbecue, outdoor fireplace, incinerator or grill and are a minimum of 30 feet (9144 mm) from a grass, grain, brush, or forest-covered area. Permanent barbecues, portable barbecues, outdoor fireplaces or grills shall not be used for the disposal of rubbish, trash or combustible waste material.

Section 326.1, Outdoor fire permits, is hereby added as follows:

326.1 Outdoor fire permits. Outdoor fire permits shall incorporate such terms and conditions which will reasonably safeguard public safety and property. Outdoor fires shall not be built, ignited or maintained in or upon hazardous fire areas under the following conditions:

1. When predicted sustained winds exceed 20 MPH at the ground level, or a red flag condition has been declared,

2. When a person age 17 or over is not present at all times to watch and tend such fire, or

3. When a public announcement is made that open burning is prohibited.

Section 327, Sky Lanterns or similar devices, is hereby added as follows:

327 Sky Lanterns or similar devices. The ignition and/or launching of a Sky Lantern or similar device is prohibited.

Exception: Upon approval of the fire code official, sky lanterns may be used as necessary for religious or cultural ceremonies providing that adequate safeguards have been taken as approved by the fire code official. Sky Lanterns must be tethered in a safe manner to prevent them from leaving the area and must be constantly attended until extinguished.

[Ord. 2013-155 § 2 (Exh. A); Ord. 2010-130 § 2 (11-3-4); Ord. 2010-126 § 1 (Exh. A); Ord. 2007-092 § 3 (3-3-5). Formerly 13.04.040].

13.04.040 Chapter 4, Emergency Planning and Preparedness, amended.
Chapter 4, Emergency Planning and Preparedness, is not adopted with the exception of the sections listed below:

A. 401;

B. 401.3.4;

C. 401.9;

D. 402;

E. 403;

F. 404.6 through 404.7.6;

G. 407;

H. 408.3.1 through 408.3.2;

I. 408.12 through 408.12.3. [Ord. 2013-155 § 2 (Exh. A); Ord. 2010-130 § 2 (11-3-5); Ord. 2010 -126 § 1 (Exh. A); Ord. 2007-092 § 3 (3-3-6). Formerly 13.04.050].

13.04.050 Chapter 5, Fire Service Features, amended.
Chapter 5, Fire Service Features, is hereby amended as follows:

Section 503.2.1, Dimensions, is revised as follows:

503.2.1 Dimensions. Fire apparatus access roads shall have an unobstructed width of not less than 20 feet (6096 mm), exclusive of shoulders, except for approved security gates in accordance with Section 503.6, and an unobstructed vertical clearance of not less than 13 feet 6 inches (4115 mm). Street widths are to be measured from top face of curb to top face of curb, on streets with curb and gutter, and from flow-line to flow-line on streets with rolled curbs.

Section 503.2.1.1, Hazardous Fire Area, is added as follows:

503.2.1.1 Hazardous Fire Areas. In Hazardous Fire Areas the minimum fire apparatus road width shall be 28 feet (8530 mm). The width shall be maintained to an approved point outside of the Hazardous Fire Area.

Exception: When the road serves no more than three dwelling units and the road does not exceed 150 feet in length, the road width may be 24 feet (7300 mm). This length may be increased to 400 feet where serving no more than three dwelling units and all structures accessed from the roadway are protected by automatic fire sprinklers.

Section 505.1, Address Identification, is revised as follows:

505.1 Address identification. New and existing buildings shall have approved address numbers, building numbers or approved building identification placed in a position that is plainly legible and visible from the street or road fronting the property. These numbers shall contrast with their background. Where required by the fire code official, address numbers shall be provided in additional approved locations to facilitate emergency response. Address numbers shall be Arabic numbers or alphabetical letters. Numbers shall be a minimum of 4 inches (101.6 mm) high with a minimum stroke width of 0.5 inch (12.7 mm) for R-3 occupancies, for all other occupancies the numbers shall be a minimum of 6 inches high with a minimum stroke width of 1 inch. Where access is by means of a private road and the building cannot be viewed from the public way, a monument, pole or other sign or means shall be used to identify the structure. Address numbers shall be maintained.

Section 510.1, Emergency responder radio coverage, is revised as follows:

510.1 Emergency responder radio coverage in new buildings. All new buildings shall have approved radio coverage for emergency responders within the building based upon the existing coverage levels of the public safety communication systems of the jurisdiction at the exterior of the building. This section shall not require improvement of the existing public safety communication systems. The Emergency responder radio coverage system shall comply with one of the following:

1. An emergency radio system installed in accordance with the local authority having jurisdiction's ordinance.

2. An emergency radio coverage system installed in accordance with Orange County Fire Authority's Emergency Responder Digital Radio Guideline.

Exceptions:

1. Where it is determined by the fire code official that the radio coverage system is not needed.

2. In facilities where emergency responder radio coverage is required and such systems, components or equipment could have a negative impact on normal operations of the facility, the fire code official shall have the authority to accept an automatically activated emergency responder radio coverage system.

Sections 510.2, 510.3, 510.4, 510.5 and 510.6 are hereby deleted without replacement. [Ord. 2013-155 § 2 (Exh. A); Ord. 2010-130 § 2 (11-3-6); Ord. 2010-126 § 1 (Exh. A); Ord. 2007-092 § 3 (3-3-7). Formerly 13.04.060].

13.04.060 Chapter 6, Building Services and Systems, amended.
Chapter 6, Building Services and Systems, is hereby amended as follows:

Section 608.1, Scope, is hereby amended as follows:

608.1 Scope. Stationary storage battery systems having an electrolyte capacity of more than 50 gallons (189 L) for flooded lead acid, nickel cadmium (Ni-Cd) and valve-regulated lead acid (VRLA), or 1,000 pounds (454 kg) for lithium-ion and lithium metal polymer, used for facility standby power, emergency power or uninterruptible power supplies shall comply with this section and Table 608.1. Indoor charging systems for electric carts/cars with more than 50 gallons (189 L) aggregate quantity shall comply with Section 608.10.

Section 608.10, Indoor charging of electric carts/cars, is hereby added as follows:

608.10 Indoor charging of electric carts/cars. Indoor charging of electric carts/cars where the combined volume of all battery electrolyte exceeds 50 gallons shall comply with following:

1. Spill control and neutralization shall be provided and comply with Section 608.5.

2. Room ventilation shall be provided and comply with Section 608.6.1

3. Signage shall be provided and comply with Section 608.7.1

4. Smoke detection shall be provided and comply with Section 907.2

[Ord. 2013-155 § 2 (Exh. A); Ord. 2010-130 § 2 (11-3-7); Ord. 2010-126 § 1 (Exh. A); Ord. 2007-092 § 3 (3-3-8). Formerly 13.04.070].

13.04.070 Chapter 9, Fire Protection Systems, amended.
Chapter 9, Fire Protection Systems, is hereby amended as follows:

Section 903.2, Where required, is hereby revised as follows:

903.2 Where required. Approved automatic sprinkler systems in buildings and structures shall be provided when one of the following conditions exists:

1. New buildings: Notwithstanding any applicable provisions of Sections 903.2.1 through 903.2.19, an automatic fire-extinguishing system shall also be installed in all occupancies when the total building area exceeds 5,000 square feet (465 m^2) as defined in Section 202, regardless of fire areas or allowable area, or is more than two stories in height.

2. Existing Buildings: Notwithstanding any applicable provisions of this code, an automatic sprinkler system shall be provided in an existing building when an addition occurs and one of the following conditions exists:

a. When an addition is 33% or more of the existing building area, and the resulting building area exceeds 5000 square feet (465 m^2) as defined in Section 202; or

b. When an addition exceeds 2000 square feet (186 m^2) and the resulting building area exceeds 5000 square feet (465 m^2) as defined in Section 202; or

c. An additional story is added above the second floor regardless of fire areas or allowable area.

Exception: Group R-3 occupancies shall comply with Section 903.2.8.

Section 903.2.8, Group R, is hereby revised as follows:

903.2.8 Group R. An automatic sprinkler system installed in accordance with Section 903.3 shall be provided throughout all buildings with a Group R fire area as follows:

1. New Buildings: An automatic sprinkler system shall be installed throughout all new buildings.

2. Existing Buildings: An automatic sprinkler system shall be installed throughout when one of the following conditions exists:

a. When an addition is 33% or more of the existing building area as defined in Section 202, and greater than 3600 square feet within a two year period; or

b. An addition when the existing building is already provided with automatic sprinklers; or

c. When an existing Group R Occupancy is being substantially renovated, and where the scope of the renovation is such that the Building Code Official determines that the complexity of installing a sprinkler system would be similar as in a new building.

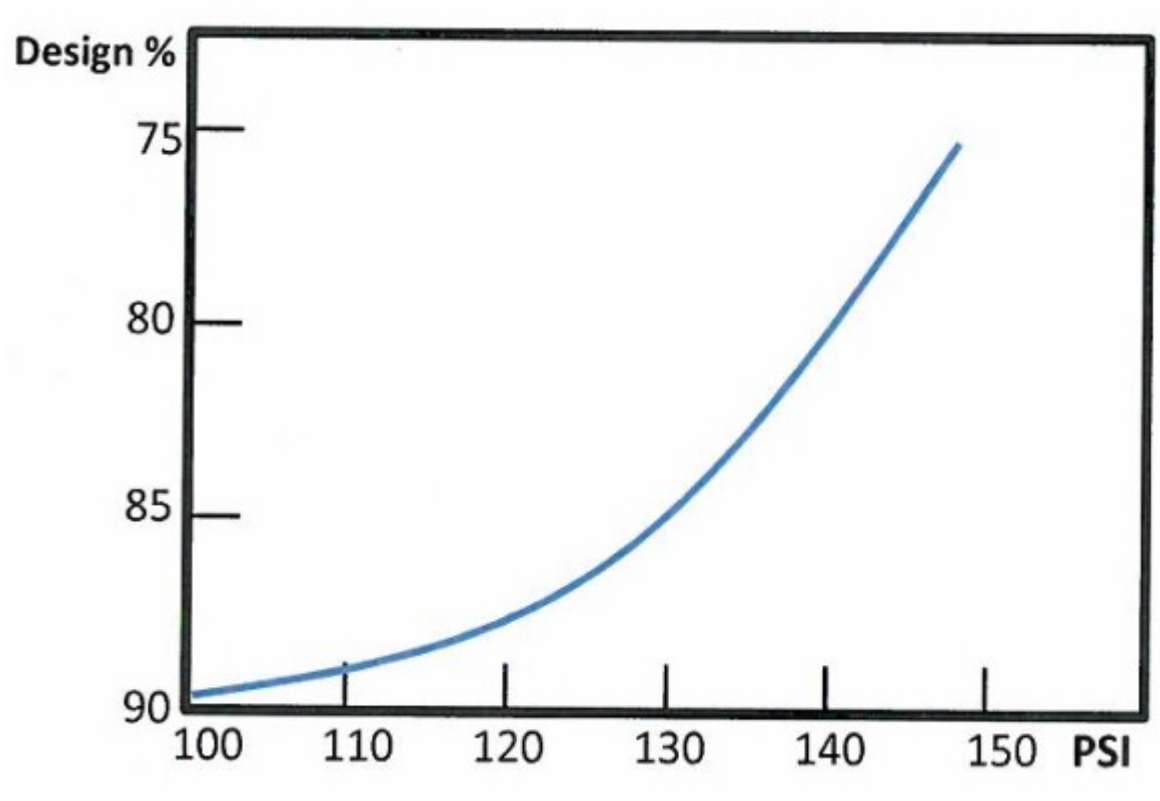
Section 903.3.5.3, Hydraulically calculated systems, is hereby added as follows:

903.3.5.3 Hydraulically calculated systems. The design of hydraulically calculated fire sprinkler systems shall not exceed 90% of the water supply capacity

Exception: When static pressure exceeds 100 psi, and required by the Fire Code Official, the fire sprinkler system shall not exceed water supply capacity specified by Table 903.3.5.3

TABLE 903.3.5.3

Hydraulically Calculated Systems



Section 903.4, Sprinkler system supervision and alarms, is hereby revised by modifying item 1, deleting items 3 and 5, and renumbering the exceptions as follows:

1. Automatic sprinkler systems protecting one- and two-family dwellings.

2. Limited area systems serving fewer than 20 sprinklers.

3. Jockey pump control valves that are sealed or locked in the open position.

4. Valves controlling the fuel supply to fire pump engines that are sealed or locked in the open position.

5. Trim valves to pressure switches in dry, preaction and deluge sprinkler systems that are sealed or locked in the open position.

Section 905.4, Location of Class I standpipe hose connections, is hereby amended by adding Item 7 as follows:

7. The centerline of the 2.5 inch (63.5 mm) outlet shall be no less than 18 inches (457.2 mm) and no more than 24 inches above the finished floor.

Section 907.2.13, High-rise buildings, is hereby revised as follows:

907.2.13 High-rise buildings and Group I-2 occupancies having occupied floors located more than 55 feet above the lowest level of fire department vehicle access. High-rise buildings and Group I-2 occupancies having occupied floors located more than 55 feet above the lowest level of fire department vehicle access shall be provided with an automatic smoke detection system in accordance with Section 907.2.13.1, a fire department communication system in accordance with Section 907.2.13.2 and an emergency voice/alarm communication system in accordance with Section 907.6.2.2.

Exceptions:

1. Airport traffic control towers in accordance with Section 907.2.22 and Section 412 of the California Building Code.

2. Open parking garages in accordance with Section 406.5 of the California Building Code.

3. Buildings with an occupancy in Group A-5 in accordance with Section 303.1 of the California Building Code.

4. Low-hazard special occupancies in accordance with Section 503.1.1 of the California Building Code.

5. In Group I-2 and R-2.1 occupancies, the alarm shall sound at a constantly attended location and occupant notification shall be broadcast by the emergency voice/alarm communication system

Section 907.3.1, Duct smoke detectors, is hereby amended as follows:

907.3.1 Duct smoke detectors. Smoke detectors installed in ducts shall be listed for the air velocity, temperature and humidity present in the duct. Duct smoke detectors shall be connected to the building's fire alarm control unit when a fire alarm system is installed. Activation of a duct smoke detector shall initiate a visible and audible supervisory signal at a constantly attended location and shall perform the intended fire safety function in accordance with this code and the California Mechanical Code. Duct smoke detectors shall not be used as a substitute for required open area detection.

Exception: In occupancies not required to be equipped with a fire alarm system, actuation of a smoke detector shall activate a visible and an audible signal in an approved location. Smoke detector trouble conditions shall activate a visible or audible signal in an approved location and shall be identified as air duct detector trouble.

Section 907.5.2.2, Emergency voice/alarm communication systems, is revised as follows:

907.5.2.2 Emergency voice/alarm communication systems. Emergency voice/alarm communication systems required by this code shall be designed and installed in accordance with NFPA 72. The operation of any automatic fire detector, sprinkler waterflow device or manual fire alarm box shall automatically sound an alert tone followed by voice instructions giving approved information and directions for a general or staged evacuation in accordance with the building's fire safety and evacuation plans required by Section 404. In high-rise buildings and Group I-2 occupancies having occupied floors located more than 55 feet above the lowest level of fire department vehicle access, the system shall operate on a minimum of the alarming floor, the floor above and the floor below. Speakers shall be provided throughout the building by paging zones. At a minimum, paging zones shall be provided as follows:

1. Elevator groups.

2. Exit stairways.

3. Each floor.

4. Areas of refuge as defined in Chapter 2.

5. Dwelling units in apartment houses.

6. Hotel guest rooms or suites.

Exception: In Group I-2 and R-2.1 occupancies, the alarm shall sound in a constantly attended area and a general occupant notification shall be broadcast over the overhead page.

Section 907.6.3.2, High-rise buildings, is revised as follows:

907.6.3.2 High-rise buildings. High-rise buildings and Group I-2 occupancies having occupied floors located more than 55 feet above the lowest level of fire department vehicle access, a separate zone by floor shall be provided for all of the following types of alarm-initiating devices where provided:

1. Smoke detectors.

2. Sprinkler water-flow devices.

3. Manual fire alarm boxes

4. Other approved types of automatic detection devices or suppression systems.

Section 907.6.5, Monitoring, is revised as follows:

907.6.5 Monitoring. Fire alarm systems required by this chapter or by the California Building Code shall be monitored by an approved supervising station in accordance with NFPA 72, this section, and per Orange County Fire Authority Guideline “New and Existing Fire Alarm & Signaling Systems.”

[Ord. 2013-155 § 2 (Exh. A); Ord. 2010-130 § 2 (11-3-9); Ord. 2010-126 § 1 (Exh. A); Ord. 2007-092 § 3 (3-3-9). Formerly 13.04.090].

13.04.080 Chapter 11, Construction Requirements for Existing Buildings, amended.
Chapter 11, Construction Requirements for Existing Buildings, is not adopted with the exception of the sections listed below:

A. 1103.7;

B. 1103.7.3;

C. 1103.7.3.1;

D. 1103.7.8 through 1103.7.8.2;

E. 1103.7.9 through 1103.7.9.10;

F. 1103.8 through 1103.8.5.3;

G. 1106. [Ord. 2013-155 § 2 (Exh. A); Ord. 2010-130 § 2 (11-3-18). Formerly 13.04.180].

13.04.090 Chapter 20, Aviation Facilities, amended.
Chapter 20, Aviation Facilities, is hereby amended as follows:

Section 2008, Emergency Helicopter Landing Facility (EHLF), and its subsections are hereby added as follows.

SECTION 2008

Emergency Helicopter Landing Facility (EHLF)

2008.1 General. Every building of any type of construction or occupancy having floors used for human occupancy located more than 75 ft above the lowest level of fire department vehicle access shall have a rooftop emergency helicopter landing facility (EHLF) in a location approved by the fire code official for use by fire, police, and emergency medical helicopters only.

2008.1.1 Rooftop Landing Pad. The landing pad shall be 50 ft. x 50 ft. or a 50 ft. diameter circle that is pitched or sloped to provide drainage away from access points and passenger holding areas at a slope of 0.5 percent to 2 percent. The landing pad surface shall be constructed of

approved non-combustible, nonporous materials. It shall be capable of supporting a helicopter with a maximum gross weight of 15,000 lbs. For structural design requirements, see California Building Code.

2008.1.2 Approach-Departure Path. The emergency helicopter landing facility shall have two approach-departure paths separated from each other by at least 90 degrees. No objects shall penetrate above the approach-departure paths. The approach-departure path begins at the edge of the landing pad, with the same width or diameter as the landing pad and rises outward and upward at a ratio of eight feet horizontal distance for every one foot of vertical height.

2008.1.3 Safety Area. The safety area is a horizontal plane level with the landing pad surface and shall extend 25 ft. in all directions from the edge of the landing pad. No objects shall penetrate above the plane of the safety area.

2008.1.4 Safety Net. If the rooftop landing pad is elevated more than 30 in. (2'-6") above the adjoining surfaces, a 6 ft. in wide horizontal safety net capable of supporting 25 lbs./sf. shall be provided around the perimeter of the landing pad. The inner edge of the safety net attached to the landing pad shall be slightly dropped (greater than 5 in. but less than 18 in.) below the pad elevation. The safety net shall slope upward but the outer safety net edge shall not be above the elevation of the landing pad.

2008.1.5 Take-off and Landing Area. The takeoff and landing area shall be free of obstructions and 100 ft x 100 ft. or 100 ft. diameter.

2008.1.6 Wind Indicating Device. An approved wind indicating device shall be provided but shall not extend into the safety area or the approach-departure paths.

2008.1.7 Special Markings. The emergency helicopter landing facility shall be marked as indicated in Figure 2008.1.7.

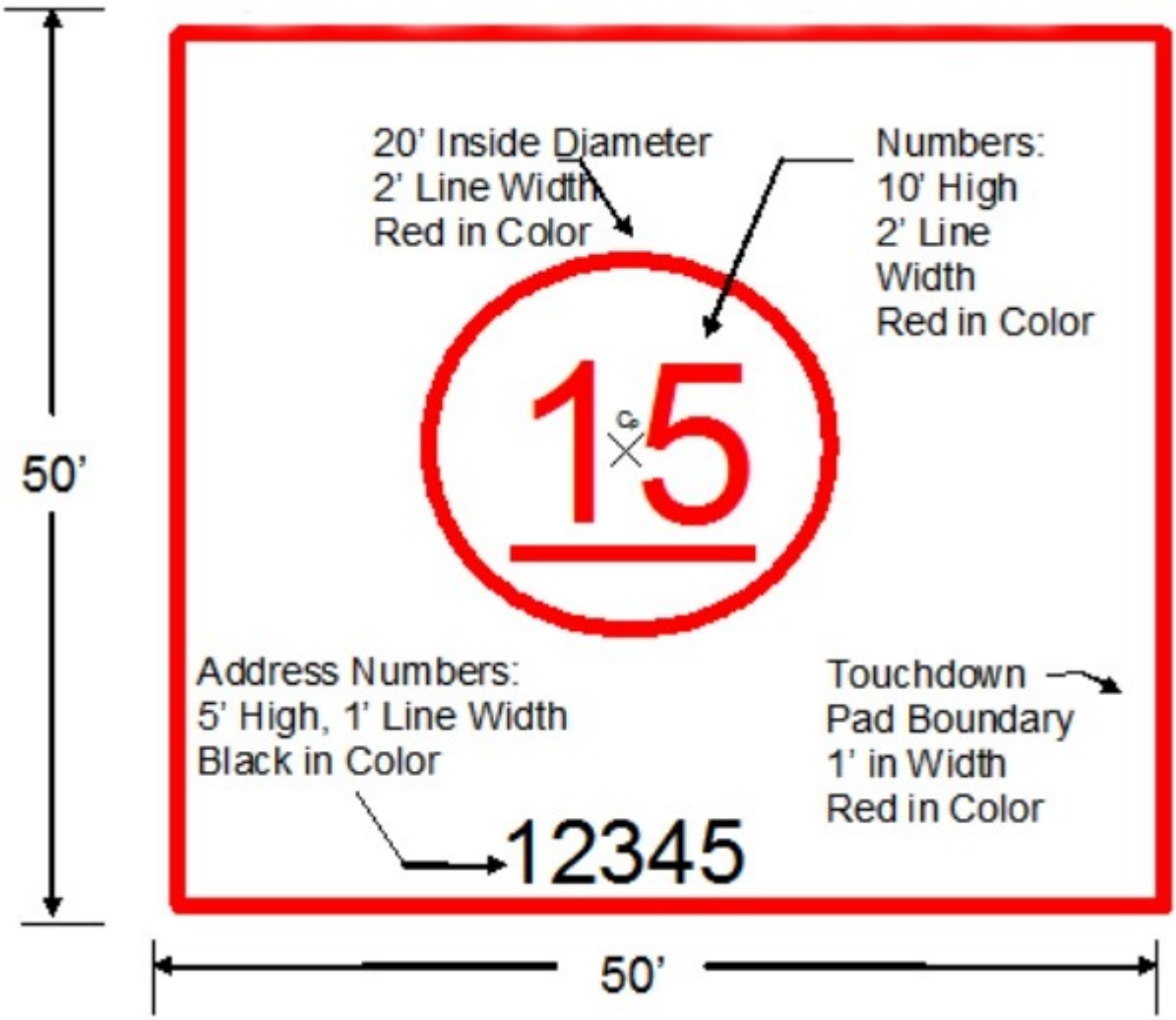
2008.1.8 EHLF Exits. Two stairway exits shall be provided from the landing platform area to the roof surface. For landing areas less than 2,501 square feet in area, the second exit may be a fire escape or ladder leading to the roof surface below. The stairway from the landing facility platform to the floor below shall comply with Section 1009.7.2 for riser height and tread depth. Handrails shall be provided, but shall not extend above the platform surface.

2008.1.9 Standpipe systems. The standpipe system shall be extended to the roof level on which the EHLF is located. All portions of the EHLF area shall be within 150 feet of a 2.5-inch outlet on a Class I or III standpipe.

2008.1.10 Fire extinguishers. A minimum of one portable fire extinguisher having a minimum 80-B:C rating shall be provided and located near the stairway or ramp to the landing pad. The fire extinguisher cabinets shall not penetrate the approach-departure paths, or the safety area. Installation, inspection, and maintenance of extinguishers shall be in accordance with the CFC, Section 906.

2008.1.11 EHLF. Fueling, maintenance, repairs, or storage of helicopters is prohibited.

Figure 2008.1.7 Helicopter Landing Pad Markings



1. The preferred background is white or tan.

2. The circled, red numbers indicate the allowable weight that the facility is capable of supporting in thousands of pounds.

3. The numbers shall be oriented towards the preferred flight (typically facing the prevailing wind).

[Ord. 2013-155 § 2 (Exh. A); Ord. 2010-130 § 2 (11-3-10); Ord. 2010-126 § 1 (Exh. A); Ord. 2007-092 § 3 (3-3-10). Formerly 13.04.100].

13.04.100 Chapter 28, Lumber Yards and Woodworking Facilities, amended.
Chapter 28, Lumber Yards and Woodworking Facilities, is hereby amended as follows:

Section 2801.2, Permit, is hereby revised by adding the following statement to the last sentence:

2801.2 Permit. Permits shall be required as set forth in Section 105.6. For Miscellaneous Combustible Storage Permit, see Section 105.6.29.

Section 2808.2, Storage site, is hereby revised as follows:

2808.2 Storage site. Storage sites shall be level and on solid ground or other all-weather surface. Sites shall be thoroughly cleaned and approval from the fire code official obtained before transferring products to the site.

Section 2808.3, Size of piles, is hereby revised as follows:

2808.3 Size of piles. Piles shall not exceed 15 feet (4572 mm) in height, 50 feet (15 240 mm) in width and 100 feet (30 480 mm) in length.

Section 2808.7, Pile fire protection, is hereby revised by adding the following statement to the last sentence:

2808.7 Pile fire protection. Automatic sprinkler protection shall be provided in conveyor tunnels and combustible enclosures that pass under a pile. Combustible conveyor systems and enclosed conveyor systems shall be equipped with an approved automatic sprinkler system. Oscillating sprinklers with a sufficient projectile reach are required to maintain a 40% to 60% moisture content and wet down burning/smoldering areas.

Section 2808.9, Material-handling equipment, is hereby revised by adding the following sentence at the beginning of the section:

2808.9 Material-handling equipment. All material handling equipment operated by an internal combustion engine shall be provided and maintained with an approved spark arrester. Approved material-handling equipment shall be available for moving wood chips, hogged material, wood fines and raw product during fire-fighting operations.

Section 2808.11, Temperature control, is hereby added as follows:

2808.11 Temperature control. The temperature shall be monitored and maintained as specified in Sections 2808.11.1 and 2808.11.2.

Section 2808.11.1, Pile temperature control, is hereby added as follows:

2808.11.1 Pile temperature control. Piles shall be rotated when the internal temperature readings are in excess of 165 degrees Fahrenheit.

Section 2808.11.2, New material temperature control, is hereby added as follows:

2808.11.2 New material temperature control. New loads delivered to the facility shall be inspected and tested at the facility entry prior to taking delivery. Material with temperature exceeding 165 degrees Fahrenheit shall not be accepted on the site. New loads shall be monitored to verify that the temperature remains stable.

[Ord. 2013-155 § 2 (Exh. A); Ord. 2010-130 § 2 (11-3-11); Ord. 2010-126 § 1 (Exh. A); Ord. 2007-092 § 3 (3-3-12). Formerly 13.04.110].

13.04.110 Chapter 49, Requirements for Wildland-Urban Interface Fire Areas, amended. Chapter 49, Requirements for Wildland-Urban Interface Fire Areas, is hereby amended as follows:

Section 4906.3, Vegetation, is hereby revised by adding Subsection (5) as follows:

(5) OCFA Vegetation Management Guidelines.

Section 4908, Fuel Modification Requirements for New Construction, is hereby added as follows:

4908 Fuel Modification Requirements for New Construction. All new buildings to be built or installed in hazardous fire areas shall comply with the following:

1. Preliminary fuel modification plans shall be submitted to and approved by the fire code official concurrent with the submittal for approval of any tentative map.

2. Final fuel modification plans shall be submitted to and approved by the fire code official prior to the issuance of a grading permit.

2.1 The fuel modification plan shall include provisions for the maintenance of the fuel modification for perpetuity.

3. The fuel modification plans shall meet the criteria set forth in the Fuel Modification Section of the Orange County Fire Authority Vegetation Management Guidelines.

4. The fuel modification plan may be altered if conditions change. Any alterations to the fuel modification areas shall have prior approval from the fire code official.

5. All elements of the fuel modification plan shall be maintained in accordance with the approved plan and are subject to the enforcement process outlined in the Fire Code.

Section 4909, Explosives and Blasting, is hereby added as follows:

Section 4909 Explosives and Blasting. Explosives shall not be possessed, kept, stored, sold, offered for sale, given away, used, discharged, transported or disposed of within wildland-urban interface areas, or hazardous fire areas except by permit from the fire code official.

[Ord. 2013-155 § 2 (Exh. A); Ord. 2010-130 § 2 (11-3-20); Ord. 2010-126 § 1 (Exh. A); Ord. 2007-092 § 3 (3-3-20). Formerly 13.04.200].

13.04.120 Chapter 50, Hazardous Materials – General Provisions, amended.
Chapter 50, Hazardous Materials – General Provisions, is hereby amended as follows:

Section 5001.5.2, Hazardous Materials Inventory Statement (HMIS), is hereby amended by modifying the first paragraph as follows:

5001.5.2 Hazardous Materials Inventory Statement (HMIS). Where required by the fire code official, an application for a permit shall include Orange County Fire Authority's Chemical Classification Packet, which shall be completed and approved prior to approval of plans, and/or the storage, use or handling of chemicals on the premises. The Chemical Classification Packet shall include the following information:

1. Product Name

2. Component

3. Chemical Abstract Service (CAS) number

4. Location where stored or used.

5. Container size

6. Hazard classification

7. Amount in storage

8. Amount in use-closed systems

9. Amount in use-open systems.

Table 5003.1.1(1), Maximum Allowable Quantity per Control Area of Hazardous Materials Posing a Physical Hazard, is hereby amended by deleting Footnote K without replacement.

Section 5003.1.1.1 Extremely Hazardous Substances is hereby added as follows:

5003.1.1.1 Extremely Hazardous Substances. No person shall use or store any amount of extremely hazardous substances (EHS) in excess of the disclosable amounts (see Health and Safety Code Section 25500 et al) in a residential zoned or any residentially developed property.

Section 5003.5, Hazard identification signs, is hereby amended by modifying the NFPA standard as follows:

5003.5 Hazard identification signs. Unless otherwise exempted by the fire code official, visible hazard identification signs as specified in the Orange County Fire Authority Signage Guidelines for the specific material contained shall be placed on stationary containers and above-ground tanks and at entrances to locations where hazardous materials are stored, dispensed, used or handled in quantities requiring a permit and at specific entrances and locations designated by the fire code official.

[Ord. 2013-155 § 2 (Exh. A); Ord. 2010-130 § 2 (11-3-13); Ord. 2010-126 § 1 (Exh. A); Ord. 2007-092 § 3 (3-3-14). Formerly 13.04.130].

13.04.130 Chapter 55, Cryogenic Fluids, amended.
Chapter 55, Cryogenic Fluids, is hereby amended as follows:

Section 5503.4.1, Identification signs, is hereby revised as follows:

5503.4.1 Identification signs. Visible hazard identification signs in accordance with the Orange County Fire Authority Signage Guidelines shall be provided at entrances to buildings or areas in which cryogenic fluids are stored, handled or used.

[Ord. 2013-155 § 2 (Exh. A); Ord. 2010-130 § 2 (11-3-14); Ord. 2010-126 § 1 (Exh. A); Ord. 2007-092 § 3 (3-3-15). Formerly 13.04.140].

13.04.140 Chapter 56, Explosives and Fireworks, amended.
Chapter 56, Explosives and Fireworks. California Fire Code Chapter 56 is hereby amended as follows:

Section 5601.2, Retail Fireworks, is hereby added as follows:

5601.2 Retail Fireworks. The storage, use, sale, possession, and handling of fireworks 1.4G (commonly referred to as Safe & Sane) and fireworks 1.3G is prohibited.

Exception: Fireworks 1.4G and fireworks 1.3G may be part of an electrically fired public display when permitted and conducted by a licensed pyrotechnic operator

Section 5601.3, Seizure of Fireworks, is hereby added as follows:

5601.3 Seizure of Fireworks. The fire code official shall have the authority to seize, take, remove all fireworks stored, sold, offered for sale, used or handled in violation of the provisions of Title 19 CCR, Chapter 6. Any seizure or removal pursuant to this section shall be in compliance with all applicable statutory, constitutional, and decisional law.

Section 5602, Explosives and blasting, is hereby added as follows:

5602 Explosives and blasting. Explosives shall not be possessed, kept, stored, sold, offered for sale, given away, used, discharged, transported or disposed of within wildland-urban interface areas, or hazardous fire areas except by permit from the fire code official.

Section 5608.1, General, is hereby revised as follows:

5608.1 General. Outdoor fireworks displays, use of pyrotechnics before a proximate audience and pyrotechnic special effects in theatrical and group entertainment productions shall comply with California Code of Regulations, Title 19, Division 1, Chapter 6 Fireworks, the Orange County

Fire Authority Guidelines for Public Fireworks Displays, and with the conditions of the permit as approved by the fire code official.

Section 5608.2, Firing, is hereby added as follows:

5608.2 Firing. All fireworks displays shall be electrically fired.

[Ord. 2013-155 § 2 (Exh. A); Ord. 2010-130 § 2 (11-3-15); Ord. 2010-126 § 1 (Exh. A); Ord. 2007-092 § 3 (3-3-16). Formerly 13.04.150].

13.04.150 Chapter 57, Flammable and Combustible Liquids, amended.
Chapter 57, Flammable and Combustible Liquids, is hereby amended as follows:

Section 5704.2.3.2, Label or placard, is hereby amended by modifying the NFPA standard as follows:

5704.2.3.2 Label or placard. Tanks more than 100 gallons (379 L) in capacity, which are permanently installed or mounted and used for the storage of Class I, II or III liquids, shall bear a label and placard identifying the material therein. Placards shall be in accordance with the Orange County Fire Authority Signage Guidelines.

[Ord. 2013-155 § 2 (Exh. A); Ord. 2010-130 § 2 (11-3-16); Ord. 2010-126 § 1 (Exh. A); Ord. 2007-092 § 3 (3-3-17). Formerly 13.04.160].

13.04.160 Chapter 60, Highly Toxic and Toxic Materials, amended.
Chapter 60, Highly Toxic and Toxic Materials, is hereby amended as follows:

Section 6004.2.2.7, Treatment system, is hereby amended by deleting Exception 1 without substitution and renumbering Item 2 to 1 with modifications to read as follows:

Exception:

1. Toxic gases – storage/use. Treatment systems are not required for toxic gases supplied by cylinders or portable tanks not exceeding 1,700 pounds (772 kg) water capacity when the following are provided:

1.1 A listed or approved gas detection system with a sensing interval not exceeding 5 minutes.

1.2. For storage, valve outlets are equipped with gas-tight outlet plugs or caps.

1.3 For use, a listed and approved automatic-closing fail-safe valve located immediately adjacent to cylinder valves. The fail-safe valve shall close when gas is detected at the permissible exposure limit (PEL) by a gas detection system monitoring the exhaust system at the point of discharge from the gas cabinet, exhausted enclosure, ventilated enclosure or gas room. The gas detection system shall comply with Section 6004.2.2.10.

[Ord. 2013-155 § 2 (Exh. A); Ord. 2010-130 § 2 (11-3-17); Ord. 2010-126 § 1 (Exh. A); Ord. 2007-092 § 3 (3-3-18). Formerly 13.04.170].

13.04.170 Chapter 80, Referenced Standards, amended.
Chapter 80, Referenced Standards, is hereby amended as follows:

NFPA 13, 2013 Edition, Standard for the Installation of Sprinkler Systems, is hereby amended as follows:

Section 6.8.3 is hereby revised as follows:

6.8.3 Fire department connections (FDC) shall be of an approved type. The FDC shall contain a minimum of two 2 1/2" inlets. The location shall be approved and be no more than 150 feet from

a public hydrant. The FDC may be located within 150 feet of a private fire hydrant when approved by the fire code official. The size of piping and the number of inlets shall be approved by the fire code official. If acceptable to the water authority, it may be installed on the backflow assembly. Fire department inlet connections shall be painted OSHA safety red. When the fire sprinkler density design requires 500 gpm (including inside hose stream demand) or greater, or a standpipe system is included, four 2 1/2" inlets shall be provided.

Section 8.3.3.1 is hereby revised as follows:

8.3.3.1. When fire sprinkler systems are installed in shell buildings of undetermined use (Spec Buildings) other than warehouses (S occupancies), fire sprinklers of the quick-response type shall be used. Use is considered undetermined if a specific tenant/occupant is not identified at the time the fire sprinkler plan is submitted. Sprinklers in light hazard occupancies shall be one of the following:

(1) Quick-response type as defined in 3.6.4.7

(2) Residential sprinklers in accordance with the requirements of 8.4.5

(3) Standard-response sprinklers used for modifications or additions to existing light hazard systems equipped with standard-response sprinklers

(4) Standard-response sprinklers used where individual standard-response sprinklers are replaced in existing light hazard systems

Section 8.17.1.1.1 is hereby added as follows:

8.17.1.1.1 Residential Waterflow Alarms. A local water-flow alarm shall be provided on all sprinkler systems and shall be connected to the building fire alarm or water-flow monitoring system, where provided. Group R occupancies not requiring a fire alarm system by the California Fire Code shall be provided with a minimum of one approved interior alarm device in each unit. Interior alarm devices shall be required to provide 55 dBA or 15 dBA above ambient, whichever is greater, throughout all living spaces within each unit. Sound levels in all sleeping areas with all intervening doors closed shall be a minimum of 15 dBA above the average ambient sound level but not less than 75 dBA, whichever is greater. When not connected to a fire alarm or water-flow monitoring system, audible devices shall be powered from an uninterruptible circuit (except for over-current protection) serving normally operated appliances in the residence.

Section 11.1.1.2 is hereby added as follows:

11.1.1.2 When fire sprinkler systems are required in buildings of undetermined use other than warehouses, they shall be designed and installed to have a fire sprinkler density of not less than that required for an Ordinary Hazard Group 2 use, with no reduction(s) in density or design area. Warehouse fire sprinkler systems shall be designed to Figure 16.2.1.3.2 (d) curve “G”. Use is considered undetermined if a specific tenant/occupant is not identified at the time the sprinkler plan is submitted. Where a subsequent occupancy requires a system with greater capability, it shall be the responsibility of the occupant to upgrade the system to the required density for the new occupancy.

Section 11.2.3.1.1.1 is hereby added as follows:

11.2.3.1.1.1 The available water supply for fire sprinkler system design shall be determined by one of the following methods, as approved by the Fire Code Official:

1) Subtract the project site elevation from the low water level for the appropriate pressure zone and multiply the result by 0.433;

2) Use a maximum of 40 psi, if available;

3) Utilize the Orange County Fire Authority water-flow test form/directions to document a flow test conducted by the local water agency or an approved third party licensed in the State of California.

Section 23.2.1.1 is hereby revised as follows:

Section 23.2.1.1 Where a waterflow test is used for the purposes of system design, the test shall be conducted no more than 6 months prior to working plan submittal unless otherwise approved by the authority having jurisdiction.

NFPA 13R, 2013 Edition, Installation of Sprinkler System in Residential Occupancies up to and Including Four Stories in Height, is hereby amended as follows:

Section 6.16.1 is hereby revised as follows:

6.16.1 A local water-flow alarms shall be provided on all sprinkler systems and shall be connected to the building fire alarm or water-flow monitoring system where provided. Group R occupancies containing less than the number of stories, dwelling units or occupant load specified in the California Fire Code as requiring a fire alarm system shall be provided with a minimum of one approved interior alarm device in each unit. Interior alarm devices shall be required to provide 55 dBA or 15 dBA above ambient, whichever is greater, throughout all living spaces within each dwelling unit. Sound levels in all sleeping areas with all intervening doors closed shall be a minimum of 15 dBA above the average ambient sound level but not less than 75 dBA, whichever is greater. When not connected to a fire alarm or water-flow monitoring system, audible devices shall be powered from an uninterruptible circuit (except for over-current protection) serving normally operated appliances in the residence.

There shall also be a minimum of one exterior alarm indicating device, listed for outside service and audible from the access roadway that serves that building.

NFPA 13D, 2013 Edition, Standard for the Installation of Sprinkler Systems in One- and Two-Family Dwellings and Manufactured Homes is hereby amended as follows:

Section 4.1.3 is hereby added as follows:

4.1.3 Stock of Spare Sprinklers

Section 4.1.3.1 is hereby added as follows:

4.1.3.1. A supply of at least two sprinklers for each type shall be maintained on the premises so that any sprinklers that have operated or been damaged in any way can be promptly replaced.

Section 4.1.3.2 is hereby added as follows:

4.1.3.2 The sprinklers shall correspond to the types and temperature ratings of the sprinklers in the property.

Section 4.1.3.3 is hereby added as follows:

4.1.3.3 The sprinklers shall be kept in a cabinet located where the temperature to which they are subjected will at no time exceed 100°F (38°C).

Section 4.1.3.4 is hereby added as follows:

4.1.3.4 A special sprinkler wrench shall be provided and kept in the cabinet to be used in the removal and installation of sprinklers. One sprinkler wrench shall be provided for each type of sprinkler installed.

Section 7.1.2 is hereby revised as follows:

7.1.2 The system piping shall not have a separate control valve unless supervised by a central station, proprietary, or remote station alarm service.

Section 7.6 is hereby deleted in its entirety and replaced as follows:

7.6 Alarms. Exterior alarm indicating device shall be listed for outside service and audible from the street from which the house is addressed. Exterior audible devices shall be placed on the front or side of the structure and the location is subject to final approval by the fire code official. Additional interior alarm devices shall be required to provide 55 dBA or 15 dBA above ambient, whichever is greater, throughout all living spaces. Sound levels in all sleeping areas with all intervening doors closed shall be a minimum of 15 dBA above the average ambient sound level but not less than 75 dBA, whichever is greater. Audible devices shall be powered from an uninterruptible circuit (except for over-current protection) serving normally operated appliances in the residence.

Exceptions:

1. When an approved water flow monitoring system is installed, interior audible devices may be powered through the fire alarm control panel.

2. When smoke detectors specified under CBC Section 907.2.11 are used to sound an alarm upon waterflow switch activation.

NFPA 14, 2013 Edition, Installation of Standpipe and Hose Systems, is hereby amended as follows:

Section 7.3.1.1 is hereby is deleted in its entirety and replaced as follows:

7.3.1.1 Class I and III Standpipe hose connections shall be unobstructed and shall be located not less than 18 inches or more than 24 inches above the finished floor. Class II Standpipe hose connections shall be unobstructed and shall be located not less than 3 feet or more than 5 feet above the finished floor.

NFPA 24, 2013 Edition, Standard for the Installation of Private Fire Service Mains and Their Appurtenances, is hereby amended as follows:

Section 6.2.1.1 is hereby added as follows:

6.2.1.1 The closest upstream indicating valve to the riser shall be painted OSHA red.

Section 6.2.11(5) is hereby deleted without replacement and (6) and (7) renumbered:

(5) Control Valves installed in a fire-rated room accessible from the exterior.

(6) Control valves in a fire-rated stair enclosure accessible from the exterior as permitted by the authority having jurisdiction.

Section 6.3.3 is hereby added as follows:

Section 6.3.3 All post indicator valves controlling fire suppression water supplies shall be painted OSHA red.

Section 10.1.6.3 is hereby added as follows:

10.1.6.3 All ferrous pipe shall be coated and wrapped. Joints shall be coated and wrapped after assembly. All fittings shall be protected with a loose 8-mil polyethylene tube. The ends of the tube shall extend past the joint by a minimum of 12 inches and be sealed with 2 inch wide tape approved for underground use. Galvanizing does not meet the requirements of this section.

Exception: 304 or 316 Stainless Steel pipe and fittings

Section 10.3.6.2 is hereby revised as follows:

10.3.6.2 All bolted joint accessories shall be cleaned and thoroughly coated with asphalt or other corrosion-retarding material, prior to poly-tube, and after installation.

Exception: Bolted joint accessories made from 304 or 316 stainless steel.

Section 10.3.6.3 is hereby added as follows:

10.3.6.3 All bolts used in pipe-joint assembly shall be 316 stainless steel.

Section 10.6.3.1 is hereby deleted and replaced as follows:

10.6.3.1 Where fire service mains enter the building adjacent to the foundation, the pipe may run under a building to a maximum of 24 inches, as measured from the interior face of the exterior wall to the center of the vertical pipe. The pipe under the building or building foundation shall be 304 or 316 stainless steel and shall not contain mechanical joints or it shall comply with 10.6.2.

Section 10.6.4 is hereby revised as follows:

10.6.4 Pipe joints shall not be located under foundation footings. The pipe under the building or building foundation shall be 304 or 316 stainless steel and shall not contain mechanical joints.

[Ord. 2013-155 § 2 (Exh. A); Ord. 2010-130 § 2 (11-3-19); Ord. 2010-126 § 1 (Exh. A); Ord. 2007-092 § 3 (3-3-19). Formerly 13.04.190].

---

[1]**Cross-references:** nuisances, AVMC 8.24.010; fire regulations in parks and recreational areas, AVMC 11.10.310; fire-retardant-treated shingles and shakes, AVMC 13.02.120; fire protection in subdivisions, AVMC 14.10.160; fire hazard regulations, AVMC 15.50.010.

The Aliso Viejo Municipal Code is current through Ordinance 2014-156, passed January 8, 2014.
Disclaimer: The City Clerk's Office has the official version of the Aliso Viejo Municipal Code. Users should contact the City Clerk's Office for ordinances passed subsequent to the ordinance cited above.

City Website: http:///www.cityofalisoviejo.com/ (http://www.cityofalisoviejo.com/)
City Telephone: (949) 425-2500
Code Publishing Company (http://www.codepublishing.com/)