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

May 26, 2011

Paul Melby, Chief Building Official
City of Los Alamitos
3191 Katella Avenue
Los Alamitos, CA 90720-5600

Dear Mr. Melby:

This letter is to acknowledge receipt on May 26, 2011 of the City of Los Alamitos submittal pertaining to Ordinance No. 10-07 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,

Enrique M. Rodriguez
Associate Construction Analyst

cc: Chron
Local Filings

May 17, 2011

Mr. Dave Walls
California Building Standards Commission
2525 Natomas Park Dr., Suite 120
Sacramento, California 95833

RE: CITY OF LOS ALAMITOS, BUILDING ORDINANCE

Mr. Walls,

The City of Los Alamitos has adopted the current Building, Plumbing, Mechanical, Electrical, Residential, Green Building, and Existing Building Codes of the State of California.

The City of Los Alamitos has recommended changes and modifications to the 2010 Editions of the California Codes and has advised that said changes and modifications are reasonably necessary due to local conditions in the City. It has further been advised that the remainder of said changes and modifications are: of an administrative or procedural nature; concern themselves with subjects not covered by the Code; or, are reasonably necessary to safeguard life and property within the City of Los Alamitos.

Enclosed for your records is a copy of the adopted City Council Ordinance. Should you have any additional questions or require further information please feel free to contact me at (562) 431-3538.

Sincerely,

CITY OF LOS ALAMITOS

Paul Melby C.B.O.
Chief Building Official

Enclosure

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ORDINANCE NO. 10-07

AN URGENCY ORDINANCE OF THE CITY COUNCIL OF THE CITY OF LOS ALAMITOS REPEALING CHAPTER 15.04 OF TITLE 15 OF THE LOS ALAMITOS MUNICIPAL CITY CODE AND ADDING A NEW CHAPTER 15.04, ADOPTING BY REFERENCE THE 2010 EDITION OF THE CALIFORNIA BUILDING STANDARDS CODES (CALIFORNIA CODE OF REGULATIONS, TITLE 24), CONSISTING OF THE 2010 CALIFORNIA BUILDING CODE, (INCORPORATING AND AMENDING THE 2009 INTERNATIONAL BUILDING CODE), THE 2010 CALIFORNIA RESIDENTIAL CODE (INCORPORATING AND AMENDING THE 2009 INTERNATIONAL RESIDENTIAL CODE), THE 2010 CALIFORNIA GREEN BUILDING STANDARDS CODE, THE 2010 CALIFORNIA ELECTRICAL CODE (INCORPORATING AND AMENDING THE 2008 NATIONAL ELECTRICAL CODE), THE 2010 CALIFORNIA MECHANICAL CODE (INCORPORATING AND AMENDING THE 2009 UNIFORM MECHANICAL CODE), THE 2010 CALIFORNIA PLUMBING CODE (INCORPORATING AND AMENDING THE 2009 UNIFORM PLUMBING CODE), AND THE 2009 INTERNATIONAL PROPERTY MAINTENANCE CODE.

THE CITY COUNCIL OF THE CITY OF LOS ALAMITOS DOES HEREBY ORDAIN AS FOLLOWS:

SECTION 1. Findings.

A. California law requires that on January 1, 2011, all portions of the 2010 Building Standards Code will be effective within the City.

B. Pursuant to Sections 17922, 17958, 17958.5 and 17958.7 of the California Health and Safety Code, the City may amend the provisions of the Building Standards Code which are reasonably necessary to protect the health, welfare and safety of citizens of Los Alamitos because of "local climatic, geological, or topographical conditions."

C. The City of Los Alamitos is located in the northwest portion of Orange County and is more prone to high winds and earthquakes than other portions of the state.

D. The Building Official has recommended modifying the 2010 California Building Standards Code due to local conditions in the City of Los Alamitos.

E. The findings within Exhibit A are incorporated by reference. Such findings are in accordance with California Health and Safety Code Section 18941.5.

F. In accordance with Section 15061(b)(3) of the California Code of Regulations, the adoption of local amendments to the California Building Standards Code is exempt from the provisions of the California Environmental Quality Act.

SECTION 2. Section 15.04.10 of the Los Alamitos Municipal Code is hereby amended to read as follows:

"**Sec. 15.04.010 Construction Codes Adopted.**

A. For the purpose of prescribing regulations for erecting, construction, enlargement, alteration, repair, improving, removal, conversion, demolition, occupancy, equipment use, height, and area of buildings and structures, the following construction codes subject to the modifications set forth in this Chapter, are hereby adopted:

1. The 2010 California Administrative Code (Part 1);
2. The California Building Code (Part 2, which is based on the 2009 International Building Code);
3. 2010 California Residential Code (Part 2.5, based on the 2009 International Residential Code);
4. 2010 California Electrical Code (Part 3, based on the 2008 National Electrical Code);
5. 2010 California Mechanical Code (Part 4, based on the 2009 Uniform Mechanical Code);
6. 2010 California Plumbing Code, (Part 5, based upon the 2009 Uniform Plumbing Code);
7. 2010 California Energy Code, (Part 6, identical to the 2007 California Energy Code, and based on the 2008 Energy Efficiency Standards);
8. 2010 California Historical Building Code (Part 8);
9. 2010 California Existing Building Code (Part 10, based on the 2009 International Existing Building Code);
10. 2010 California Green Building Standards (Part 11, known as the "CALGreen" Code);
11. 2010 California Referenced Standards Code (Part 12).

B. The provisions of these Construction Codes as amended by this chapter shall constitute the Building Regulations of the City of Los Alamitos.

C. One (1) copy of all the above codes and standards shall be kept on file in the office of the building official pursuant to Health and Safety Code Section 18942 (d) (1) and made available for public inspection.

D. References in Documents and Continuing Legal Effect. References to prior editions of the Building Standards Code or the Municipal Code sections amended herein that are cited on notices issued by the City or other documents of ongoing or continuing legal effect, including specifically resolutions adopting or imposing fees or charges, until converted, are deemed to be references to the new counterpart 2010 Building Standards Code or amended Municipal Code sections for the purposes of notice and enforcement. The provisions adopted hereby shall not in any manner affect deposits, established fees or other matters of record which refer to, or are otherwise connected with, ordinances which are specifically designated by number, code section or otherwise, but such references shall be deemed to apply to the corresponding provisions set forth in the 2010 Building Standards Code adopted hereby. Any fee authorized by the above-referenced construction codes which was in effect in the city at the time of the adoption of this ordinance (such as those approved via Resolution 2008-12) need not be re-adopted by resolution, and shall continue in effect, and remain unadjusted in amount unless and until the City Council adopts a resolution repealing the fee or establishing a different fee.

SECTION 3. Section 15.04.030 of the Los Alamitos Municipal Code is hereby amended to read as follows:

15.04.030 Amendments to the 2010 California Building Code.

The following amendments to the California Building Code shall apply in the City:

Chapter 1, Division II Scope and Administration is adopted in its entirety without amendments.

Chapter Section 403 High-Rise Buildings is hereby 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 hereby revised as follows:

> **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.

403.1.1 Definitions is hereby 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.

Section 403.4.7.2 Standby power loads of the California Building Code is amended by deleting #2 and renumbering as follows:

> **[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 Section 403.4.5;
2. Standby power shall be provided for elevators in accordance with Sections 1007.4, 3003, 3007 and 3008.

Section 403.4.8.1 Emergency power loads of the California Building Code is hereby amended by adding the following:

[F] 403.4.8.1.1 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; and
7. Ventilation and automatic fire detection equipment for smokeproof enclosures.

Section 412.2 Definitions is hereby 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 heli-stop 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 of the California Building Code is hereby amended by adding Sections 412.7.5 through 412.7.5.13 as follows:

412.7.5. Emergency Helicopter Landing Facility. Emergency Helicopter Landing Facility (EHLF) shall be constructed as specified in Section 412.7.5.1 through 412.7.5.13.

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

412.7.5.2 Rooftop Landing Pad. The landing pad shall be 50 ft. x 50 ft. or a 50 ft. diameter circle that is pitched or sloped to provide drainage away from access points and passenger holding areas at a slope of 0.5 percent to 2 percent. The landing pad surface shall be constructed of approved non-combustible, nonporous materials. I t shall be capable of supporting a helicopter with a maximum gross weight of 15,000 lbs. For structural design requirements, see California Building Code.

412.7.5.3 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.

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

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

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

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

412.7.5.8 Special Markings. The emergency helicopter landing facility shall be marked as indicated in Figure 412.7.5.8

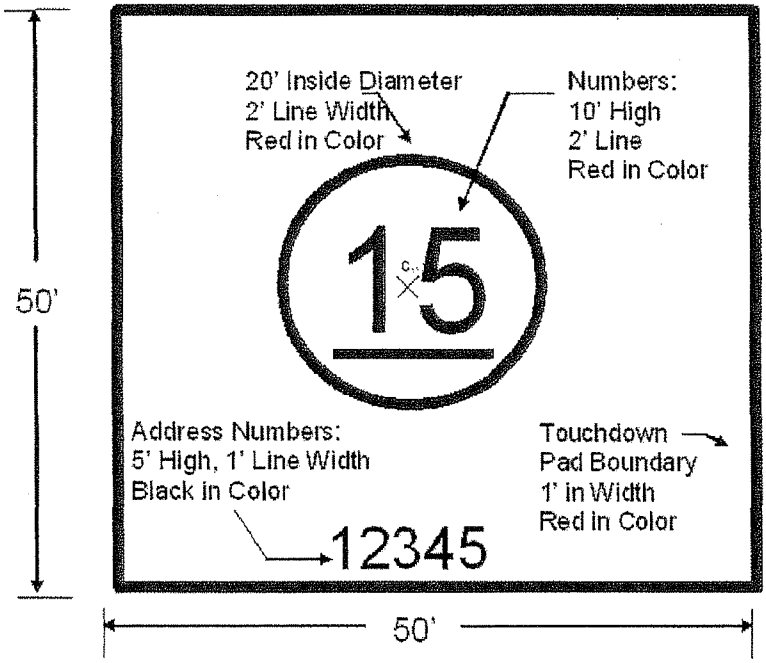
412.7.5.9 EHLF Exits. Two stairway exits shall be provided from the landing platform area to the roof surface. For landing areas less than 2,501 square feet in area, the second exit may be a fire escape or ladder leading to the roof surface below. The stairway from the landing facility platform to the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

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.

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.

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

Figure 1108.1.7 Helicopter Landing Pad Markings



1. The preferred background is white or tan.
2. The circled, red numbers indicate the allowable weight that the facility is capable of supporting in thousands of pounds.
3. The numbers shall be oriented towards the preferred flight (typically facing the prevailing wind).

Section 903.2 Where required is hereby revised as follows:

[F] 903.2 Where required. Approved automatic sprinkler systems in buildings and structures shall be provided in the following locations:

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, as defined in Section 502.1, exceeds 5,000 square feet (465 m^2), or more than two stories in height, 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 the addition is 33% or more of the existing building area and the resulting building area, as defined in Section 502.1, exceeds 5000 square feet (465 m^2); or

   b. When the addition exceeds 2000 square feet (185.81 m^2) and the resulting building area, as defined in Section 502.1, exceeds 5000 square feet (465 m^2); or

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

Section 903.2, Group R is hereby revised as follows:

[F] 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 following condition exists:

   a. An addition when the existing building is already provided with automatic sprinklers.

Section 903.3.1.1.1 Exempt locations, is hereby amended by revising Exception 4 as follows:

Exception:

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 hereby revised as follows:

[F] 903.4 Sprinkler system supervision and alarms. All valves controlling the water supply for automatic sprinkler systems, pumps, tanks, water levels and temperatures, critical air pressures and water-flow switches on all sprinkler systems shall be electrically supervised by a listed fire alarm control unit.

Exceptions:

1. Automatic sprinkler systems protecting one- and two-family dwellings.
2. Limited area systems serving fewer than 20 sprinklers.
3. Jockey pump control valves that are sealed or locked in the open position.
4. Valves controlling the fuel supply to fire pump engines that are sealed or locked in the open position.
5. Trim valves to pressure switches in dry, preaction and deluge sprinkler systems that are sealed or locked in the open position.

Section 904.3.5 Monitoring is hereby revised as follows:

[F] 904.3.5 Monitoring. Where a building fire alarm or monitoring system is installed, 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 hereby amended by adding items 7 and 8 as follows:

[F] 905.4 Location of Class I standpipe hose connections. Class I standpipe hose connections shall be provided in all of the following locations:

1. In every required stairway, a hose connection shall be provided for each floor level above or below grade. Hose connections shall be located at an intermediate floor level landing between floors, unless otherwise approved by the fire code official. See Section 909.20.3.2 for additional provisions in smoke-proof enclosures.

2. On each side of the wall adjacent to the exit opening of a horizontal exit.

   Exception: Where floor areas adjacent to a horizontal exit are reachable from exit stairway hose connections by a nozzle attached to 100 feet (30 480 mm) of hose, as measured along the path of travel, a hose connection shall not be required at the horizontal exit.

3. In every exit passageway, at the entrance from the exit passageway to other areas of a building.

   Exception: Where floor areas adjacent to an exit passageway are reachable from exit stairway hose connections by a 30-foot (9144 mm)

hose stream from a nozzle attached to 100 feet (30 480 mm) of hose, a hose connection shall not be required at the entrance from the exit passageway to other areas of the building.

4. In covered mall buildings, adjacent to each exterior public entrance to the mall and adjacent to each entrance from an exit passageway or exit corridor to the mall.

5. Where the roof has a slope less than four units vertical in 12 units horizontal (33.3-percent slope), each standpipe shall be provided with a hose connection located either on the roof or at the highest landing of a stairway with stair access to the roof. An additional hose connection shall be provided at the top of the most hydraulically remote standpipe for testing purposes.

6. Where the most remote portion of a non-sprinklered floor or story is more than 150 feet (45,720 mm) from a hose connection or the most remote portion of a sprinklered floor or story is more than 150 feet (45,720 mm) from a hose connection, the fire code official is authorized to require that additional hose connections be provided in approved locations. The distance from a hose connection shall be measured along the patch of travel.

7. The centerline of the 2.5 inches (64 mm) outlet shall be no less than 18 inches (457 mm) above and no more than 24 inches (610 mm) 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 inches (64 mm) outlets so that all portions of the building can be reached with 150 feet (45,720 mm) 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.

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

[F] 907.2.13 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 floors located more than 75 feet above the lowest level fire department vehicle access. 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 floors located more than 75 feet above the lowest level fire department vehicle access shall be provided with an automatic smoke detection in accordance with Section 907.2.13.1, a fire department

communication system in accordance with Section 907.2.13.2 and an emergency voice/alarm communication system in accordance with Section 907.5.2.2.

Exceptions:

1. Airport traffic control towers in accordance with Section 907.2.22 and Section 412
2. Open parking garages in accordance with Section 406.3
3. Buildings with an occupancy in Group A-5 in accordance with Section 303.1
4. Low-hazard special occupancies in accordance with Section 503.1.1
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.

Section 907.3.1 Duct smoke detectors is hereby amended as follows:

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

Exception:

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

Section 907.5.2.2 Emergency voice/alarm communication system is revised as follows.

[F] 907.5.2.2 Emergency voice/alarm communication system. Emergency voice/alarm communication system required by this code shall be designed and installed in accordance with NFPA 72. The operation of any automatic fire detector, sprinkler waterflow device or manual fire alarm box shall automatically sound an alert tone followed by voice instructions giving approved information and directions for a general or staged evacuation in accordance with the building's fire safety and evacuation plans required by Section 404. In high-rise buildings having occupied floors located more than 55 feet above the lowest level of fire department vehicle access, and Group I-2 occupancies having floors located more than 75 feet 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.

Section 907.6.3.2 High-rise buildings is hereby revised as follows.

907.6.3.2 High-rise buildings. 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 floors located more than 75 feet 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 waterflow devices.
3. Manual fire alarm boxes.
4. Other approved types of automatic detection devices or suppression systems.

Section 910.3.2.2 Sprinklered buildings is hereby amended as follows:

[F] 910.3.2.2 Sprinkler buildings. Where installed in buildings provided 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.

Table 1505.1 is hereby amended, by the deletion of Table 1505.1 and the addition of a new Table 1505.1 thereto, to read as follows:

TABLE 1505.1[a]
MINIMUM ROOF COVERING CLASSIFICATIONS
TYPES OF CONSTRUCTION

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

For SI: 1 foot = 304.8 mm, 1 square foot = 0.0929 m^2.
a. Unless otherwise required in accordance with Chapter 7A.

Section 1505.1.3 is hereby amended, by the deletion of the entire section and the addition of a new section thereto, to read as follows:

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

Section 1505.5 is hereby amended, by the deletion of the entire section without replacement.

Section 1505.7 is hereby amended, by the deletion of the entire section without replacement.

Section 3109 Barriers For Swimming Pools, is hereby amended as follows:

Section 3109 BARRIERS FOR SWIMMING POOLS, SPAS AND HOT TUBS of Chapter 31 of the Building Code is amended as follows:

a. Section 3109.2 of the Building Code is amended by adding a new definition of "Barrier", and revising the definition of "Swimming Pools", respectively, to read as follows:

> Barrier. A fence, wall, building wall or combination thereof that completely surrounds the swimming pool and obstructs access to the swimming pool.
>
> Swimming Pools. Any body of water created by artificial means which is designed, intended for use, or used, for swimming or immersion purposes, which has a water depth exceeding eighteen (18) inches. The term "pool" includes swimming pools, spas, hot tubs, above and below ground, and vinyl-lined pools; "pool" does not include plumbing fixtures such as bathtubs nor does it apply to man-made lakes, reservoirs, farm ponds, or ponds used primarily for public park purposes, water conservation purposes, irrigation purposes or for the watering of livestock.

b. Section 3109.4, Exception, of the Building Code is deleted in its entirety.

c. Section 3109.4.1 of the Building Code is amended to read as follows:

> **3109.4.1 Barrier Height and Clearances.** The top of the barrier shall be at least sixty (60) inches above grade measured on the side of the barrier that faces away from the swimming pool. The maximum vertical clearance between grade and the bottom of the barrier shall be two (2) inches measured on the side of the barrier that faces away from the swimming pool. Where the top of the pool structure is above grade, the barrier is authorized to be at

ground level or mounted on top of the pool structure, and the maximum vertical clearance between the top of the pool structure and the bottom of the barrier shall be four (4) inches."

d. Section 3109.4.1.7 of the Building Code is amended to read as follows:

3109.4.1.7 Gates. Access gates shall comply with the requirements of Sections 3109.4.1 through 3109.4.1.6 and shall be equipped to accommodate a locking device. Pedestrian access gates shall open outward away from the pool and shall be self-closing and have a self-latching device. Gates other than pedestrian access gates shall have a self latching device and shall be equipped with lockable hardware or padlocks and shall remain locked at all times when not in use. Release mechanisms shall be in accordance with Sections 1008.1.8 and 1109.13. Where release mechanisms of the self-latching device are located less than sixty (60) inches above grade measured on the side of the barrier that faces away from the swimming pool, the release mechanism shall be located on the pool side of the gate at least three (3) inches below the top of the gate and the gate barrier shall have no opening greater than one-half (1/2) inch within eighteen (18) inches of the release mechanism.

Section 3109.4.4.1 is hereby amended by adding the following definition:

PRIVATE POOL, is any constructed pool, permanent or portable, and over 18 inches deep which is intended for non-commercial use as swimming pool by not more than three owner families and their guests.

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

Section 6.8.3 is hereby revised as follows:

6.8.3 Fire department connections (FDC) shall be of an approved type. The FDC shall contain a minimum of two 2 ½" inlets. The location shall be approved and be no more than 150 feet from a public hydrant. The size of piping and the number of inlets shall be approved by the 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 2 ½" inlets shall be provided. FDC may be located within 150 feet of a private fire hydrant when approved by the chief.

Section 8.3.3.1 is hereby revised as follows:

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

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.

Section 8.17.1.1.1 is hereby added as follows:

8.17.1.1.1 Residential Waterflow 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.

Section 8.17.2.4.6 is hereby revised as follows:

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.

Section 11.1.1.2 is hereby added as follows:

11.1.1.2 When fire sprinkler systems are required in buildings of undetermined use other than warehouses, they shall be designed and installed to have a fire sprinkler density of not less than that required for an Ordinary Hazard Group 2 use, with no reduction/s in density or design area. Warehouse fire sprinkler systems shall be designed to Figure 16.2.1.3.2 (d) curve "G". Use is considered undetermined if a specific tenant/occupant is not identified at the time the 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.

Section 11.2.3.1.1.1 is hereby added as follows:

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

Official:

1. Subtract the project site elevation from the low water level for the appropriate pressure zone and 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.

Section 22.1.3 (43) is hereby revised as follows:

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 hereby amended as follows:

Section 6.6.6 is hereby revised as follows:

Section 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.

Section 6.6.9 is hereby added as follows:

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.

Section 6.16.1 is hereby revised as follows:

6.16.1 Local water-flow alarms shall be provided on all sprinkler systems and shall be connected to the building fire alarm or water-flow monitoring system where provided. Group R occupancies containing less than the number of stories, dwelling units or occupant load specified in Section 907.2.8 of the 2010 California Fire Code as requiring a fire alarm system shall be provided with a

minimum of one approved interior alarm device in each unit. Sound levels in all sleeping areas shall be a minimum of 15 dBA above the average ambient sound or a minimum of 75 dBA with all intervening doors closed. Alarms shall be audible within all other living areas within each dwelling unit. When not connected to a fire alarm or water-flow monitoring system, audible devices shall be powered from an uninterruptible circuit (except for over-current protection) serving normally operated appliances in the residence.

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

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

Section 4.1.5 is hereby added as follows:

4.1.5 Stock of Spare Sprinklers

Section 4.1.5.1 is hereby added as follows:

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

Section 4.1.5.2 is hereby added as follows:

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

Section 4.1.5.3 is hereby added as follows:

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).

Section 4.1.5.4 is hereby added as follows:

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.

Section 7.1.2 is hereby revised as follows:

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

Section 7.3.1 is hereby deleted in its entirety and replaced as follows:

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

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

7.6 Alarms Exterior alarm indicating device shall be listed for outside service and audible from the street from which the house is addressed. Exterior audible devices shall be placed on the front or side of the structure and the location 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.

Exception:

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.

Section 8.6.4.2 is hereby added as follows:

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 hereby amended as follows:

Section 6.4.5.4.1 is hereby deleted in its entirety and replaced as follows:

6.4.5.4.1 The fire department connection shall have a minimum of two 2 ½ 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.

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

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 hereby amended as follows:

Section 5.9.1.3 is hereby revised as follows:

5.9.1.3 The fire department connection shall be of an approved type and contain a minimum of two 2 ½ 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.

Section 5.9.1.3.1 is hereby added as follows:

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 2 ½" inlets shall be provided.

Section 5.9.1.3.2 is hereby added as follows:

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.

Section 6.2.1.1 is hereby added as follows:

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

Section 6.2.11 (5) is hereby deleted without replacement:

Section 6.2.11 (6) is hereby revised as follows:

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

Section 6.2.11 (7) is hereby deleted without replacement:

Section 6.3.3 is hereby added as follows:

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

Section 10.1.6.3 is hereby added as follows:

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

Exception: 316 Stainless Steel pipe and fittings

Section 10.3.5.2 is hereby revised as follows:

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

Section 10.3.5.3 is hereby added as follows:

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

Section 10.6.3.1 is hereby revised as follows:

10.6.3.1 Where fire service mains enter the building adjacent to the foundation, the pipe may run under a building to a maximum of 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 comply with 10.6.2.

Section 10.6.5 is hereby revised as follows:

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

Section 14.2.1.2.3 is hereby revised as follows:

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' designated representative and fire code official shall be informed of the impairment in writing within 24 hours.

Section 23.8.2 Fire Alarm Control Units is revised as follows:

23.8.2.2 Except as permitted in 23.8.2.3, the fire alarm systems components shall be permitted to share control equipment or shall be able to operate as

stand-along 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.

Section 23.8.2.3 is hereby deleted without replacement:

Section 26.2.3.1 is hereby amended by modifying the start paragraph as follows:

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 4. Municipal Code Amendment.

Section 15.04.040 is hereby repealed and replaced as follows:

15.04.040 Amendments to the 2010 California Residential Code.

a) Table R301.2(1) is revised to read:

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

GROUND SNOW LOAD	WIND DESIGN Speed [d] (mph)	WIND DESIGN Topographic effects [k]	SEISMIC DESIGN CATEGORY [f]	SUBJECT TO DAMAGE FROM Weathering [a]	SUBJECT TO DAMAGE FROM Frost line Depth [b]	SUBJECT TO DAMAGE FROM Termite [c]	WINTER DESIGN TEMP [e]	ICE BARRIER UNDERLAYMENT REQUIRED [h]	FLOOD HAZARDS [g]	AIR FREEZING INDEX [i]	MEAN ANNUAL TEMP [j]
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 R30l.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 l00-year (99%) value on the National Climatic Data Center data table "Air Freezing Index- USA Method (Base 32°)" at www.ncdc.noaa.gov/fpsf.htrnl.

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.

b) Section R 313.1 is modified by deleting it in its entirety and replacing it with the following :

R313.1 Townhouse automatic fire sprinklers systems. An automatic residential fire sprinkler system shall be installed in Townhouses as follows:

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

Existing buildings: An automatic sprinkler system shall be installed throughout when the following condition exists:

1. An addition when the existing building is already provided with automatic sprinklers.

c) Section R 313.2 is modified by deleting it in its entirety and replacing it with the following :

R313.2 One- and two-family dwellings automatic fire sprinklers systems. An automatic residential fire sprinkler system installed in one- and two-family dwellings as follows:

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

Existing buildings: An automatic sprinkler system shall be installed throughout when the following condition exists:

1. An addition when the existing building is already provided with automatic sprinklers.

d) Section R403.1.3 is modified by deleting the exception for masonry stem walls:

In Seismic Design Categories D_0, D_1 and D_2 masonry stem walls without solid grout and vertical reinforcing are not permitted.

~~Exception: In detached one- and two-family dwellings which are three stories or less in height and constructed with stud bearing walls, plain concrete footings without longitudinal reinforcement supporting walls and isolated plain concrete footings supporting columns or pedestals are permitted~~.

e) Section R405.1 shall be modified to read as follows:

.....at least one sieve size larger than the tile joint opening or perforation and covered with not less than 6 inches of the same material.

~~Exception: A drainage system is not required with the foundation is installed on well-drained ground or sand-gravel mixture soils according to the Unified Soil Classification System, Group 1 Soils, as detailed in Table R405.1~~.

f) Section R902.1 is amended by revising it to allow only class A or B roofs as follows:

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

Exceptions:

1. Class A roof assemblies include those with coverings of brick, masonry and exposed concrete roof deck.
2. Class A roof assemblies also include ferrous or copper shingles or sheets, metal sheets and shingles, clay or concrete roof tile, or slate installed on noncombustible decks.

e) Section R902.1.3 is amended by revising it to require a minimum Class A roof as follows:

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

f) Section R902.2, first paragraph is amended by revising it to allow only Class A treated wood roofs as follows:

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

SECTION 5. Municipal Code Amendment. Section 15.04.050 is hereby revised to provide as follows:

15.04.050 Amendments to the 2010 California Green Building Standards Code.

a) Section 202 is amended to read as follows:

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

b) Section 4.304.1 is amended to read as follows:

Irrigation Controllers. Automatic irrigation system controllers for landscaping provided and installed at the time of final inspection and 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 of communicates with the controller(s). Soil moisture-based controllers are not required to have rain sensor input.

SECTION 6. Municipal Code Amendment. Sections 15.04.060 and 15.04.070 of the municipal code are hereby repealed.

SECTION 7. No Effect on Enforceability. The repealing provisions of the Los Alamitos Municipal Code shall not affect or impair any act done, or right vested or approved, or any proceeding, suit or prosecution had or commenced in any cause before such repeal shall take effect; but every such act, vested right, proceeding, suit, or prosecution shall remain in full force and effect for all purposes as if the applicable provisions of the 1990 Code, or part thereof, had remained in force and effect. No offense committed and no liability, penalty, or forfeiture, either civil or criminal, incurred prior to the repeal or alteration of any applicable provision of the 2007 Code as amended, shall be discharged or affected by such repeal or alteration but prosecutions and suits for such offenses, liabilities, penalties or forfeitures shall be instituted and proceed in all respects as if the applicable provisions of the 2007 Code, as amended, had not been repealed or altered.

SECTION 8. Severability. If any section, subsection, sentence, clause, phrase or portion of this Ordinance is for any reason held out to be invalid or unconstitutional by the decision of any court of competent jurisdiction, such decision shall not affect the validity of the remaining portions of this ordinance. The City Council of the City of Los Alamitos hereby declares that it would have adopted this ordinance and each section, subsection, sentence, clause, phrase or portion thereof irrespective of the fact that any one or more sections, subsection, sentence clause, phrases or portions be declared valid or unconstitutional.

SECTION 9. Effective Date. This Ordinance is hereby declared an urgency ordinance measure for the immediate preservation of the public health, safety and welfare and shall go into January 1, 2011.

SECTION 10. Publication by Clerk. The City Clerk shall cause this Ordinance to be published or posted in accordance with California Government Code Section 36933, shall certify to the adoption of this Ordinance and his/her certification, together with proof of the publication, to be entered in the book of Ordinances of the City Council.

PASSED, APPROVED AND ADOPTED THIS 6th DAY OF DECEMBER, 2010 by the following roll call vote:

AYES: Edgar, Graham-Mejia, Kusumoto, Mayor Pro Tem Stephens, Mayor Poe
NOES:
ABSENT:
ABSTAIN:

Marilynn M. Poe, Mayor

ATTEST:

Adria M. Jimenez, CMC
City Clerk

APPROVED AS TO FORM:

Sandra J. Levin, City Attorney

EXHIBIT A

FACTUAL FINDINGS ESTABLISHING THE REASONABLE NEED FOR LOCAL AMENDMENTS TO PORTIONS OF THE BUILDING STANDARDS CODE BASED UPON CLIMATIC, GEOLOGICAL AND/OR TOPOGRAPHICAL CONDITIONS

Section 1 of this Exhibit sets forth various findings that apply in Los Alamitos, explaining the various local climatic, geological and/or topographical conditions that necessitate the various changes.

Section 2 of this Exhibit explains which findings apply to which amendments.

Section 1. General Findings

The following findings apply in the City of Los Alamitos, and explain why the changes to the Building Standards Code are necessary because of climatic, geological and/or topographical conditions in the city.

A. Climatic Conditions

1. Hot, dry Santa Ana winds are common to all areas within the City of Los Alamitos and Orange County in general. These winds, which can cause small fires to spread quickly, are a contributing factor to the high fire danger in the area, and create the need for an increased level of fire protection. This added protection will supplement normal fire department response available and provide immediate protection for life and safety of multiple occupants during fire occurrences.

2. Orange County and the City of Los Alamitos are located in a semi-arid Mediterranean type climate which predisposes all fuels, including wood shingles, to rapid ignition and spread of fire. Therefore, there exists a need for additional fire protection measures.

B. Geologic Conditions

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

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

2. Traffic and circulation congestion presently existing in the City of Los Alamitos 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.

3. 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.

   The City of Los Alamitos is located in an area subject to a climatic condition of high winds and low humidity. This combination of events creates an environment, which is conducive to rapidly spreading fires. Control of such fires requires rapid response. Obstacles generated by a strong wind, such as fallen trees, street lights and utility poles, and the requirement to climb 75 feet vertically up flights of stairs will greatly impact the response time to reach an incident scene. Additionally, Section 6, Figure 6-2 of ASCE 7 identifies 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.

   The City of Los Alamitos is located in the middle of the seismically active area. The viability of the public water system would be questionable at best after a major seismic event. This would leave tall buildings vulnerable to uncontrolled fires due to a lack of available water and an inability to pump sufficient quantities of any available water to floors above the 55-foot level. A severe seismic event has the potential to negatively impact any rescue or fire suppression activities because it is likely to create obstacles similar to those indicated under the high wind section above. With the probability of strong aftershocks there exists a need to provide increased protection for anyone on upper floors.

4. Untreated wood roofs cause or contribute to serious fire hazard and to the rapid spread of fires when such fires are accompanied by high winds. Pieces of burning wooden roofs become flying brands and are carried by the wind to other locations and thereby spread fire quickly. Recent Grand Jury Report findings support this concern.

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

Section 2 – Which Findings Apply to Which Amendments

Amendments to the 2010 Edition of the California Codes are found reasonably necessary based on the climatic and/or geologic conditions cited in Section 1 of this ordinance.

California Building Code Sections	**Applicable Findings**
403 (403.1, 403.1.1	A-1, B-2, B-3
403.4.7.2 (403.4.7.2	A-1, B-2, B-3
403.4.8.1 (403.4.8.1.1	A-1, B-2, B-3
412.2	A-1, B-1, B-3
412.7 (412.7.5., 412.7.5.1, 412.7.5.2, 412.7.5.3, 412.7.5.4, 412.7.5.5, 412.7.5.6, 412.7.5.7, 412.7.5.8, 412.7.5.9, 412.7.5.10, 412.7.5.11, 412.7.5.13)	B-1, B-2, B-3
, 903.3.1.1.1	A-1, A-2, B-2
903.4	A-1, A-2, B-1, B-2
904.3.5	A-1, A-2, B-1, B-2
905.4	B-1, B-2, B-3
907.2.13	B-1, B-2, B-3
907.3.1	A-1; B1, B-2, B-3
907.5.2.2	B-1, B-2, B-3
907.6.3.2	B-1, B-2, B-3
907.6.3.2	A-1, B-2, B-3
910.3.2.2	A-1, A-2, B-1, B-2
Table 1505.1	A-1, A-2, B-2, B-4
3109 (3109.4, 3109.4.1.7, 3109.4.4.1)	A-1, B-2
NFPA 13	
6.8.3	A-1, A-2, B-1, B-4
8.3.3.1	A-1, A-2, B-1, B-2, B-4
8.17.1.1.1	A-1, A-2, B-1, B-2
8.17.2.4.6	A-1, A-2, B-1, B-2, B-4
11.1.1.2, 11.2.3.1.1.1	A-1, A-2, B-1, B-2, B-4
22.1.3 (43)	A-1, A-2, B-1, B-2, B-4

NFPA 13R	
6.6.6	A-1, A-2, B-1, B-2, B-4
6.6.9	A-1, A-2, B-1, B-2, B-4
6.16.1,	A-1, A-2, B-1, B-2, B-4
NFPA 13D	
4.1.5 (4.1.5.1, 4.1.5.2, 4.1.5.3, 4.1.5.4),	A-1, A-2, B-1, B-2, B-4
7.1.2	A-1, A-2, B-1, B-2, B-4
7.3.1	A-1, A-2, B-1, B-2, B-4
7.6	A-1, A-2, B-1, B-2, B-4
8.6.4.2	A-1, A-2, B-1, B-2, B-4
NFPA 14	
6.4.5.4.1	A-1, A-2, B-1, B-2, B-4
7.3.1.1	A-1, A-2, B-1, B-2, B-4
NFPA 24	
5.9.1.3 (5.9.1.3.1, 5.9.1.3.2)	A-1, A-2, B-1, B-2, B-4
6.2.1.1, 6.2.11 (5), 6.2.11 (6), 6.2.11 (7)	A-1, A-2, B-1, B-2, B-4
6.3.3	A-1, A-2, B-1, B-2, B-4
10.1.6.3	A-1, A-2, B-1, B-2, B-4
10.3.5.2	A-1, A-2, B-1, B-2, B-4
10.3.5.3,	A-1, A-2, B-1, B-2, B-4
10.6.3.1,	A-1, A-2, B-1, B-2, B-4
10.6.5	A-1, A-2, B-1, B-2, B-4
NFPA 72	
14.2.1.2.3	A-1, A-2, B-1, B-2, B-4
23.8.2 (23.8.2.3)	A-1, A-2, B-1, B-2, B-4
26.2.3.1	A-1, A-2, B-1, B-2, B-4
Residential Code	
Table R301.2(1)	A-2, B-1, B-2
R403.1.3	A-1, A-2, B-1, B-2, B-4
R405.1	A-1, A-2, B-1, B-2, B-4
R902.1, R902.1.3	A-1, A-2, B-1, B-2, B-4
R902.2	A-1, A-2, B-1, B-2, B-4
Green Building Code	
202	A-1, A-2
4.304.1	A-1, A-2