CITY COUNCIL ORDINANCE NO. 25-26

AN ORDINANCE OF THE CITY COUNCIL OF THE CITY OF IRVINE, CALIFORNIA, AMENDING CHAPTERS 1 THROUGH 5 OF DIVISION 9 OF TITLE 5 OF THE IRVINE MUNICIPAL CODE TO ESTABLISH THE IRVINE BUILDING STANDARDS CODE THROUGH ADOPTION OF THE 2025 CALIFORNIA BUILDING STANDARDS CODE WITH LOCAL AMENDMENTS

WHEREAS, Title 5, Division 9 of the Irvine Municipal Code (IMC) pertains to the adoption of the city's building standards code. Specifically, the Irvine City Council adopts such a code for the purpose of prescribing regulations for the construction, alteration, movement, replacement, repair, equipment, use and occupancy, location, maintenance, and removal and demolition of every building or structure or any appurtenances connected or attached to such buildings or structures; and

WHEREAS, the city's building standards code includes building, residential, electrical, mechanical, plumbing, energy, wildland-urban interface, historical building, fire, existing building, and green building standard regulations and provisions; and

WHEREAS, the existing building standards code regulations and provisions within the IMC are based upon the 2022 California Building Standards Code (CBSC); and

WHEREAS, in accordance with state law, the 2025 CBSC was recently adopted by the State Building Standards Commission, was published in the California Code of Regulations, Title 24, and is mandated for statewide enforcement starting January 1, 2026; and

WHEREAS, cities are mandated by Health and Safety Code §§13143.5 and 17922 to impose substantially the same or more stringent requirements than are contained in the most recent edition of the CBSC, including the California Building Code, California Residential Code, California Electrical Code, California Mechanical Code, California Plumbing Code, California Energy Code, California Wildland-Urban Interface Code, California Historical Code, California Fire Code, California Existing Building Code, and California Green Building Standards Code; and

WHEREAS, on October 9, 2025, notice of the October 28, 2025, City Council public hearing was published in the *Irvine World News* and was posted at City-designated locations; and

WHEREAS, the City Council of the City of Irvine considered information presented by the applicant, the Community Development Department, and other interested parties at a public hearing held October 28, 2025.

NOW, THEREFORE, the City Council of the City of Irvine DOES HEREBY ORDAIN as follows:

SECTION 1. Unless amended or added as discussed below, Division 9, *Building Regulations*, of Title 5*, Planning*, of the Irvine Municipal Code is hereby incorporated by reference.

SECTION 2. Chapter 1, *Adoption of Building and Fire Code*, of Division 9 of Title 5 of the Irvine Municipal Code is hereby deleted in its entirety and replaced with the language found in Exhibit A.

SECTION 3. Chapter 2, *Administrative Code for Building Code Regulations*, of Division 9 of Title 5 of the Irvine Municipal Code is hereby deleted in its entirety and replaced with the language found in Exhibit B.

SECTION 4. Chapter 3, *Administrative Code for Fire Code Regulations*, of Division 9 of Title 5 of the Irvine Municipal Code is hereby deleted in its entirety and replaced with the language found in Exhibit C.

SECTION 5. Chapter 4, *Amendments to Building and Fire Code Technical Regulations*, of Division 9 of Title 5 of the Irvine Municipal Code is hereby deleted in its entirety and replaced with the language found in Exhibit D.

SECTION 6. Chapter 5*, Uniform Security Code*, of Division 9 of Title 5 of the Irvine Municipal Code is hereby deleted in its entirety and replaced with the language found in Exhibit E.

SECTION 7. If any section, subsection, subdivision, sentence, clause, phrase or portion of this Ordinance is, for any reason, held to be invalid or unconstitutional by the decision of any court of competent jurisdiction, such decision shall not affect the validity of the remaining portions of this Ordinance. The City Council hereby declares that it would have adopted this Ordinance and each section, subsection, subdivision, sentence, clause, phrase or portion thereof, irrespective of the fact that any one or more sections, subsection, subdivision, sentence, clause, phrase or portions thereof be declared invalid or unconstitutional.

SECTION 8. The City Clerk shall certify to the passage of this Ordinance and this Ordinance shall be published as required by law and shall take effect as provided by law.

NOW, THEREFORE, the City Council hereby approves an amendment to Chapters 1, 2, 3, 4, and 5 of Division 9 of Title 5 of the Irvine Municipal Code pertaining to the 2025 CBSC, as shown in Exhibits A through E, attached hereto.

PASSED AND ADOPTED by the City Council of the City of Irvine at an adjourned regular meeting held on the 12th day of November 2025.

_____
MAYOR OF THE CITY OF IRVINE

ATTEST:

_____
CITY CLERK OF THE CITY OF IRVINE

STATE OF CALIFORNIA)
COUNTY OF ORANGE) ss
CITY OF IRVINE)

I, CARL PETERSEN, City Clerk of the City of Irvine, HEREBY DO CERTIFY that the foregoing Ordinance was introduced for first reading on the 28th day of October 2025, and duly adopted at an adjourned regular meeting of the City Council of the City of Irvine, held on the 12th day of November 2025.

AYES:	7	COUNCILMEMBERS:	Carroll, Go, Liu, Mai, Martinez Franco, Treseder, and Agran
NOES:	0	COUNCILMEMBERS:	None
ABSENT:	0	COUNCILMEMBERS:	None
ABSTAIN:	0	COUNCILMEMBERS:	None

_____
CITY CLERK OF THE CITY OF IRVINE

CHAPTER 1. ADOPTION OF BUILDING STANDARDS CODE

Section 5-9-101. - Adoption of Building Codes.

There is hereby adopted by the City Council, for the purpose of prescribing regulations for the construction, alteration, movement, replacement, repair, equipment, use and occupancy, location, maintenance, and removal and demolition of every building or structure or any appurtenances connected or attached to such buildings or structures, the following building codes, by reference, subject to the modifications set forth in this Division:

1. California Building Code (CBC) Volumes 1 and 2, 2025 edition with errata (Title 24, Part 2, California Code of Regulations), based on the 2024 International Building Code, as published by the International Code Council.
2. California Residential Code (excluding Chapter 1, Division II), 2025 edition with errata (Title 24, Part 2.5, California Code of Regulations), including Appendices BH and CI, based on the 2024 International Residential Code, as published by the International Code Council.
3. California Electrical Code, 2025 edition with errata (Title 24, Part 3, California Code of Regulations), based on the 2023 National Electrical Code, as published by the National Fire Protection Association.
4. California Mechanical Code, 2025 edition with errata (Title 24, Part 4, California Code of Regulations), including Appendix D, based on the 2024 Uniform Mechanical Code, as published by the International Association of Plumbing and Mechanical Officials.
5. California Plumbing Code, 2025 edition with errata (Title 24, Part 5, California Code of Regulations), including Appendices A, B, D, G, H, and I, based on the 2024 Uniform Plumbing Code, as published by the International Association of Plumbing and Mechanical Officials.
6. California Energy Code, 2025 edition with errata (Title 24, Part 6, California Code of Regulations), as published by the International Code Council.
7. California Wildland-Urban Interface Code (excluding Chapter 1, Division II), 2025 edition with errata (Title 24, Part 7, California Code of Regulations), based on the 2024 International Wildland-Urban Interface Code, as published by the International Code Council.
8. California Historical Building Code (Title 24, Part 8, California Code of Regulations), as published by the International Code Council.
9. California Existing Building Code (excluding Chapter 1, Division II), 2025 edition with errata (Title 24, Part 10, California Code of Regulations), based on the 2024 International Existing Building Code, as published by the International Code Council.
10. California Green Building Standards Code, 2025 edition with errata (Title 24, Part 11, California Code of Regulations), as published by the International Code Council.

The provisions of these codes, as amended by the provisions of this Division of the Irvine Municipal Code, shall constitute the Building Code Regulations of the City of Irvine.

Section 5-9-102. - Adoption of Fire Code.

There is hereby adopted by the City Council, for the purpose of prescribing regulations governing conditions hazardous to life and property from fire or explosion, the following fire code, by reference, subject to the modifications set forth in this Division:

California Fire Code (CFC), 2025 edition with errata (Title 24, Part 9, California Code of Regulations), including Appendices B, BB, C, CC, and H, based on the 2024 International Fire Code, as published by the International Code Council.

The provisions of this code, as amended by the provisions of this Division of the Irvine Municipal Code, shall constitute the Fire Code Regulations of the City of Irvine.

CHAPTER 2. ADMINISTRATIVE CODE FOR BUILDING CODE REGULATIONS

Section 5-9-201. - Adoption of administrative provisions.

There is hereby adopted by the City Council, for the purpose of prescribing administrative regulations for the Building Code Regulations of the City of Irvine, the following codes, by reference, subject to the amendments set forth in this Chapter:

1. California Administrative Code, 2025 edition with errata (Title 24, Part 1, California Code of Regulations), as published by the International Code Council.
2. Chapter 1, Division II of the California Building Code, 2025 edition with errata (Title 24, Part 2, California Code of Regulations), as published by the International Code Council.

The provisions of these codes, as amended by the provisions of this Chapter of the Irvine Municipal Code, shall constitute the Building Code Administrative Regulations of the City of Irvine.

Administrative provisions incorporated in other parts of the Building Code Regulations of the City of Irvine, including the California Electrical Code (Part 3), California Mechanical Code (Part 4), California Plumbing Code (Part 5), shall remain in effect to the extent they do not conflict with the provisions prescribed in this Chapter. In the event such a conflict does occur, the provisions of this Chapter shall govern to the extent necessary to ensure consistent local enforcement as determined by the building official.

Section 5-9-202. - Scope and General.

A. Title. Section 101.1 Title, of Chapter 1, Division II of the California Building Code is hereby deleted and replaced to read:

   These regulations shall be known as the Building Code of City of Irvine, hereinafter referred to as “this code.”

B. Scope. Section 101.2 Scope, of Chapter 1, Division II of the California Building Code is hereby deleted and replaced to read:

   The provisions of the California Building Code shall apply to the construction, alteration, relocation, enlargement, replacement, repair, equipment, use and occupancy, location, maintenance, removal and demolition of every building or structure located within the territory of the City of Irvine or any appurtenances connected or attached to such buildings or structures.

   Exceptions:
   1. Detached one- and two-family dwellings and townhouses not more than three stories above the grade plane in height with a separate means of egress and their accessory structures not more than three stories above

grade plane in height, shall comply with either the California Building Code or the California Residential Code.
2. Encroachments and public works located primarily in a public right-of-way.
3. Facilities for the production, generation, storage or transmission of water or electrical energy by a local agency.
4. Public utility towers and poles.
5. Buildings or structures used for administration or education purposes by public schools when acting under the State Contract Act and except as exempted by these codes.
6. Mechanical equipment not specifically regulated in these codes.
7. Hydraulic flood control structures.

C. Referenced codes. Section 101.4 of Chapter 1, Division II of the California Building Code is hereby amended to add 101.4.8 to read:

101.4.9 Electrical. The provisions of the California Electrical Code shall apply to the installation of electrical systems, including alterations, repairs, replacement, equipment, appliances, fixtures, fittings and appurtenances thereto.

Section 5-9-203. - Division of Building and Safety.

A. Division of Building and Safety. The title of Section 103 of Chapter 1, Division II of the California Building Code is hereby deleted and replaced with the following:

SECTION 103
DIVISION OF BUILDING AND SAFETY

B. Creation of Division of Building and Safety. Section 103.1 of Chapter 1, Division II of the California Building Code is hereby deleted and replaced with the following:

103.1 Creation of the Division of Building and Safety. The Division of Building and Safety is hereby created and the official in charge thereof shall be known as the Chief Building Official. The function of the agency shall be the implementation, administration and enforcement of the provisions of this code.

C. Chief Building Official. Section 103.2 of Chapter 1, Division II of the California Building Code is hereby deleted and replaced with the following:

103.2 Chief Building Official. The Chief Building Official shall be appointed by the Director of Community Development of the City of Irvine or their designee. Where referred to by this code, “building official” shall mean the Chief Building Official of the City of Irvine or their designee. Any and all classification or title changes are made with respect to approvals thereto by the City Council.

Section 5-9-204. - Reserved.

Section 5-9-205. - Permits.

A. Required. Section 105.1 of Chapter 1, Division II of the California Building Code is hereby amended to add Section 105.1.3 to read:

Section 105.1.3 Permit exemption. Permits are required for installations described in all codes adopted by reference unless specifically exempted by these codes or by the building official, in writing, for proper cause on an individual case basis after consideration of all circumstances and facts presented. Exemptions from permit requirements of this code shall not be deemed to grant authorization for any work to be done in any manner in violation of the provisions of this code or any other laws or ordinances of this jurisdiction.

B. Work exempt from permit. Section 105.2 of Chapter 1, Division II of the California Building Code, is hereby amended as follows:

1. Delete and replace Section 105.2 Building Item 1 to read:
    1. One-story detached structures used as tool or storage sheds, playhouses, or similar uses, and accessory to a detached one- or two-family residential building not located in a wildland-urban interface area, provided that the accessory structure conforms to development standards prescribed in the City of Irvine Zoning Ordinance and the floor area does not exceed than 120 square feet (11.15 m^2).

2. Delete and replace Section 105.2 Building Item 5 to read:
    5. Reserved.

3. Delete and replace Section 105.2 Building Item 11 to read:
    11. Swings and other playground equipment when City review and approval is not otherwise required by state or local laws, regulations or standards.

4. Add Section 105.2 Building Item 14 to read:
    14. Replacement windows and doors having the same dimension as those being replaced and not requiring any change to the structural frame or opening size. Such replacements must still conform to all technical codes and applicable city, county and state ordinances relating to weather proofing, security and energy efficiency.

5. Delete and replace Section 105.2 Plumbing Item 2 to read:
    2. The clearing of stoppages or the repairing of leaks in pipes, valves or fixtures and the removal and reinstallation or replacement of water closets, sinks, garbage disposals or dishwashers, provided such work does not involve or require the replacement or rearrangement of valves, pipes or fixtures and is in conformance with this code and applicable state laws.

C. Time limitation of application. Section 105.3.2 of Chapter 1, Division II of the California Building Code is hereby deleted and replaced to read:

105.3.2 Time limitation of application. An application for a permit for any proposed work shall be deemed to have been abandoned 12 months after the date of filing, unless a permit has been issued; except that the building official is authorized to grant, in writing, one extension of time for an additional period not exceeding 6 months. The extension shall be requested in writing and justifiable cause demonstrated. When required by state law or City ordinance, extended permit applications shall be amended to comply with pertinent state laws and City ordinances adopted subsequent to the date of application. Plans and other data submitted for review and relating to an expired application may be returned to the applicant or destroyed by the building official.

Permit applications for work intended to remedy one or more code violations identified in a written code enforcement notice or administrative citation shall expire 30 days from the date of filing. The building official is authorized to grant, in writing, one or more extensions of time for additional periods not exceeding 30 days. Such extensions shall be requested in writing and justifiable cause demonstrated.

D. Expiration. Section 105.5, including Subsection 105.5.1, of Chapter 1, Division II of the California Building Code is deleted and replaced to read:

105.5 Expiration. Every permit issued shall become invalid unless the work on the site authorized by such permit is commenced within 12 months after its issuance, or if the work authorized on the site by such permit is suspended or abandoned for a period of 12 months after the time the work is commenced. The building official is authorized to grant, in writing, two extensions of time for a period not more than 6 months. Such extensions may require the payment of permit fees based on the remainder of work to be completed. The extension shall be requested in writing and justifiable cause demonstrated.

Every permits for any work intended to remedy one or more code violations identified in a written code enforcement notice or administrative citation shall become invalid unless the work on the site authorized by such permit is commenced within 30 days after its issuance and inspected by the City, or if the work authorized on the site by such permit is suspended or abandoned for a period of 30 days after the time the work is commenced. The building official is authorized to grant, in writing, one or more extensions of time for additional periods not exceeding 30 days. Such extensions shall be requested in writing and justifiable cause demonstrated.

105.5.1 Group R-3 Residential Remodel Permits. Every permit issued for work which constitutes the construction, enlargement, alteration, erection, repair, demolition, or improvement of a Group R-3 residential building, or other

improvement located on residential property containing a Group R-3 residential building, shall become invalid unless the work on the site authorized by such permit is completed and approved by the City within 18 months after its issuance. The building official is authorized to grant, in writing, one extension of time for an additional period not to exceed 6 months. The extension shall be requested in writing and demonstrate that: (1) due to circumstances beyond the owner's or permittee's control, construction could not be completed within the time frame allowed by this section; (2) that all means reasonably available to the permittee to complete the work within the prescribed time have been exhausted; (3) that the condition of the property presents no health or safety hazard; and (4) that the continued delay will not create any unreasonable visual or physical detriment to the neighborhood. The decision of the building official may be appealed to the City Council by any person who owns property or resides within 300 feet of the boundaries of the subject property.

Any extension beyond 6 months must be approved by the Community Development Director. The Director's decision regarding approval or denial of the application for additional extension shall be based upon the applicant's ability to demonstrate the same factors required for the initial extension of the building construction period. Such extension may require the payment of permit fees based on the remainder of work to be completed. The extension shall be requested in writing and justifiable cause demonstrated.

During work on a property containing a Group R-3 residential building authorized by an active permit, the site shall be maintained in a reasonably clean and well-kept manner. All lumber and building materials shall be neatly piled or stacked in a safe manner and stored in the rear yard of the residential property or inside of the building construction perimeter except that building materials may be stored in a front yard for a period not to exceed 30 days. Properties shall be secured by fencing when the building official determines fencing is necessary for public safety and/or welfare.

Exterior walls and roofs of buildings shall be covered with finished materials, in accordance with City-approved plans and the Building Code within six months from the commencement of construction. A written waiver of this requirement may be obtained from the building official if the construction is screened from view from adjacent occupied or public property with fencing materials approved by City zoning and building regulations.

E. Placement of permit. Section 105.7 of Chapter 1, Division II of the California Building Code is hereby deleted and replaced to read:

105.7 Placement of permit and inspection record card. The building permit or copy and the inspection record card shall be kept on site and maintained available by the permit holder until final approval has been granted by the building official.

F. Change of contractor or of ownership. Section 105 of Chapter 1, Division II of the California Building Code is hereby amended to add Section 105.8 to read:

105.9 Change of contractor or of ownership. A permit issued hereunder shall expire upon a change of ownership or a change of contractor for the building, structure or grading for which said permit was issued if the work thereon has not been completed and received a final inspection approval and a new permit shall be required for the completion of the work. If no changes have been made to the plans or specifications last submitted to the building official, a permit issuance fee as set forth in the City's fee resolution shall be charged to the permit applicant. If changes to the plans or specifications have been made, the building official shall determine appropriate permit fees in accordance with the City's fee resolution.

G. Subcontractors. Section 105 of Chapter 1, Division II of the California Building Code is hereby amended to add Section 105.9 to read:

105.10 Subcontractors. For projects over $8 million in value at the time of permit issuance, prior to the commencement of work, the applicant shall complete a form provided by the City Division of Building and Safety which (i) lists all subcontractors, (ii) shows verification of workers' compensation insurance, state contractor license and license category, City business license and federal tax identification number for each subcontractor, and (iii) shows verification whether each subcontractor, or its principals, has any final adverse determinations for state or federal labor violations within the prior seven years, or paid any penalties to a state or federal governing agency for the enforcement of settlement actions over $500,000 within the prior seven years. No person shall contract or sub-contract construction work without a valid contractor's license pursuant to applicable provisions of the State of California Business and Professions Code. If the applicant adds or replaces a subcontractor to the permitted project that is not listed on the form provided for above, then before the new subcontractor commences work, except as noted below, the applicant shall complete a form provided by the City Division of Building and Safety that provides the information required above for only the newly added subcontractors.

In the event that the applicant cannot provide a complete list of valid subcontractors at the time of permit issuance or later at the time of adding or replacing a subcontractor, the applicant shall provide such information in each circumstance to the City within two business days after award of each permit, and/or after adding or replacing a subcontractor. Failure to provide a complete list of subcontractors prior to commencing work on the project, or failure to provide subcontractor information after adding or replacing a subcontractor within two business days when either the City determines that the delay was not reasonable or was intentional, or if the City has made an additional request for this information which was not complied with within two business days, shall

result in the City having the right to stop work on the project, and/or assess the applicant a penalty for default in an amount determined by the City as necessary for each subcontractor violation to defray City costs of enforcement of this section. In such instances, failure to remit penalty payment shall constitute a violation of this code, punishable under the provisions of the City Charter and Municipal Code.

H. Approvals. Section 105 of Chapter 1, Division II of the California Building Code is hereby amended to add Section 105.10 to read:

105.11 Approvals. To be valid, any approval, waiver, determination or similar action referenced in this code benefiting the party so requesting such action must be in writing and prepared by a building official with authority to provide the same.

Section 5-9-206. - Construction documents.

A. Small residential rooftop solar energy systems. Section 107.1 of Chapter 1, Division II of the California Building Code is hereby amended to add Section 107.1.1 to read:

107.1.1 Small residential rooftop solar energy systems. Applications for small residential rooftop solar energy systems may be processed utilizing the City of Irvine Small Residential Rooftop Solar Energy System Expedited/Streamlined Process.

Section 5-9-207. - Reserved.

Section 5-9-208. - Fees.

A. Schedule of plan review, permit and investigation fees. Section 109.2 of Chapter 1, Division II of the California Building Code is hereby deleted and replaced to read:

109.2 Schedule of plan check and permit fees. A fee for each building, electrical, plumbing or mechanical permit shall be paid as established by City Council resolution in effect at the time of issuance of the permit.

109.2.1 Permit fees. The fee for each permit shall be as set forth in the fee schedule established by City Council resolution in effect at the time of issuance of the permit.

109.2.2 Plan review fees. When submittal documents are required by California Building Code Chapter 1, Division II Section 107.3.4.1, a plan review fee shall be paid at the time of submitting the submittal documents for plan review. Said plan review fees shall be as set forth in the fee schedule established by City Council resolution in effect at the time of plan review submittal.

The plan review fees specified in this section are separate fees from the permit fees specified in Section 109.2.1 and are in addition to the permit fees.

When submittal documents are incomplete or changed so as to require additional plan review, or when the project involves deferred submittal items as defined in Section 107.3.4.1, an additional plan review fee shall be charged as set forth in the fee schedule established by the City Council resolution in effect at the time of the additional or defined plan review submittal.

109.2.3 Investigation fees. Whenever work for which a permit is required by this code has been commenced without first obtaining a permit, the building official may require an investigation to be made before a permit may be issued for such work.

An investigation fee, in addition to the permit fee, shall be collected whether or not a permit is then or subsequently issued to recover City costs of investigation. The payment of such investigation fee shall not exempt an applicant from compliance with all other provisions of this code, the technical codes or from the penalty prescribed by law.

B. Building permit valuations. Section 109.3 of Chapter 1, Division II of the California Building Code is hereby deleted and replaced to read:

109.3 Building permit valuations. The determination of value or valuation under any of the provisions of these Codes shall be made as set forth in the fee schedule established by City Council resolution in effect at the time of plan review submittal. The value to be used in computing the building permit and building plan review fees shall be the total value of all construction work, including materials and labor, for which the permit is issued as well as all finish work, painting, roofing, electrical, plumbing, heating, air conditioning, elevators, fire-extinguishing systems and other permanent equipment.

C. Refunds. Section 109.6 of Chapter 1, Division II of the California Building Code is hereby deleted and replaced to read:

109.6 Refunds. The building official may authorize refunding of a fee paid hereunder which was erroneously paid or collected.

The building official may authorize refunding not more than 80 percent of the permit fee paid when no work has been done under a permit issued in accordance with this code.

The building official may authorize refunding of not more than 80 percent of the plan review fee paid when an application for a permit for which a plan review fee has been paid is withdrawn or canceled before any examination time has been expended.

The building official shall not authorize the refunding of any fee paid except upon written application filed by the permittee not later than 360 days after the date of fee payment or as otherwise required by law.

D. Strong Motion Instrumentation Program fee. Section 109 of Chapter 1, Division II of the California Building Code is hereby amended to add Section 109.7 to read:

109.7 Strong Motion Instrumentation Program Fee.

1. Scope and purpose. In accordance with Public Resources Code Division 2, Chapter 8 (Public Resources Code § 2700 et seq.), each applicant for a building permit pursuant to this division shall be charged a fee as described herein for purposes of administering the State of California Strong Motion Instrumentation Program. Said fees are in addition to any and all other fees required for applicants for the issuance of building permits.
2. Definitions:
   Building. For the purpose of this section, a "building" is any structure built for the support, shelter, or enclosure of persons, animals, chattels or property of any kind.
   Fee schedule. Every applicant for a building permit shall pay a Strong Motion Instrumentation Program fee in the amount stipulated by the State of California.
   Administration. The Manager of Fiscal Services or his or her authorized representative shall file all reports and pay all fees as required by the provisions of Chapter 8, Division 2 of the California Public Resources Code (Public Resources Code § 2700 et seq.), and shall comply with all rules and regulations of the State of California Department of Conservation, as administrative agency for the program.

Section 5-9-209. - Reserved.

Section 5-9-210. - Certificate of Occupancy

A. Change of Occupancy. Section 111.1 of Chapter 1, Division II of the California Building Code is hereby amended to replace the exception to read:

Exception**:** Certificates of occupancy are not required for R-2 occupancy apartments and condominiums, R3 occupancy one- and two-family dwellings, and work exempt from permits in accordance with Section 105.2.

B. Revocation. Section 111.4 of Chapter 1, Division II of the California Building Code is hereby deleted and replaced to read:

111.4 Revocation. The building official is authorized to suspend or revoke a certificate of occupancy or completion issued under the provisions of this code,

in writing, wherever the certificate is issued in error, or on the basis of incorrect information supplied, or where it is determined that the building or structure or portion thereof is in violation of the provisions of this code or other ordinance of the jurisdiction, including, but not limited to, any zoning ordinance. The building official is authorized to order, in writing, any building, structure, or portion thereof to be vacated where a certificate of occupancy has been suspended or revoked. Such vacated building or structure shall not be reoccupied until either the existing certificate of occupancy has been reinstated by the building official in writing or a new certificate of occupancy has been issued.

Section 5-9-211. - Reserved.

Section 5-9-212. - Board of Appeals.

A. General. Section 113.1 of Chapter 1, Division II of the California Building Code is hereby deleted and replaced to read:

113.1 General. An Appeals Board Committee, consisting of one member appointed by each City Council member, shall be established, either prior to or immediately following receipt of a completed application for an appeal hearing, to hear and decide appeals of orders, decisions or determinations made by the building official relative to the application and interpretation of this code. For matters concerning disabled accessibility, the City Council shall appoint an additional two physically disabled voting members.

The building official shall be an ex-officio member of the Appeals Board Committee and shall act as secretary to said board, but shall have no vote upon any matter before the Appeals Board Committee.

The Appeals Board Committee shall render decisions by majority vote in response to City staff reports. Minutes of all proceedings shall be maintained by City staff.

The hearing is intended to be informal in nature. Formal rules of the California Evidence Code and discovery shall not apply, except that irrelevant and unduly repetitious evidence may be excluded at the Appeals Board Committee's discretion. Each party shall have the opportunity to offer testimony and evidence and cross-examine witnesses in support of his or her case.

The building official shall maintain a full set of records for each case in accordance with the City of Irvine records retention schedule.

113.1.1 Application and request for hearing. Within 15 calendar days from the date the order, decision or determination of the building official, the applicant must make a written request for a hearing. If no appeal notice is

filed within the 15 calendar-day period, the decision shall be deemed confirmed and final.

Applicants for a hearing before the Appeals Board Committee shall pay a fee in the amount set by City Council resolution prior to administrative processing for any proceedings. The applicant shall complete the established City application form for an appeals hearing along with submittal of required fees.

113.1.2 Notification of hearing. At least 15 calendar days prior to the date of the hearing, the City shall, by first class mail or posting of the subject property, give notice to the applicant of the time, date and location of the hearing.

113.1.3 Notification of decision. Within 10 calendar days of the hearing's conclusion, the building official shall provide the applicant with the Appeals Board Committee decision in writing. The written decision shall contain the Appeals Board Committee findings of fact and conclusions.

Section 5-9-213. - Violations.

A. Unlawful acts. Section 114.1 of Chapter 1, Division II of the California Building Code is hereby deleted and replaced to read:

Section 114.1 Unlawful acts. It shall be unlawful for any person, firm or corporation to erect, construct, alter, extend, repair, move, remove, demolish, occupy, possess, control or have an interest in any building, structure or equipment regulated by this code, or cause the same to be done, in conflict with or in violation of any of the provisions of the codes and ordinances adopted by the City of Irvine.

B. Violations penalties. Section 114.4 of Chapter 1, Division II of the California Building Code is hereby deleted and replaced to read:

114.4 Violation penalties. Any person, firm or corporation violating any of the provisions of the codes adopted by the City of Irvine or failing to comply with any of the requirements thereof or who interferes, obstructs, or prevents the City from obtaining or maintaining such compliance, or who erects, constructs, alters or repairs a building or structure in violation of the approved construction documents or directive of the building official, or of a permit or certificate issued according to the provisions of this code, shall be deemed guilty of a misdemeanor; each such person, firm or corporation shall be deemed guilty of a separate offense for each and every day or portion thereof during which any violation is committed, continued or permitted; and upon conviction of any such violation such person shall be punished by a fine or by imprisonment as prescribed in the Code Enforcement Division of the Municipal Code, or by both such fine and imprisonment.

C. Attorneys' fees and costs. Section 114 of Chapter 1, Division II of the California Building Code is hereby amended to add Section 114.5 to read:

114.5 Attorneys' fees and costs. Any person violating the provisions of this chapter shall reimburse the City for any and all costs, expenses and fees incurred by the City in responding to, investigating, assessing, monitoring, treating, cleaning, removing or remediating any action taken or condition caused in violation of this division. Such costs, expenses and fees to be paid to the City shall include all administrative expenses and all legal expenses, including costs and attorneys' fees in obtaining compliance and in litigation, including all costs and attorneys' fees on any appeal. The costs to be recovered pursuant to this section shall be recoverable from any and all persons violating this code. When required by law, this provision shall act as a prevailing party provision entitling the prevailing party to an award of attorneys' fees.

Section 5-9-214. - Emergency Measures.

A. Section 117 of Chapter 1, Division II of the California Building Code is hereby added to read:

SECTION 117
EMERGENCY MEASURES

117.1 Imminent danger. Where, in the opinion of the code official, there is imminent danger of failure or collapse of a building that endangers life, or where any building or part of a building has fallen and life is endangered by the occupation of the building, or where there is actual or potential danger to the building occupants or those in the proximity of any structure because of explosives, explosive fumes or vapors, or the presence of toxic fumes, gases, or materials, or operation of defective or dangerous equipment, the code official is hereby authorized and empowered to order and require the occupants to vacate the premises forthwith. The code official shall cause to be posted at each entrance to such structure a notice reading as follows: "This Structure Is Unsafe and Its Occupancy Has Been Prohibited by the Code Official." It shall be unlawful for any person to enter such structure except for the purpose of securing the structure, making the required repairs, removing the hazardous condition, or of demolishing the same.

117.2 Temporary safeguards. Notwithstanding other provisions of this code, whenever, in the opinion of the code official, there is imminent danger due to an unsafe condition, the code official shall order the necessary work to be done, including the boarding up of openings, to render such structure temporarily safe whether or not the legal procedure herein described has been instituted; and shall cause such other action to be taken as the code official deems necessary to meet such emergency.

117.3 Closing streets. Where necessary for public safety, the code official shall temporarily close structures and close or order the authority having jurisdiction to close sidewalks, streets, public ways and places adjacent to unsafe structures, and prohibit the same from being utilized.

117.4 Emergency repairs. For the purposes of this section, the code official shall employ the necessary labor and materials to perform the required work as expeditiously as possible.

117.5 Costs of emergency repairs. Costs incurred in the performance of emergency work shall be paid by the jurisdiction. The legal counsel of the jurisdiction shall institute appropriate action against the owner of the premises or the owner's authorized agent where the unsafe structure is or was located for the recovery of such costs.

117.6 Hearing. Any person ordered to take emergency measures shall comply with such order forthwith. Any affected person shall thereafter, on petition directed to the appeals board, be afforded a hearing as described in this code.

Section 5-9-215. - Demolition.

A. Demolition. Section 118 of Chapter 1, Division II of the California Building Code is hereby created to read:

SECTION 118
DEMOLITION

118.1 General. When the building official determines any structure is so old, dilapidated or has become so out of repair and is dangerous, unsafe, insanitary and otherwise unfit for human habitation or occupancy the building official can order either of the following:

1.The building official is permitted to authorize the owner or owner's authorized agent to make the structure safe by repairs in order to make the structure safe and sanitary. Where there has been a cessation of construction repairs of any structure for a period of more than 2 years, the structure will be ordered demolished and removed.
2.The building official is permitted to order the owner or owner's authorized agent to demolish and remove any such structure.

118.2 Notices and orders. Notices and orders shall comply with Section 114.

118.3 Failure to comply. If the owner or the owner's authorized agent of a premises fails to comply with a demolition order within the time prescribed, the building official shall cause the structure to be demolished and removed, either through an available public agency or by contract or arrangement with private persons, and the cost of such demolition and removal shall be charged against

the real estate on which the structure is located and shall be a lien on such real estate.

118.4 Salvage materials. Where any structure has been ordered demolished and removed, the governing body or other designated officer under said contract or arrangement aforesaid shall have the right to sell the salvage and valuable materials at the highest price obtainable. The net proceeds of such sale, after deducting the expenses of such demolition and removal, shall be promptly remitted with a report of such sale or transaction, including the items of expense and the amounts deducted, for the person who is entitled thereto, subject to any order of a court. If such a surplus does not remain to be turned over, the report shall so state.

CHAPTER 3. ADMINISTRATIVE CODE FOR FIRE CODE REGULATIONS

Section 5-9-301. - Adoption of administrative provisions.

A. Fire Code administrative provisions. There is hereby adopted by the City Council for the purpose of prescribing administrative regulations for the Fire Code Regulations of the City of Irvine, the following administrative code provisions by reference, subject to the modifications set forth in this Division:

Chapter 1, Division II of the California Fire Code, 2025 edition (Title 24, Part 9, California Code of Regulations).

B. Enforcement. The California Fire Code with amendments set forth in this Division shall be enforced by the Orange County Fire Authority (OCFA), which shall be operated under the Fire Chief of the OCFA. The Fire Chief of the OCFA may designate such members of the fire authority as inspectors as shall be necessary from time to time.

Section 5-9-302. - Reserved.
Section 5-9-303. - Reserved.
Section 5-9-304. - Reserved.

Section 5-9-305. - Violation penalties.

A. Violation penalties. Section 113.4 of Chapter 1, Division II of the California Fire Code is hereby deleted and replaced to read:

113.4 Violation penalties. Persons who shall violate a provision of this code or shall fail to comply with any of the requirements thereof or shall fail to comply with any issued orders or notices 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 subject to penalties assessed as prescribed in the OCFA Prevention Field Services adopted fee schedule. Each day that a violation continues after due notice has been served shall be deemed a separate offense.

B. Infractions and misdemeanors. Section 113.4 of Chapter 1, Division II of the California Fire Code is hereby amended to add Section 113.4.2 to read:

113.4.2 Infraction and misdemeanor. 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. 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 are guilty of a misdemeanor.

CHAPTER 4. AMENDMENTS TO BUILDING AND FIRE CODE TECHNICAL REGULATIONS

Section 5-9-401. - Building Code.

A. Fire Protection Systems. Chapter 9 of the California Building Code is hereby amended as follows:

1. Where required. Section 903.2 is hereby deleted and replaced to read:

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

A. New buildings or structures. Notwithstanding any applicable provisions of Sections 903.2.1 through 903.2.21, an automatic sprinkler system shall also be installed in all occupancies when the total building area exceeds 5,000 square feet as defined in Section 202, regardless of fire areas or allowable area, or is more than two stories in height.

Exception: Subject to approval by the fire code official, open parking garages in accordance with Section 406.5 of the California Building Code that are smaller than the area specified in section 903.2.10 (3) or 903.2.10.1 of the California Fire Code.

B. Existing Buildings: Notwithstanding any applicable provisions of this code, an automatic sprinkler system shall be provided in an existing building when an addition occurs and one of the following conditions exists:

1. When an addition is 33% or more of the existing building area, and the resulting building area exceeds 5,000 square feet.
2. When an addition exceeds 2,000 square feet, and the resulting building area exceeds 5,000 square feet.
3. An additional story is added above the second floor regardless of fire areas or allowable area.

Exception: Additions to Group R-3 occupancies shall comply with Section 903.2.8 (2).

2. Group R. Section 903.2.8 is hereby deleted and replaced to read:

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 R-3 Buildings. An automatic sprinkler system shall be installed throughout when one of the following conditions exists:

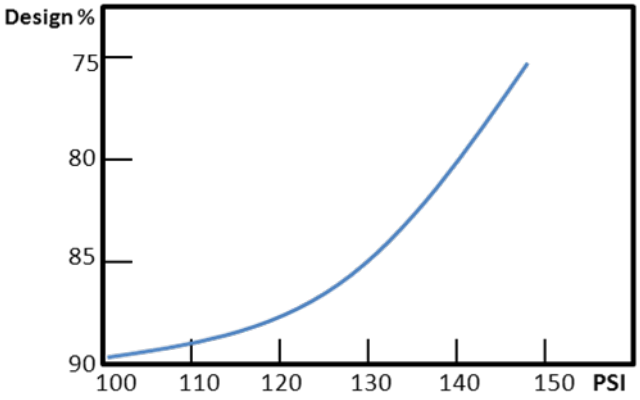
    1. When the floor area of alterations within any two-year period exceeds 50 percent of gross floor area of the existing structure and the building gross floor area exceeds 5,500 square feet; or:
    2. When an existing Group R Occupancy is being substantially renovated, and where the scope of the renovation 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. Hydraulically calculated systems. Section 903.3.5 is hereby amended to add Section 903.3.5.3 to read:

    903.3.5.3 Hydraulically calculated systems. The design of hydraulically calculated fire sprinkler systems shall not exceed 90 percent of the water supply capacity.

        Exception: When static pressure exceeds 100 psi, and required by the fire code official, the fire sprinkler system shall not exceed water supply capacity specified by Table 903.3.5.3.

TABLE 903.3.5.3
Hydraulically Calculated Systems



B. Ventilation. Section 1202 of Chapter 12 of the California Building Code is hereby amended as follows:

1. Openings into attic. Section 1202.2.2 is hereby deleted and replaced to read:

    1202.2.2 Openings into attic. Exterior openings into the attic space of any building intended for human occupancy shall be protected to prevent the entry of birds, squirrels, rodents, snakes and other similar creatures. Openings for ventilation having a least dimension of not less than 1/16 inch (1.6 mm) and not more than 1/8 inch (6.4 mm) shall be permitted. Openings

for ventilation having a least dimension larger than 1/8 inch (6.4 mm) shall be provided with corrosion-resistant wire cloth screening, hardware cloth, perforated vinyl or similar material with openings having a least dimension of not less than 1/16 inch (1.6 mm) and not more than 1/8 inch (6.4 mm). Where combustion air is obtained from an attic area, it shall be in accordance with Chapter 7 of the California Mechanical Code.

2. Ventilation openings. 1202.4.1 through 1202.4.1.3 are hereby deleted and replaced to read:

1202.4.1 Ventilation openings. Ventilation openings through foundation walls shall be provided. The openings shall be placed so as to provide cross ventilation of the under-floor space. The net area of ventilation openings shall be in accordance with Section 1202.4.1.1 or 1202.4.1.2. Ventilation openings shall be covered for their height and width with any of the following materials, provided that the least dimension of the covering shall be not greater than 1/8 inch (3.2 mm):

1. Perforated sheet metal plates not less than 0.070 inch (1.8 mm) thick.
2. Expanded sheet metal plates not less than 0.047 inch (1.2 mm) thick.
3. Cast-iron grilles or gratings.
4. Extruded load-bearing vents.
5. Hardware cloth of 0.035-inch (0.89 mm) wire or heavier.
6. Corrosion-resistant wire mesh, with the least dimension not exceeding 1/8 inch (3.2 mm).

1202.4.1.1 Openings for under-floor ventilation shall not be less than 1 1/2 square feet (0.135 m2) for each 25 linear feet (7620 linear mm) of exterior wall and shall be covered with corrosion-resistant wire mesh with mesh openings not less than 1/16 inch (1.6 mm) nor more than 1/8 inch (3.2 mm) in any dimension.

C. Minimum roof covering classification. Section 1505.1 of Chapter 15 of the California Building Code is hereby amended as follows:

1. Minimum Roof Classification for Types of Construction. Table 1505.1 is hereby deleted and replaced to read:

TABLE NO. 1505.1 MINIMUM ROOF ASSEMBLY CLASSIFICATION FOR TYPES OF CONSTRUCTION (1)

TYPES OF CONSTRUCTION								
IA	IB	IIA	IIB	IIIA	IIIB	IV	VA	VB
A	A	A	A	A	A	A	A	A

2. Roof coverings within all other areas. Section 1505.1.2 is hereby deleted and replaced to read:

   1505.1.2 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 comply with Table 1505.1.

D. Structural Tests and Special Inspections. Chapter 17 of the California Building Code is hereby amended as follows:

1. Special inspector qualifications. Section 1704.2.1 is hereby deleted and replaced to read:

   1704.2.1 Qualifications of special inspector, examination and certificate of registration.

   1. The special inspector shall be a qualified person approved by the building official. The special inspector shall furnish continuous or periodic inspection on the construction and work requiring his or her employment as prescribed in the applicable code and statement of special inspections. The special inspector shall report to the building official in writing, noting all code violations and other information as required on forms prescribed by the City of Irvine.
   2. Each person applying for listing/registration as a special inspector for the City of Irvine shall possess a valid special inspector certificate, issued as evidence of successful completion of testing/examination by a testing agency which is acceptable to the building official, for each classification for which the person is applying. On special occasions, the building official may administer an oral interview and/or appropriate testing for certification.
   3. Each person applying for registration as a special inspector for the City of Irvine shall pay a registration fee, as established by resolution

of the City Council, for each classification payable with the application upon approval for listing.

4. A registration card shall be issued to each such special inspector who qualifies. A renewal fee, as established by resolution of the City Council, for each classification shall be charged on July 1 of each year, thereafter, at which time the special inspector may, at the building official's discretion, be subject to reexamination.
5. The building official may revoke any special inspector's certificate of registration at any time for due cause on written notice. This notice shall set forth the time and place for a hearing if requested by the special inspector in writing within 10 days of the City's notice of revocation at which time evidence may be submitted to show cause why the certificates of registration should not be withdrawn.
6. Failure to appear at such hearing by the special inspector may result in immediate revocation of said inspector's certificate of registration.
7. Special inspector's qualification registrations are to be given only for the execution of work done under Chapter 17 of the California Building Code in the City of Irvine or for work specifically authorized by the building official.

2. Special inspection of fabricated items. Section 1704.2.5 is hereby deleted and replaced to read:

   1704.2.5 Registration and approval of fabricators. Where fabrication of structural, load-bearing or lateral load-resisting members or assemblies is being conducted on the premises of a fabricator's shop, the fabricator must be registered and approved in writing in accordance with Section 1704.2.5.1.

3. Fabricator approval. Section 1704.2.5.1 is hereby deleted and replaced to read:

   1704.2.5.1 Fabricator approval. Approval shall be based on review of the fabricator's written fabrication procedures and quality control manuals that provide a basis for control of materials and workmanship, with periodic auditing of fabrication and quality control practices by an approved agency. At completion of fabrication, the approved fabricator shall submit a certificate of compliance to the building official as specified in Section 1704.5 stating that the work was performed in accordance with the approved construction documents.

4. Concrete construction. Section 1705.3 of the California Building Code is hereby amended as follows:

   1. Table 1705.3. Item 7 is hereby deleted and replaced to read:

7. Inspect concrete and shotcrete placement for proper application techniques, including all structural concrete placement for new swimming pools.

2. 1705.3 Exception Items 3, 4, and 5 of the exception are hereby deleted and replaced to read:

3. Concrete in building foundations and slabs supported on grade less than 500 square feet in area in all occupancies and other non-building construction.
4. Concrete patios, driveways and sidewalks on grade.
5. (Deleted)

E. Swimming Pool, Spa and Hot Tub. Section 3109 of the California Building Code is hereby amended as follows:

1. Swimming pool safety features. Section 115922 of Section 3019.2 of the California Building Code is hereby deleted and replaced to read:

(a) Except as provided in Section 115925, subject to subdivision (b), and consistent with Section 1596.814, when a building permit is issued for the construction of a new swimming pool or spa or the remodeling of an existing swimming pool or spa at a private single-family home, the respective swimming pool or spa shall be equipped with Item (1) below and at least one additional drowning prevention safety feature from Items (2)-(6):

(1) An enclosure that meets the requirements of Section 115923 and isolates the swimming pool and spa from the private single-family home. Any walls of the residential structure or accessory structures used to complete the isolation enclosure must comply with either Section 115922 (a) (4) or (5). Any such door or window protection device provided for this purpose may not be used to comply with the second drowning prevention feature requirement.
(2) Removable mesh fencing that meets the ASTM International F2286 standard in conjunction with a gate that is self-closing and self-latching and can accommodate a key lockable device.
(3) A manually operated or power-operated safety pool cover that is accompanied by a label verifying that the cover meets the specifications of the ASTM International F1346-23 standard.
(4) Exit alarms on the private single-family home's doors and windows that provide direct access to the swimming pool or spa without any intervening enclosure. Whenever any door or window is opened or left ajar, exit alarms shall make either an audible, continuous alarm sound or a repeating verbal warning, such as a

notification that “the door to the pool is open.” An exit alarm may be battery operated or connected to the electrical wiring of the building.
(5) A self-closing, self-latching device with a release mechanism placed no lower than 54 inches above the floor on the private single family home’s doors providing direct access to the swimming pool or spa.
(6) An alarm in good repair and operable as designed that, when placed in a swimming pool or spa, will sound upon detection of accidental or unauthorized entrance into the water. The alarm shall meet and be independently certified to the ASTM International F2208 standard that includes surface motion, pressure, sonar, laser and infrared type alarms. A swimming protection alarm feature designed for individual use, including an alarm attached to a child that sounds when the child exceeds a certain distance or becomes submerged in water, is not a qualifying drowning prevention safety feature.
(7) Other means of protection, if the degree of protection afforded is equal to or greater than that afforded by any of the features set forth above and has been independently verified by an approved testing laboratory as meeting standards for those features established by ASTM International, the American Society of Mechanical Engineers, or another nationally recognized standards development organization, and the feature is accompanied by a label verifying that the protection meets those standards.

(b) The requirements of subdivision (a) are not satisfied by any of the following:

(1) An exit alarm and a self-closing, self-latching device on the same door.
(2) An exit alarm and a door latch on separate doors.
(3) A safety pool cover and an alarm described in paragraph (6) of subdivision (a)

(c) Before the issuance of a final approval for the completion of permitted construction or remodeling work, the building official shall inspect the drowning safety prevention features required by this section and, if no violations are found, shall give final approval.

2. Enclosure of yards containing private pools/spas. Section 3019 of the California Building Code is hereby amended to add Section 3109.2.1 to read:

3109.2.1 Enclosure of yards containing private pools/spas. Every person in possession of land within the City, either as owner, purchaser under contract, lessee, tenant, licensee or otherwise, upon which is situated a private swimming pool or other out-of-doors body of water having a depth in excess of 18 inches that is designed, constructed and/or used for

swimming, dipping or immersion by men, women or children shall maintain in good condition an enclosure to completely separate the private pool from adjoining properties by fencing complying with Health and Safety Code Section 115923 or building walls, or a combination thereof, substantially constructed, not lower than five feet in height above the surface of the ground measured vertically from the outside grade.

Any pool enclosed by a fence or enclosure which does not meet the requirements of this chapter shall be drained immediately and shall not be refilled until such time as the enclosure is brought into compliance with the provisions of this article.

All gates opening through the swimming pool yard enclosure shall be equipped with a self-closing and self-latching device designed to keep such door or gate securely closed at all times when not in actual use. Access gates through the enclosure shall open away from the swimming pool. The unlocking or unlatching device shall be located not less than five feet above grade or steps at the gate or door measured vertically outside the enclosed areas and shall include any passage door or gate opening from an accessory building, such as a garage.

Exceptions:

1. The unlocking or unlatching device may be located on the inside of the enclosure at less than the required five feet in height when not operable from the outside of the enclosure.
2. Double-gates installed across vehicular access ways shall be self-closing and shall be equipped with a latching device which may be manually operated. Such gates shall be securely closed at all times when not in actual use.

F. Vehicular gates or other barriers across required fire apparatus access roads. Section 3110.4 of the California Building Code is hereby added as follows:

3110.4 Vehicular gates or other barriers across required fire apparatus access roads. The installation of gates or other barriers across a required fire apparatus access road shall be approved in writing by the fire code official. Gates or barriers shall be in accordance with the City of Irvine Security Code and the Orange County Fire Authority Guideline B-09 "Fire Master Plans for Commercial and Residential Development."

Section 5-9-402. - Residential Code.

A. Definitions. Section R202 of Chapter 2 of the California Residential Code is hereby amended to add the following definitions to read:

CITY OF IRVINE SMALL RESIDENTIAL ROOFTOP SOLAR ENERGY SYSTEM EXPEDITED/STREAMLINED PERMITTING PROCESS: A ministerial permitting process in substantial conformance to the California Solar Permitting Guidebook published by the Governor's Office of Planning and Research, applicable to systems meeting the definition of a *small residential rooftop solar energy system*. For such qualifying systems, the process, including permit issuance, may be conducted entirely online utilizing digital forms or may be conducted over the counter at the City's One-Stop Permit Processing Center utilizing printed forms.

OCFA: Orange County Fire Authority, fire authority having jurisdiction.

SMALL RESIDENTIAL ROOFTOP SOLAR ENERGY SYSTEM: A residential rooftop solar energy system that meets all of the following:

1. A solar system that is no larger than 10 kilowatts alternating current nameplate rating (PV) or 30 kilowatts thermal (solar water heating).
2. A solar energy system that conforms to all applicable state fire, structural, electrical and other building codes as adopted or amended by the City of Irvine and paragraph (3) of subdivision (c) of Section 714 of the Civil Code.
3. A solar energy system that is installed on a single or duplex family dwelling.
4. A solar panel or module array that does not exceed the maximum legal building height.

SPARK ARRESTER: A listed device constructed of noncombustible material specifically for the purpose of meeting one of the following conditions:

1. Removing and retaining carbon and other flammable particles/debris from the exhaust flow of an internal combustion engine in accordance with California Vehicle Code Section 38366.
2. Fireplaces that burn solid fuel in accordance with California Building Code Chapter 28.

B. Climatic and Geographic Design Criteria. Table R301.2(1) of Chapter 3 of the California Residential Code is hereby deleted and amended to read:

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

	Wind Design		Seismic	Subject to Damage From			Ice Barrier		Air	Mean
Ground Snow Load	Speed	Topographic effects	Design Category	Weathering	Frost line Depth	Termite	Underlayment Required	Flood Hazards	Freezing Index	Annual Temp

	(mph)									
Not applicable	95	No	D_2	Negligible	Not applicable	Very Heavy	Not applicable	See footnote a	0	60

a. Date of the City of Irvine entry into the National Flood Insurance Program June 21, 1974. The panel numbers of all FIRMs are: 169, 278, 279, 281, 282, 283, 284, 286, 287, 288, 289, 291, 292, 293, 294, 305, 308, 313, 314, 315, 316, 402, 406, 407, and 426.

C. Fuel modification requirements for new construction. Section R301.9 of the California Residential Code is hereby added to read:

R301.9 Fuel modification requirements for new construction. All new structures and facilities adjoining land containing hazardous combustible vegetation shall *be approved and in accordance with the requirements of OCFA Guideline C-05 "Vegetation Management Guideline: Technical Design for New Construction, Fuel Modification Plans, and Maintenance Program."*

D. Site Address. Section R308 is hereby deleted and amended as follows:

R308.1 Site Address. New and existing buildings shall have approved address numbers as required by Chapter 5 Uniform Security Code of Division 9 Building Regulations of Title 5 Planning of the City of Irvine Municipal Code.

Exception: Addressing complying with regulations in effect at the time of installation may be maintained provided that any replacement addressing shall comply with current provisions to the extent practicable as determined by the building official.

E. Automatic Fire Sprinkler Systems. Section R309 is hereby amended as follows:

1. R309.1 Townhouse automatic fire sprinkler systems. The exception to Section R309.1 is hereby deleted and replaced to read:

Exception: An automatic sprinkler system shall not be required where additions or alterations are made to existing townhouses that do not have an automatic sprinkler system installed except when the floor area of such additions or alterations within any two-year period exceeds 50 percent of the initial existing gross floor area and the final gross floor area exceeds 5,500 square feet.

2. R309.2 One- and two-family dwellings automatic fire sprinkler systems. The exception to Section R309.2 is hereby deleted and amended to read:

Exception: An automatic sprinkler system shall not be required where additions or alterations are made to existing one- and two-family dwellings that do not have an automatic sprinkler system installed except when the

floor area of such additions or alterations within any two-year period exceeds 50 percent of the initial existing gross floor area and the final gross floor area exceeds 5,500 square feet.

3. R309.3.6.2.2 Calculation procedure. The first sentence of Section R309.3.6.2.2 is hereby amended to read as follows:

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

F. Fire sprinklers, attached garages and carports with habitable space above. Section R317.5.1 is hereby amended by deleting and replacing the exception to read:

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

G. Under-Floor Space. Section R408.2 is hereby deleted and replaced to read:

   R408.2 Openings for under-floor ventilation. Ventilation openings through foundation or exterior walls surrounding the under-floor space shall be provided in accordance with this section. The minimum net area of ventilation openings shall be not less than 1 square foot (0.0929 m^2) for each 150 square feet (14 m^2) of under-floor area. One ventilation opening shall be within 3 feet (915 mm) of each external corner of the under-floor space. Ventilation openings shall be covered for their height and width with any of the following materials provided that the least dimension of the covering shall not exceed 1/8 inch (6.4 mm), and operational louvers are permitted:

   1. Perforated sheet metal plates not less than 0.070 inch (1.8 mm) thick.
   2. Expanded sheet metal plates not less than 0.047 inch (1.2 mm) thick.
   3. Cast-iron grill or grating.
   4. Extruded load-bearing brick vents.
   5. Hardware cloth of 0.035-inch (0.89 mm) wire or heavier.
   6. Corrosion-resistant wire mesh, with the least dimension not exceeding 1/8 inch (3.2 mm).

   Exceptions:
   1. The total area of ventilation openings shall be permitted to be reduced to 1/1,500 of the under-floor area where the ground surface is covered with an approved Class I vapor retarder material.
   2. Where the ground surface is covered with an approved Class 1 vapor retarder material, ventilation openings are not required to be within 3

feet (915 mm) of each external corner of the under-floor space provided that the openings are placed to provide cross ventilation of the space.

H. Ventilation required. Section R806.1 is hereby deleted and replaced to read:

R806.1 Ventilation required. Enclosed attics and enclosed rafter spaces formed where ceilings are applied directly to the underside of roof rafters shall have cross ventilation for each separate space by ventilating openings protected against the entrance of rain or snow. Ventilation openings shall have a least dimension of 1/16 inch (1.6 mm) minimum and 1/8 inch (6.4 mm) maximum. Ventilation openings having a least dimension larger than 1/8 inch (6.4 mm) shall be provided with corrosion-resistant wire cloth screening, hardware cloth, perforated vinyl or similar material with openings having a least dimension of 1/16 inch (1.6 mm) minimum and 1/8 inch (6.4 mm) maximum. Openings in roof framing members shall conform to the requirements of Section R802.7. Required ventilation openings shall open directly to the outside air and shall be protected to prevent the entry of birds, rodents, snakes and other similar creatures.

I. Fire Classification. Section R902 is hereby amended as follows:

1. Roof covering materials. The first paragraph of Section R902.1 is hereby deleted and replaced to read:

R902.1 Roofing covering materials. Roof decks shall be covered with materials as set forth in Section R904 or with roof coverings as set forth in Section R905. A minimum Class A roofing shall be installed in areas designated by this section or where the edge of the roof deck is less than 3 feet (914 mm) from a lot line. Class A roof assemblies shall be tested in accordance with ASTM E108 or UL 790. Where required, the roof assembly shall be listed and identified as to class by an approved testing agency.

Exceptions:

1. Class A roof assemblies include those with coverings of brick, masonry and exposed concrete roof deck.
2. Class A roof assemblies include ferrous or copper shingles or sheets, metal sheets and shingles, clay or concrete roof tile, or slate installed on noncombustible roof decks or ferrous, copper or metal sheets installed without a roof deck on noncombustible framing.
3. Class A roof assemblies include minimum 16 ounces per square foot (4.882 kg/m2) copper sheets installed over combustible roof decks.
4. Class A roof assemblies include slate installed over underlayment over ASTM D226, Type II underlayment over combustible decks.

2. Roof coverings in all other areas. Section R902.1.2 is hereby deleted and replaced to read:

R902.1.2 Roof coverings in all other areas. The entire roof covering of every existing structure where more than 50 percent of the total roof area is replaced within any one-year period, the entire roof covering of every new structure, and any roof covering applied in the alteration, repair or replacement of the roof of every existing structure, shall be a fire-retardant roof covering that is at least Class A fire classification.

J. Outdoor fireplaces, fire pits, fire rings or similar devices. Section R1001.14 is hereby added to read:

R1001.14 Outdoor fireplaces, fire pits, fire rings, or similar devices. Outdoor fireplaces, fire pits, fire rings, or similar exterior devices, other than barbeques, grills, and other portable devices intended solely for cooking, shall comply with this section.

R1001.14.1 Gas-fueled devices. Outdoor fireplaces, fire pits and similar devices fueled by natural gas or liquefied-petroleum gas are allowed when approved in writing by the Building Department and the device is designed to only burn a gas flame and not wood or other solid fuel. At R-3 occupancies, combustible construction shall not be located within 3 feet of an atmospheric column that extends vertically from the perimeter of the device. Where a permanent Building Department approved hood and vent is installed, combustible construction may encroach upon this column between the bottom of the hood and the vent opening. Where chimneys or vents are installed, they shall have a spark arrester in accordance with Section R1003.9.2.

R1001.14.2 Devices using wood or fuels other than natural gas or liquefied-petroleum gas. Fireplaces burning wood or other solid fuel shall be constructed in accordance with Section R1001. Fires in a fireplace shall be contained within a firebox with an attached chimney. The opening in the face of the firebox shall have an installed and maintained method of arresting sparks. The burning of wood or other solid fuel in a device is not allowed within 15 feet of combustible structures, unless within a permanent or portable fireplace.

R1001.14.3 Where prohibited. The burning of wood and other solid fuels shall not be conducted within a fuel modification zone. Wood and other solid fuel burning fires in devices other than permanent fireplaces are not allowed within Wildfire Risk Areas (WRA) and adopted Fire Hazard Severity Zones (FHSZ) or in locations where conditions could cause the spread of fire to the WRA or FHSZ, unless the fire code official determines that the

location or design of the device should reasonably prevent the start of a wildfire.

K. Automatic Vehicular Gates. Section BH103 of Appendix BH is hereby amended by adding Section BH103.3 to read:

BH103.3 Vehicular gates or other barriers across required fire apparatus access roads. The installation of gates or other barriers across a required fire apparatus access road shall be approved in writing by the fire code official. Gates or barriers shall be in accordance with the City of Irvine Security Code and the Orange County Fire Authority Guideline B-09 “Fire Master Plans for Commercial and Residential Development.”

L. Swimming Pool Safety Act. Appendix CI of the California Residential Code is hereby amended as follows:

1. Swimming pool safety features. Section 115922 of Appendix CI is hereby deleted and replaced to read:

(a) Except as provided in Section 115925, subject to subdivision (b), and consistent with Section 1596.814, when a building permit is issued for the construction of a new swimming pool or spa or the remodeling of an existing swimming pool or spa at a private single-family home, the respective swimming pool or spa shall be equipped with Item (1) below and at least one additional drowning prevention safety feature from Items (2)-(6):

(1) An enclosure that meets the requirements of Section 115923 and isolates the swimming pool and spa from the private single-family home. Any walls of the residential structure or accessory structures used to complete the isolation enclosure must comply with either Section 115922 (a) (4) or (5). Any such door or window protection device provided for this purpose may not be used to comply with the second drowning prevention feature requirement.

(2) Removable mesh fencing that meets the ASTM International F2286 standard in conjunction with a gate that is self-closing and self-latching and can accommodate a key lockable device.

(3) A manually operated or power-operated safety pool cover that is accompanied by a label verifying that the cover meets the specifications of the ASTM International F1346-23 standard.

(4) Exit alarms on the private single-family home’s doors and windows that provide direct access to the swimming pool or spa without any intervening enclosure. Whenever any door or window is opened or left ajar, exit alarms shall make either an audible, continuous alarm sound or a repeating verbal warning, such as a notification that “the door to the pool is open.” An exit alarm may be battery operated or connected to the electrical wiring of the building.

(5) A self-closing, self-latching device with a release mechanism placed no lower than 54 inches above the floor on the private single family home's doors providing direct access to the swimming pool or spa.

(6) An alarm in good repair and operable as designed that, when placed in a swimming pool or spa, will sound upon detection of accidental or unauthorized entrance into the water. The alarm shall meet and be independently certified to the ASTM International F2208 standard that includes surface motion, pressure, sonar, laser and infrared type alarms. A swimming protection alarm feature designed for individual use, including an alarm attached to a child that sounds when the child exceeds a certain distance or becomes submerged in water, is not a qualifying drowning prevention safety feature.

(7) Other means of protection, if the degree of protection afforded is equal to or greater than that afforded by any of the features set forth above and has been independently verified by an approved testing laboratory as meeting standards for those features established by ASTM International, the American Society of Mechanical Engineers, or another nationally recognized standards development organization, and the feature is accompanied by a label verifying that the protection meets those standards.

(b) The requirements of subdivision (a) are not satisfied by any of the following:

(1) An exit alarm and a self-closing, self-latching device on the same door.

(2) An exit alarm and a door latch on separate doors.

(3)A safety pool cover and an alarm described in paragraph (6) of subdivision (a)

(c) Before the issuance of a final approval for the completion of permitted construction or remodeling work, the building official shall inspect the drowning safety prevention features required by this section and, if no violations are found, shall give final approval.

2. Enclosure of yards containing private pools/spas. Appendix AX of the California Residential Code is hereby amended to add Section AX101 to read:

AX101 Enclosure of yards containing private pools/spas. Every person in possession of land within the City, either as owner, purchaser under contract, lessee, tenant, licensee or otherwise, upon which is situated a private swimming pool or other out-of-doors body of water having a depth in excess of 18 inches that is designed, constructed and/or used for swimming, dipping or immersion by men, women or children shall maintain in good condition an enclosure to completely separate the private pool from adjoining properties by fencing complying with Health

and Safety Code Section 115923 or building walls, or a combination thereof, substantially constructed, not lower than five feet in height above the surface of the ground measured vertically from the outside grade.

Any pool enclosed by a fence or enclosure which does not meet the requirements of this chapter shall be drained immediately and shall not be refilled until such time as the enclosure is brought into compliance with the provisions of this article.

All gates opening through the swimming pool yard enclosure shall be equipped with a self-closing and self-latching device designed to keep such door or gate securely closed at all times when not in actual use. Access gates through the enclosure shall open away from the swimming pool. The unlocking or unlatching device shall be located not less than five feet above grade or steps at the gate or door measured vertically outside the enclosed areas and shall include any passage door or gate opening from an accessory building, such as a garage.

Exceptions:

1. The unlocking or unlatching device may be located on the inside of the enclosure at less than the required five feet in height when not operable from the outside of the enclosure.
2. Double-gates installed across vehicular access ways shall be self-closing and shall be equipped with a latching device which may be manually operated. Such gates shall be securely closed at all times when not in actual use.

Section 5-9-403. - Electrical Code.

A. Underground wiring. Section 300.1 of the California Electrical Code is hereby amended to add the following subsection to read:

(D) All outside wiring on private property shall be underground.

Exception: For temporary wiring installed under the provisions of Section 590 and contained within a construction zone.

Section 5-9-404. - Reserved.

Section 5-9-405. - Plumbing Code.

A. Saline waste. Section 602.5 of the California Plumbing Code is hereby added to read:

602.5 Saline waste. Except where permitted by State law, it shall be unlawful to install or replace any plumbing equipment, including any automatic or self-regenerating water softener unit, the operation of which may result in the discharge of saline waste into the facilities of the Irvine Ranch Water District, or the discharge of such wastes that might pollute any surface or underground stream, watercourse, lake or any body of water, including any underground, natural or artificial storage reservoir, or which might impair or contribute to the impairment of the usefulness of such waters for human or animal consumption, or domestic, agricultural, industrial or recreational purposes or for any other useful purpose.

B. Pipe, Tube, and Fittings. The third paragraph of Section 604.1 of the California Plumbing Code is hereby deleted and replaced to read:

Materials for building water piping and building supply piping shall comply with the applicable standards referenced in Table 604.1. Galvanized malleable iron, galvanized wrought iron or galvanized steel are prohibited materials for use underground.

C. Acceptable Piping Materials and Joining Methods. The first paragraph of Section 1208.6 of the California Plumbing Code is hereby deleted and replaced with read:

Section 1208.6. Acceptable Piping Materials and Joining Methods. Materials used for piping systems shall either comply with the requirements of this chapter or shall be acceptable to the Authority Having Jurisdiction. All pipes used for the installation, extension, alteration or repair of any exterior underground piping system shall be approved polyethylene or other approved non-metallic pipe, tubing and fittings.

Section 5-9-406. - Reserved.
Section 5-9-407. - Wildland-Urban Interface Code - Reserved.
Section 5-9-408. - Reserved.

Section 5-9-409. - Fire Code.

A. Chapter 2, *Definitions*, is adopted in its entirety, as amended by Office of the State Fire Marshal (SFM), with the following amendments:

1. Section 202, General Definitions, is hereby revised by adding “OCFA” and “Spark Arrester” as follows:

202 General Definitions

OCFA: Orange County Fire Authority, authority having jurisdiction.

SPARK ARRESTER. A listed device constructed of noncombustible material specifically for the purpose of meeting one of the following conditions:

1. Removing and retaining carbon and other flammable particles/debris from the exhaust flow of an internal combustion engine in accordance with California Vehicle Code Section 38366.
2. Fireplaces that burn solid fuel in accordance with California Building Code Chapter 28.

B. Chapter 3 General Requirements. Adopt only those sections and subsections in Chapter 3 that are adopted by the SFM with the following amendments:

a. Section 304.1.3 Vegetation is hereby revised as follows:

304.1.3 Vegetation. Weeds, grass, vines or other growth that is capable of being ignited and endangering property, shall be cut down and removed by the owner or occupant of the premises. Vegetation clearance requirement in urban-wildland interface areas shall be in accordance with Chapter 49. Type, amount, arrangement, and maintenance of vegetation in a fuel modification area, interior slope, or similarly hazardous area shall be in accordance with OCFA Guideline C-05 “Vegetation Management Guideline—Technical Design for New Construction, Fuel Modification Plans, and Maintenance Program.”

b. Section 305.6 Hazardous conditions is hereby added as follows:

305.6 Hazardous conditions. Outdoor fires burning wood or other solid fuel are not allowed when any of the following conditions applies:

1. when predicted sustained winds exceed 8 MPH and relative humidity is less than 25%, or a red flag condition has been declared
2. when an official sign was caused to be posted by the fire code official, or a public announcement is made

No outdoor fires using any fuel type are permitted when predicted sustained winds exceed 20 MPH or when such fires present a hazard as determined by the fire code official.

c. Section 305.7 Disposal of rubbish is hereby added as follows:

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

d. Section 307 OPEN BURNING, RECREATIONAL FIRES AND PORTABLE OUTDOOR FIREPLACES is hereby revised as follows:

i. Sections 307.6 Outdoor Fireplaces, Fire Pits, Fire Rings, or similar devices used at Group R Occupancies is hereby added as follows:

307.6 Outdoor Fireplaces, Fire Pits, Fire Rings, or similar devices used at Group R Occupancies. Outdoor fireplaces, fire pits, fire rings, or similar exterior devices used at Group R occupancies shall comply with this section.

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

ii. Section 307.6.1 Gas-fueled devices is hereby added as follows:

307.6.1 Gas-fueled devices. Outdoor fireplaces, fire pits and similar devices fueled by natural gas or liquefied-petroleum gas are allowed when approved by the Building Department and the device is designed to only burn a gas flame and not wood or other solid fuel. At R-3 occupancies, combustible construction and vegetation shall not be located within 3 feet of an atmospheric column that extends vertically from the perimeter of the device. At other R occupancies, the minimum distance shall be ten feet. Where a permanent Building Department approved hood and vent is installed, combustible construction may encroach upon this column between the bottom of the hood and the vent opening. Where chimneys or vents are installed, they shall have a spark arrester as defined in Section 202.

iii. Section 307.6.2 Devices using wood or fuels other than natural gas or liquefied-petroleum gas is hereby added as follows:

307.6.2 Devices using wood or fuels other than natural gas or liquefied-petroleum gas. Permanent outdoor fireplaces burning wood or other solid fuel shall be constructed in accordance with the California Building Code with clearance from combustible construction and building openings as required therein. Fires in a fireplace shall be contained within a firebox with an attached chimney. The opening in the face of the firebox shall have an installed and maintained method of arresting sparks.

The burning of wood or other solid fuel in a device is not allowed within 25 feet of combustible structures unless within an approved permanent fireplace, Conditions which could cause a fire to spread within 25 feet of a structure or to vegetation shall be eliminated prior to ignition. Fires in devices burning wood or solid fuel shall be in accordance with Sections 305, 307, and 308.

Exceptions:

1. Portable fireplaces and fire rings/pits equipped with a device to arrest sparks shall be located at least 3' from combustible construction at R-3 occupancies,
2. Portable fireplaces, and fire pits/rings equipped with a device to arrest sparks, shall be located at least 15 feet from combustible structures at other R occupancies.

iv. Section 307.6.2.1 Where prohibited is hereby added as follows:

307.6.2.1 Where prohibited. The burning of wood and other solid fuels shall not be conducted within a fuel modification zone, Wildfire Risk Area (WRA), Wildland-Urban Interface Area (WUI), or in locations where conditions could cause the spread of fire to the WRA or WUI.

Exceptions:

1. Permanent fireplaces that are not located in a fuel modification zone
2. Where determined by the fire code official that the location or design of the device should reasonably prevent the start of a wildfire.

v. Section 324 Fuel modification requirements for new construction is hereby added as follows:

324 Fuel modification requirements for new construction. All new structures and facilities adjoining land containing hazardous combustible vegetation shall be approved and in accordance with the requirements of OCFA Guideline C-05 "Vegetation Management Guideline – Technical Design for New Construction Fuel Modification Plans and Maintenance Program."

vi. Section 325 Clearance of brush or vegetation growth from roadways is hereby added as follows:

325 Clearance of brush or vegetation growth from roadways. The fire code official is authorized to cause areas within 10 feet (3048 mm) on each side of portions of highways and private streets which are improved, designed or ordinarily used for vehicular traffic, to be cleared of flammable vegetation and other combustible growth. Measurement shall be from the flow-line or the end of the improved edge of the roadway surfaces.

Exception: Single specimens of trees, ornamental shrubbery or cultivated ground cover such as green grass, ivy, succulents or

similar plants used as ground covers, provided that they do not form a means of readily transmitting fire.

vii. Section 326 Unusual circumstances is hereby added as follows:

326 Unusual circumstances. The fire code official may suspend enforcement of the vegetation management requirements and require reasonable alternative measures designed to advance the purpose of this code if determined that in any specific case that any of the following conditions exist:

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

viii. Section 327 Use of equipment is hereby added as follows:

327 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 202 maintained in effective working order, or the engine is constructed, equipped and maintained for the prevention of fire.

Exceptions:

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

ix. Section 327.1 Use of equipment and devices generating heat, sparks or open flames is hereby added as follows:

327.1 Equipment and devices generating heat, sparks or open flames. During any time of the year within Wildfire Risk Areas, within or

immediately adjacent to any forest- or brush-covered land or non-irrigated grass-covered land, no person shall use or operate any welding equipment, cutting torches, tar pots, grinding devices, or other tools or equipment that may produce a spark, fire, or flame that could result in a wildfire without doing the following:

1. First clearing away all flammable material, including snags, from the area around such operation for a distance of 30 feet or other approved method to reduce fire spread into the wildlands. If 30-foot clearing cannot be achieved, then an alternate method shall be approved by the AHJ prior to work starting.
2. Maintain one serviceable round point shovel with an overall length of not less than forty-six (46) inches and one backpack pump water-type fire extinguisher fully equipped and ready for use at the immediate area during the operation.
3. Stop work when winds are 8 MPH or greater during periods when relative humidity is less than 25%, or a red flag condition has been declared or public announcement is made, when an official sign was caused to be posted by the fire code official, or when such fires present a hazard as determined by the fire code official.
4. Keep a cell phone nearby and call 911 immediately in case of fire.

x. Section 327.2 Spark Arresters is hereby added as follows:

327.2 Spark arresters. Spark arresters shall comply with Section 202, and when affixed to the exhaust system of engines or vehicles subject to Section 324327 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.

C. Chapter 4 Emergency Planning and Preparedness. Adopt only those sections and subsections adopted by SFM with the following amendment.

1. Section 407.5 is revised as follows:

407.5 Hazardous materials inventory statement. Where required by the fire code official, each application for a permit shall OCFA's Chemical Classification Guideline in accordance with Section 5001.5.2.

D. Chapter 5 Fire Service Features is adopted in its entirety as amended by SFM with the following amendments:

1. Section 501.1 Scope is revised as follows:

501.1 Scope. Fire service features for buildings, structures and premises shall comply with this chapter and, where required by the fire code official, with

OCFA Guideline B-01, “Fire Master Plan for Commercial & Residential Development.”

2. Section 510.1 Emergency responder communications enhancement systems in new buildings is hereby deleted and replaced as follows:

   510.1 Emergency responder radio coverage in new buildings. All new buildings shall have approved radio coverage for emergency responders within the building based upon the existing coverage levels of the public safety communication systems of the jurisdiction at the exterior of the building. This section shall not require improvement of the existing public safety communication systems. The Emergency Responder Radio Coverage System shall comply with the requirements of the Orange County Sheriff’s Department, Communications and Technology Division, and where the functionality of performance requirements in the California Fire Code are more stringent, this code.

   Exceptions:
   1. In buildings or structures where it is determined by the fire code official that the radio coverage system is not needed, including but not limited to the following:
      a. Existing buildings or structures, unless required by the building official and OCFA for buildings and structures undergoing extensive remodel and/or expansion.
      b. Elevators.
      c. Structures that meet all of the following:
         i. Three stories or less, and
         ii. Do not have subterranean storage or parking, and
         iii. Do not exceed 50,000 square feet on any single story.
      d. Structures that meet all of the following:
         i. Residential structures four stories or less, and
         ii. Constructed of wood, and
         iii. Do not have subterranean storage or parking, and
         iv. Are not built integral to an above ground multi-story parking structure.

   Should a structure that is three stories or less and 50,000 square feet or smaller on any single story include subterranean storage or parking, then this ordinance shall apply only to the subterranean areas.

   2. In facilities where emergency responder radio coverage is required and such systems, components or equipment required could have a negative impact on the normal operations of the facility, the fire code official shall have the authority to accept an automatically activated emergency radio coverage system.

E. Chapter 6 Building Services and Systems is adopted in its entirety, as amended by SFM.

F. Chapter 7 Fire and Smoke Protection Features is adopted in its entirety, as amended by SFM.

G. Chapter 8 Interior Finish, Decorative Materials and Furnishings is adopted in its entirety, as amended by SFM.

H. Chapter 9 Fire Protection and Life Safety Systems is adopted in its entirety, as amended by SFM, with the following amendments:

1. Section 903.2 Where required is hereby revised as follows:

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

New buildings: Notwithstanding any applicable provisions of Sections 903.2.1 through 903.2., an automatic fire sprinkler system shall also be installed in all occupancies when the total building area exceeds 5,000 square feet as defined in Section 202, regardless of fire areas or allowable area, or is more than two stories in height.

Exceptions:

1. Subject to approval by the fire code official, open parking garages in accordance with Section 406.5 of the California Building Code that are smaller than the area specified in section 903.2.10 (3) or 903.2.10.1 of the California Fire Code.
   a. Existing Buildings: Notwithstanding any applicable provisions of this code, an automatic fire sprinkler system shall be provided in an existing building when an addition occurs and one of the following conditions exists:
      i. When an addition is 33% or more of the existing building area, and the resulting building area exceeds 5000 square feet.
      ii. When an addition exceeds 2000 square feet, and the resulting building area exceeds 5000 square feet.
      iii. An additional story is added above the second floor regardless of fire areas or allowable area.
2. Additions to Group R-3 occupancies shall comply with Section 903.2.8 (2).

2. Section 903.2.8 Group R is hereby revised as follows:

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

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

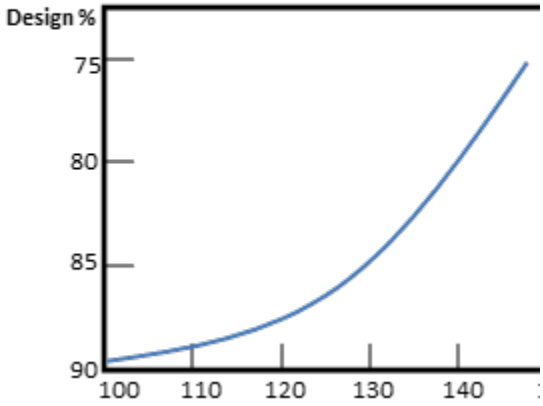
2. Existing R-3 Buildings: An automatic fire sprinkler system shall be installed throughout when one of the following conditions exists:
   a. When the floor area of alterations within any two-year period exceeds 50 percent of gross floor area of the existing structure and the building gross floor area exceeds 5,500 square feet; or
   b. 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. Section 903.3.5.3 Hydraulically calculated systems is hereby added as follows:

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

   Exception: When static pressure exceeds 100 psi, and when required by the fire code official, the fire sprinkler system shall not exceed the water supply capacity specified by Table 903.3.5.3.

TABLE 903.3.5.3
Hydraulically Calculated Syste



I. Chapter 10 Means of Egress is adopted in its entirety, as amended by SFM.

J. Chapter 11 Construction Requirements for Existing Buildings. Adopt only those sections and subsections adopted by SFM.

K. Chapter 12 Energy Systems is adopted in its entirety, as amended by SFM.

L. Chapter 20 Aviation Facilities is adopted in its entirety.

M. Chapter 21 Dry Cleaning is adopted in its entirety, as amended by SFM.

N. Chapter 22 Combustible Dust-Producing Operations is adopted in its entirety, as amended by SFM.

O. Chapter 23 Motor Fuel-Dispensing Facilities and Repair Garages is adopted in its entirety, as amended by SFM.

P. Chapter 24 Flammable Finishes is adopted in its entirety, as amended by SFM.

Q. Chapter 25 Fruit and Crop Ripening is not adopted.

R. Chapter 26 Fumigation and Insecticidal Fogging is not adopted.

S. Chapter 27 Semiconductor Fabrication Facilities is adopted in its entirety.

T. Chapter 28 Lumber Yards and Agro-Industrial, Solid Biomass and Woodworking Facilities is adopted in its entirety, with the following amendments:

1. Section 2801.2 Permit is hereby revised as follows:

   2801.2 Permit. Permits shall be required as set forth in Section 105.6 and 105.6.29.

2. Section 2808.2 Storage site is hereby revised as follows:

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

3. Section 2808.3 Size of piles is hereby revised as follows:

   2808.3 Size of piles. Piles shall not exceed 15 feet in height, 50 feet in width and 100 feet in length.

   Exception: The fire code official is authorized to allow the pile size to be increased where a fire protection plan is provided for approval that includes, but is not limited to, the following:
   1. Storage yard areas and materials-handling equipment selection, design and arrangement shall be based upon sound fire prevention and protection principles.
   2. Factor that lead to spontaneous heating shall be identified in the plan, and control of the various factors shall be identified and implemented, including provisions for monitoring the internal condition of the pile.

3. The plan shall include means for early fire detection and reporting to the public fire department; and facilities needed by the fire department for fire extinguishment including a water supply and fire hydrants.
4. Fire apparatus access roads around the piles and access roads to the top of the piles shall be established, identified, and maintained.
5. Regular yard inspections by trained personnel shall be included as part of an effective fire prevention maintenance program.

Additional fire protection called for in the plan shall be provided and shall be installed in accordance with this code. The increase of the pile size shall be based upon the capabilities of the installed fire protection system and features.

4. Section 2808.4 Pile Separation is hereby revised as follows:

   2808.4. Pile separation. Piles shall be separated from adjacent piles by a minimum distance of 20 feet. Additionally, piles shall have a minimum separation of 100 feet from combustible vegetation.

5. Section 2808.7 Pile fire protection is hereby revised as follows:

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

6. Section 2808.9 Material-handling equipment is hereby revised as follows:

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

7. Section 2808.11 Temperature control is hereby added as follows:

   2808.11 Temperature control. The temperature shall be monitored and maintained as specified in Sections 2808.11.1 and 2808.11.2.

8. Section 2808.11.1 Pile temperature control is hereby added as follows:

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

9. Section 2808.11.2 New material temperature control is hereby added as follows:

   2808.11.2 New material temperature control. New loads delivered to the facility shall be inspected and tested at the facility entry prior to taking delivery. Material with temperature exceeding 165 degrees Fahrenheit shall not be accepted on the site. New loads shall comply with the requirements of this chapter and be monitored to verify that the temperature remains stable.

10. Section 2808.12 Water availability is hereby added as follows:

    2808.12 Water Availability. Facilities with over 2500 cubic feet shall provide a water supply. The minimum fire flow shall be no less than 500 GPM @ 20 psi for a minimum of 1 hour duration for pile heights up to 6 feet and 2-hour duration for pile heights over 6 feet. If there is no water purveyor, an alternate water supply with storage tank(s) shall be provided for fire suppression. The water supply tank(s) shall provide a minimum capacity of 2500 gallons per pile (maximum 30,000 gallons) for piles not exceeding 6 feet in height and 5000 gallons per pile (maximum 60,000) for piles exceeding 6 feet in height. Water tank(s) shall not be used for any other purpose unless the required fire flow is left in reserve within the tank at all times. An approved method shall be provided to maintain the required amount of water within the tank(s).

11. Section 2808.13 Tipping area is hereby added as follows:

    2808.13 Tipping areas shall comply with the following:
    1. Tipping areas shall not exceed a maximum area of 50 feet by 50 feet.
    2. Material within a tipping area shall not exceed 5 feet in height at any time.
    3. Tipping areas shall be separated from all piles by a 20-foot-wide fire access lane.
    4. A fire hydrant or approved fire water supply outlet shall be located within 150 feet of all points along the perimeter of the tipping area.
    5. All material within a tipping area shall be processed within 5 days of receipt.

12. Section 2808.14 Emergency Contact is hereby added as follows:

    2808.14 Emergency Contact. The contact information of a responsible person or persons shall be provided to the Fire Department and shall be posted at the entrance to the facility for responding units. The responsible party should be available to respond to the business in emergency situation.

13. Section 2808.15 Maximum Grid of Piles and Rows is hereby added as follows:

    2808.15 Maximum Grid of Piles and Rows, Rows of Piles shall not exceed 500 feet by 500 feet. Grids shall be separated by a minimum 50-foot clear space used for no other purpose.

14. 2808.16 Push-out / Clear area is hereby added as follows:

    2808.16 Push-out / Clear area. Piles exceeding 20 cubic yards shall be provided with push-out areas. Push-out areas shall be maintained clear at all times to allow for the largest pile to be spread out to a depth of 2 feet in height. Push-out areas shall be located within 250 feet of all edges of any pile and shall be located a minimum of 20 feet from any building.

U. Chapter 29 Manufacture of Organic Coatings is adopted in its entirety.

V. Chapter 30 Industrial Ovens is adopted in its entirety.

W. Chapter 31 Temporary Special Event Structures and Other Membrane Structures is adopted in its entirety, as amended by SFM.

X. Chapter 32 High-Piled Combustible Storage is adopted in its entirety, as amended by SFM.

Y. Chapter 33 Fire Safety During Construction and Demolition is adopted in its entirety.

Z. Chapter 34 Tire Rebuilding and Tire Storage is adopted in its entirety, as amended by SFM.

AA. Chapter 35 Welding and Other Hot Work is adopted in its entirety.

BB. Chapter 36 Marinas is adopted in its entirety.

CC. Chapter 37 Combustible Fibers is adopted in its entirety.

DD. Chapter 39 Processing and Extraction Facilities is adopted in its entirety.

EE. Chapter 40 Storage of Distilled Spirits and Wines is adopted in its entirety.

FF. Chapter 41 Temporary Heating and Cooking Operations is adopted in its entirety, as amended by the SFM.

GG. Chapter 48 Motion Picture and Television Production Studio Sound Stages, Approved Production Facilities, and Production Locations is adopted in its entirety.

HH. Chapter 49 Requirements for Wildland-Urban Interface Fire Areas is adopted in its entirety, with the following amendment:

1. Section 4903.3 Fuel Modification Plans is hereby added as follows:

   4903.3 Fuel Modification Plans. Fuel modification plans shall be reviewed and approved by OCFA for all new buildings to be built or installed in a wildfire risk area. Plans shall meet the criteria set forth in OCFA Guideline C05 "Vegetation Management Guideline – Technical Design for New Construction Fuel Modification Plans and Maintenance Program."

II. Chapter 50 Hazardous Materials – General Provisions is adopted in its entirety, as amended by SFM, and with the following amendments:

1. Section 5001.5.2 Hazardous Materials Inventory Statement (HMIS), is hereby revised as follows:

   5001.5.2 Hazardous Materials Inventory Statement (HMIS). Where required by the fire code official, an application for a permit shall include. Orange County Fire Authority's Chemical Classification Guideline, which shall be completed and approved prior to approval of plans, and/or the storage, use or handling of chemicals on the premises.

2. Section 5003.1.1.1 Extremely Hazardous Substances is hereby added as follows:

   5003.1.1.1 Extremely Hazardous Substances. No person shall use or store any amount of extremely hazardous substances (EHS) in excess of the disclosable amounts (see Health and Safety Code Section 25500 et al) in a residential zoned or any residentially developed property.

JJ. Chapter 51 Aerosols is adopted in its entirety.

KK. Chapter 53 Compressed Gases is adopted in its entirety.

LL. Chapter 54 Corrosive materials is adopted in its entirety, as amended by SFM.

MM. Chapter 55 Cryogenic Fluids is adopted in its entirety.

NN. Chapter 56 Explosives and Fireworks is adopted in its entirety, as amended by SFM, and with the following amendments:

1. Section 5608.2 Firing is hereby added as follows:

   5608.2 Firing. All fireworks displays, regardless of mortar, device, or shell size, shall be electrically fired.

2. Section 5608.3 Application for Permit is hereby added as follows:

   Section 5608.3 Application for Permit. A diagram of the grounds on which the display is to be held showing the point at which the fireworks are to be discharged, the fallout area based on 100 feet per inch of shell size, the location of all buildings, roads, and other means of transportation, the lines behind which the audience will be restrained, the location of all nearby trees, telegraph or telephone line, or other overhead obstructions shall be provided to OCFA.

OO. Chapter 57 Flammable and Combustible Liquids. Adopt Chapter 57, with the exception of Section 5707, in its entirety and with the following amendment:

1. Section 5701.1.1 On-Demand Mobile fueling is added as follows:

   Section 5701.1.1 Mobile fueling. On-demand mobile fueling of Class I, II, and III liquids into the fuel tanks of vehicles is prohibited.

PP. Chapter 58 Flammable Gases and Flammable Cryogenic Fluids. Adopt Chapter 58, with the exception of Section 5809, in its entirety and with the following amendment:

1. Section 5801.1 Scope is revised as follows:

Section 5801.1 Scope. The storage and use of flammable gases and flammable cryogenic fluids shall be in accordance with this chapter, NFPA 2 and NFPA 55. Compressed gases shall also comply with Chapter 53 and cryogenic fluids shall also comply with Chapter 55. Flammable cryogenic fluids shall comply with Section 5806. Hydrogen motor fuel-dispensing stations and repair garages and their associated above-ground hydrogen storage systems shall also be designed, constructed and maintained in accordance with Chapter 23. Mobile fueling of gaseous and liquid hydrogen, compressed natural gas (CNG), and liquefied natural gas (LNG) into the fuel tanks of vehicles is prohibited.

QQ. Chapter 59 Flammable Solids is adopted in its entirety.

RR. Chapter 60 Highly Toxic and Toxic Materials is adopted in its entirety.

SS. Chapter 61 Liquefied Petroleum Gases is adopted in its entirety.

TT. Chapter 62 Organic Peroxides is adopted in its entirety.

UU. Chapter 63 Oxidizers, Oxidizing Gases, and Oxidizing Cryogenic Fluids is adopted in its entirety.

VV. Chapter 64 Pyrophoric Materials is adopted in its entirety.

WW. Chapter 65 Pyroxylin (Cellulose Nitrate) Plastics is adopted in its entirety.

XX. Chapter 66 Unstable (Reactive) Materials is adopted in its entirety.

YY. Chapter 67 Water-Reactive Solids and Liquids is adopted in its entirety.

ZZ. Chapter 80 Referenced Standards is adopted in its entirety, as amended by the SFM, and with the following amendments:

1. NFPA 13, 2025 Edition, Standard for the Installation of Sprinkler Systems is hereby amended as follows:

   a. Section 9.2.1.7 is hereby revised as follows:

   9.4.3.1 When fire sprinkler systems are installed in shell buildings of undetermined use (Spec Buildings) other than warehouses (S occupancies), fire sprinklers of the quick-response type shall be used. Use is considered undetermined if a specific tenant/occupant is not identified at the time the fire sprinkler plan is submitted. Sprinklers in light hazard occupancies shall be one of the following:
   (1) Quick-response type as defined in 3.3.223.4.16
   (2) Residential sprinklers in accordance with the requirements of Chapter 12
   (3) Quick-response CMSA sprinklers
   (4) ESFR sprinklers
   (5) Standard-response sprinklers used for modifications or additions to existing light hazard systems equipped with standard-response sprinklers.
   (6) Standard-response sprinklers used where individual standard-response sprinklers are replaced in existing light hazard systems

   b. Section 16.12.3.3 is hereby revised as follows:

   16.12.3.3 Fire department connections (FDC) shall be of an approved type. The location shall be approved and be no more than 150 feet from a public hydrant. The FDC may be located within 150 feet of a private fire hydrant when approved by the fire code official. The size of piping and the number of 2½" inlets shall be approved by the fire code official. If acceptable to the water authority, it may be installed on the backflow assembly. Fire

department inlet connections shall be painted OSHA safety red or as approved. When the fire sprinkler density design requires more than 500 gpm (including inside hose stream demand), or a standpipe system is included, four 2½" inlets shall be provided.

2. NFPA 13D 2025 Edition, Standard for the Installation of Sprinkler Systems in One- and Two-Family Dwellings and Manufactured Homes is hereby amended as follows:

   a. Section 7.1.2 is hereby revised as follows:

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

3. NFPA 24, 2025 Edition, Standard for the Installation of Private Fire Service Mains and Their Appurtenances is hereby amended as follows:

   a. Section 6.2.8.1 is hereby added as follows:

      6.2.8.1 All indicating valves controlling fire suppression water supplies shall be painted OSHA red.

      Exceptions:
      (1) Brass or bronze valves on sprinkler risers mounted to the exterior of the building may be left unpainted.
      (2) Where OS&Y valves on the detector check assembly are the only control valves, at least one OS&Y valve shall be painted red.

   b. Section 6.2.9 is hereby revised as follows:

      All connections to private fire service mains for fire protection systems shall be arranged in accordance with one of the following so that they can be isolated:

      (1) A post indicator valve installed not less than 40 ft (12 m) from the building
         (a) For buildings less than 40 ft (12 m) in height, a post indicator valve shall be permitted to be installed closer than 40 ft (12 m) but at least as far from the building as the height of the wall facing the post indicator valve.
         (b) Post indicating valves shall be allowed to be closer than 40 ft (12 m) to the building when a property line or other physical barriers make it impossible to have a post indicating valve 40 ft (12m) away.

(c) Post indicating valves shall be allowed to be closer than 40 ft (12 m) to the building when building driveway or fire access roadways or other building traffic make it impractical to be 40 ft (12 m).

(2) A wall post indicator valve on risers located within the building, either a nonrising stem gate valve with a wall post indicator or a listed butterfly valve with an indicating handle extending out through the building wall.

(3) A backflow preventer with at least one indicating valve not less than 40 ft (12 m) from the building

(a) For buildings less than 40 ft (12 m) in height, a backflow preventer with at least one indicating valve shall be permitted to be installed closer than 40 ft (12 m) but at least as far from the building as the height of the wall facing the backflow preventer.

(b) Backflow preventer valves shall be allowed to be closer than 40 ft (12 m) to the building when a property line or other physical barriers make it impossible to have a backflow preventer valve 40 ft (12 m) away.

(c) Backflow preventer valves shall be allowed to be closer than 40 ft (12 m) to the building when building driveways or fire access roadways or other building traffic make it impractical to be 40 ft (12 m).

(4) Indicating control valves installed in a fire-rated room accessible from the exterior

(5) Indicating control valves in a fire-rated stair enclosure accessible from the exterior as permitted by the AHJ

(6) Any other valve type or location as permitted by the AHJ

c. Section 10.1.5 is hereby added as follows:

10.1.5 All ferrous pipe and joints shall be polyethylene encased per AWWA C150, Method A, B, or C. All fittings shall be protected with a loose 8-mil polyethylene tube or sheet. The ends of the tube or sheet shall extend past the joint by a minimum of 12 inches and be sealed with 2-inch-wide tape approved for underground use. Galvanizing does not meet the requirements of this section.

Exception: 304 or 316 Stainless Steel pipe and fittings

d. Section 10.4.1.1 is hereby revised as follows:

10.4.1.1 All bolted joint accessories shall be cleaned and thoroughly coated with asphalt, bituminous, or other corrosion-retarding material after installation.

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

e. Section 10.4.1.1.1 is hereby added as follows:

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

f. Section 10.4.3.2 is hereby deleted and replaced as follows:

10.4.3.2 Where fire service mains enter the building adjacent to the foundation, the pipe may run under a building to a maximum of 24 inches, as measured from the interior face of the exterior wall to the center of the vertical pipe. The pipe under the building or building foundation shall be 304 or 316 stainless steel and shall not contain mechanical joints or it shall comply with 10.4.3.2.1 through 10.4.3.2.4.

AAA. Appendix A is not adopted.
BBB. Appendix B is adopted in its entirety, as amended by the SFM.
CCC. Appendix BB is adopted in its entirety.
DDD. Appendix C is adopted in its entirety, as amended by the SFM.
EEE. Appendix CC is adopted in its entirety.
FFF. Appendix D is not adopted.
GGG. Appendix E is not adopted.
HHH. Appendix F is not adopted.
III. Appendix G is not adopted.
JJJ. Appendix H is adopted in its entirety.
KKK. Appendix I is not adopted.
LLL. Appendix J is not adopted.
MMM. Appendix K is not adopted.
NNN. Appendix L is not adopted.
OOO. Appendix M is not adopted.
PPP. Appendix N is not adopted.
QQQ. Appendix O is not adopted.
RRR. Appendix P is not adopted.
SSS. Appendix Q is not adopted.

Section 5-9-410. - Reserved.
Section 5-9-411. - Reserved.

Chapter 5 – Uniform Security Code

Sec. 5-9-501. - Purpose.

The purpose of this chapter is to provide minimum standards to safeguard property and public welfare by regulating and controlling the design, construction, quality of materials, use and occupancy, location and maintenance of buildings and structures subject to the provisions of this chapter within the City of Irvine, as specified in Penal Code § 14051 relating to building safety.

Sec. 5-9-502. - Scope.

A. The provisions of this chapter shall apply only to new constructions and to buildings or structures to which additions, alterations, or repairs are made, except as specifically provided by this chapter. When additions, alterations, or repairs made within any 12-month period exceed 50% of the value of the existing building or structure, such building or structure shall be made to conform to the requirements for new buildings and structures. When additions, alterations, and repairs do not exceed 75% or less of the value of an existing building, then only the new construction would have to meet the standards set forth by this chapter.

   Exceptions:
   1. Nonresidential buildings shall comply with Section 5-9-517.L.1-4, regarding address numbers if a building permit is required for an existing structure regardless of the valuation.
   2. Any modifications or replacements made to existing emergency access key vaults, key switches, or radio-controlled entry systems shall comply with Section 5-9-519.

B. Existing multiple dwelling units that are converted to privately owned family units (condominiums) shall comply with the provisions of Section 5-9-516 of this chapter.
C. Any existing structure which converts from its original occupancy group as designated in the California Building Code shall comply with the provisions of this chapter.
D. Any building, as defined in the California Building Code and Title 24, California Code of Regulations requiring special type releasing, latching, or locking devices, other than described herein, shall be exempt from the provisions hereof relating to locking devices of interior and exterior doors.

Sec. 5-9-503. - Glossary.

For the purpose of this chapter, certain terms are defined as follows:

Alley is any roadway not exceeding 25 feet in width which is primarily used for access to the rear or side entrances of abutting property.

Approved means certified in writing as meeting the requirements of this chapter by the Enforcing Authority or its authorized agents, or by other officials designated by law to give approval on a particular matter dealt with by the provisions of this chapter with regard to a given material, mode of construction, piece of equipment or device.

Astragal is a device, either fixed or movable, which eliminates the vertical opening between a pair of doors when in the closed position.

Bolt is a metal bar which, when actuated, is projected (or thrown) either horizontally or vertically into a retaining member, such as a strike plate, to prevent a door or window from moving or opening.

Bolt projection or *bolt thrown* is the distance from the edge of the door, at the bolt center line, to the farthest point on the bolt in the projected position.

Burglary resistant glazing means those materials as defined in Underwriters' Laboratories Bulletin 972.

Common area is an area of space, a building or portion of a building, which is legally accessible to the owners or users of a multi-tenant property.

Cylinder means the subassembly of a lock containing the cylinder core, tumbler mechanism and the keyway. A double cylinder lock is one which has a key-actuated cylinder on both the exterior and interior of the door.

Cylinder guard means a tapered or flush metal ring or plate surrounding the otherwise exposed portion of a cylinder lock to resist cutting, drilling, prying, pulling or wrenching with common tools.

Deadbolt is a lock bolt which does not have a spring action. The bolt must be actuated by a key and a knob or thumb-turn, and when projected becomes locked against return by end pressure.

Dead latch or *deadlocking latch bolt* means a spring-actuated latch bolt having a beveled end and incorporating a plunger which, when depressed, automatically locks the projected latch bolt against return by end pressure.

Double cylinder deadbolt means a deadbolt lock which can be activated only by a key on both the interior and exterior.

Dwelling means a building or portion thereof designed exclusively for residential occupancy, including single-family and multi-family dwellings.

Enforcing authority is the agency or person having the responsibility for enforcing the provisions of this chapter.

Flush bolt is a manual, key- or turn-operated metal bolt normally used on inactive door(s), and is attached to the top and bottom of the door and engages in the head and threshold of the frame.

Fully tempered glass means those materials meeting or exceeding Chapter 24 of the California Building Code.

Glazing is all glass, plastics, and fiberglass utilized as an exterior window, vision panel, light, or pane within any type of door.

Hours of darkness shall mean any time from one-half hour before sunset and one-half hour after sunrise and any other time when the illumination level is less than the required lighting for uses as designated in this chapter.

Hours of operation shall mean the time period when any activity requires the presence of employees or workers within or about the affected business.

Jamb means the vertical members of a door frame to which the door is secured.

Jamb/wall is that component of a door assembly to which a door is attached and secured; the wall and jamb used together are considered a unit.

Latch or *latch bolt* is a beveled, spring-actuated bolt, which may or may not have a deadlocking device.

Lock (or lockset) is a keyed device (complete with cylinder, latch or deadbolt mechanism, and trim such as knobs, levers, thumb turns, escutcheons, etc.) for securing a door in a closed position against forced entry. For the purposes of this chapter, a lock does not include the strike plate.

Locking device is a part of a window assembly, which is intended to prevent movement of the moveable sash, which may be the sash lock or sash operator.

Luminaire is a complete lighting device consisting of a light source together with its direct appurtenances, such as globe, reflector refractor, housing and such support as is integral with the housing. The pole, post or bracket is not considered a part of the luminaire.

Minimum maintained foot-candles of light is the amount of light falling on that point of a surface with the least illumination, calculated through application of a maintenance factor, which is a multiplier applied to account for aging of the lamp and for dirt build-up on the luminaire during the period for which a lamp is in place.

Multi-family dwelling means a building or portion thereof designed for occupancy by two or more families living independently of each other, including hotels, motels, apartments, duplexes and townhouses.

Nonresidential means any building, parking lot and associated areas used for any purpose other than a dwelling.

Panic hardware means a latching device on a door assembly for use when emergency egress is required due to fire or other threat to life safety. Devices designed so that they will facilitate the safe egress of people in case of an emergency when a pressure not to exceed 15 pounds is applied to the releasing device in the direction of exit travel. Such releasing devices are bars or panels extending not less than one-half of the width of the door and placed at heights suitable for the service require, not less than 30 nor more than 44 inches above the floor.

Primary locking device means the single locking system on a door or window unit whose primary function is to prevent unauthorized intrusion.

Private or single-family dwelling means a building designed exclusively for occupancy by one family.

Rail means the horizontal member of a window or door. A meeting rail is one which mates with a rail of another sash or a framing member of the door or window frame when the sash is in the closed position.

Recreational space means any public or private park, community common open space or paseo, bike trail, community swimming pools and associated sidewalks and parking lots.

Sash is an assembly of stiles, rails, and sometimes, mullions assembled into a single frame, which supports the glazing material. A fixed sash is one which is not intended to be opened. A moveable sash is intended to be opened.

Sill is the lowest horizontal member of a window frame.

Single cylinder deadbolt means a deadbolt lock which is activated from the outside by a key and from the inside by a knob, thumb-turn, lever, or similar mechanism.

Solid core door means a door composed of solid wood or composed of compressed wood equal in strength to solid wood construction.

Stile is a vertical framing member of a window or door.

Strike is a metal plate attached to or mortised into a door or door jamb to receive and to hold a projected latch bolt and deadbolt in order to secure the door to the jamb.

Swinging door means a door hinged at the stile or at the head and threshold.

Underwriters' Laboratories listed means tested and listed by Underwriters' Laboratory, Inc.

Vandal resistant light fixture has a lens constructed of materials meeting or exceeding U.L. Bulletin 972 (Burglary Resistant Glazing) and a housing meeting or exceeding U.L. Bulletin 1572 (Wet Locations).

Window assembly is a unit which includes a window and the anchorage between the window and the wall.

Window frame is the part of a window which surrounds and supports the sashes and is attached to the surrounding wall. The members include side jambs (vertical), head jamb (upper, horizontal), sill and mullions.

Sec. 5-9-504. - Enforcement provisions.

Enforcement of this chapter shall be the responsibility of the City Building Safety Division and the Irvine Police Department. All building officials and administrative authority determinations required by this chapter shall be made jointly by the responsible representatives of each function charged with administration of this chapter or individually as charged.

Sec. 5-9-505. - Right of entry.

A. Whenever necessary to make an inspection to enforce any of the provisions of this chapter, or whenever the building official has reasonable cause to believe that there exists in any building or upon any premises any condition or code violation which makes such building or premises unsafe, dangerous or hazardous, the building official may enter such building or premises at all reasonable times to inspect the same or to perform any duty imposed upon the Chief Building Official by this chapter, provided that if such building or premises be occupied, he shall first present proper credentials and request entry; and if such building or premises be unoccupied, he shall first make a reasonable effort to locate the owner or other persons having charge or control of the building or premises and request entry. If such entry is refused, the building official shall have recourse to every remedy provided by law to secure entry.
B. When the building official shall have first obtained a proper inspection warrant or other remedy provided by law to secure entry, no owner or occupant or any other persons having charge, care of control of any building or premises shall fail or neglect, after proper request is made as herein provided, to promptly permit entry therein by the building official for the purpose of inspection and examination pursuant to this chapter.

Sec. 5-9-506. - Reserved.

Sec. 5-9-507. - Violations and penalties.

It shall be unlawful for any person, firm or corporation to erect, construct, enlarge, alter, move, improve, convert, or demolish, equip, use, occupy or maintain any building or structure in the City of Irvine or cause same to be done, contrary to or in violation of any of the provisions of this chapter.

Sec. 5-9-508. – Waiver of requirements.

In order to prevent or lessen the unnecessary hardship or practical difficulties in exceptional cases where it is difficult or impossible to comply with the strict letter of this chapter, the owner or his/her designated agent shall have the option to apply for an exemption from any provision of this chapter to the designated representative of the Public Safety Department and the City Chief Building Official. The reviewing authority shall exercise its powers on these matters in such a way that the public welfare is secured, and substantial justice done most nearly in accord with the intent and purpose of this chapter. An approval of a waiver must be made in writing.

Sec. 5-9-509. - Life safety factors.

No portion of this chapter shall supersede any local, State, or federal law, regulation, or codes dealing with life safety factors. When local, State, and federal regulations or codes can be satisfied without a conflict, then each regulation or code must be satisfied. If a conflict between regulations or codes cannot be avoided, the most stringent regulation shall apply.

Sec. 5-9-510. - Alternate materials and methods of construction.

A. The provisions of this chapter are not intended to prevent the use of any material or method of construction not specifically prescribed by this chapter, provided any such alternate has been approved by the Enforcing Authority, nor is it the intention of this chapter to exclude any sound method of structural design or analysis not specifically provided for in this chapter. Materials, methods of construction, or structural design limitations provided for in this chapter are to be unless an exception is granted by the Enforcing Authority.
B. The Enforcing Authority may approve any such alternate provided they find the proposed design to be satisfactory and the material and method of work is for the purpose intended, at least equivalent to that prescribed in this chapter in quality, strength, effectiveness, burglary resistance, durability and safety.

Sec. 5-9-511. - Keying requirements.

Upon occupancy by the owner or proprietor, each single unit in a tract or commercial development, constructed under the same general plan, shall have locks

using combinations which are interchange free from locks used in all other separate dwellings, proprietorships or similar distinct occupancies.

Sec. 5-9-512. - Reserved.

Sec. 5-9-513. - Frames; jambs; strikes; hinges.

Installation and construction of frames, jambs, strikes and hinges for exterior swinging doors and door leading from garage into dwelling unit shall be as follows:

A. In wood framing, horizontal blocking shall be placed between studs at door lock height for three stud spaces each side of the door openings. Trimmers shall be full length from the header to the floor with solid backing against sole plates.
B. Door stops on wooden jambs for in-swinging doors shall be of one-piece construction with the jamb. Jambs for all doors shall be constructed or protected so as to prevent violation of the strike.
C. The strike plate for deadbolts on all wood framed doors shall be constructed of minimum 16 U.S. gauge steel, bronze, or brass, and secured to the jamb by a minimum of two three-inch-long screws, which must penetrate at least two inches into solid backing beyond the surface to which the strike is attached.
D. Hinges for out-swinging doors shall be equipped with nonremovable hinge pins or a mechanical interlock to preclude removal of the door from the exterior by removing the hinge pins.
E. When pairs of doors are utilized in residential structures, a one-piece assembly attached to the full-length edge of the inactive door leaf, incorporating an astragal and flush-bolts for the header and threshold, will be accepted as a strike plate, provided the assembly is constructed of aluminum or steel a minimum of one-eighth inch in thickness.
F. All exterior doors equipped with lever-handled locking devices which operate the deadbolt shall have thresholds designed and installed so as to prevent the passing of rigid materials between the door and threshold to the interior.

Sec. 5-9-514. - Windows; sliding glass doors.

The following requirements must be met for windows and sliding glass doors:

A. Except as otherwise specified in this chapter, all openable exterior windows and sliding glass doors shall comply with the tests as set forth in Section 5-9-528, "Tests."
B. Louvered windows shall not be utilized if any portion of it is within eight feet vertically or 6 feet horizontally from any exterior accessible surface or any adjoining roof, balcony, landing, stair tread, platform or similar structure.

Sec. 5-9-515. - Garage-type doors; rolling overhead, solid overhead, swing, sliding or accordion.

The above described doors shall conform to the following standards:

A. Wood doors shall have panels a minimum of 5/16-inch in thickness with the locking hardware being attached to the support framing.
B. Aluminum doors shall be a minimum thickness of 0.0215-inch and riveted together a minimum of 18 inches on center along the outside seams. There shall be a full width horizontal beam attached to the main door structure which shall meet the pilot, or pedestrian access, door framing within 3 inches of the strike area of the pilot or pedestrian access door.
C. Fiberglass doors shall have panels a minimum density of 6 ounces per square foot from the bottom of the door to a height of 7 feet. Panels above 7 feet and panels in residential structures shall have a density not less than five ounces per square foot.
D. Doors utilizing a cylinder lock shall have a minimum five-pin tumbler operation with the locking bar or bolt extending into the receiving guide a minimum of one inch.
E. Doors that exceed 16 feet in width shall have two lock receiving points; or, if the door does not exceed 19 feet, a single bolt may be used if placed in the center of the door with the locking point located either at the floor or door frame header; or torsion spring counterbalance-type hardware may be used.
F. Except in a residential building, doors secured by electrical operation shall have a keyed-switch to open the door when in a closed position, or by a signal locking device.
G. Doors with slide bolt assemblies shall have frames a minimum of 0.12-inch in thickness, with a minimum bolt diameter of 1/2-inch and protrude at least one and one-half inches into the receiving guide. A bolt diameter of 3/8-inch may be used in a residential building. The slide bolt shall be attached to the door with non-removable bolts from the outside. Rivets shall not be used to attach slide bolt assemblies.

Sec. 5-9-516. - Special residential building provisions.

The provisions of this section shall apply only to single- and multi-family dwelling units as well as “Residential, accessory dwelling unit” and “Residential, junior accessory dwelling unit,” as defined in the Zoning Ordinance.

A. Except for vehicular access doors, all exterior swinging doors of any residential building and garages, including the door leading from the garage area into the dwelling unit, and interior entrances to accessory dwelling units, shall be equipped as follows:
    1. All wood doors shall be of solid core construction with a minimum thickness of 1 3/4 inches, or with panels not less than 9/16-inch thick.
    2. A single or double door shall be equipped with a single cylinder deadbolt lock. The bolt shall have a minimum projection of one inch and be

constructed so as to repel cutting tool attack. The deadbolt shall have an embedment of at least 3/4-inch into the strike receiving the projected bolt. The cylinder shall have a cylinder guard, a minimum of five-pin tumblers, and shall be connected to the inner portion of the lock by connecting screws of at least 1/4-inch in diameter.

3. The inactive leaf of double door(s) shall be equipped with metal flush bolts having a minimum embedment of 5/8-inch into the head and threshold of the door frame.
4. Glazing in exterior doors, or within 40 inches of any locking mechanism, shall be of fully tempered glass or rated burglary resistant glazing.
5. Except where clear vision panels are installed, all front exterior doors shall be equipped with a wide-angle (minimum 180 degrees) door viewer.
6. Dutch-type doors shall have a deadbolt on the upper and lower half, both engaging the door frame.

B. Single-family residential buildings shall display a street address number conforming to the following specifications:
    1. Numerals shall be located where they are clearly visible from the street on which they are addressed. They shall be of a color contrasting to the background to which they are affixed. Method of attachment shall not include the use of two-sided tape or any material not resistant to weather conditions.
    2. Numerals shall be no less than four inches in height, and no more than 12 inches in height, and illuminated during the hours of darkness. The numerals and light source shall be contained within a single, weather-resistant fixture. The light source shall be provided with an uninterruptible A.C. power source or controlled only by a photoelectric device. Battery operated units are prohibited. Nothing in this section shall preclude the requirement for circuit protection devices where applicable.
    3. Buildings farther than 75 feet from the center line of the addressed street, or where at least two homes are accessed off the same driveway or common area walkway, shall, in addition to the illuminated address fixture, provide a wayfinding sign designed as follows:
        a. A sign shall be placed, when determined by the City to be possible, on the right side of the driveway or common area roadway or pedestrian entrance, at a height not less than four feet for driveways and two feet for walkways. Landscaping or by cars parked on the street shall not obstruct such additional addressing; or,
        b. A pole sign, the same height as a standard City Street sign, placed at the entrance to the driveway servicing the homes.
        c. Additional signs shall be installed at all decision-making locations along the driveways and walkways.
        d. Signs shall have minimum three-inch-high numerals and letters, and include the address numbers of each home, or the range of numbers may be used when there are multiple buildings instead of listing

individual address numbers. Signs shall contain directional arrows, at least two inches in length/height.

e. Range of addresses shall note if all numbers are even or odd based upon existing or potential address sequencing conflicts on the opposite side of the addressed street, with the word "even" or "odd" in minimum 3-inch-high letters.

4. Numerals shall be in a Sans Serif font with a stroke weight of medium to bold, or an approved equivalent font which is clearly legible.
5. Any building which affords vehicular access to the rear through a public or private alley shall display, in a clearly visible location, an address number that is a minimum of four inches in height.
6. Residential accessory dwelling units (ADU) and junior accessory dwelling units (JADU) shall display a street address number, and unit number (when applicable) conforming to the following:
    a. A self-illuminated primary address sign, including all addresses on the property, shall be provided which is clearly visible from the addressed street and contained within a single, weather-resistant fixture. The light source shall be an uninterruptible A.C. power source or controlled only by a photoelectric device. Battery operated units are prohibited. The address shall be illuminated during the hours of darkness.
    b. Primary sign copy shall use numerals and letters no less than four inches in height and no more than 12 inches in height and contain street address number, and unit number (when applicable) and conform to the following:
        (1) Top row for primary dwelling unit: address number and unit number (when applicable).
        (2) Second row for an exterior accessed ADU or JADU: address number and unit number (when applicable) and general location of ADU or JADU in relationship to primary building, using a highly visible directional arrow, at least four inches length, pointing to the path of travel to the ADU or JADU.
        (3) Third row for exterior accessed units or interior accessed units with address number and unit number and the words “inside the home” (when applicable).
        (4) If using a unit number, it shall be preceded by the word “unit”.
        (5) Additional information may be required depending upon building configuration and orientation to the addressed street.
        (6) Numbers/letters and shall be in a Sans Serif font with a stroke weight of medium to bold, or an approved equivalent font which is clearly legible.
        (7) Address sign shall be in place after issuance of a building permit and prior to construction if replacing an existing address sign.
        (8) Mounted at a height between five to eight feet above ground level.

7. There shall be positioned, at each entrance of a tract of 20 or more residences constructed on private streets, but using a single public street name and address, an illuminated diagrammatic representation of the complex which depicts the location of the viewer and the unit designations within the complex. It shall be lighted during the hours of darkness utilizing a light source which is constructed of weather and vandal resistant materials and provided with an uninterrupted power source or controlled by a photoelectric device. Nothing in this section shall preclude the requirement for circuit protection devices where applicable.

C. Multi-family buildings and detached condos shall display a street address number conforming to the following specifications. Dual signage may be required to meet accessibility requirements of the California Building Code including but not limited to mounting height, size, font, Braille, and tactile standards:
    1. Each individual unit within the complex shall display a prominent identification number at the main dwelling entry door, but not on the entry door, of a contrasting color to the background to which it is affixed and clearly visible to approaching vehicles and/or pedestrians. Size and design shall conform to the following:
        a. Minimum four inches in height; or
        b. Minimum two inches in height if the entry door is located within a fully enclosed corridor; or
        c. Minimum two inches in height if, from the interior of the building common space area, the sight line to the entry door from any approach does not exceed 50 feet; and
        d. Numerals shall be in a Sans Serif font with a stroke weight of regular to medium, or an approved equivalent font which is clearly legible.
    2. Numerals shall be located within one foot of the door frame and illuminated during the hours of darkness. The numerals and light source shall be contained with a single, weather-resistant fixture. The light source shall be provided with an uninterruptible A.C. power source or controlled only by a photoelectric device. Battery operated units are prohibited. Nothing in this section shall preclude the requirement for circuit protection devices where applicable. An illuminated fixture is not required when the City determines in writing that the address number can adequately be lighted by area lighting as required in section 5-9-516E. regarding walkways and doors if the fixture is at least seven feet above the walking surface.
    3. For buildings containing ten or more units, each side which affords vehicle and/or pedestrian access, shall provide directional signage as follows:
        a. Signs shall be mounted on the building with the primary address number or range of primary address numbers within the building, and range of unit numbers within the building where a multi-building complex has one primary address.
        b. If the building has vehicle or pedestrian access from an adjacent street not associated with the building addressing, then in addition to

the address numbers, the addressed street name must also be displayed.

c. Numerals and lettering shall be a minimum of eight inches in height. The font used shall be Sans Serif with a stroke weight of medium to bold, or an approved equivalent font which is clearly legible. Such numerals and lettering shall be of contrasting color to the background to which they are attached and mounted not less than ten feet nor more than 20 feet from ground level.

d. Addressing shall be illuminated with a minimum maintained two footcandles of light during the hours of darkness with an uninterruptible A.C. power source or controlled only by a photoelectric device, which may be the common area site lighting.

e. Building landscaping shall not obstruct visibility to the building numerals.

4. Multi-family complexes and detached condos, where all unit address numbers are not visible from the addressed public or private street, shall provide vehicle directional signage as follows:

   a. Vehicular signage shall be installed from the point of entry onto the property to each building parking area and/or building entrance and at all decision-making locations along the driveways and walkways. Sign copy shall be at least two feet from ground level. Landscaping at full maturity or by cars parked on the street shall not obstruct such additional addressing.

   b. Signs shall display building addresses or unit number range using numerals at least four inches in height. Range of addresses shall note if all numbers are even or odd based upon existing or potential address sequencing conflicts on the opposite side of the addressed street, with the word "even" or "odd" in minimum four-inch-high letters.

   c. Signs shall contain directional arrows, at least four inches in length/height, and street name in minimum 3-inch-high letters, if the complex has more than one addressed street.

   d. Monument signs may be used at vehicle entrances from a street to complex with sign copy no less than two feet from ground level and not obstructed by landscaping or by parked cars. Numerals shall be at least four inches in height using a Sans Serif font with a stroke weight of medium to bold, or an approved equivalent font which is clearly legible.

5. There shall be positioned, at each vehicle entrance of a multi-family dwelling complex with more than two buildings, an illuminated diagrammatic representation of the complex, which depicts the location of the viewer and the unit designations within the complex. The diagram shall be of a size clearly readable from a distance of at least ten feet. It shall be lighted with a minimum maintained 2.0 foot-candles of light on the surface of the sign during the hours of darkness, utilizing a light source, constructed of weather- and vandal-resistant materials, and provided with an

uninterruptible A.C. power source or controlled by a photoelectric device. Battery operated units are prohibited. Nothing in this section shall preclude the requirement for circuit protection devices where applicable.

6. There shall be positioned, at each common area pedestrian entrance, for the public and tenants, of a multi-family dwelling complex having buildings that are at least four stories in height, an illuminated diagrammatic representation of the complex, which depicts the location of the viewer and the unit designations within the complex. The diagram shall be of a size clearly readable from a distance of five feet. It shall be lighted with a minimum maintained 2.0 foot-candles of light on the surface of the sign during the hours of darkness, utilizing a light source, constructed of weather- and vandal-resistant materials, and provided with an uninterruptible A.C. power source or controlled by a photoelectric device. Battery operated units are prohibited. Nothing in this section shall preclude the requirement for circuit protection devices where applicable.
7. Pedestrian directional signage shall be provided for multifamily complexes and detached condos to guide persons to dwelling units and amenities (pool, recreation areas, active courtyards, offices) within and around buildings, and be posted at all decision-making locations, including: entrances, elevators, stair landings, and walkway intersections. Signage shall include the street name if more than one street name applies to the complex and be so positioned such that text and numerals are mounted not less than two feet in height from the ground/floor level, clearly illuminated by dedicated or common area lighting, and not obstructed by landscaping at full maturity. Numerals, lettering, and arrows shall be at least two inches in height using a Sans Serif font with a stroke weight of medium to bold, or an approved equivalent font which is clearly legible.
8. A Wayfinding Plan shall be developed, and approved by the City, indicating the following:
    a. Location and wording of directional signage for vehicles and pedestrians;
    b. Location of building address numbers;
    c. Landscaping details for areas near any signage or address numbers, including elevation showing trees near exterior address numbers;
    d. Unit address numbers on each floor.
    e. The plan shall include design drawings or exhibits that clearly illustrate the intent of the Wayfinding Plan.
9. In multi-family complexes, garages or carports not directly attached to the dwelling unit or placed next to the dwelling unit and discernible as being associated with one addressed dwelling unit shall not use corresponding dwelling unit addresses to identify the garage or carport. Where garages are attached and the dwelling unit number is not adjacent to the garage door, an address number shall be displayed, in a clearly visible location, using an address number a minimum of four inches in height.

10. Exterior address identification numbers and/or letters shall not be affixed to a surface using two-sided tape or any material not resistant to weather conditions.
11. An 8.5-inch by 11-inch site plan(s) of the complex shall be provided to the Police and Fire Authority. It shall contain all streets, sidewalks, buildings, including identification numbers and/or descriptions, emergency services access key vaults or key override switches, radio-controlled entry system access points, and fire hydrants.
12. Residential parking structures shall be provided with rooftop addressing to meet the requirements as specified in Section L.6 of 5-9-517.

D. Single-family dwelling units, garages, motor courts, and tracts of homes shall conform to the following lighting standards:
    1. All garage doors shall have a light fixture that is capable of illuminating the door. Garage doors accessed from alleys are to have vandal resistant light fixtures.
    2. Private streets, drive aisles, alleys and Fire Department required roadways designed for use only in emergency situations shall be illuminated using the same standards as established for public thoroughfares.
    3. Off street parking spaces, or parking spaces not within the roadway, or motor courts serving at least three homes, shall be illuminated with a minimum maintained 0.50 foot-candle of light on the ground level during the hours of darkness.
    4. Model home temporary parking lots shall be illuminated with a minimum maintained 0.50 foot-candle of light on the ground surface during the hours of operation and one hour thereafter.
    5. Flag lots with a driveway serving at least two homes, only on one side of the driveway, shall be illuminated as follows:
        a. Bollard lights at least 36 inches in height or pole lights with shields, if necessary to block light into adjacent homes, and be illuminated with a minimum maintained 0.25 foot-candle of light on the ground level during the hours of darkness; or
        b. A garage door light fixture, with an LED light emitting a minimum 1,200 lumens of light and controlled by a photocell or astronomical clock.
    6. Common area sidewalks, not directly adjacent to roadways, shall be illuminated with a minimum maintained 0.25 foot-candle of light on the ground level during the hours of darkness.
    7. Except as otherwise required, accessible luminaires utilized to meet the requirements of this section shall have fully enclosed vandal resistant light fixtures and be not less than 3 feet in height from the walking surface when used to illuminate walkways and a minimum of eight feet in height above the driving surface when illuminating surfaces associated with vehicles. Light fixtures shall be deemed accessible if mounted within 15 feet vertically or 6 feet horizontally from any accessible surface or any adjoining roof, balcony, landing, stair tread, platform or similar structure.

8. The light source utilized to comply with this section shall have a rated average bulb life of not less than 20,000 hours, not battery operated, and controlled by a photocell device or a time clock with an astronomic feature.
9. For developments that include common areas such as motor courts, internal walkways or similar spaces, a site plan shall be provided showing buildings and common areas required to be illuminated including tree landscaping, tree legend, fixture schedule, mounting height, lighting ratio and a point-by-point photometric calculation of the required light levels. Foot-candles shall be measured at grade on a horizontal plane and conform to a uniformity ratio of six to one (6:1 maximum/minimum). Landscaping shall not be planted so as to obscure required light levels with light fixtures exceeding eight feet in height installed at least two feet from a tree's canopy at 70% maturity.

E. Multi-family buildings, carports, parking areas, driveways, and walking surfaces shall conform to the following lighting standards:
    1. All vehicular drive surfaces, open parking areas and carports shall be illuminated with a minimum maintained one foot-candle of light at ground level during the hours of darkness.

        Exceptions:
        1. A residential drive aisle may be illuminated with a minimum maintained 0.50 foot-candle of light on the ground level during the hours of darkness, if it is no wider than 30 feet, has buildings opposing each other on each side of the aisle and pedestrian circulation routes are not part of this aisle.
        2. Model home temporary parking lots may be illuminated with a minimum maintained 0.50 foot-candle of light on the ground surface during the hours of operation and one hour thereafter.

    2. All exterior common area pedestrian walkways and recreation areas shall be illuminated with a minimum maintained 0.25 foot-candle of light at ground level during the hours of darkness.
    3. Open stairways and enclosed common area corridors shall be illuminated with a minimum maintained two foot-candles of light on all landings and stair treads during the hours of darkness. Enclosed stairways shall be illuminated at all times with a minimum maintained one foot-candle of light on all landings and stair treads.
    4. Cluster mailboxes, trash enclosures/areas, vending machines, and public phones located on the exterior shall be illuminated with a minimum maintained one foot-candle of light, measured within a five-foot radius at ground level, during the hours of darkness.
    5. Recessed areas of building or fences, which have a minimum depth of two feet, a minimum height of five feet, and do not exceed 6 feet in width and are capable of human concealment, shall be illuminated with a minimum maintained 0.25 foot-candle of light at ground level during the hours of

darkness. This requirement applies to defined recessed areas which are within 6 feet of the edge of designated walking surface with an unobstructed pathway to it, not hindered by walls or hedge row landscaping a minimum of two feet in height.

6. Accessible luminaires utilized to meet the requirements of this section shall have fully enclosed vandal resistant light fixtures and be not less than 3 feet in height from the walking surface when used to illuminate walkways and a minimum of 78 inches in height above the driving surface when illuminating surfaces associated with vehicles. Light fixtures shall be deemed accessible if mounted within 15 feet vertically or 6 feet horizontally from any accessible surface or any adjoining roof, balcony, landing, stair tread, platform or similar structure.
7. The light source utilized to comply with this section shall have a rated average bulb life of not less than 20,000 hours, not battery operated, and controlled by a photocell device or a time clock with an astronomic feature.
8. Light fixtures for open parking lots may utilize motion sensing occupancy devices to raise and lower the light levels based upon the presence of vehicles or people. The light level shall not be less than a minimum maintained 0.25 foot-candle of light at ground level when not occupied. The motion sensing device shall be adjusted to sense and activate a light when a vehicle or person is within 24 feet of the fixture. A site plan shall be provided, and approved by the City, showing buildings, parking areas, walkways, detailed landscaping with tree legend (if pole lights are used) and shrub legend (if bollards are used), fixture schedule, mounting height, lighting ratio and a point-by-point photometric calculation of the required light levels.
9. If a parking lot is equipped with an occupancy sensor, then a point-by-point photometric calculation is required to show it meets the required minimum level of light. Foot-candles shall be measured at grade on a horizontal plane and conform to a uniformity ratio of six to one (6:1) average/minimum. Landscaping shall not be planted so as to obscure required light levels with light fixtures exceeding eight feet in height installed at least two feet from a tree's canopy at 70% maturity.
10. Private streets, drive aisles, alleys, and Fire Department required roadways designed for use only in emergency situations shall be illuminated using the same standards as established for public thoroughfares.

F. Common-area laundry rooms in multi-family complexes shall be designed and protected as follows:
    1. Entry doors shall have:
        a. A minimum 600 square-inch clear vision panel, in the upper half of the door.
        b. Automatic, hydraulic door closures.
        c. Self-locking door locks equipped with a dead-locking latch, allowing exiting by a single motion and openable from the inside without the use of a key or any special knowledge or effort.

d. Nonremovable hinge pins for out-swinging doors to preclude removal of the door from the exterior by removing the hinge pins.
e. A latch protector consisting of minimum 0.125-inch thick steel attached to the door's exterior with non-removable bolts from the exterior. It shall be two inches wide and extend a minimum of five inches above and below the strike opening and extend a minimum of one inch beyond the edge of the door. It shall have a metal anti-spread pin a minimum of 1/2-inch in length.

2. The laundry room shall be illuminated at all times with a minimum maintained 5 foot-candles of light at floor level, using a non-interruptible power source. There shall be no light switches inside the room that control light fixtures used to meet the lighting requirement.
3. Any portion of an openable window which is within eight feet vertically or 6 feet horizontally from any accessible surface or any adjoining roof, balcony, landing, stair tread, platform, or similar surface, or any climbable pole or tree, or any surface providing a foothold, shall be secured as follows:
    a. Windows shall not provide an opening greater than 96 square inches; or
    b. Transom windows opening at the top and hinged at the bottom may be utilized provided the bottom portion is not less than 6 feet from an exterior accessible surface.
4. The entire laundry room shall be visible from the exterior along common area walking or driving surfaces. Perimeter windows and interior mirrors may be utilized to meet this requirement.
5. Laundry rooms are to be located in high activity areas with natural surveillance opportunities, and not in remote or isolated locations.
6. The laundry room shall have a camera surveillance system complying with the following standards:
    a. High-Definition color cameras shall be installed to view the entire room and shall clearly capture the entire person and a recognizable face image.
    b. Camera images shall be digitally stored for at least 30 days.
    c. A camera surveillance plan noting the type and mounting height of cameras, demonstrating compliance with this section, shall be developed as part of the construction plans.

G. Mail rooms and exterior mailbox areas of multi-family complexes shall be designed and secured as follows:
    1. Mailboxes not within a room are to be located in highly visible areas adjacent to common area activity amenities and not directly accessed from inside parking structures. The front of these boxes are to be illuminated, within a ten-foot radius, with a minimum maintained five foot-candles of light on the ground at all times,
    2. Mail rooms are to have glass doors and/or windows to provide visibility into them from the surrounding area. The room is to be illuminated with a minimum maintained five foot-candles of light on the floor at all times. The

room shall have a camera surveillance system complying with the following standards:

a. High-Definition color cameras shall be installed to view the entire room and shall clearly capture the entire person and a recognizable face image.
b. Camera images shall be digitally stored for at least 30 days.
c. A camera surveillance plan noting the type and mounting height of cameras, demonstrating compliance with this section, shall be developed as part of the construction plans.

H. Except as part of a required egress system, gates to side or backyards are to be equipped with a latch capable of being locked with either a padlock or other mechanical locking device which is accessible from outside the gate.

I. Multi-family garages and any shared residential parking facility with storage units/cabinets shall be protected as follows:

1. Storage rooms shall comply with Section 5-9-517A if standard swinging doors are utilized.

Exception: Hollow steel doors may be a minimum 18 U.S. gauge.

2. Storage units utilizing storage cabinets installed above grade shall utilize non-removable door hinges from the exterior and a locking device which protects a padlock from being cut.
3. Garages and carports with three walls and a ceiling shall have garage doors and floor to ceiling walls separating assigned parking.

J. Public streets which connect to and change ownership to private streets while still maintaining the same character and width of the public street, making it indistinguishable from a public street, shall have a sign posted at the location where ownership changes stating "private street". The sign is to be at least two feet in height with sign copy not less than two feet from ground level using at least 3-inch lettering. Install in location that is highly visible and not blocked by landscaping.

Sec. 5-9-517. - Special nonresidential building provisions.

The provisions of this section shall apply to nonresidential units and structures.

A. Swinging exterior glass doors, wood or metal doors with glass panels, solid wood or metal doors shall be constructed or protected as follows:

1. Wood doors shall be of solid core construction with a minimum thickness of 1 3/4 inches. Wood panel doors with panels less than one-inch thick shall be covered on the inside with a minimum 16 U.S. gauge sheet steel or its equivalent, which is to be attached with screws on minimum 6-inch centers. Hollow steel doors shall be of a minimum 16 U.S. gauge and have sufficient reinforcement to maintain the designated thickness of the door when any

locking device is installed; such reinforcement being able to restrict collapsing of the door around any locking device.

2. Except when double cylinder deadbolts are utilized, any glazing utilized within 40 inches of any door locking mechanism shall be constructed or protected as follows:
    a. Fully tempered glass or rated burglary resistant glazing; or
    b. Iron or steel grills of at least 1/8-inch material with a minimum two-inch mesh secured on the inside of the glazing may be utilized; or
    c. The glazing shall be covered with iron bars of at least ½-inch round or one-inch by ¼-inch flat steel material, spaced not more than 5 inches apart, secured on the inside of the glazing.
    d. Items b and c above, shall not interfere with the operation of opening windows if such windows are required to be openable by the California Building Code.
3. Doors without mechanical locks may be secured with a magnetic locking device which shall have a minimum holding force of 1,600 lbs. and a minimum 12-hour backup battery source.

B. All swinging exterior wood and steel doors shall be equipped as follows:
    1. A single or double door shall be equipped with a double or single cylinder deadbolt. The bolt shall have a minimum projection of one inch and be constructed so as to repel a cutting tool attack. The deadbolt shall have an embedment of at least 3/4 inch into the strike receiving the projected bolt. The cylinder shall have a cylinder guard, a minimum of five-pin tumblers, and shall be connected to the inner portion of the lock by connecting screws of at least 1/4 inch in diameter. The provisions of the preceding paragraph do not apply where (1) panic hardware is required, or (2) an equivalent device is approved by the Enforcing Authority.
    2. Double doors shall be equipped as follows:
        a. The inactive leaf of double door(s) shall be equipped with metal flush bolts having a minimum embedment of 5/8 inch into the head and threshold of the doorframe.
        b. Double doors shall have an astragal constructed of steel a minimum of 0.125-inch thick, which will cover the opening between the doors. The astragal shall be a minimum of two inches wide and extend a minimum of one inch beyond the edge of the door to which it is attached. The astragal shall be attached to the outside of the active door by means of welding or with nonremovable bolts spaced apart on not more than 10-inch centers. (The door to which such an astragal is attached must be determined by the fire safety codes adopted by the Enforcing Authority.)

C. Aluminum frame swinging doors shall be equipped as follows:
    1. The jamb on all aluminum frame swinging doors shall be so constructed or protected to withstand 1,600 pounds of pressure in both a vertical distance

of 3 inches and a horizontal distance of one inch each side of the strike, so as to prevent violation of the strike.

2. A single or double door shall be equipped with a double cylinder deadbolt with a bolt projection exceeding one inch or a hook-shaped or expanding deadbolt that engages the strike sufficiently to prevent spreading. The deadbolt lock shall have a minimum of five-pin tumblers and a cylinder guard.

D. Panic hardware, whenever required by the California Building Code or Title 24, California Code of Regulations, shall be installed as follows:
    1. Panic hardware shall contain a minimum of two locking points on each door; or
    2. On single doors, panic hardware may have one locking point, which is not to be located at either the top or bottom rails of the doorframe. The door shall have an astragal constructed of steel 0.125-inch thick, which shall be attached with nonremovable bolts to the outside of the door. The astragal shall extend a minimum of 6 inches vertically above and below the latch of the panic hardware. The astragal shall be a minimum of two inches wide and extend a minimum of one inch beyond the edge of the door to which it is attached.
    3. Double doors containing panic hardware shall have an astragal attached to the doors at their meeting point, which will close the opening between them, but not interfere with the operation of either door.

E. Horizontal sliding doors shall be equipped with a metal guide track at top and bottom, and a cylinder lock and/or padlock with a hardened steel shackle which locks at both heel and toe, and a minimum five-pin tumbler operation with nonremovable key when in an unlocked position. The bottom track shall be so designed that the door cannot be lifted from the track when the door is in a locked position.

F. In office buildings (multiple occupancy), all entrance doors to individual office suites shall meet the construction and locking requirements for exterior doors.

G. Glazing shall be deemed accessible, if any portion of it is within 40 inches of any door locking mechanism, and shall be constructed of either two part laminated glazing with a 0.06-inch inner layer or burglary resistant glazing.

    Exception: Glass doors at least 1/2 inch thick and greater than 2,880 square inches.

H. Roof openings shall be protected as follows if the roof is accessible via an exterior ladder or the roof is less than 20 feet from ground level or if any portion of it is within 12 feet vertically or 6 feet horizontally from any exterior accessible surface or any adjoining roof, balcony, landing, stair tread or similar structure:

1. All skylights on the roof of any building used for business purposes shall be provided with:
    a. Rated burglary-resistant glazing; or
    b. Iron bars of at least one-half inch round or one by 1/4-inch flat steel material, spaced not more than five inches apart, under the skylight and securely fastened; or
    c. A steel grill of at least 1/8-inch material with a maximum two-inch mesh under the skylight and securely fastened.
2. All hatchway openings on the roof of any building or premises used for business purposes shall be secured as follows:
    a. If the hatchway is of wooden material, it shall be covered on the inside with at least 16 U.S. gauge sheet metal, or its equivalent, attached with screws.
    b. The hatchway shall be secured from the inside with a slide bar or slide bolts.
    c. Outside hinges on all hatchway openings shall be provided with nonremovable pins when using pin-type hinges.

I. Exterior mounted ladders are prohibited except:
1. Ladders with a minimum 1/8-inch thick steel plate, securely attached to the ladder edge on each side and extending to within two inches of the wall for a height of 10 feet above ground level. A door or cover shall be securely attached to the front of the ladder and be constructed of a minimum 1/8-inch steel, extending from ground level to at least 10 feet high. The ladder door shall have nonremovable hinge pins and be locked tight against the side wall by a locking mechanism with a minimum five pin tumbler operation, and attached with nonremovable bolts from the exterior; or
2. Ladders beginning a height of 10 feet above ground.

J. There shall be no exterior phone panels.

K. Buildings, open parking lots, walkways, and accesses thereto shall conform to the following light standards:
1. All types of exterior doors shall be illuminated, with an exterior light fixture, during the hours of darkness, with a minimum maintained one foot-candle of light, measured within a five-foot radius on each side of the door at ground level.
2. Recessed areas of buildings or fences, which have a minimum depth of two feet, a minimum height of five feet, and do not exceed 6 feet in width and are capable of human concealment, shall be illuminated with a minimum maintained 0.25 foot-candle of light at ground level during the hours of darkness. This requirement applies to defined recessed areas which are within 6 feet of the edge of a designated walking surface with an unobstructed pathway to it, not hindered by walls or hedge row landscaping a minimum of two feet in height.

3. Stairways shall be illuminated with a minimum maintained two foot-candles of light on all landings and stair treads, during the hours of operation, including one hour thereafter.
4. All interior or exterior corridors, passageways and walkways in any hotel, motel or inn shall be illuminated at all times with a minimum maintained one foot-candle of light on the walking surface.
5. All exterior pedestrian walkways, interior common corridors, and open parking lots shall be illuminated with a minimum maintained one foot-candle of light on the walking, parking or driving surface during the hours of operation and one hour thereafter.
6. The light source utilized to comply with this section shall have a rated average bulb life of not less than 20,000 hours, not battery operated, and controlled by a photocell device or a time clock with an astronomic clock feature.
7. Light fixtures for open parking lots may utilize motion sensing devices to raise and lower the light levels based upon the presence of vehicles or people. The light level shall not be less than a minimum maintained 0.25 foot-candle of light at ground level when not occupied. The motion sensing device shall only be used after business hours and shall be adjusted to sense and activate a light when a vehicle or person is within 24 feet of the fixture. Areas within a 50-foot radius of an elevator lobby/doors and stairways shall not fall below the required minimum maintained 1.0 foot-candle of light.
8. Accessible luminaires utilized to meet the requirements of this section shall have fully enclosed vandal resistant light fixtures and be not less than 3 feet in height from ground level when used to illuminate walkways and a minimum of 8 feet in height from ground level when illuminating surfaces associated with vehicles. Light fixtures shall be deemed accessible if mounted within fifteen feet vertically or 6 feet horizontally from any accessible surface or any adjoining roof, balcony, landing, stair tread, platform or similar structure.
9. A site plan shall be provided, and approved by the City, showing buildings, parking area, walkways, detailed landscaping with tree legend (if pole lights are used) and shrub legend (if bollards are used), fixture schedule, mounting height, lighting ratio and a point-by-point photometric calculation of the required light levels. If a parking lot is equipped with an occupancy sensor, then a point-by-point photometric calculation is required to show it meets the required minimum level of light. Foot-candles shall be measured at grade on a horizontal plane and conform to a uniformity ratio of 6 to one (6:1) average/minimum. Landscaping shall not be planted so as to obscure required light levels with light fixtures exceeding eight feet in height installed at least two feet from a tree's canopy at 70% maturity.
10. Private streets, drive aisles, alleys, and Fire Department required roadways designed for use only in emergency situations shall be illuminated using the same standards as established for public thoroughfares.

L. Addressing for nonresidential buildings shall conform to the following specifications:
    1. Numerals shall be mounted on the wall or window, not less than 8 feet or higher than 30 feet from ground level and face the street on which the building is addressed. If the building does not have vehicle access from the addressed street, then the addressed street name must also be displayed. Numerals are to be clearly visible from this same street and not obscured by building landscaping at full maturity. Addressing shall be of a color contrasting to the background to which they are affixed. Method of attachment shall not include the use of two-sided tape or any material not resistant to weather conditions.
    2. Where distance or intervening obstructions impair visibility from the street, addressing shall be mounted on all buildings so as to be visible from drive aisles and walkways internal to the site, and each such address, or an encompassing range of addresses, shall be displayed on monument signs visible from each site entrance from all approaching directions. In such cases, these signs shall be designed per No. 5 below.
    3. Numerals shall be no less than 6 inches in height, if located less than 100 feet from the center line of the addressed street or 12 inches in height if placed further than 100 feet from the center line of the addressed street. The numerals shall be in a Sans Serif font with a stroke weight of medium to bold, or an approved equivalent font which is clearly legible, and illuminated during the hours of darkness, with a minimum of two foot-candles of light on the numbers, using a light source provided with an uninterruptible A.C. power source or controlled only by a photoelectric device, which may be the common area site lighting.
    4. The rear swinging doors of all buildings shall have address numbers or unit designation not less than six inches in height, using a Sans Serif font with a stroke weight of medium to bold, or an approved equivalent font which is clearly legible, and be of a color contrasting to the background to which they are affixed. Method of attachment shall not include the use of two-sided tape or any material not resistant to weather conditions.

        Exceptions:
            1. Single tenant buildings with a single street address and rear building frontage of 300 feet or less, at least one rear door, nearest to the center, is required to have an address sign.
            2. Single tenant buildings with a rear building frontage greater than 300 feet, but less than 600 feet, at least two rear doors are required to have address signs, located at the first door at each end of the building.
            3. Single tenant buildings with a rear building frontage greater than 600 feet, at least three rear doors are required to have an address sign, located at the first door at each end of the building and at a middle door.

5. For sites having multiple buildings for which addressing mounted on the building is not clearly visible from the street, or for which drive aisles diverge from a site entrance in a manner such that the direct route to each building is not obvious, vehicle directional signs shall be provided. Vehicle direction signage from the point of site entry to each building entrance shall display building addresses or unit number range, and be located at all turning points along the route to a building entrance. Bottom of the address numbers on the sign copy shall be no less than two feet from ground level and not obstructed by landscaping or by parked cars. Numerals shall be at least four inches in height using a Sans Serif font with a stroke weight of medium to bold, or an approved equivalent font which is clearly legible.
6. Buildings with a total square footage of at least 10,000 square feet shall have rooftop numbers placed parallel to the addressed street, screened from public view and only visible from the air. The numerals are to be white, block lettered, constructed of weather resistant material, and placed against a black background. Address numbers are to be a minimum of four feet in height and 18 inches wide. When more than one street address is assigned to a building, the beginning and ending address numbers are to be placed on the rooftop at opposite ends of the building, reflecting the approximate location of these addresses.

   Exceptions:
   1. For buildings having white roofing, black lettering shall be used in lieu of white lettering.
   2. Buildings providing addressing for a helipad as specified in the California Building Code.

7. For sites having more than three separately addressed buildings with a common area sidewalk connecting each building, and the primary building entrances are not visible from the street or parking lot, pedestrian directional signage shall be provided. Signs shall be posted at all decision-making points, including walkway entrances and intersections. Bottom of the address numbers on the sign copy shall be no less than two feet from ground level and not obstructed by landscaping. Numerals, letters and arrows shall be at least 3 inches in height using a Sans Serif font with a stroke weight of medium to bold, or an approved equivalent font which is clearly legible.
8. A Wayfinding Plan shall be developed indicating the following:
   a. Location and wording of directional signage for vehicles and pedestrians;
   b. Location of building address numbers;
   c. Landscaping details for areas near any signage or address numbers, including elevation showing trees near exterior address numbers;
   d. Required lighting level on address numbers.
   e. The plan shall include design drawings or exhibits that clearly illustrate the intent of the Wayfinding Plan.

M. Elevators shall be designed as follows:
    1. Elevator cabs, the interiors of which are not completely visible when the door is open from a point centered on and 36 inches away from the door, shall have shatter resistant mirrors or other equally reflective material so placed as to make visible the entire elevator cab from this point. The elevator cab shall be illuminated at all times with a minimum maintained two foot-candles of light at floor level.
    2. Elevator emergency stop buttons shall be so installed and connected as to activate the elevator alarm when utilized.

Sec. 5-9-518. - Special parking facilities provisions.

A structure, garage or covered parking surface intended primarily for the storage of motor vehicles for any period of time, except for residential carports, shall comply with this section.

A. Remote or detached parking facilities or any other parking surfaces which are constructed as a separate entity shall be assigned a street address number. Addressing for parking structures shall conform to the following specifications:
    1. Numerals shall be mounted on the wall, no higher than 30 feet, and face the street on which the building is addressed. Numerals are to be clearly visible from this same street and not obscured by landscaping. The numerals shall be placed in such a location that it is evident the parking structure has this address or, when not visible from the street, numerals are to be located on a corner of the structure and not over the vehicle entrance. If references to the parking structure servicing a particular building are over the entrance, such references are to include wording clearly identifying parking for a particular building so as not to confuse the structure address with the building address. Numbers and any lettering shall be of a color contrasting to the background to which they are affixed. Method of attachment shall not include the use of two-sided tape or any material not resistant to weather conditions.
    2. Numerals shall be no less than 6 inches in height, using a Sans Serif font with a stroke weight of medium to bold, or approved equivalent font, which is clearly legible, and shall be illuminated during the hours of darkness using a light source provided with an uninterruptible A.C. power source or controlled only by a photoelectric device, which may be the common area site lighting.
    3. Residential parking structures only shall be provided with rooftop addressing to meet the requirements as specified in Section 5-9-517(L)(6). Nonresidential parking structures shall not have rooftop addressing.

B. Restrooms shall not be open to the general public and shall be continuously locked, with access provided only to authorized individuals. They shall be located in an area which is highly visible from the parking attendant kiosk or other area where natural surveillance is afforded.

C. Signs shall be developed in order to facilitate safe and efficient movement within the parking facility and designed as follows:
    1. Signs shall be installed identifying elevators and stairwells with lettering at least ten inches in height, mounted not less than 8' from floor level, and clearly visible within the parking facility.
    2. Parking facilities with at least 300 parking spaces per floor shall provide additional signage as follows:
        a. Floor and section identification signs shall be placed at least every 75 feet and have numerals/letters at least ten inches in height, with section identification at least eight inches in height. The placement, quantity and orientation of these signs should allow vehicle and pedestrian users to maintain an ongoing awareness of their location with the bottom of the sign copy placed at least 6 feet above the parking surface.
        b. Wayfinding signs directing persons to elevators and stairwells are required when the elevator or stairwell is greater than 100 feet away from a parking space. Signs shall be highly visible and placed at least 6 feet above the parking surface. The signs shall have text of at least four inches in height utilizing a Sans Serif font with stroke weight of medium to bold.
        c. Residential parking garages shall have signage mounted above stairway doors/openings and elevator lobbies, containing the range of addresses or unit numbers serviced by that stairway. The signs shall have text of at least four inches in height utilizing a Sans Serif font with stroke weight of medium to bold.
        d. A Wayfinding-Directional signage plan, demonstrating compliance with this section, shall be developed as part of the construction plans.

D. Structures or fencing designed to screen trash enclosures from public view shall be designed with no more than three solid walls and an access gate(s). They shall be designed in such a manner as to allow a maximum of 6 inches clearance between trash bins, walls and gates.

E. Bicycle storage areas shall be designed and protected as follows:
    1. Located in areas highly visible to users of the facility.
    2. Bicycle racks in residential complexes shall be protected by see-through metal fencing which either fully encloses the racks with fencing or have floor to ceiling fencing, and secured either with an access control system locking device or mechanical door lock. Padlocks are prohibited.
    3. The bicycle storage room shall be illuminated with a minimum maintained two foot-candles of light on the floor at all times.
    4. The bicycle storage room shall have a camera surveillance system complying with the following standards:
        a. High-Definition color cameras shall be installed to view the entire room and shall clearly capture the entire person and a recognizable face image.

b. Camera images shall be digitally stored for at least 30 days.
c. A camera surveillance plan noting the type and mounting height of cameras, demonstrating compliance with this section, shall be developed as part of the construction plans.

F. Automated Teller Machines are prohibited from being installed inside a parking structure or garage.

G. Solid perimeter walls shall be either full height floor to ceiling or not exceed 42 inches in height from the parking surface and where applicable comply with Section H. below.

H. The number of pedestrian and vehicular access points shall be minimized. Except at vehicle and primary pedestrian openings, the structure shall be designed, to the satisfaction of the City, to preclude human entry from any exterior accessible surface to a height of eight feet. Chain link fencing shall not be utilized if visible from a public right of way. When required, fire authority openings in the form of swing-out gates shall be provided and secured by a padlock with a minimum 3/8-inch diameter shackle and five-pin tumbler operation.

I. Exterior pedestrian doors which provide access into the parking facility shall be constructed and equipped as follows:
    1. A minimum 18-gauge steel and equipped with automatic hydraulic closure device.
    2. A minimum 100-square-inch vision panel, with the width not less than five inches, to provide visibility into the area being entered. Vision panels shall meet requirements of the California Building Code.
    3. Vision panels shall preclude manipulation of the interior locking device from the exterior.
    4. No openings within 24 inches of the locking device which would allow a piece of metal, 1/16-inch diameter or greater to be inserted and access gained to the interior side of the door.
    5. When panic hardware is required, it shall have a self-locking mechanism and be constructed/equipped as follows:
        a. Panic hardware on pairs of doors shall contain a minimum of two locking points on each door; or
        b. On single doors, panic hardware may have one locking point, which is not located at either the top or bottom of the doorframe. When mortise hardware is utilized, a protective astragal consisting of a minimum 0.125-inch thick steel shall be attached to the exterior of the door and rendered nonremovable from the exterior. It shall be two inches wide and extend a minimum of five inches above and below the strike opening and extend a minimum of one inch beyond the edge of the door; or
        c. Double doors containing panic hardware shall have an astragal attached to the doors at their meeting point, which will close the

opening between them, but not interfere with the operation of either door. Fire rated astragals, meeting specifications of the California Building Code, shall be utilized when required. Astragals are not required when panic hardware is utilized with push pads offset a minimum of 3 inches from the door edges.

6. Emergency exits not intended as a primary entrance shall have no exterior handles, knobs, or levers.
7. Hinges shall be equipped with nonremovable hinge pins or a mechanical interlock to preclude removal of the door from the exterior by removing the hinge pins.

J. Stairways shall be designed as follows:
    1. Interior doors shall have glazing panels a minimum of five inches wide and 20 inches in height and meet requirements of the California Building Code.
    2. Areas beneath stairways at or below ground level shall be fully enclosed or access to them restricted.
    3. Stairways shall be designed to be completely visible from either the interior or exterior or both, unless mandated by the California Building Code to be enclosed.
    4. Fully enclosed interior or exterior stairways with solid walls, when required, shall have shatter resistant mirrors or other equally reflective material at each level and landing and be designed or placed in such a manner as to provide visibility around corners.

K. Elevator cabs and lobbies shall be designed as follows:
    1. Elevators which serve more than two floors, above ground level, with at least one shaft wall exposed to the exterior shall have clear glazing installed in one exterior wall to provide visibility into the elevator cab.
    2. Elevator cabs, the interiors of which are not completely visible when the door is open from a point centered on and 36 inches away from the door, shall have shatter resistant mirrors or other equally reflective material so placed as to make visible the entire elevator cab from this point. The elevator cab shall be illuminated at all times with a minimum maintained two foot-candles of light at floor level.
    3. Elevator emergency stop buttons shall be so installed and connected as to activate the elevator alarm when utilized.
    4. Elevator lobbies, if enclosed, shall be constructed of glazing, the maximum amount allowed by the California Building Code.

L. Lighting of driveways, parking areas, walkways and doors shall conform to the following standards:
    1. All parking, driving, and walking surfaces, except stairways, shall be illuminated at all times with a minimum maintained 1.25 foot-candles of light.

Exceptions:

1. Parking facilities which have physically precluded pedestrian and vehicle access during non-business hours may provide a minimum maintained 0.25 of light on the parking, walking and driving surfaces.
2. Open roof top parking may be illuminated to a minimum maintained one foot-candle of light on the parking and walking surface.

2. Stairways shall be illuminated at all times with a minimum maintained two foot-candles of light on all landings and stair treads.
3. All types of exterior doors shall be illuminated, during the hours of darkness, with a minimum maintained one foot-candle of light, measured within a five-foot radius of each side of the door at ground level.
4. Recessed areas of buildings or fences, which have a minimum depth of two feet, a minimum height of five feet, and do not exceed 6 feet in width and are capable of human concealment, shall be illuminated with a minimum maintained 0.25 foot-candle of light at ground level during the hours of darkness. This requirement applies to defined recessed areas which are within 6 feet of the edge of a designated walking surface with an unobstructed pathway to it, not hindered by walls or hedge row landscaping a minimum of two feet in height.
5. All luminaires utilized to meet the requirements of this section shall have fully enclosed vandal resistant light fixtures, if on the exterior, with no portion of the fixture placed less than eight feet above the walking or driving surface.
6. The light source utilized to comply with this section shall have rated average bulb life of not less than 20,000 hours, not battery operated, and controlled by a photocell device or a time clock with an astronomic feature.
7. Light fixtures may utilize motion sensing devices to raise and lower the light levels based upon the presence of vehicles or people. The light level shall not be less than a minimum maintained 0.5 foot-candle of light at ground level when not occupied. The devices shall be adjusted to sense and activate a light when a vehicle or person is within 24 feet of the fixture. Areas within a 50-foot radius of an elevator lobby/doors and stairways shall not fall below the required minimum maintained 1.25 foot-candles of light.
8. A site plan shall be provided, and approved by the City, showing buildings' parking area, walkways, detailed landscaping, with tree legend (if pole lights are used) and shrub legend (if bollards are used), fixture schedule, mounting height, lighting ratio and a point-by-point photometric calculation of the required light levels. If a parking lot is equipped with an occupancy sensor, then a point-by-point photometric calculation is required to show it meets the required minimum level of light. Foot-candles shall be measured at grade on a horizontal plane and conform to a uniformity ratio of six to one (6:1) average/minimum. Landscaping shall not be planted so as to obscure required light levels with light fixtures exceeding eight feet in height installed at least 2 feet from a tree's canopy at 70% maturity.

M. Landscaping around the perimeter of the structure shall not provide access to any portion of the structure unless the accessible point is protected as described in Subsection H hereinabove.

N. Residential parking structures and garages shall have a camera surveillance system complying with the following standards:
    1. High-Definition color cameras shall be installed at all vehicle and pedestrian entrances, all elevator lobbies, bicycle and motorcycle storage areas and be capable of clearly capturing an entire vehicle including license plate and driver's face. Cameras at pedestrian entrances, elevator lobbies and bicycle storage areas shall clearly capture the entire person and a recognizable face image.
    2. Camera images shall be digitally stored for at least 30 days.
    3. A camera surveillance plan noting the type and mounting height of cameras, demonstrating compliance with this section, shall be developed and approved by the City as part of the construction plans.

Sec. 5-9-519. - Emergency access.

The provisions of this section shall apply to new construction and any modifications or replacements made to existing emergency access key vaults, key switches, or radio-controlled entry systems.

A. Private roads and parking areas or parking facilities, when controlled by unmanned automated parking gates, shall provide for police emergency access, at all individual gates, both ingress and egress, utilizing an approved radio-controlled entry system and approved key switch device to be installed and designed as follows:
    1. The key switch control shall be installed at a height of 42 inches from finished driveway grade and a minimum of 15 feet from the entry/exit gate and be located on the driver's side of the road or driveway. The key switch is to be accessible in such a manner as to not require a person to exit their vehicle to reach it; nor to require any back-up movements in order to enter/exit the gate. The control housing may be mounted on a wall or pillar in a parking structure. The key switch may be installed within a visitor telephone/intercom call box if meeting the above criteria. The key switch control housing shall consist of heavy gauge metal, be vandal- and weather-resistant and be mounted on a substantial structure such as a steel post, concrete, or masonry pedestal.
    2. Key switches shall be secured to the control housing, telephone/intercom call box or parking ticket dispenser utilizing tamper resistant screws.
    3. Except for an open surface parking lot with less than 100 parking spaces, a radio-controlled entry system shall be installed per City specifications.
    4. Vehicle gates shall be designed to open in a power failure.
    5. Vehicle gates shall be illuminated during the hours of darkness, with a minimum maintained one foot-candle of light, measured 25 feet on each

side of the gate at ground level. The light source shall be controlled by a photocell device or a time clock with an astronomic clock feature and capable of operating during a power outage.

B. All lockable pedestrian gates or doors to exterior and interior common area walkways, fire department emergency access pathways, mailrooms, and recreation areas/buildings of residential multifamily complexes or tract of homes shall provide for police emergency access utilizing an approved radio-controlled entry system and approved key switch device or approved key vault which shall be installed as follows:
    1. Pedestrian gates or doors utilizing an electrically automated type lock shall be provided with an approved radio-controlled entry system and a key switch. The key switch shall be affixed with tamper resistant fasteners, mounted next to the access control reader, or installed within a telephone/intercom console, or mounted at a height of four to five feet above the finished grade or floor in a control housing as described in section A.1. above, or in a method approved by the Enforcing Authority. The radio-controlled receiver shall be visible in order to determine, when activated, if the signal was received by illuminating a light. More than one gate or door, which is in close proximity to another, may be operated by a single radio-controlled entry system, if approved by the Police Department.

        Exceptions:
        1. Recreation buildings/rooms are not required to have a radio-controlled entry system.
        2. Interior stairway doors which are not a primary or common method to enter the building and designed as emergency exits, are not required to have a radio-controlled entry system.

    2. Pedestrian gates or exterior doors utilizing mechanical locks shall be provided with a key vault adjacent to each gate or door, securely attaching it to a fence or wall, mounted 5 feet above finished grade and within two feet of the locking device. Mechanical locks using combination locks shall have a keyway and key for the key vault.
    3. Pedestrian gates, not adjacent to vehicle gates and located in perimeter community walls or fencing, and is using an electronically automated type lock, shall utilize a key switch, affixed with tamper resistant fasteners, mounted next to the access control reader; or, if a mechanical lock is used, then a key vault, mounted five feet above finished grade and within two feet of the locking device is required.
    4. Pool gates with electronically automated type lock, shall utilize a key switch, affixed with tamper resistant fasteners, mounted next to the access control reader. If the gate does not automatically unlock when losing power then, it is to also have a mechanical lockset, and key vault, mounted five feet above finished grade and within two feet of the locking device and contain the mechanical key for the gate.

5. Elevators with access control systems shall install a key switch adjacent to the access control reader utilizing tamper-resistant screws.

C. Nonresidential multi-tenant buildings and hotels with a common area entrance shall provide police emergency access utilizing an approved radio-controlled entry system and approved key switch device or approved key vault which shall be installed as follows:
    1. All common area, exterior and interior doors, using an electrically automated type lock shall be provided with a key switch device within the building's exterior telephone/intercom call box, adjacent to an access control reader, or in a control housing as described in section A.1 above, or in a method approved by the Enforcing Authority, and located within close proximity and in a visible area near the door, mounted four to five feet above finished grade or floor. Key switches shall be secured utilizing tamper resistant screws. A radio-controlled entry system is only required at all primary entry doors.
    2. Exterior entry common area doors utilizing mechanical door locks shall be provided with a key vault mounted 5 feet above finished grade and within two feet of the locking device.
    3. Hotels shall have a keyswitch at all building entrances with electrically automated type locks accessible to the hotel guests and mounted adjacent to the access control reader. Doors when equipped with both panic hardware and mechanical locks, shall have a key vault mounted five feet above finished grade and within two feet of the locking device. A radio-controlled entry system is not required.
    4. Elevators with access control systems shall install a key switch adjacent to the access control reader utilizing tamper resistant screws.

D. Emergency vehicle access gates shall be designed so as to provide access to the padlock from either side of the gate. A key vault shall be installed on the interior and exterior side of the gate, mounted five feet above finished grade and within two feet of the locking device. Owner's padlock shall be used to secure the gate.
E. Non-residential businesses or facilities with vehicle gates requiring a key vault or padlock by the Orange County Fire Authority, shall be keyed per Section 5-9-519(G).
F. Lockable doors to the roof of multi-tenant residential and non-residential buildings and hotels shall have a key vault.
G. All key switches, key vaults, and padlocks shall be sub-mastered to an Orange County Fire Authority key for access by the Police Department. The radio-controlled entry system shall be programmed to frequencies approved in writing by the Police Department and the Orange County Fire Authority.
H. Key switches containing a label for operating the switch, key vaults, padlocks, and radio-controlled entry systems shall be installed per manufacturer's instructions and are clearly identifiable to approaching police personnel in a manner as approved by the Police Department.

I. An Emergency Access Plan, approved by the Police Department, shall be required when a radio-controlled entry system, key switch, or key vault is required to be installed. The Plan shall identify the location of each device on a site plan.

Sec. 5-9-520. - Special recreational spaces provisions.

The provisions of this section shall apply to all public and private community buildings, parks, open spaces, trails, community swimming pools, recreation centers, and associated sidewalks and parking lots.

A. Structures shall comply with all provisions of the Uniform Security Code except Section 5-9-517(K), Special nonresidential building provisions, regarding lighting standards.

B. Exterior lighting shall conform to the following standards:
    1. All types of exterior doors shall be illuminated during the hours of darkness with a minimum maintained one foot-candle of light at ground level, measured within a five-foot radius from the center of the door.
    2. Recessed areas of buildings or fences, which have a minimum depth of 2 feet, a minimum height of 5 feet, and do not exceed 6 feet in width and are capable of human concealment, shall be illuminated with a minimum maintained 0.25-foot candle of light at ground level during the hours of darkness. This requirement applies to defined recessed areas which are within 6 feet of the edge of a designated walking surface with an unobstructed pathway to it, not hindered by walls or hedge row landscaping a minimum of 2 feet in height.
    3. Stairways shall be illuminated with a minimum two foot-candles of light on all landings and stair treads, during the hours of operation, including one hour thereafter.
    4. Parking lots and walkways accessing buildings and parking areas shall be illuminated with a minimum maintained one foot-candle of light on the driving or walking surface during the hours of operation and one hour thereafter.
    5. Bike trails not incorporated in the roadway shall be illuminated with a minimum maintained 0.25 foot-candle of light at ground level during the hours of darkness, except that any bike trail or recreational facility within the designated Natural Community Conservation Plan/Habitat Conservation Plan, Central Coastal Subregion reserve area shall be exempt from the requirements of this subsection.
    6. Paved walkways in open space areas, not directly serving buildings or parking areas, shall be illuminated with a minimum maintained 0.25 foot-candle of light on the walking surface during the hours of operation.
    7. Swimming pool decks and other hard surface recreation activity areas shall be illuminated with a minimum maintained 0.50 foot-candle of light on the walking surface during the hours of operation and one hour thereafter.

8. The light source utilized to comply with this section shall have a rated average bulb life of not less than 20,000 hours, not battery operated, and controlled by a photocell device or a time clock with an astronomic feature.
9. Luminaires utilized to meet the requirements of this section shall have fully enclosed vandal resistant light fixtures, if accessible, and be not less than eight feet in height from ground level. A luminaire not less than 42 inches may be utilized to illuminate a walkway if adjacent landscaping is of a variety which does not mature higher than two feet, and it does not interfere with the required light distribution for a distance of 16 feet along the walkway. Light fixtures shall be deemed accessible if mounted within 15 feet vertically or 6 feet horizontally from any accessible surface or any adjoining roof, balcony, landing, stair treads, platform or similar structure.
10. Lighting near basketball courts shall be designed so as to eliminate or greatly minimize illuminating the courts.
11. Activation of the required exterior lighting shall be either by a photocell device or a time clock with an astronomic clock feature.
12. A site plan shall be provided showing buildings, parking area, walkways, detailed landscaping, with tree legend (if pole lights are used) and shrub legend (if bollards are used), fixture schedule, mounting height, lighting ratio and a point-by-point photometric calculation of the required light levels. Foot-candles shall be measured at grade on a horizontal plane and conform to a uniformity ratio of six to one (6:1) average/minimum. Landscaping shall not be planted so as to obscure required light levels with light fixtures exceeding eight feet in height installed at least two feet from a tree's canopy at 70% maturity.
13. Public recreation facilities and spaces shall utilize light poles and fixtures listed on the Irvine Community Services Department approved products list.

C. Swimming pools shall be secured as follows:
    1. Restroom doors and pool gates shall be equipped with automatic closure devices, dead latches, and a latch protector consisting of minimum 0.125-inch thick steel, two inches wide and 6 inches long.
    2. The pool equipment room shall be secured as follows:
        a. A dead latch bolt lockset, with a minimum bolt throw of ¾ inches, operated either mechanically or electrically with a protective plate constructed of steel 0.125 inch thick, which shall be attached with nonremovable bolts to the outside of the door. The plate shall extend a minimum of 6 inches vertically above and below the latch of the panic hardware. The plate shall be a minimum of two inches wide and extend a minimum of one inch beyond the edge of the door to which it is attached; or
        b. A deadbolt lockset as specified in Section 5-9-517(B) which can be either operated mechanically or electrically.
    3. The on and off switch for the spa is to be keyed or access controlled.

4. Perimeter fencing, using either tubular steel or aluminum, is to be installed at a minimum height of 6 feet. Vertical fence pickets are to be spaced not more than four inches on-center and be designed to discourage climbing.
5. Emergency access to locked gates is to be provided through installation of a Knox box key vault which shall contain a mechanical key for the gate. The vault shall be sub-mastered to the Orange County Fire Authority for access by the Police Department. The mounting location shall be five feet above finish grade and within two feet of the locking device. Pools with double gates shall have the key vault installed as close as possible to the hinge side of one gate. Gates shall utilize a mechanical lock with the gate key placed inside the key vault.

   Exception: If it is not practical to install the key vault within two feet of locking device due to structural issues, then it may be mounted within four feet of the locking device.

6. Selection of landscaping is to consider height of plants regarding providing needed visibility into the pool area from adjacent uses, buildings, and streets.
7. Lighting shall conform to Section 5-9-517L.8 regarding lighting fixtures.
8. Private park pools/spas, which may be reached by the general public, shall have signage indicating it is private property and no trespassing allowed, citing the current Penal Code section for trespassing.
9. Address numbers, when assigned, shall be visible from inside and outside the pool, and the numerals and street name shall be at least four inches in height using Sans Serif font with a stroke weight of regular to medium, or an approved equivalent font which is clearly legible.
10. Showers shall be located in highly visible areas outside and not inside a building and not be obscured by wing walls greater than 42 inches in width.

D. Landscaping and amenity guidelines and requirements are as follows:
   1. Plant materials and walls shall take into consideration the need for users of the space to easily view their surroundings as well as police patrols to monitor the area from adjacent streets. Plants should be selected which do not grow beyond a height of 42 inches.
   2. Trees shall be positioned to avoid interfering with required lighting levels and take into consideration the height of canopies from ground level regarding surveillance opportunities by users of the space and police patrols.
   3. Planting of wide hedge rows and narrow vertical plants adjacent to solid fences is encouraged.
   4. In public parks, planters at least two feet in length and under 42 inches in height, which are directly adjacent to a cement or asphalt walking or driving surface, shall have devices attached to the outer edges which are designed to discourage skateboard grinding (vandalism) or the edges shall be designed in such a manner as to deter such grinding.

5. Park benches are to be designed to deter laying upon them which may include a center arm rest or similar design feature.

E. Park identification signs shall be provided at all public and private parks as follows:
    1. Parks and private recreation facilities shall have a park identification sign, with address number, street name, park name, and the word "Private" if it is a private park. The sign copy size shall be a minimum height of 6 inches for the park name, a minimum of four inches for the address number and street name, and a minimum 3 inches for "private". The sign copy shall be of a color contrasting to the background to which they are affixed. Signs shall be highly visible and placed within 100 feet of the centerline of the addressed street. Bottom line of the sign copy shall be no less than two feet from ground level and not obstructed by landscaping or by parked cars. Public Park identification signs also must meet the design criteria adopted in the City's Park/Public Facility Design Standards.
    2. Landscaping in front of the park signage shall be of a variety which grows to no more than two feet in height.
    3. Park shall not have duplicate names or names that sound similar to existing parks.

F. Trail and park connections to neighborhoods shall be identified as follows:
    1. Pedestrian connections from trails, parks, and open space areas into adjacent neighborhood public or private sidewalks and streets shall have a City street sign or other approved sign identifying the street where the connection occurs.
    2. Trails crossing public or private streets shall have a City street sign at the intersection of the trail and street identifying the street and trail names.
    3. Named City trails shall have markers placed on concrete or asphalt surfaces every one-tenth of a mile and shall meet the design and application criteria as established by the Community & Library Services Department.

G. Private and public space delineation shall be provided as follows:
    1. When private and public spaces are shared, there shall be a clear delineation between the two entities. Signage and physical markers shall make it clear where the property line extends between the City owned property and private property.

H. Dog parks. Enclosed spaces designed for dogs to be off-leash shall conform to the following standards:
    1. The dog park shall be located in a highly visible area.
    2. Perimeter of the dog park shall have a fence, at least five feet in height, with no more than 40% of it being of solid construction. Fencing shall be tubular steel with openings between pickets not more than 3 inches in width, and designed to prevent dogs from crawling under it.
    3. Gates shall be a double gated entry system where one gate must be closed before the other can be opened.

4. Access to the dog park is to be controlled by an access control system if park is part of a residential complex. Emergency access is to be provided for police and fire departments per Section 5-9-519(B).
5. Provide waste bag station and trash container
6. All surfaces of the enclosed fenced portion of the dog park shall be illuminated with a minimum maintained 0.5 foot-candle of light at ground level, during the hours of operation, including one hour thereafter. Parking lots and walkways shall be illuminated per Section 5-9-520(B). and a photometric lighting plan provided prior to the issuance of building permits.
    a. The light source utilized to comply with this section shall have a rated average bulb life of not less than 12,000 hours.
    b. A site plan shall be provided, and approved by the City, showing the park, buildings, parking area, walkways, detailed landscaping with tree legend (if pole lights are used) and shrub legend (if bollards are used), fixture schedule, mounting height, lighting ratio and a point-by-point photometric calculation of the required light levels. If the park is equipped with an occupancy sensor, then a point-by-point photometric calculation is required to show it meets the required minimum level of light. Foot-candles shall be measured at grade on a horizontal plane and conform to a uniformity ratio of six to one (6:1) average/minimum. Landscaping shall not be planted so as to obscure required light levels with light fixtures exceeding eight feet in height installed at least two feet from a tree's canopy at 70% maturity.

I. Privately owned, publicly accessible parks.
    1. Privately owned parks, open to the public as deemed by the City, shall develop a security operations plan to monitor and control the park. Plan shall include addressing the following issues: noise, loitering, hours of operation, violation of owner's rules and regulations, High-Definition cameras for recording activity, and the on-site title(s) of persons responsible for enforcement of the security operations plan.
    2. Park identification signs shall conform to Section 5-9-520(E), with the following change in type of park identified: "Private Open to Public"
    3. Signs shall be installed at all pedestrian walkway entrances to the park which state: "Park is privately owned, open for public use, controlled and maintained by the property owner."

J. Rooftop Recreational Spaces
    1. Recreation spaces located on top of parking structures or residential units shall have a camera surveillance system complying with the following standards:
        a. High-Definition color cameras shall be installed to view the entire recreational space and shall clearly capture the entire person and a recognizable face image.
        b. Camera images shall be digitally stored for at least 30 days.

c. A camera surveillance plan noting the type and mounting height of cameras, demonstrating compliance with this section, shall be developed as part of the construction plans.

Sec. 5-9-521. - Construction site and vacant property security.

A. Scope of construction site and vacant property security. The provisions of this section shall apply to residential and nonresidential developments and vacant property as follows:
    1. "Construction site" shall mean any site, excluding a single residential lot and additions and alterations to existing nonresidential structures, upon which construction or demolition work is occurring, or upon which such work has commenced but has not been completed. The provisions of this section shall apply from the time raw building materials are placed on the site until the installation of all building fixtures is completed.
    2. "Vacant property" shall mean any property more than 20 acres in area where there are buildings or other facilities of any type that have been abandoned or are otherwise not in use for a period of more than 30 calendar days, except that a residential lot shall not be deemed to be a vacant property merely by virtue of the fact that a home on the property is currently unoccupied.

B. Construction site general security requirements.
    1. The owner of a construction site shall implement those security measures reasonably necessary to control access to the site, and to deter vandalism, theft, and other crime.
    2. Access points: The number of access points onto the site shall be minimized and, where feasible, situated in locations that are highly visible from an adjacent street.
    3. Perimeter construction site fencing shall be installed adjacent to streets and designed as follows:
        a. Chain link or other metal fencing and gates, at least 6 feet in height, covered with green 94% minimum blackout heavy duty plastic screening material; and
            (1) Vehicle and pedestrian access gates shall not be covered. Fencing shall not be covered for the first 20 feet in lineal length, or greater where necessary for sight distance control, on each side of a gate.
        b. All vehicle and pedestrian openings shall have gates secured after hours of operation by a padlock(s) designed to prohibit cutting of the shackle; and
            (1) Coil chain, minimum 30 grade, at least 3/8 -inch thick, if used to secure a gate; or
            (2) Cable at least 5/16 -inch thick, if used to secure a gate.
        c. Perimeter fencing may be removed when there is no longer outside storage of building materials or building fixtures and when there are

no remaining exterior construction activities requiring separation of non-construction related personnel and public from exterior construction activity.

d. Alternative fencing and protection may be approved in writing by the Chief of Police or Chief Building Official.

e. Emergency access Knox Boxes, when required by the Orange County Fire Authority, shall be sub-mastered to an Orange County Fire Authority key for access by the Police Department.

4. Office trailers and temporary buildings shall be secured as follows:
   a. At a minimum, doors shall have a deadbolt lock per Section 5-9-517B.1 and an auxiliary locking device using a hasp or slide bolt with a protective device to prohibit cutting of a padlock, attached with non-removable bolts from the exterior, and locked with a padlock having a minimum ½-inch thick shackle with heel and toe locking; or secured in a manner as approved in writing by the Chief of Police.
   b. All windows shall be secured from entry using either:
      (1) Steel bars of at least ½-inch round or one-inch by ¼-inch flat steel material, spaced not more than five inches apart, securely attached on the inside of the trailer using bolts that are nonremovable from the exterior; or
      (2) Steel grate mesh of at least 1/8-inch thick material, securely attached on the interior or exterior of the trailer using means that are resistant to removal from the exterior.
5. Storage containers with at least 64 square feet of storage area shall be secured as follows:
   a. Doors shall be secured using a hasp or slide bolt with a protective device to prohibit cutting of the padlock, attached with nonremovable bolts from the exterior, and locked with a padlock having a minimum ½-inch thick shackle with heel and toe locking; or secured in a manner as approved in writing by the Chief of Police.
   b. Exterior hinge pins shall be rendered nonremovable by design or welding.
6. Site lighting shall be installed and designed as follows:
   a. Where lighting required by the provisions of 6.b through 6.e below would impinge on occupied residential properties:
      (1) Motion sensors may be used to control light fixtures.
      (2) Elements of the lighting provisions 6.b through 6.e below may be modified or not required when approved by the Chief Building Official or Chief of Police.
   b. All vehicle gate locations shall be illuminated, during the hours of darkness, with an approximate minimum maintained one foot-candle of light on the ground, within and on all sides of the gated opening for a distance of 15 feet beyond the opening. Outdoor lighting shall be maintained and installed so that direct rays are confined to the site and adjacent properties and streets open to the public are protected from glare.

c. All open centralized storage areas for building materials or building fixtures shall be illuminated, during the hours of darkness, with an approximate minimum maintained one foot-candle of light on the ground, within and on all sides of the stored items for a distance of 15 feet beyond the materials or fixtures.
d. All trailers, temporary buildings, or containers used as an office or for storage of building materials, or fixtures for buildings, or construction equipment shall be illuminated on all sides with openings, during the hours of darkness, with an approximate minimum maintained one foot-candle of light on the ground for a distance of 15 feet beyond the exterior walls.
e. Luminaries utilized to meet this section shall be installed at least 18 feet from the ground, have tempered or polycarbonate lenses, and meet or exceed U.L. Bulletin 1572 for wet locations.
f. When Southern California Edison power is not available the following temporary alternatives shall be utilized until such power is on site:
(1) Portable power generators that meet City noise requirements for construction sites during non-working hours; or
(2) Battery or solar operated lights which illuminate the doors of construction trailers, tool bins, and raw materials storage.

7. Forklifts shall be rendered inoperable, when hours of operation are ceased, by removing the key and adding a device to either disable the engine or other measure to prohibit moving it.
8. A record shall be developed and maintained of on-site motorized construction vehicle equipment, which have wheels a minimum of 15 inches in diameter, listing the manufacturer, model, license plate number, vehicle identification number (VIN), and product identification number (PIN).
9. An address sign shall be installed at all perimeter vehicle access points and include the street address and tract number, using minimum 6-inch high letters and numbers, and shall be posted at the top of the perimeter fence or at least five feet from the ground.
10. A "No Trespassing" sign, conforming to the requirements of California Penal Code Section 602, shall be installed at all perimeter access points, posted at the top of the perimeter fence or at least five feet from the ground.
11. A 24-hour emergency phone number, for management of the site, shall be posted at the main gated entrance and on the exterior of an on-site office trailer or building near the main vehicle entrance.
12. Residential units shall not have appliances installed until the home can be completely secured and locked.

C. Construction site security plan.
1. A security plan shall be required if the residential construction site has 15 or more dwelling units, or a nonresidential construction site has 50,000 square feet or more of building area. Residential building area is considered the same builder within a master tract regardless if the units are contiguous.

2. A security plan shall be submitted as part of the normal and customary building permit application and review process for review and approval prior to issuance of building permits.
3. A security plan shall include the requirements in Section 5-9-521.B and the following:
    a. Description of the construction site including: Location, size, boundaries, type of project, overall site plan, access points, office/storage locations, and contact person responsible for implementing the security plan.
    b. A copy of the approved security plan shall be maintained at the site to show the original location of site security elements and any changes made thereto to adjust to changing field conditions.
    c. Institute at least one of the following additional security measures:
        (1) Provide color cameras that view all vehicle access points and record vehicle license plates when the hours of operation cease, saving recorded activity for at least 60 days; or
        (2) Utilize one California State Licensed Security Guard for every 10 contiguous acres of the same project or portion thereof, to monitor the site when hours of operation cease, recording persons and vehicles entering and leaving it, saving recorded activity for at least 60 days; or
        (3) Compliance with a construction site security program approved by the Chief of Police in writing that addresses: Identification and marking of equipment and construction materials; inventory of construction equipment; key control; alarm system for trailers/storage containers; materials inventory control procedure; securing tools/equipment; securing vehicles and large pieces of equipment; perimeter security of construction site; lighting; liaison with law enforcement; or
        (4) Other alternate measure(s) approved by the Chief of Police that are found to provide at least the equivalent security of providing one of measures (1), (2), or (3) above.
    d. Develop a written procedure and implement a property identification program approved by the Chief of Police that is designed to readily identify ownership of heavy equipment, building materials where feasible, and building equipment.
4. As part of the security plan review and approval process, the Chief of Police or the Chief Building Official may require modifications to the security plan when:
    a. The plan fails to comply with any of the requirements set forth in the provisions of this chapter in any respect;
    b. The security measures described in the plan are insufficient to meet the security needs of the particular site; or
    c. The security personnel are unqualified to meet the security needs of the particular site.

D. Vacant property general security requirements.
    1. All security measures taken to secure vacant properties shall be consistent with Chapter 6 of Division 11 of Title 4 of the Municipal Code regarding minimum property maintenance standards.
    2. Access points: The number of access points onto the site shall be minimized and placed in locations that are highly visible from an adjacent street.
    3. Perimeter fencing shall be installed around the entire site and designed as follows:
        a. Chain link or other metal fencing and gates, at least 6 feet in height, covered with green 94% minimum blackout heavy duty plastic screening material; and
            (1) A 20-foot-wide opening in the material every 400 lineal feet; and
            (2) Vehicle and pedestrian access gates shall not be covered. Fencing shall not be covered for the first 20 feet in lineal length, or greater where necessary for sight distance control, on each side of a gate.
        b. All vehicle and pedestrian openings shall have gates secured after hours of operation by a padlock(s) designed to prohibit cutting of the shackle; and
            (1) Coil chain, minimum 30 grade, at least 3/8 -inch thick, if used to secure a gate, or
            (2) Cable at least 5/16 -inch thick, if used to secure a gate.
        c. Alternative fencing and protection may be approved in writing by the Chief of Police or Chief Building Official.
    4. An address sign shall be installed at all perimeter vehicle access points and include the street name and number, and tract number, using minimum 6-inch-high letters and numbers, and shall be posted at the top of the perimeter fence or at least five feet from the ground.
    5. A "No Trespassing" sign, conforming to the requirements of California Penal Code Section 602, shall be installed at all perimeter access points, posted at the top of the perimeter fence or at least five feet from the ground.
    6. A 24-hour emergency phone number, for management of the site, shall be posted at the main gated entrance and on the exterior of a building or office trailer near the main vehicle entrance.
    7. Based upon an evaluation of the site by the Chief of Police or Chief Building Official, a security plan meeting the requirements of Subsection C above may be required if deemed necessary in order to ensure the safety and security of the vacant property.

Section 5-9-522. - Special convenience store provisions.

The provisions of this section shall apply to all convenience stores, mini markets, and liquor stores, as defined in the Irvine Zoning Ordinance. The following shall apply:

A. A camera surveillance system capable of viewing and recording events inside the premises as follows:
    1. A minimum of one High-Definition color camera, mounted no higher than 7 feet from the floor, at each cash register which views the front of a customer, from the waist to the top of the head, obtaining a straight on face picture.
    2. A minimum of one High-Definition color camera, mounted no higher than 9 feet, which views the full-length side of a customer at the cash register area and all public entrances/exits to the store.
    3. Provide High-Definition color cameras to view the exterior public entrance/exit doors and all of the motor fuel islands.
    4. Provide High-Definition color cameras to view all cash counting areas and safe(s).
    5. A color camera digital recorder capable of recording events on all cameras simultaneously. There shall be an accurate date and time stamp on the images.
    6. Digital recordings of cameras shall be kept for a minimum of 30 days.
    7. The recorder must be kept locked in a cabinet within the office and not on the sales floor. The key to the cabinet must be accessible to employees on duty, but kept secured inside the office and not left in plain view.

B. A money drop-safe capable of easily providing the cashier the ability to quickly deposit money into it.
C. Windows clear of any signs or other materials at all times, between 3 and 6 feet in height from ground level, consistent with the City's Sign Ordinance (Division 7 of the Irvine Zoning Ordinance).
D. Clearly distinguishable height markers on the interior side of the door jamb, or on the interior edge of a pair of doors, of all doors used by the public to access the store. Horizontal marks, one-inch wide by 3 inches long, in different colors, and in a contrasting color to the background, shall be placed every 6 inches beginning at 5 feet above the floor and ending at 6 feet, 6 inches. An alternative marking system used by the applicant may be substituted subject to review and approval by the Police Department.
E. "No Loitering" signs, conforming to California Penal Code Section 602, shall be placed on each side of the building exterior where there is a parking or walking surface.
F. All displays of alcoholic beverages shall be at least 25 feet from a public entrance/exit door and secured between the hours of 2 a.m. and 6 a.m.to prevent access to these beverages by the general public.
G. All persons who appear younger than 30 years of age must provide legal identification (ID) in order to purchase alcohol. A Point of Sale system shall be utilized to scan the ID to validate age.
H. There shall be no pay-to-play amusement machines or video game devices maintained upon the premises at any time.
I. A prominent, permanent sign or signs stating "No open alcoholic beverage containers are allowed on these premises" shall be posted in a place that is clearly visible to patrons.

J. Any graffiti painted or marked upon the premises or on any adjacent area under the control of the owner shall be removed or painted over within 24 hours.

K. Except where clear vision panels are installed, the rear exterior door shall be equipped with a wide-angle (minimum 180 degrees) door viewer. Sec. 5-9-523. - Special self-storage security provisions.

This section is a supplement to Section 5-9-517, *Special nonresidential building provisions*, as self-storage operations have unique security issues.

A. Individual storage unit requirements for doors, locks, and walls are as follows:
   1. All storage units are to have either deadbolt locks, cylinder locks or padlocks designed to prevent cutting of the shackle and slide bolts or other locking device installed in such a manner as to deter prying the door open.
   2. Walls separating units are to be metal or other material requiring extensive force to break through and tunnel between units.
   3. Vacant units are to be kept locked and secured as described in No. 1 above.

B. Building and area lighting shall meet the following requirements:
   1. Interior corridors are to have vandal resistant fixtures as defined in the Irvine Uniform Security Code glossary, and provide a minimum maintained one foot-candle of light on the walking surface during the hours of operation. A photometric analysis and light fixture specifications are to be submitted for approval.
   2. There shall be no unrestricted access to light switches, they can only be controlled by management.
   3. Automatic sensors can be used to activate lighting; however, they must remain on for at least 20 minutes before resetting.
   4. Carports, covered storage, parking areas, driveways, and building exterior doors are to conform with Section 5-9-517(K) regarding lighting.

C. A camera surveillance system shall be installed that is capable of viewing and recording events as follows:
   1. Provide High-Definition color cameras to monitor vehicles entering/exiting the facility. Position cameras to include a readable view of the vehicle's rear license plate, full view of vehicle, and the driver’s face.
   2. Provide High-Definition color cameras to monitor all building entrances and exits, clearly capturing the entire person and a recognizable face image.
   3. Provide a color camera digital recorder capable of recording events on all cameras simultaneously. There shall be an accurate date and time stamp on the images.
   4. Digital recordings of cameras shall be kept for a minimum of 60 days.
   5. Camera recordings shall be made available to the Police Department within one hour of a request, based upon the investigation of criminal activity at the facility.

D. The following requirements shall apply to vehicle and pedestrian gates and building doors.

1. During non-operational hours, all common area doors and restrooms to the facility are to be locked, eliminating tenant access into a structure.
2. Tenants are to have access to the facility only during posted hours of operation.
3. Tenants that have only exterior units shall not have access to interior hallways or elevators.
4. A key switch and radio-controlled access control system is required to be installed at access-controlled vehicle gates. The key switch is to be installed a minimum of 15 feet from the entry/exit gate and be located on the driver's side of the road or driveway. The key switch is to be accessible in such a manner as to not require a person to exit their vehicle to reach it; nor to require any back-up movements in order to enter/exit the gate. Key switches shall be secured utilizing tamper resistant screws.
5. A key switch is required for access-controlled pedestrian gates and doors to common areas. The key switch is to be installed four to five feet above finished grade or floor and adjacent to the access control reader. Key switches shall be secured utilizing tamper resistant screws.
6. A key vault is required for doors with mechanical locks going to common areas such as lobbies, stairs, exit hallway doors, and is to be installed five feet above grade and within two feet of the door lock.
7. A key switch is to be installed to operate the elevator if it is access controlled.
8. All key switches, key vaults, and padlocks shall be sub-mastered to an Orange County Fire Authority key for access by the Police Department. The radio-controlled entry system shall be programmed to frequencies approved by the Police Department and the Orange County Fire Authority.
9. Key switches containing a label for operating the switch, key vaults, padlocks, and radio-controlled entry systems shall be installed per manufacturer's instructions and are clearly identifiable to approaching police personnel in a manner as approved by the Police Department.
10. An Emergency Access Plan, approved by the Police Department, shall be required when a radio-controlled entry system, key switch, or key vault is required to be installed. The plan shall identify the location of each device on a site plan.
11. Post a sign indicating “No Tailgating” at all vehicle entrances and exits.
12. Post a sign at all vehicle exits to inform those who may be “locked” inside the facility after hours to call the business and not the Police Department. Sign should read: “Call (phone number) if gate is locked after hours. Do not call the Police Department.”

E. Exterior Issues

1. Trash dumpsters are to be kept locked with a key only available to tenants if checked out from the management office. Facility management are to inquire about the type of trash being dumped and inspect their trash to

ensure hazardous material, personal information which can be used to obtain a person's identity, and other materials not deemed suitable for general disposal are not being disposed of by the tenant.

2. There is to be restricted access to water and electrical outlets anywhere within the facility. Any water facets or electrical outlets are to be secured and used only by facility management.
3. Post signs indicating "No Hazardous Materials May Be Stored" in various strategic locations within the facility.
4. Post signs indicating "No Dumping of Hazardous Material" and "Contact Office to Use Trash Bin" at all trash bin locations.

Sec. 5-9-524. – Reserved
Sec. 5-9-525. – Reserved
Sec. 5-9-526. – Reserved
Sec. 5-9-527. – Reserved

Sec. 5-9-528. - Tests.

A. This test section reproduces the requirements set forth in the California Model Building Security Ordinance (Jan. 1978). Documentation indicating compliance with the testing requirements shall be presented with building plans and can either be a copy of the performance testing or labeling found on the doors and windows.
B. Whenever there is insufficient evidence of compliance with the provisions of this chapter, or evidence that any material or any construction does not conform to the requirements of this chapter, or in order to substantiate claims for alternate materials or methods of construction, the Enforcing Authority may require tests as proof of compliance to be made at the expense of the owner or his agent by any agency which is approved by the Enforcing Authority.
C. Specimens shall be representative, and the construction shall be verified by assembly drawings and bill of materials. Two complete sets of manufacturer or fabricator installation instructions and full-size or accurate scale templates for all items and hardware shall be included.
D. Tests for sliding glass doors shall be conducted as follows:
    1. The construction and size of the test door assemblies, jambs and headers, and all hardware components shall be representative of that for which acceptance is desired. The door assembly and mounting in the support fixture shall stimulate the rigidity normally provided to a door assembly in a building by the ceiling, floor and walls.
    2. Sample doors submitted for testing shall be glazed. Panels shall be closed and locked with the primary locking device only. Doors shall be equipped with interlocking devices to prevent spreading or separation of the meeting stiles.
    3. Tests shall be performed on the samples in the following order:

        <u>TEST A.</u>
        With the panels in the test position, a concentrated load of 800 pounds shall be applied to the vertical pull stile incorporating a locking device,

at a point on the stile within 6 inches of the locking device, in the direction parallel to the plane of the glass that would tend to open the door. With the load removed, determine if the primary locking device can be unlocked by manipulation, as described in Test H.

TEST B.

(1) With panels in the test position, a concentrated load of 50 pounds shall be applied to the vertical pull stile incorporating a locking device, at a point on this stile within 6 inches of the locking device, in the direction parallel to the plane of the glass that would tend to open the door while, simultaneously, an additional concentrated load of 200 pounds is applied to the same area of the same stile in a direction perpendicular to the plane of glass toward the interior side of the building. With the load applied, determine if the primary locking device can be unlocked by manipulation as described in Test H.

(2) Repeat Test B(1) above, substituting 800 pounds for the indicated 50 pounds. Perform the manipulation tests with the load removed.

TEST C.

(1) With the panels in the test position, a concentrated load of 50 pounds shall be applied to the vertical pull stile incorporating a locking device, at a point on the stile within 6 inches of the loading device, in the direction parallel to the plane of the glass that would tend to open the door while, simultaneously, an additional concentrated load of 200 pounds is applied to the same stile in the direction perpendicular to the plane of the glass toward the exterior side of the door. With the load applied, determine if the primary locking device can be unlocked by manipulation as described in Test H.

(2) Repeat Test C(1) above, substituting 800 pounds for the indicated 50 pounds. Perform the manipulation tests with the load removed.

TEST D.

With the movable panel lifted upward to its full limit within the confines of the door frame, a concentrated load of 800 pounds shall be applied separately to each vertical pull stile incorporating a locking device, at a point on the stile within 6 inches of the loading device in the direction parallel to the plane of the glass that would tend to open the door. With the load removed, determine if the primary locking device can be unlocked by manipulation, as described in Test H.

TEST E.

(1) With the movable panel lifted upward to its full limit within the confines of the door frame, a concentrated load of 50 pounds shall be applied to the vertical pull stile incorporating a locking device, at a point on the stile within 6 inches of the locking device, in the direction parallel to the plane of the glass that would tend to open the door while, simultaneously, an additional concentrated load of 200 pounds is applied to the same area of the same stile in the direction perpendicular to the plane of the glass toward the interior side of the door. With load applied, determine if the primary locking device can be unlocked by manipulation as described in Test H.

(2) Repeat Test E(1) above, substituting 800 pounds for the indicated 50 pounds. Perform the manipulation tests with the load removed.

TEST F.

(1) With the movable panel lifted upward to its full limit within the confines of the door panel, a concentrated load of 50 pounds shall be applied to the vertical stile incorporating a locking device, at a point on the stile within 6 inches of the locking device, in the direction parallel to the plane of glass that would tend to open the door while, simultaneously, an additional concentrated load of 200 pounds is applied to the same area of the same stile in the direction perpendicular to the plane of the glass toward the exterior side of the door. With the load applied, determine if the primary locking device can be unlocked by manipulation, as described in Test H.

(2) Repeat Test F(1) above, substituting 800 pounds for the indicated 50 pounds. Perform the manipulation tests with the load removed.

TEST G.

For inside sliding doors, repeat Test D, while simultaneously applying a concentrated load of 50 pounds at the end of the movable bottom rail near the meeting stiles inward. For outside sliding doors, repeat Test D while applying a concentrated load of 50 pounds at the end of the movable bottom rail near the meting stiles and outward.

TEST H.

Lift, push, pull, or otherwise manipulate by hand the door relative to the clearances within the frame while attempting to open the door. This test shall be conducted continuously for five minutes.

Examine the assembly and determine a method and position for inserting a tool through the assembly from the outside so as to contact

the primary locking device or the latch. Two different tools shall be used: A knife or spatula with a thin blade approximately 1/32 -inch thick, not more than one inch wide, and no longer than 6 inches; and a piece of stiff steel wire with a diameter of approximately 1/16 inch. Determine whether it is possible to insert the wire or manipulate with either of these tools so as to unlock the door within a five-minute time period.

TEST I.
With the following tools:

(1) A knife or spatula with a thin blade approximately 1/32 -inch thick, not more than one inch side, and no longer than 6 inches; and
(2) A straight or Phillips screwdriver with a maximum 6-inch shaft; remove from the door assembly all screws, glazing beans, or other mechanical fasteners which can be removed readily from the exterior within a time limit of five minutes. Determine if the primary locking device can be unlocked or entry gained by manipulation, as described in Test H.

4. Fixed panels. Fixed panels shall be fastened in accordance with the manufacturer's instructions. Test shall be performed in the following order:

TEST A.
With the panels in the normal position, a concentrated load of 300 pounds shall be applied at midspan of the fixed jamb stile in the direction parallel to the plane of the glass that would tend to remove the fixed panel from the frame jamb pocket. With the load applied, determine if entry can be gained by manipulation, as described in Subsection D, Paragraph 3, Test H, above.

TEST B.
With the panels in the normal position, a concentrated load of 300 pounds shall be applied at midspan of the fixed jamb stile in the direction parallel to the plane of the glass that would tend to remove the fixed panel from the frame jamb pocket while, simultaneously, an additional concentrated load of 150 pounds is applied at midspan of the fixed panel interlock stile in the direction perpendicular to the plane of the glass which would tend to disengage the meeting stiles. With this load applied, determine if entry can be gained by manipulation, as described in Subsection D, Paragraph 3, Test H, above.

TEST C.
Repeat Test A with the fixed panel lifted upward to its full limit within the confines of the door frame. The lifting force need not exceed 150 pounds at the bottom of the exterior face of the meeting stile. With this load applied, determine if entry can be gained by manipulation, as described in Subsection D, Paragraph 3, Test H, above.

5. A sliding door assembly shall fail these tests if at any time during or after the test, the sliding door assembly does not remain engaged, intact, and in the closed and locked position, or by manipulating an exposed component; or if one can enter through displaced or damaged portions.
6. The report shall include the following: Identification of the samples tested; type, size, location, and number of locking devices; type, location and number of anchors; type and thickness of glazing material, and an indication of whether or not the subject passed the test. The report shall also indicate at what point the assembly fails. The report shall be certified to be a true copy by the testing laboratory and shall be forwarded directly from the laboratory to the Enforcing Authority.
7. All sliding door assemblies utilized under this code shall have affixed to each a performance label identifying the following:
    a. Manufacturer of product by name.
    b. Testing laboratory.
    c. Certification that the product complies with Section XVI, California Model Building Security Ordinance.

E. For the purpose of this chapter, windows are classified as follows:

Type A: Window assemblies incorporate one or more sashes that open by sliding in the plane of the wall in which the window is installed.
Type B: Window assemblies incorporate one or more framed sashes which are hinged at or near two corners of the individual sash and open toward the exterior of the wall.
Type C: Window assemblies incorporate one or more sashes which open toward the interior and are hinged at or near two corners of the sash.
Type D: Window assemblies incorporate one or more sashes which are hinged or pivot near the center so that part of the sash opens into the interior wall and part opens toward the exterior.

1. Window assemblies shall be mounted following the manufacturer's installation instructions. Install the window assembly in a text fixture, which simulates the wall construction required by Chapter 25 of the Uniform Building Code. The unit shall be fully glazed. The sash shall be closed and locked with the primary locking device only.
    a. Tests for Type A window assemblies shall be performed in the following order:

    <u>TEST A.</u>
    With the sliding sash in the normal position, a concentrated load of 200 pounds shall be applied separately to each member incorporating a locking device, at a point on the sash member within 6 inches of the locking device, in the direction parallel to the plane of the glass that would tend to open the window. With the load removed, apply the

manipulation text described in Subsection D, Paragraph 3, Test H, above.

TEST B.
With the sliding sash in the normal position, a concentrated load of 25 pounds shall be applied separately to each sash member incorporating a locking device, at a point on the sash member within 6 inches of the locking device in the direction parallel to the plane of the glass that would tend to open the window, while, simultaneously, an additional concentrated load of 75 pounds is applied in the same area of the same sash member in the direction perpendicular to the plane of the glass toward the interior side of the window. With the load removed, apply the manipulation test described in Subsection D, Paragraph 3, Test H, above.

TEST C.
With the sliding sash in the normal position, a concentrated load of 200 pounds shall be applied separately to each sash member incorporating a locking device, at a point on the sash member within 6 inches of the locking device, in the direction parallel to the plane of the glass that would tend to open the window, while, simultaneously, an additional concentrated load of 75 pounds is applied to the same area of the same sash member in the direction perpendicular to the plane of the glass toward the exterior side of the window. With the load removed, apply the manipulation test described in Subsection D, Paragraph 3, Test H, above.

TEST D.
With the sliding sash lifted upward to the full limit within the confines of the window frame, a concentrated load of 200 pounds shall be applied separately to each sash member incorporating a locking device, at a point on the sash within 6 inches of the locking device, in the direction parallel to the plane of glass that would tend to open the window. With the load removed, apply the manipulation test described in Subsection D, Paragraph 3, Test H, above.

TEST E.
With the sliding sash lifted upward to the full limit within the confines of the window frame, a concentrated load of 200 pounds shall be applied separately to each sash member incorporating a locking device, at a point on the sash within 6 inches of the locking device, in the direction parallel to the plane of the glass that would tend to open the window, while, simultaneously, an additional concentrated load of 75 pounds is applied to the same areas of the same sash member in the direction perpendicular to the plane of the glass towards the interior side of the

window. With the loads removed, apply the manipulation test described in Subsection D, Paragraph 3, Test H, above.

TEST F.
With the sliding sash lifted upward to the full limit within the confines of the window frame, a concentrated load of 200 pounds shall be applied separately to each sash member incorporating a locking device, at a point on the sash member within 6 inches of the locking device, in the direction parallel to the plane of the glass that would tend of open the window, while, simultaneously, an additional concentrated load of 75 pounds is applied to the same area of the same sash member in the direction perpendicular to the plane of the glass toward the exterior side of the window. With the load removed, apply the manipulation test described in Subsection D, Paragraph 3, Test H, above.

TEST G.
For inside sliding windows, repeat Test F while simultaneously applying a concentrated load of 25 pounds inward at the end of the movable bottom rail near the meeting stile opposite the lock stile. For outside windows, repeat Test F while simultaneously applying a concentrated load of 25 pounds in the same direction as the perpendicular load inward at the end of the movable bottom rail near the meeting stile opposite the lock outward.

TEST H.
Perform the disassembly and manipulation test as described in Subsection D, Paragraph 3, Test I, above.

b. The tests for Types B and C window assemblies shall be performed in the following order:

TEST A.
With the swinging sash in the normal position, apply a concentrated load of 100 pounds within 3 inches of each end of the rail or stile which is opposite the hinged side, in the direction perpendicular to the plane of the glass that would tend to open the window.

TEST B.
Repeat Test A and simultaneously apply a concentrated load of 100 pounds on the outside within one inch of the end of the stile or rail which is opposite the hinged side, in a direction parallel to the plane of the glazing which would tend to disengage the lock.

TEST C.
With the swinging sash in the normal position, apply a concentrated load of 200 pounds on the rail or stile containing the locking device within 6 inches of the lock.

TEST D.
Repeat Test B while simultaneously applying Test C. The manipulation test described in Subsection D, Paragraph 3, Test H, above, shall be applied in Tests A, B, and D to the sash with the load removed.

TEST E.
Perform the disassembly and manipulation test as described in Subsection D, Paragraph 3, Test I, above.

c. Tests for Type D window assemblies shall be performed in the following order:

TEST A.
With the sash in the normal position, simultaneously apply a concentrated load of 100 pounds within 3 inches of the ends of each rail or stile which is perpendicular to the pivot sides in the direction that would tend to open the sash.

TEST B.
With the sash in the normal position, apply a concentrated load of 100 pounds on the rail or stile containing the pivot within one inch of the pivot in a direction parallel to the pivots.

TEST C.
Repeat Test B applying the load to the opposite rail or stile.

TEST D.
With the sash in the normal position, apply a concentrated load of 200 pounds on the rail or stile containing the locking device within 6 inches of the lock.

TEST E.
Repeat Test D while simultaneously applying the load specified in Test B. Repeat Test D while simultaneously applying the load specified in Test C above. The manipulation test described in Subsection D, Paragraph 3, Test H, above, shall be applied in Tests A, B, C and D above to the sash with the load removed.

TEST F.
Perform the disassembly and manipulation test as described in Subsection D, Paragraph 3, Test I, above.

d. A window assembly shall fail these tests if at any time during or after the tests the assembly does not remain engaged, intact, and in the closed and locked position, or by manipulating an exposed component; or if one can enter through displaced or damaged portions.
e. The report shall contain a description of the results of the test performed in accordance with the test methods above. The report shall include the following: Identification of the samples tested; type, location, and number of anchors; type and thickness of glazing material, and an indication of whether or not the subject passed the test. The report shall also indicate at what point the assembly fails. The test report shall be certified to be a true copy by the testing laboratory and shall be forwarded direct from the laboratory to the Enforcing Authority.
f. All window assemblies utilized under this code shall have affixed to each a performance label identifying the following:
    (1) Manufacturer of product by name.
    (2) Testing laboratory.
    (3) Certification that the product complies With Section XVI, California Model Building Security Ordinance.