ORDINANCE NO. 2165

AN ORDINANCE ADOPTING THE 2019 EDITIONS OF THE CALIFORNIA BUILDING CODE, THE CALIFORNIA RESIDENTIAL CODE, THE CALIFORNIA ELECTRICAL CODE, THE CALIFORNIA MECHANICAL CODE, THE CALIFORNIA PLUMBING CODE, THE CALIFORNIA ENERGY CODE, THE CALIFORNIA HISTORICAL CODE, THE CALIFORNIA FIRE CODE, THE CALIFORNIA EXISTING BUILDING CODE, THE CALIFORNIA GREEN BUILDING STANDARDS CODE, THE CALIFORNIA REFERENCED STANDARDS CODE, THE CALIFORNIA BUILDING STANDARDS ADMINISTRATIVE CODE, AND THE 2018 EDITION OF THE INTERNATIONAL POOL AND SPA CODE; MAKING CERTAIN AMENDMENTS BASED UPON LOCAL CONDITIONS; AND AMENDING THE MONTEREY PARK MUNICIPAL CODE TO REFLECT SUCH CHANGES.

The City Council for the City of Monterey Park does ordain as follows:

SECTION 1: *Findings.* The City Council finds as follows:

A. The City may adopt model codes by reference pursuant to Government Code §§ 50022.2, *et seq.*;

B. Health and Safety Code § 17958 requires the City to adopt certain codes that are set forth in Health and Safety Code § 17922 and published in the California Code of Regulations;

C. In accordance with Health and Safety Code § 17958.7, it is in the public interest to adopt the most recent codes published by the California Building Standards Commission;

D. Notice of public hearing to consider the adoption of the codes was published pursuant to Government Code § 6066 and a duly noticed public hearing was held on 11/20/2019, regarding the adoption of the Codes;

E. Pursuant to § 50022.6 of the Government Code, at least one copy of all codes adopted by reference were filed with the City Clerk of the City and were available for public inspection for at least fifteen (15) days preceding the date of the hearing;

F. Pursuant to Government Code § 50022.9, the City Council intends to adopt by reference, with local amendments, the following 2019 codes in their entirety as if set forth in full herein:

1. The California Building Code, 2019 Edition - Vol. I & II as published in Title 24, Part 2 of the California Code of Regulations;

2. The California Residential Code, 2019 Edition, as published in Title 24, Part 2.5 of the California Code of Regulations;

3. The California Electrical Code, 2019 Edition, as published in Title 24, Part 3 of the California Code of Regulations;

4. The California Mechanical Code, 2019 Edition, as published in Title 24, Part 4 of the California Code of Regulations;

5. The California Plumbing Code, 2019 Edition, as published in Title 24, Part 5 of the California Code of Regulations;

6. The California Energy Code, 2019 Edition, as published in Title 24, Part 6 of the California Code of Regulations;

7. The California Historical Building Code, 2019 Edition, as published in Title 24, Part 8 of the California Code of Regulations;

8. The California Fire Code, 2019 Edition, as published in Title 24, Part 9 of the California Code of Regulations;

9. The California Existing Building Code, 2019 Edition, as published in Title 24, Part 10 of the California Code of Regulations;

10. The California Green Building Standards Code, 2019 Edition, as published in Title 24, Part 11 of the California Code of Regulations;

11. The California Referenced Standards Code, 2019 Edition, as published at Title 24, Part 12, of the California Code of Regulations;

12. The International Pool and Spa Code, 2018 Edition, as published by the International Code Council.

SECTION 2: In accordance with Health and Safety Code § 17958.7, the City Council finds that there are local climatic, geographic, and topographic conditions justifying the various local amendments to the California Building Standards Code as set forth in attached Exhibit "A," which is adopted by the City Council and incorporated by reference.

SECTION 3: Chapter 16.01 of the Monterey Park Municipal Code ("MPMC") is amended in its entirety to read as follows:

"Chapter 16.01 ADOPTION OF TECHNICAL BUILDING CODES AND ADMINISTRATIVE PROVISIONS

16.01.010 Adoption of specific Codes; Copies on file.

A. Except as otherwise provided in this chapter, the following Codes are adopted by reference:

1. The 2019 California Building Code including Appendices B, F, H, I and J;

2. The 2019 California Residential Code including Appendices F, H, O, and V;

3. The 2019 California Electrical Code;

4. The 2019 California Mechanical Code including Appendix D;

5. The 2019 California Plumbing Code including Appendices A, C, D, E, G, I, and K;

6. The 2019 California Energy Code;

7. The 2019 California Historical Building Code;

8. The 2019 California Existing Building Code;

9. The 2019 California Green Building Standards;

10. The 2019 California Referenced Standards Code; and

11. The 2018 International Pool and Spa Code.

B. In accordance with Health and Safety Code § 18942, one copy of the above-referenced Codes will remain on file in the office of the City Clerk.

16.01.020 Definition of terms.

Unless the contrary is stated or clearly appears from the context, the following definitions govern the construction of the words and phrases used in this Title. Words and phrases not defined by this chapter have the meanings set forth in the applicable Code as set forth in Title 24 of the Code of California Regulations. If the definition of any term contained in this Title conflicts with the definition of the same term in the applicable Code, then the definition contained in this Title governs.

"Building and Safety Division" means the Building Division, Public Works Department of the City of Monterey Park.

"Code" or "Codes" means the applicable 2019 code adopted by reference in this Title.

"Health office" means the Los Angeles County Department of Health Services.

16.01.030 Resolution of conflicts in application.

In the event of any conflict or ambiguity between any provision contained in the Codes and this Title, this Title will govern.

16.01.040 Administrative provisions

Add Chapter 1, Administrative Provisions to read as follows:

Chapter 1
ADMINISTRATIVE PROVISIONS

PART 1 CONTENTS

SECTION 101 GENERAL

101.1 Title. These regulations may be referred to as the Administrative Provisions of the California Building Codes of the State of California and other Codes as adopted by Title 16 and 17 of the Monterey Park Municipal Code.

101.2 Scope. The provisions of the codes apply to the construction, alteration, relocation, enlargement, replacement, repair, equipment, used and occupancy, location, maintenance, removal and demolition of every building or structure or any appurtenances connected or attached to such buildings or structures.

Exception: 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, must comply with the California Building Code or the California Residential Code.

101.2.1 Appendices. Provisions in the appendices of the codes, do not apply unless specifically adopted.

101.3 Intent. The purpose of the codes is to establish the minimum requirements to safeguard the public health, safety and general welfare through structural strength, means of egress facilities, stability, sanitation, adequate light and ventilation, energy conservation, and safety to life and property from fire and other hazards attributed to the

built environment and to provide safety to firefighters and emergency responders during emergency operations.

101.4 Referenced codes. Codes listed in Sections 101.4.1 through 101.4.11 and referenced elsewhere in the codes are part of the requirements of the codes to the prescribed extent of each such reference.

101.4.1 Building Code. The provision of the California Building Code as adopted in Section 16.01.010 apply to the construction, alteration, relocation, enlargement, replacement, repair, equipment, use and occupancy, location, maintenance, removal and demolition of every building or structure or any appurtenances connected or attached to such building or structure other than those meeting the scoping limitations contained in the California Residential Code.

101.4.2 Residential Code. The provisions of the California Residential Code as adopted in Section 16.01.010 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.

101.4.3 Electrical Code. The provisions of the California Electrical Code as adopted in Section 16.01.010 apply to the installation and removal of electrical conductors, equipment, and raceways; signaling and communications conductors, equipment, and raceways; and optical fiber cables and raceways for the following: (1) Public and private premises, including buildings, structures, mobile homes, recreational vehicles, and floating buildings; (2) Yards, lots, parking lots, carnivals, and industrial substations; (3) Installations of conductors and equipment that connect to the supply of electricity; and (4) Installations used by the electric utility, such as office buildings, warehouses, garages, machine shops, and recreational buildings, that are not an integral part of a generating plant, substation, or control center.

101.4.4 Mechanical Code. The provisions of the California Mechanical Code as adopted in Section 16.01.010 apply to the erection, installation, alteration, repair, relocation, replacement, addition to, use, or maintenance of mechanical systems.

101.4.5 Plumbing Code. The provisions of the California Plumbing Code as adopted in Section 16.01.010 apply to the erection, installation, alteration, repair, relocation, replacement, addition to, use, and maintenance of plumbing systems.

101.4.6 Energy Code. The provisions of the California Energy Code as adopted in Section 16.01.010 apply to all buildings: (1) That are occupancy Group A, B, E, F, H, I, M, R, S or U; (2) For which an application for a building permit or renewal of an existing permit is filed, or which are constructed by a governmental agency; and (3) That are unconditioned, or indirectly or directly conditioned, or process spaces.

101.4.7 Historical Building Code. The provisions of the California Historical Building Code as adopted in Section 16.01.010 apply to all issues regarding code compliance to

provide solutions to facilitate the preservation of qualified historical buildings or properties.

101.4.8 Existing Building Code. The provisions of the California Existing Building Code as adopted in Section 16.01.010 apply to the repair, alteration, change of occupancy, addition to and relocation of existing buildings.

101.4.9 Green Building Standards Code. The mandatory provisions of the California Green Building Standards Code as adopted in Section 16.01.010 apply to the planning, design, operation, construction, use and occupancy of every newly constructed building or structure.

101.4.10 Referenced Standards Code. The provisions of the California Referenced Standards Code as adopted in Section 16.01.010 apply to all buildings and structures.

101.4.11 Pool and Spa Code. The mandatory provisions of the International Pool and Spa Code as adopted in Section 16.01.010 apply to the construction, alteration, renovation, replacement, repair and maintenance of aquatic recreation facilities, pools and spas.

101.4.12 Fire. The provisions of the Fire Code of the City of Monterey Park apply to matters affecting or relating to structures, processes and premises from (i) the hazard of fire and explosion arising from storage, handling or use of structures, materials or devices, (ii) conditions hazardous to life, property or public welfare in the occupancy of structures or premises, and (iii) the construction, extension, repair, alteration or removal of fire suppression and alarm systems or fire hazards in the structure or on the premises from occupancy or operation.

SECTION 102 APPLICABILITY

102.1 General. Where there is a conflict between a general requirement and a specific requirement, the specific requirement applies. Where, in any specific case, different sections of this code specify different materials, methods of construction or other requirements, the most restrictive governs.

102.2 Other laws. The provisions of the codes cannot be deemed to nullify any provisions of local, state or federal law.

102.3 Application of references. References to chapter or section numbers, or to provisions not specifically identified by number are construed to refer to such chapter, section or provision of the codes.

102.4 Referenced codes and standards. The codes and standards referenced in the codes are considered part of the requirements of the codes to the prescribed extent of each such reference. Where conflicts occur between provisions of the codes and referenced codes and standards, the provisions of the codes apply.

102.5 Partial invalidity. In the event that any part or provision of the codes is held to be illegal or void, this does not have the effect of making void or illegal any of the other parts or provisions.

102.6 Existing structures. The legal occupancy of any structure existing on the date of adoption of the codes may continue without change, except as is specifically covered in the codes or as is deemed necessary by the Building Official for the general safety and welfare of the occupants and the public.

SECTION 103 BUILDING AND SAFETY

103.1 [INTENTIONALLY BLANK]

103.2 Appointment. The Building Official is appointed by the City Manager, or designee. More than one Building Official may be appointed by the City Manager, or designee, in his or her discretion.

103.3 Deputies. In accordance with the prescribed procedures of this jurisdiction and with the concurrence of the City Manager, or designee, the Building Official may appoint a deputy Building Official, the related technical officers, inspectors, plan examiners and other agents. Such appointed agents have powers as delegated by the Building Official.

SECTION 104 DUTIES AND POWERS OF BUILDING OFFICIAL

104.1 General. The Building Official is authorized and directed to enforce the provisions of the codes. The Building Official has the authority to render interpretations of the codes and to adopt policies and procedures in order to clarify the application of its provisions. Such interpretations, policies and procedures must be in compliance with the intent and purpose of the codes. Such policies and procedures do not have the effect of waiving requirements specifically provided for in the codes.

104.2 Applications and permits. The Building Official will receive applications, review construction documents and issue permits for the erection, and alteration, demolition and moving of buildings and structures, inspect the premises for which such permits are issued and enforce compliance with the provisions of the codes.

104.3 Notices and orders. The Building Official is authorized to issue all necessary notices or orders to ensure compliance with the codes.

104.4 Inspections. The Building Official is authorized to make all of the required inspections and the Building Official has authority to accept reports of inspection by approved agencies or individuals. Reports of such inspections must be in writing and be certified by a responsible officer of such approved agency or by the responsible individual. The Building Official is authorized to engage such expert opinion as deemed necessary to report upon unusual technical issues that arise, subject to the approval of the appointing authority.

104.5 Identification. The Building Official and appointees must carry proper identification when inspecting structures or premises in the performance of duties under the codes.

104.6 Right of entry. Where it is necessary to make an inspection to enforce the provisions of the codes or where the Building Official has reasonable cause to believe that there exists in a structure or upon a premises a condition which is contrary to or in violation of the codes which makes the structure or premises unsafe, dangerous or hazardous, the Building Official is authorized to enter the structure or premises at reasonable times to inspect or to perform the duties imposed by the codes, provided that if such structure or premises be occupied that credentials be presented to the occupant and entry requested. If such structure or premises is unoccupied, the Building Official must first make a reasonable effort to locate the owner or other person having charge or control of the structure or premises and request entry. If entry is refused, the Building Official may take additional legal actions to obtain entry to the premises.

104.7 Department records. The Building Official must keep official records of applications received, permits and certificates issued, fees collected, reports of inspections, and notices and orders issued. Such records must be retained in the official records for the period required for retention of public records.

104.8 Liability. The Building Official, member of the board of appeals or employee charged with the enforcement of this code, while acting for the City in good faith and without malice in the discharge of the duties required by the codes or other pertinent law or ordinance, will not thereby be civilly or criminally rendered liable personally and is hereby relieved from personal liability for any damage accruing to persons or property as a result of any act or by reason of an act or omission in the discharge of official duties.

104.8.1 Legal Defense. Any suit or criminal complaint instituted against an officer or employee because of an act performed by that officer or employee in the lawful discharge of duties and under the provisions of the codes must be defended by legal representatives of the City until the final termination of the proceedings. The Building Official or any subordinate will not be liable for cost in any action, suit or proceeding that is instituted in pursuance of the provisions of the codes.

104.9 Approved materials and equipment. Materials, equipment and devices approved by the Building Official must be constructed and installed in accordance with such approval.

104.9.1 Used materials and equipment. The use of used materials which meet the requirements of the codes for new materials is permitted. Used equipment and devices cannot be reused unless approved by the Building Official.

104.10 Modifications. Where there are practical difficulties involved in carrying out the provisions of the codes, the Building Official has the authority to grant modifications for individual cases, upon application of the owner or owner's representative, provided the Building Official must first find that special individual reason makes the strict letter of the

codes impractical and the modification is in compliance with the intent and purpose of the codes and that such modification does not lessen health, accessibility, life and fire safety, or structural requirements. The details of action granting modifications must be recorded and entered in the City's files.

104.11 Alternative materials, design and methods of construction and equipment. The provisions of the codes are not intended to prevent the installation of any material or to prohibit any design or method of construction not specifically prescribed by the codes, provided that any such alternative has been approved. An alternative material, design or method of construction may be approved where the Building Official finds that the proposed design is satisfactory and complies with the intent of the provisions of the codes, and that the material, method or work offered is, for the purpose intended, at least the equivalent of that prescribed in the codes in quality, strength, effectiveness, fire resistance, durability and safety. Where the alternative material, design or method of construction is not approved, the Building Official must respond in writing, stating the reasons why the alternative was not approved.

104.11.1 Research reports. Supporting data, where necessary to assist in the approval of materials or assemblies not specifically provided for in the codes, consists of valid research reports from approved sources.

104.11.2 Tests. Whenever there is insufficient evidence of compliance with the provisions of the codes, or evidence that a material or method does not conform to the requirements of the codes, or in order to substantiate claims for alternative materials or methods, the Building Official has the authority to require tests as evidence of compliance to be made at no expense to the jurisdiction. Test methods are as specified in the codes or by other recognized test standards. In the absence of recognized and accepted test methods, the Building Official may approve the testing procedures. Tests must be performed by an approved agency. Reports of such tests must be retained by the Building Official for the period required for retention of public records.

SECTION 105 PERMITS

105.1 Required. Any owner or authorized agent who intends to construct, enlarge, alter, repair, move, demolish, or change the occupancy of a building or structure, or to erect, install, enlarge, alter, repair, remove, convert or replace any electrical, gas, mechanical or plumbing system, the installation of which is regulated by the codes, or to cause any such work to be done, must obtain a valid permit from the Building Official.

Work performed without a permit is a misdemeanor. In addition, any such work constitutes a public nuisance and may be abated in accordance with the MPMC.

105.1.1 Time-based permit. In lieu of an individual permit for each alteration to an already approved electrical, gas, mechanical or plumbing installation, the Building Official is authorized to issue a permit, valid for a specific time period not exceeding one year, upon application therefore to any person, firm or corporation regularly employing one or more qualified trade persons in the building, structure or on the premises owned or operated by the applicant for the permit.

The Building Official may detail the scope, parameters and conditions of this permit. The permit may be revoked when it is determined by the Building Official that the outlined scope, parameters, conditions or intent of the codes is not upheld by the permittee. The Building Official has access to such records at all times and such records must be filed with the Building Official as designated.

105.2 Work exempt from permit. Exemptions from permit requirements of the codes are not deemed to grant authorization for any work to be done in any manner in violation of the provisions of the codes or any other applicable law or policy. Except when otherwise subject to City review and approval or when otherwise required by State or local laws, regulations or standards, permits are not required for the following:

Building:

1. One-story detached accessory structures used as tool and storage sheds, playhouses and similar uses, provided the floor area does not exceed 120 square feet and conforms to the zoning regulations of the MPMC.

2. Fences not over 6 feet high.

3. Retaining walls that are not over 4 feet in height measured from the bottom of the footing to the top of the wall.

4. Oil derricks.

5. Water tanks supported directly on grade if the capacity does not exceed 5,000 gallons and the ratio of height to diameter or width is not greater than 2:1.

6. Sidewalks and driveways that are not more than 30 inches above adjacent grade, not over any basement or story below, not part of an accessible route and not part of a commercial site.

7. Painting, papering, tiling, carpeting, cabinets, counter tops and similar finish work.

8. Temporary motion picture, television and theater stage sets and scenery.

9. Prefabricated swimming pools accessory to a Group R-3 occupancy that are less than 18 inches deep, do not exceed 5,000 gallons and are installed entirely above ground.

10. Shade cloth structures constructed for nursery or agricultural purposes, not including service systems.

11. Swings and other playground equipment accessory to detached one-and two-family dwellings.

12. Window awnings supported by an exterior wall that do not project more than 54 inches from the exterior wall and do not require additional support of Group R-3 and U occupancies.

13. Non-fixed and movable fixtures, cases, racks, counters and partitions not over 5 feet 9 inches in height.

Electrical:

1. Repairs and maintenance: Minor repair work, including the replacement of lamps or the connection of approved portable electrical equipment to approved permanently installed receptacles.

2. Radio and television transmitting stations: The provisions of the codes must not apply to electrical equipment used for radio and television transmissions, but do apply to equipment and wiring for a power supply and the installations of towers and antennas.

3. Temporary testing systems: A permit must not be required for the installation of any temporary system required for the testing or servicing of electrical equipment or apparatus.

Gas:

1. Portable heating appliance.

2. Replacement of any minor part that does not alter approval of equipment or make such equipment unsafe.

Mechanical:

1. Portable heating appliance.

2. Portable ventilation equipment.

3. Portable cooling unit.

4. Steam, hot or chilled water piping within any heating or cooling equipment regulated by the codes.

5. Replacement of any part that does not alter its approval or make it unsafe.

6. Portable evaporative cooler.

7. Self-contained refrigeration system containing 10 pounds or less of refrigerant and actuated by motors of 1 horsepower (746 W) or less.

Plumbing:

1. The stopping of leaks in drains, water, soil, waste or vent pipe, provided, however, that if any concealed trap, drain pipe, water, soil, waste or vent pipe becomes defective and it becomes necessary to remove and replace the same with the new material, such work is considered new work and a permit must be obtained and inspection made as provided in the codes.

2. The clearing of stoppages or the repairing of leaks in pipes, valves or fixtures and the removal and reinstallation of water closets, provided such repairs do not involve or require the replacement or rearrangement of valves, pipes or fixtures.

105.2.1 Emergency repairs. Where equipment replacements and repairs are performed in an emergency situation, the permit application must be submitted within the next working business day to the Building Official.

105.2.2 Public service agencies. A permit is not required for installation, alteration or repair of generation, transmission, distribution or metering or other related equipment that is under the ownership and control of public service agencies by established right.

105.3 Application for permit. To obtain a permit, the applicant must first file an application therefore in writing on a form furnished by the Building Official for that purpose. Such application must:

1. Identify and describe the work to be covered by the permit for which application is made.

2. Describe the land on which the proposed work is to be done by legal description, street address or similar description that will readily identify and definitely locate the proposed building or work.

3. Indicate the use and occupancy for which the proposed work is intended.

4. Be accompanied by construction documents and other information as required in Section 106.

5. State the valuation of the proposed work.

6. Be signed by the applicant, or the applicant's authorized agent.

7. Give such other data and information as required by the Building Official.

105.3.1 Action on application. The Building Official will examine or cause to be examined applications for permits and amendments within a reasonable time after filing. If the application or the construction documents do not conform to the requirements of applicable law, the Building Official must reject such application in writing.

No building permit or other similar applicable permit bearing on property development or use including additions, modifications or revisions may be issued unless and until the

review and approval of all other departments and agencies having legal authority for review of construction projects have found the construction project to be in compliance with all applicable code provisions or entitlements.

When the Building Official is satisfied that the proposed work conforms to the requirements of applicable law, the Building Official must issue a permit in accordance with applicable law.

105.3.2 Time limitation of application. An application for a permit for any proposed work is deemed expired 180 days after the completion of any submittal review unless a permit has been issued. The Building Official is authorized to grant one extension of time of an unexpired application for additional periods not exceeding 90 days. The extension must be requested in writing and justifiable cause demonstrated.

For the purpose of this section, contact by a City representative indicating the review is completed is deemed completion of any submittal review.

Expired application, plans and other data submitted may be returned to the applicant; or when not stamped as "REVIEWED FOR CODE COMPLIANCE" may be destroyed by the Building Official.

105.4 Permit issuance. The application, plans, specifications, computations, and other data filed by an applicant for a permit will be reviewed by the Building Official. Such plans may be reviewed by other City officials to verify compliance with applicable law. If the Building Official finds that the work described in an application for a permit and the plans, specifications and other data filed therewith conform to applicable law, and that the specified fees have been paid, the permit must be issued.

When the Building Official issues the permit where plans are required, they must endorse in writing or stamp the plans and specifications "REVIEWED FOR CODE COMPLIANCE." Such approved plans and specifications cannot be changed, modified or altered without authorization from the Building Official, and all work regulated by the codes must be done in accordance with the approved plans.

105.5 Validity of permit. Issuing a permit or approving plans, specifications, and computations cannot be construed to be a permit for, or an approval of, any violation of applicable law. Permits presuming to give authority to violate or cancel the provisions of the codes or other ordinances of the City are not valid.

Issuing a permit based on construction documents and other data does not prevent the Building Official from requiring the correction of errors in the construction document and other data. Any addition to or alteration of approved construction documents must be approved in advance by the Building Official, as evidenced by the issuance of a new or amended permit. The Building Official is also authorized to prevent occupancy or use of a structure where in violation of the codes or of any other ordinances of this City.

105.6 Expiration. Every permit issued by the Building Official under the provisions of the codes will expire by limitation and become null and void if the building or work

authorized by such permit is not commenced within 180 days, or within 365 days for residential project, from the date of permit issuance, or if the building or work authorized by such permit is suspended or abandoned at any time after the work is commenced for a period of 180 days. Before such work can be commenced or recommenced, a new permit must first be issued.

For the purpose of this section, if an inspection approval is not recorded, the work authorized by the permit is deemed not commenced, suspended or abandoned.

(1) Requesting extension of an unexpired permit: Any permittee holding an unexpired permit may apply for an extension of time within which permittee may commence work under that permit when he is unable to commence or recommence work within the time required by this section for good and satisfactory reasons. The Building Official may extend the time for action by the permittee for a period not more than 180 days upon written request by the permittee showing justifiable cause beyond the control of the permittee have prevented action from being taken. Subject to approval of the Building Official, permits extended in this manner do not require additional permit fees.

(2) Requesting reissuance of an expired permit: Any permittee holding a permit which has expired may apply for a reissuance of the permit subject to compliance with current regulations and payment of plan check and permit fees. Plans must be resubmitted for plan check.

105.7 Suspension or revocation. The Building Official is authorized to suspend or revoke a permit issued under the provisions of this code wherever the permit is issued in error or on the basis of incorrect, inaccurate or incomplete information, or in violation of any ordinance or regulation or any of the provisions of the codes.

105.8 Placement of permit. The building permit or a copy must be kept on the site of the work until the completion of the project.

105.9 Responsibility. Every person who performs work for the installation or repair of building, structure, electrical, gas, mechanical or plumbing systems, for which this code is applicable, must comply with the codes.

105.10 Preliminary inspection. Before issuing a permit, the Building Official is authorized to examine or cause to be examined buildings, structures and sites for which an application has been filed.

105.11 Change of contractor or of ownership. A valid permit terminates upon a change of ownership or a change of contractor regarding the building, structure or grading for which said permit was issued if the work is not complete. A new permit is required for the completion of the work. Permit and applicable State fees, will be made for issuing a new permit under such circumstances. If, however, changes have been made to the plans and specifications last submitted to the Building Official, a permit fee based upon the proposed changes may be levied.

105.12 Incomplete construction. When a permit is revoked pursuant to Section 105.7 or abandoned pursuant to Section 105.6, the incomplete construction for which the permit is issued constitute a public nuisance and must be appropriately abated as in accordance with the procedure set forth in Chapter 4.30.

105.13 Surrender of permit. If a portion of the work or construction covered by the issued permit has not been commenced, the permittee may deliver such permit and approved documents to the Building Official with request that such permit is to be canceled. The Building Official will make note on the permit with or with like wording "Canceled at the request of the Permittee." Thereupon the permit and documents becomes null and void.

105.14 Liens to be discharged. A permit cannot be issued to any person or corporation under the provision of this Title in respect to any property where the cost of any building repair or abatement has been performed and a lien is recorded by the City, unless and until the amount of said lien with interest, has been paid in full.

SECTION 106 -FLOOR AND ROOF DESIGN LOADS

106.1 Live loads posted. In commercial, institutional or industrial buildings, for each floor or portion thereof designed for live loads exceeding 50 psf, such design live loads must be conspicuously posted by the owner or the owner's authorized agent in that part of each story in which they apply, using durable signs. It is unlawful to remove or deface such notices.

106.2 Issuance of certificate of occupancy. A certificate of occupancy required by Section 111 will not be issued until the floor load signs required by 106.1 is installed.

106.3 Restrictions on loading. It is unlawful to place, or cause or permit to be placed, on any floor or roof of a building, structure or portion thereof, a load greater than is permitted by this code.

SECTION 107 CONSTRUCTION DOCUMENTS

107.1 General. Construction documents, statement of special inspections, geotechnical reports and other data must be submitted in two or more sets with each permit application. The construction documents must be prepared by a registered design professional where required by the statutes of the City in which the project is to be constructed. Where special conditions exist, the Building Official is authorized to require additional construction documents to be prepared by a registered design professional.

Exception: The Building Official is authorized to waive the submission of construction documents and other data not required to be prepared by a registered design professional if the Building Official finds that the nature of the work applied for is such that review of construction documents is not necessary to obtain compliance with the codes.

107.2 Information on construction documents. Construction documents must be dimensioned and drawn upon suitable material. Electronic media documents are permitted to be submitted when approved by the Building Official. Construction documents must be of sufficient clarity to indicate the location, nature and extent of the work proposed and show in detail that it will conform to the provisions of the codes and relevant laws, ordinances, rules and regulations, as determined by the Building Official.

107.2.1 Fire protection system shop drawings. Shop drawings for the fire protection system(s) must be submitted to indicate conformance with the codes and the construction documents and must be approved before the start of system installation. Shop drawings must contain all information as required by the referenced installation standards in Chapter 9.

107.2.2 Means of egress. The construction documents must show in sufficient detail the location, construction, size and character of all portions of the means of egress including the path of the exit discharge to the public way in compliance with the provisions of the codes. In other than occupancies in Groups R-2, R-3, and I-I, the construction documents must designate the number of occupants to be accommodated on every floor, and in all rooms and spaces.

107.2.3 Exterior wall envelope. Construction documents for all buildings must describe the exterior wall envelope in sufficient detail to determine compliance with the codes. The construction documents must provide details of the exterior wall envelope as required, including flashing, intersections with dissimilar materials, corners, end details, control joints, intersections at roof, eaves or parapets, means of drainage, water-resistive membrane and details around openings.

The construction documents must include manufacturer's installation instructions that provide supporting documentation that the proposed penetration and opening details described in the construction documents maintain the weather resistance of the exterior wall envelope. The supporting documentation must fully describe the exterior wall system which was tested, where applicable, as well as the test procedure used.

107.2.4 Exterior balconies and elevated walking surfaces. Balconies or other elevated walking surfaces that are exposed to water from direct or blowing rain, snow, or irrigation, and the structural framing is protected by an impervious moisture barrier, the construction document must include details for all elements of the impervious moisture barrier system. The construction documents must also include manufacturer's installation instructions.

107.2.5 Site plan. The construction documents submitted with the application for permit must be accompanied by a site plan showing to scale the size and location of new construction and existing structures on the site, distances from lot lines, the established street grades and the proposed finished grades and, as applicable, flood hazard areas, floodways, and design flood elevations; and it must be drawn in accordance with an accurate boundary line survey. In the case of demolition, the site plan must show construction to be demolished and the location and size of existing structures and construction that are to remain on the site or plot. The Building Official is authorized to

waive or modify the requirement for a site plan when the application for permit is for alteration or repair or when otherwise warranted.

107.2.6 Structural information. The construction documents must provide the information specified in Section 1603.

107.3 Examination of documents. The Building Official must examine or cause to be examined the accompanying construction documents and must ascertain by such examinations whether the construction indicated and described is in accordance with the requirements of the codes and other applicable laws or ordinances.

107.3.1 Approval of construction documents. When the Building Official issues a permit, the construction documents must be approved, in writing or by stamp, as "Reviewed for Code Compliance." One set of construction documents so reviewed must be retained by the Building Official. The other set must be returned to the applicant, must be kept at the site of work and must be open to inspection by the Building Official or a duly authorized representative.

107.3.2 Previous approvals. The codes cannot require changes in the construction documents, construction or designated occupancy of a structure for which a lawful permit was previously issued or otherwise lawfully authorized, and the construction of which was pursued in good faith within 180 days after the effective date of the codes, has not been abandoned or the Building Official has not determined the permit was issued under false information.

107.3.3 Phased approval. The Building Official is authorized to issue a permit for the construction of foundations or any other part of a building or structure before the construction documents for the whole building or structure have been submitted, provided that adequate information and detailed statements are filed complying with pertinent requirements of the codes and the MPMC. The holder of such permit for the foundation or other parts of a building or structure must proceed at the holder's own risk with the building operation and without assurance that a permit for the entire structure will be granted.

107.3.4 Design professional in responsible charge. When it is required that documents be prepared by a registered design professional, the Building Official is authorized to require the owner to engage and designate on the building permit application a registered design professional who must act as the registered design professional in responsible charge. If the circumstances require, the owner must designate a substitute registered design professional in responsible charge who must perform the duties required of the original registered design professional in responsible charge. The Building Official must be notified in writing by the owner if the registered design professional in responsible charge is changed or is unable to continue to perform the duties.

The registered design professional in responsible charge must be responsible for reviewing and coordinating submittal documents prepared by others, including phased and deferred submittal items, for compatibility with the design of the building.

Where structural observation is required, the statement of special inspections must name the individual or firms who are to perform structural observation and describe the stages of construction at which structural observation is to occur.

107.3.4.1 Deferred submittals. For the purposes of this section, deferred submittals are defined as those portions of the design that are not submitted at the time of the application and that are to be submitted to the Building Official within a specified period.

Deferral of any submittal items must have the prior approval of the Building Official. The registered design professional in responsible charge must list the deferred submittals on the construction documents for review by the Building Official.

Documents for deferred submittal items must be submitted to the registered design professional in responsible charge who must review them and forward them to the Building Official with a notation indicating that the deferred submittal documents have been reviewed and been found to be in general conformance to the design of the building. The deferred submittal items must not be installed until the design and submittal documents have been approved by the Building Official.

107.4 Amended construction documents. Work must be installed in accordance with the approved construction documents, and any changes made during construction that are not in compliance with the approved construction documents must be resubmitted for approval as an amended set of construction documents,

107.5 Number of construction documents. One set of approved construction documents must be retained by the Building Official for a period of not less than that required by state law and the City's retention policy.

SECTION 108 TEMPORARY STRUCTURES AND USES

108.1 General. The Building Official is authorized to issue a permit for temporary structures and temporary uses. Such permits must be limited as to time of service, but cannot be permitted for more than 180 days. The Building Official is authorized to grant extensions for demonstrated good cause.

108.2 Conformance. Temporary structures and uses must conform to the structural strength, fire safety, means of egress, accessibility, light, ventilation and sanitary requirements of the codes as necessary to ensure public health, safety and general welfare.

108.3 Temporary power. The Building Official is authorized to give permission to temporarily supply and use power in part of an electric installation before such installation has been fully completed and the final certificate of completion has been issued. The part covered by the temporary certificate must comply with the requirements specified for temporary lighting, heat or power in the California Electrical Code.

108.4 Termination of approval. The Building Official is authorized to terminate such permit for a temporary structure or use and to order the temporary structure or use to be discontinued.

SECTION 109 FEES

109.1 General. A fee as established by resolution of the City Council must be paid for each plan review when submitted and each permit at time of issuance.

109.2 Permit fees. A fee for each required permit must be assessed in accordance with the fee schedule adopted by City Council resolution.

Failure to pay fees and obtain a permit before commencing work is a violation of the codes, except when a program is established by the Building Official and permit conditions are defined, or it can be proven to the satisfaction of the Building Official that an emergency existed which made it impractical to first obtain the permit. A violation will result in an assessment of an investigation fee in an amount equal to the permit fee for the work undertaken without permit. Payment of a double fee does not relieve any person from fully complying with the requirements of the codes nor from any other penalties prescribed herein.

109.3 Plan review fees. When a plan or other data is ready to be submitted by Section 105.3, a plan-checking fee, in the amount as established by City Council must be paid to the Building Official at the time of submitting plans and specifications for checking. When submittal documents are incomplete or changes so as to require additional plan review or when the project involves differed submittal items an additional fee must be assessed in accordance with the fee schedule established by City Council.

109.4 Investigation fee. An investigation fee as established by Section 108.2 may be charged by the Building Official whenever work for which a permit is required by the codes has been commenced without first obtaining said permit. This fee must be paid and the investigation must be made before the issuance of any permit for said work. An investigation fee may be charged for any investigation of a building, structure, work reports, certification or any other related work requested by an owner or authorized agent of such owner.

109.5 Fee Refunds. The Building Official may authorize refunding of any fee paid hereunder which was erroneously paid or collected. The Building Official may authorize refunding of not more than 80 percent of the permit fee paid when no work has been done under a permit issued in accordance with the codes, except that no refund will be made for less than $100. The Building Official may authorize refunding of not more than 80 percent of the plan review fee paid when an application for a permit for which a plan review fee has been paid is withdrawn or canceled before any plan reviewing is performed, except that no refund will be made for less than $100. The Building Official cannot authorize refunding of any fee paid except on written application filed by the original permittee not later than 60 days after the date of fee payment.

Permit and plan check fees will be refunded in their entirety when inadvertently paid for a project outside the City or as duplicate fees, except that no refund will be made if 60 days have elapsed from the date of payment.

109.6 Additional plan review fees. Where plans are incomplete or changed so as to require additional plan checking, an additional plan checking fee must be paid to the Building Official based upon the value of construction of the proposed change or redesign. In establishing said fee, no allowance for a decreased valuation is permitted due to the replacement, omission or lessening of any member or portion of the building shown in the original plans. No additional fees can be charged for checking corrections required by the Building Official; except where excessive plan reviews are performed, additional fees may be levied as established by City Council.

109.7 Change of Occupancy Investigation fee. A fee as established by City Council resolution must be paid when an occupancy investigation inspection is required by the Building Official. Note: The occupancy investigation fees are in addition to other investigation fees and do not include the fees for the building permit, or fees for electrical, plumbing or mechanical permits covering the alterations and/or repairs of the occupancy conversion.

SECTION 110 INSPECTIONS

110.1 General. Construction or work for which a permit is required is subject to inspection by the Building Official and such construction or work must remain accessible and exposed for inspection purposes until approved. Approval as a result of an inspection cannot be construed to approve violations of applicable law. Inspections presuming to give authority to violate or cancel the provisions of the codes or of other ordinances of the City are not valid. It is the duty of the permit applicant to cause the work to remain accessible and exposed for inspection purposes. Neither the Building Official nor the City is liable for expense entailed in the removal or replacement of any material required to allow inspection.

110.2 Preliminary inspection. Before issuing a permit, the Building Official is authorized to examine or cause to be examined buildings, structures and sites for which an application has been filed.

110.3 Required inspections. The Building Official, upon notification, must make the inspections set forth in Sections 109.3.1 through 109.3.10.

110.3.1 Footing and foundation inspection. Footing and foundation inspections must be made after excavations for footings are complete and any required reinforcing steel is in place. For concrete foundations, any required forms must be in place before inspection. Materials for the foundation must be on the job, except where concrete is ready mixed in accordance with ASTM C 94, the concrete need not be on the job.

110.3.2 Concrete slab and under-floor inspection. Concrete slab and under-floor inspections must be made after in-slab or under-floor reinforcing steel and building service equipment, conduit, piping accessories and other ancillary equipment items are

in place, but before any concrete is placed or floor sheathing installed, including the subfloor.

110.3.3 Lowest floor elevation. In flood hazard areas, upon placement of the lowest floor, including the basement, and before further vertical construction, the elevation certification required in Section 1612.5 must be submitted to the Building Official.

110.3.4 Frame inspection. Framing inspections must be made after the roof deck or sheathing, all framing, fire-blocking and bracing are in place and pipes, chimneys and vents to be concealed are complete and the rough electrical, plumbing, heating wires, pipes and ducts are approved.

110.3.5 Lath and gypsum board inspection. Lath and gypsum board inspections must be made after lathing and gypsum board, interior and exterior, is in place, but before any plastering is applied or gypsum board joints and fasteners are taped and finished.

110.3.6 Weather-exposed balcony and walking surface waterproofing. Balconies or other elevated walking surfaces that are exposed to water from direct or blowing rain, snow or irrigation, and the structural framing is protected by an impervious moisture barrier, all elements of the impervious moisture barrier system must not be concealed until inspected and approved.

110.3.7 Fire-resistant penetrations. Protection of joints and penetrations in fire-resistance-rated assemblies, smoke barriers and smoke partitions must not be concealed from view until inspected and approved.

110.3.8 Energy efficiency inspections. Inspections must be made to determine compliance with the California Energy Code, California Green Building Standards Codes and must include, without limitation, inspections for: envelope insulation R and U-values, fenestration U-value, duct system R-value, and HVAC and water-heating equipment efficiency.

110.3.9 Other inspections. In addition to the inspections specified in Section 109.3.1 through Section 109.3.8, the Building Official is authorized to make or require other inspections of any construction work to ascertain compliance with the provisions of the codes, standards and other laws that are enforced by the City.

110.3.10 Special inspections. For special inspections, see Chapter 17 of the California Building Code.

110.3.11 Final inspection. The final inspection must be made after all work required by the building permit is completed.

110.4 Inspection agencies. The Building Official is authorized to accept reports of approved inspection agencies, provided such agencies satisfy the requirements as to qualifications and reliability.

110.5 Inspection requests. It is the duty of the holder of the building permit or their duly authorized agent to notify the Building Official when work is ready for inspection. It is also the duty of the permit holder to provide access to and means for inspections of such work that are required by the codes.

110.6 Approval required. Work cannot be done beyond the point indicated in each successive inspection without first obtaining the approval of the Building Official. The Building Official, upon notification, must make the requested inspections and must either indicate the portion of the construction that is satisfactory as completed, or notify the permit holder or their agent wherein the same fails to comply with the codes. Any portions that do not comply must be corrected and such portion must not be covered or concealed until authorized by the Building Official.

SECTION 111 CERTIFICATE OF OCCUPANCY

111.1 Use and occupancy. No building or structure can be used or occupied, and no change in the existing use or occupancy classification of a building or structure or portion thereof can be made until the Building Official has issued a certificate of occupancy therefore as provided herein. The Building Official cannot issue a Certificate of Occupancy to the builder upon the completion of a commercial structure where there is tenant space. Instead, a Certificate of Occupancy is issued to a business entity that is going to occupy the building or a portion thereof. Issuance of a certificate of occupancy must not be construed as an approval of a violation of the provisions of the codes or other ordinances of the City. Certificates presuming to give authority to violate or cancel the provisions of the codes or other ordinances are not valid.

Exception: The Building Official does not issue Certificate of Occupancies for single and duplex residential dwelling units and owner-occupied dwelling units, such as townhomes, condominiums and U occupancies.

111.2 Time limitation of application. An application for a certificate of occupancy is deemed abandoned 180 days after the date of filing, unless such application has been pursued in good faith or a certificate of occupancy has been issued.

111.3 Certificate issued. After the Building Official inspects the building or structure and finds no violations of the provisions of the codes or other laws that are enforced by the City, the Building Official must issue a certificate of occupancy that contains the following:

1. The building permit number.

2. The address of the structure.

3. The name and address of the owner.

4. A description of that portion of the structure for which the certificate is issued.

5. A statement that the described portion of the structure has been inspected for compliance with the requirements of the codes for the occupancy and division of occupancy and the use for which the proposed occupancy is classified.

6. The name of the Building Official.

7. The edition of the code under which the permit was issued.

8. The use and occupancy, in accordance with the provisions of Chapter 3.

9. The type of construction as defined in Chapter 6.

10. The design occupant load.

11. If an automatic sprinkler system is provided, whether the sprinkler system is required.

12. Any special stipulations and conditions of the building permit.

111.4 Temporary occupancy. The Building Official is authorized to issue a temporary certificate of occupancy before the completion of the entire work covered by the permit, provided that such portion or portions must be occupied safely. The Building Official must set a time period during which the temporary certificate of occupancy is valid.

In the event the building is not completed and ready for final inspection in the time prescribed by the Building Official, the building must be vacated and the utilities disconnected until such time the building is completed, final inspection is completed and a Certificate of Occupancy is issued.

111.5 Revocation. The Building Official is authorized to, in writing, suspend or revoke a certificate of occupancy or completion issued under the provisions of the codes wherever the certificate is issued in error, or on the basis of incorrect information supplied, or where it is determined that the building or structure or portion thereof is in violation of any ordinance or regulation or any of the provisions of the codes.

SECTION 112 SERVICE UTILITIES

112.1 Connection of service utilities. Connections from a utility, source of energy, fuel or power to any building or system that is regulated by the codes for which a permit is required, must not be established until released by the Building Official.

112.2 Temporary connection. The Building Official has authority to authorize the temporary connection of the building or system to the utility source of energy, fuel or power.

Temporary connections may be terminated by the Building Official in the event the permit for such work expires, temporary occupancy is terminated, or it is determined by the Building Official that conditions associated with the connected utility are not met.

112.3 Authority to disconnect service utilities. The Building Official is authorized and empowered to cause or order the disconnection or discontinuance of utility service to a building, structure, premises, system, equipment, fixture, or device that is regulated by this Code or by the referenced codes and standards set forth in Section 101.4, or elsewhere in the Monterey Park Municipal Code: (i) when necessary to eliminate or mitigate an immediate hazard to life, health, safety, or property; (ii) when such building, structure, system, equipment, fixture, or device, or any utility service thereto, has been installed, equipped, altered, or used without requisite approvals, permits, or inspections; or (iii) when such building, structure. premises, system, equipment. fixture or device is found to be an unlicensed cannabis facility. An "unlicensed cannabis facility" means any facility within the City conducting commercial cannabis activity.

The Building Official must attempt to notify the serving utility, and wherever possible the owner and occupant of the building, structure, premises, system, equipment, fixture, or device, of the decision to disconnect before taking such action; provided that the Building Official may dispense with any attempt at prior notification if, in the sole discretion of the Building Official, the nature or severity of the hazard justifies such inaction. If not notified before disconnecting, the Building Official must notify the owner or occupant of the building, structure, premises, system, equipment, fixture, or device in writing of the disconnection as soon as practical thereafter.

The utility service must remain disconnected or discontinued until the Building Official releases the utility service. The Building Official cannot release the utility service until: (i) the imminent hazard has been abated or eliminated; or (ii) all requisite approvals, permits, and inspections have been obtained for the building, structure, system, equipment, fixture, or device, or any utility service thereto.

SECTION 113 BOARD OF APPEALS – PLANNING COMMISSION

113.1 General. The Planning Commission is designated to hear and decide appeals of orders, decisions or determinations made by the Building Official relative to the application and interpretation of this code. All references to the "Board of Appeals" means the Planning Commission.

113.2 Limitations on authority. The Board of Appeals does not have authority relative to interpretation of the administrative provisions of the codes nor is the Board empowered to waive requirements of the codes. The application for appeal must be based on a claim that the true intent of the codes or the rules legally adopted thereunder have been incorrectly interpreted where the provision of the codes do not fully apply, or where an equally good or better form of construction is proposed.

113.3 Applications, fees and findings. Any person appealing the decision of the Building Official must file with the Building Official a written application accompanied by a filing fee in accordance with the fee schedule adopted by City Council resolution at any time not more than 20 calendar days after the decision of the Building Official.

The application must set forth and include any information as the Building Official may require.

Upon the filing of a verified application, the Building Official must transmit said application forthwith to the Board of Appeals, and such Board must investigate, examine, review, hear testimony, from and on behalf of the applicant, and render findings and decisions on the matter in writing to the applicant with a duplicate copy to the Building Official within 20 days after the conclusion of its proceedings, the Building Official must make all findings and decisions available to the public without fees.

SECTION 114 VIOLATIONS AND PENALTIES

114.1 General. Violation of the codes constitutes a misdemeanor. In addition, such violation constitutes a public nuisance subject to abatement in accordance with applicable law.

114.2 Notice of violation. The Building Official is authorized to serve a notice of violation or order on the person responsible for the erection, construction, alteration, extension, repair, moving, removal, demolition or occupancy of a building or structure in violation of the provisions of the codes, or in violation of a permit or certificate issued under the provisions of the codes. Such order must direct the discontinuance of the illegal action or condition and the abatement of the violation.

114.3 Compliance with Notice and prosecution of violation. If the notice of violation is not complied with promptly, the Building Official is authorized to request the City Attorney to institute the appropriate proceeding at law or in equity to restrain, correct or abate such violation, or to require the removal or termination of the unlawful occupancy of the building or structure in violation of the provisions of the codes or of the order or direction made pursuant thereto. No person may remain in or enter any building or structure that has been posted with a red tag by the Building Official. Notwithstanding the foregoing, a person may enter the building or structure to repair, demolish or remove such building or structure pursuant to a duly issued permit. No person may remove or deface any order issued by the Building Official including, without limitation, a red tag, after it is posted until the required repairs, demolition or removal have been completed and a certificate of occupancy has been issued, where applicable.

114.4 Violation penalties. Any person who violates a provision of the codes or fails to comply with any of the requirements thereof or who erects, constructs, alters or repairs a building or structure in violation of the approved construction documents or directive of the Building Official, or of a permit or certificate issued under the provisions of the codes, is subjected to penalties as prescribed by law.

SECTION 115 STOP WORK ORDER

115.1 Authority. Whenever the Building Official finds any work regulated by the codes being performed in a manner either contrary to the provisions of the codes or dangerous or unsafe, the Building Official is authorized to issue a stop work order.

115.2 Issuance. The stop work order must be in writing and must be given to the owner of the property involved, or to the owner's agent, or to the person doing the work. Upon issuance of a stop work order, the identified work must immediately cease. The stop work order must state the reason for the order, and the conditions under which the cited work will be permitted to resume.

115.3 Unlawful continuance. Any person who continues any work after having been served with a stop work order, except such work as that person is directed to perform to remove a violation or unsafe condition, is subjected to penalties as prescribed by law.

SECTION 116 UNSAFE STRUCTURES AND BUILDINGS

116.1 General. All buildings, structures or existing equipment that are or hereafter become unsafe, insanitary or deficient because of inadequate means of egress facilities, inadequate light and ventilation, or which constitute a fire hazard, or are otherwise dangerous to human life or the public welfare, or that involve illegal or improper occupancy or inadequate maintenance, are, for the purpose of this section, unsafe conditions. All such unsafe buildings or conditions are public nuisances and must be abated by repair, rehabilitation, improvement, removal, or demolition, in whole or part. A vacant building or structure that is not secure against entry is deemed "unsafe."

116.2 Placards and tags relating to occupancy of unsafe structures and buildings. Pursuant to the completion of a visual, nondestructive examination to determine the condition for continued occupancy, the building official or designee is authorized to designate the condition of the unsafe building or structure with a placard or tag, as follows:

1. A "yellow tag" denotes restricted use and is to be posted on each building or structure that has been damaged wherein the damage has resulted in some form of restriction to the continued occupancy. The individual who posts this placard will note in general terms the type of damage encountered and will clearly note the restrictions on continued occupancy.

2. A "red tag" denotes that the building or structure is so damaged that continued occupancy poses a threat to life safety. Buildings or structures posted with this placard may not be entered under any circumstance except as authorized in writing by the building official or designee. Safety assessment teams are authorized to enter these buildings at any time. This placard is not to be used or considered as a demolition order. The individual who posts this placard will note in general terms the type of damage encountered.

The appropriate placard must be posted at each entry point to a building or structure. Once it has been attached to a building or structure, a placard is not to be removed, altered or covered until done so by an authorized representative of the building official. It is unlawful for any person, firm or corporation to alter, cover or deface a placard pursuant to this section.

116.3 Notice. If an unsafe condition is found, the building official must serve on the owner, agent or person in control of the structure, a written notice that describes the condition deemed unsafe and specifies the required repairs or improvements to be made to abate the unsafe condition, or that requires the unsafe structure to be demolished within a reasonable time. Such notice will be deemed properly served when made in conjunction with section 1.04.080 of the Monterey Park Municipal Code.

SECTION 4: Chapter 16.05 of the MPMC is amended in its entirety to read as follows:

"Chapter 16.05 BUILDING CODE

Sec. 16.05.010 Document adopted by reference.

Pursuant to Government Code § 50022.9, the City Council incorporates by reference the California Building Code, 2019 Edition, as published in Title 24, Parts 2, Volume 1 and 2 of the California Code of Regulations.

Sec. 16.05.020. Chapter 1, Division II Scope and Administration amended.

The text within Chapter 1 Division II is amended in its entirety to read as follows:

Division II
Administrative Provisions

Section 101. For administrative provisions for this Code, see Section 16.01.040.

Sec. 16.05.030. Section 202 amended.

The alphabetized list of definitions in Section 202 is amended to add a definition for "intermodal shipping container" to read as follows:

Intermodal Shipping Container. A six- sided steel unit originally constructed as a general cargo container used for the transport of good and materials.

The definition of "swimming pool" in Section 202 is amended in its entirety to read as follows:

Swimming Pool. Any structure intended for swimming, recreational bathing or wading that contains water over 18 inches deep. This includes in-ground, above ground and on-ground pools; hot tubs; spas and fixed-in-place wading pools.

Sec. 16.05.040. Section 903.1.2 added.

Section 903.1.2 is added to read as follows:

903.1.2 Partial Automatic Fire Suppression Systems Prohibited. Whenever an automatic fire suppression system is installed for any portion of any building or

structure, an automatic fire suppression system must be installed for the entire building or structure.

16.05.050. Section 903.2 amended.

Section 903.2 is amended to read as follows:

903.2 Where required. Approved automatic extinguishing systems must be installed:

1. In all new buildings regardless of the type of construction or occupancy.

   Exceptions:

   1.1. Detached Group U occupancies, providing the floor area does not exceed 1000 square feet.

   1.2. ~~Other minor buildings and/or occupancies as approved by the Fire Chief.~~ Unmanned facilities and/or minor buildings and/or occupancies as approved by the Fire Chief.

2. In existing buildings with new occupancies as required by other sections of the Fire Code.

16.05.060. Section 903.3.1.1 amended.

Section 903.3.1.1 is amended to read as follows:

903.3.1.1 NFPA 13 sprinkler systems. In other than Group R buildings that are not over two stories in height, automatic sprinkler systems will be designed and installed in accordance with the NFPA 13, 2019 Edition as amended in Chapter 35 except as provided in Section 903.3.1.1.1 and 903.3.1.1.2.

16.05.070. Section 903.3.1.1.3 added.

Section ~~903.3.1.1.2~~ 903.3.1.1.3 is added to read as follows:

~~**903.3.1.1.2**~~ **903.3.1.1.3 Riser room location.** In structures over three stories in height or served by more than two fire sprinkler risers, a dedicated Fire Sprinkler Riser Room must be provided at an approved location. The riser room must be accessible to emergency personnel from the exterior of the building.

16.05.080. Section 903.3.1.2 amended.

Section 903.3.1.2 is amended to read as follows:

903.3.1.2. NFPA 13R sprinkler systems. Where allowed in buildings of Group R, up to and including two stories in height, automatic sprinkler systems will be installed throughout in accordance with NFPA 13R, 2019 Edition as amended in Chapter 35.

Sec. 16.05.090. Section 903.3.1.2.4 added.

Add Section 903.3.1.2.4 to read as follows:

903.3.1.2.4 Basement spaces. In residential buildings with automatic sprinkler systems designed and installed in accordance with NFPA 13R, basements used for living or storage purposes must be fully sprinklered with residential type heads.

Sec. 16.05.100. Section 903.3.1.3 amended.

Section 903.3.1.3 is amended to read as follows:

903.3.1.3. NFPA 13D sprinkler systems. Where allowed, automatic sprinkler systems will be installed in one- and two-family dwellings will be installed throughout in accordance with NFPA 13D, 2019 Edition as amended in Chapter 35.

Sec. 16.05.110. Section 903.3.1.3.1 added.

Section 903.3.1.3.1 is added to read as follows:

903.3.1.3.1. Detailed requirements. Automatic sprinkler system protection for one and two-family dwellings will be designed and installed in accordance with NFPA 13D, 2016 Edition with the following modifications:

1. A local water flow alarm must be provided for all sprinkler systems.

2. Attics and basements used for storage purposes must be fully sprinklered with residential type heads.

3. Overhead piping must be hydrostatically tested for leakage at 200 psi for two hours and inspected before drywall or insulation installation.

4. A minimum of three spare representative sprinkler heads and installation wrench must be provided at an approved location.

Sec. 16.05.120. Section 903.3.5 amended.

Section 903.3.5 is amended to read as follows:

903.3.5 Water Supplies. Water supplies for automatic sprinkler systems must comply with this section and the standards referenced in section 903.3.1. The potable water supply must be protected against backflow in accordance with the *Health and Safety Code* and the Monterey Park Municipal Code. Hydraulic calculations for systems designed per NFPA 13, 13D, or 13R will include a ten percent (10%) reduction from the available supply source.

Sec. 16.05.130. Section 903.6 added.

Section 903.6 is added to read as follows:

903.6 Existing Occupancies. An automatic sprinkler system will be installed in existing occupancies as follows:

1. In all commercial and industrial buildings greater than 5000 square feet in area when enlarged by an addition to the existing structure or as required by the Fire Chief.

2. In all commercial and industrial buildings equal to or less than 5000 square feet in area, when enlarged by an addition to the existing structure, exceeds 5000 square feet or as required by the Fire Chief.

3. In all commercial and industrial buildings when an addition to the existing area exceeds fifty percent (50%) within any twelvemonth period.

4. In all residential occupancies when an addition to the existing living area exceeds fifty percent (50%) within any twelvemonth period.

5. As required by the Fire Code due to a change in occupancy.

6. As required by the Fire Code in Chapter 11.

Sec. 16.05.140. Section 907.1.6 added.

Section 907.1.6 is added to read as follows:

907.1.6 Multiple Fire Alarm Systems. Multiple fire alarm systems within single protected premises must be interconnected and must transmit signals as one system.

Sec. 16.05.150. Table 1505.1 amended.

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

TABLE 1505.1
MINIMUM ROOF COVERING CLASSIFICATIONS

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

Sec. 16.05.160. Section 1505.1.3 amended.

Section 1505.1.3 is amended to read as follows:

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

Sec. 16.05.170. Section 1507.3.1 amended.

Section 1507.3.1 is amended to read as follows:

1507.3.1 Deck requirements. Concrete and clay tile must be installed only over solid sheathing ~~or spaced structural sheathing boards~~.

Sec. 16.05.180. Section 1613.5 and 1613.5.1 added.

Section 1613.5 and 1613.5.1 are added to read as follows:

1613.5 Amendments to ASCE 7. The provision of Section 1613.5 is permitted as an amendment to the relevant provisions of ASCE 7.

1613.5.1 Values for vertical combinations. Modify ASCE 7 Section 12.2.3.1 Exception 3 as follows:

3. Detached one- and two-family dwellings up to two stories in height of light frame construction.

Sec. 16.05.190 Section 1613.5.2 added.

Section 1613.5.2 is added as follows:

1613.5.2 Wood Diaphragms. Modify ASCE 7 Section 12.11.2.3 as follows:

12.11.2.2.3 Wood Diaphragms. The anchorage of concrete or masonry structural walls to wood diaphragms must be in accordance with AWC SDPWS 4.1.5.1 and this section. Continuous ties required by this section are in addition to the diaphragm sheathing. Anchorage must not be accomplished by use of toenails or nails subject to withdrawal, nor will wood ledgers or framing be used in cross-grain bending or cross-grain tension. The diaphragm sheathing must not be considered effective for providing the 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 must comply with the following:

1. The spacing of continuous ties is not to 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 must not exceed 75% of the maximum diaphragm shear.

Sec. 16.05.200 Section 1613.5.3 added.

Section 1613.5.3 is added to read as follows:

1613.5.3 Structural Separation. Modify ASCE 7 Section 12.12.3 Equation 12.12-1 as follows:

$$\delta_M = \frac{C_d \delta_{xe}}{I_e} \quad \textbf{(12.12-1)}$$

Sec. 16.05.210. Section 1613.6 added.

Section 1613.6 is added as follows:

1613.6 Seismic design provisions for hillside buildings.

1613.6.1 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.

1613.6.2 Scope. The provisions of this section 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 must 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.

1613.6.3 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 Sections 1613.6.5 and 1613.6.7.3 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 Sections 1613.6.6 and 1613.6.7.4.

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.

1613.6.4 Analysis and design.

1613.6.4.1 General. Every hillside building within the scope of this section must be analyzed, designed, and constructed in accordance with the provisions of this division. When the code-prescribed wind design produces greater effects, the wind design will govern, but detailing requirements and limitations prescribed in this and referenced sections must be followed.

1613.6.4.2 Base level diaphragm-downhill direction. The following provisions apply to the seismic analysis and design of the connections for the base level diaphragm in the downhill direction.

1613.6.4.2.1 Base for lateral force design defined. For seismic forces acting in the downhill direction, the base of the building is the floor at or closest to the top of the highest level of the foundation.

1613.6.4.2.2 Base shear. In developing the base shear for seismic design, the response modification coefficient (R) must not exceed 5 for bearing wall and building frame systems. The total base shear must include the forces tributary to the base level diaphragm including forces from the base level diaphragm.

1613.6.5 Base shear resistance-primary anchors.

1613.6.5.1 General. The base shear in the downhill direction must be resisted through primary anchors from diaphragm struts provided in the base level diaphragm to the foundation.

1613.6.5.2 Location of primary anchors. A primary anchor and diaphragm strut must be provided in line with each foundation extending in the downhill direction. Primary anchors and diaphragm struts must 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 must not exceed 30 feet.

1613.6.5.3 Design of primary anchors and diaphragm struts. Primary anchors and diaphragm struts must be designed in accordance with the requirements of Section 1613.6.8.

1613.6.5.4 Limitations. The following lateral-force-resisting elements must 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.

1613.6.6 Base shear resistance-secondary anchors.

1613.6.6.1 General. In addition to the primary anchors required by Section 1613.6.5, the base shear in the downhill direction must 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 on center extend up to and are directly connected to the base level diaphragm for at least 70% of the diaphragm depth.

1613.6.6.2 Secondary anchor capacity and spacing. Secondary anchors at the base level diaphragm must 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 based on Allowable Stress Design (ASD) levels. The secondary anchors must be uniformly distributed along the uphill diaphragm edge and must be spaced a maximum of 4 feet on center.

1613.6.6.3 Design. Secondary anchors and diaphragm struts must be designed in accordance with Section 1613.6.8.

1613.6.7 Diaphragms below the base level-downhill direction. The following provisions will apply to the lateral analysis and design of the connections for all diaphragms below the base level diaphragm in the downhill direction.

1613.6.7.1 Diaphragm defined. Every floor level below the base level diaphragm must be designed as a diaphragm.

1613.6.7.2 Design force. Each diaphragm below the base level diaphragm must be designed for all tributary loads at that level using a minimum seismic force factor not less than the base shear coefficient.

1613.6.7.3 Design force resistance-primary anchors. The design force described in Section 1613.6.7.2 must be resisted through primary anchors from diaphragm struts provided in each diaphragm to the foundation. Primary anchors must be provided and designed in accordance with the requirements and limitations of Section 1613.6.5.

1613.6.7.4 Design force resistance-secondary anchors.

1613.6.7.4.1 General. In addition to the primary anchors required in Section 1613.6.7.3, the design force in the downhill direction must 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 on center, extend up to and are directly connected to each diaphragm below the base level for at least 70% of the diaphragm depth.

1613.6.7.4.2 Secondary anchor capacity. Secondary anchors at each diaphragm below the base level diaphragm must be designed for a minimum force equal to the design force but not less than 300 pounds per lineal foot based on Allowable Stress Design (ASD) levels. The secondary anchors must be uniformly distributed along the uphill diaphragm edge and shall be spaced a maximum of 4 feet on center.

1613.6.7.4.3 Design. Secondary anchors and diaphragm struts must be designed in accordance with Section 1613.6.8.

1613.6.8 Primary and secondary anchorage and diaphragm strut design. Primary and secondary anchors and diaphragm struts must be designed in accordance with the following provisions:

1. Fasteners. All bolted fasteners used to develop connections to wood members must be provided with square plate washers at all bolt heads and nuts. Washers must be minimum 0.229 inch by 3 inches by 3 inches in size. Nuts must be tightened to finger tight plus one half (1/2) wrench turn prior to covering the framing.

2. Fastening. The diaphragm to foundation anchorage cannot be accomplished by the use of toenailing, nails subject to withdrawal, or wood in cross-grain bending or cross-grain tension.

3. Size of Wood Members. Wood diaphragm struts, collectors, and other wood members connected to primary anchors must not be less than 3 inch nominal width.

The effects of eccentricity on wood members must be evaluated as required per Item 9.

4. Design. Primary and secondary anchorage, including diaphragm struts, splices, and collectors must be designed for 125% of the tributary force.

5. Allowable Stress Increase. The one-third allowable stress increase permitted under Section 1605.3.2 is not permitted 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, must be increased by 1.4 times the forces otherwise required.

7. Primary Anchors. The load path for primary anchors and diaphragm struts must 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 must 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 must 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 cannot be used to resist cross-grain bending or cross-grain tension.

1613.6.9 Lateral-force-resisting elements normal to the downhill direction.

1613.6.9.1 General. In the direction normal to the downhill direction, lateral-force-resisting elements must be designed in accordance with the requirements of this section.

1613.6.9.2 Base shear. In developing the base shear for seismic design, the response modification coefficient (R) cannot exceed 5 for bearing wall and building frame systems.

1613.6.9.3 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 must be determined using the height measured from the top of the lowest level of the building foundation.

1613.6.9.4 Drift limitations. The story drift below the base level diaphragm cannot 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 cannot exceed 3/4 inch. 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 must be measured from the average height of the top of the foundation. The story drift cannot be reduced by the effect of horizontal diaphragm stiffness.

1613.6.9.5 Distribution of lateral forces.

1613.6.9.5.1 General. The design lateral force must be distributed to lateral-force-resisting elements of varying heights in accordance with the stiffness of each individual element.

1613.6.9.5.2 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 must be used for the entire wall. Each section of wall must be anchored for shear and uplift at each step. The minimum horizontal length of a step is 8 feet and the maximum vertical height of a step is 2 feet 8 inches.

1613.6.9.5.3 Reinforced concrete or masonry shear walls. Reinforced concrete or masonry shear walls must have forces distributed in proportion to the rigidity of each section of the wall.

1613.6.9.6 Limitations. The following lateral force-resisting-elements cannot 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 Section 2205.2.1.2 of this Code 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. Deflections of frames must account for the variation in slope of diagonal members when the frame is not rectangular.

1613.6.10 Specific design provisions.

1613.6.10.1 Footings and grade beams. All footings and grade beams must comply with the following:

1. Grade beams must extend at least 12 inches below the lowest adjacent grade and provide a minimum 24 inch distance horizontally from the bottom outside face of the grade beam to the face of the descending slope.

2. Continuous footings must 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 must be bent into the intersecting footing and fully developed around each corner and intersection.

4. All concrete stem walls must extend from the foundation and reinforced as required for concrete or masonry walls.

1613.6.10.2 Protection against decay and termites. All wood to earth separation must comply with the following:

1. Where a footing or grade beam extends across a descending slope, the stem wall, grade beam, or footing must extend up to a minimum 18 inches 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 based on Allowable Stress Design (ASD) levels and located within 48 inches 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.

1613.6.10.3 Sill plates. All sill plates and anchorage must comply with the following:

1. All wood framed walls, including nonbearing walls, when resting on a footing, foundation, or grade beam stem wall, must be supported on wood sill plates bearing on a level surface.

2. Power-driven fasteners cannot be used to anchor sill plates except at interior nonbearing walls not designed as shear walls.

1613.6.10.4 Column base plate anchorage. The base of isolated wood posts (not framed into a stud wall) supporting a vertical load of 4,000 pounds based on Allowable Stress Design (ASD) levels or more and the base plate for a steel column must 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 must be designed and reinforced as required for concrete or masonry columns. The pedestal must 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 must 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, must be confined with two No. 4 or three

No. 3 ties within the top 5 inches of the concrete or masonry pedestal. The base plate anchor bolts must be embedded a minimum of 20 bolt diameters into the concrete or masonry pedestal. The base plate anchor bolts and post bases must be galvanized and each anchor bolt must have at least 2 galvanized nuts above the base plate.

1613.6.10.5 Steel beam to column supports. All steel beams to column supports must be positively braced in each direction. Steel beams must have stiffener plates installed on each side of the beam web at the column. The stiffener plates must be welded to each beam flange and the beam web. Each brace connection or structural member must consist of at least two 5/8 inch diameter machine bolts.

Sec. 16.05.220. Section 1613.7 added.

Section 1613.7 is added as follows:

1613.7 Suspended ceilings. Minimum design and installation standards for suspended ceilings must be determined in accordance with the requirements of Section 2506.2.1 of this Code and this section.

1613.7.1 Scope. This part contains special requirements for suspended ceilings and lighting systems. Provisions of Section 13.5.6 of ASCE 7 will apply except as modified herein.

1613.7.2 General. The suspended ceilings and lighting systems must be limited to 6 feet below the structural deck unless the lateral bracing is designed by a licensed engineer or architect.

1613.7.3 Sprinkler heads. All sprinkler heads (drops) except fire-resistance-rated floor/ceiling or roof/ceiling assemblies, must be designed to allow for free movement of the sprinkler pipes with oversize rings, sleeves or adaptors through the ceiling tile. Sprinkler heads and other penetrations must have a 2 inch oversize ring, sleeve, or adapter through the ceiling tile to allow for free movement of at least 1 inch in all horizontal directions. Alternatively, a swing joint that can accommodate 1 inch of ceiling movement in all horizontal directions is permitted to be provided at the top of the sprinkler head extension.

Sprinkler heads penetrating fire-resistance-rated floor/ceiling or roof/ceiling assemblies must comply with Section 714 of this Code.

1613.7.4 Special requirements for means of egress. Suspended ceiling assemblies located along means of egress serving an occupant load of 30 or more must comply with the following provisions.

1613.7.4.1 General. Ceiling suspension systems must be connected and braced with vertical hangers attached directly to the structural deck 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 must not exceed 2 feet on center along the

entire length of the suspended ceiling assembly located along the means of egress or at the lobby.

1613.7.4.2 Assembly device. All lay-in panels must be secured to the suspension ceiling assembly with two hold-down clips minimum for each tile within a 4-foot radius of the exit lights and exit signs.

1613.7.4.3 Emergency systems. Independent supports and braces must be provided for light fixtures required for exit illumination. Power supply for exit illumination must comply with the requirements of Section 1008.3 of this Code.

1613.7.4.4 Supports for appendage. Separate support from the structural deck must be provided for all appendages such as light fixtures, air diffusers, exit signs, and similar elements.

Sec. 16.05.230. Section 1704.6 amended.

Section 1704.6 is amended as follows:

1704.6 Structural observations. Where required by the provisions of Section 1704.6.1, 1704.6.2 or 1704.6.3, the owner or the owner's authorized agent must employ ~~a registered design professional~~ structural observer to perform structural observations. Structural observation does not include or waive the responsibility for the inspections in Section 110 or the special inspections in Section 1705 or other sections of this code. The structural observer must be one of the following individuals:

1. The registered design professional responsible for the structural design, or
2. A registered design professional designated by the registered design professional responsible for the structural design.

Prior to the commencement of observations, the structural observer must submit to the building official a written statement identifying the frequency and extent of structural observations.

~~At the conclusion of the work included in the permit, the structural observer shall submit to the building official a written statement that the site visits have been made and identify any reported deficiencies that, to the best of the structural observer's knowledge, have not been resolved.~~

The owner or owner's authorized agent must coordinate and call a preconstruction meeting between the structural observer, contractors, affected subcontractors and special inspectors. The structural observer must preside over the meeting. The purpose of the meeting is to identify the major structural elements and connections that affect the vertical and lateral load resisting systems of the structure and to review scheduling of the required observations. A record of the meeting must be included in the report submitted to the building official.

Observed deficiencies must be reported in writing to the owner or owner's authorized agent, special inspector, contractor and the building official. Upon the form prescribed by the building official, the structural observer must submit to the building official a written statement at each significant construction stage stating that the site visits have been made and identifying 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 building official.

Sec. 16.05.240. Section 1704.6.2 amended.

Section 1704.6.2 is amended as follows:

1704.6.2 Structural observations for seismic resistance. Structural observations must be provided for those structures assigned to Seismic Design Category D, E or F where one or more of the following conditions exist:

1. The structure is classified as Risk Category III or IV.

2. The structure ~~is assigned to Seismic Design Category E,~~ is classified as Risk Category I or II, and ~~is greater than two stories above the grade plane~~ a lateral design is required for the structure or portion thereof.

Exception: One-story wood framed Group R-3 and Group U Occupancies less than 2,000 square feet in area, provided the adjacent grade is not steeper than 1 unit vertical in 10 units horizontal (10% sloped), assigned to Seismic Design Category D.

Sec. 16.05.250. Section 1705.3 amended.

Section 1705.3 is amended as follows:

1705.3 Concrete Construction. The special inspections and tests for concrete construction must be performed in accordance with this section and Table 1705.3.

Exceptions: Special inspections and tests are not 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) regardless of the compressive strength specified in the construction documents or used in the footing construction.

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 Table 1809.7; or

2.3 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), regardless of the compressive strength specified in the 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.

~~4. Concrete foundation walls constructed in accordance with Table 1807.1.6.2.~~

~~5~~4. Concrete patios, driveways and sidewalks, on grade.

Sec. 16.05.260. Exception 3 of Section 1705.12 amended.

Exception 3 of Section 1705.12 is amended as follows:

3. The structure is a detached one- or two-family dwelling not exceeding two stories above grade plane, is not assigned to Seismic Design Category D, E or F and does not have any of the following horizontal or vertical irregularities in accordance with Section 12.3 of ASCE 7:

Sec. 16.05.270. Section 1807.1.4 amended.

Section 1807.1.4 is amended as follows:

1807.1.4 Permanent wood foundation systems. Permanent wood foundation systems must be designed and installed in accordance with AWC PWF. Lumber and plywood must be treated in accordance with AWPA U1 (Commodity Specification A, Use Category 4B and Section 5.2) and must be identified in accordance with Section 2303.1.9.1. Permanent wood foundation systems must not be used for structures assigned to Seismic Design Category D, E or F.

Sec. 16.05.280. Section 1807.1.6 amended.

Section 1807.1.6 is amended as follows:

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 is permitted to be designed and constructed in accordance with this section. Prescriptive design of foundation walls cannot to be used for structures assigned to Seismic Design Category D, E or F.

Sec. 16.05.290. Section 1807.2 amended.

Section 1807.2 is amended as follows:

1807.2 Retaining walls. Retaining walls must be designed in accordance with Section 1807.2.1 through 1807.2.3. Retaining walls assigned to Seismic Design Category D, E or F cannot be partially or wholly constructed of wood.

Sec. 16.05.300. Section 1807.3.1 amended.

Section 1807.3.1 is amended as follows:

1807.3.1 Limitations. The design procedures outlined in this section are subject to the following limitations:

1. The frictional resistance for structural walls and slabs on silts and clays is limited to one-half of the normal force imposed on the soils by the weight of the fooling or slab.

2. Posts embedded in earth cannot be used to provide lateral support for structural or nonstructural materials such as plaster, masonry or concrete unless bracing is provided that develops the limited deflection required.

Wood poles must be treated in accordance with AWPA U1 for sawn timber posts (Commodity Specification A, Use Category 4B) and for round timber posts (Commodity Specification B, Use Category 4B). Wood poles and posts embedded in direct contact with soil cannot be used for structures assigned to Seismic Design Category D, E or F.

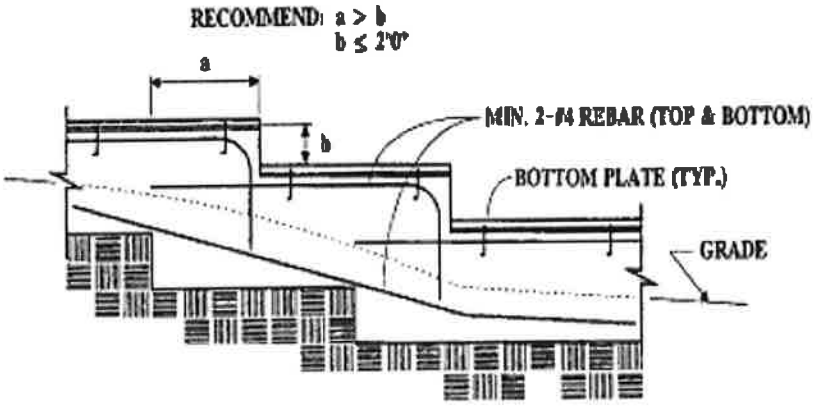
Exception: Wood poles and posts embedded in direct contact with soil may be used to support nonhabitable, nonoccupiable structures such as fences when approved by the building official.

Sec. 16.05.310. Section 1809.3 amended.

Section 1809.3 is amended as follows:

1809.3 Stepped footings. The top surface of footings must be level. The bottom surface of footings must be permitted to have a slope not exceeding one unit vertical in 10 units horizontal (10-percent slope). Footings must 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 will also apply to the top surface of grade beams supporting walls. Footings must be reinforced with four No. 4 bars. Two bars must be place at the top and bottom of the footings as shown in Figure 1809.3.



STEPPED FOUNDATIONS

FIGURE 1809.3
STEPPED FOOTING

Sec. 16.05.320. Section 1809.7 and Table 1809.7 amended.

Section 1809.7 and Table 1809.7 is amended as follows:

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 is permitted to be designed in accordance with Table 1809.7. Light-frame construction using prescriptive footings in Table 1809.7 cannot exceed one story above grade plane for structures assigned to Seismic Design Category D, E or F.

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

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

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

a. Depth of footings shall be in accordance with Section 1809.4.
b. The ground under the floor shall be permitted to be excavated to the elevation of the top of the footing.
c. ~~Interior stud-bearing walls shall be permitted to be supported by isolated footings. The footing width and length shall be twice the width shown in this table, and footings shall be spaced not more than 6 feet on center.~~ Not Adopted.
d. See Section 1908 for additional requirements for concrete footings of structures assigned to Seismic Design Category C, D, E or F.
e. For thickness of foundation walls, see Section 1807.1.6.
f. Footings shall be permitted to support a roof addition to the stipulated number of floors. Footings supporting roof only shall be as required for supporting one floor.
g. ~~Plain concrete footings for Group R-3 occupancies shall be permitted to be 6 inches thick.~~

Sec. 16.05.330. Section 1809.12 amended.

Section 1809.12 is amended as follows:

1809.12 Timber footings. Timber footings is permitted for buildings of Type V construction and as otherwise approved by the Building Official. Such footings must 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 footing supported upon treated piles is not to exceed 70 percent of the allowable stresses for the species and grade of timber as specified in the ANSI/AWC NDS. Timber footings cannot be used in structures assigned to Seismic Design Category D, E or F.

Sec. 16.05.340. Section 1810.3.2.4 amended.

Section 1810.3.2.4 is amended as follows:

1810.3.2.4 Timber. Timber deep foundation elements must be designed as piles or poles in accordance with ANSI/AWC_NDS. Round timber elements must conform to ASTM D 25. Sawn timber elements must conform to DOC PS-20. Timber deep foundation elements cannot be used in structures assigned to Seismic Design Category D, E or F.

Sec. 16.05.350. Section 1905.1.7 amended.

Section 1905.1.7 is amended as follows:

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.

14.1.4.1 – Structures assigned to Seismic Design Category C, D, E or F cannot have elements of structural plain concrete, except as follows:

1.1. ~~Structural plain concrete basement, foundation or other walls below the base as defined in ASCE 7 are permitted in detached one- and two-family dwellings three stories or less in height constructed with stud-bearing walls. In dwellings assigned to Seismic Design Category D or E, the height of the wall may not exceed 8 feet (2438 mm), the thickness may not be less than 7½ inches (190 mm), and the wall shall retain no more than 4 feet (1219 mm) of unbalanced fill. Walls must have reinforcement in accordance with 14.6.1.~~ Concrete used for fill with a minimum cement content of two (2) sacks of Portland cement or cementious material per cubic yard.

1.2. 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.

~~Exception: In detached one- and two-family dwellings three stories or less in height, the projection of the footing beyond the face of the supported member is permitted to exceed the footing thickness.~~

1.3. Plain concrete footings supporting walls are permitted provided the footings have at least two continuous longitudinal reinforcing bars. Bars must not be smaller than No. 4 and have a total area of not less than 0.002 times the gross cross-sectional area of the footing. ~~For footings that exceed 8 inches (203 mm) in thickness, a~~A minimum of one bar must be provided at the top and bottom of the footing. Continuity of reinforcement must be provided at corners and intersections.

Exceptions:

1. ~~In Seismic Design Categories A, B and C,~~ Detached one- and two-family dwellings three stories or less in height and constructed with stud-bearing walls, are permitted to have plain concrete footings ~~without longitudinal reinforcement~~ with at least two continuous longitudinal reinforcing bars not smaller than No. 4 are permitted to have a total area of less than 0.002 times the gross cross-sectional area of the footing.

2. ~~For foundation systems consisting of a plain concrete footing and a plain concrete stemwall, a minimum of one bar must be provided at the top of the stemwall and at the bottom of the are footing.~~

3. ~~Where a slab on ground is cast monolithically with the footing, one No. 5 bar is permitted to be located at either the top of the slab or bottom of the footing.~~

Sec. 16.05.360. Section 1905.1 amended and Sections 1905.1.9 through 1905.1.11 added.

Section 1905.1 is amended and Sections 1905.1.9 through 1905.1.11 are added to read as follows:

1905.1 General. The text of ACI 318 will be modified as indicated in Sections 1905.1.1 through ~~1908.1.8~~ 1905.1.11.

1905.1.9 ACI 318, Section 18.7.5. Modify ACI 318, Section 18.7.5, by adding Section 18.7.5.7 and 18.7.5.8 as follows:

18.7.5.7 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 Sections 18.7.5.1, Items (a) through (c), over the full height of the member.

18.7.5.8 – At any section where the design strength, φP_n, of the column is less than the sum of the shears V_e computed in accordance with ACI 318 Sections 18.7.6.1 and 18.6.5.1 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 must be provided. For beams framing into opposite sides of the column, the moment

components are permitted to be assumed to be of opposite sign. For the determination of the design strength, φP_n, of the column, these moments are permitted to be assumed to result from the deformation of the frame in any one principal axis.

1905.1.10 ACI 318, Section 18.10.4. Modify ACI 318, Section 18.10.4, by adding Section 18.10.4.6 as follows:

18.10.4.6 – Walls and portions of walls with $P_u > 0.35P_o$ cannot be considered to contribute to the calculated shear strength of the structure for resisting earthquake-induced forces. Such walls must conform to the requirements of ACI 318 Section 18.14.

1905.1.11 ACI 318, Section 18.12.6. Modify ACI 318, by adding Section 18.12.6.2 as follows:

18.12.6.2 Collector and boundary elements in topping slabs placed over precast floor and roof elements must not be less than 3 inches (76 mm) or 6 d_b in thickness, where d_b is the diameter of the largest reinforcement in the topping slab.

Sec. 16.05.370. Section 2304.10.1 amended.

Section 2304.10.1 is amended as follows:

2304.10.1 Fastener requirements. Connections for wood members must be designed in accordance with the appropriate methodology in Section 2301.2. The number and size of fasteners connecting wood members cannot be less than that set forth in Table 2304.10.1. Staple fasteners in Table 2304.10.1 cannot 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 Building Official.

Sec. 16.05.380. Section 2304.10.2.1 added.

Section 2304.10.2.1 is added to read follows:

2304.10.2.1 Quality of nails. In Seismic Design Category D, E or F, mechanically driven nails used in wood structural panel shear walls must 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. 16.05.390. Section 2304.12.5 amended.

Section 2304.12.5 is amended as follows:

2304.12.5 Wood used in retaining walls and cribs. Wood installed in retaining or crib walls must be preservative treated in accordance with AWPA U1 for soil and fresh water

use. Wood cannot be used in retaining or crib walls for structures assigned to Seismic Design Category D, E or F.

Sec. 16.05.400. Section 2305.4 added.

Section 2305.4 is added as follows:

2305.4 Hold-down connectors. In Seismic Design Category D, E or F, hold-down connectors must 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 require steel plate washers on the post on the opposite side of the anchorage device. Plate size must be a minimum of 0.229 inch by 3 inches by 3 inches in size. Hold-down connectors must be tightened to finger tight plus one half (1/2) wrench turn just before covering the wall framing.

Sec. 16.05.410. Section 2306.2 amended.

Section 2306.2 is amended to read as follows:

2306.2 Wood-frame diaphragms. Wood-frame diaphragms must be designed and constructed in accordance with AWC SDPWS. Where panels are fastened to framing members with staples, requirements and limitations of AWC SDPWS must be met and the allowable shear values set forth in Table 2306.2(1) or 2306.2(2) will 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 in Tables 2306.2(1) and 2306.2(2) are permitted to be increased 40 percent for wind design.

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

Exception: Wood structural panel diaphragms are 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. 16.05.420. Section 2306.3 amended.

Section 2306.3 is amended to read as follows:

2306.3 Wood-frame shear walls. Wood-frame shear walls must 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 must include the following:

1. Wood structural panel thickness for shear walls cannot be less than 3/8 inch thick and studs cannot be spaced at more than 16 inches on center.

2. The maximum nominal unit shear capacities for 3/8 inch wood structural panels resisting seismic forces in structures assigned to Seismic Design Category D, E or F is 400 pounds per linear foot (plf).

Exception: Other nominal unit shear capacities may be permitted if such values are substantiated by cyclic testing and approved by the Building Official.

3. Nails must be placed not less than 1/2 inch in from the panel edges and not less than 3/8 inch from the edge of the connecting members for shear greater than 350 plf using ASD or 500 plf using LRFD. Nails must be placed not less than 3/8 inch from panel edges and not less than 1/4 inch from the edge of the connecting members for shears of 350 plf or less using ASD or 500 plf or less using LRFD.

4. Table 4.3B 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 cannot be used below the top level in a multi-level building.

Where panels are fastened to framing members with staples, requirements and limitations of AWC SDPWS must be met and the allowable shear values set forth in Table 2306.3(1), 2306.3(2) or 2306.3(3) are only 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 in Tables 2306.3(1) and 2306.3(2) are permitted to be increased 40 percent for wind design. Panels complying with ANSI/APA PRP-210 must be permitted to use design values for Plywood Siding in the AWC SDPWS.

Sec. 16.05.430. Section 2307.2 added.

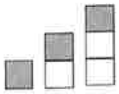
Section 2307.2 is added to read as follows:

2307.2 Wood-frame shear walls. Wood-frame shear walls must be designed and constructed in accordance with Section 2306.3 as applicable.

Sec. 16.05.440. Table 2308.6.1 amended.

Table 2308.6.1 is amended to read as follows:

TABLE 2308.6.1[a]
WALL BRACING REQUIREMENTS

SEISMIC DESIGN CATEGORY	STORY CONDITION (SEE SECTION 2308.2)	MAXIMUM SPACING OF BRACED WALL LINES	BRACED PANEL LOCATION, SPACING (O.C.) AND MINIMUM PERCENTAGE (X)			MAXIMUM DISTANCE OF BRACED WALL PANELS FROM EACH END OF BRACED WALL LINE
			Bracing method[b]			
			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″
C		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 [f, g, h]		25′- 0″	NP	S_{DS} < 0.50: Each end and ≤ 25′- 0″ o.c. (minimum 21% of wall length)[e]	S_{DS} < 0.50: Each end and ≤ 25′- 0″ o.c. (minimum 43% of wall length)[e]	8′- 0″
				0.5 ≤ S_{DS} < 0.75: Each end and ≤ 25′- 0″ o.c. (minimum 32% of wall length)[e]	0.5 ≤ S_{DS} < 0.75: Each end and ≤ 25′- 0″ o.c. (minimum 59% of wall length)[e]	
				0.75 ≤ S_{DS} ≤ 1.00: Each end and ≤ 25′- 0″ o.c. (minimum 37% of wall length)[e]	0.75 ≤ S_{DS} ≤ 1.00: Each end and ≤ 25′- 0″ o.c. (minimum 75% of wall length)	
				S_{DS} > 1.00: Each end and ≤ 25′- 0″ o.c. (minimum 48% of wall length)[e]	S_{DS} > 1.00: Each end and ≤ 25′- 0″ o.c. (minimum 100% of wall length)[e]	

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 2308.6.3 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. DWB, SFB, PBS, and HPS wall braces are not permitted in Seismic Design Catergories D or E.

g. Minimum length of panel bracing of one face of the wall for WSP sheathing shall be at least 4'-0" long or both faces of the wall for GB or PCP sheathing shall be at least 8'-0" long; h/w ratio shall not exceed 2:1. 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 and spaced a maximum of 16 inches on center. Braced wall panel construction types shall not be mixed within a braced wall line.

h. WSP sheathing shall be a minimum of 15/32" thick nailed with 8d common placed 3/8 inches from panel edges and spaced not more than 6 inches on center and 12 inches on center along intermediate framing members.

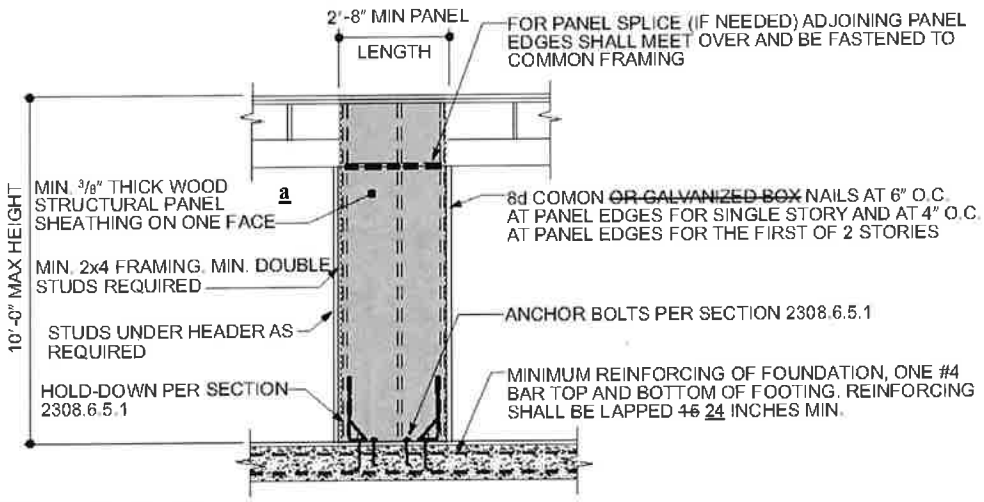
Sec. 16.05.450. Section 2308.6.5, 2308.6.5.1 and 2308.6.5.2 and Figure 2308.6.5.1 and Figure 2308.6.5.2 amended.

Section 2308.6.5, 2308.6.5.1 and 2308.6.5.2 and Figure 2308.6.5.1 and Figure 2308.6.5.2 are amended to read as follows:

2308.6.5 Alternative bracing. An alternate braced wall (ABW) or a portal frame with hold-downs (PFH) described in this section is permitted to substitute for a 48-inch braced wall panel of Method DWB, WSP, SFB, PBS, PCP or HPS. For Method GB, each 96-inch section (applied to one face) or 48-inch section (applied to both faces) or portion thereof required by Table 2308.6.1 is permitted to be replaced by one panel constructed in accordance with Method ABW or PFH.

2308.6.5.1 Alternate braced wall (ABW). An ABW must be constructed in accordance with this section and Figure 2308.6.5.1. In one-story buildings, each panel must have a length of not less than 2 feet 8 inches and a height of not more than 10 feet. Each panel must be sheathed on one face with 3/8-inch minimum-thickness wood structural panel sheathing nailed with 8d common or galvanized box nails in accordance with Table 2304.10.1 and blocked at wood structural panel edges. For structures assigned to Seismic Design Category D or E, each panel must be sheathed on one face with 15/32-inch-minimum-thickness wood structural panel sheathing nailed with 8d common nails spaced 3 inches on panel edges, 3 inches at intermediate supports. Two anchor bolts installed in accordance with Section 2308.3.1 must be provided in each panel. Anchor bolts must be placed at each panel outside quarter points. Each panel end stud must have a hold-down device fastened to the foundation, capable of providing an approved uplift capacity of not less than 1,800 pounds. The hold-down device must be installed in accordance with the manufacturer's recommendations. The ABW must 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 must 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, a minimum 12-inch by 12-inch 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~~ must be reinforced with not less than one No. 4 bar top and bottom. This reinforcement must be lapped ~~15~~ 24 inches 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 two-story buildings, the wood structural panel sheathing must be provided on both faces, three anchor bolts must be placed at one-quarter points and tie-down device uplift capacity must be not less than 3,000 pounds.



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

a. For structures assigned to Seismic Design Category D or E, sheathed on one face with 15/32-inch-minimum-thickness (11.9 mm) wood structural panel sheathing.

FIGURE 2308.6.5.1
ALTERNATE BRACED WALL PANEL (ABW)

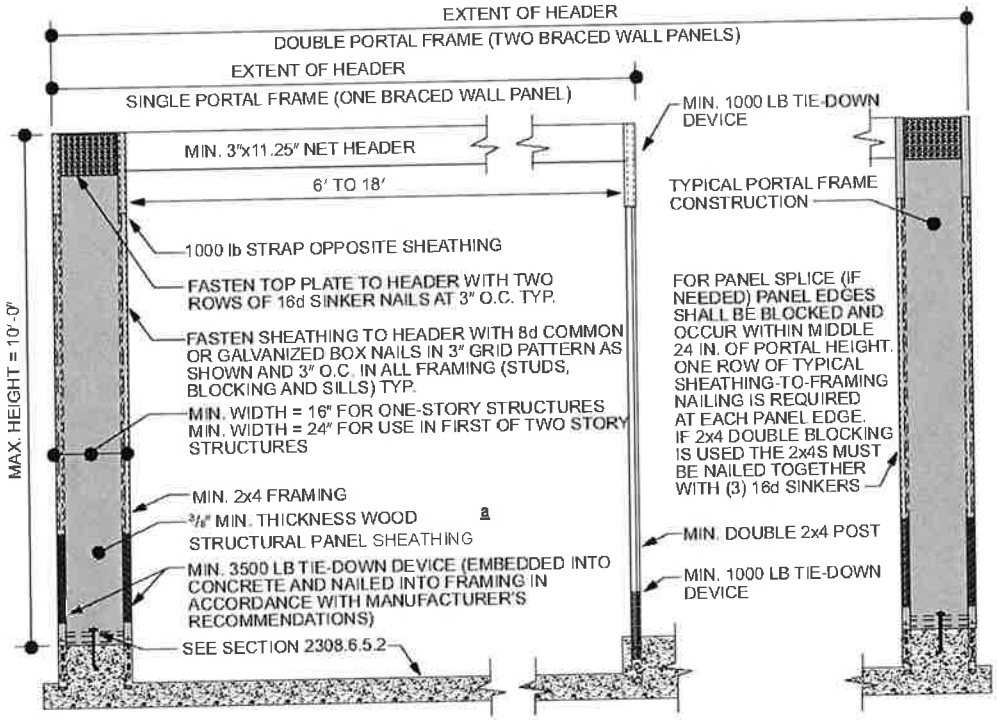
2308.6.5.2 Portal frame with hold-downs (PFH). A PFH must be constructed in accordance with this section and Figure 2308.6.5.2. The adjacent door or window opening must have a full-length header.

In one-story buildings, each panel must have a length of not less than 16 inches and a height of not more than 10 feet. Each panel must be sheathed on one face with a single layer of 3/8-inch minimum-thickness wood structural panel sheathing nailed with 8d common or galvanized box nails in accordance with Figure 2308.6.5.2. For structures assigned to Seismic Design Category D or E, each panel must be sheathed on one face with 15/32-inch-minimum-thickness wood structural panel sheathing nailed with 8d common nails spaced 3 inches on panel edges, 3 inches at intermediate supports and in accordance with Figure 2308.6.5.2. The wood structural panel sheathing must extend up over the solid sawn or glued-laminated header and must be nailed in accordance with Figure 2308.6.5.2. A built-up header consisting of at least two 2-inch by 12-inch boards, fastened in accordance with Item 24 of Table 2304.10.1 must be permitted to be used. A spacer, if used, must be placed on the side of the built-up beam opposite the wood structural panel sheathing. The header must 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 must be not less than 6 feet and not more than 18 feet in length. A strap with an uplift capacity of not less than 1,000 pounds must fasten the header to the inner studs opposite the sheathing. One anchor bolt not less than 5/8 inch diameter and installed in accordance with Section 2308.3.1 must be provided in the center of each sill plate. The studs at each end of the panel must have a hold-down device fastened to the foundation with an uplift capacity of not less than 3,500 pounds.

Where a panel is located on one side of the opening, the header must 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 must fasten the header to the bearing studs. The bearing studs must also have a hold-down device fastened to the foundation with an uplift capacity of not less than 1,000 pounds.

The hold-down devices must be an embedded strap type, installed in accordance with the manufacturer's recommendations. The PFH panels must be supported directly on a foundation that is continuous across the entire length of the braced wall line. This foundation must 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, a minimum 12-inch by 12-inch 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~~ must be reinforced with not less than one No. 4 bar top and bottom. This reinforcement must be lapped not less than ~~15~~ 24 inches 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 two-story buildings, each panel must have a length of not less than 24 inches.



For SI: 1 inch = 25.4 mm, 1 foot = 304.8 mm, 1 pound = 4.448 N.

a. For structures assigned to Seismic Design Category D or E, sheathed on one face with 15/32-inch-minimum-thickness (11.9 mm) wood structural panel sheathing.

FIGURE 2308.6.5.2
PORTAL FRAME WITH HOLD-DOWNS (PFH)

Sec. 16.05.460. Section 2308.6.8.1 amended.

Section 2308.6.8.1 is amended to read as follows:

2308.6.8.1 Foundation requirements. Braced wall lines must be supported by continuous foundations.

Exception: For structures with a maximum plan dimension not more than 50 feet, continuous foundations are required at exterior walls only for structures assigned to Seismic Design Category A, B, or C.

For structures in Seismic Design Categories D and E, exterior braced wall panels must be in the same plane vertically with the foundation or the portion of the structure containing the offset must be designed in accordance with accepted engineering practice and Section 2308.1.1.

~~**Exceptions:**~~

1. ~~Exterior braced wall panels must 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 may not exceed four times the nominal depth of the floor joists.~~

   1.2. ~~Floor joists must be 2 inches by 10 inches or larger and spaced not more than 16 inches on center.~~

   1.3. ~~The ratio of the back span to the cantilever must be not less than 2 to 1.~~

   1.4. ~~Floor joists at ends of braced wall panels must be doubled.~~

   1.5. ~~A continuous rim joist must 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 (16 galvanized gage) and 11/2 inches in width fastened with six 16d common nails on each side. The metal tie must have a yield stress not less than 33,000 psi.~~

   1.6. ~~Joists at setbacks or the end of cantilevered joists may 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 or more.~~

   1.7. ~~The end of a required braced wall panel must be allowed to extend not more than 1 foot 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 in width where the header is a 4-inch by 12-inch or larger member.~~

Sec. 16.05.470. Section 2308.6.9 amended.

Section 2308.6.9 is amended to read as follows:

2308.6.9 Attachment of sheathing. Fastening of braced wall panel sheathing cannot be less than that prescribed in Tables 2308.6.1 or 2304.10.1. Wall sheathing cannot be

attached to framing members by adhesives. Staple fasteners in Table 2304.10.1 cannot 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 Building Official.

All braced wall panels must extend to the roof sheathing and must be attached to parallel roof rafters or blocking above with framing clips (18 gauge minimum) spaced at maximum 24 inches on center with four 8d nails per leg (total eight 8d nails per clip). Braced wall panels must be laterally braced at each top corner and at maximum 24 inches intervals along the top plate of discontinuous vertical framing.

Sec. 16.05.480. Section 3101.1 amended.

Section 3101.1 is amended to read as follows:

3101.1 Scope. The provisions of this chapter will govern special building construction including membrane structures, temporary structures, pedestrian walkways and tunnels, automatic vehicular gates, awnings and canopies, marquees, signs, towers, antennas, relocatable buildings, swimming pool enclosures and safety devices, and solar energy systems, and intermodal shipping containers.

SECTION 3114
INTERMODAL SHIPPING CONTAINERS

3114.1 General. The provisions of Section 3114 and other applicable sections of this code will apply to intermodal shipping containers that are repurposed for use as buildings or structures or as a part of buildings or structures.

Exceptions:

1. Stationary storage battery arrays located in intermodal shipping containers complying with Chapter 12 of the California Fire Code.

2. Intermodal shipping containers that are listed as equipment complying with the standard for equipment, such as air chillers, engine generators, modular datacenters, and other similar equipment.

3. Intermodal shipping containers housing or supporting experimental equipment are exempt from the requirements of Section 3114 provided they comply with all of the following:

    3.1. Single-unit stand-alone intermodal shipping containers must be supported at grade level and used only for occupancies as specified under Risk Category I in Table 1604.5;

3.2. Single-unit stand-alone intermodal shipping containers must be located a minimum of 8 feet from adjacent structures and are not connected to a fuel gas system or fuel gas utility; and

3.3. In hurricane-prone regions and flood hazard areas, single-unit stand-alone intermodal shipping containers are designed in accordance with the applicable provisions of Chapter 16.

4. Intermodal shipping containers approved as temporary structures complying with Section 3103.

5. Single-unit stand-alone intermodal shipping containers used as temporary storage or construction trailer on active construction sites. Construction support facilities for uses and activities not directly associated with the actual processes of construction, including but not limited to, offices, meeting rooms, plan rooms, other administrative or support functions will not be exempt from Section 3114.

3114.2 Construction documents. The construction documents must contain information to verify the dimensions and establish the physical properties of the steel components, and wood floor components, of the intermodal shipping container in addition to the information required by Sections 107 and 1603.

3114.2.1 Fire protection. All intermodal shipping containers used for sleeping purposes shall be provided with the following:

1) A fire sprinkler system designed per 2019 NFPA 13D as amended by the Monterey Park Municipal Code.

2) A hard-wired single station smoke alarm.

3114.3 Intermodal shipping container information. Intermodal shipping containers must bear the manufacturer's existing data plate containing the following information as required by ISO 6346 and verified by an approved agency. A report of the verification process and findings must be provided to the building owner.

1. Manufacturer's name or identification number

2. Date manufactured

3. Safety approval number

4. Identification number

5. Maximum operating gross mass or weight (kg) (lbs)

6. Allowable stacking load for 1.8G (kg) (lbs)

7. Transverse racking test force (Newtons)

8. Valid maintenance examination date

Where approved by the building official, the markings and manufacturer's existing data plate are permitted to be removed from the intermodal shipping containers before they are repurposed for use as buildings or structures or as part of buildings or structures.

3114.4 Protection against decay and termites. Wood structural floors of intermodal shipping containers must be protected from decay and termites in accordance with the applicable provisions of Section 2304.12.1.1.

3114.5 Under-floor ventilation. The space between the bottom of the floor joists and the earth under any intermodal shipping container, except spaces occupied by basements and cellars, must be provided with ventilation in accordance with Section 1202.4.

3114.6 Roof assemblies. Intermodal shipping container roof assemblies must comply with the applicable requirements of Chapter 15.

Exception: Single-unit stand-alone intermodal shipping containers not attached to, or stacked vertically over, other intermodal shipping containers, buildings or structures.

3114.7 Joints and voids. Joints and voids that create concealed spaces between intermodal shipping containers, that are connected or stacked, at fire-resistance-rated walls, floor or floor/ceiling assemblies and roofs or roof/ceiling assemblies must be protected by an approved fire-resistant joint system in accordance with Section 715.

3114.8 Structural. Intermodal shipping containers that conform to ISO 1496-1 and are repurposed for use as buildings or structures, or as a part of buildings or structures, must be designed in accordance with Chapter 16 and this section.

3114.8.1 Foundations. Intermodal shipping containers repurposed for use as a permanent building or structure must be supported on foundations or other supporting structures designed and constructed in accordance with Chapters 16 through 23.

3114.8.1.1 Anchorage. Intermodal shipping containers must be anchored to foundations or other supporting structures as necessary to provide a continuous load path for all applicable design and environmental loads in accordance with Chapter 16.

3114.8.2 Welds. All new welds and connections must be equal to or greater than the original connections.

3114.8.3 Openings in containers. Where openings are made in container walls, floors, and roofs for doors, windows and other similar openings:

1. The openings must be framed with steel elements that are designed in accordance with Chapter 16 and Chapter 22.

2. The cross section and material grade of any new steel element must be equal to or greater than the steel element removed.

3114.8.4 Detailed structural design procedure. A structural analysis meeting the requirements of this section must be provided to the building official to demonstrate the structural adequacy of the intermodal shipping containers.

Exception: Intermodal shipping containers that meet the limitation of Section 3114.8.5.1 and designed in **accordance** with the simplified procedure in Section 3114.8.5.

3114.8.4.1 Material properties. Structural material properties for existing intermodal shipping container steel components must be established by material testing where the steel grade and composition cannot be identified by the manufacturer's designation as to manufacture and mill test.

3114.8.4.2 Seismic design parameters. The seismic force-resisting system must be designed and detailed in accordance with one of the following:

1. Where all or portions of the intermodal shipping container sides are considered to be the seismic force-resisting system, design and detailing must be in accordance with the ASCE 7 Table 12.2-1 requirements for light-frame bearing-wall systems with shear panels of all other materials.

2. Where portions of intermodal shipping container sides are retained, but are not considered to be the seismic force-resisting system, an independent seismic force-resisting system must be selected, designed and detailed in accordance with ASCE 7 Table 12.2-1, or

3. Where portions of the intermodal shipping container sides are retained and integrated into a seismic force-resisting system other than as permitted by Section 3114.8.4.2 Item 1, seismic design parameters must be developed from testing and analysis in accordance with Section 104.11 and ASCE 7 Section 12.2.1.1 or 12.2.1.2.

3114.8.4.3 Allowable shear value. The allowable shear values for the intermodal shipping container side walls and end walls must be demonstrated by testing and analysis accordance with Section 104.11. Where penetrations are made in the side walls or end walls designated as part of the lateral force-resisting system, the penetrations must be substantiated by rational analysis.

3114.8.5 Simplified structural design procedure of single-unit containers. Single-unit intermodal shipping containers conforming to the limitations of Section 3114.8.5.1 is permitted to be designed in accordance with Sections 3114.8.5.2 and 3114.8.5.3.

3114.8.5.1 Limitations. Use of Section 3114.8.5 is subject to all the following limitations:

1. The intermodal shipping container must be a single stand-alone unit supported on a foundation and cannot be in contact with or supporting any other shipping container or other structure.

2. The intermodal shipping container's top and bottom rails, corner castings, and columns or any portion thereof cannot be notched, cut, or removed in any manner.

3. The intermodal shipping container must be erected in a level and horizontal position with the floor located at the bottom.

3114.8.5.2 Structural design. Where permitted by Section 3114.8.5.1, single-unit stand-alone intermodal shipping containers must be designed using the following assumptions for the side walls and end walls:

1. The appropriate detailing requirements contained in Chapters 16 through 23.

2. Response modification coefficient, $R = 2$,

3. Over strength factor, $\Omega_0 = 2.5$,

4. Deflection amplification factor, $C_d = 2$, and

5. Limits on structural height, $h_n = 9.5$ feet (2900 mm).

3114.8.5.3 Allowable shear value. The allowable shear values for the intermodal shipping container side walls (longitudinal) and end walls (transverse) for wind design and seismic design using the coefficients of Section 3114.8.5.2 may be in accordance with Table 3114.8.5.3, provided that all of the following conditions are met:

1. The total linear length of all openings in any individual side walls or end walls is limited to not more than 50 percent of the length of that side walls or end walls, as shown in Figure 3114.8.5.3(1).

2. Any full height wall length, or portion thereof, less than 4 feet long is not considered as a portion of the lateral force-resisting system, as shown in Figure 3114.8.5.3(2).

3. All side walls or end walls used as part of the lateral force-resisting system have an existing or new boundary element on all sides to form a continuous load path, or paths, with adequate strength and stiffness to transfer all forces from the point of application to the final point of resistance, as shown in Figure 3114.8.5.3(3).

4. A maximum of one penetration not greater than a 6-inch diameter hole for conduits, pipes, tubes or vents, or not greater than 16 square inches for electrical boxes, is permitted for each individual 8 feet length lateral force resisting wall. Penetrations located in walls that are not part of the wall lateral force resisting system is not limited in size or quantity. Existing intermodal shipping container's vents is not considered a penetration, as shown in Figure 3114.8.5.3(4).

5. End wall door or doors designated as part of the lateral force-resisting system is welded closed.

TABLE 3114.8.5.3
ALLOWABLE SHEAR VALUES FOR INTERMODAL SHIPPING CONTAINER SIDE WALLS AND END WALLS FOR WIND OR SEISMIC LOADING

CONTAINER DESIGNATION [2]	CONTAINER DIMENSION (Nominal Length)	CONTAINER DIMENSION (Nominal Height)	ALLOWABLE SHEAR VALUES (PLF) [1,3]	
			Side Wall	End Wall
1EEE	45 feet (13.7 M)	9.5 feet (2896 mm)	75	843
1EE		8.6 feet (2591 mm)		
1AAA	40 feet (12.2 M)	9.5 feet (2896 mm)	84	
1AA		8.5 feet (2592 mm)		
1A		8.0 feet (2438 mm)		
1AX		<8.0 feet (2483 mm)		
1BBB	30 feet (9.1 M)	9.5 feet (2896 mm)	112	
1BB		8.5 feet (2591 mm)		
1B		8.0 feet (2438 mm)		
1BX		<8.0 feet (2438 mm)		
1CC	20 feet (9.1 M)	8.5 feet (2591 mm)	168	
1C		8.0 feet (2438 mm)		
1CX		<8.0 feet (2438 mm)		

1. The allowable strength for the side walls and end walls of the intermodal shipping containers are derived from ISO 1496-1 and reduced by a factor of safety of 5.
2. Container designation type is derived from ISO 668.
3. Limitations of Sections 3114.8.5.1 and 3114.8.5.3 shall apply.

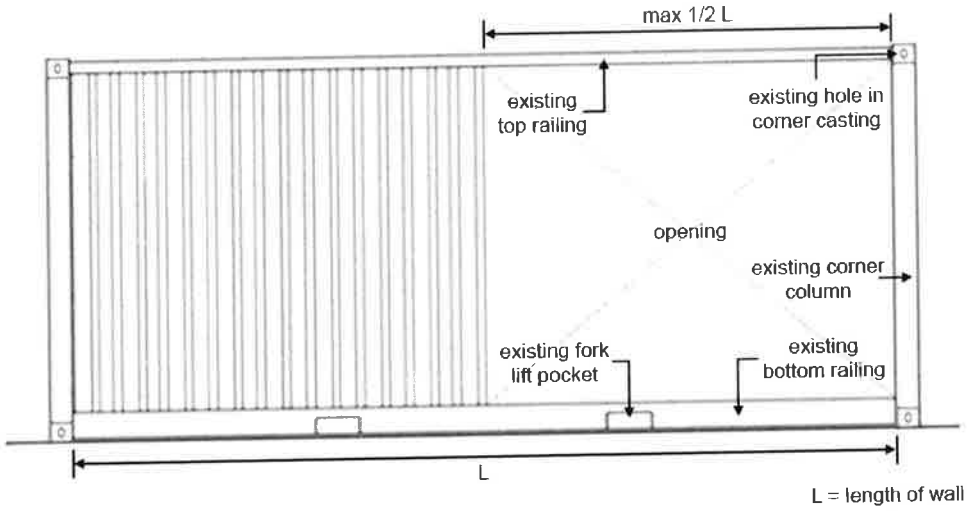


FIGURE 3114.8.5.3(1)
Bracing Unit Distribution – Maximum Linear Length

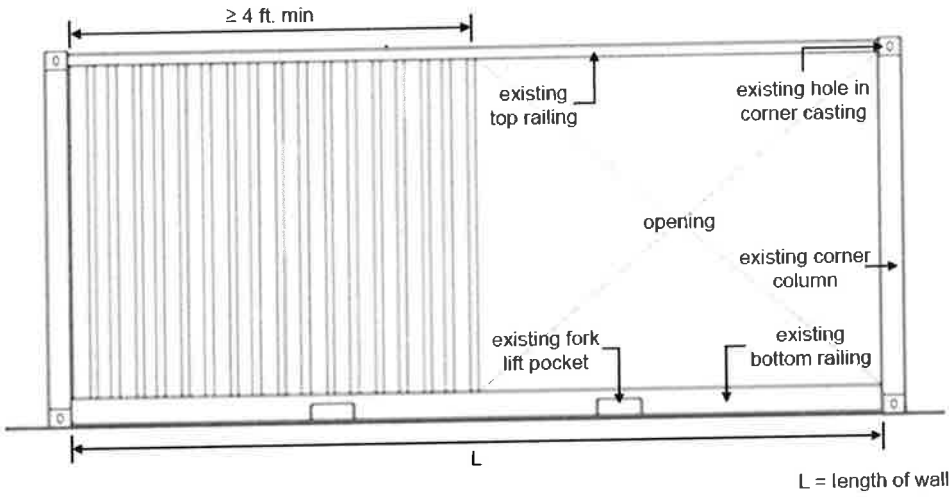


FIGURE 3114.8.5.3(2)
Bracing Unit Distribution – Minimum Linear Length

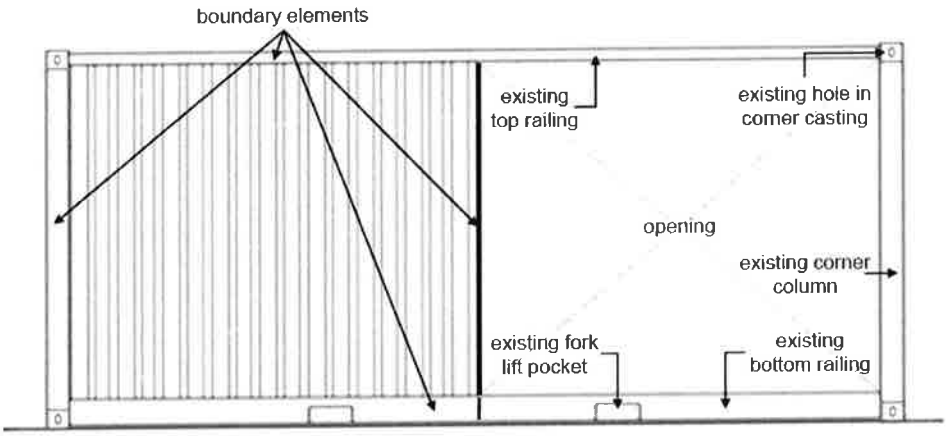


FIGURE 3114.8.5.3(3)
Bracing Unit Distribution – Boundary Elements

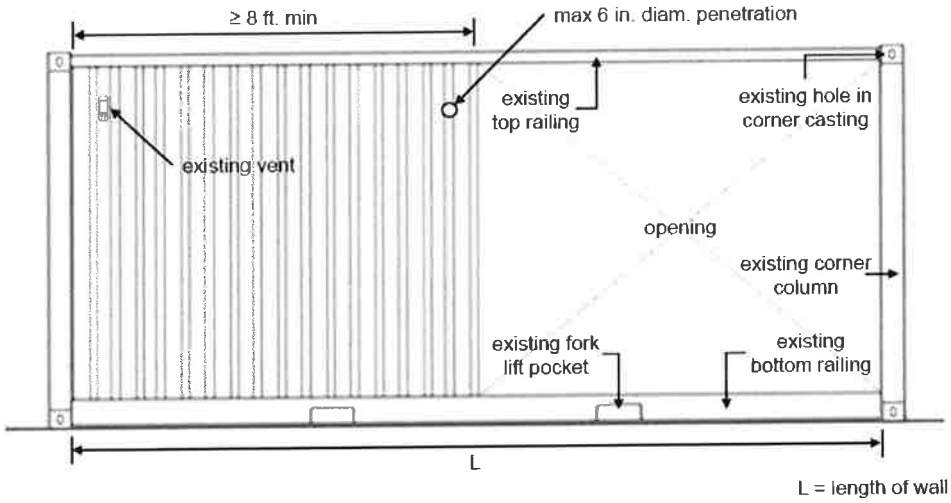


FIGURE 3114.8.5.3(4)
Bracing Unit Distribution – Penetrating Limitations

Sec. 16.05.490. Chapter 35 amended.

Chapter 35, ISO referenced standard is added as follows:

CHAPTER 35
REFERENCED STANDARDS

ISO	International Organization for Standardization ISO Central Secretariet 1 ch, de la Voie-Creuse, Casa Postale 566 CH-1211 Geneva 20, Switzerland	
Standard Reference Number	Title	Referenced in code section number
ISO 1496-1:2013	Series 1 Freight Containers – Specification and Testing – Part 1: General Cargo Containers for General Purposes	3114.8, Table 3114.8.5.3
ISO 6346:1995, with Amendment 3: 2012	Freight Containers – Coding, Identification and marking	3114.3
ISO 668:2013	Series 1 Freight Containers – Classifications, dimensions and ratings.	Table 3114.8.5.3

SECTION 5: Chapter 16.06 of the MPMC is amended in its entirety to read as follows:

"Chapter 16.06 RESIDENTIAL CODE

16.06.010 Document adopted by reference.

Pursuant to Government Code § 50022.9, the City Council incorporates by reference the California Residential Building Code, 2019 Edition, as published in Title 24, Part 2.5 of the California Code of Regulations.

16.06.020. Chapter 1 Division II amended.

The text within Chapter 1 Division II is deleted and replaced with the following:

Chapter 1 Division II
Administrative Provisions

For administrative provisions for this Code, see Section 16.01.040.

16.06.030. Section R301.1.3.2 amended.

Section R301.1.3.2 is amended to read as follows:

R301.1.3.2 Woodframe structures ~~greater than two-stories~~. The Building Official requires construction documents to be approved and stamped by a California licensed architect or engineer for all dwellings of woodframe construction more than two stories and basement in height located in Seismic Design Category A, B or C. Notwithstanding other sections of law; the law establishing these provisions is found in Business and Professions Code Section 5537 and 6737.1.

The Building Official requires 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 or with a basement located in Seismic Design Category D_0, D_1, D_2.

16.06.040. Section R301.1.4 added.

Section R301.1.4 is added as follows:

R301.1.4 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 percent slope) must comply with Section 1613.6 of the Building Code.

16.06.050. Table R301.2(1) amended.

Table R301.2(1) is amended to read as follows:

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

GROUND SNOW LOAD	WIND DESIGN				SEISMIC DESIGN CATEGORY[f]	SUBJECT TO DAMAGE FROM			WINTER DESIGN TEMP[e]	ICE BARRIER UNDERLAYMENT REQUIRED[h]	FLOOD HAZARDS[g]	AIR FREEZING INDEX[i]	MEAN ANNUAL TEMP[j]
	Speed[d] (mph)	Topographic Effects[k]	Special Wind Region[l]	Wind-borne Debris Zone[m]		Weathering[a]	Frost Line Depth[b]	Termite[c]					
Zero	*95*	*No*	*No*	*1*	*E*	*Negligible*	*0"*	*Moderate*	*48°F*	*NO*	*NO*	*0*	*64°F*

MANUAL J DESIGN CRITERIA[n]							
Elevation	Latitude	Winter heating	Summer Cooling	Altitude correction factor	Indoor design temperature	Design temperature cooling	Heating temperature difference
380	*N34*	*37*	*91*	*0.988*	*68*	*75*	*31*
Cooling temperature difference	Wind velocity heating	Wind velocity cooling	Coincident wet bulb	Daily range	Winter humidity	Summer humidity	
16	-	-	*69*	*23*	*20*	*50*	

16.06.060. Section R301.2.2.6 amended.

Items 1, 3 and 5 of Section R301.2.2.6 are amended to read as follows:

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.

~~**Exception:** For wood light-frame construction, floors with cantilevers or setbacks not exceeding four times the nominal depth of the wood floor joists are permitted to support braced wall panels that are out of plane with braced wall panels below provided that all of the following are satisfied:~~

~~1. Floor joists are nominal 2 inches by 10 inches (51 mm by 254 mm) or larger and spaced not more than 16 inches (406 mm) on center.~~

~~2. The ratio of the back span to the cantilever is not less than 2 to 1.~~

~~3. Floor joists at ends of braced wall panels are doubled.~~

~~4. For wood-frame construction, a continuous rim joist is connected to ends of cantilever joists. When spliced, the rim joists shall be spliced using a galvanized metal tie not less than 0.058 inch (1.5 mm) (16 gage) and 1 1/2 inches (38 mm) wide fastened with six 16d nails on each side of the splice or a block of the same size as the rim joist of sufficient length to fit securely between the joist space at which the splice occurs fastened with eight 16d nails on each side of the splice; and~~

~~5. Gravity loads carried at the end of cantilevered joists are limited to uniform wall and roof loads and the reactions from headers having a span of 8 feet (2438 mm) or less.~~

3. **Shear wall or braced wall offsets in** plane. Conditions where the end of a braced wall panel occurs over an opening in the wall below. ~~and ends at a horizontal distance greater than 1 foot (305 mm) from the edge of the opening. This provision is applicable to shear walls and braced wall panels offset in plane and to braced wall panels offset out of plane as permitted by the exception to item 1.~~

~~Exception: For wood light-frame wall construction, one end of a braced wall panel shall be permitted to extend more than one foot (305 mm) over an opening not more than 8 feet (2438 mm) in width in the wall below provided that the opening includes a header in accordance with all of the following:~~

~~1. The building width, loading condition and framing member species limitations of Table R602.7(1) shall apply.~~

~~3. The header is composed of:~~
~~2.1. Not less than one 2x12 or two 2x10 for an opening not more than 4 feet (1219 mm) wide.~~
~~2.2. Not less than two 2x12 or three 2x10 for an opening not more than 6 feet (1829 mm) in width.~~
~~2.3. Not less than three 2x12 or four 2x10 for an opening not more than 8 feet (2438 mm) in width.~~

~~3. The entire length of the braced wall panel does not occur over an opening in the wall below.~~

5. **Floor level** offset. Conditions where portions of a floor level are vertically offset.

~~**Exceptions:**~~

~~1. Framing supported directly by continuous foundations at the perimeter of the building.~~

~~2. For wood light-frame construction, floors shall be permitted to be vertically offset where the floor framing is lapped or tied together as required by section R502.6.1.~~

16.06.070. Section R301.2.2.11 added.

Section R301.2.2.11 is added as follows:

R301.2.2.11 Anchorage of mechanical, electrical, or plumbing components and equipment. Mechanical, electrical, or plumbing components and equipment must be anchored to the structure. Anchorage of the components and equipment must be designed to resist loads in accordance with the California 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; and either

1. The component weighs 400 lb or less and has a center of mass located 4 ft or less above the supporting structure; or

2. The component weighs 20 lb or less or, in the case of a distributed system, 5 lb/ft or less.

16.06.072. Section R309.6 exception amended.

Section R309.6 exception is amended as follows:

Exception: An automatic residential fire sprinkler system must not be required when additions or alterations are made to existing carports and/or garages that do not have an automatic fire sprinkler system installed unless a sprinkler system is required in accordance with California Fire Code Section 903.6.

16.06.073. Section R313.1 exception amended.

Section R313.1 exception is amended as follows:

Exception: An automatic residential fire sprinkler system must not be required when additions or alterations are made to existing townhouses that do not have an automatic fire sprinkler system installed unless a sprinkler system is required in accordance with

California Fire Code Section 903.6.

16.06.074. Section R313.2 exception amended.

Section R313.2 exception is amended as follows:

Exception: An automatic residential fire sprinkler system must not be required for additions or alterations to existing buildings that are not already provided with an automatic sprinkler system unless a sprinkler system is required in accordance with California Fire Code Section 903.6.

16.06.075. Section R313.3.6.2 amended.

Section R313.3.6.2 is amended as follows:

Section R313.3.6.2 Calculation procedure. Determination of the required size for water distribution piping must be in accordance with the following procedure and California Fire Code Sections 903.3.1.3.1 and 903.3.5.

16.06.080. Section R401.1 amended.

Section R401.1 is amended to read as follows:

R401.1 Application. The provisions of this chapter control the design and construction of the foundation and foundation spaces for buildings. In addition to the provisions of this chapter, the design and construction of foundations in flood hazard areas as established by Table R301.2(1) must meet the provisions of Section R322. Wood foundations must be designed and installed in accordance with AWC PWF.

Exception: The provisions of this chapter are 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.

Wood foundations in Seismic Design Category D_0, D_1 or D_2 ~~designed in accordance with accepted engineering practice~~ is not 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 plane at any point, and the maximum roof projection does not exceed 24 inches.

16.06.090. Sections R403.1.2, R403.1.3.6 and R403.1.5 amended.

Sections R403.1.2, R403.1.3.6 and R403.1.5 are amended to read as follows:

R403.1.2 Continuous footing in Seismic Design Categories D_0, D_1 and D_2. Exterior walls of buildings located in Seismic Design Categories D_0, D_1 and D_2 must be supported by continuous solid or fully grouted masonry or concrete footings. ~~Other footing materials or systems must be designed in accordance with accepted engineering practice.~~ All required interior braced wall panels in buildings located in Seismic Design Categories D_0, D_1 and D_2 ~~with plan dimensions greater than 50 feet (15 240 mm) must be supported by continuous solid or fully grouted masonry or concrete footings in accordance with Section R403.1.3.4, except for two-story buildings in Seismic Design Category D_2, in which all braced wall panels, interior and exterior~~, must be supported on continuous foundations.

~~**Exception:** Two-story buildings must be permitted to have interior braced wall panels supported on continuous foundations at intervals not exceeding 50 feet (15 240 mm) provided that:~~

1. ~~The height of cripple walls does not exceed 4 feet (1219 mm).~~
2. ~~First-floor braced wall panels are supported on doubled floor joists, continuous blocking or floor beams.~~
3. ~~The distance between bracing lines does not exceed twice the building width measured parallel to the braced wall line.~~

R403.1.3.6 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.

R403.1.5 Slope. The top surface of footings must be level. The bottom surface of footings cannot have a slope exceeding one unit vertical in 10 units horizontal (10-percent slope). Footings must 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 10 units horizontal (10-percent slope).

For structures located in Seismic Design Categories D_0, D_1 or D_2, stepped footings must be reinforced with four No. 4 rebar. Two bars must be place at the top and bottom of the footings as shown in Figure R403.1.5.

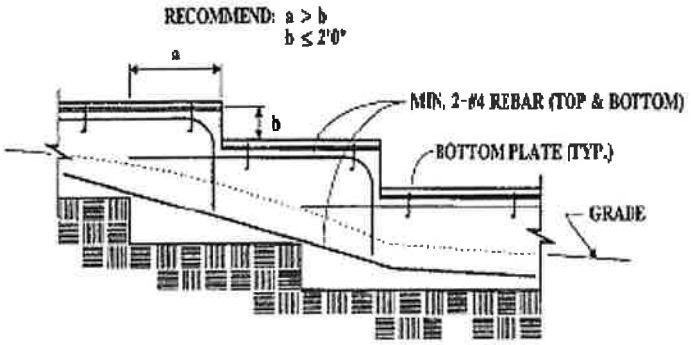


FIGURE R403.1.5
STEPPED FOOTING

16.06.100. Section R404.2 amended.

Section R404.2 is amended to read as follows:

R404.2 Wood foundation walls. Wood foundation walls must be constructed in accordance with the provisions of Sections R404.2.1 through R404.2.6 and with the details shown in Figures R403.1(2) and R403.1(3). Wood foundation walls is not permitted for structures located in Seismic Design Category D_0, D_1 or D_2.

16.06.110. Section R501.1 amended.

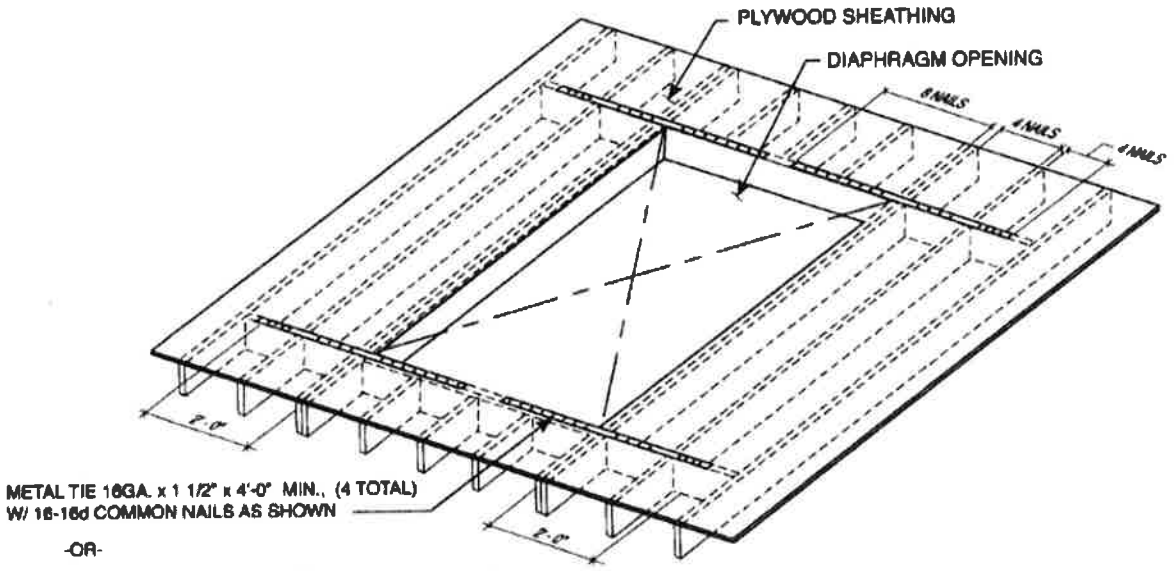
Section R501.1 is amended to read as follows:

R501.1 Application. The provisions of this chapter 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 or plumbing fixtures and equipment must be attached (or anchored) to the structure in accordance with Section R301.2.2.11.

16.06.120. Section R503.2.4 added.

Section R503.2.4 is added as follows:

R503.2.4 Openings in horizontal diaphragms. Openings in horizontal diaphragms with a dimension perpendicular to the joist that is greater than 4 feet must be constructed in accordance with Figure R503.2.4.



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 Section R301.2.2.6.

FIGURE R503.2.4
OPENINGS IN HORIZONTAL DIAPHRAGMS

16.06.130. Table R602.3(1) amended.

Lines 19, 20, 23, and 33-36 of Table R602.3(1) are amended to read as follows:

ITEM	DESCRIPTION OF BUILDING ELEMENTS	NUMBER AND TYPE OF FASTENER[a, b, c]	SPACING AND LOCATION
19 [k]	1″ × 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 [k]	1″ × 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	Face nail	
		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		
Floor				
23 [k]	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., $1^3/_4$″ long	Face nail	
Other wall sheathing[g]				
33 [k]	$^1/_2$″ structural cellulosic fiberboard sheathing	$1^1/_2$″ galvanized roofing nail, $^7/_{16}$″ head diameter, or $1^1/_4$″ long 16 ga. staple with $^7/_{16}$″ or 1″ crown	3	6
34 [k]	$^{25}/_{32}$″ structural cellulosic fiberboard sheathing	$1^3/_4$″ galvanized roofing nail, $^7/_{16}$″ head diameter, or $1^1/_2$″ long 16 ga. staple with $^7/_{16}$″ or 1″ crown	3	6
35 [k]	$^1/_2$″ gypsum sheathing[d]	$1^1/_2$″ galvanized roofing nail; staple galvanized, $1^1/_2$″ long; $1^1/_4$″ screws, Type W or S	7	7
36 [k]	$^5/_8$″ gypsum sheathing[d]	$1^3/_4$″ galvanized roofing nail; staple galvanized, $1^5/_8$″ long; $1^5/_8$″ screws, Type W or S	7	7

For SI: 1 inch = 25.4 mm, 1 foot = 304.8 mm, 1 mile per hour = 0.447 m/s; 1 ksi = 6.895 MPa.

TABLE R602.3(1)—continued
FASTENING SCHEDULE

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 (20d common nail), 90 ksi for shank diameters larger than 0.142 inch but not larger than 0.177 inch, and 100 ksi for shank diameters of 0.142 inch or less.
b. Staples are 16 gage wire and have a minimum $^7/_{16}$-inch on diameter crown width.
c. Nails shall be spaced at not more than 6 inches on center at all supports where spans are 48 inches or greater.
d. Four-foot by 8-foot or 4-foot by 9-foot panels shall be applied vertically.
e. Spacing of fasteners not included in this table shall be based on Table R602.3(2).
f. For wood structural panel roof sheathing attached to gable end roof framing and to intermediate supports within 48 inches of roof edges and ridges, nails shall be spaced at 6 inches on center where the ultimate design wind speed is less than 130 mph and shall be spaced 4 inches on center where the ultimate design wind speed is 130 mph or greater but less than 140 mph.
g. Gypsum sheathing shall conform to ASTM C1396 and shall be installed in accordance with GA 253. Fiberboard sheathing shall conform to ASTM C208.
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 other provisions of this code. Floor perimeter shall be supported by framing members or solid blocking.
i. Where a rafter is fastened to an adjacent parallel ceiling joist in accordance with this schedule, provide two toe nails on one side of the rafter and toe nails from the ceiling joist to top plate in accordance with this schedule. The toe nail on the opposite side of the rafter shall not be required.
j. RSRS-01 is a Roof Sheathing Ring Shank nail meeting the specifications in ASTM F1667.
k. Use of staples in braced wall panels shall be prohibited in Seismic Design Category D_0, D_1, or D_2.

16.06.140. Exception of Section R602.3.2 and Table R602.3.2 amended.

Exception of Section R602.3.2 and Table R602.3.2 are amended to read as follows:

Exception: A In other than Seismic Design Category D_0, D_1 or D_2, a single top plate used as an alternative to a double top plate must comply with the following:

1. The single top plate must be tied at corners, intersecting walls, and at in-line splices in straight wall lines in accordance with Table R602.3.2.

2. The rafters or joists must be centered over the studs with a tolerance of not more than 1 inch.

3. Omission of the top plate is permitted over headers where the headers are adequately tied to adjacent wall sections in accordance with Table R602.3.2.

TABLE R602.3.2
SINGLE TOP-PLATE SPLICE CONNECTION DETAILS

CONDITION	TOP-PLATE SPLICE LOCATION			
	Corners and intersecting walls		Butt joints in straight walls	
	Splice plate size	Minimum nails each side of joint	Splice plate size	Minimum nails each side of joint
Structures in SDC A-C; ~~and in SDC D_0, D_1 and D_2 with braced wall line spacing less than 25 feet~~	3″ × 6″ × 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
~~Structures in SDC D_0, D_1 and D_2, with braced wall line spacing greater than or equal to 25 feet~~	~~3″ × 8″ by 0.036″ galvanized steel plate or equivalent~~	~~(9) 8d box ($2^1/_2$″ × 0.113″) nails~~	~~3′ × 16″ × 0.036″ galvanized steel plate or equivalent~~	~~(18) 8d box ($2^1/_2$″ × 0.113″) nails~~

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

16.06.150. Footnote "b" of Table R602.3(2) amended.

Footnote "b" of Table R602.3(2) is amended to read as follows:

b. Staples must 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 is prohibited in Seismic Design Category D_0, D_1, or D_2.

16.06.160. Section R602.10.2.3 amended.

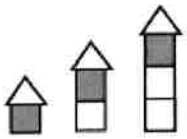
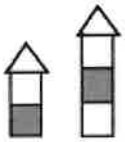
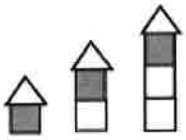
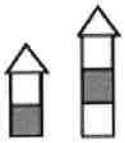
Section R602.10.2.3 is amended to read as follows:

R602.10.2.3 Minimum number of braced wall panels. Braced wall lines with a length of 16 feet or less must have a minimum of two braced wall panels of any length or one braced wall panel equal to 48 inches or more. Braced wall lines greater than 16 feet must have a minimum of two braced wall panels. Braced wall panel cannot be less than 48 inches in length in Seismic Design Category D_0, D_1, or D_2.

16.06.170. Table R602.10.3(3) amended.

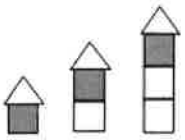
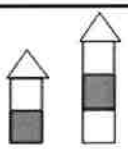
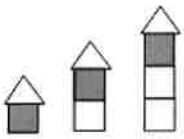
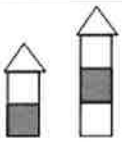
Table R602.10.3(3) is amended to read as follows:

TABLE R602.10.3(3)
BRACING REQUIREMENTS BASED ON SEISMIC DESIGN CATEGORY

• SOIL CLASS D[b] • WALL HEIGHT = 10 FEET • 10 PSF FLOOR DEAD LOAD • 15 PSF ROOF/CEILING DEAD LOAD • BRACED WALL LINE SPACING ≤ 25 FEET			MINIMUM TOTAL LENGTH (FEET) OF BRACED WALL PANELS REQUIRED ALONG EACH BRACED WALL LINE[a]				
Seismic Design Category	Story Location	Braced Wall Line Length (feet)[c]	Method LIB[d]	Method GB[e,f]	Methods DWB, SFB, PBS, PCP, HPS, CS-SFB[e,f]	Method WSP	Methods CS-WSP, CS-G
C (townhouses only)		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
		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
		20	NP	9.0	9.0	6.0	5.1
		30	NP	13.5	13.5	9.0	7.7
		40	NP	18.0	18.0	12.0	10.2
		50	NP	22.5	22.5	15.0	12.8
		10	NP	6.0	6.0	4.5	3.8
		20	NP	12.0	12.0	9.0	7.7
		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
D_0		10	NP	~~2.8~~ 5.6	~~2.8~~ 5.6	1.8	1.6
		20	NP	~~5.5~~ 11.0	~~5.5~~ 11.0	3.6	3.1
		30	NP	~~8.3~~ 16.6	~~8.3~~ 16.6	5.4	4.6
		40	NP	~~11.0~~ 22.0	~~11.0~~ 22.0	7.2	6.1
		50	NP	~~13.8~~ 27.6	~~13.8~~ 27.6	9.0	7.7
		10	NP	~~5.3~~ NP	~~5.3~~ NP	3.8	3.2
		20	NP	~~10.5~~ NP	~~10.5~~ NP	7.5	6.4
		30	NP	~~15.8~~ NP	~~15.8~~ NP	11.3	9.6
		40	NP	~~21.0~~ NP	~~21.0~~ NP	15.0	12.8
		50	NP	~~26.3~~ NP	~~26.3~~ NP	18.8	16.0
		10	NP	~~7.3~~ NP	~~7.3~~ NP	5.3	4.5
		20	NP	~~14.5~~ NP	~~14.5~~ NP	10.5	9.0
		30	NP	~~21.8~~ NP	~~21.8~~ NP	15.8	13.4
		40	NP	~~29.0~~ NP	~~29.0~~ NP	21.0	17.9
		50	NP	~~36.3~~ NP	~~36.3~~ NP	26.3	22.3

(continued)

TABLE R602.10.3(3)—continued
BRACING REQUIREMENTS BASED ON SEISMIC DESIGN CATEGORY

• SOIL CLASS D[b] • WALL HEIGHT = 10 FEET • 10 PSF FLOOR DEAD LOAD • 15 PSF ROOF/CEILING DEAD LOAD • BRACED WALL LINE SPACING ≤ 25 FEET			MINIMUM TOTAL LENGTH (FEET) OF BRACED WALL PANELS REQUIRED ALONG EACH BRACED WALL LINE[a, f]				
Seismic Design Category	Story Location	Braced Wall Line Length (feet)[c]	Method LIB[d]	Method GB[g]	Methods DWB, SFB, PBS, PCP, HPS, CS-SFB[e, g]	Method WSP	Methods CS-WSP, CS-G, CS-PF
D_0		10	NP	~~3.0~~ 6.0	~~3.0~~ 6.0	2.0	1.7
		20	NP	~~6.0~~ 12.0	~~6.0~~ 12.0	4.0	3.4
		30	NP	~~9.0~~ 18.0	~~9.0~~ 18.0	6.0	5.1
		40	NP	~~12.0~~ 24.0	~~12.0~~ 24.0	8.0	6.8
		50	NP	~~15.0~~ 30.0	~~15.0~~ 30.0	10.0	8.5
		10	NP	~~6.0~~ NP	~~6.0~~ NP	4.5	3.8
		20	NP	~~12.0~~ NP	~~12.0~~ NP	9.0	7.7
		30	NP	~~18.0~~ NP	~~18.0~~ NP	13.5	11.5
		40	NP	~~24.0~~ NP	~~24.0~~ NP	18.0	15.3
		50	NP	~~30.0~~ NP	~~30.0~~ NP	22.5	19.1
		10	NP	~~8.5~~ NP	~~8.5~~ NP	6.0	5.1
		20	NP	~~17.0~~ NP	~~17.0~~ NP	12.0	10.2
		30	NP	~~25.5~~ NP	~~25.5~~ NP	18.0	15.3
		40	NP	~~34.0~~ NP	~~34.0~~ NP	24.0	20.4
		50	NP	~~42.5~~ NP	~~42.5~~ NP	30.0	25.5
D_1		10	NP	~~4.0~~ 8.0	~~4.0~~ 8.0	2.5	2.1
		20	NP	~~8.0~~ 16.0	~~8.0~~ 16.0	5.0	4.3
		30	NP	~~12.0~~ 24.0	~~12.0~~ 24.0	7.5	6.4
		40	NP	~~16.0~~ 32.0	~~16.0~~ 32.0	10.0	8.5
		50	NP	~~20.0~~ 40.0	~~20.0~~ 40.0	12.5	10.6
		10	NP	~~7.5~~ NP	~~7.5~~ NP	5.5	4.7
		20	NP	~~15.0~~ NP	~~15.0~~ NP	11.0	9.4
		30	NP	~~22.5~~ NP	~~22.5~~ NP	16.5	14.0
		40	NP	~~30.0~~ NP	~~30.0~~ NP	22.0	18.7
		50	NP	~~37.5~~ NP	~~37.5~~ NP	27.5	23.4
		10	NP	NP	NP	NP	NP
		20	NP	NP	NP	NP	NP
		30	NP	NP	NP	NP	NP
		40	NP	NP	NP	NP	NP
		50	NP	NP	NP	NP	NP
	Cripple wall below one- or two-story dwelling	10	NP	NP	NP	7.5	6.4
		20	NP	NP	NP	15.0	12.8
		30	NP	NP	NP	22.5	19.1
		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 = 304.8 mm, 1 pound per square foot = 0.0479 kPa.

NP = Not Permitted.

a. Linear interpolation shall be permitted.

b. Wall bracing lengths are based on a soil site class "D." 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*.

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.

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.

e. Methods PFG and CS-SFB do not apply in Seismic Design Categories D_0, D_1 and D_2.

f. Where more than one bracing method is used, mixing methods shall be in accordance with Section R602.10.4.1.

g. Methods GB and PCP braced wall panel h/w ratio shall not exceed 1:1 in SDC D_0, D_1 and D_2. Methods DWB, SFB, PBS, and HPS are not permitted in D_0, D_1 and D_2.

16.06.180. Table R602.10.4 amended.

Table R602.10.4 is amended to read as follows:

TABLE R602.10.4
BRACING METHODS [1]

	METHODS, MATERIAL	MINIMUM THICKNESS	FIGURE	CONNECTION CRITERIA[a]	
				Fasteners	Spacing
Intermittent Bracing Methods	**LIB** Let-in-bracing	1 × 4 wood or approved metal straps at 45° to 60° angles for maximum 16" stud spacing		Wood: 2-8d common nails or 3-8d ($2^1/_2$" long x 0.113" dia.) nails	Wood: per stud and top and bottom plates
				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 Wood structural panel (See Section R604)	~~$^3/_8$"~~ 15/32"	8d common (2 1/2"x0.131) nails 3/8" edge distance to panel edge	~~Exterior sheathing per Table R602.3(3)~~	6" edges 12" field
			8d common (2 1/2"x0.131) nails 3/8" edge distance to panel edge	~~Interior sheathing per Table R602.3(1) or R602.3(2)~~	~~Varies by fastener~~ 6" edges 12" field
	BV-WSP[e] Wood structural panels with stone or masonry veneer (See Section R602.10.6.5)	$^7/_{16}$"	See Figure R602.10.6.5	8d common ($2^1/_2$" × 0.131) nails	4" at panel edges 12" at intermediate supports 4" at braced wall panel end posts
	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	3" edges 6" field
	GB Gypsum board	$^1/_2$"		Nails or screws per Table R602.3(1) for exterior locations	For all braced wall panel locations: 7" edges (including top and bottom plates) 7" field
				Nails or screws per Table R702.3.5 for interior locations	
	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 R703.7 for maximum 16" stud spacing		$1^1/_2$" long. 11 gage, $^7/_{16}$" dia. head nails or $^7/_8$" long, 16 gage staples [g]	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 $1^1/_2$" penetration into studs	4" edges 8" field
	ABW Alternate braced wall	$^3/_8$"		See Section R602.10.6.1	See Section R602.10.6.1

(continued)

TABLE R602.10.4—continued
BRACING METHODS [f]

	METHODS, MATERIAL	MINIMUM THICKNESS	FIGURE	CONNECTION CRITERIA[a]	
				Fasteners	Spacing
Intermittent Bracing Methods	**PFH** Portal frame with hold-downs	$^3/_8$"		See Section R602.10.6.2	See Section R602.10.6.2
	PFG Portal frame at garage	$^7/_{16}$"		See Section R602.10.6.3	See Section R602.10.6.3
Continuous Sheathing Methods	**CS-WSP** Continuously sheathed wood structural panel	$^3/_8$" 15/32"	8d common (2 1/2"x0.131) nails 3/8" edge distance to panel edge	~~Exterior sheathing per Table R602.3(3)~~	6" edges 12" field
		$^3/_8$" 15/32"	8d common (2 1/2"x0.131) nails 3/8" edge distance to panel edge	~~Interior sheathing per Table R602.3(1) or R602.3(2)~~	~~Varies by fastener~~ 6" edges 12" field
	CS-G[b,c] Continuously sheathed wood structural panel adjacent to garage openings	$^3/_8$" 15/32"		See Method CS-WSP	See Method CS-WSP
	CS-PF Continuously sheathed portal frame	$^7/_{16}$" 15/32"		See Section R602.10.6.4	See Section R602.10.6.4
	CS-SFB[d, f] 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	3" edges 6" field

For SI: 1 inch = 25.4 mm, 1 foot = 304.8 mm, 1 degree = 0.0175 rad, 1 pound per square foot = 47.8 N/m^2, 1 mile per hour = 0.447 m/s.

a. Adhesive attachment of wall sheathing, including Method GB, shall not be permitted in Seismic Design Categories C, D_0, D_1 and D_2.

b. Applies to panels next to garage door opening where supporting gable end wall or roof load only. Shall only be used on one wall of the garage. In Seismic Design Categories D_0, D_1 and D_2, roof covering dead load shall not exceed 3 psf.

c. Garage openings adjacent to a Method CS-G panel shall be provided with a header in accordance with Table R602.5(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 D_0, D_1 and D_2.

e. Method applies to detached one- and two-family dwellings in Seismic Design Categories D_0 through D_2 only.

f. Methods GB and PCP braced wall panel h/w ratio shall not exceed 1:1 in SDC D_0, D_1, or D_2. Methods LIB, DWB, SFB, PBS, HPS, and PFG are not permitted in SDC D_0, D_1, or D_2.

g. Use of staples in braced wall panels shall be prohibited in SDC D_0, D_1, or D_2.

16.06.190. Table R602.10.5 amended.

Table R602.10.5 is amended to read as follows:

Table R602.10.5
MINIMUM LENGTH OF BRACED WALL PANELS

METHOD (See Table R602.10.4)		MINIMUM LENGTH[a] (inches) Wall Height 8 feet	9 feet	10 feet	11 feet	12 feet	CONTRIBUTING LENGTH (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 mph	28	32	34	38	42	48
	SDC D_0, D_1 and D_2, ultimate design wind speed < 140 mph	32	32	34	NP	NP	
CS-G		24	27	30	33	36	Actual[b]
CS-WSP, CS-SFB	Adjacent clear opening height (inches)						
	≤ 64	24	27	30	33	36	Actual[b]
	68	26	27	30	33	36	
	72	27	27	30	33	36	
	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	
	100	—	44	40	38	38	
	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)		Portal header height 8 feet	9 feet	10 feet	11 feet	12 feet	
PFH	Supporting roof only	~~16~~ 24	~~16~~ 24	~~16~~ 24	Note c	Note c	48
	Supporting one story and roof	24	24	24	Note c	Note c	
PFG		24	27	30	Note d	Note d	1.5 × Actual[b]
CS-PF	SDC A, B and C	16	18	20	Note e	Note e	1.5 × Actual[b]
	SDC D_0, D_1 and D_2	~~16~~ 24	~~18~~ 24	~~20~~ 24	Note e	Note e	Actual[b]

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 where it is greater than or equal to the minimum length.
c. Maximum header height for PFH is 10 feet in accordance with Figure R602.10.6.2, but wall height shall be permitted to be increased

to 12 feet with pony wall.

d. Maximum header height for PFG is 10 feet in accordance with Figure R602.10.6.3, but wall height shall be permitted to be increased to 12 feet with pony wall.

e. Maximum header height for CS-PF is 10 feet in accordance with Figure R602.10.6.4, but wall height shall be permitted to be increased to 12 feet with pony wall.

16.06.200. Figure R602.10.6.1 amended.

Figure R602.10.6.1 is amended to read as follows:

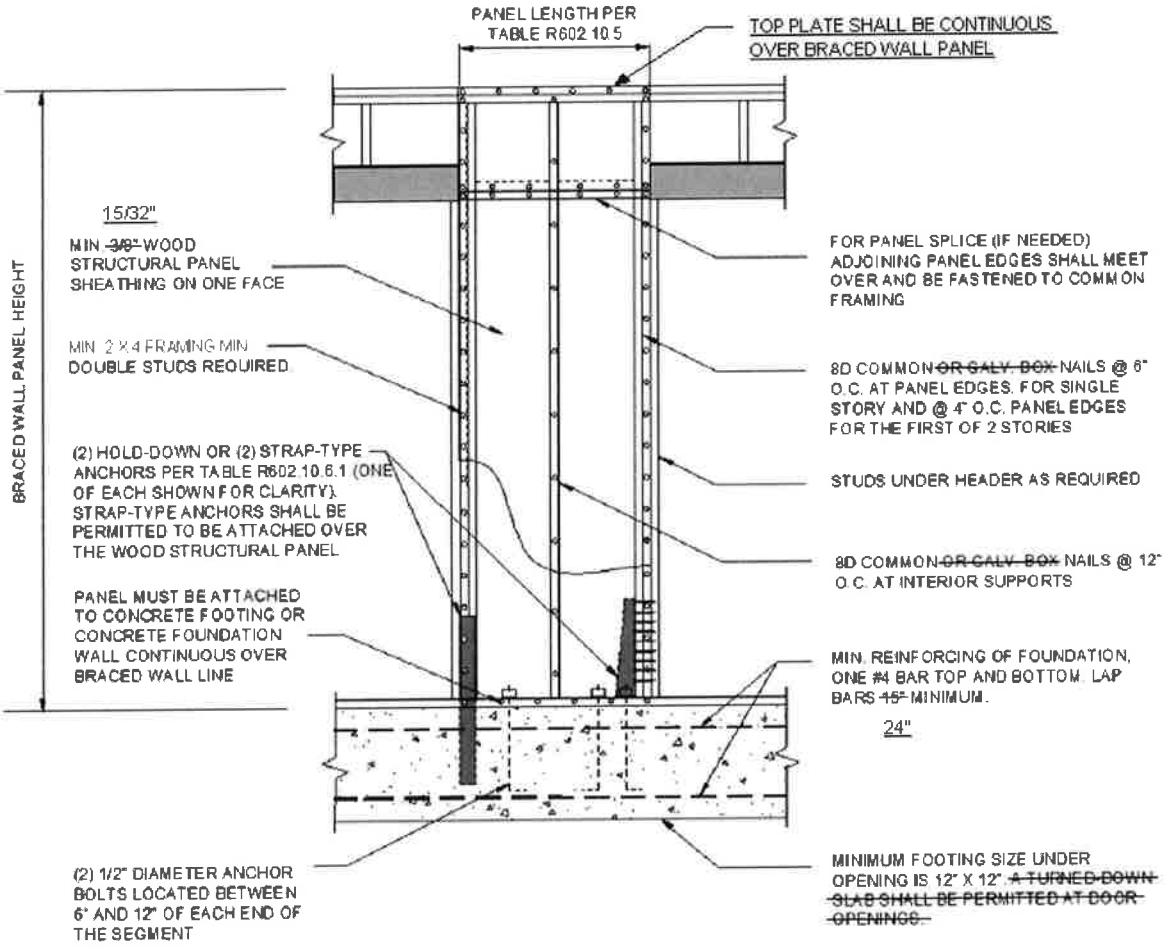
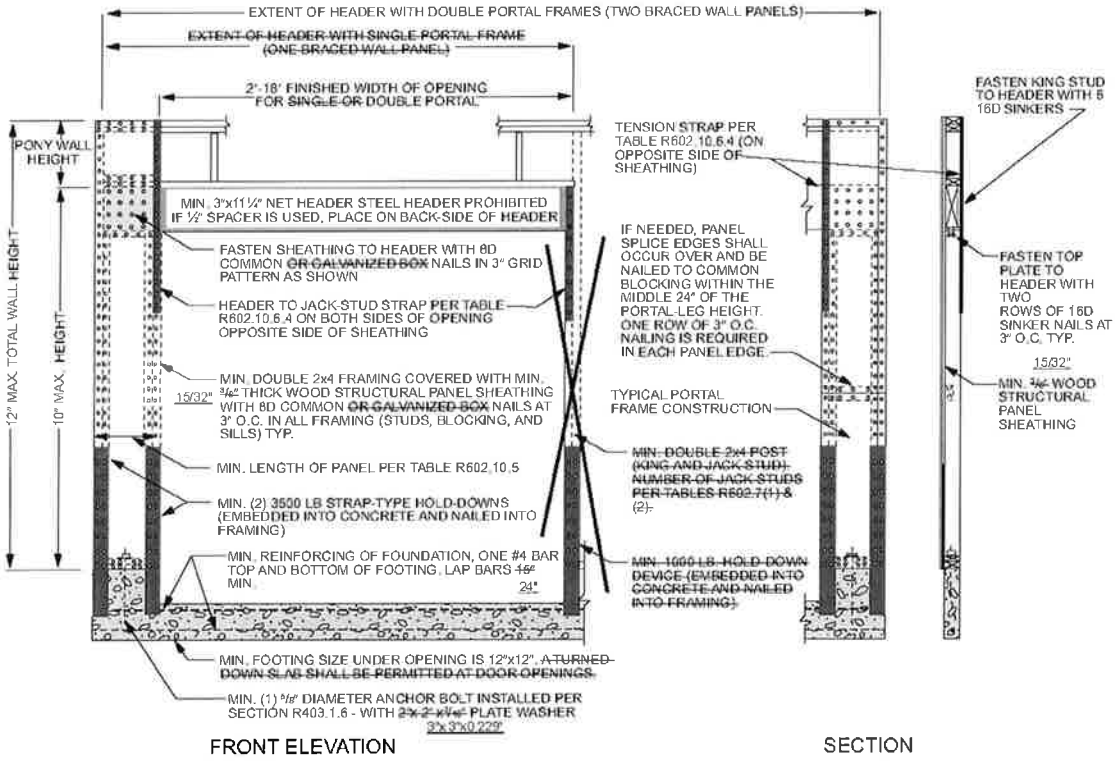


FIGURE R602.10.6.1
METHOD ABW—ALTERNATE BRACED WALL PANEL

16.06.210. Figure R602.10.6.2 amended.

Figure R602.10.6.2 is amended to read as follows:

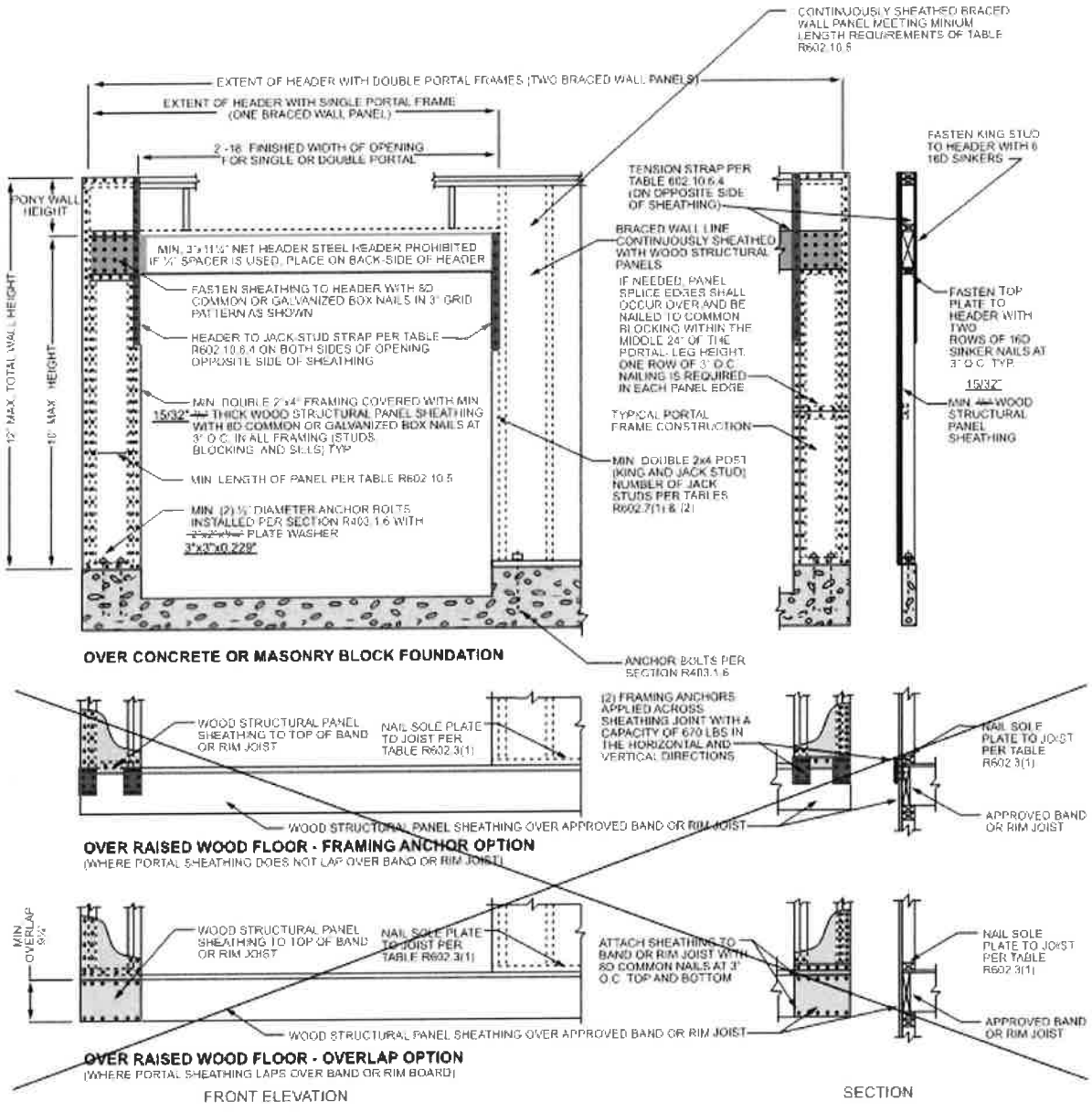


For SI: 1 inch = 25.4 mm, 1 foot = 304.8 mm.

FIGURE R602.10.6.2
METHOD PFH—PORTAL FRAME WITH HOLD-DOWNS
AT DETACHED GARAGE DOOR OPENINGS

16.06.220. Figure R602.10.6.4 amended.

Figure R602.10.6.4 is amended to read as follows:



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

FIGURE R602.10.6.4
METHOD CS-PF—CONTINUOUSLY SHEATHED PORTAL FRAME PANEL CONSTRUCTION

16.06.230. Section R606.4.4 amended.

Section R606.4.4 is amended to read as follows:

R606.4.4 Parapet walls. Unreinforced solid masonry parapet walls must not be less than 8 inches thick and their height must not exceed four times their thickness. Unreinforced hollow unit masonry parapet walls must not be less than 8 inches thick, and their height must not exceed three times their thickness. Masonry parapet walls in

areas subject to wind loads of 30 pounds per square foot or located in Seismic Design Category D_0, D_1 or D_2, or on townhouses in Seismic Design Category C must be reinforced in accordance with Section R606.12.

16.06.240. Section R606.12.2.2.3 amended.

Section R606.12.2.2.3 is amended to read as follows:

R606.12.2.2.3 Reinforcement requirements for masonry elements. Masonry elements listed in Section R606.12.2.2.2 must be reinforced in either the horizontal or vertical direction as shown in Figure ~~R606.11(2)~~ R606.11(3) and in accordance with the following:

1. Horizontal reinforcement. Horizontal joint reinforcement consists of ~~at least two longitudinal W1.7 wires spaced not more than 16 inches for walls greater than 4 inches in width and at least one longitudinal W1.7 wire spaced not more than 16 inches for walls not exceeding 4 inches in width; or~~ at least one No. 4 bar spaced not more than 48 inches. ~~Where two longitudinal wires of joint reinforcement are used, the space between these wires must be the widest that the mortar joint will accommodate.~~ Horizontal reinforcement must be provided within 16 inches of the top and bottom of these masonry elements.

2. Vertical reinforcement. Vertical reinforcement consists of at least one No. 4 bar spaced not more than 48 inches. Vertical reinforcement must be within ~~16~~ 8 inches of the ends of masonry walls.

16.06.250. Section R803.2.4 added.

Section R803.2.4 is added as follows:

R803.2.4 Openings in horizontal diaphragms. Openings in horizontal diaphragms must conform with Section R503.2.4.

16.06.260. Section R902.1 amended.

Section R902.1 is amended to read as follows:

R902.1 Roofing covering materials. Roofs must be covered with materials as set forth in Sections R904 and R905. A minimum Class A roofing must be installed in all areas designated by this section. Class A roofing required to be listed by this section must be tested in accordance with UL 790 or ASTM E108.

Exceptions:

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

3. Class A roof assemblies include minimum 16 ounces per square foot copper sheets installed over combustible decks.
4. Class A roof assemblies include slate installed over underlayment over combustible decks.

16.06.270. Section R902.1.3 amended.

Section R902.1.3 is amended to read as follows:

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

16.06.280. Section 905.3.1 amended.

Section R905.3.1 is amended to read as follows:

R905.3.1 Deck requirements. Concrete and clay tile must be installed only over solid sheathing ~~or spaced structural sheathing boards~~.

Exception: Spaced lumber is be permitted in Seismic Design Categories A, B, and C.

16.06.290. Section R1001.3.1 amended.

Section R1001.3.1 of the 2016 Edition of the California Residential Code is amended to read as follows:

R1001.3.1 Vertical reinforcing. For chimneys up to 40 inches wide, four No. 4 continuous vertical bars adequately anchored into the concrete foundation must be placed between wythes of solid masonry or within the cells of hollow unit masonry and grouted in accordance with Section R606. Grout must 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 wide, two additional No. 4 vertical bars adequately anchored into the concrete foundation must be provided for each additional flue incorporated into the chimney or for each additional 40 inches in width or fraction thereof.

SECTION 6: Chapter 16.07 of the MPMC is amended in its entirety to read as follows:

"Chapter 16.07 ELECTRICAL CODE

16.07.010 Document adopted by reference.

Pursuant to Government Code § 50022.9, the City Council incorporates by reference the California Electrical Code, 2019 Edition, as published in Title 24, Part 3 of the California Code of Regulations.

16.07.020. Article 91 added.

Article 91 is added to read in its entirety, as follows:

Article 91
Administrative Provisions

For administrative provisions for this Code, see Section 16.01.040."

SECTION 7: Chapter 16.08 of the MPMC is amended in its entirety to read as follows:

"Chapter 16.08 MECHANICAL CODE

16.08.010 Document adopted by reference.

Pursuant to Government Code § 50022.9, the City Council incorporates by reference the California Mechanical Code, 2019 Edition, as published in Title 24, Part 4 of the California Code of Regulations.

16.08.020. Chapter 1 Division II amended.

The text within Chapter 1 Division II is amended to read as follows:

Chapter 1 Division II
Administrative Provisions

For administrative provisions for this Code, see Section 16.01.040."

SECTION 8: Chapter 16.09 of the MPMC is amended in its entirety to read as follows:

"Chapter 16.09 PLUMBING CODE

16.09.010 Document adopted by reference.

Pursuant to Government Code § 50022.9, the City Council incorporates by reference the California Plumbing Code, 2019 Edition, as published in Title 24, Part 5 of the California Code of Regulations.

16.09.020. Chapter 1 Division II amended.

Chapter 1 Division II is amended in its entirety read as follows:

Chapter 1 Division II
Administrative Provisions

For administrative provisions for this Code, see Section 16.01.040."

SECTION 9: Chapter 16.10 of the MPMC is amended in its entirety to read as follows:

"Chapter 16.10 ENERGY CODE

16.10.010 Document adopted by reference.

Pursuant to Government Code § 50022.9, the City Council incorporates by reference the California Energy Code, 2019 Edition, as published in Title 24, Part 6 of the California Code of Regulations.

16.10.020. Section 100.2 of Subchapter 1 added.

Section 100.2 is added to Subchapter 1 to read as follows:

Section 100.01
Administrative Provisions

For administrative provisions for this Code, see Section 16.01.040."

SECTION 10: Chapter 16.11 of the MPMC is amended in its entirety to read as follows:

"Chapter 16.11 HISTORICAL BUILDING CODE

16.11.010 Document adopted by reference.

Pursuant to Government Code § 50022.9, the City Council incorporates by reference the California Historical Building Code, 2019 Edition, as published in Title 24, Part 8 of the California Code of Regulations.

16.11.020. Chapter 8-1(1) added.

Chapter 8-1(1) is added to read as follows:

Chapter 8-1(1)
Administrative Provisions

For administrative provisions for this Code, see Section 16.01.040."

SECTION 11: Chapter 16.12 of the MPMC is amended in its entirety to read as follows:

"Chapter 16.12 EXISTING BUILDING CODE

16.12.010 Document adopted by reference.

Pursuant to Government Code § 50022.9, the City Council incorporates by reference the California Existing Building Code, 2019 Edition, as published in Title 24, Part 10, of the California Code of Regulations.

16.12.020. Chapter 1 Division 2 amended.

Chapter 1 of Division 2 is amended in its entirety to read as follows:

Chapter 1 Part 2
Administrative Provisions

For administrative provisions for this Code, see Section 16.01.040."

SECTION 12: Chapter 16.13 of the MPMC is amended in its entirety to read as follows:

"Chapter 16.13 GREEN BUILDING STANDARDS CODE

16.13.010 Document adopted by reference.

Pursuant to Government Code § 50022.9, the City Council incorporates by reference the California Green Building Standards Code, 2019 Edition, as published in Title 24, Part 11, of the California Code of Regulations.

16.13.020. Chapter 1-1 added.

Chapter 1-1 is added to read as follows:

Chapter 1-1
Administrative Provisions

For administrative provisions for this Code, see Section 16.01.040."

SECTION 13: Chapter 16.14 of the MPMC is amended in its entirety to read as follows:

"Chapter 16.14 REFERENCED STANDARDS CODE

16.14.010 Document adopted by reference.

Pursuant to Government Code § 50022.9, the City Council incorporates by reference the California Referenced Standards Code, 2019 Edition, as published in Title 24, Part 12, of the California Code of Regulations."

SECTION 14: Chapter 16.15 of the MPMC is amended in its entirety to read as follows:

"Chapter 16.15 POOL AND SPA CODE

16.15.010 Document adopted by reference.

Pursuant to Government Code § 50022.9, the City Council incorporates by reference the International Pool and Spa Code, 2015 Edition, as published by the International Code Council, Inc.

16.15.020. Chapter 1, Part 2 Administration and Enforcement amended.

Chapter 1 of Part 2 is amended in its entirety to read as follows:

Chapter 1, Part 2
Administrative Provisions

For administrative provisions for this Code, see Section 16.01.040."

SECTION 15: Chapter 16.21 of the MPMC is amended to read as follows:

"Chapter 16.21 EXCAVATION AND GRADING CODE

16.21.010 Document adopted by reference.

Pursuant to Government Code § 50022.9, the City Council incorporates by reference the California Building Code, 2019 Edition, as published in Title 24, Part 2, Volume 2, Appendix J of the California Code of Regulations.

~~Appendix J of that certain document, known and designated as the California Building Code, 2019 Edition, published by the California Building Standards Commission is incorporated herein by reference, subject to the additions, deletions and amendments specified in this chapter, and shall be known as the Monterey Park Excavation and Grading Code.~~"

Section 16: Chapters 17.01 and 17.02 of the MPMC are amended in their entirety to read as follows:

"Chapter 17.01. CALIFORNIA FIRE CODE

17.01.010 Adoption of the California Fire Code

Pursuant to Government Code § 50022.9, the City Council incorporates by reference the California Fire Code, 2019 Edition ("CFC"), as published at Title 24, Part 9, of the California Code of Regulations. The CFC, as adopted by the MPMC, includes Appendices Chapter 4, B, C, D, and O.

Chapter 17.02 LOCAL AMENDMENTS TO CALIFORNIA FIRE CODE

17.02.010 Amendment—Application of Residential Code.

Section 102.5 is amended to read as follows:

102.5 Application of Residential Code. Where structures are designed and constructed in accordance with the International Residential Code, the provisions of this code apply as follows:

1. Construction and designed provisions: Provisions of this code pertaining to the exterior of the structure will apply including, without limitation, premises identification, fire apparatus access and water supplies. Provisions of this code pertaining to the interior of the structure when specifically required by this code including, without limitation, Section ~~903.1~~ 903 where interior or exterior systems or devices are installed, construction permits required by Section 105.7 of this code will also apply.
2. Administrative, operational, and maintenance provisions: All such provisions of this code will apply.

17.02.020 Addition—Police Powers.

Section 103.5 is added to read as follows:

103.5 Police Powers. The fire code official and deputies have the powers of police officers in performing their duties under this code. When requested to do so by the fire code official, the chief of police of the jurisdiction is authorized to assign such available police officers as necessary to assist the fire code official in enforcing the provisions of this code.

17.02.030 Deletion – Mobile food preparation vehicles.

Section 105.6.30 is deleted in its entirety.

17.02.040 Amendment—Appeals.

Section 109, including its subparts is amended in its entirety to reads as follows:

109.1 Grounds for Appeal. Any aggrieved party may appeal any of the following decisions of the Fire Chief:

1. Disapproval of any application.
2. Refusal to grant any permit applied for when it is claimed that the provisions of this California Fire Code do not apply.
3. Interpretation of this California Fire Code.
4. Determination of suitability of alternate materials or types of construction or materials to types of construction or methods.

109.2 Written Decision. Any such decision must be in writing and a copy thereof will be served upon the applicant, if any, by mail. Any such decision will be final, unless an appeal will be filed there from, within the time and in the manner prescribed by this section.

109.3 Appeal Procedure. Any person dissatisfied with any such determination or decision of the Fire Chief has the right of appeal via the Administrative Civil Review

Process established under the provisions of Chapter 5.48 of the Monterey Park Municipal Code.

109.4 Notice of Appeal. Any person desiring to take such an appeal must, within five days after receipt of the written decision of the Fire Chief, file a written notice of appeal with the Fire Chief for further review through an Administrative Hearing. Such written notice of appeal must be on a form provided by the Monterey Park Fire Department and contain such information as may be required for the Administrative Review.

109.5 Hearing. Each such appeal will be set for hearing for the Administrative Review. Not less than five days before the date of such hearing, written notice of the time and place of the hearing will be given to the applicant.

109.6 Hearing Procedure. At the time of the hearing, the Hearing Examiner will consider the evidence of the appellant, of the Fire Chief, or their authorized representative, and any other evidence, which may be presented.

109.7 Final Decision. At or after the conclusion of the hearing, the Hearing Examiner will render its findings of fact and its decision in writing, and will furnish a copy thereof to the Fire Chief, and will also serve a copy thereof upon the appellant by mail.

17.02.050 Amendment—Definition added.

Section 202 is amended by adding the following definition:

ALL WEATHER SURFACE. A road surface constructed to the minimum standards approved by the jurisdiction capable of supporting loads of 80,000 pounds.

17.02.060 Amendment—Definitions revised.

Section 202 is amended by revising the following definitions:

FIRE CHIEF. The Chief Officer of the City of Monterey Park Fire Department.

FIRE CODE OFFICIAL. The Fire Chief or other member of the fire service appointed by the Fire Chief, charged with the administration and enforcement of the Code.

17.02.070. Amendment—Combustible Waste Material.

Section 304.1.2 is amended to read as follows:

304.1.2 Vegetation. Weeds, grass, vines or other growth that is capable of being ignited and endangering property, must be cut down and removed by the owner or occupant of the premises. Vegetation clearance requirements in areas deemed a fire hazard by the Fire Chief or Fire Code Official must maintain a defensible space around all buildings and structures as follows:

~~(b)~~ Ground clearance. The space surrounding every building or structure must be maintained in accordance with the following:

Any person that owns, leases, controls, operates, or maintains any building or structure in, upon, or adjoining any mountainous area or forest-covered lands, brush covered lands, or grass-covered lands, or any land which is covered with flammable material, must at all times do the following:

(1) Maintain around and adjacent to such building or structure a firebreak made by removing and clearing away, for a distance of not less than 30 feet on each side thereof or to the property line, whichever is nearer, all flammable vegetation or other combustible growth. This section does not apply to single specimens of trees, ornamental shrubbery, or similar plants which are used as ground cover, if they do not form a means of rapidly transmitting fire from the native growth to any building or structure.

(2) Maintain around and adjacent to any such building or structure additional fire protection or fire-break made by removing all bush, flammable vegetation, or combustible growth which is located from 30 to 100 feet from such building or structure or to the property line, whichever is nearer, as required by the enforcing agency if he finds that, because of extra hazardous conditions, a fire break of only 30 feet around such building or structure is not sufficient to provide reasonable fire safety. Grass and other vegetation located more than 30 feet from such building or structure and less than 18 inches in height above the ground may be maintained where necessary to stabilize the soil and prevent erosion.

17.02.080 Amendment—Open burning.

Section 307.1 is amended to reads as follows:

307.1 Bonfires, Weed Abatement, Religious Burning, and Outdoor Rubbish Fires. No person may build, light, maintain, or cause or permit to be built, lighted or maintained, any open or outdoor fire; use, or cause or permit to be used, any fire for clearing land; burn or cause or permit to be burned, any brush, trash, rubbish, stubble, or other flammable or combustible material, unless he complies with the regulations set forth in this section as follows:

1. Applicant must first secure from the Fire Chief, or their authorized representative, a written permit for such burning.
2. Such burning must be in accordance with the following:
   a. Each recipient of a written permit for burning must follow all rules shown. Acceptance of a burning permit will constitute an agreement that the holder will be responsible for all damages resulting from burning.
   b. Any such fire must be maintained in one small pile or area that can be readily controlled.

c. At least one adult person must be in actual attendance and in charge of such fire at all times during its burning. He/she must have on hand at all such times water, garden hose, shovels, or other fire extinguishing equipment.
d. Such burning will be permitted only at a safe distance from all structures or other combustible material.
e. Burning will be permitted only if there is no appreciable wind.
f. Upon completion of any such burning, all resultant embers must be extinguished and hot ashes must be thoroughly wet down.

3. The Fire Chief may prohibit any or all outdoor fires or burning at any time he/she deems that atmospheric conditions or local circumstances will make such a fire hazardous.

17.02.090 Deletion – Mobile Food Preparation Vehicles

Section 319 is deleted in its entirety.

17.02.100 Amendment—Automatic sprinkler systems.

Section 903 is amended as follows:

Amend Section 903.1.2 to read as follows:

903.1.2 Partial Automatic Fire Suppression Systems Prohibited.
Whenever an automatic fire suppression system is installed for any portion of any building or structure, an automatic fire suppression system must be installed for the entire building or structure.

Amend Section 903.2 to read as follows:

903.2 Where required. Approved automatic extinguishing systems must be installed:

1. In all new buildings regardless of the type of construction or occupancy.

Exceptions:
A) Detached Group U occupancies, providing the floor area does not exceed 1000 square feet.
B) ~~Other minor buildings and/or occupancies as approved by the Fire Chief~~. Unmanned facilities and/or minor buildings and/or occupancies as approved by the Fire Chief.

2. In existing buildings with an occupancy change as required by other sections of the Fire Code.

Amend Section 903.6 as follows:

903.6 Existing Occupancies. An automatic sprinkler system will be installed in existing occupancies as follows:

1. In all commercial and industrial buildings greater than 5000 square feet in area when enlarged by an addition to the existing structure or as required by the Fire Chief.

2. In all commercial and industrial buildings equal to or less than 5000 square feet in area, when enlarged by an addition to the existing structure, exceeds 5000 square feet or as required by the Fire Chief.

3. In all commercial and industrial buildings when an addition to the existing area exceeds fifty percent (50%) within any twelve-month period.

4. In all residential occupancies when an addition to the existing living area exceeds fifty percent (50%) within any twelve-month period.

5. As required by the Fire Code due to a change in occupancy.

6. As required by the Fire Code in Chapter 11.

Amend Section 903.3.1.1 as follows:

903.3.1.1 NFPA 13 sprinkler systems. In other than Group R buildings that are not over two stories in height, automatic sprinkler systems will be designed and installed in accordance with the NFPA 13, 2019 Edition as amended in Chapter 80 except as provided in Sections 903.3.1.1.1 and 903.3.1.1.2.

Add Section 903.3.1.1.3 to read as follows:

903.3.1.1.3 Riser room location. In structures over three stories in height or served by more than two fire sprinkler risers, a dedicated Fire Sprinkler Riser Room must be provided at an approved location. The riser room must be accessible to emergency personnel from the exterior of the building.

Amend Section 903.3.1.2 as follows:

903.3.1.2. NFPA 13R sprinkler systems. Where allowed in buildings of Group R, up to and including two stories in height, automatic sprinkler systems will be installed throughout in accordance with NFPA 13R, 2019 Edition as amended in Chapter 80.

Add Section 903.3.1.2.4 to read as follows:

903.3.1.2.4 Basement spaces. In residential buildings with automatic sprinkler systems designed and installed in accordance with NFPA 13R, basements used for living or storage purposes must be fully sprinklered with residential type heads.

Add Section 903.3.1.3 to read as follows:

903.3.1.3. NFPA 13D sprinkler systems. Where allowed, automatic sprinkler systems will be installed in one- and two-family dwellings will be installed throughout in accordance with NFPA 13D, ~~2016~~ 2019 Edition as amended in Chapter 80.

Add Section 903.3.1.3.1 to read as follows:

903.3.1.3.1. Detailed requirements. Automatic sprinkler system protection for one and two-family dwellings will be designed and installed in accordance with NFPA 13D, 2019 Edition with the following modifications:

1. A local water flow alarm must be provided for all sprinkler systems.
2. Attics and basements used for storage purposes must be fully sprinklered with residential type heads.
3. Overhead piping must be hydrostatically tested for leakage at 200 psi for two hours and inspected before drywall or insulation installation.
4. A minimum of three spare representative sprinkler heads and installation wrench must be provided at an approved location.

Amend Section 903.3.5 as follows:

903.3.5 Water Supplies. Water supplies for automatic sprinkler systems must comply with this section and the standards referenced in section 903.3.1. The potable water supply must be protected against backflow in accordance with the *Health and Safety Code* and the Monterey Park Municipal Code. Hydraulic calculations for systems designed per NFPA 13, 13D, or 13R will include a ten percent (10%) reduction from the available supply source.

17.02.110 Addition—Multiple fire alarm and detection systems.

Section 907.1.6 is added to read as follows:

907.1.6 Multiple Fire Alarm Systems. Multiple fire alarm systems within single protected premises must be interconnected and must transmit signals as one system.

17.02.120 Amendment—Emergency Responder Radio Coverage

Section 1103.2 is amended to read as follows:

1103.2 Emergency responder radio coverage in existing buildings. Existing buildings that do not have approved radio coverage for emergency responders within the building based upon the existing coverage levels of the public safety communication systems of the jurisdiction at the exterior of the building, must be equipped with such coverage according to one of the following:

1. Whenever an existing wired communication system cannot be repaired or is being replaced, or where not approved in accordance with Section 5101, Exception 1.

2. Whenever total additions result in an increase of more than 6,000 square feet in the total floor area, including mezzanines or additional stories, regardless of ownership. Additions must be cumulative with each application for a building permit from January 1, 2011.
3. Whenever the value of alternations requiring permits exceed $500,000 in valuation. Alterations values must be cumulative with each application for a building permit from January 1, 2011.

17.02.130 Amendment—Explosive materials.

Sections 5601.2 and 5601.3 are amended to read as follows:

5601.2 The manufacture, possession, storage, sale, transportation and use of explosive materials will be prohibited, unless it is authorized by the State Fire Marshal. This will not apply to hand loading of small arms ammunition for personal use when not for resale.

5601.3 Non explosive materials must be bolts, explosive rivets or cartridges for explosive-actuated power tasks in quantities involving less than 500 pounds.

17.02.140 Addition—Fireworks display.

Sections 5608.1.2 and 5608.1.3 are added to read as follows:

5608.1.2 Permits. It is unlawful for any person to present or conduct any public display of fireworks within the City of Monterey Park without first having obtained a permit there from the Fire Chief or their representative.

5608.1.3 Detailed Requirements. The public display of fireworks within the City of Monterey Park must be in accordance with Section 5608.1 of this Code and all of the following:

1. The Fire Chief is authorized to grant permits for supervised public displays of fireworks to be conducted by the city or by other organizations. Every such display must be personally supervised by a competent, licensed pyrotechnic operator approved by the Fire Chief. Each such display must be held at an approved location and must be so discharged or fired as, in the opinion of the Fire Chief after proper investigation, not to be hazardous to property or to endanger any person.
2. Applications for permit must be made in writing at least ten days in advance of the date of the display. After such permit will have been granted, the sale, possession, use, and/or distribution of fireworks for such display will be lawful for the permitted activity and time frame only. No permit granted under this code will be transferable.
3. The permittee must furnish a bond or certificate of insurance in an amount deemed adequate by the Fire Chief for the payment of all damages which may be caused either to a person or persons or to property by reason of the permitted display and arising from any acts of the permittee, agents, employees, or subcontractors.

4. When required by the Chief, the pyrotechnic operator will employ and provide additional personnel whose sole duty will be the enforcement of crowd control around the display area. Unauthorized persons will not be allowed to enter the discharge site until the site has been inspected and cleared after conclusion of the display by the pyrotechnic operator.
5. The Fire Chief is authorized to require rope barriers, fences, signs or other devices to be installed around the display area to aid in crowd control.
6. The Fire Chief is authorized to adopt such additional rules and regulations not inconsistent herewith as are reasonably required to prevent injury to persons and/or property, including without limitation the requirement for standby fire personnel or apparatus at the firing site.
7. If the Fire Chief or appointed designee determines that there is a lack of crowd control or that the crowd is in danger, the display will be immediately discontinued. If at any time high winds or wet weather creates a danger, the display will be postponed until weather conditions are acceptable to the Chief.
8. The entire firing site must be inspected immediately following a display and before allowing public access for the purpose of locating unexploded aerial shells and/or hazardous debris. Unexploded shells will not be handled within 15 minutes after the time of their firing. Such shells must then be doused thoroughly with water, allowed to stand for at least 5 minutes, and then be submersed in a full bucket of water.

17.02.150 Addition—Fireworks manufacturing.

Section 5614 is added to read as follows:

SECTION 5614
FIREWORKS MANUFACTURING

5614.1 It is unlawful to manufacture fireworks within the City of Monterey Park.

5614.2 The Chief is authorized to seize, take, remove or cause to be removed, at the expense of the owner, all stocks of fireworks or explosives offered or exposed for sale, or stored or held in violation of this section.

17.02.160 Addition—Sale of fireworks.

Section 5615 is added to read as follows:

SECTION 5615
SALE OF FIREWORKS

5615.1 Sales of Fireworks. The sale of "Safe and Sane" fireworks within the City of Monterey Park city limits will be in accordance with Section 3301 of the Code, Chapter 5.48 of the Monterey Park Municipal Code, and all of the following:

5615.1.1 It is unlawful for any person to sell, or to cause or permit to be sold, within the city, any fireworks at retail without first securing a permit to do so from the Fire Chief. A

separate permit must be obtained for each separate or distinct place of business or stand. Any person having a permit, who fails to comply with the conditions of the permit as provided for by this section, will be deemed to be operating without a permit. Application must be made no earlier than April 1 and no later than May 15 of each calendar year.

5615.1.2 The maximum number of permits, which may be issued will be (20) during any one calendar year.
If the number of applications exceed the number of permits to be issued, the permittees, who did not violate any requirements of this chapter during the preceding year, will have first priority for the available permits until April 15, provided each permittee represents the same participating organization which operated under the permit during the preceding year.
If there are any additional permits available, such additional permits will be granted by a drawing supervised by the license officer, or other municipal officer designated by the City Council.

1. The following qualifications must be met by each application for a permit:
   a. No permit will be issued to any person, firm, or corporation, except any veterans organization or any auxiliary of such organization chartered by the Congress of the United States, maintaining a charter and meeting place in the City whose membership is composed of members now and/or heretofore serving in the armed forces of the United States; or, any nonprofit associations or corporations organized primarily for civic betterment or youth activities, charitable, or religious purposes.
   b. Each such organization must have its principal and permanent meeting place within the city limits of Monterey Park, and must have been organized and established within the city limits of Monterey Park, and must have been organized and established within such city limits for a minimum of one year continuously preceding the filing of an application for a permit.
   c. No organization may receive more than one permit for fireworks sales during any one calendar year.
   d. No stand will be within 500 feet of another stand.
2. Each applicant for a permit must take out and maintain in force, while any such fireworks stand is open, public liability insurance in an amount of not less than $1,000,000 for injury to one person, and not less than $1,000,000 for any one occurrence, and one million dollars ($1,000,000) for damage to property. The City of Monterey Park must be named as "additional insured" on all policies required hereunder. Before the issuance of a permit hereunder, each applicant must furnish evidence satisfactory in form and substance to the city that such insurance is in force, and adequate legal assurance that the carrier will give the city at least thirty days' prior written notice of the cancellation of the policy, during the effective period of the permit.
3. Applicants for a permit hereunder must pay a permit fee in accordance with the City of Monterey Park Master Schedule of Fees and Charges for each fireworks stand.
4. It will be unlawful for any person to sell at retail "dangerous fireworks," as defined in the California State Fireworks Law.

5. No "safe and sane" fireworks, as defined in the California State Fireworks Law, will be sold or offered for sale at retail within the City, except from 12:00 noon on June 28 to 9:00 p.m. on July 4 of each year. In addition, the discharge of fireworks is limited to 10 a.m. to 10 p.m. on only July 4.
6. No "safe and sane" fireworks will be sold or offered for sale at retail unless the fuses or other igniting devices are protected by approved protective caps, or each item or group of items is enclosed or sealed in a package bearing the California State Fire Marshal's Seal of Registration, upon which the wholesaler's license number appears.
7. The Fire Chief is authorized to promulgate reasonable additional rules and regulations for the operation of fireworks stands, in order to eliminate or reduce to a minimum the risk of fire or injury to persons or damage to property. A copy of any such rules and regulations must be posted in a prominent place in each fireworks stand. Failure to comply with said rules and regulations will be grounds for the immediate revocation of any permit granted under this section.

17.02.170 Amendment—Locations where aboveground tanks are prohibited.

Section 5704.2.9.6.1 is amended to read as follows:

5704.2.9.6.1 The storage of Class I and II liquids in above ground tanks outside of buildings is prohibited within the limits established by law as the limits of districts in which such storage is prohibited.

1. Class I and II liquids must be stored in above ground tanks outside of buildings only at locations in the city zoned or used for Manufacturing purposes, as designated in the Monterey Park Municipal Code and the zoning map of the City of Monterey Park.
   Exception: Above ground storage tanks dispensing Class I and II liquids will not be allowed in motor fuel service stations.
2. The storage of Class I and II liquids in above ground tanks may be permitted in other zones if the Fire Chief finds that such use in a particular installation will not create an unreasonable risk of injury to person or property after consideration of special factors; such as, topographical conditions, nature of occupancy and proximity to buildings or adjoining property, and height and character of construction of such buildings, capacity and construction of proposed tanks and character of liquids to be stored, degree of private fire protection to be provided, and facilities of the Fire Department available to cope with flammable or combustible liquid fires.

17.02.180 Amendment—Liquefied petroleum gases—Location of containers.

Section 6104.2 is amended to read as follows:

6104.2 Liquefied petroleum gas may be stored only at locations zoned or used for Manufacturing Development purposes, as designated in the Monterey Park Municipal Code and the zoning map of the City of Monterey Park.

Such storage, however, may be permitted in other zones if the fire code official finds that such use in a particular installation will not create an unreasonable risk of injury to person or property, after consideration of the special features; such as, topographical conditions, nature of occupancy and proximity to building or adjoining property and height and character of construction of such buildings, capacity and construction of proposed tanks, and character of liquids to be stored, degree of private fire protection to be provided, and facilities of the Fire Department to cope with flammable or combustible liquid fires.

17.02.190 Amendment—Appendix Chapter D Dead ends.

Section D103.4 of Appendix Chapter D is amended to read as follows:

D103.4 Dead Ends. Dead-end fire apparatus access roads in excess of 150 feet must be provided with width and turnaround provisions to the minimum standards adopted by the jurisdiction.

17.02.200 Amendment — Appendix Chapter O Haunted Houses

Section O101.2 of Appendix Chapter O is amended to read as follows:

O101.2 Permits. An operational permit must be required for haunted houses, ghost walks, or similar amusement uses in accordance with Appendix O101.2.

EXCEPTION: Haunted houses, ghost walks, or similar amusement uses in Group R-3 occupancies.

SECTION 17: ***Construction***. This Ordinance must be broadly construed in order to achieve the purposes stated in this Ordinance. It is the City Council's intent that the provisions of this Ordinance be interpreted or implemented by the City and others in a manner that facilitates the purposes set forth in this Ordinance.

SECTION 18: ***Enforceability***. Repeal of any provision of the Monterey Park Municipal Code does not affect any penalty, forfeiture, or liability incurred before, or preclude prosecution and imposition of penalties for any violation occurring before this Ordinance's effective date. Any such repealed part will remain in full force and effect for sustaining action or prosecuting violations occurring before the effective date of this Ordinance.

SECTION 19: ***Validity of Previous Code Sections***. If this entire Ordinance or its application is deemed invalid by a court of competent jurisdiction, any repeal or amendment of the MPMC or other city ordinance by this Ordinance will be rendered void and cause such previous MPMC provision or other the city ordinance to remain in full force and effect for all purposes.

SECTION 20: ***Environmental Assessment.*** The City Council finds that adoption of this Ordinance is exempt from review under the California Environmental Quality Act (California Public Resources Code §§ 21000, et seq., "CEQA") and the regulations

State of California)
County of Los Angeles) ss.
City of Monterey Park)

I, Vincent D. Chang, City Clerk of the City of Monterey Park, California, do hereby certify that the foregoing Ordinance No. 2165 was introduced, and placed upon its first reading at a regular meeting of the City Council of the City of Monterey Park, held on the 6th day of November, 2019. That thereafter on the 20th day of November, 2019, said Ordinance was duly passed, approved and adopted by the following vote:

Ayes:	Council Members:	Lam, Real Sebastian, Ing, Liang, Chan
Noes:	Council Members:	None
Absent:	Council Members:	None
Abstain:	Council Members:	None

Dated this 20th day of November, 2019.

Vincent D. Chang, City Clerk
City of Monterey Park, California

promulgated thereunder (14 California Code of Regulations §§ 15000, et seq., the "State CEQA Guidelines") because it consists only of minor revisions and clarifications to an existing code of construction-related regulations and specification of procedures related thereto and will not have the effect of deleting or substantially changing any regulatory standards or findings required therefor, and therefore does not have the potential to cause significant effects on the environment. In addition, this ordinance is an action being taken for enhanced protection of the environment and is exempt from further review under CEQA Guidelines § 15308.

SECTION 21: ***Severability***. If any part of this Ordinance or its application is deemed invalid by a court of competent jurisdiction, the city council intends that such invalidity will not affect the effectiveness of the remaining provisions or applications and, to this end, the provisions of this Ordinance are severable.

SECTION 22: ***Publication***. The City Clerk is directed to certify the passage and adoption of this Ordinance; cause it to be entered into the City of Monterey Park's book of original ordinances; make a note of the passage and adoption in the records of this meeting; and, within fifteen (15) days after the passage and adoption of this Ordinance, cause it to be published or posted in accordance with California law.

SECTION 23: ***Effective Date***. This Ordinance will become effective on the thirty-first (31st) day following its passage and adoption.

SECTION 24: ***Filing with Building Standards Commission***. The City Clerk must file a certified copy of this Ordinance with the California Building Standards Commission.

PASSED, APPROVED AND ADOPTED this 20th day of November, 2019.

Hans Liang, Mayor
City of Monterey Park, California

ATTEST:

Vincent D. Chang, City Clerk
City of Monterey Park, California

APPROVED AS TO FORM:
Mark D. Hensley, City Attorney

By: _____
Karl H. Berger, Assistant City Attorney

EXHIBIT A

Local Amendments
To The
2019 California Building Standards Code

The City Council finds as follows:

SECTION 1: Pursuant to the requirements of Health and Safety Code §17958.7, the City Council finds that there are local climatic, geographic, and topographic conditions justifying the various local amendments to the California Building Standards Code as set forth herein.

SECTION2: Specifically, the City Council finds:

A. Climatic Conditions

1. The City of Monterey Park is a densely populated area within a climate system capable of producing major winds, fire and rain related disasters, including but not limited to those caused by the Santa Ana winds and El Niño (or La Niña) subtropical-like weather. This region is especially susceptible to more active termite and wood attacking insects and microorganisms.

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

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

4. The warm, dry climate is conducive to swimming pools which creates a higher probability of child drowning where pools are unprotected.

B. Geological Conditions

1. The City of Monterey Park is a densely populated area having buildings and structures constructed over and near a vast array of

fault systems capable of producing major earthquakes, including but not limited to the 1994 Northridge Earthquake, the 1987 Whittier Narrows Earthquake, the 1971 San Fernando Earthquake and the 1933 Long Beach Earthquake.

2. The October 17, 1989, Santa Cruz earthquake resulted in only one major San Francisco fire in the Marina district. But, when combined with the 34 other fires and over 500 responses, the department was taxed to its full capabilities. The Marina fire was difficult to contain because mains supplying water to the district burst during the earthquake. If more fires had been ignited by the earthquake, it would have been difficult for the fire department to contain them. This situation creates the need for both additional fire protection measures and automatic on-site fire protection for building occupants since a multitude of fires may result from breakage of gas and electric lines as a result of an earthquake. As noted by "Planning Scenario on a Major Earthquake Department on of the Newport-Inglewood Fault Zone, 1988, State Conservation," "unfortunately meeting the minimum earthquake standards of building codes barely places a building on the verge of being legally unsafe."

3. Traffic and circulation congestion presently existing in the City of Monterey Park often challenges fire department response times. This condition will be exacerbated by any major disaster, including any earthquake wherein damage to the highway system will occur. This condition makes the need for additional on-site protection for property occupants necessary.

4. Placement of multiple occupancy buildings, location of arterial roads, and fire department staffing constraints due to recent revenue-limiting state legislation have made it difficult for the fire department to locate additional fire stations and provide manpower sufficient to concentrate fire companies and personnel to control fires in high density apartment or condominium buildings. Fire Department equipment does not allow easy access to areas of buildings greater than 55 feet above the level of Fire Department vehicle access. These conditions create the need for built-in onsite fire protection systems to protect occupants and property until firefighting apparatus and personnel arrive on the scene.

5. The City of Monterey Park is located in an area subject to a climatic condition of high winds and low humidity. This combination of events creates an environment which is conducive to rapidly spreading fires. Control of such fires requires rapid response. Obstacles generated by a strong wind, such as fallen trees, street lights and utility poles, and the requirement to climb 75 feet vertically up flights of stairs will greatly impact the response time to

reach an incident scene. Additionally, ASCE-7, Section 6, Figure 6 - 2 Height Adjustment Table identifies a significant increase in the amount of wind force at 60 feet above the ground. Use of aerial type firefighting apparatus above this height would place rescue personnel at increased risk of injury.

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

7. Untreated wood roofs cause or contribute to serious fire hazard and to the rapid spread of fires when such fires are accompanied by high winds. Pieces of burning wooden roofs become flying brands and are carried by the wind to other locations and thereby spread fire quickly.

C. Topographic Conditions

1. The City of Monterey Park is in an area that has a high percentage of structures on hillsides. Access for fire or rescue response and staging for firefighting are made challenging and difficult due to the terrain.

SECTION 3: Because of the local climatic, geologic and topographic conditions, the following local amendments are needed:

2019 California Building Code		
Code Section	**Topic**	**Finding**
Chapter 1, Division II	Administrative Provisions	Administrative
Section 202	Definition	Administrative

Section 903.1.2	Partial Automatic Suppression Systems	A-1, A-2, B-4, C-1
Section 903.2	Automatic Sprinkler Systems Required	A-1, A-2, B-4, C-1
Section 903.3.1.1	NFPA 13 Sprinkler Systems	A-1, A-2, B-4, C-1
Section 903.3.1.1.3	Riser Room Location	A-1, A-2, B-4, C-1
Section 903.3.1.2	NFPA 13R Sprinkler Systems	A-1, A-2, B-4, C-1

Section 903.3.1.2.4	Basement Spaces	A-1, A-2, B-4, C-1
Section 903.3.1.3	NFPA 13D Sprinkler Systems	A-1, A-2, B-4, C-1
Section 903.3.1.3.1	Detailed Requirements	A-1, A-2, B-4, C-1
Section 903.3.5	Water Supplies	A-1, A-2, B-4, C-1
Section 903.6	Existing Occupancies	A-1, A-2, B-4, C-1
Section 907.1.6	Multiple Fire Alarm Systems	A-1, A-2, B-4, C-1
Table 1505.1	Roof Covering	A-1, A-2, B-4, C-1
1505.1.3	Roof Covering	A-1, A-2, B-4, C-1

Section 1507.3.1	Deck Requirements	B-1
Section 1613.5 and 1613.5.1	Values for Vertical Combinations	B-1
Section 1613.5.2	Wood Diaphragms	B-1
Section 1613.5.3	Structural Separation	B-1
Section 1613.6	Seismic Design Provisions for Hillside Buildings	B-1
Section 1613.7	Suspended Ceilings	B-1
Section 1704.6	Structural Observations	B-1
Section 1704.6.2	Structural Observations For Seismic Resistance	B-1
Section 1705.3	Concrete Construction	B-1
Section 1705.12	Special Inspections For Seismic Resistance	B-1
Section 1807.1.4	Permanent Wood Foundation Systems	A-1, B-1
Section 1807.1.6	Prescriptive Design Of Concrete And Masonry Foundation Walls	B-1
Section 1807.2	Retaining Walls	
Section 1807.3.1	Limitations	
Section 1809.3	Stepped Footings	B-1
Section 1809.7 and Table 1809.7	Prescriptive Footings For Light-Frame Construction	B-1
Section 1809.12	Timber Footings	A-1, B-1
Section 1810.3.2.4	Timber	A-1, B-1
Section 1905.1.7	Minimum Reinforcement	B-1
Section 1905.1 to Add Sections 1905.1.9 through 1905.1.11	Reinforcement	B-1
Section 2304.10.1	Fastener Requirements	B-1
Section 2304.10.2.1	Quality of Nails	
Section 2304.12.5	Wood Used In Retaining Walls And Cribs	A-1, B-1
Section 2305.4	Hold-down Connectors	B-1

Section 2306.2	Wood-Frame Diaphragms	B-1
Section 2306.3	Wood-Frame Shear Walls	B-1
Section 2307.2	Wood-frame shear walls	B-1
Table 2308.6.1	Wall Bracing Requirements	B-1
Section2308.6.5, 2308.6.5.1 and 2308.6.5.2, and Figures 2308.6.5.1 and 2308.6.5.2	Alternate Bracing	B-1
Section 2308.6.8.1	Foundation Requirements	B-1
Section 2308.6.9	Attachment Of Sheathing	B-1
Section 3101.1	Scope	B-1
Section 3114	Intermodal Shipping Containers	B-1

2019 California Residential Code		
Code Section	**Topic**	**Finding**
Chapter 1, Division II	Administrative Provisions	Administrative
Section R301.1.3.2	Woodframe Structures	B-1
Section R301.1.4	Seismic Design Provisions for Buildings on Slopes Steeper than 33%	B-1, C-1
Table R301.2(1)	Design Criteria	Administrative
Section R301.2.2.6	Irregular Buildings	B-1
Section R301.2.2.11	Anchorage Of Mechanical, Electrical, Or Plumbing Components And Equipment	B-1

Section R309.6	Fire Sprinklers	A-1, A-2, B-4, C-1
Section R313.1	Fire Sprinklers	A-1, A-2, B-4, C-1
Section R313.2	Fire Sprinklers	A-1, A-2, B-4, C-1
Section R313.3.6.2	Fire Sprinklers	A-1, A-2, B-4, C-1

Section R401.1	Application	A-1, B-1
Section R403.1.2, R403.1.3.6 and R403.1.5	General Footings	B-1
Section R404.2	Wood Foundation Walls	A-1, B-1
Section R501.1	Application	B-1
Section R503.2.4	Openings In Horizontal Diaphragms	B-1
Table R602.3(1)	Fastening Schedule	B-1
Section R602.3.2 and Table R602.3.2	Top Plate	B-1
Table R602.3(2)	Alternate Attachments to Table R602.3(1)	B-1
Section R602.10.2.3	Minimum Number Of	B-1

	Braced Wall Panels	
Table R602.10.3(3)	Bracing Requirements Based on Seismic Design Category	B-1
Table R602.10.4	Bracing Methods	B-1
Table R602.10.5	Minimum Length of Braced Wall Panels	B-1
Figure R602.10.6.1	Method ABW	B-1
Figure R602.10.6.2	Method PFH	B-1
Figure R602.10.6.4	Method CS-PF-Continuously Sheathed Portal Frame Panel Construction	B-1
Section R606.4.4	Parapet Walls	B-1
Section R606.12.2.2.3	Reinforcement Requirements For Masonry Elements	B-1
Section R803.2.4	Openings In Horizontal Diaphragms	B-1

Section R902.1	Roof Covering	A-1, A-2, B-4, C-1
Section R902.1.3	Roof Covering	A-1, A-2, B-4, C-1

Section R905.3.1	Deck Requirements	B-1
Section R1001.3.1	Vertical Reinforcing	B-1

2019 California Electrical Code		
Code Section	**Topic**	**Finding**
Article 91	Administrative Provisions	Administrative

2019 California Mechanical Code		
Code Section	**Topic**	**Finding**
Chapter 1, Division II	Administrative Provisions	Administrative

2019 California Plumbing Code		
Code Section	**Topic**	**Finding**
Chapter 1, Division II	Administrative Provisions	Administrative

2019 California Energy Code		
Code Section	**Topic**	**Finding**
Chapter 100.2	Administrative Provisions	Administrative

2019 California Historical Building Code		
Code Section	**Topic**	**Finding**
Chapter 8-1(1)	Administrative Provisions	Administrative

2019 California Existing Building Code		
Code Section	**Topic**	**Finding**
Chapter 1, Division II	Administrative Provisions	Administrative

2019 California Green Building Standards Code		
Code Section	**Topic**	**Finding**
Chapter 1-1	Administrative Provisions	Administrative

2018 International Pool and Spa Code		
Code Section	**Topic**	**Finding**
Chapter 1, Part 2	Administrative Provisions	Administrative

2019 California Fire Code		
Code Section	**Topic**	**Finding**
102.5	Application of Residential Code	Administrative
103.5	Police Powers	Administrative
105.6.30	Mobile Food Preparation Vehicles	Administrative
109	A	Administrative
202	Definitions	Administrative
304.1.2	Vegetation	A-1, A-2, B-4, C-1
307.1	Open Burning	A-1, A-2, B-4, C-1
319	Mobile Food Preparation Vehicles	Administrative
903	Fire Sprinklers	A-1, A-2, B-4, C-1
907.1.6	Multiple Fire Alarm and Detections Systems	A-1, A-2, B-4, C-1
1103.2	Emergency Radios	A-1, A-2, B-4, C-1
5601.2 and 5601.3	Explosive Materials	A-1, A-2, B-4, C-1
5608.1.2 and 5608.1.3	Fireworks Displays	A-1, A-2, B-4, C-1
5614	Fireworks Manufacturing	A-1, A-2, B-4, C-1
5615	Fireworks Sales	A-1, A-2, B-4, C-1
5704.2.9.6.1	Above Ground Tanks	A-1, A-2, B-4, C-1
6104.2	Liquefied Petroleum Gases	A-1, A-2, B-4, C-1
D103.4	Dead Ends	A-1, A-2, B-4, C-1
O101.2	Haunted Houses	A-1, A-2, B-4, C-1

California Building Code	
Section	*Rationale*
1507.3.1	Section 1507.3.1 is amended to require concrete and clay tiles to be installed only over solid sheathing. The change is necessary because there were numerous observations of tile roofs pulling away from wood framed buildings following the 1994 Northridge Earthquake. The SEAOSC/LA City Post Northridge Earthquake committee findings indicated significant problems with tile roofs was due to inadequate design and/or construction.
1613.5 and 1613.5.1	Observed damages to one- and two-family dwellings of light frame construction after the Northridge Earthquake may have been partially attributed to vertical irregularities common to this type of occupancy and construction. In an effort to improve quality of construction and incorporate lesson learned from studies after the Northridge Earthquake, the proposed modification to ASCE 7-16 Section 12.2.3.1 Exception 3 by limiting the number of stories and height of the structure to two stories will significantly minimize the impact of vertical irregularities and concentration of inelastic behavior from mixed structural systems.
1613.5.2	A joint Structural Engineers Association of Southern California (SEAOSC), Los Angeles County and Los Angeles City Task Force investigated the performance of concrete and masonry construction with flexible wood diaphragm failures after the Northridge earthquake. It was concluded at that time that continuous ties are needed at specified spacing to control cross grain tension in the interior of the diaphragm. Additionally, there was a need to limit subdiaphragm allowable shear loads to control combined orthogonal stresses within the diaphragm. Recognizing the importance and need to continue the recommendation made by the task force while taking into consideration the improve performances and standards for diaphragm construction today, this proposal increases the continuous tie spacing limit to 40 ft in lieu of 25 ft and to use 75% of the allowable code diaphragm shear to determine the depth of the sub-diaphragm in lieu of the 300 plf and is deemed appropriate and acceptable. Due to the frequency of this type of failure during the past significant earthquakes, various jurisdictions within the Los Angeles region have taken this additional step to prevent roof or floor diaphragms from pulling away from concrete or masonry walls.
1613.5.3	The inclusion of the importance factor in this equation has the unintended consequence of reducing the minimum seismic separation distance for important facilities such as hospitals, schools, police and fire stations from adjoining structures. The proposal to omit the importance factor from Equation 12.12-1 will ensure that a safe seismic separation distance is provided.
1613.6	Due to the difficulty of fire suppression vehicles accessing winding and narrow hillside properties and the probabilities for future earthquakes in the Los Angeles region, this technical amendment is

	required to address the special needs for buildings constructed on hillside locations. A joint Structural Engineers Association of Southern California (SEAOSC) and both the Los Angeles County and Los Angeles City Task Force investigated the performance of hillside building failures after the Northridge earthquake. Numerous hillside failures resulted in loss of life and millions of dollars in damage. These criteria were developed to minimize the damage to these structures and have been in use by both the City and County of Los Angeles for several years with much success.
1613.7	The California Building Code has little to no information regarding the safe design and construction requirements for ceiling suspension systems subject to seismic loads. It is through the experience of prior earthquakes, such as the Northridge Earthquake, that this amendment is proposed so as to minimize the amount of bodily and building damage within the spaces in which this type of ceiling will be installed. This proposed amendment complements ASCE 7-16 Chapter 13 Section 13.5.6.2.2 and the cited reference to ASTM E580.
1704.6	The language in Section 1704.6 of the California Building Code permits the owner to employ any registered design professional to perform structural observations with minimum guideline. However, it is important to recognize that the registered design professional responsible for the structural design has thorough knowledge of the building he/she designed. By requiring the registered design professional responsible for the structural design or their designee who were involved with the design to observe the construction, the quality of the observation for major structural elements and connections that affect the vertical and lateral load resisting systems of the structure will greatly be increased. Additional requirements are provided to help clarify the role and duties of the structural observer and the method of reporting and correcting observed deficiencies to the building official.
1704.6.2	With the higher seismic demand placed on buildings and structures in this region, the language in Section 1704.6.2 of the California Building Code would permit many low-rise buildings and structures with complex structural elements to be constructed without the benefit of a structural observation. By requiring a registered design professional to observe the construction, the quality of the observation for major structural elements and connections that affect the vertical and lateral load resisting systems of the structure will greatly be increased. An exception is provided to permit simple structures and buildings to be excluded.
1705.3	Results from studies after the 1994 Northridge Earthquake indicated that a lot of the damage was attributed to a lack of quality control during construction resulting in poor performance of the building or structure. Therefore, the proposed amendment requires special inspection for concrete with a compressive strength greater than 2,500 pounds per square inch.
1705.12	In Southern California, very few detached one- or two-family dwellings

	not exceeding two stories above grade plane are built as "box-type" structures, especially those in hillside areas and near the oceanfront. Many steel moment frames or braced frames and/or cantilevered columns within buildings can still be shown as "regular" structures by calculations. With the higher seismic demand placed on buildings and structures in this region, the language in Section 1705.12 Exception 3 of the California Building Code would permit many detached one- or two-family dwellings not exceeding two stories above grade plane with complex structural elements to be constructed without the benefit of special inspections. By requiring special inspections, the quality of major structural elements and connections that affect the vertical and lateral load resisting systems of the structure will greatly be increased. The exception should only be allowed for detached one- or two-family dwellings not exceeding two stories above grade plane assigned to Seismic Design Category A, B and C.
1807.1.4	No substantiating data has been provided to show that wood foundation systems are effective in supporting buildings and structures during a seismic event while being subject to deterioration caused by the combined detrimental effects of constant moisture in the soil and wood-destroying organisms. Wood foundation systems not properly treated and protected against deterioration, have performed very poorly and have led to slope failures. Most contractors are typically accustomed to construction in dry and temperate weather in the Southern California region and are not generally familiar with the necessary precautions and treatment of wood that makes it suitable for both seismic events and wet applications. The proposed amendment takes the precautionary steps to reduce or eliminate potential problems that may result in using wood foundation systems that experience relatively rapid decay due to the fact that the region does not experience temperatures cold enough to destroy or retard the growth and proliferation of wood-destroying organisms.
1807.1.6	With the higher seismic demand placed on buildings and structures in this region, it is deemed necessary to take precautionary steps to reduce or eliminate potential problems that may result by following prescriptive design provisions that does not take into consideration the surrounding environment. Plain concrete performs poorly in withstanding the cyclic forces resulting from seismic events. In addition, no substantiating data has been provided to show that under-reinforced foundation walls are effective in resisting seismic loads and may potentially lead to a higher risk of failure. It is important that the benefit and expertise of a registered design professional be obtained to properly analyze the structure and take these issues into consideration.
1807.2	No substantiating data has been provided to show that wood foundation systems are effective in supporting buildings and structures during a seismic event while being subject to deterioration caused by the combined detrimental effects of constant moisture in the soil and wood-destroying organisms. Wood foundation systems

	not properly treated and protected against deterioration, have performed very poorly and have led to slope failures. Most contractors are typically accustomed to construction in dry and temperate weather in the Southern California region and are not generally familiar with the necessary precautions and treatment of wood that makes it suitable for both seismic events and wet applications. The proposed amendment takes the precautionary steps to reduce or eliminate potential problems that may result in using wood foundation systems that experience relatively rapid decay due to the fact that the region does not experience temperatures cold enough to destroy or retard the growth and proliferation of wood-destroying organisms.
1807.3.1	No substantiating data has been provided to show that wood foundation systems are effective in supporting buildings and structures during a seismic event while being subject to deterioration caused by the combined detrimental effects of constant moisture in the soil and wood-destroying organisms. Wood foundation systems not properly treated and protected against deterioration, have performed very poorly and have led to slope failures. Most contractors are typically accustomed to construction in dry and temperate weather in the Southern California region and are not generally familiar with the necessary precautions and treatment of wood that makes it suitable for both seismic events and wet applications. The proposed amendment takes the precautionary steps to reduce or eliminate potential problems that may result in using wood foundation systems that experience relatively rapid decay due to the fact that the region does not experience temperatures cold enough to destroy or retard the growth and proliferation of wood-destroying organisms.
1809.3	With the higher seismic demand placed on buildings and structures in this region, precautionary steps are proposed to reduce or eliminate potential problems that may result for under reinforced footings located on sloped surfaces. Requiring minimum reinforcement for stepped footings is intended to address the problem of poor performance of plain or under-reinforced footings during a seismic event.
1809.7	No substantiating data has been provided to show that under-reinforced footings are effective in resisting seismic loads and may potentially lead to a higher risk of failure. Therefore, this proposed amendment requires minimum reinforcement in continuous footings to address the problem of poor performance of plain or under-reinforced footings during a seismic event. With the higher seismic demand placed on buildings and structures in this region, precautionary steps are proposed to reduce or eliminate potential problems that may result by following prescriptive design provisions for footing that does not take into consideration the surrounding environment. It was important that the benefit and expertise of a registered design professional be obtained to properly analyze the structure and take these issues into consideration. This amendment reflects the recommendations by the Structural Engineers Association of

	Southern California (SEAOSC) and the Los Angeles City Task Force that investigated the poor performance observed in the 1994 Northridge Earthquake.
1809.12	No substantiating data has been provided to show that timber footings are effective in supporting buildings and structures during a seismic event, especially while being subjected to deterioration caused by the combined detrimental effects of moisture in the soil and wood-destroying organisms. Timber footings, when they are not properly treated and protected against deterioration, have performed very poorly. Most contractors are typically accustomed to construction in dry and temperate weather in the Southern California region and are not generally familiar with the necessary precautions and treatment of wood that makes it suitable for both seismic event and wet applications. The proposed amendment takes the precautionary steps to reduce or eliminate potential problems that may result by using timber footings that experience relatively rapid decay due to the face that the region does not experience temperatures cold enough to destroy or retard the growth and proliferation of wood-destroying organisms.
1810.3.2.4	No substantiating data has been provided to show that timber deep foundation is effective in supporting buildings and structures during a seismic event while being subject to deterioration caused by the combined detrimental effect of constant moisture in the soil and wood-destroying organisms. Timber deep foundation, when they are not properly treated and protected against deterioration, has performed very poorly. Most contractors are typically accustomed to construction in dry and temperate weather in the Southern California region and are not generally familiar with the necessary precautions and treatment of wood that makes it suitable for both seismic event and wet applications. The proposed amendment takes the precautionary steps to reduce or eliminate potential problems that may result by using timber deep foundation that experience relatively rapid decay due to the face that the region does not experience temperatures cold enough to destroy or retard the growth and proliferation of wood-destroying organisms.
1905.1.7	This proposed amendment requires minimum reinforcement in continuous footings to address the problem of poor performance of plain or under-reinforced footings during a seismic event. This amendment reflects the recommendations by the Structural Engineers Association of Southern California (SEAOSC) and the Los Angeles City Joint Task Force that investigated the poor performance observed in 1994 Northridge Earthquake.
1905.1	This amendment is intended to carry over critical provisions for the design of concrete columns in moment frames from the legacy 1997 Uniform Building Code. Increased confinement is critical to the integrity of such columns and these modifications ensure that it is provided when certain thresholds are exceeded.

	In addition, this amendment carries over from the legacy 1997 Uniform Building Code a critical provision for the design of concrete shear walls. It essentially limits the use of very highly gravity-loaded walls in being included in the seismic load resisting system, since their failure could have catastrophic effect on the building. Furthermore, this amendment was incorporated in the code based on observations from the 1994 Northridge Earthquake. Rebar placed in very thin concrete topping slabs have been observed in some instances to have popped out of the slab due to insufficient concrete coverage. This modification ensures that critical boundary and collector rebars are placed in sufficiently thick topping slab to prevent buckling of such reinforcements.
2304.10.1	Due to the high geologic activities in the Southern California area and the expected higher level of performance on buildings and structures, this proposed local amendment limit the use of staple fasteners in resisting or transferring seismic forces. In September 2007, limited cyclic testing data was provided to the ICC Los Angeles Chapter Structural Code Committee showing that stapled wood structural shear panels do not exhibit the same behavior as the nailed wood structural shear panels. The test results of the stapled wood structural shear panels appeared much lower in strength and drift than the nailed wood structural shear panel test results. Therefore, the use of staples as fasteners to resist or transfer seismic forces may not be permitted without being substantiated by cyclic testing.
2304.10.2.1	The overdriving of nails into the structural wood panel still remains a concern when pneumatic nail guns are used for wood structural panel shear wall nailing. Box nails were observed to cause massive and multiple failures of the typical 3/8-inch thick plywood during the 1994 Northridge Earthquake. The use of clipped head nails as allowed in Table A1 of AFPA SDPWS footnote referencing to ASTM F1667, continues to be restricted from being used in wood structural panel shear walls where the minimum nail head size must be maintained in order to minimize nails from pulling through sheathing materials. Clipped or mechanically driven nails used in wood structural panel shear wall construction were found to perform much less in previous wood structural panel shear wall testing done at the University of California Irvine. The existing test results indicated that, under cyclic loading, the wood structural panel shear walls were less energy absorbent and less ductile. The panels reached ultimate load capacity and failed at substantially less lateral deflection than those using same size hand-driven nails. This amendment reflects the recommendations by the Structural Engineers Association of Southern California (SEAOSC) and the Los Angeles City Joint Task Force that investigated the poor performance observed in 1994 Northridge Earthquake.
2304.12.5	No substantiating data has been provided to show that wood used in retaining or crib walls are effective in supporting buildings and

	structures during a seismic event while being subject to deterioration caused by the combined detrimental effect of constant moisture in the soil and wood-destroying organisms. Wood used in retaining or crib walls, when they are not properly treated and protected against deterioration, have performed very poorly. Most contractors are typically accustomed to construction in dry and temperate weather in the Southern California region and are not generally familiar with the necessary precautions and treatment of wood that makes it suitable for both seismic event and wet applications. The proposed amendment takes the precautionary steps to reduce or eliminate potential problems that may result by using wood in retaining or crib walls that experience relatively rapid decay due to the face that the region does not experience temperatures cold enough to destroy or retard the growth and proliferation of wood-destroying organisms.
2305.4	ICC-ES AC 155 Acceptance Criteria for Hold-downs (Tie-Downs) Attached to Wood Members is widely used to establish allowable values for hold-down connectors in evaluation reports. AC 155 uses monotonic loading to establish allowable values. Yet, cyclic and dynamic forces imparted on buildings and structures by seismic activity cause more damage than equivalent forces that are applied in a monotonic manner. However, the engineering, regulatory and manufacturing industries have not reached consensus on the appropriate cyclic or dynamic testing protocols. This condition is expected to continue for some time. In the interim, this proposed amendment continues to limit the allowable capacity to 75% of the evaluation report value to provide an additional factor of safety for statically tested anchorage devices. Steel plate washers will reduce the additional damage that can result when hold-down connectors are fastened to wood framing members. This amendment reflects the recommendations by the Structural Engineers Association of Southern California (SEAOSC) and the Los Angeles City Joint Task Force that investigated the poor performance observed in 1994 Northridge Earthquake. This proposed amendment is a continuation of an amendment adopted during previous code adoption cycles with additional editorial revisions for clarification.
2306.2	The Structural Engineers Association of Southern California (SEAOSC) and the Los Angeles City Joint Task Force that investigated the damages to buildings and structures during the 1994 Northridge Earthquake recommended reducing allowable shear values in wood structural panel shear walls or diaphragms that were not substantiated by cyclic testing. That recommendation was consistent with a report to the Governor from the Seismic Safety Commission of the State of California recommending that code requirements be "more thoroughly substantiated with testing." The allowable shear values for wood structural panel shear walls or diaphragms fastened with staples are based on monotonic testing and does not take into consideration that earthquake forces load shear wall or diaphragm in a repeating and fully reversible manner.

	In September 2007, limited cyclic testing was conducted by a private engineering firm to determine if wood structural panels fastened with staples would exhibit the same behavior as the wood structural panels fastened with common nails. The test result revealed that wood structural panel fastened with staples appeared to be much lower in strength and stiffness than wood structural panels fastened with common nails. It was recommended that the use of staples as fasteners for wood structural panel shear walls or diaphragms not be permitted to resist seismic forces in structures assigned to Seismic Design Category D, E and F unless it can be substantiated by cyclic testing. Furthermore, the cities and county within the Los Angeles region has taken extra measures to maintain the structural integrity of the framing of shear walls and diaphragms designed for high levels of seismic forces by requiring wood sheathing be applied directly over the framing members and prohibiting the use of panels placed over gypsum sheathing. This proposed amendment is intended to prevent the undesirable performance of nails when gypsum board softens due to cyclic earthquake displacements and the nail ultimately does not have any engagement in a solid material within the thickness of the gypsum board.
2306.3	The Structural Engineers Association of Southern California (SEAOSC) and the Los Angeles City Joint Task Force that investigated the damages to buildings and structures during the 1994 Northridge Earthquake recommended reducing allowable shear values in wood structural panel shear walls or diaphragms that were not substantiated by cyclic testing. That recommendation was consistent with a report to the Governor from the Seismic Safety Commission of the State of California recommending that code requirements be "more thoroughly substantiated with testing." The allowable shear values for wood structural panel shear walls or diaphragms fastened with stapled nails are based on monotonic testing and does not take into consideration that earthquake forces load shear wall or diaphragm in a repeating and fully reversible manner. In September 2007, limited cyclic testing was conducted by a private engineering firm to determine if wood structural panels fastened with stapled nails would exhibit the same behavior as the wood structural panels fastened with common nails. The test result revealed that wood structural panel fastened with stapled nails appeared to be much lower in strength and stiffness than wood structural panels fastened with common nails. It was recommended that the use of stapled nail as fasteners for wood structural panel shear walls or diaphragms not be permitted to resist seismic forces in structures assigned to Seismic Design Category D, E and F unless it can be

	substantiated by cyclic testing. Furthermore, the cities and county within the Los Angeles region has taken extra measures to maintain the structural integrity of the framing of shear walls and diaphragms designed for high levels of seismic forces by requiring wood sheathing be applied directly over the framing members and prohibiting the use of panels placed over gypsum sheathing. This proposed amendment is intended to prevent the undesirable performance of nails when gypsum board softens due to cyclic earthquake displacements and the nail ultimately does not have any engagement in a solid material within the thickness of the gypsum board.
2307.2	The Structural Engineers Association of Southern California (SEAOSC) and the Los Angeles City Joint Task Force that investigated the damages to buildings and structures during the 1994 Northridge Earthquake recommended reducing allowable shear values in wood structural panel shear walls or diaphragms that were not substantiated by cyclic testing. That recommendation was consistent with a report to the Governor from the Seismic Safety Commission of the State of California recommending that code requirements be "more thoroughly substantiated with testing." The allowable shear values for wood structural panel shear walls or diaphragms fastened with stapled nails are based on monotonic testing and does not take into consideration that earthquake forces load shear wall or diaphragm in a repeating and fully reversible manner. In September 2007, limited cyclic testing was conducted by a private engineering firm to determine if wood structural panels fastened with stapled nails would exhibit the same behavior as the wood structural panels fastened with common nails. The test result revealed that wood structural panel fastened with stapled nails appeared to be much lower in strength and stiffness than wood structural panels fastened with common nails. It was recommended that the use of stapled nail as fasteners for wood structural panel shear walls or diaphragms not be permitted to resist seismic forces in structures assigned to Seismic Design Category D, E and F unless it can be substantiated by cyclic testing. Furthermore, the cities and county within the Los Angeles region has taken extra measures to maintain the structural integrity of the framing of shear walls and diaphragms designed for high levels of seismic forces by requiring wood sheathing be applied directly over the framing members and prohibiting the use of panels placed over gypsum sheathing. This proposed amendment is intended to prevent the undesirable performance of nails when gypsum board softens due to cyclic earthquake displacements and the nail ultimately does not have any engagement in a solid material within the thickness of the

	gypsum board.
Table 2308.6.1	This proposed amendment specifies minimum sheathing thickness and nail size and spacing so as to provide a uniform standard of construction for designers and buildings to follow. This is intended to improve the performance level of buildings and structures that are subject to the higher seismic demands placed on buildings or structure in this region. This proposed amendment reflects the recommendations by the Structural Engineers Association of Southern California (SEAOSC) and the Los Angeles City Joint Task Force that investigated the poor performance observed in 1994 Northridge Earthquake.
2308.6.5	3/8" thick, 3 ply-plywood shear walls experienced many failures during the Northridge Earthquake. Box nails were observed to cause massive and multiple failures of the typical 3/8" thick 3-ply plywood during the Northridge Earthquake. This proposed amendment specifies minimum sheathing thickness, nail size and spacing so as to provide a uniform standard of construction for designers and buildings to follow. This is intended to improve the performance level of buildings and structures that are subject to the higher seismic demands and reduce and limit potential damages to property.
2308.6.8.1	With the higher seismic demand placed on buildings and structures in this region, interior walls can easily be called upon to resist over half of the seismic loading imposed on simple buildings or structures. Without a continuous foundation to support the braced wall line, seismic loads would be transferred through other elements such as non-structural concrete slab floors, wood floors, etc. The proposed change is to limit the use of the exception to structures assigned to Seismic Design Category A, B or C where lower seismic demands are expected. Requiring interior braced walls be supported by continuous foundations is intended to reduce or eliminate the poor performance of buildings or structures.
2308.6.9	This proposed amendment is intended to improve the performance level of buildings and structures that are subject to the higher seismic demands placed on buildings or structure in this region. This proposed amendment reflects the recommendations by the Structural Engineers Association of Southern California (SEAOSC) and the Los Angeles City Joint Task Force that investigated the poor performance observed in 1994 Northridge Earthquake.
3114	Due to the US trade deficit with other countries, there is an abundant supply of unused intermodal shipping containers, particularly in jurisdictions that have ports, that have created negative impacts on the environment. This results in more materials that are not recycled and increases energy consumption required to melt down and recycle others that are. The repurposing of existing intermodal shipping containers will help to reduce the environmental impact and improve the sustainability of the community by being less reliant on traditional construction material.

	This amendment is based on a similar code provision adopted into the 2021 Edition of the International Building Code. It is intended to assist code officials address the environmental impact of unused materials, reduce consumption of traditional raw materials, minimize non-industrial wastes, and ensure minimum design and safety standards associated with the repurposing of existing intermodal shipping containers as buildings or structures or component of buildings and structures are achieved.

California Residential Code	
Section	*Rationale*
R301.1.3.2	After the 1994 Northridge Earthquake, the Wood Frame Construction Joint Task Force recommended that the quality of wood frame construction need to be greatly improved. One such recommendation identified by the Task Force is to improve the quality and organization of structural plans prepared by the engineer or architect so that plan examiners, building inspectors, contractors and special inspectors may logically follow and construct the presentation of the seismic force-resisting systems in the construction documents. For buildings or structures located in Seismic Design Category D_0, D_1, D_2 or E that are subject to a greater level of seismic forces, the requirement to have a California licensed architect or engineer prepare the construction documents is intended to minimize or reduce structural deficiencies that may cause excessive damage or injuries in wood frame buildings. Structural deficiencies such as plan and vertical irregularities, improper shear transfer of the seismic force-resisting system, missed details or connections important to the structural system, and the improper application of the prescriptive requirements of the California Residential Code can be readily addressed by a registered design professional.
R301.1.4	Due to the difficulty of fire suppression vehicles accessing winding and narrow hillside properties and the probabilities for future earthquakes in the Los Angeles region, this technical amendment is required to address the special needs for buildings constructed on hillside locations. A joint Structural Engineers Association of Southern California (SEAOSC) and both the Los Angeles County and Los Angeles City Task Force investigated the performance of hillside building failures after the Northridge earthquake. Numerous hillside failures resulted in loss of life and millions of dollars in damage. These criteria were developed to minimize the damage to these structures and have been in use by both the City and County of Los Angeles for several years with much success.
Item 1, 3 and 5 of Section R301.2.2.6	With the higher seismic demand placed on buildings and structures in this region, precautionary steps are proposed to reduce or eliminate potential problems that may result by limiting the type of irregular conditions specified in the California Residential Code. Such limitations are intended to reduce the potential structural damage

	expected in the event of an earthquake. The cities and county of the Los Angeles region has taken extra measures to maintain the structural integrity of the framing of the shear walls and all associated elements when designed for high levels of seismic loads.
R301.2.2.11	There is no limitation for weight of mechanical and plumbing fixtures and equipment in the California Residential Code. Requirements from ASCE 7 and the California Building Code would permit equipment weighing up to 400 lbs. when mounted at 4 feet or less above the floor or attic level without engineering design. Where equipment exceeds this requirement, it is the intent of this proposed amendment that a registered design professional be required to analyze if the floor support is adequate and structurally sound.
R401.1	No substantiating data has been provided to show that wood foundation is effective in supporting buildings and structures during a seismic event while being subject to deterioration caused by the combined detrimental effect of constant moisture in the soil and wood-destroying organisms. Wood foundation, when they are not properly treated and protected against deterioration, have performed very poorly and have led to slope failures. Most contractors are typically accustomed to construction in dry and temperate weather in the Southern California region and are not generally familiar with the necessary precautions and treatment of wood that makes it suitable for both seismic event and wet applications. The proposed amendment takes the precautionary steps to reduce or eliminate potential problems that may result in using wood foundation that experience relatively rapid decay due to the fact that the region does not experience temperatures cold enough to destroy or retard the growth and proliferation of wood-destroying organisms. However, an exception is made for non-occupied, single-story storage structures that pose significantly less risk to human safety and may utilize the wood foundation guidelines specified in this Chapter.
R403.1.2	With the higher seismic demand placed on buildings and structures in this region, precautionary steps are proposed to reduce or eliminate potential problems that may result for under-reinforced footings located on sloped surfaces. Requiring minimum reinforcement for stepped footings is intended to address the problem of poor performance of plain or under-reinforced footings during a seismic event. Furthermore, interior walls can easily be called upon to resist over half of the seismic loading imposed on simple buildings or structures. Without a continuous foundation to support the braced wall line, seismic loads would be transferred through other elements such as non-structural concrete slab floors, wood floors, etc. The proposed change is to limit the use of the exception to structures assigned to Seismic Design Category A, B or C where lower seismic demands are expected. Requiring interior braced walls be supported by continuous foundations is intended to reduce or eliminate the poor performance of buildings or structures.
R404.2	No substantiating data has been provided to show that wood

	foundation wall is effective in supporting buildings and structures during a seismic event while being subject to deterioration caused by the combined detrimental effect of constant moisture in the soil and wood-destroying organisms. Wood foundation walls, when they are not properly treated and protected against deterioration, have performed very poorly and have led to slope failures. Most contractors are typically accustomed to construction in dry and temperate weather in the Southern California region and are not generally familiar with the necessary precautions and treatment of wood that makes it suitable for both seismic event and wet applications. The proposed amendment takes the precautionary steps to reduce or eliminate potential problems that may result in using wood foundation walls that experience relatively rapid decay due to the fact that the region does not experience temperatures cold enough to destroy or retard the growth and proliferation of wood-destroying organisms.
R501.1	There is no limitation for weight of mechanical and plumbing fixtures and equipment in the California Residential Code. Requirements from ASCE 7 and the California Building Code would permit equipment weighing up to 400 lbs. when mounted at 4 feet or less above the floor or attic level without engineering design. Where equipment exceeds this requirement, it is the intent of this proposed amendment that a registered design professional is required to analyze if the floor support is adequate and structurally sound.
R503.2.4	Section R502.10 of the Code does not provide any prescriptive criteria to limit the maximum floor opening size nor does Section R503 provide any details to address the issue of shear transfer near larger floor openings. With the higher seismic demand placed on buildings and structures in this region, it is important to ensure that a complete load path is provided to reduce or eliminate potential damages caused by seismic forces. Requiring blocking with metal ties around larger floor openings and limiting opening size is consistent with the requirements of Section R301.2.2.2.6.
Lines 19, 20, 23 and 33 - 36 of Table R602.3(1)	The Structural Engineers Association of Southern California (SEAOSC) and the Los Angeles City Joint Task Force that investigated the damages to buildings and structures during the 1994 Northridge Earthquake recommended reducing allowable shear values in wood structural panel shear walls or diaphragms that were not substantiated by cyclic testing. That recommendation was consistent with a report to the Governor from the Seismic Safety Commission of the State of California recommending that code requirements be "more thoroughly substantiated with testing." The allowable shear values for wood structural panel shear walls or diaphragms fastened with staples are based on monotonic testing and does not take into consideration that earthquake forces load shear wall or diaphragm in a repeating and fully reversible manner. In September 2007, limited cyclic testing was conducted by a private engineering firm to determine if wood structural panels fastened with

	staples would exhibit the same behavior as the wood structural panels fastened with common nails. The test result revealed that wood structural panel fastened with staples appeared to be much lower in strength and stiffness than wood structural panels fastened with common nails. It was recommended that the use of staples as fasteners for wood structural panel shear walls or diaphragms not be permitted to resist seismic forces in structures assigned to Seismic Design Category D_0, D_1 and D_2 unless it can be substantiated by cyclic testing.
Exception of Section R602.3.2	The cities and county of the Los Angeles region have taken extra measures to maintain the structural integrity of the framing of the shear wall system for buildings and structures subject to high seismic loads by eliminating single top plate construction. The performance of modern day braced wall panel construction is directly related to an adequate load path extending from the roof diaphragm to the foundation system. A single top plate is likely to be over nailed due to the nailing requirements at a rafter, stud, top plate splice, and braced wall panel edge in a single location. In addition, notching on a single top plate for plumbing, ventilation and electrical wiring may reduce the load transfer capacity of the plate without proper detailing. A majority of buildings and structures designed and built per the California Residential Code with a single top plate may not need structural observation and special inspections. The potential construction mistakes mentioned above could not be caught and corrected by knowledgeable engineers and inspectors, and could jeopardize structural performance of buildings and structures located in high seismic areas.
Footnote "b" of Table R602.3(2)	The Structural Engineers Association of Southern California (SEAOSC) and the Los Angeles City Joint Task Force that investigated the damages to buildings and structures during the 1994 Northridge Earthquake recommended reducing allowable shear values in wood structural panel shear walls or diaphragms that were not substantiated by cyclic testing. That recommendation was consistent with a report to the Governor from the Seismic Safety Commission of the State of California recommending that code requirements be "more thoroughly substantiated with testing." The allowable shear values for wood structural panel shear walls or diaphragms fastened with staples are based on monotonic testing and does not take into consideration that earthquake forces load shear wall or diaphragm in a repeating and fully reversible manner. In September 2007, limited cyclic testing was conducted by a private engineering firm to determine if wood structural panels fastened with staples would exhibit the same behavior as the wood structural panels fastened with common nails. The test result revealed that wood structural panel fastened with staples appeared to be much lower in strength and stiffness than wood structural panels fastened with common nails. It was recommended that the use of staples as

	fasteners for wood structural panel shear walls or diaphragms not be permitted to resist seismic forces in structures assigned to Seismic Design Category D_0, D_1 and D_2 unless it can be substantiated by cyclic testing.
R602.10.2.3	Plywood shear walls with high aspect ratio experienced many failures during the Northridge Earthquake. This proposed amendment specifies a minimum braced wall length to meet an aspect ratio consistent with other sections of the Residential Code as to provide a uniform standard of construction for designers and buildings to follow. This is intended to improve the performance level of buildings and structures that are subject to the higher seismic demands and reduce and limit potential damages to property. This proposed amendment reflects the recommendations by the Structural Engineers Association of Southern California (SEAOSC) and the Los Angeles City Joint Task Force that investigated the poor performance observed in 1994 Northridge Earthquake.
Table R602.10.3(3)	Due to the high geologic activities in the Southern California area and the expected higher level of performance on buildings and structures, this proposed local amendment increase the length and limits the location where shear walls sheathed with lath, plaster or gypsum board are used in multi-level buildings. In addition, shear walls sheathed with other materials are prohibited in Seismic Design Category D_0, D_1 and D_2 to be consistent with the design limitation for similar shear walls found in the California Building Code. The poor performance of such shear walls in the 1994 Northridge Earthquake was investigated by the Structural Engineers Association of Southern California (SEAOSC) and the Los Angeles City Task Force and formed the basis for this proposed amendment. Considering that shear walls sheathed with lath, plaster or gypsum board are less ductile than steel moment frames or wood structural panel shear walls, the cities and county of the Los Angeles region has taken the necessary measures to limit the potential structural damage that may be caused by the use of such walls at the lower level of multi-level building that are subject to higher levels of seismic loads.
Table R602.10.4	3/8" thick 3 ply-plywood shear walls experienced many failures during the Northridge Earthquake. Box nails were observed to cause massive and multiple failures of the typical 3/8" thick 3-ply plywood during the Northridge Earthquake. This proposed amendment specifies minimum sheathing thickness, nail size and spacing so as to provide a uniform standard of construction for designers and buildings to follow. This is intended to improve the performance level of buildings and structures that are subject to the higher seismic demands and reduce and limit potential damages to property. This proposed amendment reflects the recommendations by the Structural Engineers Association of Southern California (SEAOSC) and the Los Angeles City Joint Task Force that investigated the poor performance observed in 1994 Northridge Earthquake.

	In September 2007, limited cyclic testing was conducted by a private engineering firm to determine if wood structural panels fastened with staples would exhibit the same behavior as the wood structural panels fastened with common nails. The test result revealed that wood structural panel fastened with staples appeared to be much lower in strength and stiffness than wood structural panels fastened with common nails. It was recommended that the use of staples as fasteners for wood structural panel shear walls or diaphragms not be permitted to resist seismic forces in structures assigned to Seismic Design Category D_0, D_1 and D_2 unless it can be substantiated by cyclic testing.
Table R602.10.5	It was observed by the Structural Engineer Association of Southern California (SEAOSC) and the Los Angeles City Task Force that high aspect ratio shear walls experienced many failures during the 1994 Northridge Earthquake. This proposed amendment provides a uniform standard of construction for designers and buildings to follow. This is intended to improve the performance level of buildings and structures that are subject to the higher seismic demands and reduce and limit potential damages to property.
Figure R602.10.6.1	3/8" thick 3 ply-plywood shear walls experienced many failures during the Northridge Earthquake. Box nails were observed to cause massive and multiple failures of the typical 3/8" thick 3-ply plywood during the Northridge Earthquake. This proposed amendment specifies minimum sheathing thickness, nail size and spacing so as to provide a uniform standard of construction for designers and buildings to follow. This is intended to improve the performance level of buildings and structures that are subject to the higher seismic demands and reduce and limit potential damages to property. This proposed amendment reflects the recommendations by the Structural Engineers Association of Southern California (SEAOSC) and the Los Angeles City Joint Task Force that investigated the poor performance observed in 1994 Northridge Earthquake.
Figure R602.10.6.2	3/8" thick 3 ply-plywood shear walls experienced many failures during the Northridge Earthquake. Box nails were observed to cause massive and multiple failures of the typical 3/8" thick 3-ply plywood during the Northridge Earthquake. This proposed amendment specifies minimum sheathing thickness, nail size and spacing so as to provide a uniform standard of construction for designers and buildings to follow. This is intended to improve the performance level of buildings and structures that are subject to the higher seismic demands and reduce and limit potential damages to property. This proposed amendment reflects the recommendations by the Structural Engineers Association of Southern California (SEAOSC) and the Los Angeles City Joint Task Force that investigated the poor performance observed in 1994 Northridge Earthquake.
Figure R602.10.6.4	3/8" thick 3 ply-plywood shear walls experienced many failures during the Northridge Earthquake. Box nails were observed to cause massive and multiple failures of the typical 3/8" thick 3-ply plywood

	during the Northridge Earthquake. This proposed amendment specifies minimum sheathing thickness, nail size and spacing so as to provide a uniform standard of construction for designers and buildings to follow. This is intended to improve the performance level of buildings and structures that are subject to the higher seismic demands and reduce and limit potential damages to property. This proposed amendment reflects the recommendations by the Structural Engineers Association of Southern California (SEAOSC) and the Los Angeles City Joint Task Force that investigated the poor performance observed in 1994 Northridge Earthquake.
R606.4.4	The addition of the word "or" will prevent the use of unreinforced parapets in Seismic Design Category D_0, D_1 or D_2, or on townhouses in Seismic Design Category C.
R606.12.2.2.3	Reinforcement using longitudinal wires for buildings and structures located in high seismic areas are deficient and not as ductile as deformed rebar. Having vertical reinforcement closer to the ends of masonry walls help to improve the seismic performance of masonry buildings and structures.
R803.2.4	Section R802 of the Code does not provide any prescriptive criteria to limit the maximum roof opening size nor does Section R803 provide any details to address the issue of shear transfer near larger roof openings. With the higher seismic demand placed on buildings and structures in this region, it is important to ensure that a complete load path is provided to reduce or eliminate potential damages caused by seismic forces. Requiring blocking with metal ties around larger roof openings and limiting opening size is consistent with the requirements of Section R301.2.2.2.6.
R905.3.1	Section R905.3.1 is amended to require concrete and clay tiles to be installed only over solid sheathing. The change is necessary because there were numerous observations of tile roofs pulling away from wood framed buildings following the 1994 Northridge Earthquake. The SEAOSC/LA City Post Northridge Earthquake committee findings indicated significant problems with tile roofs was due to inadequate design and/or construction. Therefore, the amendment is needed to minimize such occurrences in the event of future significant earthquakes.
R1001.3.1	The performance of fireplace/chimney without anchorage to the foundation has been observed to be inadequate during major earthquakes. The lack of anchorage to the foundation can result in the overturning or displacement of the fireplace/chimney.

California Fire Code	
Section	**Finding**
102.5	Administrative
103.5	Administrative
105.6.30	Administrative
109	Administrative

202	Administrative
304.1.2	Hot, dry Santa Ana winds are common to all areas within the City of Monterey Park. These winds, which can cause small fires which spread quickly, are a contributing factor to the high fire danger in the area, and create the need for control of dry vegetation.
307.1	Los Angeles County and the City of Monterey Park are located in a semi-arid Mediterranean type climate which predisposes all fuels, including wood shingles to rapid ignition and spread of fire. Therefore, there exists a need for control of open burning.
319	Administrative
903	The October 17,1989,Santa Cruz earthquake resulted in only one major San Francisco fire in the Marina district. But, when combined with the 34 other fires and over 500 responses, the department was taxed to its full capabilities. The Marina fire was difficult to contain because mains supplying water to the district burst during the earthquake. If more fires had been ignited by the earthquake, it would have been difficult for the fire department to contain them. This situation creates the need for both additional fire protection measures and automatic on-site fire protection for building occupants since a multitude of fires may result from breakage of gas and electric lines as a result of an earthquake.
907.1.6	Traffic and circulation congestion presently existing in the City of Monterey Park often challenges fire department response times. This condition will be exacerbated by any major disaster, including any earthquake wherein damage to the highway system will occur. This condition makes the need for accurate fire alarm notification necessary.
1103.2	City of Monterey Park and the greater Los Angeles region is a densely populated area having buildings and structures constructed over and near a vast array of fault systems capable of producing major earthquakes including, without limitation, the 1994 Northridge Earthquake. This situation creates the need a dependable means of interior communication for emergency personnel in case of an earthquake.
5601.2 and 5601.3	Traffic and circulation congestion presently existing in the City of Monterey Park often challenges fire department response times. This condition will be exacerbated by any major disaster, including any earthquake wherein damage to the highway system will occur. The control of explosive materials are a necessity for property occupant protection.
5608	Los Angeles County and the City of Monterey Park are located in a semi-arid Mediterranean type climate which predisposes all fuels, including wood shingles to rapid ignition and spread of fire. Therefore, there exists a need for control of firework displays.
5614	Los Angeles County and the City of Monterey Park are located in a semi-arid Mediterranean type climate which predisposes all fuels, including wood shingles to rapid ignition and spread of fire. Therefore, there exists a need for control of firework manufacturing.
5615	Los Angeles County and the City of Monterey Park are located in a

	semi-arid Mediterranean type climate which predisposes all fuels, including wood shingles to rapid ignition and spread of fire. Therefore, there exists a need for control of firework sales.
5704.2.9.6.	The October 17,1989,Santa Cruz earthquake resulted in only one major San Francisco fire in the Marina district. But, when combined with the 34 other fires and over 500 responses, the department was taxed to its full capabilities. The Marina fire was difficult to contain because mains supplying water to the district burst during the earthquake. If more fires had been ignited by the earthquake, it would have been difficult for the fire department to contain them. This situation creates the need to control the amount of flammable liquid tanks that may be damaged as a result of an earthquake.
6104.2	The October 17,1989,Santa Cruz earthquake resulted in only one major San Francisco fire in the Marina district. But, when combined with the 34 other fires and over 500 responses, the department was taxed to its full capabilities. The Marina fire was difficult to contain because mains supplying water to the district burst during the earthquake. If more fires had been ignited by the earthquake, it would have been difficult for the fire department to contain them. This situation creates the need to control the amount of liquefied petroleum storage tanks that may be damaged as a result of an earthquake.
D103.4	Traffic and circulation congestion presently existing in the City of Monterey Park often challenges fire department response times. This condition will be exacerbated by any major disaster, including any earthquake wherein damage to the highway system will occur. This condition makes the need for additional on-site protection for property occupants necessary.
O101.2	Administrative – clarifies scope of permit issuance.