

BUILDING STANDARDS COMMISSION

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



March 11, 2011

Gary Hawken, Building Official
City of Laguna Niguel
27781 La Paz Road
Laguna Niguel, CA 92677

Dear Mr. Hawken:

This letter is to acknowledge receipt on January 24, 2011 of the City of Laguna Niguel submittal pertaining to Ordinance Nos. 2010-159 and 2010-160 with findings and is acceptable for filing. Your filing attests to your understanding that according to Health and Safety Code Section 17958.7 no modification or change to the California Building Standards Code shall become effective or operative for any purpose until the finding and the modification or change have been filed with the California Building Standards Commission (the Commission).

This letter attests only to the filing of these local modifications with the Commission, which is not authorized by law to determine the merit of the filing.

As a reminder, local modifications 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. In addition, should you receive Fire Protection District ordinances for ratification, it is required to submit the ratified ordinances to the Department of Housing and Community Development [H&SC Section 13869.7(c)], attention State Housing Law Program Manager, rather than the Commission.

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

Sincerely,

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

Enrique M. Rodriguez
Associate Construction Analyst

cc: Chron
Local Filings

January 20, 2011

California Building Standards Commission
2525 Natomas Park Dr., Suite 130
Sacramento, California 95833-2936

RE: City of Laguna Niguel, Building Adoption Ordinance

Mr. Dave Walls:

The City of Laguna Niguel has adopted the current Building, Residential, Green Building Standards, Plumbing, Mechanical, and Electrical 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 2010 Editions of the California Building and Residential Codes are reasonably necessary due to local conditions in the City of Laguna Niguel 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 of Laguna Niguel.

The enclosed City Ordinance is for your files.

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

Sincerely,



Gary Hawken CBO
Building Official

Attachment: Ordinance 2010-159
Ordinance 2010-160

RECEIVED
CALIFORNIA BUILDING
STANDARDS COMMISSION
JAN 24 P 2:04

ORDINANCE NO. 2010-160

**ORDINANCE OF THE CITY COUNCIL
OF THE CITY OF LAGUNA NIGUEL, CALIFORNIA,
ADOPTING
THE 2010 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 2010 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 Sections 304.1.2(7)(E), 305.5, 318, 507.5.1, 604.2.15.1.1, 604.2.15.2.1, 608.10, 610, 903.2, 903.2.8, 903.3.1.1.1, 903.4, 905.4, 907.4.1, 907.6.2.2, 1108.1 thru 1108.1.11, 2308.3, 2703.1.1(1), 2703.1.1.1, 3704.2.2.7, 4503.7, 4504.2.2, Chapter 47, 4906.3, 4908, 4909 of the 2010 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.
- 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

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."

- A. 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.
- B. 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.
- C. Soils throughout the County possess corrosive properties that reduce the expected usable life of water services when metallic pipes in contact with soils are utilized.
- D. Portions of the County contain active or former oil production fields. These areas contain a variety of naturally occurring gasses, liquids and vapors. These compounds present toxicity or flammability hazards to building occupants. Evaluation of these hazards and the risks they pose to development is necessary implement appropriate mitigation.

SECTION 2. ADOPTION OF THE 2010 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 "2010 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. 2010 EDITION OF THE CALIFORNIA FIRE CODE

Sec. 11-3-1. Adoption of the 2010 Edition Of The California Fire Code

Except as hereinafter provided, the 2010 Edition of the California Fire Code, based on the 2009 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 105.6 Required Operational Permits, is amended by modifying and deleting permit categories to read as follows:

Subsection 105.6.29 Miscellaneous Combustion Storage. An operational permit is required to store in any building or upon any premises in excess of 2500 cubic feet (71 m³) gross volume of combustible empty packing cases, boxes, barrels or similar containers, rubber tires, rubber, cork, green waste, composting, yard waste, or similar combustible material.

Subsection 105.6.35 Private Fire Hydrants, is deleted without substitution.

SECTION 109.3 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 109.3 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 109.3.2 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 109.3.3 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:

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

Sec. 11-3-4. Chapter 3, General Precautions Against Fire, amended

Chapter 3, General Precautions Against Fire, is amended as follows:

SUBSECTION 304.1.2 Vegetation, is amended as follows:

Subsection 304.1.2 Vegetation Item (7), is revised by adding the following:

(E) OCFA Vegetation Management Guideline.

SECTION 305 Ignition Sources, is amended to add the following:

Section 305.5, Spark Arrestors. All chimneys attached to any appliance or fireplace that burns solid fuel shall be equipped with an approved spark arrester, the spark arrester shall meet all of the following requirements:

1. The net free area of the spark arrester shall not be less than four times the net area of the outlet of the chimney.
2. The spark arrester screen shall have heat or corrosion resistance equivalent to 12 gage steel wire, 19 gage galvanized wire or 24 gage stainless steel.
3. Openings shall not permit the passage of spheres having a diameter larger than ½ inch and shall not block the passage of spheres having a diameter of less than 3/8 inch.
4. The spark arrester shall be accessible for cleaning and the screen or chimney cap shall be removable to allow for cleaning of the chimney flue.

SECTIONS 318 through 325 are added to read as follows:

Section 318 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 (304.800 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 319 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 320 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 321 Unusual Circumstances. The fire code official may suspend enforcement of the vegetation management requirements and require reasonable alternative measures designed to advance the purpose of this code if determined that in any specific case that any of the following conditions exist:

1. Difficult terrain.
2. Danger of erosion.
3. Presence of plants included in any state and federal resources agencies, California Native Plant Society and county-approved list of wildlife, plants, rare, endangered and/or threatened species.
4. Stands or groves of trees or heritage trees.
5. Other unusual circumstances that make strict compliance with the clearance of vegetation provisions of Sections 15, 16 or 17 of this appendix undesirable or impractical.

Section 322 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 322.1 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 322.1 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 323 Restricted Entry. The fire code official shall determine and publicly announce when hazardous fire areas shall be closed to entry and when such areas shall again be opened to entry. Entry on and occupation of hazardous fire areas, except public roadways, inhabited areas or established trails and camp sites which have not been closed during such time when the hazardous fire area is closed to entry, is prohibited.

Exceptions:

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

Section 324 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 325 Outdoor Fires. Outdoor fires shall not be built, ignited or maintained in or upon hazardous fire areas, except by permit from the fire code official.

Exception: Outdoor fires within habited premises or designated campsites where such fires are built in a permanent barbecue, portable barbecue, outdoor fireplace, incinerator or grill and are a minimum of 30 feet (9,144 mm) from a grass-, grain-, brush- or forest-covered area.

Section 325.1 Outdoor Fire Permits. Outdoor fire permits shall incorporate such terms and conditions which will reasonably safeguard public safety and property. Outdoor fires shall not be built, ignited or maintained in or upon hazardous fire areas under the following conditions:

1. When predicted sustained winds exceed 20 MPH at the ground level, or a red flag condition has been declared.
2. When a person age 17 or over is not present at all times to watch and tend such fire, or
3. When a public announcement is made that open burning is prohibited.

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. Section 401.
2. Section 402.
3. Section 403.
4. Section 407.

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

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

SUBSECTION 503.1.1 Buildings And Facilities, is amended to read as follows:

Subsection 503.1.1 Buildings and Facilities. Approved fire apparatus access roads shall be provided for every facility, building or portion of a building hereafter constructed or moved into or within the jurisdiction. The fire apparatus access road shall comply with the requirements of this section and shall extend to within 150 feet (45,720 mm) of all portions of the facility and all portions of the exterior walls of the first story of the building as measured by an approved route around the exterior of the building or facility.

Exception: The fire code official is authorized to increase the dimension of 150 feet (45,720 mm) where:

1. The building is equipped throughout with an approved automatic sprinkler system installed in accordance with Subsection 903.3.1.1, 903.3.1.2 or 903.3.1.3.
2. Fire apparatus access roads cannot be installed because of location on property, topography, waterways, nonnegotiable grades or other similar conditions, and an approved alternative means of fire protection is provided.
3. There are not more than two Group R-3 or Group U occupancies.
4. For Group R-3 and Group U occupancies equipped throughout with an approved automatic sprinkler system installed in accordance with Subsection 903.3.1.1 or 903.3.1.2, or 903.3.1.3 the fire apparatus access road shall comply with the requirements of this section and shall extend to within 300 feet (91 m) of the main entry door to the building.

SUBSECTION 503.2.1 Dimensions, is amended to read as follows:

Subsection 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 areas defined as State Responsibility Area: Very High Fire Hazard Severity Zones, and Local Responsibility Area: Very High Fire Hazard Severity Zones Area as adopted by the local agencies, the minimum fire apparatus road width shall be 28 feet (8.53 m).

Exception: When the road serves no more than 3 dwelling units and the road does not exceed 150 feet (45.7 m) in-length, the road width may be 24 feet (7.3 m).

SECTION 503.4 Obstruction Of Fire Apparatus Access Roads, is amended to read as follows:

Section 503.4 Obstruction Of Fire Apparatus Access Roads. Fire apparatus access roads shall not be obstructed in any manner, including the parking of vehicles. The minimum widths and clearances established in Subsection 503.2.1 shall be maintained at all times. Speed bumps, speed humps and similar traffic slowing devices shall not be installed on any public or private street unless they are in compliance with the applicable guidelines of the Orange County Fire Authority and until the installation is approved by the fire chief.

SECTION 503.6, Security Gates, is amended to read as follows:

Section 503.6 Security Gate. The installation of security gates across a fire apparatus access road shall be approved by the fire chief. Where security gates are installed, they shall have an approved means of emergency operation. The security gates and the emergency operation shall be maintained operational at all times. Electric gate operators, where provided, shall be listed in accordance with UL 325. Gates intended for automatic operation shall be designed, constructed and installed to comply with the requirements of ASTM F 2200. Vehicle access gates or barriers shall be in accordance with the Orange County Fire Authority Guidelines "Fire Master Plan for Commercial and Residential Development". All electrically operated vehicle access gates shall be equipped with an automatic opening device in addition to a key opening switch.

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.

SUBSECTION 507.5.1 Where Required, is amended to read as follows:

Subsection 507.5.1 Where Required. Where a portion of the facility or building hereafter constructed or moved into or within the jurisdiction is more than allowed in APPENDIX C – FIRE HYDRANT LOCATIONS AND DISTRIBUTION from a hydrant on a fire apparatus access road, as measured by an approved route

around the exterior of the facility or building, on-site fire hydrants and mains shall be provided where required by the fire code official.

Exception: For Group R-3 and Group U occupancies equipped throughout with an approved automatic sprinkler system installed in accordance with Subsection 903.3.1.1 or 903.3.1.2, or 903.3.1.3, the distance requirement shall be not more than 600 feet (183 m).

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

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.

SECTION 510.2 Radio Signal Strength, is deleted without replacement.

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

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

SUBSECTION 604.2.15.1.1 CFC Standby Power Loads, is amended to read as follows:

Subsection 604.2.15.1.1. CFC Standby Power Loads. The following loads are classified as standby power loads:

1. Smoke control system.
2. Fire pumps.
3. Standby power shall be provided for elevators in accordance with Section 3003 of the California Building Code.

SUBSECTION 604.2.15.2.1 CFC (Section 403.1.1 CBC), Emergency Power Loads, is amended by adding Item 6 as follows:

Subsection 604.2.15.2.1 Emergency Power Loads. The following loads are classified as emergency power loads:

1. Emergency voice/alarm communication systems.
2. Fire alarm systems.
3. Automatic fire detection systems.
4. Elevator car lighting.

5. Means of egress lighting and exit sign illumination as required by Chapter 10.
6. Ventilation and automatic fire detection equipment for smoke proof enclosures.

SECTION 606.8 Refrigerant Detector, is amended to read as follows:

Section 606.8 Refrigerant Detector. Machinery rooms shall contain a refrigerant detector with an audible and visual alarm. The detector, or a sampling tube that draws air to the detector, shall be located in an area where refrigerant from a leak will concentrate. The alarm shall be actuated at a value not greater than the corresponding TLV-TWA values shown in the California Mechanical Code for the refrigerant classification. Detectors and alarms shall be placed in approved locations. Emergency shutoff shall also be automatically activated when the concentration of refrigerant vapor exceeds 25 percent of LFL. The detector shall transmit a signal to an approved location.

SUBSECTION 606.10.1.2 Manual Operation, is amended to read as follows:

Subsection 606.10.1.2 Manual Operation. When required by the fire code official, automatic crossover valves shall be capable of manual operation. The manual valves shall be located in an approved location immediately outside of the machinery room, in a secure metal box or equivalent and marked as Emergency Controls.

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

SECTION 610 Photovoltaic Systems, is hereby added as follows:

Section 610.1 General, is hereby added as follows:

Section 610.1 Manual Operation. Photovoltaic systems shall comply with Orange County Fire Chief's Association Guideline for Fire Safety Elements of Solar Photovoltaic Systems. The provision of this section may be applied by either the fire code official or the building code official.

Sec. 11-3-8. Chapter 8 Interior Finish, Decorative Materials and Furnishings, amended

Chapter 8 Interior Finish, Decorative Materials and Furnishings, is not adopt with the exception of the Sections, Subsections, and Table listed below:

1. Section 801.
2. Section 802.
3. Section 803.
4. Section 804.
5. Subsection 806.2.
6. Subsection 807.1.
7. Subsection 807.1.2.
8. Subsection 807.4.5.1.
9. Subsection 807.4.2.4.1.
10. Subsection 807.4.5.
11. Subsection 807.4.2.4.
12. Table 803.3.

Sec. 11-3-9. 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:

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 m²) 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 m²) as defined in Section 202; or
 - b. When an addition exceeds 2,000 square feet (186 m²) and the resulting building area exceeds 5,000 square feet (465 m²) 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.

SUBSECTION 903.3.1.1.1 Exempt Locations, is amended by revising Item 4 as follows:

4. When approved by the fire code official, spaces or areas in telecommunications buildings used exclusively for telecommunications equipment, and associated electrical power distribution equipment, provided those spaces or areas are equipped throughout with an automatic smoke detection system in accordance with Section 907.2 and are separated from the remainder of the building by fire barriers consisting of not less than 1 hour fire barriers constructed in accordance with Section 707 or not less than 2 hour horizontal assemblies constructed in accordance with Section 712, or both.

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.

SUBSECTION 904.3.5 Monitoring, is revised as follows:

Subsection 904.3.5 Monitoring. Where a building fire alarm or monitoring system is installed, new automatic fire-extinguishing systems shall be monitored by the building fire alarm or monitoring system in accordance with NFPA 72.

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.
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. High-rise buildings having occupied floors located more than 55 feet (16,769 mm) above the lowest level of fire department vehicle access and Group I-2 occupancies having floors located more than 75 feet (22,860 mm) above the lowest level fire department vehicle access shall be provided with an automatic smoke detection system in accordance with Section 907.2.13.1, a fire department communication system in accordance with Subsection 907.2.13.2 and an emergency voice/alarm communication system in accordance with Subsection 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 406.3 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. 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 907.6.2.2 Emergency Voice/Alarm Communication System, is revised as follows.

Subsection 907.6.2.2 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 907.9.3 High-Rise Buildings, is amended to read as follows:

Subsection 907.9.3 High-Rise Building. High-rise buildings having occupied floors located more than 55 feet (16,764 mm) above the lowest level of fire department vehicle access and Group I-2 occupancies having occupied floors located more than 75 feet (22,860 mm) above the lowest level 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.

SUBSECTION 910.3.2.2 Sprinklered Buildings, is amended to read as follows:

Subsection 910.3.2.2 Sprinklered Buildings. Where installed in buildings equipped with an approved automatic sprinkler system, smoke and heat vents shall be designed to operate automatically by actuation of a heat-responsive device rated at least 100° F above the operating temperature of the sprinkler, unless otherwise approved.

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

Chapter 11, Aviation Facilities, is amended as follows:

SECTION 1102.1 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 or medical helicopters engaged in emergency operations.

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.

SECTION 1108 Emergency Helicopter Landing Facility (EHLF), is added to read as follows:

SECTION 1108 EMERGENCY HELICOPTER LANDING FACILITY (EHLF)

Section 1108.1 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 1108.1.1 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 1108.1.2 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 1108.1.3 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 1108.1.4 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 1108.1.5 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 1108.1.6 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 1108.1.7 Special Markings. The emergency helicopter landing facility shall be marked as indicated in Figure 1108.1.7.

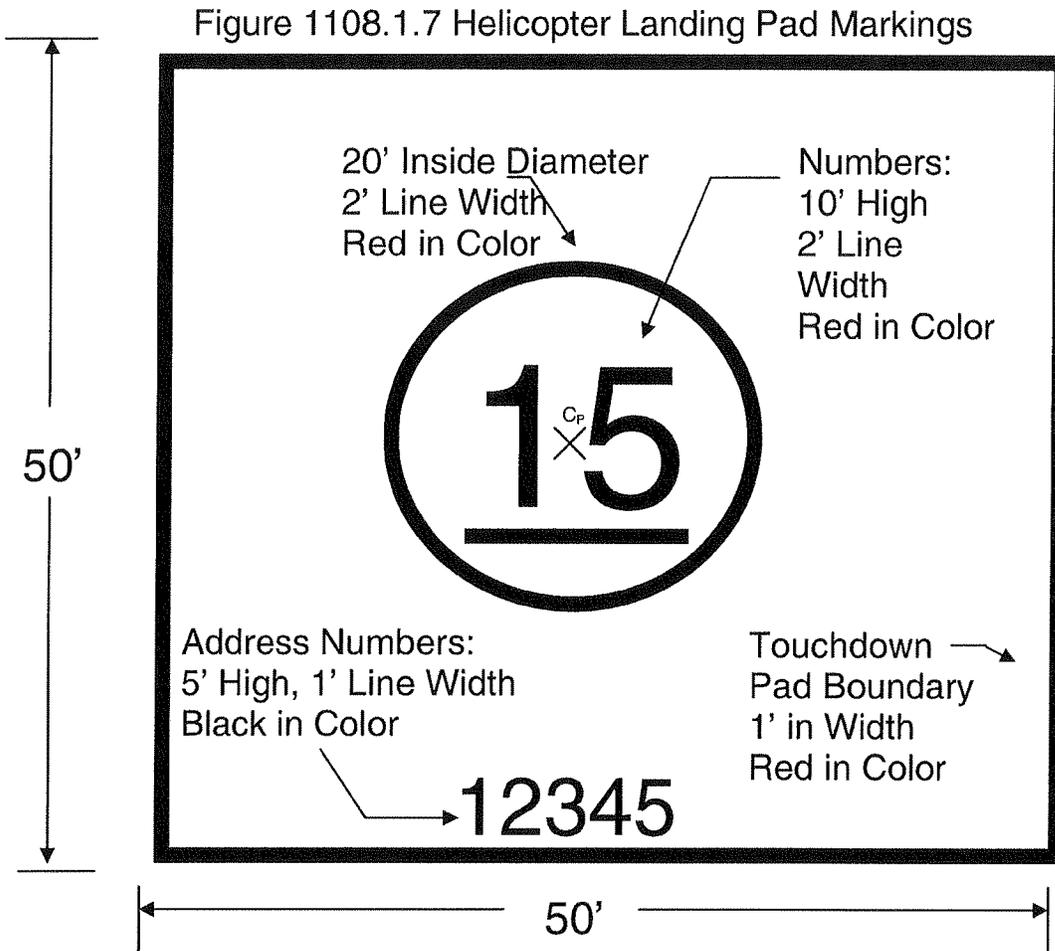
Subsection 1108.1.8 EHLF Exits. Two stairway exits shall be provided from the landing platform area to the roof surface. For landing areas less than 2,501 square feet in area, the second exit may be a fire escape or ladder leading to the roof surface below. The stairway from the landing facility platform to the floor below shall comply with CFC 1009.4.2 for riser height and tread depth. Handrails shall be provided, but shall not extend above the platform surface.

Subsection 1108.1.9 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 1108.1.10 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 1108.1.11 EHLF. Fueling, maintenance, repairs, or storage of helicopters is prohibited.

Subsection 1108.1 Figure 1108.1.7 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).

Section 11-3-11. Chapter 19, Lumber Yards and Woodworking Facilities, amended

Chapter 19, Lumber Yards and Woodworking Facilities, is amended as follows:

SECTION 1901.2, Permit, is amended to read as follows:

Section 1901.2 Permit. Permits shall be required as set forth in Section 105.6. For Miscellaneous Combustible Storage Permit (see Subsection 105.6.29).

SECTION 1908.1, General, is amended by adding the following at the end of the section:

Section 1908.1 General. The storage and processing of more than 400 cubic feet of wood chips, hogged materials, fines, compost and raw product produced from yard waste, debris and recycling facilities shall comply with this section.

SECTION 1908.2 Storage Site, is amended to read as follows:

Section 1908.2 Storage Site. The storage and processing of more than 400 cubic feet of wood chips, hogged materials, fines, compost, green waste, and raw product produced from yard waste, debris and recycling facilities shall comply with Sections 1908.2 through 1908.10.

SECTION 1908.3 Size Of Piles, is amended to read as follows:

Section 1908.3 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 1908.7 Pile Fire Protection, is amended by adding the following to the end of the section:

Oscillating sprinklers with a sufficient projectile reach are required to maintain a 40% to 60% moisture content and wet down burning/smoldering areas.

SECTION 1908.9 Material-Handling Equipment, is amended by adding the following at the beginning of the section:

Section 1908.9 Material-Handling Equipment. All material handling equipment operated by an internal combustion engine shall be provided and maintained with an approved spark arrester.

Section 11-3-12. Chapter 23, High-Piled Combustible Storage, amended

Chapter 23, High-Piled Combustible Storage, is amended as follows:

SECTION 2308.3 Flue Spaces, is amended by adding the following at the end of the section:

Section 2308.3 Flue Spaces. Flue spaces shall be provided in accordance with Table 2308.3. Required flue spaces shall be maintained. In double-row racks a pallet/commodity stop shall be provided along the longitudinal flue space at each level. The stop shall be steel or other ferrous material ¼ inch thick and in the mounted position shall extend a minimum of 4 inches above the shelve or cross member, or other method approved by fire code official. In double row racks and where products are hand-stacked chain link shall be securely attached to the rear of both racks. Chain link shall be a minimum of

12 gauge. Attachment method shall be in compliance with Figure 2308.3 or other methods as approved by the fire code official.

Section 2308.3, Table 2308.3 Required Flue Spaces For Rack Storage, is revised as follows:

TABLE 2308.3: REQUIRED FLUE SPACES FOR RACK STORAGE

RACK CONFIGURATION	FIRE SPRINKLER PROTECTION		SPRINKLER AT THE CEILING WITH OR WITHOUT MINIMUM IN-RACK SPRINKLERS			IN-RACK SPRINKLERS AT EVERY TIER	NON-SPRINKLERED
			≤ 25 feet		> 25 feet	Any Height	Any Height
			Option 1	Option 2			
Single-row Rack	Transverse Flue Space	Size ^b	3 inch	NA	3 inch	NR	NR
		Vertically Aligned	NR	NA	Yes	NA	
	Longitudinal Flue Space		NR	NA	NR	NR	
Double-row Rack	Transverse Flue Space	Size ^b	6 inch ^{a, c}	3 inch	3 inch	NR	
		Vertically Aligned	NR	NR	Yes	NA	
	Longitudinal Flue Space		NR	6 inch	6 inch	NR	
Multi-row Rack	Transverse Flue Space	Size ^b	6 inch ^c	NA	6 inch	NR	
		Vertically Aligned	NR	NA	Yes	NA	
	Longitudinal Flue Space		NR	NA	NR	NR	

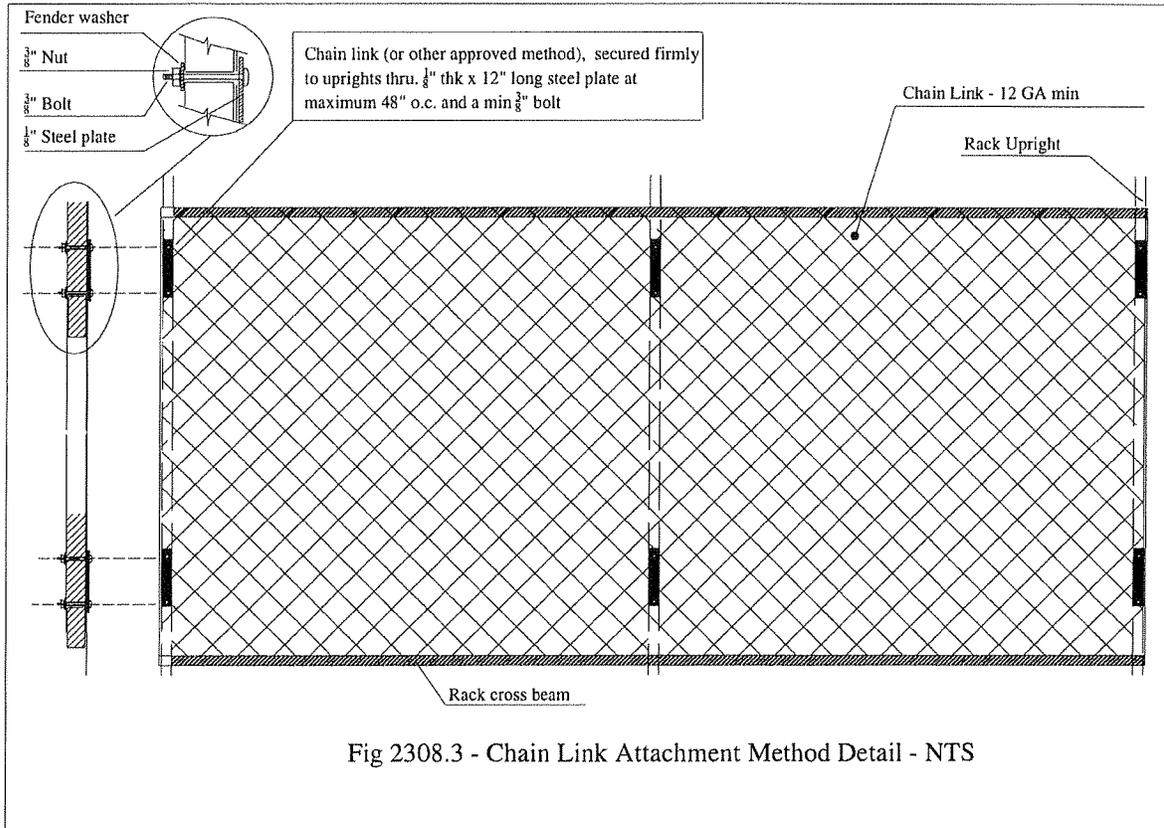
NR = "not required." NA means "not applicable."

^a Three-inch transverse flue spaces shall be provided at least every 10 feet where ESFR sprinkler protection is provided.

^b Random variations are allowed, provided that the configuration does not obstruct water penetration.

^c Transverse flue space shall be maintained by mechanical means as approved.

Section 2308.3, Figure 2308.3 Chain Link Attachment Method Detail, is added as follows:



Section 11-3-13. Chapter 27, Hazardous Materials – General Provisions, amended

Chapter 27, Hazardous Materials – General Provisions, is amended as follows:

SUBSECTION 2701.5.2 Hazardous Materials Inventory Statement, is amended by modifying the first paragraph to read as follows:

Subsection 2701.5.2 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 HMIS shall include the following information:

1. Product Name.
2. Component.
3. Chemical Abstract Service (CAS) number.

4. Location where stored or used.
5. Container size.
6. Hazard classification.
7. Amount in storage.
8. Amount in use-closed systems.
9. Amount in use-open systems.

SECTION 2703, Table 2703.1.1(1) Maximum Allowable Quantity Per Control Area, is amended by deleting Footnote K:

SUBSECTION 2703.1.1 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 2703.5 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 32, Cryogenic Fluids, amended

Chapter 32, Cryogenic Fluids, is amended as follows:

SUBSECTION 3203.4.1 Identification Signs, is amended by modifying the NFPA standard to read as follows:

Subsection 3203.4.1 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 33, Explosives and Fireworks, amended

Chapter 33, Explosives and Fireworks, is amended as follows:

SECTION 3301.2 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.

SECTION 3301.3 Seizure Of Fireworks, is added as follows:

Section 3301.3 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 3308.1 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 3308.2 Firing is added as follows:

Section 3308.2 Firing. All fireworks displays shall be electrically fired.

Section 11-3-16. Chapter 34, Flammable and Combustible Liquids, amended

Chapter 34, Flammable and Combustible Liquids, is amended as follows:

SUBSECTION 3404.2.3.2 Label Or Placard, is amended by modifying the NFPA standard as follows:

Subsection 3404.2.3.2 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 37, Highly Toxic and Toxic Materials, amended

Chapter 37, Highly Toxic and Toxic Materials, is amended as follows:

SUBSECTION 3704.2.2.7 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 3704.2.2.10.

Section 11-3-18. Construction Requirements For Existing Buildings, amended

Chapter 46 Construction Requirements For Existing Buildings, is not adopted with the exception of the Sections and Subsections listed below:

1. Section 4606.
2. Subsection 4603.6.
3. Subsection 4603.6.3.
4. Subsection 4603.6.3.1.
5. Subsection 4603.6.8 through 4603.6.8.2.
6. Subsection 4603.6.9 through 4603.6.9.10.
7. Subsection 4603.7 through 4603.7.5.3.

Section 11-3-19. Chapter 47 Referenced Standards, amended

Chapter 47 Referenced Standards is amended as follows:

NFPA 13, 2010 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 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:

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. The result shall be adjusted in accordance with the graduated scaled found in the guideline.

SUBSECTION 22.1.3 (43) is revised as follows:

Subsection 22.1.3 (43) Size and location of hydrants, showing size and number of outlets and if outlets are to be equipped with independent gate valves. Whether hose houses and equipment are to be provided, and by whom, shall be indicated. Static and residual hydrants that were used in the flow tests shall be shown. Flow test shall be completed within six months of the plan submittal to the authority having jurisdiction.

NFPA 13R, 2010 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 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.

SUBSECTION 6.6.6 is revised as follows:

Subsection 6.6.6 Sprinklers shall not be required in penthouse equipment rooms, elevator machine rooms, concealed spaces dedicated exclusively to containing only dwelling unit ventilation equipment, crawl spaces, floor/ceiling spaces, noncombustible elevator shafts where the elevator cars comply with ANSI A17.1, Safety Code for Elevators and Escalators, and other concealed spaces that are not used or intended for living purposes or storage and do not contain fuel fired equipment.

SUBSECTION 6.6.9 is added as follows:

Subsection 6.6.9 Sprinklers shall not be required in attics that are not located over dwelling units. When attics are separated by unit, each unit's attic space may be protected per NFPA 13D Section 8.6.4.2. All other attics shall be protected per NFPA 13.

NFPA 13D, 2010 Edition, Installation of Sprinkler Systems in One and Two-Family Dwellings and Manufactured Homes is amended as follows:

SUBSECTION 4.1.5.1 Stock Of Spare Sprinklers is added as follows:

Subsection 4.1.5.1 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 4.1.5.2 is added as follows:

Subsection 4.1.5.2 The sprinklers shall correspond to the types and temperature ratings of the sprinklers in the property.

SUBSECTION 4.1.5.3 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 4.1.5.4 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.

SUBSECTION 7.3.1 Pressure Gauges is deleted and substituted with the following:

Subsection 7.3.1 Pressure Gauges. At least one water pressure gauge shall be installed on the riser assembly.

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 310.9 are used to sound an alarm upon waterflow switch activation.

SUBSECTION 8.6.4.2 is added as follows:

Subsection 8.6.4.2 All attics shall be protected with an intermediate temperature quick response sprinkler which shall be located to protect attic penetrations created by the access scuttles or mechanical equipment.

NFPA 14, 2007 Edition, Installation Of Standpipe And Hose Systems is amended as follows:

SUBSECTION 6.4.5.4.1 is deleted in its entirety and replaced as follows:

Subsection 6.4.5.4.1 The fire department connection shall have a minimum of two 2½ inches, internal threaded (NHS) inlets. Additional inlets shall be provided on a 250 GPM per inlet ratio to meet the system demand. The inlets shall be provided with approved caps to protect the system from entry of debris. The location of the FDC shall be approved and be no more than 150 feet from a public hydrant. If acceptable to the water authority, it may be installed on the backflow assembly. Fire department inlet connections shall be painted OSHA safety red.

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

SUBSECTION 5.9.1.3 is revised as follows:

Subsection 5.9.1.3 The fire department connection shall be of an approved type and contain a minimum of two 2½ inch inlets. The location shall be approved and be no more than 150 feet from a public fire hydrant. If acceptable to the water authority, it may be installed on the backflow assembly. The supply pipe shall be painted OSHA safety red.

SUBSECTION 5.9.1.3.1 is added as follows:

Subsection 5.9.1.3.1 When the sprinkler density design is 500 gpm (including the interior hose stream demand) or greater, or a standpipe system is included, four 2½ inch inlets shall be provided.

SUBSECTION 5.9.1.3.2 is added as follows:

Subsection 5.9.1.3.2 The fire department connection (FDC) may be located within 150 feet of a private fire hydrant provided the FDC connects down-stream of an aboveground sprinkler system check valve.

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.

SUBSECTION 6.2.11 (6) is revised as follows:

Subsection 6.2.11 (6) Control valves in a one-hour fire-rated room accessible from the exterior.

SUBSECTION 6.2.11 (7) is deleted without replacement.

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: 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.

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 18-inches, as measured from the interior of the exterior wall. The pipe under the building or building foundation shall be 316 stainless steel and shall not contain mechanical joints or otherwise comply with 10.6.2.

SUBSECTION 10.6.5 is revised as follows:

Subsection 10.6.5 Pipe Joints shall not be located under foundation footings. The pipe under the building or building foundation shall be 316 stainless steel and shall not contain mechanical joints.

NFPA 72, 2010 Edition, National Fire Alarm Code is amended as follows:

SUBSECTION 14.2.1.2.3 is revised as follows:

Subsection 14.2.1.2.3 If a defect or malfunction is not corrected at the conclusion of system inspection, testing, or maintenance, the system owner or the owner's designated representative and fire code official shall be informed of the impairment in writing within 24 hours.

SUBSECTION 23.8.2 Fire Alarm Control Units is revised as follows:

Subsection 23.8.2.2 Except as permitted in Subsection 23.8.2.3, the fire alarm systems components shall be permitted to share control equipment or shall be able to operate as stand-alone subsystems, but in any case, they shall be arranged to function as a single system and send a single signal to a central, remote, or proprietary station.

SUBSECTION 23.8.2.3 is deleted without replacement.

SUBSECTION 26.2.3.1 is amended by modifying the start paragraph as follows:

Subsection 26.2.3.1 Supervising station customers or clients and the fire code official shall be notified in writing within 7 days of any scheduled change in service that results in signals from their property being handled by a different supervising station facility.

Sec. 11-3-20. Chapter 49, Requirements For Wildland-Urban Interface Fire Areas, amended

Chapter 49 Requirements For Wildland-Urban Interface Fire Areas is amended as follows:

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

(5) Orange County Fire Authority Vegetation Management Guideline.

Section 4908 Fuel Modification Requirements For New Construction is added as follows:

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.
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 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 4909 Explosives and Blasting is added as follows:

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

Sec. 11-3-21. Appendix B, amended

Appendix B is amended as follows:

Section B105.1 One- And Two-Family Dwellings is added as follows:

Section B105.1 One- And Two-family Dwellings. The minimum fire-flow and flow duration requirements for one- and two-family dwellings having a fire-flow calculation area that does not exceed 3,600 square feet (344.5 m²) shall be 1,000 gallons per minute (3785.4 L/min) for 1 hour. Fire-flow and flow duration for dwellings having a fire-flow calculation area in excess of 3,600 square feet (344.5m²) shall not be less than that specified in Table B105.1.

Exception: When the building is equipped with an approved automatic sprinkler system, the fire flow requirements of Table B105.1 are reduced by 50%, provided that the resulting fire flow is not less than 1,000 gallons-per-minute (3785.4 L/min) for 1 hour.

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**

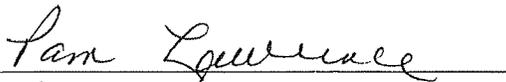
The City Clerk shall certify to the adoption of this Ordinance and cause the same to be posted at the duty designated posting places within the City and published once within fifteen (15) days after passage and adoption as required by law; or, in the alternative, the City Clerk may cause to be published 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 16th day of November, 2010.



Linda Lindholm, Mayor

ATTEST:



Pam Lawrence
Deputy City Manager/Acting City Clerk

CERTIFICATION

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

I, Pamela Lawrence, Acting City Clerk of the City of Laguna Niguel, California, do hereby certify that the foregoing is Ordinance No. 2010-160 which was adopted at a regular meeting of the City Council of the City of Laguna Niguel, California, held November 16, 2010 by the following vote:

- AYES: Council Members Brown, Glaab, Ming, Mayor Pro Tem
 Capata and Mayor Lindholm
- NOES: None
- ABSTENTIONS: None
- ABSENT: None



Pam Lawrence
Deputy City Manager/Acting City Clerk

ORDINANCE NO. 2010-159

**ORDINANCE OF THE CITY COUNCIL
OF THE CITY OF LAGUNA NIGUEL, CALIFORNIA,
ADOPTING**

**THE 2010 CALIFORNIA BUILDING CODE;
THE 2010 CALIFORNIA PLUMBING CODE;
THE 2010 CALIFORNIA MECHANICAL CODE;
THE 2010 CALIFORNIA ELECTRICAL CODE;
THE 2010 CALIFORNIA RESIDENTIAL CODE;
THE 2010 CALIFORNIA GREEN BUILDING STANDARDS CODE;
THE 2010 CALIFORNIA ADMINISTRATIVE CODE;
THE 2010 CALIFORNIA REFERENCE STANDARDS;
THE 2010 CALIFORNIA ENERGY CODE;
THE 2009 INTERNATIONAL PROPERTY MAINTENANCE CODE;
THE 2006 UNIFORM SWIMMING POOL, SPA AND HOT TUB 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 2010 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

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

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

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."

- A. 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.
- B. 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.

- C. Soils throughout the County possess corrosive properties that reduce the expected usable life of water services when metallic pipes in contact with soils are utilized.
- D. Portions of the County contain active or former oil production fields. These areas contain a variety of naturally occurring gasses, liquids and vapors. These compounds present toxicity or flammability hazards to building occupants. Evaluation of these hazards and the risks they pose to development is necessary implement appropriate mitigation.

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, Uniform Swimming Pool, Spa and Hot Tub 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 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, Uniform Swimming Pool, Spa and Hot Tub 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, Uniform Swimming Pool, Spa and Hot Tub 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, Uniform Swimming Pool, Spa and Hot Tub Code and Uniform Solar Energy Code, are hereby deleted and replaced by Chapter 1 of the 2010 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 "2010 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. 2010 EDITION OF THE CALIFORNIA BUILDING CODE

Sec. 8-1-12. Adoption of 2010 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 and the amendment to these codes set forth in this division: the California Building Code, 2010 Edition, based on the 2009 International Building Code as published by the International Code Council; the California Plumbing Code, 2010 Edition, based on the 2009 Uniform Plumbing Code as published by the International Association of Plumbing and Mechanical Officials; the California Mechanical Code, 2010 Edition, based on the 2009 Uniform Mechanical Code as published by the International Association of Plumbing and Mechanical Officials; the California Electrical Code, 2010 Edition, based on the 2008 National Electrical Code as published by BNi Publications, Inc; the California Residential Code, 2010 Edition, based on the 2009 International Residential Code as published by the International Code Council; the California Green Building Standards Code, 2010 Edition as published by the California Building Standards Commission; the International Property Maintenance Code, 2009 Edition as published by the International Code Council; the Uniform Swimming Pool, Spa and Hot Tub Code,

2006 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, 2010 Edition as published by the International Code Council; the California Referenced Standards, 2010 Edition as published by the International Code Council; and, the California Administrative Code, 2010 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 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.

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 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 Heading is revised as follows:

SECTION 403 HIGH-RISE BUILDINGS HAVING OCCUPIED FLOORS LOCATED MORE THAN 55 FEET ABOVE THE LOWEST LEVEL OF FIRE DEPARTMENT VEHICLE ACCESS AND GROUP I-2 OCCUPANCIES HAVING OCCUPIED FLOORS LOCATED MORE THAN 75 FEET ABOVE THE LOWEST LEVEL OF FIRE DEPARTMENT VEHICLE ACCESS

SECTION 403.1 Applicability is revised as follows:

Section 403.1 Applicability. New high-rise buildings 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 75 feet above the lowest level of fire department vehicle access shall comply with Sections 403.2 through 403.6.

SUBSECTION 403.1.1 Definitions is revised as follows:

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 (see Section 403.1.2), except buildings used as hospitals as defined by the Health and Safety Code Section 1250.
3. "New high-rise structure" means a high-rise structure, the construction of which commenced on or after July 1, 1974.

SUBSECTION [F] 403.4.7.2 Standby Power Loads is amended by deleting Item 2 and renumbering as follows:

Subsection [F] 403.4.7.2 Standby Power Loads. The following are classified as standby power loads:

1. Power and lighting for the fire command center required by Subsection 403.4.5.
2. Standby power shall be provided for elevators in accordance with Sections 1007.4, 3003, 3007 and 3008.

SUBSECTION [F] 403.4.8.1 Emergency Power Loads is amended as follows:

Subsection [F] 403.4.8.1 Emergency Power Loads. The following are classified as emergency power loads:

1. Exit signs and means of egress illumination required by Chapter 10.
2. Elevator car lighting.
3. Emergency voice/alarm communications system.
4. Automatic fire detection systems.
5. Fire alarm systems.
6. Electrically powered fire pumps.
7. Ventilation and automatic fire detection equipment for smoke-proof enclosures.

SECTION 412.2 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.

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.

SECTION 412.7 Heliports And Helistops is amended by adding Subsections 412.7.5 and 412.7.5.1 through 412.7.5.12 as follows:

Subsection 412.7.5. Emergency Helicopter Landing Facility. Emergency Helicopter Landing Facility (EHLF) shall be constructed as specified in Subsection 412.7.5.1 through 412.7.5.12.

Subsection 412.7.5.1 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 412.7.5.2 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 412.7.5.3 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 412.7.5.4 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 412.7.5.5 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 412.7.5.6 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 412.7.5.7 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 412.7.5.8 Special Markings. The emergency helicopter landing facility shall be marked as indicated in Figure 412.7.5.8

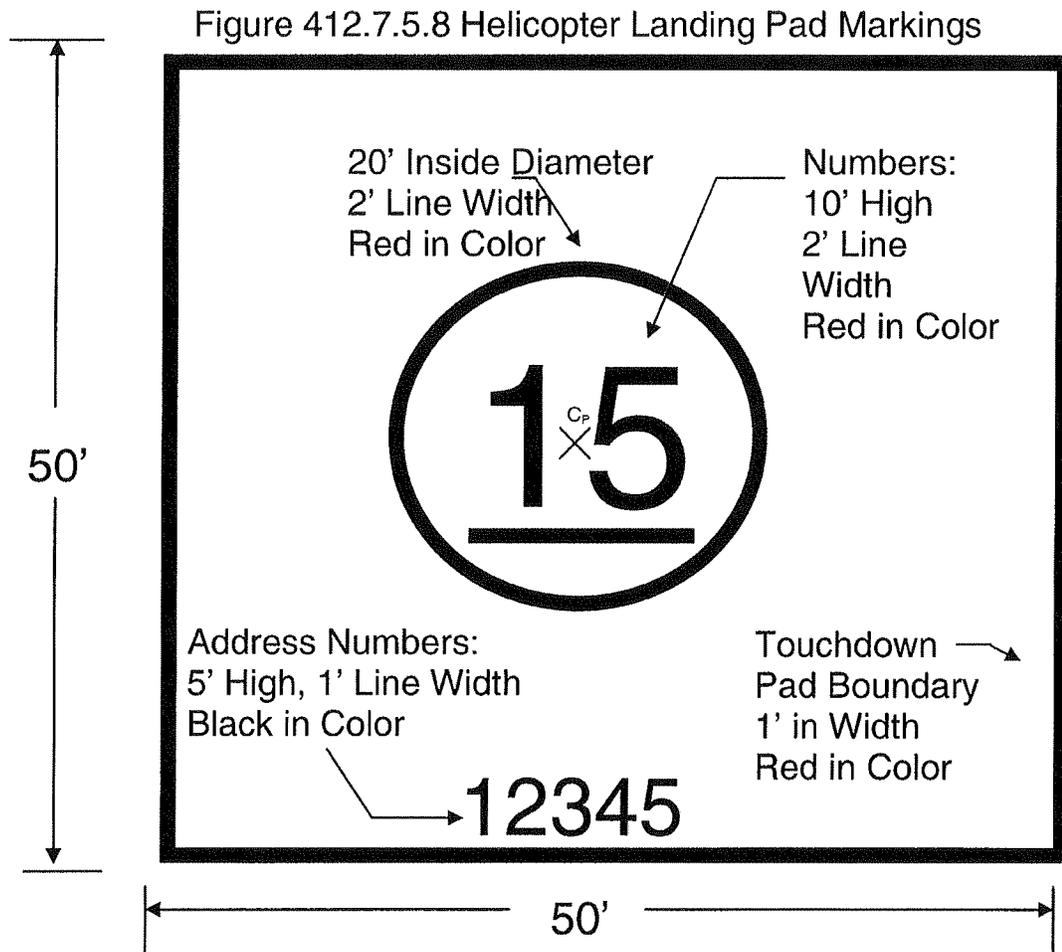
Subsection 412.7.5.9 EHLF Exits. Two stairway exits shall be provided from the landing platform area to the roof surface. For landing areas less than 2,501 square feet in area, the second exit may be a fire escape or ladder leading to the roof surface below. The stairway from the landing facility platform 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 412.7.5.10 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 412.7.5.11 Fire Extinguishers. A minimum of one portable fire extinguisher having a minimum 80-B:C rating shall be provided and located near the stairways or ramp to the landing pad. The fire extinguisher cabinets shall not penetrate the approach-departure paths, or the safety area. Installation, inspection, and maintenance of extinguishers shall be in accordance with the CFC, Section 906.

Subsection 412.7.5.12 EHLF. Fueling, maintenance, repairs, or storage of helicopters is prohibited.

Subsection 412.7.5 Figure 412.7.5.8 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).

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 m²) 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 m²) as defined in Section 202; or
 - b. When an addition exceeds 2,000 square feet (186 m²) and the resulting building area exceeds 5,000 square feet (465 m²) 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:
 - 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.

SUBSECTION [F] 903.3.1.1.1 Exempt Locations, is amended by revising Item 4 as follows:

4. When approved by the fire code official, spaces or areas in telecommunications buildings used exclusively for telecommunications equipment, and associated electrical power distribution equipment, provided those spaces or areas are equipped throughout with an automatic smoke detection system in accordance with Section 907.2 and are separated from the remainder of the building by fire barriers consisting of not less than 1-hour fire barriers constructed in accordance with Section 707 or not less than 2 hour horizontal assemblies constructed in accordance with Section 712, or both.

SECTION 903.4 [F] 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.

SUBSECTION [F] 904.3.5 Monitoring, is revised as follows:

Subsection [F] 904.3.5 Monitoring. Where a building fire alarm or monitoring system is installed, new automatic fire-extinguishing systems shall be monitored by the building fire alarm or monitoring system in accordance with NFPA 72.

SECTION [F] 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.
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 [F] 907.2.13 High-Rise Buildings, is amended to read as follows:

Subsection [F] 907.2.13 High-Rise Buildings. High-rise buildings having occupied floors located more than 55 feet (16,769 mm) above the lowest level of fire department vehicle access and Group I-2 occupancies having floors located more than 75 feet (22,860 mm) above the lowest level fire department vehicle access shall be provided with an automatic smoke detection system in accordance with Subsection 907.2.13.1, a fire department communication system in accordance with Subsection 907.2.13.2 and an emergency voice/alarm communication system in accordance with Subsection 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 [F] 907.4.1 Duct Smoke Detectors, is amended as follows:

Subsection [F] 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. 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 [F] 907.6.2.2 Emergency Voice/Alarm Communication System, is revised as follows:

Subsection [F] 907.6.2.2 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 [F] 907.9.3 High-Rise Buildings, is amended to read as follows:

Subsection 907.9.3 High-Rise Building. High-rise buildings having occupied floors located more than 55 feet (16,764 mm) above the lowest level of fire department vehicle access and Group I-2 occupancies having occupied floors located more than 75 feet (22,860 mm) above the lowest level 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.

SUBSECTION [F] 910.3.2.2 Sprinklered Buildings, is amended to read as follows:

Subsection [F] 910.3.2.2 Sprinklered Buildings. Where installed in buildings equipped with an approved automatic sprinkler system, smoke and heat vents shall be designed to operate automatically by actuation of a heat-responsive device rated at least 100° F above the operating temperature of the sprinkler, unless otherwise approved.

Sec. 8-1-16. Chapter 35 Referenced Standards, amended

Chapter 35 Reference Standards, is amended as follows:

NFPA 13, 2010 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 8.17.2.4.6 is revised as follows:

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 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. The result shall be adjusted in accordance with the graduated scaled found in the guideline.

SUBSECTION 22.1.3 (43) is revised as follows:

Subsection 22.1.3 (43) Size and location of hydrants, showing size and number of outlets and if outlets are to be equipped with independent gate valves. Whether hose houses and equipment are to be provided, and by whom, shall be indicated. Static and residual hydrants that were used in the flow tests shall be shown. Flow test shall be completed within six months of the plan submittal to the authority having jurisdiction.

NFPA 13R, 2010 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 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.

SUBSECTION 6.6.6 is revised as follows:

Subsection 6.6.6 Sprinklers shall not be required in penthouse equipment rooms, elevator machine rooms, concealed spaces dedicated exclusively to containing only dwelling unit ventilation equipment, crawl spaces, floor/ceiling spaces, noncombustible elevator shafts where the elevator cars comply with ANSI A17.1, Safety Code for Elevators and Escalators, and other concealed spaces that are not used or intended for living purposes or storage and do not contain fuel fired-equipment.

SUBSECTION 6.6.9 is added as follows:

Subsection 6.6.9 Sprinklers shall not be required in attics that are not located over dwelling units. When attics are separated by unit, each unit's attic space may be protected per NFPA 13D Section 8.6.4.2. All other attics shall be protected per NFPA 13.

NFPA 13D, 2010 Edition, Installation of Sprinkler Systems in One and Two-Family Dwellings and Manufactured Homes is hereby amended as follows:

SUBSECTION 4.1.5.1 Stock Of Spare Sprinklers is added as follows:

Subsection 4.1.5.1 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 4.1.5.2 is added as follows:

Subsection 4.1.5.2 The sprinklers shall correspond to the types and temperature ratings of the sprinklers in the property.

SUBSECTION 4.1.5.3 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 4.1.5.4 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.

SUBSECTION 7.3.1 Pressure Gauges is deleted and substituted with the following:

Subsection 7.3.1 Pressure Gauges. At least one water pressure gauge shall be installed on the riser assembly.

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 310.9 are used to sound an alarm upon water-flow switch activation.

SUBSECTION 8.6.4.2 is added as follows:

Subsection 8.6.4.2 All attics shall be protected with an intermediate temperature quick response sprinkler which shall be located to protect attic penetrations created by the access scuttles or mechanical equipment.

NFPA 14, 2007 Edition, Installation Of Standpipe And Hose Systems is amended as follows:

SUBSECTION 6.4.5.4.1 is deleted in its entirety and replaced as follows:

Subsection 6.4.5.4.1 The fire department connection shall have a minimum of two 2½ inches, internal threaded (NHS) inlets. Additional inlets shall be provided on a 250 GPM per inlet ratio to meet the system demand. The inlets shall be provided with approved caps to protect the system from entry of debris. The location of the FDC shall be approved and be no more than 150 feet from a public hydrant. If acceptable to the water authority, it may be installed on the backflow assembly. Fire department inlet connections shall be painted OSHA safety red.

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

SUBSECTION 5.9.1.3 is revised as follows:

Subsection 5.9.1.3 The fire department connection shall be of an approved type and contain a minimum of two 2½ inch inlets. The location shall be approved and be no more than 150 feet from a public fire hydrant. If acceptable to the water authority, it may be installed on the backflow assembly. The supply pipe shall be painted OSHA safety red.

SUBSECTION 5.9.1.3.1 is added as follows:

Subsection 5.9.1.3.1 When the sprinkler density design is 500 gpm (including the interior hose stream demand) or greater, or a standpipe system is included, four 2½ inch inlets shall be provided.

SUBSECTION 5.9.1.3.2 is added as follows:

Subsection 5.9.1.3.2 The fire department connection (FDC) may be located within 150 feet of a private fire hydrant provided the FDC

connects down-stream of an aboveground sprinkler system check valve.

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.

SUBSECTION 6.2.11 (6) is revised as follows:

Subsection 6.2.11 (6) Control valves in a one-hour fire-rated room accessible from the exterior.

SUBSECTION 6.2.11 (7) is deleted without replacement.

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: 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.

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 18- inches, as measured from the interior of the exterior wall. The pipe under the building or building foundation shall be 316 stainless steel and shall not contain mechanical joints or otherwise comply with 10.6.2.

SUBSECTION 10.6.5 is revised as follows:

Subsection 10.6.5 Pipe Joints shall not be located under foundation footings. The pipe under the building or building foundation shall be 316 stainless steel and shall not contain mechanical joints.

NFPA 72, 2010 Edition, National Fire Alarm Code is amended as follows:

SUBSECTION 14.2.1.2.3 is revised as follows:

Subsection 14.2.1.2.3 If a defect or malfunction is not corrected at the conclusion of system inspection, testing, or maintenance, the system owner or the owner's designated representative and fire code official shall be informed of the impairment in writing within 24 hours.

SUBSECTION 23.8.2 Fire Alarm Control Units is revised as follows:

Subsection 23.8.2.2 Except as permitted in Subsection 23.8.2.3, the fire alarm systems components shall be permitted to share control equipment or shall be able to operate as stand-alone subsystems, but in any case, they shall be arranged to function as a single system and send a single signal to a central, remote, or proprietary station.

SUBSECTION 23.8.2.3 is deleted without replacement.

SUBSECTION 26.2.3.1 is amended by modifying the first paragraph as follows:

Subsection 26.2.3.1 Supervising station customers or clients and the fire code official shall be notified in writing within 7 days of any scheduled change in service that results in signals from their property being handled by a different supervising station facility.

Sec. 8-1-17. 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.

SECTION 1505.7 is amended by deletion of the entire section.

Sec. 8-1-18. 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:

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 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 "2010 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. 2010 EDITION OF THE CALIFORNIA RESIDENTIAL CODE

Sec. 8-1-1. 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 °	ICE BARRIER UNDERLAYMENT REQUIRED ⁿ	FLOOD HAZARDS ^o	AIR FREEZING INDEX ⁱ	MEAN ANNUAL TEMP ^l
	Speed ^d (mph)	Topographic effects ^k		Weathering ^a	Frost line Depth ^b	Termite ^c					
Zero	85	No	D ₂ or E	Negligible	12-24"	Very Heavy	43	No	See Exhibit B	0	60

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

- a. Weathering may require a higher strength concrete or grade of masonry than necessary to satisfy the structural requirements of this code. The weathering column shall be filled in with the weathering index (i.e., "negligible," "moderate" or "severe") for concrete as determined from the Weathering Probability Map [Figure R301.2(3)]. The grade of masonry units shall be determined from ASTM C 34, C 55, C 62, C 73, C 90, C 129, C 145, C 216 or C 652.
- b. The frost line depth may require deeper footings than indicated in Figure R403.1(1). The jurisdiction shall fill in the frost line depth column with the minimum depth of footing below finish grade.
- c. The jurisdiction shall fill in this part of the table to indicate the need for protection depending on whether there has been a history of local subterranean termite damage.
- d. The jurisdiction shall fill in this part of the table with the wind speed from the basic wind speed map [Figure R301.2(4)]. Wind exposure category shall be determined on a site-specific basis in accordance with Section R301.2.1.4.
- e. Temperatures shall be permitted to reflect local climates or local weather experience as determined by the building official.
- f. The jurisdiction shall fill in this part of the table with the seismic design category determined from Section R301.2.2.1.
- g. The jurisdiction shall fill in this part of the table with (a) the date of the jurisdiction's entry into the National Flood Insurance Program (date of adoption of the first code or ordinance for management of flood hazard areas), (b) the date(s) of the Flood Insurance Study and (c) the panel numbers and dates of all currently effective FIRMs and FBFMs or other flood hazard map adopted by the authority having jurisdiction, as amended.
- h. In accordance with Sections R905.2.7.1, R905.4.3.1, R905.5.3.1, R905.6.3.1, R905.7.3.1 and R905.8.3.1, where there has been a history of local damage from the effects of ice damming, the jurisdiction shall fill in this part of the table with "YES." Otherwise, the jurisdiction shall fill in this part of the table with "NO."
- i. The jurisdiction shall fill in this part of the table with the 100-year return period air freezing index (BF-days) from Figure R403.3(2) or from the 100-year (99%) value on the National Climatic Data Center data table "Air Freezing Index- USA Method (Base 32°)" at www.ncdc.noaa.gov/fpsf.html.
- 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.
- 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.

SUBSECTION 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 R405.1 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.

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

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.

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

Subsection 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.

Section 8-1-2. Chapter 44 Referenced Standards, amended

Chapter 44 Referenced Standards is amended as follows:

NFPA 13, 2010 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 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:

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. The result shall be adjusted in accordance with the graduated scaled found in the guideline.

SUBSECTION 22.1.3 (43) is revised as follows:

Subsection 22.1.3 (43) Size and location of hydrants, showing size and number of outlets and if outlets are to be equipped with independent gate valves. Whether hose houses and equipment are to be provided, and by whom, shall be indicated. Static and residual hydrants that were used in the flow tests shall be shown. Flow test shall be completed within six months of the plan submittal to the authority having jurisdiction.

NFPA 13R, 2010 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 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.

SUBSECTION 6.6.6 is revised as follows:

Subsection 6.6.6 Sprinklers shall not be required in penthouse equipment rooms, elevator machine rooms, concealed spaces dedicated exclusively to containing only dwelling unit ventilation equipment, crawl spaces, floor/ceiling spaces, noncombustible elevator shafts where the elevator cars comply with ANSI A17.1, Safety Code for Elevators and Escalators, and other concealed spaces that are not used or intended for living purposes or storage and do not contain fuel firedequipment.

SUBSECTION 6.6.9 is added as follows:

Subsection 6.6.9 Sprinklers shall not be required in attics that are not located over dwelling units. When attics are separated by unit, each unit's attic space may be protected per NFPA 13D Section 8.6.4.2. All other attics shall be protected per NFPA 13.

NFPA 13D, 2010 Edition, Installation of Sprinkler Systems in One and Two-Family Dwellings and Manufactured Homes is amended as follows:

SUBSECTION 4.1.5.1 Stock Of Spare Sprinklers is added as follows:

Subsection 4.1.5.1 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 4.1.5.2 is added as follows:

Subsection 4.1.5.2 The sprinklers shall correspond to the types and temperature ratings of the sprinklers in the property.

SUBSECTION 4.1.5.3 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 4.1.5.4 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.

SUBSECTION 7.3.1 Pressure Gauges is deleted and substituted with the following:

Subsection 7.3.1 Pressure Gauges. At least one water pressure gauge shall be installed on the riser assembly.

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 310.9 are used to sound an alarm upon waterflow switch activation.

SUBSECTION 8.6.4.2 is added as follows:

Subsection 8.6.4.2 All attics shall be protected with an intermediate temperature quick response sprinkler which shall be located to protect attic penetrations created by the access scuttles or mechanical equipment.

NFPA 14, 2007 Edition, Installation Of Standpipe And Hose Systems is amended as follows:

SUBSECTION 6.4.5.4.1 is deleted in its entirety and replaced as follows:

Subsection 6.4.5.4.1 The fire department connection shall have a minimum of two 2½ inches, internal threaded (NHS) inlets. Additional inlets shall be provided on a 250 GPM per inlet ratio to meet the system demand. The inlets shall be provided with approved caps to protect the system from entry of debris. The location of the FDC shall be approved and be no more than 150 feet from a public hydrant. If acceptable to the water authority, it may be installed on the backflow assembly. Fire department inlet connections shall be painted OSHA safety red.

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

SUBSECTION 5.9.1.3 is revised as follows:

Subsection 5.9.1.3 The fire department connection shall be of an approved type and contain a minimum of two 2½ inch inlets. The location shall be approved and be no more than 150 feet from a public fire hydrant. If acceptable to the water authority, it may be installed on the backflow assembly. The supply pipe shall be painted OSHA safety red.

SUBSECTION 5.9.1.3.1 is added as follows:

Subsection 5.9.1.3.1 When the sprinkler density design is 500 gpm (including the interior hose stream demand) or greater, or a standpipe system is included, four 2½ inch inlets shall be provided.

SUBSECTION 5.9.1.3.2 is added as follows:

Subsection 5.9.1.3.2 The fire department connection (FDC) may be located within 150 feet of a private fire hydrant provided the FDC connects down-stream of an aboveground sprinkler system check valve.

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.

SUBSECTION 6.2.11 (6) is revised as follows:

Subsection 6.2.11 (6) Control valves in a one-hour fire-rated room accessible from the exterior.

SUBSECTION 6.2.11 (7) is deleted without replacement.

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: 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.

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 18- inches, as measured from the interior of the exterior wall. The pipe under the building or building foundation shall be 316 stainless steel and shall not contain mechanical joints or otherwise comply with 10.6.2.

SUBSECTION 10.6.5 is revised as follows:

Subsection 10.6.5 Pipe Joints shall not be located under foundation footings. The pipe under the building or building foundation shall be 316 stainless steel and shall not contain mechanical joints.

NFPA 72, 2010 Edition, National Fire Alarm Code is amended as follows:

SUBSECTION 14.2.1.2.3 is revised as follows:

Subsection 14.2.1.2.3 If a defect or malfunction is not corrected at the conclusion of system inspection, testing, or maintenance, the system owner or the owner's designated representative and fire code official shall be informed of the impairment in writing within 24 hours.

SUBSECTION 23.8.2 Fire Alarm Control Units is revised as follows:

Subsection 23.8.2.2 Except as permitted in Subsection 23.8.2.3, the fire alarm systems components shall be permitted to share control equipment or shall be able to operate as stand-alone subsystems, but in any case, they shall be arranged to function as a single system and send a single signal to a central, remote, or proprietary station.

SUBSECTION 23.8.2.3 is deleted without replacement.

SUBSECTION 26.2.3.1 is amended by modifying the start paragraph as follows:

Subsection 26.2.3.1 Supervising station customers or clients and the fire code official shall be notified in writing within 7 days of any scheduled change in service that results in signals from their property being handled by a different supervising station facility.

SECTION 5. CALIFORNIA GREEN BUILDING STANDARDS CODE

Article 10, entitled "2010 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. 2010 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 "2010 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, 2010 Edition, based on the 2009 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 "2010 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, 2010 Edition, based on the 2009 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, 2010 Edition based on the 2009 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 EXISTING BUILDINGS CODE

Division 6, entitled "California Existing Buildings Code", of Title 8, entitled "Building Regulations," is hereby repealed and not replaced.

SECTION 11. CALIFORNIA ADMINISTRATIVE CODE

Division 7, entitled "California Administrative Code," of Title 8, entitled "Building Regulations," is repealed and a new Division 7, entitled "2010 Edition Of The California Administrative Code," is added to Title 8, entitled "Building Regulations," to read as follows:

DIVISION 7. 2010 EDITION OF THE CALIFORNIA ADMINISTRATIVE CODE

Sec. 8-7-1 Adoption of The 2010 Edition Of The California Administrative Code

Except as provided in this division, the 2010 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 12. 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 13. 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 14. 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 16th day of November, 2010.


Linda Lindholm, Mayor

ATTEST:


Pam Lawrence
Deputy City Manager/Acting City Clerk

CERTIFICATION

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

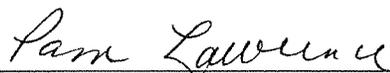
I, Pamela Lawrence, Acting City Clerk of the City of Laguna Niguel, California, do hereby certify that the foregoing is Ordinance No. 2010-159 which was adopted at a regular meeting of the City Council of the City of Laguna Niguel, California, held November 16, 2010 by the following vote:

AYES: Council Members Brown, Glaab, Ming, Mayor Pro Tem
 Capata and Mayor Lindholm

NOES: None

ABSTENTIONS: None

ABSENT: None



Pam Lawrence
Deputy City Manager/Acting City Clerk