ORDINANCE NO.	
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An ordinance amending Chapter IX of the Los Angeles Municipal Code to incorporate by reference certain portions of the 2025 Edition of the California Building Standards Code and to carry forward existing local administrative, climatic, geological, topographical, or environmental changes.

WHEREAS, California Health and Safety Code Sections 17958.5 and 17958.7 authorize the City Council to make reasonably necessary changes or modifications to the provisions of the California Building Standards Code (Title 24, California Code of Regulations) upon finding these changes are reasonably necessary due to local administrative, climatic, geological, topographical, or environmental conditions;

WHEREAS, the City of Los Angeles has several earthquake faults which run under and adjacent to the City;

WHEREAS, seismic experts predict a massive earthquake on one of these faults within the next 30 years and several earthquakes similar in intensity to the 1994 Northridge Earthquake (6.8 magnitude) during the same period;

WHEREAS, massive earthquakes pose unusual and extraordinary stresses on buildings and structures requiring more stringent building regulations than would otherwise be required;

WHEREAS, in 1999, large pockets of methane gas in the subsurface geological formation were discovered in various areas of the City of Los Angeles;

WHEREAS, the City of Los Angeles has topographic conditions, natural and man-made, such as the natural hills, mountains and the coastal region, as well as the man-made harbors and highly concentrated areas of high-rise buildings;

WHEREAS, the City of Los Angeles has flat land and hillside areas that create a natural basin with high strong winds which contribute to the spread of fires;

WHEREAS, in the highly concentrated area of high-rise buildings, traffic congestion and possible gridlock may jeopardize the quick response to fires by the Fire Department;

WHEREAS, the City of Los Angeles has climatic conditions, which subject it to a mild winter, an extremely hot desert-like summer, and hot, dry (Santa Ana) winds that make the temperature rise and the humidity drop, increasing the fire danger to all, exposed combustible materials; and

WHEREAS, in support of the following modifications and changes, the City Council hereby expressly finds that the following amendments and modifications to the California Building Standards Code are reasonably necessary due to local administrative, climatic, geological or topographical conditions.

NOW, THEREFORE,

THE PEOPLE OF THE CITY OF LOS ANGELES DO ORDAIN AS FOLLOWS:

Section 1. Article 1, Chapter IX of the Los Angeles Municipal Code is amended to add a new Division 7A Materials and Construction Methods for Exterior Wildfire Exposure to the table of contents in numerical order, revise the table of contents, and revise Article 1 title to Amendments to the California Building Code, with no other changes to divisions, sections or subsections therein except as amended herein, to read as follows:

ARTICLE 1 AMENDMENTS TO THE CALIFORNIA BUILDING CODES [BUILDING CODE]

Division

- 1 Administration
- 2 Definitions and Abbreviations
- 3 Use or Occupancy Classification and Use
- 4 Special Detailed Requirements Based on Use and Occupancy and Use
- 5 General Building Heights and Areas
- 6 Types of Construction
- 7 Fire and Smoke Protection Features-resistant Materials and Construction
- 7A Materials and Construction Methods for Exterior Wildfire Exposure
- 8 Interior Finishes
- 9 Fire -pProtection and Life Safety Systems
- 10 Means of Egress
- 11 Accessibility
- 12 Interior Environment
- 13 Energy Efficiency Conservation
- 14 Exterior Walls-Coverings
- 15 Roof Assembliese and Rooftop Structures
- 16 Structural Design
- 17 Structural Tests and Special Inspections and Tests
- 18 Soils and Foundations
- 19 Concrete
- 20 Aluminum
- 21 Masonry
- 22 Steel
- 23 Wood
- 24 Glass and Glazing
- 25 Gypsum Panel Products and PlasterBoard and Plaster
- 26 Plastic
- 27 Electrical Systems
- 28 Mechanical Systems
- 29 Plumbing Systems
- 30 Elevators and Conveying Systems
- 31 Special Construction
- 32 Encroachments into the Public Right-of-Way

- 33 Safeguards During Construction
- 35 Referenced Standards
- 61 Special Hazard Areas
- 62 Signs
- 63 Additional Provisions for Specific Uses
- 67 Security Provisions
- 70 Grading, Excavations and Fills
- 71 Methane Seepage Regulations
- 72 Fire District Regulations
- 81 Existing Buildings and Structures General Requirements
- 82 Change of Occupancy, Use and Rating Classification
- 83 Relocation Permit
- 85 Alternative Building Standards for Joint Living and Work Quarters
- 86 Special Provisions for Existing Buildings
- 88 Earthquake Hazard Reduction in Existing Buildings
- 89 Abatement of Buildings, Structures, Premises and Portions Thereof Which Constitute a Nuisance or Are Hazardous, or Substandard
- 90 Nuisance Abatement and Discontinuance of Land Use and Discretionary Zoning Approvals; Relocation Assistance; Enforcement
- 91 Earthquake Hazard Reduction in Existing Tilt-up Concrete Wall Buildings
- 92 Voluntary Earthquake Hazard Reduction in Existing Wood Frame Residential Buildings with Weak Cripple Walls and Unbolted Sill Plates
- 93 Mandatory Earthquake Hazard Reduction in Existing Wood-Frame Buildings with Soft, Weak or Open-Front Walls
- 94 Voluntary Earthquake Hazard Reduction in Existing Hillside Buildings
- 95 Mandatory Earthquake Hazard Reduction in Existing Non-Ductile Concrete Buildings
- 96 Voluntary Earthquake Hazard Reduction in Existing Reinforced Concrete and
- Reinforced Masonry Wall Buildings with Flexible Diaphragms 97 Existing Buildings Energy and Water Efficiency Program
- Sec. 2. Subsection 91.101.1 of Section 91.101, Division 1, Article 1, Chapter IX of the Los Angeles Municipal Code is amended to read as follows:

91.101.1. Title. This article shall be known as the Los Angeles Building Code or Building Code or LABC, a portion of the Los Angeles Municipal Code (LAMC), and wherever the word Code is used in this article, it shall mean the Los Angeles Building Code. Sections of Article 1.5 of Chapter IX of the LAMC shall collectively be known as the Los Angeles Residential Code or LARC. The provisions of the LARC for one- and two-family dwellings shall apply to the construction, alteration, movement, enlargement, replacement, repair, equipment, use and occupancy, location, removal and demolition of detached one- and two- family dwellings and townhouses not more than three stories above grade plane in height with a separate means of egress and their accessory structures not more than three stories above grade plane in height. In addition to the LARC, appropriate sections of Chapters Divisions 1, 11A, 11B, 12, 17, 31, 31B, 33, 63, 67, 70, 71, 72, 81, 89, 92, 93 and 96 of the LABC shall also be applicable to one- and two-family dwellings and townhouses unless stated otherwise.

The Los Angeles Building Code and the Los Angeles Residential Code adopt by indicated reference portions of the 20252022 California Building Code (CBC) and the 20252022 California Residential Code (CRC), respectively. The CBC and the CRC are Parts 2 and 2.5, respectively of Title 24 of the California Code of Regulations (CCR).

EXCEPTION: Live/work units complying with the requirements of CBC Section 508.5419 shall be permitted to be built as one- and two-family dwellings or townhouses. Fire suppression required by CBC Section 419.5 when constructed under the CRC for one- and two-family dwellings shall conform to CBC Section 903.3.1.3.

- Sec. 3. Subsection 91.101.6 of Section 91.101, Division 1, Article 1, Chapter IX of the Los Angeles Municipal Code is added, to be placed in numerical order, to read as follows:
 - **91.101.6.** Wildland-urban interface. The provisions of Part 7 of Title 24, the California Wildland-Urban Interface Code as amended in Article 7.1 of Chapter V of the LAMC shall apply to buildings and structures built in the wildland-urban interface (WUI) or a Fire Hazard Severity Zone.
- Sec. 4. Subsection 91.104.2.6 of Section 91.104, Division 1, Article 1, Chapter IX of the Los Angeles Municipal Code is amended to read as follows:
 - **91.104.2.6.** Alternate Materials, Alternate Design and Methods of Construction. New or alternate materials and methods of construction may be approved by the Department as provided by CBC Section 104.2.344 and LAMC Section 98.0501.
- Sec. 5. Subsection 91.105.5.5.5 of Section 91.105, Division 1, Article 1, Chapter IX of the Los Angeles Municipal Code is amended to read as follows:
 - **91.105.5.5.5.** Time Limits. The rights and privileges granted by the commission pursuant to any decision, determination, approval, appeal or exception shall be void if all required building permits are not secured within one year of the effective date of such action, or if the permit expires under any of the conditions specified in Section 98.0602 of the Los Angeles Municipal Code.

However, the commission, and the superintendent acting on behalf of the commission, may grant extensions of time if the applicant submits in writing substantial evidence that unusual conditions or circumstances either precluded the securing of all required permits within the allocated time or caused the permit to expire as specified in Section 98.0602 of the Los Angeles Municipal Code.

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Requests for extensions of time shall be made not later than 30 days after the expiration times specified in this section.

- Sec. 6. Subsection 91.106.2 of Section 91.106, Division 1, Article 1, Chapter IX of the Los Angeles Municipal Code is amended to read as follows:
 - **91.106.2.** Work exempt from a permit.**EXCEPTIONS:** 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 ordinance of the City of Los Angeles. Permits shall not be required for the following:
 - 1. Work regulated by this Code that is valued at \$2,500 or less, unless it impacts the structural stability of a building, affects public safety, is performed to comply with a Department order, or involves a change in the use or occupancy.

Permit not required for:

- 24. Flag poles and towers not erected upon a building and not more than 15 feet high. Radio and television antennae towers which do not exceed 45 feet in height or light standards which do not exceed 30 feet in height.
- 32. Construction sheds, state approved construction trailers without toilet facilities and sidewalk protection barriers and canopies built pursuant to Division 33, Article 1, Chapter IX of the LAMC.
- 43. Sandblasting, liquid washing, compressed air cleaning, steam cleaning of buildings outside of Fire District No. 1 and also those exterior surfaces of buildings which are located more than 20 feet from pedestrian walkways in dedicated streets. Painting, papering and similar work, provided, however, that the values thereof shall be included as part of the value of any new construction for which a permit is required by this Code, for the purpose of determining the amount of the fee to be paid for the permit; and provided further that this exception does not include operations such as liquid washing, compressed air cleaning and steam cleaning on the exterior surfaces of buildings adjacent and within 20 feet of pedestrian walkways in dedicated streets where these operations extend above the first story.
- 54. Platforms, walks and driveways not more than 30 inches (762 mm) above grade and not over any basement or story below.
- 65. Exhibits, booths, partitions and display counters for temporary use not exceeding 30 days in conjunction with an exhibit or show and not exceeding 12 feet in height above the floor.
- 76. Outdoor tents or cloth structures for temporary use not exceeding 30 days and not exceeding 12 feet in any dimension, provided such tents are accessory to an indoor or outdoor assembly use on the site.
- 8₹. Swimming, bathing, and wading pools not exceeding 24 inches in depth and having a surface area not exceeding 250 square feet.
- 98. Canopies or awnings located outside of Fire District No. 1 extending not more than 4 feet from the exterior wall of the building and attached to Group R Occupancies.
 - 109. Impact hazard glazing pursuant to LAMC Section 91.6101.
- 1140. Work performed by Certified Licensed Contractors in accordance with LAMC Subdivision 91.108.12.1.
- 1244. Any work accomplished under the auspices of and owned and controlled by the United States of America, by the State of California or the Los Angeles County.
- 1312. Masonry or concrete fences not over 3-1/2 feet high, and other fences, other than swimming pool barriers, not over 10 feet high.

- 1443. Tanks for the storage of combustible liquids, if resting upon the surface of the ground and surrounded by an impounding basin conforming to the requirements of Article 7 of Chapter V of the Los Angeles Municipal Code (Fire Code).
 - 1544. Cases, counters and partitions, not over 5 feet 9 inches high.
- 1645. Waterproof pointing of joints in masonry or veneer, also cleaning with detergents which are not injurious to clothing or skin of persons and are not removed by liquid washing, provided work is done from safely enclosed scaffolding which will collect any dust, debris or dropped tools and materials in use.
 - 17. Retaining walls in accordance with LAMC 101.5 item 4.
- Sec. 7. Subsection 91.106.3.3.3.2 of Section 91.106, Division 1, Article 1, Chapter IX of the Los Angeles Municipal Code is added, to be placed in numerical order, to read as follows:
 - **91.106.3.3.3.2. Standard Plans.** At the discretion of the Department of Building and Safety, the Department may approve a set of plans for a building or structure as a Standard Plan, provided that the applicant submits a proper application, includes complete sets of plans as required by this section, and pays the plan check fee as specified in LAMC Section 91.107.3.1. The plans must comply with the laws and ordinances in effect at the time a permit is issued and shall expire in accordance with LAMC Section 98.0603.
- Sec. 8. Subsection 91.106.4.4.3 of Section 91.106, Division 1, Article 1, Chapter IX of the Los Angeles Municipal Code is amended, to read as follows:
 - **91.106.4.4.3. Unfinished Buildings or Structures.** Whenever the department determines by inspection that work on any building or structure for which a permit has been issued and the work started thereon has been suspended for a period of 12 months 180 days or more, the owner of the property upon which such structure is located, or other person or agent in control of said property, upon receipt of notice in writing from the department to do so, shall, within 90 days from the date of such written notice, obtain a new permit to complete the required work and diligently pursue the work to completion, or shall remove or demolish the building or structure within 180 days from the date of the written notice.
- Sec. 9. Subsection 91.107.2.2 of Section 91.107, Division 1, Article 1, Chapter IX of the Los Angeles Municipal Code is amended to read as follows:
 - **91.107.2.2.** Combined Building-Mechanical Permit. A combined building-mechanical permit shall be issued, provided a fee is paid. The permit fee shall be as determined by using Table 1-A.1 of this division. A combined building-mechanical permit shall entitle the permittee to the inspection of all building, electrical, plumbing, heating, ventilating, and air conditioning work forin the following-systems:
 - 1. New construction or any work necessary and in conjunction with alterations, additions or demolitions to the following:
 - a. A new one- or two-family dwelling.
 - b. Detached buildings accessory to a one- or two-family dwelling.
 - c. A one-family dwelling with an attached accessory dwelling unit (ADU).

- **EXCEPTION:** A combined permit shall also be allowed for a two-family dwelling with an attached ADU in conjunction with alterations, additions or demolitions only.
- d. A detached ADU building (with up to two ADUs) when accessory to a one- or two- family dwelling.
- e. A detached ADU building (with up to two ADUs) when accessory to an apartment building, provided that such detached ADU building does not contain any other accessory uses to the apartment building.
 - **EXCEPTION:** Separate mechanical, electrical, plumbing and fire sprinkler permits are required for service feed connections.
- 2. Äny work necessary and in conjunction with alterations, additions, or demolitions to the following:a one- or two- family dwelling. ¶
 - a. A one- or two-family dwelling.¶
 - b. Detached buildings accessory to a one- or two-family dwelling.¶
 - c. A one- or two-family dwelling with an attached accessory dwelling unit. I
 - d. A detached accessory dwelling unit building with up to two dwelling units when accessory to a one- or two-family dwelling.¶
 - e. A detached accessory dwelling unit building with up to two dwelling units when accessory to a multi-family dwelling as long as the detached accessory dwelling unit building contains no other uses accessory to the apartment.¶

In the event that work in one or more of the mechanical trades is not required, the applicable fee(s) shall not be collected.

- 2. A pool accessory to a one- or two-family dwelling, except pools that are exempt from a building permit but may require a permit for electrical, plumbing, and heatring work, a combined building-mechanical permit shall be issued, provided a fee is paid. The fee shall be 75% of the fee determined from Table 1-A of this division.
- 3. A complete solar heating and/or cooling system installation appurtenant to and used exclusively by a one- or two-family dwelling; or an individual dwelling unit, individual accessory dwelling unit, or an efficiency dwelling unit in an apartment house, apartment-hotel or hotel; or a pool accessory to a one-family dwelling.
- Sec. 10. Division 2, Article 1, Chapter IX of the Los Angeles Municipal Code is amended, with no other changes to existing sections therein, to read as follows:

DIVISION 2 DEFINITIONS AND ABBREVIATIONS

Section 91.201 General. 91.202 Definitions.

Sec. 11. Section 91.202, Division 2, Article 1, Chapter IX of the Los Angeles Municipal Code is amended to read as follows:

SEC. 91.202. DEFINITIONS.

Section 202 of the CBC is adopted by reference, except that the following CBC definitions are not adopted:

APPROVED AGENCY

APPROVED FABRICATOR

BUILDING LINE

BUILDING OFFICIAL

DEPARTMENT

REGISTERED DESIGN PROFESSIONAL

The following definitions are also adopted:

APPROVED AGENCY or APPROVED TESTING AGENCY. An established and recognized agency regularly engaged in conducting tests or furnishing inspection services which has been approved by the Superintendent of Building.

APPROVED FABRICATOR. An established and qualified person, firm or corporation approved by the Superintendent of Building pursuant to Division 17 of this Code and LAMC Section 96.200.

BOARD is the Board of Building and Safety Commissioners of the City of Los Angeles.

BUILDING CODE (CODE) is the Los Angeles City Building Code, Article 1 of Chapter IX of the Los Angeles Municipal Code.

BUILDING LINE is any private property line coterminous with a public way; or a building line established by City ordinance.

BUILDING OFFICIAL is the Superintendent of Building for the City of Los Angeles Department of Building and Safety.

CALIFORNIA BUILDING CODE (CBC). Is Part 2, Title 24 of the California Code of Regulations as adopted by the California Building Standards Commission.

CHIEF OF THE FIRE DEPARTMENT is the Fire Chief of the Los Angeles Fire Department or a duly authorized representative.

CITY is the City of Los Angeles, California.

CONCRETE BUILDING is a building having concrete floors and/or roofs, either with or without beams, supported by concrete walls and/or concrete columns, with or without masonry infills, and any combination thereof.

DEPARTMENT is the Department of Building and Safety.

ELECTRICAL CODE is the Los Angeles City Electrical Code, Article 3 of Chapter IX of the Los Angeles Municipal Code.

ELEVATOR CODE is the Los Angeles City Elevator Code, Article 2 of Chapter IX of the Los Angeles Municipal Code.

FIRE CODE is the Los Angeles City Fire Code, Article 7 of Chapter V of the Los Angeles Municipal Code.

FIRE DISTRICT is any portion of the City of Los Angeles as described in Division 72 of this Code.

FOUNDATION-ONLY PERMIT is a building permit issued for that portion of a building, which constitutes the footings for the building and which, subject to the approval of the Department, may include those portions of the building below the grade level.

GRADING shall mean soil excavation or fill or any combination of soil excavation or fill and shall include the conditions resulting from any soil excavation or fill.

GRAFFITI shall mean any form of unauthorized inscription, word, figure or design which is marked, etched, scratched, drawn, sprayed, painted or otherwise affixed to or on any surface of public or private property, including, but not limited to buildings, walls, signs, structures or places, or other surfaces, regardless of the nature of the material of that structural component.

INDUSTRIAL CATERING TRUCK. An industrial catering truck is a motor vehicle used for the purpose of dispensing and selling liquids from sanitary dispensers and/or ready-to-eat food and beverages that have been prepared and sealed or packaged on premises so long as the owner and operator have a valid health permit authorizing the preparation of food. The above items may be prepared on any industrial catering truck so long as the owner and operator have a valid health permit for that preparation.

MECHANICAL CODE is the Los Angeles City Mechanical Code, Article 5 of Chapter IX of the Los Angeles Municipal Code.

NON-DUCTILE CONCRETE BUILDING. A concrete building that was built pursuant to a permit application for a new building submitted before January 13, 1976, or, if no permit can be located, is determined by the Department to have been built under building code standards enacted before January 13, 1976.

EXCEPTION: "Non-Ductile Concrete Building" shall not include detached single-family dwellings or duplexes.

PLUMBING CODE is the Los Angeles City Plumbing Code, Article 4, Chapter IX of the Los Angeles Municipal Code.

REGISTERED DESIGN PROFESSIONAL. A licensed architect or engineer registered with the appropriate California State licensing board.

STANDARD PLAN is a set of plans for a building or structure created and designed by the City or private architects and/or engineers to accommodate various site conditions. These plans can be utilized for various project sites throughout the City, provided they are reviewed and approved by the Department of Building and Safety. For privately owned Standard Plans, property owners interested in constructing a building or structure using a Standard Plan must contact the plan owner to purchase a copy and then apply for a building permit.

SUPERINTENDENT OF BUILDING is the General Manager of the Department of Building and Safety of the City of Los Angeles or a duly authorized representative.

TEMPORARY. Buildings and facilities intended for use at one location for not more than 180 days and seats intended for use at one location for not more than 90 days.

UNREINFORCED MASONRY BEARING WALL BUILDING is a building with at least one unreinforced masonry bearing wall as the term is defined in the California Existing Building Code, at Title 24 of the California Code of Regulations.

VERY HIGH FIRE HAZARD SEVERITY ZONE (VHFHSZ) is a Fire District in the City of Los Angeles established by the Board of Forestry and the Office of the State Fire Marshal and described in Division 72, Article 1 of Chapter IX of the Los Angeles Municipal Code.

Sec. 12. Division 3, Article 1, Chapter IX of the Los Angeles Municipal Code is amended, with no other changes to existing sections therein, to read as follows:

DIVISION 3 USE OR OCCUPANCY CLASSIFICATION AND USE

Section 91.300 Basic Provisions.

Sec. 13. Division 4, Article 1, Chapter IX of the Los Angeles Municipal Code is amended, with no other changes to existing sections therein, to read as follows:

DIVISION 4 SPECIAL DETAILED REQUIREMENTS BASED ON USE AND OCCUPANCY AND USE

Section 91 400 Basic Provisions

Sec. 14. Division 7, Article 1, Chapter IX of the Los Angeles Municipal Code is amended, with no other changes to existing sections therein, to read as follows:

DIVISION 7 FIRE-RESISTANT MATERIALS- AND SMOKE PROTECTION FEATURESCONSTRUCTION

Section 91.700 Basic Provisions

- 91.703 Fire-Resistance Ratings and Fire Tests.
- Sec. 15. Subsection 91.703.2.3 of Section 91.703, Division 7, Article 1, Chapter IX of the Los Angeles Municipal Code is deleted and reinstated, to be placed in numerical order, to read as follows:
 - **91.703.2.3. Approved Alternate Method.** The fire resistance of building elements, components or assemblies not complying with CBC Section 703.2.1 or 703.2.2 shall be permitted to be established by an alternative protection method in accordance with LAMC Section 91.104.2.6.
- Sec. 16. Division 7A, Article 1, Chapter IX of the Los Angeles Municipal Code is added, to be placed in numerical order, to read as follows:

DIVISION 7A MATERIALS AND CONSTRUCTION METHODS FOR EXTERIOR WILDFIRE EXPOSURE

Section

91.700A Basic Provisions.

Sec. 17. Section 91.700A of Division 7A, Article 1, Chapter IX of the Los Angeles Municipal Code is added to read as follows:

SEC. 91.700A. BASIC PROVISIONS.

Chapter 7A of the CBC is hereby adopted by reference.

Sec. 18. Division 9, Article 1, Chapter IX of the Los Angeles Municipal Code is amended, with no other changes to existing sections therein, to read as follows:

DIVISION 9 FIRE -PROTECTION AND LIFE SAFETY -and Life Safety-SYSTEMS

Section

91.900 Basic Provisions.

91.909 Smoke Control Systems.

- Sec. 19. Subsection 91.909.3 of Section 91.909, Division 9, Article 1, Chapter IX of the Los Angeles Municipal Code is deleted and reinstated, to be placed in numerical order, to read as follows:
 - **91.909.3.** Special Inspection and Test Requirements. In addition to the ordinary inspection and test requirements, which buildings, structures and parts of buildings and structures are required to undergo, smoke control systems subject to the provisions of LAMC Section 91.909 shall undergo special inspections and tests sufficient to verify the proper commissioning of the smoke control design in its final installed condition. The design submission accompanying the construction documents shall clearly detail procedures and methods to be used and the items subject to the inspections and tests. The commissioning shall be in accordance with generally accepted practice and, where possible, based on published standards for the particular testing involved. The special

inspections and tests required by this section shall be in compliance with LAMC Section 91.1704.

A copy of the final report of the results of the special inspections and tests shall be filed with the Superintendent of Building and the Fire Department and an identical copy shall be maintained in an approved location at the building.

- Sec. 20. Subsection 91.909.3.1 of Section 91.909, Division 9, Article 1, Chapter IX of the Los Angeles Municipal Code is deleted and reinstated, to be placed in numerical order, to read as follows:
 - **91.909.3.1. System Testing.** Prior to the issuance of a Certificate of Occupancy, all of the smoke-control systems shall be tested as required by the Department of Building and Safety and the Fire Department and shall show compliance with the minimum standards of both Departments. The tests shall be conducted in the presence of an authorized representative from both Departments. A report of the results shall be submitted to both Departments.
- Sec. 21. Subsection 91.909.3.2 of Section 91.909, Division 9, Article 1, Chapter IX of the Los Angeles Municipal Code is deleted and reinstated, to be placed in numerical order, to read as follows:
 - **91.909.3.2. Periodic Retesting.** After occupancy of the building, all operating parts of the smoke-control systems shall be retested every six months in accordance with the retest requirements established by the Department of Building and Safety and the Fire Department. The retest shall be conducted by an approved inspection agency or by the owner or the owner's representative when so approved by both Departments. Also, a report of the test results shall be submitted to both Departments.
- Sec. 22. Section 91.1206, Division 12, Article 1, Chapter IX of the Los Angeles Municipal Code is amended, with no other changes to existing subsections therein, to read as follows:

SEC. 91.1206. SOUND TRANSMISSION.

Section 1206 of the CBC is adopted by reference, except CBC Section 1206.1, is not adopted and, in lieu, LAMC Subsections 91.1206.1, 91.1206.1.2, 91.1206.6, 91.1206.7, 91.1206.8, 91.1206.9, 91.1206.9.1, 91.1206.10, 91.1206.11, 91.1206.12, 91.1206.13, 91.1206.14, 91.1206.14.1, 91.1206.14.2, 91.1206.14.3, 91.1206.15.4, 91.1206.16 and 91.1206.17 are added.

- Sec. 23. Subsection 91.1206.1 of Section 91.1206, Division 12, Article 1, Chapter IX of the Los Angeles Municipal Code is deleted and reinstated, to be placed in numerical order, to read as follows:
 - **91.1206.1. Purpose and Scope.** The purpose of this section is to establish uniform minimum noise insulation performance standards to protect persons within new hotels, motels, dormitories, residential care facilities, apartment houses, dwellings, private schools, and places of worship from the effects of excessive noise, including but not limited to, hearing loss or impairment and interference with speech and sleep.

Sec. 24. Subsection 91.1206.1.2 of Section 91.1206, Division 12, Article 1, Chapter IX of the Los Angeles Municipal Code is deleted and reinstated, to be placed in numerical order, to read as follows:

91.1206.1.2. **Definitions.** The following special definitions shall apply to this section:

SOUND TRANSMISSION CLASS (STC) is a single-number rating used to compare walls, floor- ceiling assemblies and doors for their sound-insulating properties with respect to speech and small household appliance noise. The STC is derived from laboratory measurements of sound transmission loss across a series of 16 test bands. Laboratory STC ratings should be used to the greatest extent possible in determining that the design complies with this section.

FIELD SOUND TRANSMISSION CLASS (FSTC) is a single-number rating similar to STC, except that the transmission loss values used to derive the FSTC are measured in the field. All sound transmitted from the source room to the receiving room is assumed to be through the separating wall or floor-ceiling assembly. This section does not require determination of the FSTC, and field-measured values of noise reduction should not be reported as transmission loss.

IMPACT INSULATION CLASS (IIC) is a single-number rating used to compare the effectiveness of floor-ceiling assemblies in providing reduction of impact-generated sounds such as footsteps. The IIC is derived from laboratory measurements of impact sound pressure level across a series of 16 test bands using a standardized tapping machine. Laboratory IIC ratings should be used to the greatest extent possible in determining that the design complies with this section.

FIELD IMPACT INSULATION CLASS (FIIC) is a single-number rating similar to the IIC, except that the impact sound pressure levels are measured in the field.

NOISE ISOLATION CLASS (NIC) is a single- number rating derived from measured values of noise reduction between two enclosed spaces that are connected by one or more paths. The NIC is not adjusted or normalized to a standard reverberation time.

NORMALIZED NOISE ISOLATION CLASS (NNIC) is a single-number rating similar to the NIC, except that the measured noise reduction values are normalized to a reverberation time of one-half second.

NORMALIZED A-WEIGHTED SOUND LEVEL DIFFERENCE (D_n) means for a specified source room sound spectrum, D_n is the difference, in decibels, between the average sound levels produced in two rooms after adjustment to the expected acoustical conditions when the receiving room under test is normally furnished.

DAY-NIGHT AVERAGE SOUND LEVEL (L_{dn}) is the A-weighted equivalent continuous sound exposure level for a 24-hour period with a 10 db adjustment added to sound levels occurring during nighttime hours (10 p.m. to 7 a.m.).

COMMUNITY NOISE EQUIVALENT LEVEL (CNEL) is a metric similar to the L_{dn} , except that a 5 db adjustment is added to the equivalent continuous sound exposure level for evening hours (7 p.m. to 10 p.m.) in addition to the 10 db nighttime adjustment used in the L_{dn} .

- Sec. 25. Subsection 91.1206.6 of Section 91.1206, Division 12, Article 1, Chapter IX of the Los Angeles Municipal Code is deleted and reinstated, to be placed in numerical order, to read as follows:
 - 91.1206.6. Relevant Standards. The current edition of the following standards is generally applicable for determining compliance with this section and copies may be obtained from the ASTM International: ASTM C 634, Standard Terminology Relating to Building and Environmental Acoustics; ASTM E 90, Standard Test Method for Laboratory Measurement of Airborne Sound Transmission Loss of Building Partitions and Elements: ASTM E 336, Standard Test Method for Measurement of Airborne Sound Attenuation Between Rooms in Buildings; ASTM E 413, Classification for Rating Sound Insulation; ASTM E 492, Standard Test Method for Laboratory Measurement of Impact Sound Transmission Through Floor-Ceiling Assemblies Using the Tapping Machine; ASTM E 497. Standard Recommended Practice for Installation of Fixed Partitions of Light Frame Type for the Purpose of Conserving Their Sound Insulation Efficiency: ASTM E 597. Recommended Practice for Determining a Single-Number Rating of Airborne Sound Isolation in Multi-unit Building Specifications; ASTM E 966, Standard Guide for Field Measurements of Airborne Sound Insulation of Building Facades and Facade Elements; ASTM E 989, Standard Classification for Determination of Impact Insulation Class (IIC); ASTM E 1007, Standard Test Method for Field Measurement of Tapping Machine Impact Sound Transmission Through Floor-Ceiling Assemblies and Associated Support Structures; and ASTM E 1014, Standard Guide for Measurement of Outdoor A-Weighted Sound Levels.
- Sec. 26. Subsection 91.1206.7 of Section 91.1206, Division 12, Article 1, Chapter IX of the Los Angeles Municipal Code is deleted and reinstated, to be placed in numerical order, to read as follows:
 - **91.1206.7. Complaints.** Where a complaint as to noncompliance with this division requires a field test, the complainant shall post a bond or adequate funds in escrow for the cost of the field test. Such costs shall be chargeable to the complainant if the field tests show compliance with this division. If the tests show noncompliance, testing costs shall be borne to the owner or builder.
- Sec. 27. Subsection 91.1206.8 of Section 91.1206, Division 12, Article 1, Chapter IX of the Los Angeles Municipal Code is deleted and reinstated, to be placed in numerical order, to read as follows:
 - **91.1206.8.** Local Modification. The governing body of any city or county or city and county may, by ordinance, adopt changes or modifications to the requirements of this section as set forth in Section 17922.7 of the Health and Safety Code.
- Sec. 28. Subsection 91.1206.9 of Section 91.1206, Division 12, Article 1, Chapter IX of the Los Angeles Municipal Code is deleted and reinstated, to be placed in numerical order, to read as follows:

91.1206.9. Interdwelling Sound Transmission Control.

- Sec. 29. Subsection 91.1206.9.1 of Section 91.1206, Division 12, Article 1, Chapter IX of the Los Angeles Municipal Code is deleted and reinstated, to be placed in numerical order, to read as follows:
 - **91.1206.9.1. Wall and Floor-Ceiling Assemblies.** Wall and floor-ceiling assemblies separating dwelling units or guest rooms from each other and from public or service areas such as interior corridors, garages and mechanical spaces shall provide airborne sound insulation for walls, and both airborne and impact sound insulation for floor-ceiling assemblies.
 - **EXCEPTION:** Impact sound insulation is not required for floor-ceiling assemblies over nonhabitable rooms or spaces not designed to be occupied, such as garages, mechanical rooms or storage areas.
- Sec. 30. Subsection 91.1206.10 of Section 91.1206, Division 12, Article 1, Chapter IX of the Los Angeles Municipal Code is deleted and reinstated, to be placed in numerical order, to read as follows:
 - 91.1206.10. Airborne Sound Insulation. All such acoustically rated separating wall and floor-ceiling assemblies shall provide airborne sound insulation equal to that required to meet a sound transmission class (STC) rating of 50 based on laboratory tests as defined in ASTM E 90 and E 413. Field-tested assemblies shall meet a noise isolation class (NIC) rating of 45 for occupied units and a normalized noise isolation class (NINIC) rating of 45 for unoccupied units as defined in ASTM E 336 and E 413. ASTM E 597 may be used as simplified procedure for field tests of the airborne sound isolation between rooms in unoccupied buildings. In such tests, the minimum value of D_n is 45 db for compliance. Entrance doors from interior corridors together with their perimeter seals shall have STC ratings not less than 26. Such tested doors shall operate normally with commercially available seals. Solid-core wood-slab doors 1 3/8 inches (35 mm) thick minimum or 18 gauge insulated steel-slab doors with compression seals all around, including the threshold, may be considered adequate without other substantiating information. Field tests of corridor walls should not include segments with doors. If such tests are impractical, however, the NIC or NNIC rating for the composite wall-door assembly shall not be less than 30. Penetrations or openings in construction assemblies for piping, electrical devices, recessed cabinets, bathtubs, soffits or heating, ventilating or exhaust ducts shall be sealed, lined, insulated or otherwise treated to maintain the required ratings.
- Sec. 31. Subsection 91.1206.11 of Section 91.1206, Division 12, Article 1, Chapter IX of the Los Angeles Municipal Code is deleted and reinstated, to be placed in numerical order, to read as follows:
 - **91.1206.11. Impact Sound Insulation.** All acoustically rated separating floor-ceiling assemblies shall provide impact sound insulation equal to that required to meet a IIC rating of 50 based on laboratory tests as defined in ASTM E 492 and E 989. Field-tested assemblies shall meet a field impact insulation class (FIIC) rating of 45 for both occupied and unoccupied units as defined in ASTM E 1007 and E 989, with the exception that the measured impact sound pressure levels shall not be normalized to a standard amount of absorption in the receiving room. Floor coverings may be included in the assembly to

obtain the required ratings. These coverings must be retained as a permanent part of the assembly and may be replaced only by other floor coverings that provide the required impact sound insulation.

- Sec. 32. Subsection 91.1206.12 of Section 91.1206, Division 12, Article 1, Chapter IX of the Los Angeles Municipal Code is deleted and reinstated, to be placed in numerical order, to read as follows:
 - 91.1206.12. Tested Assemblies. Laboratory-tested wall or floor-ceiling designs having STC or IIC ratings of 50 or more may be used by the Building Official to determine compliance with this section during plan review phase. Field tests shall be required by the Building Official when evidence of sound leaks or flanking paths is noted, or when the separating assembly is not built according to the approved design. Generic sound transmission control systems as listed in the Catalog of STC and IIC Ratings for Wall and Floor-Ceiling Assemblies, as published by the Office of Noise Control. California Department of Health Services, or the Fire Resistance Design Manual, as published by the Gypsum Association, may be used to evaluate construction assemblies for their sound transmission properties. Other tests from recognized laboratories may also be used. When ratings for essentially similar assemblies differ, and when ratings are below STC or IIC 50, field testing may be used to demonstrate that the building complies with this section. For field testing, rooms should ideally be large and reverberant for reliable measurements to be made in all test bands. This is often not possible for bathrooms. kitchens, hallways or rooms with large amounts of sound-absorptive materials. Field test results should, however, report the measured values in all bands, noting those which do not meet relevant ASTM criteria for diffusion. It should be noted that STC ratings do not adequately characterize the sound insulation of construction assemblies when the intruding noise is predominantly low-pitched, as is often produced by amplified music or by large pieces of mechanical equipment. It should also be noted that the transmission of impact sound from a standardized tapping machine may vary considerably for a given design due to differences in specimen size, flanking transmission through associated structure and the acoustical response of the room below. Laboratory IIC values should therefore be used with caution when estimating the performance of hard- surfaced floors in the field. Additionally, IIC ratings may not always be adequate to characterize the subjectively annoying creak or boom generated by footfalls on a lumber floor.
- Sec. 33. Subsection 91.1206.13 of Section 91.1206, Division 12, Article 1, Chapter IX of the Los Angeles Municipal Code is deleted and reinstated, to be placed in numerical order, to read as follows:
 - **91.1206.13. Certification.** Field testing, when required, shall be done under the supervision of a person experienced in the field of acoustical testing and engineering, who shall forward test results to the Building Official showing that the sound isolation requirements stated above have been met. Documentation of field test results should generally follow the requirements outlined in relevant ASTM standards.
- Sec. 34. Subsection 91.1206.14 of Section 91.1206, Division 12, Article 1, Chapter IX of the Los Angeles Municipal Code is deleted and reinstated, to be placed in numerical order, to read as follows:

91.1206.14. Exterior Sound Transmission Control.

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- Sec. 35. Subsection 91.1206.14.1 of Section 91.1206, Division 12, Article 1, Chapter IX of the Los Angeles Municipal Code is deleted and reinstated, to be placed in numerical order, to read as follows:
 - **91.1206.14.1.** Application Consistent with Local Land-Use Standards. All structures identified in LAMC Subsection 91.1206.1 located in noise critical areas, such as proximity to highways, country roads, city streets, railroads, rapid transit lines, airports or industrial areas shall be designed to prevent the intrusion of exterior noises beyond prescribed levels. Proper design shall include, but shall not be limited to, orientation of the structure, setbacks, shielding and sound insulation of the building itself.
- Sec. 36. Subsection 91.1206.14.2 of Section 91.1206, Division 12, Article 1, Chapter IX of the Los Angeles Municipal Code is deleted and reinstated, to be placed in numerical order, to read as follows:
 - **91.1206.14.2.** Allowable Interior Noise Levels. Interior noise levels attributable to exterior sources shall not exceed 45 db in any habitable room. The noise metric shall be either the day-night average sound level (L_{dn}) or the community noise equivalent level (CNEL), consistent with the noise element of the local general plan.

Note: L_{dn} is the preferred metric for implementing these standards. Worst-case noise levels, either existing or future, shall be used as the basis for determining compliance with this section. Future noise levels shall be predicted for a period of at least ten (10) years from the time of building permit application.

- Sec. 37. Subsection 91.1206.14.3 of Section 91.1206, Division 12, Article 1, Chapter IX of the Los Angeles Municipal Code is deleted and reinstated, to be placed in numerical order, to read as follows:
 - **91.1206.14.3. Airport Noise Sources.** Residential structures and all other structures identified in LAMC Subsection 91.1206.1 located where the annual L_{dn} or CNEL (as defined in California Code of Regulations, Title 21, Division 2.5, Chapter 6, Section 5001) exceeds 60 db, shall require an acoustical analysis showing that the proposed design will achieve the prescribed allowable interior level.

EXCEPTION: New single-family detached dwellings and all non-residential noise sensitive structures located outside the noise impact boundary of 65 db CNEL are exempt from LAMC Section 91.1206.

Alterations or additions to all noise sensitive structures, within the 65 db and greater CNEL shall comply with LAMC Section 91.1206. If the addition or alteration cost exceeds 75% of the replacement cost of the existing structure, then the entire structure must comply with LAMC Section 91.1206.

For public-use airports or heliports, the $L_{d}n$ or CNEL shall be determined from the Aircraft Noise Impact Area Map prepared by the Airport Authority. For military bases, the L_{dn} shall be determined from the facility Air Installation Compatible Use Zone (AICUZ) plan. For all other airports or heliports, or public-use airports or heliports for which a land-use plan has not been developed, the L_{dn} or CNEL shall be determined from the noise element of the general plan of the local jurisdiction.

When aircraft noise is not the only significant source, noise levels from all sources shall be added to determine the composite site noise level.

- Sec. 38. Subsection 91.1206.15.4 of Section 91.1206, Division 12, Article 1, Chapter IX of the Los Angeles Municipal Code is deleted:
 - **91.1206.15.4.** Other Noise Sources. All structures identified in LAMC Subsection 91.1206.1 located where the L_{dn} or CNEL exceeds 60 db shall require an acoustical analysis showing that the proposed design will limit exterior noise to the prescribed allowable interior level. The noise element of the local general plan shall be used to the greatest extent possible to identify sites with noise levels potentially greater than 60 db.
- Sec. 39. Subsection 91.1206.15 of Section 91.1206, Division 12, Article 1, Chapter IX of the Los Angeles Municipal Code is added, to be placed in numerical order, to read as follows:
 - **91.1206.15. Other Noise Sources.** All structures identified in LAMC Subsection 91.1206.1 located where the L_{dn} or CNEL exceeds 60 db shall require an acoustical analysis showing that the proposed design will limit exterior noise to the prescribed allowable interior level. The noise element of the local general plan shall be used to the greatest extent possible to identify sites with noise levels potentially greater than 60 db.
- Sec. 40. Subsection 91.1206.16 of Section 91.1206, Division 12, Article 1, Chapter IX of the Los Angeles Municipal Code is deleted and reinstated, to be placed in numerical order, to read as follows:
 - **91.1206.16. Compliance.** Evidence of compliance shall be submitted with the application for a building permit for all structures identified in LAMC Subsection 91.1206.1. Evidence of compliance shall consist of the submittal of an acoustical analysis report prepared under the supervision of a person experienced in the field of acoustical engineering or the use of prescriptive standards as determined by the Superintendent of Building for residential structures. The report shall show topographical relationships of noise sources and dwelling sites, identification of noise sources and their characteristics, predicted noise spectra and levels at the exterior of the proposed structure considering present and future land usage, the basis for the prediction (measured or obtained from published data), the noise attenuation measures to be applied, and an analysis of the noise insulation effectiveness of the proposed construction showing that the prescribed interior level requirements are met.

If interior allowable noise levels are met by requiring that windows be unopenable or closed, the design for the structure must also specify a ventilation or air-conditioning system to provide a habitable interior environment. The ventilation system must not compromise the interior room noise reduction.

- Sec. 41. Subsection 91.1206.17 of Section 91.1206, Division 12, Article 1, Chapter IX of the Los Angeles Municipal Code is deleted and reinstated, to be placed in numerical order, to read as follows:
 - **91.1206.17. Field Testing.** When inspection indicates that the construction is not in accordance with the approved design, or that the noise reduction is compromised due to sound leaks or flanking paths, field testing may be required. A test report showing compliance or noncompliance with prescribed interior allowable levels shall be submitted

to the building official. Measurements of outdoor sound levels shall generally follow the guidelines in ASTM E 1014. Field measurements of the A-weighted airborne sound insulation of buildings from exterior sources shall generally follow the guidelines in ASTM E 966. For the purpose of this standard, sound level differences measured in unoccupied units shall be normalized to a receiving room reverberation time of one-half second. Sound level differences measured in occupied units shall not be normalized to a standard reverberation time.

Sec. 42. Division 13, Article 1, Chapter IX of the Los Angeles Municipal Code is amended, with no other changes to existing sections therein, to read as follows:

DIVISION 13 ENERGY EFFICIENCY CONSERVATION

Section 91.1300 General.

91.1301 Solar Energy Collectors.

- Sec. 43. Subsection 91.1402.3 of Section 91.1402, Division 14, Article 1, Chapter IX of the Los Angeles Municipal Code is amended to read as follows:
 - **91.1402.3. Structural.** Exterior walls, exterior wall coverings, exterior soffits and fascias, and the associated openings, shall be designed and constructed to resist safely the superimposed loads required by Division 16, Article 1, Chapter IX of the LAMC.

In no case shall veneer be considered as part of the wall in computing strength or deflection, nor shall it be considered a part of the required thickness of the wall. Deflection of lateral support of veneer, including wood studs, shall be no greater than h/500.

- Sec. 44. Subsection 91.1402.3.2 of Section 91.1402, Division 14, Article 1, Chapter IX of the Los Angeles Municipal Code is added, to be placed in numerical order, to read as follows:
 - **91.1402.3.2 Veneer Deflection.** In no case shall veneer be considered as part of the wall in computing strength or deflection, nor shall it be considered a part of the required thickness of the wall. Deflection of lateral support of veneer, including wood studs, shall be no greater than h/500.
- Sec. 45. Division 15, Article 1, Chapter IX of the Los Angeles Municipal Code is amended to revise Section 91.1511's title to Rooftop Structures and add Section 91.1512 Reroofing, in numerical order, with no other changes to existing sections therein, to read as follows:

DIVISION 15 ROOFS AND ROOF STRUCTURES

Section

91.1500 Basic Provisions.

91.1505 Fire Classification.

91.1507 Requirements for Roof Coverings.

91.1511 Rooftop StructuresReroofing.

91.1512 Reroofing.

Sec. 46. Subsection 91.1505.1 of Section 91.1505, Division 15, Article 1, Chapter IX of the Los Angeles Municipal Code is amended to read as follows:

91.1505.1. General. Fire classification of roof assemblies shall be in accordance with Section 1505. The minimum fire classification of roof assemblies installed on buildings shall comply with Table 1505.1 based on type of construction of the building. Class A, B and C roof assemblies and roof coverings required to be listed by this section shall be tested in accordance with ASTM E108 or UL 790. Roof assemblies shall be divided into the classes defined below. Class A, B and C roof assemblies and roof coverings required to be listed by this section shall be tested in accordance with ASTM E 108 or UL 790. The minimum roof coverings installed on buildings shall comply with CBC Table 1505.1 based on the type of construction of the building.

EXCEPTION: Skylights and sloped glazing shall comply with Division 2412, Article 1, Chapter IX of the LAMC.

No wood shake or wood shingle roof covering is permitted anywhere in the City.

Sec. 47. Table 1507.3.7 of Section 91.1507, Division 15, Article 1, Chapter IX of the Los Angeles Municipal Code is amended by revising the entries under "GENERAL - CLAY OR CONCRETE ROOF TILE" to read as follows:

GENERAL – CLAY OR CONCRETE ROOF TILE					
Maximum Allow- able Stress Design Wind Speed, V _{asd} [†] (mph) Maximum basic- wind speed (mph)	Mean roof height (feet)	Roof slope up to <3:12	Roof slope 3:12 and over		
85	0-60	Two fasteners per tile.	Two fasteners per tile.		
100	0-40	Two lasteriers per tile.	Two fasteriers per tile.		
100	>40-60	The head of all tiles shall be nailed. The nose of all eave tiles shall be fastened with approved clips. All rake tiles shall be nailed with two nails. The nose of all ridge, hip and rake tiles shall be set in a bead of roofer's mastic.			
110	0-60	The fastening system shall resist the wind forces in CBC Section 1609.6.3.15.3.			
120	0-60	The fastening system shall resist the wind forces in CBC Section 1609.6.3.15.3.			
130	0-60	The fastening system shall resist the wind forces in CBC Section 1609.6.3.15.3.			
All	>60	The fastening system shall resist the wind forces in CBC Section 1609.6.3.15.3.			

Sec. 48. Table 1507.3.7 of Section 91.1507, Division 15, Article 1, Chapter IX of the Los Angeles Municipal Code is amended by revising the entries under "INTERLOCKING CLAY"

OR CONCRETE ROOF TILE WITH PROJECTING ANCHOR LUGS (Installations on solid sheathing with battens)" to read as follows:

INTERLOCKING CLAY OR CONCRETE ROOF TILE WITH PROJECTING ANCHOR LUGS d, e (Installations on solid sheathing with battens)						
Maximum Allow- able Stress Design Wind Speed, V _{asd} f (mph) Maximum basic wind speed (mph)	Mean roof height (feet)	Roof slope up to < 5:12	Roof slope 5:12 < 12:12	Roof slope 12:12 and over		
85	0-60	Minimum slope is One fastener per til	One fastener per tile. Tiles with installed weight less than 9 lbs./sq.	One fastener required for every tile. Tiles with installed weight less than 9		
100	0 - 40	ner tile		lbs./sq. ft. require a minimum of one fastener per tile.		
100		The head of all tiles shall be nailed. The nose of all eave tiles shall be fastened with approved clips. All rake tiles shall be nailed with two nails. The nose of all ridge, hip and rake tiles shall be set in a bead of roofer's mastic.				
110	0-60	The fastening system shall resist the wind forces in CBC Section 1609.6.3.15.3.				
120	0-60	The fastening system shall resist the wind forces in CBC Section 1609.6.3.15.3.				
130	0-60	The fastening system shall resist the wind forces in CBC Section 1609.6.3.15.3.				
All	>60	The fastening system shall resist the wind forces in CBC Section 1609.6.3.15.3.				

Sec. 49. Table 1507.3.7 of Section 91.1507, Division 15, Article 1, Chapter IX of the Los Angeles Municipal Code is amended by revising the entries under "INTERLOCKING CLAY OR CONCRETE ROOF TILE WITH PROJECTING ANCHOR LUGS (Installations on solid sheathing without battens)" and to add footnote f. to read as follows:

INTERLOCKING CLAY OR CONCRETE ROOF TILE WITH PROJECTING ANCHOR LUGS (Installations on solid sheathing without battens)					
Maximum Allow- able Stress Design Wind Speed, V _{asd} [†] (mph)Maximum basic wind speed (mph)	Mean roof height (feet)	Minimum roof slopes 4 units vertical in 12 units horizontal Maximum slope 7 units vertical in 12 units horizontal			
85	0-60	One fastener per tile.			
100	0-40	One fastener per tile.			
100	>40-60	The head of all tiles shall be nailed. The nose of all eave tiles shall be fastened with approved clips. All rake tiles shall be nailed with two nails The nose of all ridge, hip and rake tiles shall be set in a bead of roofer's mastic.			
110	0-60	The fastening system shall resist the wind forces in CBC Section 1609.6.3.15.3.			
120	0-60	The fastening system shall resist the wind forces in CBC Section 1609.6.3.15-3.			
130	0-60	The fastening system shall resist the wind forces in CBC Section 1609.6.3.15.3.			
All	>60	The fastening system shall resist the wind forces in CBC Section 1609.6.3.15.3.			

Sec. 50. Table 1507.3.7 Footnotes of Table 1507.3.7 of Section 91.1507, Division 15, Article 1, Chapter IX of the Los Angeles Municipal Code are amended to read as follows:

For SI: one inch = 25.4 mm, one foot = 304.8 mm, one mile per hour = 0.447 m/s, one pound per square foot= 4.882 kg/m2.

- a. Minimum fastener size. Hot dipped galvanized ring shank or other corrosion-resistant nails not less than No. 11 gage with 5/16-inch head. Fasteners shall be long enough to penetrate into the sheathing 0.75 inch or through the thickness of the sheathing, whichever is less. Attaching wire for clay and concrete tile shall not be smaller than 0.083 inch and shall be copper, brass or stainless steel.
- b. Snow areas. A minimum of two fasteners per tile are required or battens and one fastener
- c. Roof slopes greater than 24:12. The nose of all tiles shall be securely fastened.
- d. Horizontal battens. Battens shall be not less than one-inch by two-inch nominal. Provisions shall be made for drainage by a minimum of 1/8-inch riser at each nail or by four-foot-long battens with at least a 0.5-inch separation between battens. Horizontal battens are required for slopes over 7:12.
- e. Perimeter fastening areas include three tile courses but not less than 36 inches from either side of hips or ridges and edges of eaves and gable rakes.
- f. V_{asd} shall be determined in accordance with CBC Section 1609.3.1.
- Sec. 51. Section 91.1511, Division 15, Article 1, Chapter IX of the Los Angeles Municipal Code is amended to read as follows:

SEC. 91.1511. ROOFTOP STRUCTURESREROOFING.

Section 1511 of the CBC is adopted by reference., except CBC Sections 1512.2.1 and 1512.3 are not adopted and, in lieu, Los Angeles Municipal Code Subsections 91 1512.2.1 and 91 1512.3 are added

Sec. 52. Subsection 91.1512.2.1 of Section 91.1511, Division 15, Article 1, Chapter IX of the Los Angeles Municipal Code is deleted:

91.1512.2.1. Roof Recover. The installation of a new roof covering over an existing roof covering shall be permitted where any of the following conditions occur:¶

- 1. Where the new roof covering is installed in accordance with the roof covering-manufacturer's approved instructions.
 - 2. Complete and separate roofing systems, such as standing-seam metal roof panel-systems, that are designed to transmit the roof loads directly to the building's structural system and that do not rely on existing roofs and roof coverings for support, shall not require the removal of existing roof coverings.
 - 3. The application of a new protective coating over an existing spray polyurethanefoam roofing system shall be permitted without tear off of existing roof coverings.
- Sec. 53. Subsection 91.1512.3 of Section 91.1511, Division 15, Article 1, Chapter IX of the Los Angeles Municipal Code is deleted:

91.1512.3. Roof Recovering. Roof covering may be applied over existing roofing in accordance to Los Angeles Municipal Code Table 1512.1.

Sec. 54. Table 1512.1 of Section 91.1511, Division 15, Article 1, Chapter IX of the Los Angeles Municipal Code is deleted:

††							
	NEW OVERLAY ROOFING¶						
EXISTING- ROOFING¶	BUILT UP¶	ASPHALT SHINGLE¶	TILE ROOF¶	METAL ROOF¶	MODIFIED- BITUMEN¶	SPRAY POLY- URETHANE- FORM¶	
Built Up¶	¥es¶	¥es¶ (2:12) ¶	¥es¶ (2.5:12)¶	¥es¶	¥es¶	¥es¶	
Asphalt Shingle¶	NP¶	¥es¶	¥es¶ (2.5:12) ¶	¥es¶	Yes¶	NP¶	
Asphalt over Asphalt¶	NP¶	¥es¶	¥es¶	¥es¶	¥es¶	NP¶	
Tile¶ Reef¶	NP¶	NP¶	NP¶	NP¶	NP¶	NP¶	
Metal¶ Roof¶	NP¶	NP¶	NP¶	¥es¶	NP¶	NP¶	
Medified Bitumen¶	¥es¶	¥es¶	¥es¶ (2.5:12)¶	¥es¶	Yes¶	NP¶	

NP = Not Permitted.¶
Note: (Minimum Roof Slope)

Sec. 55. Section 91.1512, Division 15, Article 1, Chapter IX of the Los Angeles Municipal Code is added, to be placed in numerical order, to read as follows:

SEC. 91.1512. REROOFING

Section 1512 of the CBC is adopted by reference, except CBC Sections 1512.3 and 1512.3.1 are not adopted and, in lieu, Los Angeles Municipal Code Subsections 91.1512.3 and 91.1512.3.1 are added.

Sec. 56. Subsection 91.1512.3 of Section 91.1512 of Division 15, Article 1, Chapter IX of the Los Angeles Municipal Code is added, to be placed in numerical order, to read as follows:

1512.3 Roof recover. The installation of a new roof covering over an existing roof covering shall be permitted where any of the following conditions occur:

- 1. Where the new roof covering is installed in accordance with the roof covering manufacturer's approved instructions.
- 2. Complete and separate roofing systems, such as standing-seam metal roof panel systems, that are designed to transmit the roof loads directly to the building's structural system and that do not rely on existing roofs and roof coverings for support, shall not require the removal of existing roof coverings.
- 3. The application of a new protective coating over an existing spray polyurethane foam roofing system shall be permitted without tear off of existing roof coverings.

Exception: A roof recover shall not be permitted where any of the following conditions occur:

- 1. The existing roof or roof covering is water-soaked or has deteriorated to the point that the existing roof or roof covering is not adequate as a base for additional roofing.
- 2. The existing roof covering is slate, clay, cement or asbestos-cement tile.
- 3. The existing roof has two or more applications of any type of roof covering.
- Sec. 57. Subsection 91.1512.3.1 of Section 91.1512 of Division 15, Article 1, Chapter IX of the Los Angeles Municipal Code is added, to be placed in numerical order, to read as follows:
 - **91.1512.3.1 Roof Recovering.** Roof covering may be applied over existing roofing in accordance with the Los Angeles Municipal Code Table 1512.1.
- Sec. 58. Table 91.1512.3.1 of Section 91.1512 of Division 15, Article 1, Chapter IX of the Los Angeles Municipal Code is added, to be placed in numerical order, to read as follows:

TABLE 91.1512.3.1
ALLOWABLE REROOFS OVER EXISTING ROOFING

	NEW OVERLAY ROOFING					
EXISTING ROOFING	BUILT UP	ASPHALT SHINGLE	TILE ROOF	METAL ROOF	MODIFIED BITUMEN	SPRAY POLY- URETHANE FORM
Built Up	Yes	Yes (2:12)	Yes (2.5:12)	Yes	Yes	Yes
Asphalt Shingle	NP	Yes	Yes (2.5:12)	Yes	Yes	NP
Asphalt over Asphalt	NP	Yes	Yes	Yes	Yes	NP
Tile Roof	NP	NP	NP	NP	NP	NP
Metal Roof	NP	NP	NP	Yes	NP	NP
Modified Bitumen	Yes	Yes	Yes (2.5:12)	Yes	Yes	NP

NP = Not Permitted.

Note: (Minimum Roof Slope)

- Sec. 59. Subsection 91.1603.1.10 of Section 91.1603, Division 16, Article 1, Chapter IX of the Los Angeles Municipal Code is deleted and reinstated, to be placed in numerical order, to read as follows:
 - **91.1603.1.10.** Systems and Components Requiring Special Inspections for Seismic Resistance. Construction documents or specifications shall be prepared for those systems and components requiring special inspection for seismic resistance as specified in CBC Section 1705.13 by the registered design professional responsible for their design and shall be submitted for approval in accordance with LAMC Subsection 91.106.3.3. Reference to seismic standards in lieu of detailed drawings is acceptable.

- Sec. 60. Subsection 91.1609.1.1.2 of Section 91.1609, Division 16, Article 1, Chapter IX of the Los Angeles Municipal Code is deleted and reinstated, to be placed in numerical order, to read as follows:
 - **91.1609.1.1.2. High Wind Velocity Areas.** The Superintendent of Building may designate certain areas of the City as "high wind velocity areas" when evidence or studies indicate that the wind velocity results in damage to structures conforming to the minimum requirements of this Code. The Superintendent of Building may specify additional requirements over and above those required by this Code with respect to the following:
 - 1. Glazing of openings in exterior walls;
 - 2. Anchorage of post and beam construction;
 - 3. Cantilever overhangs; and
 - 4. Roofing and roof framing.
- Sec. 61. Subsection 91.1612.3 of Section 91.1612, Division 16, Article 1, Chapter IX of the Los Angeles Municipal Code is deleted and reinstated, to be placed in numerical order, to read as follows:
 - **91.1612.3. Establishment of Flood Hazard Areas.** To establish flood hazard areas, the applicable governing authority shall adopt a flood hazard map and supporting data. The flood hazard map shall include, at a minimum, areas of special flood hazard as identified by the Federal Emergency Management Agency in an engineering report entitled "The Flood Insurance Study for The City of Los Angeles", dated June 2, 2012, as amended or revised with the accompanying Flood Insurance Rate Map (FIRM) and Flood Boundary and Floodway Map (FBFM) and related supporting data along with any revisions thereto. The adopted flood hazard map and supporting data are hereby adopted by reference and declared to be part of this section.
- Sec. 62. Section 91.1613, Division 16, Article 1, Chapter IX of the Los Angeles Municipal Code is amended, with no other changes to existing subsections therein, to read as follows:

SEC. 91.1613. EARTHQUAKE LOADS.

Section 1613 of the CBC is adopted by reference, and Los Angeles Municipal Code Subsections 91.1613.85 through 91.1613.12.1.3.410.5 are added to read as follows:

Sec. 63. Subsection 91.1613.7 of Section 91.1613, Division 16, Article 1, Chapter IX of the Los Angeles Municipal Code is deleted:

91.1613.7. Reserved.

Sec. 64. Subsection 91.1613.8 of Section 91.1613, Division 16, Article 1, Chapter IX of the Los Angeles Municipal Code is amended to read:

91.1613.8. Reserved Additional Seismic Requirements.

Sec. 65. Subsection 91.1613.9 of Section 91.1613, Division 16, Article 1, Chapter IX of the Los Angeles Municipal Code is deleted and reinstated, to be placed in numerical order, to read as follows:

91.1613.9. Seismic Design Provisions for Hillside Buildings.

- Sec. 66. Subsection 91.1613.9.1 of Section 91.1613, Division 16, Article 1, Chapter IX of the Los Angeles Municipal Code is deleted and reinstated, to be placed in numerical order, to read as follows:
 - **91.1613.9.1. Purpose.** The purpose of this section is to establish minimum regulations for the design and construction of new buildings and additions to existing buildings when constructing such buildings on or into slopes steeper than one unit vertical in three units horizontal (33.3%). These regulations establish minimum standards for seismic force resistance to reduce the risk of injury or loss of life in the event of earthquakes.
- Sec. 67. Subsection 91.1613.9.2 of Section 91.1613, Division 16, Article 1, Chapter IX of the Los Angeles Municipal Code is deleted and reinstated, to be placed in numerical order, to read as follows:
 - **91.1613.9.2.** Scope. The provisions of this section shall apply to the design of the lateral-force-resisting system for hillside buildings at and below the base level diaphragm. The design of the lateral-force-resisting system above the base level diaphragm shall be in accordance with the provisions for seismic and wind design as required elsewhere in this division.

EXCEPTION: Non-habitable accessory buildings and decks not supporting or supported from the main building are exempt from these regulations.

- Sec. 68. Subsection 91.1613.9.3 of Section 91.1613, Division 16, Article 1, Chapter IX of the Los Angeles Municipal Code is amended, to be placed in numerical order, to read as follows:
 - **91.1613.9.3. Definitions.** For the purposes of this section, certain terms are defined as follows:

BASE LEVEL DIAPHRAGM is the floor at, or closest to, the top of the highest level of the foundation.

DIAPHRAGM ANCHORS are assemblies that connect a diaphragm to the adjacent foundation at the uphill diaphragm edge.

DOWNHILL DIRECTION is the descending direction of the slope approximately perpendicular to the slope contours.

FOUNDATION is concrete or masonry, which supports a building, including footings, stem walls, retaining walls, and grade beams.

FOUNDATION EXTENDING IN THE DOWNHILL DIRECTION is a foundation running downhill and approximately perpendicular to the uphill foundation.

HILLSIDE BUILDING is any building or portion thereof constructed on or into a slope steeper than one unit vertical in three units horizontal (33.3%). If only a portion of the building is supported on or into the slope, these regulations apply to the entire building.

PRIMARY ANCHORS are diaphragm anchors designed for and providing a direct connection as described in LAMC Subdivision 91.1613.9.5 and Paragraph 91.1613.9.7.3 between the diaphragm and the uphill foundation.

SECONDARY ANCHORS are diaphragm anchors designed for and providing a redundant diaphragm to foundation connection, as described in LAMC Subdivision 91.1613.9.6 and Paragraph 91.1613.9.7.4.

UPHILL DIAPHRAGM EDGE is the edge of the diaphragm adjacent and closest to the highest ground level at the perimeter of the diaphragm.

UPHILL FOUNDATION is the foundation parallel and closest to the uphill diaphragm edge.

Sec. 69. Subsection 91.1613.9.4 of Section 91.1613, Division 16, Article 1, Chapter IX of the Los Angeles Municipal Code is deleted and reinstated, to be placed in numerical order, to read as follows:

91.1613.9.4. Analysis and Design.

- Sec. 70. Subsection 91.1613.9.4.1 of Section 91.1613, Division 16, Article 1, Chapter IX of the Los Angeles Municipal Code is deleted and reinstated, to be placed in numerical order, to read as follows:
 - **91.1613.9.4.1. General.** Every hillside building within the scope of this division shall be analyzed, designed and constructed in accordance with provisions of this division. When the code-prescribed wind design produces greater effects, the wind design shall govern, but detailing requirements and limitations prescribed in this and referenced sections shall be followed.
- Sec. 71. Subsection 91.1613.9.4.2 of Section 91.1613, Division 16, Article 1, Chapter IX of the Los Angeles Municipal Code is deleted and reinstated, to be placed in numerical order, to read as follows:
 - **91.1613.9.4.2.** Base Level Diaphragm Downhill Direction. The following provisions shall apply to the seismic analysis and design of the connections for the base level diaphragm in the downhill direction.
- Sec. 72. Subsection 91.1613.9.4.2.1 of Section 91.1613, Division 16, Article 1, Chapter IX of the Los Angeles Municipal Code is deleted and reinstated, to be placed in numerical order, to read as follows:

- **91.1613.9.4.2.1. Base for Lateral Force Design Defined.** For seismic forces acting in the downhill direction, the base of the building shall be the floor at, or closest to, the top of the highest level of the foundation.
- Sec. 73. Subsection 91.1613.9.4.2.2 of Section 91.1613, Division 16, Article 1, Chapter IX of the Los Angeles Municipal Code is deleted and reinstated, to be placed in numerical order, to read as follows:
 - **91.1613.9.4.2.2. Base Shear.** In developing the base shear for seismic design, the response modification coefficient (R) shall not exceed 5 for bearing wall and building frame systems. The total base shear shall include the forces tributary to the base level diaphragm including forces from the base level diaphragm.
- Sec. 74. Subsection 91.1613.9.5 of Section 91.1613, Division 16, Article 1, Chapter IX of the Los Angeles Municipal Code is deleted and reinstated, to be placed in numerical order, to read as follows:

91.1613.9.5. Base Shear Resistance - Primary Anchors.

- Sec. 75. Subsection 91.1613.9.5.1 of Section 91.1613, Division 16, Article 1, Chapter IX of the Los Angeles Municipal Code is deleted and reinstated, to be placed in numerical order, to read as follows:
 - **91.1613.9.5.1. General.** The base shear in the downhill direction shall be resisted through primary anchors from diaphragm struts provided in the base level diaphragm to the foundation.
- Sec. 76. Subsection 91.1613.9.5.2 of Section 91.1613, Division 16, Article 1, Chapter IX of the Los Angeles Municipal Code is deleted and reinstated, to be placed in numerical order, to read as follows:
 - **91.1613.9.5.2.** Location of Primary Anchors. A primary anchor and diaphragm strut shall be provided in line with each foundation extending in the downhill direction. Primary anchors and diaphragm struts shall also be provided where interior vertical lateral-force-resisting elements occur above and in contact with the base level diaphragm. The spacing of primary anchors and diaphragm struts or collectors shall in no case exceed 30 feet (9144 mm).
- Sec. 77. Subsection 91.1613.9.5.3 of Section 91.1613, Division 16, Article 1, Chapter IX of the Los Angeles Municipal Code is deleted and reinstated, to be placed in numerical order, to read as follows:
 - **91.1613.9.5.3. Design of Primary Anchors and Diaphragm Struts.** Primary anchors and diaphragm struts shall be designed in accordance with the requirements of LAMC Subdivision 91.1613.9.8.
- Sec. 78. Subsection 91.1613.9.5.4 of Section 91.1613, Division 16, Article 1, Chapter IX of the Los Angeles Municipal Code is amended, to be placed in numerical order, to read as follows:

- **91.1613.9.5.4. Limitations.** The following lateral-force- resisting elements shall not be designed to resist seismic forces below the base level diaphragm in the downhill direction:
 - 1. Wood structural panel wall sheathing,
 - 2. Cement plaster and lath,
 - 3. Gypsum wallboard, and
 - 4. Tension only braced frames.

Braced frames designed in accordance with the requirements of CBC Section 2202.2.15.2.1.2 may be used to transfer forces from the primary anchors and diaphragm struts to the foundation, provided lateral forces do not induce flexural stresses in any member of the frame or in the diaphragm struts. Deflections of frames shall account for the variation in slope of diagonal members when the frame is not rectangular.

Sec. 79. Subsection 91.1613.9.6 of Section 91.1613, Division 16, Article 1, Chapter IX of the Los Angeles Municipal Code is deleted and reinstated, to be placed in numerical order, to read as follows:

91.1613.9.6. Base Shear Resistance - Secondary Anchors.

- Sec. 80. Subsection 91.1613.9.6.1 of Section 91.1613, Division 16, Article 1, Chapter IX of the Los Angeles Municipal Code is deleted and reinstated, to be placed in numerical order, to read as follows:
 - **91.1613.9.6.1. General.** In addition to the primary anchors required by LAMC Subdivision 91.1613.9.5, the base shear in the downhill direction shall be resisted through secondary anchors in the uphill foundation connected to diaphragm struts in the base level diaphragm.

EXCEPTION: Secondary anchors are not required where foundations extending in the downhill direction spaced at not more than 30 feet (9144 m) on center extend up to and are directly connected to the base level diaphragm for at least 70% of the diaphragm depth.

- Sec. 81. Subsection 91.1613.9.6.2 of Section 91.1613, Division 16, Article 1, Chapter IX of the Los Angeles Municipal Code is deleted and reinstated, to be placed in numerical order, to read as follows:
 - **91.1613.9.6.2.** Secondary Anchor Capacity and Spacing. Secondary anchors at the base level diaphragm shall be designed for a minimum force equal to the base shear, including forces tributary to the base level diaphragm, but not less than 600 pounds per lineal foot (8.76 kN/m). The secondary anchors shall be uniformly distributed along the uphill diaphragm edge and shall be spaced a maximum of four feet (1219 mm) on center.

- Sec. 82. Subsection 91.1613.9.6.3 of Section 91.1613, Division 16, Article 1, Chapter IX of the Los Angeles Municipal Code is deleted and reinstated, to be placed in numerical order, to read as follows:
 - **91.1613.9.6.3. Design.** Secondary anchors and diaphragm struts shall be designed in accordance with LAMC Subdivision 91.1613.9.8.
- Sec. 83. Subsection 91.1613.9.7 of Section 91.1613, Division 16, Article 1, Chapter IX of the Los Angeles Municipal Code is deleted and reinstated, to be placed in numerical order, to read as follows:
 - **91.1613.9.7. Diaphragms Below the Base Level Downhill Direction.** The following provisions shall apply to the lateral analysis and design of the connections for all diaphragms below the base level diaphragm in the downhill direction.
- Sec. 84. Subsection 91.1613.9.7.1 of Section 91.1613, Division 16, Article 1, Chapter IX of the Los Angeles Municipal Code is deleted and reinstated, to be placed in numerical order, to read as follows:
 - **91.1613.9.7.1. Diaphragm Defined.** Every floor level below the base level diaphragm shall be designed as a diaphragm.
- Sec. 85. Subsection 91.1613.9.7.2 of Section 91.1613, Division 16, Article 1, Chapter IX of the Los Angeles Municipal Code is deleted and reinstated, to be placed in numerical order, to read as follows:
 - **91.1613.9.7.2. Design Force.** Each diaphragm below the base level diaphragm shall be designed for all tributary loads at that level using a minimum seismic force factor not less than the base shear coefficient.
- Sec. 86. Subsection 91.1613.9.7.3 of Section 91.1613, Division 16, Article 1, Chapter IX of the Los Angeles Municipal Code is deleted and reinstated, to be placed in numerical order, to read as follows:
 - **91.1613.9.7.3. Design Force Resistance Primary Anchors.** The design force described in LAMC Paragraph 91.1613.9.7.2 shall be resisted through primary anchors from diaphragm struts provided in each diaphragm to the foundation. Primary anchors shall be provided and designed in accordance with the requirements and limitations of LAMC Subdivision 91.1613.9.5.
- Sec. 87. Subsection 91.1613.9.7.4 of Section 91.1613, Division 16, Article 1, Chapter IX of the Los Angeles Municipal Code is deleted and reinstated, to be placed in numerical order, to read as follows:

91.1613.9.7.4. Design Force Resistance - Secondary Anchors.

Sec. 88. Subsection 91.1613.9.7.4.1 of Section 91.1613, Division 16, Article 1, Chapter IX of the Los Angeles Municipal Code is deleted and reinstated, to be placed in numerical order, to read as follows:

- **91.1613.9.7.4.1. General.** In addition to the primary anchors required in LAMC Paragraph 91.1613.9.5 the design force in the downhill direction shall be resisted through secondary anchors in the uphill foundation connected to diaphragm struts in each diaphragm below the base level.
- **EXCEPTION:** Secondary anchors are not required where foundations extending in the downhill direction, spaced at not more than 30 feet (9144 mm) on center, extend up to and are directly connected to each diaphragm below the base level for at least 70% of the diaphragm depth.
- Sec. 89. Subsection 91.1613.9.7.4.2 of Section 91.1613, Division 16, Article 1, Chapter IX of the Los Angeles Municipal Code is deleted and reinstated, to be placed in numerical order, to read as follows:
 - **91.1613.9.7.4.2.** Secondary Anchor Capacity. Secondary anchors at each diaphragm below the base level diaphragm shall be designed for a minimum force equal to the design force but not less than 300 pounds per lineal foot (4.38 kN/m). The secondary anchors shall be uniformly distributed along the uphill diaphragm edge and shall be spaced a maximum of four feet (1219 mm) on center.
- Sec. 90. Subsection 91.1613.9.7.4.3 of Section 91.1613, Division 16, Article 1, Chapter IX of the Los Angeles Municipal Code is deleted and reinstated, to be placed in numerical order, to read as follows:
 - **91.1613.9.7.4.3. Design.** Secondary anchors and diaphragm struts shall be designed in accordance with LAMC Subdivision 91.1613.9.8.
- Sec. 91. Subsection 91.1613.9.8 of Section 91.1613, Division 16, Article 1, Chapter IX of the Los Angeles Municipal Code is deleted and reinstated, to be placed in numerical order, to read as follows:
 - **91.1613.9.8.** Primary and Secondary Anchorage and Diaphragm Strut Design. Primary and secondary anchors and diaphragm struts shall be designed in accordance with the following provisions:
 - 1. **Fasteners.** All bolted fasteners used to develop connections to wood members shall be provided with square plate washers at all bolt heads and nuts. Washers shall be a minimum 0.229 inch by 3 inches by 3 inches (5.82 mm by 76 mm) in size. Nuts shall be tightened to finger tight plus one-half (1/2) wrench turn prior to covering the framing.
 - 2. **Fastening**. The diaphragm to foundation anchorage shall not be accomplished by the use of toenailing, nails subject to withdrawal, or wood in cross-grain bending or cross-grain tension.
 - Size of Wood Members. Wood diaphragm struts collectors, and other wood
 members connected to primary anchors shall not be less than three-inch (76 mm)
 nominal width. The effects of eccentricity on wood members shall be evaluated
 as required per Item 9.

- 4. **Design.** Primary and secondary anchorage, including diaphragm struts, splices, and collectors shall be designed for 125% of the tributary force.
- Allowable Stress Increase. The allowable stress increase permitted under CBC Section 1605.3.2 shall not be taken when the working (allowable) stress design method is used.
- 6. **Steel Element of Structural Wall Anchorage System.** The strength design forces for steel elements of the structural wall anchorage system, with the exception of anchor bolts and reinforcing steel, shall be increased by 1.4 times the forces otherwise required.
- 7. **Primary Anchors.** The load path for primary anchors and diaphragm struts shall be fully developed into the diaphragm and into the foundation. The foundation must be shown to be adequate to resist the concentrated loads from the primary anchors.
- 8. **Secondary Anchors.** The load path for secondary anchors and diaphragm struts shall be fully developed in the diaphragm but need not be developed beyond the connection to the foundation.
- 9. **Symmetry.** All lateral force foundation anchorage and diaphragm strut connections shall be symmetrical. Eccentric connections may be permitted when demonstrated by calculation or tests that all components of force have been provided for in the structural analysis or tests.
- 10. **Wood Ledgers.** Wood ledgers shall not be used to resist cross-grain bending or cross-grain tension.
- Sec. 92. Subsection 91.1613.9.9 of Section 91.1613, Division 16, Article 1, Chapter IX of the Los Angeles Municipal Code is deleted and reinstated, to be placed in numerical order, to read as follows:

91.1613.9.9. Lateral-Force-Resisting Elements Normal to the Downhill Direction.

- Sec. 93. Subsection 91.1613.9.9.1 of Section 91.1613, Division 16, Article 1, Chapter IX of the Los Angeles Municipal Code is deleted and reinstated, to be placed in numerical order, to read as follows:
 - **91.1613.9.9.1. General.** In the direction normal to the downhill direction, lateral-force-resisting elements shall be designed in accordance with the requirements of this section.
- Sec. 94. Subsection 91.1613.9.9.2 of Section 91.1613, Division 16, Article 1, Chapter IX of the Los Angeles Municipal Code is deleted and reinstated, to be placed in numerical order, to read as follows:
 - **91.1613.9.9.2.** Base Shear. In developing the base shear for seismic design, the response modification coefficient (R) shall not exceed 5 for bearing wall and building frame systems.

- Sec. 95. Subsection 91.1613.9.9.3 of Section 91.1613, Division 16, Article 1, Chapter IX of the Los Angeles Municipal Code is deleted and reinstated, to be placed in numerical order, to read as follows:
 - **91.1613.9.9.3. Vertical Distribution of Seismic Forces.** For seismic forces acting normal to the downhill direction, the distribution of seismic forces over the height of the building using Section 12.8.3 of ASCE 7 shall be determined using the height measured from the top of the lowest level of the building foundation.
- Sec. 96. Subsection 91.1613.9.9.4 of Section 91.1613, Division 16, Article 1, Chapter IX of the Los Angeles Municipal Code is deleted and reinstated, to be placed in numerical order, to read as follows:
 - **91.1613.9.9.4. Drift Limitations.** The story drift below the base level diaphragm shall not exceed 0.007 times the story height at strength design force level. The total drift from the base level diaphragm to the top of the foundation shall not exceed 3/4 inch (19 mm). Where the story height or the height from the base level diaphragm to the top of the foundation varies because of a stepped footing or story offset, the height shall be measured from the average height of the top of the foundation. The story drift shall not be reduced by the effect of horizontal diaphragm stiffness.
- Sec. 97. Subsection 91.1613.9.9.5 of Section 91.1613, Division 16, Article 1, Chapter IX of the Los Angeles Municipal Code is deleted and reinstated, to be placed in numerical order, to read as follows:

91.1613.9.9.5. Distribution of Lateral Forces.

- Sec. 98. Subsection 91.1613.9.9.5.1 of Section 91.1613, Division 16, Article 1, Chapter IX of the Los Angeles Municipal Code is deleted and reinstated, to be placed in numerical order, to read as follows:
 - **91.1613.9.9.5.1. General.** The design lateral force shall be distributed to lateral-force-resisting elements of varying heights in accordance with the stiffness of each individual element.
- Sec. 99. Subsection 91.1613.9.9.5.2 of Section 91.1613, Division 16, Article 1, Chapter IX of the Los Angeles Municipal Code is deleted and reinstated, to be placed in numerical order, to read as follows:
 - **91.1613.9.9.5.2.** Wood Structural Panel Sheathed Walls. The stiffness of a stepped wood structural panel shear wall may be determined by dividing the wall into adjacent rectangular elements, subject to the same top of wall deflection. Deflections of shear walls may be estimated by AWC SDPWS Section 4.3.2. Sheathing and fastening requirements for the stiffest section shall be used for the entire wall. Each section of wall shall be anchored for shear and uplift at each step. The minimum horizontal length of a step shall be 8 feet (2438 mm) and the maximum vertical height of a step shall be 2 feet, 8 inches (813 mm).
- Sec. 100. Subsection 91.1613.9.9.5.3 of Section 91.1613, Division 16, Article 1, Chapter IX of the Los Angeles Municipal Code is deleted and reinstated, to be placed in numerical order, to read as follows:

- **91.1613.9.9.5.3.** Reinforced Concrete or Masonry Shear Walls. Reinforced concrete or masonry shear walls shall have forces distributed in proportion to the rigidity of each section of the wall.
- Sec. 101. Subsection 91.1613.9.9.6 of Section 91.1613, Division 16, Article 1, Chapter IX of the Los Angeles Municipal Code is deleted and reinstated, to be placed in numerical order, to read as follows:
 - **91.1613.9.9.6. Limitations.** The following lateral force-resisting-elements shall not be designed to resist lateral forces below the base level diaphragm in the direction normal to the downhill direction:
 - 1. Cement plaster and lath;
 - 2. Gypsum wallboard; and
 - 3. Tension-only braced frames.

Braced frames designed in accordance with the requirements of CBC Section 2205.2.1.2 may be designed as lateral-force-resisting elements in the direction normal to the downhill direction, provided lateral forces do not induce flexural stresses in any member of the frame.

Sec. 102. Subsection 91.1613.9.10 of Section 91.1613, Division 16, Article 1, Chapter IX of the Los Angeles Municipal Code is deleted and reinstated, to be placed in numerical order, to read as follows:

91.1613.9.10. Specific Design Provisions.

Sec. 103. Subsection 91.1613.9.10.1 of Section 91.1613, Division 16, Article 1, Chapter IX of the Los Angeles Municipal Code is deleted and reinstated, to be placed in numerical order, to read as follows:

91.1613.9.10.1. Footings and Grade Beams. All footings and grade beams shall comply with the following:

- 1. Grade beams shall extend at least 12 inches (305 mm) below the lowest adjacent grade and provide a minimum 24-inch (610 mm) distance horizontally from the bottom outside face of the grade beam to the face of the descending slope.
- 2. Continuous footings shall be reinforced with at least two No. 4 reinforcing bars at the top and two No. 4 reinforcing bars at the bottom.
- 3. All main footing and grade beam reinforcement steel shall be bent into the intersecting footing and fully developed around each corner and intersection.
- 4. All concrete stem walls shall extend from the foundation and reinforced as required for concrete or masonry walls.

Sec. 104. Subsection 91.1613.9.10.2 of Section 91.1613, Division 16, Article 1, Chapter IX of the Los Angeles Municipal Code is deleted and reinstated, to be placed in numerical order, to read as follows:

91.1613.9.10.2. Protection Against Decay and Termites. All wood to earth separation shall comply with the following:

- 1. Where a footing or grade beam extends across a descending slope, the stem wall, grade beam, or footing shall extend up to a minimum 18 inches (457 mm) above the highest adjacent grade.
 - **EXCEPTION:** At paved garage and doorway entrances to the building, the stem wall need only extend to the finished concrete slab, provided the wood framing is protected with a moisture proof barrier.
- 2. Wood ledgers supporting a vertical load of more than 100 pounds per lineal foot (1.46 kN/m) and located within 48 inches (1219 mm) of adjacent grade are prohibited. Galvanized steel ledgers and anchor bolts, with or without wood nailers, or treated or decay resistant sill plates supported on a concrete or masonry seat, may be used.
- Sec. 105. Subsection 91.1613.9.10.3 of Section 91.1613, Division 16, Article 1, Chapter IX of the Los Angeles Municipal Code is deleted and reinstated, to be placed in numerical order, to read as follows:

91.1613.9.10.3. Sill Plates. All sill plates and anchorage shall comply with the following:

- 1. All wood framed walls, including nonbearing walls, when resting on a footing, foundation, or grade beam stem wall, shall be supported on wood sill plates bearing on a level surface.
- 2. Power-driven fasteners shall not be used to anchor sill plates except at interior nonbearing walls not designed as shear walls.
- Sec. 106. Subsection 91.1613.9.10.4 of Section 91.1613, Division 16, Article 1, Chapter IX of the Los Angeles Municipal Code is deleted and reinstated, to be placed in numerical order, to read as follows:
 - **91.1613.9.10.4.** Column Base Plate Anchorage. The base of isolated wood posts (not framed into a stud wall) supporting a vertical load of 4,000 pounds (17.8 kN) or more and the base plate for a steel column shall comply with the following:
 - 1. When the post or column is supported on a pedestal extending above the top of a footing or grade beam, the pedestal shall be designed and reinforced as required for concrete or masonry columns. The pedestal shall be reinforced with a minimum of four No. 4 bars extending to the bottom of the footing or grade beam. The top of exterior pedestals shall be sloped for positive drainage.
 - 2. The base plate anchor bolts or the embedded portion of the post base, and the vertical reinforcing bars for the pedestal, shall be confined with two No. 4 or three No. 3 ties within the top 5 inches (127 mm) of the concrete or masonry pedestal.

The base plate anchor bolts shall be embedded a minimum of 20-bolt diameters into the concrete or masonry pedestal. The base plate anchor bolts and post bases shall be galvanized and each anchor bolt shall have at least two galvanized nuts above the base plate.

- Sec. 107. Subsection 91.1613.9.10.5 of Section 91.1613, Division 16, Article 1, Chapter IX of the Los Angeles Municipal Code is deleted and reinstated, to be placed in numerical order, to read as follows:
 - **91.1613.9.10.5. Steel Beam to Column Supports.** All steel beam to column supports shall be positively braced in each direction. Steel beams shall have stiffener plates installed on each side of the beam web at the column. The stiffener plates shall be welded to each beam flange and the beam web. Each brace connection or structural member shall consist of at least two 5/8 inch (15.9 mm) diameter machine bolts.
- Sec. 108. Subsection 91.1613.10 of Section 91.1613, Division 16, Article 1, Chapter IX of the Los Angeles Municipal Code is deleted and reinstated, to be placed in numerical order, to read as follows:

91.1613.10. Earthquake Recording Instrumentation.

- Sec. 109. Subsection 91.1613.10.1 of Section 91.1613, Division 16, Article 1, Chapter IX of the Los Angeles Municipal Code is deleted and reinstated, to be placed in numerical order, to read as follows:
 - **91.1613.10.1. Applicability.** The requirements of this section shall apply to buildings for which permits were issued after July 1, 1965.
- Sec. 110. Subsection 91.1613.10.2 of Section 91.1613, Division 16, Article 1, Chapter IX of the Los Angeles Municipal Code is deleted and reinstated, to be placed in numerical order, to read as follows:
 - **91.1613.10.2. General.** Every new building over six stories in height with an aggregate floor area of 60,000 square feet (5574 m²) or more and every new building over ten stories in height regardless of the floor area shall be equipped with at least three approved recording accelerographs.

EXCEPTIONS:

- 1. A building selected by the State of California as part of its Strong Motion Instrumentation Program (California Public Resources Code Section 2700 et seq.) need not comply with this section until it ceases to be part of the program.
- 2. All new buildings that are designed using the non-linear response history procedure of "Seismic Response History Procedures" of Chapter 16 of ASCE 7 shall be equipped with a structural monitoring system in accordance with standards established by the Superintendent of Building.
- A building designed using a two-stage analysis procedure per Section 12.2.3.2 of ASCE 7 having a flexible upper portion above a rigid lower portion and a total building height not exceeding 85 feet above the grade plane.

- Sec. 111. Subsection 91.1613.10.3 of Section 91.1613, Division 16, Article 1, Chapter IX of the Los Angeles Municipal Code is deleted and reinstated, to be placed in numerical order, to read as follows:
 - **91.1613.10.3. Maintenance.** Maintenance and service of the instruments shall be provided by the owner of the building subject to the approval of the Superintendent of Building. Data produced by the instruments shall be made available to the Superintendent of Building on request.

Maintenance and service of the instruments shall be performed annually and shall be performed only by an approved testing agency. The owner shall file with the Department a written report from an approved testing agency certifying that each instrument has been serviced and is in proper working condition. This report shall be submitted when the instruments are installed and annually thereafter. Each instrument shall have affixed to it an externally visible tag specifying the date of the last maintenance or service and the printed name and address of the testing agency performing the service.

- Sec. 112. Subsection 91.1613.10.4 of Section 91.1613, Division 16, Article 1, Chapter IX of the Los Angeles Municipal Code is deleted and reinstated, to be placed in numerical order, to read as follows:
 - **91.1613.10.4.** Location. For new buildings requiring accelerographs in accordance with LAMC Subdivision 91.1613.10.2, the instruments shall be located in the basement, mid-height and near the top of the building. Each instrument shall be located so that access is maintained at all times and is unobstructed by room contents. A sign stating "MAINTAIN CLEAR ACCESS TO THIS INSTRUMENT" in 1 inch (25.4 mm) block letters shall be posed in a conspicuous location at the instrument.
- Sec. 113. Subsection 91.1613.10.5 of Section 91.1613, Division 16, Article 1, Chapter IX of the Los Angeles Municipal Code is deleted and reinstated, to be placed in numerical order, to read as follows:
 - **91.1613.10.5.** Instrumentation of Existing Buildings. All owners of existing structures selected by the Department shall provide accessible space for the installation of appropriate earthquake-recording instruments. Locations of the instruments shall be determined by the engineer of record and approved by the Department. The owners shall make arrangements with the Department to provide, maintain and service the instruments as required above. Data shall be the property of the Department, but copies of individual records shall be made available to the public on request with the payment of an appropriate fee.

All legally existing instruments shall be maintained and serviced in proper working condition. Each instrument shall be maintained and serviced as specified by LAMC Subdivision 91.1613.10.3 and shall be provided with a sign as required by LAMC Subdivision 91.1613.10.4.

Sec. 114. Subsection 91.1613.5 of Section 91.1613, Division 16, Article 1, Chapter IX of the Los Angeles Municipal Code is renumbered 91.1613.11, to be placed in numerical order, and amended to read as follows:

- **91.1613.115. Amendments to ASCE 7.** The provisions of Subsections 91.1613.115.1 thru 91.1613.128 are amendments to the relevant provisions of ASCE 7.
- Sec. 115. Subsection 91.1613.5.1 of Section 91.1613, Division 16, Article 1, Chapter IX of the Los Angeles Municipal Code is renumbered 91.1613.11.1, to be placed in numerical order, and amended to read as follows:
 - **91.1613.115.1. ASCE Supplements.** Supplements number 2 and 3 of ASCE 7 are hereby adopted by reference.
- Sec. 116. Subsection 91.1613.5.2 of Section 91.1613, Division 16, Article 1, Chapter IX of the Los Angeles Municipal Code is renumbered 91.1613.11.2, to be placed in numerical order, to read as follows:
 - **91.1613.115.2.** ASCE 7, Section 12.2.3.1, Exception 3 is modified to read as follows:
 - 3. Detached one- and two- family dwellings up to two stories in height of light frame construction.
- Sec. 117. Subsection 91.1613.5.3 of Section 91.1613, Division 16, Article 1, Chapter IX of the Los Angeles Municipal Code is renumbered 91.1613.11.3, to be placed in numerical order, to read as follows:
 - **91.1613.115.3. General.** The text of ASCE 7, Section 12.11.2.2.3 is modified to read as follows:
 - **12.11.2.2.3. Wood Diaphragms.** The anchorage of concrete or masonry structural walls to wood diaphragms shall be in accordance with AWC SDPWS 4.1.5.1 and this Section. Continuous ties required by this section shall be in addition to the diaphragm sheathing. Anchorage shall not be accomplished by use of toenails or nails subject to withdrawal, nor shall wood ledgers or framing be used in cross-grain bending or cross-grain tension. The diaphragm sheathing shall not be considered effective as providing ties or struts required by this section.

For structures assigned to seismic Design Category D, E or F, wood diaphragms supporting concrete or masonry walls shall comply with the following:

- 1. The spacing of continuous ties shall not exceed 40 feet. Added chords of diaphragms may be used to form subdiaphragms to transmit the anchorage forces to the main continuous crossties.
- 2. The maximum diaphragm shear used to determine the depth of the subdiaphragm shall not exceed 75% of the maximum diaphragm shear.
- Sec. 118. Subsection 91.1613.5.4 of Section 91.1613, Division 16, Article 1, Chapter IX of the Los Angeles Municipal Code is deleted:

91.1613.5.4. The Equation 12.2-1 of ASCE 7, Section 12.12.3 is modified to read as follows:¶



Sec. 119. Subsection 91.1613.12 of Section 91.1613, Division 16, Article 1, Chapter IX of the Los Angeles Municipal Code is added to read:

91.1613.12. Additional Seismic Requirements.

- Sec. 120. Subsection 91.1613.8.1 of Section 91.1613, Division 16, Article 1, Chapter IX of the Los Angeles Municipal Code is renumbered 91.1613.12.1, to be placed in numerical order, and amended to read as follows:
 - **91.1613.128.1. Scope.** This part contains special requirements for suspended ceilings and lighting systems. The provisions of Section 13.5.6 of ASCE 7 shall apply except as modified here.
- Sec. 121. Subsection 91.1613.8.1.2 of Section 91.1613, Division 16, Article 1, Chapter IX of the Los Angeles Municipal Code is renumbered 91.1613.12.1.2, to be placed in numerical order, and amended to read as follows:

91.1613.128.1.2. Design and Installation Requirements.

- Sec. 122. Subsection 91.1613.8.1.2.1 of Section 91.1613, Division 16, Article 1, Chapter IX of the Los Angeles Municipal Code is renumbered 91.1613.12.1.2.1, to be placed in numerical order, and amended to read as follows:
 - **91.1613.128.1.2.1. General.** The suspended ceilings and lighting systems shall be limited to 6 feet (1828 mm) below the structural deck unless the lateral bracing is designed by a licensed engineer or architect.
- Sec. 123. Subsection 91.1613.8.1.2.2 of Section 91.1613, Division 16, Article 1, Chapter IX of the Los Angeles Municipal Code is renumbered 91.1613.12.1.2.2, to be placed in numerical order, and amended to read as follows:
 - **91.1613.128.1.2.2. Bracing at Discontinuity.** Positive bracing to the structure shall be provided at changes in the ceiling plane elevation or at discontinuities in the ceiling grid system.
- Sec. 124. Subsection 91.1613.8.1.2.3 of Section 91.1613, Division 16, Article 1, Chapter IX of the Los Angeles Municipal Code is renumbered 91.1613.12.1.2.3, to be placed in numerical order, and amended to read as follows:
 - **91.1613.128.1.2.3. Support for Appendages.** Cable trays, electrical conduits and piping shall be independently supported and independently braced from the structure.
- Sec. 125. Subsection 91.1613.8.1.2.4 of Section 91.1613, Division 16, Article 1, Chapter IX of the Los Angeles Municipal Code is renumbered 91.1613.12.1.2.4, to be placed in numerical order, and amended to read as follows:
 - **91.1613.128.1.2.4. Sprinkler Heads.** All sprinkler heads (drops), except fire-resistance-rated floor/ceiling or roof/ceiling assemblies, shall be designed to allow for

free movement of the sprinkler pipes with oversize rings, sleeves or adaptors through the ceiling tile.

Sprinkler heads penetrating fire-resistance-rated floor/ceiling or roof/ceiling assemblies shall comply with CBC Section 714. Sprinkler heads and other penetrations shall have a 2 in. (50 mm) oversize ring, sleeve or adapter through the ceiling tile to allow for free movement of at least 1 in. (25 mm) in all horizontal directions. Alternatively, a swing joint that can accommodate 1 in. (25 mm) of ceiling movement in all horizontal directions is permitted to be provided at the top of the sprinkler head extension.

- Sec. 126. Subsection 91.1613.8.1.3 of Section 91.1613, Division 16, Article 1, Chapter IX of the Los Angeles Municipal Code is renumbered 91.1613.12.1.3, to be placed in numerical order, and amended to read as follows:
 - **91.1613.128.1.3. Special Requirements for Means of Egress.** Suspended ceiling assemblies located along means of egress serving an occupant load of 30 or more shall comply with the following provisions:
- Sec. 127. Subsection 91.1613.8.1.3.1 of Section 91.1613, Division 16, Article 1 Chapter IX of the Los Angeles Municipal Code is renumbered 91.1613.12.1.3.1, to be placed in numerical order, and amended to read as follows:
 - **91.1613.128.1.3.1. General.** Ceiling suspension systems shall be connected and braced with vertical hangers attached directly to the structural floor or roof system above and along the means of egress serving an occupant load of 30 or more and at lobbies accessory to Group A Occupancies. Spacing of vertical hangers shall not exceed 2 feet (610 mm) on center along the entire length of the suspended ceiling assembly located along the means of egress or at the lobby.
- Sec. 128. Subsection 91.1613.8.1.3.2 of Section 91.1613, Division 16, Article 1, Chapter IX of the Los Angeles Municipal Code is renumbered 91.1613.12.1.3.2, to be placed in numerical order, and amended to read as follows:
 - **91.1613.128.1.3.2. Assembly Device.** All lay-in panels shall be secured to the suspension ceiling assembly with two hold-down clips minimum for each tile within a 4-foot (1219 mm) radius of the exit lights and exit signs.
- Sec. 129. Subsection 91.1613.8.1.3.3 of Section 91.1613, Division 16, Article 1, Chapter IX of the Los Angeles Municipal Code is renumbered 91.1613.12.1.3.3, to be placed in numerical order, and amended to read as follows:
 - **91.1613.128.1.3.3. Emergency Systems.** Independent supports and braces shall be provided for light fixtures required for exit illumination. Power supply for exit illumination shall comply with the requirements of CBC Section 1008.3.
- Sec. 130. Subsection 91.1613.8.1.3.4 of Section 91.1613, Division 16, Article 1, Chapter IX of the Los Angeles Municipal Code is renumbered 91.1613.12.1.3.4, to be placed in numerical order, and amended to read as follows:

- **91.1613.128.1.3.4.** Supports for Appendage. Separate support from the structural floor or roof system above shall be provided for all appendages such as light fixtures, air diffusers, exit signs and similar elements.
- Sec. 131. Division 17, Article 1, Chapter IX of the Los Angeles Municipal Code is amended to revise Section 91.1704's title to Special Inspections and Tests, Contractor Responsibility and Structural Observation, Section 91.1705's title to Required Special Inspections and Tests, delete Section 91.1702 and 91.1710, and add Section 91.1712 Certified Security Bar Installer, with no other changes to existing sections therein, to read as follows:

DIVISION 17 STRUCTURAL TESTS AND SPECIAL INSPECTIONS AND TESTS

Section

91.1700 General.

91.1702 New Materials.

91.1703 Approvals.

91.1704 Special Inspections and Tests, Contractor Responsibility and Structural Observation.

91.1705 Required Special Verification and Inspections and Tests.

91.1706 Design Strengths of Materials.

91.1710 Certified Security Bar Installer.

91.1711 Prefabricated Construction.

91.1712 Certified Security Bar Installer.

Sec. 132. Section 91.1702, Division 17, Article 1, Chapter IX of the Los Angeles Municipal Code is deleted:

SEC. 91.1702. NEW MATERIALS.¶

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Section 1702 of the CBC is adopted.

- Sec. 133. Subsection 91.1703.1 of Section 91.1703, Division 17, Article 1, Chapter IX of the Los Angeles Municipal Code is deleted and reinstated, to be placed in numerical order, to read as follows:
 - **91.1703.1. Approved Agency.** Pursuant to LAMC Section 98.0503, a testing agency shall provide all information required by the Superintendent of Building to determine whether the agency shall become an approved testing agency.
- Sec. 134. Subsection 91.1703.2 of Section 91.1703, Division 17, Article 1, Chapter IX of the Los Angeles Municipal Code is deleted and reinstated, to be placed in numerical order, to read as follows:
 - **91.1703.2. Written Approval.** Any new material, appliance, equipment, system or method of construction meeting the requirements of this Code shall be approved in writing after satisfactory completion of the required tests and submission of required test reports pursuant to LAMC Sections 98.0501 and 98.0502.

- Sec. 135. Subsection 91.1703.3 of Section 91.1703, Division 17, Article 1, Chapter IX of the Los Angeles Municipal Code is deleted and reinstated, to be placed in numerical order, to read as follows:
 - **91.1703.3. Approved Record.** For any material, appliance, equipment, system or method of construction that has been approved, a record of that approval, including the conditions and limitations of the approval, shall be kept on file in the Department and shall be open to public inspection at appropriate times.
- Sec. 136. Subsection 91.1703.4 of Section 91.1703, Division 17, Article 1, Chapter IX of the Los Angeles Municipal Code is deleted and reinstated, to be placed in numerical order, to read as follows:
 - **91.1703.4. Performance.** Specific information consisting of test reports conducted by an approved testing agency in accordance with standards referenced in Division 35, Article 1, Chapter IX of the LAMC, or other information as necessary, shall be provided for the Superintendent of Building to determine that the material meets the applicable Code requirements, including LAMC Sections 98.0501 and 98.0502.
- Sec. 137. Subsection 91.1703.4.1 of Section 91.1703, Division 17, Article 1, Chapter IX of the Los Angeles Municipal Code is deleted and reinstated, to be placed in numerical order, to read as follows:
 - **91.1703.4.1. Research and Investigation.** Sufficient technical data shall be submitted to the Superintendent of Building to substantiate the proposed use of any product, material or assembly. If it is determined that the evidence submitted is satisfactory proof of performance for the use intended, the Superintendent of Building shall approve the use of the product, material or assembly subject to the requirements of this Code. The costs, reports and investigations required under these provisions shall be paid by the permit applicant as required by LAMC Sections 98.0501, 98.0502 and 98.0503.
- Sec. 138. Subsection 91.1703.4.2 of Section 91.1703, Division 17, Article 1, Chapter IX of the Los Angeles Municipal Code is deleted and reinstated, to be placed in numerical order, to read as follows:
 - **91.1703.4.2. Research Reports.** Supporting data, where necessary to assist in the approval of products, materials or assemblies not specifically provided for in this Code, shall consist of valid research reports from approved sources as required in LAMC Sections 98.0501 and 98.0502.
- Sec. 139. Section 91.1704, Division 17, Article 1, Chapter IX of the Los Angeles Municipal Code is amended, with no other changes to existing subsections therein, to read as follows:

SEC. 91.1704. SPECIAL INSPECTIONS AND TESTS, CONTRACTOR RESPONSIBILITY AND STRUCTURAL OBSERVATION.

Section 1704 of the CBC is adopted by reference, except that CBC Sections 1704.2, 1704.2.1, 1704.2.3, 1704.2.4, 1704.2.5, 1704.2.5.1, 1704.2.5.2, 1704.6, and 1704.6.1 are not adopted; and, in lieu, LAMC Subsections 91.1704.1.1, 91.1704.1.2, 91.1704.1.3, 91.1704.1.4, 91.1704.1.5, 91.1704.1.6, 91.1704.1.7, 91.1704.2, 91.1704.2.1,

- 91.1704.2.1.1, 91.1704.2.1.2, 91.1704.2.1.3, 91.1704.2.3, 91.1704.2.4, 91.1704.2.5, 91.1704.2.5.1, 91.1704.6, and 91.1704.6.1 are added or amended to read as follows:
- Sec. 140. Subsection 91.1704.1.1 of Section 91.1704, Division 17, Article 1, Chapter IX of the Los Angeles Municipal Code is deleted and reinstated, to be placed in numerical order, to read as follows:

91.1704.1.1. Certified Licensed Contractors.

- Sec. 141. Subsection 91.1704.1.2 of Section 91.1704, Division 17, Article 1, Chapter IX of the Los Angeles Municipal Code is deleted and reinstated, to be placed in numerical order, to read as follows:
 - **91.1704.1.2. Registration.** Application for registration as a certified licensed contractor shall be made to the Superintendent of Building on a form furnished by the Department and a separate application shall be made for each type of registration desired. Before the application can be accepted, the applicant must furnish proof satisfactory to the Department that the applicant holds a valid active California State Contractor's License in the same specialty as the certification requested.
- Sec. 142. Subsection 91.1704.1.3 of Section 91.1704, Division 17, Article 1, Chapter IX of the Los Angeles Municipal Code is deleted and reinstated, to be placed in numerical order, to read as follows:

91.1704.1.3. Application.

- 1. **Form.** Application for a Certificate of Registration shall be made on a form furnished by the Department.
- 2. **Information Necessary.** The application shall bear the name and address of the applicant and, if the applicant is employed by a firm, partnership or corporation, the names of the principal officers should also be included. The application shall carry other information deemed necessary by the Department.
- 3. **Verification.** The applicant shall declare that the information contained in the application is true and correct.
- 4. **Fee.** The application shall be accompanied by an examination fee of \$188.
- Sec. 143. Subsection 91.1704.1.4 of Section 91.1704, Division 17, Article 1, Chapter IX of the Los Angeles Municipal Code is deleted and reinstated, to be placed in numerical order, to read as follows:

91.1704.1.4. Examination.

1. **Examination Required**. Before issuance of a Certificate of Registration, the applicant shall have successfully passed the examination required for the issuance of the Certificate of Registration within ninety (90) days preceding the date of the issuance. To be eligible for the examination for a Certificate of Registration, the applicant shall have a valid California State Contractor's License in an appropriate specialty and a valid City Business Tax Certificate.

- 2. Board of Examiners. The Superintendent of Building and/or Board of Examiners composed of three qualified persons appointed by the Superintendent of Building shall conduct examinations. The results of every examination shall be subject to the approval of the Superintendent of Building. Each examiner shall serve at the pleasure of the Superintendent of Building and shall serve for a period of one year unless re-appointed by the Superintendent of Building.
- 3. **Scope of Examination.** The examination shall, in the judgment of the Superintendent of Building, fairly determine the ability of the applicant to perform properly the work, which the applicant would be authorized to do by the Certificate of Registration requested, and may include the following:
 - a. A written test.
 - b. Practical tests as may be required.
 - c. An oral interview as may be required.
 - d. Other tests as may be required by the Board of Examiners.
- 4. **Time of Examination.** The applicant shall be examined as soon as practicable after filing an application.
- 5. **Rules and Regulations.** The Department shall have the authority to establish rules and regulations for the conduct of examinations.
- 6. **Fitness of Applicant.** Any applicant may be required to submit satisfactory proof of the applicant's fitness to carry out the intent of this Code.
- 7. **Failure to Pass.** An applicant who fails to pass an examination shall not be eligible for another examination until four (4) weeks after taking the previous examination.
- Sec. 144. Subsection 91.1704.1.5 of Section 91.1704, Division 17, Article 1, Chapter IX of the Los Angeles Municipal Code is deleted and reinstated, to be placed in numerical order, to read as follows:

91.1704.1.5. Issuance of Certificates.

- 1. The Superintendent of Building shall issue separate Certificates of Registration for each of the following categories:
 - a. FAU/AC units: evaporative coolers.
 - b. Domestic water piping/plumbing fixtures/hot water heaters/solar panels.
 - c. Reroofing and roof repair.
 - d. Electrical equipment/fixtures/smoke detectors.

- e. Masonry and concrete fences.
- f. Masonry chimney repairs.
- g. Shower pan replacement.

Nothing here prohibits any person from being qualified for more than one type of certification, provided the person files an application, pays the required fees, takes the required examinations and is duly qualified by the Superintendent of Building for each type of certification.

- 2. Upon payment of a \$45 fee, the Department may issue a Certificate of Registration to every applicant who passes the required examination for a Certified Licensed Contractor.
- 3. Each Certificate of Registration shall expire twelve (12) months from the date of issuance.
- 4. The Superintendent of Building shall keep on file a list, open to public inspection, of the names of all registered certified licensed contractors, showing the type of work each has been authorized to inspect.
- 5. **Renewal of Certificates.** Expired Certificates of Registration may be renewed at any time within thirty (30) days following the date of expiration. After a Certificate of Registration has been expired for thirty (30) days, it may not be renewed; rather, a new application for a new certificate must be submitted at that time.
- Sec. 145. Subsection 91.1704.1.6 of Section 91.1704, Division 17, Article 1, Chapter IX of the Los Angeles Municipal Code is deleted and reinstated, to be placed in numerical order, to read as follows:

91.1704.1.6. Exhibition of Certificate.

- 1. Every person having a fixed place of business shall keep their Certificate of Registration posted in some conspicuous location at their place of business during the time the certificate is in force.
- Every person not having a fixed place of business shall carry their Certificate of Registration with them at all times while doing any inspections or other work pursuant to this certificate.
- Sec. 146. Subsection 91.1704.1.7 of Section 91.1704, Division 17, Article 1, Chapter IX of the Los Angeles Municipal Code is deleted and reinstated, to be placed in numerical order, to read as follows:
 - **91.1704.1.7. Revocation of Certificate.** The Superintendent of Building may revoke, suspend or refuse to renew any Certificate of Registration upon a showing of incompetence, willful or negligent failure to observe or report violations of this Code, or failure to maintain a valid active California State Contractor's License in the same specialty as the certification. Prior to any action, the holder shall be given an opportunity to appear before the Superintendent of Building and be heard.

Suspension or revocation of any Certificate of Registration issued under this Section shall be in accordance with the provisions of Article 8, Chapter IX of the LAMC.

Sec. 147. Subsection 91.1704.2 of Section 91.1704, Division 17, Article 1, Chapter IX of the Los Angeles Municipal Code is deleted and reinstated, to be placed in numerical order, to read as follows:

91.1704.2. Special Inspections. Where application is made for construction as described in this section, the owner or the registered design professional in responsible charge acting as the owner's agent shall employ one or more Registered Deputy Inspectors to perform inspections during construction on the types of work listed under CBC Section 1705. The Registered Deputy Inspector shall be a qualified person as set forth in LAMC Subsection 91.1704.2.1 and shall demonstrate competence to the satisfaction of the Superintendent of Building for inspection of the particular type of construction or operation requiring special inspection.

The special inspections shall be in addition to the inspections made by the employees of the Department as set forth in LAMC Section 91.108.

All special inspections shall be made by a Registered Deputy Inspector. Whenever the term "Special Inspector" is used in this Code, it shall mean "Registered Deputy Inspector" as described in LAMC Subdivision 91.1704.2.1.

EXCEPTIONS:

- 1. Special inspections are not required for construction of a minor nature or as warranted by conditions in the jurisdiction as approved by the Superintendent of Building.
- 2. Unless otherwise required by the Superintendent of Building, special inspections are not required for Group U occupancies that are accessory to a residential occupancy including, but not limited to, those listed in CBC Section 312.1.
- 3. Special inspections are not required for portions of structures designed and constructed in accordance with the cold-formed steel light-frame construction provisions of CBC Section 2211.7 or the conventional light-frame construction provisions of CBC Section 2308.
- 4. The contractor is permitted to employ the approved agencies where the contractor is also the owner.
- Sec. 148. Subsection 91.1704.2.1 of Section 91.1704, Division 17, Article 1, Chapter IX of the Los Angeles Municipal Code is deleted and reinstated, to be placed in numerical order, to read as follows:
 - **91.1704.2.1. Registered Deputy Inspector Qualifications.** An applicant for Deputy Inspector shall provide written documentation to the Superintendent of Building demonstrating the applicant's competence and relevant experience or training. Experience or training shall be considered relevant when the documented experience or

training is related in complexity to the same type of special inspection activities for projects of similar complexity and material qualities. These qualifications are in addition to qualifications specified in other sections of this Code.

Application for registration as a Registered Deputy Inspector shall be made to the Superintendent of Building on a form furnished by the Department. A separate application shall be made for each type of registration desired. Registration is available for the following types of inspections: Reinforced Concrete (RC), Structural Masonry (SM), Structural Steel/Welding (SSW), Grading (GD), Sprayed Fire resistant Materials (SFRM), Methane Barrier (MB) and Wood (WD).

A committee appointed by the Superintendent of Building shall examine each applicant as to the applicant's experience and training for performing the duties of an inspector of the type for which application has been made. Additionally, the applicant will be examined on the applicant's knowledge of the LAMC and Registered Deputy Inspector duties, responsibilities and procedures. When satisfied as to the fitness of the applicant, the Superintendent of Building shall issue a Certificate of Registration. Upon application for renewal of a Certificate of Registration, the applicant shall be re-examined to ascertain the applicant's fitness to perform the duties of inspector of the type for which application has been made.

EXCEPTION: If the Department determines that the initial examination (which includes general knowledge, code requirements and plan comprehension) for the special inspector program under the International Code Council (ICC) is equivalent to the above-described initial or renewal examination, then the Department may accept the results of the ICC examination in lieu of the Department's examination in that category; however, the Department will be examining the applicant's knowledge of the LAMC and Registered Deputy Inspector duties, responsibilities and procedures.

The Superintendent of Building shall issue a separate Certificate of Registration for each type of registration requiring special inspection in accordance with LAMC Section 91.1704 and as determined by the Superintendent of Building for any construction requiring either continuous or periodic special inspection.

Nothing here shall be deemed to prohibit any one person from being qualified for more than one type of special inspection, provided the person applies, pays the required fees, takes the required examinations and is duly qualified by the Superintendent of Building for each type.

Each Certificate of Registration shall expire three (3) years from the date of issuance, but may be renewed by the Superintendent of Building within a grace period of thirty (30) days thereafter.

The Department shall maintain a list of the names of all Registered Deputy Inspectors, showing the type of work each has been authorized to inspect. This list shall be available to the public.

Upon evidence satisfactory to the Superintendent of Building of incompetence, of willful or negligent failure to observe or report violations of this Code, or of any other failure to perform properly and effectively the duties assumed by a Registered Deputy Inspector,

the Superintendent of Building may revoke, suspend or refuse to renew any Certificate of Registration. But, prior to that action, the holder shall be given an opportunity to appear before the Superintendent of Building and be heard.

Except where there is a City employee inspecting buildings or structures being erected or repaired by the City, no Registered Deputy Inspector shall receive any compensation from the City. A Registered Deputy Inspector shall undertake and perform the duties of inspection solely on the request of the owner or the owner's agent. The designation shall be deemed to indicate that the duties incident to the inspection are within the course and scope of the Registered Deputy Inspector's employment by the owner or agent, and except where the Registered Deputy Inspector is in fact an employee of the City, the Registered Deputy Inspector shall not be deemed an employee of the City, a contractor, a subcontractor or a material vendor for any purpose.

The registered design professional in responsible charge and engineers of record involved in the design of the project are permitted to act as the supervising agency and their personnel are permitted to act as the deputy inspector for the work designed by them, provided they qualify as Registered Deputy Inspectors.

Sec. 149. Subsection 91.1704.2.1.1 of Section 91.1704, Division 17, Article 1, Chapter IX of the Los Angeles Municipal Code is deleted and reinstated, to be placed in numerical order, to read as follows:

91.1704.2.1.1. Duties and Responsibilities of the Registered Deputy Inspector.

- 1. The Registered Deputy Inspector employed on any work must be present during the execution of all the work the Registered Deputy Inspector has undertaken to inspect. The Registered Deputy Inspector shall notify the Department of the commencement of inspection of a job and shall specify the type of inspection for which the Registered Deputy Inspector has been engaged. This notification shall be made no later than the last working day preceding the commencement of inspection. The Registered Deputy Inspector shall report to the job sufficiently in advance of construction to review the plans and to inspect all materials to be used or concealed within the work, shall inspect the construction, erection, placing or other use of the materials, and shall observe whether there is compliance with the Code as to all of the foregoing. During the execution of the work, the Registered Deputy Inspector shall not undertake or engage in any other task or occupation that will interfere with the proper performance of the Registered Deputy Inspector's duties relating to the inspections. The Registered Deputy Inspector shall report, as directed, to the Superintendent of Building, noting all violations of this Code that have occurred and any other information as may be required. At the conclusion of the Registered Deputy Inspector's duties on any project, which has been completed in accordance with this Code, the Registered Deputy Inspector shall submit a report to the Department setting forth the portion of the work inspected. The report shall be made on forms supplied by the Department and shall be filed with the Department.
- Nothing here shall be deemed to authorize any Registered Deputy Inspector to approve any inspection required by this Code, other than the special inspection for which the Registered Deputy Inspector was hired and is of the type for which the Registered Deputy Inspector is registered.

- 3. Where, in the opinion of the Department, the magnitude or complexity of a job warrants it, additional Registered Deputy Inspectors may be required.
- 4. Where, in the opinion of the Department, the Registered Deputy Inspector is negligent in the performance of the Deputy Inspector's duties, the job shall be stopped.
- 5. Nothing herein shall be deemed to authorize any Registered Deputy Inspector to approve the pouring of concrete, the placement of masonry, structural steel or fill prior to the approval of the regular building inspector.

Sec. 150. Subsection 91.1704.2.1.2 of Section 91.1704, Division 17, Article 1, Chapter IX of the Los Angeles Municipal Code is deleted and reinstated, to be placed in numerical order, to read as follows:

91.1704.2.1.2. Fees for Registered Deputy Inspector.

- 1. New Application. Before accepting any application for registration as a Registered Deputy Inspector, the Department shall collect a new examination fee of \$528. A separate application shall be submitted and a separate examination fee shall be collected for each additional type of registration desired. When the applicant passes the examination(s), a Certificate(s) of Registration for each type of examination passed shall be issued. If the applicant fails to pass an examination, the applicant may reapply and again pay the examination fees. No refund(s) will be given to the applicant after the Department has administered the examination(s).
- 2. Renewal Application. Before renewing a Certificate of Registration as a Registered Deputy Inspector, the Department shall collect a renewal Registration and examination fee in the amount of \$482. A separate application shall be submitted and a separate examination fee shall be collected for each additional type of renewal registration desired. When the applicant passes the examination(s), a Certificate(s) of Registration for each type of examination passed shall be issued. If the applicant fails to pass the examination(s), the applicant may reapply; however, the applicant must again pay the renewal Registration and examination fees before the Department can issue the Certificate of Registration(s). No refund(s) will be given to applicant after the Department has administered the examination.
- 3. International Code Council (ICC) Certification(s). International Code Council (ICC) Certification(s) is required prior to taking the Department's new or renewal examination(s). In addition to ICC's certification, the Department's examination will be required for each type of registration and fees collected as specified in this Section.

EXCEPTIONS:

If the ICC does not have an examination for a Department registration, the applicant will be required to take the Department examination only.

The ICC Certification may not be required when the Department registration is utilized by the Department of Public Works for City business only.

- Sec. 151. Subsection 91.1704.2.1.3 of Section 91.1704, Division 17, Article 1, Chapter IX of the Los Angeles Municipal Code is deleted and reinstated, to be placed in numerical order, to read as follows:
 - **91.1704.2.1.3.** Failure to Pass Examination for Registered Deputy Inspector. Every applicant who fails to pass a new or renewal examination(s) shall not be eligible for re-examination until 30 days after taking the previous examination.
- Sec. 152. Subsection 91.1704.2.3 of Section 91.1704, Division 17, Article 1, Chapter IX of the Los Angeles Municipal Code is deleted and reinstated, to be placed in numerical order, to read as follows:
 - **91.1704.2.3. Statement of Special Inspections.** The permit applicant shall submit a statement of special inspections in accordance with LAMC Subsection 91.106.3.3. The statement of special inspections shall be prepared by the registered design professional in responsible charge as a condition for permit issuance. This statement shall be in accordance with LAMC Subsection 91.1704.3.

EXCEPTION:

- A statement of special inspections is not required for portions of structures designed and constructed in accordance with the cold-formed steel light-frame construction provisions of CBC Section 2211.1.2 or the conventional light-frame construction provisions of LAMC Section 91.2308.
- Sec. 153. Subsection 91.1704.2.4 of Section 91.1704, Division 17, Article 1, Chapter IX of the Los Angeles Municipal Code is deleted and reinstated, to be placed in numerical order, to read as follows:
 - **91.1704.2.4.** Report Requirement. In addition to all the requirements of LAMC Subsection 91.1704.2.1.1, Registered Deputy Inspectors shall keep records of inspections and tests. The Registered Deputy Inspectors shall furnish inspection reports and tests to the Superintendent of Building, and to the registered design professional in responsible charge. Reports shall indicate that work inspected was or was not completed in conformance to approved construction documents. Discrepancies shall be brought to the immediate attention of the contractor for correction. If they are not corrected, the discrepancies shall be brought to the attention of the Superintendent of Building and to the registered design professional in responsible charge prior to the completion of that phase of the work. A final report documenting required special inspections and tests, and correction of any discrepancies noted in the inspections or tests, shall be submitted at a point in time agreed upon prior to the start of the work by the owner or owner's authorized agent to the Superintendent of Building.
- Sec. 154. Subsection 91.1704.2.5 of Section 91.1704, Division 17, Article 1, Chapter IX of the Los Angeles Municipal Code is deleted and reinstated, to be placed in numerical order, to read as follows:

- **91.1704.2.5.** Special Inspection of Fabricated Items. Where fabrication of structural, load-bearing or lateral load resisting members or assemblies is being conducted on the premises of a fabricator's shop, deputy inspections of the fabricated items shall be performed during fabrication, when approved by the Superintendent of Building, except where the fabricator has been approved to perform work without special inspection in accordance with LAMC Subsection 1704.2.5.1.
- Sec. 155. Subsection 91.1704.2.5.1 of Section 91.1704, Division 17, Article 1, Chapter IX of the Los Angeles Municipal Code is deleted and reinstated, to be placed in numerical order, to read as follows:
 - **91.1704.2.5.1. Fabricator Approval.** Pursuant to LAMC Section 96.200 et seq., special inspections required by LAMC Section 91.1705 are not required where the work is done on the premises of a fabricator approved to perform such work without special inspection. Approval shall be based upon review of the fabricator's written fabrication procedures and quality control manuals that provide a basis for control of materials and work quality, with periodic auditing of fabrication and quality control practices by an approved agency or the Superintendent of Building. At completion of fabrication, the approved fabricator shall submit a certificate of compliance to the owner or owner's authorized agent for submittal to the Superintendent of Building as specified in CBC Section 1704.5 stating that the work was performed in accordance with the approved construction documents
- Sec. 156. Subsection 91.1704.5 of Section 91.1704, Division 17, Article 1, Chapter IX of the Los Angeles Municipal Code is deleted:

91.1704.5. Section 1704.5 of the CBC is adopted in its entirety.

- Sec. 157. Subsection 91.1704.6 of Section 91.1704, Division 17, Article 1, Chapter IX of the Los Angeles Municipal Code is deleted and reinstated, to be placed in numerical order, to read as follows:
 - **91.1704.6.** Structural Observations. Where required by the provisions of LAMC Subsection 91.1704.6.1, the owner shall employ the registered design professional in responsible charge for the structural design, or another registered design professional designated by the registered design professional in responsible charge of the structural design to perform structural observations as defined in CBC Section 202. The structural observer shall visually observe representative locations of structural systems, details and load paths for general conformance to the approved construction documents.

Prior to the commencement of observations, the structural observer shall submit to the Superintendent of Building a written statement identifying the frequency and extent of proposed structural observations.

The owner or owner's representative shall coordinate and call a preconstruction meeting between the engineer or architect responsible for the structural design, structural observer, contractor, affected subcontractors and deputy inspectors. The structural observer shall preside over the meeting. The purpose of the meeting shall be to identify the major structural elements and connections that affect the vertical and lateral load systems of the structure and to review scheduling of the required observations. A record

of the meeting shall be included in the first report submitted to the Superintendent of Building.

Observed deficiencies shall be reported, in writing, to the owner's representative, Registered Deputy Inspector, contractor and the Superintendent of Building. Upon the form prescribed by the Superintendent of Building, the structural observer shall submit to the Superintendent of Building a written statement at each significant construction stage stating that the site visits have been made and identify any reported deficiencies which, to the best of the structural observer's knowledge, have not been resolved. A final report by the structural observer, which states that all observed deficiencies have been resolved, is required before acceptance of the work by the Superintendent of Building.

Sec. 158. Subsection 91.1704.6.1 of Section 91.1704, Division 17, Article 1, Chapter IX of the Los Angeles Municipal Code is deleted and reinstated, to be placed in numerical order, to read as follows:

91.1704.6.1. Structural observation for structures. Structural observation shall be provided for those structures where one or more of the following conditions exist:

- 1. The structure is classified as Risk Category III or IV.
- 2. The structure is a high-rise building.
- 3. A lateral design is required for the structure or portion thereof.

EXCEPTION: One-story wood framed Group R-3 and U occupancies less than 2,000 square feet in area, provided the adjacent grade is not steeper than I unit vertical in 10 units horizontal (10% slope), assigned to Seismic Design Category D

- 4. Such observation is required by the registered design professional responsible for the structural design.
- 5. Such observation is specifically required by the building official.

Sec. 159. Section 91.1705, Division 17, Article 1, Chapter IX of the Los Angeles Municipal Code is amended, with no other changes to existing subsections therein, to read as follows:

SEC. 91.1705. REQUIRED SPECIAL VERIFICATION AND INSPECTIONS AND TESTS.

Section 1705 of the CBC is adopted by reference, except CBC Sections 1705.3, 1705.3.2, 1705.6, 1705.7, 1705.8, 1705.12.1, 1705.12.1.1, 1705.13.1, 1705.13.1, 1705.13.4, 1705.16.2, and 1705.17 are not adopted; and, in lieu, LAMC Subsections 91.1705.1.2, 91.1705.1.3, 91.1705.1.4, 91.1705.1.5, 91.1705.1.6, 91.1705.1.7, 91.1705.1.8, 91.1705.1.9, 91.1705.1.10, 91.1705.1.11, 91.1705.1.12, 91.1705.1.13, 91.1705.1.13.1, 91.1705.2.54, 91.1705.3, 91.1705.3.1.1, 91.1705.3.2, 91.1705.6, 91.1705.6.2, 91.1705.7, 91.1705.8, 91.1705.13.1, 91.1705.13.1.1, 91.1705.14.1, 91.1705.18.2, and 91.1705.19 are added.

- Sec. 160. Subsection 91.1705.1.2 of Section 91.1705, Division 17, Article 1, Chapter IX of the Los Angeles Municipal Code is deleted and reinstated, to be placed in numerical order, to read as follows:
 - **91.1705.1.2.** Certifications by Engineer or Geologist. If the grading or foundation earthwork has required continuous inspection, the responsible engineering geologist or soils engineer shall certify by signature to the Department that, to the best of the geologist's or engineer's knowledge, the field work was completed in conformity with the technical design data.
- Sec. 161. Subsection 91.1705.1.3 of Section 91.1705, Division 17, Article 1, Chapter IX of the Los Angeles Municipal Code is deleted and reinstated, to be placed in numerical order, to read as follows:
 - **91.1705.1.3. Department's Responsibility.** The employment of a Registered Deputy Inspector for any work does not deprive the Department of the right to make periodic or called inspections of all or portions of the work. On any work requiring continuous inspection by a Registered Deputy Inspector, the called inspections required by Section 91.108 of this Code may be delegated to the Registered Deputy Inspector by the Superintendent of Building.
- Sec. 162. Subsection 91.1705.1.4 of Section 91.1705, Division 17, Article 1, Chapter IX of the Los Angeles Municipal Code is deleted and reinstated, to be placed in numerical order, to read as follows:
 - **91.1705.1.4. Structural, Termite and Fungus Damage.** Every building raised from its foundation shall be inspected. If there is any superficial evidence of structural damage, termites or fungus growth, the permittee shall remove and renew the damaged or infested members before reseating the building or moving it from its existing site or into the City.
- Sec. 163. Subsection 91.1705.1.5 of Section 91.1705, Division 17, Article 1, Chapter IX of the Los Angeles Municipal Code is deleted and reinstated, to be placed in numerical order, to read as follows:
 - **91.1705.1.5.** Emergencies or Catastrophes. In the event of an emergency or of a major catastrophe in the City, the Department may deputize Emergency Building Inspectors for the Department. The inspectors shall receive no compensation from the City, and they shall be appointed for the periods of time the Department deems advisable.
- Sec. 164. Subsection 91.1705.1.6 of Section 91.1705, Division 17, Article 1, Chapter IX of the Los Angeles Municipal Code is deleted and reinstated, to be placed in numerical order, to read as follows:
 - **91.1705.1.6.** Special Activity Inspection. In addition to the construction or work inspected as described in LAMC Sections 91.108 and 91.1704 through 91.1705, there are other construction activities that are sufficiently important to the structural stability of the structure, the occupants of and the fire and life safety of the structure that inspection by a specially qualified inspector is necessary in order to ensure compliance with the

Code requirements. These special activity inspections may occur during off-site fabrication or during on-site construction.

Inspections by Department Approved Special Activity Inspectors will be required in accordance with regulations promulgated by the Superintendent of Building where:

- 1. The structure is more than five stories or 60 feet (18,288 mm) in height.
- 2. The structure exceeds 50,000 square feet (4645 m 2) of ground area or 200,000 square feet (18 580 m 2) of total floor area.
- 3. Nondestructive structural testing methods are utilized.
- 4. The quality identification markings of the materials used are not inspectable after installation.
- 5. The manner of use of materials precludes full inspection after installation.

EXCEPTION: The Department may waive continuous or periodic inspection required by this Section where minor quantities are involved and no unusual hazards exist.

In addition to the projects included in the above categories, the Superintendent of Building may require Special Activity inspections if the Superintendent of Building determines that these inspections are needed to ensure compliance with the provisions of this Code and the work involves:

- 6. Unique, novel or innovative construction;
- 7. Highly complex or intricate construction;
- 8. Unique, novel or innovative grading, earth support or foundation procedures; or
- 9. New methods of construction not yet provided for in the rules and regulations.

Special Activity inspection authority will be determined on a case-by-case basis and will require Registered Deputy Inspector registration. The Superintendent of Building shall adopt rules and regulations implementing the provisions of this Section. These regulations may establish and set the requirements for different types of Department Approved Special Activity Inspectors.

Sec. 165. Subsection 91.1705.1.7 of Section 91.1705, Division 17, Article 1, Chapter IX of the Los Angeles Municipal Code is deleted and reinstated, to be placed in numerical order, to read as follows:

91.1705.1.7. Special Activity Inspection Authority.

Sec. 166. Subsection 91.1705.1.8 of Section 91.1705, Division 17, Article 1, Chapter IX of the Los Angeles Municipal Code is deleted and reinstated, to be placed in numerical order, to read as follows:

- **91.1705.1.8. Registration.** The procedures and conditions of registration as a Special Activity Inspector shall be the same as applicable to a Registered Deputy Inspector under LAMC Subsection 91.1704.2.1, except that the extent and duration of special inspection authority shall be as specified in the rules and regulations adopted by the Superintendent of Building.
- Sec. 167. Subsection 91.1705.1.9 of Section 91.1705, Division 17, Article 1, Chapter IX of the Los Angeles Municipal Code is deleted and reinstated, to be placed in numerical order, to read as follows:
 - **91.1705.1.9. Duties.** Except as otherwise indicated by regulations promulgated by the Superintendent of Building, the duties and responsibilities for a Special Activity Inspector shall be the same as specified for a Registered Duty Inspector under LAMC Subsection 91.1704.2.1.1.
- Sec. 168. Subsection 91.1705.1.10 of Section 91.1705, Division 17, Article 1, Chapter IX of the Los Angeles Municipal Code is deleted and reinstated, to be placed in numerical order, to read as follows:
 - **91.1705.1.10. Fees.** The procedures for the examination, registration and renewal of authority as a Special Activity Inspector shall be the same as specified for a Registered Deputy Inspectors under LAMC Subsection 91.1704.2.1.2.
- Sec. 169. Subsection 91.1705.1.11 of Section 91.1705, Division 17, Article 1, Chapter IX of the Los Angeles Municipal Code is deleted and reinstated, to be placed in numerical order, to read as follows:
 - **91.1705.1.11. Renewal Process.** LAMC Subsection 91.1704.2.1.2 applies to the application, examination and renewal process for registration as a Special Activity Inspector.
- Sec. 170. Subsection 91.1705.1.12 of Section 91.1705, Division 17, Article 1, Chapter IX of the Los Angeles Municipal Code is deleted and reinstated, to be placed in numerical order, to read as follows:

91.1705.1.12. Certification of Welders.

- Sec. 171. Subsection 91.1705.1.13 of Section 91.1705, Division 17, Article 1, Chapter IX of the Los Angeles Municipal Code is deleted and reinstated, to be placed in numerical order, to read as follows:
 - **91.1705.1.13.** The Superintendent of Building shall suspend or revoke any certificate upon evidence of failure of the person so certified to conduct welding operations in compliance with any of the conditions upon which it is based, or where quality of work or workmanship is not equivalent to that required by the Code, or for any of the reasons set forth in Article 8, Chapter IX of the Los Angeles Municipal Code. Any action shall be in accordance with the provisions of Article 8, Chapter IX of the Los Angeles Municipal Code.

- Sec. 172. Subsection 91.1705.2.4. of Section 91.1705, Division 17, Article 1, Chapter IX of the Los Angeles Municipal Code is renumbered 91.1705.2.5, to be placed in numerical order, and amended to read as follows:
 - **91.1705.2.54.** Cold-formed Steel Trusses Spanning 60 Feet or Greater. Where a cold-formed steel truss clear span is 60 feet (18 288 mm) or greater, the deputy inspector shall verify that the temporary installation restraint/bracing and the permanent individual truss member restraint/bracing are installed in accordance with the approved truss submittal package.
- Sec. 173. Subsection 91.1705.3 of Section 91.1705, Division 17, Article 1, Chapter IX of the Los Angeles Municipal Code is deleted and reinstated, to be placed in numerical order, to read as follows:
 - **91.1705.3.** Concrete Construction. Special inspections and tests of concrete construction shall be performed in accordance with this section and LAMC Table 1705.3.

EXCEPTION: Special inspections and tests shall not be required for:

- 1. Isolated spread concrete footings of buildings three stories or less above grade plane that are fully supported on earth or rock, where the structural design of the footing is based on a specified compressive strength, f'c, no greater than 2,500 pounds per square inch (psi) (17.2 MPa).
- 2. Continuous concrete footings supporting walls of buildings three stories or less above grade plane that are fully supported on earth or rock where:
 - 2.1. The footings support walls of light-frame construction;
 - 2.2. The footings are designed in accordance with LAMC Table 1809.7; or
 - 2.3. The structural design of the footing is based on a specified compressive strength, f'c, not more than 2,500 pounds per square inch (psi) (17.2 MPa), regardless of the compressive strength specified in the approved construction documents or used in the footing construction.
- 3. Nonstructural concrete slabs supported directly on the ground, including prestressed slabs on grade, where the effective prestress in the concrete is less than 150 psi (1.03 MPa).
- 4. Concrete foundation walls constructed in accordance with CBC Table 1807.1.6.2.
- 5. Concrete patios, driveways and sidewalks on grade.
- Sec. 174. Subsection 91.1705.3.1.1 of Section 91.1705, Division 17, Article 1, Chapter IX of the Los Angeles Municipal Code is deleted and reinstated, to be placed in numerical order, to read as follows:

91.1705.3.1.1. Structural Inspection – Concrete. During the construction of all buildings over 160 feet (48.768 m) in height with concrete special moment-resisting space frames, a structural inspector under the supervision of the engineer responsible for the structural design shall be present to inspect the materials and work quality for conformance with approved plans, specifications and change orders involved in construction of the ductile frames and shear walls. This inspection may be made by one or more structural inspectors, provided that at least one structural inspector is present during the placement of all concrete and reinforcement in the structural frame and shear walls.

The number of structural inspectors to be provided for each structure shall be determined by the engineer responsible for the structural design, provided that more than one structural inspector shall be provided where the magnitude of a structure prevents a single inspector from adequately performing the inspection.

The owner shall provide each structural inspector. Each structural inspector shall be paid by the owner directly or through the person responsible for the structural design. Each structural inspector shall be responsible to the person who prepared the structural design.

The inspection by the structural inspector or inspectors shall be in addition to inspections made by Department employees as specified in LAMC Section 91.108 and by Registered Deputy Inspectors as specified for other parts of the work in LAMC Section 91.1704.

Prior to the issuance of the Certificate of Occupancy, each structural inspector shall submit a report in writing to the engineer and the Department certifying that the portions of the structural frame inspected by the inspector were constructed in accordance with the approved plans, specifications, change orders and Division 19, Article 1, Chapter IX of the LAMC.

- Sec. 175. Subsection 91.1705.3.2 of Section 91.1705, Division 17, Article 1, Chapter IX of the Los Angeles Municipal Code is deleted and reinstated, to be placed in numerical order, to read as follows:
 - **91.1705.3.2. Material Tests.** In the absence of sufficient data or documentation providing evidence of conformance to quality standards for materials in Chapters 19 and 20 of ACI 318, the Superintendent of Building shall require testing of materials in accordance with the appropriate standards and criteria for the material in Chapters 19 and 20 of ACI 318. Weldability of reinforcement, except that which conforms to ASTM A706, shall be determined in accordance with the requirements of Section 26.6.4 of ACI 318.
- Sec. 176. Subsection 91.1705.6 of Section 91.1705, Division 17, Article 1, Chapter IX of the Los Angeles Municipal Code is deleted and reinstated, to be placed in numerical order, to read as follows:
 - **91.1705.6.** Soils. Special inspections defined per LAMC Subsections 91.7008.2 and 91.7011.3 and tests for existing site soil conditions, fill placement and load-bearing requirements shall be as required by this section and LAMC Table 1705.6. The approved geotechnical report, and the construction documents prepared by the registered design

professionals shall be used to determine compliance. During fill placement, the special inspector shall determine that proper materials and procedures are used in accordance with the provisions of the approved geotechnical report, as specified in CBC Section 1803.6.

EXCEPTION: Special inspection is not required during placement of controlled fill having a total depth of 12 inches (305 mm) or less and where the fill is not used for graded slopes or for support of footings or foundations.

- Sec. 177. Subsection 91.1705.6.2 of Section 91.1705, Division 17, Article 1, Chapter IX of the Los Angeles Municipal Code is amended to read as follows:
 - **91.1705.6.2. Grading.** A registered Deputy Grading Inspector, approved by and accountable to the soil engineer of record, is required in all circumstancesunder all cenditions where the planned site grading or foundation earthwork for planned on a project includes has any of the following:
 - 11.1. A contiguous grading area exceeding 60,000 square feet (5574 m²).
 - 21.2. An excavated or filled slope steeper than 2 horizontal in 1 vertical (50% slope).
 - 31.3. An excavated slope exceeding 40 feet (12,192 mm) in height and the top of which is within 20 feet (6096 mm) of a property line coterminous with improved private property or a public way.
 - 41.4. Foundation excavations below a 1 horizontal in 1 vertical plane inward and down from the property line.

EXCEPTION: The Department may waive continuous inspection where minor areas or heights are involved and no unusual hazards exist.

Sec. 178. Table TABLE 1705.6 of Section 91.1705, Division 17, Article 1, Chapter IX of the Los Angeles Municipal Code is deleted and reinstated, to be placed in numerical order, to read as follows:

TABLE 1705.6
REQUIRED VERIFICATION AND INSPECTION OF SOILS

VERIFICATION AND INSPECTION TASK	CONTINUOUS DURING TASK LISTED	PERIODICALLY DURING TASK LISTED
Verify materials below shallow foundations are adequate to achieve the design bearing capacity.	_	Х
Verify excavations are extended to proper depth and have reached proper material.	-	Х
Perform classification and testing of compacted fill materials.	_	Х

Verify use of proper materials, densities and lift thicknesses during placement and compaction of compacted fill.	X a	-
 Prior to placement of compacted fill, observe subgrade and verify that site has been prepared properly. 	_	Х

- a. Frequency of special inspections to be determined by the registered design professional responsible for the project.
- Sec. 179. Subsection 91.1705.7 of Section 91.1705, Division 17, Article 1, Chapter IX of the Los Angeles Municipal Code is deleted and reinstated, to be placed in numerical order, to read as follows:
 - **91.1705.7. Driven Deep Foundations and Connecting Grade Beams.** Special inspections and tests shall be performed during installation and testing of the driven deep foundation elements as specified by CBC Table 1705.7. The approved geotechnical report, required by CBC Section 1803.6 and the construction documents prepared by the registered design professionals shall be used to determine compliance. Special inspections for connecting grade beams shall be in accordance with LAMC Section 91.1705.3.
- Sec. 180. Subsection 91.1705.8 of Section 91.1705, Division 17, Article 1, Chapter IX of the Los Angeles Municipal Code is deleted and reinstated, to be placed in numerical order, to read as follows:
 - **91.1705.8.** Cast-in-Place Deep Foundations and Connecting Grade Beams. Special inspections and tests shall be performed during installation and testing of cast-in-place deep foundation elements as specified by CBC Table 1705.8. The approved geotechnical report, required by CBC Section 1803.6 and the construction documents prepared by the registered design professionals shall be used to determine compliance. Special inspections for connecting grade beams shall be in accordance with LAMC Section 91.1705.3.
- Sec. 181. Subsection 91.1705.13.1 of Section 91.1705, Division 17, Article 1, Chapter IX of the Los Angeles Municipal Code is deleted and reinstated, to be placed in numerical order, to read as follows:
 - **91.1705.13.1. Structural Steel.** Special inspection for seismic resistance shall be in accordance with CBC Section 1705.13.1.1 or 1705.13.1.2, as applicable and during the fabrication and erection of buildings over 160 feet (48,768 mm) in height with structural steel moment resisting frames. A registered deputy inspector shall be present during the performance of all structural welding or the installation of all high-strength bolts whether in a fabricator's shop or at the job site.

EXCEPTIONS:

- 1. Single-pass fillet welds not exceeding 5/16-inch (7.9 mm) in size.
- 2. Floor and roof deck welding.
- Sec. 182. Subsection 91.1705.13.1.1.1 of Section 91.1705, Division 17, Article 1, Chapter IX of the Los Angeles Municipal Code is deleted and reinstated, to be placed in numerical order, to read as follows:

91.1705.13.1.1.1. Certification. For buildings exceeding 160 feet (48,768 mm) in height, the engineer responsible for the structural design and the general contractor responsible for the construction, or their competent authorized representatives, shall make periodic inspections of the work at the site to verify general compliance with the approved plans, specifications and change orders. The engineer and general contractor shall submit a statement in writing to the Department stating that they know from personal knowledge that the materials installed and the structural work performed is in compliance with the approved plans, specifications and change orders.

The phrase "personal knowledge" as used above in reference to the engineer and general contractor means the knowledge resulting from the general observation by the engineer and the general supervision by the contractor of the work, as required by both in the superintendence of the building's construction, and as distinguished from the continuous personal superintendence of the special inspector and/or deputy inspector who are continuously at the site during the progress of the work. The exercise of reasonable diligence to obtain the facts is required and anyone who intentionally remains unaware may be charged with knowledge. The interpretation of personal knowledge as it applies to the special inspector and/or deputy inspector is that the inspector(s) must have actual personal knowledge that the requirements of the plans and specifications are being carried out, which is obtained by the inspector's continuous observation of the work of construction at the site in all stages of its progress.

EXCEPTION: Special inspections of structural steel in structures assigned to Seismic Design Category C that are not specifically detailed for seismic resistance, with a response modification coefficient, R, of 3 or less, excluding cantilever column systems.

Sec. 183. Subsection 91.1705.14.1 of Section 91.1705, Division 17, Article 1, Chapter IX of the Los Angeles Municipal Code is deleted and reinstated, to be placed in numerical order, to read as follows:

91.1705.14.1. Structural Steel. Testing for structural steel shall be in accordance with the quality assurance requirements of AISC 341 and the additional requirements in this Section. Nondestructive testing shall be performed by an approved agency and the written report, including the test results, shall be submitted for evaluation by the Superintendent of Building. The acceptance criteria for nondestructive testing shall be as required in AWS D1.1 as specified by the registered design professional.

Base metal thicker than 1.5 inches (38 mm), where subject to through-thickness weld shrinkage strains, shall be ultrasonically tested for discontinuities behind and adjacent to those welds after joint completion. Any material discontinuities shall be accepted or rejected on the basis of ASTM A 435 or ASTM A 898 (Level 1 criteria) and criteria as established by the registered design professional(s) in responsible charge, and the construction documents.

Sec. 184. Subsection 91.1705.18.2 of Section 91.1705, Division 17, Article 1, Chapter IX of the Los Angeles Municipal Code is deleted and reinstated, to be placed in numerical order, to read as follows:

- **91.1705.18.2. Fire-Resistant Joint Systems.** Inspection of fire-resistant joint systems that are tested and listed in accordance with CBC Sections 715.3 and 715.4 shall be conducted by an approved deputy inspector in accordance with ASTM E 2393.
- Sec. 185. Subsection 91.1705.19 of Section 91.1705, Division 17, Article 1, Chapter IX of the Los Angeles Municipal Code is deleted and reinstated, to be placed in numerical order, to read as follows:
 - **91.1705.19. Special Inspection for Smoke Control.** Smoke control systems shall be tested by a deputy inspector.
- Sec. 186. Subsection 91.1706.1 of Section 91.1706, Division 17, Article 1, Chapter IX of the Los Angeles Municipal Code is deleted and reinstated, to be placed in numerical order, to read as follows:
 - **91.1706.1.** Conformance to Standards. The design strengths and permissible stresses of any structural material that are identified by a manufacturer's designation as to manufacture and grade by mill tests, or the strength and stress grade is otherwise confirmed to the satisfaction of the Superintendent of Building shall conform to the specifications and methods of design of accepted engineering practice or the approved rules in the absence of applicable standards.
- Sec. 187. Section 91.1710, Division 17, Article 1, Chapter IX of the Los Angeles Municipal Code is deleted:

SEC. 91.1710. CERTIFIED SECURITY BAR INSTALLER.

- Sec. 188. Subsection 91.1710.1 of Section 91.1710, Division 17, Article 1, Chapter IX of the Los Angeles Municipal Code is deleted:
 - **91.1710.1. General.** A certified security bar installer may certify to the Department that any bars, grilles, grates, security roll-down shutters, or similar devices installed on required emergency escape windows or doors meet the requirements of LAMC Subsection 91.6304.3.
 - The Department may allow the use of a certified installer if:
 - 1. The certified installer obtains a Certificate of Registration in accordance with the provisions of this section.
 - 2. The certified installer files with the Department a Certificate of Compliance for each dwelling unit for which certification is being made. The Certificate of Compliance shall be on a form provided by the Department and shall be signed by the property owner and the certified installer.¶
 - 3. The Certificate of Compliance processing fee is paid in accordance with LAMC Subsection 91.107.7.¶
 - 4. The certified installer files the Certificate of Compliance with the Department within 15 days after completion of the installation.

Sec. 189. Subsection 91.1710.2 of Section 91.1710, Division 17, Article 1, Chapter IX of the Los Angeles Municipal Code is deleted:

91.1710.2. Registration. A certified installer shall obtain a Certificate of Registration from the Department.

Sec. 190. Subsection 91.1710.3 of Section 91.1710, Division 17, Article 1, Chapter IX of the Los Angeles Municipal Code is deleted:

91.1710.3. Application.

Sec. 191. Subsection 91.1710.3.1 of Section 91.1710, Division 17, Article 1, Chapter IX of the Los Angeles Municipal Code is deleted:

91.1710.3.1. Forms. Application for a certified security bar installer Certificate of Registration shall be made on a form furnished by the Department.

Sec. 192. Subsection 91.1710.3.2 of Section 91.1710, Division 17, Article 1, Chapter IX of the Los Angeles Municipal Code is deleted:

91.1710.3.2. Information Necessary. The application shall bear the name and address of the applicant and, if a firm, partnership or corporation, the names of the principal officers. The application shall carry other information deemed necessary by the Department.

Sec. 193. Subsection 91.1710.3.3 of Section 91.1710, Division 17, Article 1, Chapter IX of the Los Angeles Municipal Code is deleted:

91.1710.3.3. Verification. The applicant shall declare that the information contained in the application is true and correct.

Sec. 194. Subsection 91.1710.3.4 of Section 91.1710, Division 17, Article 1, Chapter IX of the Los Angeles Municipal Code is deleted:

91.1710.3.4. Fees. The application shall be accompanied by an examination fee of \$125.00.

Sec. 195. Subsection 91.1710.4 of Section 91.1710, Division 17, Article 1, Chapter IX of the Los Angeles Municipal Code is deleted:

91.1710.4. Examination.

Sec. 196. Subsection 91.1710.4.1 of Section 91.1710, Division 17, Article 1, Chapter IX of the Los Angeles Municipal Code is deleted:

91.1710.4.1. Examination Required. Before any person shall be issued a Certificate of Registration, the applicant, who must be an officer in the case of a firm, partnership or corporation, shall have successfully passed the examination required for the issuance of the certificate within ninety (90) days preceding the date of the issuance.

Sec. 197. Subsection 91.1710.4.2 of Section 91.1710, Division 17, Article 1, Chapter IX of the Los Angeles Municipal Code is deleted:

91.1710.4.2. Experience Required. To be eligible for the examination for a Registration Certificate, the applicant shall have a valid California State Contractor's License in an appropriate specialty and a valid City Business Tax Certificate.

Sec. 198. Subsection 91.1710.4.3 of Section 91.1710, Division 17, Article 1, Chapter IX of the Los Angeles Municipal Code is deleted:

91.1710.4.3. Board of Examiners. The Superintendent of Building or a Board of Examiners composed of qualified person(s) appointed by the Superintendent of Building shall conduct examinations.

- -¶
 - The results of every examination shall be subject to the approval of the Superintendent.¶
- Each examiner shall serve at the pleasure of the Superintendent of Building and shall serve for a period of one year unless reappointed by the Superintendent of Building.
- Sec. 199. Subsection 91.1710.4.4 of Section 91.1710, Division 17, Article 1, Chapter IX of the Los Angeles Municipal Code is deleted:

91.1710.4.4. Scope of Examination. The examination shall, in the judgment of the Board of Examiners, fairly determine the ability of the applicant to properly perform the work, which the applicant would be authorized to do by the certificate requested, and may include the following:

- -¶
- 1. A written test.¶
- -¶
- 2. Practical tests as may be required.
- 4
- 3. An oral interview as may be required.
- -¶
- 4. Other tests as may be required by the Board of Examiners.
- Sec. 200. Subsection 91.1710.4.5 of Section 91.1710, Division 17, Article 1, Chapter IX of the Los Angeles Municipal Code is deleted:

91.1710.4.5. Time of Examination. The applicant shall be examined as soon as practicable after filing an application.

Sec. 201. Subsection 91.1710.4.6 of Section 91.1710, Division 17, Article 1, Chapter IX of the Los Angeles Municipal Code is deleted:

91.1710.4.6. Rules and Regulations. The Department shall have the authority to establish rules and regulations for the conduct of examinations.

Sec. 202. Subsection 91.1710.4.7 of Section 91.1710, Division 17, Article 1, Chapter IX of the Los Angeles Municipal Code is deleted:

- **91.1710.4.7. Fitness of Applicant.** Any applicant for a certificate may be required to submit satisfactory proof of the applicant's fitness to carry out the intent of this Code.
- Sec. 203. Subsection 91.1710.4.8 of Section 91.1710, Division 17, Article 1, Chapter IX of the Los Angeles Municipal Code is deleted:
 - **91.1710.4.8. Failure to Pass.** Every applicant who fails to pass an examination shall not be eligible for another examination until four (4) weeks after taking the previous examination. Any applicant who fails to pass on the third try shall not be eligible again until six (6) months after taking the previous examination.
- Sec. 204. Subsection 91.1710.5 of Section 91.1710, Division 17, Article 1, Chapter IX of the Los Angeles Municipal Code is deleted:

91.1710.5. Issuance of Certificates.

- Sec. 205. Subsection 91.1710.5.1 of Section 91.1710, Division 17, Article 1, Chapter IX of the Los Angeles Municipal Code is deleted:
 - **91.1710.5.1.** Upon the payment of a \$90 fee, the Department may issue a Certificate of Registration to every applicant who passes the required examination for a certified security bar installer.
- Sec. 206. Subsection 91.1710.5.2 of Section 91.1710, Division 17, Article 1, Chapter IX of the Los Angeles Municipal Code is deleted:
 - **91.1710.5.2.** Renewal of Certificates. Expired certificates may be renewed at any time within twelve (12) months following the date of expiration. However, after the first month, the renewal fee shall be increased by 10% for each subsequent month. After a certificate has been expired for one year, it may not be renewed; however, an applicant may apply for a new certificate at that time.
- Sec. 207. Subsection 91.1710.6 of Section 91.1710, Division 17, Article 1, Chapter IX of the Los Angeles Municipal Code is deleted:

91.1710.6. Exhibition of Certificate.

- Sec. 208. Subsection 91.1710.6.1 of Section 91.1710, Division 17, Article 1, Chapter IX of the Los Angeles Municipal Code is deleted:
 - **91.1710.6.1.** Every person having a fixed place of business shall keep their Certificate of Registration posted in some conspicuous location at their place of business during the time the certificate is in force.
- Sec. 209. Subsection 91.1710.6.2 of Section 91.1710, Division 17, Article 1, Chapter IX of the Los Angeles Municipal Code is deleted:
 - **91.1710.6.2.** Every person not having a fixed place of business shall carry their Certificate of Registration with them at all times while doing any work pursuant to this certificate.

- Sec. 210. Subsection 91.1710.7 of Section 91.1710, Division 17, Article 1, Chapter IX of the Los Angeles Municipal Code is deleted:
 - **91.1710.7.** Revocation of Certificate. Any certificate may be suspended or revoked in accordance with the provisions of Article 8. Chapter IX of the LAMC.
- Sec. 211. Subsection 91.1710.8 of Section 91.1710, Division 17, Article 1, Chapter IX of the Los Angeles Municipal Code is deleted:
 - **91.1710.8. Transfer of Certificate.** No certificate shall be transferable. A Certificate of Registration issued to a firm, partnership or corporation may not be transferred. The dissolution of a firm, partnership or corporation renders the certificate void.
- Sec. 212. Subsection 91.1711.1 of Section 91.1711, Division 17, Article 1, Chapter IX of the Los Angeles Municipal Code is deleted and reinstated, to be placed in numerical order, to read as follows:

91.1711.1. General.

- Sec. 213. Subsection 91.1711.1.1 of Section 91.1711, Division 17, Article 1, Chapter IX of the Los Angeles Municipal Code is deleted and reinstated, to be placed in numerical order, to read as follows:
 - **91.1711.1.1. Purpose.** The purpose of this section is to regulate materials and establish methods of safe construction where any structure or portion of the structure is wholly or partially prefabricated.
- Sec. 214. Subsection 91.1711.1.2 of Section 91.1711, Division 17, Article 1, Chapter IX of the Los Angeles Municipal Code is deleted and reinstated, to be placed in numerical order, to read as follows:
 - **91.1711.1.2. Scope.** Unless otherwise specifically stated in this section, all prefabricated construction and all materials used in the construction shall conform to all the requirements of this Code. (See LAMC Subdivision 91.104.2.6.)
- Sec. 215. Subsection 91.1711.1.3 of Section 91.1711, Division 17, Article 1, Chapter IX of the Los Angeles Municipal Code is deleted and reinstated, to be placed in numerical order, to read as follows:

91.1711.1.3. Definition.

PREFABRICATED ASSEMBLY. A structural unit, the integral parts of which have been built up or assembled prior to incorporation in the building.

- Sec. 216. Subsection 91.1711.2 of Section 91.1711, Division 17, Article 1, Chapter IX of the Los Angeles Municipal Code is amended, to be placed in numerical order, to read as follows:
 - **91.1711.2. Tests of Materials.** Every approval of a material not specifically mentioned in this Code shall incorporate as a provision, the kind and number of tests to be made during prefabrication.

- Sec. 217. Subsection 91.1711.3 of Section 91.1711, Division 17, Article 1, Chapter IX of the Los Angeles Municipal Code is deleted and reinstated, to be placed in numerical order, to read as follows:
 - **91.1711.3. Tests of Assemblies.** The Superintendent of Building may require special tests to be made on assemblies to determine their durability and weather resistance.
- Sec. 218. Subsection 91.1711.4 of Section 91.1711, Division 17, Article 1, Chapter IX of the Los Angeles Municipal Code is amended, to be placed in numerical order, to read as follows:
 - **91.1711.4.** Reserved **Connections.** See CBC Section 1611.11.1 for design requirements of connections for prefabricated assemblies.
- Sec. 219. Subsection 91.1711.5 of Section 91.1711, Division 17, Article 1, Chapter IX of the Los Angeles Municipal Code is amended, to be placed in numerical order, to read as follows:
 - **91.1711.5.** Reserved Pipes and Conduits. See CBC Section 1611.11.2 for design requirements for removal of material for pipes, conduits and other equipment.
- Sec. 220. Subsection 91.1711.6 of Section 91.1711, Division 17, Article 1, Chapter IX of the Los Angeles Municipal Code is deleted and reinstated, to be placed in numerical order, to read as follows:

91.1711.6. Certificate and Inspection.

- Sec. 221. Subsection 91.1711.6.1 of Section 91.1711, Division 17, Article 1, Chapter IX of the Los Angeles Municipal Code is deleted and reinstated, to be placed in numerical order, to read as follows:
 - **91.1711.6.1. Materials.** Materials and the assembly of materials shall be inspected to determine compliance with this Code. Every material shall be graded, marked or labeled where required elsewhere in this Code.
- Sec. 222. Subsection 91.1711.6.2 of Section 91.1711, Division 17, Article 1, Chapter IX of the Los Angeles Municipal Code is deleted and reinstated, to be placed in numerical order, to read as follows:
 - **91.1711.6.2.** Certificate. A Certificate of Approval shall be furnished with every prefabricated assembly, except where the assembly is readily accessible to inspection at the site. The Certificate of Approval shall certify that the assembly in question has been inspected and meets all the requirements of this Code. When mechanical equipment is installed so that it cannot be inspected at the site, the Certificate of Approval shall certify that the equipment complies with all applicable laws and regulations.
- Sec. 223. Subsection 91.1711.6.3 of Section 91.1711, Division 17, Article 1, Chapter IX of the Los Angeles Municipal Code is deleted and reinstated, to be placed in numerical order, to read as follows:

- **91.1711.6.3.** Certifying Agency. To be acceptable under this Code, every Certificate of Approval shall be made by an approved testing agency.
- Sec. 224. Subsection 91.1711.6.4 of Section 91.1711, Division 17, Article 1, Chapter IX of the Los Angeles Municipal Code is deleted and reinstated, to be placed in numerical order, to read as follows:
 - **91.1711.6.4. Field Erection.** Placement of prefabricated assemblies at the building site shall be inspected by the Department to determine compliance with this Code.
- Sec. 225. Subsection 91.1711.6.5 of Section 91.1711, Division 17, Article 1, Chapter IX of the Los Angeles Municipal Code is deleted and reinstated, to be placed in numerical order, to read as follows:
 - **91.1711.6.5.** Continuous Inspection. If continuous inspection is required for certain materials where construction takes place on the site, it shall also be required where the same materials are used in prefabricated construction.
 - **EXCEPTION:** Continuous inspection will not be required during prefabrication if the approved testing agency certifies to the construction and furnishes evidence of compliance.
- Sec. 226. Section 91.1712, Division 17, Article 1, Chapter IX of the Los Angeles Municipal Code is added, to be placed in numerical order, to read as follows:

SEC. 91.1712. CERTIFIED SECURITY BAR INSTALLER.

- Sec. 227. Subsection 91.1712.1 of Section 91.1712, Division 17, Article 1, Chapter IX of the Los Angeles Municipal Code is added to read as follows:
 - **91.1712.1. General.** A certified security bar installer may certify to the Department that any bars, grilles, grates, security roll-down shutters, or similar devices installed on required emergency escape windows or doors meet the requirements of LAMC Subsection 91.6304.3.

The Department may allow the use of a certified installer if:

- 1. The certified installer obtains a Certificate of Registration in accordance with the provisions of this section.
- The certified installer files with the Department a Certificate of Compliance for each dwelling unit for which certification is being made. The Certificate of Compliance shall be on a form provided by the Department and shall be signed by the property owner and the certified installer.
- 3. The Certificate of Compliance processing fee is paid in accordance with LAMC Subsection 91.107.7.
- 4. The certified installer files the Certificate of Compliance with the Department within 15 days after completion of the installation.

- Sec. 228. Subsection 91.1712.2 of Section 91.1712, Division 17, Article 1, Chapter IX of the Los Angeles Municipal Code is added to read as follows:
 - **91.1712.2. Registration.** A certified installer shall obtain a Certificate of Registration from the Department.
- Sec. 229. Subsection 91.1712.3 of Section 91.1712, Division 17, Article 1, Chapter IX of the Los Angeles Municipal Code is added to read as follows:

91.1712.3. Application.

- Sec. 230. Subsection 91.1712.3.1 of Section 91.1712, Division 17, Article 1, Chapter IX of the Los Angeles Municipal Code is added to read as follows:
 - **91.1712.3.1. Forms.** Application for a certified security bar installer Certificate of Registration shall be made on a form furnished by the Department.
- Sec. 231. Subsection 91.1712.3.2 of Section 91.1712, Division 17, Article 1, Chapter IX of the Los Angeles Municipal Code is added to read as follows:
 - **91.1712.3.2. Information Necessary.** The application shall bear the name and address of the applicant and, if a firm, partnership or corporation, the names of the principal officers. The application shall carry other information deemed necessary by the Department.
- Sec. 232. Subsection 91.1712.3.3 of Section 91.1712, Division 17, Article 1, Chapter IX of the Los Angeles Municipal Code is added to read as follows:
 - **91.1712.3.3. Verification.** The applicant shall declare that the information contained in the application is true and correct.
- Sec. 233. Subsection 91.1712.3.4 of Section 91.1712, Division 17, Article 1, Chapter IX of the Los Angeles Municipal Code is added to read as follows:
 - **91.1712.3.4. Fees.** The application shall be accompanied by an examination fee of \$125.00.
- Sec. 234. Subsection 91.1712.4 of Section 91.1712, Division 17, Article 1, Chapter IX of the Los Angeles Municipal Code is added to read as follows:

91.1712.4. Examination.

- Sec. 235. Subsection 91.1712.4.1 of Section 91.1712, Division 17, Article 1, Chapter IX of the Los Angeles Municipal Code is added to read as follows:
 - **91.1712.4.1. Examination Required.** Before any person shall be issued a Certificate of Registration, the applicant, who must be an officer in the case of a firm, partnership or corporation, shall have successfully passed the examination required for the issuance of the certificate within ninety (90) days preceding the date of the issuance.

- Sec. 236. Subsection 91.1712.4.2 of Section 91.1712, Division 17, Article 1, Chapter IX of the Los Angeles Municipal Code is added to read as follows:
 - **91.1712.4.2. Experience Required.** To be eligible for the examination for a Registration Certificate, the applicant shall have a valid California State Contractor's License in an appropriate specialty and a valid City Business Tax Certificate.
- Sec. 237. Subsection 91.1712.4.3 of Section 91.1712, Division 17, Article 1, Chapter IX of the Los Angeles Municipal Code is added to read as follows:
 - **91.1712.4.3. Board of Examiners.** The Superintendent of Building or a Board of Examiners composed of qualified person(s) appointed by the Superintendent of Building shall conduct examinations.

The results of every examination shall be subject to the approval of the Superintendent.

Each examiner shall serve at the pleasure of the Superintendent of Building and shall serve for a period of one year unless reappointed by the Superintendent of Building.

- Sec. 238. Subsection 91.1712.4.4 of Section 91.1712, Division 17, Article 1, Chapter IX of the Los Angeles Municipal Code is added to read as follows:
 - **91.1712.4.4.** Scope of Examination. The examination shall, in the judgment of the Board of Examiners, fairly determine the ability of the applicant to properly perform the work, which the applicant would be authorized to do by the certificate requested, and may include the following:
 - A written test.
 - 2. Practical tests as may be required.
 - 3. An oral interview as may be required.
 - 4. Other tests as may be required by the Board of Examiners.
- Sec. 239. Subsection 91.1712.4.5 of Section 91.1712, Division 17, Article 1, Chapter IX of the Los Angeles Municipal Code is added to read as follows:
 - **91.1712.4.5. Time of Examination.** The applicant shall be examined as soon as practicable after filing an application.
- Sec. 240. Subsection 91.1712.4.6 of Section 91.1712, Division 17, Article 1, Chapter IX of the Los Angeles Municipal Code is added to read as follows:
 - **91.1712.4.6.** Rules and Regulations. The Department shall have the authority to establish rules and regulations for the conduct of examinations.
- Sec. 241. Subsection 91.1712.4.7 of Section 91.1712, Division 17, Article 1, Chapter IX of the Los Angeles Municipal Code is added to read as follows:

- **91.1712.4.7. Fitness of Applicant.** Any applicant for a certificate may be required to submit satisfactory proof of the applicant's fitness to carry out the intent of this Code.
- Sec. 242. Subsection 91.1712.4.8 of Section 91.1712, Division 17, Article 1, Chapter IX of the Los Angeles Municipal Code is added to read as follows:
 - **91.1712.4.8. Failure to Pass.** Every applicant who fails to pass an examination shall not be eligible for another examination until four (4) weeks after taking the previous examination. Any applicant who fails to pass on the third try shall not be eligible again until six (6) months after taking the previous examination.
- Sec. 243. Subsection 91.1712.5 of Section 91.1712, Division 17, Article 1, Chapter IX of the Los Angeles Municipal Code is added to read as follows:

91.1712.5. Issuance of Certificates.

- Sec. 244. Subsection 91.1712.5.1 of Section 91.1712, Division 17, Article 1, Chapter IX of the Los Angeles Municipal Code is added to read as follows:
 - **91.1712.5.1.** Upon the payment of a \$90 fee, the Department may issue a Certificate of Registration to every applicant who passes the required examination for a certified security bar installer.
- Sec. 245. Subsection 91.1712.5.2 of Section 91.1712, Division 17, Article 1, Chapter IX of the Los Angeles Municipal Code is added to read as follows:
 - **91.1712.5.2. Renewal of Certificates.** Expired certificates may be renewed at any time within twelve (12) months following the date of expiration. However, after the first month, the renewal fee shall be increased by 10% for each subsequent month. After a certificate has been expired for one year, it may not be renewed; however, an applicant may apply for a new certificate at that time.
- Sec. 246. Subsection 91.1712.6 of Section 91.1712, Division 17, Article 1, Chapter IX of the Los Angeles Municipal Code is added to read as follows:

91.1712.6. Exhibition of Certificate.

- Sec. 247. Subsection 91.1712.6.1 of Section 91.1712, Division 17, Article 1, Chapter IX of the Los Angeles Municipal Code is added to read as follows:
 - **91.1712.6.1.** Every person having a fixed place of business shall keep their Certificate of Registration posted in some conspicuous location at their place of business during the time the certificate is in force.
- Sec. 248. Subsection 91.1712.6.2 of Section 91.1712, Division 17, Article 1, Chapter IX of the Los Angeles Municipal Code is added to read as follows:
 - **91.1712.6.2.** Every person not having a fixed place of business shall carry their Certificate of Registration with them at all times while doing any work pursuant to this certificate.

- Sec. 249. Subsection 91.1712.7 of Section 91.1712, Division 17, Article 1, Chapter IX of the Los Angeles Municipal Code is added to read as follows:
 - **91.1712.7. Revocation of Certificate.** Any certificate may be suspended or revoked in accordance with the provisions of Article 8, Chapter IX of the LAMC.
- Sec. 250. Subsection 91.1712.8 of Section 91.1712, Division 17, Article 1, Chapter IX of the Los Angeles Municipal Code is added to read as follows:
 - **91.1712.8. Transfer of Certificate.** No certificate shall be transferable. A Certificate of Registration issued to a firm, partnership or corporation may not be transferred. The dissolution of a firm, partnership or corporation renders the certificate void.
- Sec. 251. Subsection 91.1801.1 of Section 91.1801, Division 18, Article 1, Chapter IX of the Los Angeles Municipal Code is deleted and reinstated, to be placed in numerical order, to read as follows:
 - **91.1801.1. Scope.** The provisions of this division shall apply to building and foundation systems in those areas not subject to scour or water pressure by wind and wave action. Buildings and foundations subject to those scour or water pressure loads shall be designed in accordance with Division 16, Article 1, Chapter IX of the LAMC.

Requirements governing grading and earthwork construction, including excavation and fills, are set forth in Division 70, Article 1, Chapter IX of the LAMC.

Hillside buildings (buildings constructed on slopes steeper than 1 unit vertical in 3 units horizontal [33.3%] slope) shall comply with LAMC Subsection 91.1613.9 (seismic design provisions for hillside buildings) and this division.

- Sec. 252. Subsection 91.1803.5.6 of Section 91.1803, Division 18, Article 1, Chapter IX of the Los Angeles Municipal Code is deleted and reinstated, to be placed in numerical order, to read as follows:
 - **91.1803.5.6.** Rock Strata. Where subsurface explorations at the project site indicate variations or doubtful characteristics in the structure of the rock upon which foundations are to be constructed, a sufficient number of borings shall be made to a depth of not less than 10 feet (3048 mm) below the level of the foundations and to a depth that would allow investigation of any unsupported bedding planes or any other rock discontinuities that could influence the foundation stability to provide assurance of the soundness of the foundation bed and its load-bearing capacity.
- Sec. 253. Subsection 91.1805.4.3 of Section 91.1805, Division 18, Article 1, Chapter IX of the Los Angeles Municipal Code is deleted and reinstated, to be placed in numerical order, to read as follows:
 - **91.1805.4.3. Drainage Discharge.** The floor base and foundation perimeter drain shall discharge by gravity or mechanical means into an approved drainage system that complies with the Plumbing Code.

- Sec. 254. Subsection 91.1806.2 of Section 91.1806, Division 18, Article 1, Chapter IX of the Los Angeles Municipal Code is amended, to be placed in numerical order, to read as follows:
 - **91.1806.2. Presumptive Load-bearing Values.** The load-bearing values used in design for supporting soils and rock near the surface shall not exceed the values specified in CBC Table 1806.2 unless data to substantiate the use of higher values are submitted and approved. Where the Department has reason to doubt the classification, strength or compressibility of the soil, the requirements of CBC Section 1803.5.2 shall be satisfied.

Presumptive load-bearing values shall apply to materials with similar physical and engineering characteristics and dispositions.

Mud, organic silt, and organic clays (OL, OH), peat (Pt) exand uncertified fill shall not be assumed to have a presumptive load-bearing capacity.

- Sec. 255. Subsection 91.1807.1.4 of Section 91.1807, Division 18, Article 1, Chapter IX of the Los Angeles Municipal Code is amended, to be placed in numerical order, to read as follows:
 - **91.1807.1.4. Permanent Wood Foundation Systems.** Permanent wood foundation systems shall be designed and installed in accordance with AWC PWFAF & PA PWF and as otherwise approved by the Department. Lumber and plywood shall be preservative treated in accordance with AWPA U1 (Commodity Specification A, Special Requirement 4.2Use Category 4B and Section 5.2) and shall be identified in accordance with CBC Section 2303.1.9.1. Permanent wood foundation systems shall not be used for structures assigned to Seismic Design Category D, E or F.

EXCEPTION: Accessory buildings not used for human occupancy and less than 120 square feet (11.1 m2) in area may be supported on treated wood mud sills.

- Sec. 256. Subsection 91.1807.1.6 of Section 91.1807, Division 18, Article 1, Chapter IX of the Los Angeles Municipal Code is deleted and reinstated, to be placed in numerical order, to read as follows:
 - **91.1807.1.6.** Prescriptive Design of Concrete and Masonry Foundation Walls. Concrete and masonry foundation walls that are laterally supported at the top and bottom shall be permitted to be designed and constructed in accordance with this Section. Prescriptive design of foundation walls shall not be used for structures assigned to Seismic Design Category D, E or F.
- Sec. 257. Subsection 91.1808.7.1.1 of Section 91.1808, Division 18, Article 1, Chapter IX of the Los Angeles Municipal Code is deleted and reinstated, to be placed in numerical order, to read as follows:
 - **91.1808.7.1.1.** Exception to CBC Section 1808.7.1. An Exception to CBC Section 1808.7.1 is an open deck or patio not covered with a roof or other overhead structure, which shall not be considered a building for the specific application of the building clearance pursuant to CBC Section 1808.7.1 and CBC Figure 1808.7.1.

- Sec. 258. Subsection 91.1809.3 of Section 91.1809, Division 18, Article 1, Chapter IX of the Los Angeles Municipal Code is deleted and reinstated, to be placed in numerical order, to read as follows:
 - **91.1809.3. Stepped Footing.** The top surface of footings shall be level. The bottom surface of footings shall be permitted to have a slope not exceeding one unit vertical in 10 units horizontal (10-percent slope). Footings shall be stepped where it is necessary to change the elevation of the top surface of the footing or where the surface of the ground slopes more than one unit vertical in 10 units horizontal (10-percent slope). For structures assigned to Seismic Design Category D, E or F, the stepping requirement shall also apply to the top surface of grade beams supporting walls. Footings shall be reinforced with four 1/2 inch diameter (12.7 mm) deformed reinforcing bars. Two bars shall be placed at the top and bottom of the footings as shown in LAMC Figure 1809.3.

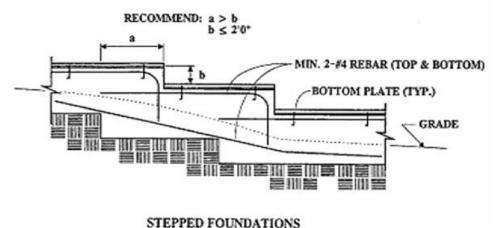


Figure 1809.3 STEPPED FOUNDATIONS

- Sec. 259. Subsection 91.1809.4 of Section 91.1809, Division 18, Article 1, Chapter IX of the Los Angeles Municipal Code is deleted and reinstated, to be placed in numerical order, to read as follows:
 - **91.1809.4. Depth and Width of Footings.** The minimum depth of footings below the surface of undisturbed soil, compacted fill material or CLSM shall be 12 inches (305 mm). Where applicable, the requirements of CBC Section 1809.5 shall also be satisfied. The minimum width of footings shall be 12 inches (305 mm).
- Sec. 260. Subsection 91.1809.7 of Section 91.1809, Division 18, Article 1, Chapter IX of the Los Angeles Municipal Code is deleted and reinstated, to be placed in numerical order, to read as follows:
 - **91.1809.7. Prescriptive Footings for Light-Frame Construction.** Where a specific design is not provided, concrete or masonry-unit footings supporting walls of light-frame construction shall be permitted to be designed in accordance with LAMC Table 1809.7. Prescriptive footings in LAMC Table 1809.7 shall not exceed one story above grade plane for structures assigned to Seismic Design Category D, E or F.

Sec. 261. Footnote d to Table 1809.7 following Subsection 91.1809.7 of Section 91.1809, Division 18, Article 1, Chapter IX of the Los Angeles Municipal Code is amended, with no other changes to the table, to read as follows:

TABLE 1809.7 PRESCRIPTIVE FOOTINGS SUPPORTING WALLS OF LIGHT-FRAMED CONSTRUCTION a, b, c, d, e

NUMBER OF FLOORS SUPPORTED BY THE FOOTING [†]	WIDTH OF FOOTING (inches)	THICKNESS OF FOOTING (inches)	
1	12	6	
2	15	6	
3	18	8 a	

For SI: one inch = 25.4 mm, one foot = 304.8 mm

- a. Depth of footings shall be in accordance with CBC Section 1809.4.
- b. The ground under the floor is permitted to be excavated to the elevation of the top of the footing.
- c. Not adopted.
- d. See CBC Section 19051908 for additional requirements for footings of structures assigned to Seismic Design Category C, D, E or F.
- e. For thickness of foundation walls, see LAMC Subdivision 91.1807.1.6.
- f. Footings are permitted to support a roof in addition to the stipulated number of floors. Footings supporting roof only shall be as required for supporting one floor.

Sec. 262. Subsection 91.1809.12 of Section 91.1809, Division 18, Article 1, Chapter IX of the Los Angeles Municipal Code is amended, to be placed in numerical order, to read as follows:

91.1809.12. Timber Footings. Timber footings shall be permitted for buildings of Type V construction and as otherwise approved by the Department. Such footings shall be treated in accordance with AWPA U1 (Commodity Specification A, Use Category 4B). Treated timbers are not required where placed entirely below permanent water level, or where used as capping for wood piles that project above the water level over submerged or marsh lands. The compressive stresses perpendicular to grain in untreated timber footings supported upon treated piles shall not exceed 70 percent of the allowable stresses for the species and grade of timber as specified in the ANSI/AWCAF&PA NDS. Timber footings shall not be used in structures assigned to Seismic Design Category D, E or F.

Sec. 263. Section 91.1810, Division 18, Article 1, Chapter IX of the Los Angeles Municipal Code is amended, with no other changes to existing subsections therein, to read:

SEC. 91.1810. DEEP FOUNDATIONS.

Section 1810 of the CBC is adopted by reference, except Sections 1810.3.1.5, 1810.3.2.4, 1810.3.3.1.4, and 1810.3.10.4, and 1810.4.8 of the CBC are not adopted; and, in lieu, LAMC Paragraphs 91.1810.3.1.5, 91.1810.3.2.4, 91.1810.3.3.1.4, 91.1810.3.10.4, and Subdivision 91.1810.4.8 are added.

Sec. 264. Subsection 91.1810.3.1.5 of Section 91.1810, Division 18, Article 1, Chapter IX of the Los Angeles Municipal Code is deleted and reinstated, to be placed in numerical order, to read as follows:

- **91.1810.3.1.5.** Helical Piles. Helical piles shall be designed and manufactured in accordance with accepted engineering practice to resist all stresses induced by installation into the ground and service loads. Helical piles shall not be used for support of new structures. Helical piles may be used to underpin foundations of existing structures or retrofit or remediate deficient foundations of existing structures. Helical piles shall not be used to resist any horizontal loads. Helical piles shall be designed and manufactured in accordance with accepted engineering practice to resist all stresses induced by installation into the ground and service loads. Helical piles shall not be used for support of new structures. Helical piles may be used to underpin foundations of existing structures or retrofit or remediate deficient foundations of existing structures. Helical piles shall not be used to resist any horizontal loads.
- Sec. 265. Subsection 91.1810.3.2.4 of Section 91.1810, Division 18, Article 1, Chapter IX of the Los Angeles Municipal Code is amended, to be placed in numerical order, to read as follows:
 - **91.1810.3.2.4.** Timber. Timber deep foundation elements shall be designed as piles or poles in accordance with ANSI/AWCAF&PA NDS. Round timber elements shall conform to ASTM D-25. Sawn timber elements shall conform to DOC PS-20. Timber shall not be used in structures assigned to Seismic Design Category D, E or F.
- Sec. 266. Subsection 91.1810.3.3.1.4 of Section 91.1810, Division 18, Article 1, Chapter IX of the Los Angeles Municipal Code is amended, to be placed in numerical order, to read as follows:
 - **91.1810.3.3.1.4.** Allowable Shaft Frictional Resistance. The assumed frictional resistance developed by any uncased cast-in-place deep foundation element shall not exceed one-sixth (1/6) of the bearing value of the soil material at minimum depth as set forth in CBC Table 1806.2, up to a maximum of 500 psf (24 kPa), unless a greater value is allowed by the Department on the basis of a geotechnical investigation as specified in LAMC Section 91.1803 or a greater value is substantiated by a load test in accordance with CBC Section 1810.3.3.1.2. Frictional resistance and bearing resistance shall not be assumed to act simultaneously.
- Sec. 267. Subsection 91.1810.3.10.4 of Section 91.1810, Division 18, Article 1, Chapter IX of the Los Angeles Municipal Code is deleted and reinstated, to be placed in numerical order, to read as follows:
 - **91.1810.3.10.4. Seismic Reinforcement.** For structures assigned to Seismic Design Category C, a permanent steel casing shall be provided from the top of the micropile down to the point of zero curvature. For structures assigned to Seismic Design Category D, E or F, the micropile shall be considered as an alternative system in accordance with LAMC Subdivision 91.104.2.6. The alternative system design, supporting documentation and test data shall be submitted to the Department for review and approval.
- Sec. 268. Subsection 91.1810.4.8 of Section 91.1810, Division 18, Article 1, Chapter IX of the Los Angeles Municipal Code is deleted and reinstated, to be placed in numerical order, to read as follows:

91.1810.4.8. Hollow-stem Augered, Cast-in-Place Elements. An indicator pile program shall be performed to confirm the installation procedure and to determine the pile capacity by static load testing. Upon completion of the pile load testing, at least one test pile shall be entirely exhumed to examine the pile integrity. Prior to the installation of production piles, the results of the testing, and confirmation or revision to the pile capacity shall be determined. Where concrete or grout is placed by pumping through a hollow-stem auger, the auger shall be permitted to rotate in a clockwise direction during withdrawal. As the auger is withdrawn at a steady rate or in increments not to exceed 1 foot (305 mm), concreting or grouting pumping pressures shall be measured and maintained high enough at all times to offset hydrostatic and lateral earth pressures. Concrete or grout volumes shall be measured to ensure that the volume of concrete or grout placed in each element is equal to or greater than the theoretical volume of the hole created by the auger. Where the installation process of any element is interrupted or a loss of concreting or grouting pressure occurs, the element shall be redrilled to 5 feet (1524 mm) below the elevation of the tip of the auger when the installation was interrupted or concrete or grout pressure was lost and reformed. Augered cast-in-place elements shall not be installed within six diameters center to center of an element filled with concrete or grout less than 12 hours old, unless approved by the building official. If the concrete or grout level in any completed element drops due to installation of an adjacent element, the element shall be replaced.

Sec. 269. Division 19, Article 1, Chapter IX of the Los Angeles Municipal Code is amended to add Section 91.1905 Seismic Provisions and Section 91.1906 Footings for Light-Frame Construction in numerical order, with no other changes to existing sections therein, to read as follows:

DIVISION 19 CONCRETE

Section

91.1900 Basic Provisions.

91.1905 Seismic Provisions

91.1906 Footings for Light-Frame Construction

Sec. 270. Section 91.1900, Division 19, Article 1, Chapter IX of the Los Angeles Municipal Code is amended, with no other changes to existing subsections therein, to read as follows:

SEC. 91.1900. BASIC PROVISIONS.

Chapter 19 of the CBC is adopted by reference, except that CBC Sections 1905.1, 1905.6.21.7, and 1906.1 are not adopted; and, in lieu, LAMC Subsections 91.1905.1, 91.1905.6.21.7, 91.1905.81.9, 91.1905.91.10, 91.1905.101.11, 91.1905.111.12, 91.1906, and 91.1906.1 are added.

Sec. 271. Subsection 91.1905.1, of Section 91.1900 Division 19, Article 1, Chapter IX of the Los Angeles Municipal Code is deleted:

91.1905.1. General. The text of ACI 318 shall be modified as indicated in CBC Sections 1905.1.1 through 1905.1.8 and as modified by the LAMC.

Sec. 272. Subsection 91.1905.1.7, of Section 91.1900 Division 19, Article 1, Chapter IX of the Los Angeles Municipal Code is deleted:

91.1905.1.7. ACI 318, Section 14.1.4. Delete ACI 318, Section 14.1.4, and replace with the following:

14.1.4 - Plain concrete in structures assigned to Seismic Design Category C, D, E or F. \P

14.1.4.1 - Structures assigned to Seismic Design Category C, D, E or F shall not have elements of structural plain concrete, except as follows:¶

(a) Concrete used for fill with a minimum cement content of two (2) sacks of Portland cement per cubic yard.¶

- (b) Isolated footings of plain concrete supporting pedestals or columns are permitted, provided the projection of the footing beyond the face of the supported member does not exceed the footing thickness.¶
- (c) Plain concrete footings supporting walls are permitted provided the footings have at least two continuous longitudinal reinforcing bars. Bars shall not be smaller than No. 4 and shall have a total area of not less than .002 times the gross cross-sectional area of the footing. A minimum of one bar shall be provided at the top and bottom of the footing. Continuity of reinforcement shall be provided at corners and intersections.¶

EXCEPTION: In detached one- and two-family dwellings three stories or less in height and constructed with stud-bearing walls, plain concrete footings with at least two continuous longitudinal reinforcement bars not smaller than No. 4 are permitted to have a total area of less than .002 times the gross cross-sectional area of the footing.

Sec. 273. Subsection 91.1905.1.9, of Section 91.1900 Division 19, Article 1, Chapter IX of the Los Angeles Municipal Code is deleted:

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91.1905.1.9. ACI 318, Section 18.7.5. Modify ACI 318, Section 18.7.5 by adding Section 18.7.5.8 to read as follows:¶

18.7.5.8 - Where the calculated point of contraflexure is not within the middle halfof the member clear height, provide transverse reinforcement as specified in ACI-318 Section 18.7.5.1 Items (a) through (c), over the full height of the member.

Sec. 274. Subsection 91.1905.1.10, of Section 91.1900 Division 19, Article 1, Chapter IX of the Los Angeles Municipal Code is deleted:

91.1905.1.10. ACI 318, Section 18.7.5. Modify ACI 318, Section 18.7.5, by adding Section 18.7.5.9 to read as follows:¶

18.7.5.9 - At any section where the design strength, ΦPn , of the column is less than the sum of the shears V e computed in accordance with ACI 318 Sections

18.6.5.1 and 18.7.6.1.1 for all the beams framing into the column above the level under consideration, transverse reinforcement as specified in ACI 318 Sections 18.7.5.1 through 18.7.5.3 shall be provided. For beams framing into opposite sides of the column, the moment components may be assumed to be of opposite sign. For determination of the design strength, Φ Pn, of the column, these moments may be assumed to result from the deformation of the frame in any one principal axis.

Sec. 275. Subsection 91.1905.1.11, of Section 91.1900 Division 19, Article 1, Chapter IX of the Los Angeles Municipal Code is deleted:

91.1905.1.11. ACI 318, Section 18.10.4. Modify ACI 318, Section 18.10.4, by adding Section 18.10.4.6 to read as follows:¶

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18.10.4.6 - Walls and portions of walls with P u > 0.35P o shall not be considered to contribute to the calculated strength of the structure for resisting earthquake-induced forces. Such walls shall conform to the requirements of ACI-318, Section 18.14 for wall piers.

Sec. 276. Subsection 91.1905.1.12, of Section 91.1900 Division 19, Article 1, Chapter IX of the Los Angeles Municipal Code is deleted:

91.1905.1.12. ACI 318, Section 18.12.6. Modify ACI 318, Section 18.12.6, by adding Section 18.12.6.2 to read as follows:¶

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18.12.6.2 - Collector and boundary elements in topping slabs placed over precast floor and roof elements shall not be less than 3 inches (76 mm) or 6d b thick, where d b is the diameter of the largest reinforcement in the topping slab. [CBC Section 1909.3.5]

Sec. 277. Subsection 91.1906, of Section 91.1900 Division 19, Article 1, Chapter IX of the Los Angeles Municipal Code is deleted:

91.1906. Footings for Light-Frame Construction.

Sec. 278. Subsection 91.1906.1, of Section 91.1900 Division 19, Article 1, Chapter IX of the Los Angeles Municipal Code is deleted:

91.1906.1. Plain Concrete Footings. The design and construction of structural plain concrete, both cast-in-place and precast, shall comply with the minimum requirements of ACI 318, as modified in CBC Section 1905.¶

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EXCEPTION: For Group R-3 occupancies and buildings of other occupancies less than two stories above grade plane of light-frame construction, the required footing thickness of ACI 318 is permitted to be reduced to 6 inches (152 mm), provided that the footing does not extend more than 4 inches (102 mm) on either side of the supported wall. This exception shall not apply to structural elements designed to resist seismic lateral forces for structures assigned to Seismic Design Category D, E, or F.

Sec. 279. Section 91.1905, Division 19, Article 1, Chapter IX of the Los Angeles Municipal Code is added, to be placed in numerical order, to read as follows:

SEC. 91.1905. SEISMIC PROVISIONS.

Section 1905 of the CBC is adopted by reference with the following exceptions, modifications and additions:

- Sec. 280. Subsection 91.1905.1 of Section 91.1905, Division 19, Article 1, Chapter IX of the Los Angeles Municipal Code is added to read as follows:
 - **91.1905.1 General.** In addition to the provisions of ACI 318, structural concrete shall comply with the requirements of CBC Section 1905 and LAMC Section 91.1905.
- Sec. 281. Subsection 91.1905.6.2 of Section 91.1905, Division 19, Article 1, Chapter IX of the Los Angeles Municipal Code is added to read as follows:
 - **91.1905.6.2 Seismic Design Categories C, D, E and F.** Structures assigned to Seismic Design Category C, D, E or F shall not have elements of structural plain concrete, except as follows:
 - 1. Concrete used for fill with a minimum cement content of two (2) sacks of Portland cement per cubic yard.
 - 2. Isolated footings of plain concrete supporting pedestals or columns are permitted, provided the projection of the footing beyond the face of the supported member does not exceed the footing thickness.
 - 3. Plain concrete footings supporting walls are permitted provided the footings have at least two continuous longitudinal reinforcing bars. Bars shall not be smaller than No. 4 and shall have a total area of not less than .002 times the gross cross-sectional area of the footing. A minimum of one bar shall be provided at the top and bottom of the footing. Continuity of reinforcement shall be provided at corners and intersections.

EXCEPTION: In detached one- and two-family dwellings three stories or less in height and constructed with stud-bearing walls, plain concrete footings with at least two continuous longitudinal reinforcement bars not smaller than No. 4 are permitted to have a total area of less than .002 times the gross cross-sectional area of the footing.

- Sec. 282. Subsection 91.1905.8 of Section 91.1905, Division 19, Article 1, Chapter IX of the Los Angeles Municipal Code is added to read as follows:
 - **91.1905.8. ACI 318, Section 18.7.5.** Modify ACI 318, Section 18.7.5 by adding Section 18.7.5.8 to read as follows:
 - 18.7.5.8 Where the calculated point of contraflexure is not within the middle half of the member clear height, provide transverse reinforcement as specified in ACI 318 Section 18.7.5.1 Items (a) through (c), over the full height of the member.
- Sec. 283. Subsection 91.1905.9 of Section 91.1905, Division 19, Article 1, Chapter IX of the Los Angeles Municipal Code is added to read as follows:

- **91.1905.9. ACI 318, Section 18.7.5.** Modify ACI 318, Section 18.7.5, by adding Section 18.7.5.9 to read as follows:
 - 18.7.5.9 At any section where the design strength, ΦPn , of the column is less than the sum of the shears V e computed in accordance with ACI 318 Sections 18.6.5.1 and 18.7.6.1.1 for all the beams framing into the column above the level under consideration, transverse reinforcement as specified in ACI 318 Sections 18.7.5.1 through 18.7.5.3 shall be provided. For beams framing into opposite sides of the column, the moment components may be assumed to be of opposite sign. For determination of the design strength, ΦPn , of the column, these moments may be assumed to result from the deformation of the frame in any one principal axis.
- Sec. 284. Subsection 91.1905.10 of Section 91.1905, Division 19, Article 1, Chapter IX of the Los Angeles Municipal Code is added to read as follows:
 - **91.1905.10. ACI 318, Section 18.10.4.** Modify ACI 318, Section 18.10.4, by adding Section 18.10.4.7 to read as follows:
 - 18.10.4.7 Walls and portions of walls with P u > 0.35P o shall not be considered to contribute to the calculated strength of the structure for resisting earthquake-induced forces. Such walls shall conform to the requirements of ACI 318, Section 18.14 for wall piers.
- Sec. 285. Subsection 91.1905.11 of Section 91.1905, Division 19, Article 1, Chapter IX of the Los Angeles Municipal Code is added to read as follows:
 - **91.1905.11. ACI 318, Section 18.12.6.** Modify ACI 318, Section 18.12.6, by adding Section 18.12.6.2 to read as follows:
 - 18.12.6.2 Collector and boundary elements in topping slabs placed over precast floor and roof elements shall not be less than 3 inches (76 mm) or 6d b thick, where d b is the diameter of the largest reinforcement in the topping slab. [CBC Section 1909.3.5]
- Sec. 286. Section 91.1906, Division 19, Article 1, Chapter IX of the Los Angeles Municipal Code is added, to be placed in numerical order, to read as follows:

SEC. 91.1906. FOOTINGS FOR LIGHT-FRAME CONSTRUCTION.

Section 1906 of the CBC is adopted by reference with the following exceptions, modifications and additions:

- Sec. 287. Subsection 91.1906.1 of Section 91.1906, Division 19, Article 1, Chapter IX of the Los Angeles Municipal Code is added to read as follows:
 - **91.1906.1. Plain Concrete Footings.** The design and construction of structural plain concrete, both cast-in-place and precast, shall comply with the minimum requirements of ACI 318, as modified in CBC Section 1905 and LAMC Section 91.1905.

EXCEPTION: For Group R-3 occupancies and buildings of other occupancies less than two stories above grade plane of light-frame construction, the required footing thickness of ACI 318 is permitted to be reduced to 6 inches (152 mm), provided that the footing does not extend more than 4 inches (102 mm) on either side of the supported wall. This exception shall not apply to structural elements designed to resist seismic lateral forces for structures assigned to Seismic Design Category D, E, or F.

Sec. 288. Subsection 91.2113.3 of Section 91.2113, Division 21, Article 1, Chapter IX of the Los Angeles Municipal Code is amended to read as follows:

91.2113.3. Seismic Reinforcing. Masonry chimneys shall be constructed, anchored, supported and reinforced as required in this division. In structures assigned to Seismic Design Category A or B, reinforcement and seismic anchorage is not required. In structures assigned to Seismic Design Category C or D, masonry chimneys shall be reinforced and anchored as detailed in CBC Sections 2113.3.1, 2113.3.2 and 2113.4. Instructures assigned to Seismic Design Category A or B, reinforcement and seismic anchorage is not required. In structures assigned to Seismic Design Category E or F, masonry chimneys shall be reinforced in accordance with the requirements of CBC Sections 2101 through 2108 and anchored in accordance with CBC Section 2113.4.

Notwithstanding any other provisions of this Code, an existing masonry chimney, which is altered or repaired more than 10 percent of its replacement cost within a 12-month period, shall have its entire chimney structure comply with the current requirements of this Code or other standards approved by the Superintendent of Building.

Sec. 289. Division 22, Article 1, Chapter IX of the Los Angeles Municipal Code is amended to delete Section 91.2204 Connections and add Section 91.2201 General and Section 91.2202 Structural Steel and Composite Structural Steel and Concrete in numerical order, with no other changes to existing sections therein, to read as follows:

DIVISION 22 STEEL

Section

91.2200 Basic Provisions.

91 2204 Connections

91.2201 General.

91.2202 Structural Steel and Composite Structural Steel and Concrete.

Sec. 290. Section 91.2200, Division 22, Article 1, Chapter IX of the Los Angeles Municipal Code is amended, with no other changes to existing subsections therein, to read as follows:

SEC. 91.2200. BASIC PROVISIONS.

Chapter 22 of the CBC is adopted by reference, with the following exceptions, modifications and additions: except that Section 2204.1 of the CBC is modified, and LAMC Subsections 91.2204.1 and 91.2205.3 are added.

Sec. 291. Section 91.2201, Division 22, Article 1, Chapter IX of the Los Angeles Municipal Code is added, to be placed in numerical order, to read as follows:

SEC. 91.2201. GENERAL.

Section 2201 of the CBC is adopted by reference, except CBC Section 2201.4 of the CBC is not adopted; and, in lieu, LAMC Subsection 91.2201.4 is added.

Sec. 292. Subsection 91.2201.4 of Section 91.2201, Division 22, Article 1, Chapter IX of the Los Angeles Municipal Code is added to read as follows:

91.2201.4 Connections. The design and installation of steel connections shall be in accordance with the applicable referenced standards within this chapter. The details of design, work quality and technique for welding, inspection of welding and qualification of welding operators shall conform to the requirements listed in CBC Sections 2201, and 2202. For special inspection of welding or installation of high-strength bolts, see CBC Section 1705.2.

All welding, except when performed at the shop of an approved fabricator, shall be done by operators certified by the Department for the type of operation involved in accordance with the provisions of LAMC Section 91.1705.

Complete details of location, type, size and amount of all welds shall be clearly shown on the plans. Where symbols are used on the plans, they shall be the "Standard Welding Symbols," AWS A 2.4, of the American Welding Society (AWS). When it is necessary to use a special erection sequence of welding to minimize locked-up stresses or distortion, the Department may require the erection sequence of welding to be shown on the plans.

Welding procedures are qualified if they are in accordance with the AWS. Other welding procedures require special qualification approval by the Department. Each application for a special qualification shall be accompanied by a fee of \$50.00.

Sec. 293. Section 91.2202, Division 22, Article 1, Chapter IX of the Los Angeles Municipal Code is added, to be placed in numerical order, to read as follows:

91.2202. STRUCTURAL STEEL AND COMPOSITE STRUCTURAL STEEL AND CONCRETE.

Section 2202 of the CBC is adopted by reference and LAMC Subsection 91.2202.3.3 is added.

Sec. 294. Subsection 91.2202.3.3 of Section 91.2202, Division 22, Article 1, Chapter IX of the Los Angeles Municipal Code is added to read as follows:

91.2202.3.3 Section F2. Modify Section F2.5 Item (5b) by adding the following:

(d) The use of rectangular HSS are not permitted for bracing members, unless filled solid with cement grout having a minimum compressive strength of 3000 psi (20.7 MPa) at 28 days. The effects of composite action in the filled composite brace shall be considered in the sectional properties of the system where it results in the more severe loading condition or detailing.

Sec. 295. Section 91.2204, Division 22, Article 1, Chapter IX of the Los Angeles Municipal Code is deleted:

SEC. 91.2204. CONNECTIONS.

Sec. 296. Subsection 91.2204.1 of Section 91.2204, Division 22, Article 1, Chapter IX of the Los Angeles Municipal Code is deleted:

91.2204.1. Welding. The details of design, work quality and technique for welding, inspection of welding and qualification of welding operators shall conform to the requirements listed in CBC Sections 2205, 2206, 2207, 2208, 2209, 2210 and 2211. Special inspection of welding shall be provided where required by CBC Section 1705. (Amended by Ord. No. 184,692, Eff. 12/30/16.)¶

All welding, except when performed at the shop of an approved fabricator, shall be done by operators certified by the Department for the type of operation involved in accordance with the provisions of CBC Section 1705.2.2.1.¶

Complete details of location, type, size and amount of all welds shall be clearly shown on the plans. Where symbols are used on the plans, they shall be the "Standard Welding-Symbols," AWS A 2.4, of the American Welding Society (AWS). When it is necessary to use a special erection sequence of welding to minimize locked-up stresses or distortion, the Department may require the erection sequence of welding to be shown on the plans.¶

Welding procedures are qualified if they are in accordance with the AWS. Other welding procedures require special qualification approval by the Department. Each application for a special qualification shall be accompanied by a fee of \$50.00.

Sec. 297. Subsection 91.2205.3 of Section 91.2204, Division 22, Article 1, Chapter IX of the Los Angeles Municipal Code is deleted:

91.2205.3. Modifications to AISC 341, Section F2.5, Members, Special Concentrically Braced Frames (SCBF) Modifications. AISC 341, Section F2.5b. is modified to add a new requirement as follows:¶

Section F2.5b(4) - The use of rectangular HSS are not permitted for bracing-members, unless filled solid with cement grout having a minimum compressive strength of 3000 psi (20.7 MPa) at 28 days. The effects of composite action in the filled composite brace shall be considered in the sectional properties of the system where it results in the more severe loading condition or detailing.

Sec. 298. Subsection 91.2301.1 of Section 91.2301, Division 23, Article 1, Chapter IX of the Los Angeles Municipal Code is deleted and reinstated, to be placed in numerical order, to read as follows:

91.2301.1. Scope. The provisions of this division shall govern the materials, design, construction and quality of wood members and their fasteners.

Hillside buildings (buildings constructed upon slopes steeper than one unit vertical in three units horizontal [33.3% slope]) shall comply with LAMC Subsection 91.1613.9 (seismic design provisions for hillside buildings) and this division.

Sec. 299. Subsection 91.2304.9.1 of Section 91.2304, Division 23, Article 1, Chapter IX of the Los Angeles Municipal Code is deleted:

91.2304.9.1. General. Section 2304.9.1 of the 2019 CBC is adopted by reference.

- Sec. 300. Subsection 91.2304.10.2 of Section 91.2304, Division 23, Article 1, Chapter IX of the Los Angeles Municipal Code is amended, to be placed in numerical order, to read as follows:
 - **91.2304.10.2. Fastener Requirements.** Connections for wood members shall be designed in accordance with the appropriate methodology in CBC Section 2302.1. The number and size of fasteners connecting wood members shall not be less than that set forth in Table 2304.10.2. Staple fasteners in Table 2304.10.2 shall not be used to resist or transfer seismic forces in structures assigned to Seismic Design Category D, E, or F.
 - **EXCEPTION:** Staples may be used to resist or transfer seismic forces when the allowable shear values are substantiated by cyclic testing and approved by the Superintendent of Building.
- Sec. 301. Subsection 91.2304.12.2.8 of Section 91.2304, Division 23, Article 1, Chapter IX of the Los Angeles Municipal Code is deleted and reinstated, to be placed in numerical order, to read as follows:
 - **91.2304.12.28.** Wood Used In Retaining Walls and Cribs. Wood installed in retaining or crib walls shall be preservative treated in accordance with AWPA U1 (Commodity Specifications A or F) for soil and fresh water use. Wood shall not be used in retaining walls or cribs for structures assigned to Seismic Design Category D, E or F.
- Sec. 302. Subsection 91.2305.4 of Section 91.2305, Division 23, Article 1, Chapter IX of the Los Angeles Municipal Code is deleted and reinstated, to be placed in numerical order, to read as follows:
 - **91.2305.4. Quality of Nails.** In Seismic Design Category D, E or F, mechanically driven nails used in wood structural panel shear walls shall meet the same dimensions as that required for hand-driven nails, including diameter, minimum length and minimum head diameter. Clipped head or box nails are not permitted in new construction. The allowable design value for clipped head nails in existing construction may be taken at no more than the nail-head-area ratio of that of the same size hand-driven nails.
- Sec. 303. Subsection 91.2305.5 of Section 91.2305, Division 23, Article 1, Chapter IX of the Los Angeles Municipal Code is deleted and reinstated, to be placed in numerical order, to read as follows:
 - **91.2305.5.** Hold-down Connectors. In Seismic Design Category D, E or F, hold-down connectors shall be designed to resist shear wall overturning moments using approved cyclic load values or 75 percent of the allowable seismic load values that do not consider cyclic loading of the product. Connector bolts into wood framing shall require steel plate

washers on the post on the opposite side of the anchorage device. Plate size shall be a minimum of 0.229 inch by 3 inches by 3 inches (5.82 mm by 76 mm by 76 mm) in size. Hold-down connectors shall be finger tight and $\frac{1}{2}$ turn just prior to covering the wall framing.

Sec. 304. Subsection 91.2306.2 of Section 91.2306, Division 23, Article 1, Chapter IX of the Los Angeles Municipal Code is deleted and reinstated, to be placed in numerical order, to read as follows:

91.2306.2. Wood-Frame Diaphragms. Wood-frame diaphragms shall be designed and constructed in accordance with AWC SDPWS. Where panels are fastened to framing members with staples, requirements and limitations of AWC DPWS shall be met and the allowable shear values set forth in CBC Table 2306.2(1) or 2306.2(2) shall only be permitted for structures assigned to Seismic Design Category A, B or C.

EXCEPTION: Allowable shear values where panels are fastened to framing members with staples may be used if such values are substantiated by cyclic testing and approved by the building official.

The allowable shear values of CBC Tables 2306.2(1) and 2306.2(2) are permitted to be increased 40% for wind design.

Wood structural panel diaphragms used to resist seismic forces in structures assigned to Seismic Design Category D, E or F shall be applied directly to the framing members.

EXCEPTION: Wood structural panel diaphragm is permitted to be fastened over solid lumber planking or laminated decking, provided the panel joints and lumber planking or laminated decking joints do not coincide.

Sec. 305. Subsection 91.2306.3 of Section 91.2306, Division 23, Article 1, Chapter IX of the Los Angeles Municipal Code is deleted and reinstated, to be placed in numerical order, to read as follows:

91.2306.3. Wood-Frame Shear Walls. Wood-frame shear walls shall be designed and constructed in accordance with AWC SDPWS. For structures assigned to Seismic Design Category D, E, or F, application of Tables 4.3A and 4.3B of AWC SDPWS shall include the following:

- 1. Wood structural panel thickness for shear walls shall not be less than 3/8 inch (9.525 mm) thick, and studs shall not be spaced at more than 16 inches (406.4 mm) on center.
- 2. The maximum nominal unit shear capacities for three-ply plywood resisting seismic forces in structures assigned to Seismic Design Category D, E or F is 400 pounds per linear foot (plf) (181.43 kg per meter).
- 3. Where shear design values using allowable stress design (ASD) exceed 350 plf or load and resistance factor design (LRFD) exceed 500 plf, all framing members receiving edge nailing from abutting panels shall not be less than a single 3 inch (76.19 mm) nominal member, or two 2 inch (50.8 mm) nominal members fastened together in accordance with CBC Section 2306.1 to transfer the design

shear value between framing members. Wood structural panel joint and sill plate nailing shall be staggered at all panel edges. See Sections 4.3.6.1 and 4.3.6.4.3 of AWC SDPWS for sill plate size and anchorage requirements.

- 4. Nails shall be placed not less than 1/2 inch (12.7 mm) in from the panel edges and not less than 3/8 inch (9.525 mm) from the edge of the connecting members for shear greater than 350 plf using ASD or 500 plf using LRFD. Nails shall be placed not less than 3/8 inch (9.525 mm) from panel edges and not less than 1/4 inch (6.35 mm) from the edge of the connecting members for shears of 350 plf or less using ASD or 500 plf or less using LRFD.
- 5. Table 4.3B of AWC SDPWS application is not allowed for structures assigned to Seismic design category D, E or F.

For structures assigned to Seismic Design Category D, Application of Table 4.3C of AWC SDPWS shall not be used below the top level in a multi-level building for structures.

Where panels are fastened to framing members with staples, requirements and limitations of AWC SDPWS shall be met and the allowable shear values set forth in CBC Tables 2306.3(1), 2306.3(2) or 2306.3(3) shall only be permitted for structures assigned to Seismic Design Category A, B or C.

EXCEPTION: Where panels are fastened to framing members with staples, allowable shear values may be used if such values are substantiated by cyclic testing and approved by the Superintendent of Building.

The allowable shear values in CBC Tables 2306.3(1) and 2306.3(2) are permitted to be increased 40% for wind design. Panels complying with ANSI/APA PRP-210 shall be permitted to use design values for Plywood Siding in the AWC SDPWS.

Sec. 306. Subsection 91.2306.4 of Section 91.2306, Division 23, Article 1, Chapter IX of the Los Angeles Municipal Code is amended, to be placed in numerical order, to read as follows:

91.2306.4. Shear Walls Sheathed with Other Materials. Shear Sheer walls sheathed with Portland cement plaster, gypsum lath, gypsum sheathing or gypsum board shall be designed and constructed in accordance with AWC SDPWS. Shear walls sheathed with these materials are permitted to resist horizontal forces using the allowable shear capacities set forth in CBC Table 2306.3(3). Shear walls sheathed with Portland cement plaster, gypsum lath, gypsum sheathing or gypsum board shall not be used to resist seismic forces in structures assigned to Seismic Design Category E or F.

Shear walls sheathed with lath, plaster or gypsum board shall not be used below the top level in a multi-level building for structures assigned to Seismic Design Category D.

Sec. 307. Section 91.2308, Division 23, Article 1, Chapter IX of the Los Angeles Municipal Code is amended, with no other changes to existing subsections therein, to read as follows:

SEC. 91.2308. CONVENTIONAL LIGHT-FRAME CONSTRUCTION.

Section 2308 of the CBC is adopted by reference, except Sections 2308.106.1, 2308.106.5.1, 2308.106.5.2, 2308.106.8.1, 2308.106.9, 2308.106.10.2 and Table 2308.106.1 are not adopted; and, in lieu, LAMC Subdivisions and Paragraphs 91.2308.106.1, 91.2308.106.5.1, 91.2308.106.5.2, 91.2308.106.8.1, 91.2308.106.9, 91.2308.106.10.2, and LAMC Table 2308.106.1 are added.

Sec. 308. Subsection 91.2308.6.1 of Section 91.2308, Division 23, Article 1, Chapter IX of the Los Angeles Municipal Code is renumbered 91.2308.10.1, to be placed in numerical order, and amended to read as follows:

91.2308.106.1. Braced Wall Lines. For the purpose of determining the amount and location of bracing required along each story level of a building, braced wall lines shall be designated as straight lines through the building plan in both the longitudinal and traverse direction and placed in accordance with LAMC Table 2308.106.1 and CBC Figure 2308.106.1. Braced wall line spacing shall not exceed the distance specified in LAMC Table 2308.106.1. In structures assigned to Seismic Design Category D or E, braced wall lines shall intersect perpendicularly to each other.

Wall framing to which sheathing used for bracing is applied shall be nominal 2 inch wide [actual 1-1/2 inch (38 mm)] or larger members. Braced wall panel construction types shall not be mixed within a braced wall line. Braced wall panels required by LAMC Section 91.2308.106.1 may be eliminated when all of the following requirements are met:

- 1. One story detached Group U occupancies are not more than 25 feet (7.62 m) in depth or length.
- 2. The roof and three enclosing walls are solid sheathed with 1/2 inch (12.7 mm) nominal thickness wood structural panels with 8d common nails placed 3/8 inches (9.525 mm) from panel edges and spaced not more than 6 inches (152.4 mm) on center along all panel edges and 12 inches (304.8 mm) on center along intermediate framing members. Wall openings for doors or windows are permitted provided a minimum 4 foot (1219.2 mm) wide wood structural braced panel with a minimum height to length ratio of 2 to 1 is provided at each end of the wall line and that the wall line be sheathed for 50% of its length.

Cripple walls bracing in Seismic Design Categories D and E shall be constructed in accordance with CBC Section 2308.106.6.2.

Sec. 309. Table 91.2308.6.1 of Section 91.2308, Division 23, Article 1, Chapter IX of the Los Angeles Municipal Code is renumbered Table 91.2308.10.1, to be placed in numerical order, and amended to read as follows:

TABLE 2308.106.1a WALL BRACING REQUIREMENTS

SEISMIC DESIGN		MAXIMUM SPACING OF	BRACED PANEL LOCATION, SPACING (O.C.) AND MINIMUM PERCENTAGE (X)	MAXIMUM DISTANCE OF BRACED WALL PANELS FROM EACH
CATEGORY	(SEE SECTION 2308.2)	BRACED WALL LINES	Bracing method ^b	END OF BRACED WALL LINE

		LIB	DWB, WSP	SFB, PBS, PCP, HPS, Gb ^{c,d}	
A and B	35'-0"	Each end and ≤ 25'-0" o.c.	Each end and ≤ 25'-0" o.c.	Each end and ≤ 25'-0" o.c.	12'-6"
	35'-0"	Each end and ≤ 25'-0" o.c.	Each end and ≤ 25'-0" o.c.	Each end and ≤ 25'-0" o.c.	12'-6"
	35'-0"	NP	Each end and ≤ 25'-0" o.c.	Each end and ≤ 25'-0" o.c.	12'-6"
С	35'-0"	NP	Each end and ≤ 25'-0" o.c.	Each end and ≤ 25'-0" o.c.	12'-6"
	35'-0"	NP	Each end and ≤ 25'-0" o.c. (minimum 25% of wall length) ^e	Each end and ≤ 25'-0" o.c. (minimum 25% of wall length) ^e	12'-6"
D and E	25'-0"	NP	S _{DS} < 0.50: Each end and 25'-0" o.c. (minimum 21% of wall length) ^{e,f,g,h}	S _{DS} < 0.50: Each end and 25'-0" o.c. (minimum 43% of wall length) ^{e,f,g,h}	8'-0"
			$0.50 \le S_{DS} < 0.75$: Each end and 25'-0" o.c. (minimum 32% of wall length) e,f,g,h	$0.50 \le S_{DS} < 0.75$: Each end and 25 '-0" o.c. (minimum 59% of wall length) e,f,g,h	
			$0.75 \le S_{DS} 1.00$: Each end and $25'$ -0" o.c. (minimum 37% of wall length) e,f,g,h	$0.75 \le S_{DS} 1.00$: Each end and 25 '-0" o.c. (minimum 75% of wall length) e,f,g,h	
			S _{DS} > 1.00: Each end and 25'-0" o.c. (minimum 48% of wall length) ^{e.f.g,h}	S ^{DS} > 1.00: Each end and 25'-0" o.c. (minimum 100% of wall length) ^{e,f,g,h}	

For SI: 1 inch = 25.4 mm, 1 foot = 304.8 mm.

NP = Not Permitted.

- a. This table specifies minimum requirements for braced wall panels along interior or exterior braced wall lines.
- b. See Section 2308.106.3 for full description of bracing methods.
- c. For Method GB, gypsum wallboard applied to framing supports that are spaced at 16 inches on center.
- d. The required lengths shall be doubled for gypsum board applied to only one face of a braced wall panel.
- e. Percentage shown represents the minimum amount of bracing required along the building length (or wall length if the structure has an irregular shape).
- f. Minimum length of panel bracing of one face of the wall for WSP sheathing shall be at least 4'-0" long or both feces of the wall for GB sheathing shall be at least 8'-0" long; h/w ratio shall not exceed 2:1. For WSP panel bracing of the same material on two faces of the wall, the minimum length is permitted to be one-half of the tabulated value, but the h/w ratio shall not exceed 2:1 and design for uplift is required. The 2:1 h/w ratio limitation does not apply to alternate braced wall panels constructed in accordance with Section 2308.106.5.1 or 2308.106.5.2.
- g. Nailing as specified below shall occur at all panel edges at studs, at top and bottom plates and, where occurring, at blocking:
 - For 1/2-inch gypsum board, 5d (0.113-inch diameter) cooler nails at 7 inches on center;
 - For 5/8-inch gypsum board, No. 11 gage (0.120-inch diameter) at 7 inches on center;
 - For gypsum sheathing board, I-3/4 inches long by 7/I6-inch head, diamond point galvanized nails at 4 inches on center; For gypsum lath, No. 13 gage (0.092 inch) by I-1/8 inches long, 19/64-inch head, plasterboard at 5 inches on center; and For Portland cement plaster, No. 11 gage (0.120 inch) by 1-1/2 inches long, 7/I6-inch head at 6 inches on center.
- h. WSP sheathing shall be a minimum of 15/32" thick nailed with 8d common placed 3/8 inch from panel edges and spaced not more than 6 inches on center and 12 inches on center along intermediate framing members.

Sec. 310. Subsection 91.2308.6.5.1 of Section 91.2308, Division 23, Article 1, Chapter IX of the Los Angeles Municipal Code is renumbered 91.2308.10.5.1, to be placed in numerical order, and amended to read as follows:

91.2308.106.5.1. Alternate Braced Wall (ABW). An ABW shall be constructed in accordance with this Section and CBC Figure 2308.106.5.1. In one-story buildings, each panel shall have a length of not less than 2 feet 8 inches (813 mm) and a height of not more than 10 feet (3048 mm). Each panel shall be sheathed on one face with 15/32 inch (11.9 mm) minimum-thickness wood structural panel sheathing nailed with 8d common or galvanized box nails in accordance with CBC Table 2304.10.2 and blocked at wood structural panel edges. Two anchor bolts installed in accordance with CBC Section 2308.73.1 shall be provided in each panel. Anchor bolts shall be placed at each panel outside quarter points. Each panel end stud shall have a hold-down device fastened to the foundation, capable of providing an approved uplift capacity of not less than 1,800 pounds (8006 N). The hold-down device shall be installed in accordance with the manufacturer's recommendations. The ABW shall be supported directly on a foundation, or on floor framing supported directly on a foundation that is continuous across the entire length of the braced wall line. This foundation shall be reinforced with not less than one No. 4 bar top and bottom. Where the continuous foundation is required to have a depth greater than 12 inches (305 mm), a minimum 12 inch by 12 inch (305 mm by 305 mm) continuous footing or turned-down slab edge is permitted at door openings in the braced wall line. This continuous footing or turned-down slab edge shall be reinforced with not less than one No. 4 bar top and bottom. This reinforcement shall be lapped 15 inches (381 mm) with the reinforcement required in the continuous foundation located directly under the braced wall line.

Where the ABW is installed at the first story of a two-story building, the wood structural panel sheathing shall be provided on both faces, three anchor bolts shall be placed at one-quarter points, and tie-down device uplift capacity shall be not less than 3,000 pounds (13 344 N).

Sec. 311. Subsection 91.2308.6.5.2 of Section 91.2308, Division 23, Article 1, Chapter IX of the Los Angeles Municipal Code is renumbered 91.2308.10.5.2, to be placed in numerical order, and amended to read as follows:

91.2308.106.5.2. Portal Frame with Hold-downs (PFH). A PFH shall be constructed in accordance with this section and CBC Figure 2308.106.5.2. The adjacent door or window opening shall have a full-length header.

In one-story buildings, each panel shall have a length of not less than 16 inches (406 mm) and a height of not more than 10 feet (3048 mm). Each panel shall be sheathed on one face with a single layer of 15/32 inch (11.9 mm) minimum-thickness wood structural panel sheathing nailed with 8d common or galvanized box nails in accordance with CBC Figure 2308.106.5.2. The wood structural pane sheathing shall extend up over the solid sawn or glued-laminated header and shall be nailed in accordance with CBC Figure 2308.106.5.2. A built-up header consisting of at least two 2 inch by 12 inch (51 mm by 305 mm) boards, fastened in accordance with Item 24 of CBC Table 2304.10.2 shall be permitted to be used. A spacer, if used, shall be placed on the side of the built-up beam opposite the wood structural panel sheathing. The header shall extend between the inside faces of the first full-length outer studs of each panel. The clear span of the

header between the inner studs of each panel shall be not less than 6 feet (1829 mm) and not more than 18 feet (5486 mm) in length. A strap with an uplift capacity of not less than 1,000 pounds (4400 N) shall fasten the header to the inner studs opposite the sheathing. One anchor bolt not less than 5/8 inch (15.9 mm) in diameter and installed in accordance with CBC Section 2308.73.1 shall be provided in the center of each sill plate. The studs at each end of the panel shall have a hold-down device fastened to the foundation with an uplift capacity of not less than 3,500 pounds (15 570 N).

Where a panel is located on one side of the opening, the header shall extend between the inside face of the first full-length stud of the panel and the bearing studs at the other end of the opening. A strap with an uplift capacity of not less than 1,000 pounds (4400 N) shall fasten the header to the bearing studs. The bearing studs shall also have a hold-down device fastened to the foundation with an uplift capacity of not less than 1,000 pounds (4400 N). The hold-down devices shall be an embedded strap type, installed in accordance with the manufacturer's recommendations. The PFH panels shall be supported directly on a foundation that is continuous across the entire length of the braced wall line. This foundation shall be reinforced with not less than one No. 4 bar top and bottom. Where the continuous foundation is required to have a depth greater than 12 inches (305 mm), a minimum 12 inch by 12 inch (305 mm by 305 mm) continuous footing or turned-down slab edge is permitted at door openings in the braced wall line. This continuous footing or turned-down slab edge shall be reinforced with not less than one No. 4 bar top and bottom. This reinforcement shall be lapped not less than 15 inches (381 mm) with the reinforcement required in the continuous foundation located directly under the braced wall line.

Where a PFH is installed at the first story of a two-story building, each panel shall have a length of not less than 24 inches (610 mm).

Sec. 312. Subsection 91.2308.6.8.1 of Section 91.2308, Division 23, Article 1, Chapter IX of the Los Angeles Municipal Code is renumbered 91.2308.10.8.1, to be placed in numerical order, and amended to read as follows:

91.2308.106.8.1. Foundation Requirements. Braced wall lines shall be supported by continuous foundations.

EXCEPTION: For structures with a maximum plan dimension not over 50 feet (15.24 m), continuous foundations are required at exterior walls only for structures not assigned to Seismic Design Category D, E or F.

For structures in Seismic Design Categories D and E, exterior braced wall panels shall be in the same plane vertically with the foundation or the portion of the structure containing the offset shall be designed in accordance with accepted engineering practice and CBC Section 2308.34.1.

EXCEPTIONS:

1. Exterior braced wall panels shall be permitted to be located not more than 4 feet (1219 mm) from the foundation below where supported by a floor constructed in accordance with all of the following:

- 1.1. Cantilevers or setbacks shall not exceed four times the nominal depth of the floor joists.
- 1.2. Floor joists shall be 2 inches by 10 inches (51 mm by 254 mm) or larger, and spaced not more than 16 inches (406 mm) on center.
- 1.3. The ratio of the back span to the cantilever shall be not less than 2 to 1.
- 1.4. Floor joists at ends of braced wall panels shall be doubled.
- 1.5. A continuous rim joist shall be connected to the ends of cantilevered joists. The rim joist is permitted to be spliced using a metal tie not less than 0.058 inch (1.47 mm) (16 galvanized gage) and 1-1/2 inches (38 mm) in width fastened with six 16d common nails on each side. The metal tie shall have a yield stress not less than 33,000 psi (227 MPa).
- 1.6. Joists at setbacks or the end of cantilevered joists shall not carry gravity loads from more than a single story having uniform wall and roof loads nor carry the reactions from headers having a span of 8 feet (2438 mm) or more.
- 2. The end of a required braced wall panel shall be allowed to extend not more than 1 foot (305 mm) over an opening in the wall below. This requirement is applicable to braced wall panels offset in plane and braced wall panels offset out of plane, as permitted by Exception 1. Braced wall panels are permitted to extend over an opening not more than 8 feet (2438 mm) in width where the header is a 4 inch by 12 inch (102 mm by 305 mm) or larger member.
- Sec. 313. Subsection 91.2308.6.9 of Section 91.2308, Division 23, Article 1, Chapter IX of the Los Angeles Municipal Code is renumbered 91.2308.10.9, to be placed in numerical order, and amended to read as follows:
 - **91.2308.106.9. Attachment of Sheathing.** Fastening of braced wall panel sheathing shall not be less than that prescribed in LAMC Table 2308.106.1 and CBC Table 2304.10.2. Wall sheathing shall not be attached to framing members by adhesives.

Staple fasteners in CBC Table 2304.10.2 shall not be used to resist or transfer seismic forces in structures assigned to Seismic Design Category D, E, or F.

EXCEPTION: Staples may be used to resist or transfer seismic forces when the allowable shear values are substantiated by cyclic testing and approved by the Superintendent of Building.

All braced wall panels shall extend to the roof sheathing and shall be attached to parallel roof rafters or blocking above with framing clips (18 gauge minimum) spaced at maximum 24 inches (6096 mm) on center four 8d nails per leg (total 8d nails per clip).

Braced wall panels shall be laterally braced at each top corner and at maximum 24 inch (6096 mm) intervals along the top plate of discontinuous vertical framing.

Sec. 314. Subsection 91.2308.6.10.2 of Section 91.2308, Division 23, Article 1, Chapter IX of the Los Angeles Municipal Code is renumbered 91.2308.10.10.2, to be placed in numerical order, and amended to read as follows:

91.2308.106.10.2. Limitations of concrete or masonry in Seismic Design Categories D and E. In seismic Design Categories D and E, concrete or masonry walls and stone or masonry veneer shall not extend above a basement.

EXCEPTION: In structures assigned to Seismic Design Category D, stone and masonry veneer is permitted to be used in the first story above grade plane, provided the following criteria are met:

- 1. The type of brace in accordance with LAMC Subdivision 91.2308.106.1 shall be WSP, and the allowable shear capacity in accordance with LAMC Section 91.2306.3 shall be not less than 350 plf (5108 N/m).
- 2. The braced wall panels in the first story shall be located at each end of the braced wall line and not more than 25 feet (7620 mm) on center, and the total length of braced wall panels shall be not less than 45 percent% of the braced wall line length.
- 3. Hold-down connectors shall be provided at the ends of braced walls for the first floor to foundation with an allowable capacity of 2,100 pounds (9341 N).
- 4. Cripple walls shall not be permitted.
- Anchored masonry and stone wall veneer not exceeding 5 inches (127 mm) in thickness shall conform to the requirements of Division 14, Article 1, Chapter IX of the Los Angeles Municipal Code and shall not extend more than 5 feet (1524 mm) above the first-story finished floor.
- Sec. 315. Division 25, Article 1, Chapter IX of the Los Angeles Municipal Code is amended, with no other changes to existing sections therein, to read as follows:

DIVISION 25 GYPSUM PANEL PRODUCTSBOARD AND PLASTER

Section 91.2503 Inspections.

- Sec. 316. Subsection 91.2503.1 of Section 91.2503, Division 25, Article 1, Chapter IX of the Los Angeles Municipal Code is deleted and reinstated, to be placed in numerical order, to read as follows:
 - **91.2503.1. Inspection.** Lath and gypsum board shall be inspected in accordance with LAMC Subsection 91.108.5.

- Sec. 317. Subsection 91.2702.2.11.1 of Section 91.2702, Division 27, Article 1, Chapter IX of the Los Angeles Municipal Code is deleted and reinstated, to be placed in numerical order, to read as follows:
 - **91.2702.2.11.1. Fuel Supply.** An on-premises fuel supply, sufficient for not less than 6-hour full-load operation of the emergency and standby power source(s), shall be provided. This fuel supply shall not be less than 8-hour when the load also includes fire pump(s).
- Sec. 318. Subsection 91.2702.2.16.1 of Section 91.2702, Division 27, Article 1, Chapter IX of the Los Angeles Municipal Code is deleted and reinstated, to be placed in numerical order, to read as follows:
 - **91.2702.2.16.1. Fuel Supply.** An on-premises fuel supply, sufficient for not less than 6-hour full-load operation of the emergency and standby power source(s), shall be provided. This fuel supply shall not be less than 8-hour when the load also includes fire pump(s).
- Sec. 319. Subsection 91.2702.2.19.1 of Section 91.2702, Division 27, Article 1, Chapter IX of the Los Angeles Municipal Code is deleted and reinstated, to be placed in numerical order, to read as follows:
 - **91.2702.2.19.1. Fuel Supply.** An on-premises fuel supply, sufficient for not less than 6-hour full-load operation of the emergency and standby power source(s), shall be provided. This fuel supply shall not be less than 8-hour when the load also includes fire pump(s).
- Sec. 320. Division 30, Article 1, Chapter IX of the Los Angeles Municipal Code is amended to revise Section 91.3005's title to Machine Rooms, with no other changes to existing sections therein, to read as follows:

DIVISION 30 ELEVATORS AND CONVEYING SYSTEMS

Section	
91.3000	Basic Provisions.
91.3001	General.
91.3002	Hoistway Enclosures.
91.3003	Emergency Operations.
91.3004	Conveying Systems.
91.3005	Machine RoomsConveying Systems
91.3007	Fire Service Access Elevator.
91.3008	Occupant Evacuation Elevators.

- Sec. 321. Subsection 91.3001.1 of Section 91.3001, Division 30, Article 1, Chapter IX of the Los Angeles Municipal Code is deleted and reinstated, to be placed in numerical order, to read as follows:
 - **91.3001.1. Scope.** This division governs the design, construction, installation, alteration and repair of elevators and conveying systems and their components. All elevators shall

comply with the additional requirements of the Elevator Code. Whenever a conflict exists between this Division and the Elevator Code, the more restrictive of the two codes shall apply.

Sec. 322. Subsection TABLE 91.3001.3 of Section 91.3001, Division 30, Article 1, Chapter IX of the Los Angeles Municipal Code is deleted and reinstated, to be placed in numerical order, to read as follows:

TABLE 91.3001.3

TYPE	STANDARD
Automotive lifts	ALI ALCTV
Belt manlifts (including any other belt lift designed for persons)	ASME A90.1
Conveyors and related equipment	ASME B20.1
Elevators, escalators, dumbwaiters, moving walks, material lifts	ASME A17.1 / CSA B44
Industrial scissor lifts	ANSI MH29.1
Platform lifts, stairway chairlifts, wheelchair lifts	ASME A18.1

- Sec. 323. Subsection 91.3002.8 of Section 91.3002, Division 30, Article 1, Chapter IX of the Los Angeles Municipal Code is deleted and reinstated, to be placed in numerical order, to read as follows:
 - **91.3002.8. Glass in Elevator Enclosures.** Glass in elevator enclosures shall comply with CBC Section 2409.2 and the Elevator Code.
- Sec. 324. Section 91.3004, Division 30, Article 1, Chapter IX of the Los Angeles Municipal Code is amended to read as follows:

SEC. 91.3004. CONVEYING SYSTEMS.

CBC-Section 3004 of the CBC is adopted by reference, except CBC Section 3004.4 is not adopted.

Sec. 325. Section 91.3005, Division 30, Article 1, Chapter IX of the Los Angeles Municipal Code is amended to read as follows:

SEC. 91.3005. MACHINE ROOMSCONVEYING SYSTEMS.

Section 3005 of the CBC is adopted by reference., except that Section 3005.4 of the CBC is not adopted.

- Sec. 326. Subsection 91.3007.1 of Section 91.3007, Division 30, Article 1, Chapter IX of the Los Angeles Municipal Code is deleted and reinstated, to be placed in numerical order, to read as follows:
 - **91.3007.1. General.** Where required by CBC Section 403.6.1, every floor of the building shall be served by fire service access elevators complying with CBC Sections 3007.1 through 3007.9 with the modifications set forth in this Code. Except as modified in this

section, fire service access elevators shall be installed in accordance with this division and the Elevator Code.

- Sec. 327. Subsection 91.3008.1 of Section 91.3008, Division 30, Article 1, Chapter IX of the Los Angeles Municipal Code is deleted:
 - **91.3008.1.** General. Where elevators are to be used for occupant self-evacuation during fires, all passenger elevators for general public use shall comply with CBC Sections 3008.1 through 3008.10. Where other elevators are used for occupant self-evacuation, those elevators shall comply with these sections.
- Sec. 328. Subsection 91.3008.1.1 of Section 91.3008, Division 30, Article 1, Chapter IX of the Los Angeles Municipal Code is deleted and reinstated, to be placed in numerical order, to read as follows:
 - **91.3008.1.1. Occupant evacuation elevators.** Occupant evacuation elevators shall comply with the California Code of Regulations, Title 8, Division 1, Chapter 4, Subchapter 6, Elevator Safety Orders.
- Sec. 329. Subsection 91.3008.8.1 of Section 91.3008, Division 30, Article 1, Chapter IX of the Los Angeles Municipal Code is deleted and reinstated, to be placed in numerical order, to read as follows:
 - **91.3008.8.1. Determination of standby power load.** Standby power loads shall be based on the determination of the number of occupant evacuation elevators in CBC Section 3008.1.
- Sec. 330. Division 31, Article 1, Chapter IX of the Los Angeles Municipal Code is amended to remove Section 91.3112 Patio Covers, revise Section 91.3108's title to Telecommunication and Broadcast Towers, and add section 91.3115 Patio Covers, with no other changes to existing sections therein, to read as follows:

DIVISION 31 SPECIAL CONSTRUCTION

Section

- 91.3100 Basic Provisions.
- 91.3106 Marquees.
- 91.3108 Telecommunications and Broadcast Towers.
- 91.3109 Swimming Pool Enclosures and Safety Devices.
- 91.3112 Patio Covers.
- 91.3115 Patio Covers.
- Sec. 331. Subsection 91.3106.1 of Section 91.3106, Division 31, Article 1, Chapter IX of the Los Angeles Municipal Code is deleted and reinstated, to be placed in numerical order, to read as follows:
 - **91.3106.1. General.** Marquees shall comply with this section and other applicable sections of this Code. The plans and specifications and the type, design, arrangement and location of every marquee shall be approved by the Board of Cultural Affairs

Commissioners of the City of Los Angeles and the Board of Public Works of the City of Los Angeles prior to the issuance of a building permit.

- Sec. 332. Subsection 91.3108.1 of Section 91.3108, Division 31, Article 1, Chapter IX of the Los Angeles Municipal Code is deleted and reinstated, to be placed in numerical order, to read as follows:
 - **91.3108.1. General.** Towers shall be designed and constructed in accordance with the provisions of TIA-222. For structural design purposes, telecommunication towers shall be considered to be a "Class III Structure" subject to an Importance Factor of 1.50, as set forth in Table 2-3, Importance Factors, of TIA-222. Towers shall be designed for seismic loads; exceptions related to seismic design listed in Section 2.7.3 of TIA-222 shall not apply. In Section 2.6.6.2 of TIA 222, the horizontal extent of Topographic Category 2, escarpments, shall be 16 times the height of the escarpment.

EXCEPTION: Single free-standing poles used to support antennas not greater than 75 feet (22.86 m), measured from the top of the pole to grade, shall not be required to be noncombustible.

Sec. 333. Section 91.3109, Division 31, Article 1, Chapter IX of the Los Angeles Municipal Code is amended, with no other changes to existing subsections therein, to read as follows:

SEC. 91.3109. SWIMMING POOL ENCLOSURES AND SAFETY DEVICES.

Section 3109 of the CBC is adopted by reference, except Sections 3109.3, 3109.4, 3109.4.1.7 and 3109.4.1 of the CBC are not adopted; and, in lieu, LAMC Subsections 91.3109.3, 91.3109.4 and Subdivisions 91.3109.4.1 and 91.3109.4.1.17 are added.

- Sec. 334. Subsection 91.3109.3 of Section 91.3109, Division 31, Article 1, Chapter IX of the Los Angeles Municipal Code is deleted and reinstated, to be placed in numerical order, to read as follows:
 - **91.3109.3. Public Swimming Pools.** Public swimming pools shall be completely enclosed by a fence or screen enclosure at least five feet (1524 mm) in height. Openings in the fence or screen enclosure shall not permit the passage of a four-inch-diameter (102 mm) sphere. The fence or screen enclosure shall be equipped with self-closing and self-latching gates.
- Sec. 335. Subsection 91.3109.4 of Section 91.3109, Division 31, Article 1, Chapter IX of the Los Angeles Municipal Code is deleted and reinstated, to be placed in numerical order, to read as follows:
 - **91.3109.4. Residential Swimming Pools.** Residential swimming pools shall be completely enclosed. The fence, barrier or a screen enclosure for residential swimming pools on a lot with one to three dwelling units shall comply with LAMC Subsection 91.3109.4.1 and CBC Sections 3109.1 through 3109.2
- Sec. 336. Subsection 91.3109.4.1 of Section 91.3109, Division 31, Article 1, Chapter IX of the Los Angeles Municipal Code is deleted and reinstated, to be placed in numerical order, to read as follows:

- **91.3109.4.1. Barrier Height and Clearances.** For residential swimming pools, the top of the barrier shall be at least 60 inches (1524 mm) above grade measured on the side of the barrier that faces away from the swimming pool. The maximum vertical clearance between grade and the bottom of the barrier shall be 2 inches (50.8 mm) measured on the side of the barrier that faces away from the swimming pool. Where the top of the pool structure is above grade, the barrier is permitted to be mounted on top of the pool structure, provided the maximum vertical clearance between the top of the pool structure and the bottom of the barrier shall be 4 inches (101.6 mm), or at grade level.
- Sec. 337. Subsection 91.3109.4.1.7 of Section 91.3109, Division 31, Article 1, Chapter IX of the Los Angeles Municipal Code is renumbered 91.3109.4.1.1, to be placed in numerical order, and amended to read as follows:
 - **91.3109.4.1.17.** Access doors or gates shall comply with the requirements of CBC Sections 3109.14.1.1 through 3109.24.1.6 and shall be equipped to accommodate a locking device.

Release mechanisms shall be in accordance with CBC Section 1010.21.9.

Sec. 338. Section 91.3112, Division 31, Article 1, Chapter IX of the Los Angeles Municipal Code is deleted:

SEC. 91.3112. PATIO COVERS.

Sec. 339. Subsection 91.3112.1 of Section 91.3112, Division 31, Article 1, Chapter IX of the Los Angeles Municipal Code is deleted:

91.3112.1. General. Section I101.1 of Appendix I of the CBC is adopted by reference.

Sec. 340. Subsection 91.3112.2 of Section 91.3112, Division 31, Article 1, Chapter IX of the Los Angeles Municipal Code is deleted:

91.3112.2. Definitions. The following word and term shall, for the purposes of Division 31, Article 1, Chapter IX of the Los Angeles Municipal Code, have the meaning shown herein.

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Patio Covers. One-story structures not exceeding 12 feet (3657 mm) in height. Enclosure walls shall be permitted to be of any configuration, provided the open or glazed area of the longer wall and one additional wall is equal to at least 65% of the area below a minimum of 6 feet 8 inches (2013 mm) of each wall, measured from the floor.

Sec. 341. Subsection 91.3112.3 of Section 91.3112, Division 31, Article 1, Chapter IX of the Los Angeles Municipal Code is deleted:

91.3112.3. Exterior Openings. Section I101.3 of Appendix I of the CBC is adopted by reference.

Sec. 342. Subsection 91.3112.4 of Section 91.3112, Division 31, Article 1, Chapter IX of the Los Angeles Municipal Code is deleted:

91.3112.4. Structural Provisions. Section I101.4 of Appendix I of the CBC is adopted by reference.

Sec. 343. Section 91.3115, Division 31, Article 1, Chapter IX of the Los Angeles Municipal Code is added, to be placed in numerical order, to read as follows:

SEC. 91.3115. PATIO COVERS.

Appendix I of the CBC is adopted except as amended herein.

- Sec. 344. Subsection 91.3115.1 of Section 91.3115, Division 31, Article 1, Chapter IX of the Los Angeles Municipal Code is added to read as follows:
 - 91.3115.1. General. Section I101.1 of Appendix I of the CBC is adopted by reference.
- Sec. 345. Subsection 91.3115.2 of Section 91.3115, Division 31, Article 1, Chapter IX of the Los Angeles Municipal Code is added to read as follows:
 - **91.3115.2. Definitions.** The following word and term shall, for the purposes of Division 31, Article 1, Chapter IX of the Los Angeles Municipal Code, have the meaning shown herein.
 - **Patio Cover.** One-story structures not exceeding 12 feet (3657 mm) in height. Enclosure walls shall be permitted to be of any configuration, provided the open or glazed area of the longer wall and one additional wall is equal to at least 65% of the area below a minimum of 6 feet 8 inches (2013 mm) of each wall, measured from the floor.
- Sec. 346. Subsection 91.3115.3 of Section 91.3115, Division 31, Article 1, Chapter IX of the Los Angeles Municipal Code is added to read as follows:
 - **91.3115.3. Exterior Walls and Openings.** Section I103 of Appendix I of the CBC is adopted by reference.
- Sec. 347. Subsection 91.3115.4 of Section 91.3115, Division 31, Article 1, Chapter IX of the Los Angeles Municipal Code is added to read as follows:
 - **91.3115.4.** Height. Section I104 of Appendix I of the CBC is adopted by reference.
- Sec. 348. Subsection 91.3115.5 of Section 91.3115, Division 31, Article 1, Chapter IX of the Los Angeles Municipal Code is added to read as follows:
 - **91.3115.5. Structural Provisions.** Section I105 of Appendix I of the CBC is adopted by reference.
- Sec. 349. Division 32, Article 1, Chapter IX of the Los Angeles Municipal Code is amended to revise Section 91.9302's title to Encroachments, with no other changes to existing sections therein, to read as follows:

DIVISION 32 ENCROACHMENTS INTO THE PUBLIC RIGHT-OF-WAY

Section

- 91.3200 Basic Provisions.
- 91.3201 General.
- 91.3202 EncroachmentsGeneral.
- Sec. 350. Subsection 91.3201.1 of Section 91.3201, Division 32, Article 1, Chapter IX of the Los Angeles Municipal Code is deleted and reinstated, to be placed in numerical order, to read as follows:
 - **91.3201.1. Scope.** The provisions of this division shall govern the encroachment of structures into the public right-of-way.

No portion of any projection from any building over any roadway shall be lower than an elevation of 14 feet (4267.2 mm) above the roadway surface.

- Sec. 351. Subsection 91.3201.3 of Section 91.3201, Division 32, Article 1, Chapter IX of the Los Angeles Municipal Code is deleted and reinstated, to be placed in numerical order, to read as follows:
 - **91.3201.3.** Other Laws. The provisions of this division shall not be construed to permit the violation of other laws or ordinances regulating the use and occupancy of public property.

Projections into the public right-of-way shall require the approval of the Department of Public Works.

- Sec. 352. Subsection 91.3202.3.1 of Section 91.3202, Division 32, Article 1, Chapter IX of the Los Angeles Municipal Code is deleted and reinstated, to be placed in numerical order, to read as follows:
 - **91.3202.3.1.** Awnings, Canopies, Marquees and Signs. Awnings, canopies, marquees and signs shall be constructed so as to support applicable loads as specified in Division 16, Article 1, Chapter IX of the LAMC. Awnings, canopies, marquees and signs with less than 15 feet (4572 mm) clearance above the sidewalk shall not extend into or occupy more than 2/3 the width of the sidewalk measured from the building. Stanchions or columns that support awnings, canopies, marquees and signs shall be located not less than 2 feet (609.6 mm) in from the curb line.

Prior to issuance of a building permit, plans and specifications and the type, design, arrangement and location of every marquee shall be approved by the City's Board of Cultural Affairs Commissioners and Board of Public Works.

Sec. 353. Division 33, Article 1, Chapter IX of the Los Angeles Municipal Code is hereby amended to revise Section 91.3305's title to Sanitary and Section 91.3307's title to Protection of Adjacent Property, with no other changes to existing sections therein, to read as follows:

DIVISION 33 SAFEGUARDS DURING CONSTRUCTION

Section

- 91.3300 Basic Provisions.
- 91.3301 General.
- 91.3304 Site Work.
- 91.3305 Sanitary Toilet Facilities During Construction.
- 91.3306 Protection of Pedestrians.
- 91.3307 Protection of AdjacentAdjoining Property.
- Sec. 354. Subsection 91.3301.1 of Section 91.3301, Division 33, Article 1, Chapter IX of the Los Angeles Municipal Code is amended to read as follows:
 - **91.3301.1.** Scope. The provisions of this division shall govern safety during construction and the protection of adjacent public and private properties. Fire safety during construction shall also comply with the applicable provisions of Chapter 33 of the California Fire Code.

This section shall not be construed to waive the requirements of the General Safety Orders of the Department of Industrial Relations of the State of California, or the provisions of California Civil Code Section 832 concerning the rights of coterminous owners as to excavations.

See Division 70, Article 1, Chapter IX of the LAMC for all grading, excavation and fill requirements.

- Sec. 355. Subsection 91.3304.1.4 of Section 91.3304, Division 33, Article 1, Chapter IX of the Los Angeles Municipal Code is deleted and reinstated, to be placed in numerical order, to read as follows:
 - **91.3304.1.4. Fill Supporting Foundations.** Fill to be used to support the foundations of any building or structure shall comply with CBC Section 1804.6 and Division 70, Article 1, Chapter IX of the LAMC. Special inspections of compacted fill shall be in accordance with CBC Section 1705.6.
- Sec. 356. Section 91.3305, Division 33, Article 1, Chapter IX of the Los Angeles Municipal Code is amended, with no other changes to existing subsections therein, to read as follows:

SEC. 91.3305. SANITARYTOILET FACILITIES DURING CONSTRUCTION.

Section 3305 of the CBC is not adopted; and, in lieu, LAMC Subsections 91.3305.1 and 91.3305.2 are added.

- Sec. 357. Subsection 91.3305.1 of Section 91.3305, Division 33, Article 1, Chapter IX of the Los Angeles Municipal Code is deleted and reinstated, to be placed in numerical order, to read as follows:
 - **91.3305.1.** Toilet Facilities Required. No person shall commence or proceed with the erection, construction, alteration, repair, raising, adding to, removal or demolition of any building or structure unless adequate, suitable, sanitary toilet facilities under the control of that person are provided for the use of any person employed or working upon the building or structure. The toilet facilities shall be located upon or within a reasonable

distance of the lot, premises, or site upon which the work is being done. In no case shall the line of travel to any toilet facility exceed 500 feet (152.4 m).

- Sec. 358. Subsection 91.3305.2 of Section 91.3305, Division 33, Article 1, Chapter IX of the Los Angeles Municipal Code is deleted and reinstated, to be placed in numerical order, to read as follows:
 - **91.3305.2.** Toilet Standards. Every toilet shall be of the water-flush type and connected to a public sewer or a private sewage disposal system built in accordance with the provisions of the Plumbing Code. All toilet structures shall be completely enclosed on four sides and the top, and the door shall be self-closing; the toilet floor shall be smooth, and screened ventilation shall be provided for the toilet compartment. Where workers are employed during the night hours, the toilet building shall be provided with artificial light. In lieu of flush water closets, approved chemical toilets, which meet the requirements of Chapter III of the Los Angeles Municipal Code, may be provided.
- Sec. 359. Subsection 91.3306.1 of Section 91.3306, Division 33, Article 1, Chapter IX of the Los Angeles Municipal Code is deleted and reinstated, to be placed in numerical order, to read as follows:
 - **91.3306.1. Protection Required.** Pedestrians shall be protected during construction, remodeling and demolition activities as required by Division 33, Article 1, Chapter IX of the Los Angeles Municipal Code and CBC Table 3306.1. Signs shall be provided to direct pedestrian traffic.

Nothing contained in this section shall be construed to grant permission to use, construct or place a canopy over any street or public place without first obtaining the necessary permits from the Department of Public Works.

- Sec. 360. Subsection 91.3307.1 of Section 91.3307, Division 33, Article 1, Chapter IX of the Los Angeles Municipal Code is deleted and reinstated, to be placed in numerical order, to read as follows:
 - **91.3307.1. Protection Required.** Adjoining public and private property shall be protected from damage during construction, remodeling and demolition work. Protection must be provided for footings, foundations, party walls, chimneys, skylights and roofs. Provisions shall be made to control water runoff and erosion during construction or demolition activities.

For excavations, adjacent property shall be protected as set forth in Section 832 of the Civil Code of California.

Prior to the issuance of any permit, which authorizes an excavation where the excavation is to be of a greater depth than are the walls or foundation of any adjoining building or structure and located closer to the property line than the depth of the excavation, the owner of the site shall provide the Department of Building and Safety with evidence that the adjacent property owner or owners have been given a 30-day written notice of the intent to excavate. This notice shall state the depth to which the excavation is intended to be made and when the excavation will commence. This notice shall be by certified mail, return receipt requested.

Sec. 361. Subsection 91.3307.2 of Section 91.3307, Division 33, Article 1, Chapter IX of the Los Angeles Municipal Code is deleted and reinstated, to be placed in numerical order, to read as follows:

91.3307.2. Underpinning.

- Sec. 362. Subsection 91.3307.2.1 of Section 91.3307, Division 33, Article 1, Chapter IX of the Los Angeles Municipal Code is deleted and reinstated, to be placed in numerical order, to read as follows:
 - **91.3307.2.1. General.** In constructing underpinning, all portions of the structure shall be supported so that no structural material is stressed beyond the yield point.
- Sec. 363. Subsection 91.3307.2.2 of Section 91.3307, Division 33, Article 1, Chapter IX of the Los Angeles Municipal Code is deleted and reinstated, to be placed in numerical order, to read as follows:
 - **91.3307.2.2.** Closure. All spaces between the existing footing and the underpinning shall be packed full of mortar conforming to the provisions of CBC Section 2103 and having no slump when tested by the method specified in ASTM C 143.
- Sec. 364. Subsection 91.3307.3 of Section 91.3307, Division 33, Article 1, Chapter IX of the Los Angeles Municipal Code is deleted and reinstated, to be placed in numerical order, to read as follows:

91.3307.3. Temporary Excavations and Shoring.

- Sec. 365. Subsection 91.3307.3.1 of Section 91.3307, Division 33, Article 1, Chapter IX of the Los Angeles Municipal Code is deleted and reinstated, to be placed in numerical order, to read as follows:
 - **91.3307.3.1. General.** Excavations shall not remove the lateral support from a public way, from an adjacent property or from an existing structure. For the purpose of this section, the lateral support shall be considered to have been removed when any of the following conditions exist:
 - 1. The excavation exposes any adverse geological formations, which would affect the lateral support of a public way, an adjacent property or an adjacent structure.
 - 2. The excavation extends below a plane extending downward at an angle of 45 degrees from the edge of the public way or an adjacent property.
 - **EXCEPTION:** Normal footing excavations not exceeding two feet in depth will not be construed as removing lateral support.
 - 3. The excavation extends below a plane extending downward at an angle of 45 degrees from the bottom of a footing of an existing structure.
- Sec. 366. Subsection 91.3307.3.2 of Section 91.3307, Division 33, Article 1, Chapter IX of the Los Angeles Municipal Code is deleted and reinstated, to be placed in numerical order, to read as follows:

91.3307.3.2. Removal of Lateral Support. Approval of the Department of Public Works shall be obtained prior to the issuance of a permit for any excavation that would remove the lateral support from a public way.

The slopes of excavations adjacent to an existing structure, an adjacent property or public way may exceed one horizontal to one vertical where either:

1. A soil report recommending that the slope may be in excess of one to one has been approved by the Department and the Department of Public Works when the excavation is adjacent to a public way.

When justified by the soils engineer, the Department may approve the use of the proposed building and/or shoring to support an adjacent structure on an adjoining property in lieu of underpinning, provided:

- (i) Evidence is submitted that the adjoining property owner has been notified in advance of the proposed excavation in compliance with Section 832 of the Civil Code of California.
- (ii) The owner of the site records a sworn affidavit with the Office of the County Recorder, which will inform future owners of the site that the lateral support of a portion of the building footings on the adjoining property is provided by the subterranean walls of the building on the site.
- 2. Underpinning is designed to support adjacent structures, temporary shoring is designed to support the excavation, and plans are approved and permits are issued by the Department.

Temporary shoring shall be designed for an earth pressure recommended by a soils engineer and approved by the Department, equivalent to that exerted by a fluid weighing not less than 24 pounds (11 kg) per cubic foot plus all surcharge loads.

Soils bearing values shall be those specified in Division 18, Article 1, Chapter IX of the LAMC or those recommended by a soils engineer and approved by the Department.

The design of the required temporary shoring and necessary underpinning shall include a sequence of construction and installation.

Allowable stresses used in the design of temporary shoring may be increased 33-1/3% for structural and reinforcing steel and 25% for wood. No increase will be permitted for concrete. Other values shall be those prescribed by this Code.

Sec. 367. Division 61 (SPECIAL HAZARD AREAS), Article 1, Chapter IX of the Los Angeles Municipal Code shall remain unchanged except as amended herein.

Sec. 368. Section 91.6102, Division 61, Article 1, Chapter IX of the Los Angeles Municipal Code is deleted:

SEC. 91.6102. RUBBISH ROOMS.¶

Every room, except a room in a Group R, Division 3 Occupancy, appropriated for the storage or treatment of combustible rubbish, shall be of one-hour fire-resistive construction. All openings in interior partitions shall be protected by a fire assembly having a one-hour fire-resistive rating. All openings in exterior walls shall be protected by a fire assembly having a three-fourths hour fire-resistive rating.

- Sec. 369. Division 62 (SIGNS), Article 1, Chapter IX of the Los Angeles Municipal Code shall remain unchanged except as amended herein.
- Sec. 370. Subsection 91.6205.1 of Section 91.6205, Division 62, Article 1, Chapter IX of the Los Angeles Municipal Code is amended to read as follows:
 - **91.6205.1. General Requirements.** Signs shall be designed and constructed to comply with the provisions of this Code for use of materials, loads and stresses. Glass panels used in signs shall comply with the size, thickness and type of glass as shown in Table H115.1(1)4-A of Appendix H of the CBC. The use, location, size, area and height of the sign shall comply with the provisions of this Code and Chapter I of the LAMC, whichever is more restrictive. Table H115.1(1)4-A of Appendix H of the CBC is adopted by reference.
- Sec. 371. Section 91.6212, Division 62, Article 1, Chapter IX of the Los Angeles Municipal Code is amended, with no other changes to existing subsections therein, to read as follows:

SEC. 91.6212. PROJECTING SIGNS.

Table H115.1(2)4-B of Appendix H of the CBC is adopted by reference.

- Sec. 372. Division 63 (ADDITIONAL PROVISIONS FOR SPECIFIC USES), Article 1, Chapter IX of the Los Angeles Municipal Code shall remain unchanged except as amended herein.
- Sec. 373. Section 91.6302, Division 63, Article 1, Chapter IX of the Los Angeles Municipal Code is deleted:

SEC. 91.6302. FOOD ESTABLISHMENT.¶

91.6302.1. General. This section shall apply to every building or portion thereof appropriated to the processing, storage or sale of food or drink for human consumption, but not including any private dwelling. Every food establishment shall conform to the requirements of this Code.

¶ EXCEPTIONS:¶

- 1. Food establishments that are used exclusively for the sale of farm produce sold at or on the premises where produced.¶
- 2. Food preparation units installed in school buildings with the following provisions:
 - A. A sign must be posted requiring all mouth utensils to be of single-use, disposable type.¶

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B. The floor surface of the area must be of linoleum, asphalt tile, or equivalent nonabsorbent material.¶

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C. A residential-type vent must be installed when a residential kitchen range is provided.

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3. Employee lunch rooms if no food other than beverages is prepared on the premises, and provided all mouth utensils are of the disposable type. Heating devices limited to this use need not be vented.¶

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4. Food establishments in which all food is to be sold in sealed packages, and in which there is to be no preparing or packaging of food, shall comply with all applicable food establishment regulations. The Certificate of Occupancy shall state "Packaged Food Only."

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91.6302.2. Ceiling Heights. Every room shall have a ceiling height of not less than eight feet between the finished floor and the finished ceiling.¶

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EXCEPTIONS:¶

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- 1. Toilet rooms may have a ceiling height of not less than seven feet six inches.
- 2. Refrigerated cold storage rooms are exempted from this ceiling height-requirement.

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91.6302.3. Special Ventilation. A mechanical exhaust ventilation system capable of effectively removing cooking odors, smoke, steam, grease and vapors shall be provided at or above cooking equipment such as ranges, griddles, ovens, deep fat fryers, barbecues and rotisseries.

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All hoods, ducts, fans and other devices provided to ventilate the cooking areas of commercial food preparation equipment in commercial food establishments shall be installed as required by and in compliance with the provisions of the Los Angeles Mechanical Code. Rooms in which exhaust systems are installed shall be provided with acceptable air inlets to admit at least as much air as is exhausted by these systems.¶

Ducts penetrating a ceiling or floor shall be enclosed in a shaft enclosure conforming to the requirements of CBC Section 713. Where a shaft enclosure is not required by CBC Section 713, ducts that convey grease vapors shall be enclosed in a one-hour fire-resistive shaft. The shaft shall be separated from the duct by a minimum 6 inch (152.4 mm) air space vented to the outside air.

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91.6302.4. Toilet Rooms and Vestibules. Toilet rooms and vestibules for public or employees shall conform to the following standards:¶

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1. Toilet Rooms Required. Toilet rooms shall be provided in accordance with the Los Angeles Plumbing Code.¶

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2. Location. Toilet rooms shall be located on the premises of the foodestablishment. Toilet rooms for public use shall be readily accessible tocustomers. Toilet rooms shall be separated from other portions of the establishment by a tight-fitting, self-closing door.

Additional lavatories or equivalent hand-washing facilities shall be provided in all food preparation areas where the lavatories required in Item 1 are not conveniently located on the same floor and in or adjacent to the food preparation areas.

3. Privacy. Toilet rooms shall be so arranged or equipped with view screens as to protect users of toilets and urinals from view from outside the room when the door to the toilet room is open.¶

EXCEPTION: View screen is not required if the toilet room is only for single accommodation, unisex and a bathroom is provided.¶

4. Dimensions. Toilet rooms shall have dimensions and area as required in Division 11, Article 1, Chapter IX of the Los Angeles Municipal Code.¶

91.6302.5. Employee Storage Areas. Lockers or other suitable facilities within foodestablishments shall be provided in compliance with Section 114256 of the California Health and Safety Code as enforced by the Los Angeles County Department of Public Health.¶

91.6302.6. Garbage Rooms. Restaurants with a seating capacity of 50 or more patrons shall be provided with a room or enclosed space for the keeping of garbage containers. The room shall have portland coment plaster, fireclay tile, ceramic tile or equally durable waterproof walls to a height of at least six feet above the floor. Doors and windows of such rooms shall be tight fitting and self-closing and all exterior openings shall be screened. Each such room shall be equipped with a hose or other suitable garbage can washing device connected to hot and cold running water and the floor shall slope to a drain and comply the requirements of the Los Angeles County Health Department.

EXCEPTION: Such garbage rooms need not be provided at places maintaining an approved device for discharging garbage to the sewer system.¶

91.6302.7. Rat Protection. Every food establishment shall be completely surrounded by a continuous exterior foundation wall not less than 12 inches below grade.

Sec. 374. Section 91.6303, Division 63, Article 1, Chapter IX of the Los Angeles Municipal Code is deleted:

SEC. 91.6303. SERVICE STATIONS.¶

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Every service station located within 660 feet (201.16 m) of an accessible right-of- way of any interstate or primary highway, as defined in California Business and Professions Code Sections 5215 and 5220, shall provide, during business hours, public restrooms for use by its customers. The public restroom shall not be temporary or portable but shall be permanent and shall include separate facilities for men and women, each with toilets and sinks suitable for use by disabled persons in accordance with Division 11, Article 1, Chapter IX of the LAMC, and shall be maintained in a clean and sanitary manner. This section shall not apply to service stations which are fully operational prior to January 1, 1990.

Sec. 375. Subsection 91.6304.1 of Section 91.6304, Division 63, Article 1, Chapter IX of the Los Angeles Municipal Code is deleted:

91.6304.1. Interior Doors. In any residential building, every interior door in a doorway-through which occupants pass shall have a minimum width of 32 inches.¶

EXCEPTION: The provisions of this section shall not apply to doors located in shower compartment and bathtub enclosures.

Sec. 376. Subsection 91.6304.2 of Section 91.6304, Division 63, Article 1, Chapter IX of the Los Angeles Municipal Code is deleted:

91.6304.2. Interior Illumination. All recreation or service rooms accessory to apartment houses shall be provided with an incandescent light bulb (minimum of 60 watts) or other artificial light at a maximum height of eight feet (2438 mm) and shall provide have a minimum average surface illumination of 0.2 footcandles (2.15 lx) at floor level. Where, in any specific case, different sections of the Los Angeles Municipal Code specify different requirements, the most restrictive shall govern.¶

EXCEPTION: Recreation or service rooms accessory to condominiums which comply with Article 2.9 (condominiums) of Chapter I of the Los Angeles Municipal Code

Sec. 377. Subsection 91.6304.3 of Section 91.6304, Division 63, Article 1, Chapter IX of the Los Angeles Municipal Code is amended to read:

91.6304.3. Additional Requirements for Installation of Bars, Grills, Grates or Similar Devices. In addition to the requirements of CBC Section 1031 and 1010.3.44030 all bars, grills, grates or similar devices shall comply with the following:

- A permit is obtained from the Department and a fee is paid as required in LAMC Subdivision 91.107.4.5. Any permit so issued shall be valid for a period of 90 days from its issuance. The Department may allow a "certified installer" to be used, in lieu of obtaining a permit, in accordance with LAMC Section 91.17124710.
- 2. Any person who willfully or knowingly, with the intent to deceive, makes a false statement or representation, or knowingly fails to disclose a material fact in any documentation required by the Department to ascertain facts relative to this section, LAMC Subdivision 91.107.4.5 or to Section 91.17124710, including any oral or written evidence presented, shall be guilty of a misdemeanor.
- Sec. 378. Division 67 (SECURITY PROVISIONS), Article 1, Chapter IX of the Los Angeles Municipal Code shall remain unchanged except as amended herein.
- Sec. 379. Section 91.6703, Division 67, Article 1, Chapter IX of the Los Angeles Municipal Code is amended to read:

SEC. 91.6703. LIMITATIONS.

The provisions of this division shall not be applicable to latching or locking devices on exit doors to the extent that the provisions of this division are contrary to the provisions of CBC Section 402.8.8 or CBC Chapter 10, nor shall the regulations of this division be construed to waive any other provision of this Code.

No person shall sell, offer for sale, advertise, display for sale or install any metal bars, grilles, grates, security roll-down shutters or similar devices manufactured or installed to preclude human entry through windows and exterior doors without a label attached to each product, printed in at least ten-point type and that reads as follows: "A building permit is required in most cases for the installation of this product. If this product is installed in a sleeping room, unless excepted by the provisions of CBC Section 10314030, the device must be equipped with a quick-release latch operable from inside and the dwelling unit provided with an approved smoke detector."

Sec. 380. Subsection 91.6709.2. of Section 91.6709, Division 67, Article 1, Chapter IX of the Los Angeles Municipal Code is amended to read as follows:

91.6709.2. Unless prohibited by CBC Section 1010.2.4 aA single swinging door, the active leaf of a pair of doors, and the bottom leaf of Dutch doors shall be equipped with a deadbolt and deadlocking latch. The deadbolt and latch may be activated by one lock or by individual locks. Deadbolts shall contain hardened inserts to repel cutting tools. The lock or locks shall be key-operated from the exterior side of the door and openable from the interior side by a device which does not require a key, special knowledge, or special effort to operate.

EXCEPTIONS:

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- 1. The latch may be omitted from doors in Group B, F, M, S Occupancies.
- 2. In other than residential buildings, locks may be key operated on the inside when not prohibited by the provisions of CBC Section 402.8.8 or CBC Chapter 10.
- 3. A swinging door greater than five feet in width may be secured as set forth in Section 91.6711.

A straight deadbolt shall have a minimum throw of one inch and an embedment of not less than 5/8 inch into the holding device receiving the projected bolt. A hook-shaped or an expanding-lug deadbolt shall have a minimum throw of 3/4-inch. All deadbolts of locks which automatically activate two or more deadbolts shall embed at least 1/2-inch into the holding devices receiving the projected bolts.

Sec. 381. Section 91.6713, Division 67, Article 1, Chapter IX of the Los Angeles Municipal Code is deleted:

SEC. 91.6713. GLAZED OPENING - GENERAL.¶

All windows, skylights, glazing in doors or other glazing in security openings shall conform to this section and to the applicable requirements of LAMC Sections 91.6714, 91.6715 and 91.6716.¶

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Glazed openings within 40 inches (1016 mm) of the required locking device of the door, when the door is in the closed and locked position and when the door is operable from the inside without the use of a key, shall be fully tempered glass, conforming to the provisions of CBC Section 2406, or approved burglary-resistant material, or shall be protected by metal bars, screens or grilles having a pattern such that the maximum-dimension of any opening does not exceed 2 inches (50.8 mm).¶

EXCEPTION: The provisions of this section shall not apply to sliding glass doors which conform to the provisions of LAMC Section 91.6710 or to view ports or windows which do not exceed 2 inches (50.8 mm) in their greatest dimension.

Sec. 382. Section 91.6714, Division 67, Article 1, Chapter IX of the Los Angeles Municipal Code is deleted:

SEC. 91.6714. GLAZING.¶

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In Group B, F, M, S Occupancies, panes of glazing with at least one dimension greater than six inches, but less than 48 inches, shall be constructed of fully tempered glass or approved burglary-resistant material or shall be protected by metal bars or grilles which are constructed to preclude human entry. Such bars or grilles shall have a pattern such that at least one dimension of any opening shall be no greater than six inches.

Sec. 383. Section 91.6715, Division 67, Article 1, Chapter IX of the Los Angeles Municipal Code is deleted:

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SEC. 91.6715. WINDOWS.¶

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91.6715.1. Sliding glass windows shall be provided with locking devices and shall be so constructed and installed that they remain intact and engaged when subjected to the tests specified in LAMC Subsection 91.6717.2. A device shall be installed in the upper channel of the moving panel to prohibit the raising and removal of the moving panel from the track while in the closed or partially open position.¶

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91.6715.2. Other openable windows shall be provided with substantial locking devices which render the building as secure as the devices required by this section. In Group B, F, M, S Occupancies, such devices shall be glide bars, bolts, cross bars and/or padlocks with minimum 9/32 inch hardened steel shackles and bolted, hardened steel hasps.¶

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91.6715.3. Special. Louvered windows shall be protected by metal bars or grilles which are constructed to preclude human entry. Such bars or grilles shall have a pattern such that no less than one dimension of any opening shall be six inches or less.¶

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91.6715.4. Any release for metal bars, grilles, grates or similar devices constructed to preclude human entry that are installed shall be located on the inside of the adjacent room and at least 24 inches from the closest opening through such metal bars, grilles, grates or similar devices that exceed two inches in any dimension.¶

EXCEPTION: Metal bars, grilles, grates or similar devices may be padlocked in position where such padlocks or similar devices are not prohibited by law.

Sec. 384. Section 91.6716, Division 67, Article 1, Chapter IX of the Los Angeles Municipal Code is deleted:

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SEC. 91.6716. OPENINGS OTHER THAN DOORS OR GLAZED OPENINGS.

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91.6716.1. Security openings other than doors or glazed openings shall be protected in accordance with the requirements of this section.

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91.6716.2. Hatchway covers of less than 1-3/4-inch thick solid wood construction shall be covered on the inside with 16-gauge sheet metal attached by screws around the perimeter spaced at six-inch maximum centers.¶

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91.6716.3. Hatchway covers shall be secured from the inside with slide bars, slide bolts, and/or padlocks with hardened steel shackles. Hasps shall be hardened steel and bolted.¶

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91.6716.4. Outside pin-type hinges shall be provided with non-removable pins.¶

91.6716.5. Openings within 40 inches of the required locking device of the door when said door is in the closed and locked position and when said door is openable without the use of a key shall not exceed two inches in their greatest dimension or shall be protected by metal bars or grilles having a pattern such that the openings of which do not exceed two inches in the greatest dimension.

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91.6716.6. All other openings shall be protected by metal bars or grilles constructed to preclude human entry. Such bars or grilles shall have a pattern such that no less than one dimension of any opening shall be six inches or less.¶

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EXCEPTION: Openings which are more than 40 inches from the required locking device of a door in the closed and locked position when the door is openable from the inside without the use of a key, and which do not exceed 96 square inches in area, with no less than one dimension thereof being six inches or less.

Sec. 385. Section 91.6717, Division 67, Article 1, Chapter IX of the Los Angeles Municipal Code is deleted:

SEC. 91.6717. TESTS - GENERAL.

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Doors, windows, and similar closures of security openings regulated by the provisions of this division, including the frames, jambs, hardware and locking devices of such closures, shall be shown to satisfactorily pass the tests specified in this division. The tests shall be performed by an approved testing laboratory on the units as installed at the jobsite or installed in test assemblies constructed according to the manufacturer's details. Each typical job installation shall be tested or the units shall be constructed and installed in conformance to a General Approval issued by the Department.¶

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91.6717.1. Sliding Glass Doors. Panels shall be closed and locked. Tests shall be performed in the following order:¶

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1. Test A. With the panels in the normal position, a concentrated load of 300 pounds shall be applied separately to each vertical pull stile incorporating a locking

device at a point on the stile within six inches of the locking device in the direction parallel to the plane of glass that would tend to open the door.

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2. Test B. Repeat Test A while simultaneously adding a concentrated load of 150 pounds to the same area of the same stile in a direction perpendicular to the plane of glass toward the interior side of the door.

-¶

3. Test C. Repeat Test B with 150-pound force in the reverse direction toward the exterior side of the door.¶

4. Tests D, E and F. Repeat Tests A, B and C with the movable panel lifted upwards to its full limit within the confines of the door frame. I

5. Moveable panels shall not be rendered easily openable or removable from the frame during or after the tests or the panel shall have failed the test.

91.6717.2. Sliding Glass Windows. Sash shall be closed and locked. Tests shall be performed in the following order:¶

1. Test A. With the sliding sash in the normal position, a concentrated load of 150pounds shall be applied separately to each sash member incorporating a lockingdevice at a point on the sash member within six inches of the locking device in the direction parallel to the plane of glass that would tend to open the window.

2. Test B. Repeat Test A while simultaneously adding a concentrated load of 75 pounds to the same area of the same sash member in the direction perpendicular to the plane of glass toward the interior side of the window.

3. Test C. Repeat Test B with the 75-pound force in the reversed direction towardthe exterior side of the window.¶

4. Tests D, E and F. Repeat Tests A, B and C with the movable sash lifted upwards to its full limit within the confines of the window frame.

- 5. Movable panels shall not be rendered easily openable or removable from the frame during or after the tests or the panel shall have failed the test.
- Division 70 (GRADING, EXCAVATIONS AND FILLS), Article 1, Chapter IX of the Los Angeles Municipal Code shall remain unchanged except as amended herein.
- Sec. 387. Division 71 (METHANE SEEPAGE REGULATIONS), Article 1, Chapter IX of the Los Angeles Municipal Code shall remain unchanged except as amended herein.
- Sec. 388. Subsection 91.7104.3.5 of Section 91.7104, Division 71, Article 1, Chapter IX of the Los Angeles Municipal Code is amended to read as follows:
 - 91.7104.3.5. Residential. Single Family Dwelling. One- and two-family dwellings, townhouses, Single Family Dwellings and buildings accessory to these structureseinglefamily dwellings shall comply with all the Methane Mitigation requirements of LAMC Table 71, except that the following mitigation system may be substituted:

- A. Single Station Gas Detectors with battery back-up may be installed in lieu of Alarm System and Gas Detection System; or
- B. 6 mil thick durable polyethylene plastic sheeting Visquene may be used in lieu of Impervious Membrane, when the Site Design Levels are I or II; or
- C. Additional Vent Risers or Mechanical Ventilation may be omitted for buildings with width less than 50 feet and footprint less than 6,000 square feet in area; or
- D. Vent Risers may be substituted in lieu of Mechanical Extraction System, provided the Vent Risers are designed at a rate twice that established by the Methane Mitigation Standards.
- Sec. 389. Division 72 (FIRE DISTRICT REGULATIONS), Article 1, Chapter IX of the Los Angeles Municipal Code shall remain unchanged except as amended herein.
- Sec. 390. Subsection 91.7201.2 of Section 91.7201, Division 72, Article 1, Chapter IX of the Los Angeles Municipal Code is amended to read as follows:
 - **91.7201.2. Very High Fire Hazard Severity Zone.** The Very High Fire Hazard Severity Zone shall be considered a Fire District. The Very High Fire Hazard Severity Zone shall be all of the territory so designated by the boundaries shown on the Very High Fire Hazard Severity Zone Map as shown established in LAMC Figure Sections 57.1.302.3.157.4908 et seg. and adopted by the City Council.
- Sec. 391. Subsection 91.7201.4 of Section 91.7201, Division 72, Article 1, Chapter IX of the Los Angeles Municipal Code is added, to be placed in numerical order, to read as follows:
 - **91.7201.4. Wildland-Urban Interface Code.** In addition to the provisions and regulations of this code, buildings and structures within any Fire Hazard Severity Zone or Wildland-Urban Interface Area shall comply with the provisions of the California Wildland-Urban Interface Code (CWUIC), and Article 7.1 in Chapter 5 of the LAMC.
- Sec. 392. Division 81 (EXISTING BUILDINGS AND STRUCTURES GENERAL REQUIREMENTS), Article 1, Chapter IX of the Los Angeles Municipal Code shall remain unchanged except as amended herein.
- Sec. 393. Section 91.8110, Division 81, Article 1, Chapter IX of the Los Angeles Municipal Code is deleted:

SEC. 91.8110. UNREINFORCED MASONRY BEARING WALL BUILDINGS.¶

Existing unreinforced masonry bearing wall buildings constructed or under construction prior to October 6, 1933, shall conform to the requirements of Division 88, Article 1, Chapter IX of the LAMC. For other than full compliance to Division 88, Article 1, Chapter IX of the LAMC, all alterations, repairs, additions, Change of Occupancy, change in Class Rating per LAMC Table 88-A, Change in Occupancy Category, and increase in occupant load shall comply with the requirements of Article 1.2, Chapter IX of the LAMC.

- Sec. 394. Division 82 (CHANGE OF OCCUPANCY, USE AND RATING CLASSIFICATION), Article 1, Chapter IX of the Los Angeles Municipal Code shall remain unchanged except as amended herein.
- Sec. 395. Division 83 (RELOCATION PERMIT), Article 1, Chapter IX of the Los Angeles Municipal Code shall remain unchanged except as amended herein.
- Sec. 396. Division 85 (ALTERNATIVE BUILDING STANDARDS FOR JOINT LIVING AND WORK QUARTERS), Article 1, Chapter IX of the Los Angeles Municipal Code shall remain unchanged except as amended herein.
- Sec. 397. Division 86 (SPECIAL PROVISIONS FOR EXISTING BUILDINGS), Article 1, Chapter IX of the Los Angeles Municipal Code shall remain unchanged except as amended herein.
- Sec. 398. Division 88 (EARTHQUAKE HAZARD REDUCTION IN EXISTING BUILDINGS), Article 1, Chapter IX of the Los Angeles Municipal Code shall remain unchanged except as amended herein.
- Sec. 399. Division 89 (ABATEMENT OF BUILDINGS, STRUCTURES, PREMISES AND PORTIONS THEREOF WHICH CONSTITUTE A NUISANCE OR ARE HAZARDOUS, OR SUBSTANDARD), Article 1, Chapter IX of the Los Angeles Municipal Code shall remain unchanged except as amended herein.
- Sec. 400. Division 90 (NUISANCE ABATEMENT AND DISCONTINUANCE OF LAND USE AND DISCRETIONARY ZONING APPROVALS; RELOCATION ASSISTANCE; ENFORCEMENT), Article 1, Chapter IX of the Los Angeles Municipal Code shall remain unchanged except as amended herein.
- Sec. 401. Division 91 (EARTHQUAKE HAZARD REDUCTION IN EXISTING TILT-UP CONCRETE WALL BUILDINGS), Article 1, Chapter IX of the Los Angeles Municipal Code shall remain unchanged except as amended herein.
- Sec. 402. Subsection 91.9108.3 of Section 91.9108, Division 91, Article 1, Chapter IX of the Los Angeles Municipal Code is amended to read as follows:
 - **91.9108.3. Development of Anchor Loads into the Diaphragm.** Development of anchor loads into roof and floor diaphragms shall comply with CBC Section 1616.3LAMC Subsection 91.1613.5.3 and Section 12.11 of ASCE 7.

EXCEPTION: If continuously tied girders are present, then the maximum spacing of the continuity ties is the greater of the girder spacing or 24 feet (7315 mm).

In wood diaphragms, anchorage shall not be accomplished by use of toe nails or nails subject to withdrawal, nor shall wood ledgers, top plates or framing be used in cross-grain bending or cross-grain tension. The continuous ties required by CBC Section 1616.3LAMC Subsection 91.1613.5.3 and Section 12.11 of ASCE 7 shall be in addition to the diaphragm sheathing.

Lengths of development of anchor loads in wood diaphragms shall be based on existing field nailing of the sheathing unless existing edge nailing is positively identified on the original construction plans or at the site.

At reentrant corners, continuity collectors may be required for existing return walls not designed as shear walls, to develop into the diaphragm a force equal to the lesser of the rocking or shear capacity of the return wall, or the tributary shear, but not exceeding the capacity of the diaphragm. Shear anchors for the return wall shall be commensurate with the collector force. If a truss or beam, other than rafters or purlins, is supported by the return wall or by a column integral with the return wall, an independent secondary column, is required to support the roof or floor members whenever rocking or shear capacity of the return wall is governing.

Seismic deflection shall be determined at the return walls, and fins/canopies at entrances, to ensure deflection compatibility with the diaphragm, by either seismically isolating the element or attaching the element and integrating its load into the diaphragm.

- Sec. 403. Division 92 (VOLUNTARY EARTHQUAKE HAZARD REDUCTION IN EXISTING WOOD FRAME RESIDENTIAL BUILDINGS WITH WEAK CRIPPLE WALLS AND UNBOLTED SILL PLATES), Article 1, Chapter IX of the Los Angeles Municipal Code shall remain unchanged except as amended herein.
- Sec. 404. Division 93 (MANDATORY EARTHQUAKE HAZARD REDUCTION IN EXISTING WOOD-FRAME BUILDINGS WITH SOFT, WEAK OR OPEN-FRONT WALLS), Article 1, Chapter IX of the Los Angeles Municipal Code shall remain unchanged except as amended herein.
- Sec. 405. Division 94 (VOLUNTARY EARTHQUAKE HAZARD REDUCTION IN EXISTING HILLSIDE BUILDINGS), Article 1, Chapter IX of the Los Angeles Municipal Code shall remain unchanged except as amended herein.
- Sec. 406. Division 95 (MANDATORY EARTHQUAKE HAZARD REDUCTION IN EXISTING NON-DUCTILE CONCRETE BUILDINGS), Article 1, Chapter IX of the Los Angeles Municipal Code shall remain unchanged except as amended herein.
- Sec. 407. Division 96 (VOLUNTARY EARTHQUAKE HAZARD REDUCTION IN EXISTING REINFORCED CONCRETE AND REINFORCED MASONRY WALL BUILDINGS WITH FLEXIBLE DIAPHRAGMS), Article 1, Chapter IX of the Los Angeles Municipal Code shall remain unchanged except as amended herein.
- Sec. 408. Division 97 (EXISTING BUILDINGS ENERGY AND WATER EFFICIENCY PROGRAM), Article 1, Chapter IX of the Los Angeles Municipal Code shall remain unchanged except as amended herein.
- Sec. 409. Article 1.2, Chapter IX of the Los Angeles Municipal Code is amended, to revise the table of contents and revise Article 1.2 title to Amendments to the California Existing Building Code, to read as follows:

ARTICLE 1.2 AMENDMENTS TO THE CALIFORNIA EXISTING BUILDING CODE

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Division
1 [Scope and 2 [Definitions]
3 [Provisions f
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1 [Scope and Administration]

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4 Repairs[Prescriptive Compliance Method]

5 Prescriptive Compliance Method[Classification of Work]

6 Classification of Work[Repairs]

7 (Alterations - Level 1)

8 (Alterations - Level 2)

9 (Alterations - Level 3)

10 (Change of Occupancy)

11 [Additions]

12 {Historic Buildings}

13 Performance Compliance Methods Relocated or Moved Buildings

14 Relocated or Moved Buildings[Performance Compliance Methods]

15 [Construction Safeguards]

16 [Referenced Standards]

Appendix A. Chapter A1

Appendix A. Chapter A2

Appendix A, Chapter A3

Appendix A, Chapter A4

Appendix A, Chapter A5

Resource A

Sec. 410. Division 1, Article 1.2, Chapter IX of the Los Angeles Municipal Code is amended to Revise Section 91.2.101's title to Scope and General Requirements and delete Section 91.2.102 Scope, with no other changes to existing sections therein, to read as follows:

DIVISION 1 [SCOPE AND ADMINISTRATION]

Section

91.2.100 Basic Provisions.

91.2.101 Scope and General Requirements Title.

91.2.102 Scope.

Sec. 411. Section 91.2.100, Division 1, Article 1.2, Chapter IX of the Los Angeles Municipal Code is amended to read as follows:

SEC. 91.2.100. BASIC PROVISIONS.

The Los Angeles Existing Building Code adopts by reference portions of the 202522 California Existing Building Code (CEBC). Chapter 1 of the CEBC is not adopted. Article 1, Division 1 of Chapter IX of the Los Angeles Municipal Code is adopted by reference with the following additions and amendments.

Sec. 412. Section 91.2.101, Division 1, Article 1.2, Chapter IX of the Los Angeles Municipal Code is amended to read as follows:

SEC. 91.2.101. SCOPE AND GENERAL REQUIREMENTSTITLE.

Article 1.2 of Chapter IX of the Los Angeles Municipal Code (LAMC) shall collectively be known as the Los Angeles Existing Building Code or LAEBC.

- Sec. 413. Subsection 91.2.101.1 of Section 91.2.101, Division 1, Article 1.2, Chapter IX of the Los Angeles Municipal Code is added, to be placed in numerical order, to read as follows:
 - **91.2.101.1 Title.** Article 1.2 of Chapter IX of the Los Angeles Municipal Code (LAMC) shall collectively be known as the Los Angeles Existing Building Code or LAEBC.
- Sec. 414. Subsection 91.2.101.2 of Section 91.2.101, Division 1, Article 1.2, Chapter IX of the Los Angeles Municipal Code is added, to be placed in numerical order, to read as follows:
 - **91.2.101.2 Scope.** The provisions of the LAEBC shall apply to repair, alteration, change of occupancy, addition to and relocation of every existing building or structure or any appurtenances connected or attached to such buildings or structures throughout the City of Los Angeles (City). Wherever the word "Code" is used in this article it shall mean the Los Angeles Existing Building Code.
- Sec. 415. Section 91.2.102, Division 1, Article 1.2, Chapter IX of the Los Angeles Municipal Code is deleted:

SEC. 91.2.102. SCOPE.¶

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The previsions of the LAEBC shall apply to repair, alteration, change of occupancy, addition to and relocation of every existing building or structure or any appurtenances connected or attached to such buildings or structures throughout the City of Los Angeles (City). Wherever the word "Code" is used in this article it shall mean the Los Angeles Existing Building Code.

Sec. 416. Division 2, Article 1.2, Chapter IX of the Los Angeles Municipal Code is amended to delete Section 91.2.201 Definitions, and add Section 91.2.202 General Definitions, to be placed in numerical order, with no other changes to existing sections therein, to read as follows:

DIVISION 2 {DEFINITIONS}

Section

91.2.200 Basic Provisions.

91.2.201 Definitions.

91.2.202 General Definitions

Sec. 417. Section 91.2.201, Division 2, Article 1.2, Chapter IX of the Los Angeles Municipal Code is deleted:

SEC. 91.2.201. DEFINITIONS.

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Section 202 of the CEBC is adopted by reference, except that the following CEBC definitions are not adopted:¶

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GODE OFFICIAL.¶ ¶ BUILDING OFFICIAL.¶ ¶ The following definitions are adopted:¶ ¶ GODE OFFICIAL. See Building Official.¶ ¶ BUILDING OFFICIAL. See Los Angeles Municipal Code Section 91.202.

Sec. 418. Section 91.2.202, Division 2, Article 1.2 Chapter IX of the Los Angeles Municipal Code is added, to be placed in numerical order, to read as follows:

SEC. 91.2.202. GENERAL DEFINITIONS.

Section 202 of the CEBC is adopted by reference, except that the following CEBC definitions are not adopted:

CODE OFFICIAL.

BUILDING OFFICIAL.

The following definitions are adopted:

CODE OFFICIAL. See Building Official.

BUILDING OFFICIAL. See Los Angeles Municipal Code Section 91.202.

Sec. 419. Division 3, Article 1.2, Chapter IX of the Los Angeles Municipal Code is amended to add Section 91.2.302 General Provisions, to be placed in numerical order, with no other changes to existing sections therein, to read as follows:

DIVISION 3 FPROVISIONS FOR ALL COMPLIANCE METHODS

Section 91.2.300 Basic Provisions. 91.2.302 General Provisions.

Sec. 420. Section 91.2.300, Division 3, Article 1.2, Chapter IX of the Los Angeles Municipal Code is amended, with no other changes to existing subsections therein, to read as follows:

SEC. 91.2.300. BASIC PROVISIONS.

Chapter 3 of the 2022 CEBC is hereby adopted by reference except as amended herein.

Sec. 421. Subsection 91.2.302.3 of Section 91.2.300, Division 3, Article 1.2, Chapter IX of the Los Angeles Municipal Code is deleted:

91.2.302.3. Existing Materials. Materials already in use in a building in compliance with requirements or approvals in effect at the time of their erection or installation shall be permitted to remain in use unless determined by the Building Official to be unsafe pursuant to CEBC Section 115.¶

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Replacement, Retention and Extension of Original Materials. The replacement, retention and extension of original materials, and the use of original methods of construction, for any building or accessory structure may remain, provided the aggregate value of work in any 12 month period does not exceed 10% of the replacement value, and provided further that no hazardous conditions exist and provided such building or structure complied with the building code provision in effect at the time of original construction and the building or accessory structure does not become or continue to be a substandard building.¶

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EXCEPTIONS:¶

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1. Replacement, retention and extension of unreinforced masonry wall is not permitted.¶

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- 2. Alteration, repair or rehabilitation of the existing portion in excess of 10% of the replacement value of a building or structure may be made provided that all the work conforms to this Code for a new building and that no hazardous condition or substandard building is continued or created in the remainder of the building as a result of such work.
- Sec. 422. Subsection 91.2.302.6 of Section 91.2.300, Division 3, Article 1.2, Chapter IX of the Los Angeles Municipal Code is deleted:
 - **91.2.302.6. Maintenance.** Buildings and structures, and parts thereof, shall be maintained in a safe and sanitary condition. Devices or safeguards which are required by the CBC and this Code shall be maintained in conformance with the code edition under which installed. The owner or the owner's designated agent shall be responsible for the maintenance of buildings and structures. To determine compliance with this subsection, the Department shall have the authority to require a building or structure to be reinspected. The requirements of this division shall not provide the basis for removal or abrogation of fire protection and safety systems and devices in existing structures. Maintenance of buildings and structures shall comply with Divisions 81 and 86 of Article 1, Chapter IX of the LAMC.
- Sec. 423. Subsection 91.2.302.7 of Section 91.2.300, Division 3, Article 1.2, Chapter IX of the Los Angeles Municipal Code is deleted:
 - 91.2.302.7. Compliance. Alterations, repairs, additions and changes of occupancy to, or relocation of, existing structure shall comply with the provisions for alterations, repairs, additions and changes of occupancy in the Los Angeles Fire Code, Los Angeles Mechanical Code, Los Angeles Plumbing Code, Los Angeles Residential Code and Los Angeles Electrical Code.¶

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Where there are different requirements in this Code, the most restrictive requirement shall govern. Where there is a conflict between a general requirement and a specific requirement, the specific requirement shall be applicable.

Sec. 424. Section 91.2.302, Division 3, Article 1.2 Chapter IX of the Los Angeles Municipal Code is added, to be placed in numerical order, to read as follows:

SEC. 91.2.302. GENERAL PROVISIONS.

Section 302 of the CEBC is hereby adopted by reference except as amended herein.

- Sec. 425. Subsection 91.2.302.3 of Section 91.2.302, Division 3, Article 1.2, Chapter IX of the Los Angeles Municipal Code is added, to be placed in numerical order, to read as follows:
 - **91.2.302.3. Existing Materials.** Materials already in use in a building in compliance with requirements or approvals in effect at the time of their erection or installation shall be permitted to remain in use unless determined by the Building Official to be unsafe pursuant to CEBC Section 115.

Replacement, Retention and Extension of Original Materials. The replacement, retention and extension of original materials, and the use of original methods of construction, for any building or accessory structure may remain, provided the aggregate value of work in any 12 month period does not exceed 10 percent of the replacement value, and provided further that no hazardous conditions exist and provided such building or structure complied with the building code provision in effect at the time of original construction and the building or accessory structure does not become or continue to be a substandard building.

EXCEPTIONS:

- 1. Replacement, retention and extension of unreinforced masonry wall is not permitted.
- 2. Alteration, repair or rehabilitation of the existing portion in excess of 10 percent of the replacement value of a building or structure may be made provided that all the work conforms to this Code for a new building and that no hazardous condition or substandard building is continued or created in the remainder of the building as a result of such work.
- Sec. 426. Subsection 91.2.302.6 of Section 91.2.302, Division 3, Article 1.2, Chapter IX of the Los Angeles Municipal Code is added, to be placed in numerical order, to read as follows:
 - **91.2.302.6. Maintenance.** Buildings and structures, and parts thereof, shall be maintained in a safe and sanitary condition. Devices or safeguards which are required by the CBC and this Code shall be maintained in conformance with the code edition under which installed. The owner or the owner's designated agent shall be responsible for the maintenance of buildings and structures. To determine compliance with this subsection, the Department shall have the authority to require a building or structure to be reinspected. The requirements of this division shall not provide the basis for removal or abrogation of fire protection and safety systems and devices in existing structures. Maintenance of buildings and structures shall comply with Divisions 81 and 86 of Article 1, Chapter IX of the LAMC.

- Sec. 427. Subsection 91.2.302.7 of Section 91.2.302, Division 3, Article 1.2, Chapter IX of the Los Angeles Municipal Code is added, to be placed in numerical order, to read as follows:
 - **91.2.302.7. Compliance.** Alterations, repairs, additions and changes of occupancy to, or relocation of, existing structure shall comply with the provisions for alterations, repairs, additions and changes of occupancy in the Los Angeles Fire Code, Los Angeles Mechanical Code, Los Angeles Plumbing Code, Los Angeles Residential Code and Los Angeles Electrical Code.

Where there are different requirements in this Code, the most restrictive requirement shall govern. Where there is a conflict between a general requirement and a specific requirement, the specific requirement shall be applicable.

Sec. 428. Division 4, Article 1.2, Chapter IX of the Los Angeles Municipal Code is amended to add Section 91.2.401 General, to be placed in numerical order, with no other changes to existing sections therein, to read as follows:

DIVISION 4 REPAIRS[PRESCRIPTIVE COMPLIANCE METHOD]

Section

91.2.400 Basic Provisions.

91.2.401 General.

- Sec. 429. Subsection 91.2.401 of Section 91.2.400, Division 4, Article 1.2, Chapter IX of the Los Angeles Municipal Code is deleted:
 - **91.2.401.** Scope. Repairs shall comply with the requirements of this division. Repair to historic buildings need only comply with Chapter 12 of the CEBC. [OSHPD 1R, 2, 4, & 5] repairs to historic buildings not adopted by OSHPD shall comply with the requirements in the California Building Code, Sections 1224.2, 1225.2, 1226.2, 1227.2 and 1228.2 for functional requirements. In addition to the requirements of the CEBC, existing buildings and structures shall comply with the applicable regulations of Divisions 81, 82, 83, 84, 85, 86, 88, 89, 91, 93, 95 and 97 of the Los Angeles Building Code (LABC) at Article 1, Chapter IX of the LAMC, Appendix A Chapters A1 and A2 of the LAEBC, and the voluntary earthquake hazard reduction standards of Divisions 92, 94 and 96 of Article 1, Chapter IX of the LAMC.
- Sec. 430. Section 91.2.401, Division 4, Article 1.2 Chapter IX of the Los Angeles Municipal Code is added, to be placed in numerical order, to read as follows:

SEC. 91.2.401. GENERAL.

Section 401 of the CEBC is hereby adopted by reference except as amended herein.

- Sec. 431. Subsection 91.2.401.1 of Section 91.2.401, Division 4, Article 1.2, Chapter IX of the Los Angeles Municipal Code is added to read as follows:
 - **91.2.401.1 Scope.** Repairs shall comply with the requirements of this division. Repairs to historic buildings and structures shall comply with Part 8, Title 24, C.C.R. [OSHPD 1R, 2, 4, & 5] Repairs to historic buildings not adopted by OSHPD. Repairs shall comply with

the requirements in the California Building Code, Sections 1224.2, 1225.2, 1226.2, 1227.2 and 1228.2 for functional requirements as applicable. In addition to the requirements of the CEBC, existing buildings and structures shall comply with the applicable regulations of Divisions 81, 82, 83, 84, 85, 86, 88, 89, 91, 93, 95 and 97 of the Los Angeles Building Code (LABC), at Article 1, Chapter IX of the LAMC, Appendix A Chapters A1, A2, A3, A4 and A5 of the LAEBC, and the voluntary earthquake hazard reduction standards of Divisions 92, 94 and 96 of Article 1, Chapter IX of the LAMC.

Sec. 432. Division 5, Article 1.2, Chapter IX of the Los Angeles Municipal Code is amended to add Sections 91.2.501 General, 91.2.502 Additions, 91.2.503 Alterations, and 91.2.506 Change of Occupancy, to be placed in numerical order, with no other changes to existing sections therein, to read as follows:

DIVISION 5 PRESCRIPTIVE COMPLIANCE METHODICLASSIFICATION OF WORK!

Section

91.2.500 Basic Provisions.

91.2.501 General.

91.2.502 Additions.

91.2.503 Alterations.

91.2.506 Change of Occupancy.

Sec. 433. Subsection 91.2.501.1 of Section 91.2.500, Division 5, Article 1.2, Chapter IX of the Los Angeles Municipal Code is deleted:

91.2.501.1. Scope. The provisions of this division shall control the alternation, additionand change of occupancy of existing buildings and structures, [BSC] including state-regulated structures in accordance with Section 501.1.2 of the CEBC. In addition to the requirements of the CEBC, existing buildings and structures shall comply with the applicable regulations of Divisions 81, 82, 83, 84, 85, 86, 88, 89, 91, 93, 95 and 97 of the Los Angeles Building Code (LABC) at Article 1, Chapter IX of the LAMC, Appendix A Chapters A1 and A2 of the LAEBC, and the voluntary earthquake hazard reduction standards of Divisions 92, 94 and 96 of Article 1, Chapter IX of the LAMC.

Sec. 434. Subsection 91.2.502.5 of Section 91.2.500, Division 5, Article 1.2, Chapter IX of the Los Angeles Municipal Code is deleted:

91.2.502.5. Existing Structural Elements Carrying Lateral Load. Where the addition is structurally independent of the existing structure, existing lateral load-carrying structural elements shall be permitted to remain unaltered. Where the addition is not structurally independent of the existing structure, the existing structure and its addition acting together as a single structure shall be shown to meet the requirements of Sections 1609 and 1613 of the California Building Code using full seismic forces. For purposes of CEBC Section 502, compliance with ASCE 41, using a Tier 3 procedure and the two level performance objective in CEBC Table 303.3.1 for the applicable risk category, shall be deemed to meet the requirements of CBC Section 1613, with procedures established by the Department.¶

EXCEPTIONS:¶

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1. Except for Unreinforced Masonry (URM) Buildings:

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Any existing lateral load-carrying structural element whose demand-capacity ratio with the addition considered is no more than 10% greater than its demand-capacity ratio with the addition ignored shall be permitted to remain unaltered. For purposes of calculating demand-capacity ratios, the demand shall consider applicable load combinations with design lateral loads or forces in accordance with CBC Sections 1609 and 1613. For purposes of this exception, comparisons of demand-capacity ratios and calculations of design lateral loads, forces and capacities shall account for the cumulative effects of additions and alterations since original construction.

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The additions do not create structural irregularity as defined in ASCE 7 or make an existing structural irregularity more severe.

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2. Unreinforced Masonry (URM) Buildings:¶

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Any existing lateral load-carrying structural element on an unreinforced masonry building whose demand-capacity ratio with the addition considered less than 10% greater than its demand-capacity ratio with the addition, must comply with CEBC Appendix Chapter A1. When the demand-capacity ratio with the addition considered is 10% or greater than its demand-capacity ratio with the addition ignored, shall be designed per CBC Division 16.¶

Sec. 435. Subsection 91.2.503.4 of Section 91.2.500, Division 5, Article 1.2, Chapter IX of the Los Angeles Municipal Code is deleted:

91.2.503.4. Existing Structural Elements Carrying Lateral Load. Except as permitted by CEBC Section 503.13, where the alteration increases design lateral loads in accordance with CBC Section 1609 or 1613, or where the alteration results in a prohibited structural irregularity as defined in ASCE 7, or where the alteration decreases the capacity of any existing lateral load-carrying structural element, the structure of the altered building or structure shall be shown to meet the requirements of CBC Sections 1609 and 1613. Reduced seismic loads shall be permitted providing the reduced seismic load is not less than the original building permitted seismic loads. For purposes of CEBC Section 503, compliance with ASCE 41, using the performance objective in CEBC Table 303.3.1 for the applicable risk category, shall be deemed to meet the requirements of CBC Section 1613, and using the performance objective in CEBC Table 303.3.2 for the applicable risk category, shall be deemed to meet the requirements of reduced seismic loads, with procedures established by the Department.¶

EXCEPTIONS:¶

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1. Except for Unreinforced Masonry Buildings (URM):¶

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Any existing lateral load-carrying structural element whosedemand-capacity ratio with the alteration considered is no more than 10% greater than its demand-capacity ratio with the alteration ignored shall be permitted to remain unaltered. For purposes of calculating demand-capacity ratios, the demand shall consider applicable load combinations with design lateral loads or forces in accordance with CBC Sections 1609 and 1613. Reduce seismic forces shall be permitted. For purposes of this exception, comparisons of demand-capacity ratios and calculations of design lateral loads, forces and capacities shall account for the cumulative effects of additions and alterations since original construction.

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The alternations do not create structural irregularity as defined in ASCE 7 or make an existing structural irregularity more severe.¶

-¶

2. Unreinforced Masonry (URM) Buildings:¶

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Any existing lateral load-carrying structural element on an URM building whose demand-capacity ratio with the alteration considered is less than 10% greater than its demand-capacity ratio with the alteration, it shall comply with CEBC Appendix Chapter A1. When the demand-capacity ratio with the alteration considered is 10% or greater than its demand-capacity ratio with the alteration ignored, it shall be designed per CBC Chapter 16.¶

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Structural analysis per CEBC Appendix Chapter A1 is required for any alterations to crosswalls or diaphragms.

Sec. 436. Subsection 91.2.506.5.3 of Section 91.2.500, Division 5, Article 1.2, Chapter IX of the Los Angeles Municipal Code is deleted:

91.2.506.5.3. Seismic Loads (seismic force-resisting system). Where a change of occupancy results in a building being assigned to a higher risk category, or where the change is from a Group S or U occupancy to an occupancy other than Group S or Group U, the building shall satisfy the requirements of Section 1613 of the California Building Code for the new risk category using full seismic forces. For purposes of this Section, compliance with ASCE 41, using a Tier 3 procedure and the two-level performance objective in CEBC Table 303.3.1 for the applicable risk category, shall be deemed to meet the requirements of CBC Section 1613, with procedures established by the Department.¶

-¶

EXCEPTIONS:¶

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1. Where the area of the new occupancy is less than 10% of the building area, the occupancy is not changing from a Group S or Group U, and the new occupancy is not assigned to Risk Category IV, compliance with this Section is not required. The cumulative effect of occupancy changes over time shall be considered.

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2. When a change of use results in a structure being reclassified from Risk Category I or II to Risk Category III and the structure is located where the seismic coefficient, SDS, is less than 0.33, compliance with the seismic requirements of CBC Sec. 1613 is not required.¶

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3. Unreinforced masonry bearing wall buildings assigned to Risk Category III and to Seismic Design Category A or B shall be permitted to use Appendix Chapter A1 of this code.

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4. Where the change is from a Group S or Group U occupancy and there is no change of risk category, use of reduced seismic forces shall be permitted.¶

For a change of occupancy of an existing commercial or industrial building to residential use, all existing buildings shall be analyzed for 75% of the design earthquake ground motion, as defined in CBC Section 1613, but in no event shall there be a reduction in the capacity of the seismic force resisting system where that system provides a greater level of protection than the minimum requirements established by this Code.¶

For an existing URM building, structural analysis per CBC Chapter 16 is required if the risk category is changed to III or IV. Structural analysis per CEBC Appendix A1 is required if rating classification per LABC Division 88, Table 88-A is changed to I or II.¶

For URM buildings with an approved occupant load greater than 100, the occupant load-may be increased by a maximum of 10% without changing the rating class or risk category.¶

The most restrictive requirement of CEBC Sections 502 (Addition), 503 (Alternation), 405 (Repair) and 506 (Change of Occupancy) shall apply.

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Sec. 437. Section 91.2.501, Division 5, Article 1.2 Chapter IX of the Los Angeles Municipal Code is added, to be placed in numerical order, to read as follows:

SEC. 91.2.501. GENERAL.

Section 501 of the CEBC is hereby adopted by reference except as amended herein.

- Sec. 438. Subsection 91.2.501.1 of Section 91.2.501, Division 5, Article 1.2, Chapter IX of the Los Angeles Municipal Code is added, to be placed in numerical order, to read as follows:
 - **91.2.501.1. Scope.** The provisions of this division shall control the alternation, addition and change of occupancy of existing buildings and structures, including historic buildings and structures, [BSC] including state-regulated structures in accordance with Section 501.1.2 of the CEBC. Historic buildings and structures shall comply with Part 8, Title 24, C.C.R. In addition to the requirements of the CEBC, existing buildings and structures shall comply with the applicable regulations of Divisions 81, 82, 83, 84, 85, 86, 88, 89, 91, 93, 95 and 97 of the Los Angeles Building Code (LABC), Article 1, Chapter IX of the LAMC, Appendix A Chapters A1, A2, A3, A4 and A5 of the LAEBC, and the voluntary earthquake hazard reduction standards of Divisions 92, 94 and 96 of Article 1, Chapter IX of the LAMC.
- Sec. 439. Subsection 91.2.501.6 of Section 91.2.501, Division 5, Article 1.2, Chapter IX of the Los Angeles Municipal Code is added, to be placed in numerical order, to read as follows:
 - **91.2.501.6. Unreinforced Masonry Buildings.** For unreinforced masonry (URM) buildings with an approved occupant load greater than 100, the occupant load may be

increased by a maximum of 10 percent as long as the Rating Class or risk category is not changed.

If the occupant load increase is over 10 percent, then compliance with CEBC Appendix Chapter A1 is required as long as there is no change in risk category. If there is a change in risk category, then compliance with CEBC Section 304.3.1 is required.

Sec. 440. Section 91.2.502, Division 5, Article 1.2 Chapter IX of the Los Angeles Municipal Code is added, to be placed in numerical order, to read as follows:

SEC. 91.2.502. ADDITIONS.

Section 502 of the CEBC is hereby adopted by reference except as amended herein.

Sec. 441. Subsection 91.2.502.4 of Section 91.2.502, Division 5, Article 1.2, Chapter IX of the Los Angeles Municipal Code is added, to be placed in numerical order, to read as follows:

91.2.502.4. Existing Structural Elements Carrying Lateral Load. Where the addition is structurally independent of the existing structure, existing lateral load-carrying structural elements shall be permitted to remain unaltered. Where the addition is not structurally independent of the existing structure, the lateral force-resisting system of the existing structure and its addition acting together as a single structure shall comply with Section 1609 of the California Building Code and with Section 304.3.1 of this code.

EXCEPTIONS:

1. Except for Unreinforced Masonry (URM) Buildings, any existing lateral load-carrying structural element whose demand-capacity ratio with the addition considered is not more than 10 percent greater than its demand-capacity ratio with the addition ignored shall be permitted to remain unaltered. For purposes of calculating demand-capacity ratios, the demand shall consider applicable load combinations with design lateral loads or forces in accordance with Sections 1609 and 1613 of the California Building Code. For purposes of this exception, comparisons of demand-capacity ratios and calculation of design lateral loads, forces and capacities shall account for the cumulative effects of additions and alterations since original construction. When calculating demand-capacity ratios for wind, the date of original construction shall be permitted to be taken as the date of completion of a prior addition, alteration or repair in compliance with Section 1609 of the California Building Code or the code wind forces in effect at the time. When calculating demand-capacity ratios for earthquake, the date of original construction shall be permitted to be taken as the date of completion of a prior addition, alteration or repair in compliance with CEBC Section 304.3.1 or the full seismic forces in effect at the time.

The additions do not create structural irregularity as defined in ASCE 7 or make an existing structural irregularity more severe.

2. For Unreinforced Masonry (URM) Buildings, any existing lateral load-carrying structural element whose demand-capacity ratio with the

addition considered is less than 10 percent greater than its demand-capacity ratio with the addition ignored, must comply with CEBC Appendix Chapter A1. Any existing lateral load-carrying structural element whose demand-capacity ratio with the addition considered is 10 percent or greater than its demand-capacity ratio with the addition ignored, must comply with CEBC Section 304.3.1.

- 3. Buildings of Group R occupancy with not more than five dwelling or sleeping units used solely for residential purposes where the existing building and the addition together comply with the conventional light-frame construction methods of the California Building Code or the provisions of the California Residential Code.
- Sec. 442. Section 91.2.503, Division 5, Article 1.2 Chapter IX of the Los Angeles Municipal Code is added, to be placed in numerical order, to read as follows:

SEC. 91.2.503. ALTERATIONS.

Section 503 of the CEBC is hereby adopted by reference except as amended herein.

Sec. 443. Subsection 91.2.503.4 of Section 91.2.500, Division 5, Article 1.2, Chapter IX of the Los Angeles Municipal Code is added, to be placed in numerical order, to read as follows:

91.2.503.4. Existing Structural Elements Carrying Lateral Load. Except as permitted by CEBC Section 503.13, where the alteration increases design lateral loads, results in a prohibited structural irregularity as defined in ASCE 7, or decreases the capacity of any existing lateral load-carrying structural element, the lateral force-resisting system of the altered building or structure shall meet the requirements of Section 1609 of the California Building Code and Section 304.3.2 of this code. Reduced seismic loads, in accordance with CEBC Section 304.3.2, shall be permitted provided the reduced seismic load is not less than the original building permitted seismic loads.

EXCEPTIONS:

1. Except for Unreinforced Masonry Buildings (URM), any existing lateral load-carrying structural element whose demand-capacity ratio with the alteration considered is not more than 10 percent greater than its demand-capacity ratio with the alteration ignored shall be permitted to remain unaltered. For purposes of calculating demand-capacity ratios, the demand shall consider applicable load combinations with design lateral loads or forces in accordance with Section 1609 of the California Building Code and Section 304.3.1 or 304.3.2 of this code. The same methodology shall be used for the altered and unaltered structures. For purposes of this exception, comparisons of demand-capacity ratios and calculation of design lateral loads, forces and capacities shall account for the cumulative effects of additions and alterations since original construction. When calculating demand-capacity ratios for wind, the date of original construction shall be permitted to be taken as the date of completion of a prior addition, alteration or repair in compliance with Section 1609 of the California Building Code or the code wind forces in effect at the time. When calculating demand-capacity ratios for

earthquake, the date of original construction shall be permitted to be taken as the date of completion of a prior addition, alteration or repair in compliance with CEBC Section 304.3.1 or CEBC Section 304.3.2, Item 1 or 3, or the full or reduced seismic forces in effect at the time. Reduced seismic loads, in accordance with CEBC Section 304.3.2, shall be permitted provided the reduced seismic load is not less than the original building permitted seismic loads.

The alternations do not create structural irregularity as defined in ASCE 7 or make an existing structural irregularity more severe.

2. For Unreinforced Masonry (URM) Buildings, any existing lateral load-carrying structural element whose demand-capacity ratio with the alteration considered is less than 10 percent greater than its demand-capacity ratio with the alteration ignored, must comply with CEBC Appendix Chapter A1. Any existing lateral load-carrying structural element whose demand-capacity ratio with the alteration considered is 10 percent or greater than its demand-capacity ratio with the alteration ignored, must comply with CEBC Section 304.3.1.

Structural analysis per CEBC Appendix Chapter A1 is required for any alterations to crosswalls or diaphragms.

- 3. Except for Unreinforced Masonry Buildings (URM), buildings in which the increase in the demand-capacity ratio is due entirely to the addition of rooftop-supported mechanical equipment individually having an operating weight less than 400 pounds (181.4 kg) and where the total additional weight of all rooftop equipment placed after initial construction of the building is less than 10 percent of the roof dead load. For purposes of this exception, "roof" shall mean the roof level above a particular story
- 4. Except for Unreinforced Masonry Buildings (URM), increases in the demand-capacity ratio due to lateral loads from seismic forces need not be evaluated for the installation of rooftop photovoltaic panel systems where the additional roof dead load due to the system, including ballast where applicable, does not exceed 5 pounds per square foot (psf) (0.2394 kN/m²) and does not exceed 10 percent of the dead load of the existing roof.
- Sec. 444. Section 91.2.506, Division 5, Article 1.2 Chapter IX of the Los Angeles Municipal Code is added, to be placed in numerical order, to read as follows:

SEC. 91.2.506. CHANGE OF OCCUPANCY.

Section 506 of the CEBC is hereby adopted by reference except as amended herein.

Sec. 445. Subsection 91.2.506.5.3 of Section 91.2.506, Division 5, Article 1.2, Chapter IX of the Los Angeles Municipal Code is added, to be placed in numerical order, to read as follows:

91.2.506.5.3. Seismic Loads (seismic force-resisting system). Where a change of occupancy results in a building being assigned to a higher risk category, or where the change is from a Group S or U occupancy to an occupancy other than Group S or Group U, the lateral force-resisting system of the building shall comply with CEBC Section 304.3.1 for the new risk category. Where a change of occupancy results in a building being assigned to Risk Category IV and Seismic Design Category D or F, nonstructural components serving any portion of the building changed to Risk Category IV shall comply with the requirements of Section 1613 of the California Building Code or shall comply with ASCE 41 using an objective of Operational nonstructural performance with the BSE-1N earthquake hazard level.

EXCEPTIONS:

- 1. Where the area of the new occupancy is less than 10 percent of the building area, the occupancy is not changing from a Group S or Group U, and the new occupancy is not assigned to Risk Category IV, compliance with this Section is not required. The cumulative effect of occupancy changes over time shall be considered.
- 2. Where a change of use results in a building being reclassified from Risk Category I or II to Risk Category III and the seismic coefficient, S_{DS}, is less than 0.33, compliance with this section is not required.
- 3. Unreinforced masonry bearing wall buildings assigned to Risk Category III and to Seismic Design Category A or B shall be permitted to use Appendix Chapter A1 of this code.
- 4. Where the change is from a Group S or Group U occupancy and there is no change of risk category, compliance with CEBC Section 304.3.2 shall be permitted. Reduced seismic loads, in accordance with CEBC Section 304.3.2, shall be permitted provided the reduced seismic load is not less than the original building permitted seismic loads.

For a change of occupancy of an existing commercial or industrial building to residential use, all existing buildings shall be analyzed for 75 percent of the design earthquake ground motion, as defined in CBC Section 1613, but in no event shall there be a reduction in the capacity of the seismic force resisting system where that system provides a greater level of protection than the minimum requirements established by this Code.

For an existing URM building, structural analysis per CBC Chapter 16 is required if the risk category is changed to III or IV. Structural analysis per CEBC Appendix A1 is required if rating classification per LABC Division 88, Table 88-A is changed to I or II. The most restrictive requirements of CEBC Sections 502 (Addition), 503 (Alternation), 405 (Repair) and 506 (Change of Occupancy) shall apply.

Sec. 446. Division 6, Article 1.2, Chapter IX of the Los Angeles Municipal Code is amended to add Section 91.2.601 General, to be placed in numerical order, with no other changes to existing sections therein, to read as follows:

DIVISION 6

CLASSIFICATION OF WORK[REPAIRS]

Section

91.2.600 Basic Provisions.

91.2.601 General.

Sec. 447. Section 91.2.600, Division 6, Article 1.2, Chapter IX of the Los Angeles Municipal Code is amended to read as follows:

SEC. 91.2.600. BASIC PROVISIONS.

Chapter 6 of the CEBC is hereby adopted by reference except as amended herein.

Sec. 448. Section 91.2.601, Division 6, Article 1.2 Chapter IX of the Los Angeles Municipal Code is added, to be placed in numerical order, to read as follows:

SEC. 91.2.601. GENERAL.

Section 601 of the CEBC is hereby adopted by reference except as amended herein.

Sec. 449. Subsection 91.2.601.1 of Section 91.2.601, Division 6, Article 1.2, Chapter IX of the Los Angeles Municipal Code is added, to be placed in numerical order, to read as follows:

91.2.601.1. Scope. The provisions of this chapter shall be used in conjunction with Chapters 7 through 11 and shall apply to the alteration, addition and change of occupancy of existing structures, as referenced in CEBC Section 301.3.2. The work performed on an existing building shall be classified in accordance with this chapter. Historic buildings and structures shall comply with Part 8, Title 24, C.C.R. In addition to the requirements of the CEBC, existing buildings and structures shall comply with the applicable regulations of Divisions 81, 82, 83, 84, 85, 86, 88, 89, 91, 93, 95 and 97 of the Los Angeles Building Code (LABC), Appendix A Chapters A1, A2, A3, A4 and A5 of the LAEBC, and the voluntary earthquake hazard reduction standards of Divisions 92, 94 and 96 of the LABC.

EXCEPTIONS:

- 1. [SFM] Use of Chapters 6-11 is not permitted in H. I and L. R-2.1, R-3.1 occupancies and high-rise buildings.
- 2. [BSC] Use of Chapters 6-11 is not permitted in occupancies, buildings and applications regulated by Building Standards Commission and listed in Section 1.2.
- Sec. 450. Subsection 91.2.601.3 of Section 91.2.601, Division 6, Article 1.2, Chapter IX of the Los Angeles Municipal Code is added, to be placed in numerical order, to read as follows:
 - **91.2.601.3. Unreinforced Masonry Buildings.** For unreinforced masonry (URM) buildings with an approved occupant load greater than 100, the occupant load may be increased by a maximum of 10 percent as long as the Rating Class or risk category is not changed.

If the occupant load increase is over 10 percent, then compliance with CEBC Appendix Chapter A1 is required as long as there is no change in risk category. If there is a change in risk category, then compliance with CEBC Section 304.3.1 is required.

Sec. 451. Division 7, Article 1.2, Chapter IX of the Los Angeles Municipal Code is amended, with no other changes to existing sections therein, to read as follows:

DIVISION 7 {ALTERATIONS - LEVEL 1}

Section

91.2.700 Basic Provisions.

Sec. 452. Division 8, Article 1.2, Chapter IX of the Los Angeles Municipal Code is amended to add Section 91.2.805 Structural, to be placed in numerical order, with no other changes to existing sections therein, to read as follows:

DIVISION 8 {ALTERATIONS - LEVEL 2}

Section

91.2.800 Basic Provisions.

91.2.805 Structural.

Sec. 453. Section 91.2.800, Division 8, Article 1.2, Chapter IX of the Los Angeles Municipal Code is amended to read as follows:

SEC. 91.2.800. BASIC PROVISIONS.

Chapter 8 of the CEBC is hereby adopted by reference except as amended herein.

Sec. 454. Section 91.2.805, Division 8, Article 1.2 Chapter IX of the Los Angeles Municipal Code is added, to be placed in numerical order, to read as follows:

SEC. 91.2.805. STRUCTURAL.

Section 805 of the CEBC is hereby adopted by reference except as amended herein.

Sec. 455. Subsection 91.2.805.3 of Section 91.2.805, Division 8, Article 1.2, Chapter IX of the Los Angeles Municipal Code is added, to be placed in numerical order, to read as follows:

91.2.805.3. Existing structural elements resisting lateral loads. Except as permitted by CEBC Section 805.4, where the alteration increases design lateral loads, or where the alteration results in prohibited structural irregularity as defined in ASCE 7, or where the alteration decreases the capacity of any existing lateral load-carrying structural element, the lateral force-resisting system of the altered building or structure shall meet the requirements of Section 1609 of the California Building Code and Section 304.3.2 of this code. Reduced seismic forces, in accordance with CEBC Section 304.3.2, shall be permitted, provided the reduced seismic load is not less than the original building permitted seismic loads.

EXCEPTIONS:

1. Except for Unreinforced Masonry Buildings (URM), any existing lateral load-carrying structural element whose demand-capacity ratio with the alteration considered is not more than 10 percent greater than its demand-capacity ratio with the alteration ignored shall be permitted to remain unaltered. For purposes of calculating demand-capacity ratios, the demand shall consider applicable load combinations with design lateral loads or forces in accordance with Section 1609 of the California Building Code and Section 304.3.1 or 304.3.2 of this code. The same methodology shall be used for the altered and unaltered structures. For purposes of this exception, comparisons of demand-capacity ratios and calculation of design lateral loads, forces and capacities shall account for the cumulative effects of additions and alterations since original construction. When calculating demand-capacity ratios for wind, the date of original construction shall be permitted to be taken as the date of completion of a prior addition, alteration or repair in compliance with Section 1609 of the California Building Code or the code wind forces in effect at the time. When calculating demand-capacity ratios for earthquake, the date of original construction shall be permitted to be taken as the date of completion of a prior addition, alteration or repair in compliance with CEBC Section 304.3.1 or CEBC Section 304.3.2. Item 1 or 3, or the full or reduced seismic forces in effect at the time. Reduced seismic loads, in accordance with CEBC Section 304.3.2, shall be permitted provided the reduced seismic load is not less than the original building permitted seismic loads.

The alternations do not create structural irregularity as defined in ASCE 7 or make an existing structural irregularity more severe.

- 2. For Unreinforced Masonry (URM) Buildings, any existing lateral load-carrying structural element whose demand-capacity ratio with the alteration considered is less than 10 percent greater than its demand-capacity ratio with the alteration ignored, must comply with CEBC Appendix Chapter A1. Any existing lateral load-carrying structural element whose demand-capacity ratio with the alteration considered is 10 percent or greater than its demand-capacity ratio with the alteration ignored, must comply with CEBC Section 304.3.1.
 - Structural analysis per CEBC Appendix Chapter A1 is required for any alterations to crosswalls or diaphragms.
- 3. Except for Unreinforced Masonry Buildings (URM), buildings in which the increase in the demand-capacity ratio is due entirely to the addition of rooftop-supported mechanical equipment individually having an operating weight less than 400 pounds (181.4 kg) and where the total additional weight of all rooftop equipment placed after initial construction of the building is less than 10 percent of the roof dead load. For purposes of this exception, "roof" shall mean the roof level above a particular story

- 4. Except for Unreinforced Masonry Buildings (URM), increases in the demand-capacity ratio due to lateral loads from seismic forces need not be evaluated for the installation of rooftop photovoltaic panel systems where the additional roof dead load due to the system, including ballast where applicable, does not exceed 5 pounds per square foot (psf) (0.2394 kN/m²) and does not exceed 10 percent of the dead load of the existing roof.
- Sec. 456. Division 9, Article 1.2, Chapter IX of the Los Angeles Municipal Code is amended to add Section 91.2.906 Structural, to be placed in numerical order, with no other changes to existing sections therein, to read as follows:

DIVISION 9 {ALTERATIONS - LEVEL 3}

Section

91.2.900 Basic Provisions.

91.2.906 Structural.

Sec. 457. Section 91.2.900, Division 9 Article 1.2, Chapter IX of the Los Angeles Municipal Code is amended to read as follows:

SEC. 91.2.900. BASIC PROVISIONS.

Chapter 9 of the CEBC is hereby adopted by reference except as amended herein.

Sec. 458. Section 91.2.906, Division 9, Article 1.2 Chapter IX of the Los Angeles Municipal Code is added, to be placed in numerical order, to read as follows:

SEC. 91.2.906. STRUCTURAL.

Section 906 of the CEBC is hereby adopted by reference except as amended herein.

- Sec. 459. Subsection 91.2.906.2 of Section 91.2.906 Division 9, Article 1.2, Chapter IX of the Los Angeles Municipal Code is added, to be placed in numerical order, to read as follows:
 - **91.2.906.2.** Existing structural elements resisting lateral loads. Where work involves a substantial structural alteration, the lateral load-resisting system of the altered building shall be shown to satisfy the requirements of Section 1609 of the California Building Code and Section 304.3.2 of this code. Reduced seismic forces, in accordance with CEBC Section 304.3.2, shall be permitted, provided the reduced seismic load is not less than the original building permitted seismic loads. Where the building is assigned to Seismic Design Category D or F, supports and attachments for nonstructural components required to serve any portion of the building with a use included in Risk Category IV shall comply with Section 1613 of the California Building Code or shall comply with ASCE 41 using an objective of Position Retention nonstructural performance with the BSE-1E earthquake hazard level.

EXCEPTIONS:

- Buildings of Group R occupancy with not more than five dwelling or sleeping units used solely for residential purposes that are altered based on the conventional light-frame construction methods of the California Building Code or in compliance with the provisions of the California Residential Code.
- Where the intended alteration involves only the lowest story of a building, only the lateral load resisting components in and below that story need comply with this section. The alternations do not create structural irregularity as defined in ASCE 7 or make an existing structural irregularity more severe.
- Sec. 460. Division 10, Article 1.2, Chapter IX of the Los Angeles Municipal Code is amended to add Section 91.2.1006 Structural, to be placed in numerical order, with no other changes to existing sections therein, to read as follows:

DIVISION 10 [CHANGE OF OCCUPANCY]

Section 91.2.1000 Basic Provisions. 91.2.1006 Structural.

Sec. 461. Section 91.2.1000, Division 10, Article 1.2, Chapter IX of the Los Angeles Municipal Code is amended to read as follows:

SEC. 91.2.1000. BASIC PROVISIONS.

Chapter 10 of the CEBC is hereby adopted by reference except as amended herein.

Sec. 462. Section 91.2.1006, Division 10, Article 1.2 Chapter IX of the Los Angeles Municipal Code is added, to be placed in numerical order, to read as follows:

SEC. 91.2.1006. STRUCTURAL.

Section 1006 of the CEBC is hereby adopted by reference except as amended herein.

- Sec. 463. Subsection 91.2.1006.3 of Section 91.2.1006, Division 10, Article 1.2, Chapter IX of the Los Angeles Municipal Code is added, to be placed in numerical order, to read as follows:
 - **91.2.1006.3 Seismic loads.** Where a change of occupancy results in a building being assigned to a higher risk category, or where the change is from a Group S or Group U occupancy to any occupancy other than Group S or Group U, the lateral force-resisting system of the building shall comply with CEBC Section 304.3.1 for the new risk category. Where a change of occupancy results in a building being assigned to Risk Category IV and Seismic Design Category D or F, nonstructural components serving any portion of the building changed to Risk Category IV shall comply with the requirements of Section 1613 of the California Building Code or shall comply with ASCE 41 using an objective of operational nonstructural performance with the BSE-1N earthquake hazard level.

EXCEPTIONS:

- 1. Where a change of use results in a building being reclassified from Risk Category I or II to Risk Category III and the seismic coefficient, S_{DS}, is less than 0.33, compliance with this section is not required.
- 2. Where the area of the new occupancy is less than 10 percent of the building area, the occupancy is not changing from a Group S or Group U occupancy, and the new occupancy is not assigned to Risk Category IV, compliance with this section is not required. The cumulative effect of occupancy changes over time shall be considered.
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- 4. Where the change is from a Group S or Group U occupancy and there is no change of risk category, compliance with CEBC Section 304.3.2 shall be permitted. Reduced seismic loads, in accordance with CEBC Section 304.3.2, shall be permitted provided the reduced seismic load is not less than the original building permitted seismic loads.

For a change of occupancy of an existing commercial or industrial building to residential use, all existing buildings shall be analyzed for 75 percent of the design earthquake ground motion, as defined in CBC Section 1613, but in no event shall there be a reduction in the capacity of the seismic force resisting system where that system provides a greater level of protection than the minimum requirements established by this Code.

For an existing URM building, structural analysis per CBC Chapter 16 is required if the risk category is changed to III or IV. Structural analysis per CEBC Appendix A1 is required if rating classification per LABC Division 88, Table 88-A is changed to I or II.

The most restrictive requirements of CEBC Chapter 4, and Chapters 6 through 11 shall apply.

Sec. 464. Division 11, Article 1.2, Chapter IX of the Los Angeles Municipal Code is amended to add Section 91.2.1103 Structural, to be placed in numerical order, with no other changes to existing sections therein, to read as follows:

DIVISION 11 [ADDITIONS]

Section

91.2.1100 Basic Provisions.

91.2.1103 Structural.

Sec. 465. Section 91.2.1100, Division 11, Article 1.2, Chapter IX of the Los Angeles Municipal Code is amended to read as follows:

SEC. 91.2.1100. BASIC PROVISIONS.

Chapter 11 of the CEBC is hereby adopted by reference except as amended herein.

Sec. 466. Section 91.2.1103, Division 11, Article 1.2 Chapter IX of the Los Angeles Municipal Code is added, to be placed in numerical order, to read as follows:

SEC. 91.2.1103. STRUCTURAL.

Section 1103 of the CEBC is hereby adopted by reference except as amended herein.

Sec. 467. Subsection 91.2.1103.2 of Section 91.2.1103, Division 11, Article 1.2, Chapter IX of the Los Angeles Municipal Code is added, to be placed in numerical order, to read as follows:

91.2.1103.2. Lateral force-resisting system. Where the addition is structurally independent of the existing structure, existing lateral load-carrying structural elements shall be permitted to remain unaltered. Where the addition is not structurally independent of the existing structure, the lateral force-resisting system of the existing structure and its addition acting together as a single structure shall comply with Section 1609 of the California Building Code and with Section 304.3.1 of this code

EXCEPTIONS:

- Buildings of Group R occupancy with not more than five dwelling or sleeping units used solely for residential purposes where the existing building and the addition together comply with the conventional light-frame construction methods of the California Building Code or the provisions of the California Residential Code.
- 2. Except for Unreinforced Masonry (URM) Buildings, any existing lateral load-carrying structural element whose demand-capacity ratio with the addition considered is not more than 10 percent greater than its demand-capacity ratio with the addition ignored shall be permitted to remain unaltered. For purposes of calculating demand-capacity ratios, the demand shall consider applicable load combinations with design lateral loads or forces in accordance with Sections 1609 of the California Building Code and Section 304.3.1 of this code. For purposes of this exception, comparisons of demand-capacity ratios and calculation of design lateral loads, forces and capacities shall account for the cumulative effects of additions and alterations since original construction. When calculating demand-capacity ratios for wind, the date of original construction shall be permitted to be taken as the date of completion of a prior addition, alteration or repair in compliance with Section 1609 of the California Building Code or the code wind forces in effect at the time. When calculating demand-capacity ratios for earthquake, the date of original construction shall be permitted to be taken as the date of completion of a prior addition, alteration or repair in compliance with CEBC Section 304.3.1 or the full seismic forces in effect at the time.

The additions do not create structural irregularity as defined in ASCE 7 or make an existing structural irregularity more severe.

3. For Unreinforced Masonry (URM) Buildings, any existing lateral load-carrying structural element whose demand-capacity ratio with the addition considered is less than 10 percent greater than its demand-capacity ratio with the addition

ignored, must comply with CEBC Appendix Chapter A1. Any existing lateral load-carrying structural element whose demand-capacity ratio with the addition considered is 10 percent or greater than its demand-capacity ratio with the addition ignored, must comply with CEBC Section 304.3.1.

Sec. 468. Division 12, Article 1.2, Chapter IX of the Los Angeles Municipal Code is amended, with no other changes to existing sections therein, to read as follows:

DIVISION 12 [HISTORIC BUILDINGS]

Section

91.2.1200 Basic Provisions.

Sec. 469. Division 13, Article 1.2, Chapter IX of the Los Angeles Municipal Code is amended, with no other changes to existing sections therein, to read as follows:

DIVISION 13 PERFORMANCE COMPLIANCE METHODS[RELOCATED OR MOVED BUILDINGS]

Section

91.2.1300 Basic Provisions.

Sec. 470. Division 14, Article 1.2, Chapter IX of the Los Angeles Municipal Code is amended, with no other changes to existing sections therein, to read as follows:

DIVISION 14 RELOCATED OR MOVED BUILDINGS[PERFORMANCE COMPLIANCE METHODS]

Section

91.2.1400 Basic Provisions.

Sec. 471. Division 15, Article 1.2, Chapter IX of the Los Angeles Municipal Code is amended, with no other changes to existing sections therein, to read as follows:

DIVISION 15 [CONSTRUCTION SAFEGUARDS]

Section

91.2.1500 Basic Provisions.

Sec. 472. Division 16, Article 1.2, Chapter IX of the Los Angeles Municipal Code is amended, with no other changes to existing sections therein, to read as follows:

DIVISION 16 FREFERENCED STANDARDS

Section

91.2.1600 Basic Provisions.

Sec. 473. Article 1.5, Chapter IX of the Los Angeles Municipal Code is amended to revise Article 1.5 title to Amendments to the California Residential Code, to read as follows:

ARTICLE 1.5 AMENDMENTS TO THE CALIFORNIALOS ANGELES RESIDENTIAL CODE

Division

- 1 [Scope and Application]
- 2 [Definitions]
- 3 [Building Planning]
- 4 [Foundations]
- 5 [Floors]
- 6 [Wall Construction]
- 7 [Wall Covering]
- 8 [Roof-Ceiling Construction]
- 9 [Roof Assemblies]
- 10 [Chimneys and Fireplaces]

Sec. 474. Section 91.5.100, Division 1, Article 1.5, Chapter IX of the Los Angeles Municipal Code is deleted and reinstated, to be placed in numerical order, to read as follows:

SEC. 91.5.100. BASIC PROVISIONS.

The Los Angeles Residential Code adopts by reference portions of the California Residential Code (CRC). Chapter 1 of the CRC is not adopted and in lieu thereof Division 1, Article 1, Chapter IX of the Los Angeles Municipal Code is hereby adopted by reference with the following amendments. Appendix BJAS of the CRC is not adopted.

- Sec. 475. Subsection 91.5.101.1 of Section 91.5.101, Division 1, Article 1.5, Chapter IX of the Los Angeles Municipal Code is deleted and reinstated, to be placed in numerical order, to read as follows:
 - **91.5.101.1. Title.** Article 1.5, Chapter IX of the LAMC shall be known as the Los Angeles Residential Code or LARC, a portion of the Los Angeles Municipal Code (LAMC), and wherever the word Code is used in this article, it shall mean the Los Angeles Residential Code.
- Sec. 476. Subsection 91.5.101.2 of Section 91.5.101, Division 1, Article 1.5, Chapter IX of the Los Angeles Municipal Code is amended to read as follows:
 - **91.5.101.2. Scope.** The provisions of the LARC for one- and two-family dwellings shall apply to the construction, alteration, movement, enlargement, replacement, repair, equipment, use and occupancy, location, removal, and demolition of detached one- and two-family dwellings, efficiency dwelling units, and townhouses not more than three stories above grade plane in height with a separate means of egress and their accessory structures not more than three stories above grade plane in height. In addition to the LARC, appropriate sections of Chapters Divisions 1, 11A, 11B, 12, 17, 31, 33, 63, 67, 70, 71, 72, 81, 89, 92, 93 and 96 of the LABC shall also be applicable to one- and two-family dwellings, efficiency dwelling units, and townhouses unless stated otherwise.

The LABC and LARC adopt by indicated reference portions of the 20252 California Building Code (CBC) or the 20252 California Residential Code (CRC) located at Title 24 of the California Code of Regulations (CCR).

EXCEPTION: The following shall be permitted to be constructed in accordance with this code where provided with a residential fire sprinkler system complying with Section R309313:

- 1. Live/work units located in townhouses and complying with the requirements of Section 508.5 of the California Building Code.
- 2. Owner-occupied lodging houses with five or fewer guestrooms.
- 3. A care facility with five or fewer persons receiving custodial care within a dwelling unit.
- 4. A care facility with five or fewer persons receiving medical care within a dwelling unit.
- 5. A day care facility for five or fewer persons of any age receiving care that are within a single-family dwelling unit.

For additions, alterations, moving, and maintenance of buildings and structures, see Article 1.2, Chapter IX of the Los Angeles Municipal Code. For temporary buildings and structures, see CBC Section 3103.

Sec. 477. Section 91.5.202, Division 2, Article 1.5, Chapter IX of the Los Angeles Municipal Code is amended to read as follows:

SEC. 91.5.202. DEFINITIONS.

Chapter 202 of the CRC is adopted by reference, except that the following CRC definitions are not adopted:

ATTIC, HABITABLE.

BUILDING OFFICIAL.

LOT.

The following definitions are adopted:

BUILDING OFFICIAL. See Los Angeles Municipal Code Section 91.202.

LOT. See Los Angeles Municipal Code Section 12.03.

SUPERINTENDENT OF BUILDING. See Los Angeles Municipal Code Section 91.202.

Sec. 478. Section 91.5.300, Division 3, Article 1.5, Chapter IX of the Los Angeles Municipal Code is amended, with no other changes to existing subsections therein, to read as follows:

SEC. 91.5.300. BASIC PROVISIONS.

Chapter 3 of the CRC is adopted by reference except as amended hereinexcept for the following Sections are not adopted: R301.1.3, R301.1.3.2, R301.2.2.6, R311.2, R313.1, R313.2, R321.1, R321.2, R322.1.4.1, and Table R301.2(1); and the following LAMC Sections are added: 91.5.301.1.3, 91.5.301.1.3.2, 91.5.301.1.5, 91.5.301.2.2.6, 91.5.301.2.2.11, 91.5.311.2, 91.5.313.1, 91.5.313.2, 91.5.321.1, 91.5.321.2, 91.5.322.1.4.1, and Table R301.2(1).

Sec. 479. Subsection 91.5.301.1.3 of Section 91.5.300, Division 3, Article 1.5, Chapter IX of the Los Angeles Municipal Code is deleted and reinstated, to be placed in numerical order, to read as follows:

91.5.301.1.3. Engineered Design. Where a building of otherwise conventional construction contains structural elements exceeding the limits of CRC Section R301 or otherwise not conforming to this Code, these elements shall be designed in accordance with accepted engineering practice. The extent of such design need only demonstrate compliance of nonconventional elements with other applicable provisions and shall be compatible with the performance of the conventional framed system. Engineered design in accordance with the Los Angeles Building Code is permitted for all buildings and structures, and parts thereof, included in the scope of this Code.

Buildings with masonry or concrete walls or of light frame construction exceeding two stories shall have an engineered design in accordance with the Los Angeles Building Code.

- Sec. 480. Subsection 91.5.301.1.3.2 of Section 91.5.300, Division 3, Article 1.5, Chapter IX of the Los Angeles Municipal Code is deleted and reinstated, to be placed in numerical order, to read as follows:
 - **91.5.301.1.3.2. Woodframe Structures.** The Building Official shall require construction documents to be approved and stamped by a California licensed architect or engineer for all dwellings of wood frame construction more than two stories in height with basement located in Seismic Design Category A, B, or C. Notwithstanding other provisions of law, the law establishing these provisions is found in Business and Professions Code Sections 5537 and 6737.1.

The Building Official shall require construction documents to be approved and stamped by a California licensed architect or engineer for all dwellings of woodframe construction more than one story in height located in Seismic Design Category D₀, D₁, D₂, or E.

- Sec. 481. Subsection 91.5.301.1.5 of Section 91.5.300, Division 3, Article 1.5, Chapter IX of the Los Angeles Municipal Code is amended to read as follows:
 - 91.5.301.1.5. Seismic Design Provisions for Buildings Constructed on or into Slopes Steeper than One Unit Vertical in Three Units Horizontal (33.3 Percent Slope). The design and construction of new buildings and additions to existing buildings

when constructed on or into slopes steeper than one-unit vertical in three-units horizontal (33.3% slope) shall comply with LAMC Subsection 91.1613.98.

Sec. 482. Table R301.2(1) of Section 91.5.300, Division 3, Article 1.5, Chapter IX of the Los Angeles Municipal Code is amended to read as follows:

Table R301.2(1) Climatic and Geographic Design Criteria

	WIND DESIGN				l	SUBJECT TO DAMAGE FROM			WINTER	ICE BARRIER		AIR	MEAN
GROUND SNOW LOAD	Speed d (mph)	Topographic effects ^k		Wind-borne debris zone	SEISMIC DESIGN CATEGORY ^f	Weathering ^a	Frost line depth ^b	Termite ^c		UNDERLAYMENT REQUIRED h	FLOOD HAZARDS ^g	FREEZING INDEX I	ANNUAL TEMP
0	11085	No	No	No	D₂/E	Negligible	12"	Yes	39 ° to 44 °	No	See Flood Map	0	61.1 °

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

- a. Where weathering requires a higher strength concrete or grade of masonry than necessary to satisfy the structural requirements of this Code, the frost line depth strength required for weathering shall govern. The weathering column shall be filled in with the weathering index (i.e., "negligible", "moderate" or "severe") for concrete as determined from the Weathering Probability Map [CRC Figure R301.2(14)].
- b. Where ∓the frost line depth may requires deeper footings than indicated in CRC Figure R403.1(1), the frost line depth strength required for weathering shall govern. The jurisdiction shall fill in the frost line depth column with the minimum depth of footing below finish grade.
- c. The jurisdiction shall fill in this part of the table to indicate the need for protection depending on whether there has been a history of local subterranean termite damage.
- d. The jurisdiction shall fill in this part of the table with the wind speed from the ultimate designbasic wind speeds map [CRC Figure R301.2 (25) A]. Wind exposure category shall be determined on a site-specific basis in accordance with CRC Section R301.2.1.4.
- e. Temperatures shall be permitted to reflect local climates or local weather experience as determined by the Building Official.
- f. The jurisdiction shall fill in this part of the table with the seismic design category determined from CRC Section R301.2.2.1.
- g. The jurisdiction shall fill in this part of the table with (a) the date of the jurisdiction's entry into the National Flood Insurance Program (date of adoption of the first code or ordinance for management of flood hazard areas), (b) the date(s) of the Flood Insurance Study and (c) the panel numbers and dates of all currently effective FIRMs and FBFMs or other flood hazard map adopted by the authority having jurisdiction, as amended.
- h. In accordance with CRC Sections R905.1.2, R905.4.3.1, R905.5.3.1, R905.6.3.1, R905.7.3.1, and R905.8.3.1, where there has been a history of local damage from the effects of ice damming, the jurisdiction shall fill in this part of the table with "YES". Otherwise, the jurisdiction shall fill in this part of the table with "NO".
- i. The jurisdiction shall fill in this part of the table with the 100-year return period air freezing index (BF-days) from CRC Figure R403.3(2) or from the 100-year (99%) value on the National Climatic Data Center data table "Air Freezing Index USA Method (Base 32°F)." at www.node.noaa.gov/fpsf.html.
- j. The jurisdiction shall fill in this part of the table with the mean annual temperature from the National Climatic Data Center data table "Air Freezing Index USA Method (Base 32°F.)" at www.nede.noaa.gov/fpsf.html.
- k. In accordance with CRC Section R301.2.1.5, where there is local historical data documenting structural damage to buildings due to topographic wind speed-up effects, the jurisdiction shall fill in this part of the table with "YES". Otherwise, the jurisdiction shall indicate "NO" in this part of the table.
- I. In accordance with CRC Figure R301.2(25) A, where there is local historical data documenting unusual wind conditions, the jurisdiction shall fill in this part of the table with "YES" and identify any specific requirements. Otherwise, the jurisdiction shall indicate "NO" in this part of the table.
- m. In accordance with CRC Section R301.2.1.2, the jurisdiction shall indicate the wind-borne debris wind zone(s). Otherwise, the jurisdiction shall indicate "NO" in this part of the table.
- Sec. 483. Subsection 91.5.301.2.2.6 of Section 91.5.300, Division 3, Article 1.5, Chapter IX of the Los Angeles Municipal Code is amended to read as follows:
 - **91.5.301.2.2.6.** Irregular Buildings. Prescriptive construction as regulated by this code shall not be used for irregular structures located in Seismic Design Categories C, D_0 , D_1 , and D_2 . A building or portion of a building shall be considered to be irregular where one or more of the conditions defined in Items 1 through 8 occur. Irregular structures, or irregular portions of structures, shall be designed in accordance with accepted engineering practice to the extent the irregular features affect the performance of the remaining structural system. Where the forces associated with the irregularity are resisted by a structural system designed in accordance with accepted engineering

practice, the remainder of the building shall be permitted to be designed using the provisions of this code. Irregular pertions of structures shall be designed in accordance with accepted engineering practice to the extent the irregular features affect the performance of the remaining structural system. When the forces associated with the irregularity are resisted by a structural system designed in accordance with accepted engineering practice, design of the remainder of the building shall be permitted using the provisions of this code. A building or portion of a building shall be considered to be irregular when one or more of the following conditions occur:

- 1. Shear wall or braced wall offsets out of plane. Conditions where exterior shear wall lines or braced wall panels are not in one plane vertically from the foundation to the uppermost story in which they are required. When exterior shear wall lines or braced wall panels are not in one plane vertically from the foundation to the uppermost story in which they are required;
- 2. Lateral support of roofs and floors. Conditions where a section of floor or roof is not laterally supported by shear walls or braced wall lines on all edges. When a section of floor or roof is not laterally supported by shear walls or braced wall-lines on all edges;

EXCEPTION: Portions of floors that do not support shear walls, or braced wall panels above, or roofs, shall be permitted to extend not more than 6 feet (1829 mm) beyond a shear wall or braced wall line.

- 3. Shear wall or braced wall offsets in plane. Conditions where When the end of a braced wall panel occurs over an opening in the wall below.
- Floor and roof opening. Conditions where When an opening in a floor or roof exceeds the lesser of 12 feet (3658 mm) or 50 percent of the least floor or roof dimension.;
- 5. **Floor level offset.** Conditions where When portions of a floor level are vertically offset.
- 6. **Perpendicular shear wall and wall bracing.** Conditions where When shear walls and braced wall lines do not occur in two perpendicular directions.
- 7. Wall bracing in stories containing masonry or concrete construction.

 Conditions where When stories above -grade are partially or completely braced by wood wall framing in accordance with CRC Section R602 or cold-formed steel wall framing in accordance with CRC Section R603 include masonry or concrete construction. Where this irregularity applies, the entire story shall be designed in accordance with accepted engineering practice.

EXCEPTION: Fireplaces, chimneys and masonry veneer as permitted by this code. When this irregularity applies, the entire story shall be designed in accordance with accepted engineering practice.

8. **Hillside light-frame construction.** Conditions in which all of the following apply: 8.1. The grade slope exceeds 1 unit vertical in 5 units horizontal where averaged across the full length of any side of the building.

- 8.2. The tallest cripple wall clear height exceeds 7 feet (2134 mm), or where a post and beam system occurs at the building perimeter, the post and beam system tallest post clear height exceeds 7 feet (2134 mm).
- 8.3. Of the total plan area below the lowest framed floor, whether open or enclosed, less than 50 percent is living space having interior wall finishes conforming to Section R702.

Where Item 8 is applicable, design in accordance with accepted engineering practice shall be provided for the floor immediately above the cripple walls or post and beam system and all structural elements and connections from this diaphragm down to and including connections to the foundation and design of the foundation to transfer lateral loads from the framing above.

EXCEPTION: Light-frame construction in which the lowest framed floor is supported directly on concrete or masonry walls over the full length of all sides except the downhill side of the building need not be considered an irregular building under Item 8.

- Sec. 484. Subsection 91.5.301.2.2.11 of Section 91.5.300, Division 3, Article 1.5, Chapter IX of the Los Angeles Municipal Code is deleted and reinstated, to be placed in numerical order, to read as follows:
 - **91.5.301.2.2.11.** Anchorage of Mechanical, Electrical, or Plumbing Components and Equipment. Mechanical, electrical, or plumbing components and equipment shall be anchored to the structure. Anchorage of the components and equipment shall be designed to resist loads in accordance with the International Building Code and ASCE 7, except where the component is positively attached to the structure and flexible connections are provided between the component and associated ductwork, piping, and conduit.
- Sec. 485. Subsection 91.5.311.2 of Section 91.5.300, Division 3, Article 1.5, Chapter IX of the Los Angeles Municipal Code is deleted:
 - **91.5.311.2. Egress Door.** At least one egress door shall be provided for each dwelling unit. The egress door shall be side-hinged, and shall provide a minimum clear width of 32 inches (813 mm) when measured between the face of the door and the stop, with the door open 90 degrees (1.57 rad). The minimum clear height of the door opening shall not be less than 78 inches (1981 mm) in height measured from the top of the threshold to the bottom of the stop. This is accomplished by providing a door not less than 3 feet inwidth and 6 feet 8 inches in height. Egress doors shall be readily openable from inside the dwelling without the use of a key or special knowledge or effort. Every interior door shall have a minimum width of 32 inches (813 mm), except for closets less than 10 square feet in size, which shall comply with CBC Section 1010.1.1, Exception 3.
- Sec. 486. Subsection 91.5.313.1 of Section 91.5.300, Division 3, Article 1.5, Chapter IX of the Los Angeles Municipal Code is renumbered 91.5.309.1, to be placed in numerical order, and amended to read as follows:

91.5.309.1.91.5.313.1. Townhouse Automatic Fire Sprinkler Systems. Every newly constructed townhouse must include an automatic residential fire sprinkler system. Where additions or alterations are made to an existing townhouse that does not have an automatic residential fire sprinkler system, and the aggregate value of the additions and alterations within a one-year period equals or exceeds 50% of the replacement cost of the existing building, an automatic residential fire sprinkler system must be installed in the entire townhouse.

Sec. 487. Subsection 91.5.313.2 of Section 91.5.300, Division 3, Article 1.5, Chapter IX of the Los Angeles Municipal Code is renumbered 91.5.309.2, to be placed in numerical order, and amended to read as follows:

91.5.309.2.91.5.313.2. One and Two-family Dwelling Automatic Fire Sprinkler Systems. Every newly constructed one or two-family dwelling must include an automatic residential fire sprinkler system. Where additions or alterations are made to an existing one or two-family dwelling, and the aggregate value of the additions and alterations within a one-year period equals or exceeds 50% of the replacement cost of the existing building, an automatic residential fire sprinkler system must be installed in the entire one or two-family dwelling.

An automatic residential fire sprinkler system is not required in an Accessory Dwelling Unit, provided that all of the following are met:

- 1. The unit meets the definition of an Accessory Dwelling Unit as defined in the Government Code Section 65852.2.
- 2. The existing primary residence does not have automatic fire sprinklers.
- 3. The detached accessory dwelling unit does not exceed 1,200 square feet in size.
- 4. The unit is on the same lot as the primary residence.
- Sec. 488. Subsection 91.5.321 of Section 91.5.300, Division 3, Article 1.5, Chapter IX of the Los Angeles Municipal Code is renumbered 91.5.323, to be placed in numerical order, and amended to read as follows:

91.5.323.91.5.321. Elevator and Platform Lifts.

- Sec. 489. Subsection 91.5.321.1 of Section 91.5.300, Division 3, Article 1.5, Chapter IX of the Los Angeles Municipal Code is renumbered 91.5.323.1, to be placed in numerical order, and amended to read as follows:
 - **91.5.323.1.91.5.321.1. Elevators.** Where provided, passenger elevators, limited-use and limited-application elevators or private residence elevators shall comply with the City of Los Angeles Elevator Code.
- Sec. 490. Subsection 91.5.321.2 of Section 91.5.300, Division 3, Article 1.5, Chapter IX of the Los Angeles Municipal Code is renumbered 91.5.323.2, to be placed in numerical order, and amended to read as follows:

91.5.323.2.91.5.321.2. Platform Lifts. Where provided, platform lifts shall comply with the City of Los Angeles Elevator Code.

Sec. 491. Subsection 91.5.322.1.4.1 of Section 91.5.300, Division 3, Article 1.5, Chapter IX of the Los Angeles Municipal Code is renumbered 91.5.306.1.4.1, to be placed in numerical order, and amended to read as follows:

91.5.306.1.4.1.91.5.322.1.4.1. Determination of Design Flood Elevations. If design flood elevations are not specified, the building official is authorized to require the applicant to comply with either of the following:

- 1. Obtain and reasonably use data available from a federal, state or other source; or
- 2. Determine the design flood elevation in accordance with accepted hydrologic and hydraulic engineering practices used to define special flood hazard areas. Determinations shall be undertaken by a registered civil engineer who shall document that the technical methods used reflect currently accepted engineering practice. Studies, analyses and computations shall be submitted in sufficient detail to allow thorough review and approval.
- Sec. 492. Subsection 91.5.401.1 of Section 91.5.400, Division 4, Article 1.5, Chapter IX of the Los Angeles Municipal Code is amended to read as follows:
 - **91.5.401.1. Application.** The provisions of this Division shall control the design and construction of the foundation and foundation spaces for all buildings. In addition to the provisions of this division, the design and construction of foundations in flood hazard areas as established by LAMCERE Table R301.2(1) shall meet the provisions of CRC Section R30622. Wood foundations shall be designed and installed in accordance with AWC PWFAF&PA PWF.

EXCEPTION: The provisions of this Chapter shall be permitted to be used for wood foundations only in the following situations:

- 1. In buildings that have no more than two floors and a roof;
- 2. When interior basement and foundation walls are constructed at intervals not exceeding 50 feet (15 240 mm).

Wood foundations in Seismic Design Category D_0 , D_1 , or D_2 shall not be permitted.

EXCEPTION: In non-occupied, single-story, detached storage sheds and similar uses other than carport or garage, provided the gross floor area does not exceed 200 square feet, the plate height does not exceed 12 feet in height above the grade at any point, and the maximum roof projection does not exceed 24 inches.

Sec. 493. Subsection 91.5.403.1.2 of Section 91.5.400, Division 4, Article 1.5, Chapter IX of the Los Angeles Municipal Code is deleted and reinstated, to be placed in numerical order, to read as follows:

91.5.403.1.2. Continuous Footing in Seismic Design Categories D_0 , D_1 , D_2 . Exterior walls of buildings located in Seismic Design Categories D_0 , D_1 , and D_2 shall be supported by continuous solid or fully grouted masonry or concrete footings. All required interior braced wall panels in buildings located in Seismic Design Categories D_0 , D_1 , and D_2 shall be supported on foundations.

Sec. 494. Subsection 91.5.403.1.3.6 of Section 91.5.400, Division 4, Article 1.5, Chapter IX of the Los Angeles Municipal Code is deleted and reinstated, to be placed in numerical order, to read as follows:

91.5.403.1.3.6. Isolated Concrete Footings. In detached one- and two-family dwellings located in Seismic Design Category A, B or C that are three stories or less in height and constructed with stud bearing walls, isolated plain concrete footings supporting columns or pedestals are permitted in accordance with CRC Section R403.1.3.4.

Sec. 495. Subsection 91.5.403.1.5 of Section 91.5.400, Division 4, Article 1.5, Chapter IX of the Los Angeles Municipal Code is deleted and reinstated, to be placed in numerical order, to read as follows:

91.5.403.1.5. Slope. The top surface of footings shall be level. The bottom surface of footings shall not have a slope exceeding one unit vertical in 10 units horizontal (10-percent slope). Footings shall be stepped where it is necessary to change the elevation of the top surface of the footings or where the slope of the bottom surface of the footings will exceed one unit vertical in ten units horizontal (10-percent slope).

For structures located in Seismic Design Categories D_0 , D_1 , and D_2 , or E, stepped footings shall be reinforced with four 1/2-inch diameter (12.7 mm) deformed reinforcing bars. Two bars shall be placed at the top and bottom of the footing as shown in figure 91.5.403.1.5.

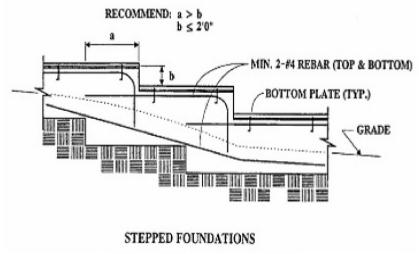


Figure 91.5.403.1.5 Stepped Footing

- Sec. 496. Subsection 91.5.404.2 of Section 91.5.400, Division 4, Article 1.5, Chapter IX of the Los Angeles Municipal Code is deleted and reinstated, to be placed in numerical order, to read as follows:
 - **91.5.404.2.** Wood Foundation Walls. Wood foundation walls shall be constructed in accordance with the provisions of CRC Sections R404.2.1 through R404.2.6 and with the details shown in CRC Figures R403.1(2) and R403.1(3). Wood foundation walls shall not be used for structures located in Seismic Design Category D₀, D₁, or D₂.
- Sec. 497. Subsection 91.5.501.1. of Section 91.5.500, Division 5, Article 1.5, Chapter IX of the Los Angeles Municipal Code is deleted:
 - **91.5.501.1.** Application. The provisions of this division shall control the design and construction of the floors for buildings, including the floors of attic spaces used to house mechanical or plumbing fixtures and equipment. Mechanical, plumbing fixtures, and equipment shall be attached (or anchored) to the structure in accordance with LAMC Subsection 91.5.301.2.2.11.
- Sec. 498. Subsection 91.5.503.2.4 of Section 91.5.500, Division 5, Article 1.5, Chapter IX of the Los Angeles Municipal Code is amended, to read as follows:
 - **91.5.503.2.4.** Openings in Horizontal Diaphragms. Openings in horizontal diaphragms with a dimension perpendicular to the joist that is greater than 4 feet (1219.2 mm) shall be constructed in accordance with LAMC Figure 91.5.503.2.4.

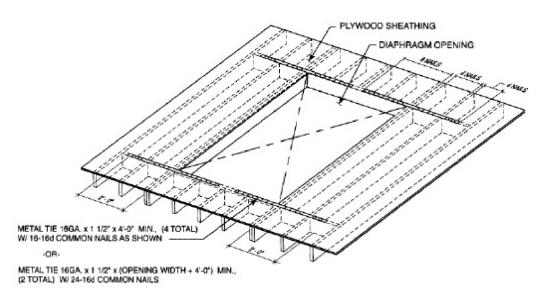


Figure 91.5.503.2.4

For SI: 1 inch = 25.4 mm, 1 foot = 304.8 mm.

- a. Blockings shall be provided beyond headers.
- b. Metal ties not less than 0.058 inch [1.47 mm (16 galvanized gage)] by 1.5 inches (38 mm) wide with eight 16d common nails on each side of the header-joist intersection. The metal ties shall have a minimum yield of 33,000 psi (227 MPa).

c. Openings in diaphragms shall be further limited in accordance with CRC Section R301.2.2.62.5.

Sec. 499. Table 91.5.602.3(1) of Section 91.5.600, Division 6, Article 1.5, Chapter IX of the Los Angeles Municipal Code is deleted:

Table 91.5.602.3(1)¶ Fastener Schedule for Structural Members¶ [Table R602.3(1) Fastening Schedule]¶

ITEM¶	DESCRIPTION OF BUILDING ELEMENTS	NUMBER AND TYPE OF FASTENER ^{a, b, o} ¶	SPACING AND LOCATION¶
		Roof¶	
4¶	Blocking between ceiling joists or rafters to top plate¶	4-8d box (2 1/2" × 0.113") or¶ 3-8d common (2 1/2" × 0131"); or¶ 3-10d box (3" × 0.128"), or¶ 3-3" × 0.131" nails¶	Toe nail¶
2¶	Ceiling joists to plate, toe nail¶	4-8d box (2 1/2" × 0.113") or¶ 3-8d common (2 1/2" × 0131"); or¶ 3-10d box (3" × 0.128"); or¶ 3-3" × 0.131" nails¶	Per joist, toe nail ¶
3¶	Ceiling joist not attached to parallel rafter, laps over partitions [see Sections R802.3.1, R802.3.2 and Table R802.5.1(0)]¶	4-10d box (3" × 0.128"); or¶ 3-16d common (3 1/2" × 0.162"); or¶ 4-3" × 0.131" nails¶	Face nail¶
4¶	Ceiling joist attached to parallel rafter (heel- joint) [see Sections R802.3.1 and R802.3.2 and Table R802.5.1(0)]¶	Table R802.5.1(9)¶	Face nail¶
5¶	Gollar tie to rafter, face nail or 1 1/4" × 20- ga. ridge strap to rafter¶	4-10d box (3" × 0.128"); or¶ 3-10d common (3" × 0.148"); or¶ 4-3" × 0.131" nails¶	Face nail each rafter¶
6¶	Rafter or roof truss to plate¶	3-16d box nails (3 1/2" × 0.135"); or¶ 3-10d common nails (3" × 0.148"); or¶ 4-10d box (3" × 0.128"); or¶ 4-3" × 0.131" nails¶	2 toe nails on one side and 1 toe na on opposite side of each rafter or truss ¶
7₫	Roof rafters to ridge, valley or hip rafters or	4-16d (3 1/2" × 0.135"); or¶ 3-10d common (3 1/2" × 0.148"); or¶ 4-10d box (3" × 0.128"); or¶ 4-3" × 0.131" nails¶	Toe nail¶
74	roof rafter to minimum 2" ridge beam¶	3-16d box (3 1/2" × 0.135"); or¶ 2-16d common (3 1/2" × 0.162"); or¶ 3-10d box (3" × 0.128"); or¶ 3-3" × 0.131" nails¶	End-nail¶
		Wall¶	
		16d common (3 1/2" × 0.162")¶	24" o.c. face nail¶
8¶	Stud to stud (not at braced wall panels)¶	10d box (3" × 0.128"); or¶ 3" × 0.131" nails¶	16" o.c. face nail¶
9¶	Stud to stud and abutting studs at- intersecting wall corners (at braced wall-	16d box (3 1/2" × 0.135"); or¶ 3" × 0.131" nails¶	12" o.c. face nail¶
	panels)¶	16d common (3 1/2" × 0.162")¶	16" o.c. face nail¶
10¶	Built-up header (2" to 2" header with 1/2"	16d common (3-1/2" × 0.162")¶	16" o.c. each edge face nail¶
.511	spacer) ¶	16d box (3 1/2" × 0.135")¶	12" o.c. each edge face nail¶
11¶	Continuous header to stud¶	5-8d box (2 1/2" × 0.113"); or¶ 4-8d common (2 1/2" × 0.131"); or¶ 4-10d box (3" × 0.128")¶	Toe nail¶
		16d common (3 1/2" × 0.162")¶	16" o.c. face nail¶
12¶	Top plate to top plate¶	10d box (3" × 0.128"); or¶ 3" × 0.131" nails¶	12" o.c. face nail¶
43¶	Double top plate splice for SDCs A-D ₂ with- seismic braced wall line spacing < 25 ⁴ ¶	8-16d common (3 1/2" × 0.162"); or¶ 12-16d box (3 1/2" × 0.135"); or¶ 12-10d box (3" × 0.128"); or¶ 12-3" × 0.131" nails¶	Face nail on each side of end joint (minimum 24" lap splice length each side of end joint)¶

	Double top plate splice SDGs D ₀ , D ₁ , or D ₂ ; and braced wall line spacing ≥ 25'¶	12-16d (3 1/2" × 0.135")¶	
		16d common (3 1/2" × 0.162")¶	16" o.c. face nail¶
44¶	Bettom plate to joist, rim joist, band joist or blocking (not at braced wall panels)¶	16d box (3 1/2" × 0.135"); or¶ 3" × 0.131" nails¶	42" o.c. face nail¶
45¶	Bottom plate to joist, rim joist, band joist or blocking (at braced wall panel)¶	3-16d box (3 1/2" × 0.135"); or¶ 2-16d common (3 1/2" x 0.162"); or¶ 4-8" × 0.131" nails¶	3 each 16" o.c. face nail¶ 2 each 16" o.c. face nail¶ 4 each 16" o.c. face nail¶
16 ¶	Top or bottom plate to stud¶	4-8d box (2 1/2" × 0.113"), or¶ 3-16d box (3 1/2" × 0.135"); or¶ 4-8d common (2 1/2" × 0.131"); or¶ 4-10d box (3" × 0.128"); or¶ 4-3" × 0.131" nails¶	Toe nail¶
"		3-16d box (3 1/2" × 0.135"); or¶ 2-16d common (3 1/2" × 0.162"); or¶ 3-10d box (3" × 0.128"); or¶ 3-3" × 0.131" nails¶	End nail¶
17 ¶	Top plates, laps at corners and intersections	3-3" × 0.131" nails¶	Face nail¶
18¶	1" brace to each stud and plate¶	3-8d box (2 1/2" × 0.113"); or¶ 2-8d common (2 1/2" × 0.131"); or¶ 2-10d box (3" × 0.128"); or¶ 2-staples 1 3/4"¶	Face nail¶
19¶	4" × 6" sheathing to each bearing¶	3-8d box (2 1/2" × 0.113"); or¶ 2-8d common (2 1/2" × 0.131"); or¶ 2-10d box (3" × 0.128"); or¶ 2-staples, 1" crown, 16-ga., 1 3/4" long¶	Face nail¶
20¶	4" × 8" and wider sheathing to each bearing	3-8d box (2 1/2" × 0.113"); or¶ 3-8d common (2 1/2" × 0.131"); or¶ 3-10d box (3" × 0.128"); or¶ 3-staples, 1" crown, 16 ga., 1 3/4" long¶ Wider than 1" × 8"¶ 4-8d box (2 1/2" × 0.113"); or¶ 3-8d common (2 1/2" × 0.131"); or¶ 3-10d box (3" × 0.128"); or¶ 4-staples, 1" crown, 16 ga., 1 3/4" long¶	Face nail¶
		Floor¶	
21¶	doist to sill, top plate or girder¶	4-8d box (2 1/2" × 0.113"); or¶ 3-8d common (2 1/2" × 0.131"); or¶ 3-10d box (3" × 0.128"); or¶ 3-3" × 0.131" nails¶	Toe nail¶
22 ¶	Rim joist, band joist or blocking to sill or top- plate (roof applications also)¶	8d box (2 1/2" × 0.113")¶ 8d common (2 1/2" × 0.131"); or¶ 10d box (3" × 0.128"); or¶ 3" × 0.131" nails¶	4" o.c. toe nail¶ 6" o.c. toe nail¶
23¶	1" × 6" subfloor or less to each joist¶	3-8d box (2 1/2" × 0.113"); or¶ 2-8d common (2 1/2" × 0.131"); or¶ 3-10d box (3" × 0.128"); or¶ 2-staples, 1" crown, 16 ga., 1 3/4" leng¶	Face nail¶
24¶	2" subfloor to joist or girder¶	3-16d box (31/2" × 0.135"); or¶ 2-16d common (3 1/2" × 0.162")¶	Blind and face nail¶
25¶	2" planks (plank & beam - floor & roof)¶	3-16d box (3 1/2" × 0.135"); or¶ 2-16d common (3 1/2" x 0.162")¶	At each bearing, face nail¶
26¶	Band or rim joist to joist¶	3-16d common (3 1/2" × 0.162")¶ 4-10 bex (3" × 0.128"), or¶ 4-3" × 0.131" nails; or¶ 4-3" × 14 ga. staples, 7/16" crown¶	End nail¶
		20d common (4" × 0.192"); or¶	Nail each layer as follows: 32" o.c. at top and bottom and staggered.
27¶	Built-up-girders and beams, 2-inch lumber- layers¶	10d box (3" × 0.128"); or¶ 3" × 0.131" nails¶	24" o.c. face nail at top and bottom- staggered on opposite sides¶

		And:¶ 2-20d common (4" × 0.192"); or¶ 3-10d box (3" × 0.128"); or¶ 3-3" × 0.131" nails¶	Face nail at ends and at each splice¶
28¶	Ledger strip supporting joints or refters¶	4-16d box (3 1/2" × 0.135"); or¶ 3-16d common (3 1/2" × 0.162"); or¶ 4-10d box (3" × 0.128"); or¶ 4-3" × 0.131" nails¶	At each joist or rafter, face nail¶
29¶	Bridging to joist¶	2-10d (3" × 0.128")¶	Each end, toe nail¶

			SPACING OF FASTENSERS¶		
ITEM¶	DESCRIPTION OF BUILDING- ELEMENTS¶	NUMBER AND TYPE OF FASTENER ^{a, b, off}	Edges¶ (inches) ʰ¶	Intermediate- supports c, eq (inches)¶	
Wood str	uctural panels, subfloor, roof and interio	r wall sheathing to framing and parti tructural panel exterior wall sheathin			
30¶	3/8" - 1/2"¶	6d common (2" x 0.113") nail (subfloor, wall) ¶ 8d common (2 ½" × 0.131") nail (roof)¶	6¶	12 ¶	
31¶	19/32" - 1"¶	8d common nail (2 1/2" × 0.131")¶	6¶	12 ¶	
32¶	1 1/8" - 1 1/4"¶	10d common (3" × 0.148") nail; or¶ 8d (2 1/2" × 0.131") deformed nail¶	6¶	12 ¶	
		Other wall sheathing¶			
33¶	1/2" structural cellulosic fiberboard- sheathing¶	11/2" galvanized roofing nail, 7/16 "- head diameter, or 1" crown staple 16- a., 11/4"long¶	3¶	6¶	
34¶	25/32" structural cellulosic fiberboard- sheathing¶	1 3/4" galvanized roofing nail, 7/16" head diameter, or 1" crown staple 16 ga., 11/4" long¶	3¶	6¶	
35¶	1/2" gypsum sheathing d III	1 1/2" galvanized roofing nail; staple- galvanized, 1 1/2" long; 1 1/4" screws, Type W or S¶	79	79	
36¶	5/8" gypsum sheathing d.i¶	1 3/4" galvanized roofing nail, staple- galvanized, 1 5/8" long; 1 5/8" screws, Type W or S¶	74	7 ¶	
	Wood structural panels,	combination subfloor underlayment	to-framing¶		
37¶	3/4" and less¶	6d deformed (2" × 0.120") nail; or¶ 8d common (2 1/2" × 0.131") nail¶	6¶	12 ¶	
38¶	7/8" - 1"¶	8d common (2 1/2" × 0.131") nail; or¶ 8d deformed (2 1/2" × 0.120") nail¶	6¶	12 ¶	
39¶	1 1/8" - 1 1/4 "¶	10d common (3" × 0.148") nail; or¶ 8d deformed (2 1/2" × 0.120") nail¶	6¶	12¶	

- a. Nails are smooth common, box or deformed shanks except where otherwise stated. Nails used for framing and sheathing connections shall have minimum average bending yield strengths as shown: 80 ksi for shank-diameter of 0.192 inch (4.87 mm) (20d common nail), 90 ksi for shank diameters larger than 0.142 inch (3.60 mm) but not larger than 0.177 inch (4.49 mm), and 100 ksi for shank diameters of 0.142 inch (3.60 mm) or less.¶
- b. Staples are 16 gage wire and have a minimum 7/16 inch (11.11 mm) on diameter crown width.
- c. Nails shall be spaced at not more than 6 inches (152.4 mm) on center at all supports where spans are 48 inches (1219.2 mm) or greater.¶
- d. 4 foot by 8 foot (1219.2 mm x 2438.1 mm) or 4 foot by 9 foot (1219.2 mm x 2743.2 mm) panels shall be applied vertically.¶
- e. Spacing of fasteners not included in this table shall be based on LAMC Table 91.5.602.3(2).¶
- f. Where the ultimate design wind speed is greater than 130 mph, nails for attaching panel roof sheathing to intermediate supports shall be spaced 6 inches on center for minimum 48 inch distance from ridges, eaves and gable end walls; and 4 inches on center to gable end wall framing.¶
- g. Gypsum sheathing shall conform to ASTM C 1396 and shall be installed in accordance with GA 253. Fiberboard sheathing shall conform to ASTM C 208.¶
- h. Spacing of fasteners on floor sheathing panel edges applies to panel edges supported by framing members and required blocking and at floor perimeters only. Spacing of fasteners on roof sheathing panel edges applies to panel edges supported by framing members and required blocking. Blocking of roof or floor

- sheathing panel edges perpendicular to the framing members need not be provided except as required by ether provisions of this Code. Floor perimeter shall be supported by framing members or solid blocking.¶
- i. Use of staples in braced wall panels shall be prohibited in Seismic Design Category D₀, D₁, or D₂.

Sec. 500. Table 91.5.602.3(2) of Section 91.5.600, Division 6, Article 1.5, Chapter IX of the Los Angeles Municipal Code is deleted:

Table 91.5.602.3(2)¶ **Alternate Attachments to Table 91.5.602.3(1)**¶

NOMINAL MATERIAL	DESCRIPTION *- b OF FASTENER¶	SPACING OF FASTENERS		
THICKNESS¶ (inches)¶	AND LENGTH¶ (inches)¶	Edges¶ (inches)¶	Intermediate supports	
Wood structural panels su	ubfloor, roof ^a and wall sheathing to framing an	d particleboard wall	sheathing to framing ¶	
	Staple 15 ga. 1 3/4¶	4¶	8¶	
Up to 1/2¶	0.097 - 0.099 Nail 2 1/4¶	3 ¶	6¶	
	Staple 16 ga. 1 3/4¶	3¶	6¶	
	0.113 Nail 2¶	3¶	6¶	
19/32 and 5/8¶	Staple 15 and 16 ga. 2¶	4¶	8¶	
	0.097 - 0.099 Nail 2 1/4¶	4¶	8 ¶	
	Staple 14 ga. 2¶	4¶	6¶	
22/22 and 2/45	Staple 15 ga. 1 3/4¶	3¶	8 ¶	
23/32 and 3/4¶	0.097 - 0.099 Nail 2 1/4¶	4¶	8¶	
	Staple 16 ga. 2¶	4¶	8¶	
	Staple 14 ga. 2 1/4¶	4¶	8¶	
46	0.113 Nail 2 1/4¶	3¶	6¶	
49	Staple 15 ga. 2 1/4¶	4¶	8¶	
	0.097 - 0.099 Nail 2 1/2¶	4¶	8¶	

NOMINAL MATERIAL	DESCRIPTION ab OF FASTENER®	SPACING OF FASTENERS		
THICKNESS¶ (inches)¶	AND LENGTH¶ (inches)¶	Edges¶ (inches)¶	Body of Panel ⁴¶ (inches)¶	
Fle	or-underlayment; plywood—hardboard—particlebo	oard ^f - fiber - cement ^h	Ī	
	Fiber-cement¶			
	3d, corrosion-resistant, ring shank nails (finished- flooring other than-tile)¶		6¶	
	Staple 18 ga., 7/8 long, 1/4 crown (finished flooring- other than tile)¶	3 ¶	6¶	
1/4¶	1 1/4 long × .121 shank × .375 head diameter corrosion-resistant (galvanized or stainless steel) roofing nails (for tile finish)¶	8¶	0¶	

	1 1/4 long, No. 8 × .375 head diameter, ribbed- wafer-head screws (for tile-finish)¶	8¶	8¶					
	Plywood ¶							
1/4 and 5/16 ¶	1 1/4 ring or screw shank nail - minimum¶ 12 1/2 ga. (0.099") shank diameter¶	3¶	6¶					
	Staple 18 ga., 7/8, 3/16 crown width¶	2¶	5¶					
11/32, 3/8, 15/32, and 1/2¶	1 1/4 ring or screw shank nail - minimum¶ 12 1/2 ga. (0.099") shank diameter¶	6¶	8-¶					
19/32, 5/8, 23/32, and 3/4¶	1 1/2-ring or screw shank nail - minimum¶ 12 1/2 ga. (0.099") shank diameter¶	6¶	8¶					
	Staple 16 ga. 1 1/2¶	6¶	8¶					
	Hardboard 1							
	4 1/2 long ring-grooved underlayment nail¶	G¶	6¶					
0.200¶	4d cement-coated sinker nail¶	6 ¶	6¶					
	Staple 18 ga., 7/8 long (plastic coated)¶	₽¶	6¶					
	Particleboard¶							
1/49	4d ring-grooved underlayment nail¶	3 ¶	6¶					
174 	Staple 18 ga., 7/8 long, 3/16 crown¶	₽¶	6¶					
3/8¶	6d ring-grooved underlayment nail¶	6¶	10¶					
9/9 	Staple 16 ga., 1 1/8 long, 3/8 crown¶	₽¶	6¶					
1/2. 5/8¶	6d ring-grooved underlayment nail¶	6¶	10¶					
4/2, 5/0 ₁	Staple 16 ga., 1 5/8 long, 3/8 crown¶	3¶	6¶					

For SI: 1 inch = 25.4 mm.¶

- a. Nail is a general description and shall be permitted to be T-head, modified round head or round head.
- b. Staples shall have a minimum crown width of 7/16 inch on diameter except as noted. Use of staples in roof, floor, subfloor, and braced wall panels shall be prohibited in Seismic Design Category D_m, D_r or D_x.¶
- c. Nails or staples shall be spaced at not more than 6 inches on center at all supports where spans are 48 inches or greater. Nails or staples shall be spaced at not more than 12 inches on center at intermediate supports for floors.¶
- d. Fasteners shall be placed in a grid pattern throughout the body of the panel.¶
- e. For 5-ply panels, intermediate nails shall be spaced not more than 12 inches on center each way.¶
- f. Hardboard underlayment shall conform to CPA/ANSI A135.4¶
- g. Specified alternate attachments for roof sheathing shall be permitted where the ultimate design wind speed is less than 130 mph. Fasteners attaching wood structural panel roof sheathing to gable end wall framing shall be installed using the spacing listed for panel edges.
- h. Fiber-cement underlayment shall conform to ASTM C1288 or ISO 8336, Category C.
- Sec. 501. Subsection 91.5.602.3.6 of Section 91.5.600, Division 6, Article 1.5, Chapter IX of the Los Angeles Municipal Code is added, to be placed in numerical order, to read as follows:
 - **R602.3.6 Use of staples.** Use of staples in roof, floor, subfloor, and braced wall panels shall be prohibited in Seismic Design Category D_0 , D_1 or D_2 .
- Sec. 502. Subsection 91.5.602.3.2 of Section 91.5.600, Division 6, Article 1.5, Chapter IX of the Los Angeles Municipal Code is deleted and reinstated, to be placed in numerical order, to read as follows:

91.5.602.3.2. Wood stud walls shall be capped with a double top plate installed to provide overlapping at corners and intersections with bearing partitions. End joints in top plates shall be offset at least 24 inches (609.6 mm). Joints in plates need not occur over studs. Plates shall be not less than 2 inches (50.8 mm) nominal thickness and have a width at least equal to the width of the studs.

EXCEPTION: In other than Seismic Design Category D₀, D₁, or D₂, a single top plate used as an alternative to a double top plate shall comply with the following:

- 1. The single top plate shall be tied at the corners, intersecting walls, and at in-line splices in straight wall lines in accordance with LAMC Table 91.5.602.3.2.
- 2. The rafters or joists are centered over the studs with a tolerance of no more than 1 inch (25 mm).
- 3. Omission of the top plate is permitted over headers where the headers are adequately tied to adjacent wall sections in accordance with LAMC Table 91.5.602.3.2.

Sec. 503. Table 91.5.602.3.2 of Section 91.5.600, Division 6, Article 1.5, Chapter IX of the Los Angeles Municipal Code is deleted and reinstated, to be placed in numerical order, to read as follows:

Table 91.5.602.3.2 Single Top-Plate Splice Connection Details

	TOP-PLATE SPLICE LOCATION				
CONDITION	Corners and int	ersecting walls	Butt joints in straight walls		
CONDITION	Splice plate size	Minimum nails each side of joint	Splice plate size	Minimum nails each side of joint	
Structures in SDC A-C	3" x 6" x 0.036" galvanized steel plate or equivalent	(6) 8d box (2 1/2" × 0.113") nails	3' × 12" × 0.036" galvanized steel plate or equivalent	(12) 8d box (2 1/2" × 0.113") nails	

For SI: 1 inch = 25.4 mm, 1 foot = 304.8 mm.

Sec. 504. Subsection 91.5.602.10.2.3 of Section 91.5.600, Division 6, Article 1.5, Chapter IX of the Los Angeles Municipal Code is amended to read as follows:

91.5.602.10.2.3. Minimum Number of Braced Wall Panels. Braced wall lines with a length of 16 feet (4877 mm) or less shall have a not less than minimum of two braced wall panels of any length or one braced wall panel equal to 48 inches (1219 mm) or more. Braced wall lines greater than 16 feet (4877 mm) shall have not less than minimum of two braced wall panels. In Seismic Design Category D_0 , D_1 , or D_2 , no braced wall panel shall have a contributing length less than 48 inches in length or as required in Section R602.10.3, whichever is greater. No braced wall panel shall be less than 48 inches in length in Seismic Design Category D0 , D1 , or D2.

Sec. 505. Table 91.5.602.10.3(3) of Section 91.5.600, Division 6, Article 1.5, Chapter IX of the Los Angeles Municipal Code is amended to read:

Table 91.5.602.10.3(3)
Bracing Requirements Based on Seismic Design Category

		ΞΤ	MINIMUM TOTAL LENGTH (FEET) OF BRACED WALL PANELS REQUIRED ALONG EACH BRACED WALL LINE ^{9, 9}				
Seismic Design Category ^b	Story Location	Braced Wall Line Length (feet)°	Method LIB ^d	Method GB ^{≗ i}	Methods DWB ⁱ , SFB ⁱ , PBS ⁱ , PCP ^{g, i} , HPS ⁱ , CS-SFB ^{ed, i}	Method WSP, ABW ^f , PFH ^f and PFG ^{e,f}	Methods CS-WSP, CS-G, CS-PF
	^	10	2.5	2.5	2.5	1.6	1.4
	_ ^ 🗀	20	5.0	5.0	5.0	3.2	2.7
		30	7.5	7.5	7.5	4.8	4.1
	$\triangle \blacksquare \sqcup$	40	10.0	10.0	10.0	6.4	5.4
		50	12.5	12.5	12.5	8.0	6.8
	^	10	NP	4.5	4.5	3.0	2.6
	\wedge \longleftrightarrow	20	NP	9.0	9.0	6.0	5.1
C (townhouses only)	\leftrightarrow	30	NP	13.5	13.5	9.0	7.7
(townhouses only)		40	NP	18.0	18.0	12.0	10.2
		50	NP	22.5	22.5	15.0	12.8
	٨	10	NP	6.0	6.0	4.5	3.8
		20	NP	12.0	12.0	9.0	7.7
	H	30	NP	18.0	18.0	13.5	11.5
		40	NP	24.0	24.0	18.0	15.3
		50	NP	30.0	30.0	22.5	19.1
		10	NP	5.6	5.6	1.8	1.6
		20	NP	11.0	11.0	3.6	3.1
		30	NP	16.6	16.6	5.4	4.6
		40	NP	22.0	22.0	7.2	6.1
		50	NP	27.6	27.6	9.0	7.7
		10	NP	NP	NP	3.8	3.2
	\wedge \cap	20	NP	NP	NP	7.5	6.4
D_0		30	NP	NP	NP	11.3	9.6
		40	NP	NP	NP	15.0	12.8
		50	NP	NP	NP	18.8	16.0
	^	10	NP	NP	NP	5.3	4.5
	\cap	20	NP	NP	NP	10.5	9.0
	Н	30	NP	NP	NP	15.8	13.4
		40	NP	NP	NP	21.0	17.9
		50	NP	NP	NP	26.3	22.3
	\wedge	10	NP	6.0	6.0	2.0	1.7
		20	NP	12.0	12.0	4.0	3.4
		30	NP	18.0	18.0	6.0	5.1
D_1	\vdash	40	NP	24.0	24.0	8.0	6.8
		50	NP	30.0	30.0	10.0	8.5

		10	NP	NP	NP	4.5	3.8
		20	NP	NP	NP	9.0	7.7
		30	NP	NP	NP	13.5	11.5
		40	NP	NP	NP	18.0	15.3
		50	NP	NP	NP	22.5	19.1
		10	NP	NP	NP	6.0	5.1
		20	NP	NP	NP	12.0	10.2
	H	30	NP	NP	NP	18.0	15.3
		40	NP	NP	NP	24.0	20.4
		50	NP	NP	NP	30.0	25.5
	\wedge	10	NP	8.0	8.0	2.5	2.1
		20	NP	16.0	16.0	5.0	4.3
		30	NP	24.0	24.0	7.5	6.4
		40	NP	32.0	32.0	10.0	8.5
		50	NP	40.0	40.0	12.5	10.6
		10	NP	NP	NP	5.5	4.7
		20	NP	NP	NP	11.0	9.4
		30	NP	NP	NP	16.5	14.0
		40	NP	NP	NP	22.0	18.7
D ₂ ^h		50	NP	NP	NP	27.5	23.4
D ₂	^	10	NP	NP	NP	NP	NP
		20	NP	NP	NP	NP	NP
	l H	30	NP	NP	NP	NP	NP
		40	NP	NP	NP	NP	NP
		50	NP	NP	NP	NP	NP
		10	NP	NP	NP	7.5	6.4
	Cripple wall below one- or two-story dwelling	20	NP	NP	NP	15.0	12.8
		30	NP	NP	NP	22.5	19.1
	J. Me olory arrolling	40	NP	NP	NP	30.0	25.5
		50	NP	NP	NP	37.5	31.9

For SI: 1 inch = 25.4 mm, 1 foot = 305 mm, 1 pound per square foot = 0.0479 kPa.

- a. Linear interpolation shall be permitted.
- b. Interpolation of bracing length between the S_{ds} values associated with the seismic design categories shall be permitted when a site-specific S_{ds} value is determined in accordance with Section 1613.2 of the California Building Code. Wall bracing lengths are based on a soil site class "D". Interpolation of bracing length-between the Sds values associated with the Seismic Design Categories shall be permitted when a site-specific Sds value is determined in accordance with CBC Section 1613.3.
- c. Where the braced wall line length is greater than 50 feet, braced wall lines shall be permitted to be divided into shorter segments having lengths of 50 feet or less, and the amount of bracing within each segment shall be in accordance with this table. Method LIB (methods defined by LAMC Table 91.5.602.10.4) shall have gypsum board fastened to at least one side with nails or serews per CRC Table R602.3(1) for exterior sheathing or CRC Table R702.3.5 for interior gypsum board. Spacing of fasteners at panel edges shall not exceed 8 inches (203.2 mm).
- d. Method LIB shall have gypsum board fastened to not less than one side with nails or screws in accordance with Table R602.3(1) for exterior sheathing or Table R702.3.5 for interior gypsum board. Spacing of fasteners at panel edges shall not exceed 8 inches. Method CS-SFB applies in SDC C only.
- e. Methods PFG and CS-SFB do not apply in Seismic Design Categories D₀, D₁ and D₂. Methods GB and PCP braced wall panel h/w ratio shall not exceed 1:1 in SDC D0, D1, and D2. Methods DWB, SFB, PBS, and HPS are not permitted in SDC D0, D1, and D2.
- f. Methods PFH, PFG and ABW are only permitted on a single story or a first of two stories.
- g. Where more than one bracing method is used, mixing methods shall be in accordance with Section R602.10.4.1.

- h. One- and two-family dwellings in Seismic Design Category D₂ exceeding two stories shall be designed in accordance with accepted engineering practice.
 i. Methods GB and PCP braced wall panel h/w ratio shall not exceed 1:1 in SDC D₀, D₁ and D₂. Methods DWB, SFB, PBS, HPS, and CS-SFB are not permitted in D₀, D₁ and D₂.

Sec. 506. Table 91.5.602.10.4 of Section 91.5.600, Division 6, Article 1.5, Chapter IX of the Los Angeles Municipal Code is amended, to read as follows:

Table 91.5.602.10.4 **Bracing Methods**^f

METHO	DDS, MATERIAL	MINIMUM	FIGURE	CONNECTION	CONNECTION CRITERIA ^a		
WETHO	DS, MATERIAL	THICKNESS	FIGURE	Fasteners	Spacing		
	LIB Let-in-bracing	1 × 4 wood or approved metal straps at 45° to 60° angles for		Wood: 2-8d common nails or 3-8d (2 1/2" long × 0.113" dia.) nails	Wood: per stud and top and bottom plates		
	Let-in-bracing	maximum 16" stud spacing		Metal strap: per manufacturer	Metal: per manufacturer		
	DWB Diagonal wood boards	3/4"(1" nominal) for maximum 24" stud spacing		2-8d (2 1/2" long × 0.113" dia.) nails or 2 - 1 3/4" long staples	Per stud		
	WSP			Exterior sheathing using 8d common nails (2.5" × 0.131") nails ¾" edge distance to panel edgeper Table R602.3(3)	6" edges 12" field		
	Wood structural panel (See Section R604)	15/32"		8d common (2.5" × 0.131") nails 3/6" edge distance to panel edgeInterior sheathing per Table 91.5.602.3(1) or 91.5.602.3(2)	Varies by fastener		
Intermittent Bracing Methods	BV-WSP ° Wood structural Panels with stone or masonry veneer (See Section R602.10.6.5)	15/32"	See Figure R602.10.6.5	8d common (2 1/2" × 0.131) nails	4" at panel edges12"at intermediate supports 4"at braced wall panel end posts		
Memous	SFB Structural fiberboard sheathing	1/2" or 25/32" for maximum 16" stud spacing		1 1/2" long × 0.12" dia. (for 1/2" thick sheathing) 1 3/4" long × 0.12" dia. (for 25/32" thick sheathing) galvanized roofing nails or 8d common (2 1/2" long × 0.131" dia.) nails	3" edges 6" field		
	GB Gypsum board	1/2"		Nails or screws per Table 91.5.602.3(1) for exterior locations Nails or screws per Table R702.3.5 for interior locations	For all braced wall panel locations: 7" edges (including top and bottom plates) 7" field		
	PBS Particleboard sheathing (See Section R605)	3/8" or 1/2" for maximum 16" stud spacing		For 3/8", 6d common (2" long × 0.113" dia.) nails For 1/2", 8d common (2 1/2" long × 0.131" dia.) nails	3" edges 6" field		
	PCP Portland cement plaster	See Section R703.6 for maximum 16" stud spacing		1 1/2" long, 11 gage, 7/16" dia. head nails	6" o.c. on all framing members		

	HPS Hardboard panel siding	7/16" for maximum 16" stud spacing		0.092" dia., 0.225" dia. head nails with length to accommodate 11/2"penetration into studs	4" edges 8" field
	ABW Alternate braced wall	15/32"		See Section R602.10.6.1	See Section R602.10.6.1
	PFH Portal frame with hold-downs	15/32"		See Section R602.10.6.2	See Section R602.10.6.2
	PFG Portal frame at garage	15/32"	+ + + +	See Section R602.10.6.3	See Section R602.10.6.3
	CS-WSP Continuously sheathed wood structural panel			8d common (2.5" × 0.131") nails ¾" edge distance to panel edge Exterior sheathing per Table R602.3(3)	6" edges 12" field
		15/32"		8d common (2.5" × 0.131") nails 3/4" edge distance to panel edgeInterior sheathing per Table 91.5.602.3(1) or 91.5.602.3(2)	Varies by fastener
Continuous Sheathing Methods	CS-G ^{b, c} Continuously sheathed wood structural panel adjacent to garage openings	15/32"		See Method CS-WSP	See Method CS-WSP
	CS-PF Continuously sheathed portal frame	15/32"		See Section R602.10.6.4	See Section R602.10.6.4
	CS-SFB ^d Continuously sheathed structural fiberboard	1/2" or 25/32" for maximum 16" stud spacing		1 1/2" long × 0.12" dia. (for 1/2" thick sheathing) 1 3/4" long × 0.12" dia. (for 25/32" thick sheathing) galvanized roofing nails or 8d common (2 1/2" long × 0.131" dia.) nails	3" edges 6" field

For SI: 1 inch = 25.4 mm, 1 foot = 305 mm, 1 degree = 0.0175 rad, 1 pound per square foot = 47.8 N/m2, 1 mile per hour = 0.447 m/s.

- Adhesive attachment of wall sheathing, including Method GB, shall not be permitted in Seismic Design Categories C, D₀, D₁ and D₂.
- b. Applies to panels next to garage door opening when supporting gable end wall or roof load only. May only be used on one wall of the garage. In Seismic Design Categories D₀, D₁ and D₂, roof covering dead load may not exceed 3 psf.
- c. Garage openings adjacent to a Method CS-G panel shall be provided with a header in accordance with CRC Table 602.7(1). A full height clear opening shall not be permitted adjacent to a Method CS-G panel.
- d. Method CS-SFB does not apply in Seismic Design Categories D₀, D₁ and D₂ and in areas where the wind speed exceeds 100 mph.
- e. Method applies to detached one- and two-family dwellings in Seismic Design Categories D₀ through D₂ only.
- f. Methods GB and PCP braced wall panel h/d ratio shall not exceed 1:1 in SDC D₀, Ď₁, and, Ď₂. Methods LIB, DWB, SFB, PBS, HPS, and PFG are not permitted in SDC D₀, D₁, and, D₂.
- g. Use of stapes in braced wall panels shall be prohibited in SDC D0, D1 and D2.

Sec. 507. Table 91.5.602.10.5 of Section 91.5.600, Division 6, Article 1.5, Chapter IX of the Los Angeles Municipal Code is amended to read:

Table 91.5.602.10.5 Minimum Length Of Braced Wall Panels

MINIMUM LENGTH ^a (inches)							
METHOD (See Table R602.10.4)				Vall Heigh	CONTRIBUTING LENGTH		
		8 feet	9 feet	10 feet	11 feet	12 feet	(inches)
DWB, WSP, SFB, PBS, PCP, HPS, BV-WSP		48	48	48	53	58	Actual ^b
GB		48	48	48	53	58	Double sided = Actual Single sided = 0.5 × Actual
LIB		55	62	69	NP	NP	Actual ^b
ABW	SDC A, B and C, ultimate design wind speed < 140 440 mph	28	32	34	38	42	48
	SDC D_o , D_1 and D_2 , ultimate design wind speed < 1404440 mph	32	32	34	NP	NP	
CS-GPFH¶ Supporting roof only		24	27 24	30 24	33 24°	36 24°	Actual ^{b48}
¶	Supporting one story and roof¶	24¶	24¶	24¶	27°¶	29° ¶	48¶
PFG¶		24¶	27¶	30¶	334¶	36 ^d ¶	1.5 × Actual⁵¶
CS-G¶		24¶	27¶	30¶	PEE	36¶	Actual ^b ¶
CS-PF¶		24¶	24¶	24¶	24°¶	24°¶	Actual ^b ¶
	Adjacent clear opening height (inches)						
	≤ 64	24	27	30	33	36	
	68	26	27	30	33	36	
	72	27	27	30	33	36	Actual ^b
	76	30	29	30	33	36	
	80	32	30	30	33	36	
	84	35	32	32	33	36	
	88	38	35	33	33	36	
	92	43	37	35	35	36	
	96	48	41	38	36	36	
CS-WSP,	100	_	44	40	38	38	
CS-SFB	104	_	49	43	40	39	
	108	_	54	46	43	41	
	112	_	_	50	45	43	
	116	_		55	48	45	
	120	_	_	60	52	48	
	124	_	_	_	56	51	
	128	_	_	_	61	54	
	132	_	_	_	66	58	
	136	_	_	_	_	62	
	140	_	_	_	_	66	
	144	_	_	_		72	
METHOD (See Table R602.10.4)			Porta	header I			
		8 feet	9 feet	10 feet	11 feet	12 feet	
DEN	Supporting roof only	24	24	24	Note c	Note c	48
PFH	Supporting one story and roof	24	24	24	Note c	Note c	40
PFG		24	27	30	Note d	Note d	1.5 × Actual⁵
CS-PF	SDC A, B and C	16	18	20	Note e	Note e	1.5 × Actual⁵

SDC D ₀ , D ₁ and D ₂	24	24	24	Note e	Note e	Actual ^b
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For SI: 1 inch = 25.4 mm, 1 foot = 304.8 mm, 1 mile per hour = 0.447 m/s. NP = Not Permitted.

- a. Linear interpolation shall be permitted.
- b. Use the actual length when it is greater than or equal to the minimum length. The actual length of Methods CS-G, CS-WSP, CS-SFB, PFH, PFG and CS-PF is the length of the full-height sheathed section.
- c. Maximum header height for PFH is 10 feet (3048 mm) in accordance with CRC Figure R602.10.6.2, but wall height may be increased to 12 feet (3657.6 mm) with pony wall.
- d. Maximum opening height for PFG is 10 feet (3048 mm) in accordance with CRC Figure R602.10.6.3, but wall height may be increased to 12 feet (3657.6 mm) with pony wall.
- e. Maximum opening height for CS-PF is 10 feet (3048 mm) in accordance with CRC Figure R602.10.6.4, but wall height may be increased to 12 feet (3657.6 mm) with pony wall.

Sec. 508. Figure 91.5.602.10.6.1 of Section 91.5.600, Division 6, Article 1.5, Chapter IX of the Los Angeles Municipal Code is deleted and reinstated, to be placed in numerical order, to read as follows:

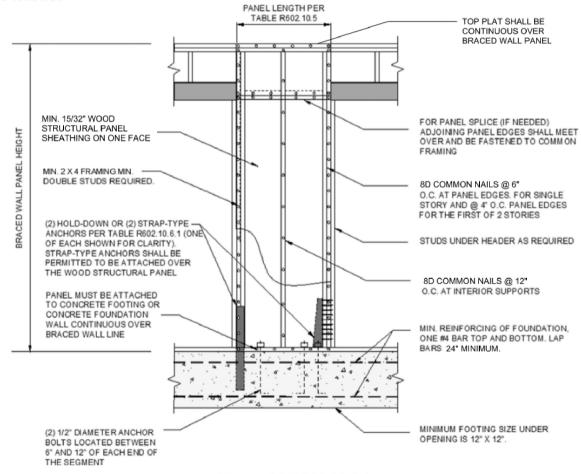


Figure 91.5.602.10.6.1

Method ABW – Alternate Braced Wall Panel

Sec. 509. Figure 91.5.602.10.6.2 of Section 91.5.600, Division 6, Article 1.5, Chapter IX of the Los Angeles Municipal Code is deleted and reinstated, to be placed in numerical order, to read as follows:

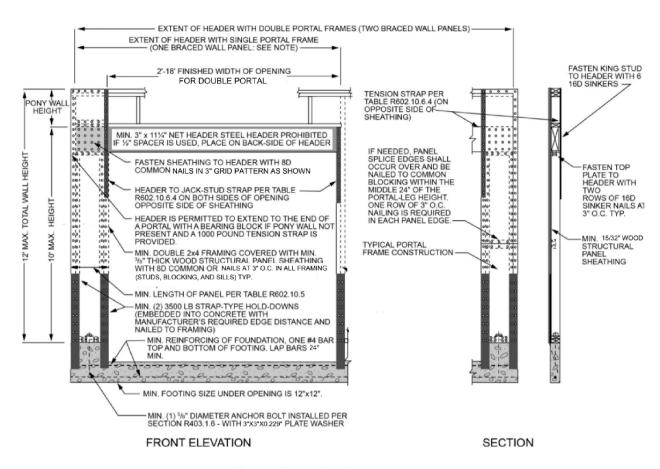
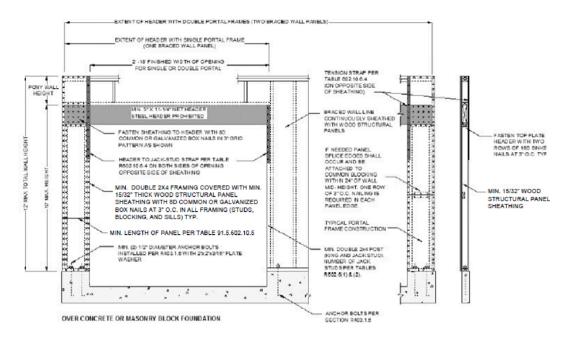


Figure 91.5.602.10.6.2

Method PFH – Portal Frame with Hold-downs at Garage Door Openings

Sec. 510. Figure 91.5.602.10.6.4 of Section 91.5.600, Division 6, Article 1.5, Chapter IX of the Los Angeles Municipal Code is deleted and reinstated, to be placed in numerical order, to read as follows:



For SI: 1 inch = 25.4 mm, 1 foot = 304.8 mm.

Figure 91.5.602.10.6.4 Method CS-PF – Continuously Sheathed Portal Frame Construction

- Sec. 511. Subsection 91.5.606.12.2.2.3 of Section 91.5.600, Division 6, Article 1.5, Chapter IX of the Los Angeles Municipal Code is deleted and reinstated, to be placed in numerical order, to read as follows:
 - **91.5.606.12.2.2.3.** Reinforcement of Requirements for Masonry Elements. Masonry elements listed in CRC Section R606.12.2.2.2 shall be reinforced in either the horizontal or vertical direction as shown in CRC Figure R606.11(2) and in accordance with the following:
 - 1. Horizontal reinforcement. Horizontal joint reinforcement shall consist of at least one No. 4 bar spaced not more than 48 inches (1219 mm). Horizontal reinforcement shall be provided within 16 inches (406 mm) of the top and bottom of these masonry elements.
 - 2. Vertical reinforcement. Vertical reinforcement shall consist of at least one No. 4 bar spaced not more than 48 inches (1219 mm). Vertical reinforcement shall be within 16 inches (406 mm) of the ends of masonry walls.
- Sec. 512. Subsection 91.5.802.8 of Section 91.5.800, Division 8, Article 1.5, Chapter IX of the Los Angeles Municipal Code is deleted and reinstated, to be placed in numerical order, to read as follows:
 - **91.5.802.8.** Lateral Support. Roof framing members and ceiling joists having a depth-to-thickness ratio exceeding 2 to 1 based on nominal dimensions shall be provided with lateral support at points of bearing to prevent rotation. For roof rafters with

ceiling joists attached per CRC Table R602.3(1), the depth-thickness ratio for the total assembly shall be determined using the combined thickness of the rafter plus the attached ceiling joist.

- Sec. 513. Subsection 91.5.802.10.2 of Section 91.5.800, Division 8, Article 1.5, Chapter IX of the Los Angeles Municipal Code is deleted:
 - **91.5.802.10.2. Design.** Wood trusses shall be designed in accordance with accepted engineering practice. The design and manufacture of metal-plate-connected wood trusses shall comply with ANSI/TPI 1. The truss design drawings shall be prepared by a registered professional.
- Sec. 514. Subsection 91.5.803.2.4 of Section 91.5.800, Division 8, Article 1.5, Chapter IX of the Los Angeles Municipal Code is deleted and reinstated, to be placed in numerical order, to read as follows:
 - **91.5.803.2.4. Openings in Horizontal Diaphragms.** Openings in horizontal diaphragms shall conform to LAMC Paragraph 91.5.503.2.4.
- Sec. 515. Subsection 91.5.902.2 of Section 91.5.900, Division 9, Article 1.5, Chapter IX of the Los Angeles Municipal Code is amended to read as follows:
 - **91.5.902.2.** Fire-retardant-treated Shingles and Shakes. Fire-retardant-treated wood shakes and shingles are wood shakes and shingles complying with UBC Standard 15-3 or 15-4 which are impregnated by the full-cell vacuum-pressure process with fire-retardant chemicals, and which have been qualified by UBC Standard 15-2 or ASTM E108 or UL 790 for use on Class A, B or C roofs. Fire-retardant-treated wood shakes and shingles shall comply with ICC-ES EG107 and with the weathering requirements contained in California Health and Safety Code Section 13132.7(j). Each bundle shall bear labels from an ICBO accredited quality control agency identifying their roof-covering classification and indicating their compliance with ICC-ES EG107 and with the weathering requirements contained in California Health and Safety Code Section 13132.7(j).

No wood shake or shingle roof covering is permitted as provided by LAMC Subsection 91.1505.1.

- Sec. 516. Subsection 91.5.1001.3.1 of Section 91.5.1000, Division 10, Article 1.5, Chapter IX of the Los Angeles Municipal Code is deleted and reinstated, to be placed in numerical order, to read as follows:
 - **91.5.1001.3.1. Vertical Reinforcing.** For chimneys up to 40 inches (1016 mm) wide, four No. 4 continuous vertical bars adequately anchored into the concrete foundation shall be placed between wythes of solid masonry or within the cells of hollow unit masonry and grouted in accordance with CRC Section R606. Grout shall be prevented from bonding with the flue liner so that the flue liner is free to move with thermal expansion. For chimneys more than 40 inches (1016 mm) wide, two additional No. 4 vertical bars adequately anchored into the concrete foundation shall be provided for each additional flue incorporated into the chimney or for each additional 40 inches (1016 mm) in width or fraction thereof.

Sec. 517. Section 92.0302, Division 3, Article 2, Chapter IX of the Los Angeles Municipal Code is amended to read as follows:

All inclined elevators in private residences shall comply with the provisions of ASME A 17.1-2004, A17.1-2004 Sections 5.3.1.7.2 and this article. Part 5, Section 5.4 of ASME A 17.1-2004 is adopted by reference, with the following exceptions and modifications: ASME Sections 5.3.1.7.2, 5.3.1.7.7, 5.3.1.18.4, 5.3.1.18.5 and 5.4.8 are not adopted.

- (a) **Suspension Means.** Suspension means shall comply with Part 5, Section 5.3.1.12 of ASME A 17.1-2004.
- (b) Machine and Controls. Machine and controls shall be located as follows:
 - 1. Machines, controls and disconcerting means shall not be mounted on cars, and shall be located outside of the hoistway in spaces dedicated to the elevator equipment.
 - 2. The machine room shall have a head clearance of at least seven feet, and shall be provided with permanent electric lighting and a duplex receptacle rated at not less than 15A at 120V.
 - 3. Required workspace clearance for elevator control and/or machinery spaces shall be located entirely within the interior of the building.
- (c) **Maintenance.** The owner shall develop, implement, and maintain a written maintenance program for Private Residence Inclined Elevators in accordance with the manufacturer's recommendations. The maintenance shall be performed by a registered Journey-Level Elevator Mechanic as required by LAMC Section 92.0119. A log of all repairs and maintenance shall be kept at the location.
- Sec. 518. Section 92.0304, Division 3, Article 2, Chapter IX of the Los Angeles Municipal Code is amended to read as follows:

All elevators in private residences shall comply with the provisions of ASME A17.1-2004 and this article. Part 5, Section 5.3 of ASME A17.1-2004 is adopted by reference, with the following exceptions and modifications: Sections 5.3.1.7.2, 5.3.1.7.7, 5.3.1.8.1(a), 5.3.1.8.1(d), 5.3.1.18.4(a) and 5.3.1.18.5 are not adopted. ASME A17.1-2004 Sections 5.3.1.7.2 and 5.3.1.8 are adopted by reference, Sections 5.3.1.8.1(a), 5.3.1.8.1(d) are not adopted.

- (a) **Car Enclosure.** Except at entrances, cars shall be enclosed on all sides and on the top. The enclosure shall be constructed of solid material, except openwork material may be provided for ventilation. When openwork material for ventilation is provided, it shall meet the requirement of ASME A17.1-2004, Rule 2.14.2.3.
- (b) Machine and Controls. Machine and controls shall be located as follows:
 - 1. Machines, controls and disconcerting means shall not be mounted on cars, and shall be located outside of the hoistway in spaces dedicated to the elevator equipment.

- 2. The machine room shall have a head clearance of at least 7 feet, and shall be provided with permanent electric lighting and a duplex receptacle rated at not less than 15A at 120V.
- Required workspace clearance for elevator control and/or machinery spaces shall be located entirely within the interior of the building.
- (c) **Care Doors and Gates.** A car door, when closed, shall guard the full opening of the entrance to the car. Car doors or gates shall be of solid construction. Scissors type gates are prohibited.
- (d) **Glass in Hoistway Landing Doors.** Glass used in hoistway landing doors shall comply with ASME A17.1-2004, Section 2.11.7.
- (e) Car Platform and Landing Sills. Sills shall be of metal and shall comply with ASME A17.1-2004, Rule 2.11.10.1.1 except 2.11.10.1.1(c).
- (f) **Projections or Setbacks in the Hoistway.** Any projection or setbacks in the hoistway shall comply with ASME A17.1-2004, Section 2.1.6 except Rule 2.1.6.2(b) and Rule 2.1.6.2(d) where projections or setbacks allow 4 inches (101.6 mm), this shall be reduced to 2 inches (50.8 mm).
- (g) Glass Used in a Hoistway of a Non-Fire Resistive Construction. Glass used in the hoistway shall comply with ASME A17.1-2004, Rule 2.1.1.2.1, Rule 2.1.1.2.2(d) and Rule 2.1.1.5 and shall also comply with the following:
 - 1. Entrance into the bottom (below car) of the hoistway or at the top (above car) of the hoistway for cleaning and maintenance purposes shall comply with ASME A17.1-2004, Rule 5.2.1.4.2 (Bottom) and Rule 5.2.1.4.4 (top).
 - 2. The cleaning and maintenance of the glass in the hoistway shall comply with the following:
 - (i) The cleaning of glass car enclosure and/or hoistway enclosures from inside the hoistway shall be performed by a City of Los Angeles Licensed Journey Level Elevator Mechanic as required by LAMC Section 92.0119 and employed by a State of California C11 Licensed Elevator Company.
 - (ii) A written cleaning procedure shall be developed by the original installation elevator company and kept on the premises where the elevator controller is located. The procedure shall identify the hazards and shall also detail safety precautions to be utilized.
 - (iii) A maintenance data plate with lettering a minimum size of 6 mm (0.25 inch) high on a contrasting background shall be fastened in a conspicuous place inside the elevator stating: "ALL MAINTENANCE OF ELEVATOR. INCLUDING THE CLEANING

OF GLASS, SHALL BE PERFORMED AS REQUIRED BY LAMC Section 92.0119."

- (iv) A copy of the glass cleaning procedure from the original elevator installation company, on the original elevator installation company's letterhead, shall be made available on the acceptance inspection to the LADBS Elevator Division.
- Sec. 519. Section 93.0101, Division 1, Article 3, Chapter IX of the Los Angeles Municipal Code is amended to read as follows:

SEC. 93.0101. TITLE.

This article shall be known as the "Los Angeles Electrical Code" a portion of the "Los Angeles Municipal Code". Wherever the word "Code" is used in this article, it shall mean the "Los Angeles Electrical Code" and whenever "LAMC" is used, it shall refer to the "Los Angeles Municipal Code". References to the "CEC" and the "CBSC" shall mean the 20252022 "California Electrical Code" and the 20252022 "California Building Standards Codes" respectively. Whenever the word "City" is used, it shall mean the "City of Los Angeles". Whenever the word "Department" is used, it shall mean the "Department of Building and Safety."

Sec. 520. Subsection (a) of Section 93.0202, Division 2, Article 3, Chapter IX of the Los Angeles Municipal Code is amended, with no other changes to existing subsections therein, to read as follows:

- (a) No permit shall be required in the following cases:
 - 1. Electric wiring expressly declared to be exempt from permit requirements of this Code by any other sections of the Code or by any other provisions of the LAMC.
 - 2. Wiring for temporary theater sets on the theater stages or temporary motion picture or television sets on any property belonging to or under the control of the City, privately owned studios, theaters, or similar locations designed for that usage.
 - 3. Installation of any portable motor or other portable appliance energized by means of a cord or cable having an attachment plug end, when that cord or cable is permitted by this Code.
 - 4. Repair or replacement of fixed motors or fixed appliances, supplied by branch circuits not exceeding 20 amperes and not exceeding 240 volts nominal, of the same type and rating in the same location where not located in an area classed as "hazardous" under CEC Article 500.
 - 5. Festive temporary decorative lighting in dwelling occupancies only, for a period not to exceed 90 days.
 - 6. Repair or replacement of current-carrying parts of any switch, contactor or control device.

- 7. Reinstallation of attachment plug receptacle, but not the outlets for it.
- 8. Replacement of any overcurrent device of the same rating and in the same location.
- 9. Replacement of gas tube electrodes, transformers, tubes, drivers and power supplies with the same original manufactured parts having the same size, type, capacity and ratings for electric signs, or luminaries.
- 10. Taping of joints.
- 11. Removal of electric wiring.
- 12. Temporary wiring for experimental purposes in suitable experimental laboratories.
- 13. The following electrical wiring:
 - (i) Non-required signaling circuits supplied by an approved Class 2 limited power source, capable of supplying not more than 30 volts and 100 volt-amperes; and
 - (ii) Non-required communication circuits which have the power limited in accordance with CEC Section 725.121; and
 - (iii) Non-required amplifier output circuits which are permitted by CEC Section 640.9(C) to employ Class 2 or Class 3 wiring; and
 - (iv) Any non-required circuit which operates at 12.4 volts or less and does not generate, transmit, transform, utilize or control more than 25 watts or volt-amperes of electric power.

EXCEPTION: ANe permit is required when provided the above-described wiring is net-located in any of the following locations:

- a. Area classified as "hazardous" under CEC Article 500; or
- b. Appurtenant to a required fire alarm and signaling system as classified under CEC Article 760; or
- c. Penetrating any fire-resistive wall, or floor, or ceiling system.; or
- d. In a plenum, duct or other space used for environmental air including access floors.
- 14. Any similar repair or replacement determined by the Department not to involve any hazard to life or property.
- 15. Repair or replacement of like in kind luminaires in single-family dwellings.
- 16. Any electric wiring, except wiring located in an area classified as "hazardous" under CEC Article 500 after the branch circuit distribution panelboards used

exclusively to supply or interconnect equipment installed, owned, operated or maintained by a communication public utility and used exclusively for communication purposes, in the exercise of its communication public utility functions within the communication public utility controlled areas.

- 17. The replacement of defective smoke detectors, smoke alarms or carbon monoxide alarms in a single-family dwelling when the work is performed by a contractor with a valid Certificate of Registration pursuant to LAMC Section 91.1704. A Certificate of Compliance pursuant to LAMC Subsection 91.108.12 must be filed with the City in lieu of a permit.
- 18. Electric wiring in the Harbor District pursuant to Section 98.0102.1(a) of the Los Angeles Municipal Code.

Sec. 521. Subsection (b) of Section 93.0206, Division 2, Article 3, Chapter IX of the Los Angeles Municipal Code is amended, with no other changes to existing subsections therein, to read as follows:

- (b) Plans and specifications for all wiring intended to be installed on the premises shall be submitted to and approved by the Department before a permit is issued and before installing any wiring related to the following:
 - 1. Theaters or motion picture theaters.
 - 2. Places of assembly.
 - 3. All health care facilities within the scope of CEC Article 517.
 - 4. A new building or an addition to a building if the computed area exceeds 30,000 square feet (2,787 m2), any first-time tenant(s), any installation if the new total connected load exceeds 400 amperes, or the installation of equipment rated 600 amperes or more. The computed area shall be the sum of the areas on each floor bounded by the outside surfaces of the exterior walls and shall include floor areas beneath building projections that extend more than 6 feet (182.8 mm);

EXCEPTION: When the service distribution board includes a main breaker rated at 400A or less and a busbar rated at 600A or more, the main breaker shall be utilized to determine the rating, as specified in Section 93.0206(b)(4). A permanent placard indicating the service size provided by the utility company must be affixed and compliant with 93.110.21

Note: The rating of the main breaker shall match the service being provided by the utility company.

- 5. All electrical installations over 600 volts.
- 6. Installation in locations classified as hazardous locations, unless otherwise satisfactory to the Department.
- 7. Projects which include the installation of exit signs, egress lighting or security lighting.

- 8. Installation of a complicated electrical system as determined by the Department, such as Emergency, Legally Required Standby, Fire Alarm and Signaling, and Gas Detection Systems, except for the following:
 - (i) The addition of strobe power supplies and their attached devices connected to any existing fire control unit or panel. (Note: This exception does not apply for a first-time tenant.)
 - (ii) The installation of special extinguishing, central station monitoring systems, dialers, and their attached devices.
 - (iii) The addition of any fire alarm and signaling devices connected to an existing addressable fire alarm and signaling system. (Note: this exception does not apply for a first-time tenant.)
- 9. Installation of lighting fixtures weighing more than 300 pounds.
- 10. Installation of renewable energy system(s) (i.e., photovoltaic, wind, fuel cell, etc.).

EXCEPTION: Department approved online permitted Standard plans.

11. Installation of Energy Storage System(s) (ESS).

EXCEPTION: Department approved online permitted Standard plans.

- 12. Engineering calculation(s) and analysis.
- Sec. 522. Subsection (a) of Section 93.0217, Division 2, Article 3, Chapter IX of the Los Angeles Municipal Code is amended, with no other changes to existing subsections therein, to read as follows:
 - (a) The fees for installing, replacing or relocating, each fire alarm and signaling system, communication, control or signal system equipment, or portion thereof, shall be as follows:

Number or Devices	Fees
1 to 10 total devices	\$48.00
11 to 40 devices	\$4.00 each
41 or more devices	\$3.00 each
Each control panel, standby power supply panel, annunciator panel or similar main piece of control equipment for one of the above systems	\$36.00

For the purpose of this subsection, devices shall include all signaling equipment, stations, power equipment such as damper actuators or door holding devices, communication jacks or outlets, control sensors, or switches or remote indicators, and smoke detectors that are part of fire alarm and signaling systems or process

EXCEPTION: Communications equipment installed, owned or operated and maintained by a communications public utility and exempt under the provisions of LAMC Section 93.0108(c).

Sec. 523. Section 93.0314, Division 3, Article 3, Chapter IX of the Los Angeles Municipal Code is amended to read as follows:

SEC. 93.0314. RESPONSIBILITY FOR COMPLIANCE.

Every person designing, engineering, installing, altering, repairing, using or maintaining electric wiring shall be responsible for compliance with this Code.

Sec. 524. Section 93.0402, Division 4, Article 3, Chapter IX of the Los Angeles Municipal Code is amended to read as follows:

SEC. 93.0402. ELECTRICAL EQUIPMENT.

Electrical equipment, as defined in CEC Article 100; shall either be approved by the Department or be listed or be certified by a Department approved Electrical Testing Agency.

Listed or certified electrical equipment shall bear the label, symbol, or other identifying mark of the approved testing agency. The equipment shall be installed, used, and maintained in conformance with its listing or certification and the Los Angeles Electrical Code. All nationally recognized test labs shall be on the OSHA approval list.

Sec. 525. Section 93.0501, Division 5, Article 3, Chapter IX of the Los Angeles Municipal Code is amended to read as follows:

SEC. 93.0501. QUALIFIED INSTALLER.

It is unlawful for any person to install, alter, reconstruct, or repair any electrical system unless they are a qualified installer or are working under the direct supervision of a qualified installer. The person obtaining the permit shall be a qualified installer or their authorized agent, as defined below, or be exempt from licensing requirements as specified by the California State Licensing Board. It is unlawful for any person who is not a qualified installer to install, alter, reconstruct or repair any electric system unless the person is under the direct supervision of a qualified installer.

A qualified installer is:

- (a) A person who holds a valid contractor's license in the appropriate proper classification issued by the State of California; or
- (b) A person who holds a valid Maintenance Certificate of Registration issued pursuant to the provisions of this Code; or
- (c) A person who is the owner of a single- family dwelling and has demonstrated to the satisfaction of the Department their qualifications to satisfactorily perform electric wiring in the dwelling which is occupied by the owner, and their accessory buildings, provided that all of the following conditions are met:

- (1) The work is performed prior to sale of the dwelling.
- (2) The owner actually resides in the dwelling The homeowner actually resides in the residence.
- (3) The owner has not used this exemption for more than two structures within any three-year period. The homeowner has not availed themself of this exemption on more than two structures during any three year period; or
- (d) A person employed by a governmental agency subject to this Code, who is deemed qualified by the Department to supervise or perform electrical work regulated under this CodeA person who is employed by a governmental agency that is required to comply with the provisions of this Code, and who is qualified, as determined by the Department, to supervise or control any work regulated by this Code.
- (e) A person who has journey-level experience in the appropriate classification as defined by the California State Licensing Board. Journey-level experience applies to a person who has completed an apprenticeship program or is an experienced worker, not a trainee, and is fully qualified and able to perform a specific trade without supervision. However, that person does not have a license and is not able to contract for jobs that require a building permit or use employee labor or are more than \$1,000 in labor and materials.
- Sec. 526. The first paragraph of Section 93.0700, Division 7, Article 3, Chapter IX of the Los Angeles Municipal Code is amended, with no other changes to existing subsections therein, to read as follows:

SEC. 93.0700. THE CALIFORNIA ELECTRICAL CODE.

Chapters 1 through 9, Annex C, H, G and I of the 2023 National Electrical Code (NEC), as published by the National Fire Protection Association (N.F.P.A. 70), the California Electrical Code (CEC) and the California Building Standards Code are adopted by reference as part of the Code. When there is a conflict between the 2023 NEC, the CEC and the Los Angeles Municipal Code (LAMC), LAMC Section 93.0105 shall prevail. Except as specified in Divisions 1 through 7 of Article 3, Chapter IX of the LAMC, all electrical installations and materials shall be in conformity with the California Electrical Code, as adopted by reference to be part of this Code; and Subsections 93.0700.19, 93.515.17 and 93.515.18 are added as provided here.

Sec. 527. Subsection 93.0700.19 of Section 93.0700, Division 7, Article 3, Chapter IX of the Los Angeles Municipal Code is amended to read as follows:

93.0700.19. Illuminated Exit Signs. Illuminated exit signs used as part of emergency system shall be supplied from two independent branch circuits. One branch circuit shall be supplied from an emergency system, and the other branch circuit shall be supplied from a normal system.

EXCEPTION: Battery-Equipped Emergency Luminaires Unit equipment branch circuits as permitted in CEC Section 700.12(HI).

Sec. 528. Subsection 94.101.1 of Section 94.101.0, Division 1, Article 4, Chapter IX of the Los Angeles Municipal Code is amended to read as follows:

94.101.1. Title. This article shall be known as the "Los Angeles Plumbing Code", a portion of the Los Angeles Municipal Code, and wherever the word "Code" is used in this article, it shall mean the "Los Angeles Plumbing Code" and whenever "LAMC" is used, it shall mean the Los Angeles Municipal Code. Whenever the word "City" is used in this article, it shall mean "City of Los Angeles". Whenever the word "Department" is used in this article, it shall mean "Department of Building and Safety".

The Los Angeles Plumbing Code adopts by indicated reference portions of the 20252022 California Plumbing Code (CPC) of Title 24 of the California Code of Regulations (CCR).

Sec. 529. Section 94.205.0. C., Division 2, Article 4, Chapter IX of the Los Angeles Municipal Code is amended to read as follows:

SEC. 94.205.0. C.

—Section 205.0 of the CPC is adopted by reference with the following additions and amendments:

California Plumbing Code (CPC). The 20252022 Edition of the California Plumbing Code, also known as Part 5, Title 24 of the California Code of Regulations (CCR), a portion of the California Building Standards Code.

Sec. 530. Section 94.216.0. N., Division 2, Article 4, Chapter IX of the Los Angeles Municipal Code is amended to read as follows:

SEC. 94.216.0. N.

Section 216.0 of the CPC is hereby adopted by reference.

Sec. 531. Section 94.217.0. O., Division 2, Article 4, Chapter IX of the Los Angeles Municipal Code is amended to read as follows:

SEC. 94.217.0. O.

Section 217.0 of the CPC is hereby adopted by reference.

Sec. 532. Section 94.218.0. P., Division 2, Article 4, Chapter IX of the Los Angeles Municipal Code is amended to read as follows:

SEC. 94.218.0. P.

Section 218.0 of the CPC is hereby adopted by reference.

Sec. 533. The first sentence of Section 94.219.0. Q., Article 4, Chapter IX of the Los Angeles Municipal Code is amended, with no other changes to existing language therein, to read as follows:

Section 219.0 of the CPC is adopted by reference with the following additions and amendments.

- Sec. 534. Subsection 94.407.2.4 of Section 94.400.0, Division 4, Article 4, Chapter IX of the Los Angeles Municipal Code is deleted:
 - **94.407.2.4.** All faucets in public restrooms shall be self-closing or self-closing metering faucets. Metered faucets shall deliver a maximum of 0.20 gallons (0.76 L) per metering eyele.
- Sec. 535. Subsection 94.407.2.4.1 of Section 94.400.0, Division 4, Article 4, Chapter IX of the Los Angeles Municipal Code is added, to be placed in numerical order, to read as follows:
 - **94.407.2.4.1.** All faucets in public restrooms shall be self-closing or self-closing metering faucets. Metered faucets shall deliver a maximum of 0.20 gallons (0.76 L) per metering cycle.
- Sec. 536. Subsection 94.414.4 of Section 94.400.0, Division 4, Article 4, Chapter IX of the Los Angeles Municipal Code is renumbered 94.414.5, to be placed in numerical order, and amended to read as follows:

94.414.54. Commercial Dishwashers. Water use for commercial dishwashers shall meet the following requirements:

Туре	High-Temperature Maximum Gallons Per Rack	Chemical Maximum Gallons Per Rack			
Conveyer	0.7	0.62			
Door	0.95	1.16			
Under-counter	0.9	0.98			
Note: All installed dishwashers shall be Energy Star® rated					

- Sec. 537. Subsection 94.414.5 of Section 94.400.0, Division 4, Article 4, Chapter IX of the Los Angeles Municipal Code is renumbered 94.414.6, to be placed in numerical order, and amended to read as follows:
 - **94.414.65. Domestic Dishwashers.** The maximum water use per washing cycle for domestic dishwasher shall be 5.8 gallons (21.95L).
- Sec. 538. Section 94.600.0, Division 6, Article 4 Chapter IX of the Los Angeles Municipal Code is amended, with no other changes to existing subsections therein, to read as follows:

SEC. 94.600.0. BASIC PROVISIONS.

Chapter 6 of the CPC is adopted by reference with the following exceptions: CPC Sections 603.5.12 and 610.5 are not adopted and Los Angeles Municipal Code Subsections 94.603.5.12, 94.610.4.1, 94.610.4.1.1, 94.610.4.1.2, 94.610.4.1.3, and 94.610.5 are added.

Sec. 539. Subsection 94.603.5.12 of Section 94.600.0, Division 6, Article 4, Chapter IX of the Los Angeles Municipal Code is deleted:

94.603.5.12. Beverage Dispensers. Potable water supply to carbonated beverage dispensers shall be protected by an air gap or vented backflow preventer that complies with ASSE 1022. For carbonated beverage dispensers, piping material installed downstream of the backflow preventer shall not be affected by carbon dioxide gas. Potable water supply to non-carbonated beverage dispensers, such as ice makers and coffee machines, shall be protected by an air gap or dual check backflow preventer that comply with ASSE 1032 or ASSE 1024.

Sec. 540. Division 12, Article 4, Chapter IX of the Los Angeles Municipal Code is hereby amended to renumber Section 94.1217.0 to 94.216.0, with no other change to existing sections therein, to read as follows:

DIVISION 12 FUEL GAS PIPING

Section

94.1200.0 Basic Provisions.

94.121617.0 Seismic Gas Shutoff Valves.

Sec. 541. Section 94.1216.0, Division 12, Article 4, Chapter IX of the Los Angeles Municipal Code is added, to be placed in numerical order, to read as follows:

SEC. 94.1216.0. SEISMIC GAS SHUTOFF VALVES

Sec. 542. Subsection 94.1216.1 of Section 94.1216.0, Division 12, Article 4, Chapter IX of the Los Angeles Municipal Code is added, to be placed in numerical order, to read as follows:

94.1216.1. Definitions. For purposes of this section, certain terms shall be defined as follows:

Downstream of the Gas Utility Meter shall refer to all customer owned gas piping, downstream of the bypass valve, as specified by the public gas utility company.

Excess Flow Shutoff Valve shall mean a shutoff system activated by significant gas leaks or overpressure surges downstream of the valves.

Residential Building shall mean any single-family dwelling, duplex, apartment building, condominium, townhouse, lodging house, congregate residence, hotel or motel.

Seismic Gas Shutoff Valve shall mean a system consisting of a seismic sensing means and actuating means designed to automatically actuate a companion gas shutoff means installed in a gas piping system in order to shutoff the gas downstream of the location of the gas shutoff means in the event of a severe seismic disturbance. The system may

- consist of separable components or may incorporate all functions in a single body. The terms "Seismically Activated Gas Shutoff Valves" and "Earthquake Sensitive Gas Shutoff Valves" are synonymous.
- **Upstream of the Gas Utility Meter** shall refer to all gas piping installed by the utility up to and including the meter and the utility's bypass tee at the connection to the customer owned piping.
- Sec. 543. Subsection 94.1216.2 of Section 94.1216.0, Division 12, Article 4, Chapter IX of the Los Angeles Municipal Code is added, to be placed in numerical order, to read as follows:
 - **94.1216.2. Scope.** An approved seismic gas shutoff valve or excess flow shutoff valve shall be installed downstream of the gas utility meter on each fuel gas line where the gas line serves the following buildings or structures:
- Sec. 544. Subsection 94.1216.2.1 of Section 94.1216.0, Division 12, Article 4, Chapter IX of the Los Angeles Municipal Code is added, to be placed in numerical order, to read as follows:
 - **94.1216.2.1.** A building or structure containing fuel gas piping for which a building permit was first issued on or after September 1, 1995.
- Sec. 545. Subsection 94.1216.2.2 of Section 94.1216.0, Division 12, Article 4, Chapter IX of the Los Angeles Municipal Code is added, to be placed in numerical order, to read as follows:
 - 94.1216.2.2. An existing building or structure which is altered or added to; and
- Sec. 546. Subsection 94.1216.2.2.1 of Section 94.1216.0, Division 12, Article 4, Chapter IX of the Los Angeles Municipal Code is added, to be placed in numerical order, to read as follows:
 - **94.1216.2.2.1.** That building or structure has fuel gas piping supplying the existing building or structure or the addition to the building or structure; and
- Sec. 547. Subsection 94.1216.2.2.2 of Section 94.1216.0, Division 12, Article 4, Chapter IX of the Los Angeles Municipal Code is added, to be placed in numerical order, to read as follows:
 - **94.1216.2.2.2.** The alteration or addition is valued at more than \$10,000 and a building permit for the work in commercial buildings was first issued on or after September 1, 1995. Alterations or additions to individual units or tenant spaces shall require a seismic gas shutoff valve or excess flow shutoff valve to be installed for all gas piping serving that individual unit or tenant space; or
- Sec. 548. Subsection 94.1216.2.2.3 of Section 94.1216.0, Division 12, Article 4, Chapter IX of the Los Angeles Municipal Code is added, to be placed in numerical order, to read as follows:
 - **94.1216.2.2.3.** The alteration or addition is valued at more than \$10,000 and a building permit for the work in residential buildings, including condominium units, is first issued on

or after January 10, 1998. Alterations or additions to an individual condominium unit shall require a seismic gas shutoff valve or excess flow shutoff valve to be installed for all gas piping serving that individual condominium unit; or

- Sec. 549. Subsection 94.1216.2.2.4 of Section 94.1216.0, Division 12, Article 4, Chapter IX of the Los Angeles Municipal Code is added, to be placed in numerical order, to read as follows:
 - **94.1216.2.2.4.** The alteration or addition is to the fuel gas piping system and involves the alteration or replacement of the gas meter.
- Sec. 550. Subsection 94.1216.2.3 of Section 94.1216.0, Division 12, Article 4, Chapter IX of the Los Angeles Municipal Code is added, to be placed in numerical order, to read as follows:
 - **94.1216.2.3.** Prior to entering into an agreement of sale, or prior to the close of escrow when an escrow agreement has been executed in connection with the sale,
 - 1. Buildings or structures which contain fuel gas piping shall have a seismic gas shutoff valve or excess flow shutoff valve installed.
 - 2. The sale of an individual condominium unit in a building shall require the installation of a seismic gas shutoff valve or excess flow shutoff valve for all gas piping serving that individual unit.

EXCEPTIONS:

- (a) Seismic gas shutoff valves or excess flow shutoff valve may be installed upstream of a gas utility meter provided they meet the requirements of this section.
- (b) Seismic gas shutoff valves or excess flow shutoff valve installed on a building or structure prior to September 1, 1995, are exempt from the requirements of this section provided they remain installed on the building or structure and are maintained for the life of the building or structure.
- (c) Notwithstanding LAMC Subdivisions 94.1216.2.1, 94.1216.2.2 and 94.1216.2.3 above, these provisions shall not apply to a building or structure if the Department determines that a building or structure satisfies all three of the following criteria:
 - (i) That the building or structure is owned, operated, and maintained by a governmental entity or public utility; or that the building or structure is owned by a private concern and provides a public benefit, such as a co-generation facility which shares its excess power with a public utility or with a large industrial facility which has governmental contracts;
 - (ii) That the building or structure has available 24-hour, year round maintenance staffing; and
 - (iii) That the gas piping system contained in the building or structure is designed to withstand seismic effects of earthquakes.

- (d) A single seismic gas shutoff valve or excess flow shutoff valve may be installed upstream of the gas utility meter at the discretion of the gas utility.
- Sec. 551. Subsection 94.1216.3 of Section 94.1216.0, Division 12, Article 4, Chapter IX of the Los Angeles Municipal Code is added, to be placed in numerical order, to read as follows:
 - **94.1216.3. General Requirements.** Seismic gas shutoff valves or excess flow shutoff valves installed either in compliance with LAMC Subsection 94.1216.2, et seq., or voluntarily with a permit issued on or after September 1, 1995, shall comply with the following requirements:
- Sec. 552. Subsection 94.1216.3.1 of Section 94.12167.0, Division 12, Article 4, Chapter IX of the Los Angeles Municipal Code is added, to be placed in numerical order, to read as follows:
 - **94.1216.3.1**. Seismic gas shutoff valves or excess flow shutoff valve shall be installed by a contractor licensed in the appropriate classification by the State of California.

EXCEPTIONS:

- (a) A person who has been determined by the Department to meet the qualifications of a Qualified Installer pursuant to the definition of a Qualified Installer set forth in Article 4, Chapter IX of the LAMC may install a seismic gas shutoff valve or excess flow shutoff valve to a single-family dwelling which is or is intended to be occupied by the Qualified Installer.
- (b) Seismic gas shutoff valves or excess flow shutoff valve may be installed, without a permit, by a gas utility or a contractor authorized by the gas utility when the valves are installed upstream of the gas utility meter and the valves are installed and approved in accordance with this section.
- Sec. 553. Subsection 94.1216.3.2 of Section 94.1216.0, Division 12, Article 4, Chapter IX of the Los Angeles Municipal Code is added, to be placed in numerical order, to read as follows:
 - **94.1216.3.2.** Seismic gas shutoff valves or excess flow shutoff valve shall be mounted rigidly to the exterior, or other approved location, of the building or structure containing the fuel gas piping.
 - **EXCEPTION:** If the Department determines that the seismic gas shutoff valve or excess flow shutoff valve has been tested and listed for an alternate method of installation, then a seismic gas shutoff valve or excess flow shutoff valve need not be mounted rigidly to the exterior of the building or structure containing the fuel gas piping.
- Sec. 554. Subsection 94.12167.3.3 of Section 94.1216.0, Division 12, Article 4, Chapter IX of the Los Angeles Municipal Code is added, to be placed in numerical order, to read as follows:
 - **94.1216.3.3.** Be certified by the Office of the State Architect.

- Sec. 555. Subsection 94.1216.3.4 of Section 94.1216.0, Division 12, Article 4, Chapter IX of the Los Angeles Municipal Code is added, to be placed in numerical order, to read as follows:
 - **94.1216.3.4.** Be approved by the Department of Building and Safety, Mechanical Testing Laboratory.
- Sec. 556. Subsection 94.1216.3.5 of Section 94.1216.0, Division 12, Article 4, Chapter IX of the Los Angeles Municipal Code is added, to be placed in numerical order, to read as follows:
 - **94.1216.3.5**. Have a thirty (30) year warranty which warrants that the valve is free from defects and will continue to properly operate for thirty (30) years from the date of installation.
- Sec. 557. Subsection 94.1216.3.6 of Section 94.1216.0, Division 12, Article 4, Chapter IX of the Los Angeles Municipal Code is added, to be placed in numerical order, to read as follows:
 - **94.1216.3.6.** Where seismic gas shutoff valves or excess flow shutoff valve are installed as required by this section, they shall be maintained for the life of the building or structure or be replaced with a valve complying with the requirements of this section.
- Sec. 558. Subsection 94.1216.3.7 of Section 94.1216.0, Division 12, Article 4, Chapter IX of the Los Angeles Municipal Code is added, to be placed in numerical order, to read as follows:
 - **94.1216.3.7.** Seismic gas shutoff valves must be in compliance with all requirements of California Referenced Standard 12-16-1, at Part 12, Title 24, of the California Code of Regulations (CCR).
- Sec. 559. Subsection 94.1216.3.8 of Section 94.1216.0, Division 12, Article 4, Chapter IX of the Los Angeles Municipal Code is added, to be placed in numerical order, to read as follows:
 - **94.1216.3.8.** Excess flow shutoff valves must be in compliance with all requirements of California Referenced Standard 12-16-2. (Part 12, Title 24, of the CCR).
- Sec. 560. Section 94.1217.0, Division 12, Article 4, Chapter IX of the Los Angeles Municipal Code is deleted:

SEC. 94.1217.0. SEISMIC GAS SHUTOFF VALVES.

- Sec. 561. Subsection 94.1217.1 of Section 94.1217.0, Division 12, Article 4, Chapter IX of the Los Angeles Municipal Code is deleted:
 - **94.1217.1. Definitions.** For purposes of this section, certain terms shall be defined as follows:¶

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Downstream of the Gas Utility Meter shall refer to all customer owned gas piping, downstream of the bypass valve, as specified by the public gas utility company.¶

Excess Flow Shutoff Valve shall mean a shutoff system activated by significant gasleaks or overpressure surges downstream of the valves.¶

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Residential Building shall mean any single-family dwelling, duplex, apartment building, condominium, townhouse, lodging house, congregate residence, hotel or motel.¶

Seismic Gas Shutoff Valve shall mean a system consisting of a seismic sensing means and actuating means designed to automatically actuate a companion gas shutoff means installed in a gas piping system in order to shutoff the gas downstream of the location of the gas shutoff means in the event of a severe seismic disturbance. The system may consist of separable components or may incorporate all functions in a single body. The terms "Seismically Activated Gas Shutoff Valves" and "Earthquake Sensitive Gas Shutoff Valves" are synonymous.¶

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Upstream of the Gas Utility Meter shall refer to all gas piping installed by the utility up to and including the meter and the utility's bypass tee at the connection to the customer ewned piping.¶

Sec. 562. Subsection 94.1217.2 of Section 94.1217.0, Division 12, Article 4, Chapter IX of the Los Angeles Municipal Code is deleted:

94.1217.2. Scope. An approved seismic gas shutoff valve or excess flow shutoff valve shall be installed downstream of the gas utility meter on each fuel gas line where the gas line serves the following buildings or structures:

Sec. 563. Subsection 94.1217.2.1 of Section 94.1217.0, Division 12, Article 4, Chapter IX of the Los Angeles Municipal Code is deleted:

94.1217.2.1. A building or structure containing fuel gas piping for which a building permitwas first issued on or after September 1, 1995.¶

Sec. 564. Subsection 94.1217.2.2 of Section 94.1217.0, Division 12, Article 4, Chapter IX of the Los Angeles Municipal Code is deleted:

94.1217.2.2. An existing building or structure which is altered or added to; and \[\]

Sec. 565. Subsection 94.1217.2.2.1 of Section 94.1217.0, Division 12, Article 4, Chapter IX of the Los Angeles Municipal Code is deleted:

94.1217.2.2.1. That building or structure has fuel gas piping supplying the existing building or structure or the addition to the building or structure; and ¶

Sec. 566. Subsection 94.1217.2.2.2 of Section 94.1217.0, Division 12, Article 4, Chapter IX of the Los Angeles Municipal Code is deleted:

94.1217.2.2.2. The alteration or addition is valued at more than \$10,000 and a building permit for the work in commercial buildings was first issued on or after September 1, 1995. Alterations or additions to individual units or tenant spaces shall require a seismic-

gas shutoff valve or excess flow shutoff valve to be installed for all gas piping serving that individual unit or tenant space; or []

Sec. 567. Subsection 94.1217.2.2.3 of Section 94.1217.0, Division 12, Article 4, Chapter IX of the Los Angeles Municipal Code is deleted:

94.1217.2.2.3. The alteration or addition is valued at more than \$10,000 and a building permit for the work in residential buildings, including condominium units, is first issued on after January 10, 1998. Alterations or additions to an individual condominium unit shall require a seismic gas shutoff valve or excess flow shutoff valve to be installed for all gas piping serving that individual condominium unit; or

Sec. 568. Subsection 94.1217.2.2.4 of Section 94.1217.0, Division 12, Article 4, Chapter IX of the Los Angeles Municipal Code is deleted:

94.1217.2.2.4. The alteration or addition is to the fuel gas piping system and involves the alteration or replacement of the gas meter.

Sec. 569. Subsection 94.1217.2.3 of Section 94.1217.0, Division 12, Article 4, Chapter IX of the Los Angeles Municipal Code is deleted:

94.1217.2.3. Prior to entering into an agreement of sale, or prior to the close of escrowwhen an escrow agreement has been executed in connection with the sale,¶

3. Buildings or structures which contain fuel gas piping shall have a seismic gas shutoff valve or excess flow shutoff valve installed.¶

4. The sale of an individual condominium unit in a building shall require the installation of a seismic gas shutoff valve or excess flow shutoff valve for all gas piping serving that individual unit.¶

EXCEPTIONS:¶

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- (f) Seismic gas shutoff valves or excess flow shutoff valve installed on a building or structure prior to September 1, 1995, are exempt from the requirements of this section provided they remain installed on the building or structure and are maintained for the life of the building or structure.¶
- (g) Notwithstanding LAMC Subdivisions 94.1217.2.1, 94.1217.2.2 and 94.1217.2.3 above, these provisions shall not apply to a building or structure if the Department determines that a building or structure satisfies all three of the following criteria:

 ¶
 - (iv) That the building or structure is owned, operated, and maintained by a governmental entity or public utility; or that the building or structure is owned by a private concern and provides a public benefit, such as a co-generation facility which shares its excess

- power with a public utility or with a large industrial facility which has governmental contracts:
- (v) That the building or structure has available 24-hour, year round-maintenance staffing; and
- (vi) That the gas piping system contained in the building or structure is designed to withstand seismic effects of earthquakes.¶

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- (h) A single seismic gas shutoff valve or excess flow shutoff valve may be installed upstream of the gas utility meter at the discretion of the gas utility.¶
- Sec. 570. Subsection 94.1217.3 of Section 94.1217.0, Division 12, Article 4, Chapter IX of the Los Angeles Municipal Code is deleted:
 - 94.1217.3. General Requirements. Seismic gas shutoff valves or excess flow shutoff valves installed either in compliance with LAMC Subsection 94.1217.2, et seq., or voluntarily with a permit issued on or after September 1, 1995, shall comply with the following requirements:¶
- Sec. 571. Subsection 94.1217.3.1 of Section 94.1217.0, Division 12, Article 4, Chapter IX of the Los Angeles Municipal Code is deleted:
 - **94.1217.3.1**. Seismic gas shutoff valves or excess flow shutoff valve shall be installed by a contractor licensed in the appropriate classification by the State of California.¶

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EXCEPTIONS:¶

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(a) A person who has been determined by the Department to meet the qualifications of a Qualified Installer pursuant to the definition of a Qualified Installer set forth in Article 4, Chapter IX of the LAMC may install a seismic gas shutoff valve or excess flow shutoff valve to a single-family dwelling which is or is intended to be occupied by the Qualified Installer.¶

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- (b) Seismic gas shutoff valves or excess flow shutoff valve may be installed, without a permit, by a gas utility or a contractor authorized by the gas utility when the valves are installed upstream of the gas utility meter and the valves are installed and approved in accordance with this section.
- Sec. 572. Subsection 94.1217.3.2 of Section 94.1217.0, Division 12, Article 4, Chapter IX of the Los Angeles Municipal Code is deleted:
 - **94.1217.3.2.** Seismic gas shutoff valves or excess flow shutoff valve shall be mounted rigidly to the exterior, or other approved location, of the building or structure containing the fuel gas piping.¶

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EXCEPTION: If the Department determines that the seismic gas shutoff valve or excess flow shutoff valve has been tested and listed for an alternate method of installation, then a seismic gas shutoff valve or excess flow shutoff valve need not be mounted rigidly to the exterior of the building or structure containing the fuel gas piping.

Sec. 573. Subsection 94.1217.3.3 of Section 94.1217.0, Division 12, Article 4, Chapter IX of the Los Angeles Municipal Code is deleted:

94.1217.3.3. Be certified by the Office of the State Architect.

- Sec. 574. Subsection 94.1217.3.4 of Section 94.1217.0, Division 12, Article 4, Chapter IX of the Los Angeles Municipal Code is deleted:
 - **94.1217.3.4.** Be approved by the Department of Building and Safety, Mechanical Testing Laboratory.
- Sec. 575. Subsection 94.1217.3.5 of Section 94.1217.0, Division 12, Article 4, Chapter IX of the Los Angeles Municipal Code is deleted:
 - **94.1217.3.5**. Have a thirty (30) year warranty which warrants that the valve is free from defects and will continue to properly operate for thirty (30) years from the date of installation.
- Sec. 576. Subsection 94.1217.3.6 of Section 94.1217.0, Division 12, Article 4, Chapter IX of the Los Angeles Municipal Code is deleted:
 - **94.1217.3.6.** Where seismic gas shutoff valves or excess flow shutoff valve are installed as required by this section, they shall be maintained for the life of the building or structure or be replaced with a valve complying with the requirements of this section.
- Sec. 577. Subsection 94.1217.3.7 of Section 94.1217.0, Division 12, Article 4, Chapter IX of the Los Angeles Municipal Code is deleted:
 - **94.1217.3.7.** Seismic gas shutoff valves must be in compliance with all requirements of California Referenced Standard 12-16-1, at Part 12, Title 24, of the California Code of Regulations (CCR).
- Sec. 578. Subsection 94.1217.3.8 of Section 94.1217.0, Division 12, Article 4, Chapter IX of the Los Angeles Municipal Code is deleted:
 - **94.1217.3.8.** Excess flow shutoff valves must be in compliance with all requirements of California Referenced Standard 12-16-2. (Part 12, Title 24, of the CCR).
- Sec. 579. Section 94.1800.0, Division 18, Article 4 Chapter IX of the Los Angeles Municipal Code is amended, with no other changes to existing subsections therein, to read as follows:

SEC. 94.1800.0. BASIC PROVISIONS.

The 20242021 Uniform Solar Energy, Hydronics, and Geothermal code is adopted by reference, except Chapters 1, 8, and the Appendices are not adopted.

Sec. 580. Section 94.1900.0, Division 19, Article 4 Chapter IX of the Los Angeles Municipal Code is amended, with no other changes to existing subsections therein, to read as follows:

SEC. 94.1900.0. BASIC PROVISIONS.

The 20242021 Uniform Swimming Pool, Spa, and Hot Tub Code is adopted by reference, except Chapters 1, 3, 4, 8, and 9 are not adopted.

Sec. 581. Section 94.2010.0, Division 20, Article 4 Chapter IX of the Los Angeles Municipal Code is amended, with no other changes to existing subsections therein, to read as follows:

SEC. 94.2010.0. NFPA 13.

Chapter 35 of the 20252022 California Building Code to the extent it adopts and amends NFPA 13 is adopted by reference and the following Subsections are added to read as follows:

- Sec. 582. Subsection 94.2010.1 of Section 94.2010.0, Division 20, Article 4, Chapter IX of the Los Angeles Municipal Code is amended to read as follows:
 - **94.2010.1.** Comply with the sprinkler provisions in Chapters 4 and 9 of the 2022 California Building Code as they pertain to sprinkler systems.
- Sec. 583. Subsection 94.2010.2 of Section 94.2010.0, Division 20, Article 4, Chapter IX of the Los Angeles Municipal Code is amended to read as follows:
 - **94.2010.2.** NFPA 13 Section 3.3.252243 is added to read as follows:
 - **3.3.252243.** Water Curtain is a line of closely spaced fire sprinklers (or a single sprinkler) aligned adjacent to openings to keep fire from penetrating those openings.
- Sec. 584. Subsection 94.2010.3 of Section 94.2010.0, Division 20, Article 4, Chapter IX of the Los Angeles Municipal Code is amended to read as follows:
 - **94.2010.3.** NFPA 13 Section 9.3.5.5 is added to read as follows:
 - **9.3.5.5.** Water curtains shall consist of closely spaced sprinklers and draft stops that are made of noncombustible or limited combustible material. The draft stops shall be located immediately adjacent to the opening and shall be at least 18 inches (47.2 mm) deep measured from the sprinkler deflector to the bottom of the draft stop and shall be of noncombustible or limited-combustible material. Sprinklers shall be spaced not more than 6 feet (1929.8 mm) apart and placed 6 to 12 inches (152.4 mm to 304.8 mm) from the draft stop on the side away from the opening. Where sprinklers are closer than 6 feet (1828.8 mm), cross baffles shall be provided in accordance with NFPA 13 Section 10.2.65.4.2.
- Sec. 585. Section 94.2013.0, Division 20, Article 4 Chapter IX of the Los Angeles Municipal Code is amended, with no other changes to existing subsections therein, to read as follows:

SEC. 94.2013.0. NFPA 13R.

Chapter 35 of the 20252022 California Building Code to the extent it adopts and amends NFPA 13R is adopted by reference and LAMC Subsection 94.2013.1 is added to read as follows:

- Sec. 586. Subsection 94.2013.1 of Section 94.2013.0, Division 20, Article 4, Chapter IX of the Los Angeles Municipal Code is amended to read as follows:
 - **94.2013.1.** Comply with the sprinkler provisions in Chapters 4 and 9 of the 2022 California Building Code as they pertain to NFPA 13R.
- Sec. 587. Section 94.2014.0, Division 20, Article 4 Chapter IX of the Los Angeles Municipal Code is amended, with no other changes to existing subsections therein, to read as follows:

SEC. 94.2014.0. NFPA 13D.

Chapter 35 of the 20252022 California Building Code to the extent it adopts and amends NFPA 13D is adopted by reference and LAMC Subsection 94.2014.1 is added to read as follows:

- Sec. 588. Subsection 94.2014.1 of Section 94.2014.0, Division 20, Article 4, Chapter IX of the Los Angeles Municipal Code is amended to read as follows:
 - **94.2014.1**. Comply with the sprinkler provisions in Chapters 4 and 9 of the 2022 California Building Code as they pertain to sprinkler systems in residential occupancies within the scope of NFPA 13D.
- Sec. 589. Section 94.2020.0, Division 20, Article 4 Chapter IX of the Los Angeles Municipal Code is amended, with no other changes to existing subsections therein, to read as follows:

SEC. 94.2020.0. NFPA 14.

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Chapter 35 of the 20252022 California Building Code to the extent it adopts and amends NFPA 1420 is adopted by reference and the following Los Angeles Municipal Code subsections are added to read as follows:

- Sec. 590. Subsection 94.2020.1 of Section 94.2020.0, Division 20, Article 4, Chapter IX of the Los Angeles Municipal Code is amended to read as follows:
 - **94.2020.1.** Comply with the fire sprinkler provisions in Chapters 4, 9, and 33 of the 2022 California Building Code as they pertain to NFPA 14.
- Sec. 591. Subsection 94.2020.2 of Section 94.2020.0, Division 20, Article 4, Chapter IX of the Los Angeles Municipal Code is deleted:

94.2020.2. NFPA 14 Section 6.4.5.3.1 is hereby added to read as follows:

6.4.5.3.1. Where the Fire Department inlet connection does not serve the entire building, the portion served shall be suitably identified.

Sec. 592. Subsection 94.2020.3 of Section 94.2020.0, Division 20, Article 4, Chapter IX of the Los Angeles Municipal Code is amended to read as follows:

94.2020.3. NFPA 14 Section 9.1.15 is hereby added to read as follows:

- **9.1.5.** Water supplies from the following sources shall be permitted:
 - 1. A public waterworks system where pressure and flow rate are adequate;
 - 2. Automatic fire pumps connected to an approved water source in accordance with NFPA 20, Standard for the Installation of Stationary Pumps for Fire Protection.
- Sec. 593. Subsection 94.2020.5 of Section 94.2020.0, Division 20, Article 4, Chapter IX of the Los Angeles Municipal Code is amended to read as follows:
 - **94.2020.5.** NFPA 14 Section 12.2.211.2.3 is amended to read as follows:
 - **12.2.211.2.3.** Flushing the System Riser. Water shall flow from the topmost outlet of each riser until the system is clear of debris.
 - **12.2.241.2.3.1.** Roof Outlets. Standpipe risers going through the last floor of the building, through a floor under a roof, or adjacent to a roof shall be designed so that they can be flushed through outlets located on roof.
 - **12.2.241.2.3.2.** Flow. All standpipes shall be flushed individually through the roof, or in the absence of roof outlets, through the topmost outlet at a residual pressure of at least 65 psi. The flow for Class I and Class III standpipes shall be at least 500 g.p.m through each riser.
- Sec. 594. Section 94.2030.0, Division 20, Article 4 Chapter IX of the Los Angeles Municipal Code is amended, with no other changes to existing subsections therein, to read as follows:

SEC. 94.2030.0. FIRE PUMPS AND DRIVERS.

Chapter 35 of the 20252022 California Building Code to the extent it adopts and amends NFPA 20 is adopted by reference and Los Angeles Municipal Code Subsections 94.2030.1, 94.2030.2, and 94.2030.3 are amended or added to read as follows:

- Sec. 595. Subsection 94.2030.1 of Section 94.2030.0, Division 20, Article 4, Chapter IX of the Los Angeles Municipal Code is amended to read as follows:
 - **94.2030.1.** Comply with the fire pump provisions in Chapters 4 and 9 of the 2022 California Building Code.
- Sec. 596. Subsection 94.2030.2 of Section 94.2030.0, Division 20, Article 4, Chapter IX of the Los Angeles Municipal Code is amended to read as follows:

94.2030.2. NFPA 20 Sec. 43.16.11 is added to read as follows:

43.16.11. Fire Department Connections. Fire Department connections shall not be connected to the suctionon suction side of the pump.

Sec. 597. Section 94.2040.0, Division 20, Article 4 Chapter IX of the Los Angeles Municipal Code is amended, with no other changes to existing subsections therein, to read as follows:

SEC. 94.2040.0. NFPA 24 INSTALLATION OF PRIVATE FIRE SERVICE MAINS AND THEIR APPURTENANCES.

Chapter 35 of the 20252022 California Building Code to the extent it adopts and amends NFPA 24 is adopted by reference.

- Sec. 598. Subsection 94.2040.1 of Section 94.2040.0, Division 20, Article 4, Chapter IX of the Los Angeles Municipal Code is amended to read as follows:
 - **94.2040.1.** Comply with the provisions in Chapter 9 of the 2022 California Building Code as it pertains to the installation of private fire service mains and their appurtenances.
- Sec. 599. Section 94.2050.0, Division 20, Article 4 Chapter IX of the Los Angeles Municipal Code is amended, with no other changes to existing subsections therein, to read as follows:

SEC. 94.2050.0. NFPA 22 FIRE PROTECTION TANKS.

Comply with the fire tank provisions in Chapters 4 and 9 of the California Building Code as it pertains to Fire Protection Tanks. Chapter 35 of the 2022 California Building Code to the extent it adopts and amends NFPA 22 is adopted by reference.

Sec. 600. Subsection 94.2050.1 of Section 94.2050.0, Division 20, Article 4, Chapter IX of the Los Angeles Municipal Code is deleted:

94.2050.1. Comply with the fire tank provisions in Chapters 4 and 9 of the California Building Code as it pertains to NFPA 22.

Sec. 601. Subsection 94.2050.2 of Section 94.2050.0, Division 20, Article 4 Chapter IX of the Los Angeles Municipal Code is renumbered 94.2050.1, to be placed in numerical order, and amended to read as follows:

94.2050.12. Water Tanks in High-Rise Buildings.

- 1. One or more water tanks shall be installed to serve the fire sprinklers and standpipes in a high-rise building. No tanks shall serve more than one building, however, one water service may supply tanks for more than one building, structure or tower.
- 2. The tank shall be supplied from the City water main via an automatic fill line. The auto-fill system shall be sized to replenish the water in the tank at a rate equal to, or greater than, the required fire pump capacity. The auto-fill lines shall be a minimum of two inches in diameter and shall not exceed a maximum of four inlets into the tank. The auto-fill system bypass shall be provided around all fill lines

with a shut off valve that is normally closed. Means shall be provided to flow test the automatic fill valves individually and collectively. A minimum 2 inches tank auxiliary drain valve shall be required for all water storage tanks to accommodate testing.

- 3. The capacity of the tank shall be based on the requirements in Section 403.3.3 of the California Building Code. The capacity of the tank shall be based on the required standpipe demand capacity for the duration as specified in Table-19.2.3.1.2 of NFPA 13 or the requirements in Section 403.3.3 of the 20252022 California Building Code, whichever is greater.
- Sec. 602. Section 94.2100.0, Division 21, Article 4 Chapter IX of the Los Angeles Municipal Code is amended, with no other changes to existing subsections therein, to read as follows:

Appendices B, D, H, I, and J of the 2022 California Plumbing Code are adopted by reference. Appendices C, E, F, G, K, L, M, and N of the 2022 California Plumbing Code are not adopted, and Appendix A of the 2022 California Plumbing Code is adopted by reference with the following amendment:

A 104.1. Residual Pressures. Decide what is the desirable minimum residual pressure that shall be maintained at the highest fixture in the supply system. The available residual pressure shall be not less than 15 psi (103 kPa). Where fixtures, fixture fittings or both are installed that require residual pressure exceeding 15 psi (103 kPa), that minimum residual pressure shall be provided.

Sec. 603. Subsection 95.101.1 of Section 95.101, Division 1, Article 5, Chapter IX of the Los Angeles Municipal Code is amended to read as follows:

95.101.1. Title. This article is a portion of the Los Angeles Municipal Code and shall be known as the Los Angeles Mechanical Code. Whenever the word Code is used in this article, it shall mean the Los Angeles Mechanical Code.

The Los Angeles Mechanical Code adopts by indicated reference portions of the 20252022 California Mechanical Code (CMC) which is Part 4 of Title 24 of the California Code of Regulations (CCR).

Sec. 604. Section 96.3030, Division D, Article 6 Chapter IX of the Los Angeles Municipal Code is amended, with no other changes to existing subsections therein, to read as follows:

SEC. 96.303. APPLICATION.

Upon written application by the owner or the owner's agent to the Department of Building and Safety on forms provided by the City and the payment of a fee specified herein to the Department of Building and Safety, the Superintendent of Building and the City Engineer shall review the appropriate City records. This application shall contain the name and address of the owner, the legal description, the county assessor's map book page and parcel number and, if available, the street address of the residential property for which the reports are sought.

The application for the report regarding a sale or exchange of a residential property shall not be accepted by the Department of Building and Safety until such time as the applicant provides the Department of Building and Safety with one of the following:

- 1. A declaration under penalty of perjury by the owner certifying that in the residential property for which the report is sought:
 - (a) Smoke detectors have been installed in accordance with Section 91.8603 of the Los Angeles Municipal Code; and
 - (b) Impact hazard glazing has been installed in accordance with Section 91.6101 of the Los Angeles Municipal Code; and
 - (c) Water conservation devices have been installed in accordance with Section 122.03 of the Los Angeles Municipal Code;
 - (d) Metal bars, grilles, grates, security roll-down shutters, and similar devices over emergency escape windows in sleeping rooms have been installed in accordance with Section 91.6304.3 of the Los Angeles Municipal Code; and
 - (e) Lights and locks have been installed in accordance with Section 91.8607 of the Los Angeles Municipal Code; and
 - (f) Seismic gas shutoff valves have been installed in accordance with Section 94.1216₹ of the Los Angeles Municipal Code.
- 2. A declaration under penalty of perjury by the owner certifying that in the residential property for which the report is sought:
 - (a) Smoke detectors will be installed in accordance with Section 91.8603 of the Los Angeles Municipal Code; and
 - (b) Impact hazard glazing will be installed in accordance with Section 91.6101 of the Los Angeles Municipal Code.

The owner shall further certify that such smoke detectors and/or impact hazard glazing will be installed prior to entering into an agreement of sale or contracting for an exchange of a residential property, or, where an escrow agreement has been executed in connection therewith, prior to close of escrow, and that within ten days after the smoke detectors and/or impact hazard glazing is/are installed the owner will so advise the Department of Building and Safety in writing; and

- (c) Water conservation devices will be installed in accordance with Section 122.03 of the Los Angeles Municipal Code;
- (d) Metal bars, grilles, grates, security roll-down shutters, and similar devices over emergency escape windows in sleeping rooms will be installed in accordance with Section 91.6304.3 of the Los Angeles Municipal Code; and

- (e) Lights and locks will be installed in accordance with Section 91.8607 of the Los Angeles Municipal Code; and
- (f) Seismic gas shutoff valves will be installed in accordance with Section 94.1216₹ of the Los Angeles Municipal Code.
- 3. A declaration under penalty of perjury by the buyer certifying that in the residential property for which the report is sought:
 - (a) Smoke detectors will be installed in accordance with 91.8603 of the Los Angeles Municipal Code Section; and
 - (b) Impact hazard glazing will be installed in accordance with Section 91.6101 of the Los Angeles Municipal Code.

The buyer shall further certify that such smoke detectors and/or impact hazard glazing will be installed within 30 days after entering into an agreement of sale or contracting for an exchange of a residential property, or, where an escrow agreement has been executed in connection therewith, within 30 days after close of escrow, and that within 10 days after the smoke detectors and/or impact hazard glazing is/are installed the buyer will so advise the Department of Building and Safety in writing; and

- (c) Water conservation devices have been installed in accordance with Section 122.03 of the Los Angeles Municipal Code;
- (d) Metal bars, grilles, grates, security roll-down shutters, and similar devices over emergency escape windows in sleeping rooms have been installed in accordance with Section 91.6304.3 of the Los Angeles Municipal Code; and
- (e) Lights and locks have been installed in accordance with Section 91.8607 of the Los Angeles Municipal Code; and
- (f) Seismic gas shutoff valves will be or have been installed in accordance with Section 94.1216₹ of the Los Angeles Municipal Code.
- 4. The Department of Building and Safety shall deliver to the applicant, either in person or by mail, the reports required within 15 calendar days after the date of the acceptance of the application.
- 5. The owner must also provide a declaration under penalty of perjury that the owner has inspected the property for the existence of protected trees and the number of protected trees, if any, located on the subject property. For the purposes of this section, the definition of "protected tree" set forth in Section 46.01 the Los Angeles Municipal Code shall apply. The declaration shall also authorize the Bureau of Street Services within the Department of Public Works to verify this information by entry upon the subject property. A fee may be collected for any inspection required to verify the declaration. The fee shall be determined

and adopted in the same manner as provided in Section 12.37 I.1 of the Los Angeles Municipal Code for establishing fees.

Sec. 605. Section 98.0602, Division 6, Article 8 Chapter IX of the Los Angeles Municipal Code is amended, with no other changes to existing subsections therein, to read as follows:

SEC. 98.0602. EXPIRATION OF PERMITS.

(a) Every permit issued for one- and two-family dwellings or townhouses shall be valid for a period of threetwo years from the date of issuance.thereof, For all other projects, permits shall be valid for a period of four years from the date of issuance.provided that any permit shall expire 12 months from date of issuance if the work authorized under any permit associated to the current scope of work has not been commenced; or shall expire whenever the Department determines the work authorized by any permit has been suspended, discontinued or abandoned for a continuous period of 12 months. (See Health and Safety Code Sections 18938.5 and 18938.6.)

However, every permit issued shall expire 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. (See Health and Safety Code Section 18938.5 and 18938.6.)

EXCEPTION:

The Department may, in writing, grant one or more extensions of time for periods not more than 180 days each on a case-by-case basis.

1. If the holder of any permit issued by the Department presents satisfactory evidence that unusual construction difficulties have prevented work from being started or continued without being suspended with the 12-month time period or completed within the two-year period of validity, the department or the Board may grant extensions of time reasonably necessary because of such difficulties.

2. If the permit(s) is related to or for a residential occupancy issued by the Department, and if the work authorized under any permit associated to the current scope of work for said residential occupancy has not been commenced, the permit(s) shall expire within 12 months after issuance. If the holder of any permit concerning residential occupancy issued by the Department presents satisfactory evidence that unusual construction difficulties have prevented work from being started or continued without being suspended with the 12-month time period or completed within the two-year period of validity, the Department or the Board may grant extensions of time reasonably necessary because of such difficulties.

Notwithstanding the provisions of this subsection, the validity of a permit may be further restricted in the following conditions:

- 1. In the case that a building or structure has been ordered repaired or demolished in accordance with Los Angeles Municipal Code Sections 91.8903, 91.8904, or 91.8905, such time limits as are specified therein shall apply.
- 2. The Department or the Board may, because of unusual circumstances or conditions such as, but not limited to, the demolition of an imminently hazardous building, or a grading operation which may be subject to flooding during the rainy season, impose restrictions upon the time limits for expiration of any permit.
- 3. The time limit for the validity of relocation permits shall be as specified in LAMC Section 91.8306.
- 4. The time limit for the validity of tent permits shall be as specified in LAMC Subsection 91.106.1.3.
- 5. The time limit for the validity of permits for the installation of metal bars, grills, grates, security roll-down shutters, and similar devices, and of quick-release systems shall be as specified in Los Angeles Municipal Code Subsection 91.107.4.5.
- 6. The time limit of validity of permits for temporary signs on temporary construction walls, or for temporary signs on a fence of solid wood or similar material surrounding a vacant lot, issued pursuant to the provisions of Section 14.4.17, shall be as specified in Subsection 14.4.17 C. of the Los Angeles Municipal Code.
- (b) Permits which have expired shall have the site, building or project restored to the condition which existed immediately prior to the commencement of work described by such permit.
- (c) It shall be unlawful for any owner, either before or after the issuance of a permit under this section, and notwithstanding the issuance of such permit, to fail to comply with any order, determination or action of the Department or Board.
- Sec. 606. Section 98.0603, Division 6, Article 8, Chapter IX of the Los Angeles Municipal Code is hereby amended to read as follows:

SEC. 98.0603. EXPIRATION OF PLAN CHECK.

If a permit is not secured within 18 months after a complete set of construction documents—plans have been filed for checking such plan check shall expire and no permit shall be issued until the plans are rechecked and approved and a new plan check fee paid.

EXCEPTIONS:

The Department or the Board may grant extensions of time if a permit applicant submits in writing sufficient evidence that unusual conditions or circumstances precluded the securing of the permit within the allocated time.

- 1. Standard Plans shall be valid for a period of three years from the date of approval or until changes to the California Building Standards Code would result in a non-conforming design, whichever time is less. In such cases, the Standard Plan will become invalid on the effective date of the revised California Building Standards Code. At that time, a new application for plan check shall be made, or the Standard Plan shall be discarded. The fee for reviewing and approving the revised Standard Plan, based on updates to the California Building Standards Code, will be calculated on an hourly basis as outlined in LAMC Sections 91.107.3.1.4 and 98.0415.
- 2. The Department may, in writing, grant one or more extensions of time for periods not more than 180 days each on a case-by-case basis. Beyond the initial 18-month vesting period, the project must comply with the zoning code regulations in effect at the time the permit is issued. When more than three extensions are granted, the project may be required, subject to the Department's discretion, to comply with the edition of the California Building Standards Code in effect at the time the latest plan check extension is granted.
- Sec. 607. Section 98.0605, Division 6, Article 8, Chapter IX of the Los Angeles Municipal Code is deleted:

SEC. 98.0605. TIME LIMITS FOR REQUEST FOR EXTENSION.¶

¶

Requests for extensions of time on the expiration times of permits, plan checks, and slight modifications shall not be made later than 90 days after the expiration time specified in this division.

Sec. 608. Subsection 99.01.101.1 of Section 99.01.101, Division 1, Article 9, Chapter IX of the Los Angeles Municipal Code is amended to read as follows:

99.01.101.1. Title. These regulations shall be known as the Los Angeles Green Building Code and may be cited as such and will be referred to herein as "this Code". The Los Angeles Green Building Code is Article 9 of Chapter IX of the Los Angeles Municipal Code, and adopts by reference the 20252022 California Green Building Standards Code (CALGreen) (Part 11, Title 24, of the California Code of Regulations (CCR)) except as amended herein. Whenever the word "City" is used, it shall mean the City of Los Angeles. Whenever the word "Department" is used, it shall mean the Department of Building and Safety of the City of Los Angeles.

Sec. 609. Subsection 99.01.102.2 of Section 99.01.102, Division 1, Article 9, Chapter IX of the Los Angeles Municipal Code is amended to read as follows:

99.01.102.2. Information on Construction Documents. Construction documents shall be of sufficient clarity to indicate the location, nature and scope of the proposed green building feature and show that it will conform to the provisions of this Code, the LAMC and other relevant laws, ordinances, rules and regulations as determined by the Department. The construction document and other data submitted to the Department for

checking shall be drawn with ink,—of indelible pencil, submitted electronically, or shall be made by a reproducible process approved by the Department.

Sec. 610. Subsection 99.01.107.1.1 of Section 99.01.107, Division 1, Article 9, Chapter IX of the Los Angeles Municipal Code is amended to read as follows:

99.01.107.1.1. Tier 1 and Tier 2 Fee. When Tier 1 or Tier 2 measures (Tier 1 or Tier 2) per CALGreen Subsections A4.601.4, A4.601.5, A5.601.2 or A5.601.3 or Section A5.601 are requested to be verified, an additional fee equal to 5% of the plan check and permit fee shall be assessed.

Sec. 611. Subsection 99.04.106.4.2 of Section 99.04.106, Division 4, Article 9, Chapter IX of the Los Angeles Municipal Code is deleted:

99.04.106.4.2. New Multi-family Dwellings, Hotels and Motels and New Residential Parking Facilities. When parking is provided, parking spaces for new multi-family dwellings, hotels and motels shall meet the requirements of Sections 99.04.106.4.2.1 and 99.04.106.4.2.2. Calculations for spaces shall be rounded up to the nearest whole number. A parking space served by electric vehicle supply equipment or designed as a future EV charging space shall count as at least one standard automobile parking space only for the purpose of complying with any applicable minimum parking space requirements established by a local jurisdiction. See Vehicle Gode Section 22511.2 for further details.

Sec. 612. Subsection 99.04.106.4.2.1 of Section 99.04.106, Division 4, Article 9, Chapter IX of the Los Angeles Municipal Code is deleted:

99.04.106.4.2.1. Multi-family Development Projects with less than 20 Dwelling Units; and Hotels and Motels with less than 20 Sleeping Units or Guest Rooms. The number of dwelling units, sleeping units or guest rooms shall be based on all buildings on a project site subject to this section.

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1. EV Capable. Thirty percent of the total number of parking spaces on a building site, provided for all types of parking facilities, shall be electric vehicle load calculations shall demonstrate that the electrical panel service capacity and electrical system, including any on-site distribution transformer(s), have sufficient capacity to simultaneously charge all EVs at all required EV spaces. An automatic load management system (ALMS) may be used to simultaneously charge all EVs at all required EV spaces at a minimum of 40 amperes.¶

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The service panel or subpanel circuit directory shall identify the overcurrent protective device space(s) reserved for future EV charging purposes as "EV CAPABLE" in accordance with the California Electrical Code.¶

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EXCEPTIONS:¶

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1. When EV chargers (Level 2 EVSE) are installed in a number equal to orgreater than the required number of EV capable spaces. \P

2. When EV chargers (Level 2 EVSE) are installed in a number less than the required number of EV capable spaces, the number of EV capable spaces

required may be reduced by a number equal to the number of EV chargers-installed.¶

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NOTES:¶

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a. Construction documents are intended to demonstrate the project's capability and capacity for facilitating future EV charging and shall show locations of proposed EV spaces.¶

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b. There is no requirement for EV spaces to be constructed or available untilreceptacles for EV charging or EV chargers are installed for use.¶

¶

2. **EV Ready.** Twenty-five percent of the total number of parking spaces, but in no case less than one per multi-family dwelling unit, shall be equipped with low power Level 2 EV charging receptacles. For multi-family dwelling parking facilities, no more than one receptacle is required per dwelling unit when more than one parking space is provided for use by a single dwelling unit. The number of EV Ready parking spaces may be counted toward the total number of EV Capable parking spaces required for the building per Los Angeles Municipal Gode Subsection 99.04.106.4.2.1, Item 1.¶

EXCEPTION: Areas of parking facilities served by parking lifts.¶

Sec. 613. Subsection 99.04.106.4.2.2 of Section 99.04.106, Division 4, Article 9, Chapter IX of the Los Angeles Municipal Code is deleted:

99.04.106.4.2.2. Multi-family Development Projects with 20 or More Dwelling Units, Hotels and Motels with 20 or More Sleeping Units or Guest Rooms. The number of dwelling units, sleeping units or guest rooms shall be based on all buildings on a project site subject to this section.¶

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1. **EV Capable.** Thirty percent of the total number of parking spaces on a building site, provided for all types of parking facilities, shall be electric vehicle charging spaces (EV spaces) capable of supporting future Level 2 EVSE. Electrical load calculations shall-demonstrate that the electrical panel service capacity and electrical system, including any on-site distribution transformer(s), have sufficient capacity to simultaneously charge all EVs at all required EV spaces. An automatic load management system (ALMS) may be used to simultaneously charge all EVs at all required EV spaces at a minimum of 40 amperes.¶

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The service panel or subpanel circuit directory shall identify the overcurrent protective device space(s) reserved for future EV charging purposes as "EV CAPABLE" in accordance with the California Electrical Code.

-¶

EXCEPTION: When EV chargers (Level 2 EVSE) are installed in a number greater than five (5) percent of parking spaces required by Los Angeles Municipal Code Subsection 99.04.106.4.2.2, Item 3, the number of EV capable spaces required may be reduced by a number equal to the number of EV chargers installed over the five (5) percent required.¶

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NOTES:¶

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a. Construction documents are intended to demonstrate the project's capability and capacity for facilitating future EV charging and shall show locations of proposed EV spaces.¶

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b. There is no requirement for EV spaces to be constructed or available until receptacles for EV charging or EV chargers are installed for use.¶

2. **EV Ready.** Twenty-five percent of the total number of parking spaces shall be equipped with low power Level 2 EV charging receptacles. For multi-family dwelling parking facilities, no more than one receptacle is required per dwelling unit when more than one parking space is provided for use by a single dwelling unit. The number of EV Ready parking spaces may be counted toward the total number of EV Capable parking spaces required for the building per Los Angeles Municipal Code Subsection 99.04.106.4.2.2, Item 1.¶

-¶

EXCEPTION: Areas of parking facilities served by parking lifts.¶

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3. **EV Chargers.** Ten percent of the total number of parking spaces shall be equipped with Level 2 EVSE. Where common use parking is provided, at least one EV charger shall be located in the common use parking area and shall be available for use by all residents or guests.¶

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When low power Level 2 EV charging receptacles or Level 2 EVSE are installed beyond the minimum required, an automatic load management system (ALMS) may be used to reduce the maximum required electrical capacity to each space served by the ALMS. The electrical system and any on-site distribution transformers shall have sufficient capacity to deliver at least 3.3 kW simultaneously to each EV charging station (EVCS) served by the ALMS. The branch circuit shall have a minimum capacity of 40 amperes and installed EVSE shall have a capacity of not less than 30 amperes. ALMS shall not be used to reduce the minimum required electrical capacity to the required EV capable spaces.

Sec. 614. Subsection 99.04.106.4.2.2.1 of Section 99.04.106, Division 4, Article 9, Chapter IX of the Los Angeles Municipal Code is deleted:

99.04.106.4.2.2.1. Electric Vehicle Charging Stations (EVCS). Electric vehicle charging stations required by Los Angeles Municipal Code Subsection 99.04.106.4.2.1, Item 3, or LAMC Subsection 99.04.106.4.2.2, Item 3, shall comply with Los Angeles Municipal Code Subsection 99.04.106.4.2.3.

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EXCEPTION: Electric vehicle charging stations serving public accommodations, public housing, motels, and hotels shall not be required to comply with this section. See California Building Code, Chapter 11B, for applicable requirements.

Sec. 615. Subsection 99.04.106.4.2.2.1.1 of Section 99.04.106, Division 4, Article 9, Chapter IX of the Los Angeles Municipal Code is deleted:

99.04.106.4.2.2.1.1. Location. EVCS shall comply with at least one of the following options: ¶

-

- 1. The charging space shall be located adjacent to an accessible parking space meeting the requirements of the California Building Code, Chapter 11A, to allow-use of the EV charger from the accessible parking space. ¶
- 2. The charging space shall be located on an accessible route, as defined in the California Building Code, Chapter 2, to the building. ¶

EXCEPTION: Electric vehicle charging stations designed and constructed in compliance with the California Building Code, Chapter 11B, are not required to comply with LAMC Subsections 99.04.106.4.2.2.1.1, and 99.04.106.4.2.2.1.2, Item 3.

Sec. 616. Subsection 99.04.106.4.2.2.1.2 of Section 99.04.106, Division 4, Article 9, Chapter IX of the Los Angeles Municipal Code is deleted:

99.04.106.4.2.2.1.2. Electric Vehicle Charging Stations (EVCS) Dimensions. The charging spaces shall be designed to comply with the following:¶

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1. The minimum length of each EV space shall be 18 feet (5486 mm).

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2. The minimum width of each EV space shall be 9 feet (2743 mm).

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3. One in every 25 charging spaces, but not less than one, shall also have an 8-foot (2438 mm) wide minimum aisle. A 5-foot (1524 mm) wide minimum aisle shall be permitted provided the minimum width of the EV space is 12 feet (3658 mm).¶

a. Surface slope for this EV space and the aisle shall not exceed 1 unit vertical in 48 units horizontal (2.083 percent slope) in any direction.¶

Sec. 617. Subsection 99.04.106.4.2.2.1.3 of Section 99.04.106, Division 4, Article 9, Chapter IX of the Los Angeles Municipal Code is deleted:

99.04.106.4.2.2.1.3. Accessible EV Spaces. In addition to the requirements in Sections 4.106.4.2.3.1 and 4.106.4.2.3.2, all EVSE, when installed, shall comply with the accessibility provisions for EV chargers in the California Building Code, Chapter 11B. EV ready spaces and EVCS in multi-family developments shall comply with California Building Code, Chapter 11A, Section 1109A.¶

Sec. 618. Subsection 99.04.106.4.2.3 of Section 99.04.106, Division 4, Article 9, Chapter IX of the Los Angeles Municipal Code is deleted:

99.04.106.4.2.3. EV Space Requirements. ¶

1. Single EV Space Required. Install a listed raceway capable of accommodating a 208/240-volt dedicated branch circuit. The raceway shall not be less than trade size 1 (nominal 1-inch inside diameter). The raceway shall originate at the main service or subpanel and shall terminate into a listed cabinet, box or enclosure in close proximity to the location or the proposed location of the EV space. Construction documents shall identify the raceway termination point, receptacle or charger location, as applicable. The service panel and/or subpanel shall have a 40-ampere minimum dedicated branch circuit for EV chargers or a 20-ampere minimum dedicated branch circuit for EV Ready parking

spaces, including branch circuit overcurrent protective device installed, or space(s) reserved to permit installation of a branch circuit overcurrent protective device.¶

EXCEPTION: A raceway is not required if a minimum 40-ampere 208/240-volt dedicated EV branch circuit is installed in close proximity to the location or the proposed location of the EV space, at the time of original construction in accordance with the California Electrical Code.¶

2. **Multiple EV Spaces Required.** Construction documents shall indicate the raceway termination point and the location of installed or future EV spaces, receptacles, or EV chargers. Construction documents shall also provide information on amperage of installed or future receptacles or EVSE, raceway method(s), wiring schematics and electrical load calculations. Plan design shall be based upon a 40-ampere minimum branch circuit. Required raceways and related components that are planned to be installed underground, enclosed, inaccessible, or in concealed areas and spaces shall be installed at the time of original construction.¶

EXCEPTION: A raceway is not required if a minimum 40-ampere 208/240-volt-dedicated EV branch circuit is installed in close proximity to the location or the proposed location of the EV space at the time of original construction in accordance with the Galifornia Electrical Code.¶

Sec. 619. Subsection 99.04.106.4.2.4 of Section 99.04.106, Division 4, Article 9, Chapter IX of the Los Angeles Municipal Code is deleted:

99.04.106.4.2.4. Identification. The service panel or subpanel circuit directory shall identify the overcurrent protective device space(s) reserved for future EV charging purposes as "EV CAPABLE" in accordance with the California Electrical Code.¶

Sec. 620. Subsection 99.04.106.4.2.5 of Section 99.04.303, Division 4, Article 9, Chapter IX of the Los Angeles Municipal Code is deleted:

99.04.106.4.2.5. Electric Vehicle Ready Space Signage. Electric vehicle ready spaces shall be identified by signage or pavement markings, in compliance with Caltrans Traffic Operations Policy Directive 13-01 (Zero Emission Vehicle Signs and Pavement Markings) or its successor(s).

Sec. 621. Table 99.04.303.4.1 of Section 99.04.303, Division 4, Article 9, Chapter IX of the Los Angeles Municipal Code is amended to read as follows:

TABLE 99.04.303.4.1 WATER USE BASELINE 43

FIXTURE TYPE	BASELINE FLOW RATE	DURATION	DAILY USES	OCCUPANTS 2
Showerheads	1.8 gpm @ 80 psi	8 min.	1	X ^{2a}
Lavatory Faucets, Residential	1.2 gpm @ 60 psi	.25 min.	3	X
Lavatory Faucets, Common/Public Uses	0.5 gpm @ 60 psi	.25 min.	3	Х
Kitchen Faucets	1.8 gpm @ 60 psi	4 min.	1	X ^{2b}

Replacement Aerators	2.2 gpm			
Metering Faucets	0.20 gallons/cycle		3	Х
Water Closets	1.28 gallons/flush	1 flush	1 male ¹ 3 female	Х
Urinals	0.125 gallons/flush	1 flush	2 male	Х

Fixture "Water Use" = Flow rate X Duration X Occupants X Daily uses

- 1. The daily use number shall be increased to three if urinals are not installed in the room.
- 2. Refer to Table 4-1A, Chapter 4 of the California Plumbing Code, for occupant load factors.
 - a. Shower use by occupants depends on the type of use of a building or portion of a building. For example, the total occupant load for a health club, but only a fraction of the occupants in an office building as determined by the anticipated number of users.
 - b. Kitchen faucet use is determined by the occupant load of the area served by the fixture.
- Floor-mounted urinals @ 0.5 GPF or wall-mounted urinals @ 0.125 GPF. Use Worksheet WS 1 of the 2016-CALGreen Code to calculate baseline water.
- 4. Use Worksheet WS-1 of the CALGreen Code to calculate baseline water.

Sec. 622. Table 4.504.1 of Section 99.04.504, Division 4, Article 9, Chapter IX of the Los Angeles Municipal Code is renumbered Table 99.04.504.1, to be placed in numerical order, and amended to read as follows:

TABLE 99.04.504.14.504.1 ADHESIVE VOC LIMIT ^{1, 2} Less Water and Less Exempt Compounds in Grams per Liter

ARCHITECTURAL APPLICATIONS	VOC LIMIT
Indoor carpet adhesives	50
Carpet pad adhesives	50
Outdoor carpet adhesives	150
Wood flooring adhesives	100
Rubber floor adhesives	60
Subfloor adhesives	50
Ceramic tile adhesives	65
VCT and asphalt tile adhesives	50
Drywall and panel adhesives	50
Cove base adhesives	50
Multipurpose construction adhesives	70
Structural glazing adhesives	100
Single-ply roof membrane adhesives	250
Other adhesives not specifically listed	250
SPECIALTY APPLICATIONS	
PVC welding	510
CPVC welding	490
ABS welding	325

Plastic cement welding	100
Adhesive primer for plastic	550
Contact adhesive	80
Special purpose contact adhesive	250
Structural wood member adhesive	140
Top and trim adhesive	540
SUBSTRATE SPECIFIC APPLICATIONS	
Metal to metal	30
Plastic foams	50
Porous material (except wood)	50
Wood	30
Fiberglass	80

^{1.} If an adhesive is used to bond dissimilar substrates together, the adhesive with the highest VOC content shall be allowed.

Sec. 623. Table 4.504.2 of Section 99.04.504, Division 4, Article 9, Chapter IX of the Los Angeles Municipal Code is renumbered Table 99.04.504.2, to be placed in numerical order, and amended to read as follows:

TABLE 99.04.504.24.504.2 SEALANT VOC LIMIT Less Water and Less Exempt Compounds in Grams per Liter

SEALANTS	VOC LIMIT
Architectural	50
Marine deck	760
Non-membrane roof	300
Roadway	250
Single-ply roof membrane	450
Other	420
SEALANT PRIMERS	
Architectural	
Nonporous	250
Porous	775
Modified bituminous	500
Marine deck	760
Other	750

For additional information regarding methods to measure the VOC content specified in this table, see South Coast Air Quality Management District Rule 1168.

Sec. 624. Table 4.504.3 of Section 99.04.504, Division 4, Article 9, Chapter IX of the Los Angeles Municipal Code is renumbered Table 99.04.504.3, to be placed in numerical order, and amended to read as follows:

TABLE 99.04.504.34.504.3 VOC CONTENT LIMITS FOR ARCHITECTURAL COATINGS ^{2, 3} Grams of VOC per Liter of Coating Less Water and Less Exempt Compounds

COATING CATEGORY	VOC LIMIT
Flat coatings	50
Nonflat coatings	50
Nonflat-high gloss coatings	50
SPECIALTY COATINGS	
Aluminum roof coatings	100
Basement specialty coatings	400
Bituminous roof coatings	50
Bituminous roof primers	350
Bond breakers	350
Concrete curing compounds	100
Concrete curing compounds, Roadways & Bridges	350
Concrete/masonry sealers	100
Driveway sealers	50
Dry fog coatings	50
Faux finishing coatings	
Clear Top Coat	100
Decorative Coatings	350
Glazes	350
Japan	350
Trowel Applied Coatings	50
Fire resistive coatings	150
Floor coatings	50
Form-release compounds	100
Graphic arts coatings (sign paints)	200
High temperature coatings	420
Industrial maintenance coatings	100
Low solids coatings ¹	120
Magnesite cement coatings	450
Mastic texture coatings	100
Metallic pigmented coatings	150

Multicolor coatings	250
Pretreatment wash primers	420
Primers, sealers, and undercoaters	100
Reactive penetrating sealers	350
Recycled coatings	250
Roof coatings	50
Roof coatings, aluminum	100
Rust preventative coatings	100
Shellacs	
Clear	730
Opaque	550
Specialty primers, sealers and undercoaters	100
Stains	100
Stains, Interior	250
Stone consolidants	450
Swimming pool coatings	340
Traffic marking coatings	100
Tub and tile refinish coatings	420
Waterproofing membranes	100
Wood coatings	275
Wood preservatives	350
Zinc-rich primers	100

- 1. Grams of VOC per liter of coating, including water and including exempt compounds.
- 2. The specified limits remain in effect unless revised limits are listed in subsequent columns in the table.
- Values in this table are derived from those specified by the South Coast Air Management District (SCAQMD) Rule 1113.
 More information is available from the SCAQMD.

Sec. 625. Subsection 99.05.106.5.3 of Section 99.05.106, Division 5, Article 9, Chapter IX of the Los Angeles Municipal Code is deleted:

99.05.106.5.3. Electric Vehicle (EV) Charging. Construction to provide electric vehicle infrastructure and facilitate electric vehicle charging shall comply with Section 99.05.106 and shall be provided in accordance with regulations in the California Building Code and the California Electrical Code. Calculations for spaces shall be rounded up to the nearest whole number.

EXCEPTIONS:¶

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 On a case-by-case basis where the local enforcing agency has determined compliance with this Section is not feasible based upon one of the following conditions:

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a. Where there is no local utility power supply.

b. Where the local utility is unable to supply adequate power.¶

c. Where there is evidence suitable to the local enforcement agency substantiating that additional local utility infrastructure design requirements, directly related to the implementation of Los Angeles Municipal Code Subsection 99.05.106.5.3, may adversely impact the construction cost of the project.

2. Parking spaces accessible only by automated mechanical car parking systems are not required to comply with this code Section.

Sec. 626. Subsection 99.05.106.5.3.1 of Section 99.05.106, Division 5, Article 9, Chapter IX of the Los Angeles Municipal Code is amended to read as follows:

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99.05.106.5.3.1. EV Capable Spaces. [N] EV capable spaces shall be provided in accordance with California Green Building Standards Code Table 5.106.5.3.1. However, in all cases, a minimum of thirty percent of the total number of parking spaces on a building site shall be EV capable spaces, and in no case shall less than one EV capable space be provided. Calculations for EV capable spaces shall be rounded up to the nearest whole number. EV capable spaces shall be provided in accordance with the following: Thirty percent of the total number of parking spaces on a building site, but in no case less than one, provided for all types of parking facilities, shall be electric vehicle charging spaces (EV spaces) capable of supporting future Level 2 EVSE and shall meet the following requirements:

- Raceways complying with the California Electrical Code and no less than 1 inch
 diameter shall be provided and shall originate at a service panel or a subpanel(s)
 serving the area, and shall terminate in close proximity to the proposed location
 of the EV capable space and into a suitable listed cabinet, box, enclosure or
 equivalent. A common raceway may be used to serve multiple EV capable
 spaces.
- 2. A service panel or subpanel(s) shall be provided with panel space and electrical load capacity for a dedicated 208/240 volts, 40-ampere minimum branch circuits for each EV capable space, with delivery of 30-ampere minimum to an installed EVSE at each EVCS.
- 3. The electrical system and any on-site distribution transformers shall have sufficient capacity to supply full rated amperage at each EV capable space.
- 4. The service panel or subpanel(s) circuit directory shall identify the reserved overcurrent protective device space(s) as "EV CAPABLE". The raceway termination location shall be permanently and visibly marked as "EV CAPABLE".

NOTE: A parking space served by electric vehicle supply equipment or designed as a future EV charging space shall count as at least one standard automobile parking space only for the purpose of complying with any applicable minimum parking space requirements established by an enforcement agency. See Vehicle Code Section 22511.2 for further details.

Sec. 627. Subsection 99.05.106.5.3.2 of Section 99.05.106, Division 5, Article 9, Chapter IX of the Los Angeles Municipal Code is amended to read as follows:

99.05.106.5.3.2. Electric Vehicle Charging Stations (EVCS). EV capable spaces shall be provided with electric vehicle supply equipment (EVSE) to create EVCS in the number indicated in California Green Building Standards Code Table 5.106.5.3.1, but in no case less than twenty percent of the total number of actual parking spaces, and in no case less than one. Calculations for spaces shall be rounded up to the nearest whole number twenty percent of the total number of actual parking spaces. The number of EVCS required by Los Angeles Municipal Code Subsection 99.05.106.5.3.1 shall be provided with Level 2 EVSE or DCFC as permitted in California Green Building Standards Code Section 5.106.5.3.2.3.count toward the total number of required EV capable spaces as required for the building per the Los Angeles Municipal Code Subsection 99.05.106.5.3.1. The EVCS required by this Section may be provided with EVSE in any combination of Level 2 and Direct Current Fast Charging (DCFC), except that at least one Level 2 EVSE shall be provided.

One EV charger with multiple connectors capable of charging multiple EVs simultaneously shall be permitted if the electrical load capacity required by California Green Building Standards Code 5.106.5.3.1the Los Angeles Municipal Code Subsection 99.05.106.5.3.1 for each EV capable space is accumulatively supplied to the EV charger.

The installation of each DCFC EVSE shall be permitted to reduce the minimum number of required EV capable spaces without EVSE by five and reduce proportionally the required electrical load capacity to the service panel or subpanel.

Sec. 628. Subsection 99.05.106.5.3.3 of Section 99.05.106, Division 5, Article 9, Chapter IX of the Los Angeles Municipal Code is deleted:

99.05.106.5.3.3. Use of Automatic Load Management Systems (ALMS). ALMS shall be permitted for EVCS. When ALMS is installed, the required electrical load capacity specified in Los Angeles Municipal Code Subsection 99.05.106.5.3.1 for each EVCS may be reduced when serviced by an EVSE controlled by an ALMS. Each EVSE controlled by an ALMS shall deliver a minimum 30 amperes to an EV when charging one vehicle and shall deliver a minimum 3.3 kW while simultaneously charging multiple EVs.

Sec. 629. Subsection 99.05.106.5.3.4 of Section 99.05.106, Division 5, Article 9, Chapter IX of the Los Angeles Municipal Code is deleted:

99.05.106.5.3.4. Accessible EVCS. When EVSE is installed, accessible EVCS shall be provided in accordance with the California Building Code Chapter 11B Sec. 11B-228.3.¶

NOTE: For EVCS signs, refer to Caltrans Traffic Operations Policy Directive 13-01 (Zero Emission Vehicle Signs and Pavement Markings) or its successor(s).

Sec. 630. Subsection 99.05.106.5.3.6 of Section 99.05.106, Division 5, Article 9, Chapter IX of the Los Angeles Municipal Code is deleted:

99.05.106.5.3.6. Number of Required Electric Vehicle Charging Stations. The number of electric vehicle charging stations (EVCS) shall be 10% of the total number of

parking spaces provided for all new nonresidential buildings. Calculations for the number of required EVCS shall be rounded up to the nearest whole number. The number of EVCS can be counted towards the total number of EV spaces required for the building per Section 99.05.106.5.3.3.

Sec. 631. Table 99.05.303.2.2 of Section 99.05.303, Division 5, Article 9, Chapter IX of the Los Angeles Municipal Code is amended to read as follows:

TABLE 99.05.303.2.2 WATER USE BASELINE⁴³

FIXTURE TYPE	BASELINE FLOW RATE	DURATION	DAILY USES	OCCUPANTS 2
Showerheads	1.8 gpm @ 80 psi	5 min.	1	X ^{2a}
Lavatory Faucets, Non-Residential	0.5 gpm @ 60 psi	.25 min.	3	Х
Kitchen Faucets	1.8 gpm @ 60 psi	4 min.	1	X ^{2b}
Replacement Aerators	2.2 gpm			
Metering Faucets	0.20 gallons/cycle	.25 min.	3	Х
Water Closets	1.28 gallons/flush	1 flush	1 male ¹ 3 female	Х
Urinals	0.125 gallons/flush	1 flush	2 male	Х

Fixture "Water Use" = Flow rate X Duration X Occupants X Daily uses

- 1. The daily use number shall be increased to three if urinals are not installed in the room.
- 2. Refer to Table 4-1A, Chapter 4 of the California Plumbing Code, for occupant load factors.
 - a. Shower use by occupants depends on the type of use of a building or portion of a building. For example, the total occupant load for a health club, but only a fraction of the occupants in an office building as determined by the anticipated number of users.
 - b. Kitchen faucet use is determined by the occupant load of the area served by the fixture.
- Floor-mounted urinals @ 0.5 GPF or wall-mounted urinals @ 0.125 GPF. Use Worksheet WS-1 of the 2016 CALGreen Code to calculate baseline water use.
- 4. Use Worksheet WS-1 of the CALGreen Code to calculate baseline water use.

Sec. 632. Table 5.504.4.1 of Section 99.05.504, Division 5, Article 9, Chapter IX of the Los Angeles Municipal Code is renumbered Table 99.05.504.4.1, to be placed in numerical order, and amended to read as follows:

TABLE 99.05.504.4.15.504.4.1 ADHESIVE VOC LIMIT ^{1, 2} Less Water and Less Exempt Compounds in Grams per Liter

ARCHITECTURAL APPLICATIONS	VOC LIMIT
Indoor carpet adhesives	50
Carpet pad adhesives	50
Outdoor carpet adhesives	150
Wood flooring adhesives	100
Rubber floor adhesives	60

Subfloor adhesives	50
Ceramic tile adhesives	65
VCT and asphalt tile adhesives	50
Drywall and panel adhesives	50
Cove base adhesives	50
Multipurpose construction adhesives	70
Structural glazing adhesives	100
Single-ply roof membrane adhesives	250
Other adhesives not specifically listed	250
SPECIALTY APPLICATIONS	
PVC welding	510
CPVC welding	490
ABS welding	325
Plastic cement welding	100
Adhesive primer for plastic	550
Contact adhesive	80
Special purpose contact adhesive	250
Structural wood member adhesive	140
Top and trim adhesive	540
SUBSTRATE SPECIFIC APPLICATIONS	
Metal to metal	30
Plastic foams	50
Porous material (except wood)	50
Wood	30
Fiberglass	80

^{1.} If an adhesive is used to bond dissimilar substrates together, the adhesive with the highest VOC content shall be allowed.

Sec. 633. Table 5.504.4.2 of Section 99.05.504, Division 5, Article 9, Chapter IX of the Los Angeles Municipal Code is renumbered Table 99.05.504.4.2, to be placed in numerical order, and amended to read as follows:

TABLE 99.05.504.4.25.504.4.2 SEALANT VOC LIMIT Less Water and Less Exempt Compounds in Grams per Liter

SEALANTS	VOC LIMIT
Architectural	50
Marine deck	760

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^{2.} For additional information regarding methods to measure the VOC content specified in this table, see South Coast Air Quality Management District (SCAQMD) Rule 1168, http://www.arb.ca.gov/DRDB/SC/CURHTML/R1168.PDF.

Non-membrane roof	300
Roadway	250
Single-ply roof membrane	450
Other	420
SEALANT PRIMERS	
Architectural	
Nonporous	250
Porous	775
Modified bituminous	500
Marine deck	760
Other	750

Note: For additional information regarding methods to measure the VOC content specified in these tables, see South Coast Air Quality Management District Rule 1168.

Sec. 634. Table 5.504.4.3 of Section 99.05.504, Division 5, Article 9, Chapter IX of the Los Angeles Municipal Code is renumbered Table 99.05.504.4.3, to be placed in numerical order, and amended to read as follows:

TABLE 99.05.504.4.35.504.4.3 VOC CONTENT LIMITS FOR ARCHITECTURAL COATINGS ^{2, 3} Grams of VOC per Liter of Coating Less Water and Less Exempt Compounds

COATING CATEGORY	VOC LIMIT
Flat coatings	50
Nonflat coatings	50
Nonflat-high gloss coatings	50
SPECIALTY COATINGS	
Aluminum roof coatings	100
Basement specialty coatings	400
Bituminous roof coatings	50
Bituminous roof primers	350
Bond breakers	350
Concrete curing compounds	100
Concrete curing compounds, Roadways & Bridges	350
Concrete/masonry sealers	100
Driveway sealers	50
Dry fog coatings	50
Faux finishing coatings	
Clear Top Coat	100
Decorative Coatings	350

Glazes	350
Japan	350
Trowel Applied Coatings	50
Fire resistive coatings	150
Floor coatings	50
Form-release compounds	100
Graphic arts coatings (sign paints)	200
High temperature coatings	420
Industrial maintenance coatings	100
Low solids coatings ¹	120
Magnesite cement coatings	450
Mastic texture coatings	100
Metallic pigmented coatings	150
Multicolor coatings	250
Pretreatment wash primers	420
Primers, sealers, and undercoaters	100
Reactive penetrating sealers	350
Recycled coatings	250
Roof coatings	50
Roof coatings, aluminum	100
Rust preventative coatings	100
Shellacs	
Clear	730
Opaque	550
Specialty primers, sealers and undercoaters	100
Stains	100
Stains, Interior	250
Stone consolidants	450
Swimming pool coatings	340
Traffic marking coatings	100
Tub and tile refinish coatings	420
Waterproofing membranes	100
Wood coatings	275
Wood preservatives	350
Zinc-rich primers	100
1 Croppe of VOC per liter of coeffice including victor and including	and the same and t

Grams of VOC per liter of coating, including water and including exempt compounds.

The specified limits remain in effect unless revised limits are listed in subsequent columns in the table.

3. Values in this table are derived from those specified by the South Coast Air Management District (SCAQMD) Rule 1113. More information is available from the SCAQMD.

Sec. 635. Worksheet (WS-1) of Section 99.08.100, Division 8, Article 9, Chapter IX of the Los Angeles Municipal Code is amended to read as follows:

WORKSHEET (WS-1) BASELINE WATER USE

	Į.	BASE	LINE WATER US	E CAL	CULATION TA	ABLE			
FIXTURE TYPE	FLOW RATE		DURATION		DAILY USES		OCCUPANTS		GALLONS PER DAY
Showerheads, residential	1.8 gpm @ 80 psi	х	8 min.	x	1	x	Note 1a	=	
Showerheads, nonresidential	1.8 gpm @ 80 psi	х	5 min.	х	1	х		=	
Lavatory faucets, residential	1.2 gpm @ 60 psi	х	0.25 min.	х	3	х		=	
Lavatory faucets nonresidential/public uses	0.5 gpm @ 60 psi	х	0.25 min	х	3	х		=	
Kitchen faucets	1.8 gpm @ 60 psi	Х	4 min.	Х	1	х	Note 1b	=	
Replacement aerators	2.2 gpm	х		Х		Х		=	
Wash fountains	1.8 gpm/20 [rim space (in) @ 60 psi]	х		х		х		=	
Metering faucets	0.20 0.25 gallons/cycle	х	0.25 min.	х	3	х		=	
Metering faucets for wash fountains	0.20 gal/cycle/20 [rim space (in.) @ 60 psi]	х	0.25 min.	х		х		=	
Water Closets	1.28 gallons/flush	х	1 flush	х	1 male ² 3 females	х		=	
Urinals	0.125 gallons/flush	х	1 flush	х	2 males	х		=	
	Total	daily b	paseline water us	e (BW	U)			=	_

^{1.} Refer to Table 4-1♠, Chapter 4 of the California Plumbing Code, for occupant load factors.

Sec. 636. Worksheet (WS-2) of Section 99.08.100, Division 8, Article 9, Chapter IX of the Los Angeles Municipal Code is amended to read as follows:

a. Shower use by occupants depends on the type of use of a building or portion of a building, e.g. total occupant load for a health club, but only a fraction of the occupants in an office building as determined by the anticipated number of users.

b. Kitchen faucet use is determined by occupant load of the area served by the fixture.

^{2.} The daily use number shall be increased to three if urinals are not installed in the room.

^{3.} Floor-mounted urinals @ 0.5 GPF or wall-mounted urinals @ 0.125 GPF.

WORKSHEET (WS-2) BASELINE WATER USE

	20-PERCENT REDUCTION WATER USE CALCULATION TABLE										
FIXTURE TYPE	FLOW RATE		DURATION		DAILY USES		OCCUPANTS		GALLONS PER DAY		
Showerheads, residential		х	8 min.	х	1	х	Note 1a	=			
Showerheads, nonresidential		х	5 min.	х	1						
Lavatory faucets, residential		х	0.25 min.	х	3	х		=			
Lavatory faucets nonresidential/public uses		х	0.25 min	х	3	х		=			
Kitchen faucets		Х	4 min.	Х	1	Х	Note 1b	=			
Replacement aerators		Х		Х		Х		Ш			
Wash fountains		Х		Х		Х		=			
Metering faucets		Х	0.25 min.	Х	3			=			
Metering faucets for wash fountains		х	0.25 min.	х		Х		=			
Water Closets		х	1 flush	х	1 male² 3 females	х		=			
Urinals		Х	1 flush	Х	2 males	Х		=			
Urinals Nonwater supplied	0.0 gal/ flush	х	1 flush	х	2 males	х		=	0		
	F	Propos	sed water use (B\	NU)				=			
20% Ro % R	eduction		(BWU from W (BWU from W	S-1) x /S-1) x	0.80 =		Allowable wate		e		

- 1. For occupancies, refer to Table 4-1 A, Chapter 4, California Plumbing Code, for occupant load factors.
 - a. Shower use by occupants depends on the type of use of a building or portion of a building, e.g., total occupant load for a health club, but only a fraction of the occupants in an office building as determined by the anticipated number of users.
 - b. Kitchen faucet use is determined by the occupant load of the area served by the fixture.
- 2. Includes single and dual flush water closets with an effective flush of 1.28 gallons or less.
 - Single flush toilets The effective flush volume shall not exceed 1.28 gallons (4.8 liters). The effective flush volume is the average flush volume when tested in accordance with ASME A112.19.2.
 - Dual flush toilets The effective flush volume shall not exceed 1.28 gallons (4.8 liters). The effective flush volume is defined as the composite, average flush volume of two reduced flushes and one full flush. Flush volumes will be tested in accordance with ASME A112.19.2 and ASME A112.19.14.
- 3. The daily use number shall be increased to three if urinals are not installed in the room.
- 4. Where complying faucets are unavailable, aerators rated at 35 gpm or other means may be used to achieve reduction.

Sec. 637. The first paragraph of Section 99.11.101, Division 11, Article 9, Chapter IX of the Los Angeles Municipal Code is amended to read as follows:

Appendix A4 of the California Green Building Standards Code (CALGreen) is adopted by reference with the following exceptions: CALGreen Section A4.105.2, A4106.5, A4.106.7, Table A4.106.8.3.1, Table A4.106.8.3.2, A4.305.2, A4.403.1, A4.404.1,

A4.405.2, A4.405.4, A4.407.1, A4.407.3, A4.407.4, A4.407.5, A4.407.7, A4.602, and Table A4.106.5.1(1), A4.106.5.1(2), A4.106.5.1(3) and A4.106.5.1(4) are not adopted; and in lieu, LAMC Sections 99.11.102 and 99.11.602, and Subsections A4.105.2, A4.106.7, A4.405.2, A4.405.4, A4.407.1, A4.407.7, A4.602, and Tables A4.106.5.1(1), A4.106.5.1(2), A4.106.5.1(3), and A4.106.5.1(4) are added or amended as provided in this article.

Sec. 638. Table A4.602 of Section 99.11.602, Division 11, Article 9, Chapter IX of the Los Angeles Municipal Code is amended to read as follows.

TABLE A4.602 RESIDENTIAL OCCUPANCIES APPLICATION CHECKLIST

{Click here for a printable PDF version of this table}

	APPLICAN	LEVELS T TO SELECT MEASURES	ELECTIVE	VERIFICATIONS ENFORCING AGENCY TO SPECIFY VERIFICATION METHOD		
FEATURE OR MEASURE	Mandatory	Prerequi elect		Enforcing Agency	Installer or Designer	Third Party
		Tier 1	Tier 2	All	All	All
PLANNING AND DESIGN						
Site Selection						
A4.103.1 A site which complies with at least one of the following characteristics is selected:						
An infill site is selected.						
A greyfield site is selected.						
An EPA-recognized Brownfield site is selected.						
A4.103.2 Facilitate community connectivity by one of the following methods:						
Locate project within a 1/4-mile true walking distance of at least 4 basic services;						
Locate project within 1/2-mile true walking distance of at least 7 basic services;						
Other methods increasing access to additional resources.						
Site Preservation						
A4.104.1 An individual with oversight responsibility for the project has participated in an educational program promoting environmentally friendly design or development and has provided training or instruction to appropriate entities.						
Deconstruction and Reuse of Existing Materials						

-				
A4.105.2 Existing buildings are				
disassembled for reuse or recycling of				
building materials. The proposed structure				
utilizes at least one of the following				
materials which can be easily reused:				
1. Light fixtures				
2. Plumbing fixtures				
3. Doors and trim				
Masonry (reused for flatwork)				
5. Electrical devices				
6. Appliances				
7. Foundations or portions of foundations				
Site Development				
4.106.2 A plan is developed and		1		
implemented to manage storm water	Х			
drainage during construction.				
4.106.3 Construction plans shall indicate				
how site grading or a drainage system will	~			
manage all surface water flows to keep	X			
water from entering buildings.				
4.106.4.1 Provide capability for electric				
vehicle charging in one- and two-family				
dwellings and in townhouses with	×			
	_ ^			
attached private garages in accordance				
with Section 4.106.4.1.				
4.106.4.2 Provide capability for electric				
vehicle charging for multi-family dwellings				
and hotels/motels in accordance with	X			
Sections 4.106.4.2.1 or 4.106.4.2.2 as				
applicable.				
4.106.4.3 Provide capability for electric				
vehicle charging for existing parking lots				
or new parking lots for existing residential	X			
	_ ^			
buildings in accordance with Section				
4.106.4.3 as applicable.				
4.106.4.4 Provide bicycle parking facilities				
as noted below or meet a				
local ordinance, whichever is more				
stringent. Number of bicycle				
parking spaces may be reduced, as				
approved by the enforcing agency,				
due to building site characteristics,				
including but not limited to,				
isolation from other development.				
Provide short-term bicycle	X			
parking, per Section				
4.106.4.4.1.				
Provide long-term bicycle				
parking for multifamily buildings				
per Section 4.106.4.4.2.				
Provide long-term bicycle				
parking for hotel and motel				
buildings, per Section				
4.106.4.4.3.				
4.106.5 Roofing materials shall have a				
minimum 3-year aged solar reflectance				
and thermal emittance or a minimum				
3-year aged Solar Reflectance Index	×			
(SRI) equal to or greater than the values				
specified in LAMC <u>Table 4.106.5</u> .				
4.106.7 Reduce nonroof heat islands for				
25% of sidewalks, patios, driveways or	×			
other paved areas by using one or more	~			
of the methods listed.				

		Γ		
A4.106.1 Reserved.				
A4.106.2.1 Soil analysis is performed by a				
licensed design professional and the				
findings utilized in the structural design of				
the building.				
A4.106.2.2 Soil disturbance and erosion are minimized by at least one of the				
following:				
Natural drainage patterns are				
evaluated and erosion controls are				
implemented to minimize erosion during construction and after				
occupancy.				
Site access is accomplished by minimizing the amount of out and fill				
minimizing the amount of cut and fill needed to install access roads and				
driveways.				
•				
3. Underground construction				
activities are coordinated to utilize the same trench, minimize the				
amount of time the disturbed soil is				
exposed and the soil is replaced				
using accepted compaction methods.	 			
A4.106.2.3 Topsoil shall be protected or				
saved for reuse as specified in this				
section.				
Tier 1. Displaced topsoil shall be stockpiled for reuse in a designated area	x ²	x ²		
and covered or protected from erosion.	X	X		
Tier 2. The construction area shall be				
identified and delineated by fencing or		2		
flagging to limit construction activity to the		x ²		
construction area.				
A4.106.3 Post-construction landscape				
designs accomplish one or more of the				
following:				
Areas disrupted during				
construction are restored to be				
consistent with native vegetation				
species and patterns.				
2. Utilize at least 75% native				
California or drought tolerant plant				
and tree species appropriate for the				
climate zone region. A4.106.4 Permeable paving is utilized for				
the parking, walking or patio surfaces in				
compliance with the following:				
Tier 1. Not less than 20% of the total	_			
parking, walking or patio surfaces shall be	x^2			
permeable.				
Tier 2. Not less than 30% of the total		. 2		
parking, walking or patio surfaces shall be permeable.		x ²		
A4.106.5 Roofing materials shall have a				
minimum 3-year aged solar reflectance				
and thermal emittance or a minimum				
Solar Reflectance Index (SRI) equal to or				
greater than the values specified in LAMC				
Tables A4.106.5.1(1) and A4.106.5.1(2)				
for low-rise residential buildings and				
LAMC <u>Tables A4.106.5.1(3)</u> and				
A4.106.5.1(4) for high-rise residential buildings.				
Low-Rise Residential				
Low-Rise Residential	ļ	l	l	

	, ,		, ,	···	1
Tier 1 roof covering shall meet or exceed		2			
the values contained in LAMC <u>Table</u>		x^2			
A4.106.5.1(1).					
Tier 2 roof covering shall meet or exceed			<u> </u>		
the values contained in LAMC Table			\times^2		
A4.106.5.1(2)			^		
High-Rise Residential, Hotels and					
Motels					
Tier 1 roof covering shall meet or exceed					
the values contained in LAMC Table		χ^2			
A4.106.5.1(3).		^			
Tier 2 roof covering shall meet or exceed					
the values contained in LAMC Table			\times^2		
A4.106.5.1(4).			^		
A4.106.6 Install a vegetated roof for at					
least 50% of the roof area. Vegetated					
roofs shall comply with requirements for					
roof gardens and landscaped roofs in the					
California Building Code, Chapters 15 and					
16. A4.106.7 Reduce nonroof heat islands for			+ -		
50% of sidewalks, patios, driveways or					
other paved areas by using one or more					
of the methods listed.			 		
A4.106.8.1 Tier 1 and Tier 2 for one- and					
two-family dwellings and townhouses with					
attached private garages. Install a		2	2		
dedicated 208/240-volt branch circuit,		x^2	x ²		
including an overcurrent protective device					
rated at 40 amperes minimum per					
dwelling unit.					
A4.106.8.2.1 Provide capability for future					
electric vehicle charging in new					
multi-family dwellings, hotels and motels,					
as specified.					
Tier 1. New multifamily dwellings and					
hotels and motels.					
1. EV Ready Parking with					
Receptacles.					
a. hotels and motels.					
Sixty (60) percent of					
the total number of					
parking spaces shall					
be equipped with low					
power Level 2 EV					
charging receptacles.					
b. Raceway					
Requirements. To					
allow for future					
upgrades to the					
electrical conductors					
serving low power		0			
Level 2 EV charging		\times^2	x ²		
receptacles, the listed					
raceway serving such					
receptacles shall be					
			1		
sized to allow the					
sized to allow the installation of a					
installation of a					
installation of a dedicated					
installation of a dedicated 208/240-volt					
installation of a dedicated 208/240-volt 40-ampere branch					
installation of a dedicated 208/240-volt 40-ampere branch circuit. Where no					
installation of a dedicated 208/240-volt 40-ampere branch circuit. Where no raceway is used, the					
installation of a dedicated 208/240-volt 40-ampere branch circuit. Where no raceway is used, the conductors shall be					
installation of a dedicated 208/240-volt 40-ampere branch circuit. Where no raceway is used, the conductors shall be sized to					
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installation of a dedicated 208/240-volt 40-ampere branch circuit. Where no raceway is used, the conductors shall be sized to accommodate a 208/240-volt 40-ampere					

	and motels may	1			
1	substitute Level 2 EV				
	chargers for some or				
	all of the required EV				
	charging receptacles.				
2.	EV Ready Parking Spaces				
	with EV Chargers.				
	a. Hotels and motels.				
	Forty (40) percent of				
	the total number of				
	parking spaces shall				
	be equipped with low				
	power Level 2 EV				
	charging receptacles.				
	b. Multifamily Parking				
	Facilities with				
	Unassigned or				
	Common Use				
	Parking. In addition				
	to the low power	1			
	Level 2 EV charging	1			
	receptacle	1			
	requirements of	1			
	Section A4.106.8	1			
	(Tier 1, subsection 1),	1			
	forty (40) percent of				
	the total number of				
	parking spaces shall				
	be equipped with				
	level 2 EV chargers				
	and shall be made				
	available for use by				
	all residents or				
	guests.				
	. Tier 1. 35 percent of the total				
	number of parking spaces shall-				
	Harrison or partiting oparous strain				
1					
	be electric vehicle (EV ready) with low power Level 2 EV				
	be electric vehicle (EV ready) with low power Level 2 EV				
	be electric vehicle (EV ready) with low power Level 2 EV charging receptacles. For				
	be electric vehicle (EV ready) with low power Level 2 EV charging receptacles. For projects with 20 or more				
	be electric vehicle (EV ready) with low power Level 2 EV charging receptacles. For projects with 20 or more- dwelling units, sleeping units or				
	be electric vehicle (EV ready) with low power Level 2 EV charging receptacles. For projects with 20 or more- dwelling units, sleeping units or- guest rooms, 10 percent of the				
	be electric vehicle (EV ready) with low power Level 2 EV charging receptacles. For projects with 20 or more dwelling units, sleeping units or guest rooms, 10 percent of the total number of parking spaces				
	be electric vehicle (EV ready) with low power Level 2 EV charging receptacles. For projects with 20 or more dwelling units, sleeping units or guest rooms, 10 percent of the total number of parking spaces shall be equipped with Level 2-				
	be electric vehicle (EV ready) with low power Level 2 EV charging receptacles. For projects with 20 or more dwelling units, sleeping units or guest rooms, 10 percent of the total number of parking spaces shall be equipped with Level 2-EVSE.				
	be electric vehicle (EV ready) with low power Level 2 EV charging receptacles. For projects with 20 or mere dwelling units, sleeping units or guest rooms, 10 percent of the total number of parking spaces shall be equipped with Level 2 EVSE. Tier 2, 40 percent of the total				
	be electric vehicle (EV ready) with low power Level 2 EV charging receptacles. For projects with 20 or more dwelling units, sleeping units or guest rooms, 10 percent of the total number of parking spaces shall be equipped with Level 2-EVSE. Tier 2, 40 percent of the total parking spaces shall be electric.				
	be electric vehicle (EV ready) with low power Level 2 EV charging receptacles. For projects with 20 or mere dwelling units, sleeping units or guest rooms, 10 percent of the total number of parking spaces shall be equipped with Level 2 EVSE. Tier 2, 40 percent of the total				
	be electric vehicle (EV ready) with low power Level 2 EV charging receptacles. For projects with 20 or more dwelling units, sleeping units or guest rooms, 10 percent of the total number of parking spaces shall be equipped with Level 2-EVSE. Tier 2, 40 percent of the total parking spaces shall be electric vehicle (EV ready) with low-				
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	be electric vehicle (EV ready) with low power Level 2 EV charging receptacles. For projects with 20 or mere dwelling units, sleeping units or guest rooms, 10 percent of the total number of parking spaces shall be equipped with Level 2 EVSE. Tier 2. 40 percent of the total parking spaces shall be electric vehicle (EV ready) with low power Level 2 EV charging receptacles. For projects with 20 or more dwelling units, sleeping units or guest rooms, 15 percent of the total number of parking spaces shall be equipped with Level 2 EVSE.		x ²		
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1. Provide short-term bicycle						
parking, per CALGreen Section A4.106.9.1.						
 Provide long-term bicycle parking- for multi-family buildings, per- 						
CALGreen Section A4.106.9.2.						
3. Provide long-term bicycle parking						
for hotel and motel buildings, per						
CALGreen Section A4.106.9.3.						
A4.106.10 [HR] Outdoor lighting systems shall be designed and installed to comply with:						
The minimum requirements in the California Energy Code for Lighting Zones 1-4; and						
Backlight, Uplight and Glare (BUG) ratings as defined in IES TM-15-11; and						
Allowable BUG ratings not exceeding those shown in CALGreen Table A4.106.10; or Comply with a lawfully enacted local ordinance, whichever is more stringent.	1					
Innovative Concepts and Local Environmental Conditions						
A4.108.1 Items in this section are						
necessary to address innovative concepts or local environmental conditions.						
Item 1						
Item 2						
Item 3						
ENERGY EFFICIENCY						
General		Γ			Γ	
4.201.1 Building meets or exceeds the		2	2			
requirements of the California Building	X	x^2	x ²			
Energy Efficiency Standards. ³						
Performance Approach for Newly Constructed Buildings		T		Г	.	
A4.203.1.1 Hourly Source Energy Rating (EDR1). EDR1 ratings for building design shall be computed by Energy Compliant software and shall reduce the EDR1 required by the software by the compliance margins specified in Table A4.203.1.1.		x ²	x ²			
A4.203.1.2 Prerequisite options. In addition, a minimum of two of the efficiency measures specified in Sections A4.203.1.2.1 through A4.203.1.2.8 will be required to be met.						
 Roof deck insulation or ducts in conditioned space. 						
High-performance walls.		χ^2	x ²			
 Compact hot water distribution system. 			^			
 Drain water heat recovery. 						
 High performance vertical fenestration. 						
						!

		1		ı	ı
Battery storage system controls.					
Heat pump space and water heating.					
A4.203.1.3 Consultation with local electric service provider. Local jurisdictions considering adoption of reduced EDR targets based on using solar photovoltaic (PV) systems larger than required by the California Energy Code shall consult with the local electric service provider to ensure that that PV system sizing required to comply with the EDR targets will be acceptable to the local electric service provider.		x ²			
Performance Approach for Additions					
A4.204.1.1 Tier 1. If only one mechanical system is added or modified, the Energy Budget is no greater than 95% of the Title 24, Part 6, Energy Budget for the Standard Design Building. If two or more mechanical systems are added or modified, the Energy Budget is no greater than 90% of the Title 24, Part 6, Energy		x ²			
Budget for the Standard Design Building.					
A4.204.1.2 Tier 2. If only one mechanical system is added or modified, the Energy Budget is no greater than 90% of the Title 24, Part 6, Energy Budget for the Standard Design Building. If two or more mechanical systems are added or modified, the Energy Budget is no greater than 85% of the Title 24, Part 6, Energy Budget for the Standard Design Building.			x ²		
Renewable Energy					
4.211.4 Buildings shall comply with the following:					
1. All one- and two-family dwellings shall comply with Section 110.10(b)1A, 110.10(b)2, 110.10(b)3, 110.10(b)4, 110.10(c), 110.10(d) and 110.10(e) of the California Energy Code (Title 24, Part 6).	×				
 All buildings, other than one- and two-family dwellings, shall comply with Section 110.10(b) through 110.10(d) of the California Energy Code (Title 24, Part 6). 					
WATER EFFICIENCY AND CONSERVATION					
Indoor Water Use					
4.303.1 Plumbing fixtures (water closets and urinals) and fittings (faucets and showerheads) installed in residential buildings shall comply with the prescriptive requirements of CALGreen Sections 4.303.1.1 through 4.303.1.4.54.303.1.4.4.4.	X				
4.303.2 Submeters for multifamily building and dwelling units in mixed-use residential/commercial buildings. Submeters shall be installed to measure water usage of individual rental dwelling units in accordance with the California Plumbing Code.	×				

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Plumbing fixtures and fittings required in					
CALGreen Section 4.303.1 shall be					
installed in accordance with the California- Plumbing Code, and shall meet the					
applicable referenced standards.					
4.303.3 Plumbing fixtures and fittings					
required in Section 4.303.1 shall be					
installed in accordance with the California					
Plumbing Code, and shall meet the					
applicable referenced standards.					
Multi-family dwellings not exceeding three	X				
stories and containing 50 units or less					
shall install a separate meter or sub-meter					
within each individual dwelling unit and					
within common areas, such as recreation					
and laundry rooms.					
4.303.4 A 20% reduction in the overall					
use of potable water within the building shall be provided, as specified.	Х				
A4.303.1 Kitchen faucets. The maximum					
flow rate of kitchen faucets shall not					
exceed 1.5 gallons per minute at 60 psi.					
Kitchen faucets may temporarily increase					
the flow above the maximum rate, but not					
to exceed 2.2 gallons per minute at 60					
psi, and must default to a maximum flow					
rate of 1.5 gallons per minute at 60 psi.					
Note: Where complying faucets are					
available, aerators or other means may be					
used to achieve reduction.					
A4.303.2 Alternate water source for					
nonpotable applications. Alternate nonpotable water sources are used for					
indoor potable water reduction. Alternate					
nonpotable water sources shall be					
installed in accordance with the California					
Plumbing Code.					
A4.303.3 Install at least one qualified					
ENERGY STAR dishwasher or clothes					
washer.					
A4.303.4 Nonwater urinals or waterless					
toilets are installed.					
A4.303.5 Hot water recirculation systems.					
One- and two-family dwellings shall be					
equipped with a demand hot water					
recirculation system, as defined in					
Chapter 2 of this Code. The demand hot					
water recirculation system shall be installed in accordance with the California					
Plumbing Code, California Energy Code,					
and the manufacturer's installation					
instructions.					
Outdoor Water Use					
			<u> </u>	Ι	
4.304.1 After December 1, 2015, new residential developments with an					
aggregate landscape area equal to or	×				
greater than 500 square feet shall comply					
with one of the following options:					
A local water efficient landscape					
ordinance or the current California Department of Water Resources'					
Model Water Efficient Landscape					
Ordinance (MWELO), whichever is					
more stringent; or					

1	1			
Projects with aggregate				
landscape areas less than 2,500				
square feet may comply with the				
MWELO's Appendix D Prescriptive				
Compliance Option.				
4.304.3 A landscape water meter				
provided by the City of Los Angeles	V			
Department of Water and Power shall be	X			
installed for landscape irrigation.				
4.304.4 Locks shall be installed on all				
publicly accessible exterior faucets and	X			
hose bibs.				
4.304.5 For one- and two-family				
dwellings, any permanently installed				
outdoor in-ground swimming pool or spa	X			
shall be equipped with a cover having a	,			
manual or power-operated reel system.				
A4.304.1 Rainwater catchment systems.				
An approved rainwater catchment system				
is designed and installed to use rainwater				
generated by at least 65% of the available				
roof area. Rainwater catchment systems				
shall be designed and installed in				
accordance with the California Plumbing				
Code.				
A4.304.2 Potable water elimination. When				
landscaping is provided and as allowed by				
local ordinance, a water efficient				
landscape irrigation design that eliminates				
the use of potable water beyond the initial				
requirements for plant installation and				
establishment should be provided.				
Methods used to accomplish the				
requirements of this section must be				
designed to the requirements of the				
California Building Standards Code and				
shall include, but not be limited to, the				
following:				
 Use of captured rainwater. 				
Use of recycled water.				
3. Water treated for irrigation				
purposes and conveyed by a water				
district or public entity.				
district of public entity.				
Use of graywater.				
A4.304.3 For new water service				
connections, landscaped irrigated areas				
less than 5,000 square feet shall be				
provided with separate sub-meters or				
metering devices for outdoor potable				
water use.				
WATER REUSE SYSTEMS		 	 _	
4.305.1 Waste piping shall be arranged to				
permit the discharge from the clothes				
washer, bathtub, showers, and	X			
bathroom/restroom wash basins to be				
used for a future graywater irrigation				
system.				
4.305.2 When City-recycled water is				
available for use within 200 feet of the				
property line, 100% of water for water	х			
closets, urinals, floor drains, and process				
cooling and heating in that building shall				
come from City-recycled water.				
4.305.3 Cooling towers shall comply with				
LAMC Section <u>99.04.305.3.1</u> or	Х			
99.04.305.3.2.				

4.305.4 Where groundwater is being					
extracted and discharged, a system for	V				
onsite reuse of the groundwater shall be	Х				
developed and constructed.					
A4.305.1 Graywater. Alternative plumbing					
piping installed to permit the discharge					
from the clothes washer or other fixtures					
and used for irrigation in compliance with					
the Los Angeles Plumbing Code.					
A4.305.2 Recycled water piping is					
installed.					
A4.305.3 Recycled water is used for					
landscape irrigation.					
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Innovative Concepts and Local Environmental Conditions					
A4.306.1 Items in this section are					
necessary to address innovative concepts					
or local environmental conditions.					
Item 1					
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MATERIAL CONSERVATION AND RESOURCE EFFICIENCY					
Foundation Systems					
A4.403.1 A Frost-protected Shallow				I	
Foundation (FPSF) is designed and					
constructed.					
A4.403.2 Cement use in foundation mix					
design is reduced. Tier 1. Not less than a 20% reduction in		_			
		x ²			
cement use.		^	_		
Tier 2. Not less than a 25% reduction in			x ²		
cement use.			Λ		
Efficient Framing Techniques					
A4.404.1 Beams and headers and					
trimmers are the minimum size to					
adequately support the load.					
A4.404.2 Building dimensions and layouts					
are designed to minimize waste.					
		-		-	
A4.404.3 Use premanufactured building					
systems to eliminate solid sawn lumber					
whenever possible.					
A4.404.4 Material lists are included in the					
plans which specify material quantity and					
provide direction for on-site cuts.]			
Material Sources					
A4.405.1 One or more of the following					
building materials, that do not require					
additional resources for finishing are					
used:					
A I Meaning thing make a serial and a serial		•	1	1	
Exterior trim not requiring paint or					
Stain. 1. Exterior trim not requiring paint or stain.					
stain.					
stain. 2. Windows not requiring paint or					
stain. 2. Windows not requiring paint or stain.					
stain. 2. Windows not requiring paint or stain. 3. Siding or exterior wall coverings					
stain. 2. Windows not requiring paint or stain. 3. Siding or exterior wall coverings which do not require paint or stain.					
stain. 2. Windows not requiring paint or stain. 3. Siding or exterior wall coverings which do not require paint or stain. A4.405.2 Floors that do not require					
stain. 2. Windows not requiring paint or stain. 3. Siding or exterior wall coverings which do not require paint or stain. A4.405.2 Floors that do not require additional coverings are used including					
stain. 2. Windows not requiring paint or stain. 3. Siding or exterior wall coverings which do not require paint or stain. A4.405.2 Floors that do not require additional coverings are used including but not limited to stained, natural or					
stain. 2. Windows not requiring paint or stain. 3. Siding or exterior wall coverings which do not require paint or stain. A4.405.2 Floors that do not require additional coverings are used including but not limited to stained, natural or stamped concrete floors.					
stain. 2. Windows not requiring paint or stain. 3. Siding or exterior wall coverings which do not require paint or stain. A4.405.2 Floors that do not require additional coverings are used including but not limited to stained, natural or stamped concrete floors. A4.405.3 Post-consumer or pre-consumer					
stain. 2. Windows not requiring paint or stain. 3. Siding or exterior wall coverings which do not require paint or stain. A4.405.2 Floors that do not require additional coverings are used including but not limited to stained, natural or stamped concrete floors. A4.405.3 Post-consumer or pre-consumer recycled content value (RCV) materials					
stain. 2. Windows not requiring paint or stain. 3. Siding or exterior wall coverings which do not require paint or stain. A4.405.2 Floors that do not require additional coverings are used including but not limited to stained, natural or stamped concrete floors. A4.405.3 Post-consumer or pre-consumer					

Tion 4. Not loss than a 400/ resulted	I	1 -	ī	1	ı	1 1
Tier 1. Not less than a 10% recycled		x ²				
content value.		^				
Tier 2. Not less than a 15% recycled			x ²			
content value.			^			
A4.405.4 Renewable source building						
products are used.						
Enhanced Durability and Reduced			1	1		
Maintenance						
				1		
4.406.1 Annular spaces around pipes,						
electric cables, conduits or other openings						
in plates at exterior walls shall be						
protected against the passage of rodents	X					
by closing such openings with cement	^					
mortar, concrete masonry or similar						
method acceptable to the enforcing						
agency.						
Water Resistance and Moisture			1	•		
Management		ı	1		1	
4.407.3 Provide flashing details on the						
building plans and comply with accepted	X					
industry standards or manufacturer's	^					
instructions.						
4.407.4 Protect building materials						
delivered to the construction site from rain	X					
and other sources of moisture.	^					
				+		
A4.407.1 Install foundation and landscape						
drains.				ļ		
A4.407.2 Install gutter and downspout						
systems to route water at least 5 feet						
away from the foundation or connect to						
landscape drains which discharge to a dry						
well, sump, bioswale, rainwater capture						
system or other approved on-site location.						
				1		
A4.407.6 Exterior doors to the dwelling						
are protected to prevent water intrusion.						
A4.407.7 A permanent overhang or						
awning at least 2 feet in depth is provided.						
Construction Waste Reduction,			1	1		
Disposal and Recycling						
		I	1	T	I	
4.408.1 Comply with Section 66.32 et seq.	X					
of the Los Angeles Municipal Code.	^					
				<u> </u>		
A4.408.1 Construction waste generated at						
the site is diverted to recycle or salvage in						
compliance with one of the following:						
1. Tier 1 at least a 65% reduction.						
Any mixed recyclables that are sent						
to mixed-waste recycling facilities						
shall include a qualified third party		2				
verified facility average diversion		x ²				
rate. Verification of diversion rates						
shall meet minimum certification						
eligibility guidelines, acceptable to						
the local enforcing agency.						
2. Tier 2 at least a 75% reduction			x ²			
with a third-party verification.			X_			
' '						
Exception: Equivalent waste						
reduction methods are developed by						
working with local agencies.						
		•	•	•		•
Building Maintenance and Operation						
4.410.1 An operation and maintenance						
manual shall be provided to the building	X					
occupant or owner.						
			1			

4.410.2 Where 5 or more multi-family						
dwelling units are constructed on a						
building site, provide readily accessible						
areas that serve all buildings on the site						
and is identified for the depositing,						
storage and collection of non-hazardous						
materials for recycling, including (at a	X					
minimum) paper, corrugated cardboard,						
glass, plastics, organic waste, and metals						
or meet a lawfully enacted local recycling						
ordinance, if more restrictive. See						
exception for rural jurisdictions.						
Innovative Concepts and Local			L		L	
Environmental Conditions						
		ı	1	T	Т	
A4.411.1 Items in this section are						
necessary to address innovative concepts						
or local environmental conditions.						
Item 1						
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Item 2						
Item 3						
ENVIRONMENTAL QUALITY			•			
ENVIRONMENTAL QUALITY						
Fireplaces						
4.503.1 Any installed gas fireplace shall						
be a direct-vent sealed-combustion type.						
Any installed woodstove or pellet stove						
shall comply with U.S. EPA New Source						
Performance Standards (NSPS) emission						
limits as applicable, and shall have a	X					
permanent label indicating they are						
certified to meet the emission limits.						
Woodstoves, pellet stoves and fireplaces						
shall also comply with applicable local						
ordinances.						
Pollutant Control						
4.504.1 Duct openings and other related						
4.504.1 Duct openings and other related air distribution component openings shall	×					
air distribution component openings shall	X					
air distribution component openings shall be covered during construction.	Х					
air distribution component openings shall be covered during construction. 4.504.2.1 Adhesives, sealants and caulks						
air distribution component openings shall be covered during construction. 4.504.2.1 Adhesives, sealants and caulks shall be compliant with VOC and other	×					
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A4.504.2 Install VOC compliant resilient					
flooring systems. Tier 1. At least 90% of the resilient flooring					
installed shall comply.		x ²			
Tier 2. At least 100% of the resilient					
flooring installed shall comply.			x ²		
A4.504.3 Thermal insulation installed in					
the building shall meet the following					
requirements:					
Tier 1. Install thermal insulation in		x ²			
compliance with VOC limits		X-			
Tier 2. Install insulation which contains					
No-Added Formaldehyde (NAF) and is in			x ²		
compliance with Tier 1.					
Interior Moisture Control					
4.505.2 Vapor retarder and capillary break	.,				
is installed at slab-on-grade foundations.	X				
4.505.3 Moisture content of building					
materials used in wall and floor framing is	X				
checked before enclosure.					
Indoor Air Quality and Exhaust					
4.506.1 Return air filters with a value					
greater than MERV 6 shall be installed on					
HVAC systems. Pressure drop across the					
filter shall not exceed 0.1 inches water					
column.					
A4.506.2 [HR] Provide filters on return air					
openings rated MERV 6 or higher during					
construction when it is necessary to use					
HVAC equipment.					
A4.506.3 Direct-vent appliances shall be					
used when equipment is located in					
conditioned space; or the equipment must					
be installed in an isolated mechanical room.					
Environmental Comfort				L	
		I	ı	1	
4.507.2. Duct systems are sized,					
4.507.2. Duct systems are sized, designed, and equipment is selected	X				
4.507.2. Duct systems are sized, designed, and equipment is selected using the following methods:	X				
4.507.2. Duct systems are sized, designed, and equipment is selected using the following methods: 1. Establish heat loss and heat gain	X				
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702.2 Special inspectors employed by the owner or owner's agentenforcing agency must be qualified and able to demonstrate competence in the discipline they are inspecting.				
Verifications				
703.1 Verification of compliance with this code may include construction documents, plans, specifications, builder or installer certification, inspection reports, or other methods acceptable to the enforcing agency which show substantial conformance.	X			

- Green building measures listed in this table may be mandatory if adopted by a city, county, or city and county as specified in CALGreen Section 101.7.
- 2. Required prerequisite for this Tier.
- 3. These measures are currently required elsewhere in statute or in regulation.

Sec. 639. The first paragraph of Section 99.12.101, Division 12, Article 9, Chapter IX of the Los Angeles Municipal Code is amended, with no other changes to existing subsections therein, to read as follows:

Appendix A5 of the California Green Building Standards Code (CALGreen) is adopted by reference with the following exceptions: CALGreen Sections A5.105.1.1, A5.105.1.2, A5.106.4.3, A5.106.6.1, A5.106.11.1, A5.303.2.3.1, A5.303.2.3.2, A5.303.2.3.3, A5.303.2.3.4, A5.406.1, and Tables A5.106.4.3 A5.106.11.2.2, A5.106.11.2.3, A5.406.1, A5.410.3, A5.601, and A5.602 are not adopted; and in lieu, Los Angeles Municipal Code Section 99.12.508 and Subsections A5.105.1.1, A5.105.1.2, A5.106.4.3, A5.106.6, A5.106.6.1, A5.106.11.1, A5.303.2.3.1, A5.303.2.3.2, A5.303.2.3.3, A5.303.2.3.4, A5.406.1, A5.410.3, and Tables A5.106.4.3, A5.106.11.2.2, A5.106.11.2.3, A5.601, and A5.602 are added or amended as provided in this article.

Sec. 640. Table A5.601 of Section 99.12.101, Division 12, Article 9, Chapter IX of the Los Angeles Municipal Code is amended to read as follows:

TABLE A5.601 NONRESIDENTIAL BUILDINGS:

Green Building Standards Code Proposed Performance Approach

Note: This table is intended only as an aid in illustrating the nonresidential tier structure (Refer to Checklists A5.602, A5.602.1, and A5.602.2 for CALGreen verification guidelines for Mandatory Checklist, Tier 1 Checklist, and Tier 2 Checklist.) {Click here for a printable PDF version of this table}

CATEGORY	ENVIRONMENTAL PERFORMANCE GOAL	TIER 1	TIER 2
All	Minimum Mandatory (See Mandatory Checklist)	Meet all of the provisions of Chapter 5 (See Tier 1 Checklist)	Meet all of the provisions of Chapter 5 (See Tier 2 Checklist)
	Reuse of existing building	See Section A5.105.1 and Section A5.105.2 requirements	See Section A5.105.1 and Section A5.105.2 requirements
DIVISION 5.1 Planning and Design	Designated Parking for Fuel Efficient Vehicles-(Tier 1 and Tier 2 only)	Approx. 35% of total spacesMeet Table A5.106.5.1.1	Approx. 50% of total spacesMeet- Table A5.106.5.1.2
- I amming a mar Booligii	Electric Vehicle Charging	Approx. 30%8% of total spaces	Approx. 45% 10% of total spaces

Cool Roof to Reduce Heat Island Effect	Meet <u>Table A5.106.11.2.2</u>	Meet <u>Table A5.106.11.2.3</u>
	1 additional Elective from Division A5.1	3 additional Electives from Division A5.1
Energy Performance ²	Outdoor lighting power 90% of Part 6 allowance	Outdoor lighting power 90% of Part 6 allowance
	If applicable, solar water-heating system with minimum solar savings fraction of 0.15	If applicable, solar water-heating system with minimum solar savings fraction of 0.15
	Warehouse door seals	Warehouse door seals
	Comply with day lighting requirements	Comply with day lighting requirements
	Exhaust heat recovery	Exhaust heat recovery
	Energy Budget 95% or 90% of Part 6 calculated value of allowance	Energy Budget 90% or 85% of Part 6 calculated value of allowance
Indoor Water Use	12% Savings	20% Savings
	1 additional Elective from Division A5.3	3 additional Electives from Division A5.3
Cradle-to-Grave Whole Building Life Cycle AssessmentGenstruction Waste- Reduction	See Section A5.409.1, Section A5.409.2 and Section A5.409.2.3 requirements At least 65% reduction	See Section A5.409.1, Section A5.409.2 and Section A5.409.2.3 requirements At least 80% reduction
Product GWP compliance – prescriptive path Recycled Content	See Section A5.409.1, Section A5.409.2 and Section A5.409.2 and Section A5.409.2.3 requirements Utilize recycled content materials for 10% of total material cost	See Section A5.409.1, Section A5.409.2 and Section A5.409.2 and Section A5.409.2.3 requirements Utilize recycled content materials for 15% of total material cost
	1 additional Elective from Division A5.4	3 additional Electives from Division A5.4
Low-VOC Resilient Flooring	90% of flooring meets VOC limits	100% of flooring meets VOC limits ¹
Low-VOC Thermal Insulation	Comply with VOC limits	Install no-added formaldehyde insulation and comply with VOC limits
	1 additional Elective from Division A5.5	3 additional Electives from Division A5.5
	1 Additional Elective from	3 Additional Electives from
	any division	any division
	Indoor Water Use Cradle-to-Grave Whole Building Life Cycle AssessmentConstruction Waste- Reduction Product GWP compliance – prescriptive pathRecycled Content Low-VOC Resilient Flooring	Heat Island Effect 1 additional Elective from Division A5.1 2

- Exception: Allowance may be permitted in Tier 2 for up to 5 percent specialty purpose flooring. Solar water-heating system requirement for newly constructed restaurants as per A5.203.1.1.2.

Exceptions:

- a. b.
- Buildings with a natural gas service water heater with a minimum of 95 percent thermal efficiency.

 Buildings where greater than 75 percent of the total roof area has annual solar access that is less than 70 percent. Solar access is the ratio of solar insolation including shade to the solar insolation without shade.

Shading from obstructions located on the roof or any other part of the building shall not be included in the determination of annual solar access.

3. Life cycle assessment compliant with Section A5.409.4 in this code may be substituted for prescriptive measures from Division A5.4.

Sec. 641. Table A5.602 of Section 99.12.508, Division 12, Article 9, Chapter IX of the Los Angeles Municipal Code is amended to read as follows:

TABLE A5.602

CALGREEN VERIFICATION GUIDELINES MANDATORY MEASURES CHECKLIST

{Click here for a printable PDF version of this table}

Application: This checklist shall be used for nonresidential projects that meet one of the following: new construction, building additions of 1,000 square feet or greater, or building alterations with a permit valuation of \$200,000 or more pursuant to Section 301.3 AND do not trigger a Tier 1 or Tier 2 requirement:

Y = Yes (section has been selected and/or included)

N/A = Not Applicable (code section does not apply to the project – mainly used for additions and alterations)

O = Other (provide explanation)

[N] = New construction pursuant to Section 301.3

[A] = Additions and/or Alterations pursuant to Section 301.3

CHAPTER 5 DIVISIONS		SECTION TITLE	CODE SECTION	Υ	N/A	o	PLAN SHEET, SPEC, OR ATTACH REFERENCE
		Deconstruction and reuse of existing structures, Scope with Exception	5.105.1				
	Mandatory	Reuse of existing building & Verification of compliance with note	5.105.2 and 5.105.2.1				
	Mandatory	Storm water pollution prevention for projects that disturb less than 1 acre of land	5.106.1 through 5.106.2				
	Mandatory	Short-term bicycle parking (with exception)	5.106.4.1.1				
	Mandatory	Long-term bicycle parking	5.106.4.1.2 through 5.106.4.1.5				
		Electric vehicle (EV) charging [N] w/- exceptions¶	5.106.5.3¶	4	4	4	4
DIVISION 5.1 Planning and	Mandatory	EV capable spaces [N]¶	5.106.5.3.1¶	4	4	4	+
Design DIVISION 5.1 Planning and	Mandatory	Electric vehicle charging stations (EVCS)¶	5.106.5.3.2¶	4	4	4	4
Design	Mandatory	Use of automatic load management systems (ALMS)¶	5.106.5.3.3¶	4	4	4	4
	Mandatory	Accessible EVCS¶	5.106.5.3.4¶	4	4	4	4
	Mandatory	Note for EVCS signs¶	¶	4	4	-11	4
	Mandatory	Table 5.106.5.3.1 w/ footnotes¶	5.106.3.1,¶ 5.106.3.2 and¶ 5.106.3.3¶	¶	-¶	-¶	-11
	Mandatory	Electric vehicle (EV) charging: medium-duty- and heavy-duty [N]¶	5.106.5.4¶	4	4	4	-4

	Mandatory	5.106.5.3.1 OR Independently Power Allocation Method:	5.106.5.3.1, 5.106.5.3.2, Table 5.106.5.3.1, 5.106.5.3.2.1, 5.106.5.3.2.3, 5.106.5.3.2.4, 5.106.5.3.3, 5.106.5.3.4 and 5.106.5.3.5 OR 5.106.5.3.4, 5.106.5.3.6, 5.106.5.3.6, Table 5.106.5.3.6, 5.106.5.3.6, 5.106.5.3.6, 5.106.5.3.6, 5.106.5.3.6, 5.106.5.3.6, 5.106.5.3.6, 5.106.5.3.6, 5.106.5.3.6, 5.106.5.3.6, 5.106.5.3.6, 5.106.5.3.6, 5.106.5.3.6, 5.106.5.3.6, 5.106.5.3.6, 5.106.5.3.6, 5.106.5.3.6, 5.106.5.3.6, 5.106.5.3.6, 5.106.5.3.6, 5.106.5.3.6, 5.106.5.3.6, 5.106.5.3.6, 5.106.5.3.6, 5.106.5.3.6, 5.106.5.3.6, 5.106.5.3.6, 5.106.5.3.6, 5.106.5.3.6, 5.106.5.3.6, 5.106.5.3.6, 5.106.5.3.6, 5.106.5.3.6, 5.106.5.3.6, 5.106.5.3.6, 5.106.5.3.6, 5.106.5.3.6, 5.106.5.3.6, 5.106.5.3.6, 5.106.5.3.6,	
	Mandatory	Additions or Alterations to existing buildings or parking facilities [A] with Exceptions	5.106.5.4	
	Mandatory	Existing buildings or parking areas without previously installed EV capable infrastructure [A]	5.106.5.4.1	
	Mandatory	Existing buildings or parking areas without previously installed EV capable infrastructure [A]	5.106.5.4.2	
	Mandatory	Electric vehicle (EV) charging: medium-duty and heavy-duty [N]	5.106.5.5	
	Mandatory	Electric vehicle charging readiness requirements for warehouses, grocery stores, office buildings, and manufacturing facilities and retail stores with planned off-street loading spaces [N]	5.106.5.5.1 5.106.	
	Mandatory	Table 5.106.5.5.1 <u>5.106.5.4.1</u>	5.106.5.5 and 5.106.5.5.1 5.106. 5.4 and 5.106.5.4.1	
	Mandatory	Light pollution reduction [N] (with exceptions, notes and table)	5.106.8 through 5.106.8.2	
	Mandatory	Grading and paving (exception for additions and alterations not altering the drainage path)	5.106.10	
	Mandatory	Heat island effect	5.106.11	
	Mandatory	Hardscape alternatives [N]	5.106.11.1	
Division 5.2 Energy Efficiency	Mandatory	Meet the minimum energy efficiency standard	5.201.1	
	Mandatory	Separate meters (new buildings or additions > 50,000 sf that consume more than 100 gal/day)	5.303.1.1	
Division 5.3 Water Efficiency and	Mandatory	Separate meters (for tenants in new buildings or additions that consume more than 1,000 gal/day)	5.303.1.2	
Conservation	Mandatory	Water Reduction	5.303.2	

Mandatory Mal-mounted urinals shall not exceed 0.125 5.303.3.2.1 Mandatory Agrif Mandatory Mal-mounted urinals shall not exceed 0.15 5.303.3.2.1 Mandatory Mandatory Mandatory Mandatory Mandatory Mandatory Mandatory Areas of additions or alterations Mandatory Areas of additions or alterations Mandatory Areas of additions or alterations Mandatory Mandatory Standards for plumbing fixtures and fittings Mandatory Areas of additions or alterations Mandatory Mandatory Standards for plumbing fixtures and fittings Mandatory Areas of additions or alterations Mandatory Mandatory Mandatory Standards for plumbing fixtures and fittings Mandatory Mandatory Standards for plumbing fixtures and fittings Mandatory Mandatory Mandatory Mandatory Mandatory Mandatory Mandatory Standards for plumbing fixtures and fittings Mandatory Mandator			<u>, </u>		 	
Mandatory Single showerhead shall not exceed 0.5 S.303.3.2.2 Single showerhead shall have maximum Mandatory Multiple showerhead shall have maximum Multiple showerhead shall have a combined flow rate of 1.8 gpm S.303.3.3.1 S.303.3.3.1 Multiple showerheads serving one shower S.303.3.3.2 S.303.3.3.3 S.303.3.3.3 S.303.3.3.3 S.303.3.3.3 S.303.3.3.3 S.303.3.3 S.303.3.3 S.303.3.3 S.303.3.3 S.303.3.3 S.303.3.3 S.303.3.3 S.303.3.3 S.303.3.3 S.303.3		Mandatory	Water closets shall not exceed 1.28 gallons per flush (gpf)	5.303.3.1		
Mandatory Single showerhead shall have maximum Mandatory floor rate of 1.8 gpm (gallons per minute) at 5.303.3.3.1 Multiple showerheads serving one shower shall have a combined flow rate of 1.8 gpm at 80 psi Multiple showerheads serving one shower shall have a combined flow rate of 1.8 gpm at 80 psi Mandatory Nonresidential lavatory faucets 5.303.3.4.1 Mandatory Wash fountains 5.303.3.4.2 Mandatory Wash fountains 5.303.3.4.3 Mandatory Metering faucets for wash fountains 5.303.3.4.4 Mandatory Pre-rinse spray valve 5.303.3.4.6 Mandatory Pre-rinse spray valve 5.303.3.4.6 Mandatory Food waste disposers 5.303.3.4.1 Mandatory Areas of additions or alterations 5.303.5 Mandatory Standards for plumbing fixtures and fittings 5.303.6 Mandatory Weather protection 5.407.1 Mandatory Weather protection 5.407.1 Mandatory Moisture control: sprinklers 5.407.2.1 Mandatory Moisture control: sprinklers 5.407.2.1 Mandatory Moisture control: sprinklers 5.407.2.1 Mandatory Moisture control: flashing 5.408.1.2, 5.408.1.3 or more stringent local ordinance 5.408.1.3 Mandatory Universal waste [A] 5.408.2 Mandatory Universal waste [A] 5.408.2 Mandatory Universal waste [A] 5.408.2 Mandatory Moisture soor recycle) Mandatory Moisture soor recycles building life cycle assessment with Notes, 5.409.1, 5.409.2, 5.409.1, 5.409.2, 5.409.1, 5.409.2, 5.409.2, 5.409.2, 5.409.2, 5.409.2, 5.409.2, 5.409.2, 5.409.2, 5.409.2, 5.409.2, 5.409.2, 5.409.2, 5.409.2, 5.409.2, 5.409.2, 5.409.2, 5.409.2, 5.409.2, 5.409.2, 5.409.2, 5.409.2, 5.409.2, 5.409.2, 5.409.2, 5.409.2, 5.409.2, 5.409.2, 5.409.2, 5.409.2, 5.409.2, 5.409.2, 5.409.2, 5.409.2, 5.409.2, 5.409.2, 5.409.2, 5.409.2, 5.409.2, 5.409.2, 5.409.2, 5.409.2, 5.409.2, 5.409.2, 5.409.2, 5.409.2, 5.409.2, 5.409.2, 5.409.2, 5.409.2, 5.409.2, 5.409.2, 5.409.2, 5.409.2, 5.409.2, 5.409.2, 5.409.2, 5.409.2, 5.409.2, 5.409.2, 5.409.2, 5.409.2, 5.409.2, 5.409.2, 5.409.2, 5.409.2, 5.409.2, 5.409.2, 5.409.2, 5.409.2, 5.409.2, 5.409.2, 5.409.2, 5.409.2, 5.409.2, 5.409.2, 5.409.2, 5.409.2, 5.409.2, 5		Mandatory		5.303.3.2.1		
Single showerhead shall have maximum flow rate of 1.8 gpm (gallons per minute) at 5.303.3.3.1		Mandatory	Floor-mounted urinals shall not exceed 0.5	5.303.3.2.2		
Mundatory Shall have a combined flow rate of 1.8 gpm at 80 psi Mandatory Nonresidential lavatory faucets 5.303.3.4.1 Mandatory Wash fountains 5.303.3.4.2 Mandatory Wash fountains 5.303.3.4.3 Mandatory Metering faucets 5.303.3.4.4 Mandatory Metering faucets 5.303.3.4.4 Mandatory Pre-rinse spray valve 5.303.3.4.5 Mandatory Pre-rinse spray valve 5.303.3.4.6 Mandatory Areas of additions or alterations 5.303.4.1 Mandatory Standards for plumbing fixtures and fittings 5.303.6 Mandatory Methor protection 5.407.1 Mandatory Washer protection 5.407.1 Mandatory Moisture control: exterior door protection 5.407.2.2.1 Mandatory Moisture control: exterior door protection 5.407.2.2.2 Construction waste management — comply with either: Sections 5.408.1.1, 5.408.1.2, 5.408.1.3 Division 5.4 Mandatory Mandatory Universal waste [A] Mandatory Mandator		Mandatory	Single showerhead shall have maximum flow rate of 1.8 gpm (gallons per minute) at	5.303.3.3.1		
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Mandatory Pre-rinse spray valve 5.303.3.4.6 Mandatory Food waste disposers 5.303.4.1 Mandatory Areas of additions or alterations 5.303.5 Mandatory Standards for plumbing fixtures and fittings 5.303.6 Mandatory Outdoor potable water use in landscape areas (with notes) 5.407.1 Mandatory Weather protection 5.407.1 Mandatory Moisture control: sprinklers 5.407.2.1 Mandatory Moisture control: exterior door protection 5.407.2.2.1 Mandatory Moisture control: flashing 5.407.2.2.2 Construction waste management – comply with either: Sections 5.408.1.1, 5.408.1.2, 5.408.1.3 Construction waste management: 5.408.1.1, 5.408.1.2, 5.408.1.3 Mandatory Moisture control: flashing 5.408.1.1, 5.408.1.2, 5.408.1.2, 5.408.1.3 Division 5.4 Mandatory Moisture control: flashing 5.408.1.1, 5.408.1.2, 5.408.1.2, 5.408.1.3 Construction waste management – comply with either: Sections 5.408.1.1, 5.408.1.2, 5.408.1.3 Mandatory Moisture control: flashing 5.408.1.1, 5.408.1.2, 5.408.1.3 Construction waste management of s.408.1.3 Mandatory		Mandatory	Metering faucets	5.303.3.4.4		
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Mandatory Areas of additions or alterations Mandatory Standards for plumbing fixtures and fittings Mandatory Outdoor potable water use in landscape areas (with notes) Mandatory Weather protection Mandatory Moisture control: sprinklers Mandatory Moisture control: exterior door protection Mandatory Moisture control: exterior door protection Mandatory Moisture control: flashing Mandatory Moisture control		Mandatory	Pre-rinse spray valve	5.303.3.4.6		
Mandatory Standards for plumbing fixtures and fittings 5.303.6 Mandatory Outdoor potable water use in landscape areas (with notes) Mandatory Weather protection 5.407.1 Mandatory Moisture control: sprinklers 5.407.2.1 Mandatory Moisture control: exterior door protection 5.407.2.2.1 Mandatory Moisture control: flashing 5.407.2.2.2 Construction waste management – comply with either: Sections 5.408.1.1, 5.408.1.2, 5.408.1.3 or more stringent local ordinance 5.408.1.3 Mandatory Construction waste management: 5.408.1.4 Mandatory Universal waste [A] 5.408.2 Division 5.4 Mandatory Universal waste [A] 5.408.3 Mandatory Conservation and Resource Mandatory Cycle Assessment, Scope, Whole building life cycle assessment with Notes, Building components, Reference study 5.409.2.1, 5.409.2.2 and		Mandatory	Food waste disposers	5.303.4.1		
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Mandatory Universal waste [A] 5.408.2 Division 5.4 Material Conservation and Resource Mandatory		Mandatory		5.408.1.4		
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Material Conservation and Resource Mandatory Conservation and Resource Mandatory Man	Division 5.4	Mandatory		5.408.3		
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Mandatory Recycling by occupants (with exception) 5.410.1		Mandatory		5.410.1		
Mandatory Recycling by occupants: additions (with exception) 5.410.1.1		Mandatory	Recycling by occupants: additions (with exception)	5.410.1.1		
Mandatory Recycling by occupants: sample ordinance 5.410.1.2		Mandatory	Recycling by occupants: sample ordinance	5.410.1.2		
Mandatory Commissioning new buildings (≥ 10,000 sf) [N] 5.410.2		Mandatory	[N]	5.410.2		
Mandatory Owner's or owner representative's Project Requirements (OPR) [N] 5.410.2.1		Mandatory		5.410.2.1		

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	-	Basis of Design (BOD) [N]	5.410.2.2	<u> </u>
	Mandatory	Commissioning plan [N]	5.410.2.3	<u> </u>
	Mandatory	Functional performance testing [N]	5.410.2.4	
	Mandatory	Documentation and training [N]	5.410.2.5	
	Mandatory	Systems manual [N]	5.410.2.5.1	
	Mandatory	Systems operation training [N]	5.410.2.5.2	
	Mandatory	Commissioning report [N]	5.410.2.6	
		Testing and adjusting for new buildings < 10,000 sf or new systems that serve additions or alterations [A]	5.410.4	
		System testing plan for renewable energy, landscape irrigation and water reuse [A]	5.410.4.2	
	Mandatory	Procedures for testing and adjusting	5.410.4.3	
	Mandatory	Procedures for HVAC balancing	5.410.4.3.1	
	Mandatory	Reporting for testing and adjusting	5.410.4.4	
	Mandatory	Operation and maintenance (O&M) manual	5.410.4.5	
	Mandatory	Inspection and reports	5.410.4.5.1	
	Mandatory	Fireplaces	5.503.1	
	Mandatory	Woodstoves	5.503.1.1	
	Mandatory	Temporary ventilation	5.504.1	
	Mandatory	Covering of ducts openings and protection of mechanical equipment during construction	5.504.3	
	Mandatory	Adhesives, sealants and caulks	5.504.4.1	
	Mandatory	Paints and coatings	5.504.4.3	
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	Mandatory	Aerosol paints and coatings: verification	5.504.4.3.2	
	Mandatory	Carpet systems	5.504.4.4	
	Mandatory	Carpet cushion	5.504.4.4.1	
	Mandatory	Carpet adhesives per Table 5.504.4.1	5.504.4.4.2	
Division 5.5 Environmental	Mandatory	Composite wood products	5.504.4.5	
Quality	Mandatory	Composite wood products: documentation	5.504.4.5.3	
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	-	Filters: labeling	5.504.5.3.1	
		-	5.504.7	
		Indoor moisture control	5.505.1	
	,			

	Mandatory	Outside air delivery	5.506.1			
	Mandatory	Carbon dioxide (CO ₂) monitoring	5.506.2			
	Mandatory	Carbon dioxide (CO2) monitoring in classrooms	5.506.3			
	Mandatory	Acoustical control (with exception)	5.507.4			
	Mandatory	Exterior noise transmission, prescriptive method (with exceptions)	5.507.4.1			
	Mandatory	Noise exposure where noise contours are not readily available	5.507.4.1.1			
	Mandatory	Performance method	5.507.4.2			
	Mandatory	Site features	5.507.4.2.1			
	Mandatory	Documentation of compliance	5.507.4.2.2			
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	Mandatory	Ozone depletion and greenhouse gas reductions	5.508.1			
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	Mandatory	Halons	5.508.1.2			
	Mandatory	Supermarket refrigerant leak reduction for retail food stores 8,000 square feet or more Sections 5.508.2 through 5.508.2.6.3	5.508.2 through 5.508.2.6.3			
		END OF MANDATORY PROVISIONS				
Documentation Author's / Responsible Designer's Declaration Statement Mandatory: attest that this mandatory provisions checklist is accurate and complete.						
Signature:						
Company:			Date:			
Address:			License:			
City/State/Zip:			Phone:			