

ORDINANCE NO. 2010-554

AN ORDINANCE OF THE CITY COUNCIL OF THE CITY OF VILLA PARK, CALIFORNIA, AMENDING CHAPTERS IX AND XI OF THE VILLA PARK MUNICIPAL CODE ADOPTING BY REFERENCE THE CALIFORNIA CODES OF REGULATIONS TITLE 24, PARTS 1-12, KNOWN AND DESIGNATED AS THE 2010 EDITION OF THE CALIFORNIA BUILDING CODE, 2010 EDITION OF THE CALIFORNIA RESIDENTIAL CODE, 2010 EDITION OF THE CALIFORNIA ELECTRICAL CODE, 2010 EDITION OF THE CALIFORNIA PLUMBING CODE, 2010 EDITION OF THE CALIFORNIA MECHANICAL CODE, 2010 EDITION OF THE CALIFORNIA ADMINISTRATIVE CODE, 2010 EDITION OF THE CALIFORNIA REFERENCE STANDARDS CODE, 2010 EDITION OF THE CALIFORNIA ENERGY CODE, 2010 EDITION OF THE CALIFORNIA GREEN BUILDING STANDARDS CODE, 2010 EDITION OF THE CALIFORNIA HISTORICAL BUILDING CODE, 2010 EDITION OF THE CALIFORNIA EXISTING BUILDING CODE AND THE 2010 EDITION OF THE CALIFORNIA FIRE CODE, MAKING AMENDMENTS THERETO, AND RELATED ACTIONS.

THE CITY COUNCIL OF THE CITY OF VILLA PARK DOES ORDAIN AS FOLLOWS:

Section 1. The City hereby adopts Ordinance No. 2010-554 that amends Chapters IX and XI of the Villa Park Municipal Code. This Ordinance shall take effect on January 1, 2011, for all codes.

Section 2. Section 9-1.1 of the Villa Park Municipal Code, entitled "California Codes Adopted", is hereby amended to read in its entirety as follows:

Section 9-1.1. California Codes Adopted.

- a) The City Council of the City of Villa Park hereby adopts by reference the California Code of Regulations Title 24, Part 1, as modified herein, known and designated as the California Administrative Code, 2010 Edition.
- b) The City Council of the City of Villa Park hereby adopts for the purpose of prescribing regulations for the erection, construction, enlargement, alteration, repair, improving, removal, conversion, demolition, occupancy, equipment, use, height, area and maintenance of all buildings and structures by reference the California Code of Regulations Title 24, Part 2, known and designated as the California Building Code (CBC), 2010 Edition, based on the 2009 International Building Code as published by the International Code Council, including Division II in Chapter 1 and Appendix I and with the modifications set forth below. The provisions of this code shall constitute the building code regulations of the City.

- c) The City Council of the City of Villa Park hereby adopts for the purpose of prescribing regulations for the erection, construction, enlargement, alteration, repair, improving, removal, conversion, demolition, occupancy, equipment, use, height, area and maintenance of all buildings and structures by reference the California Code of Regulations Title 24, Part 2.5, known and designated as the California Residential Code (CRC), 2010 Edition, based on the 2009 International Residential Code as published by the International Code Council, including Division II in Chapter 1 and Appendix H and with the modifications set forth below. The provisions of this code shall constitute the One- and Two-Family and Townhouse building code regulations of the City.
- d) The City Council of the City of Villa Park hereby adopts by reference the California Code of Regulations Title 24, Part 3, known and designated as the California Electrical Code (CEC), 2010 Edition based on the National Electrical Code (NEC), 2008 Edition, as published by the National Fire Protection Association with the modifications set forth below for the purpose of prescribing regulations for the installation, arrangement, alteration, repairing, replacement, remodeling, or use and other operation of electrical wiring, connections, fixtures and other electrical appliances on premises within the City. The provisions of this code shall constitute the electrical code regulations of the City.
- e) The City Council of the City of Villa Park hereby adopts by reference the California Code of Regulations Title 24, Part 4, known and designated as the California Mechanical Code (CMC), 2010 Edition based on the 2009 Uniform Mechanical Code as published by the International Association of Plumbing and Mechanical Officials with the modifications set forth below for the purpose of prescribing regulations for the design, construction, installation, quality of materials, location, operation and maintenance or use of heating, ventilating, cooling, refrigeration systems, incinerators and other heat-producing appliances in the City including Appendices A, B, C and D. The provisions of this code shall constitute the mechanical code regulations of the City.
- f) The City Council of the City of Villa Park hereby adopts by reference the California Code of Regulations Title 24, Part 5, known and designated as the California Plumbing Code (CPC), 2010 Edition based on the 2009 Uniform Plumbing Code as published by the International Association of Plumbing and Mechanical Officials with the modifications set forth below for the purpose of prescribing regulations for the design, quality of materials, erection, installation, alteration, repair, relocation, replacement, addition to, use or maintenance of plumbing systems in the City including Appendices A, B, D, G, I, K, and L. The provisions of this code shall constitute the plumbing code regulations of the City.
- g) The City Council of the City of Villa Park hereby adopts by reference the California Code of Regulations Title 24, Part 6, known and designated as the California Energy Code, 2010 Edition.

- h) The City Council of the City of Villa Park hereby adopts by reference the California Code of Regulations Title 24, Part 8, known and designated as the California Historical Building Code, 2010 Edition.
- i) The City Council of the City of Villa Park hereby adopts by reference the California Code of Regulations Title 24, Part 10, known and designated as the California Existing Building Code, 2010 Edition.
- j) The City Council of the City of Villa Park hereby adopts by reference the California Code of Regulations Title 24, Part 11, known and designated as the California Green Building Standards (CALGreen) Code, 2010 Edition.
- k) The City Council of the City of Villa Park hereby adopts by reference the California Code of Regulations Title 24, Part 12, known and designated as the California Referenced Standards Code, 2010 Edition.

Copies of the above publications are on file in the office of the City Clerk for public inspection and are adopted with the same force and effect as though set out herein in full.

Section 3. Section 9-2.1 of the Villa Park Municipal Code remains unchanged and continues to read in its entirety as follows:

9-2.1 Local Amendments.

Pursuant to state law, the City may make changes to the state codes as are reasonably necessary because of local climatic, topographic and geological conditions. Furthermore, the City may make changes to the state codes that are administrative or procedural in nature. The City has found and declared via resolution that the City's amendments to the state codes are based on local climatic, topographic and geological conditions or are administrative or procedural in nature.

Section 4. Section 9-2.2 of the Villa Park Municipal Code remains unchanged and continues to read in its entirety as follows:

9-2.2 Board of Appeals.

All sections in the respective codes, including the California Fire Code adopted in Villa Park Municipal Code Chapter XI, pertaining to the Board of Appeal are hereby amended in their entirety to read as follows:

"In order to hear and decide appeals or orders and determine the suitability of alternate materials and methods of construction and to provide for reasonable interpretations of the provisions of these codes, there shall be and there is hereby created 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 findings, 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-Tempore 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 in making its findings and decisions."

Section 5. Section 9-2.3 of the Villa Park Municipal Code remains unchanged and continues to read in its entirety as follows:

9-2.3 Fees.

All sections in the respective codes, including the California Fire Code adopted in Villa Park Municipal Code Chapter XI, pertaining to fees are amended to state that fees shall be as set forth by resolution of the City Council.

Section 6. Section 9-2.4 of the Villa Park Municipal Code entitled "Amendments to California Building Code" is hereby amended to read in its entirety as follows:

9-2.4 Amendments To California Building Code.

The California Building Code adopted by the City is hereby amended as follows:

1. Section 403, Subsection 403.1 and 403.1.1 item number 2 of Section 403 of CBC is hereby amended to read in its entirety 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

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.

1. "Existing high-rise structure" means a high-rise structure, the construction of which commenced or completed prior to July 1, 1974
"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.
2. "New high-rise structure" means a high-rise structure, the construction of which commenced on or after July 1, 1974
2. Subsection 403.4.7.2 of Section 403 of CBC is hereby amended to read in its entirety as follows:

403.10.2 Standby power loads. The following loads are classified as standby power loads:

1. Power and lighting for the fire command center required by Section 403.4.5; and
2. Standby power shall be provided for elevators in accordance with Sections 1007.4, 3003, 3007, and 3008.
3. Subsection 403.4.8.1 of Section 403 of CBC is hereby amended to read in its entirety as follows:

403.11.1 Emergency power loads. The following loads 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 communication systems;
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.

4. Subsection 412.2 of Section 412 of CBC is hereby amended by adding the following definitions to read as follows:

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

EMERGENCY HELICOPTER LANDING FACILITY (EHLF). A landing area on the roof of a 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.

5. Section 412.7 of the CBC is hereby amended by adding Sections 412.7.5 through 412.7.5.12 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. It shall be capable of supporting a helicopter with a maximum gross weight of 15,000 lbs. For structural design requirements, see California Building Code.

412.7.5.3 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

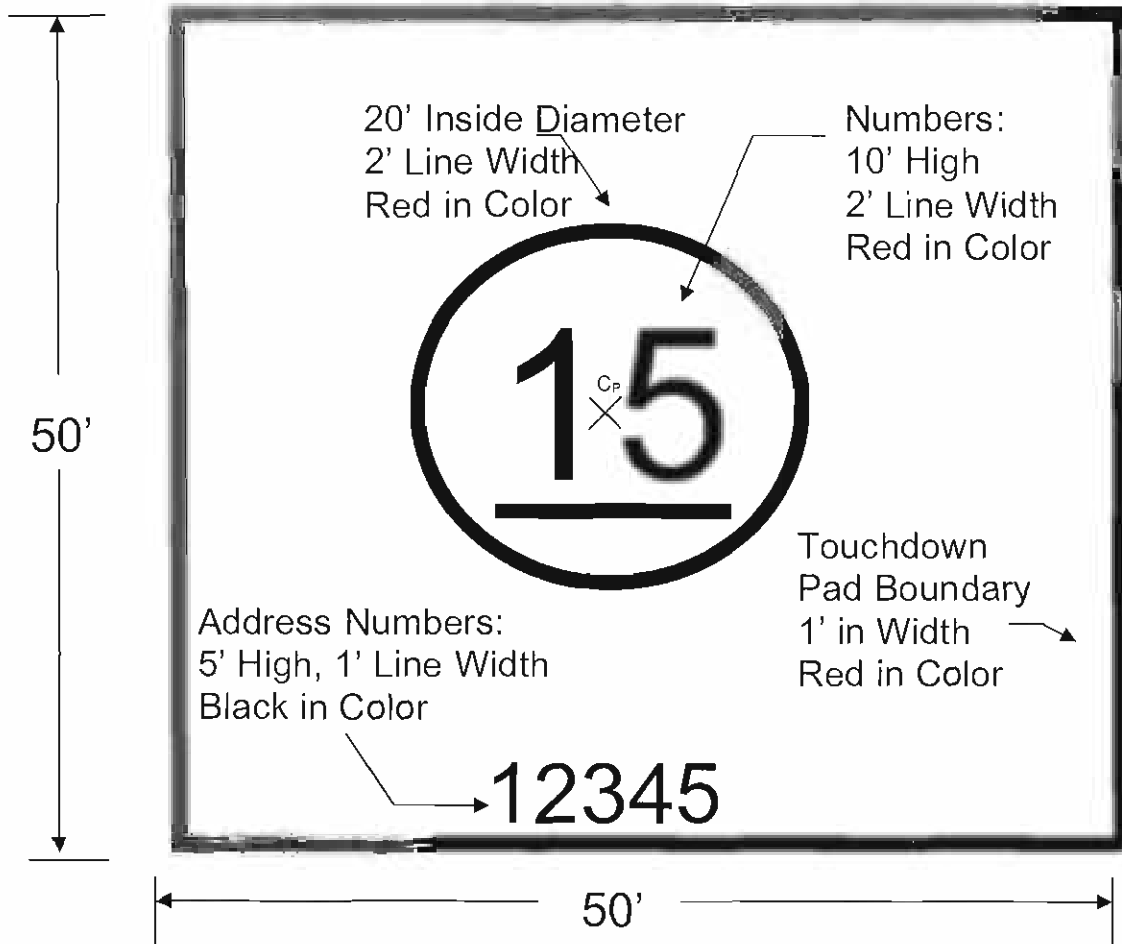
412.7.5.9 EHLF Exits. Two stairway exits shall be provided from the landing platform area to the roof surface. For landing areas less than 2,501 square feet in area, the second exit may be a fire escape or ladder leading to the roof surface below. The stairway from the landing facility platform to the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

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

Figure 412.7.5.8 Helicopter Landing Pad Markings



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

6. Subsection 903.2.8 of Section 903 of CBC is hereby amended to read in its entirety as follows:

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

1. **New buildings:** Notwithstanding any applicable provisions of Sections 903.2.1 through 903.2.12, 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 5000 square feet (465 m²) as defined in Section 202; or
 - b. When an addition exceeds 2000 square feet (186 m²) and the resulting building area exceeds 5000 square feet (465 m²) as defined in Section 202.

7. Subsection 903.2.8 of Section 903 of CBC is hereby amended to read in its entirety as follows:

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

1. **New buildings:** An automatic sprinkler system shall be installed throughout all new buildings.
2. **Existing buildings:** An automatic sprinkler system shall be installed throughout any existing building where an addition occurs and the resulting building area, as defined in CBC Section 502.1 exceeds 5500 square feet.

8. Subsection 903.3.1.1.1 **Exempt locations**, of Section 903 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.

9. Subsection 903.4 of Section 903 of CBC is hereby revised as follows:

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.

10. Subsection 904.3.5 of Section 904 of CBC is hereby revised as follows:

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.

11. Subsection 905.4 of Section 905 of CBC is hereby amended by adding items 7 and 8 as follows:

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

7. The centerline of the 2.5" (64mm) outlet shall be no less than 18" (457) above and no more than 24" (610mm) 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" (64mm) outlets so that all portions of the building can be reached with 150 feet (45,720) 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 (2032 mm) in height. These doors are for fire department access only.

12. Subsection 907.2.13 of Section 907 of CBC is hereby revised as follows:

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 of the
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

13. Subsection 907.3.1 of Section 907 of CBC is hereby amended to read in its entirety as follows:

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

Exception:

In occupancies not required to be equipped with a fire alarm system, actuation of a smoke detector shall activate a visible and an audible signal in an approved

location. Smoke detector trouble conditions shall activate a visible or audible signal in an approved location and shall be identified as air duct detector trouble.

14. Subsection 907.5.2.2 of Section 907 of CBC is hereby amended to read in its entirety as follows.

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.

15. Subsection 907.6.3.2 of Section 907 of CBC is hereby amended to read in its entirety 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.

16. Subsection 910.3.2.2 of Section 910 of CBC is hereby amended to read in its entirety as follows:

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.

17. Table 1505.1 in Subsection 1505.1 of Section 1505 of CBC is hereby amended to read as follows:

TABLE 1505.1^a
MINIMUM ROOF COVERING CLASSIFICATION
FOR TYPES OF CONSTRUCTION

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

For SI: 1 Foot = 304.8 mm, 1 square foot = 0.0929 m²

a. Unless otherwise required in accordance with Chapter 7A

18. Subsection 1505.1.3 of Section 1505 of CBC is hereby deleted and replaced with new Subsection 1505.1.3 to read in its entirety 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.

19. Subsection 1505.1.3 of Section 1505 of CBC is hereby amended, by the deletion of the entire section without replacement.

20. Subsection 1505.7 of Section 1505 of CBC is hereby amended, by the deletion of the entire section without replacement.

21. Subsection 3109.4.4.1 of Section 3109 of CBC is hereby amended to read as follows:

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.

22. Subsection 3109.4.4.2 of Section 3109 of CBC is hereby amended to read as follows:

3109.4.4.2 Construction permit; safety features required. Commencing January 1, 1998, except as provided in Section 3109.4.4.5, whenever a construction permit is issued for construction of a new private pool at a residence, it shall have an enclosure complying with 3109.4.4.3 and, it shall be equipped with at least one of the following safety features:

23. **Chapter 35 Referenced Standards** is hereby adopted and revised as follows:

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. A local water-flow alarms shall be provided on all sprinkler systems and shall be connected to the building

fire alarm or water-flow monitoring system where provided. Group R occupancies not requiring a fire alarm system by the California Fire Code shall be provided with a minimum of one approved interior alarm device in each unit. 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:

Section 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 6.16.1 is hereby revised as follows:

6.16.1 A local water-flow alarms shall be provided on all sprinkler systems and shall be connected to the building fire alarm or water-flow monitoring system where provided. Group R occupancies containing less than the number of stories, dwelling units or occupant load specified in 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.

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.

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 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 (5) 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. Sanitary valves must 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-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.

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 7. Section 9-2.5 entitled "Amendments to California Residential Code" is hereby added to the Villa Park Municipal Code to read in its entirety as follows:

9-2.5 Amendments To California Residential Code.

The California Residential Code adopted by the City is hereby amended as follows:

1. Table R301.2(1) of Section R301 of CRC is hereby amended to read as follows:

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

GROUND SNOW LOAD	WIND DESIGN		SEISMIC DESIGN CATEGORY ^f	SUBJECT TO DAMAGE FROM			WINTER DESIGN TEMP ^o	ICE BARRIER UNDERLAYMENT REQUIRED ^h	FLOOD HAZARDS ^g	AIR FREEZING INDEX ⁱ	MEAN ANNUAL TEMP ^j
	Speed ^d (mph)	Topographic effects ^h		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.

2. Subsection R313.1 of Section R313 of CRC is hereby amended to read in its entirety as follows:

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

New buildings: An automatic sprinkler system shall be installed throughout all new buildings, including the attached garages.

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

1. When an addition is 33% or more of the existing building area as defined in Section 202, and greater than 1000 square feet (93 m²) within a two year period; or
2. An addition when the existing building is already provided with automatic sprinklers; or.
3. 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.

3. Subsection R313.2 of Section R313 of CRC is hereby amended to read in its entirety as follows:

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, including the attached garages.

Existing buildings: An automatic sprinkler system shall be installed throughout any existing building where an addition occurs and the resulting building area, as defined in CBC Section 502.1 exceeds 5,500 square feet.

4. Subsection R403.1.3 of in Section R403 of CRC is hereby amended by deleting the exception.
5. Subsection R405.1 of in Section R405 of CRC is hereby amended 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.~~

6. Subsection R902.1 of in Section R902 of CRC 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 or B roofing shall be installed in areas designated by this section. Classes A or B 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.
7. Subsection R902.1.3 of in Section R902 of CRC is amended by revising it to require a minimum Class B 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 B.

8. Subsection R902.1.3 of in Section R902 of CRC is amended by revising it to allow only Class A or B 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.

9. Chapter 44 Referenced Standards is hereby adopted and revised as follows:

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. A local water-flow alarms shall be provided on all sprinkler systems and shall be connected to the building fire alarm or water-flow monitoring system where provided. Group R occupancies not requiring a fire alarm system by the California Fire Code shall be provided with a minimum of one approved interior alarm device in each unit. 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 6.16.1 is hereby revised as follows:

6.16.1 A local water-flow alarms shall be provided on all sprinkler systems and shall be connected to the building fire alarm or water-flow monitoring system where provided. Group R occupancies containing less than the number of stories, dwelling units or occupant load specified in 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.

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.

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.

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-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.

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 8. Section 9-2.6 entitled "Amendments to California Green Building Standards Code" is hereby added to the Villa Park Municipal Code to read in its entirety as follows:

9-2.6 Amendments To California Green Building Standards Code.

The California Green Building Standards Code adopted by the City is hereby amended as follows:

1. Section 202 of CGBSC is hereby amended by adding a definition for "Sustainability" 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.

2. Subsection 4.304.1 of Section 4.304 of CGBSC is hereby amended to read in its entirety as follows:

4.304.1 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 or communicates with the controller(s). Soil moisture-based controllers are not required to have rain sensor input.

Section 9. Section 11-1.1 of the Villa Park Municipal Code is amended to read in its entirety as follows:

11-1.1. Adoption of the California Fire Code. The City Council of the City of Villa Park hereby adopts by reference the California Code of Regulations Title 24, Part 9, known and designated as the 2010 California Fire Code (CFC), based on the International Fire Code, 2009 Edition, with errata, published by International Code Council (ICC), and the whole thereof, including Division II in Chapter 1, Appendix B, Appendix BB, Appendix C, and Appendix CC, with the modifications set forth below for the purpose of prescribing regulations governing conditions hazardous to the life and property from fire or explosion. The provisions of this code shall constitute the fire code regulations of the City. The California Fire Code is on file for public examination in the office of the City Clerk.

Section 9. Section 11-1.2 of the Villa Park Municipal Code is unchanged and continues to read in its entirety as follows:

11-1.2. Enforcement-Inspections.

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

Section 10. Section 11-1.3 of the Villa Park Municipal Code is amended to read in its entirety as follows:

11-1.3 Amendments.

The California Fire Code adopted by the City is hereby amended as follows:

1. Subsection 105.6.29 of Division II of Chapter 1 of CFC is hereby amended as follows:

105.6.29. Miscellaneous combustible storage. An operational permit is required to store in any building or upon any premises in excess of 2500 cubic feet (71 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.

2. Subsection 105.6.35 of Division II of Chapter 1 of CFC is hereby is hereby deleted without replacement.
3. Section 109.3 of Division II of Chapter 1 of CFC is hereby amended and by adding new Sections 109.3.2 and 109.3.3 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 a misdemeanor or infraction as prescribed in Section 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.

Section 109.3.2 Infraction. Except as provided in Section 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.

Section 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

4. Section 202 of CFC is hereby amended and by adding the following definitions:

FLOW-LINE. is 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:

3. “Existing high-rise structure” means a high-rise structure, the construction of which commenced or completed prior to July 1, 1974
 4. “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.
 5. “New high-rise structure” means a high-rise structure, the construction of which commenced on or after July 1, 1974
5. Subsection 304.1.2 (7) of Section 304 of CFC is hereby amended by adding subsection (E) as follows:
- (E) OCFA Vegetation Management Guideline.
6. A new subsection 305.5 is hereby added to section 305 of CFC to read in its entirety as follows:

305.5 Chimney 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 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.

7. A new section 318 is hereby added to Chapter 3 of the CFC to read in its entirety as follows:

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 (304.8 m) of a parcel of land that has an active, inactive, or abandoned oil or gas well operation, petroleum or chemical refining facility, petroleum or chemical storage, or may contain or give off toxic, combustible or flammable liquids, gases or vapors.

8. A new section 319 is hereby added to Chapter 3 of the CFC to read in its entirety as follows:

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 Orange County Fire Authority Fuel Modification Plan Guidelines.
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.

9. A new section 320 is hereby added to Chapter 3 of the CFC to read in its entirety as follows:

320 Clearance of brush or vegetation growth from roadways

The fire code official is authorized to cause areas within 10 feet (3048 mm) on each side of portions of highways and private streets which are improved, designed or ordinarily used for vehicular traffic to be cleared of flammable vegetation and other combustible growth. The fire code official is authorized to enter upon private property to do so.

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.

10. A new section 321 is hereby added to Chapter 3 of the CFC to read in its entirety as follows:

321 Unusual Circumstances. The fire code official may suspend enforcement and require reasonable alternative measures designed to advance the purposes of this code if determined that in any specific case that any of the following conditions exist:

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

11. A new section 322 is hereby added to Chapter 3 of the CFC to read in its entirety as follows:

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.

Exception:

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

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.

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.

12. A new section 323 is hereby added to Chapter 3 of the CFC to read in its entirety as follows:

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.

Exception:

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.

15. A new section 324 is hereby added to Chapter 3 of the CFC to read in its entirety as follows:

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.

16. A new section 325 is hereby added to Chapter 3 of the CFC to read in its entirety as follows:

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 (9144 mm) from a grass, grain, brush, or forest-covered area. Permanent barbecues, portable barbecues, outdoor fireplaces or grills shall not be used for the disposal of rubbish, trash or combustible waste material.

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.

17. Chapter 4 Sections 404, 405, 406, and 408 of the CFC is hereby deleted without replacements.

18. Subsection 503.1.1 of section 503 of the CFC is hereby amended by adding exception 4 as follows:

4. For Group R-3 and Group U occupancies equipped throughout with an approved automatic sprinkler system installed in accordance with Section 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.

19. Subsection 503.2.1 of section 503 of the CFC is hereby revised as follows:

503.2.1 Dimensions. Fire apparatus access roads shall have an unobstructed width of not less than 20 feet (6096 mm), exclusive of shoulders, except for approved gates in accordance with Section 503.6, and an unobstructed vertical

clearance of not less than 13 feet 6 inches (4115 mm). Street widths are to be measured from top face of curb to top face of curb, on streets with curb and gutter, and from flow-line to flow-line on streets with rolled curbs.

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).

20. Subsection 503.4 of section 503 of the CFC is hereby revised as follows:

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 Section 503.2.1 shall be maintained at all times. Speed Bumps and speed humps, shall be approved prior to installation.

21. Subsection 503.6 of section 503 of the CFC is hereby revised as follows:

503.6 Security gates. 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.

22. Subsection 505.1 of section 505 of the CFC is hereby revised as follows:

505.1 Address identification. New and existing buildings shall have approved address numbers, building numbers or approved building identification on the building 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.

23. Subsection 507.5.1 of section 507 of the CFC is hereby revised as follows:

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:

1. For Group R-3 and Group U occupancies equipped throughout with an approved automatic sprinkler system installed in accordance with Section 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).

24. Section 510 of the CFC is hereby revised as follows:

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 communication systems.

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

Section 510.2 Radio signal strength is hereby deleted without replacement.

25. Subsection 604.2.15.1.1 of section 604 of the CFC is hereby amended as follows:

[B] 604.2.15.1.1 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.

26. Subsection 604.2.15.2.1 of section 604 of the CFC is hereby amended as follows:

[B] 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 smokeproof enclosures.

27. Subsection 606.8 of section 606 of the CFC is hereby amended to read in its entirety as follows:

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.

28. Subsection 606.10.2 of section 606 of the CFC is hereby amended as follows:

606.10.2 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.

29. Subsection 608.1 of section 608 of the CFC is hereby amended to read in its entirety as follows:

608.1 Scope. Stationary storage battery systems having an electrolyte capacity of more than 50 gallons (189 L) for flooded lead acid, nickel cadmium (Ni-Cd) and valve-regulated lead acid (VRLA), or 1,000 pounds (454 kg) for lithium-ion and lithium metal polymer, used for facility standby power, emergency power or, 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.

30. Subsection 608.10 of section 608 of the CFC is hereby added to read as follows:

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 following:

neutralization shall be provided and comply with Section

shall be provided and comply with Section 608.6.1

shall be provided and comply with Section 608.7

shall be provided and comply with Section 907.2

6 of the CFC is hereby added to read as follows:

SECTION 610
PHOTOVOLTAIC SYSTEMS

on. Photovoltaic systems shall comply with Orange
Association Guideline for Fire Safety Elements of Solar
The provision of this section may be applied by either the
building code official.

g Sections 801, 802, 803, 804, Subsections 806.2, 807.1,
7.4.2.4.1, 807.4.5, 807.4.2.4 and Table 803.3.

ection 903 of the CFC is hereby amended to read in its

d. Approved automatic sprinkler systems in buildings and
vided when one of the following conditions exists

Notwithstanding any applicable provisions of Sections
3.2.12, an automatic fire-extinguishing system shall also
occupancies when the total building area exceeds 5,000
(²) as defined in Section 202, regardless of fire areas or

-3 occupancies. Group R-3 occupancies shall comply with

c. Notwithstanding any applicable provisions of this code,
ler system shall be provided in an existing building when
and when one of the following conditions exists:

dition is 33% or more of the existing building area, and the
ding area exceeds 5000 square feet (465 m²) as defined
in Section 202; or

- b. When an addition exceeds 2000 square feet (186 m²) and the resulting building area exceeds 5000 square feet (465 m²) as defined in Section 202.

- 1. Spill control and 608.5.
- 2. Room ventilatio
- 3. Signage shall b
- 4. Smoke detectio

31. Section 610 of Chapt

610.1 Manual operati
County Fire Chief's As
Photovoltaic Systems.
fire code official or the

32. Chapter 8 only adopti
807.1.2, 807.4.5.1, 80

33. Subsection 903.2 of s
entirety as follows:

903.2 Where require
structures shall be pro

- 1. **New buildings:**
903.2.1 through 90
be installed in all
square feet (465 m²)
allowable area.

Exception: Group F
Section 903.2.8.

- 2. **Existing Buildings:**
an automatic sprin
an addition occurs

- a. When an ad
resulting

34. Subsection 903.2.8 of section 903 of the CFC is hereby amended to read in its entirety as follows:

903.2.8 Group R. 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 any existing building where an addition occurs and the resulting building area, as defined in CBC Section 502.1 exceeds 5,500 square feet.

35. Subsection 903.3.1.1.1 of section 903 of the CFC is hereby amended by revising exception 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.

36. Subsection 903.4 of section 903 of the CFC is hereby amended by modifying item 1, deleting item 3 and 5, and renumbering the Exceptions as follows:

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

37. Subsection 904.3.5 of section 904 of the CFC is hereby revised as follows:

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.

38. Subsection 905.4 of section 905 of the CFC is hereby amended by adding items 7 and 8 as follows:

7. The centerline of the 2.5 inches (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" outlets so that all portions of the building can be reached with 150 feet (45,720) 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 (2032 mm) in height. These doors are for fire department access only.

39. Subsection 907.2.13 of Section 907 of CFC is hereby amended to read in its entirety as follows:

907.2.13 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. 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 in accordance with Section 907.2.13.1, a fire department communication system in accordance with Section 907.2.13.2 and an emergency voice/alarm communication system in accordance with Section 907.6.2.2.

Exceptions:

1. Airport traffic control towers in accordance with Section 907.2.22 and Section 412 of the California Building Code.
2. Open parking garages in accordance with Section 406.3 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 Section 503.1.1 of the California Building Code.
5. In Group I-2 and R-2.1 occupancies, the alarm shall sound at a constantly attended location and general occupant notification shall be broadcast by the emergency voice/alarm communication system

40. Subsection 907.4.1 of Section 907 of CFC is hereby amended to read in its entirety as follows:

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:

1. 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.

41. Subsection 907.6.2.2 of Section 907 of CFC is hereby amended to read in its entirety as follows:

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.

42. Subsection 907.7.3.2 of Section 907 of CFC is hereby amended to read in its entirety as follows:

907.7.3.2 High-rise buildings. 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 detection devices or suppression systems.

43. Subsection 910.3.2.2 of Section 910 of CFC is hereby amended to read in its entirety as follows:

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.

44. Subsection 1102.1 of section 1102 of the CFC is hereby amended and 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.

45. A new section 1108 is hereby added to Chapter 11 of CFC to read in its entirety as follows:

SECTION 1108
Emergency Helicopter Landing Facility (EHLF)

1108.1 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.

1108.1.1 Rooftop Landing Pad. The landing pad shall be 50 ft. x 50 ft. or a 50 ft. diameter circle that is pitched or sloped to provide drainage away from access points and passenger holding areas at a slope of 0.5 percent to 2 percent. The landing pad surface shall be constructed of approved non-combustible, nonporous materials. It shall be capable of supporting a helicopter with a maximum gross weight of 15,000 lbs. For structural design requirements, see California Building Code.

1108.1.2 Approach-Departure Path. The emergency helicopter landing facility shall have two approach-departure paths separated from each other by at least 90 degrees. No objects shall penetrate above the approach-departure paths. The approach-departure path begins at the edge of the landing pad, with the same width or diameter as the landing pad and is a rising slope extending outward and upward at a ratio of eight feet horizontal distance for every one foot of vertical height.

1108.1.3 Safety Area. The safety area is a horizontal plane level with the landing pad surface and shall extend 25 ft in all directions from the edge of the landing pad. No objects shall penetrate above the plane of the safety area.

1108.1.4 Safety Net. If the rooftop landing pad is elevated more than 30 in. (2'-6") above the adjoining surfaces, a 6 ft in wide horizontal safety net capable of supporting 25 lbs/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.

1108.1.5 Take-off and Landing Area. The takeoff and landing area shall be free of obstructions and 100 ft x 100 ft. or 100 ft. diameter.

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.

1108.1.7 Special Markings. The emergency helicopter landing facility shall be marked as indicated in Figure 1108.1.7

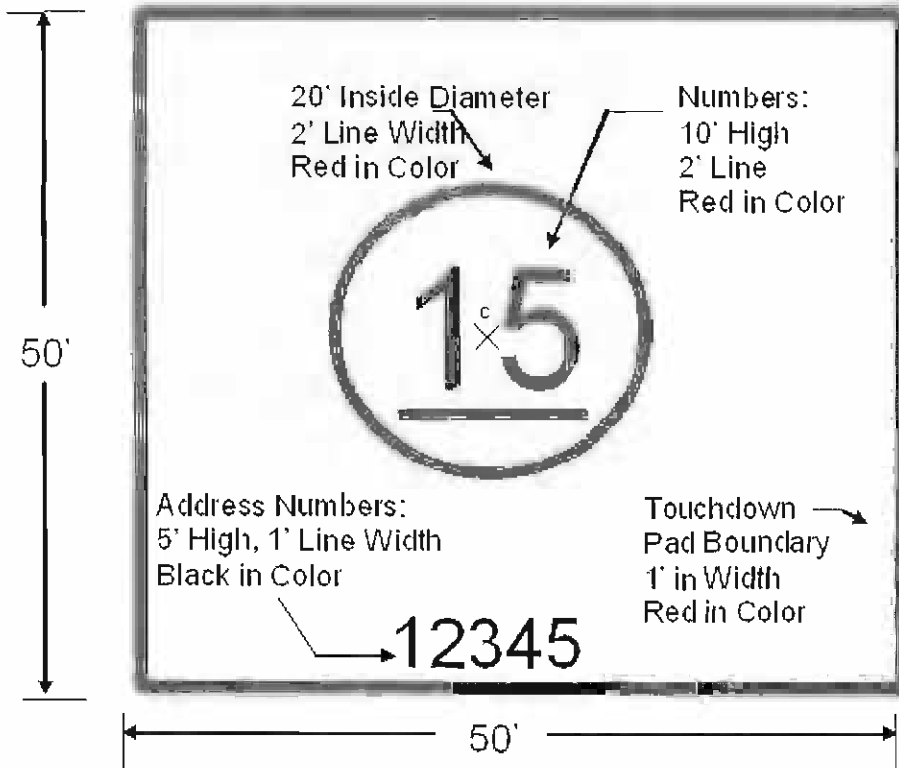
1108.1.8 EHLF Exits. Two stairway exits shall be provided from the landing platform area to the roof surface. For landing areas less than 2,501 square feet in area, the second exit may be a fire escape or ladder leading to the roof surface below. The stairway from the landing facility platform to the 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.

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.

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 stairway or ramp to the landing pad. The fire extinguisher cabinets shall not penetrate the approach-departure paths, or the safety area. Installation, inspection, and maintenance of extinguishers shall be in accordance with the CFC, Section 906.

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

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).

46. Subsection 1901.2 of Section 1901 of CFC is hereby amended to read in its entirety as follows:

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

47. Subsection 1908.1 of Section 1908 of CFC is hereby amended to read in its entirety as follows:

1908.1 General. 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.

48. Subsection 1908.2 of Section 1908 of CFC is hereby amended to read in its entirety as follows:

1908.2 Storage site. Storage sites shall be level and on solid ground or other all-weather surface. Sites shall be thoroughly cleaned and approval from fire code official is obtained before transferring products to the site.

49. Subsection 1908.3 of Section 1908 of CFC is hereby revised as follows:

1908.3 Size of piles. Piles shall not exceed 15 feet (4572 mm) in height, 50 feet (15 240 mm) in width and 100 feet (30 480 mm) in length.

50. Subsection 1908.7 of Section 1908 of CFC is hereby amended to read in its entirety as follows:

1908.7 Pile fire protection. Automatic sprinkler protection shall be provided in conveyor tunnels and combustible enclosures that pass under a pile. Combustible conveyor systems and enclosed conveyor systems shall be equipped with an approved automatic sprinkler system. Oscillating sprinklers with a sufficient projectile reach are required to maintain a 40% to 60% moisture content and wet down burning/smoldering areas.

51. Subsection 1908.9 of Section 1908 of CFC is hereby amended as follows:

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. Approved material-handling equipment shall be available for moving wood chips, hogged material, wood fines and raw product during fire-fighting operations.

52. Subsection 2308.3 of Section 2308 of CFC is hereby amended to read in its entirety as follows:

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 $\frac{1}{4}$ inch thick and in the mounted position shall extend a minimum of 4 inches above the shelf 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.

53. Table 2308.3 of Section 2701 of CFC is hereby revised as follows:

TABLE 2308.3: REQUIRED FLUE SPACES FOR RACK STORAGE

RACK CONFIGURATION	FIRE SPRINKLER PROTECTION Storage Height		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.

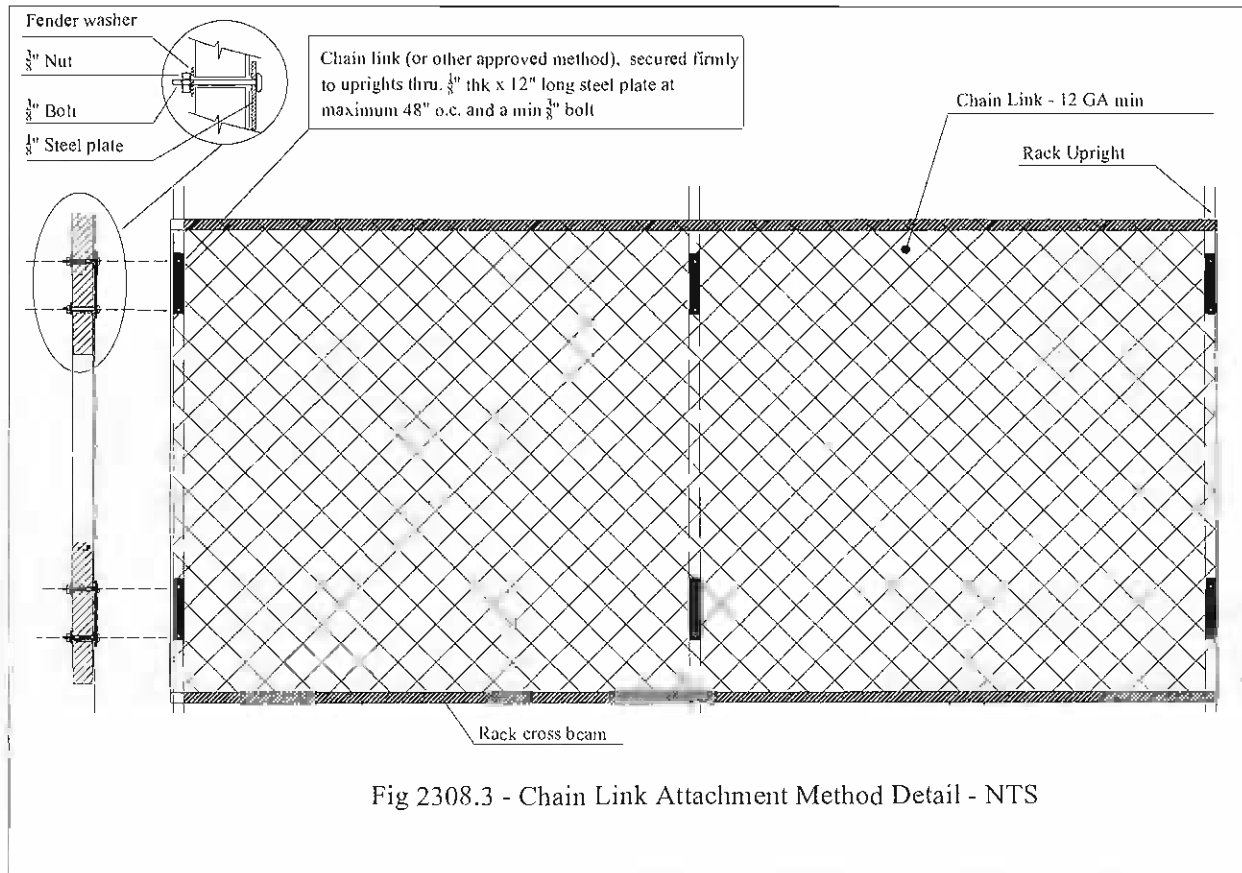


Fig 2308.3 - Chain Link Attachment Method Detail - NTS

54. Subsection 2701.5.2 of Section 2701 of CFC is hereby amended by modifying the starting paragraph as follows:

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:
...(Balance of the subsection to remain unchanged)

55. Table 2703.1.1(1) of Section 2703 of CFC is hereby amended by deleting Footnote K.

56. Subsection 2703.1.1 of Section 2703 of CFC is hereby amended by adding a new subsection as follows:

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.

57. Subsection 2703.5 of Section 2703 of CFC is hereby amended by modifying the NFPA standard as follows:

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.

58. Subsection 3203.4.1 of Section 3203 of CFC is hereby amended as follows:

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.

59. Chapter 33 of CFC is hereby amended by adding the following subsections as follows:

3301.2 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

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.

60. Subsection 3308.1 of Section 3308 of CFC is hereby amended as follows:

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.

61. Subsection 3308.2 of Section 3308 of CFC is hereby added as follows:

3308.2 Firing. All fireworks displays shall be electrically fired.

62. Subsection 3404.2.3.2 of Section 3404 of CFC is hereby amended by modifying the NFPA standard as follows:

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.

63. Subsection 3704.2.2.7 of Section 3704 of CFC is hereby amending the exception as follows:

Exception:

1. Toxic gases – storage/use. Treatment systems are not required for toxic gases supplied by cylinders or portable tanks not exceeding 1,700 pounds (772 Kg) water capacity when the following are provided:
 - 1.1 A listed or approved gas detection system with a sensing interval not exceeding 5 minutes.
 - 1.2 For storage, valve outlets are equipped with gas-tight outlet plugs or caps.

1.3 For use, 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 Section 3704.2.2.10.

64. Subsection 4503.7 of Section 4503 of CFC is hereby amended as follows:

Section 4503.7 Slip identification. Slips and mooring spaces shall be individually identified by an approved numeric or alphabetic designator. Space designators shall be posted at the space. Signs indicating the space designators located on finger piers and floats shall be posted at the base of all piers, finger piers, floats and finger floats. A monument sign shall be installed at each gate designating slip and mooring spaces in contrasting colors.

65. Subsection 4504.2.2 of Section 4504 of CFC is hereby added as follows:

4504.2.2 All standpipes exposed to the outside elements shall be painted for corrosion protection.

Exception: Stainless Steel (316 Grade) Standpipes

66. Chapter 46 only adopting Section 4606 and Subsections 4603.6, 4603.6.3, 4603.6.3.1, 4603.6.8 through 4603.6.8.2, 4603.6.9 through 4603.6.9.10 and 4603.7 through 4603.7.5.3.

67. **Chapter 47 Referenced Standards** of CFC is hereby adopted in its entirety with the following amendments:

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. A local water-flow alarms shall be provided on all sprinkler systems and shall be connected to the building fire alarm or water-flow monitoring system where provided. Group R occupancies not requiring a fire alarm system by the California Fire Code shall be provided with a minimum of one approved interior alarm device in each unit. 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 6.16.1 is hereby revised as follows:

6.16.1 A local water-flow alarms shall be provided on all sprinkler systems and shall be connected to the building fire alarm or water-flow monitoring system where provided. Group R occupancies containing less than the number of stories, dwelling units or occupant load specified in 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.

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.

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 (5) 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-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.

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.

Chapter 48 Motion Picture and Television Production Studio Sound Stages, Approved Production Facilities, and Production Locations is adopted in its entirety without amendments.

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

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

(5) OCFA Vegetation Management Guideline.

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

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

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

modification plans shall be submitted to and approved by the fire
or to the issuance of a grading permit.

modification plans shall meet the criteria set forth in the Fuel
section of the Orange County Fire Authority Vegetation
Guidelines.

modification plan may be altered if conditions change. Any
the fuel modification areas shall have prior approved by the

the fuel modification plan shall be maintained in accordance
red plan and are subject to the enforcement process outlined
e.

2. Final fuel mod
code official pr
3. The fuel modi
Modification S
Management C
4. The fuel mod
alterations to t
fire code officia
5. All elements of
with the approv
in the Fire Cod

and Blasting is hereby added as follows:

Section 4909 Explosives and

and Blasting. Explosives shall not be possessed, kept, stored,
e, given away, used, discharged, transported or disposed of
n interface areas, or hazardous fire areas except by permit
ficial.

4909 Explosives and
sold, offered for sale
within wildland-urban
from the fire code off

s entirety with the following amendment:

Appendix B is adopted in its

two-family dwellings is hereby added as follows:

Section B105.1 One- and two-

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 (344.5m²) 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.

Appendix BB is adopted in its entirety without amendments:

Appendix C is adopted in its entirety without amendments:

Appendix CC is adopted in its entirety without amendments:

Section 11. The amendments to the codes herein have been adopted pursuant to
Health and Safety Code sections 17958.5, 17958.7, and 18941.5 and Public Resources
Code section 4117 and have been justified by the local conditions prevalent in the City

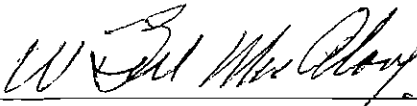
of Villa Park as more particularly described in City Council Resolution No. 2010-3141 incorporated herein by this reference as if set forth in full.

Section 12. The City hereby repeals prior ordinances 2002-489, 2002-490, 2005-511, and 2008-530 to the extent they are inconsistent with this ordinance.

Section 13. If any section, subsection, subdivision, sentence, clause, phrase, or portion of this Ordinance, or the application thereof to any person or place, 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 or its application to other persons or places. The City Council hereby declares that it would have adopted this Ordinance, and each section, subsection, subdivision, sentence, clause, phrase, or portion thereof, irrespective of the fact that any one or more sections, subsections, subdivisions, sentences, clauses, phrases, or portions of the application thereof to any person or place, be declared invalid or unconstitutional.

Section 14. The City Clerk shall certify as to the adoption of the Ordinance and cause the same to be published and posted as required by law.

PASSED AND ADOPTED by the City Council of the City of Villa Park at a regular meeting of the City Council held on the 16th day of November, 2010.



W. Bill Mac Aloney, Mayor
City of Villa Park

ATTEST:



Jarad L. Hildenbrand, City Clerk
City of Villa Park

STATE OF CALIFORNIA }
COUNTY OF ORANGE } SS
CITY OF VILLA PARK }

I, JARAD L. HILDENBRAND, City Clerk of the City of Villa Park DO HEREBY CERTIFY that the foregoing Resolution was duly adopted by the City Council of the City of Villa Park on the 16th day of November, 2010, and was carried by the following roll call vote, to wit:

AYES: COUNCILMEMBERS: PAULY, ULMER, REESE, MACALONEY

NOES: COUNCILMEMBERS: NONE

ABSENT: COUNCILMEMBERS: RHEWS

ABSTAIN: COUNCILMEMBERS: NONE



Jarad L. Hildenbrand, City Clerk
City of Villa Park

The table that follows is provided for your community's use in determining the FIRM panels affecting your community. Note, when referencing the FIRM panels in your floodplain management ordinances, the complete FIRM panel number should be referenced. For example, the first FIRM panel entry for Aliso Viejo will read **06059C0409J** and the first panel entry for Anaheim will read **06059C0069J**. The countywide prefix **06059C** and suffix **J** are common to all communities.

LISTING OF COMMUNITIES

COMMUNITY NAME	COMMUNITY NUMBER	LOCATED ON PANELS	INITIAL NFIP MAP DATE	INITIAL FIRM DATE	MOST RECENT FIRM PANEL DATE
ALISO VIEJO, CITY OF	060770	409, 426, 427, 428, 429, 436, 437	JANUARY 10, 1975	SEPTEMBER 14, 1979	December 3, 2009
ANAHEIM, CITY OF	060213	69, 90, 109, 117, 126, 127, 128, 129, 131, 132, 133, 136, 137, 141, 142, 151, 152, 153, 154, 156, 157, 158, 159, 161, 180, 185	JULY 26, 1974	JUNE 4, 1980	December 3, 2009
BREA, CITY OF	060214	33, 34, 41, 42, 58, 59, 61, 62, 63, 66	MAY 21, 1974	DECEMBER 2, 1980	December 3, 2009
BUENA PARK, CITY OF	060215	19, 38, 106, 107, 108, 109, 117, 125, 128	NOVEMBER 1, 1974	FEBRUARY 1, 1979	December 3, 2009
COSTA MESA, CITY OF	060216	254, 258, 259, 262, 264, 266, 267, 268, 269, 278, 286	MAY 17, 1974	SEPTEMBER 30, 1982	December 3, 2009
CYPRESS, CITY OF	060217	165, 108, 109, 112, 116, 117	FEBRUARY 9, 1979	SEPTEMBER 15, 1989	December 3, 2009
DANA POINT, CITY OF	060736	501, 502, 504, 506, 508, 509	SEPTEMBER 15, 1989	SEPTEMBER 15, 1989	December 3, 2009
FOUNTAIN VALLEY, CITY OF	060218	251, 252, 253, 254, 256, 258, 251, 262	MARCH 29, 1974	NOVEMBER 17, 1982	December 3, 2009
FULLERTON, CITY OF	060219	36, 37, 38, 39, 41, 42, 43, 44, 51, 63, 126, 127, 131, 132	JUNE 28, 1974	JULY 5, 1977	December 3, 2009
GARDEN GROVE, CITY OF	060220	116, 117, 118, 119, 136, 137, 138, 139, 141, 142, 143, 144, 252	JUNE 14, 1974	SEPTEMBER 30, 1982	December 3, 2009
HUNTINGTON BEACH, CITY OF	065034	118, 119, 227, 229, 231, 232, 233, 234, 241, 242, 244, 252, 253, 261, 262, 263, 264	AUGUST 9, 1974	FEBRUARY 16, 1973	December 3, 2009
IRVINE, CITY OF	060222	169, 190, 276, 279, 281, 282, 283, 284, 286, 287, 288, 289, 291, 292, 293, 294, 305, 308, 313, 314, 315, 316, 402, 406, 407, 426	JUNE 21, 1974	FEBRUARY 15, 1980	December 3, 2009

EXHIBIT B

LAGUNA BEACH, CITY OF	060223	407, 409, 412, 416, 417, 419, 426, 428, 436, 438, 501	JUNE 21, 1974	SEPTEMBER 28, 1979	December 3, 2009
LAGUNA HILLS, CITY OF	060760	313, 314, 426, 427, 429, 431, 433, 437, 441	JANUARY 10, 1975	SEPTEMBER 14, 1979	December 3, 2009
LAGUNA NIGUEL, CITY OF	060764	429, 433, 436, 437, 438, 439, 441, 443, 501, 502, 506	JANUARY 10, 1975	SEPTEMBER 14, 1979	December 3, 2009
LAGUNA WOODS, CITY OF	060768	407, 426, 427, 429	JANUARY 10, 1975	SEPTEMBER 14, 1979	December 3, 2009
LAKE FOREST, CITY OF	060759	310, 313, 314, 315, 316, 317, 318, 319, 326, 336, 427, 431	JANUARY 10, 1975	SEPTEMBER 14, 1979	December 3, 2009
LA HABRA, CITY OF	060224	29, 28, 33, 36, 37, 41	MAY 3, 1974	FEBRUARY 15, 1980	December 3, 2009
LA PALMA, CITY OF	060225	106, 107, 108	JULY 21, 1978	JULY 21, 1978	December 3, 2009
LOS ALAMITOS, CITY OF	060226	105, 112, 116	SEPTEMBER 15, 1989	SEPTEMBER 15, 1989	December 3, 2009
MISSION Viejo, CITY OF	060735	317, 318, 319, 336, 338, 427, 431, 432, 433, 434, 441, 442	SEPTEMBER 15, 1989	SEPTEMBER 15, 1989	December 3, 2009
NEWPORT BEACH, CITY OF	060227	264, 267, 268, 269, 286, 296, 289, 377, 381, 382, 384, 401, 402, 403, 404, 406, 409	MARCH 15, 1974	SEPTEMBER 1, 1978	December 3, 2009
ORANGE, CITY OF	060228	142, 144, 151, 152, 153, 154, 156, 159, 161, 162, 163, 164, 166, 167, 168, 169, 180	MARCH 28, 1978	DECEMBER 4, 1979	December 3, 2009
ORANGE COUNTY UNINCORPORATED AREAS	060212	28, 29, 33, 34, 35, 42, 55, 58, 59, 61, 62, 63, 64, 66, 67, 68, 69, 90, 95, 108, 112, 113, 114, 116, 117, 118, 129, 136, 137, 138, 151, 153, 154, 156, 157, 158, 159, 162, 164, 166, 167, 168, 169, 180, 185, 190, 195, 225, 226, 227, 229, 231, 233, 234, 241, 242, 251, 256, 264, 267, 269, 277, 278, 281, 282, 286, 294, 305, 306, 307, 309, 309, 318, 316, 317, 326, 327, 328, 329, 335, 336, 337, 338, 339, 345, 375, 377, 404, 406, 407, 408, 409, 412, 416, 417, 419, 426, 428, 432, 434, 436, 438, 441, 442, 444, 451, 452, 453, 454, 460, 465, 470, 500, 526, 527, 529, 535	JANUARY 10, 1975	SEPTEMBER 14, 1979	December 3, 2009
PLACENTIA, CITY OF	060229	44, 61, 62, 63, 64, 132, 151, 152	JUNE 14, 1974	FEBRUARY 15, 1980	December 3, 2009
RANCHO SANTA MARGARITA, CITY OF	060769	319, 336, 337, 338, 339, 345, 432, 451, 452, 455, 460	JANUARY 10, 1975	SEPTEMBER 14, 1979	December 3, 2009
SAN CLEMENTE, CITY OF	060230	507, 508, 509, 517, 526, 527, 528, 529, 536, 537, 536, 539	JUNE 14, 1974	DECEMBER 4, 1979	December 3, 2009
SAN JUAN CAPISTRANO, CITY OF	060231	441, 442, 443, 444, 465, 506, 507, 508, 509, 526	MAY 10, 1974	SEPTEMBER 14, 1979	December 3, 2009
SANTA ANA, CITY OF	060232	139, 142, 143, 144, 163, 164, 252, 256, 257, 258, 259, 276, 277, 278, 279	JUNE 21, 1974	JULY 3, 1978	December 3, 2009
SEAL BEACH, CITY OF	060233	112, 115, 116, 118, 226, 227	JUNE 21, 1974	JULY 3, 1978	December 3, 2009
STANTON, CITY OF	060234	109, 117, 128, 136, 137, 138	SEPTEMBER 15, 1989	SEPTEMBER 15, 1989	December 3, 2009
TUSTIN, CITY OF	060235	164, 168, 169, 277, 278, 278, 281, 282, 283	JUNE 21, 1974	SEPTEMBER 14, 1979	December 3, 2009
VILLA PARK, CITY OF	060236	154, 158, 162, 166	MARCH 22, 1974	DECEMBER 4, 1979	December 3, 2009
WESTMINSTER, CITY OF	060237	118, 119, 138, 139, 231, 232, 251, 252	NOVEMBER 15, 1977	AUGUST 8, 1978	December 3, 2009
YORBA LINDA, CITY OF	060238	62, 63, 64, 66, 67, 68, 69, 90, 95, 152, 156, 157, 180, 185	AUGUST 9, 1974	AUGUST 1, 1978	December 3, 2009

PANEL NOT PRINTED. NO SPECIAL FLOOD HAZARD AREAS
OR FLOOD PRONE COMMUNITY

