

**BUILDING STANDARDS COMMISSION**

2525 Natomas Park Drive, Suite 130  
Sacramento, California 95833-2936  
(916) 263-0916 FAX (916) 263-0959



March 28, 2014

Jay Elbettar  
Building Official  
City of Mission Viejo  
200 Civic Center  
Mission Viejo, CA 92691

RE: Ordinance #13-300 and #13-301

Dear Mr. Elbettar:

This letter is to advise you of our determination regarding the referenced ordinance with express findings received from your agency on March 24, 2014.

Our review finds the submittal to contain two ordinances modifying provisions of the 2013 California Building Standards Code in Title 24, California Code of Regulations (code), and express findings complying with Health and Safety Code §§17958.7 and 18941.5. The code modifications are accepted for filing and are enforceable. This letter attests only to the satisfaction of the cited law for filing of local code amendment supported by an express finding with the Commission. The Commission is not authorized by law to evaluate the merit of the code modification or the express finding.

Local modifications to the code are specific to a particular edition of the code. They must be readopted and filed with the Commission in order to remain in effect when the next triennial edition of the code is published.

On a related matter, should your city receive and ratify Fire Protection District ordinances making modifications to the code, be advised that Health and Safety Code §13869.7(c) requires such ratified ordinances and express findings to be filed with the Department of Housing and Community Development, Division of Codes and Standards, State Housing Law Program, rather than this Commission. Also, ordinances making modifications to the energy efficiency standards of the code may require approval from the California Energy Commission pursuant to Public Resources Code §25402.1(h)(2).

If you have any questions or need any further information, you may contact me at (916) 263-0916.

Sincerely,

  
Enrique M. Rodriguez  
Associate Construction Analyst

cc: Chron  
Local Filings



# City of Mission Viejo

Community Development Department

2014 MAR 24 A 11:10  
STANDARDS COMMISSION

**Trish Kelley**  
*Mayor*

**Dave Leckness**  
*Mayor Pro Tem*

**Rhonda Reardon**  
*Council Member*

**Cathy Schlicht**  
*Council Member*

**Frank Ury**  
*Council Member*

March 20, 2014

Mr. Jim McGowan  
Executive Director  
California Building Standards Commission  
2525 Natomas Park Drive, Suite 130  
Sacramento, CA 95833-2936

**Subject: 2013 California Building, Residential, Mechanical, Electrical, Plumbing, Cal Green, and Fire Codes Adoption**

Dear Mr. McGowan:

On December 2, 2013, the City of Mission Viejo adopted the Ordinances No. 13-300 and 13-301, amending the Mission Viejo Municipal Code to adopt the 2013 California Building, Residential, Mechanical, Electrical, Plumbing, Cal Green, and Fire codes, effective January 1, 2014.

These changes and modifications were reasonably necessary due to local climatic, geological, or topographical conditions. These findings were adopted by Resolutions 13-65 and 13-66, enclosed herein for your information and filing.

Please call (949) 470-3028 if you have any questions or if I can be of further assistance.

Very truly yours,  
Building Division  
Community Development

Jay Elbettar, P.E., C.B.O.  
Building Official

Attachment: Adopted Ordinances No. 13-300 and 13-301 and Resolutions No. 13-65 and 13-66

**ORDINANCE 13-300**

**AN ORDINANCE OF THE CITY COUNCIL OF THE CITY OF MISSION VIEJO ADOPTING BY REFERENCE THE 2013 EDITIONS OF THE CALIFORNIA BUILDING, RESIDENTIAL, PLUMBING, ELECTRICAL, MECHANICAL, GREEN BUILDING STANDARDS, HISTORICAL BUILDING, AND EXISTING BUILDING CODES, AND THE 2012 EDITIONS OF THE INTERNATIONAL SWIMMING POOL AND SPA CODE AND INTERNATIONAL PROPERTY MAINTENANCE CODE, TOGETHER, WITH CERTAIN APPENDICES AND AMENDMENTS THERETO, AND AMENDING TITLE 8 OF THE MISSION VIEJO MUNICIPAL CODE**

**THE CITY COUNCIL OF THE CITY OF MISSION VIEJO DOES HEREBY ORDAIN AS FOLLOWS:**

**Section 1.** Chapter 8.02 “Building and Housing Codes” of Title 8 “Buildings and Construction” of the Mission Viejo Municipal Code, is hereby repealed; provided, however, that such repeal shall not affect or excuse any violation of any of said Chapter or codes occurring prior to the effective date of this ordinance.

**Section 2.** A new Chapter 8.02 is hereby added to Title 8 of the Mission Viejo Municipal Code to read as follows:

**“CHAPTER 8.02. BUILDING AND HOUSING CODES**

**Sec. 8.02.010. Adoption of California Building Codes and related model codes.**

For the purpose of prescribing regulations for erection, construction, alteration, relocation, enlargement, replacement, repair, improving, conversion, equipment, use and occupancy, location, maintenance, removal and demolition of every building and structure, or any appurtenances connected or attached to such buildings or structures, the following construction codes, subject to the modifications set forth in this Chapter, are hereby adopted by reference: the California Building Code, 2013 Edition, based on the 2012 International Building Code as published by the International Code Council; the California Residential Code, 2013 Edition, based on the 2012 International Residential Code as published by the International Code Council; the California Electrical Code, 2013 Edition, based on the 2011 National Electrical Code as published by the National Fire Protection Association; the California Mechanical Code, 2013 Edition, based on the 2012 Uniform Mechanical Code as published by the International Association of Plumbing and Mechanical Officials; the California Plumbing Code, 2013 Edition, based on the 2012 Uniform Plumbing Code as published by the International Association of Plumbing and Mechanical Officials; the California Historical Building Code, 2013 Edition; the California Existing Building Code, 2013 Edition; the California Green Building Standards Code, 2013 Edition; the International Swimming Pool and Spa Code, 2012 Edition, as published by the International Code Council,;

the International Property Maintenance Code, 2012 Edition, as published by the International Code Council. For the purpose of prescribing regulations for grading and excavations, the Orange County Grading and Excavation Code, as is in effect on the date this Chapter becomes effective, is hereby adopted by reference. The provisions of these Construction Codes as amended by this chapter shall constitute the Building Regulations of the City of Mission Viejo. Where the California Code of Regulations and/or State Building Standards Code conflict with any sections of the Construction Codes, applicable State laws and regulations shall govern.

One (1) copy of all the above codes and standards therefor are on file in the office of the Building Official pursuant to Health and Safety Code Section 18942 (e) (1) and are made available for public inspection.

**Sec. 8.02.030. Penalties and civil remedies.**

It shall be unlawful for any person, firm or corporation to erect, construct, enlarge, alter, repair, move, improve, remove, convert or demolish, equip, use, or maintain any building or structure in the city, or cause same to be done, contrary to or in violation of any of the provisions of the code, or to otherwise violate any provision of any of the codes adopted in this chapter.

Any person, firm, or corporation violating any of the provisions or failing to comply with any of the mandatory requirements of this chapter or any of the codes adopted herein, shall be guilty of a misdemeanor, unless such violation is designated as an infraction, and penalties for any such violation shall be as set forth in section 1.01.200 of the Municipal Code. Any person, firm, or corporation shall be guilty of a separate offense for each and every day during which any violation of any provision of this chapter or any of the codes adopted herein is committed, continued, or permitted. Any violation of this chapter or any of the codes adopted herein is a nuisance that may be abated pursuant to Chapter 9.59 of this Code.

**Sec. 8.02.040. Fees.**

All fees authorized by this chapter shall be as set forth by resolution of the City Council.

**Sec. 8.02.050. Adoption of the California Building Code.**

Except as provided in this chapter, the California Building Code, 2013 Edition, based on the 2012 International Building Code as published by the International Code Council, shall be and become the Building Code of the City of Mission Viejo. The California Building Code is on file for public examination in the office of the Building Official.

**Sec. 8.02.060. Section 104.8 Liability amended.**

**Section 104.8 Liability** of Chapter 1 of the California Building Code is hereby amended by adding a sentence to the end of the paragraph as follows:

The provisions of this section shall apply if the Building Official or his/her authorized representative are employees of this jurisdiction and shall also apply if the

Building Official or his/her authorized representative are acting under contract as agents of this jurisdiction.

**Sec. 8.02.070. Section 105.2 amended.**

**Section 105.2 Work exempt from a permit** of Chapter 1 of the California Building Code is hereby amended by amending exemption 2 and 9 to read as follows:

2. Fences not over 6 feet (2134 mm) high.
9. Prefabricated swimming pools accessory to a Group R-3 occupancy that are less than 18 inches deep, do not exceed 5,000 gallons and are installed entirely above ground.

**Sec. 8.02.080. Section 105.8 added.**

**Section 105.8 Reconstruction** is added to Chapter 1 of the California Building Code to read as follows:

**105.8. Reconstruction.** If the value of the reconstruction (or renovation) of a building is equal to or exceeds 75 percent of the value of the building, the entire building shall comply with the code provisions for new construction. The value of the reconstruction (or renovation) for a property shall include the value of all construction stemming from construction-related permits issued within the last two years.

**Sec. 8.02.85. Section 109.4 amended.**

**Section 109.4 Work commencing before permit issuance** of the California Building Code is hereby amended as follows:

**Section 109.4 Work commencing before permit issuance.** Any person who commences any work on a building, structure, electrical, gas, mechanical, or plumbing system before obtaining the necessary permits shall be subject to an investigation fee in addition to the required permit fees. The investigation fee shall be collected whether or not a permit is then or subsequently issued. The investigation fee shall be equal to the amount of the permit fee required by this code. The payment of such investigation fee shall not exempt an applicant from compliance with all other provisions of either this code or the technical codes nor from the penalty prescribed by law.

**Sec. 8.02.90. Section 112.4 added.**

**Section 112.4 Underground utilities required** is added to Chapter 1 of the California Building Code to read as follows:

**112.4. Underground utilities required.** The building official shall, as a condition precedent to the issuance of a building permit, require all utility services located within the exterior boundary lines of a lot or parcel of property to be installed underground if:

1. The property is to be developed with a new or relocated main building.
2. The remodeling, alteration or addition to an existing main building exceeds 50 percent of the value or area of the existing building.
3. A residential building or use is converted to any nonresidential use or purpose.

For purposes of this section, the term "main building" shall mean a building in which is conducted the principal use of the lot or building site on which it is located.

The owner or developer of the property is responsible for complying with the requirements of this section and shall provide all necessary facilities on the property to receive such service from the supplying utilities.

If it is determined that practical difficulties or unreasonable hardships inconsistent with the purposes of this chapter and unique to a particular parcel of property would result from the literal interpretation of this section, the building official may waive, modify or delay the imposition of any undergrounding requirement imposed pursuant to the section upon written application of any affected property owner. If the building official determines to delay the installation of required underground utilities, a recorded agreement guaranteeing the future performance of the work may be required, together with adequate performance security enforceable by the city in the form of a cash deposit, bond letter of credit or other instrument satisfactory to the city attorney.

For purposes of this section, appurtenances and associated equipment, such as but not limited to surface-mounted transformers, pedestal-mounted terminal boxes and meter cabinets, and concealed ducts in an underground system, may be placed above ground.

#### **Sec. 8.02.100. Section 113 Board of appeals amended.**

**Section 113 Board of appeals** of the California Building Code is hereby deleted and replaced with the following:

In order to determine the suitability of alternate materials and methods of construction and to provide for reasonable interpretations of the provisions of these codes, there shall be and there in hereby created a Board of Examiners and Appeals, consisting of five members, composed of the Mayor and the other members of the City Council. Said members shall hold their respective membership on said Board of Examiners and Appeals by reason of, and concurrently with their terms of service as Council members and shall cease to be such members upon their ceasing to be such Council members. The Building Official shall be the Secretary of the Board. The Board may adopt reasonable rules and regulations of conducting its investigations and shall render all its decisions and findings on contested matters, in writing to the Building Official, with duplicate copy thereof to any appellant or contestant affected by any such decision or findings, and may recommend to the City Council such new legislations, if any, as is consistent therewith.

Three members of the Board shall constitute a quorum. The Mayor shall be the presiding officer of the Board and in his/her absence the Board shall select a temporary chairperson. Notices of meetings of the Board shall be given by a least three days notice delivered to each member personally or by registered mail; provided, however, that any meeting of the board shall be legal for any purpose if the written consent of all of the members of the Board to such meeting is executed and filed in the records of the Board. The Board shall hold meetings at its pleasure.

The Board shall have the right, subject to such limits as the City Council may prescribe by resolution, to employ at the cost and expense of the City, such qualified individuals as the board, in its discretion, may deem reasonably necessary in order to assist it in its investigations and in making its findings and decisions. Disabled access actions which require appeals action ratifications as required by Section 1.9.1.5 may be made ministerial by the Building Official with the concurrence of at least one knowledgeable advocate for people with disabilities.

**Sec. 8.02.110. Section 202 Definitions amended.**

Section 202 Definitions of the California Building Code is amended by adding and /or amending the following 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 building that is not intended to function as a heliport or helistop but is capable of accommodating fire or medical helicopters engaged in emergency operations.*

***ENCLOSED STRUCTURE.*** *is a structure with a roof and two or more sides.*

***FLOOR AREA, FIRE SPRINKLERS.*** *For the purpose of calculating square footage for application of fire sprinkler requirements, the floor area shall be determined in accordance with the CBC definition for "Floor Area, Gross.*

***FLOW-LINE.*** *Flow-Line is the continuous elevation of a rolled curb defined by the path traced by a particle in a moving body of water at the bottom of the rolled curb.*

***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 (see Section 403.1.2), except buildings used as hospitals as defined in the Health and Safety Code Section 1250.*

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

***SPECIAL FIRE PROTECTION AREA (SFPA).*** is a geographical area designated by resolution 12-47 as adopted by the City of Mission Viejo where the provisions of Chapter 7A of the California Building Code apply to any buildings within that area. The term *Special Fire Protection Area* for the purpose of Chapter 7A shall replace the terms *Fire Hazard Severity Zone* and *Wild-Urban Interface Fire Area* where applicable. The map and boundaries of this area is on file with the office of the Community Development Director.

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

**UNENCLOSED STRUCTURES.** includes structures with a roof and no more than one side and structures having no roof or other covering. Unenclosed structures include patio covers, decks, and balconies.

**Sec. 8.02.120. Sections 403, 403.1, and 412.7 amended.**

**Section 403 HIGH-RISE BUILDINGS AND GROUP I-2 OCCUPANCIES HAVING OCCUPIED FLOORS LOCATED MORE THAN 75 FEET ABOVE THE LOWEST LEVEL OF FIRE DEPARTMENT VEHICLE ACCESS** of the California Building Code is hereby amended as follows:

**SECTION 403 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**

**Section 403.1 Applicability** of the California Building Code is hereby amended as follows:

**403.1 Applicability.** New high-rise buildings and Group I-2 having occupied floors located more than 55 feet above the lowest level of fire department vehicle access and new Group I-2 occupancies having occupied floors located more than 55 feet above the lowest level of fire department vehicle access shall comply with Sections 403.2 through 403.6.

**Section 412.7 Heliports and helistops** of the California Building Code is hereby amended by adding Sections 412.7.6 through 412.7.6.13 as follows:

**412.7.6. Emergency Helicopter Landing Facility.** *Emergency Helicopter Landing Facility (EHLF) shall be constructed as specified in Section 412.7.6.1 through 412.7.6.13.*

**412.7.6.1 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 the 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.*

**412.7.6.2 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.*

**412.7.6.3 Approach-Departure Path.** *The emergency helicopter landing facility shall have two approach-departure paths separated in plan 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 is a rising slope extending outward and upward at a ratio of eight feet horizontal distance for every one foot of vertical height.*

**412.7.6.4 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.*

**412.7.6.5 Safety Net.** *If the rooftop landing pad is elevated more than 30 in. (2'-6") above the adjoining surfaces, a 6 ft. wide horizontal safety net capable of supporting 25 lbs/psf 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.*

**412.7.6.6 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.*

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

**412.7.6.8 Special Markings.** *The emergency helicopter landing facility shall be marked as indicated in Figure 412.7.6.8*

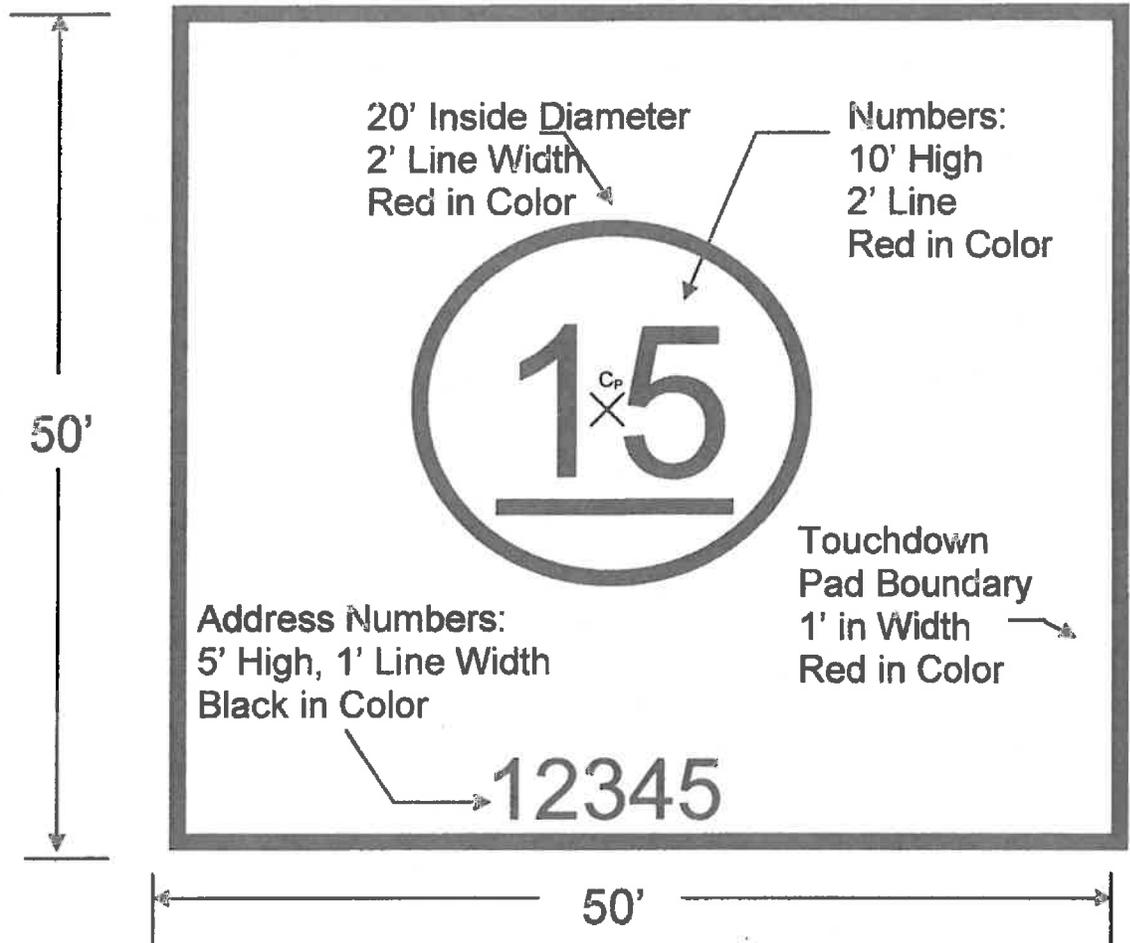
**412.7.6.9 EHLF Exits.** *Two stairway exits shall be provided from the landing platform area to the roof surface. For landing areas less than 2,501 square feet in area, the second exit may be a fire escape or ladder leading to the roof surface below. The stairway from the landing facility platform 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.*

**412.7.6.10 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.*

**412.7.6.11 Fire extinguishers.** *A minimum of one portable fire extinguisher having a minimum 80-B:C rating shall be provided and located near the stairways 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 California Fire Code Section 906.*

**412.7.6.12 EHLF.** *Fueling, maintenance, repairs, or storage of helicopters shall not be permitted.*

Figure 412.7.5.8 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).

**Sec. 8.02.130. Sections 903.2, 903.2.8, 903.3, 903.4, 905.4, 907.2.13, 907.3.1, 907.5.2.2, 907.6.3.2, and 907.6.5 amended.**

**Section 903.2** Where required of the California Building Code is hereby amended 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<sup>2</sup>) as defined in Section 202, regardless of fire areas or allowable area, or is more than two stories in height.*

*Exception: Group R-3 occupancies. Group R-3 occupancies shall comply with Section R313 of the California Residential Code.*

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<sup>2</sup>) as defined in Section 202; or*
  - b. *When an addition exceeds 2000 square feet (186 m<sup>2</sup>) and the resulting building area exceeds 5000 square feet (465 m<sup>2</sup>) 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. Group R-3 occupancies shall comply with Section R313 of the California Residential Code.*

**Section 903.2.8 Group R.** of the California Building Code 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 1000 square feet (92.903 m<sup>2</sup>) 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.*

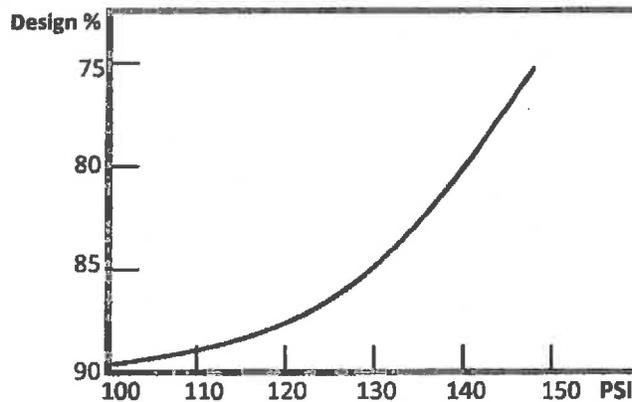
**Exception:** *Group R-3 occupancies. Group R-3 occupancies shall comply with Section R313 of the California Residential Code.*

**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 deleting item 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 and Group I-2 occupancies having occupied floors located more than 75 feet above the lowest level of fire department vehicle access of the California Building Code is hereby amended 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 of the California Building Code 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 system** of the California Building Code 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-1 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** of the California Building Code is hereby 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 waterflow devices.
3. Manual fire alarm boxes
4. Other approved types of automatic detection devices or suppression systems.

**Section 907.6.5 Monitoring** is hereby 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."*

**Sec. 8.02.140. Table 1505.1 amended.**

Table 1505.1 of the California Building Code is hereby amended to read as follows:

**TABLE 1505.1**

**MINIMUM ROOF COVERING CLASSIFICATIONS**

**TYPES OF CONSTRUCTION**

IA	IB	IIA	IIB	IIIA	IIIB	IV	VA	VB
A	A	A	A	A	A	A	A	A

**Sec. 8.02.150. Section 1505.1.3 amended.**

Section 1505.1.3 Roof coverings within all other areas of the California Building Code is hereby amended to read as follows:

**1505.1.3. Roof coverings within all other areas.** The entire roof covering of every existing structure where more than 50 percent of the total roof area is replaced within any one-year period, the entire roof covering of every new structure, and any roof covering applied in the alteration, repair or replacement of the roof of every existing structure, shall be a fire-retardant roof covering that is at least Class A.

The roof covering assembly includes the roof deck, underlayment, interlayment, insulation, and covering that is assigned a roof-covering classification.

**Sec. 8.02.190. Sections 3109.1 and 3109.4.1 amended.**

An exception is added to Section 3109.1 of the California Building Code to read as follows:

**Exception:** A spa or hot tub which is less than or equal to sixty-four (64) square feet in area need not comply with the provisions of Section 3109.4 if the following criteria are met:

A cover which is either solid or which will not permit a four-inch sphere to pass through it may be used, provided it can be locked to prevent access. It must be weatherproof and structurally secure. A gazebo may be used, if it is structurally secure, completely enclosed and capable of being secured or locked. Components of the gazebo may be open where they comply with the provisions of Section 3109.4.1. Openings such as windows or doors that create openings that would not comply with Section 3109.4.1 are permitted if they can be secured or locked to prohibit entry. A lock is not required if a

latch is provided which is a minimum of 54 inches high or, in the case of windows, if the latch is on the interior only.

The first sentence of Section 3109.4.1 of the California Building Code is hereby amended to read as follows:

The top of the barrier shall be not less than 60 inches above grade measured on the side of the barrier that faces away from the swimming pool, spa or hot tub.

**Sec. 8.02.200. Withholding approval.**

Plaster inspection or approval to fill a pool or spa with water shall be withheld by the Building Official until there has been compliance with all fencing and other requirements of this Section.

**Sec. 8.02.210. Fees.**

Fees for in-ground and above-ground pools and spas are as established by resolution of the City Council for swimming pools.

**Sec. 8.02.220. Chapter 35 amended.**

**Chapter 35 Referenced standards** of the California Building Code is hereby adopted and 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 amended as follows:

*6.8.3 Fire department connections (FDC) shall be of an approved type. The FDC shall contain a minimum of two 2 ½" 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 ½" inlets shall be provided.*

**Section 8.3.3.1** is hereby amended 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 unit.*

**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 amended 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 amended 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 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 unit.*

*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 amended 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:

A. 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 amended as follows:

*10.3.5.2 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:

*10.3.5.3 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. 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 amended 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.*

**Sec. 8.02.230. Adoption of the California Residential Code.**

Except as provided in this chapter, the California Residential Code, 2013 Edition, including Appendices G, H and O based on the 2012 International Residential Code as published by the International Code Council, shall become the Residential Code for the City of Mission Viejo. The California Residential Code is on file for public examination in the office of the Building Official.

**Sec. 8.02.240. Section 202 Definitions amended.**

Section 202 Definitions of the California Residential Code is hereby amended by adding "Hazardous Fire Area" as follows:

**HAZARDOUS FIRE AREA.** *Includes all areas identified within California Fire Code 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.*

**Sec. 8.02.250. Table R301.2(1) amended.**

Table R301.2(1) of the California Residential Code is revised by filling the table values as follows:

TABLE R301.2(1)  
CLIMATIC AND GEOGRAPHIC DESIGN CRITERIA

GROUND SNOW LOAD	WIND DESIGN		SEISMIC DESIGN CATEGORY	SUBJECT TO DAMAGE FROM			WINTER DESIGN TEMP °	ICE BARRIER UNDERLAYMENT REQUIRED "	FLOOD HAZARDS °	AIR FREEZING INDEX <sup>1</sup>	MEAN ANNUAL TEMP <sup>1</sup>
	Speed <sup>a</sup> (mph)	Topographic effects <sup>k</sup>		Weathering <sup>a</sup>	Frost line Depth <sup>b</sup>	Termite					
Zero	35	No	D <sub>2</sub> or E	Negligible	12-24"	Very Heavy	43	No	See Exhibit B	0	60

For SI: 1 pound per square foot = 0.0479 kPa, 1 mile per hour = 0.447 m/s.

- a. Weathering may require a higher strength concrete or grade of masonry than necessary to satisfy the structural requirements of this code. The weathering column shall be filled in with the weathering index (i.e., "negligible," "moderate" or "severe") for concrete as determined from the Weathering Probability Map [Figure R301.2(3)]. The grade of masonry units shall be determined from ASTM C 34, C 55, C 62, C 73, C 90, C 129, C 145, C 216 or C 652.
- b. The frost line depth may require deeper footings than indicated in Figure R403.1(1). The jurisdiction shall fill in the frost line depth column with the minimum depth of footing below finish grade.

- c. The jurisdiction shall fill in this part of the table to indicate the need for protection depending on whether there has been a history of local subterranean termite damage.
- d. The jurisdiction shall fill in this part of the table with the wind speed from the basic wind speed map [Figure R301.2( 4)]. Wind exposure category shall be determined on a site-specific basis in accordance with Section R301.2.1.4.
- e. Temperatures shall be permitted to reflect local climates or local weather experience as determined by the building official.
- f. The jurisdiction shall fill in this part of the table with the seismic design category determined from Section R301.2.2.1.
- g. The jurisdiction shall fill in this part of the table with (a) the date of the jurisdiction's entry into the National Flood Insurance Program (date of adoption of the first code or ordinance for management of flood hazard areas), (b) the date(s) of the Flood Insurance Study and (c) the panel numbers and dates of all currently effective FIRMs and FBFMs or other flood hazard map adopted by the authority having jurisdiction, as amended.
- h. In accordance with Sections R905.2.7.1, R905.4.3.1, R905.5.3.1, R905.6.3.1, R905.7.3.1 and R905.8.3.1, where there has been a history of local damage from the effects of ice damming, the jurisdiction shall fill in this part of the table with "YES." Otherwise, the jurisdiction shall fill in this part of the table with "NO."
- i. The jurisdiction shall fill in this part of the table with the 100-year return period air freezing index (BF-days) from Figure R403.3(2) or from the 100-year (99%) value on the National Climatic Data Center data table "Air Freezing Index- USA Method (Base 32°)" at [www.ncdc.noaa.gov/fpsf.html](http://www.ncdc.noaa.gov/fpsf.html).
- j. The jurisdiction shall fill in this part of the table with the mean annual temperature from the National Climatic Data Center data table "Air Freezing Index-USA Method (Base 32°F)" at [www.ncdc.noaa.gov/fpsf.html](http://www.ncdc.noaa.gov/fpsf.html).
- k. In accordance with Section R301.2.1.5, where there is local historical data documenting structural damage to buildings due to topographic wind speed-up effects, the jurisdiction shall fill in this part of the table with "YES." Otherwise, the jurisdiction shall indicate "NO" in this part of the table.

**Sec. 8.02.260. Sections R301.9 and R301.10 added.**

**Section R301.9 Development on or Near Land Containing or Emitting Toxic, Combustible or Flammable Liquids, Gases or Vapors** is hereby added to the California Residential Code as follows:

*R301.9 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 R301.10 Fuel Modification Requirements for New Construction** is hereby added to the California Residential Code as follows:

***R301.10 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.*

**Sec. 8.02.270. Section R313.3.6.2.2 Calculation procedure amended.**

**Section R313.3.6.2.2 Calculation procedure** of the California Residential Code is hereby amended as follows:

**Section R313.3.6.2.2 Calculation procedure.** Determination of the required size for water distribution piping shall be in accordance with the following procedure *and California Fire Code Section 903.3.5.3.*

**Sec. 8.02.280. Section R319.1 Address numbers amended.**

**Section R319.1 Address numbers of the California Residential Code** is hereby amended as follows:

**R319.1 Address numbers.** *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). 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.*

**Sec. 8.02.290. Section R327.1.6 Fuel modification requirements for new construction added.**

**Section R327.1.6 Fuel modification requirements for new construction** is hereby added as follows:

**R327.1.6 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.*

**Sec. 8.02.300. Sections R403.1.3, R405.1 amended.**

**Section R403.1.3 Seismic reinforcing** of the California Residential Code is amended by deleting the exception for plain concrete footings.

**Section R405.1 Concrete or masonry foundations** of the California Residential Code is amended by deleting the exception.

**Sec. 8.02.310. Section R902.1 amended.**

**Section R902.1 Roofing covering materials** of the California Residential Code is amended as follows:

**R902.1 Roofing covering materials.** Roofs shall be covered with materials as set forth in Sections R904 and R905. A minimum Class A roofing shall be installed in areas designated by this section. Classes A roofing required by this section to be listed shall be tested in accordance with UL 790 or ASTM E 108.

**Exceptions:**

1. Class A roof assemblies include those with coverings of brick, masonry and exposed concrete roof deck.
2. Class A roof assemblies also include ferrous or copper shingles or sheets, metal sheets and shingles, clay or concrete roof tile, or slate installed on noncombustible decks.
3. Class A roof assemblies include minimum 16 oz/ft<sup>2</sup> copper sheets installed over combustible decks.

**Sec. 8.02.320. Section R902.1.3 amended.**

**Section R902.1.3 Roof coverings in all other areas** of the California Residential Code is amended as follows:

**R902.1.3 Roof coverings within all other areas.** The entire roof covering of every existing structure where more than 50 percent of the total roof area is replaced within any one-year period, the entire roof covering of every new structure, and any roof covering applied in the alteration, repair or replacement of the roof of every existing structure, shall be a fire-retardant roof covering that is at least Class A.

**Sec. 8.02.330. Section R902.2 Fire-retardant-treated shingles and shakes amended.**

Section R902.2 Fire-retardant-treated shingles and shakes of the California Residential Code is amended as follows:

**R902.2 Fire-retardant-treated shingles and shakes.** Fire-retardant-treated wood shakes and shingles are wood shakes and shingles complying with UBC Standard 15-3 or 15-4 which are impregnated by the full-cell vacuum-pressure process with fire-retardant chemicals, and which have been qualified by UBC Standard 15-2 for use on Class A roofs.

**Sec. 8.02.340. Section R1001.13 Chimney spark arresters amended.**

Section R1001.13 Chimney spark arresters of the California Residential Code is hereby added as follows:

*R1001.13 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.*

**Sec. 8.02.350. Chapter 44 Referenced Standards amended.**

Chapter 44 Referenced Standards of the California Residential Code is amended as follows:

**NFPA 13, 2010 Edition, Installation of Sprinkler Systems** is hereby amended as follows:

**Section 6.8.3** is hereby amended as follows:

*6.8.3 Fire department connections (FDC) shall be of an approved type. The FDC shall contain a minimum of two 2 ½" 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 ½" inlets shall be provided.*

**Section 8.3.3.1** is hereby amended 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. Sound levels in all sleeping areas shall be minimum of 15 DBA above the average ambient sound or a minimum of 75 DBA with all intervening doors closed, whichever is greater. Alarms shall be audible within all other living areas within each dwelling unit. 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 amended 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 amended 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 Section 907.2.8 of the 2010 California Fire Code as requiring a fire alarm system shall be provided with a minimum of one approved interior alarm device in each unit. Sound levels in all sleeping areas shall be a minimum of 15 dBA above the average ambient sound or a minimum of 75 dBA with all intervening doors closed, whichever is greater. Alarms shall be audible within all other living areas within each dwelling unit. 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 4.1.5.2** 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 amended 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. 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.*

**Sec. 8.02.360. Appendix O Automatic Vehicular Gates amended.**

The following section AO103.3 of Appendix O of the California Residential Code is hereby added all other sections are not adopted.

*AO103.3 Vehicular gates or other barriers across required fire apparatus access roads. The installation of gates or other barriers across a required fire apparatus access road shall be approved by the fire code official. Gates or barriers shall be in accordance with Orange County Fire Authority Guideline "Fire Master Plan for Commercial and Residential Development".*

**Sec. 8.02.370. Adoption of the California Electrical Code.**

Except as provided in this chapter, the California Electrical Code, 2013 Edition, including Annexes A, B, C, and I, based on the 2011 National Electrical Code as published by the National Fire Protection Association, shall be and become the Electrical Code of the City of Mission Viejo. The California Electrical Code is on file for public examination in the office of the Building Official.

**Sec. 8.02.380. Adoption of the California Mechanical Code.**

The California Mechanical Code, 2013 Edition, including Appendices B, D, and F, based on the 2012 Uniform Mechanical Code as published by the IAMPO, shall be and become the Mechanical Code of the City. The California Mechanical Code is on file for public examination in the office of the Building Official.

**Sec. 8.02.390. Adoption of the California Plumbing Code.**

The California Plumbing Code, 2013 Edition, including Appendices A, B, C, D, and G, based on the 2012 Uniform Plumbing Code as published by the IAMPO, shall be and become the Plumbing Code of the City. The California Mechanical Code is on file for public examination in the office of the Building Official.

**Sec. 8.02.400. Adoption of International Swimming Pool and Spa Code.**

The International Swimming Pool and Spa Code, 2012 Edition, published by the International Code Council, shall be and become the Swimming Pool and Spa Code of the City of Mission Viejo. The International Swimming Pool and Spa Code is on file for public examination in the office of the Building Official.

**Sec. 8.02.410. Adoption of the California Green Building Standards Code.**

The California Green Building Standards Code, 2013 Edition, published by the international Code Council, shall be and become the Green Building Standards Code of the City of Mission Viejo. The California Green Building Standards Code is on file for public examination in the office of the Building Official.

**Sec. 8.02.420. Adoption of the International Property Maintenance Code.**

The International Property Maintenance Code, 2012 Edition, as published by the International Code Council, shall be and become the Property Maintenance Code of the City. The International Property Maintenance Code is on file for public examination in the office of the Building Official.

**Sec. 8.02.430. Adoption of the California Historical Building Code.**

The California Historical Building Code, 2013 Edition, as published by the International Code Council; shall be and become the Historical Building Code of the City. The California Historical Building Code is on file for public examination in the office of the Building Official.

**Sec. 8.02.440. Adoption of the California Existing Building Code.**

Except as amended in this Chapter, the 2013 California Existing Building Code, based on the 2012 International Existing Building Code as published by the International Code Council, shall become the Existing Building Code of the City for regulating existing buildings in the City. The California Existing Building Code is on file for public examination in the office of the Building Official.

**Section 3.** Effective Date

This ordinance shall take effect 30 days from the adoption of this ordinance for all codes referenced herein, but no sooner than January 1, 2014. Projects for which a building permit application and building plans have been submitted prior to the effective date of this ordinance, which building permits have been obtained within 180 days from the effective date of this ordinance, shall be exempt from the provisions of this ordinance. Projects for which a building permit application and building plans have been submitted prior to the effective date of this ordinance, and building permits therefor have not been obtained within 180 days from the effective date of this ordinance, shall be subject to all provisions of this ordinance and the codes adopted in this ordinance.

**Section 4.** Severability

If any subsection, subdivision, sentence, clause, phrase, or portion of this section, ordinance or any code adopted herein, is for any reason held to be invalid or unconstitutional by the decision of any court or competent jurisdiction, such decision shall not affect the validity of the remaining portions of the ordinance or any such code. The City Council hereby declares that it would have adopted this Ordinance, and each subsection, subdivision, sentence, clause, phrases, or portion thereof, irrespective of the fact that any one or more subsections, subdivisions, sentences, clauses, phrases, or portions thereof, be declared invalid or unconstitutional.

PASSED, APPROVED and ADOPTED this 2nd day of December, 2013.

  
Rhonda Reardon, Mayor

ATTEST:

  
Karen Hamman, City Clerk

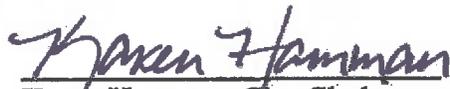
STATE OF CALIFORNIA )  
COUNTY OF ORANGE ) ss.  
CITY OF MISSION VIEJO )

I, Karen Hamman, City Clerk of the City of Mission Viejo, do hereby certify that the foregoing Ordinance No. 300 was duly introduced and placed upon its first reading at a regular meeting of the City Council on the 4<sup>th</sup> day of November, 2013, and that thereafter, said Ordinance was duly adopted and passed at a regular meeting of the City Council on the 2nd day of December, 2013 by the following vote, to wit:

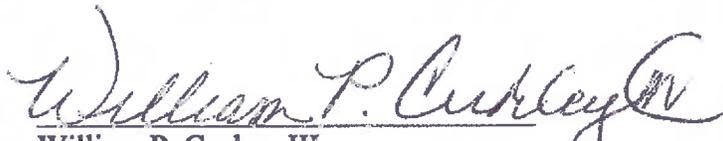
AYES: Kelley, Leckness, Reardon, Schlicht, and Ury

NOES: None

ABSENT: None

  
\_\_\_\_\_  
Karen Hamman, City Clerk

APPROVED AS TO FORM:

  
\_\_\_\_\_  
William P. Curley, III  
City Attorney

## ORDINANCE 13-301

### AN ORDINANCE OF THE CITY COUNCIL OF THE CITY OF MISSION VIEJO ADOPTING BY REFERENCE THE 2013 CALIFORNIA FIRE CODE, TOGETHER WITH CERTAIN AMENDMENTS AND DELETIONS

#### THE CITY COUNCIL OF THE CITY OF MISSION VIEJO DOES HEREBY ORDAIN AS FOLLOWS:

**Section 1.** Chapter 8.04 “Fire Code” of Title 8 “Buildings and Construction” of the Mission Viejo Municipal Code is hereby repealed; provided, however, that such repeal shall not affect or excuse any violation of any of said Chapter occurring prior to the effective date of this ordinance.

**Section 2.** A new Chapter 8.04 is hereby added to Title 8 of the Mission Viejo Municipal Code to read as follows:

#### CHAPTER 8.04. FIRE CODE

##### Sec. 8.04.010. Adoption of the California Fire Code.

The 2013 California Fire Code, incorporating the International Fire Code 2012 Edition, published by the International Code Council, including Appendices B, BB, C and CC, and the Referenced Standards, is hereby adopted by reference by the City of Mission Viejo for the purpose of prescribing regulations governing conditions hazardous to the life and property from fire or explosion, save and except such portions as are hereinafter added, deleted, modified or amended.

##### Sec. 8.04.020. Enforcement and inspections.

Except as otherwise provided by the City Council, the California Fire Code, as amended, shall be enforced by the Orange County Fire Authority, which shall be operated under the Director of Fire Services of the Orange County Fire Authority. The Director of Fire Services of the Fire Authority may detail such members of the fire authority as inspectors as shall be necessary from time to time.

##### Sec. 8.04.030. Section 109.4 Violation penalties amended.

**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 or infraction, as prescribed in Section 109.4.2 and 109.4.3.

Penalties shall be as prescribed in Chapter 1.01.200 of the Mission Viejo Municipal

Code. Alternatively, an administrative penalty may be imposed by issuance of an administrative citation pursuant to Chapters 1.02 and/or 1.03 of the Mission Viejo Municipal Code. Each day that a violation continues after due notice has been served shall be deemed a separate offense.

**Sec. 8.04.040. Section 109.4.2 Infraction added.**

**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.*

**Sec. 8.04.050. Section 109.4.3 Misdemeanor added.**

**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*

**Sec. 8.04.060. Chapter 2 DEFINITIONS amended.**

**Section 202 GENERAL DEFINITIONS** is hereby revised by adding "Approach-Departure Path," "Emergency Helicopter Landing Facility (EHLF)," "Flow-line," "Hazardous Fire Area," "Safety Area," "Sky Lantern," and "Takeoff and Landing Area", and revising "High-Rise Building", as follows:

**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.*

**Sec. 8.04.070. Section 304.1.2 Vegetation amended.**

**Section 304.1.2 Vegetation** is hereby revised as follows:

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.

**Sec. 8.04.080. Section 305.5 Chimney spark arrestors added. Section 305.5 Chimney spark arrestors** 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.*

**Sec. 8.04.090. Section 305.6 Outdoor fires added.**

**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.*

*Exception: 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 barbecue 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.*

**Sec. 8.04.100. Section 305.6.2 Hazardous conditions added.**

**Section 305.6.2 Hazardous conditions** is hereby added as follows:

**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.*

**Sec. 8.04.110. Section 305.6.3 Disposal of rubbish added.**

**Section 305.6.2 Disposal of rubbish** is hereby added as follows:

**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.*

**Sec. 8.04.120. Section 307 OPEN BURNING, RECREATIONAL FIRES AND PORTABLE OUTDOOR FIREPLACES amended.**

**SECTION 307 OPEN BURNING, RECREATIONAL FIRES AND PORTABLE OUTDOOR FIREPLACES** is hereby amended as follows:

**Section 307.6 Outdoor fireplaces, fire pits, fire rings, or similar devices used at Group R Occupancies added.**

**307.6 Outdoor fireplaces, fire pits, fire rings, or similar devices used at Group R Occupancies** is hereby added as follows:

**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.*

**Sec. 8.04.130. SECTION 319 DEVELOPMENT ON OR NEAR LAND CONTAINING OR EMITTING TOXIC, COMBUSTIBLE OR FLAMMABLE LIQUIDS, GASES OR VAPORS added.**

**SECTION 319 DEVELOPMENT ON OR NEAR LAND CONTAINING OR EMITTING TOXIC, COMBUSTIBLE OR FLAMMABLE LIQUIDS, GASES OR VAPORS** is hereby added as follows:

***SECTION 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.*

**Sec. 8.04.140. SECTION 320 FUEL MODIFICATION REQUIREMENTS FOR NEW CONSTRUCTION added.**

**SECTION 320 FUEL MODIFICATION REQUIREMENTS FOR NEW CONSTRUCTION** is hereby added as follows:

***SECTION 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.*

**Sec. 8.04.150. SECTION 321 CLEARANCE OF BRUSH OR VEGETATION GROWTH FROM ROADWAYS added.**

**SECTION 321 CLEARANCE OF BRUSH OR VEGETATION GROWTH FROM ROADWAYS** is hereby added as follows:

***SECTION 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.*

**Sec. 8.04.160. SECTION 322 UNUSUAL CIRCUMSTANCES added.**

**SECTION 322 UNUSUAL CIRCUMSTANCES** is hereby added as follows:

***SECTION 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.*

**Sec. 8.04.170. SECTION 323 USE OF EQUIPMENT added.**

**SECTION 323 USE OF EQUIPMENT** is hereby added as follows:

***SECTION 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.*

**Exception:**

- 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*

**Sec. 8.04.180. Section 323.1 Spark Arrestors added.**

**Section 323.1 Spark Arrestors** 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.*

*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.*

**Sec. 8.04.190. SECTION 324 RESTRICTED ENTRY added.**

**SECTION 324 RESTRICTED ENTRY** is hereby added as follows:

**SECTION 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.*

**Sec. 8.04.200. SECTION 325 TRESPASSING ON POSTED PROPERTY added.**

**SECTION 325 TRESPASSING ON POSTED PROPERTY** is hereby added as follows:

**SECTION 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.*

**Sec. 8.04.210. SECTION 326 SKY LANTERNS OR SIMILAR DEVICES added.**

**SECTION 326 SKY LANTERNS OR SIMILAR DEVICES** is hereby added as follows:

**SECTION 326 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.*

**Sec. 8.04.220. Chapter 4 EMERGENCY PLANNING AND PREPAREDNESS amended.**

**Chapter 4 EMERGENCY PLANNING AND PREPAREDNESS** is revised by adopting only the sections listed below:

401  
401.3.4  
401.9  
402  
403  
404.6 – 404.7.6  
407  
408.3.1 – 408.3.2

**Sec. 8.04.230. Section 503.2.1 Dimensions amended.**

**SECTION 503.2.1 Dimensions** is hereby 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.*

**Sec. 8.04.240. Section 503.2.1.1 Hazardous areas added.**

**SECTION 503.2.1.1 Hazardous areas** is hereby 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.*

**Sec. 8.04.250. Section 505.1 Address identification amended.**

**Section 505.1 Address identification** is hereby 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.

**Sec. 8.04.260. Section 510.1 Emergency responder radio coverage in new buildings amended.**

**Section 510.1 Emergency responder radio coverage in new buildings** 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.*

**Sec. 8.04.270. Sections 510.2; 510.3; 510.4; 510.5; 510.6 are hereby deleted.**

**Sec. 8.04.280. Chapter 6 BUILDING SERVICES AND SYSTEMS amended.**

**Chapter 6 BUILDING SERVICE 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*

**Sec. 8.04.290. Chapter 9 FIRE PROTECTION SYSTEMS amended.**

**Chapter 9 FIRE PROTECTION SYSTEMS** is hereby revised 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<sup>2</sup>) as defined in Section 202, regardless of fire areas or allowable area, or is more than two stories in height.*

**Exception:** Group R-3 occupancies. Group R-3 occupancies shall comply with Section R313 of the California Residential Code.

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<sup>2</sup>) as defined in Section 202; or*
  - b. *When an addition exceeds 2000 square feet (186 m<sup>2</sup>) and the resulting building area exceeds 5000 square feet (465 m<sup>2</sup>) 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. Group R-3 occupancies shall comply with Section R313 of the California Residential Code.

**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 1000 square feet (93 m<sup>2</sup>) 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.*

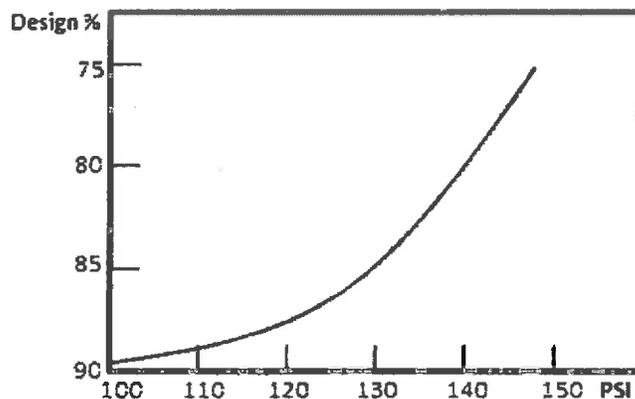
**Exception:** Group R-3 occupancies. Group R-3 occupancies shall comply with Section R313 of the California Residential Code.

**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 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 revised 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 revised 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 ~~75~~ 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 hereby 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."*

**Sec. 8.04.300. Chapter 11 Construction Requirements for Existing Buildings amended.**

**Chapter 11 CONSTRUCTION REQUIREMENTS FOR EXISTING BUILDINGS** is revised by adopting the sections listed below only:

**1103.7**

**1103.7.3**

**1103.7.3.1**

**1103.7.8 – 1103.7.8.2**

**1103.7.9 – 1103.7.9.10**

**1103.8 – 1103.8.5.3**

**1106**

**Sec. 8.04.310. SECTION 2008 EMERGENCY HELICOPTER LANDING FACILITY (EHLF) added.**

**SECTION 2008 EMERGENCY HELICOPTER LANDING FACILITY (EHLF)** is 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.*

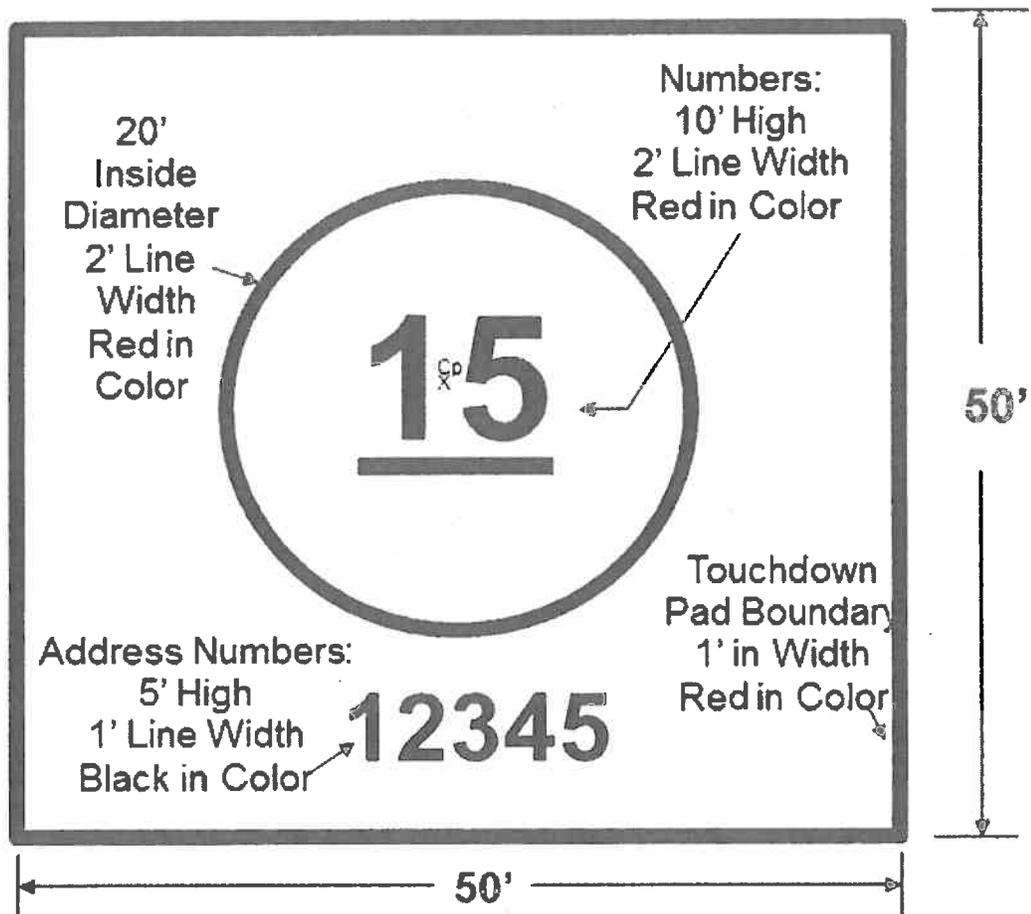
**2008.1.8 EHLF Exits.** *Two stairway exits shall be provided from the landing platform area to the roof surface. For landing areas less than 2,501 square feet in area, the second exit may be a fire escape or ladder leading to the roof surface below. The stairway from the landing facility platform to 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 center number indicates the allowable weight that the facility is capable of supporting in thousands of pounds.
3. The numbers shall be orientated towards the preferred flight (typically facing the prevailing wind)

**Sec. 8.04.320. Chapter 28 LUMBER YARDS AND WOODWORKING FACILITIES amended.**

**Chapter 28 LUMBER YARDS AND WOODWORKING FACILITIES** is hereby revised as follows:

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

**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 wood-products to the site.

**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.*

**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 40% to 60% moisture content and wet down burning/smoldering areas.*

**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.

**Sec. 8.04.330. Section 2808.11 Temperature control added.**

**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.*

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

*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.*

**Sec. 8.04.340. Chapter 49 REQUIREMENTS FOR WILDLAND-URBAN INTERFACE FIRE AREAS amended.**

**Chapter 49 REQUIREMENTS FOR WILDLAND-URBAN INTERFACE FIRE AREAS** is hereby revised as follows:

**Section 4906.3 Vegetation** is hereby revised by adding Section “(5)” as follows:

(5) OCFA Vegetation Management Guidelines.

**SECTION 4908 FUEL MODIFICATION REQUIREMENTS FOR NEW CONSTRUCTION** is hereby added as follows:

**SECTION 4903 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.*

**Sec. 8.04.350. Chapter 50 HAZARDOUS MATERIALS – GENERAL PROVISIONS amended.**

**Section 5001.5.2 Hazardous Materials Inventory Statement (HMIS)** is hereby revised 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.

**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 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.

**Sec. 8.04.360. Section 5503.4.1 Identification signs amended.**

**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.

**Sec. 8.04.370. Chapter 56 EXPLOSIVES AND FIREWORKS amended.**

**Chapter 56 Explosives and Fireworks** is hereby revised 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.*

**Sec. 8.04.360. Section 5704.2.3.2 Label or placard amended.**

**Section 5704.2.3.2 Label or placard** is hereby revised by 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.*

**Sec. 8.04.370. Section 6004.2.2.7 Treatment system amended.**

**Section 6004.2.2.7 Treatment system** is hereby revised as follows:

**Exceptions:**

*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 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.

**Sec. 8.04.380. Chapter 80 Referenced Standards amended.**

**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 ½" 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 ½" inlets shall be provided.*

**Section 6.3.3.1** 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 unit.*

**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 revised 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 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 unit.*

*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 revised as follows:

**Section 4.1.3 Stock of Spare Sprinklers and the following subsections** are hereby added as follows:

***4.1.3 Stock of Spare Sprinklers***

*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.*

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

*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).*

*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 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 revised as follows:

**Section 7.3.1.1** is hereby is deleted 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 revised 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:

**10.3.5.2** 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:

**10.3.5.3** *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.*

**Section 3.** Effective Date. This ordinance shall become operative at 12:01 a.m. January 1, 2014. Projects for which a building permit application and building plans have been submitted prior to the effective date of this ordinance, which building permits have been obtained within 180 days from the effective date of this ordinance, shall be exempt from the provisions of this ordinance. Projects for which a building permit application and building plans have been submitted prior to the effective date of this ordinance, and building permits have not been obtained within 180 days from the effective date of this ordinance, shall be subject to all provisions of this ordinance and the codes referenced in this ordinance.

**Section 4.** Severability. If any subsection, subdivision, sentence, clause, phrase, or portion of this section, is for any reason held to be invalid or unconstitutional by the decision of any court or competent jurisdiction, such decision shall not affect the validity of the remaining portions of this section. The City Council hereby declares that it would have adopted this section, and each subsection, subdivision, sentence, clause, phrases, or portion thereof, irrespective of the fact that any one or more subsections, subdivisions, sentences, clauses, phrases, or portions thereof, be declared invalid or unconstitutional.

**Section 5.** City Clerk's Certification. The City Clerk shall certify to the adoption of this Ordinance and cause the same to be posted at the duly designated posting places within the City and published once within fifteen (15) days after passage and adoption as required by law; or, in the alternative, the City Clerk may cause to be published and posted a summary of this Ordinance in the Office of the City Clerk, five (5) days prior to and within fifteen (15) days after

the date of adoption of this Ordinance, and shall post a certified copy of this Ordinance, together with the vote for and against the same, in the Office of the City Clerk.

PASSED, APPROVED and ADOPTED this 2nd day of December, 2013.

  
Rhonda Reardon, Mayor

ATTEST:

  
Karen Hamman, City Clerk

STATE OF CALIFORNIA )  
COUNTY OF ORANGE ) ss.  
CITY OF MISSION VIEJO )

I, Karen Hamman, City Clerk of the City of Mission Viejo, do hereby certify that the foregoing Ordinance No. 301 was duly introduced and placed upon its first reading at a regular meeting of the City Council on the 4th day of November, 2013, and that thereafter, said Ordinance was duly adopted and passed at a regular meeting of the City Council on the 2nd day of December, 2013 by the following vote, to wit:

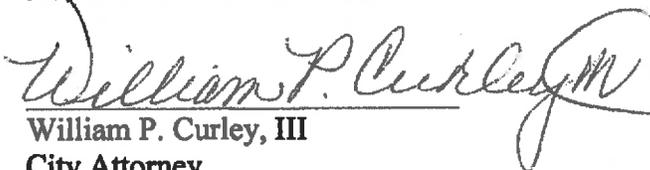
AYES: Kelley, Leckness, Reardon, Schlicht, and Ury

NOES: None

ABSENT: None

  
Karen Hamman, City Clerk

APPROVED AS TO FORM:

  
William P. Curley, III  
City Attorney

RESOLUTION 13-65

A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF MISSION VIEJO CALIFORNIA, SETTING FORTH FINDINGS FOR REQUIRED AMENDMENTS TO THE 2013 CALIFORNIA BUILDING AND RESIDENTIAL CODES RELATIVE TO LOCAL CLIMATIC, TOPOGRAPHIC AND GEOLOGIC CONDITIONS

Section 1

The City Council of the City of Mission Viejo finds and resolves as follow:

WHEREAS, Health and Safety Code Section 17958 provides that the City of Mission Viejo ("City") shall adopt ordinances and regulations imposing the same or modified or changed requirements as are contained in the regulations adopted by the State pursuant to Health and Safety Code Section 17922; and

WHEREAS, the State of California is mandated by Health and Safety Code Section 17922 to impose the same requirements as are contained in the most recent edition of the California Building Code, the California Residential Code, the California Electrical Code, the California Mechanical Code, the California Plumbing Code, and, and the California Green Building Standards Code (hereinafter referred to collectively as "Codes"); and

WHEREAS, Health and Safety Code Section 17958.5(a) permits the City to make modifications or changes to the Code, which are reasonably necessary because of local climatic, geologic, or topographic conditions; and

WHEREAS, Health and Safety Code Section 17958.7 requires that the City Council, before making any modifications or changes to the Codes, shall make an express finding that such changes or modifications are reasonably necessary because of local climatic, geologic, or topographic conditions; and

WHEREAS, the Community Development Department in consultation with the Orange County Fire Authority has recommended that changes and modifications be made to the Codes and have advised that certain said changes and modifications to the California Codes are reasonably necessary due to local conditions in the City of Mission Viejo and have further advised that the remainder of said changes and modifications are of an administrative or procedural nature, or concern themselves with subjects not covered by the Codes or are reasonably necessary to safeguard life and property within the City of Mission Viejo.

Amendments related to life and fire safety contained in Sections 403, 403.1, 412.7, 903.2, 903.2.8, 903.3, 903.4, 905.4, 907.2.13, 907.3.1 907.5.2.2, 907.6.3.2, 907.6.5, Table 1505.1, and 1505.1.3 of the 2013 Edition of the California Building Code, and Sections R301.9, R301.10, R313.3.6.2.2, R319.1, R327.1.6, R403.1.3, R405.1, R902.1, R902.1.3, R902.2, and R1001.13 of the 2013 Edition of the California Residential Code as recommended by the Community Development in consultation with the Orange County Fire Authority are hereby found to be reasonably necessary due to the following local conditions:

**I. Climatic Conditions**

- A. Orange County and the City of Mission Viejo are located in a semi-arid Mediterranean type climate. It annually experiences extended periods of high temperatures with little or no precipitation. Hot, dry (Santa Ana) winds, which may reach speeds of 70 M.P.H. or greater, are also common to the area. These climatic conditions cause extreme drying of vegetation and common building materials. Frequent periods of drought and low humidity add to the fire danger. This predisposes the area to large destructive fires (conflagration). In addition to directly damaging or destroying buildings, these fires are also prone to disrupt utility services throughout the County. Obstacles generated by a strong wind, such as fallen trees, street lights and utility poles will greatly impact the response time to reach an incident scene. Additionally, there is a significant increase in the amount of wind force at 60 feet above the ground. Use of aerial type fire fighting apparatus above this height would place rescue personnel at increased risk of injury.
- B. The climate alternates between extended periods of drought and brief flooding conditions. Flood conditions may affect the Orange County Fire Authority's ability to respond to a fire or emergency condition. Floods also disrupt utility services to buildings and facilities within the County.
- C. Water demand in this densely populated area far exceeds the quantity supplied by natural precipitation; and although the population continues to grow, the already-taxed water supply does not. California is projected to increase in population by nearly 10 million over the next quarter of a century with 50 percent of that growth centered in Southern California. Due to storage capacities and consumption, and a limited amount of rainfall future water allocation is not fully dependable. This necessitates the need for additional and on-site fire protection features. It would also leave tall buildings vulnerable to uncontrolled fires due to a lack of available water and an inability to pump sufficient quantities of available water to floors in a fire.
- D. These dry climatic conditions and winds contribute to the rapid spread of even small fires originating in high-density housing or vegetation. These fires spread very quickly and create a need for increased levels of fire protection. The added protection of fire sprinkler systems and other fire protection features will supplement normal fire department response by providing immediate protection for the building occupants and by containing and controlling the fire spread to the area of origin. Fire sprinkler systems will also reduce the use of water for firefighting by as much as 50 to 75 percent.
- E. Untreated wood roofs cause or contribute to serious fire hazard and to the rapid spread of fires when such fires are accompanied by high winds. Pieces of burning wooden roofs become flying brands and are carried by the wind to other locations and thereby spread fire quickly. Recent Grand Jury Report findings support this concern.

## **II. Topographical conditions**

- A. Natural; slopes of 15 percent or greater generally occur throughout the foothills of Orange County. The elevation change cause by the hills creates the geological foundation on which communities with Orange County is built and will continue to build. With much of the populated flatlands already built upon, future growth will occur in areas with steeper slopes and greater constraints in terrain.
- B. Road circulation features located throughout the County also make amendments reasonably necessary. Located through the County are major roadways, highways and flood control channels that create barriers and slow response times. Hills, slopes, street and storm drain design accompanies with occasional heavy rainfall, causes roadway flooding and landslides and at times may make an emergency access route impassable. There are areas in Orange County that naturally have extended Fire Department emergency response times that exceed the 5 minute goal.
- C. Placement of multiple occupancy buildings, location of arterial roads, and fire department staffing constraints due to recent revenue-limiting state legislation have made it difficult for the fire department to locate additional fire stations and provide manpower sufficient to concentrate fire companies and personnel to control fires in high density apartment or condominium buildings. Fire Department equipment does not allow easy access to areas of buildings greater than 55 feet above the level of Fire Department vehicle access. These conditions create the need for built-in on-site fire protection systems to protect occupants and property until fire fighting apparatus and personnel arrive on the scene

These topographical conditions combine to create a situation, which places fire department response time to fire occurrences at risk, and makes it necessary to provide automatic on-site fire-extinguishing systems and other protection measures to protect occupants and property.

## **III. Geological Conditions**

Orange County and the City of Mission Viejo are located in a highly active seismic area. There are earthquake faults that run along both the northeastern and southwestern boundaries of Orange County. The Newport-Inglewood Fault Zone (NIFZ) which runs through Orange County was the source of the destructive 1933 Long Beach earthquake (6.3 magnitude, hypocenter off Newport Beach coast), which took 120 lives, with areas damaged from Laguna Beach to Marina del Rey and inland to Whittier, and poses one of the greatest hazards to lives and property in the nation. Regional planning for reoccurrence is recommended by the State of California, Department of Conservation. There was also an earthquake in December 1989, with the epicenter located near the City of Irvine. The fault on which this quake occurred was unknown prior to this activity. The October 17, 1989, Santa Cruz earthquake resulted in only one major San Francisco fire in the Marina district, but when combined with the 34 other fires and over 500 responses, the department was taxed to its full capabilities. The Marina fire was difficult to contain

because mains supplying water to the district burst during the earthquake. If more fires had been ignited by the earthquake, it would have been difficult for the fire department to contain them. Experts predict a major earthquake in our area within the next 50 years. This situation creates the need for both additional fire protection measures and automatic on-site fire protection for building occupants since a multitude of fires may result from breakage of gas and electric lines as a result of an earthquake. As noted by "Planning Scenario on a Major Earthquake on the Newport-Inglewood Fault Zone, 1988, State Department of Conservation," page 59, "unfortunately, barely meeting the minimum earthquake standards of building codes places a building on the verge of being legally unsafe";

- A. Traffic and circulation congestion presently existing in the City of Mission Viejo often places fire department response time to fire occurrences at risk. This condition will be exacerbated by any major disaster, including any earthquake wherein damage to the highway system will occur. This condition makes the need for additional on-site protection for property occupants necessary.
- B. The City of Mission Viejo is located in the middle of the seismically active area. The viability of the public water system would be questionable at best after a major seismic event. This would leave tall buildings vulnerable to uncontrolled fires due to a lack of available water and an inability to pump sufficient quantities of any available water to floors above the 55-foot level. A severe seismic event has the potential to negatively impact any rescue or fire suppression activities because it is likely to create obstacles similar to those indicated under the high wind section above. With the probability of strong aftershocks there exists a need to provide increased protection for anyone on upper floors.
- C. Soils throughout the County possess corrosive properties that reduce the expected usable life of water services when metallic pipes in contact with soils are utilized.
- D. Portions of the County contain active or former oil production fields. These areas contain a variety of naturally occurring gasses, liquids and vapors. These compounds present toxicity or flammability hazards to building occupants. Evaluation of these hazards and the risks they pose to development is necessary implement appropriate mitigation.

Additional amendments have been made to Codes. On the recommendation of the Community Development Department in consultation with the Orange County Fire Authority, such amendments are hereby found to be either administrative or procedural in nature or concern themselves with subjects not covered in such Codes. The changes made include provisions making each of said Codes compatible with other Codes enforced by the City.

## Section 2

Amendments to the 2013 Edition of the California Codes are found reasonably necessary based on the climatic, topographical, and/or geological conditions cited in Section 1 of this resolution and are listed as follows:

Code Section

Findings in Section 1

CBC 403, 403.1, 403.4.7.2, 403.4.8.1, 907.2.13,  
907.6.3.2, CRC R327.1.6, R403.1.3, R405.1, R1001.13

A-1, A-3, B-2, B-3

CBC 412.7, CRC R313.3.6.2.2, R319.1  
CBC 903.2, 903.2.8, 903.3, 903.4, 905.4, 907.2.13,

B-1, B-2, B-3, C-2

907.3.1, 907.5.2.2, 907.6.3.2, 907.6.5  
CBC Table 1505.1, 1505.3.1, CRC R301.10,

A-1, A-2, B-2

R902.1, R902.1.3, R902.2

A-1, E-1, A-2, B-2, B-3

CRC R301.9, R403.1.3, R405.1

B-1, D-3

The aforementioned amendments have been incorporated in detail in Ordinance 13-300.

Section 3

The Community Development Department shall file copies of this Resolution and Ordinance 13-300 with the California Building Standards Commission as required by Health and Safety Code Section 17958.7.

PASSED, APPROVED AND ADOPTED this 2nd day of December, 2013.

  
Rhonda Reardon, Mayor

I hereby certify that the foregoing Resolution was duly adopted by the City Council of the City of Mission Viejo at a regularly scheduled meeting thereof, held on the 2nd day of December, 2013 by the following vote of the Council:

AYES: Kelley, Leckness, Reardon, Schlicht, and Ury  
NOES: None  
ABSENT: None

ATTEST:

  
Karen Hamman, City Clerk

## RESOLUTION 13-66

### A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF MISSION VIEJO CALIFORNIA, SETTING FORTH FINDINGS FOR REQUIRED AMENDMENTS TO THE 2013 CALIFORNIA FIRE CODE RELATIVE TO LOCAL CLIMATIC, TOPOGRAPHIC AND GEOLOGIC CONDITIONS

#### Section 1

The City Council of the City of Mission Viejo finds and resolves as follow:

WHEREAS, Health and Safety Code Section 17958 provides that the City of Mission Viejo ("City") shall adopt ordinances and regulations imposing the same or modified or changed requirements as are contained in the regulations adopted by the State pursuant to Health and Safety Code Section 17922; and

WHEREAS, the State of California is mandated by Health and Safety Code Section 17922 to impose the same requirements as are contained in the most recent edition of the California Fire Code; and

WHEREAS, Health and Safety Code Section 17958.5(a) permits the City to make modifications or changes to the Code, which are reasonably necessary because of local climatic, geologic, or topographic conditions; and

WHEREAS, Health and Safety Code Section 17958.7 requires that the City Council, before making any modifications or changes to the Codes, shall make an express finding that such changes or modifications are reasonably necessary because of local climatic, geologic, or topographic conditions; and

WHEREAS, the Community Development Department in consultation with the Orange County Fire Authority has recommended that changes and modifications be made to the Codes and have advised that certain said changes and modifications to the California Codes are reasonably necessary due to local conditions in the City of Mission Viejo and have further advised that the remainder of said changes and modifications are of an administrative or procedural nature, or concern themselves with subjects not covered by the Codes or are reasonably necessary to safeguard life and property within the City of Mission Viejo.

Amendments related to life and fire safety contained in Sections 304.1.2, 305.5, 305.6, 305.6.2, 305.6.3, 307, 319, 326, 608.10, 903.2, 903.2.8, 903.3.5.3, 903.4, 905.4, 907.3.1, 907.5.2.2, 907.6.3.2, 2008.1 thru 2008.1.11, 6004.2.2.7, and Chapter 50 of the 2013 Edition of the California Fire Code as recommended by the Community Development in consultation with the Orange County Fire Authority are hereby found to be reasonably necessary due to the following local conditions:

#### **I. Climatic Conditions**

- A. Orange County and the City of Mission Viejo are located in a semi-arid Mediterranean type climate. It annually experiences extended periods of high temperatures with little or no precipitation. Hot, dry (Santa Ana) winds, which

may reach speeds of 70 M.P.H. or greater, are also common to the area. These climatic conditions cause extreme drying of vegetation and common building materials. Frequent periods of drought and low humidity add to the fire danger. This predisposes the area to large destructive fires (conflagration). In addition to directly damaging or destroying buildings, these fires are also prone to disrupt utility services throughout the County. Obstacles generated by a strong wind, such as fallen trees, street lights and utility poles will greatly impact the response time to reach an incident scene. Additionally, there is a significant increase in the amount of wind force at 60 feet above the ground. Use of aerial type fire fighting apparatus above this height would place rescue personnel at increased risk of injury.

- B. The climate alternates between extended periods of drought and brief flooding conditions. Flood conditions may affect the Orange County Fire Authority's ability to respond to a fire or emergency condition. Floods also disrupt utility services to buildings and facilities within the County.
- C. Water demand in this densely populated area far exceeds the quantity supplied by natural precipitation; and although the population continues to grow, the already-taxed water supply does not. California is projected to increase in population by nearly 10 million over the next quarter of a century with 50 percent of that growth centered in Southern California. Due to storage capacities and consumption, and a limited amount of rainfall future water allocation is not fully dependable. This necessitates the need for additional and on-site fire protection features. It would also leave tall buildings vulnerable to uncontrolled fires due to a lack of available water and an inability to pump sufficient quantities of available water to floors in a fire.
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- B. Road circulation features located throughout the County also make amendments reasonably necessary. Located through the County are major roadways, highways and flood control channels that create barriers and slow response times. Hills,

slopes, street and storm drain design accompanies with occasional heavy rainfall, causes roadway flooding and landslides and at times may make an emergency access route impassable. There are areas in Orange County that naturally have extended Fire Department emergency response times that exceed the 5 minute goal.

- C. Placement of multiple occupancy buildings, location of arterial roads, and fire department staffing constraints due to recent revenue-limiting state legislation have made it difficult for the fire department to locate additional fire stations and provide manpower sufficient to concentrate fire companies and personnel to control fires in high density apartment or condominium buildings. Fire Department equipment does not allow easy access to areas of buildings greater than 55 feet above the level of Fire Department vehicle access. These conditions create the need for built-in on-site fire protection systems to protect occupants and property until fire fighting apparatus and personnel arrive on the scene

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### **III. Geological Conditions**

Orange County and the City of Mission Viejo are located in a highly active seismic area. There are earthquake faults that run along both the northeastern and southwestern boundaries of Orange County. The Newport-Inglewood Fault Zone (NIFZ) which runs through Orange County was the source of the destructive 1933 Long Beach earthquake (6.3 magnitude, hypocenter off Newport Beach coast), which took 120 lives, with areas damaged from Laguna Beach to Marina del Rey and inland to Whittier, and poses one of the greatest hazards to lives and property in the nation. Regional planning for reoccurrence is recommended by the State of California, Department of Conservation. There was also an earthquake in December 1989, with the epicenter located near the City of Irvine. The fault on which this quake occurred was unknown prior to this activity. The October 17, 1989, Santa Cruz earthquake resulted in only one major San Francisco fire in the Marina district, but when combined with the 34 other fires and over 500 responses, the department was taxed to its full capabilities. The Marina fire was difficult to contain because mains supplying water to the district burst during the earthquake. If more fires had been ignited by the earthquake, it would have been difficult for the fire department to contain them. Experts predict a major earthquake in our area within the next 50 years. This situation creates the need for both additional fire protection measures and automatic on-site fire protection for building occupants since a multitude of fires may result from breakage of gas and electric lines as a result of an earthquake. As noted by "Planning Scenario on a Major Earthquake on the Newport-Inglewood Fault Zone, 1988, State Department of Conservation," page 59, "unfortunately, barely meeting the minimum earthquake standards of building codes places a building on the verge of being legally unsafe";

- A. Traffic and circulation congestion presently existing in the City of Mission Viejo

often places fire department response time to fire occurrences at risk. This condition will be exacerbated by any major disaster, including any earthquake wherein damage to the highway system will occur. This condition makes the need for additional on-site protection for property occupants necessary.

- B. The City of Mission Viejo is located in the middle of the seismically active area. The viability of the public water system would be questionable at best after a major seismic event. This would leave tall buildings vulnerable to uncontrolled fires due to a lack of available water and an inability to pump sufficient quantities of any available water to floors above the 55-foot level. A severe seismic event has the potential to negatively impact any rescue or fire suppression activities because it is likely to create obstacles similar to those indicated under the high wind section above. With the probability of strong aftershocks there exists a need to provide increased protection for anyone on upper floors.
- C. Soils throughout the County possess corrosive properties that reduce the expected usable life of water services when metallic pipes in contact with soils are utilized.
- D. Portions of the County contain active or former oil production fields. These areas contain a variety of naturally occurring gasses, liquids and vapors. These compounds present toxicity or flammability hazards to building occupants. Evaluation of these hazards and the risks they pose to development is necessary implement appropriate mitigation.

Additional amendments have been made to Codes. On the recommendation of the Community Development Department in consultation with the Orange County Fire Authority, such amendments are hereby found to be either administrative or procedural in nature or concern themselves with subjects not covered in such Codes. The changes made include provisions making each of said Codes compatible with other Codes enforced by the City.

Section 2

Amendments to the 2013 Edition of the California Fire Code is found reasonably necessary based on the climatic, topographical, and/or geological conditions cited in Section 1 of this resolution and are listed as follows:

<u>Code Section</u>	<u>Findings in Section 1</u>
304.1.2, 305.5, 305.6, 305.6.2, 305.6.3, 307, 326	I, II
319	III-D
608.10	III-A, III-B
903.2, 903.2.8, 903.3.5.3, 903.4, 905.4	II, III
907.3.1, 907.5.2.2, 907.6.3.2, 2008.1 thru 2008.1.11	II, III-A
Chapter 50	III
6004.2.2.7	II, III

The aforementioned amendments have been incorporated in detail in Ordinance 13-301.

Section 3

The Community Development Department shall file copies of this Resolution and Ordinance 13-301 with the California Building Standards Commission as required by Health and Safety Code Section 17958.7.

PASSED, APPROVED AND ADOPTED this 2nd day of December, 2013.

  
Rhonda Reardon, Mayor

I hereby certify that the foregoing Resolution was duly adopted by the City Council of the City of Mission Viejo at a regularly scheduled meeting thereof, held on the 2nd day of December, 2013 by the following vote of the Council:

AYES:	Kelley, Leckness, Reardon, Schlicht, and Ury
NOES:	None
ABSENT:	None

ATTEST:

  
Karen Hamman, City Clerk