ORDINANCE NO. 3143

AN ORDINANCE OF THE CITY COUNCIL OF THE CITY OF WHITTIER. CALIFORNIA, ADOPTING BY REFERENCE THE 2022 EDITIONS OF THE CALIFORNIA BUILDING CODE, CALIFORNIA RESIDENTIAL CODE, CALIFORNIA ELECTRICAL CODE, CALIFORNIA MECHANICAL CODE, CALIFORNIA PLUMBING CODE. CALIFORNIA ENERGY CALIFORNIA HISTORICAL BUILDING CODE, CALIFORNIA EXISTING BUILDING CODE, CALIFORNIA GREEN BUILDING STANDARDS CODE, CALIFORNIA REFERENCED STANDARDS CODE, INTERNATIONAL SWIMMING POOL AND SPA CODE, THE 1997 ABATEMENT OF DANGEROUS BUILDINGS CODE AND THE 1997 UNIFORM HOUSING CODE. WITH APPENDICES AND AMENDMENTS THERETO. RENUMBERING OF CERTAIN EXISTING PROVISIONS OF THE WHITTIER MUNICIPAL CODE AND ADOPTING LOCAL AMENDMENTS THERETO AND FINDING THAT THE ADOPTION OF THESE LOCAL AMENDMENTS IS EXEMPT FROM THE CALIFORNIA ENVIRONMENTAL QUALITY ACT

THE CITY COUNCIL OF THE CITY OF WHITTIER, CALIFORNIA, DOES ORDAIN AS FOLLOWS:

Section 1. Findings.

- A. California law requires that on January 1, 2023, all portions of the 2022 Building Standards Code will be effective within the City; and,
- B. Pursuant to Sections 17922, 17958, 17958.5 and 17958.7 of the California Health and Safety Code, the City may amend the provisions of the Building Standards Code which are reasonably necessary to protect the health, welfare, and safety of the citizens of Whittier because of "local climatic, geological, or topographical conditions."
- C. The City of Whittier is located in a densely populated area of Los Angeles County that is more prone to high winds, earthquakes, and fire, more difficult for firefighters to access than many other areas in California.
- D. The Building Official has recommended modifying California Building Standards Code due to local conditions in the City of Whittier.
- E. The findings supporting the necessity for the amendments contained in Section 4 are contained in Attachment A to this ordinance in accordance with California Health and Safety Code Section 18941.5.
- F. In accordance with Section 15061(b)(3) of the California Code of Regulations, the adoption of local amendments to the California Building Standards Code and amending the Whittier Municipal Code are exempt from the provisions of the California Environmental Quality Act.

Section 2. Administrative Provisions Adopted.

For the purpose of prescribing administrative provisions for construction codes used to erecting, construction, enlargement, alteration, repair, improving, removal, conversion, demolition, occupancy, relocation, and appurtenances connected or attached to buildings

Ordinance No. 3143 Page 2 of 99

and structures, the administrative provisions set forth in this Chapter and Section, are hereby adopted: Where the California Code of Regulations and State Building Standards Code of Regulations differ from any sections of the provisions, State regulations shall prevail.

One (1) copy of the administrative provisions therefore are on file in the office of the building official pursuant to Health and Safety Code Section 18942 (d) (1) and are made available for public inspection.

Notwithstanding the provisions of the above-referenced administrative provisions, all fees for services provided pursuant to the administrative provisions shall not take effect until a resolution for such fees is adopted by the City Council pursuant to California Government Code Sections 66016 and 66020."

Section 3. Chapter 15.04 of Title 15 of the City of Whittier Municipal Code is hereby deleted in its entirety and new Chapters 15.01 through 15.14 of Title 15 of the Municipal City Code are hereby added. Existing Chapters 15.06, 15.08, 15.10, 15.12, 15.15, 15.16, 15.20 and 15.28 are renumbered with no change in content or substance.

Chapter 15.01 Code Adoption and Administrative Provisions Added.

CODE ADOPTION AND ADMINISTRATIVE PROVISIONS

Chapter 15.01 ADOPTION OF TECHNICAL BUILDING CODES AND ADMINISTRATIVE PROVISIONS

15.01.010. Adoption of specific Codes - Copies on file.

15.01.020 Definition of terms.

15.01.030 Resolution of conflicts in application.

15.01.040 Administrative provisions.

15.01.010 Adoption of specific Codes--Copies on file.

- (a) Except as otherwise provided in this chapter, the following California Building Codes are adopted and include:
- 1. The 2022 California Building Code including Appendix F, I and J;
- 2. The 2022 California Residential Code including Appendix H;
- 3. The 2022 California Electrical Code;
- 4. The 2022 California Mechanical Code:
- 5. The 2022 California Plumbing Code including Appendix A and I;
- 6. The 2022 California Energy Code;
- 7. The 2022 California Historical Building Code;
- 8. The 2022 California Existing Building Code;
- 9. The 2022 California Green Building Standards;
- 10. The 2022 California Referenced Standards Code;
- 11. The 2021 International Pool and Spa Code;
- 12. The 1997 Abatement of Dangerous Buildings Code.
- 13. The 1997 Uniform Housing Code.

Ordinance No. 3143 Page 3 of 99

including all indices and amendments, are hereby adopted and made a part of this chapter as if fully set out herein, as Chapter 15.01.010 of Title 15 of this Code.

(b) Copies of Codes Available. In accordance with, Health & Safety Code § 18942(d), one copy of said Codes will remain on file in the office of the City Clerk.

15.01.020 Definition of terms.

Whenever any of the following names or terms are used in the 2022 California Codes; including all indices and amendments, or in the Whittier Municipal Code, such names or terms will be deemed and constructed to have the name ascribed to it in this section, as follows:

A. "Building and Safety Division" means the Building and Safety Division, Community Development Services Department of the City of Whittier;

B. "Health office" means the Los Angeles County Health Department.

15.01.030 Resolution of conflicts in application.

In the event of any conflict or ambiguity between any provision contained in the California Codes and any amendment or addition thereto contained in this title, the amendment or addition thereto will control.

15.01.040 Administrative provisions

Chapter 1 ADMINISTRATIVE PROVISIONS

SECTION 100 CONTENTS

Section 101 General

Section 102 Applicability

Section 103 Building and Safety

Section 104 Duties and Powers of Building Official

Section 105 Permits

Section 106 Construction Documents

Section 107 Temporary Structures and Uses

Section 108 Fees

Section 109 Inspections

Section 110 Certificate of Occupancy

Section 111 Service Utilities

Section 112 Board of Appeals

Section 113 Violations and Penalties

Section 114 Stop Work Order

Section 115 Unsafe Structures and Buildings

Section 116 Safety Assessment Placards

SECTION 101 GENERAL

101.1 Title. These regulations shall be known as the Administrative Provisions of the California Building Codes of the State of California, hereinafter referred to as "the code(s)."

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

- **101.2.1 Appendices.** Provisions in the appendices of the codes, shall 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 101.4.12 and referenced elsewhere in the codes shall be considered part of the require- ments 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 15.02.010 shall apply to all buildings and structures 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 15.03.010 shall apply to detached one- and two-family dwellings and multiple single-family dwellings (townhomes) 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 15.04.010 shall apply to the installation of electrical systems, including alterations, repairs, replacement, equipment, appliances, fixtures, fittings, and appurtenances thereto.
- **101.4.4 Mechanical Code.** The provisions of the California Mechanical Code as adopted in Section 15.05.010 shall apply to the installation, alterations, repairs and replacement of residential and commercial mechanical and gas systems, including equipment, appliances, fixtures, fittings and for appurtenances, including ventilating, heating, cooling, airconditioning and refrigeration systems, incinerators, and other energy-related systems. Where there is a conflict between the California Mechanical and Plumbing Codes, as related to chapters for gas or fuel, the provisions provided in the Plumbing Code shall prevail.
- **101.4.5 Plumbing Code.** The provisions of the California Plumbing Code as adopted in Section 15.06.010 shall apply to the installation, alteration, repair, replacement of plumbing systems and gas delivery systems, including equipment, appliances, fixtures, fittings and appurtenances, and where connected to a water or sewage system and all aspects of a medical gas system. The provisions of the California Plumbing Code shall apply to private sewage disposal systems.

101.4.6 Energy Code. The provisions of the California Energy Code as adopted in Section 15.07.010 shall apply to all matters governing the design and construction of buildings for energy efficiency.

- **101.4.7 Historic Building Code.** The provisions of the California Historic Building Code as adopted in Section 15.08.010 shall apply to the alteration and repair of historic buildings,
- **101.4.8 Existing Building Code.** The provisions of the California Existing Building Code as adopted in Section 15.09.010 shall 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 15.10.010 shall apply to all new buildings and structures.
- **101.4.10 Referenced Standards Code.** The provisions of the California Referenced Standards Code as adopted in Section 15.11.010 shall apply to all new buildings and structures.
- **101.4.11 Swimming Pool and Spa Code.** The mandatory provisions of the International Pool and Spa Code as adopted in Section 15.12.010 shall apply to all pool and spas.
- **101.5 Separate Municipal Code Requirements.** Separate requirements contained in the City of Whittier Municipal Code (WMC) shall be applicable and should be consulted. The following WMC Chapters are referenced herein as follows:
 - 101.5.1 Chapter 15.13 Abatement of Dangerous Buildings Code.
 - 101.5.2 Chapter 15.14 Uniform Housing Code.
 - 101.5.3 Chapter 15.15 Fire Code.
 - 101.5.4 Chapter 15.20 Construction Hours.
 - 101.5.5 Chapter 15.22 Stop Work Citations.
 - 101.5.6 Chapter 15.24 Plan Check Fees.
 - **101.5.7 Chapter 15.28 Fireworks.**
 - 101.5.8 Chapter 15.30 House Moving.
 - 101.5.9 Chapter 15.32 Use of Tents and Commercial Trailers.
 - 101.5.10 Chapter 15.34 Small Residential Rooftop Solar Systems.
 - 101.5.11 Chapter 15.36 New Residential Energy Guidelines.

Ordinance No. 3143 Page 6 of 99

101.5.12 Chapter 15.38 Earthquake Hazard Reduction in Existing Buildings.

101.5.13 Chapter 15.40 Flood Damage Prevention.

SECTION 102 APPLICABILITY

- **102.1 General.** Where, in any specific case, different sections of the codes specify different materials, methods of construction or other requirements, the most restrictive shall govern. Where there is a conflict between a general requirement and a specific requirement, the specific requirement shall be applicable.
- **102.2 Other laws.** The provisions of the codes shall not 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 shall be 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 shall be considered part of the requirements of the codes to the prescribed extent of each such reference. Where differences occur between provisions of the codes and referenced codes and standards, the provisions of the codes shall apply.
- **102.5 Partial invalidity.** In the event that any part or provision of the codes is held to be illegal or void, this shall 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 shall be per- mitted to 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 Creation of enforcement agency.** The Building and Safety Division is hereby created and the official in charge thereof shall be known as the Building Official.
- **103.2 Appointment.** The Building Official shall be appointed by the authorized representative of the authority having jurisdiction.
- **103.3 Deputies.** In accordance with the prescribed procedures of this jurisdiction and with the concurrence of the appointing authority, the Building Official shall have the authority to appoint a deputy Building Official, the related technical officers, inspectors, plan examiners and other agents. Such appointed agents shall have powers as delegated by the Building Official.

SECTION 104 DUTIES AND POWERS OF BUILDING OFFICIAL

- **104.1 General.** The Building Official is hereby authorized and directed to enforce the provisions of the codes. The Building Official shall have 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 shall be in compliance with the intent and purpose of the codes. Such policies and procedures shall not have the effect of waiving requirements specifically provided for in the codes.
- **104.2 Applications and permits.** The Building Official shall receive applications, review construction documents and issue permits for the erection, alteration, demolition, moving of buildings and structures, grading, and inspection of premises for which such permits have been issued and enforce compliance with the provisions of the codes.
- **104.3 Notices and orders.** The Building Official shall issue all necessary notices or orders to ensure compliance with the codes.
- **104.4 Inspections.** The Building Official shall make all of the required inspections, and the Building Official shall have the authority to accept reports of inspection by approved agencies or individuals. Reports of such inspections shall 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 shall 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 is occupied that credentials be presented to the occupant and entry requested. If such structure or premises is unoccupied, the Building Official shall 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 shall have recourse to the remedies provided by law to secure entry.
- **104.7 Department records.** The Building Official shall keep official records of applications received, permits and certificates issued, fees collected, reports of inspections, and notices and orders issued. Such records shall be retained in the official records for the period required for retention of public records.
- **104.8 Liability.** The Building Official or employee charged with the enforcement of the codes, while acting for the jurisdiction in good faith and without malice in the discharge of the duties required by the codes or other pertinent law or ordinance, shall not thereby be rendered liable personally and is hereby relieved from personal liability for any damage

Ordinance No. 3143 Page 8 of 99

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. Any suit 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 shall be defended by legal representative of the jurisdiction until the final termination of the proceedings. The Building Official or any subordinate shall 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 shall 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 shall not be reused unless approved by the Building Official.
- **104.10 Modifications.** Wherever there are practical difficulties involved in carrying out the provisions of the codes, the Building Official shall have the authority to grant modifications for individual cases, upon application of the owner or owner's representative, provided the Building Official shall first justify the reason for the modification that makes the strict letter of the codes impractical to implement 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 shall be recorded and entered in the files of the Department of Building Safety.
- **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 shall 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, or at least the equivalent of that prescribed in the codes in quality, strength, effectiveness, fire resistance, durability and safety,
- **104.11.1 Evaluation reports.** Supporting data, where necessary to assist in the approval of materials or assemblies not specifically provided for in the codes, shall consist of valid evaluation 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 shall have the authority to require tests as evidence of compliance to be made at no expense to the jurisdiction. Test methods shall be as specified in the codes or by other recognized test standards. In the absence of recognized and accepted test methods, the Building Official shall approve the testing procedures. Tests shall be performed by an approved agency. Reports of such tests shall be retained by the Building Official for the period required for retention of public records.

Ordinance No. 3143 Page 9 of 99

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, grading on private property, 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, shall first make application to the Building Official and obtain the required permit.

Work performed without permit constitutes a violation of this code and is subject to Section 113 of this Chapter. Upon determination by the Building Official, work performed without permit may constitute an unsafe structure or building.

Incidental structures or improvements of a minor nature may be exempt from the city permit process upon the determination of the Building Official. In place of permits and inspections, the Building Official may utilize alternate means, such as certifications, imaging or programs to track and verify compliance.

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 shall have access to such records at all times and such records shall be filed with the Building Official as designated.

105.2 Work exempt from permit. Exemptions from permit requirements of the codes shall not be deemed to grant authorization for any work to be done in any manner in violation of the provisions of the codes, State laws, ordinances, or established policies of this jurisdiction. Except when otherwise subject to City review and approval or when otherwise required by State or local laws, regulations or standards, permits shall not be 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 Code.
- 2. Walls or fences not over 18 inches in height. Walls supporting a surcharge or impounding Class I, II or III A liquids are not exempt from permit.
- 3. Oil derricks.
- 4. Water tanks supported directly on grade if the capacity does not exceed 5,000 gallons and the ratio of height to diameter or width does not exceed 2:1.

Ordinance No. 3143 Page 10 of 99

5. Sidewalks and driveways 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.

- 6. Painting, papering, tiling, carpeting, cabinets, counter tops, and similar finish work.
- 7. Temporary motion picture, television and theater stage sets and scenery.
- 8. 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.
- 9. Shade cloth structures constructed for nursery or agricultural purposes, not including service systems.
- 10. Swings and other playground equipment accessory to detached one-and two-family dwellings.
- 11. 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.
- 12. Non-fixed and movable fixtures, cases, racks, counters, and partitions not over 6 feet in height.
- 13. Wood decks not over 30 inches above surrounding grade or finishes, not attached to a structure, or serving any part of the means of egress.

Electrical:

- 1. Repairs and maintenance: Minor repair work, including the replacement of lamps or the connection of approved portable electrical equipment to approved per- manently installed receptacles.
- 2. Radio and television transmitting stations: The provisions of the codes shall 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 shall not be required for the installation of any temporary system required for the testing or servicing of electrical equipment or apparatus.
- 4. No permit shall be required for the installation, alteration or repair of wiring, devices, appliances, or equipment for the operation of signals or the transmission of intelligence (not including the control of lighting or appliance circuits) where such wiring, devices, appliances, or equipment operate at a voltage not exceeding twenty-five volts between conductors.
- 5. No permit shall be required for the installation, alteration or repair of electrical wiring, devices, appliances, and equipment installed by or for a public service corporation for the use of such a corporation in the generation, transmission, distribution, or metering of electrical energy, or for the use of such a corporation in the operation of signals or the transmission of intelligence.

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 ap- proval 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, drainpipe, water, soil, waste or vent pipe becomes defective and it becomes necessary to remove and replace the same with the new material, such work shall be considered as new work and a permit shall 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 shall be performed in an emergency situation, the permit application shall be submitted within the next working business day to the Building Official.
- **105.2.2 Repairs.** Application or notice to the Building Official is not required for ordinary repairs to structures, replacement of lamps or the connection of approved portable electrical equipment to approved permanently installed receptacles. Such repairs shall not include the cutting away of any wall, partition, or portion thereof, the removal or cut- ting of any structural beam or load-bearing support, or the removal or change of any required means of egress, or rearrangement of parts of a structure affecting the egress requirements; nor shall ordinary repairs include addition to, alteration of, replacement or relocation of any standpipe. water supply, sewer, drainage, drain leader, gas, soil, waste, vent or similar piping, electric wiring or mechanical or other work affecting public health or general safety.
- **105.2.3 Public service agencies.** A permit shall not be required for the 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 shall first file an application therefore in writing on a form furnished by the department of building safety for that purpose. Such application shall:

Ordinance No. 3143 Page 12 of 99

1. Identify and describe the work to be undertaken by the per- mit 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 with certainty the precise location of 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 shall examine or cause to be examined applications for permits and amendments thereto within a reasonable time after filing. If the application or the construction documents do not conform to the requirements of pertinent laws, the Building Official shall reject such application in writing, stating the reasons, therefore.

No building permit or other similar applicable permit bearing on property development or use including additions, modifications or revisions shall be issued unless and until the review and approval of all other departments and agencies having responsibility or 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 the codes and laws and ordinances applicable thereto, the Building Official shall issue a permit therefore as soon as practicable.

105.3.2 Time limitation of application. An application for a permit for any proposed work shall be deemed to have been abandoned 180 days after the date of filing, unless such application has been pursued in good faith or a permit has been issued; except that the Building Official is authorized to grant one or more extensions of time for additional periods not exceeding 180 days. The extension shall be requested in writing and justifiable cause demonstrated.

Permit applications which were submitted because of a Code Enforcement notice of violation and subsequently not issued within 90 days of filing will be deemed to have expired. The Building Official may authorize the extension of time for justifiable good cause.

105.4 Permit issuance. The application, plans, specifications, computations, and other data filed by an applicant for a permit shall be reviewed by the Building Official. Such plans may be reviewed by other City Departments to verify compliance with any applicable laws and ordinances under their jurisdiction. If the Building Official finds that the work described

Ordinance No. 3143 Page 13 of 99

in an application for a permit and the plans, specifications and other data filed therewith conform to the requirements of the codes and other pertinent laws and ordinances, and that the specified fees have been paid, the permit shall be issued as soon as practicable.

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

The Building Official may issue a permit for the construction of part of the building or structure before the entire plans and specifications for the whole building or structure have been submitted or approved, provided adequate information, and detailed statements have been filed complying with all pertinent requirements of the codes. The holder of such permit shall proceed at their own risk without assurance that the permit for the entire building or structure will be granted.

- **105.5 Retention of plans.** One set of approved plans, specifications and computations shall be retained by the Building Official for a period as detailed by governing retention laws and one set of approved plans and specifications shall be returned to the applicant and said set shall be kept on the project site at all times during which the work authorized thereby is in progress.
- **105.6 Validity of permit.** The issuance or granting of a permit or approval of plans, specifications, and computations shall not be construed to be a permit for, or an approval of, any violation of any of the provisions the codes or of any other ordinance of the City. Permits presuming to give authority to violate or cancel the provisions of the codes or other ordinances of the jurisdiction shall not be valid.

The issuance of a permit based on construction documents and other data shall not prevent the Building Official from requiring the correction of errors in the construction document and other data. The Building Official is also authorized to prevent occupancy or use of a structure where it is in violation of the codes or of any other ordinances of this jurisdiction.

105.7 Expiration. Every permit issued by the Building Official under the provisions of the codes shall expire by limitation and become null and void if the building or work authorized by such permit is not commenced within 180 days 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 90 days. Before such work can commence or recommence, a permit shall first be renewed or reissued.

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

(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 reasonable and satisfactory reasons. The Building Official may extend the time for action by the permittee for a period not exceeding one year upon written

Ordinance No. 3143 Page 14 of 99

request by the permittee showing that circumstances beyond the control of the permittee have prevented action from being taken. Subject to approval of the Building Official, permits extended in this manner will not require additional permit fees and will not be subject to new regulations adopted after issuance of the permit.

- (2) Requesting renewal of an unexpired permit: Any permittee holding an unexpired permit may apply for a renewal of permit. Permit renewal fees shall be in accordance with the fees established by the City Council. Each renewal will extend the expiration date for a period of one year. Permits renewed in this manner will not be subject to new regulations adopted after issuance of the permit.
- (3) Requesting reinstatement of a permit which has been expired for less than 30 days: Any permittee holding a permit which has been expired for less than 30 days may apply for a renewal of permit. Permit renewal fees shall be in accordance with the fees established by the City Council. Subject to the approval of the Building Official, permits renewed in this manner will not be subject to new regulations adopted after issuance of the permit.
- (4) Requesting reissuance of a permit which has been expired for one year or more: Any permittee holding a permit which has been expired for one year or more may apply for reissuance of the permit subject to compliance with current regulations and payment of full plan check and permit fees. Plans shall be resubmitted for plan check. Portions of the structure which have been built under the expired permit will not be subject to current regulations. For the purpose of permit extension, renewal, and reissuance, multiple permits of the same structure such as building, foundation, retaining wall, plumbing, mechanical, and electrical permits shall be considered as one permit. Each separate permit with work completed entirely prior to suspension or abandonment will not be subject to renewal or reissuance.
- **105.8 Change of contractor or of ownership.** A permit issued hereunder shall expire 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 thereon has not been completed, and a new permit shall be required for the completion of the work. If no changes have been made to the plans and specifications last submitted to the Building Official, no charge, other than the permit issuance fee and applicable State fees, shall be made for the issuance of the 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.
- **105.9 Suspension or revocation.** The Building Official may, in writing, suspend or revoke a permit issued under provisions of the codes whenever the permit is issued in error or on the basis of incorrect information supplied by the applicant or applicant's representative or in violation of any ordinance or regulation or any of the provisions of the codes.
- **105.10 Incomplete construction.** When a permit is revoked pursuant to 105.9, the incomplete construction for which the permit is issued shall constitute an unsafe condition and shall be appropriately abated as determined by the Building Official.
- **105.11 Placement of permit.** The building permit or copy thereof shall be kept readily available on the site of the work until the completion of the pro- ject.

Ordinance No. 3143 Page 15 of 99

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

105.13 Liens to be discharged. A permit shall be not be issued to any person or corporation under the provision of this Chapter with respect to any property where the cost of any building repair or abatement has been performed and a lien therefore has been recorded by the jurisdiction, unless and until the amount of said lien with interest, has been paid in full.

SECTION 106 CONSTRUCTION DOCUMENTS

106.1 Submittal documents. Construction documents, statement of special inspections, geotechnical reports and other data shall be submitted in two or more sets with each permit application. The construction documents shall be prepared by a registered design professional where required by the statutes of the jurisdiction 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 it is found that the nature of the work applied for is such that review of construction documents is not necessary to obtain compliance with the codes.

106.2 Expiration of plan review. Reviews for which a permit is not issued within 180 days following the date of original submittal shall expire by limitation, and plans and other data submitted for review may thereafter be returned to the applicant, if not stamped as approved for issuance, or may be destroyed by the Building Official.

Exception: The Building Official may authorize one or more extensions of periods not to exceed 180 days each. These extensions shall not exceed that of the related application as indicated in subsection 105.3.2.

- **106.3 Information on construction documents.** Construction documents shall be dimensioned and drawn upon suitable material. Electronic media documents are permitted to be submitted when approved by the Building Official. Construction documents shall 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.
- **106.3.1 Fire protection system shop drawings.** Shop drawings for the fire protection system(s) shall be submitted to indicate conformance with the codes and the construction documents and shall be approved prior to the start of system installation. Shop drawings shall contain all information as required by the referenced installation standards in Chapter 9.

Ordinance No. 3143 Page 16 of 99

106.3.2 Means of egress. The construction documents shall show in sufficient detail the location, construction, size, and character of all portions of the means of egress in compliance with the provisions of the code. In other than occupancies in Groups R-2, R-3, and I-I, the construction documents shall designate the number of occupants to be accommodated on every floor, and in all rooms and spaces.

106.3.3 Exterior wall envelope. Construction documents for all buildings shall describe the exterior wall envelope in sufficient detail to determine compliance with the code. The construction documents shall 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 shall 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 shall fully describe the exterior wall system, which was tested, where applicable, as well as the test procedure used.

- **106.4 Site plan.** The construction documents submitted with the application for permit shall 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 shall be drawn in accordance with an accurate boundary line survey. In the case of demolition, the site plan shall 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.
- **106.5 Examination of documents.** The Building Official shall examine or cause to be examined the accompanying construction documents and shall ascertain by such examination whether the construction indicated and described is in accordance with the requirements of the codes and other pertinent laws or ordinances.
- **106.6 Approval of construction documents.** When the Building Official issues a permit, the construction documents shall be approved, in writing or by stamp, as "Reviewed for Code Compliance." One set of construction documents so reviewed shall be retained by the Building Official. The other set shall be returned to the applicant, shall be kept at the site of work and shall be open to inspection by the Building Official or a duly authorized representative.
- **106.6.1 Previous approvals.** The codes shall not require changes in the construction documents, construction, or designated occupancy of a structure under the following circumstances: 1) when a lawful permit has been issued or otherwise lawfully authorized, 2) when the construction has been pursued in good faith within 30 days after the effective date of the codes, and 3) when the project has not been abandoned or the Building Official has not determined that the permit was not issued under false information.

Ordinance No. 3143 Page 17 of 99

106.6.2 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 entire building or structure have been submitted, provided that adequate information and detailed statements have been filed complying with pertinent requirements of the codes. The holder of such permit for the foundation or other parts of a building or structure shall proceed at the holder's own risk and without assurance that a permit for the entire structure will be granted.

106.7 Design professional in responsible charge.

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

The registered design professional in charge shall 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 by Section 1704, the statement of special inspections shall name the individual or firms who are to perform structural observation and describe the stages of construction at which structural observation is to occur (see also duties specified in Section 1704).

106.7.2 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 shall have the prior approval of the Building Official. The registered design professional in charge shall list the deferred submittals on the construction documents for review by the Building Official.

Documents for deferred submittal items shall be submitted to the registered design professional in charge who shall 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 shall not be installed until the design and submittal documents have been approved by the Building Official.

106.8 Amended construction documents. Work shall be installed in accordance with the approved construction documents, and any changes made during construction that are not

Ordinance No. 3143 Page 18 of 99

in compliance with the approved construction documents shall be resubmitted for approval as an amended set of construction documents.

106.9 Number of construction documents. One set of approved construction documents shall be retained by the Building Official for a period of not less than that required by state law and the city's adopted records retention policy.

SECTION 107 TEMPORARY STRUCTURES AND USES

- **107.1 General.** The Building Official is authorized to issue a permit for temporary structures and temporary uses. Such per- mits shall be limited as to time of service but shall not be permitted for more than 90 days. The Building Official is authorized to grant extensions for demonstrated cause.
- **107.2 Conformance.** Temporary structures and uses shall 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,
- **107.3 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 temporary certificate shall comply with the requirements specified for temporary lighting, heat, or power in the California Electrical Code.
- **107.4 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 108 FEES

- **108.1 General.** A fee as established by resolution of the City Council shall be paid for each plan review when submitted and each permit at time of issuance.
- **108.2 Permit fees.** A fee for each required permit shall be assessed in accordance with the fee schedule adopted by City Council.

Failure to pay fees and obtain a permit before commencing work shall be deemed 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 shall result in an assessment of an investigation fee in accordance with the fee schedule adopted by City Council. Payment of the fee shall not relieve any person from fully complying with the requirements of the codes nor from any other penalties prescribed herein.

108.3 Plan review fees. When a plan or other data is ready to be submitted pursuant to subsection 105.3, applicant shall present a plan-checking fee, in an amount established by City Council, to the Building Official at the time of submitting plans and specifications for

Ordinance No. 3143 Page 19 of 99

checking. When submittal documents are incomplete or require additional plan review or when the project involves required documents are omitted from the submittal items, an additional fee shall be assessed in accordance with the fee schedule established by City Council.

108.4 Investigation fee. An investigation fee as established by the 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 shall be paid, and the investigation shall be made prior to 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.

108.5 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 shall not 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 jurisdiction or as duplicate fees, except that no refund will be made if 60 days have elapsed from the date of payment.

108.6 Additional plan review fees. Where plans are incomplete or changed so—as to require additional plan checking, an additional plan checking fee shall 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 shall be permitted due to the replacement, omission or lessening of any member or portion of the building shown in the original plans. Said fee may be waived when in the opinion of the Building Official the additional fee is not warranted. No additional fees shall 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.

108.7 Change of Occupancy Investigation fee. A fee as established by the City Council shall 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 heating and ventilating permits covering the alterations and/or repairs of the occupancy conversion.

SECTION 109 INSPECTIONS

109.1 General. Construction or work for which a permit is required shall be subject to inspection by the Building Official and such construction or work shall remain accessible and exposed for inspection purposes until approved. Approval as a result of an inspection

Ordinance No. 3143 Page 20 of 99

shall not be construed to be an approval of a violation of the provisions of the codes or of other ordinances of the jurisdiction. Inspections presuming to give authority to violate or cancel the provisions of the codes or of other ordinances of the jurisdiction shall not be valid. It shall be the duty of the permit applicant to cause the work to remain accessible and exposed for inspection purposes. Neither the Building Official nor the jurisdiction shall be liable for expense entailed in the removal or replacement of any material required to allow inspection.

- **109.2 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
- **109.3 Required inspections.** The Building Official, upon noti- fication, shall make the inspections set forth in Sections 109.3.1 through 109.3.10.
- **109.3.1 Footing and foundation inspection.** Footing and foundation inspections shall be made after excavations for footings are complete and any required reinforcing steel is in place. For concrete foundations, any required forms shall be in place prior to inspection, Materials for the foundation shall be on the job, except where concrete is ready mixed in accordance with ASTM C 94, the concrete need not be on the job.
- **109.3.2 Concrete slab and under-floor inspection.** Concrete slab and under-floor inspections shall 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.
- **109.3.3 Lowest floor elevation.** In flood hazard areas, upon placement of the lowest floor, including the basement, and prior to further vertical construction, the elevation certification shall be submitted to the Building Official.
- **109.3.4 Frame inspection.** Framing inspections shall be made after the roof deck or sheathing, all framing, fireblocking 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,
- **109.3.5** Lath and gypsum board inspection. Lath and gypsum board inspections shall 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.
- **109.3.6 Fire-resistant penetrations.** Protection of joints and penetrations in fire-resistance-rated assemblies shall not be concealed from view until inspected and approved.
- **109.3.7 Energy efficiency inspections.** Inspections shall be made to determine compliance with the California Energy, and Green Building Standards Codes and shall include, but not be limited to, inspections for: envelope insulation R and U-values, fenestration U-value, duct system R-value, and HVAC and water-heating equipment efficiency.

Ordinance No. 3143 Page 21 of 99

109.3.8 Other inspections. In addition to the inspections specified above, 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 jurisdiction having authority.

- **109.3.9 Special inspections.** For special inspections, see Section 1704 of the California Building Code.
- **109.3.10 Final inspection.** The final inspection shall be made after all work required by the building permit is completed.
- **109.4 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.
- **109.5 Inspection requests.** It shall be 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 shall also be the duty of the permit holder to provide access to and means for inspections of such work that are required by the codes.
- **109.6 Approval required.** Work shall not be done beyond the point indicated in each successive inspection without first obtaining the approval of the Building Official. The Building Official, upon notification, shall make the requested inspections and shall either indicate the portion of the construction that is satisfactory as completed, or notify the permit holder or his or her agent wherein the same fails to comply with the codes. Any portions that do not comply shall be corrected and such portion shall not be covered or concealed until authorized by the Building Official.

SECTION 110 CERTIFICATE OF OCCUPANCY

110.1 Use and occupancy. No building or structure shall be used or occupied, and no change in the existing occupancy classification of a building or structure or portion thereof shall be made until the Building Official has issued a certificate of occupancy therefore as provided herein.

Exception: The Building Official may not issue Certificate of Occupancies for remodels and additions to owner-occupied dwellings, such as single-family homes, townhomes, Co-Op or condominiums and U occupancies.

Issuance of a certificate of occupancy shall not be construed as an approval of a violation of the provisions of the codes or of other ordinances of the jurisdiction. Certificates presuming to give authority to violate or cancel the provisions of the codes or other ordinances of the jurisdiction shall not be valid.

The jurisdiction may not issue a Certificate of Occupancy for a commercial shell building intended for single or multiple tenant occupancies upon the completion of a commercial structure. Instead, a Certificate of Occupancy is issued to each business entity that is going to occupy the building, or a portion thereof.

Ordinance No. 3143 Page 22 of 99

110.2 Certificate issued. After the Building Official inspects the building or structure and finds no violations of the provisions of the codes or other laws, the Building Official shall 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 require- ments 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.
- **110.3 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 shall be occupied safely. The Building Official shall set a time period during which the tempo- rary 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 shall be vacated and the utilities disconnected until such time the building is completed, final inspection is completed and a Certificate of Occupancy is issued.

110.4 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 111 SERVICE UTILITIES

Ordinance No. 3143 Page 23 of 99

111.1 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, shall not be established until released by the Building Official.

111.2 Temporary connection. The Building Official shall have the 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.

111.3 Authority to disconnect service utilities. The Building Official shall have the authority to authorize disconnection of utility service to the building, structure or system regulated by the codes and the codes referenced in case of emergency where necessary to eliminate an immediate hazard to life or property. The Building Official shall notify the serving utility, and wherever possible the owner and occupant of the building, structure, or service system of the decision to disconnect prior to taking such action. If not notified prior to disconnecting, the owner or occupant of the building, structure or service system shall be notified in writing, as soon as practical thereafter.

SECTION 112 APPEALS

- **112.1 General.** In order to hear and decide appeals of orders, decisions or determinations made by the Building Official relative to the application and interpretation of this code, there shall be and is hereby created an appeals body.
- **112.2 Appeals body defined.** The appeals body shall be the city manager. The city manager shall meet when necessary to hear and decide the appeals of an order, decision, or determination of the building official. The building official shall act as secretary and keep a record of all business transactions.
- 112.3 Appeal procedures for exception. Any owner of any property in which work is being done and subject to the provisions of the building regulations, or any contractor for any such owner, may file a petition in writing with the appeals body requesting a hearing on any order, decision, or determination of the building official, except as limited herein. The appeals body shall hear such evidence as may be desired in considering the petition and make any exception or grant such relief as they deem advisable in alternate types of materials or construction or in the interpretation of the building regulations, provided, however, that the appeals body shall have no authority relative to the interpretation of administrative provisions, nor shall the appeals body be empowered to waive any requirement of the building regulations. In hearing any such petition, all parties thereto shall be bound by the rules and regulations of the appeals body, as adopted by the appeals body, and the decision of the appeals body shall be final. The appeals body as created and set forth in this code shall at all times be the appeals body to consider any petition asking for relief from any order, decision or determination of the building official.

SECTION 113 VIOLATIONS AND PENALTIES

Ordinance No. 3143 Page 24 of 99

113.1 General. It shall be unlawful for any person, firm, or corporation to erect, construct, enlarge, alter, repair, move, improve, remove, convert, or demolish, equip, use, occupy, or maintain any building or structure, grading on private property in the City of Whittier, or cause or permit the same to be done in violation of the codes.

- **113.2 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 shall direct the discontinuance of the illegal action or condition and the abatement of the violation.
- **113.3 Prosecution of violation.** If the notice of violation is not complied with in a prompt and reasonably timely manner, the Building Official is authorized to request the legal counsel of the jurisdiction 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.
- **113.4 Violation penalties.** Any person who violates a provision of the codes or fails to comply with any of the requirements thereof or who erects, contracts, alters, or repairs a building or structure in violation of the approved construction document or directive of the Building Official, or of a permit or certificate issued under the provision of this code, shall be subject to penalties as prescribed by law.

SECTION 114 STOP WORK ORDER

- **114.1 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.
- **114.2 Issuance.** The stop work order shall be in writing and shall 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 cited work shall immediately cease. The stop work order shall state the reason for the order, and the conditions under which the cited work will be permitted to resume.
- **114.3 Unlawful continuance.** Any person who shall continue 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, shall be subject to penalties as prescribed by law.

SECTION 115 UNSAFE STRUCTURES AND BUILDINGS

115.1 General. All buildings or structures which are structurally unsafe or not provided with adequate egress, or which constitute a fire hazard, or are otherwise dangerous to human life, or which in relation to existing use constitute a hazard to safety, or health or public welfare, by reason of inadequate maintenance, dilapidation, obsolescence, fire hazard, disaster damage, or abandonment, as specified in this Code or in any other effective ordinance or statute, are, for the purpose of this section, unsafe buildings and constitute an unsafe condition. All such unsafe buildings or conditions are hereby declared to be public

Ordinance No. 3143 Page 25 of 99

nuisances and shall be abated by repair, rehabilitation, improvement, removal, or demolition, in whole or part. A vacant building or structure that is not secure against entry shall be deemed unsafe.

SECTION 116 SAFETY ASSESSMENT PLACARDS

- **116.1 Purpose.** This section establishes standard placards to be used to indicate the condition of a structure for continued occupancy. The section further authorizes the building official and his or her authorized representatives to post the appropriate placard at each entry point to a building or structure upon completion of a safety assessment.
- **116.2 Scope.** The provisions of this section are applicable to all buildings and structures of all occupancies regulated by the city of Whittier.
- **116.3 Definitions.** The following definitions apply to this section:
- "Safety Assessment" means a visual, non-destructive examination of a building or structure for the purpose of determining the condition for continued occupancy.
- **116.4 Placards.** The descriptions of City of Whittier's placards to be used to designate the condition for continued occupancy of buildings or structures shall be as set forth herein.

This ordinance number, the name of the jurisdiction, its address and phone number shall be permanently affixed to each placard.

Once 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 shall be unlawful for any person, firm or corporation to alter, remove, cover, or deface a placard unless authorized pursuant to this section.

The placards to be used in application of this Section shall be one of the following:

- 1. "INSPECTED—Lawful occupancy permitted" is to be posted on any building or structure wherein no apparent structural hazard has been found. This placard is not intended to mean that there is no damage to the building or structure.
- 2. "RESTRICTED USE" 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 and concisely note the restrictions on continued occupancy.
- 3. "UNSAFE—Do not enter or occupy" is to be posted on each building or structure that has been damaged such that continued occupancy poses a threat to life and safety. Buildings or structures posted with this placard shall not be entered under any circumstances except as authorized in writing by the building official, or his or her authorized representative. Safety assessment teams shall be authorized to enter these buildings at any time. This placard is not to be used or

Ordinance No. 3143 Page 26 of 99

considered as a demolition order. The individual who posts this placard will note in general terms the type of damage encountered.

116.5 Penalty. The penalty for violating the provisions of this chapter shall be as set forth in Section 1.08.010 of the City of Whittier Municipal Code.

Section 4. Chapter 15.02 of Title 15 of the Municipal City Code is hereby added to read as follow:

Chapter 15.02 BUILDING CODE

15.02.010 Documents – Adopted by reference.

<u>15.02.020 Chapter 1 – Administrative provisions.</u>

15.02.030 Section 312.1 amended – Swimming pools, U occupancy.

15.02.040 Sections 705.2.3 amended – Combustible eave projections.

15.02.050 Section 718.3 amended _ Draft-stopping

15.02.060 Section 718.4 amended _ Draft-stopping.

15.02.070 Table 1505.1 amended _ Class A Roof Covering

15.02.080 Section 1505.1.2 amended _ Roof covering replacement

15.02.090. Section 1618 added - Seismic design provisions for hillside buildings

15.02.100. Section 1807.1.4 amended - Permanent wood foundation systems

15.02.110 Section 1807.1.6 amended - Concrete and masonry foundation walls

15.02.120 Section 1809.3 amended - Stepped footings

15.02.130 Section 1809.4 - Prescriptive footing depth for light frame construction

15.02.140 Section 1809.7 and Table 1809.7 amended - Prescriptive footings for light frame construction

15.02.150 Section 1809.12 amended - Timber footings

15.02.160 Section 1810.3.2.4 amended - Timber

15.02.170 Section 1905.1.7 amended - Minimum reinforcement

15.02.180 Section 2304.10.1 amended - Fastener requirements

15.02.190 Section 2304.12.2.8 amended - Wood retaining walls

Ordinance No. 3143 Page 27 of 99

15.02.200 Section 2305.4 amended - Quality of nails

15.02.210 Section 2305.5 amended - Hold-Down connectors

15.02.220 Section 2306.2 amended - Wood-frame diaphragms

15.02.230 Section 2306.3 amended - Wood-frame shear walls

15.02.240 Section 2307.2 added - Wood-frame shear walls

15.02.250 Table 2308.6.1 amended - Wall bracing requirements

15.02.010 Documents--Adopted by reference.

- (a) The City Council of the City of Whittier hereby adopts the California Building Code specified in Chapter 15.01.010 as Chapter 15.02.010 of Title 15 of the Codes, except such portions as are deleted, modified, or amended as set forth in this chapter. Said Code is adopted and incorporated as if fully set forth herein.
- (b) The purpose of these Codes is to prescribe regulations for the erection, construction, enlargement, alteration, repair, improving, removal, conversion, demolition, occupancy, equipment, use, height, area and maintenance of all buildings and structures.

State law references: Authority to regulate construction, Government Code § 38660; California Building Standards Law, Government Code § 18901 et seq.

Sec. 15.02.020. Chapter 1, Division II Scope and Administration amended.

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

Division II Administrative Provisions

Section 101. For administrative provisions for this Code, see Sec. 15.01.040.

------ Amendments to Building Code (15.02) ------

Sec. 15.02.030. Section 312.1 amended.

Section 312.1 is amended to add "swimming pools" to the list of Group U occupancies such that the section reads as follows:

312.1 General. Buildings and structures of an accessory character and miscellaneous structures not classified in any specific occupancy will be constructed, equipped, and maintained to conform to the requirements of the Codes commensurate with the fire and life hazard incidental to their occupancy. Group U will include, but not be limited to, the following:

Agricultural buildings

Ordinance No. 3143 Page 28 of 99

Aircraft hangars, accessory to a one-or two-family residence (see Section 412.3)

Barns

Carports

Fences more than 6 feet (1,829 mm) high

Grain silos, accessory to a residential occupancy

Greenhouses

Livestock shelters

Private garages

Retaining walls

Sheds

Stables

Tanks

Towers

Swimming pools

Sec. 15.02.040. Sections 705.2.3 amended.

Section 705.2.3 is amended by adding an additional exception to read as follows:

Type VB construction shall be allowed for combustible projections for additions to existing R-3 occupancies provided the fire separation distance is greater than or equal to 2 feet and the floor area of the addition does not exceed 50 percent of the existing floor area of the R-3 occupancy.

Sec. 15.02.050. Sections 718.3 amended.

Section 718.3 is amended by deletion of the Exception.

Sec. 15.02.060. Sections 718.4 amended.

Section 717.4 is amended by deletion of the Exception:

Sec. 15.02.070. Table 1505.1 amended.

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

TABLE 1505.1^a MINIMUM ROOF COVERING CLASSIFICATIONS TYPES OF CONSTRUCTION

| IA | IB | IIA | IIB | IIIA | IIIB | IV | VA | VB |
|----|----|-----|-----|------|------|----|----|----|

| Α | Α | Α | Α | Α | Α | Α | Α | Α |
|-----|-----|-------|-----|-------|-------|--------------|--------------|-------|
| / \ | / \ | , , , | / \ | , , , | , , , | , , , | , , , | , , , |

For SI: 1 foot = 304.8 mm, 1 square foot = 0.0929 m^2 .

a. Unless otherwise required in accordance with Chapter 7A or due to the location of the building within a fire district in accordance with Appendix D.

Sec. 15.02.080. Section 1505.1.2 amended.

Section 1505.1.2 is amended, by the deletion of the entire section and the addition of a new section thereto, to read as follows:

1505.1.2 Roof coverings within all other areas. The entire roof covering of every existing structure where more than 50 percent of the total roof area is replaced within any one-year period, the entire roof covering of every new structure, and any roof covering applied in the alteration, repair or replacement of the roof of every existing structure, shall be a fire-retardant roof covering that is at least Class A.

Sec. 15.02.090. Section 1618 added.

Section 1618 is added to Chapter 16 to read as follows:

1618.1 Seismic Design Provisions for Hillside Buildings.

1618.1.1 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.

1618.1.2 Scope. The provisions of this section shall apply to the design of the lateral-force-resisting system for hillside buildings at and below the base level diaphragm. The design of the lateral-force resisting system above the base level diaphragm shall be in accordance with the provisions for seismic and wind design as required elsewhere in this division.

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

1618.2 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.

Ordinance No. 3143 Page 30 of 99

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 1618.4 and 1618.7 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 1618.5 and 1618.6.3.1. 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.

- 1618.3 Analysis and Design.
- 1618.3.1 General. Every hillside building within the scope of this section shall 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 shall govern, but detailing requirements and limitations prescribed in this and referenced sections shall be followed.
- 1618.3.2 Base Level Diaphragm-Downhill Direction. The following provisions shall apply to the seismic analysis and design of the connections for the base level diaphragm in the downhill direction.
- 1618.3.2.1 Base for Lateral Force Design Defined. For seismic forces acting in the downhill direction, the base of the building shall be the floor at or closest to the top of the highest level of the foundation.
- 1618.3.2.2 Base Shear. In developing the base shear for seismic design, the response modification coefficient (R) shall not exceed 5 for bearing wall and building frame systems. The total base shear shall include the forces tributary to the base level diaphragm including forces from the base level diaphragm.
- 1618.4 Base Shear Resistance-Primary Anchors.
- 1618.4.1 General. The base shear in the downhill direction shall be resisted through primary anchors from diaphragm struts provided in the base level diaphragm to the foundation.
- 1618.4.2 Location of Primary Anchors. A primary anchor and diaphragm strut shall be provided in line with each foundation extending in the downhill direction. Primary anchors and diaphragm struts shall also be provided where interior vertical lateral-force-resisting elements occur above and in contact with the base level diaphragm. The spacing of primary anchors and diaphragm struts or collectors shall in no case exceed 30 feet (9144 mm).
- 1618.4.3 Design of Primary Anchors and Diaphragm Struts. Primary anchors and diaphragm struts shall be designed in accordance with the requirements of Section 1613.7.8.
- 1618.4.4 Limitations. The following lateral-force-resisting elements shall not be designed to resist seismic forces below the base level diaphragm in the downhill direction:

- 1. Wood structural panel wall sheathing,
- 2. Cement plaster and lath,
- 3. Gypsum wallboard, and
- 4. Tension only braced frames.

Braced frames designed in accordance with the requirements of AISC 341 may be used to transfer forces from the primary anchors and diaphragm struts to the foundation provided lateral forces do not induce flexural stresses in any member of the frame or in the diaphragm struts. Deflections of frames shall account for the variation in slope of diagonal members when the frame is not rectangular.

1618.5 Base Shear Resistance-Secondary Anchors.

1618.5.1 General. In addition to the primary anchors required by Section 1618.4, the base shear in the downhill direction shall be resisted through secondary anchors in the uphill foundation connected to diaphragm struts in the base level diaphragm.

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

1618.5.2 Secondary Anchor Capacity and Spacing. Secondary anchors at the base level diaphragm shall be designed for a minimum force equal to the base shear, including forces based on Allowable Stress Design (ASD) levels. The secondary anchors shall be uniformly distributed along the uphill diaphragm edge and shall be spaced a maximum of 4 feet (1219 mm) on center.

1618.5.3 Design. Secondary anchors and diaphragm struts shall be designed in accordance with Section 1618.7.

1618.6 Diaphragms Below the Base Level-Downhill Direction. The following provisions shall apply to the lateral analysis and design of the connections for all diaphragms below the base level diaphragm in the downhill direction.

1618.6.1 Diaphragm Defined. Every floor level below the base level diaphragm shall be designed as a diaphragm.

1618.6.2 Design Force. Each diaphragm below the base level diaphragm shall be designed for all tributary loads at that level using a minimum seismic force factor not less than the base shear coefficient.

1618.6.3 Design Force Resistance-Primary Anchors. The design force described in Section 1618.6.2 shall be resisted through primary anchors from diaphragm struts provided in each diaphragm to the foundation. Primary anchors shall be provided and designed in accordance with the requirements and limitations of Section 1618.4.

1618.6.3.1 Design Force Resistance-Secondary Anchors.

Ordinance No. 3143 Page 32 of 99

1618.6.3.1.1 General. In addition to the primary anchors required in Section 1618.4, the design force in the downhill direction shall be resisted through secondary anchors in the uphill foundation connected to diaphragm struts in each diaphragm below the base level.

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

- 1618.6.3.1.2 Secondary Anchor Capacity. Secondary anchors at each diaphragm below the base level diaphragm shall be designed for a minimum force equal to the design force but not less than 300 pounds per lineal foot (4.38 kN/m) based on Allowable Stress Design (ASD) levels. The secondary anchors shall be uniformly distributed along the uphill diaphragm edge and shall be spaced a maximum of 4 feet (1219 mm) on center.
- 1618.6.3.1.3 Design. Secondary anchors and diaphragm struts shall be designed in accordance with Section 1618.7.
- 1618.7 Primary and Secondary Anchorage and Diaphragm Strut Design. Primary and secondary anchors and diaphragm struts shall be designed in accordance with the following provisions:
- 1. Fasteners. All bolted fasteners used to develop connections to wood members shall be provided with square plate washers at all bolt heads and nuts. Washers shall be minimum 0.229 inch by 3 inches by 3 inches (5.82 mm by 76 mm by 76 mm) in size. Nuts shall be tightened to finger tight plus one half (1/2) wrench turn prior to covering the framing.
- 2. Fastening. The diaphragm to foundation anchorage shall not be accomplished by the use of toenailing, nails subject to withdrawal, or wood in cross-grain bending or cross-grain tension.
- 3. Size of Wood Members. Wood diaphragm struts collectors, and other wood members connected to primary anchors shall not be less than 3 inches (76 mm) in nominal width. The effects of eccentricity on wood members shall be evaluated as required per Item 9.
- 4. Design. Primary and secondary anchorage, including diaphragm struts, splices, and collectors shall be designed for 125% of the tributary force.
- 5. Allowable Stress Increase. The one-third allowable stress increase permitted under Section 1605.3.2 shall not be taken when the working (allowable) stress design method is used.
- 6. Steel Element of Structural Wall Anchorage System. The strength design forces for steel elements of the structural wall anchorage system, with the exception of anchor bolts and reinforcing steel, shall be increased by 1.4 times the forces otherwise required.
- 7. Primary Anchors. The load path for primary anchors and diaphragm struts shall be fully developed into the diaphragm and into the foundation. The foundation must be shown to be adequate to resist the concentrated loads from the primary anchors.
- 8. Secondary Anchors. The load path for secondary anchors and diaphragm struts shall be fully developed in the diaphragm but need not be developed beyond the connection to the foundation.
- 9. Symmetry. All lateral force foundation anchorage and diaphragm strut connections shall be symmetrical. Eccentric connections may be permitted when demonstrated by calculation

Ordinance No. 3143 Page 33 of 99

or tests that all components of force have been provided for in the structural analysis or tests.

- 10. Wood Ledgers. Wood ledgers shall not be used to resist cross-grain bending or cross-grain tension.
- 1618.8 Lateral-Force-Resisting Elements Normal to the Downhill Direction.
- 1618.8.1 General. In the direction normal to the downhill direction, lateral-force-resisting elements shall be designed in accordance with the requirements of this section.
- 1618.8.2 Base Shear. In developing the base shear for seismic design, the response modification coefficient (R) shall not exceed 5 for bearing wall and building frame systems.
- 1618.8.3 Vertical Distribution of Seismic Forces. For seismic forces acting normal to the downhill direction the distribution of seismic forces over the height of the building using Section 12.8.3 of ASCE 7 shall be determined using the height measured from the top of the lowest level of the building foundation.
- 1618.8.4 Drift Limitations. The story drift below the base level diaphragm shall not exceed 0.007 times the story height at strength design force level. The total drift from the base level diaphragm to the top of the foundation shall not exceed 3/4 inch (19 mm). Where the story height or the height from the base level diaphragm to the top of the foundation varies because of a stepped footing or story offset, the height shall be measured from the average height of the top of the foundation. The story drift shall not be reduced by the effect of the horizontal diaphragm stiffness.
- 1618.8.5 Distribution of Lateral Forces.
- 1618.8.5.1 General. The design lateral force shall be distributed to lateral-force-resisting elements of varying heights in accordance with the stiffness of each individual element.
- 1618.8.5.2 Wood Structural Panel Sheathed Walls. The stiffness of a stepped wood structural panel shear wall may be determined by dividing the wall into an adjacent rectangular estimated by AWC SDPWS Section 4.3.2. Sheathing and fastening requirements for the stiffest section shall be used for the entire wall. Each section of wall shall be anchored for shear and uplift at each step. The minimum horizontal length of a step shall be 8 feet (2438 mm) and the maximum vertical height of a step shall be 2 feet 8 inches (813 mm).
- 1618.8.5.3 Reinforced Concrete or Masonry Shear Walls. Reinforced concrete or masonry shear walls shall have forces distributed in proportion to the rigidity of each section of the wall.
- 1618.8.5.4 Limitations. The following lateral force-resisting-elements shall not be designed to resist lateral forces below the base level diaphragm in the direction normal to the downhill direction:
- 1. Cement plaster and lath,
- 2. Gypsum wallboard, and

Ordinance No. 3143 Page 34 of 99

3. Tension-only braced frames.

Braced frames designed in accordance with the requirements of Section 2205A 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 shall account for the variation in slope of diagonal members when the frame is not rectangular.

1618.9 Specific Design Provisions.

1618.9.1 Footings and Grade Beams. All footings and grade beams shall comply with the following:

- 1. Grade beams shall extend at least 12 inches (305 mm) below the lowest adjacent grade and provide a minimum 24-inch (610 mm) distance horizontally from the bottom outside face of the grade beam to the face of the descending slope.
- 2. Continuous footings shall be reinforced with at least two No. 4 reinforcing bars at the top and two No. 4 reinforcing bars at the bottom.
- 3. All main footing and grade beam reinforcement steel shall be bent into the intersecting footing and fully developed around each corner and intersection.
- 4. All concrete stem walls shall extend from the foundation and reinforced as required for concrete or masonry walls.
- 1618.9.2 Protection Against Decay and Termites. All wood to earth separation shall comply with the following:
- 1. Where a footing or grade beam extends across a descending slope, the stem wall, grade beam, or footing shall extend up to a minimum 18 inches (457 mm) above the highest adjacent grade.

Exception: At paved garage and doorway entrances to the building, the stem wall need only extend to the finished concrete slab, provided the wood framing is protected with a moisture proof barrier.

2. Wood ledgers supporting a vertical load of more than 100 pounds per lineal foot (1.46 kN/m) based on Allowable Stress Design (ASD) levels and located within 48 inches (1219 mm) of adjacent grade are prohibited. Galvanized steel ledgers and anchor bolts, with or without wood nailers, or treated or decay resistant sill plates supported on a concrete or masonry seat, may be used.

1618.9.3 Sill Plates. All sill plates and anchorage shall comply with the following:

- 1. All wood framed walls, including nonbearing walls, when resting on a footing, foundation, or grade beam stem wall, shall be supported on wood sill plates bearing on a level surface.
- 2. Power-driven fasteners shall not be used to anchor sill plates except at interior nonbearing walls not designed as shear walls.

Ordinance No. 3143 Page 35 of 99

a stud wall) supporting a vertical load of 4,000 pounds (17.8 kN) based on Allowable Stress Design (ASD) levels or more and the base plate for a steel column shall comply with the following:

- 1. When the post or column is supported on a pedestal extending above the top of a footing or grade beam, the pedestal shall be designed and reinforced as required for concrete or masonry columns. The pedestal shall be reinforced with a minimum of four No. 4 bars extending to the bottom of the footing or grade beam. The top of exterior pedestals shall be sloped for positive drainage.
- 2. The base plate anchor bolts or the embedded portion of the post base, and the vertical reinforcing bars for the pedestal, shall be confined with two No. 4 or three No. 3 ties within the top 5 inches (127 mm) of the concrete or masonry pedestal. The base plate anchor bolts shall be embedded a minimum of 20 bolt diameters into the concrete or masonry pedestal. The base plate anchor bolts and post bases shall be galvanized, and each anchor bolt shall have at least 2 galvanized nuts above the base plate.

1618.9.5 Steel Beam to Column Supports. All steel beam to column supports shall be positively braced in each direction. Steel beams shall have stiffener plates installed on each side of the beam web at the column. The stiffener plates shall be welded to each beam flange and the beam web. Each brace connection or structural member shall consist of at least two 5/8-inch (15.9 mm) diameter machine bolts.

Sec. 15.02.100. Section 1807.1.4 amended:

Section 1807.1.4 amended to read as follows:

1807.1.4 Permanent wood foundation systems. Permanent wood foundation systems shall be designed and installed in accordance with AWC PWF. Lumber and plywood shall be treated in accordance with AWPA U1 (Commodity Specification A, Special Requirement 4.2) and shall be identified in accordance with Section 2303.1.9.1. Permanent wood foundation systems shall not be used for structures assigned to Seismic Design Category D, E or F.

Sec. 15.02.110. Section 1807.1.6 amended to read 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 shall be permitted to be designed and constructed in accordance with this section. Prescriptive design of foundation walls shall not be used for structures assigned to Seismic Design Category D, E or F.

Sec. 15.02.120. Section 1809.3 amended to read as follows:

1809.3 Stepped footings. The top surface of footings shall be level. The bottom surface of footings shall be permitted to have a slope not exceeding one unit vertical in 10 units horizontal (10-percent slope). Footings shall be stepped where it is necessary to change the elevation of the top surface of the footing or where the surface of the ground slopes more than one unit vertical in 10 units horizontal (10-percent slope).

Ordinance No. 3143 Page 36 of 99

For structures assigned to Seismic Design Category D, E or F, the stepping requirement shall also apply to the top surface of grade beams supporting walls. Footings shall be reinforced with four No. 4 bars. Two bars shall be place at the top and bottom of the footings as shown in Figure 1809.3.

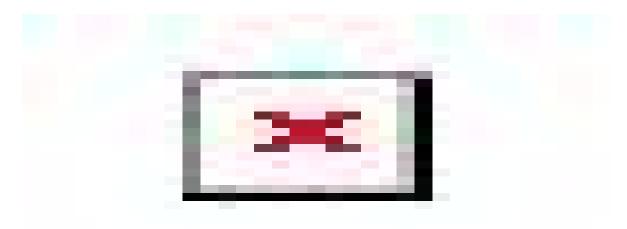


FIGURE 1809.3 STEPPED FOOTING

Sec. 15.02.130. Section 1809.4 amended the first sentence to read as follows:

1809.4 Depth and Width of Footings. The minimum depth of footings below undisturbed ground surface shall be 18 inches (305 mm).

Sec. 15.02.140. Section 1809.7 and Table 1809.7 amended to read 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 shall be permitted to be designed in accordance with Table 1809.7. Prescriptive footings in Table 1809.7 shall not 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 CONSTRUCTIONa,b,c,d,e

| NUMBER OF FLOORS SUPPORTED BY FOOTING ^f | WIDTH OF FOOTING (inches) | THICKNESS OF FOOTING (inches) |
|--|---------------------------------|----------------------------------|
| 1 | 12 | 6 |
| 2 | 15 | 6 |

Ordinance No. 3143 Page 37 of 99



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.
- 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.

Sec. 15.02.150 Section 1809 amended to read as follows:

1809.12 Timber footings. Timber footings shall be permitted for buildings of Type V construction and as otherwise approved by the building official. Such footings shall be treated in accordance with AWPA U1 (Commodity Specification A, Use Category 4B). Treated timbers are not required where placed entirely below permanent water level, or where used as capping for wood piles that project above the water level over submerged or marsh lands. The compressive stresses perpendicular to grain in untreated timber footing supported upon treated piles shall not exceed 70 percent of the allowable stresses for the species and grade of timber as specified in the ANSI/AWC NDS. Timber footings shall not be used in structures assigned to Seismic Design Category D, E or F.

Sec. 15.02.160. Section 1810.3.2.4 amended to read as follows:

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

Sec. 15.02.170. Section 1905.17 amended to read 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** Plain concrete in structures assigned to Seismic Design Category C, D, E or F shall not have elements of structural plain concrete, except as follows:
- (a) Concrete used for fill with a minimum cement content of two (2) sacks of Portland cement or cementitious material per cubic yard.
- (b) Isolated footings of plain concrete supporting pedestals or columns are permitted, provided the projection of the footing beyond the face of the supported member does not exceed the footing thickness.

Ordinance No. 3143 Page 38 of 99

(c) Plain concrete footings supporting walls are permitted provided the footings have at least two continuous longitudinal reinforcing bars. Bars shall not be smaller than No. 4 and shall have a total area of not less than 0.002 times the gross cross-sectional area of the footing. A minimum of one bar shall be provided at the top and bottom of the footing. Continuity of reinforcement shall be provided at corners and intersections.

Exception:

1. 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 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.

Sec. 15.02.180. Section 2304.10.1 amended to read as follows:

2304.10.1 Fastener requirements. Connections for wood members shall be designed in accordance with the appropriate methodology in Section 2302.2. The number and size of fasteners connecting wood members shall not be less than that set forth in Table 2304.10.2. Staple fasteners in Table 2304.10.1 shall not be used to resist or transfer seismic forces in structures assigned to Seismic Design Category D, E or F.

Exception: Staples may be used to resist or transfer seismic forces when the allowable shear values are substantiated by cyclic testing and approved by the building official.

Sec. 15.02.190. Section 2304.12.2.8 amended to read as follows:

2304.12.2.8 Wood used in retaining walls and cribs. Wood installed in retaining or crib walls shall be preservative treated in accordance with AWPA U1 for soil and freshwater use. Wood shall not be used in retaining or crib walls for structures assigned to Seismic Design Category D, E or F.

Sec. 15.02.200. Section 2305.4 added to Chapter 23 to read as follows:

2305.4 Quality of Nails. In Seismic Design Category D, E or F, mechanically driven nails used in wood structural panel shear walls shall meet the same dimensions as that required for hand-driven nails, including diameter, minimum length, and minimum head diameter. Clipped head or box nails are not permitted in new construction. The allowable design value for clipped head nails in existing construction may be taken at no more than the nail-head-area ratio of that of the same size hand-driven nails.

Sec. 15.02.210. Section 2305.5 added to Chapter 23 to read as follows:

2305.5 Hold-down connectors. In Seismic Design Category D, E or F, hold-down connectors shall be designed to resist shear wall overturning moments using approved cyclic load values or 75 percent of the allowable seismic load values that do not consider cyclic loading of the product. Connector bolts into wood framing shall require steel plate washers on the post on the opposite side of the anchorage device. Plate size shall be a minimum of 0.229 inch by 3 inches by 3 inches (5.82 mm by 76 mm by 76 mm) in size.

Ordinance No. 3143 Page 39 of 99

Hold-down connectors shall be tightened to finger tight plus one half (1/2) wrench turn left prior to covering the wall framing.

Sec. 15.02.220. Section 2306.2 amended to read as follows:

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

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

The allowable shear values 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 shall 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. 15.02.230. Section 2306.3 amended to read as follows:

2306.3 Wood-frame shear walls. Wood-frame shear walls shall be designed and constructed in accordance with AWC SDPWS. For structures assigned to Seismic Design Category D, E, or F, application of Tables 4.3A and 4.3B of AWC SDPWS shall include the following:

- 1. Wood structural panel thickness for shear walls shall not be less than 3/8 inch thick and studs shall not 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

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 shall 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 shall 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 shall not be used below the top level in a multi-level building.

Ordinance No. 3143 Page 40 of 99

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

Exception: 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 shall be permitted to use design values for Plywood Siding in the AWC SDPWS.

Sec. 15.02.240. Section 2307.2 added to read as follows:

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

Sec. 15.02.250. Section 2308.6.9 amended to read as follows:

2308.6.9 Attachment of sheathing. Fastening of braced wall panel sheathing shall not be less than that prescribed in Tables 2308.6.1 or 2304.10.1. Wall sheathing shall not be attached to framing members by adhesives. Staple fasteners in Table 2304.0.1 shall not be used to resist or transfer seismic forces in structures assigned to Seismic Design Category D, E or F.

Exception: Staples may be used to resist or transfer seismic forces when the allowable shear values are substantiated by cyclic testing and approved by the building official.

All braced wall panels shall extend to the roof sheathing and shall be attached to parallel roof rafters or blocking above with framing clips (18 gauge minimum) spaced at maximum 24 inches (6096 mm) on center with four 8d nails per leg (total eight 8d nails per clip). Braced wall panels shall be laterally braced at each top corner and at maximum 24 inches (6096 mm) intervals along the top plate of discontinuous vertical framing.

Section 5. Chapter 15.03 of Title 15 of the Municipal City Code is hereby added to read as follow:

Chapter 15.03 RESIDENTIAL CODE

15.03.010 Document adopted by reference.

15.03.020 Reference to administrative provisions.

15.03.030 Section R301.2(1) amended _ Wood frame structures.

15.03.040 Table R301.1.3.2 amended - Design criteria.

15.03.050 Section R301.1.5 added _ Seismic design steep slopes.

Ordinance No. 3143 Page 41 of 99

- 15.03.060 Section R301.2.2.2.6 amended _ Irregular buildings.
- <u>15.03.070 Section R301.9 added Equipment anchorage.</u>
- 15.03.080 Section R401.1 amended _ Wood foundations.
- <u>15.03.090 Sections R403.1.2, R403.1.3.6 and R403.1.5 amended Footings.</u>
- 15.03.100 Section R404.2 amended _ Wood foundations.
- 15.03.110 Section R501.1 amended _ Equipment support.
- <u>15.03.120 Section R503.2.4 added Horizontal diaphragm openings.</u>
- 15.03.130 Table R602.3(1) amended _ Fastener schedule.
- 15.03.140 Table R602.3(2) amended Alternate attachment.
- 15.03.150 Table R602.10.3(3) added _ Bracing requirements.
- 15.03.160 Table R602.10.4 amended _ Bracing methods.
- 15.03.170 .Figure R602.10.6.1 amended Alternate braced wall panel.
- <u>15.03.180</u> .Figure R602.10.6.2 amended Portal frame.
- 15.03.190 Table R602.10.5 amended _ Braced wall lengths.
- 15.03.200 Section R602.10.2.3 amended _ Minimum number of braced wall panels.
- <u>15.03.210</u> Figure R602.10.6.4 amended _ Method CS-PF.
- 15.03.220 Section R606.4.4 amended Parapet walls.
- 15.03.230 .Section R606.12.2.2.3 amended _Masonry element reinforcement.
- 15.03.240 .Section R602.3.2 and Table R602.3.2 Single top plate splice.
- 15.03.250 Section R803.2.4 added _ Horizontal diaphragm openings.
- 15.03.260 Section R1001.3.1 amended _ Vertical reinforcement chimneys.
- 15.03.010 California Residential Code adopted by reference.
- (a) The City Council of the City of Whittier hereby adopts the California Residential Code specified in Chapter 15.01.010 as Chapter 15.03.010 of Title 15 of this Code, except such portions as are deleted, modified, or amended as set forth in this chapter. Said Code is adopted and incorporated as if fully set forth herein.

Ordinance No. 3143 Page 42 of 99

(b) The purpose of this Code is to prescribe regulations for the protection of the public health and safety and to establish minimum regulations for the erection, installation, alteration, repair, relocation, replacement, maintenance of one-and-two family dwelling units not exceeding three stories in height and separate means of egress.

State law references: Adoption by reference, Government Code § 50022.1 et seq.

Sec. 15.03.020. Chapter 1 amended.

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

Chapter 1 Administrative Provisions

Section 101. For administrative provisions for this Code, see Sec. 15.01.040.

_____ Residential Code Amendments (15.03) ------

Sec. 15.03.030. Section R301.1.3.2 amended.

Section R301.1.3.2 amended to read as follows:

R301.1.3.2 Wood frame structures greater than two-stories. The building official shall require construction documents to be approved and stamped by a California licensed architect or engineer for all dwellings of wood frame construction more than two stories 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 shall require construction documents to be approved and stamped by a California licensed architect or engineer for all dwellings of wood frame construction more than one story in height or with a basement located in Seismic Design Category D_0 , D_1 , D_2 or E.

Sec. 15.03.040. Table R301.2(1) amended.

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

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

| GROUND | WIND DESIGN | | SEISMIC | SUBJECT TO DAMAGE FROM | | | WINTER | ICE BARRIER | | AIR | MEAN |
|--------|-------------|-------------|---------------------|------------------------|--------------------|-----------|--------|--------------|-----------|--------------------|-------------------|
| SNOW | Speed d | Topographic | DESIGN | | Frost line | | DESIGN | UNDERLAYMENT | FLOOD | FREEZING | ANNUAL |
| LOAD | (mph) | effects k | CATEGORY f | Weathering a | Depth ^b | Termite c | TEMP e | REQUIRED h | HAZARDS 9 | INDEX ¹ | TEMP ^j |
| | | | | | | Very | | | See | | |
| Zero | 85 | No | D ₂ or E | Negligible | 12-24" | Heavy | 43 | No | Exhibit B | 0 | 60 |

For SI: 1 pound per square foot = 0.0479 kPa, 1 mile per hour = 0.447 m/s.

 a. Weathering may require a higher strength concrete or grade of masonry than necessary to satisfy the structural requirements of this code. The weathering column shall be filled in with the weathering index (i.e., "negligible," "moderate" or "severe") for concrete as determined from the Weathering Probability Map Ordinance No. 3143 Page 43 of 99

[Figure R301.2(3)]. The grade of masonry units shall be determined from ASTM C 34, C 55, C 62, C 73, C 90, C 129, C 145, C 216 or C 652.

- b. The frost line depth may require deeper footings than indicated in Figure R403.1(1). The jurisdiction shall fill in the frost line depth column with the minimum depth of footing below finish grade.
- c. The jurisdiction shall fill in this part of the table to indicate the need for protection depending on whether there has been a history of local subterranean termite damage.
- d. The jurisdiction shall fill in this part of the table with the wind speed from the basic wind speed map [Figure R30I.2(4)]. Wind exposure category shall be determined on a site-specific basis in accordance with Section R301.2.1.4.
- e. The outdoor design dry-bulb temperature shall be selected from the columns of 971/2-percent values for winter from Appendix D of the *California Plumbing Code*. Deviations from the Appendix D temperatures shall be permitted to reflect local climates or local weather experience as determined by the building official.
- f. The jurisdiction shall fill in this part of the table with the seismic design category determined from Section R301.2.2.1.
- g. The jurisdiction shall fill in this part of the table with (a) the date of the jurisdiction's entry into the National Flood Insurance Program (date of adoption of the first code or ordinance for management of flood hazard areas), (b) the date(s) of the Flood Insurance Study and (c) the panel numbers and dates of all currently effective FIRMs and FBFMs or other flood hazard map adopted by the authority having jurisdiction, as amended.
- h. In accordance with Sections R905.2.7.1, R905.4.3.1, R905.5.3.1, R905.6.3.1, R905.7.3.1 and R905.8.3.1, where there has been a history of local damage from the effects of ice damming, the jurisdiction shall fill in this part of the table with "YES." Otherwise, the jurisdiction shall fill in this part of the table with "NO."
- i. The jurisdiction shall fill in this part of the table with the 100-year return period air freezing index (BF-days) from Figure R403.3(2) or from the l00-year (99%) value on the National Climatic Data Center data table "Air Freezing Index- USA Method (Base 32°)" at www.ncdc.noaa.gov/fpsf.html.
- j. The jurisdiction shall fill in this part of the table with the mean annual temperature from the National Climatic Data Center data table "Air Freezing Index-USA Method (Base 32°F)" at www.ncdc.noaa.gov/fpsf.html.
- k. In accordance with Section R301.2.1.5, where there is local historical data documenting structural damage to buildings due to topographic wind speed-up effects, the jurisdiction shall fill in this part of the table with "YES." Otherwise, the jurisdiction shall indicate "NO" in this part of the table.

Sec. 15.03.050. Section R301.1.5 added.

Section R301.1.5 added to Chapter 3 to read as follows:

R301.1.5 Seismic design provisions for buildings constructed on or into slopes steeper than one unit vertical in three units horizontal (33.3 percent slope). The design and construction of new buildings and additions to existing buildings when constructed on or into slopes steeper than one unit vertical in three units horizontal (33.3 percent slope) shall comply with Section 1613.9 of the Building Code.

Sec. 15.03.060. Section R301.2.2.2.6 amended.

Items 1, 3 and 5 of Section R301.2.2.2.6 amended to read as follows:

- 1. 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.
- 3. When the end of a braced wall panel occurs over an opening in the wall below.
- 5. Where portions of a floor level are vertically offset.

Sec. 15.03.070. Section R301.9 added.

Section R301.9 is added to read as follows:

Ordinance No. 3143 Page 44 of 99

R301.9 Anchorage of Mechanical, Electrical, or Plumbing Components and Equipment. Mechanical, electrical, or plumbing components and equipment shall be anchored to the structure. Anchorage of the components and equipment shall be designed to resist loads in accordance with the 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 (1,780 N) or less and has a center of mass located 4 ft (1.22 m) or less above the supporting structure: or
- 2. The component weighs 20 lb (89N) or less or, in the case of a distributed system, 5 lb/ft (73 N/rn) or less.

Sec. 15.03.080 Section R401.1 amended.

Section R401.1 amended to read as follows:

R401.1 Application. The provisions of this chapter shall 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) shall meet the provisions of Section R322. Wood foundations shall be designed and installed in accordance with AWC PWF.

Exception: The provisions of this chapter shall be permitted to be used for wood foundations only in the following situations:

- 1. In buildings that have no more than two floors and a roof.
- 2. When interior basement and foundation walls are constructed at intervals not exceeding 50 feet (15,240 mm).

Wood foundations in Seismic Design Category D₀, D₁ or D₂ shall not be permitted.

Exception: In non-occupied, single-story, detached storage sheds and similar uses other than carport or garage, provided the gross floor area does not exceed 200 square feet, the plate height does not exceed 12 feet in height above the grade plane at any point, and the maximum roof projection does not exceed 24 inches.

Sec. 15.03.090. Section 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 D₀, D₁ and D₂. Exterior walls of buildings located in Seismic Design Categories D₀, D₁ and D₂ shall be supported by continuous solid or fully grouted masonry or concrete footings. All required interior braced wall panels in buildings located in Seismic Design Categories D₀, D₁ and D₂ shall be supported on continuous foundations.

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

Ordinance No. 3143 Page 45 of 99

constructed with stud bearing walls, isolated plain concrete footings supporting columns or pedestals are permitted.

R403.1.5 Slope. The top surface of footings shall be level. The bottom surface of footings shall not have a slope exceeding one unit vertical in 10 units horizontal (10-percent slope). Footings shall be stepped where it is necessary to change the elevation of the top surface of the footings or where the slope of the bottom surface of the footings will exceed one unit vertical in 10 units horizontal (10-percent slope).

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



FIGURE R403.1.5 STEPPED FOOTING

Sec. 15.03.100. Section R404.2 amended.

Section R404.2 amended to read as follows:

R404.2 Wood foundation walls. Wood foundation walls shall 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 shall not be used for structures located in Seismic Design Category D_0 , D_1 and D_2 .

Sec. 15.03.110. Section R501.1 amended.

Section R501.1 amended to read as follows:

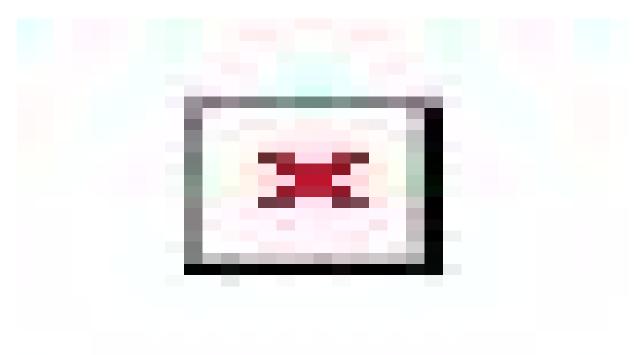
R501.1 Application. The provisions of this chapter shall control the design and construction of the floors for buildings, including the floors of attic spaces used to house mechanical or plumbing fixtures and equipment. Mechanical or plumbing fixtures and equipment shall be attached (or anchored) to the structure in accordance with Section R301.9.

Ordinance No. 3143 Page 46 of 99

Sec. 15.03.120 Section R503.2.4 added.

Section R503.2.4 added to Chapter 5 to read 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 (1.2 m) shall be constructed in accordance with Figure R503.2.4.



- a. Blockings shall be provided beyond headers.
- b. Metal ties not less than 0 58 inches (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 R301.2.2.2.5.

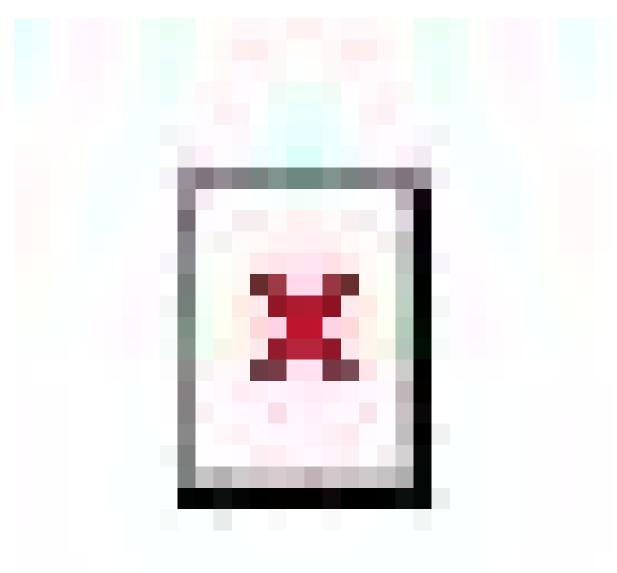
Ordinance No. 3143 Page 47 of 99

FIGURE R503.2.4 OPENINGS IN HORIZONTAL DIAPHRAGMS

Sec. 15.03.130. Table R602.3.1 amended

Lines 35 and 36 of Table R602.3(1) amended and footnote j is add to read as follows:

Ordinance No. 3143 Page 48 of 99



Use of staples in braced wall pastels shall be prohibited in Seismic Design Category D₀, D₁ and D₂.

j.

Sec. 15.03.140 Section R602.3(2) amended.

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

b. Staples shall have a minimum crown width of 7/16-inch on diameter except as noted. Use of staples in roof, floor, subfloor, and braced wall panels shall be prohibited in Seismic Design Category D_0 , D_1 and D_2 .

Ordinance No. 3143 Page 49 of 99

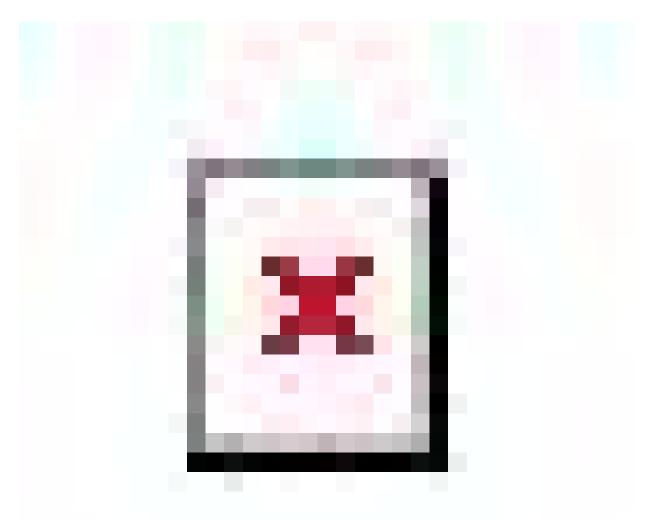
Sec. 15.03.150 Table R602.10.3(3) amended.

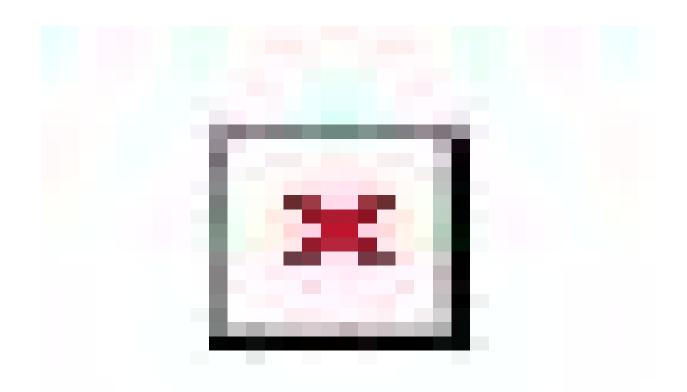
Table R602.10.3(3) amended to read as follows:

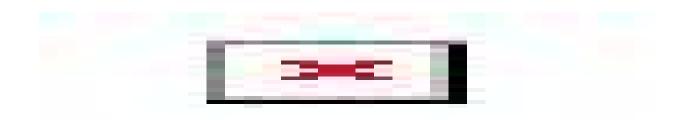


Sec. 15.04.020.160 Table R602.10.4 amended.

Table R602.10.4 amended to read as follows:







Sec. 15.03.170 Figure R602.10.6.1 amended.

Figure R602.10.6.1 amended to read as follows:



Ordinance No. 3143 Page 54 of 99

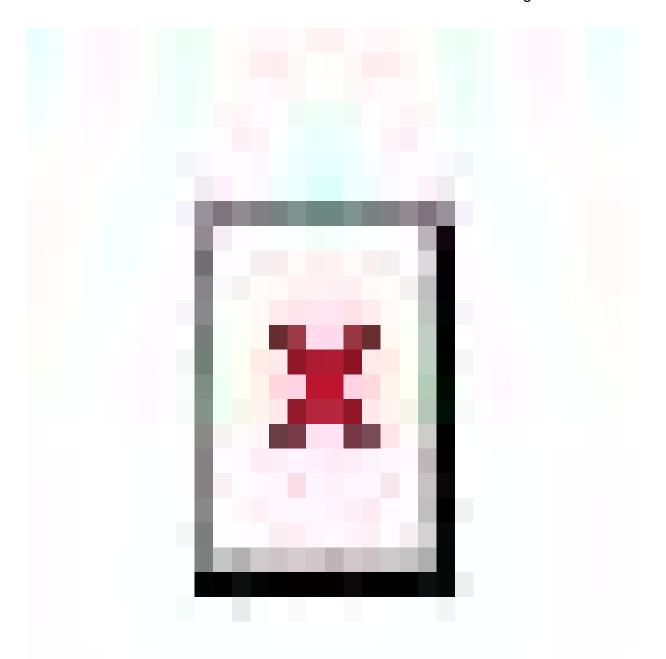
Sec. 15.03.180 Figure R602.10.6.2 amended.

Figure R602.10.6.2 amended to read as follows:



Sec. 15.03.190 Table R602.10.5 amended.

Table R602.10.5 amended to read as follows:



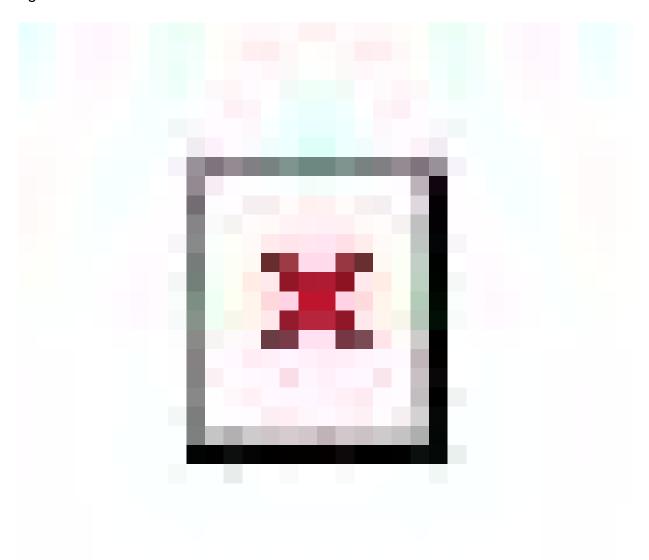
Sec. 15.03.200 Section R602.10.2.3 amended.

Section R602.10.2.3 amended to read as follows:

R602.10.2.3 Minimum number of braced wall panels. Braced wall lines with a length of 16 feet (4,877 mm) or less shall have a minimum of two braced wall panels of any length or one braced wall panel equal to 48 inches (1,219 mm) or more. Braced wall lines greater than 16 feet (4,877 mm) shall have a minimum of two braced wall panels. No braced wall panel shall be less than 48 inches in length in Seismic Design Category D₀, D₁, or D₂.

Sec. 15.03.210 Figure R602.10.6.4 amended.

Figure R602.10.6.4 amended to read as follows:



Sec. 15.03.220 Section R606.4.4 amended.

Section R606.4.4 amended to read as follows:

Ordinance No. 3143 Page 58 of 99

R606.4.4 Parapet walls. Unreinforced solid masonry parapet walls shall not be less than 8 inches (203 mm) thick, and their height shall not exceed four times their thickness. Unreinforced hollow unit masonry parapet walls shall be not less than 8 inches (203 mm) thick, and their height shall not exceed three times their thickness. Masonry parapet walls in areas subject to wind loads of 30 pounds per square foot (1.44 kPa) or located in Seismic Design Category D_0 , D_1 or D_2 , or on townhouses in Seismic Design Category C shall be reinforced in accordance with Section R606.12.

Sec. 15.03.230 Section R606.12.2.2.3 amended.

Section R606.12.2.2.3 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 shall be reinforced in either the horizontal or vertical direction as shown in Figure R606.11(3) and in accordance with the following:

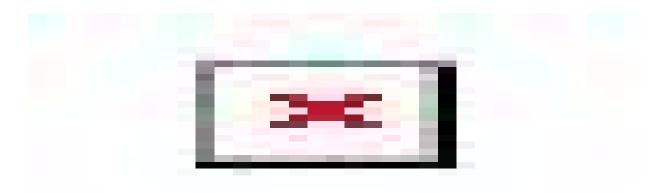
- Horizontal reinforcement. Horizontal joint reinforcement shall consist of at least one No. 4 bar spaced not more than 48 inches (1219 mm) Horizontal reinforcement shall be provided within 16 inches (406 mm) of the top and bottom of these masonry elements.
- 2. Vertical reinforcement. Vertical reinforcement shall consist of at least one No. 4 bar spaced not more than 48 inches (1,219 mm). Vertical reinforcement shall be within 46-8 inches (406mm) of the ends of masonry walls.

Sec. 15.03.240 Section R602.3.2 and Table R602.3.2 amended.

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

Exception: A—In other than Seismic Design Category D₀. D₁ or D₂_a single top plate used as an alternative to a double top plate shall comply with the following:

- 1. The single top plate shall be tied at corners, intersecting walls, and at inline splices in straight wall lines in accordance with Table R602.3.2
- 2. The rafters or joists shall be centered over the studs with a tolerance of not more than 1 inch (25 mm).
- 3. Omission of the top plate is permitted over headers where the headers are adequately tied to adjacent wall sections in accordance with Table R602.3.2.



Sec. 15.03.250 Section R803.2.4 added.

Section R803.2.4 added to Chapter 8 to read as follows:

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

Sec. 15.03.260 Section R1001.3.1 amended.

Section R1001.3.1 amended to read as follows:

R1001.3.1 Vertical reinforcing. For chimneys up to 40 inches (1,016 mm) wide, four No. 4 continuous vertical bars adequately anchored into the concrete foundation shall be placed between wythes of solid masonry or within the cells of hollow unit masonry and grouted in accordance with Section R609. Grout shall be prevented from bonding with the flue liner so that the flue liner is free to move with thermal expansion. For chimneys more than 40 inches (1,016 mm) wide, two additional No. 4 vertical bars adequately anchored into the concrete foundation shall be provided for each additional flue incorporated into the chimney or for each additional 40 inches (1,016 mm) in width or fraction thereof.

Section 6. Chapter 15.04 of Title 15 of the Municipal City Code is hereby added to read as follow:

Chapter 15.04 ELECTRICAL CODE

15.04.010 California Electrical adopted by reference.

15.04.020 Reference to administrative provisions.

15.04.030 Article 310.2(B) amended _ Aluminum wiring restriction.

15.04.040 Article 310. added _ Aluminum wiring, continuous inspection.

Ordinance No. 3143 Page 60 of 99

Sec. 15.04.010 California Electrical Code adopted by reference.

(a) The City Council of the City of Whittier hereby adopts the California Electrical Code specified in Chapter 15.01.010 as Chapter 15.04.010 of Title 15 of the Codes, except such portions as are deleted, modified, or amended as set forth in this chapter. Said Code is adopted and incorporated as if fully set forth herein.

(b) The purpose of the Code is to prescribe regulations for the installation, arrangement, alteration, repair, use and other operation of electrical wiring, connections, fixtures, and other electrical appliances on premises within the City.

State law references: Adoption by reference, Government Code § 50022.1 et seq.

Sec. 15.04.020. Chapter 1 amended.

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

Chapter 1

Administrative Provisions

Section 101. For administrative provisions for this Code, see Sec. 15.01.040.

Sec. 15.04.030. Article 310.3(B) amended.

Article 310.3(B) is hereby amended, by the addition of a second paragraph, to read as follows:

"Copper wire will be used for wiring No. 6 and smaller in all installation. Consideration for use of aluminum wiring can be made by the Building Official for feeder lines only on an individual basis where adequate safety measures can be ensured."

Sec. 15.04.040. Article 310 amended.

Article 310 is amended, by addition of a new Article 310.121, to read as follows:

"310-121 Continuous inspection of aluminum wiring.

Aluminum conductors of No. six (6) or smaller used for branch circuits will require continuous inspection by an independent testing agency approved by the Building Official for proper torquing of connections at their termination point."

Section 7. Chapter 15.05 of Title 15 of the Municipal City Code is hereby added to read as follow:

Chapter 15.05 MECHANICAL CODE

15.05.010 California Mechanical Code adopted by reference.

Ordinance No. 3143 Page 61 of 99

15.05.020 Reference to administrative provisions.

15.05.010 California Mechanical Code adopted by reference.

- (a) The City Council of the City of Whittier hereby adopts the California Mechanical Code specified in Chapter 15.01.010 as Chapter 15.05.010 of Title 15 of this Code, except such portions as are deleted, modified, or amended as set forth in this chapter. Said Code is adopted and incorporated as if fully set forth herein.
- (b) The purpose of this Code is to prescribe regulations for the protection of the public health and safety and to establish minimum regulations for the installation, alteration, design, construction, quality of materials, location, operation, and maintenance of heating, ventilating, comfort cooling, refrigeration systems, incinerators, and other miscellaneous heat-producing appliances within the City.

State law references: Adoption by reference, Government Code § 50022.1 et seg.

Sec. 15.05.020. Chapter 1 amended.

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

Chapter 1

Administrative Provisions

Section 101. For administrative provisions for this Code, see Sec. 15.01.040.

Section 8. Chapter 15.06 of Title 15 of the Municipal City Code is hereby added to read as follow:

Chapter 15.06 PLUMBING CODE

15.06.010 California Plumbing Code adopted by reference.

15.06.020 Reference to administrative provisions.

15.06.010 California Plumbing Code adopted by reference.

- (a) The City Council of the City of Whittier hereby adopts the California Plumbing Code, specified in Chapter 15.01.010 as Chapter 15.06.010 of Title 15 of this Code, except such portions as are deleted, modified, or amended as set forth in this chapter. Said Code is adopted and incorporated as if fully set forth herein.
- (b) The purpose of this Code is to prescribe regulations for the protection of the public health and safety and to establish minimum regulations for the erection, installation, alteration, repair, relocation, replacement, maintenance, or use of plumbing systems within the City.

Ordinance No. 3143 Page 62 of 99

State law references: Adoption by reference, Government Code § 50022.1 et seq.

Sec. 15.06.020. Chapter 1 amended.

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

Chapter 1

Administrative Provisions

Section 101. For administrative provisions for this Code, see Sec. 15.01.040.

Section 9. Chapter 15.07 of Title 15 of the Municipal City Code is hereby added to read as follow:

Chapter 15.07 ENERGY CODE

15.07.010 California Energy Code adopted by reference.

15.07.020 Reference to administrative provisions.

15.07.030 Main electrical panel provisions for solar.

15.07.040 Dedicated solar zone.

15.07.010 California Energy Code adopted by reference.

- (a) The City Council of the City of Whittier hereby adopts the California Energy Code specified in Chapter 15.01.010 as Chapter 15.07.010 of Title 15 of this Code, except such portions as are deleted, modified, or amended as set forth in this chapter. Said Code is adopted and incorporated as if fully set forth herein.
- (b) The purpose of this Code is to prescribe regulations for the protection of the public health and safety and to establish minimum regulations for energy efficiency of buildings within the City.

State law references: Adoption by reference, Government Code § 50022.1 et seg.

Sec. 15.07.020. Chapter 1 amended.

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

Chapter 1

Administrative Provisions

Section 101. For administrative provisions for this Code, see Sec. 15.01.040.

Sec. 15.07.030. Subchapter 2, Section 110.10 amended.

The section is amended by adding a new Item 3 and 4 to read as follows:

- 3. The main electrical panel shall have a minimum three-quarter inch conduit routed to the rooftop for future solar installation.
- 4. The main electrical panel shall have a minimum three-quarter inch conduit routed to an enclosed garage for future electric vehicle charging station installation.

Sec. 15.07.040. Subchapter 2, Section 110.10 (a) Item 1 amended.

The section is amended by adding a new paragraph to subsection (a) Item 1 to read as follows:

A new single-family residence not included within the requirements of the preceding paragraph shall comply with the requirements of Sections 110.10 (b) through 110.10 (e). In addition, modifications or alterations to an existing single-family dwelling that are undertaken that materially change the size, type, or components of energy efficiency standards and require a permit shall be required to comply with the requirements of Sections 110.10 (b) through 110.10 (e).

Section 10. Chapter 15.08 of Title 15 of the Municipal City Code is hereby added to read as follow:

Chapter 15.08 HISTORIC BUILDING CODE

15.08.010 California Historical Code adopted by reference.

15.08.020 Reference to administrative provisions.

15.08.010 California Historical Code adopted by reference.

- (a) The City Council of the City of Whittier hereby adopts the California Historical Building Code specified in Chapter 15.01.010 as Chapter 15.08.010 of Title 15 of this Code, except such portions as are deleted, modified, or amended as set forth in this chapter. Said Code is adopted and incorporated as if fully set forth herein.
- (b) The purpose of this Code is to prescribe regulations for the protection of the public health and safety and to establish minimum regulations for preservation of historic buildings within the City.

State law references: Adoption by reference, Government Code § 50022.1 et seq.

Sec. 15.08.020. Chapter 1 amended.

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

Chapter 1

Administrative Provisions

Section 101. For administrative provisions for this Code, see Sec. 15.01.040.

Section 11. Chapter 15.09 of Title 15 of the Municipal City Code is hereby added to read as follow:

Chapter 15.09 EXISTING BUILDING CODE

15.09.010 California Existing Building Code adopted by reference.

15.09.020 Reference to administrative provisions.

15.09.010 California Existing Building Code adopted by reference.

- (a) The City Council of the City of Whittier hereby adopts the California Existing Building Code specified in Chapter 15.01.010 as Chapter 15.09.010 of Title 15 of this Code, except such portions as are deleted, modified, or amended as set forth in this chapter. Said Code is adopted and incorporated as if fully set forth herein.
- (b) The purpose of this Code is to prescribe regulations for the protection of the public health and safety and to establish minimum regulations for existing buildings within the City.

State law references: Adoption by reference, Government Code § 50022.1 et seq.

Sec. 15.09.020. Chapter 1 amended.

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

Chapter 1

Administrative Provisions

Section 101. For administrative provisions for this Code, see Sec. 15.01.040.

Section 12. Chapter 15.10 of Title 15 of the Municipal City Code is hereby added to read as follow:

Chapter 15.10 GREEN BUILDING STANDARDS CODE

15.10.010 Green Building Standards Code adopted by reference.

15.10.020 Reference to administrative provisions.

15.10.030 Section 202 amended _ Sustainability definition.

Ordinance No. 3143 Page 65 of 99

15.10.040 Section 4.304.1 amended _ Irrigation controllers.

Sec. 15.10.010. Document adopted by reference.

(a) The City Council of the City of Whittier hereby adopts the mandatory provisions of the California Green Building Standards Code specified in Chapter 15.01.010 as Chapter 15.10.010 of Title 15 of this Code, except such portions as are deleted, modified, or amended as set forth in this chapter. Said Code is adopted and incorporated as if fully set forth herein.

(b) The purpose of this Code is to prescribe regulations for the protection of the public health and safety and to establish minimum regulations for reducing the environmental impact of buildings within the City.

State law references: Adoption by reference, Government Code § 50022.1 et seq.

Sec. 15.10.020. Chapter 1 amended.

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

Chapter 1 Administrative Provisions

Section 101. For administrative provisions for this Code, see Sec. 15.01.040.

Sec. 15.10.030. Sustainability definition added.

Section 202 is amended by adding the following definition:

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

Sec. 15.10.040. Irrigation controllers amended.

Section 4.304.1 is deleted and replaced as follows:

4.304.1 Irrigation controllers. Automatic irrigation system controllers for landscaping provided and installed at the time of final inspection and shall comply with the following:

- a) Controllers shall be weather or soil moisture-based irrigation controllers that automatically adjust irrigation in response to changes in plants' needs as weather conditions change.
- b) Weather-based controllers without integral rain sensors or communication systems that account for local rainfall shall have a separate wired or wireless rain sensor which connects or communicates with the controller(s). Soil moisture-based controllers are not required to have rain sensor input.

Ordinance No. 3143 Page 66 of 99

Section 13. Chapter 15.11 of Title 15 of the Municipal City Code is hereby added to read as follow:

Chapter 15.11 REFERENCED STANDARDS CODE

15.11.010 California Referenced Standards Code adopted by reference.

15.11.020 Reference to administrative provisions.

15.11.010 California Referenced Standards Code adopted by reference.

- (a) The City Council of the City of Whittier hereby adopts the California Referenced Standards Code specified in Chapter 15.01.010 as Chapter 15.11.010 of Title 15 of this Code, except such portions as are deleted, modified, or amended as set forth in this chapter. Said Code is adopted and incorporated as if fully set forth herein.
- (b) The purpose of this Code is to provide specific referenced standard adopted as state standards.

State law references: Adoption by reference, Government Code § 50022.1 et seq.

Sec. 15.11.020. Chapter 1 amended.

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

Chapter 1

Administrative Provisions

Section 101. For administrative provisions for this Code, see Sec. 15.01.040.

Section 14. Chapter 15.12 of Title 15 of the Municipal City Code is hereby added to read as follow:

Chapter 15.12 2021 International Swimming Pool and Spa Code

15.12.010 2021 International Swimming Pool and Spa Code adopted by reference.

15.12.020 Reference to administrative provisions.

15.12.030 Amendments.

15.12.010 2021 International Swimming Pool and Spa Code adopted by reference.

(a) The City Council of the City of Whittier hereby adopts the Chapters 1 through 3 and 7 through 11 of the 2021 International Swimming Pool and Spa Code as published by the International Code Council and specified in Chapter 15.01.010 as Chapter 15.12.010 of Title 15 of this Code, except such portions as are deleted, modified, or

Ordinance No. 3143 Page 67 of 99

amended as set forth in this chapter. Said Code is adopted and incorporated as if fully set forth herein.

(b) The purpose of this Code is to prescribe regulations for the protection of the public health and safety and to establish minimum regulations for swimming pools and spas within the City.

State law references: Adoption by reference, Government Code § 50022.1 et seg.

Sec. 15.12.020. Chapter 1 amended.

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

Chapter 1

Administrative Provisions

Section 101. For administrative provisions for this Code, see Sec. 15.01.040.

Sec. 15.04.110.020. Chapter 1 amended.

The text within Part 1 is deleted and replaced with the following:

Chapter 1

Administrative Provisions

Section 101. For administrative provisions for this Code, see Sec. 15.01.040.

15.12.030 Amendments.

- 1. Where the term International Building Code is used it shall be replaced with the term California Building Code.
- 2. 2. Where the term International Residential Code is used it shall be replaced with the term California Residential Code.
- 3. 3. Where the term International Plumbing Code is used it shall be replaced with the term California Plumbing Code.
- 4. 4. Where the term International Energy Conservation Code is used it shall be replaced with the term California Energy Code.
- 5. 5. Where the term International Fire Code is used it shall be replaced with the term California Fire Code.
- 6. Where the term International Fuel Gas Code is used it shall be replaced with the term California Plumbing Code.
- 7. 7. Where the term International Mechanical Code is used it shall be replaced with the term California Mechanical Code.
- 8. 8. Where the term NFPA 70 is used it shall be replaced with the term California Electrical Code.
- 9. Revise Section 101.1 as follows:

- **101.1 Title.** These regulations shall be known as the International Swimming Pool and Spa Code of Whittier, hereinafter referred to as "this code."
- 10. Add the following administrative section from 2022 APPENDIX V $_{-}$ SWIMMING POOL SAFETY ACT:

2022 CRC APPENDIX V 115924 Agreement to Build:

- (a) Any person entering into an agreement to build a swimming pool or spa, or to engage in permitted work on a pool or spa covered by this article, shall give the consumer notice of the requirements of this article.
- (b) Pursuant to existing law, the Department of Health Services shall have available on the department's Web site, commencing January 1, 2007, approved pool safety information available for consumers to download. Pool contractors are encouraged to share this information with consumers regarding the potential dangers a pool or spa poses to toddlers. Additionally, pool contractors may provide the consumer with swimming pool safety materials produced from organizations such as the United States Consumer Product Safety Commission, Drowning Prevention Foundation, California Coalition for Children's Safety & Health, Safe Kids Worldwide, Association of Pool and Spa Professionals, or the American Academy of Pediatrics.

(Amended by Stats. 2006, Ch. 478, Sec. 3. Effective January 1, 2007.)

2022 CRC APPENDIX V 115925. The requirements of this article do not apply to any of the following:

- (a) Public swimming pools.
- (b) Hot tubs or spas with locking safety covers that comply with the American Society for Testing and Materials (ASTM F1346).
- (c) An apartment complex, or any residential setting other than a single-family home.

[Amended by Stats. 2017, Ch. 670, Sec. 5. (SB 442) Effective January 1, 2018.]

2022 CRC APPENDIX V 115926. This article does not apply to any facility regulated by the State Department of Social Services even if the facility is also used as the private residence of the operator. Pool safety in those facilities shall be regulated pursuant to regulations adopted therefor by the State Department of Social Services.

(Added by Stats. 1996, Ch. 925, Sec. 3.5. Effective January 1, 1997.)

2022 CRC APPENDIX V 115927. Notwithstanding any other provision of law, this article shall not be subject to further modification or interpretation by any regulatory agency of the state, this authority being reserved exclusively to local jurisdictions, as provided for in paragraph (7) of subdivision (a) of Section 115922 and subdivision (c) of Section 115925.

(Amended by Stats. 2018, Ch. 957, Sec. 13. (SB 1078) Effective January 1, 2019.)

- 11. Add or amend the following definitions to Chapter 2 from 2022 APPENDIX V $_{-}$ SWIMMING POOL SAFETY ACT:
- "Swimming pool" or "pool" means any structure intended for swimming or recreational bathing that contains water over 18 inches deep. "Swimming pool" includes in-ground and aboveground structures and includes, but is not limited to, hot tubs, spas, portable spas, and nonportable wading pools.
- "Public swimming pool" means a swimming pool operated for the use of the general public with or without charge, or for the use of the members and guests of a private club. Public swimming pool does not include a swimming pool located on the grounds of a private single-family home.
- "Enclosure" means a fence, wall, or other barrier that isolates a swimming pool from access to the home.
- "Approved safety pool cover" means a manually or power-operated safety pool cover that meets all of the performance standards of the American Society for Testing and Materials (ASTM), in compliance with standard F1346-91.
- "Exit alarms" means devices that make audible, continuous alarm sounds when any door or window, that permits access from the residence to the pool area that is without any intervening enclosure, is opened or is left ajar. Exit alarms may be battery operated or may be connected to the electrical wiring of the building. "ANSI/APSP performance standard" means a standard that is accredited by the American National Standards Institute (ANSI) and published by the Association of Pool and Spa Professionals (APSP).
- "Suction outlet" means a fitting or fixture typically located at the bottom or on the sides of a swimming pool that conducts water to a recirculating pump.
- 12. Add Section 301.1.2. as follows:
 - **301.1.2 Conflicts.** In the event of a conflict between the provisions of the Swimming Pool Safety Act, the International Swimming Pool and Spa Code, 2021 Edition, the 2022 California Building Code, or the 2022 California Residential Code, the Building Official shall implement the most restrictive measures cited.
- 13. Add Section 303.1.2.1 as follows:
 - **303.1.2.1 Operating time.** A time switch or other control mechanism shall be installed as part of a pool water circulation control—system that will allow all pumps to be set or programmed to run only during off-peak electric demand period, and for the minimum time necessary to maintain the water in the condition required by applicable public health standards.

Ordinance No. 3143 Page 70 of 99

- 14. Section 303.1.3 is amended as follows:
 - **303.1.3 Covers**. A cover is required for outdoor pools or outdoor spas that have a heat pump or gas heater *Exception*: Pools or spas deriving at least 60 percent of the annual heating energy from site solar energy or recovered energy.
- 15. Section 305.2 is amended as follows:
 - **305.2 Outdoor swimming pools and spas.** Other than those facilities regulated in Section 305.8, all outdoor *pools and spas* and indoor swimming pools shall be surrounded by a *barrier* that complies with Sections 305.2.1 through 305.7.
- 16. Per 2022 CRC APPENDIX V 115922 Add Section 305.8 as follows:

305.8 Construction permit; safety features required.

Except as provided in Section 115925, When a building permit is issued for the construction of a new swimming pool or spa or the remodeling of an existing swimming pool or spa at a private single-family home, the respective swimming pool or spa shall be equipped with at least two of the following seven drowning prevention safety features:

- (a) An enclosure that meets the requirements of Section 115923 and isolates the swimming pool or spa from the private single-family home.
- (b) Removable mesh fencing that meets American Society for Testing and Materials (ASTM) Specifications F2286 standards in conjunction with a gate that is self-closing and self-latching and can accommodate a key lockable device.
- (c) An approved safety pool cover, as defined in subdivision (d) of Section 115921.
- (d) Exit alarms on the private single-family home's doors that provide direct access to the swimming pool or spa. The exit alarm may cause either an alarm noise or a verbal warning, such as a repeating notification that "the door to the pool is open."
- (e) A self-closing, self-latching device with a release mechanism placed no lower than 54 inches above the floor on the private single-family home's doors providing direct access to the swimming pool or spa.
- (f) An alarm that, when placed in a swimming pool or spa, will sound upon detection of accidental or unauthorized entrance into the water. The alarm shall meet and be independently certified to the ASTM Standard F2208 "Standard Safety Specification for Residential Pool Alarms," which includes surface motion, pressure, sonar, laser, and infrared type alarms. A swimming protection alarm feature designed for individual use, including an alarm attached to a child that sounds when the child exceeds a certain distance or becomes submerged in water, is not a qualifying drowning prevention safety feature.
- (g) Other means of protection, if the degree of protection afforded is equal to or

greater than that afforded by any of the features set forth above and has been independently verified by an approved testing laboratory as meeting standards for those features established by the ASTM or the American Society of Mechanical Engineers (ASME).

17. Per 2022 CRC APPENDIX V 115923 Add Section 305.9 as follows:

305.9 Enclosure; required characteristics.

An enclosure shall have all of the following characteristics:

- (a) Any access gates through the enclosure open away from the swimming pool and are self-closing with a self-latching device placed no lower than 60 inches above the ground.
 - (b) A minimum height of 60 inches.
 - (c) A maximum vertical clearance from the ground to the bottom of the enclosure of two inches.
 - (d) Gaps or voids, if any, do not allow passage of a sphere equal to or greater than four inches in diameter.
 - (e) An outside surface free of protrusions, cavities, or other physical characteristics that would serve as handholds or footholds that could enable a child below the age of five years to climb over. (Added by Stats. 1996, Ch. 925, Sec. 3.5. Effective January 1, 1997.)
- 18. Per 2022 CRC APPENDIX V 115928 and 115928.5 Add Section 310.2 as follows:
 - **310.2 Construction Requirements for building a pool or spa.** Whenever a building permit is issued for the construction of a new swimming pool or spa, the pool or spa shall meet all of the following requirements:
 - (1) The suction outlets of the pool or spa for which the permit is issued shall be equipped to provide circulation throughout the pool or spa as prescribed in paragraphs (2) and (3).
 - (2) The swimming pool or spa shall either have at least two circulation suction outlets per pump that shall be hydraulically balanced and symmetrically plumbed through one or more "T" fittings, and that are separated by a distance of at least three feet in any dimension between the suction outlets, or be designed to use alternatives to suction outlets, including, but not limited to, skimmers or perimeter overflow systems to conduct water to the recirculation pump.
 - (3) The circulation system shall have the capacity to provide a complete turnover of pool water, as specified in Section 3124B of Chapter 31B of the California Building Standards Code (Title 24 of the California Code of Regulations).
 - (4) Suction outlets shall be covered with anti-entrapment grates, as specified in the ANSI/APSP-16 performance standard or successor standard designated by the federal Consumer Product Safety

Commission, that cannot be removed except with the use of tools. Slots or openings in the grates or similar protective devices shall be of a shape, area, and arrangement that would prevent physical entrapment and would not pose any suction hazard to bathers.

(5) Any backup safety system that an owner of a new swimming pool or spa may choose to install in addition to the requirements set forth in subdivisions (a) and (b) shall meet the standards as published in the document, "Guidelines for Entrapment Hazards: Making Pools and Spas Safer," Publication Number 363, March 2005, United States Consumer Product Safety Commission.

[Amended by Stats. 2012, Ch. 679, Sec. 2. (AB 2114) Effective January 1, 2013.]

310.2.1 Existing Pool, Toddler Pool, or Spa 115928.5.

Whenever a building permit is issued for the remodel or modification of an existing swimming pool, toddler pool, or spa, the permit shall require that the suction outlet or suction outlets of the existing swimming pool, toddler pool, or spa be upgraded so as to be equipped with anti-entrapment grates, as specified in the ANSI/APSP-16 performance standard or a successor standard designated by the federal Consumer Product Safety Commission.

[Amended by Stats. 2012, Ch. 679, Sec. 3. (AB 2114) Effective January 1, 2013.]

- 19. Add Section 316.2.1 (a) and (b) as follows:
 - **316.2.1 (a) Certification by manufacturers.** Heating systems and equipment shall be certified by the manufacturer that the heating system and equipment complies with the following:
 - 1. **Efficiency.** A thermal efficiency that complies with the Appliance Efficiency Regulations in Title 20, Division 2, Chapter 4, Article 4 of the California Code of Regulations; and
 - 2. **Instructions.** A permanent, easily readable, and weatherproof plate or card that gives instruction for the energy efficient operation of the pool or spa heater and for the proper care of pool or spa water when a cover is used; and
 - 3. **Electric resistance heating.** No electric resistance heating; and Exception 1 to Section 110.4(a)4: Listed package units with fully insulated enclosures, and with tight-fitting covers that are insulated to at least R-6. Exception 2 to Section 110.4(a)4: Pools or spas deriving at least 60 percent of the annual heating energy from site solar energy or recovered energy.
- **316.2.1 (b) Installation.** Any pool or spa system or equipment shall be installed with all of the following:
 - 1. **Piping.** At least 36 inches of pipe shall be installed between the filter and the heater or dedicated suction and return lines, or built-in or built-up connections shall be installed to allow for the future addition of solar heating equipment.

Ordinance No. 3143 Page 73 of 99

- 2. **Directional inlets.** The swimming pool shall have directional inlets that adequately mix the pool water.
- 20. Revise and amend Chapter 9 as follows:

Delete section 901.2:

Add Sections 903-908 as follows

SECTION 903 MATERIALS

903.1 Pumps and motors.

Pumps and motors shall be listed and labeled for use in spas.

SECTION 904 STRUCTURE AND DESIGN

904.1 Water depth.

The maximum water depth for spas shall be 4 feet (1219 mm) measured from the design waterline except for spas that are designed for special purposes and approved by the authority having jurisdiction. The water depth for exercise spas shall not exceed 6 feet 6 inches (1981 mm) measured from the design waterline.

904.2 Multilevel seating.

Where multilevel seating is provided, the maximum water depth of any seat or sitting bench shall be 28 inches (711 mm) measured from the design waterline to the lowest measurable point.

904.3 Floor slope.

The slope of the floor shall not exceed 1 unit vertical in 12 units horizontal (8.3-percent slope). Where multilevel floors are provided, the change in depth shall be indicated.

SECTION 905 PUMPS AND MOTORS

905.1 Emergency shutoff switch.

One emergency shutoff switch shall be provided to disconnect power to circulation and jet system pumps and air blowers. Emergency shutoff switches shall be accessible, located within sight of the spa and shall be located not less than 5 feet (1524 mm) but not greater than 10 feet (3048 mm) horizontally from the inside walls of the spa.

905.2 Timer.

The operation of the hydrotherapy jets shall be limited by a cycle timer having a maximum setting of 10 minutes. The cycle timer shall be located not less than 5 feet (1524 mm) away, adjacent to, and within sight of the spa.

SECTION 906 RETURN AND SUCTION FITTINGS

906.1 Return fittings.

Return fittings shall be provided and arranged to facilitate a uniform circulation of water and maintain a uniform sanitizer residual throughout the entire spa or exercise spa.

906.2 Suction fittings.

Suction fittings shall be in accordance with Sections 505.2.1 through 505.2.4.

906.2.1 Testing and certification.

Suction fittings shall be *listed* and *labeled* in accordance with APSP 16.

906.2.2 Installation.

Suction fittings shall be sized and installed in accordance with the manufacturer's specifications. Spas and exercise spas shall not be used or operated if the suction outlet cover is missing, damaged, broken or loose.

906.2.3 Outlets per pump.

Suction fittings shall be provided in accordance with Section 310.

906.2.4Submerged vacuum fittings.

Submerged vacuum fittings shall be in accordance with Section 310.

SECTION 907 HEATER AND TEMPERATURE REQUIREMENTS

907.1 General.

This section pertains to fuel-fired and electric appliances used for heating spa or exercise spa water.

907.2 Water temperature controls.

Components provided for water temperature controls shall be suitable for the intended application.

907.2.1 Water temperature regulating controls.

Water temperature regulating controls shall comply with UL 873 or UL 372. A means shall be provided to indicate the water temperature in the spa.

Exception: Water temperature regulating controls that are integral to the heating appliance and *listed* in accordance with the applicable end use appliance standard.

907.2.2 Water temperature limiting controls.

Water temperature limiting controls shall comply with UL 873 or UL 372. Water temperature at the heater return outlet shall not exceed 140°F (60°C).

SECTION 908 WATER SUPPLY

908.1 Water temperature.

The temperature of the incoming makeup water shall not exceed 104°F (40°C).

Section 15. Chapter 15.13 of Title 15 of the Municipal City Code is hereby added to read as follow:

Chapter 15.13 ABATEMENT OF DANGEROUS BUILDINGS CODE

15.13.010 1997 Abatement of Dangerous Buildings Code adopted by reference.

15.13.010 1997 Abatement of Dangerous Buildings Code adopted by reference.

- (a) The City Council of the City of Whittier hereby adopts the 1997 Edition of the Uniform Code for Abatement of Dangerous Buildings based on the 1997 Edition of the Uniform Code for Abatement of Dangerous Buildings, as published by the International Code Council, as Chapter 15.13.010 of Title 15 of this Code, except such portions as are deleted, modified, or amended as set forth in this chapter. Said Code is adopted and incorporated as if fully set forth herein.
- (b) The purpose of this Code is to prescribe regulations for the protection of the public health and safety and to establish minimum regulations for the abatement of dangerous buildings within the City.

State law references: Adoption by reference, Government Code § 50022.1 et seq.

Section 16. Chapter 15.14 of Title 15 of the Municipal City Code is hereby added to read as follow:

Chapter 15.14 UNIFORM HOUSING CODE

15.14.010 1997 Uniform Housing Code adopted by reference.

15.14.010 1997 Uniform Housing Code adopted by reference.

- (a) The City Council of the City of Whittier hereby adopts the 1997 Edition of the Uniform Housing Code based on the 1997 Edition of the Uniform Housing Code as published by the International Code Council, as Chapter 15.14.010 of Title 15 of this Code, except such portions as are deleted, modified, or amended as set forth in this chapter. Said Code is adopted and incorporated as if fully set forth herein.
- (b) The purpose of this Code is to prescribe regulations for the protection of the public health and safety and to establish minimum regulations for the abatement of dangerous buildings within the City.

State law references: Adoption by reference, Government Code § 50022.1 et seg.

Section 17. Chapter 15.34 of Title 15 of the Municipal City Code is hereby added to read as follow:

Chapter 15.34 - SMALL RESIDENTIAL ROOFTOP SOLAR SYSTEMS

Section 15.34.010 - Intent and purpose.

The intent and purpose of this chapter is to adopt an expedited, streamlined solar permitting process that complies with the Solar Rights Act and AB 2188 (Chapter 521, Statues 2014) to achieve timely and cost-effective installations of small residential rooftop solar energy systems. This chapter is designed to encourage the use of solar systems by removing unreasonable barriers, minimizing costs to property owners and the city, and expanding the ability of property owners to install solar energy systems. This chapter allows the city to achieve these goals while protecting the public health and safety.

Section 15.34.020 - Definitions.

"Association" means a nonprofit corporation or unincorporated association created for the purpose of managing a common interest development.

"Board of appeals" means the board of appeals referenced in Section 15.01.040 of the Whittier Municipal Code.

"Building department" means the building and safety division for the City of Whittier.

"Building official" means the building official for the City of Whittier.

"City" means the City of Whittier.

"Common interest development" means any of the following:

- 1. A community apartment project.
- 2. A condominium project.
- 3. A planned development.
- 4. A stock cooperative.

"Electronic submittal" means the utilization of one or more of the following:

- 1. E-mail.
- 2. The Internet.
- 3. Facsimile.

"Expedited permitting" and "expedited review" means the process outlined in Section 15.34.060 entitled "Expedited permit review and inspection requirements."

A "feasible method to satisfactorily mitigate or avoid the specific, adverse impact" includes, but is not limited to, any cost-effective method, condition or mitigation imposed by the city on another similarly situated application in a prior successful application for a similar permit.

"Reasonable restrictions" on a solar system are those restrictions that do not significantly increase the cost of the system or significantly decrease its efficiency or specific performance, or that allow for an alternative system of comparable cost, efficiency, and energy conservation benefits.

"Restrictions that do not significantly increase the cost of the system or decrease its efficiency or specified performance" means:

- For water heater systems or solar swimming pool heating systems: an amount exceeding ten percent of the cost of the system, but in no case more than one thousand dollars, or decreasing the efficiency of the solar energy system by an amount exceeding ten percent, as originally specified and proposed.
- For photovoltaic systems: an amount not to exceed one thousand dollars over the system cost as originally specified and proposed, or a decrease in system efficiency of an amount exceeding ten percent as originally specified and proposed.
 - "Small residential rooftop solar energy system" means all of the following:
- 1. A solar energy system that is no larger than ten kilowatts alternating current nameplate rating or thirty kilowatts thermal.
- 2. A solar energy system that conforms to all applicable state fire, structural, electrical, and other building codes as adopted or amended by the city and paragraph (iii) of subdivision (c) of Section 714 of the Civil Code, as such section or subdivision may be amended, renumbered, or re-designated from time to time.
- 3. A solar energy system that is installed on a single or duplex family dwelling.
- 4. A solar panel or module array that does not exceed the maximum legal building height as defined by the authority having jurisdiction.
 - "Solar energy system" means either of the following:
- 1. Any solar collector or other solar energy device whose primary purpose is to provide for the collection, storage, and distribution of solar energy for space heating, space cooling, electric generation, or water heating.
- 2. Any structural design feature of a building whose primary purpose is to provide for the collection, storage, and distribution of solar energy for electricity generation, space heating, space cooling or water heating.

"Specific, adverse impact" means a significant, quantifiable, direct and unavoidable impact, based on objective, identified and written public health or safety standards, policies or conditions as they existed on the date the application was deemed complete.

Section 15.34.030 - Applicability.

This chapter applies to the permitting of all small residential rooftop solar energy systems in the city. Small residential rooftop solar energy systems legally established or permitted prior to the effective date of this chapter are not subject to the

requirements of this chapter unless physical modifications or alterations are undertaken that materially change the size, type, or components of a small rooftop energy system in such a way as to require new permitting. Routine operation and maintenance or like-kind replacements shall not require a permit.

Section 15.34.040 - Solar energy system requirements.

- A. All solar energy system shall meet applicable health and safety standards and requirements imposed by the city and the State of California.
- B. Solar energy systems for heating water in single family residences and for heating water in commercial or swimming pool applications shall be certified by an accredited listing agency as defined by the California Plumbing and Mechanical Code.
- C. Solar energy systems for producing electricity shall meet all applicable safety and performance standards established by the California Electrical Code, the Institute of Electrical and Electronics Engineers and accredited testing laboratories such as Underwriters Laboratories and where applicable, rules of the public utilities commission regarding safety and reliability.

Section 15.34.050 - Duties of building department and building official.

- A. All documents required for the submission of an expedited small residential rooftop solar energy system application shall be made available on the city's publicly accessible website.
- B. Electronic submittal of the required permit application and documents via e-mail, the city's website, or facsimile shall be made available to all small residential rooftop solar energy system permit applicants.
- C. An applicant's electronic signature shall be accepted on all form, application, and other documents in lieu of a wet signature.
- D. The building department shall adopt a standard plan and checklist of all requirements with which small residential rooftop solar energy systems shall comply with to be eligible for expedited review.
- E. The small residential rooftop solar system permit process, standard plans, and checklist shall substantially conform to the recommendations for expedited permitting, including the checklist and standard contained in the most current version of the California Solar Permitting Guidebook adopted by the Governor's Office of Planning and Research.
- F. All fees prescribed for the permitting of small residential rooftop solar energy systems must comply with Government Code Sections 65850.55 and 66015 and Health & Safety Code Section 17951.

Section 15.34.060 - Expedited permit review and inspection requirements.

A. The building department has implemented an administrative, nondiscretionary review process to expedite the approval of small residential rooftop solar energy

system applications. For an application for a small residential rooftop solar energy system that meets the requirements of the approved checklist and standard plan, the building department shall issue a building permit or other non-discretionary permit the same day for over-the-counter applications or within three business days for electronically filed applications so long as payment of all permit fees associated with an electronically filed application are paid the same day as filing. A building official may require an applicant to apply for a use permit if the official finds, based on substantial evidence, that the solar energy system could have a specific, adverse impact upon the public health and safety. Such decisions may be appealed pursuant to the procedures outlined in Section 15.01.040 of this code.

- B. Review of the application shall be limited to the building official's review of whether the applicant meets local, state, and federal health and safety requirements.
- C. If a discretionary permit is required, a building official may deny an application for the use permit if the official makes written findings based upon substantive evidence in the record that the proposed installation would have a specific, adverse impact upon public health or safety and there is no feasible method to satisfactorily mitigate or avoid the specific, adverse impact. Such findings shall include the basis for the rejection of the potential feasible alternative for preventing the adverse impact. Such decisions may be appealed pursuant to the procedures outlined in Section 15.01.040 of this code.
- D. Any condition imposed on an application shall be designed to mitigate the specific, adverse impact upon health and safety at the lowest possible cost. The city shall use its best efforts to ensure that the selected method, condition, or mitigation meets the conditions of Civil Code Section 714(d)(1)(A)-(B).
- E. The city shall not condition the approval of an application on the approval of an association as defined in Civil Code Section 4080.
- F. If an application for a small residential rooftop solar energy system is deemed incomplete, a written correction notice detailing all deficiencies in the application and any additional information or documentation required to be eligible for expedited permitting shall be sent to the applicant for resubmission.
- G. Only one inspection shall be required and performed by the Building Department for small residential rooftop solar energy systems eligible for expedited review.
- H. The Inspection shall be done in a timely manner and should include consolidated inspections. An inspection will be scheduled within two business days of a request and will provide the applicant with a two-hour inspection window
- I. If a small residential rooftop solar energy system fails inspection, a subsequent inspection is authorized but need not conform to the requirements of this chapter.
- J. If an application for a small residential rooftop solar energy system is deemed incomplete, a written correction notice detailing all deficiencies in the application and any additional information or documentation required to be eligible for expedited permitting shall be sent to the applicant for resubmission.
- K. City building permit approval does not authorize an applicant to connect the small residential rooftop energy system to the local utility provider's electricity grid. The

applicant is responsible for obtaining such approval or permission from the local utility provider.

- L. Prior to submitting an application, the applicant shall:
 - 1. Self-certify through the use of standard engineering evaluation techniques that the support structure for the small residential rooftop solar energy system is stable and adequate to transfer all wind, seismic, and dead and live loads associated with the system to the building foundation; and
 - 2. At the applicant's cost, self-certify using standard electrical inspection techniques that the existing electrical system including existing line, load, ground and bonding wiring as well as main panel and subpanel sizes are adequately sized, based on the existing electrical system's current use, to carry all new photovoltaic electrical loads.

Section 18. Chapter 15.36 of Title 15 of the Municipal City Code is hereby added to read as follow:

Chapter 15.36 - NEW RESIDENTIAL ENERGY GUIDELINES

Section 15.36.010 - Intent and purpose.

The intent and purpose of this chapter is to encourage energy efficiency improvements. This chapter is designed to promote an energy efficient infrastructure for residential units, minimizing costs to property owners and the city, and expanding the ability of property owners to conserve energy. This chapter allows the city to achieve these goals while protecting the public health and safety.

Section 15.36.020 - Applicability.

This chapter should serve as a guideline for all new residential homes in the city. Existing modifications to residential or alterations that are undertaken that materially change the size, type, or components of energy efficiency standards in such a way as to require new permitting.

Section 15.36.030 - Energy efficiency requirements.

- A. All energy efficiency measures shall meet applicable health and safety standards and requirements imposed by the city and the State of California.
- B. The main electrical service for residential buildings should have a rating no less than two hundred amps or greater to accommodate future improvements.
- C. The main electrical panel should have a minimum three-quarter-inch conduit routed to the rooftop for future solar installation.
- D. The main electrical panel should have a minimum three-quarter-inch conduit routed to an enclosed garage for future electric vehicle charging station installation.
- E. The single-family residence should have a solar zone dedicated on the roof oriented between one hundred ten degrees and two hundred seventy degrees of

true north. The recommended minimum solar area should be two hundred fifty square feet.

F. Water heating systems to serve individual dwelling units should be installed using solar hot water heating systems.

Section 19. Chapter 15.38 of Title 15 of the Municipal City Code is hereby added to read as follow:

Chapter 15.38 - EARTHQUAKE HAZARD REDUCTION IN EXISTING BUILDINGS

15.38.010 - Purpose.

- A. The purpose of this chapter is to promote public safety and welfare by reducing the risk of death or injury that may result from the effects of earthquakes on unreinforced masonry bearing wall buildings, or buildings containing unreinforced masonry infill walls, constructed prior to August 10, 1933. Such buildings have been widely recognized for sustaining life-hazardous damage, including partial or complete collapse during moderate to strong earthquakes.
- B. The provisions of this chapter are intended as minimum standards for structural seismic resistance established primarily to reduce the risk of life loss or injury. Compliance with these standards will not necessarily prevent loss of life or injury or prevent earthquake damage to rehabilitated buildings. This chapter does not require alteration of existing electrical, plumbing, mechanical or fire safety systems unless they constitute a hazard to life or property.
- C. This chapter provides systematic procedures and standards for identification and classification of unreinforced masonry bearing wall and infill buildings based on their present use. Priorities, time periods and standards are also established under which these buildings are required to be structurally analyzed and anchored. Where the analysis finds deficiencies, this chapter requires the building to be strengthened or demolished.
- D. Qualified historical buildings shall comply with the State Historical Building Code (SHBC) established under Part 8, Title 24 of the California Administrative Code.
- A. Applicability. The provisions of this chapter shall apply to buildings constructed or under construction prior to August 10, 1933, or for which a building permit was issued prior to August 10, 1933, which on the effective date of the ordinance codified in this chapter have unreinforced masonry bearing walls, or unreinforced masonry infilled walls, as defined herein.
- B. Exception. This chapter shall not apply to detached one- or two-family dwellings or detached apartment houses containing less than five units and used solely for residential purposes.

15.38.030 - Definitions.

A. For purposes of this chapter, the applicable definitions in Sections 2302 and 2312 of the Uniform Building Code, 1988 edition, shall apply.

- B. Additional Definitions.
- 1. Essential building means any building housing a hospital or other medical treatment facility having surgery or emergency treatment areas; fire or police stations; municipal government disaster operation and communication centers.
- 2. High risk building.
- a. High risk building means any building, not classified as an essential building, having an occupant load of one hundred or more, as determined by Section 3302 (a) of the Uniform Building Code, 1988 edition.
- b. Exception. A high-risk building shall not include the following:
- i. Any building having exterior walls braced with masonry cross-walls or wood frame cross-walls spaced less than forty feet apart in each story. Cross-walls shall be full story height with a minimum length of one-and-one-half times the story height.
- ii. Any building used for its intended purpose, as determined by the Building Official, for less than twenty hours per week.
- 3. Medium risk building means any building, not classified as a high-risk building or an essential building, having an occupant load of twenty or more as determined by Section 3302 (a) of the Uniform Building Code, 1988 edition.
- 4. Low risk building means any building, not classified as an essential building, having an occupant load of less than twenty as determined by Section 3302 (a) of the Uniform Building Code, 1988 edition.
- 5. Unreinforced masonry bearing wall means a masonry wall having all of the following characteristics:
- a. Provides the vertical support for a floor or roof;
- b. The total superimposed load exceeds one hundred pounds per lineal foot;
- c. The area of reinforcing steel is less than fifty percent of that required by Section 2407 (h) of the Uniform Building Code, 1988 edition.
- 6. Unreinforced masonry infill wall means a masonry wall, or portion of a wall, not classified as an unreinforced masonry bearing wall, where the area of reinforcing steel is less than fifty percent of that required by Section 2407(h) of the Uniform Building Code, 1988 edition.

15.38.040 - Rating classifications.

- A. The rating classifications shown in Table 15.38040, are hereby established and each building within the scope of this chapter shall be placed in one such rating classification by the Building Official. The total occupant load of the entire building, as determined by Section 3302(a) of the Uniform Building Code, 1988 edition, shall be used to determine the rating classification.
- B. Exception. For the purpose of this chapter, portions of buildings constructed to act independently when resisting seismic forces may be placed in separate rating classifications.

Ordinance No. 3143

Table 15.06.040 Rating Classifications

| Type of Building | Classification |
|----------------------|----------------|
| | |
| | |
| Focontial building | 1 |
| Essential building | l |
| High risk building | |
| Medium risk building | III |
| Low risk building | IV |

15.38.050 - General requirements.

- A. The owner of each building within the scope of this chapter shall cause a structural analysis of the building to be made by a civil or structural engineer or architect licensed by the state of California. If the building does not meet the minimum earthquake standards specified in this chapter, the owner shall either cause it to be structurally altered to conform to such standards or cause the building to be demolished.
- B. The owner of a building within the scope of this chapter shall comply with the requirements set forth above by submitting to the Building Official for review within the stated time limits:
- 1. Within two hundred seventy days after service of the order, a structural analysis, which is subject to approval by the director of building and safety, demonstrating that the building meets the minimum requirements of this chapter; or
- 2. Within two hundred seventy days after service of the order, a structural analysis and plans for the proposed structural alterations to the building necessary to comply with the minimum requirements of this chapter; or
- 3. Within one hundred twenty days after service of the order, plans for the installation of wall anchors in accordance with the requirements specified in Section 15.38.070(C); or
- 4. Within two hundred seventy days after service of the order, plans for the demolition of the building.
- C. After plans are submitted and approved by the Building Official, the owner shall obtain a building permit, commence and complete the required construction or demolition within the time limits set forth in Table 15.38.050 A. These time limits shall commence to run from the date the order is served in accordance with subsections A and B of this section.
- D. Owners electing to comply with subsection B 3 of this section are also required to comply with subsections B 2 or B 4 of this section; provided, however, that the two hundred seventy day time period provided for in said subsections and the time limits for obtaining a building permit, commencing construction and completing construction for complete structural alterations or building demolition set forth in Table 15.38.050 A shall be extended in accordance with Table 15.38.050 B. Each such extended time limit, except the time limit for commencing construction, shall commence to run from the date the order is served in accordance with Section 15.38.060 (B). The time limit for commencing construction shall commence from the date the building permit is issued.

Ordinance No. 3143 Page 84 of 99

Table 15.38.050A Time Limits For Compliance

| Doguirod Action | Obtain Building | Commence | Complete | |
|--------------------------|----------------------------|-------------------------|--------------|--------|
| Required Action | Permit | Construction | Construction | on |
| By Owner | Within | Within | Within | |
| | · | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| Complete structural a | alterations or building | 1 year l80 days 1 | 2 years | |
| | | | | |
| Wall anchor installation | on | 180 days | 270 days | 1 year |
| 1 Magazirad from the | data of building parmit in | oughos All other time I | imita ara | |

¹ Measured from the date of building permit issuance. All other time limits are measured from the date of the order.

Table 15.06.050B Service Priorities and Extended Time Provisions

| Rating Classification | Occu Load | pant | Extension of Time If Wall Anchors Are Installed | Minimum Time Periods for Service of Order |
|--------------------------|--------------|------------------------|---|---|
| | | | | |
| | | | | |
| I (highest priority | /) | Any | 270 days | 0 |
| ll | | 100 or more | 2 years | 90 days |
| Ш | | 100 or more | 3 years | 270 days |
| | | 51 to and including 99 | 4 years | 1 year |
| | | 20 to and including 50 | 4 years | 1 year |
| IV (lowest priority) |) | Less than 20 | 5 years | 1 year |

15.38.060 - Administration.

A. Service of Order. The Building Official shall issue an order, as provided in subsection B of this section, to the owner of each building within the scope of this chapter in accordance with the minimum time periods for service of such orders set forth in Table 15.38.050 B. The minimum time period for the service of such orders shall be measured from the effective date of this chapter. Upon receipt of a written request from the owner,

the Building Official shall order a building to comply prior to the normal service date for such building set forth in this section.

B. Contents of Order. The order shall be in writing and shall be served either personally or by certified or registered mail upon the owner as shown on the last equalized assessment, and upon the person, if any, in apparent charge or control of the building. The order shall specify that the building has been determined by the Building Official to be within the scope of this chapter and, therefore, is required to meet the minimum seismic standards of this chapter. The order shall specify the rating classification of the building and shall be accompanied by a copy of Section 15.06.050 which sets forth the owner's alternatives and time limits for compliance.

C. Appeal Form Order.

- 1. The owner or person in charge or control of the building may appeal to the board of examiners and appeals the Building Official's initial determination that the building is within the scope of this chapter. Such an appeal shall be filed within sixty days from the service date of the order described in subsection B of this section. Any such appeal shall be decided by the board no later than sixty days after the date that the appeal is filed. Such appeal shall be made in writing upon appropriate forms provided by the Building Official and the grounds therefor shall be stated clearly and concisely. Each appeal shall be accompanied by a filing fee as established by resolution of the city council.
- 2. Appeals or requests for minor modifications from any other determinations, orders or actions by the Building Official pursuant to this chapter, shall be made in accordance with the appeal procedures established in Section 15.38.260.

D. Recordation.

- 1. At the time that the aforementioned order is served, the Building Official shall cause to be filed with the office of the County Recorder a document stating that the subject building is within the scope of this chapter. The document shall also state that the owner thereof has been ordered to structurally analyze the building and to structurally alter or demolish it where it is not found to comply with this chapter.
- 2. If the building is found not to be within the scope of this chapter, or as a result of structural alterations or an analysis is found to be structurally capable of resisting minimum seismic forces required by this chapter; or is demolished; the Building Official shall cause to be filed with the office of the county recorder a document terminating the status of the subject building as being classified within the scope of this chapter.

 E. Enforcement. If the owner or other person in charge or control of the subject building fails to comply with any order issued by the Building Official pursuant to this chapter within any of the time limits set forth in Section 15.06.050, the director of building and safety shall order that the entire building be vacated and remain vacated until such order has been complied with. If compliance with such order has not been accomplished within ninety days after the date the building has been ordered vacated, or by such additional time as may have been granted by appeals, the Building Official may order demolition of the building in accordance with the provisions of Chapter 8.08 of this code.

15.38.070 - Analysis and design.

A. Generally. Every structure within the scope of this chapter shall be analyzed and constructed to resist minimum total lateral seismic forces assumed to act non-concurrently in the direction of each of the main axes of the structure in accordance with the following equation:

V = IKCSW

The value of IKCS need not exceed the values set forth in Table 15.38.070 A based on the applicable rating classification of the building.

- B. Lateral Forces on Elements of Structures.
- 1. Parts or portions of structures shall be analyzed and designed for lateral loads in accordance with subsection A of this section and Section 2312 (e) of the Uniform Building Code, 1985 edition but not less than the value from the following equation: F p = IC p SW p

For the provisions of this subsection, the product of IS need not exceed the values as set forth in Table 15.06.070 B.

- 2. Exception. Unreinforced masonry walls in buildings not having a rating classification of I may be analyzed in accordance with Section 15.38.080.
- 3. The value of C p need not exceed the values set forth in Table 15.38.070 C.
- C. Anchorage and Interconnection. Anchorage and interconnection of all parts, portions and elements of the structure shall be analyzed and designed for lateral forces in accordance with Table 15.38.070 C and the equation F p = IC p SW p as modified by Table 15.38.070 B. Minimum anchorage of masonry walls to each floor or roof shall resist a minimum force of two hundred pounds per linear foot acting normal to the wall at the level of the floor or roof.
- D. Level of Required Repair. Alterations and repairs required to meet the provisions of this chapter shall comply with all other applicable requirements of the Uniform Building Code unless otherwise specifically provided for in this chapter.
- E. Required Analysis.
- 1. Generally. Except as modified herein, the analysis and design relating to the structural alteration of existing structures within the scope of this chapter shall be in accordance with the analysis specified in the Uniform Building Code.
- 2. Continuous Stress Path. A complete, continuous stress path from every part or portion of the structure to the ground shall be provided for the required horizontal forces.
- 3. Positive Connections. All parts, portions or elements of the structure shall be interconnected by positive means.
- F. Analysis Procedure.
- 1. Generally. Stresses in materials and existing construction utilized to transfer seismic forces from parts or portions of the structure to the ground shall conform to those permitted by the Uniform Building Code and those materials and types of construction specified in Section 15.38.080.
- 2. Connections. Materials and connectors used for interconnection of parts and portions of the structure shall conform to the Uniform Building Code. Nails may be used as part of an approved connector.
- 3. Unreinforced Masonry Walls.
- a. Except as modified herein, unreinforced masonry walls shall be analyzed as specified in Sections 2406, 2407 and 2408 to withstand all vertical loads as specified in Chapter 23 of the Uniform Building Code in addition to the seismic forces required by this

chapter. The fifty percent increase in the seismic force factor for shear walls as specified in Section 2407 (h)4.F of the Uniform Building Code may be omitted in the computation of seismic loads to existing shear walls.

- b. No allowable tension stress will be permitted in unreinforced masonry walls. Walls not capable of resisting the required design forces specified in this chapter shall be strengthened or shall be removed and replaced.
- c. Exception.
- i. Unreinforced masonry walls in buildings not classified as a Rating Classification I pursuant to Table 15.38.040 may be analyzed in accordance with Section 15.38.080.
- ii. An unreinforced masonry wall which carries no design or applied loads other than its own weight may be considered as veneer if it is adequately anchored to new supporting elements.
- G. Combination of Vertical and Seismic Forces.
- 1. New Materials. All new materials introduced into the structure to meet the requirements of this chapter which are subject to combined vertical and horizontal forces shall comply with Section 2303 (f) of the Uniform Building Code. 2.

Existing Materials. When stresses in existing lateral force resisting elements are due to a combination of dead loads plus live loads plus seismic loads, the allowable working stress specified in the Uniform Building Code may be increased one hundred percent. However, no increase will be permitted in the stresses allowed in Section 15.38.080, and the stresses in members due only to seismic and dead loads shall not exceed the values permitted by Section 2303 (d) of the Uniform Building Code.

3. Allowable Reduction of Bending Stress by Vertical Load. In calculating tensile fiber stress due to seismic forces required by this chapter, the maximum tensile fiber stress may be reduced by the full direct stress due to vertical dead loads.

Table 15.38.070A

Horizontal Force Factors Based on Rating Classification

| Rating Classification | IKCS |
|--------------------------|-------|
| | |
| | |
| <u> </u> | 0.186 |
| | 0.133 |
| III & IV | 0.100 |

Table 15.06.070B Horizontal Force Factors "IS" for Parts or Portions of Structures

| Rating Classification | IS |
|-----------------------|------|
| Classification | 10 |
| | |
| | |
| | |
| | |
| | 1.50 |
| [I] | 1.00 |
| III & IV | 0.75 |

Table 15.06.070C Horizontal Force Factor "C p " for Parts or Portions of Buildings or Other Structures 1

| Part or Portion of Buildings | Direction of Force | Value of C p | |
|--|--------------------------------------|-------------------------------|-------------|
| | | | |
| Exterior bearing and nonbearing partitions, interior nonbearing wa height, masonry fences over six | alls and partitions over ten feet in | Normal to flat surface | 0.20 |
| Cantilever parapet and other car walls | ntilever walls, except retaining | Normal to flat surface | 1.00 |
| Exterior and interior ornamentation | ons and appendages | Any direction | 1.00 |
| When connected to, or a part of, and tanks plus contents, racks o contents, chimneys, smokestack | . . | Any direction | 0.20 2&4 |
| When connected to, or a part of, mounted equipment and machinoperation of essential occupanci | ery not required for continued | Any horizontal direction | 0.20 |
| Tanks plus effective contents res | sting on the ground. | Any direction | 0.12 |
| Floors and roofs acting as diaphi | ragms. | In the plane of the diaphragm | 0.12 6 |
| Prefabricated structural elements applied at center of gravity of ass | · | Any horizontal director | 0.30 |
| Connections for exterior panels or elements. | | Any direction | 2.00 |

Notes:

- 1 See Section 15.38.070 B for use of Cp .
- 2 When located in the upper portion of any building with a h n /D ratio of 5 to 1 or greater, the value shall be increased by fifty percent.

- 3 For flexible and flexibly mounted equipment and machinery, the appropriate values for C p shall be determined with consideration given to both the dynamic properties of the equipment and machinery and to the building or structure in which it is placed.
- 4 The W, for storage racks shall be the weight of the racks plus contents. The value of C p for racks over two storage support levels in height shall be 0.16 for the levels below the top two levels.
- 5 The design of the equipment and machinery and their anchorage is an integral part of the design and specification of such equipment and machinery. The structure to which the equipment or machinery is mounted shall be capable of resisting the anchorage forces (see also Section 2312 (k) of the Uniform Building Code, 1985 edition). 6 Floors and roofs acting as diaphragms shall be designed for a minimum force resulting from a C p of .l2 applied to W p unless a greater force results from the distribution of lateral forces in accordance with Section 2312 (e) of the Uniform Building Code, 1985 edition.

15.38.080 - Materials of construction.

A. Generally. All materials permitted by the Uniform Building Code including their appropriate allowable stresses and those existing configurations of materials specified herein may be utilized to meet the requirements of this chapter.

B. Existing Materials.

- 1. Unreinforced Masonry Walls.
- a. Unreinforced masonry walls analyzed in accordance with this chapter may provide vertical support for roof and floor construction and resistance to lateral loads. The facing and backing of such walls shall be bonded so that not less than four percent of the exposed face area is composed of solid headers extending not less than four inches into the backing. The distance between adjacent full-length headers shall not exceed twenty-four inches vertically or horizontally. Where the backing consists of two or more wythes the header shall extend not less than four inches into the most distant wythe, or the backing wythes shall be bonded together with separate headers whose area and spacing conform to the foregoing.
- b. Tension stresses due to seismic forces normal to the wall may be neglected if the walls do not exceed the height to thickness ratio in Table 15.38.080 A and the in-plane shear stresses due to seismic loads do not exceed those set forth in Table 15.38.080 B. c. If the wall height-thickness ratio exceeds the specified limits, the wall may be supported by vertical bracing members designed in accordance with Section 15.38.070. The deflection of such bracing member at design load shall not exceed one-tenth of the wall thickness.
- d. Exception. The wall may be supported by flexible vertical bracing members designed in accordance with Section 15.38.070 (B) if the deflection at design loads is not less than one-quarter nor more than one-third of the wall thickness.
- e. All vertical bracing members shall be attached to floor and roof construction for their design loads independently of required wall anchors. Horizontal spacing of vertical bracing members shall not exceed one-half of the wall height nor ten feet.
- f. The wall height may be measured vertically to bracing elements other than a floor or roof. Spacing of the bracing elements and wall anchors shall not exceed six feet.

Bracing elements shall be detailed to minimize the horizontal displacement of the wall by components of vertical displacements of the floor or roof.

- 2. Existing Roof, Floors, Walls, Footings and Wood Framing. Existing materials, including wood shear walls, utilized in the described configuration may be used as part of the lateral load resisting system, provided that the stresses in these materials do not exceed the values shown in Table 15.38.080 C.
- C. Strengthening of Existing Materials. New materials, including wood shear walls, may be utilized to strengthen portions of the existing seismic resisting system in the described configurations provided that the stresses do not exceed the values shown in Table 15.38.080 D.
- D. Alternate Materials. Alternate materials, designs and methods of construction may be approved by the Building Official in accordance with the provisions of the Uniform Building Code.
- E. Minimum Acceptable Quality of Existing Unreinforced Masonry Walls.
- 1. General Provisions. All unreinforced masonry walls utilized to carry vertical loads and seismic forces parallel and perpendicular to the wall plane shall be tested as specified in this subsection. All masonry quality shall equal or exceed the minimum standards established herein or shall be removed and replaced with new materials. The quality of mortar in all masonry walls shall be determined by performing in-place shear tests or by testing eight-inch diameter cores. Alternative methods of testing may be approved by the Building Official. Nothing shall prevent pointing with mortar of the masonry wall joints before the tests are first made. Prior to any pointing, the mortar joints must be raked and cleaned to remove loose and deteriorated mortar. Mortar for pointing shall be type S or N except that masonry cements shall be used. All preparation and pointing shall be done under the continuous inspection of a registered deputy building inspector. At the conclusion of the inspection, the inspector shall submit a written report to the licensed engineer or architect responsible for the seismic analysis of the building setting forth the result of the work inspected. Such report shall be submitted to the director of building and safety for approval as part of the structural analysis. All testing shall be performed in accordance with the requirements specified in this subsection by a testing agency approved by the director of building and safety. An accurate record shall be kept of all such tests and of their locations in the building, and these results shall be submitted to the Building Official for approval as part of the structural analysis.
- 2. Number and Location of Tests. The minimum number of tests shall be two per wall or line of wall elements resisting a common force, or one per one thousand five hundred square feet of wall surface, with a minimum of eight tests in any case. The exact test or core location shall be determined at the building site by the licensed engineer or architect responsible for the seismic analysis of the subject building.
- 3. In-place Shear Tests. The bed joints of the outer wythe of the masonry shall be tested in shear by laterally displacing a single brick relative to the adjacent bricks in that wythe. The opposite head joint of the brick to be tested shall be removed and cleaned prior to testing. The minimum quality mortar in eighty percent of the shear tests shall not be less than the total of thirty psi plus the axial stress in the wall at the point of the test. The shear stress shall be based on the gross area of both bed joints and shall be that at which movement of the brick is first observed.

4. Core Tests. A minimum number of mortar test specimens equal to the number of required cores shall be prepared from the cores and tested as specified herein. The mortar joint of the outer wythe of the masonry core shall be tested in shear by placing the circular core section in a compression testing machine with the mortar bed joint rotated fifteen degrees from the axis of the applied load. The mortar joint tested in shear shall have an average ultimate stress of twenty psi based on the gross area. The average shall be obtained from the total number of cores made. If test specimens cannot be made from cores taken, then the shear value shall be reported as zero. F. Testing of Shear Bolts. One-fourth of all new shear bolts and dowels embedded in unreinforced masonry walls shall be tested by a registered deputy inspector using a calibrated torque wrench to the following minimum torques:

| ½" diameter bolts or dowels = | 40 foot-lbs. |
|---|--------------|
| 5/8 ⁻ diameter bolts or dowels = | 50 foot-lbs. |
| 3/4" diameter bolts or dowels = | 60 foot-lbs. |

No bolts exceeding three-quarters of an inch shall be used. All nuts shall be installed over malleable iron or plate washers when bearing on wood and heavy cut washers when bearing on steel.

- G. Determination of Allowable Stresses for Design Methods Based on Test Results.
- 1. Design Shear Values. Design seismic in-plane shear stresses shall be substantiated by tests performed as specified in Section 15.38.080 E 3 and 4. Design stresses shall be related to test results obtained in accordance with Table 15.38.080 B. Intermediate values between three and ten psi may be interpolated.
- 2. Design Compression and Tension Values. Compression stresses for unreinforced masonry having a minimum design shear value of three psi shall not exceed one hundred psi. Design tension values for unreinforced masonry shall not be permitted. H. Five percent of the existing rod anchors utilized as all or part of the required wall anchors shall be tested in pullout by an approved testing laboratory. The minimum number tested shall be four per horizontal assembly, with two tests at walls with joists framing into the wall and two tests at walls with joists parallel to the wall. The test apparatus shall be supported on the masonry wall at a minimum distance of the wall thickness from the anchor tested. The rod anchor shall be given a preload of three hundred pounds prior to establishing a datum for recording elongation. The tension test load reported shall be recorded at one-eighth inch relative movement of the anchor and the adjacent masonry surface. Results of all tests shall be reported. The report shall include the test results as related to the wall thickness and joist orientation. The allowable resistance value of the existing anchors shall be forty percent of the average of those tested anchors having the same wall thickness and joist orientation.
- I. Qualification tests for new devices used for wall anchorage shall be tested with the entire tension load carried on the enlarged head at the exterior face of the wall. Bond on the part of the device between the enlarged head and the interior wall face shall be eliminated for the qualification tests. The resistance value assigned the device shall be twenty percent of the average of the ultimate loads.

Ordinance No. 3143 Page 92 of 99

Table 15.06.080A Allowable Value of Height-Thickness Ratio of Unreinforced Masonry Walls with Minimum Quality Mortar 1, 2

| Building With | All Other | |
|--|------------|----------|
| Cross-walls* | Buildings | |
| | | |
| | | |
| | | |
| Malla of an a stand buildings | 4.0 | 4.0 |
| Walls of one-story buildings | 16 | 13 |
| First story wall of multistory buildings | 16 | 15 |
| Walls in top story of multistory buildings | 14 | 9 |
| All other walls | 16 | 13 |
| 1 Minimum quality mortar shall be determined by laboratory testing | in accorda | nce with |
| Section 15.06.080 E. | | |
| 2 This table is not applicable to buildings of rating classification 1. Walls of buildings | | |
| within rating classification I shall be analyzed in accordance with Section 15.06.070 F. | | |
| * As defined by Section 15.06.030 | | |

Table 15.06.080B Allowable Shear Stress for Tested Unreinforced Masonry Walls

| Eighty Percent of Test Results in psi Not Less Than: | Average Test Results of Cores in psi | Seismic In-plane Shear Based on Gross Area 1 |
|--|--|--|
| 30 plus axial stress | 20 | 3 psi |
| 40 plus axial stress | 27 | 4 psi |
| 50 plus axial stress | 33 | 5 psi |
| 100 plus axial stress or more | 67 or more | 10 psi max |

¹ Allowable shear stress may be increased by addition of 10% of the axial stress due to the weight of the wall directly above.

Ordinance No. 3143 Page 93 of 99

Table 15.06.080C Values for Existing Materials

| Values for Existing Materials | | | |
|---|--|--|--|
| Existing Materials or Configuration of Materials 1 | Allowable Values | | |
| garation of materials 1 | | | |
| | | | |
| | | | |
| Harizantal diaphragms: | | | |
| Horizontal diaphragms: | | | |
| a. Roofs with straight sheathing and roofing applied directly to the sheathing. | 100 lbs. per ft. for seismic shear. | | |
| b. Roofs with diagonal sheathing and roofing applied directly to the sheathing. | 400 lbs. per ft. for seismic shear. | | |
| c. Floors with straight tongue and groove sheathing. | 150 lbs. per ft. for seismic shear. | | |
| d. floors with straight sheathing and finished wood flooring. | 300 lbs. per ft. for seismic shear | | |
| e. Floors with diagonal sheathing and finished wood flooring. | 450 lbs. per ft. for seismic shear | | |
| f. Floors or roofs with straight sheathing and plaster applied to the joist or rafters. 2 | Add 50 lbs. per ft. to the allowable values for items a & c. | | |
| Shear walls: | | | |
| Wood stud walls with lath and plaster. | 100 lbs. per ft. each side for seismic shear. | | |
| Plain concrete footings | f' c = 1500 psi unless otherwise | | |
| | shown by tests. | | |
| Douglas fir lumber | Allowable stress same as d and f above. 3 | | |
| Reinforcing steel | f t = 18,000 psi maximum. 3 | | |
| Structural steel | f t = 20,000 psi maximum. 3 | | |

Notes:

- 1 Material must be sound and in good condition.
- 2 Wood lath and plaster must be reattached to existing joists or rafters in a manner approved by the Building Official.
- 3 Stresses given may be increased for combinations of loads as specified in Section 15.38.070 G2.

Table 15.38.080D Allowable Values of New Materials Used In Conjunction with Existing Construction 1

| NI. NA. C. S. L | 1 |
|---|---|
| New Materials or | Allowable Values |
| Configuration of Materials | |
| | |
| | |
| | |
| 4. Llevimontal diambrascos | |
| 1. Horizontal diaphragms: | |
| Plywood sheathing applied directly over | Company of the Table 25, Leftha |
| existing straight sheathing with ends of | Same as specified in Table 25-J of the |
| plywood sheets bearing on joists or rafters | UBC, 1985 edition, for blocked |
| and edges of plywood located on centers of | diaphragms.* |
| individual sheathing boards. 2. Shear walls: | |
| | |
| a. Plywood sheathing applied directly over | Come on values apositized in Table 25 K |
| existing wood studs. No value shall be given | Same as values specified in Table 25-K for shear walls. |
| to plywood applied over existing plaster or | ioi sileai walis. |
| wood sheathing. | 75 percent of the values appoified in |
| b. Drywall or plaster applied directly over wood studs. | 75 percent of the values specified in Table 47-I. |
| | |
| c. Drywall or plaster applied to plywood | 33 1/3 percent of the values specified in Table 47-I. |
| sheathing over existing wood studs. 3. Shear bolts: | Table 47-1. |
| | |
| Shear bolts and shear dowels embedded a | 100 percent of the values for colid |
| minimum of 8 inches into unreinforced | 100 percent of the values for solid |
| masonry walls. Bolt centered in a 2½ inch | masonry specified in Table 24.E. No |
| diameter cored hold with dry-pack or non- | values larger than those given for ¾″Ø bolts shall be used. |
| shrink grout around circumference of bolt or dowel. 1 | boits shall be used. |
| 4. Tension bolts: | |
| Tension bolts and tension dowels extending | |
| entirely through unreinforced masonry walls | |
| secured with bearing plates on far side of | 1200 lbs. per bolt or dowel. |
| wall with at least 30 sq. inches of area. 2 | |
| 5. Wall anchors (15.38.090 B 1): | |
| a. Bolts extending to the exterior face of the | |
| wall with a 2½ inch round plate under the | |
| head. Installed as specified for shear bolts. | 600 lbs. per bolt. |
| Spaced not closer than 12" o.c. 1, 2 | |
| b. Bolts or dowels extending to the exterior | |
| face of the wall with a 2½ inch round plate | 1200 lbs. per bolt or dowel. |
| under the head and drill at an angle 22½ | 1200 ibs. per boit of dower. |
| under the head and drill at all allyle 22/2 | |

| New Materials or | Allowable Values |
|---|--|
| Configuration of Materials | / Mowabic values |
| | |
| | |
| | |
| degrees to the horizontal. Installed as | |
| specified for shear | |
| bolts. 1, 2 | |
| 6. Infilled walls: | |
| Reinforced masonry infilled opening in | Comp on values an acified for up = informati |
| existing unreinforced masonry walls with | Same as values specified for unreinforced |
| keys or dowels to match existing reinforcing. | masonry walls. |
| 7. Reinforced masonry: | |
| Masonry piers and walls reinforced per | Same values as specified in Chapter 24. |
| Section 2407. | Same values as specified in Chapter 24. |
| 8. Reinforced concrete: | |
| Concrete footings, walls and piers reinforced | |
| as specified in Chapter 26 and designed for | Same values as specified in Chapter 26. |
| tributary loads. | |
| 9. Existing foundation loads: | |
| | Calculated existing foundation loads due |
| Foundation loads for structures exhibiting no | to maximum dead load plus live load may |
| evidence of settlement. | be increased 25% for dead load, and may |
| CVIGOTION OF SOCIECTION. | be increased 50% for dead load plus |
| | seismic load required by Chapter 15.06. |

Notes:

- * All referenced tables and sections not carrying a 15.38 number are to be found in the Uniform Building Code, 1985 edition.
- 1 Bolts and dowels to be tested as specified in Section 15.38.080 F.
- 2 Bolts and dowels to be ½ inch minimum in diameter.
- 3 Drilling for bolts and dowels shall be done with an electric rotary drill. Impact tools shall not be used for drilling holes or tightening anchor and shear bolt nuts.

15.06.090 - Information required on plans.

- A. Generally. In addition to the seismic analysis required elsewhere in this chapter, the licensed engineer or architect responsible for the seismic analysis shall determine and record the information required by this section on the approved plans.
- B. Construction Details. The following requirements with appropriate construction details shall be made a part of the approved plans:
- 1. a. All unreinforced masonry walls shall be anchored at the roof level with tension bolts through the wall as specified in Table 15.38.080 D or by approved equivalent at a maximum anchor spacing of six feet.

- b. All unreinforced masonry walls shall be anchored at all floors with tension bolts through the wall or by existing rod anchors at the maximum anchor spacing of six feet. All existing rod anchors shall be secured to the joists to develop the required forces. Existing rod anchors shall be tested in accordance with the provisions of Section 15.38.080 (H).
- c. When access to the exterior face of the building is restricted due to proximity of an adjacent building, wall anchors conforming to Items 5 and 6 of Table 15.38.080 D may be used.
- d. Alternative devices to be used in lieu of tension bolts for masonry wall anchorage shall be tested as specified in Section 15.38.080 (I).
- 2. Diaphragm chord stresses of horizontal diaphragms shall be developed in existing materials or by addition of new materials.
- 3. Where trusses and beams other than rafters or joists are supported on masonry, ledgers or columns shall be installed to support vertical loads of the roof or floor members.
- 4. Parapets and exterior wall appendages not capable of resisting the forces specified in this chapter shall be removed, stabilized or braced to ensure that the parapets and appendages remain in their original position.
- 5. All deteriorated mortar joints in unreinforced masonry walls shall be pointed with Type S or N mortar (masonry cements shall not be used). Prior to any pointing, the wall surface must be raked and cleaned to remove loose and deteriorated mortar. All preparation and pointing shall be done under the continuous inspection of a registered deputy inspector certified to inspect concrete or masonry. At the conclusion of the project, the inspector shall submit a written report to the Building Official setting forth the scope of the work inspected.
- 6. Repair details shall be prepared for any cracked or damaged unreinforced masonry wall required to resist forces specified in this chapter.
- 7. A prominent note shall be placed on the plans prohibiting the use of impact type tools on unreinforced masonry walls or in other elements of the structure which will transmit impact shock to unreinforced masonry construction.
- C. Existing Construction. The following existing construction information shall be made part of the approved plans:
- 1. The type of dimensions of existing walls and the size and spacing of floor and roof members:
- 2. The extent and type of existing wall anchorage to floors and roof;
- 3. The extent and type of parapet corrections, if any, which were previously performed in accordance with requirements of the Uniform Building Code;
- 4. Accurately dimensioned floor plans and masonry wall elevations showing dimensioned openings, piers, wall thickness and heights;
- 5. The location of cracks or damaged portions of unreinforced masonry walls requiring repairs;
- 6. The type of interior wall surfaces and whether reinstalling or anchoring of ceiling plaster is necessary;
- 7. The general condition of the mortar joints and whether or not the joints require pointing.

| Glossary of Symbols and Notations for | Chapter | 15.38 Tables |
|---------------------------------------|---------|---------------------|
|---------------------------------------|---------|---------------------|

| С | = Numerical coefficient as specified in Section 2312(d). | | | | | |
|-----------------|---|--|--|--|--|--|
| Cp | Numerical coefficient as specified in Section 2312 (g) and as set forth in Table 23-J. | | | | | |
| D | = The dimension of the structure, in feet, in a direction parallel to the applied forces. | | | | | |
| f' _c | = Specified compressive strength of concrete, psi. | | | | | |
| Fp | = Lateral forces on a part of the structure and in the direction under consideration. | | | | | |
| F_t | = Allowable tensile stress, psi. | | | | | |
| h_n | = Height in feet above the base to level n. | | | | | |
| I | = Occupancy Importance Factor as set forth in Table 23-K. | | | | | |
| S | = Numerical coefficient for site-structure resonance. | | | | | |
| V | = The total lateral force or shear at the base. | | | | | |
| W | = The total dead load as defined in Section 2302 including the partition loading specified in Section 2304(d) where applicable. | | | | | |
| W_p | = The weight of a portion of a structure or nonstructural component. | | | | | |

Section 20. Existing Chapter 15.06 Construction Hours is renumbered to Chapter 15.20 with no change in content, Chapter 15.08 Stop Work Citations is renumbered to Chapter 15.22 with no change in content, Chapter 15.10 Plan Check Fees is renumbered to Chapter 15.24 with no change in content, Chapter 15.12 Fire Code is renumbered to Chapter 15.15 with no change in content, Chapter 15.16 Fireworks is renumbered to Chapter 15.28 with no change in content, Chapter 15.20 House Moving is renumbered to Chapter 15.30 with no change in content and Chapter 15.28 Use of Tents and Commercial Trailers is renumbered to Chapter 15.32 with no change in content.

SECTION 21. Any provision of the Whittier Municipal Code or appendices thereto inconsistent with the provisions of the Ordinance, to the extent of such inconsistencies and no further, are repealed or modified to that extent necessary to affect the provisions of this Ordinance.

Section 22. Severability. If any section, subsection, sentence, clause, phrase or portion of this Ordinance is for any reason held out to be invalid or unconstitutional by the decision of any court of competent jurisdiction, such decision will not affect the validity of the remaining portions of this ordinance. The City Council of the City of Whittier hereby declares that it would have adopted this ordinance and each section, subsection, sentence, clause, phrase or portion thereof irrespective of the fact that any one or more sections, subsection, sentence clause, phrases or portions be declared valid or unconstitutionally.

Section 23. Continuity. To the extent the provisions of this Ordinance are substantially the same as previous provisions of the Whittier Municipal Code, these provisions will be construed as continuations of those provisions and not as amendments of the earlier provisions.

Section 24. Intent to Comply with Laws. The City Council intends this Ordinance to supplement, not to duplicate or contradict, applicable state and federal law and this Ordinance will be construed in light of that intent.

Section 25. Publication by Clerk. The City Clerk shall cause a summary of this Ordinance to be published as provided by law. The summary shall be published and a certified copy of the full text of this Ordinance shall be posted in the Office of the City Clerk at least five (5) days prior to the City Council meeting at which this Ordinance is to be adopted. Within fifteen (15) days after the adoption of this Ordinance, the City Clerk shall cause a summary to be published with the names of those City Council members voting for and against this Ordinance and shall post in the Office of the City Clerk a certified copy of the full text of this Ordinance along with the names of those City Council members voting for and against the Ordinance. The City Clerk will certify to the adoption of this Ordinance and his/her certification, together with proof of the publication, to be entered in the book of Ordinances of the City Council.

Section 26. Filing with Building Standards Commission. The City Clerk will file a certified copy of this Ordinance with the California Building Standards Commission.

Section 27. Effective Date. The City Clerk shall certify to the passage and adoption hereof. This Ordinance shall take effect 30 days after its adoption and shall be published pursuant to law.

APPROVED AND ADOPTED this 13th day of December 2022.

| ATTEST: | JOSEPH A. VINATIERI, Mayor |
|---|----------------------------|
| RIGOBERTO GARCIA JR., City Clerk (seal) | |
| Date: | |

I CERTIFY THAT THE FOREGOING ORDINANCE NO. 3143 was introduced on the 8th day of November 2022, and was continued to and adopted by the City Council of the City of Whittier at the regular meeting held on the 13th day of December 2022, by the following vote:

AYES: 5 Council Members: Vinatieri, J. Martinez, Dutra, Warner, O. Martinez

NOES: 0 ABSTAIN: 0

| Ordinance N | lo. | 31 | 43 |
|-------------|-----|----|----|
|-------------|-----|----|----|

Page 99 of 99

ABSENT: 0

RIGOBERTO GARCIA JR., City Clerk (seal)