

**BUILDING STANDARDS COMMISSION**

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



February 21, 2014

Gary Hawken  
Building Official  
City of Laguna Niguel  
30111 Crown Valley Parkway  
Laguna Niguel, CA 92677

RE: Ordinance #2013-174 and #2013-175

Dear Mr. Hawken:

This letter is to advise you of our determination regarding the referenced ordinance with express findings received from your agency on January 17, 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,

A handwritten signature in blue ink that reads "Enrique M. Rodriguez".

Enrique M. Rodriguez  
Associate Construction Analyst

cc: Chron  
Local Filings



**CITY of LAGUNA NIGUEL**

**Community Development Department**

30111 Crown Valley Parkway • Laguna Niguel, California 92677

Phone/949•362•4360 Fax/949•362•4369

**CITY COUNCIL**

Laurie Davies

Linda Lindholm

Jerry McCloskey

Robert Ming

Jerry Slusiewicz

January 8, 2014

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

Re: Adoption of 2013 Codes

Dear Mr. McGowan:

The City of Laguna Niguel has adopted the 2013 Editions of Building, Fire, Plumbing, Mechanical, Electrical, Residential and the Existing Building Codes of the State of California.

The City of Laguna Niguel has recommended changes and modifications to the Codes and have advised that certain said changes and modifications to the 2013 Editions of the California Building, Electrical, Mechanical, Plumbing, Residential and Fire Codes are reasonably necessary due to local climatic, geological or topographical conditions within the City 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 Code or are reasonably necessary to safeguard life and property within the City.

City Ordinances indicating the local Amendments and Resolutions providing the related expressed findings for each amendment are enclosed for your files.

If additional information is desired, please contact this office at (949) 362-4326.

Sincerely,

Gary Hawken CBO  
Building Official  
City of Laguna Niguel  
30111 Crown Valley Parky  
Laguna Niguel, California 92677

**ORDINANCE NO. 2013-175**

**ORDINANCE OF THE CITY COUNCIL  
OF THE CITY OF LAGUNA NIGUEL, CALIFORNIA,  
ADOPTING THE 2013 CALIFORNIA FIRE CODE;  
AND MODIFICATIONS AND AMENDMENTS TO THE CODE**

The City Council of the City of Laguna Niguel does ordain as follows:

**SECTION 1. RECITALS.**

1. Health and Safety Code Section 17958 provides that the City of Laguna Niguel ("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;
2. 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;
3. Health and Safety Code Section 17958.7 requires that the City, before making any modifications or changes to the Code, shall make an express finding that such changes or modifications are reasonably necessary because of local climatic, geologic, or topographic conditions;
4. The Fire Marshal has recommended that changes and modifications be made to the 2013 Edition of the California Fire Code, and has advised that certain of said changes and modifications to the Code, are reasonably necessary due to local conditions within the Orange County and the City of Laguna Niguel, and has further advised that the remainder of the said changes and modifications are of an administrative or procedural nature, or concern themselves with subjects not covered by the Code, or are reasonably necessary to safeguard life and property within the City of Laguna Niguel;
5. Amendments related to life and fire safety contained in the 2013 Edition of the California Fire Code as recommended by the Fire Marshal are hereby found to be reasonably necessary due to the following local conditions:
  - I. Climatic Conditions
    - A. Orange County and the City of Laguna Niguel 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 (Fire Department) 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.

## II. Topographical Conditions

- A. Natural slopes of 15 percent or greater generally occur throughout the foothills of Orange County. The elevation change caused by the hills creates the geological foundation on which communities within Orange County are built and will continue to be built on. With much of the populated flatlands already built upon, future growth will occur in areas with steeper slopes and greater constraints in terrain.

*Ordinance No. 2013-175*

- 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, accompanied 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.
- D. 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. Geologic Conditions

- A. Orange County and the City of Laguna Niguel 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. The quake damaged areas 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 fire department was taxed to its full capabilities. The Marina District 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."

- B. Traffic and circulation congestion presently existing in the City of Laguna Niguel 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.
- C. The City of Laguna Niguel is located in a 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.
- D. 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.
- E. 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.

**SECTION 2. ADOPTION OF THE 2013 CALIFORNIA FIRE CODE AND AMENDMENTS THERETO**

Article 1, entitled "Uniform Fire Code," of Division 3, entitled "Fire Protection and Explosives," of Title 11, entitled "Public Morals, Safety and Welfare," is hereby repealed and Article 1, entitled "2013 Edition Of The California Fire Code," is added to Division 3, entitled "Fire Protection and Explosives," of Title 11, entitled "Public Morals, Safety and Welfare," to read as follows:

**ARTICLE 1. 2013 EDITION OF THE CALIFORNIA FIRE CODE**

**Sec. 11-3-1. Adoption of the 2013 Edition Of The California Fire Code**

Except as hereinafter provided, the 2013 Edition of the California Fire Code, based on the 2012 Edition of the International Fire Code, as published by the International Code Council, is hereby adopted by the City of Laguna Niguel for the purpose of prescribing regulations governing conditions hazardous to life and property from fire and explosion hazards, save and except such portions as are hereinafter added, deleted, modified or amended. One copy of all the above is now on file in the office of the Clerk for public inspection. This code is adopted with the same force and effect as through set out herein in full.

**Sec. 11-3-2. Chapter 1, Scope and Administration; Division II Administration, amended**

Chapter 1, Scope and Administration; Division II Administration, is amended as follows:

SECTION 109.4 Violation Penalties, is amended by modifying Section 109.3 and adding new Subsections 109.3.2, Infraction and 109.3.3, Misdemeanor to read as follows:

Section 109.4 Violation Penalties. Persons who shall violate a provision of this code or shall fail to comply with any of the requirements thereof or who shall erect, install, alter, repair or do work in violation of the approved construction documents or directive of the fire code official, or of a permit or certificate used under provisions of this code, shall be guilty of either a misdemeanor, infraction or both as prescribed in Subsections 109.3.2 and 109.3.3 Penalties shall be as prescribed in local ordinance Each day that a violation continues after due notice has been served shall be deemed a separate offense.

Subsection 109.4.2 Infraction. Except as provided in Subsection 109.3.2, 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.

Subsection 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.
- 107.6 Overcrowding.
- 109.2.2 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.
- 2404.7 Open or exposed flames.

**Sec. 11-3-3. Chapter 2, Definitions, amended**

Chapter 2, Definitions, is amended as follows:

SECTION 202, General Definitions, is amended by adding 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 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 rolled 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 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 by this Code:

1. "Existing high-rise structure" means a high-rise structure, the construction of which commenced or completed prior to July 1, 1974.
2. "High-rise structure" means every building of any type of construction or occupancy having floor used for human occupancy located more than 55 feet above the lowest floor level having building access, except buildings used as hospitals as defined by the Health and Safety Code Section 1250.
3. New high-rise building means 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.

*Ordinance No. 2013-175*

4. "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. 11-3-4. Chapter 3, General Requirements, amended**

Chapter 3, General Requirements, is amended as follows:

SUBSECTION 304.1.2 Vegetation, is amended as follows:

Subsection 304.1.2 Vegetation Item (7), is 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.

SECTION 305.5 Chimney spark arresters is hereby added as follows:

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

SECTION 305.6 Outdoor fires is hereby added as follows:

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

Section 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:

*Ordinance No. 2013-175*

1. Fires in approved outdoor or portable fireplaces, fire pits, fire rings and similar devices at Group R occupancies that are installed and used in accordance with this code.
2. Outdoor fires at inhabited premises or official organized campsites or parks when located in a permanent or portable barbeque or grill, incinerator, or outdoor fireplace located at least 30 feet from combustible vegetation.
3. Installations or uses approved by the fire code official.

Subsection 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.

Subsection 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.

SECTION 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.

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

SECTION 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.

SECTION 320 Fuel Modification Requirements For New Construction is hereby added as follows:

*Ordinance No. 2013-175*

**SECTION 320 Fuel Modification Requirements For New Construction.** All new buildings to be built or installed in areas containing combustible vegetation 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.
3. The fuel modification plans shall meet the criteria set forth in the Fuel Modification Section of the Orange County Fire Authority Vegetation Managements Guideline.
4. The fuel modification plan may be altered if conditions change. Any alterations to the fuel modification shall be approved by the fire code official.
5. All elements of the fuel modification plan shall be maintained in accordance with the approved plan and are subject to the enforcement process outlined in the Fire Code.

**SECTION 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 (3,048 mm) on each side of portions of highways and private streets which are improved, designed or ordinarily used for vehicular traffic, to be cleared of flammable vegetation and other combustible growth. Measurement shall be from the flow-line or the end of the improved edge of the roadway surfaces.

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

**SECTION 322 Unusual Circumstances** is hereby added as follows:

**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.

*Ordinance No. 2013-175*

5. Other unusual circumstances that make strict compliance with the clearance of vegetation provisions of Sections 15, 16 or 17 of this appendix undesirable or impractical.

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.

Exceptions:

1. Engines used to provide motor power for trucks, truck tractors, buses, and passenger vehicles, except motorcycles, are not subject to this section if the exhaust system is equipped with a muffler as defined in the Vehicle Code of the State of California.
2. Turbocharged engines are not subject to this section if all exhausted gases pass through the rotating turbine wheel, there is no exhaust bypass to the atmosphere, and the turbocharger is in good mechanical condition.

Section 323.1 Spark Arrestors. Spark arrestors shall comply with the following:

1. A spark arrester is a device constructed of nonflammable material specifically for the purpose of removing and retaining carbon and other flammable particles over 0.0232 of an inch (0.58 mm) in size from the exhaust flow of an internal combustion engine that uses hydrocarbon fuels or which is qualified and rated by the United States Forest Service.
2. Spark arresters affixed to the exhaust system of engines or vehicles subject to Section 322 shall not be placed or mounted in such a manner as to allow flames or heat from the exhaust system to ignite any flammable material.

SECTION 324 Restricted Entry is hereby added as follows:

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.

*Ordinance No. 2013-175*

Exceptions:

1. Residents and owners of private property within hazardous fire areas and their invitees and guests going to or being upon their lands.
2. Entry, in the course of duty, by peace or police officers, and other duly authorized public officers, members of a fire department and members of the United States Forest Service.

SECTION 325 Trespassing On Posted Property is hereby added as follows:

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.

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.

Exceptions:

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. 11-3-5. Chapter 4, Emergency Planning and Preparedness, amended**

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

1. 401
2. 401.3.4
3. 401.9
4. 402
5. 403

*Ordinance No. 2013-175*

6. 404.6 – 404.7.6
7. 407
8. 408.3.1 – 408.3.2
9. 408.12 – 408.12.3

**Sec. 11-3-6. Chapter 5, Fire Service Features, amended**

Chapter 5, Fire Service Features, is amended as follows:

SECTION 503.2.1 Dimensions, is amended to read as follows:

Section 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 gates in accordance with Section 503.6, and an unobstructed vertical clearance of not less than 13 feet-6-inches (4,115 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.

SUBSECTION 503.2.1.1 Hazardous Areas, is added to read as follows:

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

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

SECTION 505.1 Address Identification, is amended to read as follows:

Section 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. 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 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.

SECTION 510.1 Emergency Responder Radio Coverage In Buildings, is revised to read as follows:

*Ordinance No. 2013-175*

Section 510.1 Emergency Responder Radio Coverage In Buildings. All new buildings shall have radio coverage for emergency responders in accordance with the city's digital radio ordinance. In the absence of a city ordinance, Orange County Fire Authority's Emergency Responder Digital Radio Guideline shall apply. This section shall not require improvement of the existing public safety communications systems.

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

SECTIONS 510.2; 510.3; 510.4; 510.5; and, 510.6 Radio Signal Strength, Testing, Design, and Maintenance are deleted without replacement.

**Sec. 11-3-7. Chapter 6, Building Services and Systems, amended**

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

SECTION 608.1 Scope, is amended to read as follows:

Section 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, uninterrupted power supplies, shall comply with this section and Table 608.1. Indoor charging of electric carts/cars with more than 50 gallons (189 L) shall comply with Section 608.10.

SECTION 608.10 Indoor Charging Of Electric Carts/Cars, is hereby added as follows:

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

1. Spill control and neutralization shall be provided and comply with Section 608.5.
2. Room ventilation shall be provided and comply with Subsection 608.6.1.
3. Signage shall be provided and comply with Section 608.7.
4. Smoke detection shall be provided and comply with Section 907.2.

**Sec. 11-3-8. Chapter 9, Fire Protection Systems, amended**

Chapter 9, Fire Protection Systems, is amended as follows:

SECTION 903.2 Where Required, is amended to read as follows:

*Ordinance No. 2013-175*

Section 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 903.2.12, 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.

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

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 when 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 5,000 square feet (465 m<sup>2</sup>) as defined in Section 202; or
  - b. When an addition exceeds 2,000 square feet (186 m<sup>2</sup>) and the resulting building area exceeds 5,000 square feet (465 m<sup>2</sup>) as defined in Section 202.

SUBSECTION 903.2.8 Group R, is amended to read as follows:

Subsection 903.2.8. 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 the total square footage of the building, including any addition greater than 550 square feet, is 5,500 square feet or greater, or:
  - a. When an existing Group R Occupancy is being substantially renovated, and where the scope of the renovation is such that the Building Code Official determines that the complexity of installing a sprinkler system would be similar as in a new building.

SECTION 903.4 Sprinkler System Supervision And Alarms, is revised by modifying Item 1, deleting Items 3 and 5, and renumbering the Items as follows:

1. Automatic sprinkler systems protecting one- and two-family dwellings.
2. Limited area systems serving fewer than 20 sprinklers.

Ordinance No. 2013-175

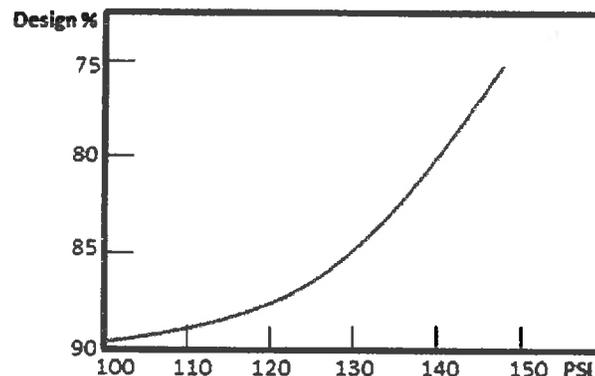
3. Jockey pump control valves that are sealed or locked in the open position.
4. Valves controlling the fuel supply to fire pump engines that are sealed or locked in the open position.
5. Trim valves to pressure switches in dry, pre-action and deluge sprinkler systems that are sealed or locked in the open position.

SUBSECTION 903.3.5.3 Hydraulically Calculated Systems is hereby added as follows:

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

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 905.4 Location Of Class I Standpipe Hose Connections, is amended by adding Items 7 and 8 as follows:

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

SUBSECTION 907.2.13 High-Rise Buildings, is amended to read as follows:

Subsection 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

*Ordinance No. 2013-175*

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 Subsection 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 Subsection 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 general occupant notification shall be broadcast by the emergency voice/alarm communication system.

SUBSECTION 907.3.1 Duct Smoke Detectors, is amended as follows:

Subsection 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.

SUBSECTION 907.5.2.2 Emergency Voice/Alarm Communication Systems, is revised as follows.

Subsection 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

*Ordinance No. 2013-175*

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.

**SUBSECTION 907.6.3 High-Rise Buildings**, is amended to read as follows:

Subsection 907.6.3 High-Rise Building. 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 fire detection devices or suppression systems.

**Section 11-3-9. Chapter 11, Construction Requirements For Existing Buildings**, is not adopted with the exception of the sections listed below:

1. 1103.7
2. 1103.7.3
3. 1103.7.3.1
4. 1103.7.8 – 1103.7.8.2
5. 1103.7.9 – 1103.7.9.10
6. 1103.8 – 1103.8.5.3
7. 1106

**Section 11-3-10. Chapter 20, Aviation Facilities, amended**

Chapter 20, Aviation Facilities, is amended as follows:

**SECTION 2008 Emergency Helicopter Landing Facility (EHLF)**, is added to read as follows:

SECTION 2008 EMERGENCY HELICOPTER LANDING FACILITY (EHLF)

Section 2008.1 General. Every building of any type of construction or occupancy having floors used for human occupancy located more than 75 feet 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.

Subsection 2008.1.1 Rooftop Landing Pad. The landing pad shall be 50 feet x 50 feet or a 50-foot-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.

Subsection 2008.1.2 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.

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

Subsection 2008.1.4 Safety Net. If the rooftop landing pad is elevated more than 30 inches above the adjoining surfaces, a 6-foot-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-inches but less than 18 inches) 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.

Subsection 2008.1.5 Take-Off And Landing Area. The takeoff and landing area shall be free of obstructions and 100 feet x 100 feet or a 100-foot-diameter.

Subsection 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.

Subsection 2008.1.7 Special Markings. The emergency helicopter landing

*Ordinance No. 2013-175*

facility shall be marked as indicated in Figure 2008.1.2.

Subsection 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 CFC 1009.7.2 for riser height and tread depth. Handrails shall be provided, but shall not extend above the platform surface.

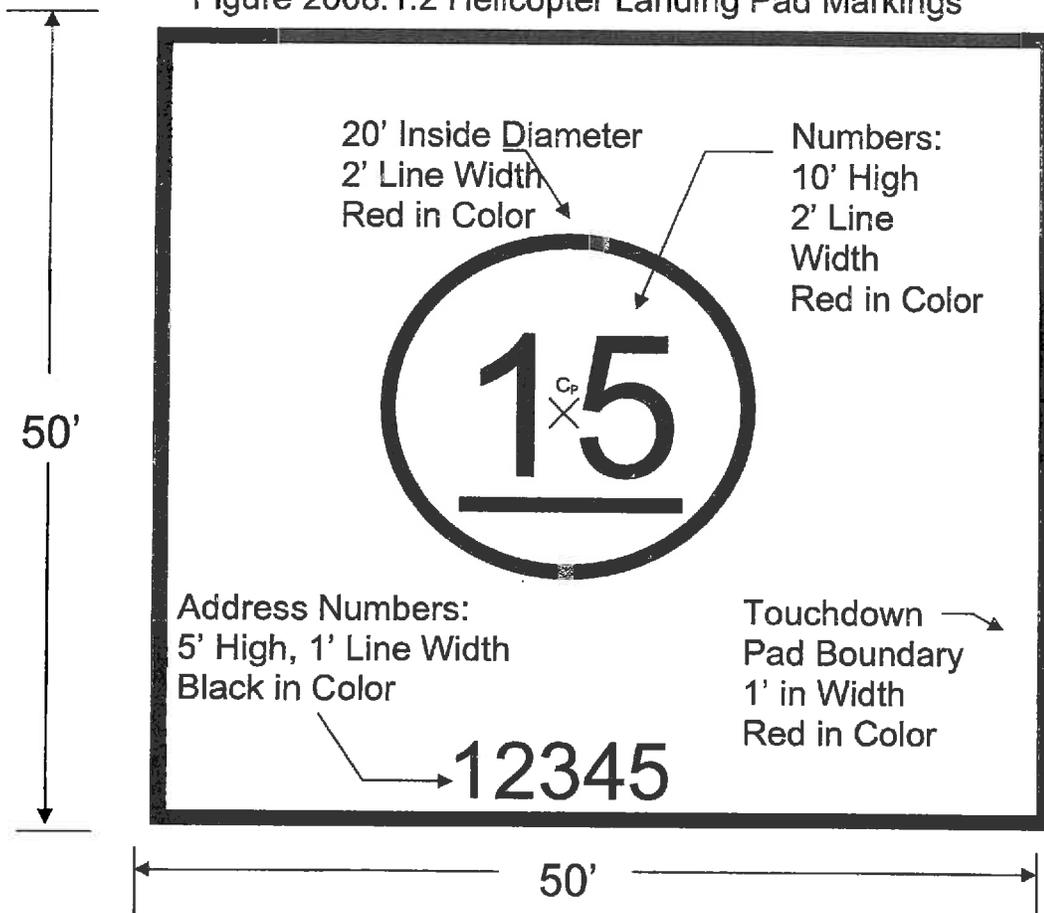
Subsection 2008.1.9 Standpipe Systems. The standpipe system shall be extended to the roof level on which the EHLF is located. All portions of the EHLF area shall be within 150 feet of a 2.5 inch outlet on a Class I or III standpipe.

Subsection 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 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 the CFC, Section 906.

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

Subsection 2008.1 Figure 2008.1.2 Helicopter Landing Pad Markings, as follows:

Figure 2008.1.2 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).

**Section 11-3-11. Chapter 28, Lumber Yards and Woodworking Facilities, amended**

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

SECTION 2801.2, Permit, is amended to read as follows:

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

*Ordinance No. 2013-175*

SECTION 2808.2 Storage Site, is amended to read as follows:

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

SECTION 2808.3 Size Of Piles, is amended to read as follows:

Section 2808.3 Size Of Piles. Piles shall not exceed 15 feet (4,572 mm) in height, 50 feet (15,240 mm) in width and 100 feet (30,480 mm) in length.

SECTION 2808.7 Pile Fire Protection, is amended by adding the following to the end of the section:

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

SECTION 2808.9 Material-Handling Equipment, is amended by adding the following at the beginning of the section:

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

**Section 11-3-12. Chapter 49 Requirements for Wildland-Urban Interface Fire Areas, amended**

Chapter 49 Requirements for Wildland-Urban Interface Fire Areas is adopted in its entirety with the following amendments:

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:

*Ordinance No. 2013-175*

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

1. Preliminary fuel modification plans shall be submitted to and approved by the fire code official concurrent with the submittal for approval of any tentative map.
2. Final fuel modification plans shall be submitted to and approved by the fire code official prior to the issuance of a grading permit.  
  
2.1 The fuel modification plan shall include provisions for the maintenance of the fuel modification for perpetuity.
3. The fuel modification plans shall meet the criteria set forth in the Fuel Modification Section of the Orange County Fire Authority Vegetation Management Guidelines.
4. The fuel modification plan may be altered if conditions change. Any alterations to the fuel modification areas shall have prior approval from the fire code official.
5. All elements of the fuel modification plan shall be maintained in accordance with the approved plan and are subject to the enforcement process outlined in the Fire Code.

**Section 11-3-13. Chapter 50, Hazardous Materials – General Provisions, amended**

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

SUBSECTION 5001.5.2 Hazardous Materials Inventory Statement, is amended by modifying the first paragraph to read as follows:

Subsection 5001.5.2 Hazardous Materials Inventory Statement (HMIS). When 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.

*Ordinance No. 2013-175*

9. Amount in use-open systems.

SECTION 5003.1.1(1), Maximum Allowable Quantity Per Control Area of Hazardous Materials Posing A Physical Hazard, is amended by deleting Footnote K without replacement:

SUBSECTION 5003.1.1 Maximum Allowable Quantity Per Control Area, is amended by adding a new subsection to read as follows:

Subsection 2703.1.1.1 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 amended to read as follows:

Section 2703.5 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.

**Section 11-3-14. Chapter 55, Cryogenic Fluids, amended**

Chapter 55, Cryogenic Fluids, is amended as follows:

SUBSECTION 5503.4.1 Identification Signs, is amended to read as follows:

Subsection 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.

**Section 11-3-15. Chapter 56, Explosives and Fireworks, amended**

Chapter 56, Explosives and Fireworks, is amended as follows:

SECTION 5601.2 Retail Fireworks, is added as follows:

Section 33101.2 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.

*Ordinance No. 2013-175*

SECTION 5601.3 Seizure Of Fireworks, is added as follows:

Section 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 5608.1 General is revised as follows:

Section 3308.1 General. Outdoor fireworks displays, use of pyrotechnics before proximity 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 added as follows:

Section 5608.2 Firing. All fireworks displays shall be electrically fired.

**Section 11-3-16. Chapter 57, Flammable and Combustible Liquids, amended**

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

SUBSECTION 5704.2.3.2 Label Or Placard, is amended by modifying the NFPA standard as follows:

Subsection 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.

**Section 11-3-17. Chapter 60, Highly Toxic and Toxic Materials, amended**

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

SUBSECTION 6004.2.2.7 is amended by deleting Exception 1 without substitution and renumbering Item 2 to 1 with modifications to read as follows:

1. Toxic gases – storage/use. Treatment systems are not required for toxic gases supplied by cylinders or portable tanks not exceeding 1,700 (772 Kg) pounds water capacity when the following are provided:
  - 1.1 A 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, an approved listed or 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 Subsection 6004.2.2.10.

**Section 11-3-18. Chapter 80 Referenced Standards, amended**

Chapter 80 Referenced Standards is amended as follows:

NFPA 13, 2013 Edition, Installation Of Sprinkler Systems is amended as follows:

SUBSECTION 6.8.3 is revised as follows:

Subsection 6.8.3 Fire department connections (FDC) shall be of an approved type. The FDC shall contain a minimum of two 2½ inch inlets. The location shall be approved and be no more than 150 feet from a public hydrant. The size of piping and the number of inlets shall be approved by the fire chief. 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 2½ inch inlets shall be provided.

SUBSECTION 8.3.3.1 is revised as follows:

Subsection 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 permit is issued. Sprinklers in light hazard occupancies shall be one of the following:

1. Quick-response type as defined in Subsection 3.6.4.7
2. Residential sprinklers in accordance with the requirements of Subsection 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.

SUBSECTION 8.17.1.1.1 is added as follows:

Subsection 8.17.1.1.1 Residential Water-flow Alarms. 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. 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. 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.

SUBSECTION 11.1.1.2 is added as follows:

Subsection 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 permit is issued. 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.

SUBSECTION 11.2.3.1.1.1 is added as follows:

Subsection 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 multiplying 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 a professional engineer licensed in the State of California.

SUBSECTION 23.2.1.1 is revised as follows:

Subsection 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

*Ordinance No. 2013-175*

having jurisdiction.

NFPA 13R, 2013 Edition, Installation Of Sprinkler System In Residential Occupancies Up To And Including Four Stories in Height, is amended as follows:

SUBSECTION 6.16.1 is revised as follows:

Subsection 6.16.1 All 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 2013 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. 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 amended as follows:

SUBSECTION 4.1.3 Stock Of Spare Sprinklers is added as follows:

Subsection 4.1.3.1 Stock Of Spare Sprinklers. 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.

SUBSECTION 4.1.3.2 is added as follows:

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

SUBSECTION 4.1.3.3 is added as follows:

Subsection 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).

*Ordinance No. 2013-175*

SUBSECTION 4.1.3.4 is added as follows:

Subsection 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.

SUBSECTION 7.1.2 is revised as follows:

Subsection 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 Alarms is deleted in its entirety and replaced as follows:

Section 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 subject to final approval by the fire code official. Additional interior alarm devices shall be required to provide audibility throughout the structure. 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. 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 amended as follows:

SUBSECTION 7.3.1.1 is deleted in its entirety and replaced as follows:

Subsection 7.3.1.1 Hose Connection Height. 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, Installation Of Private Fire Service Mains And Their Appurtenances is amended as follows:

SUBSECTION 6.2.1.1 is added as follows:

*Ordinance No. 2013-175*

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

SUBSECTION 6.2.11 (5) is hereby deleted without replacement and (6) and (7) renumbered as follows:

- (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.

SUBSECTION 6.3.3 is added as follows:

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

SUBSECTION 10.1.6.3 is added as follows:

Subsection 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 and 316 Stainless Steel pipe and fittings.

SUBSECTION 10.3.6.2 is revised as follows:

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

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

SUBSECTION 10.3.5.3 is added as follows:

Subsection 10.3.5.3 All bolts used in pipe-joint assembly shall be 316 stainless steel.

SUBSECTION 10.6.3.1 is revised as follows:

Subsection 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 center of the vertical pipe. The pipe under the building or building foundation

*Ordinance No. 2013-175*

shall be 304 and 316 stainless steel and shall not contain mechanical joints or it shall comply with 10.6.2.

SUBSECTION 10.6.4 is revised as follows:

Subsection 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.

APPENDIX B is adopted in its entirety without amendments.

APPENDIX BB is adopted in its entirety without amendments.

APPENDIX C is adopted in its entirety without amendments.

APPENDIX CC is adopted in its entirety without amendments.

**SECTION 3.**                      **EFFECTIVE DATE**

This ordinance and all codes referenced in this ordinance shall take effect 30 days from the adoption 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 for 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 section, subsection, subdivision, sentence, clause, phrase, or portion of this ordinance, 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 ordinance. The City Council hereby declares that it would have adopted this ordinance, and each section, subsection, subdivision, sentence, clause, phrases, or portion thereof, irrespective of the fact that any one or more sections, subsections, subdivisions, sentences, clauses, phrases, or portions thereof, be declared invalid or unconstitutional.

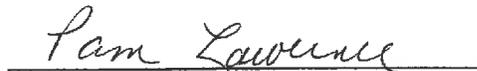
**SECTION 5.**                      **CITY CLERK'S CERTIFICATION**

The City Clerk shall certify to the adoption of this Ordinance and cause the same to be posted at the duty 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 a summary of this Ordinance in the Office of the City Clerk five (5) days prior to the date of adoption of this Ordinance, and, within fifteen (15) days after adoption, the City Clerk shall cause to be published the aforementioned summary 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 3rd day of December, 2013.

  
Linda Lindholm, Mayor

ATTEST:

  
Pam Lawrence, Acting City Clerk

CERTIFICATION

STATE OF CALIFORNIA        )  
COUNTY OF ORANGE        )SS  
CITY OF LAGUNA NIGUEL     )

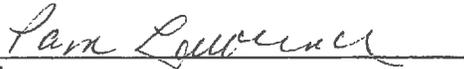
I, Pam Lawrence, Acting City Clerk of the City of Laguna Niguel, California, do hereby certify that the foregoing is Ordinance No. 2013-175 which was adopted at a regular meeting of the City Council of the City of Laguna Niguel, California, held December 3, 2013 by the following vote:

AYES:                    Council Members Davies, Ming, Slusiewicz, Mayor Pro  
                              Tem McCloskey and Mayor Lindholm

NOES:                    None

ABSTENTIONS:        None

ABSENT:                None

  
\_\_\_\_\_  
Pam Lawrence  
Deputy City Manager/Acting City Clerk

**ORDINANCE NO. 2013-174**

**ORDINANCE OF THE CITY COUNCIL  
OF THE CITY OF LAGUNA NIGUEL, CALIFORNIA,  
ADOPTING THE 2013 CALIFORNIA BUILDING CODE;  
THE 2013 CALIFORNIA PLUMBING CODE;  
THE 2013 CALIFORNIA MECHANICAL CODE;  
THE 2013 CALIFORNIA ELECTRICAL CODE;  
THE 2013 CALIFORNIA RESIDENTIAL CODE;  
THE 2013 CALIFORNIA GREEN BUILDING STANDARDS CODE;  
THE 2013 CALIFORNIA ADMINISTRATIVE CODE;  
THE 2013 CALIFORNIA REFERENCE STANDARDS;  
THE 2013 CALIFORNIA ENERGY CODE;  
THE 2012 INTERNATIONAL PROPERTY MAINTENANCE CODE;  
THE 2012 INTERNATIONAL SWIMMING POOL AND SPA CODE;  
THE 2009 UNIFORM SOLAR ENERGY CODE;  
AND MODIFICATIONS AND AMENDMENTS TO THE CODES**

The City Council of the City of Laguna Niguel does ordain as follows:

**SECTION 1.            RECITALS**

1. Health and Safety Code Section 17958 provides that the City of Laguna Niguel ("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;
2. 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;
3. Health and Safety Code Section 17958.7 requires that the City, before making any modifications or changes to the Code, shall make an express finding that such changes or modifications are reasonably necessary because of local climatic, geologic, or topographic conditions;
4. The Fire Marshal and City Building Official have recommended that changes and modifications be made to the 2013 Edition of the California Building Code, and have advised that certain of said changes and modifications to the Code, are reasonably necessary due to local conditions within the Orange County and the City of Laguna Niguel, and has further advised that the remainder of the said changes and modifications are of an administrative or procedural nature, or concern themselves with subjects not covered by the Code, or are

*Ordinance No. 2013-174*

reasonably necessary to safeguard life and property within the City of Laguna Niguel;

I. Climatic Conditions

- A. Orange County and the City of Laguna Niguel 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 (Fire Department) 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

*Ordinance No. 2013-174*

sprinkler systems will also reduce the use of water for firefighting by as much as 50 to 75 percent. In addition, 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.

II. Topographical Conditions

- A. Natural slopes of 15 percent or greater generally occur throughout the foothills of Orange County. The elevation change caused by the hills creates the geological foundation on which communities within Orange County are built and will continue to be built on. 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, accompanied 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.
- D. 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. Geologic Conditions

- A. Orange County and the City of Laguna Niguel 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. The quake damaged areas 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 fire department was taxed to its full capabilities. The Marina District 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."
- B. Traffic and circulation congestion presently existing in the City of Laguna Niguel 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.
- C. The City of Laguna Niguel is located in a 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.

- D. 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.
- E. 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.

## **SECTION 2. GENERAL PROVISIONS**

Section 8-1-2 through Section 8-1-4 of Article 1, entitled "General Provisions", of Division 1, entitled "Buildings and Construction Generally," of Title 8, entitled "Building Regulations," are hereby repealed and Article 1, entitled "General Provisions", of Division 1, entitled "Buildings and Construction Generally," of Title 8, entitled "Building Regulations," is hereby added to read as follows:

### **ARTICLE 1. GENERAL PROVISIONS**

#### **Sec. 8-1-2. Violations**

For all sections of the California Building Code, California Fire Code, California Plumbing Code, California Mechanical Code, California Electrical Code, California Residential Code, California Green Buildings Standard Code, California Administrative Code, California Referenced Standards, California Energy Code, International Property Maintenance Code, International Swimming Pool and Spa Code and Uniform Solar Energy Code, any and all amendments to these codes, included within this division, the following shall apply pertaining to violations and shall replace any sections of those codes that pertain to violation.

It shall be unlawful for any person, firm or corporation to erect, construct, enlarge, alter, repair, move, improve, remove, convert or demolish, equip, use, occupy, 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 this division.

Any person, firm, or corporation violating any of the provisions of this division, shall be deemed guilty of a misdemeanor, and each such person shall be deemed guilty of a separate offense for each and every day or portion thereof during which any violation of any of the provisions of this ordinance is committed, continued, or permitted, and upon conviction of any such violation such persons shall be punished by a fine of not more than \$500.00 or by

*Ordinance No. 2013-174*

imprisonment for not more than six months, or by both such fine and imprisonment.

**Sec. 8-1-3. Board of appeals**

For all sections of the California Building Code, California Fire Code, California Plumbing Code, California Mechanical Code, California Electrical Code, California Residential Code, California Green Buildings Standard Code, California Administrative Code, California Referenced Standards, California Energy Code, International Property Maintenance Code, International Swimming Pool and Spa Code and Uniform Solar Energy Code, including any and all amendments included within this division, the following shall apply pertaining to board of appeals and shall replace any sections of those codes that pertain to board of appeals.

In order to determine the suitability of alternate materials and methods of construction and provisions of these codes, there shall be and there is hereby create a board of 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 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 for conducting its investigations and shall render all its decisions and findings on contested matters, in writing to the building official, with a duplicate copy thereof to any appellant or contestant affected by any such decision or finding, and may recommend to the city council such new legislation, 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 the mayor's absence the mayor pro-tem shall preside. Meetings shall be conducted in accordance with the Brown Act.

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 making its findings and decisions.

**Sec. 8-1-4. Fees**

For all sections of the California Building Code, California Fire Code, California Plumbing Code, California Mechanical Code, California Electrical Code, California Residential Code, California Green Buildings Standard Code, California Administrative Code, California Referenced Standards, California Energy Code, International Property Maintenance Code, International

*Ordinance No. 2013-174*

Swimming Pool and Spa Code and Uniform Solar Energy Code, including any and all amendments included within this division, pertaining to fees are hereby amended to read as follows:

All fees shall be as set forth by resolution of the city council.

**Sec. 8-1-5. Administration**

All administrative sections of the California Building Code, California Fire Code, California Plumbing Code, California Mechanical Code, California Electrical Code, California Residential Code, California Green Buildings Standard Code, California Administrative Code, California Referenced Standards, California Energy Code, International Property Maintenance Code, International Swimming Pool and Spa Code and Uniform Solar Energy Code, are hereby deleted and replaced by Chapter 1 of the 2013 California Building Code, as amended in this division.

**SECTION 3. CALIFORNIA BUILDING CODE**

Article 2, entitled "Uniform Building Code", of Division 1, entitled "Buildings and Construction Generally," of Title 8, entitled "Building Regulations," is hereby repealed and a new Article 2, entitled "2013 Edition Of The California Building Code", is added to Division 1, entitled "Buildings and Construction Generally," of Title 8, entitled "Building Regulations," to read as follows:

**ARTICLE 2. 2013 EDITION OF THE CALIFORNIA BUILDING CODE**

**Sec. 8-1-12. Adoption of 2013 California Building Code and Related Codes**

The City Council, for the purpose of prescribing regulations for the erecting, construction, enlargement, alteration, repair, improving, removal, conversion, demolition, occupancy, equipment, use, height, area and maintenance of all buildings and structures in the city, hereby adopts the following construction codes save and except such portions as are hereinafter added, deleted, modified or amended: the California Building Code, 2013 Edition, based on the 2012 International Building Code as published by the International Code Council; 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 Mechanical Code, 2013 Edition, based on the 2012 Uniform Mechanical Code as published by the International Association of Plumbing and Mechanical Officials; the California Electrical Code, 2013 Edition, based on the 2011 National Electrical Code as published by BNi Publications, Inc; the California Residential Code, 2013 Edition, based on the 2012 International Residential Code as published by the International Code Council; the California Green Building Standards Code, 2013 Edition as published by the California Building Standards Commission; the International Property Maintenance Code,

*Ordinance No. 2013-174*

2012 Edition as published by the International Code Council; the International Swimming Pool and Spa Code, 2012 Edition as published by the International Association of Plumbing and Mechanical Officials; The Uniform Solar Energy Code; 2009 Edition as published by the International Association of Plumbing and Mechanical Officials; the California Energy Code, 2013 Edition as published by the International Code Council; the California Referenced Standards, 2013 Edition as published by the International Code Council; and, the California Administrative Code, 2013 Edition as published by the International Code Council. The provisions of these Codes as amended by this division shall constitute the Building Regulations of the City of Laguna Niguel. Where the California Code of Regulations and State Building Standards Code of Regulations differ from any sections of the Codes, the State regulations shall prevail over the Codes. The California Building Code and related Codes are on file for public examination in the office of the Building Official. One copy of the codes are now filed in the office of the city clerk. Such codes are hereby adopted and incorporated as through set forth in full in this section.

**Sec. 8-1-13. Chapter 1, Scope And Administration, amended**

Chapter 1, Division II, Scope and Administration, is amended as follows:

SECTION 104.8 Liability is amended to include the following:

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.

SECTION 105.2 Work Exempt From Permit is amended to revise Items 2 and 9 and remove Item 4 to read as follows:

Section 105.2(2)(4)(9). Work Exempt From Permit.

2. Walls and fences less than 42 inches in height.
4. (Removed).
9. Prefabricated swimming pools accessory to a Group R-3 occupancy that are 18 inches deep or less, do not exceed 5,000 gallons and are installed entirely above ground.

SECTION 105.8 is added to read as follows:

Section 105.8. Reconstruction. If the value of the reconstruction (or renovations) 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

*Ordinance No. 2013-174*

a property shall include the value of all construction stemming from construction-related permits issued within the last two years.

SECTIONS 111.5 and 111.5.1 are added to read as follows:

Section 111.5. Declaration Of Intended Use. When required by the fire chief, with the concurrence of the building official, any or all owners of any occupancy may be required to record with the county recorder of the County of Orange a legal instrument of intended use. This legal instrument shall be called a declaration of intended use. The declaration of intended use shall be in accordance with the requirements of this section. It shall specifically state, by occupancy classification, all intended uses of all portions of the occupancy and may not be modified or withdrawn without the approval of the fire chief with the concurrence of the building official. Unapproved changes of occupancy or use can be cause for an immediate hearing before the building official and the fire chief or their designees. Such hearing shall be conducted to rule on the revocation of the certificate of occupancy and the revocation of all permits issued to all owners, tenants, operators and occupants of all portions of the occupancy. The declaration of intended use shall be binding on all present and future owners, tenants, operators and occupants.

Section 111.5.1 Certified Copies. A certified copy of the recorded declaration of intended use may be required to be filed with the building official and the fire chief before any certificate of occupancy and/or any permits are issued to any or all owners, tenants, operators or occupants of the occupancy.

SECTION 112.4 is added to read as follows:

Section 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.

*Ordinance No. 2013-174*

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 under-grounding 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. 8-1-14. Chapter 2, Definitions, amended**

Chapter 2, Definitions, is amended as follows:

SECTION 202 Definitions is amended by adding 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.

**HIGH-RISE STRUCTURE.** Every building of any type of construction or occupancy having floors used for human occupancy located more than 55 above the lowest floor level having building access ( see Section 403), 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.

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

**Sec. 8-1-15. Chapter 4, Special Detailed Requirements Based On Use And Occupancy, amended**

Chapter 4, Special Detailed Requirements Based On Use And Occupancy, is amended as follows:

SECTION 403.1 Applicability is revised as follows:

Section 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 is amended by adding Subsections 412.7.6 and through 412.7.6.12 as follows:

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

Subsection 412.7.6.1 General. Every building of any type of construction or occupancy having floors used for human occupancy located more than 75 feet 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.

Subsection 412.7.6.2 Rooftop Landing Pad. The landing pad shall be 50 feet x 50 feet or a 50-foot-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.

Subsection 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.

Subsection 412.7.6.4 Safety Area. The safety area is a horizontal plane level with the landing pad surface and shall extend 25 feet in all directions from the edge of the landing pad. No objects shall penetrate above the plane of the safety area.

Subsection 412.7.6.5 Safety Net. If the rooftop landing pad is elevated more than 30-inches above the adjoining surfaces, a 6-foot-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-inches but less than 18-inches) 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.

Subsection 412.7.6.6 Take-Off And Landing Area. The takeoff and landing area shall be free of obstructions and 100 feet x 100 feet or a 100-foot-diameter.

Subsection 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.

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

Subsection 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 CFC 1009.4.2 for riser height and tread depth. Handrails shall be provided, but shall not extend above the platform surface.

Subsection 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.

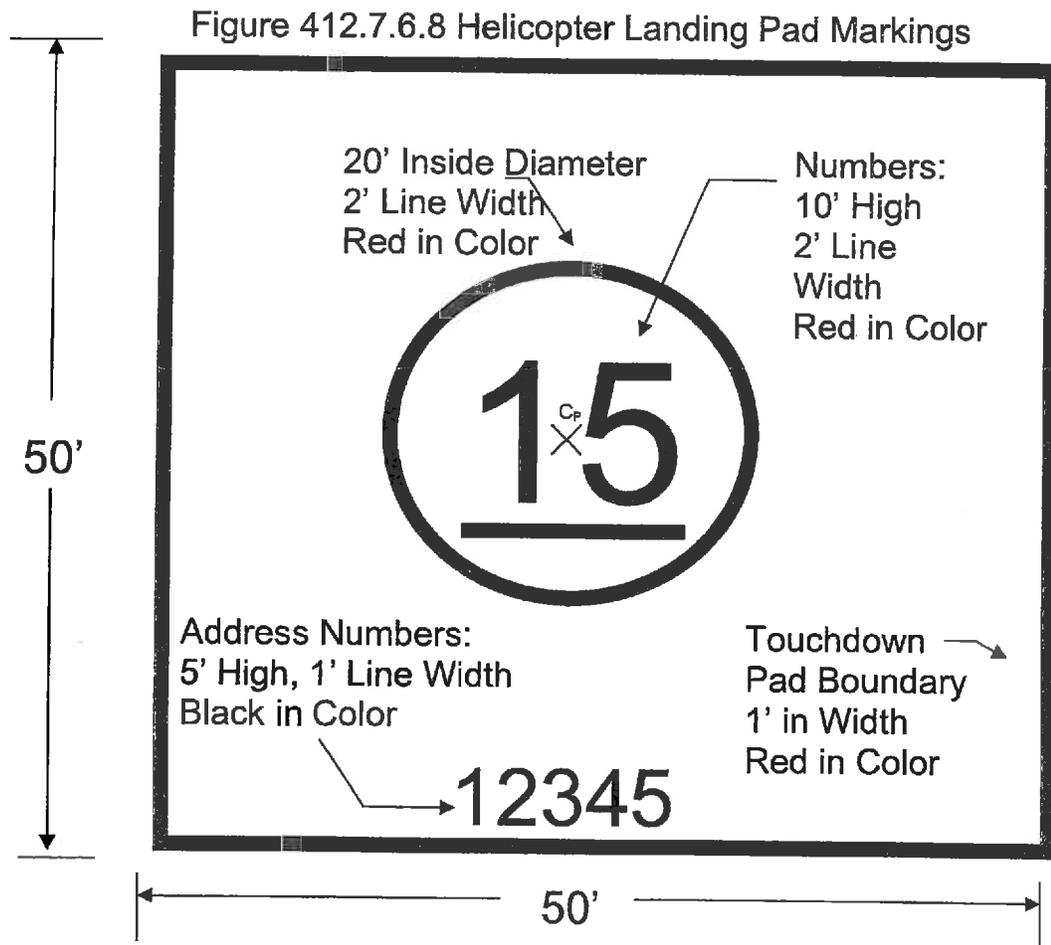
Subsection 412.7.6.11 Fire Extinguishers. A minimum of one portable fire extinguisher having a minimum 80-B:C rating shall be provided and located near the stairways or ramp to the landing pad. The fire extinguisher cabinets shall not penetrate the approach-departure paths, or the safety

Ordinance No. 2013-174

area. Installation, inspection, and maintenance of extinguishers shall be in accordance with the CFC, Section 906.

Subsection 412.7.6.12 EHLF. Fueling, maintenance, repairs, or storage of helicopters is prohibited.

Subsection 412.7.6.8, Figure 412.7.6.8 Helicopter Landing Pad Markings, as follows:



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. 8-1-16. Chapter 9, Fire Protection Systems, amended**

Chapter 9, Fire Protection Systems, is amended as follows:

SECTION [F] 903.2 Where Required, is amended to read as follows:

Section 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 Subsections 903.2.1 through 903.2.12, 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.

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

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 when 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 5,000 square feet (465 m<sup>2</sup>) as defined in Section 202; or
  - b. When an addition exceeds 2,000 square feet (186 m<sup>2</sup>) and the resulting building area exceeds 5,000 square feet (465 m<sup>2</sup>) as defined in Section 202.

SUBSECTION [F] 903.2.8 Group R, is amended to read as follows:

Subsection 903.2.8. 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 the total square footage of the building, including any addition greater than 550 square feet, is 5,500 square feet or greater, or:

Ordinance No. 2013-174

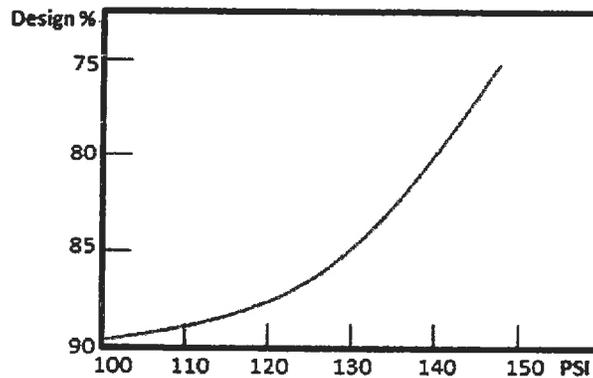
- a. When an existing Group R Occupancy is being substantially renovated, and where the scope of the renovation is such that the Building Code Official determines that the complexity of installing a sprinkler system would be similar as in a new building.

SECTION 903.3.5.3 Hydraulically calculated systems is hereby added as follows:

Section 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 revised by modifying Item 1, deleting Items 3 and 5, and renumbering the Items 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, pre-action and deluge sprinkler systems that are sealed or locked in the open position.

SECTION 905.4 Location Of Class I Standpipe Hose Connections, is amended by adding Items 7 and 8 as follows:

*Ordinance No. 2013-174*

7. The centerline of the 2.5 inch (63.5 mm) outlet shall be no less than 18 inches (457.2 mm) above and no more than 24 inches above the finished floor.
8. Every new building with any horizontal dimensions greater than 300 feet (91,440 mm) shall be provided with either access doors or a 2.5 inch outlets so that all portions of the building can be reached with 150 feet (46 m) of hose from an access door or hose outlet. Required access doors shall be located in the exterior of the building and shall be accessible without the use of a ladder. The door dimensions shall be not less than 3 feet (914 mm) in width, and not less than 6 feet 8 inches (2,032 mm) in height. These doors are for fire department access only.

SUBSECTION 907.2.13 High-Rise Buildings, is amended to read as follows:

**Subsection 907.2.13 High-rise buildings and Group I-2 occupancies having floors located more than 55 feet above the lowest level 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 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 907.5.2.2.

Exceptions:

1. Airport traffic control towers in accordance with Subsection 907.2.22 and Section 412 of the California Building Code.
2. Open parking garages in accordance with Section 406.3 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 Subsection 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 general occupant notification shall be broadcast by the emergency voice/alarm communication system.

SUBSECTION 907.4.1 Duct Smoke Detectors, is amended as follows:

Subsection 907.4.1 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.

*Ordinance No. 2013-174*

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.

SUBSECTION 907.5.2.2 Emergency Voice/Alarm Communication System, is revised as follows:

Subsection 907.5.2.2 Emergency Voice/Alarm Communication System. 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 water-flow 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 plans required by Section 404. In high-rise buildings having occupied floors located more than 55 feet, and Group I-2 occupancies having floors located more than 75 feet (22,860 mm) above the lowest level 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 Section 1002.1.
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.

SUBSECTION 907.6.3.2 High-Rise Buildings, is amended to read as follows:

Subsection 907.9.6.3.2 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:

*Ordinance No. 2013-174*

1. Smoke detectors.
2. Sprinkler water-flow devices.
3. Manual fire alarm boxes.
4. Other approved types of automatic fire detection devices or suppression systems.

**Sec. 8-1-17. Chapter 35 Referenced Standards, amended**

Chapter 35 Reference Standards, is amended as follows:

NFPA 13, 2013 Edition, Installation Of Sprinkler Systems is amended as follows:

SUBSECTION 6.8.3 is revised as follows:

Subsection 6.8.3 Fire department connections (FDC) shall be of an approved type. The FDC shall contain a minimum of two 2½ inch inlets. The location shall be approved and be no more than 150 feet from a public hydrant. The size of piping and the number of inlets shall be approved by the fire chief. 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 2½ inch inlets shall be provided. FDC may be located within 150 feet of a private fire hydrant when approved by the fire chief.

SUBSECTION 8.3.3.1 is revised as follows:

Subsection 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 permit is issued. 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.

SUBSECTION 8.17.1.1.1 is added as follows:

Subsection 8.17.1.1.1 Residential Water-flow Alarms. 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. 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. 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.

SUBSECTION 11.1.1.2 is added as follows:

Subsection 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 reductions 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 permit is issued. 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.

SUBSECTION 11.2.3.1.1.1 is added as follows:

Subsection 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 multiplying 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 a professional engineer licensed in the State of California.

*Ordinance No. 2013-174*

SUBSECTION 23.2.1.1 is revised as follows:

Subsection 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 amended as follows:

SUBSECTION 6.16.1 is revised as follows:

Subsection 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 2013 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. 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 Installation of Sprinkler Systems in One and Two-Family Dwellings and Manufactured Homes is hereby amended as follows:

SUBSECTION 4.1.3 Stock Of Spare Sprinklers is added as follows:

Subsection 4.1.3.1 Stock Of Spare Sprinklers. 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.

*Ordinance No. 2013-174*

SUBSECTION 4.1.3.2 is added as follows:

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

SUBSECTION 4.1.3.3 is added as follows:

Subsection 4.1.5.3 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).

SUBSECTION 4.1.3.4 is added as follows:

Subsection 4.1.5.4 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.

SUBSECTION 7.1.2 is revised as follows:

Subsection 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 Alarms is deleted in its entirety and replaced as follows:

Section 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 subject to final approval by the fire code official. Additional interior alarm devices shall be required to provide audibility throughout the structure. 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. 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 water-flow switch activation.

NFPA 14, 2013 Edition, Standard For Installation Of Standpipe And Hose Systems is amended as follows:

SUBSECTION 7.3.1.1 is deleted in its entirety and replaced as follows:

Subsection 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, 2010 Edition, Standard For Installation Of Private Fire Service Mains And Their Appurtenances is amended as follows:

SUBSECTION 6.2.1.1 is added as follows:

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

SUBSECTION 6.2.11 (5) is deleted without replacement and (6) and (7) renumbered.

SUBSECTION 6.3.3 is added as follows:

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

SUBSECTION 10.1.6.3 is added as follows:

Subsection 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.

SUBSECTION 10.3.5.2 is revised as follows:

Subsection 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.

*Ordinance No. 2013-174*

SUBSECTION 10.3.5.3 is added as follows:

Subsection 10.3.5.3 All bolts used in pipe-joint assembly shall be 316 stainless steel.

SUBSECTION 10.6.3.1 is revised as follows:

Subsection 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 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 otherwise comply with 10.6.2.

SUBSECTION 10.6.4 is revised as follows:

Subsection 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. 8-1-18. Chapter 15, Fire Classification, amended**

Chapter 15, Fire Classification, is amended as follows:

SECTION 1505, Table 1505.1 is 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

SUBSECTION 1505.1.3 Roof Coverings Within All Other Areas is amended to read as follows:

Subsection 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.

SECTION 1505.5 is amended by deletion of the entire section.

*Ordinance No. 2013-174*

SECTION 1505.7 is amended by deletion of the entire section.

**Sec. 8-1-19. Chapter 31, Special Construction, amended**

Chapter 31, Special Construction, is amended as follows:

SECTION 3109.2. Definitions is amended to read as follows:

Section 3109.2. Definitions. For the definition of swimming pools refer to Subsection 3109.4.4.1.

SECTION 3109.4. Residential Swimming Pools is amended to add the following subsections to read as follows:

Subsection 3109.4.1.10 Disclosure Statement. The owner of the property where the swimming pool is located shall sign and file with the city, a disclosure statement certifying the homeowner's understanding of the potential life-safety hazards associated with a swimming pool and the need to maintain the barrier requirements set forth in Sections 3109.4.1.1 through 3109.4.1.9.

Subsection 3109.4.1.11 Maintenance. Failure to maintain the barrier or comply with all provisions of this section may result in an enforcement action by the city requiring the immediate draining of the pool. The pool shall not be refilled until such time compliance has been achieved with all provisions of this section. All swimming pool water shall be maintained in a clear condition, which is free of algae, insects, debris, and in a sanitary condition.

Subsection 3109.4.1.12 Approval. Plaster inspection or approval to fill the pool with water shall be withheld by the community development director until there has been compliance with all provisions of this article.

Subsection 3109.4.1.13 Modifications. When there are practical difficulties involved in carrying out the provisions of this section, the building official may grant modifications for individual cases. The building official shall first find that a special individual reason makes the strict letter of this section impractical and that the modification is in conformance with the intent and purpose of this section and that such modification does not lessen the degree of protection afforded by the provisions of this section. The details of any action granting modifications shall be recorded and entered into the files of the community development department and the city council.

SUBSECTION 3109.4.1 Barrier Height And Clearances is amended to read as follows:

*Ordinance No. 2013-174*

Subsection 3109.4.1 Barrier Height And Clearances. The top of the barrier shall be at least 60 inches above grade measured on the side of the barrier which faces away from the swimming pool. The maximum vertical clearance between grade and the bottom of the barrier shall be 2 inches measured on the side of the barrier which faces away from the swimming pool. The maximum vertical clearance at the bottom of the barrier may be increased to 4 inches when grade is a solid surface such as a concrete deck, or when the barrier is mounted on the top of the above ground pool structure. When barriers have horizontal members spaced less than 45 inches apart, the horizontal members shall be placed on the poolside of the barrier. Any decorative design work on the side away from the swimming pool, such as protrusions, indentations or cutouts, which render the barrier easily climbable, is prohibited.

SUBSECTION 3109.4.1.1 Openings is amended to read as follows:

Subsection 3109.4.1.1 Openings. Openings in the barrier shall not allow passage of a 4 inch-diameter sphere.

Exceptions:

1. For fencing composed of vertical and horizontal members, the spacing between vertical members may be increased up to four inches when the distance between the tops of horizontal members is 45 inches or more.

SUBSECTION 3109.4.1.5 Chain Link Dimensions is amended to read as follows:

Subsection 3109.4.1.5 Chain Link Dimensions. Chain link fences used as a barrier shall not be less than 11 gage and shall have a maximum mesh size of 1¼ inch square unless the fence is provided with slats fastened at the top or the bottom which reduce the openings to no more than 1 ¾ inches.

SUBSECTION 3109.4.1.7 Gates is amended to read as follows:

Subsection 3109.4.1.7 Gates. Access gates shall comply with the requirements of Sections 3109.4.1.1 through 3109.4.1.6. Pedestrian access gates shall be self-closing and have a self-latching device. Where the release mechanisms of the self-latching device is located less than 54 inches from the bottom of the gate, (1) the release mechanism shall be located on the pool side of the barrier at least three inches below the top of the gate, and (2) the gate and barrier shall have no opening greater than ½ inch within 18 inches of the release mechanism. Pedestrian gates shall swing away from the pool. Any gates other than

*Ordinance No. 2013-174*

pedestrian access gates shall be equipped with lockable hardware or padlocks and shall remain locked at all times when not in use.

SUBSECTION 3109.4.1.8 is amended to revise the first sentence in Item (1) and add Item (4) to read as follows:

1. Doors with direct access to the pool through that wall shall be equipped with a flush mounted alarm that produces an audible warning when the door and/or its screen, if present, are opened.
4. Where a wall of a Group R, Division 3 Occupancy dwelling unit serves as part of the barrier and contains door openings between the dwelling unit and the outdoor swimming pool, which provide direct access to the pool, a separation fence measuring at least 48 inches above grade measured on the side of the barrier, which faces away from the swimming pool is required.

SUBSECTION 3109.4.4.2 Construction Permit; Safety Features Required is amended by replacing the first paragraph in its entirety with the following:

Subsection 3109.4.4.2 Construction Permit; Safety Features Required. Commencing, January 1, 1998 except as provided in Section 3109.4.4.5, whenever a building permit is issued for construction of a new private pool or spa at a residence, or any building permit is issued for remodeling of an existing pool or spa at a residence, it shall have an enclosure complying with Sections 3109.4.1 and 3109.4.4.3 and, it shall be equipped with at least one of the following safety features.

SUBSECTION 3109.4.4.2 Construction Permit; Safety Features Required is amended to add the following sentence to the end of the section to read as follows:

Subsection 3109.4.4.2 Construction Permit; Safety Features Required. Section 3109.4.4.2 (2) and (6) may be used for pool drowning prevention but are deleted from the list and shall not be a substitute for the safety features included as (1), (3), (4), (5), and (7) of this subsection.

SUBSECTION 3109.4.4.2 (4) is amended to read as follows:

4. The residence shall be equipped with flush mounted exit alarms on those doors providing direct access to the pool.

**SECTION 4. CALIFORNIA RESIDENTIAL BUILDING CODE**

Article 9, entitled "2013 Edition Of The California Residential Code", of Division 1, entitled "Buildings and Construction Generally," of Title 8, entitled "Building Regulations," is hereby added to Division 1, entitled "Buildings and Construction Generally," of Title 8, entitled "Building Regulations," to read as follows:

**ARTICLE 9. 2013 EDITION OF THE CALIFORNIA RESIDENTIAL CODE**

**Sec. 8-1-1. Chapter 2, Definitions, amended**

SECTION 202 Definitions is amended by adding the following definition:

Section 202 Definitions

**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. 8-1-2. Chapter 3, Building Planning, amended**

SECTION R301.2 Climatic And Geographic Design Criteria is amended as follows:

Section R301.2 Climatic And Geographic Design Criteria, Table R301.2(1) Climatic And Geographic Design Criteria.

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

GROUND SNOW LOAD	WIND DESIGN		SEISMIC DESIGN CATEGORY	SUBJECT TO DAMAGE FROM			WINTER DESIGN TEMP <sup>a</sup>	ICE BARRIER UNDERLAYMENT REQUIRED <sup>h</sup>	FLOOD HAZARDS <sup>o</sup>	AIR FREEZING INDEX <sup>i</sup>	MEAN ANNUAL TEMP <sup>j</sup>
	Speed <sup>d</sup> (mph)	Topographic effects <sup>k</sup>		Weathering <sup>a</sup>	Frost line Depth <sup>b</sup>	Termite <sup>c</sup>					
Zero	85	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.

- 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.
- 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.
- 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.
- 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.

*Ordinance No. 2013-174*

- 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.

**SECTION R301.9 Development on or Near Land Containing or Emitting Toxic, Combustible or Flammable Liquids, Gases or Vapors, is hereby added as follows:**

**SECTION 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 as follows:**

**Section 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.

**SECTION R309.6 Fire sprinkler attached garages, and carports with habitable space above is hereby amended by modifying the exception as follows:**

*Ordinance No. 2013-174*

Exception: An automatic residential fire sprinkler system shall not be required when additions or alterations are made to existing carports and/or garages that do not have an automatic fire sprinkler system installed unless a sprinkler system is required in accordance with California Fire Code Section 903.2.8.

SECTION R313.1 Townhouse automatic fire sprinkler systems is hereby amended by modifying the exception as follows:

Exception: An automatic residential fire sprinkler system shall not be required when additions or alterations are made to existing townhouses that do not have an automatic fire sprinkler system installed unless a sprinkler system is required in accordance with California Fire Code Section 903.2.8.

SECTION R313.2 One- and two-family dwellings automatic fire sprinkler systems is hereby amended by modifying the exception as follows:

Exception: An automatic residential fire sprinkler system shall not be required for additions or alterations to existing buildings that are not already provided with an automatic sprinkler system unless a sprinkler system is required in accordance with California Fire Code Section 903.2.8.

SECTION R313.3.6.2.2 Calculation procedure is hereby revised 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.

SECTION R319 Site Address is hereby revised as follows:

Section R319 Site Address. 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.

SECTION R327.1.6 Fuel Modification Requirements for New Construction is hereby added as follows:

*Ordinance No. 2013-174*

Section 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.
3. The fuel modification plan shall include provisions for the maintenance of the fuel modification for perpetuity.
4. The fuel modification plans shall meet the criteria set forth in the Fuel Modification Section of the Orange County Fire Authority Vegetation Management Guidelines.
5. The fuel modification plan may be altered if conditions change. Any iterations to the fuel modification areas shall have prior approval from the fire code official.
6. 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. 8-1-3. Chapter 4, Foundations, amended**

SECTION R403 Footings is amended as follows:

SECTION R403.1.3 Seismic Reinforcing is amended by deleting the "Exception" from the end of this subsection for one and two-family dwellings which are three stories or less and constructed with stud bearing walls.

SECTION R405 Foundation Drainage is amended as follows:P

SECTION R405.1 Concrete Or Masonry Foundations is amended by deleting the "Exception" from the end of this section for foundations installed on well-drained ground or sand-gravel mixture soils.

**Sec. 8-1-4. Chapter 9, Roof Assemblies, amended**

SECTION R902 Roof Classification

SECTION R902.1 Roofing Covering Materials is amended as follows:

*Ordinance No. 2013-174*

Section 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. Class 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, clay or concrete roof tile, or slate installed on noncombustible decks.

SECTION R902.1.3 Roof Coverings Within All Other Areas is amended as follows:

Section 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 a Class A.

SECTION R902.2 Fire-Retardant-Treated Shingles And Shakes is amended as follows:

Section R902.2 Fire-Retardant-Treated Shingles And Shakes. Wood shakes and shingles are not allowed within the City of Laguna Niguel.

**Sec. 8-1-5. Chapter 10, Chimneys and Fireplaces, amended**

SECTION R1001.13 Chimney spark arresters is hereby added as follows:

Section 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.

SECTION R1001.14 Outdoor Fireplaces, Fire Pits, Fire Rings, or similar devices is hereby added as follows:

Section R1001.14 Outdoor Fireplaces, Fire Pits, Fire Rings, or similar devices. Outdoor fireplaces, fire pits, fire rings, or similar exterior devices shall comply with this section.

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

Subsection R1001.14.1 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. 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 1001.13.

Subsection R1001.14.2 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 R1001.13. 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.

Subsection R1001.14.2.1 Where prohibited. The burning of wood and other solid fuels shall not be conducted within a fuel modification zone. Wood and other solid fuel burning fires in devices other than permanent fireplaces are not allowed within Wildfire Risk Areas (WRA) and adopted Fire Hazard Severity Zones (FHSZ) and Special Fire Protection Areas (SFPA) or in locations where conditions could cause the spread of fire to the WRA or FHSZ, unless determined by the Fire Code Official that the location or design of the device should reasonably prevent the start of a wildfire.

#### **Section 8-1-5. Chapter 44 Referenced Standards, amended**

Chapter 44 Referenced Standards is amended as follows:

NFPA 13, 2013 Edition, Standard For Installation Of Sprinkler Systems is amended as follows:

SUBSECTION 6.8.3 is revised as follows:

Subsection 6.8.3 Fire department connections (FDC) shall be of an approved type. The FDC shall contain a minimum of two 2½ inch inlets. The location shall be approved and be no more than 150 feet from a

*Ordinance No. 2013-174*

public hydrant. The size of piping and the number of inlets shall be approved by the fire chief. 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 2½ inch inlets shall be provided. FDC may be located within 150 feet of a private fire hydrant when approved by the fire chief.

SUBSECTION 8.3.3.1 is revised as follows:

Subsection 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 permit is issued. Sprinklers in light hazard occupancies shall be one of the following:

1. Quick-response type as defined in Subsection 3.6.4.7
2. Residential sprinklers in accordance with the requirements of Subsection 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.

SUBSECTION 8.17.1.1.1 is added as follows:

Subsection 8.17.1.1.1 Residential Water-flow Alarms. 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. 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. 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.

SUBSECTION 8.17.2.4.6 is revised as follows:

*Ordinance No. 2013-174*

Subsection 8.17.2.4.6 Fire department connections shall be on the street side of buildings and shall be located and arranged so that they are immediately adjacent to the approved fire department access road and that hose lines can be readily and conveniently attached to the inlets without interference from nearby objects including buildings, fence, posts, or other fire department connections.

SUBSECTION 11.1.1.2 is added as follows:

Subsection 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 permit is issued. 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.

SUBSECTION 11.2.3.1.1.1 is added as follows:

Subsection 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 multiplying 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 a professional engineer licensed in the State of California.

SUBSECTION 23.2.1.1 is hereby revised as follows:

Subsection 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, Standard For Installation Of Sprinkler System In Residential Occupancies Up To And Including Four Stories in Height, is amended as follows:

SUBSECTION 6.16.1 is revised as follows:

Subsection 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. 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 Installation of Sprinkler Systems in One and Two-Family Dwellings and Manufactured Homes is amended as follows:

SUBSECTION 4.1.3.1 Stock Of Spare Sprinklers is added as follows:

Subsection 4.1.3.1 Stock Of Spare Sprinklers. 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.

SUBSECTION 4.1.3.2 is added as follows:

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

SUBSECTION 4.1.3.3 is added as follows:

Subsection 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).

*Ordinance No. 2013-174*

SUBSECTION 4.1.3.4 is added as follows:

Subsection 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.

SUBSECTION 7.1.2 is revised as follows:

Subsection 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 Alarms is deleted in its entirety and replaced as follows:

Section 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 subject to final approval by the fire code official. Additional interior alarm devices shall be required to provide audibility throughout the structure. 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. 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.

**Section 8-1-6. Appendix O Vehicular Gates, adopted**

Appendix O Vehicular Gates is adopted with only the section below:

SECTION AO103.3 Vehicular gates or other barriers across required fire apparatus access roads is added as follows:

Section 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 comply with the requirements set forth in the 2013 California Fire Code Section 503.6.

**SECTION 5.            CALIFORNIA GREEN BUILDING STANDARDS CODE**

Article 10, entitled "2013 Edition Of The California Green Building Standards Code", of Division 1, entitled "Buildings and Construction Generally," of Title 8, entitled "Building Regulations," is hereby added to Division 1, entitled "Buildings and Construction Generally," of Title 8, entitled "Building Regulations," to read as follows:

**ARTICLE 10.            2013 EDITION OF THE CALIFORNIA GREEN BUILDING STANDARDS CODE**

**Sec. 8-1-1.    Chapter 2, Definitions, amended**

SECTION 202 Definitions is amended by adding the following definition:

**SUSTAINABILITY.** Consideration of present development and construction impacts on the community, the economy, and the environment without compromising the needs of the future.

SECTION 4.301.1 Irrigation Controllers is amended to read as follows:

Section 4.301.1 Irrigation Controllers. Automatic irrigation system controllers for landscaping provided and installed at the time of final inspection shall comply with the following:

1. Controllers shall be weather- or soil moisture-based irrigation controllers that automatically adjust irrigation in response to changes in plants' needs as weather conditions change.
2. Weather-based controllers without integral rain sensors or communication systems that account for local rainfall shall have a separate wired or wireless rain sensor which connects or communicates with the controller(s). Soil moisture-based controllers are not required to have rain sensor input.

**SECTION 6.            CALIFORNIA ELECTRICAL CODE**

Article 1, entitled "National Electrical Code," of Division 2, entitled "Electrical Code," of Title 8, entitled "Building Regulations," is hereby repealed and a new Article 1, entitled "2013 Edition Of The California Electrical Code", is added to Division 2, entitled "Electrical Code," of Title 8, entitled "Building Regulations," to read as follows:

**ARTICLE 1. CALIFORNIA ELECTRICAL CODE**

**Sec. 8-2-1 Adoption**

Except as provided in this article, the California Electrical Code, 2013 Edition, based on the 2011 National Electrical Code as published by the National Fire Protection Association, shall be the Electrical Code of the City, regulating all installation, arrangement, alteration, repair, use and other operation of electrical wiring, connections, fixtures and other electrical appliances on premises within the City. The California Electrical Code is on file for public examination in the office of the Building Official. One copy of the code is now filed in the office of the city clerk. This code is hereby adopted and incorporated as through set forth in full in this section.

**SECTION 7. CALIFORNIA PLUMBING CODE**

Article 1, entitled "California Plumbing Code", of Division 3, entitled "Plumbing and Swimming Pool Regulations," of Title 8, entitled "Building Regulations," is hereby repealed and a new Article 1, entitled "2013 Edition Of The California Plumbing Code", is added to Division 3, entitled "Plumbing and Swimming Pool Regulations," of Title 8, entitled "Building Regulations," to read as follows:

**ARTICLE 1. CALIFORNIA PLUMBING CODE**

**Sec. 8-3-1. Adoption of California Plumbing Code**

Except as provided in this article, the California Plumbing Code, 2013 Edition, based on the 2012 Uniform Plumbing Code as published by the International Association of Plumbing and Mechanical Officials, shall be the Plumbing Code of the City, regulating erection, installation, alteration, repair, relocation, replacement, maintenance or use of plumbing systems within the City. The California Plumbing Code is on file for public examination in the office of the Building Official. One copy of the code is now filed in the office of the city clerk. This code is hereby adopted and incorporated as through set forth in full in this section.

**SECTION 8. CALIFORNIA MECHANICAL CODE**

Article 1, entitled "Uniform Mechanical Code", of Division 5, entitled "Mechanical and Solar Energy Appliances," of Title 8, entitled "Building Regulations," is hereby repealed and a new Article 1, entitled "2010 Edition Of The California Mechanical Code", is added to Division 5, entitled "Mechanical and Solar Energy Appliances," of Title 8, entitled "Building Regulations," to read as follows:

## **ARTICLE 1. CALIFORNIA MECHANICAL CODE**

### **Sec. 8-5-1. Adoption of the California Mechanical Code**

The California Mechanical Code, 2013 Edition based on the 2012 Uniform Mechanical Code as published by the IAMPO, shall be the Mechanical Code of the City, regulating and controlling the design, construction, installation, quality of materials, location, operation and maintenance of heating, ventilating, cooling, refrigeration systems, incinerators and other miscellaneous heat producing appliances. The California Mechanical Code is on file for public examination in the office of the Building Official. One copy of the code is now filed in the office of the city clerk. This code is hereby adopted and incorporated as through set forth in full in this section.

## **SECTION 9. UNIFORM SOLAR ENERGY CODE**

Article 2, entitled "Uniform Solar Energy Code", of Division 5, entitled "Mechanical and Solar Energy Appliances," of Title 8, entitled "Building Regulations," is hereby repealed and a new Article 2, entitled "2009 Edition Of The Uniform Solar Energy Code", is added to Division 5, entitled "Mechanical and Solar Energy Appliances," of Title 8, entitled "Building Regulations," to read as follows:

### **ARTICLE 2. UNIFORM SOLAR ENERGY CODE**

#### **Sec. 8-5-10. Adoption of the Uniform Solar Energy Code**

The Uniform Solar Code, 2009 Edition, as published by the IAMPO, shall be the Solar Code of the City, regulating and controlling the design, construction, installation, quality of materials, location, operation and maintenance of Solar systems. The Uniform Solar Code is on file for public examination in the office of the Building Official. One copy of the code is now filed in the office of the city clerk. This code is hereby adopted and incorporated as through set forth in full in this section.

## **SECTION 10. CALIFORNIA ADMINISTRATIVE CODE**

Division 7, entitled "California Administrative Code," of Title 8, entitled "Building Regulations," is repealed and a new Division 7, entitled "2013 Edition Of The California Administrative Code," is added to Title 8, entitled "Building Regulations," to read as follows:

**DIVISION 7. 2013 EDITION OF THE CALIFORNIA ADMINISTRATIVE CODE**

**Sec. 8-7-1 Adoption of The 2013 Edition Of The California Administrative Code**

Except as provided in this division, the 2013 Edition Of The California Administrative Code, as published by the International Code Council, shall be the Administrative Code of the City. The California Administrative Code is on file for public examination in the office of the Building Official. One copy of the code is now filed in the office of the city clerk. This code is hereby adopted and incorporated as through set forth in full in this section.

**SECTION 11. EFFECTIVE DATE**

This ordinance and all codes referenced in this ordinance shall take effect 30 days from the adoption 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 for 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 12. SEVERABILITY**

If any section, subsection, subdivision, sentence, clause, phrase, or portion of this ordinance, 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 ordinance. The City Council hereby declares that it would have adopted this ordinance, and each section, subsection, subdivision, sentence, clause, phrases, or portion thereof, irrespective of the fact that any one or more sections, subsections, subdivisions, sentences, clauses, phrases, or portions thereof, be declared invalid or unconstitutional.

**SECTION 13. CITY CLERK'S CERTIFICATION**

The City Clerk shall certify to the adoption of this Ordinance and cause the same to be posted at the duty 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 a summary of this Ordinance in the Office of the City Clerk five (5) days prior to the date of adoption of this Ordinance, and, within fifteen (15) days after adoption, the City Clerk shall cause to be published

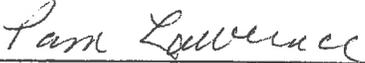
*Ordinance No. 2013-174*

the aforementioned summary 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 3rd day of December, 2013.

  
\_\_\_\_\_  
Linda Lindholm, Mayor

ATTEST:

  
\_\_\_\_\_  
Pam Lawrence, Acting City Clerk

CERTIFICATION

STATE OF CALIFORNIA            )  
COUNTY OF ORANGE            )SS  
CITY OF LAGUNA NIGUEL        )

I, Pam Lawrence, Acting City Clerk of the City of Laguna Niguel, California, do hereby certify that the foregoing is Ordinance No. 2013-174 which was adopted at a regular meeting of the City Council of the City of Laguna Niguel, California, held December 3, 2013 by the following vote:

AYES:                    Council Members Davies, Ming, Slusiewicz, Mayor Pro  
                                  Tem McCloskey and Mayor Lindholm

NOES:                    None

ABSTENTIONS:        None

ABSENT:                None

  
\_\_\_\_\_  
Pam Lawrence  
Deputy City Manager/Acting City Clerk

**AGREEMENT TO CONDITIONS IMPOSED**

I have read, understand, accept and agree to abide by the conditions of approval for Amendment No. 7 to Site Development Permit SP 80-47P and Amendment No. 10 to Minor Adjustment MA 02-19P (Aliso Village Shopping Center - Minor Expansion and Parking Modifications) - A site development permit amendment request to expand an existing tenant suite (23956 Aliso Creek Road) within the existing Aliso Village shopping center by 200 square feet from 900 square feet to 1,100 square feet.

The project also includes a minor adjustment amendment request to modify the center's approved Precise-Mix-of-Uses (parking model). These changes collectively would have no net effect on the center's existing 15% parking deficiency. The existing deficit of 135 spaces would remain the same.

  
\_\_\_\_\_  
Property Owner/Applicant (Shapel Properties) print name and sign

12/27/13  
Date