ORDINANCE NO.	

AN ORDINANCE ADOPTING THE 2016 CALIFORNIA BUILDING CODE AS VOLUME IA, THE 2016 CALIFORNIA RESIDENTIAL CODE AS VOLUME IB, THE 2016 CALIFORNIA EXISTING BUILDING CODE AS VOLUME IC, THE 2016 CALIFORNIA PLUMBING CODE AS VOLUME II, THE 2016 CALIFORNIA MECHANICAL CODE AS VOLUME III, THE 2016 CALFORNIA ELECTRICAL CODE AS VOLUME IV, THE 1997 UNIFORM HOUSING CODE AS VOLUME V, THE 2016 CALIFORNIA FIRE CODE AS VOLUME VI, THE GLENDALE SECURITY CODE AS VOLUME VII AND THE GLENDALE COMMERCIAL, INDUSTRIAL PROPERTY MAINTENANCE CODE AS VOLUME VIII AND THE 2016 CALIFORNIA GREEN BUILDING STANDARDS CODE AS VOLUME IX ALL OF WHICH COMPRISE THE BUILDING AND SAFETY CODE OF THE CITY OF GLENDALE, 2017.

BE IT ORDAINED BY THE COUNCIL OF THE CITY OF GLENDALE:

SECTION INT-1. The City of Glendale hereby adopts a Building and Safety Code of the City of Glendale, 2017, hereinafter designated as the "Glendale Building and Safety Code, 2017."

SECTION INT-2. Volume IA. Building Standards.

The City of Glendale hereby adopts the 2016 California Building Code as Volume IA of the Glendale Building and Safety Code, 2017. Except as otherwise provided herein, or as later amended, Volume IA of the Glendale Building and Safety Code, 2017, shall be as published in the California Building Code Volumes 1 and 2, 2016 edition, and as copyrighted in 2015 by the International Code Council, Inc. and the California Building Standards Commission, California Code of Regulations, Title 24, Part 2, Volumes 1 and 2, including all of its tables, indices, appendices, addenda and footnotes. Volume 1A of the Glendale Building and Safety Code, 2017, shall include the Historic Building Code, 2016 edition, published and copyrighted in 2015 by the California Building Standards

Commission, California Code of Regulations, Title 24 Part 8. Said California Building Code and California Historic Building Code are hereby referred to and by such references are incorporated herein as if fully set forth.

SECTION INT-3. Volume IB. Residential Standards.

The City of Glendale hereby adopts the 2016 California Residential Code as Volume IB of the Glendale Building and Safety Code, 2017. Except as otherwise provided herein, or as later amended, Volume IB of the Glendale Building and Safety Code, 2014, shall be as published in the California Residential Code, 2016 edition, and as copyrighted in 2015 by the International Code Council, Inc. and the California Building Standards Commission, California Code of Regulations, Title 24, Part 2.5, including all of its tables, indices, appendices, addenda and footnotes. Said California Residential Code is hereby referred to and by such reference is incorporated herein as if fully set forth.

SECTION INT-4. Volume IC. Existing Building Standards.

The City of Glendale hereby adopts the 2016 California Existing Building Code as Volume IC of the Glendale Building and Safety Code, 2017. Except as otherwise provided herein, or as later amended, Volume IC of the Glendale Building and Safety Code, 2017, shall be as published in the California Building Code Volumes 2, 2016 edition, and as copyrighted in 2015 by the International Code Council, Inc. and the California Building Standards Commission, California Code of Regulations, Title 24, Part 10, Volumes 2, including all of its tables, indices, appendices, addenda and footnotes. Volume 1C of the Glendale Building and Safety Code, 2017, shall also include Appendix Chapter A1, A3, A4 and A6 of the California Existing Building Code, 2016 edition, published and copyrighted in 2015 by the International Code Council, Inc. and

the California Building Standards Commission, California Code of Regulations, Title 24, Part 10, regarding seismic strengthening provisions for unreinforced masonry bearing wall buildings. Said California Existing Building Code is hereby referred to and by such references is incorporated herein as if fully set forth.

SECTION INT-5. Volume II. Plumbing Standards.

The City of Glendale hereby adopts the 2016 California Plumbing Code as Volume II of the Glendale Building and Safety Code, 2017. Except as otherwise provided herein, or as later amended, Volume II of the Glendale Building and Safety Code, 2017, shall be as published in the California Plumbing Code 2016 edition, and as copyrighted in 2015 by the International Association of Plumbing and Mechanical Officials and the California Building Standards Commission, California Code of Regulations, Title 24, Part 5, including all of its tables, indices, appendices, addenda and footnotes Said California Plumbing Code is hereby referred to and by such reference is incorporated herein as if fully set forth.

SECTION INT-6. Volume III. Mechanical Standards.

The City of Glendale hereby adopts the 2016 California Mechanical Code as Volume III of the Glendale Building and Safety Code, 2017. Except as otherwise provided herein, or as later amended, Volume III of the Glendale Building and Safety Code, 2017, shall be as published in the California Mechanical Code, 2016 edition, and as copyrighted in 2015 by the International Association of Plumbing and Mechanical Officials and the California Building Standards Commission, California Code of Regulations, Title 24, Part 4, including all of its tables, indices, appendices, addenda and footnotes. Said California

Mechanical Code is hereby referred to and by such reference is incorporated herein as if fully set forth.

SECTION INT-7. Volume IV. Electrical Standards.

The City of Glendale hereby adopts the 2016 California Electrical Code as Volume IV of the Glendale Building and Safety Code, 2017. Except as otherwise provided herein, or as later amended, Volume IV of the Glendale Building and Safety Code, 2017, shall be as published in the California Electrical Code, 2016 edition, and as copyrighted in 2014 to the National Fire Protection Association, Inc. and the California Building Standards Commission, California Code of Regulations, Title 24, Part 3, including all of its tables, indices, appendices, addenda, annexes and footnotes. Said California Electrical Code is hereby referred to and by such reference is incorporated herein as if fully set forth.

SECTION INT-8. Volume V. Housing Standards.

The City of Glendale hereby re-adopts the 1997 Uniform Housing Code as Volume V of the Glendale Building and Safety Code, 2017. Except as otherwise provided herein, or as later amended, Volume V of the Glendale Building and Safety Code, 2017, shall be as published in the Uniform Housing Code, 1997 edition, and as copyrighted in 1997 by the International Conference of Building Officials, including all of its tables, indices, appendices, addenda and footnotes. Said Uniform Housing Code is hereby referred to and by such reference is incorporated herein as if fully set forth.

SECTION INT-9. Volume VI. Fire Safety Standards.

The City of Glendale hereby adopts the 2016 California Fire Code as Volume VI of the Glendale Building and Safety Code, 2017. Except as otherwise provided herein, or as later amended, Volume VI of the Glendale Building and Safety Code, 2017, shall be as published in the California Fire Code, 2016 edition, and as copyrighted in 2015 by the International Code Council, Inc. and the California Building Standards Commission, California Code of Regulations, Title 24, Part 9, including all of its tables, indices, appendices, addenda and footnotes. Said California Fire Code is hereby referred to and by such reference is incorporated herein as if fully set forth.

SECTION INT-10. Volume VII. Security Standards.

Except as otherwise provided herein or as later amended, Volume VII of the Glendale Building and Safety Code, 2017 is hereby re-adopted as the Glendale Security Code, as previously adopted by Ordinance 5813.

SECTION INT-11. Volume VIII. Commercial and Industrial Property Maintenance Standards.

Except as otherwise provided herein or as later amended, Volume VIII of the Glendale Building and Safety Code, 2017 is hereby re-adopted as the Commercial and Industrial Property Maintenance Code, as previously adopted by Ordinance 5813.

SECTION INT-12. Volume IX. Green Building Standards.

The City of Glendale hereby adopts the 2016 California Green Building Standards Code as Volume IX of the Glendale Building and Safety Code, 2017. Except as otherwise provided herein, or as later amended, Volume IX of the Glendale Building and Safety Code, 2017, shall be as published in the California Green Building Standards Code, 2016

edition, and as copyrighted in 2015 by the International Code Council, Inc. and the California Building Standards Commission, California Code of Regulations, Title 24, Part 11, including all of its tables, indices, appendices, addenda and footnotes. Said California Green Building Standards Code is hereby referred to and by such reference is incorporated herein as if fully set forth. The voluntary provisions in Appendix Chapter A-4 and Chapter A-5 are not adopted as mandatory compliance features at this time.

SECTION INT-13. Effect of Code on Past Actions and Obligations. The adoption of the Glendale Building and Safety Code, 2017, does not affect any civil lawsuit instituted or filed or prosecutions for ordinance violations committed on or prior to the effective date of said Code, does not waive any fee or penalty due and unpaid prior to the effective date of said Code, and does not affect the validity of any bond or cash deposit posted, filed or deposited pursuant to the requirements of any ordinance.

SECTION INT-14. References to Prior Code. Unless superseded and expressly repealed, references in City forms, documents and regulations to the chapters and sections of the former Glendale Building and Safety Code, 2014, shall be construed to apply to the corresponding provisions contained within the Glendale Building and Safety Code, 2017. Ordinance No. 5813 and No. 5861 of the City of Glendale and all other ordinances or parts of ordinances in conflict herewith are hereby superseded and expressly repealed.

SECTION INT-15. Penalty. Unless otherwise provided in said Code, any person violating any provision of the Glendale Building and Safety Code, 2017, shall be guilty of a misdemeanor and upon conviction thereof, shall be punished by a fine not exceeding one thousand dollars, or by imprisonment in the City jail or the County jail of

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the County of Los Angeles for a term not exceeding six months, or both such fine and imprisonment.

SECTION INT-16. Severability. If any provision of this Ordinance or the application thereof to any person or circumstance is held invalid by a court of competent jurisdiction, that invalidity shall not affect other provisions or applications of this Ordinance that can be given effect without the invalid provision of application, and to this end the provisions of this Ordinance are severable.

SECTION INT-17. Effective Date, Exceptions. This ordinance becomes effective and shall be in full force on January 1, 2017; provided, however that where complete plans for buildings have been filed and are pending for building permits prior to the effective date of this Ordinance, permits may be issued, and the applicant may proceed with the construction in strict compliance with former Building and Safety Code, 2014, provided however physical construction is started within one hundred eighty (180) days from the date of issuance of the permit and continued to completion according to said former Building and Safety Code, 2014.

SECTION INT-18. Four-Fifths Vote. The City Clerk shall certify to the passage of this Ordinance by a vote of four-fifths (4/5^{ths}) of the members of the Council of the City of Glendale and shall cause a summary of the same to be published once in the official newspaper of said City.

VOLUME IA. BUILDING STANDARDS

SECTION IA-1. Volume IA of the Glendale Building and Safety Code, 2017, is amended as hereinafter provided.

SECTION IA-2. Chapter 1 Division II Section [A] 101.2 of Volume IA of the Glendale Building and Safety Code, 2017, is hereby amended to read as follows:

[A] 101.2 Scope. The provisions of this code shall apply to the construction, alteration, relocation, enlargement, replacement, repair, equipment, use and occupancy, location, maintenance, removal and demolition of every building or structure or any appurtenances connected or attached to such buildings or structures.

Exception: Detached one-and two-family dwellings and multiple single-family dwellings (townhouses) not more than three stories above grade plane in height with a separate means of egress, and their accessory structures not more than three stories above grade plane in height, shall comply with the *California Residential Code* as adopted and amended as Volume IB of the Glendale Building and Safety Code.

[A] 101.2.1 Appendices. Provisions in the appendices shall not apply unless specifically adopted.

SECTION IA-3. Chapter 1 Division II Section 104.10.2 of Volume IA of the Glendale Building and Safety Code, 2017, is hereby added to read as follows:

104.10.2 Fire code official concurrence. For those cases which may affect fire or life safety, the building official shall obtain the concurrence of the fire code official.

SECTION IA-4. Chapter 1 Division II Section 104.11.5 of Volume IA of the Glendale Building and Safety Code, 2017, is hereby added to read as follows:

104.11.5 Fire code official concurrence. For those cases which may affect fire or life safety, the building official shall obtain the concurrence of the fire code official.

SECTION IA-5. Chapter 1 Division II Section [A] 105.1 of Volume IA of the Glendale Building and Safety Code, 2017, is hereby amended to read as follows:

[A] 105.1 Required. Any owner or owner's authorized agent who intends to construct, enlarge, alter, repair, move, demolish, or change the occupancy of a building or structure, or to erect, install, enlarge, alter, repair, remove, convert, or replace any electrical, gas, mechanical or plumbing system, the installation of which is regulated by this code, or to cause any such work to be performed, shall first make application to the building official and obtain the required permit.

Parking lots shall not be paved, improved, striped, or restriped unless a separate permit for each parking lot has first been obtained from the building official.

Exception: A separate permit shall not be required to pave, improve, stripe, or restripe a parking lot when such work is included in the scope of another project for which a building permit has been issued and when the design of such parking lot was included in the plan check review of such project.

SECTION IA-6. Chapter 1 Division II Section [A] 105.2 of Volume IA of the Glendale Building and Safety Code, 2017, is hereby amended to read as follows:

[A] 105.2 Work exempt from permit. Exemptions from permit requirements of this code shall not be deemed to grant authorization for any work to be done in any manner in violation of the provisions of this code or any other laws or ordinances of this jurisdiction. 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 (11 m²).
- 2. Fences, pilasters, free-standing and retaining walls not over 7 feet (2134 mm) 18 inches (457 mm) high measured from the lowest adjacent grade to the top of fence, wall or pilaster, unless supporting a surcharge or impounding Class I, II, or IIIA liquids.
- 3. Oil derricks.
- 4. Retaining walls not over 4 feet (2134 mm) high measured from the bottom of the footing to the top of wall, unless supporting a surcharge or impounding Class I, II, or IIIA liquids.
- 54. Water tanks supported directly on grade if the capacity does not exceed 5,000 gallons (18925 L) and the ratio of height to diameter or width does not exceed 2:1.
- 65. <u>Platforms</u>, sidewalks and driveways not more than 30 inches (762 mm) above adjacent grade, and not over any basement or story below and are not part of an accessible route.
- 76. Painting, papering, tiling, carpeting, cabinets, counter tops and similar finish work.
- 87. Temporary motion picture, television and theater stage sets and scenery.

- 98. Prefabricated swimming pools accessory to a Group R-3 occupancy that are less than 24 inches (610 mm) deep, do not exceed 5,000 gallons (18925 L) and are installed entirely above ground.
- 109. Shade cloth structures constructed for nursery or agricultural purposes, not including service systems.
- 4410. Swings and other playground equipment accessory to detached one-and two-family dwellings.
- 4211. Window awnings supported by an exterior wall that do not project more than 54 inches (1372 mm) from the exterior wall and do not require additional support of Group R-3 and U occupancies.
- 4312. Nonfixed and movable fixtures, cases, racks, counters and partitions not over 5 feet 9 inches (1753 mm) in height.
- 13. Temporary frames (also known as "story poles") which are intended to temporarily show the outlines of proposed buildings as required by Title 30 of the Glendale Municipal Code, 1995 for a period of time not to exceed 1-year.

Electrical:

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

Radio and television transmitting stations: The provisions of this code 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.

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.

Gas:

- 1. Portable heating appliance.
- 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 this code.
- 5. Replacement of any part that does not alter its approval or make it unsafe.
- 6. Portable evaporative cooler.
- 7. Self-contained refrigeration system containing 10 pounds (5 kg) or less of refrigerant and actuated by motors of 1 horsepower (746 W) or less.

Plumbing:

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

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.

[A] 105.2.1 Emergency repairs. Where equipment replacements and repairs must be performed in an emergency situation, the *permit* application shall be submitted within the next working business day to the *building official*.

[A] 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 cutting 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.

[A] 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.

SECTION IA-7. Chapter 1 Division II Section [A] 105.3 of Volume IA of the Glendale Building and Safety Code, 2017, is hereby amended to read as follows:

[A] 105.3 Application for permit. To obtain a permit, the applicant shall first file an application therefor in writing on a form furnished by the department of building safety for that purpose. Such application shall:

- 1. Identify and describe the work to be covered by the permit for which application is made.
- 2. Describe the land on which the proposed work is to be done by legal description, street address or similar description that will readily identify and definitely locate the proposed building or work.
- 3. Indicate the use and occupancy for which the proposed work is intended.
- 4. Be accompanied by construction documents and other information as required in Section 107.
- 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.
- 8. Pay plan review and permit fees as required by this Chapter 1 Division II.

SECTION IA-8. Chapter 1 Division II Section 105.3.1.1 of Volume IA of the Glendale Building and Safety Code, 2017, is hereby added to read as follows:

105.3.1.1 Electric vehicle charging station review process.

105.3.1.1.1 Purpose. The purpose of this Section is to promote and encourage the use of electric vehicles by creating an expedited, streamlined permitting process for electric vehicle charging stations while promoting public health and safety and preventing specific adverse impacts in the

installation and use of such charging stations. This Section is also purposed to comply with California Government Code Section 65850.7.

105.3.1.1.2 Definitions.

- (a) <u>"Electric vehicle charging station"</u> or "charging station" means any level of electric vehicle supply equipment station that is designed and built in compliance with Article 625 of the California Electrical Code, as it reads on the effective date of this Section, and delivers electricity from a source outside an electric vehicle into a plug-in electric vehicle.
- (b) <u>"Electric vehicle charging space"</u> means a space intended for charging electric vehicles.
- (c) "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.
- (d) "Electronic submittal" means the utilization of one or more of the following:
 - a. Electronic mail or email.
 - b. The internet.
 - c. Facsimile.

105.3.1.1.3. Expedited permitting process. Consistent with Government Code Section 65850.7, the Building Official shall implement an expedited, streamlined permitting process for electric vehicle charging stations and electrical vehicle charging spaces, and adopt a checklist of all requirements with which electric vehicle charging stations and electrical charging spaces shall comply with in order to be eligible for expedited review. The expedited, streamlined permitting

process and checklist may refer to the recommendations contained in the most current version of the "Plug-In Electric Vehicle Infrastructure Permitting Checklist" of the "Zero-Emission Vehicles in California: Community Readiness Guidebook" as published by the Governor's Office of Planning and Research. The City's adopted checklist shall be published on the City's website.

105.3.1.1.4 Permit application processing.

- (a) Prior to submitting an application for processing, the applicant shall verify that the installation of an electric vehicle charging station and electric vehicle charging space will not have specific, adverse impact to public health and safety and building occupants. Verification by the applicant includes but is not limited to: electrical system capacity and loads; electrical system wiring, bonding and overcurrent protection; building infrastructure affected by charging station equipment and associated conduits; areas of charging station equipment and vehicle parking.
- (b) A permit application that satisfies the information requirements in the City's adopted checklist shall be deemed complete and be promptly processed. Upon confirmation by the Building Official that the permit application and supporting documents meets the requirements of the City adopted checklist, and is consistent with all applicable laws and health and safety standards, the Building Official shall, consistent with Government Code Section 65850.7, approve the application and issue all necessary permits. Such approval does not authorize an applicant to energize or utilize the electric vehicle charging station until approval is granted by the City. If the Building Official determines that the permit application is incomplete, he or she shall issue a

- written correction notice to the applicant, detailing all deficiencies in the application and any additional information required to be eligible for expedited permit issuance.
- (c) Due to limitations in the city's technical systems, the city does not have the ability to accept electronic signatures on forms, applications, and other permit documents and accordingly, the electronic submittal of forms, applications and other permit documents shall not be permitted under this Section until determined otherwise by the Building Official.

105.3.1.1.5. Technical Review.

- (a) It is the intent of this Section to encourage the installation of electric vehicle charging stations and electric vehicle charging spaces by removing obstacles to permitting for charging stations and charging spaces so long as the action does not supersede the Building Official's authority to address higher priority life-safety situations. If the Building Official makes a finding based on substantial evidence that the electric vehicle charging station and electric vehicle charging space could have a specific adverse impact upon the public health or safety, as defined in this Chapter, the City may require the applicant to apply for a use permit.
- (b) In the technical review of a charging station and charging space, consistent with

 Government Code Section 65850.7, the Building Official shall not condition the

 approval for any electric vehicle charging station and electric vehicle charging space

 permit on the approval of such a system by an association, as that term is defined by

 Civil Code Section 4080.

105.3.1.1.6. Electric vehicle charging space installation requirements.

- (a) Electric vehicle charging station equipment shall meet the requirements of the

 California Electrical Code, the Society of Automotive Engineers, the National

 Electrical Manufacturers Association, and accredited testing laboratories such as

 Underwriters Laboratories, and rules of the Public Utilities Commission or a

 Municipal Electric Utility Company regarding safety and reliability.
- (b) <u>Installation of electric vehicle charging stations and associated wiring, bonding,</u> <u>disconnecting means and overcurrent protective devices shall meet the requirements</u> <u>of Article 625 and all applicable provisions of the California Electrical Code.</u>
- (c) <u>Installation of electric vehicle charging stations shall be incorporated into the load</u>

 calculations of all new or existing electrical services and shall meet the requirements

 of the California Electrical Code. Electric vehicle charging equipment shall be

 considered a continuous load.
- (d) Anchorage of either floor-mounted or wall-mounted electric vehicle charging stations shall meet the requirements of the California Building or Residential Code as applicable per occupancy, and the provisions of the manufacturer's installation instructions. Mounting of charging stations shall not adversely affect building elements.
- (e) Electric vehicle charging space shall comply with the provisions in Chapter 11A or Chapter 11B of the California Building Code.

SECTION IA-9. Chapter 1 Division II Section [A] 105.3.2 of Volume IA of the Glendale Building and Safety Code, 2017, is hereby amended to read as follows:

[A] 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 one-year 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 90 days 180 days. The extension shall be requested in writing and justifiable cause demonstrated. [OSHPD 1, 2, & 4] Time limitation shall be in accordance with Title 24, Part I, Chapter 7, Section 7-129.

SECTION IA-10. Chapter 1 Division II Section 105.3.3 of Volume IA of the Glendale Building and Safety Code, 2017, is hereby added to read as follows:

105.3.3 Plan review fees. When submittal documents are required by Chapter 1 Division II, Section 105.3, a plan review fee shall be paid at the time of submitting the submittal documents for plan review. The plan review fees specified in this section are separate fees from the permit fees specified in Chapter 1 Division, Section [A] 109.2 and are in addition to the permit fees.

When submittal documents are incomplete or changed so as to require additional plan review, or when the project involves deferred submittal items as defined in Chapter 1 Division II, Section [A] 107.3.4.1, an additional plan review fee shall be charged at a rate specified by resolution.

In granting any extension the building official may require compliance with any new regulation. In order to renew action on an application after expiration, the applicant shall resubmit plans and pay a new plan review fee. The new plan review fee shall be one half the amount required for a new plan review, provided no changes have been made in the original plans and specifications for such work, and provided further that such abandonment has not exceeded one year. In order

to renew action on an expired application the applicant shall comply with all applicable new regulations.

SECTION IA-11. Chapter 1 Division II Section [A] 105.5 of Volume IA of the Glendale Building and Safety Code, 2017, is hereby amended to read as follows:

[A] 105.5 Expiration. Every permit issued shall become invalid unless the work on the site authorized by such permit is commenced within 180 days after its issuance, or if the work authorized on the site by such permit is suspended or abandoned for a period of 180 days after the time the work is commenced. Work shall be considered suspended or abandoned if the building official determines that substantial work has not been performed within the time specified above. Substantial work shall be construed to mean:

- Measurable work such as, but not limited to, the addition of footings, structural members,
 flooring, wall covering, etc.
- 2. The work mentioned in subsection 1 of this Section [A] 105.5 above must constitute 20% of the value of the work for which the permit was issued in any 180 day period for Group R, Division 3 occupancies and 10% for all other occupancies.

Before such work can be recommenced, a new permit shall be first obtained to do so, and the fee therefore shall be one half the amount required for a new permit for such work, provided no changes have been made or will be made in the original plans and specifications for such work, and provided further that such suspension or abandonment has not exceeded one year. In order to renew action on a permit after expiration, the permittee shall pay a new permit fee and may be required to comply with all applicable new regulations at the time of issuance. The building official is authorized to grant, in writing, one or more extensions of time, for periods not more

than 180 days each. The extension shall be requested in writing and justifiable cause demonstrated.

SECTION IA-12. Chapter 1 Division II Section 105.8 of Volume IA of the Glendale Building and Safety Code, 2017, is hereby added to read as follows:

<u>incorporate</u> all of the work that the applicant, the applicant's agent, employees and/or contractors shall carry out. Said proposed work shall be in accordance with the approved plans and with all requirements of this code and any other laws or regulations applicable thereto. No city approval shall relieve or exonerate any person from the responsibility of complying with the provisions of this code nor shall any vested rights be created for any work performed in violation of this code.

SECTION IA-13. Chapter 1 Division II Section [A] 107.3.4 of Volume IA of the Glendale Building and Safety Code, 2017, is hereby amended to read as follows:

[A] 107.3.4 Design professional in responsible charge.

It shall be required that all documents submitted for review the building official shall be prepared by a registered design professional, Where it is required that documents be prepared by a registered design professional, the building official shall be authorized to require the owner or the owner's authorized agent to engage and designate on the building permit application a registered design professional who shall act as the registered design professional in responsible charge. If the circumstances require, the owner or the owner's authorized agent shall designate a substitute registered design professional in responsible charge who shall perform the duties required of the original registered design professional in responsible charge. The building official shall be notified in writing by the owner or the owner's authorized agent if the registered

design professional in responsible charge is changed or is unable to continue to perform the duties.

The registered design professional in responsible charge 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.

Exception: The building official may waive the requirements for a registered design professional when, after reviewing the submitted plans it is determined that the work is minor in nature.

SECTION IA-14. Chapter 1 Division II Section [A] 109.4 of Volume IA of the Glendale Building and Safety Code, 2017, is hereby amended to read as follows:

[A] 109.4 Work commencing before permit issuance. Any person who commences any work on a building, structure, electrical, gas, mechanical or plumbing system before obtaining the necessary permits shall be subject to a fee established by the building official that shall be in addition to the required permit fees. in addition to the normally established permit fee, equal to 100% of such normally established permit fee, or as otherwise determined by the building official.

SECTION IA-15. Chapter 1 Division II Section [A] 110.3.5 of Volume IA of the Glendale Building and Safety Code, 2017, is hereby amended to read as follows:

[A] 110.3.5 Lath, gypsum board and gypsum panel product inspection. Lath, gypsum board and gypsum panel product inspections shall be made after lathing, gypsum board and gypsum panel products, interior and exterior, are in place, but before any plastering is applied or gypsum board and gypsum panel products joints and fasteners are taped and finished.

Exception: Gypsum board and gypsum panel products that are not part of a fire-resistance-rated assembly, a or a shear assembly or a sound transmission control assembly.

SECTION IA-16. Chapter 1 Division II Section 110.3.9.1 of Volume IA of the Glendale Building and Safety Code, 2017, is hereby added to read as follows:

<u>110.3.9.1 Structural observation</u>. For structural observation, see Section 1704 of Volume IA of the Glendale Building and Safety Code, 2017.

SECTION IA-17. Chapter 1 Division II Section 110.7 of Volume IA of the Glendale Building and Safety Code, 2017, is hereby added to read as follows:

110.7 Reinspections. A reinspection fee may be assessed for each inspection or re-inspection when such portion of work for which inspection is called is not complete or when corrections called for are not made.

This section shall not be interpreted as requiring reinspection fees the first time a job is rejected for failure to comply with the requirements of this code, but as controlling the practice of calling for inspections before the job is ready for such inspection or reinspection.

Reinspection fees may be assessed when the approved plans and inspection card are not readily available to the inspector, for failure to provide access on the date for which inspection is requested, or deviation from plans requiring the approval of the Building Official.

To obtain a reinspection, the applicant shall pay the re-inspection fee in accordance with a fee schedule adopted by this jurisdiction.

In instances where reinspection fees have been assessed, no additional inspection of the work will be performed until the required fees have been paid.

SECTION IA-18. Chapter 1 Division II Section 113 of Volume IA of the Glendale Building and Safety Code, 2017, is hereby amended to read as follows:

SECTION 113

BUILDING AND FIRE BOARD OF APPEALS

[A] 113.1 General. In order to hear and decide appeals of orders, decisions or determinations made by the building official or the fire code official relative to the application and interpretation of all volumes of this code, there shall be and is hereby created a joint building and fire board of appeals. The board of appeals shall be appointed by the governing body and shall hold office at its pleasure appointment and composition shall be in accordance with the governing body. The building official or the fire code official shall be an ex-officio member of said board but shall have no vote on any matter before the board. The building official shall act as the secretary to said board. The board shall adopt rules of procedure for conducting its business, and shall render all decisions and findings in writing to the appellant with a duplicate copy to the building official and fire code official.

[A] 113.2 Limitations on authority. An application for appeal shall be based on a claim that the true intent of this code or the rules legally adopted there under have been incorrectly interpreted, provisions of this code do not fully apply or an equally good or better form of construction is proposed. The board shall have no authority to waive requirements of this code. The building and fire board of appeals shall have no authority relative to interpretation of the administrative provisions of this code nor shall the board be empowered to waive requirements of this code.

[A] 113.3 Qualifications. The board of appeals shall consist of members who are qualified pursuant to Section 2.56.040 of the Glendale Municipal Code, 1995. by experience and training to pass on matters pertaining to building construction and are not employees of the jurisdiction.

113.4 Procedure for Appeals to the Building and Fire Board of Appeals.

113.4.1 Fee. A non-refundable fee for an appeal shall be established or modified by resolution of the City Council. The building official, fire code official, or both shall

review said fee no more than once annually and may, with approval of the City Manager,

recommend changes to the City Council.

113.4.2 Application. With the advice of the building official and fire code official, the Building and Fire Board of Appeals shall approve the form of application for appeals.

Such application shall include but not be limited to the following items: address and description of the property involved; statement of all facts upon which the applicant relies; any plans, sketches, or reports to support the applicant's case or as may be required by the board; the specific section or decision relevant to the applicant's appeal; a detailed account to the appellant's position and justification showing how his or her position meets or exceeds Code.

113.4.3 Acceptance and application. Upon filing of a complete application and payment of the fee, the application shall be reviewed by the building official or fire code official, or both, for completeness and conformance with this Code and the board's adopted policies and procedures. Applications which are found to be complete and compliant shall be accepted and submitted for the board's consideration.

113.4.4 Public hearing. Upon acceptance of an application, the building official shall set the matter for public hearing and notice shall be given as required by the policies and

procedures of the board. The essential facts found at such hearing shall be recorded in the minutes of the board. A copy of the findings and decision of the board shall be mailed to the applicant at the address given in the application, with duplicate copies to the building official and the fire code official.

113.4.5 Appeal to City Council. Any person, including any city official, aggrieved by the decision of the building and fire board of appeals, may appeal to the City Council with the time and in the manner provided in chapter 2.88 of the Glendale Municipal Code, 1995.

SECTION IA-19. Chapter 1 Division II Section [A] 114.1 of Volume IA of the Glendale Building and Safety Code, 2017, is hereby amended to read as follows:

[A] 114.1 Unlawful acts. It shall be unlawful for any person, firm or corporation to erect, construct, alter, extend, repair, move, remove, demolish, or occupy, or maintain any building, structure or equipment regulated by this code, or cause same to be done, in conflict with or in violation of any of the provisions of this code. Maintenance of a building or structure which was unlawful at the time it was constructed and which would be unlawful under this Code if constructed after the effective date of such Code, shall constitute a continuing violation of such Code.

SECTION IA-20. Chapter 1 Division II Section [A] 114.4 of Volume IA of the Glendale Building and Safety Code, 2017, is hereby amended to read as follows:

[A] 114.4 Violation penalties. Any person who violates a provision of this code or fails to comply with any of the requirements thereof or who erects, constructs, alters or repairs a building or structure in violation of the approved construction documents or directive of the building official, or of a permit or certificate issued under the provisions of this code, shall be subject to penalties as

than \$1,000.00 or by imprisonment for a term of not more than 6 months, or by both such fine and imprisonment. Such penalty and imprisonment shall not preclude the imposition of any other administrative or judicial civil or criminal remedies under state, federal or local laws.

SECTION IA-21. Chapter 1 Division II Section [A] 115.1 of Volume IA of the Glendale Building and Safety Code, 2017, is hereby amended to read as follows:

[A] 115.1 Authority. Whenever the building official finds any work regulated by this code being performed in a manner either contrary to the provisions of this code or other laws or ordinances of this jurisdiction or dangerous or unsafe, the building official is authorized to issue a stop work order.

SECTION IA-22. Chapter 1 Division II Section [A] 115.3 of Volume IA of the Glendale Building and Safety Code, 2017, is hereby amended to read as follows:

[A] 115.3 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 guilty of a

SECTION IA-23. Chapter 1 Division II Section 116.6 of Volume IA of the Glendale Building and Safety Code, 2017, is hereby added to read as follows:

misdemeanor.

116.6 Non-Compliance. Upon failure to comply with the order within the time specified herein, and if no appeal has been properly and timely filed, the building official shall file in the office of the County Recorder a certificate describing the property and certifying (i) that the building is an unsafe building and (ii) that the owner has been notified. Whenever the corrections ordered shall thereafter have been completed or the building demolished so that it no longer exists as an unsafe

building on the property described in the certificate, the building official shall file a new certificate with the County Recorder certifying that the building has been demolished or all required corrections have been made so that the building is no longer unsafe, whichever is appropriate.

SECTION IA-24. Chapter 1 Division II Section 116.7 of Volume IA of the Glendale Building and Safety Code, 2017, is hereby added to read as follows:

116.7 Vacated Buildings. Any unsafe building ordered vacated in accordance with this section shall not be reoccupied until the unsafe conditions have been eliminated. Each such vacated building shall be locked and otherwise secured against entry and the building official shall post thereon a placard stating: "DO NOT ENTER, UNSAFE TO OCCUPY, CITY OF GLENDALE." Such notice shall remain posted until the required repairs, demolition or removal are completed. Such notice shall not be removed without written permission of the building official and no person shall enter the building except for the purpose of making the required repairs or of demolishing the building.

SECTION IA-25. Chapter 1 Division II Section 117 of Volume IA of the Glendale Building and Safety Code, 2017, is hereby added to read as follows:

SECTION 117

REFUSE AND RECYCLING STORAGE

117.1 Definitions. The following words and phrases, when used in this Section have the meanings respectively ascribed to them in this section unless otherwise noted:
"Refuse Storage Room" A property's location to store garbage, recycling, and organic material.

"External Refuse Collection Area" Enclosure for trash, organics and recycling bins/carts located outside a building.

"Internal Refuse Collection Room" Enclosure for trash, organics and recycling bins/carts located inside a building.

"Multiple-Unit Dwelling" Building with five or more residential units.

"Organics" means food, greens (leaves and grass), landscaping (prunings, trimmings, branches and stumps), non-hazardous wood waste, and compostable paper (includes food soiled paper).

Organics excludes palm fronds or other material deemed inappropriate by the Director of Public Works.

"Rubbish" As defined in Section 8.44.010.

117.2 General. The purpose of this Section is to establish refuse and recycling storage room requirements to facilitate compliance with state recycling mandates. Refuse and recyclables shall not be allowed to accumulate such that a visual, public health or safety nuisance is created at any time. All new buildings except those in group R, Division 3,-Group U and Group R2 occupancies with less than five (5) units shall provide a refuse storage room on the premises. The refuse storage room shall be adequate for present and future refuse and recycling needs.

117.3.1 Where Required. A refuse storage room is not required for Groups A, B, E, F, H, I, M, and S Occupancies less than 1,000 square feet (93 m²).

117.3.2 Refuse Storage Room Requirements. Refuse storage rooms shall be sized to accommodate adequate recycling, organics and trash bins and ensure that such bins do not block access to one another. Each refuse storage room bin must be readily accessible without requiring users to move them. Wheel stops shall be provided along three sides of

the refuse storage room (excluding the door opening) at a minimum of seven (7) inches (178 mm) from each wall. The minimum vertical clearance shall be seven (7) feet (2135 mm) and no plumbing or electrical installations shall protrude into the refuse storage room below six (6) feet (1830 mm) from the floor. Adequate refuse storage room space shall be provided for the weekly accumulation of all estimated garbage, organics and recyclables. The room shall have adequate space to recycle at least 50% of the site's total estimated refuse.

117.3.3 Minimum Size Requirements: Each refuse storage room shall be capable of housing separate organics and recycling bins even if the property initially chooses to have all materials collected in a single bin for mixed waste processing. All doors, openings, and paths of travel/access shall be of sufficient size to provide twelve (12) inches (305 mm) of clearance on both sides of the refuse bin at the narrowest point in the opening or pathway. Any angled entrance will only be allowed if approved by the Director of Public Works under the provisions of Chapter 1 Division II, Section 104.11 of Volume IA of the Glendale Building and Safety Code, 2017. Hinged doors shall be equipped with a device to hold the doors open while moving bins in and out of the storage area. All floor(s) and paths of access shall be level with non-slip rough surfaces. The refuse storage room shall have a solid covering protecting refuse bins from rainfall. A pedestrian access door shall be placed on the refuse storage room door and if applicable, on the pedestrian access door.

117.4 Recycled material Storage Room. Fifty percent of the anticipated refuse generated at the building should be capable of being collected in recycling bins to comply with the State's

mandated waste diversion goals. Refuse storage rooms shall be a minimum 7 feet (2128 mm) x 18 feet (5486 mm) with two (2) standard 54-inch minimum width bin access doors.

117.5 Refuse Chute Location. If refuse chutes are provided, three chutes shall be installed, one for garbage, one for organics and another for recyclables (or one chute with a carousel or diverter chute system may be used). Each chute shall be a minimum of eighteen (18) inches (458 mm) from any wall of the refuse storage room to the edge of any chute. All chutes shall be installed adjacent to each other and signage shall be displayed at each chute collection area and termination point so that residents and service providers will be aware of the correct sorting method and bin placement.

117.6 Refuse Storage Rooms - Out of Public View. Refuse storage rooms or areas may not be positioned in any manner where they may be viewed from a public right-of-way other than an alley. Refuse storage areas or rooms may not be located on walls or facing public right-of-ways other than alleys unless they are screened from public view in a manner satisfactory to the Building Official.

117.7 Maintenance of Refuse Storage Rooms. Notwithstanding any other provision of this Code, all refuse storage rooms shall be maintained to the satisfaction of the Director of Public Works for the life of the structure which include keeping the floor free of debris and ensuring the floor is not slippery.

117.7.1 Recycling Plans. New buildings shall meet the following requirements:

- All new buildings shall submit a "Recycling Plan" to the City's Integrated
 Waste Management Division. The Plan shall include the following elements:
 - a. Site plan which identifies the location(s) of the trash and recycling refuse storage room relative to the facility or complex.

- Identify a list of all materials to be collected and recycled from the facility.
- c. The developer shall provide any gate opener or key needed to gain access to refuse storage rooms/areas.
- d. The developer shall provide a plan describing what measures will be taken to educate occupants and promote recycling programs to the new owner(s), manager, and tenants of the building. Recycling rules and mandates shall be included as a part of all rental, lease, or purchase agreements.

who deposit material there as well as staff who collect and remove the materials placed therein.

Adequate space shall be allocated for refuse trucks to access containers. A minimum space of 15 horizontal feet (4572 mm) and 30 vertical feet (9144mm) shall be provided immediately in front of external collection refuse storage rooms. A minimum space of 15 horizontal feet (4572 mm) and 8 feet-2 inches (2489 mm) vertical clearance shall be provided immediately in front of internal refuse storage rooms. An 8 foot 2 inch (98 inches, 2489 mm) vertical clearance path-of-travel must be provided to all refuse storage rooms.

SECTION IA-26. Chapter 1 Division II Section 118 of Volume IA of the Glendale Building and Safety Code, 2017, is hereby added to read as follows:

SECTION 118

CONSTRUCTION TOILET FACILITIES

118 Temporary Construction Toilets. Toilet Facilities Required. No person shall commence or proceed with the erection, construction, alteration, repair, raising, adding to, removal, or demolition of any building or structure unless adequate, suitable, sanitary toilet facilities under the control of such person are provided for the use of any person employed or working upon such building or structure. Such toilet facilities shall be located upon or within a reasonable distance of the lot, premises, or site upon which such work is being done. In no case shall the line of travel to any facility exceed five hundred feet (500') (153 M). Toilets may not be placed on the public way.

118.1 Toilet Standards. Every toilet shall be of water flush type and shall be connected to a public sewer or private sewage disposal system built in accordance with the provisions of the Plumbing Code. All toilet structures shall be self-closing; the toilet floor shall be smooth, and screened ventilation shall be provided for the toilet compartment. Where workmen are employed during night hours, the toilet building shall be provided with artificial light. In lieu of flush water closets approved chemical toilets may be provided. Toilets may not be located within 10' (3054 mm) of a property line.

SECTION IA-27. Chapter 1 Division II Section 119 of Volume IA of the Glendale Building and Safety Code, 2017, is hereby added to read as follows:

SECTION 119

ON SITE CONSTRUCTION TRASH AND DEBRIS CONTROL

119 On Site Construction Trash and Debris Control Facilities Required.

No person shall commence or proceed with erection, construction, alteration, repair, raising, adding to, removal, or demolition of any building or structure unless adequate, suitable on site trash and debris control facilities under the control of such person are provided for the use of any person employed or working upon such building or structure. On site trash and debris control shall consist of at least a roll off 523 ft³ (15m³) bin. The container shall be emptied often enough so that no storage of trash is outside the bin. The bin shall be removed from the site after the building has passed final inspection or within thirty (30) days of the expiration of the building permit.

Exception: Additions, less than 900 ft ² (84m²), and alterations to Group R, Division 3 occupancies and Group U occupancies need not provide a roll off bin but must store trash and debris in the rear yard in quantities less than 10 ft (3m) wide by 10 ft (3m) long by 4 ft (1.2m) high. All trash and debris whether or not in containers shall be kept 3 ft (912mm) from adjacent property lines.

SECTION IA-28. Chapter 1 Division II Section 120 of Volume IA of the Glendale Building and Safety Code, 2017, is hereby added to read as follows:

SECTION 120

DISASTER REPAIR AND RECONSTRUCTION

120.1 Intent. This section establishes standards and regulations for the expeditious repair and reconstruction of structures damaged as a result of a disaster for which a local emergency has been declared by the City Council. This section does not allow exemptions from the Building, Fire, Electrical, Mechanical, Plumbing, other Codes, or standards.

120.2 Applications of Provisions.

- emergency has been declared by the City Council to all buildings and structures of all occupancies regulated by the City of Glendale. The Council may extend the provisions as necessary.
- 120.2.2 When approved by the building official, the requirements of this section may be waived in favor of repair recommendations included in an engineering evaluation as defined in Section 120.3.
- **120.3 Definitions.** For the purpose of this section 120, the following definitions apply:
- **120.3.1** "Architect" means an individual licensed by the State of California to practice architecture as defined in the State of California Business and Professions Code.
- <u>120.3.2</u> "Civil Engineer" means an individual registered by the State of California to practice civil engineering as defined in the State of California Business and Professions Code.

- 120.3.3 "Current Code" means the edition of the California Building Code, published by the International Code Council, as adopted by the City of Glendale as the Glendale Building and Safety Code, as amended. The edition of said Glendale Building and Safety Code to be applied shall be that edition in effect at the time of the declaration of a local emergency by the City Council.
- 120.3.4 "Engineering Evaluation" means an evaluation of a damaged building or structure, or suspected damaged building or structure, performed under the direction of a structural engineer, civil engineer, or architect retained by the owner of the building or structure. Engineering evaluations shall, at a minimum, contain recommendations for repair with appropriate opinion of construction cost for those repairs.
- <u>120.3.5</u> "Replacement Value" means the dollar value, as determined by the new building official, of replacing the damaged structure with a new structure of the same size, construction material and occupancy on the same site.
- 120.3.6 "Structural Engineer" means an individual registered by the State of California to practice structural engineering and to use the title structural engineer as defined in the State of California Business and Professions Code.
- 120.3.7 "Value of Repair" means the dollar value, as determined by the building official, of making the necessary repairs to the damaged building.

120.4 Repair Criteria.

- <u>120.4.1</u> Abatement of Dangerous Buildings shall be in accordance with the provisions of Chapter 1 Division II, Section 116.
- 120.4.2 Building and structures of all occupancies which have been damaged as a result of a disaster, except as otherwise noted, shall be repaired in accordance with the following criteria:
 - 1. When the estimated value of repair does not exceed ten percent (10%) of the replacement value of the structure, the damaged portion(s) may be restored to their pre-disaster condition.
 - **Exception:** When the damaged elements include suspended ceiling systems, the ceiling system shall be repaired and all bracing required by current code shall be installed.
 - 2. When the estimated value of repair is greater than ten percent (10%) but less than fifty percent (50%) of the replacement value of the structure, the damaged elements, as well as all critical ties, supported elements and supporting elements associated with the damaged elements, shall be repaired and/or brought into conformance with the structural requirements of the current Code.
 - 3. When the estimated value of repair is fifty percent (50%) or more of the replacement value of the structure, the entire structure shall be brought into conformance with the structural requirements of the current Code.

4. In Group R, Division 3 occupancies, the repair value of damaged chimneys shall be excluded from the computation of percentage of replacement value. Damaged chimneys shall be repaired in accordance with Chapter 1Division II, Section 120.5.

120.5 Repair Criteria for Chimneys.

- 120.5.1 All damaged chimneys must be repaired or reconstructed to comply with the requirements of Section 2113 of the Glendale Building and Safety Code, 2017. Damaged portions of chimneys shall be removed in accordance with the following criteria:
 - 1. When the damaged portion of the chimney is located between the roof line and the top of the chimney, the damaged portion shall be removed to the roof line provided the roof and ceiling anchorage are in sound condition.
 - 2. For a single-story structure in which the damaged portion of the chimney is below the roof line or the damaged portion extends from above the roof line to below the roof line, the chimney shall be removed to the top of the fire box.
 - 3. For a multi-story structure, the damaged portion of the chimney shall be removed from the top to a floor line where sound anchorage is found.
 - 4. In any structure where the firebox has been damaged, the entire chimney and firebox shall be removed to the foundation. If this foundation is in sound condition, the firebox and chimney may be reconstructed using the existing foundation. If the foundation has been damaged, the foundation shall be removed and replaced.

120.5.2 Where existing conditions preclude the installation of all anchorage required by Section 2113 of the current Code, alternate systems may be used in accordance with the alternate methods and materials provisions of the current Code when approved by the building official. Such alternate systems shall be designed and detailed by a structural engineer, civil engineer, or architect.

120.6 Repair Criteria for Unreinforced Masonry Buildings and Structures.

120.6.1 All buildings as described in Appendix Chapter A1, Section A102.1 of the

California Existing Building Code of Volume IC of the Glendale Building and Safety

Code that are damaged shall be repaired and strengthened in accordance with provisions
of Chapter 1 Division II, Section 120.4.

120.6.2 Unreinforced masonry buildings damaged less than 50% shall be repaired in accordance with California Existing Building Code, Appendix Chapter A1, Seismic Strengthening Provisions for Unreinforced Masonry Bearing Wall Buildings of Volume IC of this Code.

SECTION IA-29. Chapter 1 Division II Section 121 of Volume IA of the Glendale Building and Safety Code, 2017, is hereby added to read as follows:

SECTION 121

SANDBLASTING

121.1. Sandblasting: Definition. As used in this article, unless the context expressly indicates otherwise, "sandblasting" shall mean the use of air, steam or water containing sand to clean, grind, or cut hard surfaces.

permission from the building official endorsed upon a permit. Permission for dry sandblasting may be granted only when it is not possible to employ wet sandblasting. When dry sandblasting is permitted, the building official may impose such reasonable and related conditions as he or she may deem necessary for the protection of the public and the adjacent property.

121.3. Use of Canvas. Sandblasting operations shall, at all times, be separated from all adjacent property by canvas or other suitable barrier to prevent the splashing or blowing of water and/or sand thereupon.

121.4. Stoppage of Work. The building official may order the immediate stoppage of sandblasting for failure to comply with any provision of this chapter. Failure of any person to comply immediately with such order shall constitute a misdemeanor.

SECTION IA-30. Section [**F**] 403.3 of Volume IA of the Glendale Building and Safety Code, 2017, is hereby amended to read as follows:

[F] 403.3 <u>Combination Aautomatic sprinkler / standpipe</u> system. Buildings and structures shall be equipped throughout with <u>an a combination automatic sprinkler/ standpipe</u> system in accordance with Section 903.3.1.1 and a secondary water supply where required by <u>in accordance with Section 403.3.3</u>, and the policies of the fire code official. Standpipes shall provide for a looped redundant sprinkler supply at each floor level. A sprinkler water-flow alarm-initiating device and a control valve with a supervisory signal-initiating device shall be provided at each of the lateral connections to the risers on each floor.

Exception: An automatic sprinkler system shall not be required in open parking garages in accordance with Section 406.5.

SECTION IA-31. Section 403.3.3 of Volume 1A of the Glendale Building and Safety Code, 2017, is hereby added to read as follows:

[F] 403.3.3 Secondary water supply. An automatic secondary on-site water supply having a usable capacity not less than the hydraulically calculated sprinkler demand, including the hose stream requirement for a duration of not less than 30 minutes, or the fire pump's listed flow at 100% for a duration of not less than 30 minutes, whichever is greater, shall be provided for high-rise buildings and Group 1-2 occupancies having occupied floors located more than 75 feet above the lowest level of fire department vehicle access in Seismic Design Category C, D, E or F as determined by the California Building Code. An additional fire pump shall not be required for the secondary water supply unless needed to provide the minimum design intake pressure at the suction side of the fire pump supplying the automatic sprinkler system. The secondary water supply shall have a duration of not less than 30 minutes or as determined by the occupancy hazard classification in accordance with NFPA 13, whichever is greater. The Class I standpipe system demand shall not be required to be included in the secondary on-site water supply calculations. In no case shall the secondary on-site water supply be less than 15,000 gallons.

Exception: Existing buildings.

SECTION IA-32. Section 503.2 of Volume 1A of the Glendale Building and Safety Code, 2017, is hereby added to read as follows:

<u>source</u> <u>same ownership or occupancy.</u> In those cases where lots, or portions of lots, contiguous to one another are owned or occupied by the same person, such lots, or portions of lots, may be considered one lot for the purpose of enforcing Sections 503, 602.1, Table 602 and, Table 504.4 and Table 506.2 of this Code. In such event, the owner of said lots shall be required to execute and record a covenant and agreement with the

City to the satisfaction of the building official on a form approved by the City Attorney. Said covenant and agreement shall, among other things, provide that said lots or portions of lots shall remain as one parcel and the owner thereof shall not sell, transfer or in any way sever any portion of said lots or portions of lots independently from the remaining lots or portions of lots until or unless released from the covenant and agreement by the city. Said covenant and agreement shall be recorded by the Los Angeles County Recorder, shall run with the lot or portions of lots, and shall be binding upon the owner, future owners, encumbrancers, successors, heirs, and assigns. An easement or dedication for public right of way purposes shall not constitute ownership or occupancy under this Section 503.2. The building official is hereby authorized to execute such covenants and agreements on behalf of the City.

SECTION IA-33. Table 504.3 of Volume IA of the Glendale Building and Safety Code, 2017, is hereby amended to read as follows:

(TABLE ON THE FOLLOWING PAGE)

TABLE 504.3^{a,i} ALLOWABLE BUILDING HEIGHT IN FEET ABOVE GRADE PLANE

			Т	YPE OF CO	NSTRUCTIO	N				
OCCUPANCY CLASSIFICATION		TY	PEI	TYPE II TYPE III			EIII	TYPE IV	PE V	
	SEE FOOTNOTES	Α	В	A	В	A	В	HT	Α	В
DEMCH	NS ^b	UL	160	65	55	65	55	65	50	40
B,F,M,S,U	S	UL	180	85	75	85	75	85	70	60
	NS ^b	UL	160	65	55	65	55	65	50	40
A, E	S (without area increase)	UL	180	85	75	85	75	85	70	60
	S (with area increase)	UL	160	65	55	65	55	65	50	40
11 1 11 2 11 2 11 5 1	NS ^{c, d}	1.11	160	65	55	65	55	65	50	40
H-1, H-2, H-3, H-5, <i>L</i>	S	UL	160	65	55	65	55	65	50	40
	NS ^{c, d}	UL	160	65	55	65	55	65	50	40
H-4	S without area increase)	UL	180	85	75	85	75	85	70	60
	S (with area increase)	UL	160	65	55	65	55	65	50	40
	NS ^{d, e}	UL	160	NP	NP	NP	NP	NP	NP	NP
1-3	S (without area increase)	UL	180	NP	NP	NP	NP	NP	NP	NP
	S (with area increase)	UL	160	NP	NP	NP	NP	NP	NP	NP
	$NS^{ m d, f, e}$	UL	160	65		65	55	65		
1-2, <i>I-2.1</i>	S (without area increase)	UL	180	85	55				50	40
	S (with area increase)	UL	160	65						
	NS ^{d, g}	UL	160	65	55	65	55	65	50	40
1-4	S (without area increase)	UL	180	85	75	85	75	85	70	60
	S (with area increase)	UL	160	65	55	65	55	65	50	50
	NS ^d	UL	160	65	55	65	55	65	50	40
p th	S13R	60	60	60	55	60	55	60	50	40
R - I^h	S (without area increase)	UL	180	85	75	85	75	85	70	60
	S (with area increase)	UL	160	65	55	65	55	65	50	40
	NS^d	UL	160	65	55	65	55	65	50	40
D. Oh	S1 3R	60	60	60	55	60	55	60	50	40
$R-2^h$	S (without area increase)	UL	180	85	75	85	75	85	70	60
	S (with area increase)	UL	160	65	55	65	55	65	<u>50 </u> 60 ^j	40
	NS^d	UL	160	65	55	65	55	65	50	40
n 2 n 2 1 h	S13D	60	60	60	60	60	60	60	50	40
R-3, R-3.1 h	S13R	60	60	60	60	60	60	60	60	60
	S	UL	180	85	75	85	75	85	70	60
	NS^d	UL	160	65	55	65	55	65	50	40
D 0 1 5 4	S13D	60	60	60	55	60	55	60	50	40
$R-2.1, R-4^h$	S13R	60	60	60	55	60	55	60	50	40
	S	UL	160	65	55	65	55	65	50	40

For SI:1 foot = 304.8 mm.

Note: UL = Unlimited; $NP = Not \ Permitted$; $NS = Buildings \ not \ equipped \ throughout \ with an automatic sprinkler system; <math>S = Buildings \ equipped$ throughout with an automatic sprinkler system installed in accordance with Section 903.3.1.1; $S = Buildings \ equipped$ throughout with an automatic sprinkler system installed in accordance with Section 903.3.1.2; S13D = Buildings equipped throughout with an automatic sprinkler a. See Chapters 4 and 5 for specific exceptions to the allowable height in this chapter.
b. See Section 903.2 for the minimum thresholds for protection by an automatic sprinkler system in accordance with Section 903.2.5.
d. The NS value is only for use in evaluation of existing building height in accordance with the California Existing Building Code.

- e. New Group 1-3 occupancies are required to be protected by an automatic sprinkler system in accordance with Section 903.2.6.
 f. New and existing Group 1-2 occupancies are required to be protected by an automatic sprinkler system in accordance with Section 903.2.6 and Section 1103.5 of the *California Fire Code*.
 g. For new Group 1-4 occupancies, see Exceptions 2 and 3 of Section 903.2.6.
 h. New Group R occupancies are required to be protected by an automatic sprinkler system in accordance with Section 903.2.8.
 i. In other than Group A, E., H, I, L, and R occupancies, high-rise buildings, and other applications listed in Section 1.11 regulated by the Office of the State Fire

- Marshal, the S increases for height and stories in Tables 504.3 and 504.4 are permitted in addition to the S area increase in accordance with Table
- j. For Group R-2 buildings of Type VA construction equipped throughout with an approved automatic sprinkler system in accordance with Section 903.3.1.1, \$ area

increase is permitted in addition to the height and story increase provided the height shall not exceed 60 feet and 4 stories.

SECTION IA-34. Table 504.4 of Volume IA of the Glendale Building and Safety Code,

2017, is hereby amended to read as follows:

(TABLE ON THE FOLLOWING PAGE)

TABLE 504.4^{a,b,n}
ALLOWABLE NUMBER OF STORIES ABOVE GRADE PLANE

	ALLOWABLE NU	WIBER OF		TYPE OF CO						
OCCUPANCY CLASSIFICATION		TY	PE I	TYP	EII	TYP	EIII	TYPE IV	TY	PE V
OLINOTI TOM TOM	SEE FOOTNOTES	Α	В	Α	В	Α	В	HT	Α	Α
	NS	UL	5	3	2	3	2	3	2	1
A-1	S (without area increase)	UL	6	4	3	4	3	4	3	2
	S (with area increase)	UL	5	3	2	3	2	3	2	1
	NS	UL	11	3	2	3	2	3	2	1
A-2	S (without area increase)	UL	12	4	3	4	3	4	3	3
	S (with area increase)	UL	11	3	2	3	2	3	2	1
	NS	UL	11	3	2	3	2	3	2	1
A-3	S (without area increase)	UL	12	4	3	4	3	4	3	2
	S (with area increase)	UL	11	3	2	3	2	3	2	2
	NS	UL	11	3	2	3	2	3	2	2
A-4	S (without area increase)	UL	12	4	3	4	3	4	3	2
	S (with area increase)	UL	11	3	2	3	2	3	2	1
A-5	NS	UL	UL	UL	UL	UL	UL	UL	UL	UL
113	S	UL	UL	UL	UL	UL	UL	UL	UL	UL
В	NS	UL	11	5	3	5	3	5	3	2
В	S	UL	12	6	4	6	4	6	4	3
	NS	UL	5	3	2	3	2	3	1	1
E	S (without area increase)	UL	6	4	3	4	3	4	2	2
	S (with area increase)	UL	5	3	2	3	2	3	1	1
F-1	NS	UL	11	4	2	3	2	4	2	1
1-1	S	UL	12	5	3	4	3	5	3	2
F-2	NS	UL	11	5	3	4	3	5	3	3
1-2	S	UL	12	6,	4	5	4	6	4	3
H-1	NS ^{c,d}	1	1	1	1	1	1	1	1	NP
11-1	S	1	1	1	1	1	1	1	1	141
H-2	NS ^{c,d}	20	3	2	1	1 2	1	2	1	1
П-2	S	20			1			2	1	1
11.0	NS ^{c,d}	20		4	2	4	2	4	2	1
H-3	S	20	6	4	2	4	2	4	2	1
	NS ^{c,d}	20	7	5	3	5	3	5	3	2
H-4	S (without area increase)	20	8	6	4	6	4	6	4	3
	S (with area increase)	20	7	5	3	5	3	5	3	2
TT 6	NS ^{c,d}			_	2	2	2	_	2	-
H-5	S	4	4	3	3	3	3	3	3	2
	NS ^{d, f}	UL	4	2						
1-2/1-2.1 ^j	S (without area increase)	UL	5	3	1	1	NP	1	1	NP
	S (with area increase)	UL	4	2						
	NS ^{d, e}	NP	NP	NP	NP	NP	NP	NP	NP	NP
1-3	S (without area increase)	UL	3	NP	NP	NP	NP	NP	NP	NP
	S (with area increase)	UL	2	NP	NP	NP	NP	NP	NP	NP
	NS ^{d,g}	UL	5	3	2	3	2	3	1	1
1-4	S (without area increase)	UL	6	4	3	4	3	4	2	2
	S (with area increase)	UL	5	3	2	3	2	3	1	I
L	NS	NP	NP	NP	NP	NP	NP	NP	NP	NP

	S	20	6	5	3	5	3	5	3	2
M	NS	UL	11	4	2	4	2	4	3	1
M	S	UL	12	5	3	5	3	5	4	2

(continued)

TABLE 504.4a,b,n—continued ALLOWABLE NUMBER OF STORIES ABOVE GRADE PLANE

	ALLOWABLE NO				ONSTRUCT					
OCCUPANCY		TY	/PE I	TYI	PEII	TY	PE III	TYPE IV	TYF	PE V
CLASSIFICATION	SEE FOOTNOTES	Α	В	Α	В	Α	В	НТ	Α	В
	NS ^d	UL	11	4	4	4	4	4	3	2
R-1 ^h	S13R	4	4	4	4	4	4	4	3	2
K-1	S (without area increase)	UL	12	5	5	5	5	5	4	3
	S (with area increase)	UL	11	4	4	4	4	4	3	2
	NS ^d	UL	11	4	4	4	4	4	3	2
R - 2^h	S13R	4	4	4	4	4	4	4	3	2
K-2	S (without area increase)	UL	12	5	5	5	5	5	4	3
	S (with area increase)	UL	11	4	4	4	4	4	<u>3</u> 4 [€]	2
	NS^d	UL	6^{I}	3^k	NP	3^k	NP	NP	3^k	NP
R -2. I^h	S13R	UL	4^{I}	3^k	NP	3^k	NP	NP	3^k	NP
	S	UL	6^{I}	3^k	NP	3^k	NP	NP	3^k	NP
	NS ^d	UL	11					4	3	3
R-3, R -3. I^h	Sl3D	4	4	4	4	4	4		3	3
K-3, K-3.1	S13R	4	4						4	4
	S	UL	12	5	5	5	5	5	4	4
	NS^d	UL	11 ¹							
R-4 ^h	Sl3D	4	4^{I}	4 ^k	4 ^m	4^k	4 ^m	4 ^m	3^k	2 ^m
K-4	S13R	4	41	4	4	4	4	4	3	2
	S	UL	11 ¹							
S-1	NS	UL	11	4	2	3	2	4	3	1
5-1	S	UL	12	5	3	4	3	5	4	2
S_2i	NS	UL	11	5	3	4	3	4	4	2
S-2 ⁱ	S	UL	12	6	4	5	4	5	5	3
U	NS	UL	5	4	2	3	2	4	2	1
U	S	UL	6	5	3	4	3	5	3	2

Note: UL = Unlimited; NP = Not Permitted; NS = Buildings not equipped throughout with an automatic sprinkler system; S = Buildings equipped throughout with an automatic sprinkler system installed in accordance with Section 903.3.1.1; SI3R = Buildings equipped throughout with an automatic sprinkler system installed in accordance with Section 903.3.1.2; SI 3D = Buildings equipped throughout with an automatic sprinkler system installed in accordance with Section 903.3.1.3.

- a. See Chapters 4 and 5 for specific exceptions to the allowable height in this chapter.
- b. See Section 903.2 for the minimum thresholds for protection by an automatic sprinkler system for specific occupancies.
- c. New Group H occupancies are required to be protected by an automatic sprinkler system in accordance with Section 903.2.5.
- d. The NS value is only for use in evaluation of existing building height in accordance with the California Existing Building Code.
- e. New Group 1-3 occupancies are required to be protected by an automatic sprinkler system in accordance with Section 903.2.6.
- f. New and existing Group 1-2 occupancies are required to be protected by an automatic sprinkler system in accordance with Section 903.2.6 and Section 1103.5 of the California Fire Code.
- g. For new Group 1-4 occupancies, see Exceptions 2 and 3 of Section 903.2.6.
- h. New Group R occupancies are required to be protected by an automatic sprinkler system in accordance with Section 903.2.8.
- i. See Section 408.1.2 for specific exceptions to construction type, allowable building areas and, allowable heights.

- I. Restraint shall not be permitted in any building except in Group 1-3 occupancies constructed for such use (see Section 408.1.2).
- k. Nonambulatory persons shall be limited to the first 2 stories.
- 1. Nonambulatory persons shall be limited to the first 5 stories.
- m. Nonambulatory elderly clients are not permitted in buildings of these types of construction. See Sections 435.3.3 and 435.3.4.

 n. In other than Group A, E, H, I, L, and R occupancies, high-rise buildings, and other applications listed in Section 1.11 regulated by the Office of the State Fire Marshal, the S increases for height and stories in Tables 504.3 and 504.4 are permitted in addition to the S area increase in accordance with Table 506.2.
- o. For Group R-2 buildings of Type VA construction equipped throughout with an approved automatic sprinkler system in accordance with Section 903.3.1.1, S area increase is permitted in addition to the height and story increase provided the height shall not exceed 60 feet

SECTION IA-35. Table 506.2 of Volume IA of the Glendale Building and Safety Code,

2017, is hereby amended to read as follows:

(TABLE ON THE FOLLOWING PAGE)

TABLE 506.2^{a, b, i} ALLOWABLE AREA FACTOR (A_t = NS, S1, S13R, or SM, as applicable) IN SQUARE FEET

	ALLOWABLE AREA FACTOR	$(A_t = NS,$	31, 3131	t, or Sivi, a		OF CONSTRI				
OCCUPANCY	SEE FOOTNOTES	TYP	ΕΙ	TYP			EIII	TYPE IV	TYI	PE V
CLASSIFICATION		Α	В	Α	В	Α	В	HT	Α	В
	NS	UL	UL	15,500	8,500	14,000	8,500	15,000	11,500	5,500
	S1	UL	UL	62,000	34,000	56,000	34,000	60,000	46,000	22,000
A-1	SM (without height increase)	UL	UL	46,500	25,500	42,000	25,500	45,000	34,500	16,500
	SM (with height increase)	UL	UL	15,500	8,500	14,000	8,500	15,000	11,500	5,500
	NS	UL	UL	15,500	9,500	14,000	9,500	15,000	11,500	6,000
A 2	S1	UL	UL	62,000	38,000	56,000	38,000	60,000	46,000	24,000
A-2	SM (without height increase)	UL	UL	46,500	28,500	42,000	28,500	45,000	34,500	18,000
	SM (with height increase)	UL	UL	15,500	9,500	14,000	9,500	15,000	11,500	6,000
	NS	UL	UL	15,500	9,500	14,000	9,500	15,000	11,500	6,000
A-3	S 1	UL	UL	62,000	38,000	56,000	38,000	60,000	46,000	24,000
A-3	SM (without height increase)	UL	UL	46,500	28,500	42,000	28,500	45,000	34,500	18,000
	SM (with height increase)	UL	UL	15,500	9,500	14,000	9,500	15,000	11,500	6,000
	NS	UL	UL	15,500	9,500	14,000	9,500	15,000	11,500	6,000
A 1	S 1	UL	UL	62,000	38,000	56,000	38,000	60,000	46,000	24,000
A-4	SM (without height increase)	UL	UL	46,500	28,500	42,000	28,500	45,000	34,500	18,000
	SM (with height increase)	UL	UL	15,500	9,500	14,000	9,500	15,000	11,500	6,000
	NS					UL				
A-5	S1	UL	UL	UL	UL		UL	UL	UL	UL
	SM									
	NS	UL	UL	37,500	23,000	28,500	19,000	36,000	18,000	9,000
В	S1	UL	UL	150,000	92,000	114,000	76,000	144,000	72,000	36,000
	SM	UL	UL	112,500	69,000	85,500	57,000	108,000	54,000	27,000
	NS	UL	UL	26,500	14,500	23,500	14,500	25,500	18,500	9,500
E	S1	UL	UL	106,000	58,000	94,000	58,000	102,000	74,000	38,000
E	SM (without height increase)	UL	UL	79,500	43,500	70,500	43,500	76,500	55,500	28,500
	SM (with height increase)	UL	UL	26,500	14,500	23,500	14,500	25,500	18,500	9.500
	NS	UL	UL	25,000	15,500	19,000	12,000	33,500	14,000	8,500
F-1	S1	UL	UL	100,000	62,000	76,000	48,000	134,000	56,000	34,000
	SM	UL	UL	75,000	46,500	57,000	36,000	100,500	42,000	25,500
	NS	UL	UL	37,500	23,000	28,500	18,000	50,500	21,000	13,000
F-2	S1	UL	UL	150,000	92,000	114,000	72,000	202,000	84,000	52,000
	SM	UL	UL	112,500	69,000	85,500	54,000	151,500	63,000	39,000
11.4	NS ^c	21,000	16 500	11.000	7,000	0.500	7,000	10.500	7.500	NID
H-1	S1	21,000	16,500	11,000	7,000	9,500	7,000	10,500	7,500	NP
	NS ^c									3,000
H-2	S1	21,000	16,500	11,000	7,000	9.500	7,000	10,500	7,500	
	SM								/,500	

TABLE 506.2 a, b, i, -continued

ALLOWABLE AREA FACTOR (A_i = NS, S1, S13R, or SM, as applicable) IN SQUARE FEET

<i>,</i>	ALLOWABLE AREA FACTOR	$(A_t = NS_t)$	S1, S13R	, or SM, a		OF CONST		<u> </u>		
OCCUPANCY	SEE FOOTNOTES	T	YPE I	T	/PE II		E III	TYPE IV TYPE		PE V
CLASSIFICATION		Α	В	. A	В	Α	В	HT	Α	В
	NS ^c									
H-3	S1	UL	60,000	26,500	14,000	17,500	13,000	25,500	10,000	5,000
	SM						,,,,,,,			
	NS ^{c, d}	UL	UL	37,500	17,500	28,500	17,500	36,000	18,000	6,500
***	S1	UL	UL	150,000	70,000	114,000	70,000	144,000	72,000	26,000
H-4	SM (without height increase)	UL	UL	112,500	52,500	85,500	52,500	108,000	54,000	19,500
	SM (with height increase)	UL	UL	37,500	17,500	28,500	17,500	36,000	18,000	6,500
	NS ^{d, f}	UL	UL	37,500	23,000	28,500	19,000	36,000	18,000	9,000
11.5	S1	UL	UL	150,000	92,000	114,000	76,000	144,000	72,000	36,000
H-5	SM (without height increase)	UL	UL	112,500	69,000	85,500	57,000	10,8000	54,000	27,000
	SM (with height increase)	UL	UL	37,500	23,000	28,500	19,000	36,000	18,000	9,000
	NS ^{d, e}	UL	UL	15,000	11,000	12,000	NP	12,000	9,500	NP
1 2/1 2 1	S 1	UL	UL	60,000	44,000	48,000	NP	48,000	38,000	NP
1-2/1-2.1	SM (without height increase)	UL	UL	45,000	33,000	36,000	NP	36,000	28,500	NP
	SM (with height increase)	UL	UL	15,000	11,000	12,000	NP	12,000	9,500	NP
	NS ^{d g}	UL	15,100	NP	NP	NP	NP	NP	NP	NP
1.2	S 1	UL	45,300	NP	NP	NP	NP	NP	NP	NP
1-3	SM (without height increase)	UL	30,200	NP	NP	NP	NP	NP	NP	NP
	SM (with height increase)	UL	15,100	NP	NP	NP	NP	NP	NP	NP
	NS	UL	60,500	26,500	13,000	23,500	13,000	25,500	18,500	9,000
1-4	S 1	UL	121,000	106,000	52,000	94,000	52,000	102,000	74,000	36,000
1-4	SM (without height increase)	UL	181,500	79,500	39,000	70,500	39,000	76,500	55,500	27,000
	SM (with height increase)	UL	60,500	26,500	13,000	23,500	13,000	25,500	18,500	9,000
	NS					0 28,500	17,500	36,000		6,500
L	SI	UL	60,000	37,500	17,500				18,000	
	SM									
	NS	UL	UL	21,500	12,500	18,500	12,500	20,500	14,000	9,000
M	S 1	UL	UL	86,000	50,000	74,000	50,000	82,000	56,000	36,000
	SM	UL	UL	64,500	37,500	55,500	37,500	61,500	42,000	27,000
	NS^d	UL	UL	24,000	16,000	24,000	16 000	20.500	12,000	7,000
	S13R	UL	UL	24,000	10,000	24,000	16,000	20,500	12,000	7,000
R-1 ^h	S 1	UL	UL	96,000	64,000	96,000	64,000	82,000	48,000	28,000
	SM (without height increas'e)	UL	UL	72,000	48,000	72,000	48,000	61,500	36,000	21,000
	SM (with height increase)	UL	UL	24,000	16,000	24,000	16,000	20,500	12,000	7,000
	NS ^d	UL	UL	24,000	16,000	24,000	16,000	20,500	12,000	7,000
	SI3R	UL	UL	24,000	10,000	24,000	10,000	20,300	12,000	
R-2 ^h	S1	UL	UL	96,000	64,000	96,000	64,000	82,000	48,000	28,000
	SM (without height increase)	UL	UL	72,000	48,000	72,000	48,000	61,500	36,000	21,000
	SM (with height increase)	UL	UL	24,000	16,000	24,000	16,000	20,500	12,000	7,000

TABLE 506.2^{a, b, i} -continued

ALLOWABLE AREA FACTOR (At = NS, S1, S13R, or SM, as applicable) IN SQUARE FEET TYPE OF CONSTRUCTION OCCUPANCY **SEE FOOTNOTES** TYPE I TYPE II TYPE III TYPE IV TYPE V CLASSIFICATION Α В Α В Α В HT Α В NS^d NP 12.000 NP NP NP NP NP NPNP S13R NP NP NP NP NP NP NP 12,000 NP R-2 Type VA NP NP NP NP NP NP 48,000 NP S1 NP construction^h 36.000 SM (without height increase) NP NPNP NP NP NP NP NPNP NP NP NP NP 36.000i NP SM (with height increase) NP NP NS UL55,000 19,000 NP 16,500 NP NP 16,500 NP S13R UL55,000 19,000 NP 16,500 NP 16,500 NP NP $R-2.1^{h}$ S1 UL220,000 76,000 40,000 66,000 40,000 72,000 42.000 18.000 165.000 57.000 49,500 31.500 SM (without height increase) UL30.000 30,000 54.000 13.500 *SM* (*with height increase*) UL55,000 19,000 NP 16,500 NP NP 16,500 NP NS^d S13D $R-3/R-3.1^h$ S13R UL. UL UL. UL UL UL UL UL UL S1SM NS^d III. UL 24,000 16,000 24,000 16,000 20,500 12,000 7,000 **S13R** R-4h UL UL 96,000 64,000 96,000 64,000 82,000 48,000 28,000 S1SM (without height increase) UL. UL. 72,000 48,000 72,000 48,000 61,500 36,000 21,000 SM (with height increase) ULUL24,000 16.000 24.000 16,000 20.500 12,000 7,000 NS UL 48,000 26,000 17,500 26,000 17,500 25.500 14,000 9,000 S1UL 192,000 104,000 102,000 S-1 70,000 104,000 70,000 56,000 36,000 SM UL 144,000 78,000 52.500 78,000 52,500 76.500 42,000 27,000 NS UL 79,000 39,000 26,000 39,000 26,000 38,500 21,000 13,500 5-2 **S**1 UL 316,000 156,000 104,000 156,000 104,000 154,000 84,000 54,000 SM UL. 237,000 117,000 78,000 117,000 78,000 115,500 63,000 40.500 NS UL 35,500 19,000 8,500 14,000 8,500 18,000 9,000 5,500 U S1 UL 142,000 76,000 34,000 56,000 34,000 72,000 36,000 22,000 SM UL. 106,500 57,000 25,500 42,000 25,500 54,000 27,000 16,500

Note: UL = Unlimited; NP = Not permitted;

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

NS = Buildings not equipped throughout with an automatic sprinkler system; S1 = Buildings a maximum of one story above grade plane equipped throughout with an automatic sprinkler system installed in accordance with Section 903.3.1.1; SM = Buildings two or more stories above grade plane equipped throughout with an automatic sprinkler system installed in accordance with Section 903.3.1.1; S 13R = Buildings equipped throughout with an automatic sprinkler system installed in accordance with Section 903.3.1.2; S1 3D = Buildings equipped throughout with an automatic sprinkler system installed in accordance with Section 903.3.1.3.

- a. See Chapters 4 and 5 for specific exceptions to the allowable height in this chapter.
- b. See Section 903.2 for the minimum thresholds for protection by an automatic sprinkler system for specific occupancies.
- c. New Group H occupancies are required to be protected by an automatic sprinkler system in accordance with Section 903.2.5.
- d. The NS value is only for use in evaluation of existing building area in accordance with the California Existing Building Code.
- e. New Group 1-3 occupancies are required to be protected by an automatic sprinkler system in accordance with Section 903.2.6.
- f. New and existing Group 1-2 occupancies are required to be protected by an automatic sprinkler system in accordance with Section 903.2.6 and Section 1103.5 of the *California Fire Code*.
- g. New Group 1-4 occupancies see Exceptions 2 and 3 of Section 903.2.6.
- h. New Group R occupancies are required to be protected by an automatic sprinkler system in accordance with Section 903.2.8.

- i. In other than Group A, E, H, I, L, and R occupancies, high-rise buildings, and other applications listed in Section 1.11 regulated by the Office of the State Fire Marshal, the S increases for height and stories in Tables 504.3 and 504.4 are permitted in addition to the S area increase in accordance with Table 506.2.
- j. For Group R-2 buildings of Type VA construction equipped throughout with an approved automatic sprinkler system in accordance with Section 903.3.1.1, S area increase is permitted in addition to the height and story increase provided the height shall not exceed 60 feet and 4 stories.

SECTION IA-36. Section **[F]** 903.2.20 of Volume IA of the Glendale Building and Safety Code, 2017, regarding where automatic sprinkler systems are required, is hereby added to read as follows:

[F] 903.2.20 Where required. Notwithstanding other provisions of the code, *approved* automatic sprinkler systems in new and existing buildings and structures shall be provided in accordance with this section.

Exceptions:

- 1. When approved by the fire code official, spaces or areas in telecommunications buildings used exclusively for telecommunication equipment, associated electrical power distribution equipment, batteries and standby engines, provided those spaces or areas are equipped throughout with an automatic fire alarm system and are separated from the remainder of the building by fire barriers consisting of not less than one-hour fire-resistance-rated walls and two-hour fire-resistance-rated floor/ceiling assemblies.
- 2. Automatic fire sprinkler protection for fixed guideway transit systems shall comply with Section 903.2.20.17.

903.2.20.1 New occupancies. An automatic sprinkler system shall be installed in all new occupancies.

Exceptions:

- 1. Group B, Group F Divisions 1 and 2, and Group M occupancies, less than 1000 total square feet (92.9 m²).
- 2. Group S Division 1 occupancies not classified as motor vehicle repair garages less than 1000 total square feet (92.9 m²).

- 3. Group S Division 2 occupancies not classified as parking garages less than 1000 total square feet (92.9 m²).
- 903.2.20.2 Existing occupancies. An automatic sprinkler system shall be installed and maintained in all existing occupancies as follows:
 - 1. Throughout existing and new sections of any existing building whenever total additions result in an increase of more than 1000 square feet (92.9 m²) in the total floor area, including mezzanines or additional stories, regardless of ownership. Additions shall be cumulative with each application for building permit within the previous five years.

Exception: Group R, Division 3 occupancies.

2. Throughout existing and new sections of any existing building whenever alterations exceed fifty percent (50%) of the replacement value, as determined by the building official. Alteration values shall be cumulative with each application for a building permit within the previous five years.

Exception: Expenditures for tenant improvements, maintenance and repairs such as interior and exterior painting, carpeting, interior window coverings, drapes, movable partitions, surface re-roofing or plumbing, mechanical and electrical repairs.

- 3. Throughout existing and new sections of any existing building for which there is an occupancy classification change to a more hazardous use, as determined by the fire code official or building official.
- 4. Throughout any existing Group R Division 2 occupancy being subdivided to condominium units.
- 5. Existing high-rise buildings. "Existing high-rise buildings," as defined in Volume I shall have an automatic sprinkler system installed and operational throughout.

6. Existing mid-rise buildings. Existing mid-rise buildings shall have an automatic fire sprinkler system installed and operational throughout. For the purpose of this section, "mid-rise building" means any building six or more stories in height or more than 55 feet (16,764 mm) in height and not defined as a high-rise building. Measurement shall be from the underside of the roof or floor above the topmost occupiable space to the lowest fire apparatus access road level or building access, whichever is lower.

Exception: Open parking garages.

7. Existing low-rise building. Existing low-rise buildings shall have an automatic fire sprinkler system installed and operational throughout. For the purpose of this section, "low-rise building" means any building four or more stories in height but less than 55 feet (16,764 mm) in height from the lowest level of Fire Department access.
Measurement shall be from the underside of the roof or floor above the topmost occupiable space to the lowest fire apparatus access road level or building access, whichever is lower.

Exception: Open parking garages.

903.2.20.2.1 Notification, recordation, enforcement, and standards.

Notification, recordation, enforcement and standards addressed in this Section 903.2.20.2.1 shall be enforced by the fire code official to ensure compliance with Section 903.2.20.2, subsections 6, 7, and 8.

Notification. Whenever, pursuant to Section 903.2.20.2, the fire code official determines by inspection that a building does not conform to the minimum requirements of Section
 903.2.20.2, subsection 6, 7 or 8, the fire code official shall prepare a fire/life safety notice in

writing that the building be repaired and modified to conform to the minimum requirements of said Sections. The notice shall specify in what manner the building fails to meet the minimum requirements of Section 903.2.20.2, subsection 6, 7, or 8. It shall direct that plans be submitted, and that necessary permits be obtained not later than one (1) year after the service of the notice, and that necessary corrections be completed not later than three (3) years thereafter for work required under Section 903.2.20.2, subsection 6, not later than four (4) years thereafter for work required under Section 903.2.20.2, subsection 7 and not later than five (5) years thereafter for work required under Section 903.2.20.2, subsection 8. The notice shall be transmitted by the fire code official for enforcement purposes. The fire code official shall serve the notice either personally or by certified or registered mail upon the owner as shown on the last equalized assessment roll and upon the person, if any, in real or apparent charge or control of the building. The provisions of this Section 903.2.20.2.1 are not intended to prevent the fire code official from also making a determination or issuing an order regarding failure to comply with Section 903.2.20.2, subsection 6, 7, or 8.

2. Recordation. At the time that the fire code official serves the aforementioned order or notice, the fire code official shall file with the Office of the County Recorder, a certificate stating that the subject building does not meet the minimum fire safety requirements of Section 903.2.20.2, subsection 6, 7, or 8 and that the owner thereof has been so notified. After all necessary corrective work has been performed; the fire code official shall file with the Office of the County Recorder, a certificate terminating the status of the subject building as nonconforming to the minimum fire safety requirements of Section 903.2.20.2, subsection 6, 7, or 8.

3. Enforcement. If the owner or other person in charge and control of the subject building fails to comply with the aforementioned order or notice within the time periods set forth in Section 903.2.20.2.1, such person is guilty of a misdemeanor punishable by a fine or by imprisonment or both. A person is guilty of a separate offense each day during which he or she commits, continues or permits a violation of Section 903.2.20.2, subsection 6, 7, or 8. The fire code official shall also order that the building owner or other person in charge and control post a notice of non-conformance. The notice shall be placed in a conspicuous area of the building until all required corrective work has been completed.

SECTION IA-37. Section [**F**] 903.3.1.2 of Volume IA of the Glendale Building and Safety Code, 2017, regarding NFPA 13R sprinkler systems in Group R occupancies, is hereby repealed.

[F] 903.3.1.2 NFPA 13R sprinkler systems. Automatic sprinkler systems in Group R occupancies up to and including four stories in height shall be permitted to be installed throughout in accordance with NFPA 13R as amended in Chapter 35.

903.3.1.2.1 Balconies and decks. Sprinkler protection shall be provided for exterior balconies, decks and ground floor patios of *dwelling units* where the building is of Type V construction, provided there is a roof or deck above. Sidewall sprinklers that are used to protect such areas shall be permitted to be located such that their deflectors are within 1 inch (25mm) to 6 inches (152 mm) below the structural members and a maximum distance of 14 inches (356 mm) below the deck of the exterior balconies and decks that are constructed of open wood joist construction.

SECTION IA-38. Section [F] 906.8 of Volume IA of the Glendale Building and Safety Code, 2017 is hereby amended to read as follows:

[F] 906.8 Cabinets. Cabinets used to house portable fire extinguishers shall not be locked.

Exceptions:

- Where portable fire extinguishers subject to malicious use or damage are provided with a means of ready access.
- In Group I-3 occupancies and in mental health areas in Group I-2 occupancies, access
 to portable fire extinguishers shall be permitted to be locked or to be located in staff
 locations provided the staff has keys.

In new construction, fire extinguishers shall be located within recessed or semi-recessed cabinets. In existing occupancies, fire extinguishers shall be located within recessed or semi-recessed cabinets when required by the fire code official. Cabinets should be mounted at no higher than four feet (1219 mm) above the floor to the top of the cabinet. Fire extinguishers shall be mounted with the brackets or hangers within the cabinets.

Exception: Surface mounted cabinets may be installed when construction material makes recessing the cabinet impracticable.

SECTION IA-39. Section [**F**] 906.9.1 of Volume IA of the Glendale Building and Safety Code, 2017, is hereby amended to read as follows:

[F] 906.9.1 Extinguishers weighing 40 pounds or less. Portable fire extinguishers having a gross weight not exceeding 40 pounds (18kg) shall be installed so that their tops are not more than 48 inches (1219 mm) 5 feet (1524 mm) above the floor.

SECTION IA-40. Section **[F]** 907.6.6 of Volume IA of the Glendale Building and Safety Code, 2014, is hereby amended to read as follows:

[F] 907.6.6 Monitoring. Fire alarm systems required by this chapter or by the *California Building Code* shall be monitored by an approved supervising station in accordance with NFPA 72 and this section. Supervising stations shall be listed by Underwriters Laboratories, Inc., or approved equal.

Exception: Supervisory service is not required for:

- 1. Single- and multiple-station smoke alarms required by Section 907.2.11.
- 2. Group I-3 occupancies shall be monitored in accordance with Section 907.2.6.3.
- 3. *Automatic sprinkler systems* in one-and two-family dwellings.

SECTION IA-41. Section **[F]** 907.10 of Volume IA of the Glendale Building and Safety Code, 2017, is hereby added to read as follows:

[F] 907.10 Certification, Maintenance Contract, Identification of Certificated Systems.

907.10.1 Certification. The permittee shall provide, at no cost to the fire department, a copy of a serially numbered certificate issued to the permittee by Underwriters Laboratories, Inc., or approved equal, certificating the system. The certificate shall include the following: the name and address of the protected property; type of system(s); components used; area covered; name and address of alarm service company; and the issue and expiration dates. Certification shall be required for all new systems and for all existing systems that produce three or more false alarm activations within a 12-month period, or systems that become unreliable due to dilapidation or deterioration. The copy of the certificate shall be presented to the fire code official prior to the final inspection. A certificate shall be maintained for the life of the system. The permittee,

certificate holder, and maintenance contract holder shall be one and the same unless otherwise approved by the fire code official.

Exception: Group R Division 3 occupancies.

907.10.2 Maintenance contract. The permittee shall provide, at no cost to the fire department, a copy of a minimum one year maintenance contract, signed by the building owner, prior to final inspection. The permittee, certificate holder, and maintenance contract holder shall be one and the same unless otherwise approved by the fire code official. A maintenance contract shall be maintained for the life of the system.

Exception: Group R Division 3 occupancies.

which an Underwriters Laboratories, Inc., or approved equal, certificate has been required shall be identified with an approved, tamper resistant label on the fire alarm control panel. The label shall, at a minimum, show the following: certificate number; the name, address, phone number, listing number, and California contractor's license number of the certificate holder; the date of certification and date certification expires; a warning statement to the effect that no person or entity is authorized to perform any work on the system without the express permission and authorization of the contractor/certificate holder, and that the certification may be voided in such case; a statement that a valid certificate is required to be in effect for the life of the system, and; a statement that by order of the fire code official the label shall not be removed.

SECTION IA-42. Section [**F**] 913.7 of Volume IA of the Glendale Building and Safety Code, 2017, is hereby added to read as follows:

[F] 913.7 Fire pumps and pump rooms.

913.7.1 Pump sizing. Fire pumps shall be sized to meet the required demands based upon 100% of the listed pump capacity.

913.7.2 Pump room. All fire pumps shall be located in a dedicated room. The room shall not be used for any other equipment or use.

913.7.3 High rise buildings. A minimum of two fire pumps independently driven shall be provided for all new high-rise buildings. The pumps shall be arranged and controlled so as to automatically switch should one fail. Each pump shall be provided with a secondary power supply as approved by the fire code official. One or both pumps shall receive their water directly from the municipal water supply.

SECTION IA-43. Table 1004.1.2 of Volume IA of the Glendale Building and Safety

Code, 2017, is hereby amended to read as follows:

TABLE 1004.1.2 MAXIMUM FLOOR AREA ALLOWANCES PER OCCUPANT

FUNCTION OF SPACE	OCCUPANT LOAD FACTOR ^a
Accessory storage areas, mechanical equipment room	300 gross
Agricultural building	300 gross
Aircraft hangars	500 gross
Airport terminal	
Baggage claim	20 gross
Baggage handling	300 gross
Concourse	100 gross
Waiting areas	15 gross
Assembly	
Gaming floors (keno, slots, etc.)	11 gross
Billiard/Pool Table	<u>8 per table</u>
Exhibit Gallery and Museum	30 net
Assembly with fixed seats	See section 1004.4
Assembly without fixed seats	
Concentrated (chairs only-not fixed)	7 net
Standing space	5 net
Unconcentrated (tables and chairs)	15 net
Bowling centers, allows 5 persons for each lane	
including 15 feet of runway, and for additional areas	7 net
Business areas	100 gross
Courtrooms-other than fixed seating areas	40 net
Day care	35 net
Dormitories	50 gross
Educational	20 net
Classroom area	50 net
Shops and other vocational room areas	JO Het
Exercise rooms	50 gross
Garment manufacturing	50 gross
Group H-5 Fabrication and manufacturing areas	200 gross
Industrial areas	100 gross

TABLE 1004.1.2 Continued

Institutional areas	
Inpatient treatment areas	240 gross
Outpatient areas	100 gross
Sleeping areas	120 gross
Kitchens, commercial	200 gross
Laboratory	
Educational	50 net
Laboratories, non-educational	100 net
Laboratory suite ^b	200 gross
Library	
Reading rooms	50 net
Stack area	100 gross
Locker rooms	50 gross
Mall buildings – covered and open	See Section 402.8.2
Mercantile	
Areas on other floors	60 gross
Storage, stock, shipping areas	300 gross
Parking garages	200 gross
Residential	200 gross
Skating rinks, swimming pools	
Rink and pool	50 gross
Decks	15 gross
Stages and platforms	15 net
Warehouses	500 gross

For SI: 1 square foot = 0.0929 m²
a. Floor area in square feet per occupant.
b. See Section 453.2.

SECTION IA-44. TABLE 1006.2.1 of Volume IA of the Glendale Building and Safety

Code, 2017, is hereby amended to read as follows:

TABLE 1006.2.1 SPACES WITH ONE EXIT OR EXIT ACCESS DOORWAY

OCCUPANCY	MAXIMUM OCCUPANT	MAXIMUM COMMON PATH OF EGRESS TRAVEL DISTANCE (feet)					
	LOAD OF	Without Sprink	der System (feet)	With Sprinkler			
	SPACE	Occupa	nt Load	System (feet)			
		OL ≤ 30	$OL \ge 30$				
A ^c , E, M	49	75	75	75 ^a			
В	49	100	75	100°			
F	49	75	75	100 ^a			
H-1, H-2, H-3	3	NP	NP	25 ^b			
H-4. H-5	10	NP	NP	75 ^b			
I-2 ^d , I-2.1, I-4	10	NP	NP	75 ^a			
I-3	10	NP	NP	100°			
R-1	10	NP	NP	75 ^a			
R-2	10	NP	NP	125 ^a			
R-2.1	10	NP	NP	75			
R-3 ^e , R-3.1 ^e	10	NP	NP	125 ^{a, g}			
R-4 ^e	10	NP	NP	125 ^{a, g}			
S^{f}	29	100	75	100 ^a			
U	49	100	75	75 ^a			
L	See Section						
	453.6.1						

For SI: 1 foot = 304.8 mm.

NP = Not Permitted

- a. Buildings equipped throughout with an automatic sprinkler system in accordance with Section 903.3.1.1 or 903.3.1.2. See Section 903 for occupancies where automatic sprinkler systems are permitted in accordance with Section 903.3.1.2.
- b. Group H occupancies equipped throughout with an automatic sprinkler system in accordance with Section 903.2.5.
- c. For a room or space used for assembly purposes having fixed seating, see Section 1029.8.
- d. For the travel distance limitations in Group I-2 or I-2.1, see Section 407.4.
- e. The length of common path of egress travel distance in a Group R-3 occupancy located in a mixed occupancy building or with a Group R-3 or R-4 congregate living facility.
- f. The length of common path of egress travel distance in a Group S-2 open parking garage shall be not more than 100 feet.
- g. For the travel distance limitation in Group R-3 and R-4 equipped throughout with an automatic sprinkler system in accordance with Section 903.3.1.3, see Section 1006.2.2.6.
- h. For holding cells, see Section 408.3.11.
- i. Garment manufacturing maximum occupant load is 29.

SECTION IA-45. Section 1505.1 of Volume IA of the Glendale Building and Safety

Code, 2017, is hereby amended to read as follows:

1505.1 General. Roof assemblies shall be divided into the classes defined below. Class A and B and C roof assemblies and roof coverings required to be listed by this section shall be tested in accordance with ASTM E 108 or UL 790. In addition, fire retardant-treated wood roof coverings shall be tested in accordance with ASTM D 2898. The minimum roof coverings installed on buildings shall comply with Table 1505.1 based on the type of construction of the building. The roof-covering assembly includes the roof deck, underlayment, interlayment, insulation and covering which is assigned a roof covering classification. No wood roof covering material shall be installed. See Chapter 7A for roofing requirements in Wildland Urban Interface Fire Areas (also known as High Fire Hazard Areas).

Exceptions:

- 1. Skylights and sloped glazing that comply with Chapter 24 or Section 2610.
- 2. Penthouses shall be constructed as required in Section 1510.2.

SECTION IA-46. TABLE 1505.1 of Volume IA of the Glendale Building and Safety Code, 2017, is hereby amended to read as follows:

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

IA	IB	IIA	IIB	IIIA	IIIB	IV	VA	VB
В	В	В	<u>CB</u>	В	<u>CB</u>	В	В	<u>CB</u>

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

a. Unless otherwise required in accordance with *Chapter 7A*-for Wildland Urban

Interface Fire Areas (also known as High Fire Hazard Areas).

SECTION IA-47. Section 1505.1.3 of Volume IA of the Glendale Building and Safety Code, 2017, is hereby amended to read as follows:

1505.1.3 Roof coverings within all other areas. The entire roof covering of every existing structure where more than 50 percent of the total roof area is replaced within any one-year period, the entire roof covering of every new structure, and any roof covering applied in the alteration, repair or replacement of the roof of every existing structure, shall be a fire-retardant roof covering that is at least Class \leftarrow B. No wood roof covering shall be installed.

SECTION IA-48. Section 1507.3.1 of Volume IA of the Glendale Building and Safety Code, 2017, is hereby amended to read as follows:

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

SECTION IA-49. Table 1507.3.7 of Volume IA of the Glendale Building and Safety Code, 2014 is hereby amended to read as follows:

TABLE 1507.3.7

CLAY AND CONCRETE TILE ATTACHMENT^{a, b, c}

		GENERAL—	CLAY OR CONCRETE ROOF TILE					
Maximum Nominal design Wind Speed, V _{asd} (mph)	Mean roof height (feet)	Roof slope up to < 3:12	Roof slope 3:12 and over					
85	0-60	One Two fasteners per tile. Flat tile without	Two fasteners per tile. Only one Two fasteners on slopes of 7:12 and less					
100	0-40	vertical laps, two fasteners per tile.	greater than 16 inches.					
100	> 40-60		e nailed. The nose of all eave tiles shall be fastened with approved clips. d with two nails. The nose of all ridge, hip and rake tiles shall be set in a					
110	0-60	The fastening system shall	resist the wind forces in Section 1609.5.3 minimum 2 fasteners per tile.					
120	0-60	The fastening system shall	The fastening system shall resist the wind forces in Section 1609.5.3 minimum 2 fasteners per tile.					
130	0-60	The fastening system shall	he fastening system shall resist the wind forces in Section 1609.5.3 minimum 2 fasteners per tile.					
All	>60	The fastening system shall	resist the wind forces in Section 1609.5.3 minimum 2 fasteners per tile.					

IN'	INTERLOCKING CLAY OR CONCRETE ROOF TILE WITH PROJECTING ANCHOR LUGS ^{d, e} - (Installations on spaced/solid sheathing with battens or spaced sheathing)											
Maximum Nominal design Wind Speed, V _{asd} (mph)	Mean roof height (feet)	Roof slope up to < 5:12	Roof slope 5:12 < 12:12	Roof slope 12:12 and over								
85	0-60	Fasteners are not required. Tiles with installed weight less than 9 lbs./sq. ft. require a minimum of	One fastener per tile every other row. All perimeter tiles require one fastener. Tiles with installed	One fastener required for every tile. Tiles with installed weight less than 9 lbs./sq. ft. require a								
100	0-40	one fastener per tile.	weight less than 9 lbs./sq. ft. require a minimum of one fastener per tile.	minimum of one fastener per tile.								
100	> 40-60		d. The nose of all eave tiles shall be nails. The nose of all ridge, hip and									
110	0-60	The fastening system shall resist t	The fastening system shall resist the wind forces in Section 1609.5.3.									
120	0-60	The fastening system shall resist the wind forces in Section 1609.5.3.										
130	0-60	The fastening system shall resist the wind forces in <u>Section 1609.5.3.</u>										
All	> 60	The fastening system shall resist t	he wind forces in <u>Section 1609.5.3.</u>									

INTERLOCKING CLAY OR CONCRETE ROOF TILE WITH PROJECTING ANCHOR LUGS (Installations on solid sheathing without battens)

Maximum Nominal design Wind Speed, V _{asd} (mph)	Mean roof height (feet)	All roof slopes
85	0-60	Two fasteners per tile.
100	0-40	Two fasteners per tile.
100	> 40-60	The head of all tiles shall be nailed. The nose of all eave tiles shall be fastened with approved clips. All rake tiles shall be nailed with two nails. The nose of all ridge, hip and rake tiles shall be set in a bead of roofer's mastic.
110	0-60	The fastening system shall resist the wind forces in Section 1609.5.3 minimum two fasteners per tile.
120	0-60	The fastening system shall resist the wind forces in Section 1609.5.3 minimum two fasteners per tile.
130	0-60	The fastening system shall resist the wind forces in Section 1609.5.3 minimum two fasteners per tile.
All	> 60	The fastening system shall resist the wind forces in Section 1609.5.3 minimum two fasteners per tile.

Notes to Table 1507.3.7:

For SI: 1 inch = 25.4 mm, 1 foot = 304.8 mm, 1 mile per hour = 0.447 m/s, 1 pound per square foot = 4.882 kg/m^2 .

a. Minimum fastener size. <u>Hot dipped galvanized ring shank or other approved</u>

Ccorrosion-resistant nails not less than No. 11 gage with ⁵/₁₆-inch head. Fasteners shall be long enough to penetrate into the sheathing ³/₄-inch or through the thickness of

- the sheathing, whichever is less. Attaching wire for clay and concrete tile shall not be smaller than 0.083 inch.
- b. Snow areas. A minimum of two fasteners per tile are required or battens and one fastener.
- c. Roof slopes greater than 24:12. The nose of all tiles shall be securely fastened.
- d. Horizontal battens. Battens shall be not less than 1 inch by 2 inch nominal. Provisions shall be made for drainage by a minimum of ½-inch riser at each nail or by 4-footlong battens with at least a 0.5-inch separation between battens. Horizontal battens are required for slopes over 7:12.
- e. Perimeter fastening areas include three tile courses but not less than 36 inches from either side of hips or ridges and edges of eaves and gable rakes.
- f. V_{asd} shall be determined in accordance with Section 1609.3.1.

SECTION IA-50. Section 1511.7 of Volume IA of the Glendale Building and Safety Code, 2017, is hereby added to read as follows:

1511.7 Roof sheathing. When finish roofing material is removed to the existing space sheathing, a minimum of 3/8 inch (9 mm) thick plywood sheathing shall be installed. See Chapter 7A for roof coverings permitted in the Wildland Urban Interface Fire Areas (also known as High Fire Hazard Areas). The new sheathing shall comply with the requirements of Section 2306.2. The sheathing shall be installed such that the edges align over rafters and individual spaced sheathing boards. The sheathing shall be attached to the existing spaced sheathing with 6d common nails at 6 inches (147 mm) on center at supported edges and 6d common nails at 12 inches (294 mm) on center at intermediate supports.

SECTION IA-51. Section 1613.5.2 of Volume IA of the Glendale Building and Safety Code, 2017, is hereby added to read as follows:

1613.5.2 Structural Separation.

Modify ASCE 7 Equation 12.12-1 of Section 12.12.3 to read as follows:

All portions of the structure shall be designed and constructed to act as an integral unit in resisting seismic forces unless separated structurally by a distance sufficient to avoid damaging contact as set forth in this section.

Separations shall allow for the maximum inelastic response displacement (δ_M). δ_M shall be determined at critical locations with consideration for translational and torsional displacements of the structure including torsional amplifications, where applicable, using the following equation:

$$\delta_{M} = \frac{C_{d}\delta_{\text{max}}}{I_{a}} \tag{12.12-1}$$

where $\delta_{max} = maximum$ elastic displacement at the critical location.

Adjacent structures on the same property shall be separated by at least δ_{MT} , determined as follows:

$$\delta_{MT} = \sqrt{(\delta_{M1})^2 + (\delta_{M2})^2}$$
 (12.12-2)

where δ_{M1} and δ_{M2} are the maximum inelastic response displacements of the adjacent structures at their adjacent edges.

Where a structure adjoins a property line not common to public way, the structure shall be set back from the property line by at least the displacement δ_M of that structure.

Exception:

1. Smaller separations or property line setbacks are permitted where justified by rational analysis based on inelastic response to design ground motions.

SECTION IA-52. Section 1613.5.3 of Volume IA of the Glendale Building and Safety Code, 2017, is hereby added to read as follows:

1613.5.3 R, C_d , and Ω_0 Values for Vertical Combinations.

Modify ASCE 7 Section 12.2.3.1 Exception 3 to read as follows:

Where a structure has a vertical combination in the same direction, the following requirements shall apply:

- 1. Where the lower system has a lower Response Modification Coefficient, R, the design coefficients $(R, \Omega_0, \text{ and } C_d)$ for the upper system are permitted to be used to calculate the forces and drifts of the upper system. For the design of the lower system, the design coefficients $(R, \Omega_0, \text{ and } C_d)$ for the lower system shall be used. Forces transferred from the upper system to the lower system shall be increased by multiplying by the ratio of the higher response modification coefficient to the lower response modification coefficient.
- 2. Where the upper system has a lower Response Modification Coefficient, the Design Coefficients $(R, \Omega_0, \text{ and } C_d)$ for the upper system shall be used for both systems.

Exceptions:

 Rooftop structures not exceeding two stories in height and 10 percent of the total structure weight.

- 2. Other supported structural systems with a weight equal to or less than 10 percent of the weight of the structure.
- 3. Detached one- and two-family dwellings <u>up to two stories in height</u> of light frame construction.

SECTION IA-53. Section 1613.5.4 of Volume IA of the Glendale Building and Safety Code, 2017, is hereby added to read as follows:

1613.5.4 Wood Diaphragms.

Modify ASCE 7 Section 12.11.2.2.3 to read as follows:

In wood diaphragms, the continuous ties shall be in addition to the diaphragm sheathing. Anchorage shall not be accomplished by use of toenails or nails subject to withdrawal nor shall wood ledgers or framing be used in cross-grain bending or cross-grain tension. The diaphragm sheathing shall not be considered effective as providing the ties or struts required by this section.

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

- The spacing of continuous ties shall not exceed 40 feet. Added chords of diaphragms may be used to form subdiaphragms to transmit the anchorage forces to the main continuous crossties.
- 2. The maximum diaphragm shear used to determine the depth of the subdiaphragm shall not exceed 75% of the maximum diaphragm shear.

SECTION IA-54. Section 1613.5.5 of Volume IA of the Glendale Building and Safety Code, 2017, is hereby added to read as follows:

1613.5.5 Maximum S_{DS} Value in Determination of C_S and E_V.

Replace ASCE 7 Section 12.8.1.3 by the following:

Maximum S_8 Value in Determination of C_8 . For regular structures five stories or less above the base, as defined in Section 11.2 and with a period, T, of 0.5s or less, C_8 is permitted to be evaluated using the larger of either S_8 equal to 1.5 or 80 percent of the value of S_8 determined per Section 11.4.1 or 11.4.7.

The value of C_S and E_V are permitted to be calculated using a value of S_{DS} equal to 1.0 but not less than 70% of S_{DS} as defined in Section 11.4.4, provided that all of the following criteria are met:

- 1. The structure does not have irregularities, as defined in Section 12.3.2;
- 2. The structure does not exceed five stories above the lower of the base or grade

 plane as defined in Section 11.2, and, where present, each mezzanine level

 shall be considered a story for the purpose of this limit;
- 3. The structure has a fundamental period, T, that does not exceed 0.5 seconds, as determined using Section 12.8.2;
- 4. The structure meets the requirements necessary for the redundancy factor, ρ , to be permitted to be taken as 1.0, in accordance with Section 12.3.4.2;
- 5. The site soil properties are not classified as Site Class E or F, as defined in Section 11.4.2; and
- 6. The structure is classified as Risk Category I or II, as defined in Section 1.5.1.

SECTION IA-55. Section 1613.7 of Volume IA of the Glendale Building Code, 2017, is hereby added to read as follows:

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

1613.7.1 Scope. This part contains special requirements for suspended ceilings and lighting systems. Provisions of Section 13.5.6 of ASCE 7-10 shall apply except as modified herein.

1613.7.2 General. The suspended ceilings and lighting systems shall be limited to 6 feet (1828 mm) below the structural deck unless the lateral bracing is designed by a licensed engineer or architect.

1613.7.3 Sprinkler Heads. All sprinkler heads (drops) except fire-resistance-rated floor/ceiling or roof/ceiling assemblies, shall be designed to allow for free movement of the sprinkler pipes with oversize rings, sleeves or adaptors through the ceiling tile.

Sprinkler heads and other penetrations shall have a 2 inch (50 mm) oversize ring, sleeve, or adapter through the ceiling tile to allow for free movement of at least 1 inch (25 mm) in all horizontal directions. Alternatively, a swing joint that can accommodate 1 inch (25 mm) of ceiling movement in all horizontal directions is permitted to be provided at the top of the sprinkler head extension.

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

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

with vertical hangers attached directly to the structural deck along the means of egress serving an occupant load of thirty (30) or more and at lobbies accessory to Group A Occupancies. Spacing of vertical hangers shall not exceed 2 feet (610 mm) on center along the entire length of the suspended ceiling assembly located along the means of egress or at the lobby.

1613.7.4.2 Assembly Device. All lay-in panels shall be secured to the suspension ceiling assembly with two hold-down clips minimum for each tile within a 4-foot (1219 mm) radius of the exit lights and exit signs.

1613.7.4.3 Emergency Systems. Independent supports and braces shall be provided for light fixtures required for exit illumination. Power supply for exit illumination shall comply with the requirements of Section 1006.3 of this Code.

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

SECTION IA-56. Section 1617 of Volume IA of the Glendale California Building Code, 2017, is hereby added to read as follows:

SECTION 1617

SEISMIC DESIGN PROVISIONS FOR HILLSIDE BUILDINGS

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.

1617.2 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:

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

1617.3 Definitions. For the purposes of this section certain terms are defined as follows:

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

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

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

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

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

HILLSIDE BUILDING is any building or portion thereof constructed on or into a slope steeper than one unit vertical in three unit 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 1617.5 and 1617.7.3 between the diaphragm and the uphill foundation.

SECONDARY ANCHORS are diaphragm anchors designed for and providing a redundant diaphragm to foundation connection, as described in Sections 1617.6 and 1617.7.4.

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

<u>UPHILL FOUNDATION</u> is the foundation parallel and closest to the uphill diaphragm edge.

1617.4 Analysis and Design.

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.

<u>apply to the seismic analysis and design of the connections for the base level diaphragm</u> in the downhill direction.

<u>1617.4.2.1 Base for Lateral Force Design Defined.</u> 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.

1617.4.2.2 Base Shear. In developing the base shear for seismic design, the response modification coefficient (R) shall not exceed 5 for bearing wall and building frame systems. The total base shear shall include the forces tributary to the base level diaphragm including forces from the base level diaphragm.

1617.5 Base Shear Resistance-Primary Anchors.

1617.5.1 General. The base shear in the downhill direction shall be resisted through primary anchors from diaphragm struts provided in the base level diaphragm to the foundation.

1617.5.2 Location of Primary Anchors. A primary anchor and diaphragm strut shall be provided in line with each foundation extending in the downhill direction. Primary anchors and diaphragm struts shall also be provided where interior vertical lateral-force-resisting elements occur above and in contact with the base level diaphragm. The spacing of primary anchors and diaphragm struts or collectors shall in no case exceed 30 feet (9144 mm).

<u>1617.5.3 Design of Primary Anchors and Diaphragm Struts.</u> Primary anchors and <u>diaphragm struts shall be designed in accordance with the requirements of Section</u>

1617.8.

<u>1617.5.4 Limitations.</u> 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 Section 2205.2.2 may be used to transfer forces from the primary anchors and diaphragm struts to the foundation provided lateral forces do not induce flexural stresses in any member of the frame or in the diaphragm struts. Deflections of frames shall account for the variation in slope of diagonal members when the frame is not rectangular.

1617.6 Base Shear Resistance-Secondary Anchors.

<u>1617.6.1 General.</u> In addition to the primary anchors required by Section 1617.5, the base shear in the downhill direction shall be resisted through secondary anchors in the uphill foundation connected to diaphragm struts in the base level diaphragm.

Exception:

1. 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.

1617.6.2 Secondary Anchor Capacity and Spacing. Secondary anchors at the base level diaphragm shall be designed for a minimum force equal to the base shear, including forces tributary to the base level diaphragm, but not less than 600 pounds per lineal foot (8.76 kN/m). The secondary anchors shall be uniformly distributed along the uphill diaphragm edge and shall be spaced a maximum of four feet (1219 mm) on center.

1617.6.3 Design. Secondary anchors and diaphragm struts shall be designed in accordance with Section 1617.8.

1617.7 Diaphragms Below the Base Level-Downhill Direction. The following provisions shall apply to the lateral analysis and design of the connections for all diaphragms below the base level diaphragm in the downhill direction.

<u>1617.7.1 Diaphragm Defined.</u> Every floor level below the base level diaphragm shall be designed as a diaphragm.

1617.7.2 Design Force. Each diaphragm below the base level diaphragm shall be designed for all tributary loads at that level using a minimum seismic force factor not less than the base shear coefficient.

1617.7.3 Design Force Resistance-Primary Anchors. The design force described in Section 1617.7.2 shall be resisted through primary anchors from diaphragm struts provided in each diaphragm to the foundation. Primary anchors shall be provided and designed in accordance with the requirements and limitations of Section 1617.5.

1617.7.4 Design Force Resistance-Secondary Anchors.

1617.7.4.1 General. In addition to the primary anchors required in Section
1617.7.3, 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:

1. 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.

1617.7.4.2 Secondary Anchor Capacity. Secondary anchors at each diaphragm below the base level diaphragm shall be designed for a minimum force equal to the design force but not less than 300 pounds per lineal foot (4.38 kN/m). The secondary anchors shall be uniformly distributed along the uphill diaphragm edge and shall be spaced a maximum of four feet (1219 mm) on center.

1617.7.4.3 Design. Secondary anchors and diaphragm struts shall be designed in accordance with Section 1617.8.

1617.8 Primary and Secondary Anchorage and Diaphragm Strut Design. Primary and secondary anchors and diaphragm struts shall be designed in accordance with the following provisions:

1. **Fasteners.** All bolted fasteners used to develop connections to wood members shall be provided with square plate washers at all bolt heads and nuts. Washers shall be 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 strut collectors, and other wood members connected to primary anchors shall not be less than three-inch (76 mm) nominal width. The effects of eccentricity on wood members shall be evaluated as required per Item 9.
- 4. **Design.** Primary and secondary anchorage, including diaphragm struts, splices, and collectors shall be designed for 125% of the tributary force.
- 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 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.

1617.9 Lateral-Force-Resisting Elements Normal to the Downhill Direction.

- 1617.9.1 General. In the direction normal to the downhill direction, lateral-forceresisting elements shall be designed in accordance with the requirements of this section.

 1617.9.2 Base Shear. In developing the base shear for seismic design, the response
 modification coefficient (R) shall not exceed 5 for bearing wall and building frame
 systems.
- 1617.9.3 Vertical Distribution of Seismic Forces. For seismic forces acting normal to the downhill direction the distribution of seismic forces over the height of the building using Section 12.8.3 of ASCE 7 shall be determined using the height measured from the top of the lowest level of the building foundation.
- 1617.9.4 Drift Limitations. The story drift below the base level diaphragm shall not exceed 0.007 times the story height at strength design force level. The total drift from the base level diaphragm to the top of the foundation shall not exceed 3/4 inch (19 mm).

 Where the story height or the height from the base level diaphragm to the top of the

foundation varies because of a stepped footing or story offset, the height shall be measured from the average height of the top of the foundation. The story drift shall not be reduced by the effect of horizontal diaphragm stiffness.

1617.9.5 Distribution of Lateral Forces.

1617.9.5.1 General. The design lateral force shall be distributed to lateral-force-resisting elements of varying heights in accordance with the stiffness of each individual element.

wood structural panel shear wall may be determined by dividing the wall into adjacent rectangular elements, subject to the same top of wall deflection.

Deflections of shear walls may be estimated by AWC SDPWS Section 4.3.2.

Sheathing and fastening requirements for the stiffest section shall be used for the entire wall. Each section of wall shall be anchored for shear and uplift at each step. The minimum horizontal length of a step shall be eight feet (2438 mm) and the maximum vertical height of a step shall be two feet, eight inches (813 mm).

1617.9.5.3 Reinforced Concrete or Masonry Shear Walls. Reinforced concrete or masonry shear walls shall have forces distributed in proportion to the rigidity of each section of the wall.

<u>1617.9.6 Limitations.</u> The following lateral force-resisting-elements shall not be designed to resist lateral forces below the base level diaphragm in the direction normal to the downhill direction:

- 1. Cement plaster and lath,
- 2. Gypsum wallboard, and

3. Tension-only braced frames.

Braced frames designed in accordance with the requirements of Section 2205.2.2 of this Code may be designed as lateral-force-resisting elements in the direction normal to the downhill direction, provided lateral forces do not induce flexural stresses in any member of the frame. Deflections of frames shall account for the variation in slope of diagonal members when the frame is not rectangular.

1617.10 Specific Design Provisions.

<u>1617.10.1 Footings and Grade Beams.</u> 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.

- <u>1617.10.2 Protection Against Decay and Termites.</u> All wood to earth separation shall comply with the following:
 - Where a footing or grade beam extends across a descending slope, the stem wall, grade beam, or footing shall extend up to a minimum 18 inches (457 mm) above the highest adjacent grade.

Exception:

- At paved garage and doorway entrances to the building, the stem wall
 need only extend to the finished concrete slab, provided the wood
 framing is protected with a moisture proof barrier.
- 2. Wood ledgers supporting a vertical load of more than 100 pounds per lineal foot (1.46 kN/m) and located within 48 inches (1219 mm) of adjacent grade are prohibited. Galvanized steel ledgers and anchor bolts, with or without wood nailers, or treated or decay resistant sill plates supported on a concrete or masonry seat, may be used.

1617.10.3 Sill Plates. All sill plates and anchorage shall comply with the following:

- 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.
- Power-driven fasteners shall not be used to anchor sill plates except at interior nonbearing walls not designed as shear walls.
- <u>1617.10.4 Column Base Plate Anchorage.</u> The base of isolated wood posts (not framed into a stud wall) supporting a vertical load of 4,000 pounds (17.8 kN) or more and the base plate for a steel column shall comply with the following:

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

1617.10.5 Steel Beam to Column Supports. All steel beam to column supports shall be positively braced in each direction. Steel beams shall have stiffener plates installed on each side of the beam web at the column. The stiffener plates shall be welded to each beam flange and the beam web. Each brace connection or structural member shall consist of at least two 5/8 inch (15.9 mm) diameter machine bolts.

SECTION IA-57. Section 1701.3 of Volume IA of the Glendale Building and Safety Code, 2017, is hereby added to read as follows:

<u>1701.3 Technical specialties.</u> As required by the building official, due to specific project concerns or when a project contains construction where special expertise is needed, the building official may require the work to be observed, inspected or certified by a third party, provided by

the owner or contractor and approved by the building official, that has certification or demonstrated expertise in the identified construction.

SECTION IA-58. Section 1704.2 of Volume IA of the Glendale Building and Safety Code, 2017, is hereby amended to read as follows:

1704.2 Special inspections and tests. Where application is made to the building official for construction as specified in Section 105 or 1.8.4, as applicable, the owner or the owner's authorized agent, other than the contractor, shall employ one or more approved agencies to provide special inspections and tests during construction on the types of work specified in Section 1705 and identify the approved agencies to the building official. These special inspections and tests are in addition to the inspections by the building official that are identified in Section 110.

[OSHPD 2] An inspection agency having accreditation to the International Standards Organization (ISO) accreditation Standard 17020 shall be deemed to comply with the requirements for an approved inspection agency.

Exceptions:

- Special inspections and tests are not required for construction of a minor nature or as warranted by conditions in the jurisdiction as approved by the building official.
- Unless otherwise required by the building official, special inspections and tests are not required for Group U occupancies that are accessory to a residential occupancy including, but not limited to, those listed in Section 312.1.

- 32. Special inspections and tests are not required for portions of structures designed and constructed in accordance with the cold-formed steel light-frame construction provisions of Section 2211.7 or the conventional light-frame construction provisions of Section 2308. [OSHPD 2] Not permitted by OSHPD.
- 4.3. The contractor is permitted to employ the approved agencies where the contractor is also the owner.
- 5.4.[HCD 1] The provisions of Health and Safety Code Division 13, Part 6 and the California Code of Regulations, Title 25, Division 1, Chapter 3, commencing with Section 3000, shall apply to the construction and inspection of factory-built housing as defined in Health and Safety Code Section 19971.

SECTION IA-59. Section 1704.6 of Volume IA of the Glendale Building and Safety Code, 2017, is hereby amended to read as follows:

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

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

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

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

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

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

SECTION IA-60. Section 1704.6.1 of Volume IA of the Glendale Building and Safety Code, 2017, is hereby amended to read as follows:

1704.6.1 Structural observations for seismic resistance. Structural observations shall be provided for those structures assigned to Seismic Design Category D, E or F where one or more of the following conditions exist:

- The structure is classified as Risk Category III or IV in accordance with Table
 1604.5
- 2. The height of the structure is greater than 75 feet (22,860 mm) above the base.
- 3. The structure is assigned to Seismic Design Category E, is classified as Risk Category I or II in accordance with Table 1604.5 and is greater than two stories above grade plane a lateral design is required for the structure or portion thereof.

Exception:

- One-story wood framed Group R-3 and Group U Occupancies less
 than 1,500 square feet in area, provided the adjacent grade is not
 steeper than 1 unit vertical in 10 units horizontal (10% sloped),
 assigned to Seismic Design Category D.
- 4. When so designated by the registered design professional responsible for the structural design.
- 5. When such observation is specifically required by the building official.

SECTION IA-61. Section 1705.3 of Volume IA of the Glendale Building and Safety Code, 2017, is hereby amended to read as follows:

1705.3 Concrete construction. The special inspections and tests verifications for concrete construction shall be performed in accordance with as required by this section and Table 1705.3.

Exception: Special inspection and tests shall not be required for:

- 1. Isolated spread concrete footings of buildings three stories or less above grade plane that are fully supported on earth or rock, where the structural design of the footing is based on a specified compressive strength, f'_c, no greater than 2,500 pounds per square inch (psi)(17.2 MPa) regardless of the compressive strength specified in the construction documents or used in the footing construction.
- 2. Continuous concrete footings supporting walls of buildings three stories or less above grade plane in height that are fully supported on earth or rock where:
 - 2.1. The footings support walls of light-frame construction;
 - 2.2. The footings are designed in accordance with Table 1809.7 1805.4.2; or
 - 2.3. The structural design of the footing is based on a specified compressive strength, f'c, no greater than 2,500 pounds per square inch (psi) (17.2 MPa), regardless of the compressive strength specified in the construction documents or used in the footing construction.
- Nonstructural concrete slabs supported directly on the ground, including prestressed slabs on grade, where the effective prestress in the concrete is less than 150 psi (1.03 MPa).
- 4. Concrete foundation walls constructed in accordance with Table 1807.1.6.2.
- 5.4. Concrete patios, driveways and sidewalks, on grade.

SECTION IA-62. Section 1705.12 of Volume IA of the Glendale Building and Safety Code, 2017, is hereby amended to read as follows:

1705.12 Special inspections for seismic resistance. Special inspections for seismic resistance shall be required as specified in Sections 1705.12.1 through 1705.12.9, unless exempted by the exceptions of Section 1704.2.

Exception: The special inspections specified in Section s1705.12.1 through 1705.12.9 are not required for structures designed and constructed in accordance with one of the following:

- The structure consists of light-frame construction; the design spectral response acceleration at short periods, S_{DS}, as determined in Section 1613.3.4, does not exceed 0.5; and the building height of the structure does not exceed 35 feet (10,688 mm).
- The seismic force-resisting system of the structure consists of reinforced masonry or reinforced concrete; the design spectral response acceleration at short periods, S_{DS}, as determined in Section 1613.3.4, does not exceed 0.5; and the building height of the structure does not exceed 25 feet (7620 mm).
- 3. The structure is a detached one- or two-family dwelling not exceeding two stories above grade plane, is not assigned to Seismic Design Category D, E or F and does not have any of the following horizontal or vertical irregularities in accordance with Section 12.3 of ASCE 7:
 - 3.1 Torsional or extreme torsional irregularity.
 - 3.2 Nonparallel systems irregularity.
 - 3.3 Stiffness-soft story or stiffness-extreme soft story irregularity.
 - 3.4 Discontinuity in lateral strength-weak story irregularity.

SECTION IA-63. Section 1805.4.3 of Volume IA of the Glendale Building and Safety Code, 2017, is hereby amended to read as follows:

1805.4.3 Drainage discharge. The floor base and foundation perimeter drain shall discharge by gravity or mechanical means into an approved drainage system that complies with the *California Plumbing Code*. On all building sites, and other parcels where natural drainage is altered, drainage devices acceptable to the Building Official and the City Engineer shall be installed to conduct concentrated storm water to a location approved by the City Engineer.

Exception:

1. Where a site is located in well-drained gravel or sand or sand/gravel mixture soils, a dedicated drainage system is not required.

SECTION IA-64. Section 1807.1.4 of Volume IA of the Glendale Building and Safety Code, 2017, regarding the use of wood foundations, is hereby repealed.

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, Use Category 4B and Section 5.2) 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.

SECTION IA-65. Section 1807.1.6 of Volume IA of the Glendale Building and Safety Code, 2017, is hereby amended to read as follows and all subsections 1807.1.6.1 through 1807.1.6.3.2, including tables, shall remain as set forth in the California Building Code, 2016:

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. <u>Prescriptive design of foundation walls shall not be used for structures assigned to Seismic Design Category D, E or F.</u>

SECTION IA-66. Section 1809.3 of Volume IA of the Glendale Building and Safety Code, 2017, is hereby 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).

For structures assigned to Seismic Design Category D, E or F, the stepping requirements 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 placed at the top and bottom of the footings as shown in Figure 1809.3

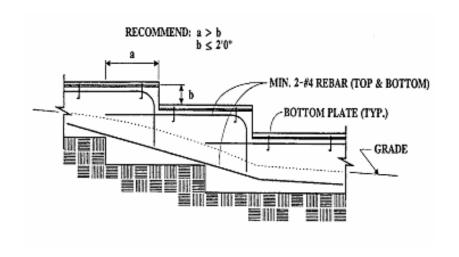


FIGURE 1809.3 STEPPED FOOTING

SECTION IA-67. Section 1809.7 of Volume IA of the Glendale Building and Safety Code, 2017, is hereby amended to read as follows:

1809.7 Prescriptive footings for light-frame construction. Where a specific design is not provided, concrete or masonry-unit footing 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 exceeds one story above grade plane for structures assigned to Seismic Design Category D, E or F.

SECTION IA-68. Table 1809.7 of Volume IA of the Glendale Building and Safety Code, 2017, is hereby amended to read as follows:

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

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

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

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

 Footings supporting roof only shall be as required for supporting one floor.
- g. Plain concrete footings for Group R-3 occupancies shall be permitted to be 6 inches thick.

SECTION IA-69. Section 1809.12 of Volume IA of the Glendale Building and Safety Code, 2017, regarding the use of timber footings, is hereby repealed.

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 footings supported upon treated piles shall not exceed 70 percent of the allowable stresses for the species and grade of timber as specified in the AF&PA ANSI/AWC NDS. Timber footings shall not be used in structures assigned to Seismic Design Category D, E or F.

SECTION IA-70. Section 1810.3.2.4 of Volume IA of the Glendale Building and Safety Code, 2017, regarding the use of timber foundations, is hereby repealed.

1810.3.2.4 Timber. Timber deep foundation elements shall be designed as piles or poles in accordance with AF&PA 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.

1810.3.2.4.1 Preservative treatment. Timber deep foundation elements used to support permanent structures shall be treated in accordance with this section unless it is established that the tops of the untreated timber elements will be below the lowest ground-water level assumed to exist during the lift of the structure. Preservative and minimum final retention

shall be in accordance with AWPA U1 (Commodity Specification E, Use Category 4C) for round timber elements and AWPA U1 (Commodity Specification A, Use Category 4B) for sawn timber elements.

Preservative-treated timber elements shall be subject to a quality control program administered by an approved agency. Element cutoffs shall be treated in accordance with AWPA M4.

SECTION IA-71. Section 1905.1 of Volume IA of the Glendale Building and Safety Code, 2017, is hereby amended to read as follows and subsections 1905.1.1 shall remain as set forth in the California Building Code, 2016:

1905.1 General. The text of ACI 318 shall be modified as indicated in Sections 1905.1.1 through 1905.1.8 1905.1.11.

SECTION IA-72. Section 1905.1.7 of Volume IA of the Glendale Building and Safety Code, 2017, is hereby 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 - Structures assigned to Seismic Design Category C, D, E or F shall not have elements of structural plain concrete, except as follows:

(a) Structural plain concrete basement, foundation or other walls below the base as defined in ASCE 7 are permitted in detached one—and two family dwelling three stories or less in height constructed with stud-bearing walls. In dwellings assigned to Seismic Design Category D or E, the height of the wall shall not exceed 8 feet (2438 mm), the thickness shall not be less than 7½

inches (190 mm), and the wall shall retain no more than 4 feet (1219 mm) of unbalanced fill. Walls shall have reinforcement in accordance with 14.6.1.

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

(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.

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

(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. For footings that exceed 8 inches (203 mm) in thickness, a 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.

Exceptions:

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

- 2. For foundation systems consisting of a plain concrete footing and a plain concrete stemwall, a minimum of one bar shall be provided at the top of the stemwall and at the bottom of the footing.
- 3. Where a slab on ground is east monolithically with the footing, one No. 5 bar is permitted to be located at either the top of the slab or bottom of the footing.

SECTION IA-73. Section 1905.1.9 of Volume IA of the Glendale Building and Safety Code, 2017, is hereby added to read as follows:

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

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

18.7.5.8 - At any section where the design strength, $φP_n$, of the column is less than the sum of the shears V_e computed in accordance with ACI 318 Sections 18.7.6.1 and 18.6.5.1 for all the beams framing into the column above the level under consideration, transverse reinforcement as specified in ACI 318 Sections 18.7.5.1 through 18.7.5.3 shall be provided. For beams framing into opposite sides of the column, the moment components are permitted to be assumed to be of

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

SECTION IA-74. Section 1905.1.10 of Volume IA of the Glendale Building and Safety Code, 2017, is hereby added to read as follows:

<u>1905.1.10 ACI 318, Section 18.10.4.</u> Modify ACI 318, Section 18.10.4, by adding Section 18.10.4.6 as follows:

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

SECTION IA-75. Section 1905.1.11 of Volume IA of the Glendale Building and Safety Code, 2017, is hereby added to read as follows:

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

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

SECTION IA-76. Section 2113.1 of Volume IA of the Glendale Building and Safety Code, 2017, is hereby amended to read as follows:

2113.1 General. The construction of masonry chimneys consisting of solid masonry units, hollow masonry units grouted solid, stone or concrete shall be in accordance with this section.

Notwithstanding any other provisions of this code, an existing masonry chimney which is altered or repaired more than ten percent (10%) of its replacement cost within any twelve (12)-month period shall have its entire chimney structure comply with the current requirements of this code or other standards approved by the building official.

SECTION IA-77. Section 2304.10.1 of Volume IA of the Glendale Building and Safety Code, 2017, is hereby 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 2301.2. The number and size of fasteners connecting wood members shall not be less than that set forth in Table 2304.10.1. Staples 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:

1. <u>Staples may be used to resist or transfer seismic forces when the allowable shear</u> values are substantiated by cyclic testing and approved by the building official.

SECTION IA-78. Section 2304.12.5 of Volume IA of the Glendale Building and Safety Code, 2017, is hereby repealed.

2304.12.5 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 fresh water use. Wood shall not be used on retaining or crib walls for structures assigned to Seismic Design Catergory D, E or F.

SECTION IA-79. Section 2305.4 of Volume IA of the Glendale Building and Safety Code, 2017, is hereby added to read as follows:

2305.4 Quality of nails. In Seismic Design Category D, E & 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.

SECTION IA-80. Section 2305.5 of Volume IA of the Glendale Building and Safety Code, 2017, is hereby added 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 earthquake load values that do not consider cyclic loading of the product. Connector bolts into wood framing shall require steel plate washers on the post on the opposite side of the anchorage device. Plate size shall be a minimum of 0.229 inch by 3 inches by 3 inches (5.82 mm by 76 mm by 76 mm) in size. Hold-down connectors shall be tightened to finger tight plus one half (1/2) wrench turn just prior to covering the wall framing.

SECTION IA-81. Section 2306.2 of Volume IA of the Glendale Building and Safety Code, 2017, is hereby 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 <u>only</u> be permitted <u>for structures assigned to Seismic</u>

Design Category A, B, or C.

Exception:

1. 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.

SECTION IA-82. Section 2306.3 of Volume IA of the Glendale Building and Safety Code, 2017, is hereby 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 (plf).

Exception:

- 1. 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. <u>Table 4.3B application is not allowed for structures assigned to Seismic Design</u>

 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.

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 <u>only</u> be permitted <u>for structures assigned to Seismic Design</u>
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.

SECTION IA-83. Section 2307.2 of Volume IA of the Glendale Building and Safety Code, 2017, is added to the 2016 Edition of the California Building Code 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.

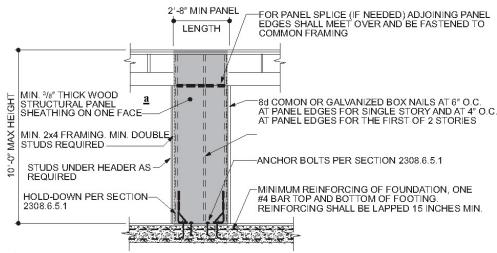
SECTION IA-84. Section 2308.6.5.1 of Volume IA of the Glendale Building and Safety Code, 2017, is hereby amended to read as follows:

2308.6.5.1 Alternate bracing wall (ABW). An ABW shall be constructed in accordance with this section and Figure 2308.6.5.1. In one-story buildings, each panel shall have a length of not less than 2 feet 8 inches (813 mm) and a height of nor more than 10 feet (3,048 mm). Each panel shall be sheathed on one face with 3/8-inch (3.2 mm) minimum-thickness wood structural panel sheathing nailed with 8d common or galvanized box nails in accordance with Table 2304.10.1 and blocked at wood structural panel edges. For structures assigned to Seismic Design Category D or E, each panel shall be sheathed on one face with 15/32-inch-minimum-thickness (11.9 mm) wood structural panel sheathing nailed with 8d common nails spaced 3 inches on panel edges, 3 inches at intermediate supports. Two anchor bolts installed in accordance with Section 2308.3.1 shall be provided in each panel. Anchor bolts shall be placed at each panel outside quarter points. Each panel end stud shall have a hold-down device fastened to the foundation, capable of providing an approved uplifted capacity of not less than 1,800 pounds (8,006 N). The hold-down device shall be installed in accordance with the manufacturer's recommendations. The ABW shall be supported directly on a foundation or on floor framing supported directly on a

foundation that is continuous across the entire length of the braced wall line. This foundation shall be reinforced with not less than one No. 4 bar top and bottom. Where the continuous foundation is required to have a depth greater than 12 inched (305 mm), a minimum 12-inch by 12-inch (305 mm by 305 mm) continuous footing or turned-down slab edge is permitted at door openings in the braced wall line. This continuous footing or turned-down slab edge shall be reinforced with not less than one No. 4 bar top and bottom. This reinforcement shall be lapped 15 inches (381 mm) with the reinforcement required in the continuous foundation located directly under the braced wall line.

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

SECTION IA-85. Figure 2308.6.5.1 and Figure of Volume IA of the Glendale Building and Safety Code, 2017, is hereby amended to read as follows:



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

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

FIGURE 2308.6.5.1 ALTERNATE BRACED WALL PANEL (ABW)

SECTION IA-86. Section 2308.6.5.2 of Volume IA of the Glendale Building and Safety Code, 2017, is hereby amended to read as follows:

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

In one-story buildings, each panel shall have a length of not less than 16 inches (406 mm) and a height of not more than 10 feet (3048 mm). Each panel shall be sheathed on one face with a single layer of 3/8-inch (9.5 mm) minimum-thickness wood structural panel sheathing nailed with 8d common or galvanized box nails in accordance with Figure 2308.6.5.2. For structures assigned to Seismic Design Category D or E, each panel shall be sheathed on one face with 15/32-inch-minimum-thickness (11.9 mm) wood structural panel sheathing nailed with 8d common nails spaced 3 inches on panel edges, 3 inches at intermediate supports and in accordance with Figure 2308.6.5.2. The wood structural panel sheathing shall extend up over the solid sawn or glued-laminated header and shall be nailed in accordance with Figure 2308.6.5.2. A built-up header consisting of at least two 2-inch by 12-inch (51 mm by 305 mm) boards, fastened in accordance with Item 24 of Table 2304.10.1 shall be permitted to be used. A spacer, if used, shall be placed on the side of the built-up beam opposite the wood structural panel sheathing. The header shall extend between the inside faces of the first full-length outer studs of each panel. The clear span of the header between the inner study of each panel shall be not less than 6 feet (1829 mm) and not more than 18 feet (5486 mm) in length. A strap with an uplift capacity of not less than 1,000 pounds (4,400 N) shall fasten the header to the inner studs opposite the sheathing. One anchor bolt not less than 5/8 inch (15.9 mm) diameter and installed in accordance with Section 2308.3.1 shall be provided in the center of each sill plate. The studs

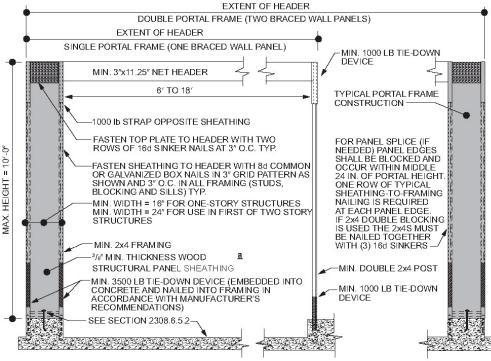
at each end of the panel shall have a hold-down device fastened to the foundation with an uplift capacity of not less than 3,500 pounds (15 570 N).

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

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

SECTION IA-87. Figure 2308.6.5.2 of Volume IA of the Glendale Building and Safety

Code, 2017, is hereby amended to read as follows:



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

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

FIGURE 2308.6.5.2 PORTAL FRAME WITH HOLD-DOWNS (PFH)

SECTION IA-88. Table 2308.6.1 of Volume IA of the Glendale Building and Safety

Code, 2017, is hereby amended to read as follows:

TABLE 2308.6.1^a WALL BRACING REQUIREMENTS

SEISMIC DESIGN CATEGORY	STORY CONDITION (SEE SECTION 2308.2)	MAXIMUM SPACING OF BRACED WALL LINES	BRACED PANEL LOCATION, SPACING (O.C.) AND MINIMUM PERCENTAGE (X)			MAXIMUM DISTANCE OF BRACED WALL PANELS FROM EACH END OF BRACED WALL LINE
			Bracing method ^b			
			LIB	DWB, WSP	SFB, PBS, PCP, HPS, GB ^{c,d}	
A and B		35′- 0″	Each end and ≤ 25'- 0" o.c.	Each end and ≤ 25′- 0″ o.c.	Each end and ≤ 25′- 0″ o.c.	12'- 6"
		35′- 0″	Each end and ≤ 25'- 0" o.c.	Each end and $\leq 25'$ - 0" o.c.	Each end and $\leq 25'$ - 0" o.c.	12'- 6"
		35′- 0″	NP	Each end and ≤ 25′- 0″ o.c.	Each end and ≤ 25′- 0″ o.c.	12'- 6"
С		35′- 0″	NP	Each end and $\leq 25'$ - 0" o.c.	Each end and ≤ 25′- 0″ o.c.	12'- 6"
		35′- 0″	NP	Each end and ≤ 25'- 0" o.c. (minimum 25% of wall length) ^c	Each end and ≤ 25'- 0" o.c. (minimum 25% of wall length) ^c	12'- 6"
<u>ட்க</u> ி D and E		25′- 0″	NP	S_{DS} < 0.50: Each end and \leq 25'- 0" o.c. (minimum 21% of wall length)°	$S_{DS} < 0.50$: Each end and \leq 25'- 0" o.c. (minimum 43% of wall length)°	8'- 0"
				$0.5 \le S_{DS} < 0.75$: Each end and $\le 25'$ - 0" o.c. (minimum 32% of wall length)°	$0.5 \le S_{DS} < 0.75$: Each end and $\le 25'$ - 0" o.c. (minimum 59% of wall length)°	
				$0.75 \le S_{DS} \le 1.00$: Each end and $\le 25'$ - 0" o.c. (minimum 37% of wall length)°	$0.75 \le S_{DS} \le 1.00$: Each end and $\le 25'$ - 0" o.c. (minimum 75% of wall length)	
				$S_{DS} > 1.00$: Each end and $\leq 25'$ - 0" o.c. (minimum 48% of wall length) ^e	$S_{DS} > 1.00$: Each end and $\leq 25'$ - 0" o.c. (minimum 100% of wall length)°	

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

NP = Not Permitted.

- a. This table specifies minimum requirements for braced wall panels along interior or exterior braced wall lines.
- b. See Section 2308.6.3 for full description of bracing methods.
- c. For Method GB, gypsum wallboard applied to framing supports that are spaced at 16 inches on center.
- d. The required lengths shall be doubled for gypsum board applied to only one face of a braced wall panel.
- e. Percentage shown represents the minimum amount of bracing required along the building length (or wall length if the structure has an irregular shape).
- f. DWB, SFB, PBS, and HPS wall braces are not permitted in Seismic Design Catergories D or E.
- g. Minimum length of panel bracing of one face of the wall for WSP sheathing shall be at least 4'-0" long or both faces of the wall for GB or PCP sheathing shall be at least 8'-0" long; h/w ratio shall not exceed 2:1. Wall framing to which sheathing used for bracing is applied shall be nominal 2 inch wide factual 1 1/2 inch (38 mm) or larger members and spaced a maximum of 16 inches on center. Braced wall panel construction types shall not be mixed within a braced wall line.
- h. WSP sheathing shall be a minimum of 15/32" thick nailed with 8d common placed 3/8 inches from panel edges and spaced not more than 6 inches on center and 12 inches on center along intermediate framing members.

SECTION IA-89. Section 2308.6.8.1 of Volume IA of the Glendale Building and Safety Code, 2017, is hereby amended to read as follows:

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

Exception:

1. For structures with a maximum plan dimension not more than 50 feet (15,240 mm), continuous foundations are required at exterior walls only <u>for structures assigned to</u> seismic design category A, B or C.

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

Exceptions:

- 1. Exterior braced wall panels shall be permitted to be located not more than 4 feet (1,219 mm) from the foundation below where supported by a floor constructed in accordance with all of the following:
 - 1.1 Cantilevers or setbacks shall not exceed four times the nominal depth of the floor joists.
 - 1.2 Floor joists shall be 2 inches by 10 inches (51 mm by 254 mm) or larger and spaced not more than 16 inches (406 mm) on center.

- 1.3 The ratio of the back span to the cantilever shall be not less than 2 to 1.
- 1.4 Floor joists at ends of braced wall panels shall be doubled.
- 1.5 A continuous rim joist shall be connected to the ends of cantilevered joists. The rim joist is permitted to be spliced using a metal tie not less than 0.058 inch (1.47 mm) (16 galvanized gage) and 1½ inches (38 mm) in width fastened with six 16d common nails on each side. The metal tie shall have a yield stress not less than 33,000 psi (227 MPa).
- 1.6 Joists at setbacks or the end of cantilevered joists shall not carry gravity loads from more than a single story having uniform wall and roof loads nor carry the reactions from headers having a span of 8 feet (2,438 mm) or more.
- 2. The end of a required braced wall panel shall be allowed to extend not more than 1 foot (305 mm) ever an opening in the wall below. This requirement is applicable to braced wall panels offset in plane and braced wall panels offset out of plane as permitted by Exception 1.

 Braced wall panels are permitted to extend over an opening not more than 8 feet (2,438 mm) in width where the header is a 4-inch by 12-inch (102 mm by 305 mm) or larger member.

SECTION IA-90. Section 2308.6.9 of Volume IA of the Glendale Building and Safety Code, 2017, is hereby 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 Table 2308.6.1 or 2304.10.1. Wall sheathing shall not be attached to framing members by adhesives. <u>Staple fasteners in Table 2304.9.1 shall not be used to resist or transfer seismic forces in structures assigned to <u>Seismic Design</u>

Category D, E or F.</u>

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 IA-91. Section 3102.6.2 of Volume IA of the Glendale Building and Safety Code, 2017, is hereby added to read as follows:

3102.6.2 Membrane less than 20 feet (6096 mm). A noncombustible membrane less than 20 feet (6096 mm) above any floor, balcony or gallery shall be permitted for use as the roof or as a skylight of any building or atrium of a building of any type of construction and shall meet all of the following requirements:

- 1. A fire protection report may be required by the building official or fire official based on the fuel loads and ignition sources below the membrane.
- 2. The membrane shall be a minimum of 10 feet (3048 mm) above any floor, balcony or gallery and shall have a minimum separation distance as required by the fire protection report and no less than 10 feet (3048 mm) above any fuel load or ignition source below the membrane.
- 3. The membrane shall be State Fire Marshal approved fire retardant fabric.
- 4. The membrane structure shall be a free standing, self supporting structure.
- 5. The membrane structure and all supports shall be non combustible.
- 6. The applicant shall enter into a Covenant and Agreement with the City of Glendale regarding the maintenance and replacement of the membrane.
- 7. A maintenance record of the membrane and membrane structure shall be provided on site by the property owner, and shall be provided to the fire department during annual inspections and/or upon request by the fire department.
- 8. The applicant shall apply for a building permit to replace the membrane every eight years.

SECTION IA-92. Section 3109.4.4.2 of Volume IA of the Glendale Building and Safety Code, 2017, is hereby amended to read as follows:

- 3109.4.4.2 Construction permit; safety features required. Commencing January 1, 2007, except as provided in Section 3109.4.4.5, whenever a building permit is issued for construction of a new swimming pool or spa, or any building permit is issued for remodeling of an existing pool or spa, at a private, single-family home, it shall be equipped with at least one of the following seven drowning prevention safety features:
 - 1. The pool shall be isolated from access to a home by an enclosure that meets the requirements of Section 3109.4.4.3.

- 2. The pool shall incorporate removable mesh pool fencing that meets American Society for Testing and Materials (ASTM) Specifications F 2286 standards in conjunction with a gate that is self-closing and self-latching and can accommodate a key lockable device.
- 3. The pool shall be equipped with an approved safety pool cover that meets all requirements of the ASTM Specifications F 1346.
- 4. The residence shall be equipped with exit alarms on those doors providing direct access to the pool.
- 5. All doors providing direct access from the home to the swimming pool shall be equipped with a self-closing, self-latching device with a release mechanism placed no lower than 54 inches (1372 mm) above the floor.
- 6. Swimming pool alarms that, when placed in pools, will sound upon detection of accidental or unauthorized entrance into the water. These pool alarms shall meet and be independently certified to the ASTM Standard F 2208 "Standards Specification for Pool Alarms" which includes surface motion, pressure, sonar, laser and infrared type alarms. For purposes of this article, "swimming pool alarms" shall not include swimming protection alarm devices designed for individual use, such as an alarm attached to a child that sounds when the child exceeds a certain distance or becomes submerged in water. Due to topographical conditions, swimming pool alarms will be accepted by the Building Official only on a case-by-case basis.
- 7. Other means of protection, if the degree of protection afforded is equal to or greater than that afforded by any of the devices set forth in items 1-4, and have been independently verified by an approved testing laboratory as meeting standards for those devices

established by the ASTM or the American Society of Testing Mechanical Engineers (ASME).

Prior to the issuance of any final approval for the completion of permitted construction or remodeling work, the local building code official shall inspect the drowning safety prevention devices required by this act and if no violations are found, shall give final approval.

Authority: Health and Safety Code Section 18942(b)

Reference: Health and Safety Code Section 115922

AB 3305 (Statutes 1996, c.925); AB 2977 (Statutes 2006, c.478); AB 382 (Statutes 2007, c.596)

SECTION IA-93. Section 3109.4.4.3 of Volume IA of the Glendale Building and Safety Code, 2017, is hereby amended to read as follows:

3109.4.4.3 Enclosure; required characteristics. An enclosure shall have all of the following characteristics.

- 1. 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 (1524 mm) above the ground.
- 2. A minimum height of 60 inches (1524 mm).
- 3. A maximum vertical clearance from the ground to the bottom of the enclosure of 2 inches (51mm).
- 4. Gaps or voids, if any, do not allow passage of a sphere equal to or greater than 4 inches (102 mm) in diameter.
- 5. 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.

6. When an ascending slope adjacent to a pool enclosure exceeds 45° from the horizontal the entire pool enclosure shall extend into the slope a minimum of 24 inches. The height of such extension shall be a minimum of 5 feet (1529 mm) measured perpendicular to the slope.

Authority: Health and Safety Code Section 18942 (b)

Reference: Health and Safety Code Section 115923

Ab 3305, Statutes 1996, c.925

SECTION IA-94. Section 3202.1.2.1 of Volume IA of the Glendale Building and Safety Code, 2017, is hereby added to read as follows:

<u>3202.1.2.1 Change of use/occupancy.</u> Change of use or occupancy of existing encroachment into the public right-of-way shall comply with the following:

- A structural review by a state licensed professional to evaluate the structure and its
 attachments (e.g. light fixtures or false ceilings) that they do not fall on the occupants if
 construction work or any other activities are performed above the occupied space within
 the public right-of-way.
- 2. The property owner shall enter into a Covenant and Agreement with the City to indemnify, defend and hold harmless the City of Glendale, its officers, agents, employees and representatives, from and against any and all liability, suits, actions, proceedings, judgments, claims, losses, liens, damages, injuries (whether in contract or in tort, including personal injury, accidental death or property damage, and regardless of whether the allegations are false, fraudulent or groundless), costs and expense (including attorney's fees litigation, arbitration, mediation, appeal expenses) as a condition of

approval to change the use of the space within public right-of-way from storage use to other use.

SECTION IA-95. Section 3202.3.2 of Volume IA of the Glendale Building and Safety Code, 2017, is hereby amended to read as follows:

3202.3.2 Windows, balconies, architectural features and mechanical equipment. Where the vertical clearance above grade to projecting windows, balconies, architectural features or mechanical equipment is more than 8 feet (2438 mm), 1 inch (25 mm) of encroachment is permitted for each additional 1 inch (25 mm) of clearance above 8 feet (2438 mm), but the maximum encroachment shall be 4 feet (1219 mm).

SECTION IA-96. Section 3203 of Volume IA of the Glendale Building and Safety Code, 2017, is hereby added to read as follows:

SECTION 3203

PROJECTIONS INTO ALLEYS

3203.1 Projections into alleys. No part of any structure or any appendage thereto shall project into any alley.

Exception: Footings located at least 8 feet (2438 mm) below grade may project not more than 12" (305 mm).

SECTION IA-97. Section 3303.8 of Volume IA of the Glendale Building and Safety Code, 2017, is hereby added to read as follows:

<u>and are not part of a larger common plan of development which in total</u>

disturbs one acre or more, shall manage storm water drainage during construction in accordance

with the California green Building Standards Code (CALGreen), Chapter 4, Division 4.2.

SECTION IA-98. Section 3306.2 of Volume IA of the Glendale Building and Safety Code, 2017, is hereby amended to read as follows:

3306.2 Walkways. A walkway shall be provided for pedestrian travel in front of every construction and demolition site unless the applicable governing authority authorizes the sidewalk to be fenced or closed. Walkways shall be of sufficient width to accommodate the pedestrian traffic, but in no case shall they be less than 4-5 feet (1219-1524 mm) in width. Walkways shall be provided with a durable walking surface. Walkways shall be accessible in accordance with *Chapter 11A or 11B as applicable*, and shall be designed to support all imposed loads and in no case shall the design live load be less than 150 pounds per square foot (psf) (7.2 kN/m²).

SECTION IA-99. Section 3306.9.1 of Volume IA of the Glendale Building and Safety Code, 2017, is hereby added to read as follows:

3306.9.1 Shoring. The sidewalk and street shall be protected from caving and settlement by shoring conforming to the safety orders issued by the Division of Occupational Safety and Health, Department of Industrial Relations.

SECTION IA-100. Section 3306.10 of Volume IA of the Glendale Building and Safety Code, 2017, is hereby added to read as follows:

<u>associated as a public sidewalk excavations.</u> Permits must be secured from the director of public works in accordance with the provisions of the Glendale Municipal Code for making an excavation within a public street, sidewalk, parkway or public property. When any portion of a public sidewalk is to be excavated, the holder of the permit shall construct a substantial temporary walkway not less than five (5) feet (1524 mm) in width for pedestrian travel over the areas to be excavated or around the same.

SECTION IA-101. Section 3306.11 of Volume IA of the Glendale Building and Safety Code, 2017, is hereby added to read as follows:

3306.11. Protection of Obstructions. No person excavating, refilling or obstructing any public sidewalk, street, alley or roadway in the city shall fail or neglect to place barriers at each end and at all necessary places along any such excavations or obstructions to prevent accidents and no such person shall fail or neglect to display and maintain amber lights from sunset to sunrise at each end and at all necessary places along any such excavation or obstructions run across or substantially across any sidewalk, street, alley, or roadway, such amber lights at such places shall be placed not more than five (5) feet (1524 mm)apart. If, in any case, the director of public works shall designate any particular locations for barriers or require additional light, such barriers or lights shall be placed and maintained at those locations designated. If any permittee fails to perform the duties herein before defined, the director of public works may cause the same to be performed, at the expense of the permittee, or if a deposit has been made pursuant to the Glendale Municipal Code, 1995, then the expense of such performance may be deducted there from to the extent said deposit is sufficient, and if insufficient, then the remaining amount may be charged against the permittee.

SECTION IA-102. Section 3308.3 of Volume IA of the Glendale Building and Safety Code, 2017, is hereby added to read as follows:

3308.3 Street Use Permits

3308.3.1 Permits generally. No person shall use or occupy or obstruct any portion of any sidewalk, street, alley or roadway for storing materials for building purposes, for mixing concrete or mortar, or for any purpose incidental thereto, or for the construction of walkways, fences or canopies in accordance with the provisions of this code, unless a street use permit has

been first obtained from the director of public works to do so, and at least one-half of the width of the sidewalk, or a width to be designated by the director of public works of the street, alley or roadway is at all times kept free and clear of all obstructions.

3308.3.2 Street use permit to be posted. The street use permit required by this Section 3308.3 shall at all times during such use, occupancy or obstruction, be conspicuously posted on or near the sidewalk, street, alley or roadway used, occupied or obstructed.

3308.3.3 Term of permit; removal of obstructions. Any permit required by this Section
3308.3 shall be granted for not longer than sixty (60) days. Upon completion of the work, all
such obstructions shall be removed, all damages caused thereby repaired and the street and
sidewalk restored to their original condition to the satisfaction of the director of public works. If
any permittee fails or neglects to so remove, repair and restore within three (3) days after being
notified by the director of public works in person or by letter, the director of public works may
cause such removal, repairs and restoration to be done at the expense of the permittee.

3308.3.4 Application for street use permits. All applications for street use permits required by this Section 3308.3 shall be in writing and made to the building and safety section and shall be in writing and shall be accompanied by a fee for services provided hereunder which shall be established or modified by resolution of the City Council. The schedule for such fees shall remain on file and be available in the office of the traffic and transportation administrator.

SECTION IA-103. Section 3308.4 of Volume IA of the Glendale Building and Safety Code, 2017, is hereby added to read as follows:

3308.4 Mixing Mortar on Public Property. The mixing or handling of mortar, concrete or other material on public property, when authorized by the director of public works under a street

use permit issued under Section 3308.3 of this Code, shall be done in a mechanical mixer or in a tight box in such a manner as to prevent dripping or splashing on public property.

SECTION IA-104. Appendix F, RODENTPROOFING, of the California Building Code, 2016 edition, published and copyrighted by the International Code Council and California Building Standards Commission is hereby adopted into Volume 1A of the Glendale Building and Safety Code, 2017, by reference and by such reference is incorporated herein as if fully set forth.

SECTION IA-105. Appendix I, PATIO COVERS, of the California Building Code, 2016 edition, published and copyrighted by the International Code Council and the California Building Standards Commission is hereby adopted into Volume 1A of the Glendale Building and Safety Code, 2017, by reference, as further amended herein, into the Glendale Building and Safety Code 2017, and by such reference, is incorporated herein as if fully set forth.

SECTION IA-106. Appendix I, Section I105.1 of Volume IA of the Glendale Building and Safety Code, 2017, is hereby amended to read as follows:

I105.1 Design loads. Patio covers shall be designed and constructed to sustain, within the stress limits of this code, all dead loads plus a minimum vertical live load of 10 pounds per square foot (0.48 lN/m²) except that snow loads shall be used where such snow loads exceed this minimum. Such patio covers shall be designed to resist the minimum wind and seismic loads set forth in this code. Solar energy systems shall not be installed on patio covers designed by this Section.

SECTION IA-107. Appendix J, GRADING, of the California Building Code, 2016 edition, published and copyrighted by the International Code Council, is hereby adopted into Volume 1A of the Glendale Building and Safety Code, 2017, by reference, as further amended herein, into the Glendale Building and Safety Code, 2017, and by such reference, is incorporated herein as if fully set forth.

SECTION IA-108. Appendix J Section J101.1 of Volume IA of the Glendale Building and Safety Code, 2017, is hereby amended to read as follows:

J101.1 Scope. The provisions of this chapter apply to grading, excavation and earthwork construction, including fills and embankments and the control of grading site runoff, including erosion sediments and construction-related pollutants. Where conflicts occur between the technical requirements of this chapter and the geotechnical report, the geotechnical report more restrictive requirement shall govern.

SECTION IA-109. Appendix J Section J101.3 of Volume IA of the Glendale Building and Safety Code, 2017, is hereby added to read as follows:

J101.3 Hazards.

1. Whenever the building official determines that any land or any existing excavation or fill has, from any cause, become a menace to life or limb, or endangers public or private property, or adversely affects the safety, use or stability of public or private property, the owner or other person in legal control of the property concerned shall, upon receipt of a written notice thereof from the building official, correct such condition in accordance with the provisions of this appendix and the requirements and conditions set forth in the notice so as to eliminate such condition. The owner or other person in legal control of the property shall immediately comply with the provisions set forth in the notice and shall

complete the work within 180 days from the date of the notice unless a shorter period of time for completion has been specified in the notice in which case the owner shall comply with the shorter period of time. Upon written application and good cause shown, the building official may approve the request for an extension of time to complete the work required by the notice.

- 2. If the above condition is not eliminated within the specified time period, the building official may file with the Office of the Los Angeles County Recorder a certificate stating that the property is deemed substandard and that the owner thereof has been so notified to correct the substandard condition. Said certificate shall specify the conditions creating the substandard classification.
- 3. When the above conditions have been corrected to the satisfaction of the building official, upon receiving a sixty-dollar fee from the owner or his agent, the building official shall file with the Office of the Los Angeles County Recorder, within a reasonable period of time, a certificate specifying that the conditions creating the substandard classification have been corrected and that the property is no longer considered substandard.

SECTION IA-110. Appendix J Section J101.4 of Volume IA of the Glendale Building and Safety Code, 2017, is hereby added to read as follows:

J101.4 Safety precautions.

1. General.

(a) If at any stage of work on an excavation or fill, the building official determines that the work has become or is likely to become dangerous to any person, or is likely to endanger any property, public or private, the building official shall be authorized to require safety precautions to be immediately taken by the property owner as a

- condition to continuing such permitted work or to require cessation thereof forthwith unless and until it is made safe and to amend the plans for such work.
- (b) Safety precautions may include, but shall not be limited to, specifying a flatter exposed slope or construction of additional drainage facilities, berms, terracing, compaction, cribbing, retaining walls or buttress fills, slough walls, desilting basins, check dams, benching, wire mesh and guniting, rock fences, revetments or diversion walls.
- (c) Upon the determination of the building official that such safety precautions during grading are necessary, the building official shall provide a notice and order to the permittee to implement same. After receiving such notice, oral or written, it is unlawful for the permittee or any person to proceed with such work contrary to such order.
- 2. Hillside Areas. For the purposes of this appendix, hillside areas shall include all property designated as "mountainous terrain" pursuant to Article 16.08.270 of the Glendale

 Municipal Code, 1995. Except as specifically excepted in this appendix, no person shall conduct any grading operation in hillside areas unless such operations are for building site development or another use for which the permittee has obtained an entitlement prior to applying for a grading permit.

Exception: Grading which is not connected with building site development may be conducted in hillside areas only when the applicant demonstrates to the satisfaction of the building official, that such work does all of the following: enhances the physical stabilization of the affected property; is not detrimental to public health, safety or welfare; and is in conformity with the approved master

plan for the area, if such master plan exists. A tentative tract or division of land map shall not be required for such exempt grading.

3. Removal of Ground Cover.

- (a) The existing vegetative ground cover of any watershed in any hillside area shall not be destroyed, removed or damaged except for routine maintenance pursuant to lawful grading, use or occupancy of the property or to clear hazardous vegetation near structures and roads in areas designated as Wildland Urban Interface Fire Areas (also known as High Fire Hazard Areas) pursuant to this code.
- (b) Except for indigenous trees as regulated by Chapter 12.44 of the Glendale Municipal

 Code, 1995, and as that chapter may subsequently be amended, removal of trees and
 shrubbery may be permitted where such work will not cause erosion, slope failure, or
 will not unduly disturb the turf, sod or other existing vegetative ground cover.

 Whenever such groundcover is removed or damaged pursuant to a validly issued
 grading permit, the permittee shall restore and maintain the affected area with an
 approved ground cover, or shall accomplish such other erosion control protection
 measures as may be approved by the building official. Such erosion control shall be
 completed within thirty days after cessation of the grading work or other work
 pursuant to a validly issued building permit.
- 4. Maintenance of Protective Devices. All devices used to protect hillside areas from erosion or landslide damage including, but not limited to, retaining walls, cribbing, terracing, surface and subsurface drainage structures, interceptor drains, check dams, and riprap shall be maintained in good condition and repair as approved by the building official at the time of completion of construction thereof.

SECTION IA-111. Appendix J Section J101.5 of Volume IA of the Glendale Building and Safety Code, 2017, is hereby added to read as follows:

<u>J101.5 Protection of utilities.</u> The owner and permittee of any property on which grading has been performed and that requires a grading permit under Section J103 shall be responsible for the prevention of damage to any public utilities or services.

SECTION IA-112. Appendix J Section J101.6 of Volume IA of the Glendale Building and Safety Code, 2017, is hereby added to read as follows:

J101.6 Protection of adjacent property. The owner and permittee of any property on which grading has been performed and that requires a grading permit under Section J103 is responsible for the prevention of damage to adjacent property and no person shall excavate on land sufficiently close to the property line to endanger any adjoining public street, sidewalk, alley, or other public or private property without supporting and protecting such property from settling, cracking or other damage that might result. Special precautions approved by the building official shall be made to prevent imported or exported materials from being deposited on the adjacent public way and/or drainage courses.

SECTION IA-113. Appendix J Section J101.7 of Volume IA of the Glendale Building and Safety Code, 2017, is hereby added to read as follows:

J101.7 Storm water control measures. The owner and permittee of any property on which grading has been performed and that requires a grading permit under Section J103 shall put into effect and maintain all precautionary measures necessary to protect adjacent water courses and public or private property from damage by erosion, flooding, and deposition of mud, debris and construction-related pollutants originating from the site during, and after, grading and related construction activities. Furthermore, the owner and permittee shall be responsible for putting

surface drainage that may adversely affect any adjoining property as a result of grading and/or construction-related activities. Such measures to prevent any adverse cross-lot surface drainage effects on adjoining property shall be required whether shown on approved grading plans or not.

SECTION IA-114. Appendix J Section J101.8 of Volume IA of the Glendale Building and Safety Code, 2017, is hereby added to read as follows:

<u>J101.8 Conditions of approval.</u> In granting any permit under this code, the building official may include such conditions as may be reasonably necessary to prevent creation of a nuisance or hazard to public or private property. Such conditions may include, but shall not be limited to:

- 1. Improvement of any existing grading to comply with the standards of this code.
- 2. Requirements for fencing of excavations or fills which would otherwise be hazardous.

SECTION IA-115. Appendix J Section J101.9 of Volume IA of the Glendale Building and Safety Code, 2017, is hereby added to read as follows:

J101.9 Rules and regulations.

J101.9.1 Rules. The permissive provisions of this chapter shall not be presumed to waive any regulations imposed by other statutes or other ordinances of the State of California or the City of Glendale.

<u>shall prevail which are more restrictive or which afford greater safety to life, limb, health,</u>

property or welfare. For the purposes of these regulations, grading permits shall be considered as building permits and shall be subject to the administrative provisions of this code, unless otherwise specifically provided for in this chapter.

SECTION IA-116. Appendix J Section J102 of Volume IA of the Glendale Building and Safety Code, 2017, is hereby amended to read as follows:

SECTION J102

DEFINITIONS

J102.1 Definitions. The following words and terms shall, for the purposes of this appendix, have the meanings shown herein. Refer to Chapter 2 of the California Building Code for general definitions.

BENCH. A relatively level step excavated into earth material on which fill is to be placed.

BEST MANAGEMENT PRATICE (BMP). A stormwater pollution mitigation measure that is required to be employed in order to comply with the requirements of the NPDES permit issued to the County of Los Angeles, and as that permit may be subsequently amended.

COMPACTION. The densification of a fill by mechanical means.

CUT. See "Excavation."

DOWN DRAIN. A device for collecting water from a swale or ditch located on or above a slope, and safely delivering it to an approved drainage facility.

EROSION. The wearing away of the ground surface as a result of the movement of wind, water or ice.

EXCAVATION. The removal of earth material by artificial means, also referred to as a cut.

FILL. Deposition of earth materials by artificial means.

GRADE. The vertical location of the ground surface.

GRADE, **EXISTING**. The grade prior to grading.

GRADE, FINISHED. The grade of the site at the conclusion of all grading efforts.

GRADING. An excavation or fill or combination thereof.

KEY. A compacted fill placed in a trench excavated in earth material beneath the toe of a slope. **SLOPE.** An inclined surface, the inclination of which is expressed as a ratio of horizontal distance to vertical distance.

SLOPE FAILURE means the slippage, instability, slide or loss of earth material from a slope for any reason. Class I slope failures involve bedrock. Class II slope failures involve soil above but not including bedrock. Class III slope failures involve only surficial problems with no involvement of bedrock.

STORM WATER POLLUTION PREVENTION PLAN. A site drawing with details, notes, and related documents that identify the measures proposed by the permittee to: (1) control erosion and prevent sediment and construction-related pollutants from being carried offsite by stormwater, and (2) prevent non-stormwater discharges from entering the storm drain system.

TERRACE. A relatively level step constructed in the face of a graded slope for drainage and maintenance purposes.

SECTION IA-117. Appendix J Section J103.1 of Volume IA of the Glendale Building and Safety Code, 2017, is hereby amended to read as follows:

J103.1 Permits required. Except as exempted in Section J103.2, no grading shall be performed without first having obtained a permit therefore from the building official. A grading permit does not include the construction of retaining walls or other structures. A separate permit shall be obtained for each site and may cover both excavations and fills. Any engineered grading as described in Appendix J Section J104 shall be performed by a contractor licensed by the State of California to perform the work described hereon. Regular grading less than 5,000 cubic yards may require a licensed contractor if the building official determines that special conditions or hazards exist.

SECTION IA-118. Appendix J Section J103.2 of Volume IA of the Glendale Building and Safety Code, 2017, is hereby amended to read as follows:

J103.2 Exemptions. A grading permit shall not be required for the following:

- When approved by the building official, grading in an isolated, self-contained area, provided there is no danger to the public, and that such grading will not adversely affect adjoining properties.
- 2. Excavation for construction of a structure permitted under this code where the excavation is limited to within the volume of the proposed structure.
- 3. Cemetery graves.
- 4. Refuse disposal sites controlled by other regulations.
- 5. Excavations for wells, or trenches for utilities.
- 6. Mining, quarrying, excavating, processing or stockpiling rock, sand, aggregate or clay controlled by other regulations, provided such operations do not affect the lateral support of, or significantly increase stresses in, soil and adjoining properties.
- 7. Exploratory excavations performed under the direction of a registered professional. soils engineer or engineering geologist. This shall not exempt grading of access roads or pads created for exploratory excavations. Exploratory excavations must not create a hazardous condition to adjacent properties or the public in accordance with Section J101.3.

 Exploratory excavations must be restored to existing conditions, unless approved by the building official.
- 8. An excavation that does not exceed 50 cubic yards (38.3 m³) and complies with one of the following conditions:
 - (1) is less than 2 feet (0.6 m) in depth.

- (2) does not create a cut slope greater than 5 feet (1.5 m) measured vertically upward from the cut surface to the surface of the natural grade and is not steeper than 2 units horizontal to 1 unit vertical (50 percent slope).
- 9. A fill not intended to support a structure, that does not obstruct a drainage course and complies with one of the following conditions:
 - (a) is less than 1 foot (0.3 m) in depth and is placed on natural terrain with a slope flatter than 5 units horizontal to 1 unit vertical (20 percent slope).
 - (b) is less than 3 feet (0.9 m) in depth at its deepest point measured vertically upward from natural grade to the surface of the fill, does not exceed 50 cubic yards, and creates a fill slope no steeper than 2 units horizontal to 1 unit vertical (50 percent slope).
 - (c) is less than 5 feet (1.5 m) in depth at its deepest point measured vertically upward from natural grade to the surface of the fill, does not exceed 20 cubic yards, and creates a fill slope no steeper than 2 units horizontal to 1 unit vertical (50 percent slope).

Exemption from the permit requirements of this appendix shall not be deemed to grant authorization for any work to be done in any manner in violation of the provisions of this code or any other laws or ordinances of this jurisdiction.

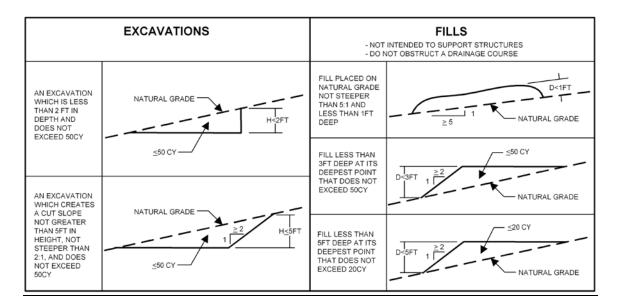


FIGURE J103.2

SECTION IA-119. Appendix J Section J103.3 of Volume IA of the Glendale Building and Safety Code, 2017, is hereby added to read as follows:

J103.3 Unpermitted grading. A person shall not own, use, occupy or maintain any site containing unpermitted grading. For the purposes of this code, unpermitted grading shall be defined as the following

- 1. Grading that was performed, at any point in time, without the required permit(s) having first been obtained from the building official, pursuant to Section J103.1.
- 2. Grading that was permitted and the work was not completed pursuant to Section J105 and the grading permit has expired pursuant to Chapter 1 Division II Section [A] 105.5.

SECTION IA-120. Appendix J Section J103.4 of Volume IA of the Glendale Building and Safety Code, 2017, regarding grading fees, is hereby added to read as follows:

J103.4 Grading fees.

- 1. Fees for grading plan check and for grading permits shall be established or modified by resolution of the city council. The schedule of such fees shall remain on file and be available in the office of the building official. The building official shall, with the approval of the city manager, recommend changes to the council when the costs to provide grading plan check and grading inspection services make it appropriate.
- 2. The applicant shall pay a plan check fee prior to acceptance of grading plans and specifications for checking by the city. The plan check fee shall be based on the total volume of the excavation and fill, on the site. The grading plan check fee shall be recalculated each time the grading plan volume of excavation and fill exceeds the volume used to determine the original plan check fee, and the applicant shall pay the difference between the revised and original fee before the revised grading plans are accepted for review by the city. The original grading plan check fee includes the cost to the applicant for the original submittal plus two additional submittals of corrected grading plans and specifications. When required by the building official, the applicant shall pay a supplemental grading plan check fee in accordance with the fee resolution established by the city council.
- 3. Whenever the applicant submits a grading plan for plan check that is substantially different in design of the earthwork as compared to previously submitted grading plans, the submittal shall be considered an original and a new grading plan check fee shall be determined and paid to the city as provided in this section.
- 4. The applicant shall pay a grading permit fee prior to the issuance of a grading permit by
 the city. The fee shall be based on the total volume of excavation and fill, on the site. If,
 during grading operations, the plans and specifications for the grading project are revised

increasing the volume of excavation, fill, or a combination thereof above the volume that was used to determine the grading permit fee, the applicant shall pay to the city the difference between the original grading permit fee and the recalculated fee before work may resume under the grading permit.

5. Whenever grading operations are commenced without an approved grading permit, a penalty shall be added to all unpaid fees for grading plan check and grading permits. The penalty shall be three hundred percent of all fees due the city.

SECTION IA-121. Appendix J Section J103.5 of Volume IA of the Glendale Building and Safety Code, 2017, is hereby added to read as follows:

J103.5 Bonds and insurance.

J103.5.1 Bonds - General.

1. Whenever an application for a grading permit is filed for the excavation or fill of one hundred cubic yards (76 m³) or more in hillside areas and five hundred cubic yards (382 m³) or more in other areas, the nature of the work regulated by this chapter is such that if left incomplete it will create a hazard to human life or endanger adjoining property, or property at a higher or lower level, or any street or street improvement or any other public property, the building official may, before issuing the grading permit, require the applicant to guarantee faithful performance and payment of labor and material in an amount determined by the building official, not less than fifty percent nor more than one hundred percent of the total estimated cost of work, including corrective work necessary to remove and eliminate geologic hazards by one of the methods provided by this section.

- 2. An additional cash deposit may be required by the building official in the form of a cash bond sufficient to cover the cost of site cleanup and debris removal if determined by the building official that it is warranted.
- Where grading is required on property adjacent to the grading site under permit to
 complete a project satisfactorily, the owner of such adjacent property need not provide
 additional performance bond if the original is of sufficient amount to include such
 additional grading.
- 4. Each bond and agreement for grading shall be effective upon the date of filing of application and shall remain in effect until the work authorized by the grading permit is completed and approved by the building official.
- 5. Installment refunds. When a substantial portion of the required grading work has been completed to the satisfaction of the building official, and when the completion of the remaining grading work, site development or planting is delayed, the building official may accept the completed portion of the grading work and consent to the proportionate reduction of the bond to an amount estimated to be adequate to ensure completion of the grading work, site development or planting remaining to be performed. Only one such reduction shall be considered for each bond posted.

J103.5.2 Performance bonds.

- 1. A guarantee of faithful performance for grading and improvement projects, when required by this chapter, shall be provided by one of the following methods:
 - a. Surety bond. In the case the amount determined by the building official is in excess of \$10,000, a bond shall be executed by the applicant, as principal, and a

- corporate surety authorized to do business in the state of California, as surety, in a form furnished by the building official and approved by the city attorney;
- b. Cash bond. A cash deposit with the city;
- c. Instrument of credit and agreement. An instrument or instruments of credit from one or more financial institutions subject to regulation by the state or federal government pledging that the funds necessary to meet the performance are on deposit and guaranteed for payment and an agreement that the funds designated by the instrument shall become trust funds for the purpose of and in an amount determined by the building official not less than fifty percent nor more than one hundred percent of the total estimated cost of the work, including corrective work necessary to remove and eliminate the agreement shall first be approved by the city attorney.

J103.5.3 Performance bond defaults.

A. Whenever the building official shall find that a default has occurred in the performance of any term or condition of any grading or construction permit, written notice of the fact of default thereof shall be given to the principal and to the corporate surety, financial institution or the depositor, stating the work to be done, and the period of time deemed by the building official to be reasonably necessary for the completion of such work. Thirty days after the receipt of such notice the principal or the surety shall perform or cause the required work to be performed by commencing and diligently prosecuting such work to its completion; but if they or either or both of them should fail to commence such work within the thirty days or having so commenced such work fail, neglect or refuse to proceed diligently to complete the same within the time so specified in such notice, then

- the city may enter such premises and do such work and the cost and expense of so doing the work so specified shall be the obligation of the principal and such surety and shall be a part of the terms of the performance bond in consideration of the issuance of the grading permit.
- B. If a cash bond has been posted, notice of default shall be given to the principal, and if such principal fails to cause the required work to be resumed as set forth in such notice within thirty days after receipt thereof, the building official shall proceed without delay and further notice or proceedings whatsoever to use the cash deposited, or any portion thereof, and cause the required work to be completed by such mode as the building official deems convenient. The balance of such cash deposit, if any, shall upon the completion of the work be returned to the depositor or the depositor's successor or assigns after deducting ten percent thereof.
- C. If an instrument of credit is used to guarantee performance, notice of default shall be given to the principal and to the financial institution issuing such instrument of credit, and if such principal fails to cause the required work to be resumed as set forth in such notice within thirty days after receipt thereof, the building official shall make a demand upon the financial institution for the payment of the estimated costs from the trust fund held by such financial institution pursuant to the agreement. Upon receipt of such sum, the building official shall proceed without delay and without further notice or proceedings whatsoever to use such sum, or any portion thereof, and cause the required work to be completed by such made as the building official deems convenient. The balance of such cash deposit, if any, shall upon the completion of the work be returned to the financial institution, its successors or assigns, after deducting ten percent thereof; but

if such institution fails or refuses to pay over such sum then the building official shall look to such institution for the costs and expense of such work, and the contractual liability of such institution shall be a term or condition of its agreement.

J103.5.4 Contractor's grading insurance – work done adjacent to public property.

Before issuing a grading permit for work being done adjacent to public property, the building official may require that the applicant, or his/her contractor, file a certificate and endorsement evidencing liability insurance satisfactory to the city attorney or risk manager. If required, such insurance shall provide coverage for damage to the city's property and for the city's liability and defense of claims for damages and suits for personal bodily injury and property damage, including but not limited to damage to the city arising out of the deposition, runoff or washing of materials, or any other damage to city property, which may arise from or out of the performance of the work, whether such performance be by such contractor, its subcontractors or any other person directly or indirectly employed by such contractor or subcontractors.

SECTION IA-122. Appendix J Section J104.2 of Volume IA of the Glendale Building and Safety Code, 2017, is hereby amended to read as follows:

J104.2 Site Grading plan requirements. In addition to the provisions of Section 107, Chapter 1, Division II, a grading plan shall show the existing grade and finished grade in contour intervals of sufficient clarity to indicate the nature and extent of the work and show in detail that it complies with the requirements of this code. The plans shall show the existing grade on adjoining properties in sufficient detail to identify how grade changes will conform to the requirements of this code.

SECTION IA-123. Appendix J Section J104.2.1 of Volume IA of the Glendale Building and Safety Code, 2017, is hereby added to read as follows:

J104.2.1 Grading Designation. Grading in mountainous terrain, as identified in Section

16.08.270 of the Glendale Municipal Code, 1995, and all grading in excess of 5,000 cubic yards

(3,825 m³) shall be performed in accordance with the approved grading plan prepared by a registered civil engineer, and shall be designated as "engineered grading." Grading involving less than 5,000 cubic yards (3,825 m³) and not located in an area of mountainous terrain shall be designated as "regular grading" unless the permittee chooses to have the grading performed as engineered grading, or the building official determines that special conditions or unusual hazards exist, in which case grading shall conform to the requirements for engineered grading.

SECTION IA-124. Appendix J Section J104.2.2 of Volume IA of the Glendale Building and Safety Code, 2017, is hereby added to read as follows:

J104.2.2 Regular grading requirements. In addition to the provisions of Section 106, and Section 104.2, Chapter 1, Division II, an application for a regular grading permit shall be accompanied by two sets of plans in sufficient clarity to indicate the nature and extent of the work. The plans shall give the location of the work, the name of the owner, and the name of the person who prepared the plan. If the slope of the grade exceeds 3 units horizontal to 1 unit vertical or as required by the building official, the plans and specifications shall be prepared and signed by an individual licensed by the state to prepare such plans or specifications. The plan shall include the following information:

- 1. General vicinity of the proposed site.
- 2. Limits and depths of cut and fill.
- 3. Location of any buildings or structures where work is to be performed, and the location of any buildings or structures within 15 feet (4.6 m) of the proposed grading.

- 4. Contours, flow areas, elevations, or slopes which define existing and proposed drainage patterns.
- 5. Storm water provisions in accordance with the requirements of Appendix J Section J111.
- 6. Location of existing and proposed utilities, drainage facilities, and recorded public and private easements and use restricted use areas.
- 7. Location of all Special Flood Hazard Areas as designated and defined in Title 44, Code of Federal Regulations.

SECTION IA-125. Appendix J Section J104.2.3 of Volume IA of the Glendale Building and Safety Code, 2017, is hereby added to read as follows:

J104.2.3 Engineered grading requirements. In addition to the provisions of Chapter 1

Division II, Section 107 and Appendix J Section J104.2, an application for an engineered grading permit shall be accompanied by three sets of plans and specifications, and supporting data consisting of a soils engineering report and engineering geology report. The plans and specifications shall be prepared and signed by an individual licensed by the state to prepare such plans or specifications when required by the building official. Specifications shall contain information covering construction and material requirements. Plans shall be drawn to scale upon substantial paper or cloth and shall be of sufficient clarity to indicate the nature and extent of the work proposed and show in detail that it will conform to the provisions of this code and all relevant laws, ordinances, rules, and regulations. The first sheet of each set of plans shall give location of the work, the name and address of the owner, and the person by whom they were prepared.

The plans shall include, but shall not be limited to, the following information:

1. General vicinity of the proposed site.

- Property limits and accurate contours of existing ground and details of terrain and area drainage.
- 3. Limiting dimensions, elevations, or finish contours to be achieved by the grading, proposed drainage channels, and related construction.
- 4. Detailed plans of all surface and subsurface drainage devices, walls, cribbing, dams and other protective devices to be constructed with, or as a part of, the proposed work. A map showing the drainage area and the estimated runoff of the area served by any drains shall also be provided.
- 5. Location of any existing or proposed buildings or structures on the property where the work is to be performed and the location of any buildings or structures on land of adjacent owners that are within 15 feet (4.6 m) of the property or that may be affected by the proposed grading operations.
- 6. Recommendations in the geotechnical engineering report and the engineering geology report shall be incorporated into the grading plans or specifications. When approved by the building official, specific recommendations contained in the geotechnical engineering report and the engineering geology report, that are applicable to grading, may be included by reference.
- 7. The dates of the geotechnical engineering and engineering geology reports together with the names, addresses, and telephone numbers of the firms or individuals who prepared the reports.
- 8. A statement of the earthwork quantities of materials to be excavated and/or filled.

 Earthwork quantities shall include quantities for geotechnical and geological

- remediation. In addition, a statement of material to be imported or exported from the site.
- A statement of the estimated starting and completion dates for work covered by the permit.
- 10. A statement signed by the owner acknowledging that a field engineer, geotechnical engineer and engineering geologist, when appropriate, will be employed to perform the services required by this code, whenever approval of the plans and issuance of the permit are to be based on the condition that such professional persons be so employed. These acknowledgements shall be on a form furnished by the building official.
- 11. Storm water provisions are required to be shown on the grading plan in accordance with Appendix J Section J111.
- 12. A drainage plan for that portion of a lot or parcel to be utilized as a building site

 (building pad), including elevation of floors with respect to finish site grade and locations
 of existing and proposed stoops, slabs, fences or other features that may affect drainage.
- 13. Location and type of any existing or proposed private sewage disposal system.
- 14. Location of existing and proposed utilities, drainage facilities, and recorded public and private easements.
- 15. Location of all recorded floodways.
- 16. Location of all Special Flood Hazard Areas as designated and defined in Title 44, Code of Federal Regulations.
- **SECTION IA-126.** Appendix J Section J104.3 of Volume IA of the Glendale Building and Safety Code, 2017, is hereby amended to read as follows:

J104.3 Geotechnical engineering and engineering geology report. A geotechnical report prepared by registered design professionals shall be provided. The report shall contain at least the following:

- 1. The nature and distribution of existing soils;
- 2. Conclusions and recommendations for grading procedures;
- Soil design criteria for any structures or embankments required to accomplish the proposed grading; and
- Where necessary, slope stability studies, and recommendations and conclusions regarding site geology.

Geotechnical reports shall be required for all projects requiring a grading permit unless such report is determined unnecessary by the building official. Whenever a geotechnical report is required, the building official may required that such report be reviewed by a licensed professional and the cost associated with such review shall be required to be paid by the applicant.

The geotechnical engineering report required by Appendix J Section J104.2.3 shall include data regarding the nature, distribution and strength of existing soils, conclusions and recommendations for grading procedures and design criteria for corrective measures, including buttress fills, when necessary, and opinion on adequacy for the intended use of sites to be developed by the proposed grading as affected by geotechnical engineering factors, including the stability of slopes. All reports shall conform with the requirements of this code and shall be subject to review by the building official. Supplemental reports and data may be required as the building official may deem necessary. Recommendations included in the reports and approved by the building official shall be incorporated in the

grading plan or specifications. The engineering geology report required by Appendix J

Section J104.2.3 shall include an adequate description of the geology of the site, conclusions

and recommendations regarding the effect of geologic conditions on the proposed

development, and opinion on the adequacy for the intended use of sites to be developed by

the proposed grading, as affected by geologic factors. The engineering geology report shall

include a geologic map and cross sections utilizing the most recent grading plan as a base.

All reports shall conform with the requirements of this code and shall be subject to review by

the building official. Supplemental reports and data may be required as the building official

may deem necessary. Recommendations included in the reports and approved by the

building official shall be incorporated in the grading plan or specifications.

Exception: A geotechnical <u>engineering or engineering geology</u> report is not required where the building official determines that the nature of the work applied for is such that a report is not necessary.

SECTION IA-127. Appendix J Section J104.4 of Volume IA of the Glendale Building and Safety Code, 2017, is hereby amended to read as follows:

J104.4 Liquefaction study. For sites with mapped maximum considered earthquake spectral response accelerations at short periods (S_s) greater than 0.5g as determined by Section 1613, a study of the liquefaction potential of the site shall be provided, and the recommendations incorporated in the plans. A geotechnical investigation will be required when the proposed work is a "Project" as defined in California Public Resources Code Section 2693, and is located in an area designated as a "Seismic Hazard Zone" as defined in California Code of Regulations Section 3722 on Seismic Hazard Zone Maps issued by the State Geologist under Public Resources Code Section 2696.

Exception: A liquefaction study is not required where the building official determines from established local data that the liquefaction potential is low.

SECTION IA-128. Appendix J Section J104.5 of Volume IA of the Glendale Building and Safety Code, 2017, is hereby added to read as follows:

J104.5 Slope failure reports. In addition to any other requirements set forth in this Appendix J, for Class I slope failures, the permit applicant shall submit to the building official a combined geotechnical engineering and engineering geology report to address its cause and provide recommended repair methods. For Class II slope failures, the permit applicant shall submit to the building official an engineering geology report to address its cause and provide recommended repair methods. For Class III slope failure, unless there exist other conditions which, in the opinion of the building official, require the submission of geotechnical engineering or engineering geology reports, the permit applicant shall not be required to submit such reports.

SECTION IA-129. Appendix J Section J104.6 of Volume IA of the Glendale Building and Safety Code, 2017, is hereby added to read as follows:

J104.6 Permit issuance.

- 1. The issuance of a grading permit shall constitute an authorization to do only that work which is described or illustrated on the application for the permit or on the grading plans and specifications approved by the building official at the time of issuance.
- Jurisdiction of other agencies. Permits issued under the requirements of this chapter shall
 not relieve the owner of responsibility for securing required permits for work to be
 accomplished which is regulated by any other code, department or division of the
 governing agency.
- 3. Tract map requirements. No grading permit shall be issued for import or export of earth materials to or from, and no grading shall be conducted on, any unimproved acreage in hillside areas unless a tentative tract map has been approved by the council or a parcel map has been approved by the planning commission or an affidavit is filed declaring the grading shall not be for subdivision purposes.
- 4. Conditions of permit. The building official, upon recommendation of the city traffic and transportation administrator, may impose such regulations with respect to access routes to and from grading sites in hillside areas as the building official shall determine are required in the interest of safety precautions involving pedestrian or vehicular traffic.
- 5. No permit shall be issued for the export or import of earth materials to or from a grading site in hillside areas involving ingress or egress on streets having less than 30 feet (9 m) in usable width, except upon all of the following conditions:

- a. The size or type of hauling equipment shall be limited in accordance with the width and conditions of the street;
- b. Traffic-control devices, including flag officers, signs and markers shall be utilized at appropriate places along the designated routes of access to such sites;
- c. Temporary no-parking restrictions shall be imposed with the approval of the city traffic and transportation administrator along such routes when determined necessary;
- d. No person shall excavate or fill so as to cause falling rocks, soil or debris in any form to fall, slide or flow onto adjoining properties or public ways;
- e. <u>In granting a permit under this chapter, the building official shall attach such</u>

 conditions as may be necessary to prevent creation of hazard to public or private

 property;
- f. In no event shall any export or import of earth materials to or from a grading site over dedicated and improved streets in hillside areas be undertaken or conducted except by use of equipment which complies in all respects with the state Vehicle Code;
- g. All vehicle loads shall be trimmed and watered, or otherwise secured so as to prevent spillage from the equipment;
- h. In cases where the building official designates the haul routes, such designation of routes shall take into consideration the most practical means of transporting the earth materials to or from the grading site consistent with the safety and welfare of residents along the routes; and

- i. All public roadways used by the permittee shall be maintained free from all dust,
 dirt and debris caused by permittee's grading operation.
- 6. Consent of adjacent property owner. Whenever any excavation or fill requires entry onto adjacent property for any reason, the permit applicant shall obtain the written consent or legal easements or other property rights of the adjacent property owner or their authorized representative, and shall file a signed and duly notarized copy of such consent with the building official, and no permit for such grading work may be issued unless and until all necessary consent documents are so filed. The consent shall be in a form acceptable to the building official.

SECTION IA-130. Appendix J Section J105.3 of Volume IA of the Glendale Building and Safety Code, 2017, is hereby added to read as follows:

J105.3 Field engineer. The field engineer shall provide inspection within such engineer's area of technical specialty, oversee and coordinate all field surveys, set grade stakes, and provide site inspections during grading operations to ensure the site is graded in accordance with the approved grading plan and the appropriate requirements of this code. During site grading, and at the completion of both rough grading and final grading, the field engineer shall submit statements and reports required by Appendix J Sections J105.11 and J105.12. If revised grading plans are required during the course of the work, they shall be prepared by a civil engineer and approved by the building official.

SECTION IA-131. Appendix J Section J105.4 of Volume IA of the Glendale Building and Safety Code, 2017, is hereby added to read as follows:

<u>J105.4 Geotechnical engineer.</u> The geotechnical engineer shall provide professional inspection within such engineer's area of technical specialty, which shall include observation during

observation during the preparation of the natural ground and placement and compaction of the fill to verify that such work is being performed in accordance with the conditions of the approved plan and the appropriate requirements of this code. Revised recommendations related to conditions differing from the approved geotechnical engineering and engineering geology reports shall be submitted to the permittee, the building official and the field engineer.

SECTION IA-132. Appendix J Section J105.5 of Volume IA of the Glendale Building and Safety Code, 2017, is hereby added to read as follows:

<u>J105.5 Engineering geologist.</u> The engineering geologist shall provide professional inspection within such engineer's area of technical specialty, which shall include professional inspection of the bedrock excavation to determine if conditions encountered are in conformance with the approved report. Revised recommendations relating to conditions differing from the approved engineering geology report shall be submitted to the geotechnical engineer.

SECTION IA-133. Appendix J Section J105.6 of Volume IA of the Glendale Building and Safety Code, 2017, is hereby added to read as follows:

J105.6 Permittee. The permittee shall be responsible for the work to be performed in accordance with the approved plans and specifications and in conformance with the provisions of this code, and the permittee shall engage project consultants, if required, to provide professional inspections on a timely basis. The permittee shall act as a coordinator between the project consultants, the contractor and the building official. In the event of changed conditions, the permittee shall be responsible for informing the building official of such change and shall provide revised plans for approval.

SECTION IA-134. Appendix J Section J105.7 of Volume IA of the Glendale Building and Safety Code, 2017, is hereby added to read as follows:

<u>J105.7 Building official.</u> The building official shall inspect the project site at the following various stages of work, as the building official deems necessary, to determine that adequate control is being exercised by the project consultants:

Pre-grade. Before any construction or grading activities occur at the site. Permittee shall schedule a pre-grade inspection with the building official. The permittee is responsible for coordinating that all project consultants are present at the pre-grade inspection.

Initial. When the site has been cleared of vegetation and unapproved fill and it has been scarified, benched or otherwise prepared for fill. No fill shall have been placed prior to this inspection.

Rough. When approximate initial elevations have been established; drainage terraces, swales and other drainage devices necessary for the protection of the building site(s) from flooding are installed; berms are installed at the top of the slopes; and the statements required by Section J105.12 have been received.

Final. When grading has been completed; all drainage devices necessary to drain the building pad(s) are installed; slope planting is established; irrigation systems are installed; and the as-built plans and required statements and reports have been submitted.

SECTION IA-135. Appendix J Section J105.8 of Volume IA of the Glendale Building and Safety Code, 2017, is hereby added to read as follows:

<u>J105.8 Notification of noncompliance.</u> If, in the course of fulfilling their respective duties under this chapter, the field engineer, the geotechnical engineer or the engineering geologist finds that the work is not being done in conformance with this chapter or the approved grading

plans, the discrepancies and corrective measures which should be taken shall be reported immediately in writing to the permittee and the building official.

SECTION IA-136. Appendix J Section J105.9 of Volume IA of the Glendale Building and Safety Code, 2017, is hereby added to read as follows:

J105.9 Transfer of responsibility. If the field engineer, the geotechnical engineer or the engineering geologist of record is changed during grading, the work shall be stopped until the replacement has agreed in writing to accept their responsibility within the area of technical competency for approval upon completion of the work. It shall be the duty of the permittee to notify the building official in writing of such change prior to the recommencement of such grading.

SECTION IA-137. Appendix J Section J105.10 of Volume IA of the Glendale Building and Safety Code, 2017, is hereby added to read as follows:

J105.10 Non-inspected grading. No person shall own, use, occupy or maintain any non-inspected grading. For the purposes of this code, non-inspected grading shall be defined as any grading for which a grading permit was first obtained, pursuant to Appendix J Section J103, but which has progressed beyond any point requiring inspection and approval by the building official without such inspection and approval having been obtained.

SECTION IA-138. Appendix J Section J105.11 of Volume IA of the Glendale Building and Safety Code, 2017, is hereby added to read as follows:

J105.11 Routine field inspections and reports. Unless waived by the building official, routine inspection reports shall be provided by the field engineer for all engineered grading projects.

The field engineer shall file these reports with the building official as follows:

- Bi-weekly during all times when grading of 400 cubic yards or more per week is occurring on the site;
- 2. Monthly, at all other time; and
- 3. At any time when requested in writing by the building official.

Such reports shall certify to the building official that the field engineer has inspected the grading site and related activities and has found them in compliance with the approved grading plans, the building code, grading permit conditions, and other applicable ordinances and requirements. The reports shall contain all required information in a standard "Report of Grading Activities" form which shall be provided by the building official.

SECTION IA-139. Appendix J Section J105.12 of Volume IA of the Glendale Building and Safety Code, 2017, is hereby added to read as follows:

<u>J105.12 Completion of work.</u> Upon completion of the rough grading work and at the final completion of the work, the following reports and drawings and supplements thereto are required for engineered grading or when professional inspection is required by the building official:

1. An "as-built" grading plan prepared by the field engineer to provide such services in accordance with Appendix J Section J105.3 showing all plan revisions as approved by the building official. This shall include original ground surface elevations, as-built ground elevations, lot drainage patterns, and the locations and elevations of surface drainage facilities and the outlets of subsurface drains. As-built locations, elevations and details of subsurface drains shall be shown as reported by the geotechnical engineer. The field engineer shall state in a report, to the building official that to the best of their knowledge, the work within the area of responsibility was done in accordance with the final approved grading plan.

- 2. A report prepared by the geotechnical engineer retained to provide such services in accordance with Appendix J Section J105.5, including locations and elevations of field density tests, summaries of field and laboratory tests, other substantiating data, and comments on any changes made during grading and their effect on the recommendations made in the approved geotechnical engineering investigation report. Geotechnical engineer shall submit a statement that, to the best of their knowledge, the work within their area of responsibility is in accordance with the approved geotechnical engineering report and applicable provisions of this chapter. The report shall contain a finding regarding the safety of the completed grading and any proposed structures against hazard from landslide, settlement or slippage.
- 3. A report prepared by the engineering geologist retained to provide such services in accordance with Appendix J Section J105.6, including a final description of the geology of the site and any new information disclosed during the grading and the effect of same on recommendations incorporated in the approved grading plan.

 Engineering geologists shall submit a statement that, to the best of their knowledge, the work within their area of responsibility is in accordance with the approved engineering geologist report and applicable provisions of this chapter. The report shall contain a finding regarding the safety of the completed grading and any proposed structures against hazard from landslide, settlement, or slippage. The report must contain a final as-built geologic map and cross-sections depicting all the information collected prior to and during grading.
- 4. The grading contractor shall submit in a form prescribed by the building official a statement of conformance to said as-built plan and the specifications.

SECTION IA-140. Appendix J Section J105.13 of Volume IA of the Glendale Building and Safety Code, 2017, is hereby added to read as follows:

J105.13 Notification of completion. The permittee shall notify the building official when the grading operation is ready for final inspection. Final approval shall not be given until all work, including installation of all drainage facilities and their protective devices, and all erosion control measures have been completed in accordance with the final approved grading plan, and the required reports have been submitted and approved.

SECTION IA-141. Appendix J Section J105.14 of Volume IA of the Glendale Building and Safety Code, 2017, is hereby added to read as follows:

<u>J105.14 Change of ownership.</u> Unless waived by the building official, when a grading permit has been issued on a site and the owner sells the property prior to final grading approval, the new property owner shall be required to obtain a new grading permit.

SECTION IA-142. Appendix J Section J106.1 of Volume IA of the Glendale Building and Safety Code, 2017, is hereby amended to read as follows:

J106.1 Maximum <u>cut</u> slope. The slope of cut surfaces shall be no steeper than is safe for the intended use, and shall be not more than one 1 unit vertical in two 2 units horizontal (50-percent slope) unless the owner or owner's authorized agent applicant furnishes a geotechnical engineering or an engineering geology report, or both justifying a steeper slope. Reports must indicate that site was investigated and give an opinion that a cut at a steeper slope will be stable and not create a hazard to public or private property in conformance with the requirements of Appendix J Section J104.2.3. The building official may require the excavation to be made with a cut face flatter in slope than 1 unit vertical to 2 units horizontal if the building official finds it necessary for stability and safety.

Exceptions:

- A cut surface may be at a slope of 1.5 units horizontal to one 1 unit vertical
 (67 percent slope) provided that all the following are met:
 - 1.1 It is not intended to support structures or surcharges.
 - 1.2 It is adequately protected against erosion.
 - 1.3 It is no more than 8 feet (2438 mm) in height.
 - 1.4 It is approved by the building code official

- 1.5 Ground water is not encountered.
- 2. A cut surface in bedrock shall be permitted to be at a slope of one 1 unit horizontal to one 1 unit vertical (100 percent slope).

SECTION IA-143. Appendix J Section J106.3 of Volume IA of the Glendale Building and Safety Code, 2017, is hereby added to read as follows:

J106.2 Drainage. Drainage, including drainage terraces and overflow protection, shall be provided as required by Appendix J Section J109.

SECTION IA-144. Appendix J Section J107.1 of Volume IA of the Glendale Building and Safety Code, 2017, is hereby amended to read as follows:

J107.1 General. Unless otherwise recommended in the geotechnical report, fills shall comply with the provisions of this section. <u>In the absence of an approved geotechnical engineering report and if approved by the building official, these provisions may be waived for minor fills not intended to support structures.</u>

SECTION IA-145. Appendix J Section J107.2 of Volume IA of the Glendale Building and Safety Code, 2017, is hereby amended to read as follows:

J107.2 Surface preparation. Fill slopes shall not be constructed on natural slopes steeper than 2 units horizontal to 1 unit vertical (50 percent slope). The ground surface shall be prepared to receive fill by removing vegetation, topsoil and other unsuitable materials, and scarifying the ground to provide a bond with the fill material. Except where recommended by the geotechnical engineer or engineering geologist as not being necessary, subdrains shall be provided under all fills placed in natural drainage courses and in other locations where seepage is evident. Such sub-drainage systems shall be of a material and design approved by the geotechnical engineer and acceptable to the building official. The geotechnical engineer shall provide continuous

inspection during the process of subdrain installations. The location of the subdrains shall be shown on a plan by the geotechnical engineer. Excavations for the subdrains shall be inspected by the engineering geologist when such subdrains are included in the recommendations of the engineering geologist.

SECTION IA-146. Appendix J Section J107.3 of Volume IA of the Glendale Building and Safety Code, 2017, is hereby amended to read as follows:

J107.3 Benching. Where existing grade is at a slope steeper than one 1 unit vertical to five 5 units horizontal (20 percent slope) and the depth of the fill exceeds 5 feet (1524 mm) benching shall be provided into sound bedrock or other competent material as determined by the geotechnical engineer. The ground preparation shall be in accordance with Figure J107.3 or as determined by the geotechnical engineer. When fill is to be placed over a cut, a. A key shall be provided which is at least 10 feet (3048 mm) in width and 2 feet (610 mm) in depth. The area beyond the toe of fill shall be sloped for sheet flow or a paved drain shall be provided. The cut shall be made before placing the fill and the geotechnical engineer or engineering geologist or both shall accept the cut as suitable for the foundation and placement of fill material.

SECTION IA-147. Appendix J Section J107.6 of Volume IA of the Glendale Building and Safety Code, 2017, is hereby amended to read as follows:

J107.6 Maximum slope. The slope of fill surfaces shall be no steeper than is safe for the intended use. Fill slopes steeper than one 1 unit vertical-to two 2 units horizontal (50- percent slope) shall be justified by a geotechnical engineering report or engineering data. conforming with the requirements of Appendix J Section J104.2.3, stating that the site has been investigated and giving an opinion that a fill at a steeper slope will be stable and not create a hazard to public or private property. Substantiating calculations and supporting data may be required where the

building official determines that such information is necessary to verify the stability and safety of the proposed slope. The building official may require the fill slope be constructed with a face flatter in slope than 1 unit vertical to 2 units horizontal (50 percent slope) if the building official finds it necessary for stability and safety.

SECTION IA-148. Appendix J Section J107.7 of Volume IA of the Glendale Building and Safety Code, 2017, is hereby added to read as follows:

<u>J107.7 Slopes to receive fill.</u> Where fill is to be placed above the top of an existing slope steeper than 3 units horizontal to 1 unit vertical (33 percent slope), the toe of the fill shall be set back from the top edge of the slope a minimum distance of 6 feet (1.8 m) measured horizontally or such other distance as may be specifically recommended by a geotechnical engineer or engineering geologist and approved by the building official.

SECTION IA-149. Appendix J Section J107.8 of Volume IA of the Glendale Building and Safety Code, 2017, is hereby added to read as follows:

J107.8 Inspection of fill. For engineered grading, the geotechnical engineer shall provide sufficient inspections during the preparation of the natural ground and the placement and compaction of the fill ensuring that the work is being performed in accordance with the conditions of plan approval and the appropriate requirements of this chapter. In addition to the above, the geotechnical engineer shall be present during the entire fill placement and compaction of fills that will exceed a vertical height or depth of 30 feet (9.1 m) or result in a slope surface steeper that 2 units horizontal to 1 unit vertical (50 percent slope).

SECTION IA-150. Appendix J Section J107.9 of Volume IA of the Glendale Building and Safety Code, 2017, is hereby added to read as follows:

<u>J107.9 Testing of fills.</u> Sufficient tests of the fill soils shall be made to determine the density and to verify compliance of the soil properties with the design requirements. This includes soil types and shear strengths in accordance with Referenced Standards Section J112.

SECTION IA-151. Appendix J Section J108 of Volume IA of the Glendale Building and Safety Code, 2017, is hereby amended to read as follows:

SECTION J108

SETBACKS AND RETAINING WALLS

J108.1 General. Cut and fill slopes shall be set back from the property lines in accordance with this section. Setback dimensions shall be measured perpendicular to the property line and shall be as shown in Figure J108.1, unless substantiating data is submitted justifying reduced setbacks and is recommended by a geotechnical engineering and engineering geology report approved by the building official.

J108.2 Top of slope. The setback at the top of a cut slope shall not be less than that shown in Figure J108.1, or than is required to accommodate any required interceptor drains, whichever is greater. For graded slopes the grading design must be such that the property line between adjacent lots will be at the apex of the berm at the top of the slope. Property lines between adjacent lots shall not be located on a graded slope steeper than 5 units horizontal to 1 unit vertical (20 percent slope).

J108.3 Slope protection. Where required to protect adjacent properties at the toe of a slope from adverse effects of the grading, additional protection, approved by the building official, shall be included. Such protection may include but shall not be limited to:

- 1. Setbacks greater than those required by Figure J108.1.
- 2. Provisions for retaining walls or similar construction.

- 3. Erosion protection of the fill slopes.
- 4. Provision for the control of surface waters.

J108.4 Alternate setbacks. The building official may approve alternate setbacks. The building official may require an investigation and recommendation by a qualified geotechnical engineer or engineering geologist to demonstrate that the intent of this section has been satisfied.

J108.5 Retaining walls and crib walls.

- All structures which are intended to retain earth material, shall be fully detailed,
 appropriately engineered, and where required by the building official be incorporated into
 a grading plan. Such grading plan shall be reviewed by the building official, or his or her
 designee, and must be approved prior to issuance of a building permit for any retaining
 walls on the site.
- 2. When required by the building official, grading permit applicants shall have grading plans prepared and reviewed by a qualified geologist, or a geotechnical engineer, or a combination thereof. All features of the grading plan must be included in such review, and a recommendation shall be submitted by such qualified individual regarding the type of retaining wall system(s) to be used. Any recommendation to utilize a particular type of earth retention system shall be based on soil strength parameters for the subject property and detailed slope stability analysis.
- 3. Cantilever retaining walls must be designed to provide a minimum factor of safety
 against overturning of 1.5 and a minimum factor of safety against sliding of 1.5. The
 building official shall have the authority to require a higher factor of safety against
 overturning or sliding, or both if he or she determines that specific site conditions warrant
 such design.

- 4. When approved for use by the building official, a crib wall earth retention system may be used. Such system must be specifically recommended, as an appropriate method of retaining a cut or fill slope, by the geotechnical engineer of record for the project.
- 5. Any crib wall earth retention system which is approved for use by the building official, must meet the following minimum design parameters:
 - a. The crib wall system shall be designed with a minimum factor of safety against overturning of 3.0. A higher factor of safety may be required, at the discretion of the building official.
 - b. The crib wall system shall be designed with a minimum factor of safety against sliding of 3.0. A higher factor of safety may be required, at the discretion of the building official.
 - c. <u>Unless an alternate height is approved by the building official, the maximum</u>

 <u>height of a crib wall shall not exceed ten feet (3 m), measured from the bottom of the lowest course.</u>
 - d. Crib walls in excess of ten feet (3 m) in height must be designed with closed cell faces, and may not be vegetated.
 - e. <u>Backfill of crib walls shall consist of granular material, which facilitates drainage,</u>
 <u>as recommended by the geotechnical engineer of record.</u>
 - f. A subdrain shall be required behind all retaining walls, unless the full effect of hydrostatic pressure is accounted for in the design, and omission of such subdrain is recommended by the geotechnical engineer of record for the project, and approved by the building official.

- g. Crib walls shall be founded upon a foundation/grade beam system that is designed by a licensed civil or structural engineer or upon competent bedrock as determined by both a qualified geotechnical engineer and engineering geologist and approved by the building official. All foundation grade beam systems shall be reviewed and approved by the geotechnical engineer of record for the project.
- h. Crib walls shall be designed to resist all seismically induced lateral forces, in addition to the lateral forces imparted by retained earth material.
- 6. Earth retention systems, other than cantilevered retaining wall systems, which are not anchored into a stable, earthen mass may not be utilized.
- Revetments and erosion control armaments shall not be considered suitable for retaining cut or fill slopes.
- 8. All retaining walls must be approved by the building official prior to construction, except for walls specifically exempt from the Glendale Building and Safety Code, 2014, as amended.
- 9. Any earth retaining structure, which creates a reasonably accessible surface, which adjoins a vertical drop of thirty inches (750 mm) or more, shall be provided with a protective guard, in accordance with the Glendale Building and Safety Code, 2014, as amended.
- 10. All retaining walls shall be provided with sufficient freeboard and a surface back drain, to effectively retain and divert ravel, debris, and concentrated storm water runoff.
- **SECTION IA-152.** Appendix J Section J109.1 of Volume IA of the Glendale Building and Safety Code, 2017, is hereby amended to read as follows:

J109.1 General. Unless otherwise recommended by a registered design professional civil engineer, and approved by the building official, drainage facilities and terracing shall be provided in accordance with the requirements of this section for all cut and fill slopes where the ground slope is steeper than 3 units horizontal to 1 unit vertical (33 percent slope).

Exception: Drainage facilities and terracing need not be provided where the ground slope is not steeper than one unit vertical in three units horizontal (33 percent).

For slopes flatter than 3 units horizontal to 1 unit vertical (33 percent slope) and steeper than 5 units horizontal to 1 unit vertical (20 percent slope) a paved swale or ditch shall be provided at 30 foot (9.1 m) vertical intervals to control surface drainage and debris. Swale shall be sized based on contributory area and have adequate capacity to convey intercepted waters to the point of disposal as defined in Appendix J Section 109.5. Swale must be paved with reinforced concrete not less than 3 inches (0.08 m) in thickness, reinforced with 6-inch (0.2 m) by 6-inch (0.2 m) No. 10 by No. 10 welded wire fabric or equivalent reinforcing centered in the concrete slab or an approved equal. Swale must have a minimum flow line depth of 1 foot (0.3 m) and a minimum paved width of 18 inches (0.5 m). Swales shall have a minimum gradient of not less than 5 percent. There shall be no reduction in grade along the direction of flow unless the velocity of flow is such that slope debris will remain in suspension on the reduced grade.

SECTION IA-153. Appendix J Section J109.3 of Volume IA of the Glendale Building and Safety Code, 2017, is hereby amended to read as follows:

J109.3 Interceptor drains and overflow protection. Berms, interceptor drains, swales or other devices shall be provided at the top of cut or fill slopes to prevent surface waters from overflowing onto and damaging the face of a slope. Berms used for slope protection shall not be less than 12 inches (0.3 m) above the level of the pad and shall slope back at least 4 feet (1.2 m)

from the top of the slope. Interceptor drains shall be installed along the top of eut-graded slopes greater than 5 feet (1.5 m) in height receiving drainage from a tributary width greater than 40 feet (12,192 mm)30 feet (9.1 m) measured horizontally. They shall have a minimum depth of 1 foot (305 mm) and a minimum width of 3 feet (915 mm). The slope shall be approved by the building official, but shall not be less than 50 horizontal to 1 vertical (2 percent slope). The drain shall be paved with concrete not less than 3 inches (76 mm) in thickness, or by other materials suitable to the application. Discharge from the drain shall be accomplished in a manner to prevent erosion and shall be approved by the building official.

SECTION IA-154. Appendix J Section J109.5 of Volume IA of the Glendale Building and Safety Code, 2017, is hereby added to read as follows:

J109.5 Disposal. All drainage facilities shall be designed to carry waters to the nearest practicable street, storm drain, or natural watercourse drainage way approved by the building official or other appropriate governmental agency jurisdiction provided it is a safe place to deposit such waters. Erosion of ground in the area of discharge shall be prevented by installation of non-erosive down drains or other devices. Desilting basins, filter barriers or other methods, as approved by the building official, shall be utilized to remove sediments from surface waters before such waters are allowed to enter streets, storm drains, or natural watercourses. If the drainage device discharges onto natural ground, riprap or a similar energy dissipater may be required. Building pads shall have a minimum drainage gradient of 2 percent toward approved drainage facilities, a public street or drainage structure approved to receive storm waters unless waived by the building official. A lesser slope may be approved by the building official for sites graded in relatively flat terrain, or where special drainage provisions are made, when the building official finds such modification will not result in unfavorable drainage conditions.

SECTION IA-155. Appendix J Section J110.1 of Volume IA of the Glendale Building and Safety Code, 2017, is hereby amended to read as follows:

J110.1 General. The faces of cut and fill slopes shall be prepared and maintained to control erosion. This control shall be permitted to consist of effective planting. This control shall consist of effective planting, erosion control blankets, soil stabilizers or other means as approved by the building official.

Exception: Erosion control measures need not be provided on cut slopes not subject to erosion due to the erosion-resistant character of the materials.

Erosion control for the slopes shall be installed as soon as practicable and prior to calling for final inspection.

SECTION IA-156. Appendix J Section J111 of Volume IA of the Glendale Building and Safety Code, 2017, is hereby amended to read as follows:

SECTION J111

REFERENCED STANDARDS

ASTM D 1557-12	Test Method for Laboratory Compaction Characteristics of Soil
	Using Modified Effort [56,000 ft-lf/ft ³ (2,700kN-m/m ³)].
ASTM D 1556	Density and Unit Weight of Soils in Place by the Sand Cone
	<u>Method</u>
ASTM D 2167	Density and Unit Weight of Soils in Place by the Rubber-Balloon
	Method
ASTM D 2937	Density of Soils in Place by the Drive-Cylinder Method
ASTM D 2922	Density of Soil and Soil Aggregate in Place by Nuclear Methods
ASTM D 3017	Water Content of Soil and Rock in Place by Nuclear Methods

SECTION IA-157. Appendix J Section J113 of Volume IA of the Glendale Building and Safety Code, 2017, is hereby added to read as follows:

SECTION J113

NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES) COMPLIANCE

J113.1 General. All grading plans and permits shall comply with the provisions of this section and Chapters 13.42 and 13.43 of the Glendale Municipal Code for NPDES compliance including the owner of any property on which grading has been performed and which requires a grading permit under Appendix J Section J103. Sites which have been graded and which require a grading permit under Appendix J Section J103 are subject to penalties and fines per Appendix J Section J113.4. All best management practices shall be installed before grading begins or as instructed in writing by the building official for unpermitted grading as defined by Section J103.3. As grading progresses, all best management practices shall be updated as necessary to prevent erosion and control construction related pollutants from discharging from the site. All best management practices shall be maintained in good working order to the satisfaction of the building official unless final grading approval has been granted by the building official and all permanent drainage and erosion control systems, if required, are in place.

official, no grading permit shall be issued unless the plans for such work include a Storm Water Pollution Prevention Plan with details of best management practices, including desilting basins or other temporary drainage or control measures, or both, as may be necessary to control construction-related pollutants which originate from the site as a result of construction related activities. For unpermitted grading as defined by Section J103.3 upon written request a SWPPP

in compliance with the provisions of this section and Chapters 13.42 and 13.43 of the Glendale Municipal Code for NPDES compliance shall be submitted to the building official.

J113.3 Wet weather erosion control plans (WWECP). In addition to the SWPPP required in Appendix J Section J113.2, where a grading permit is issued and it appears that the grading will not be completed prior to November 1, then on or before October 1 the owner of the site on which the grading is being performed shall file or cause to be filed with the building official a WWECP which includes specific best management practices to minimize the transport of sediment and protect public and private property from the effects of erosion, flooding or the deposition of mud, debris or construction related pollutants. The best management practices shown on the WWECP shall be installed on or before October 15. The plans shall be revised annually or as required by the building official to reflect the current site conditions. The WWECP shall be accompanied by an application for plan checking services and plan check fees equal in amount to 10 percent of the original grading permit fee.

J113.4 Storm water pollution prevention plan, effect of noncompliance. Should the owner fail to install the best management practices required by Appendix J Sections J113.2 and J113.3 or submit the wet weather erosion control plans required by Appendix J Section J113.3 by the dates specified therein, it shall be deemed that a default has occurred under the conditions of the grading permit security. There upon, the building official may enter the property for the purpose of installing, by city forces or by other means, the drainage, erosion control and other devices shown on the approved plans, or if there are no approved plans, as the building official may deem necessary to protect adjoining property from the effects of erosion, flooding, or the deposition of mud, debris or construction related pollutants. The building official may also cause the owner to be prosecuted as a violator of this code. The building official shall have the

authority to collect the penalties imposed by this code upon determining that the site is in noncompliance. Payment of penalty shall not relieve any persons from fully complying with the requirements of this code in the execution of the work. The following penalties may be imposed by the building official:

 If a designed wet weather erosion control plan is not submitted as prescribed in Appendix J Section J113.3:

Grading Permit Volume	Penalty
$1 - 10,000$ cubic yards $(1 - 7645.5 \text{ m}^3)$	\$ 50.00 per day
$10,001 - 100,000$ cubic yards $(7646.3 - 76455 \text{ m}^3)$	\$250.00 per day
More than 100,000 cubic yards (76455 m^3)	\$500.00 per day

 If the best management practices for storm water pollution prevention and wet weather erosion control are not installed as prescribed in Appendix J Sections J113.2 and J113.3 and approved by the building official:

Grading Permit Volume	Penalty
$1 - 10,000$ cubic yards $(1 - 7645.5 \text{ m}^3)$	\$ 100.00 per day
$10,001 - 100,000$ cubic yards $(7646.3 - 76455 \text{ m}^3)$	\$250.00 per day
More than 100.000 cubic vards (76455 m^3)	\$500.00 per day

VOLUME IB. RESIDENTIAL STANDARDS

SECTION IB-1. Volume IB of the Glendale Building and Safety Code, 2017, is amended as hereinafter provided.

SECTION IB-2. Chapter 1 Division II of the Section R104.10.2 of Volume IB of the Glendale Building and Safety Code, 2017, is hereby added to read as follows: **R104.10.2 Fire code official concurrence.** For those cases which may affect fire or life safety, the building official shall obtain the concurrence of the fire code official.

SECTION IB-3. Chapter 1 Division II Section R104.11.2 of Volume IB of the Glendale Building and Safety Code, 2017, is hereby added to read as follows:

R104.11.2 Fire code official concurrence. For those cases which may affect fire or life safety, the building official shall obtain the concurrence of the fire code official.

SECTION IB-4. Chapter 1 Division II Section R105.2 of Volume IB of the Glendale Building and Safety Code, 2017, is hereby amended to read as follows:

R105.2 Work exempt from permit. Permits shall not be required for the following.

Exemption from permit requirements of this code shall not be deemed to grant authorization for any work to be done in any manner in violation of the provisions of this code or any other laws or ordinances of this jurisdiction.

Building:

- 1. One-story detached accessory structures, provided that the floor area does not exceed 120 square feet (11.15 m²).
- 2. Fences, pilasters, free-standing and retaining walls not over 7 feet (2134 mm) high.—18 inches (457 mm) in height measured from the lowest adjacent grade to the top of the wall, fence or pilaster, unless supporting a surcharge.

- 3. Retaining walls that are not over 4 feet (1219 mm) in height measured from the bottom of the footing to the top of the wall, unless supporting a surcharge.
- 4. 3. Water tanks supported directly upon grade if the capacity does not exceed 5,000 gallons (18 927 L) and the ratio of height to diameter or width does not exceed 2 to
 1.
- 5. 4. Sidewalks and driveways.
- 6. <u>5.</u> Painting, papering, tiling, carpeting, cabinets, counter tops and similar finish work.
- 7. 6. Prefabricated swimming pools that are less than 24 inches (610 mm) deep.
- 8. 7. Swings and other playground equipment.
- 9. 8. Window awnings supported by an exterior wall which do not project more than54 inches (1372 mm) from the exterior wall and do not require additional support.
- 10. 9. Decks not exceeding 200 square feet (18.58 m²) in area, that are not more than 30 inches (762 mm) above grade at any point, are not attached to a dwelling and do not serve the exit door required by Section R311.4.
- 11. 10. Temporary frames (also known as "story poles") which are intended to temporarily show the outlines of proposed buildings as required by Title 30 the Glendale Municipal Code, 1995 for a period not to exceed 1-year.

Electrical:

- 1. Listed cord-and-plug connected temporary decorative lighting.
- 2. Reinstallation of attachment plug receptacles but not the outlets therefor.
- Replacement of branch circuit overcurrent devices of the required capacity in the same location.

- 4. Electrical wiring, devices, appliances, apparatus or equipment operating at less than 25 volts and not capable of supplying more than 50 watts of energy.
- Minor repair work, including the replacement of lamps or the connection of approved portable electrical equipment to approved permanently installed receptacles.

Gas:

- 1. Portable heating, cooking or clothes drying appliances.
- Replacement of any minor part that does not alter approval of equipment or make such equipment unsafe.
- 3. Portable-fuel-cell appliances that are not connected to a fixed piping system and are not interconnected to a power grid.

Mechanical:

- 1. Portable heating appliances.
- 2. Portable ventilation appliances.
- 3. Portable cooling units.
- 4. Steam, hot- or chilled-water piping within any heating or cooling equipment regulated by this code.
- Replacement of any minor part that does not alter approval of equipment or make such equipment unsafe.
- 6. Portable evaporative coolers.
- 7. Self-contained refrigeration systems containing 10 pounds (4.54 kg) or less of refrigerant or that are actuated by motors of 1 horsepower (746 W) or less.

8. Portable-fuel-cell appliances that are not connected to a fixed piping system and are not interconnected to a power grid.

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 new material, such work shall be considered as new work and *a* permit shall be obtained and inspection made as provided in this code.

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.

R105.2.1 Emergency repairs. Where equipment replacements and repairs must be performed in an emergency situation, the permit application shall be submitted within the next working business day to the building official.

R105.2.2 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 cutting 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 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.

R105.2.3 Public service agencies. A permit shall not be required for the installation, alteration or repair of generation, transmission, distribution, metering or other related equipment that is under the ownership and control of public service agencies by established right.

SECTION IB-5. Chapter 1 Division II Section R105.3 of Volume IB of the Glendale Building and Safety Code, 2017, is hereby amended to read as follows: **R105.3 Application for permit.** To obtain a permit, the applicant shall first file an application therefor in writing on a form furnished by the department of building safety for that purpose. Such application shall:

- Identify and describe the work to be covered by the permit for which application is made.
- Describe the land on which the proposed work is to be done by legal
 description, street address or similar description that will readily identify and
 definitely locate the proposed building or work.
- 3. Indicate the use and occupancy for which the proposed work is intended.
- Be accompanied by construction documents and other information as required in Section R106.1.
- 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.
- 8. Pay plan review and permit fees as required by Volume 1A Chapter 1 Division II of this Code.

SECTION IB-6. Chapter 1 Division II Section R105.3.1.1 of Volume IB of the Glendale Building and Safety Code, 2017, is hereby amended to read as follows:

existing buildings in flood hazard areas. For applications for reconstruction, rehabilitation, addition, alteration, repair or other improvement of existing buildings or structures located in a flood hazard area as established by Table R301.2(1), the building official shall examine or cause to be examined the construction documents and shall make a determination with regard to the value valuation of the proposed work. For buildings that have sustained damage of any origin, the value valuation of the proposed work shall include the cost to repair the building or structure to its predamaged condition. If the building official finds that the value valuation of proposed work equals or exceeds 50 percent of the market value of the building or structure before the damage has occurred or the improvement is started, the proposed work is a substantial improvement or restoration of substantial damage and the building official shall require existing portions of the entire building or structure to meet the requirements of Section R322.

SECTION IB-7. Chapter 1 Division II Section R105.3.1.2 of Volume IB of the Glendale Building and Safety Code, 2017, is hereby added to read as follows:

R105.3.1.2 Small residential rooftop solar energy system review process.

- A. **Applicability.** This Section applies to the permitting of all small residential rooftop solar energy systems, as defined herein, in the city.
- B. **Definitions.** The following words and phrases as used in this section are defined as follows:

"Electronic submittal" means the utilization of email, facsimile, or the internet.

"Small residential rooftop solar energy system" means all of the following:

- 1. A solar energy system that is no larger than 10 kilowatts alternating current nameplate rating or 30 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 redesignated 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 city.

"Solar energy system" has the same meaning set forth in paragraphs (1) and (2) of subdivision (a) of Section 801.5 of the California Civil Code, as such section or subdivision may be amended, renumbered, or redesignated from time to time.

"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.

C. Solar Energy System Requirements

All solar energy systems shall meet applicable health and safety standards
 and requirements imposed by the State of California and of the city of

- Glendale, including the Glendale Fire Department and the Glendale Water and power department.
- 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.
- 3. 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.

D. Expedited Permitting Process and Checklist, and Permit Fees.

- On or before September 30, 2015, the building official shall adopt an
 expedited permitting process for small residential rooftop solar energy
 systems, including a standard plan and checklist(s) of all requirements with
 which small residential rooftop solar energy systems shall comply to be
 eligible for expedited review.
- 2. The checklist and all documents required for the submission of an expedited small residential solar energy system application shall be made available to the public on the City of Glendale website. Due to limitations in the city's technical systems, the city does not have the ability to accept electronic signatures on forms, applications, and other permit documents

- and accordingly, the electronic submittal of forms, applications and other permit documents shall not be permitted under this Section.
- 3. The fees prescribed for the permitting of small residential rooftop solar energy system shall be established from time to time by resolution of the city council and shall be in compliance with Government Code Section 65850.55, Government Code Section 66016, and State Health and Safety Code Section 17951.
- E. Prior to submitting an application for permits for a small residential rooftop solar system, the applicant shall:
 - 1. Verify to the applicant's reasonable satisfaction 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, verify to the applicant's reasonable satisfaction 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.
- F. An application that satisfies the information requirements in the checklist, as

 determined by the building official, shall be deemed complete. Upon receipt of an

 incomplete application, the building official shall issue a written correction notice

- detailing all deficiencies in the application and any additional information required to be eligible for expedited permit issuance.
- G. 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 to the City Planning Commission. If a use 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, as defined, the 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 to the City Planning Commission.
- H. Any condition imposed on an application shall be designed to mitigate the specific, adverse impact upon health and safety at the lowest possible cost.
- I. "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 permit. The City shall use its best efforts to ensure that the selected method, condition, or mitigation meets the conditions of subparagraphs
 (A) and (B) of paragraph (1) of subdivision (d) of Section 714 of the Civil Code defining restrictions that do not significantly increase the cost of the system or decrease its efficiency or specified performance.

- J. Upon confirmation by the building official of the application and supporting documentation being complete and meeting the requirements of the checklist, the building official shall administratively approve the application and issue all required permits or authorizations. Such 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.
- K. For a small residential rooftop solar energy system eligible for expedited review, only one inspection shall be required, which shall be done in a timely manner and may include a consolidated inspection by the building official and fire chief. If a small residential rooftop solar energy system fails inspection, a subsequent inspection is authorized; however the subsequent inspection need not conform to the requirements of this subsection.

SECTION IB-8. Chapter 1 Division II Section R105.3.2 of Volume IB of the Glendale Building and Safety Code, 2017, is hereby amended to read as follows:

R105.3.2 Time limitation of application. An application for a permit for any proposed work shall be deemed to have been abandoned 180 days one-year 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 each. The extension shall be requested in writing and justifiable cause demonstrated.

In granting any extension the building official may require compliance with any new regulation. In order to renew action on an application after expiration, the applicant shall

resubmit plans and pay a new plan review fee. The new plan review fee shall be one half the amount required for a new plan review, provided no changes have been made in the original plans and specifications for such work, and provided further that such abandonment has not exceeded one year. In order to renew action on an expired application the applicant shall comply with all applicable new regulations.

SECTION IB-9. Chapter 1 Division II of the Section R105.3.3 of Volume IB of the Glendale Building and Safety Code, 2017, is hereby added to read as follows:

R105.3.3 Plan review fees. When submittal documents are required by Chapter I

Division II, Section R105.3, a plan review fee shall be paid at the time of submitting the submittal documents for plan review. The plan review fees specified in this section are separate fees from the permit fees specified in Chapter 1 Division II, Section R108.2 and are in addition to the permit fees. When submittal documents are incomplete or changed so as to require additional plan review, or when the project involves deferred submittal items as defined in Chapter 1 Division II, Section 106.3.4, an additional plan review fee shall be charged at a rate specified by resolution.

SECTION IB-10. Chapter 1 Division II Section R105.5 of Volume IB of the Glendale Building and Safety Code, 2017, is hereby amended to read as follows:

R105.5. Expiration. Every permit issued shall become invalid unless the work authorized by such permit is commenced within 180 days after its issuance, or if the work authorized by such permit is suspended or abandoned for a period of 180 days after the time the work is commenced. Work shall be considered suspended or abandoned if the building official determines that substantial work has not been performed within the time specified above. Substantial work shall be construed to mean:

- Measurable work such as, but not limited to, the addition of footings, structural members, flooring, wall covering, etc.
- 2. The work mentioned in subsection 1 of this Section 105.5 above must constitute 20% of the value of the work for which the permit was issued in any 180 day period for Group R, Division 3 occupancies.

Before such work can be recommenced, a new permit shall be first obtained to do so, and the fee therefore shall be one half the amount required for a new permit for such work, provided no changes have been made or will be made in the original plans and specifications for such work, and provided further that such suspension or abandonment has not exceeded one year. In order to renew action on a permit after expiration, the permittee shall pay a new permit fee and may be required to comply with all applicable new regulations at the time of issuance.

The building official is authorized to grant, in writing, one or more extensions of time, for periods not more than 180 days each. The extension shall be requested in writing and justifiable cause demonstrated.

SECTION IB-11. Chapter 1 Division II Section R105.8 of Volume IB of the Glendale Building and Safety Code, 2017, is hereby amended to read as follows:

R105.8 Responsibility of permittee. It shall be the duty of every person who performs work for the installation or repair of building, structure, electrical, gas, mechanical or plumbing systems, for which this code is applicable, to comply with this code.

Building permits shall be presumed to incorporate the provision that the applicant, the applicant's agent, employees or contractors shall carry out the proposed work in accordance with the approved plans and with all requirements of this code and any other

laws or regulations applicable thereto, whether specified or not. No approval shall relieve or exonerate any person from the responsibility of complying with the provisions and intent of this code.

SECTION IB-12. Chapter 1 Division II of the Section R106.3.4 of Volume IB of the Glendale Building and Safety Code, 2017, is hereby added to read as follows:

R106.3.4 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 responsible 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 responsible 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 deferred submittal documents have been approved by the building official.

SECTION IB-13. Chapter 1 Division II Section R108.6 of Volume IB of the Glendale Building and Safety Code, 2017, is hereby amended to read as follows: **R108.6 Work commencing before permit issuance.** Any person who commences work requiring a *permit* on a building, structure, electrical, gas, mechanical or plumbing system before obtaining the necessary permits shall be subject to a fee established by the applicable governing authority that shall be in addition to the required *permit* fees. in

addition to the normally established permit fee, equal to 100% of such normally established permit fee, or as otherwise determined by the building official.

SECTION IB-14. Chapter 1 Division II Section R109.1.5.3 of Volume IB of the Glendale Building and Safety Code, 2017, is hereby added to read as follows: **R109.1.5.3 Structural observation.** For structural observation, see Section 1704 of Volume IA.

SECTION IB-15. Chapter 1 Division II Section R109.1.5.4 of Volume IB of the Glendale Building and Safety Code, 2017, is hereby added to read as follows:

R109.1.5.4 Sound transmission control. Fire-resistance-rated construction

inspection. Where fire-resistance-rated construction is required between dwelling units or due to location on property, the building official shall require an inspection of such construction after all lathing and/or wallboard is in place, but before any plaster is applied, or before wall-board joints and fasteners are taped and finished. Protection of joints and penetrations in fire resistance rated assemblies shall not be concealed from view until inspected and approved.

SECTION IB-16. Chapter 1 Division II Section R109.5 of Volume IB of the Glendale Building and Safety Code, 2017, is hereby added to read as follows:

R109.5 Reinspections. A reinspection fee may be assessed for each inspection or reinspection when such portion of work for which inspection is called is not complete or when corrections called for are not made.

This section shall not be interpreted as requiring reinspection fees the first time a job is rejected for failure to comply with the requirements of this code, but as controlling the

practice of calling for inspections before the job is ready for such inspection or reinspection.

Reinspection fees may be assessed when the approved plans and inspection card are not readily available to the inspector, for failure to provide access on the date for which inspection is requested, or deviation from plans requiring the approval of the Building Official.

To obtain a reinspection, the applicant shall pay the re-inspection fee in accordance with a fee schedule adopted by this jurisdiction.

SECTION IB-17. Chapter 1 Division II Section R112 and all subsections thereof of Volume IB of the Glendale Building and Safety Code, 2017, is hereby amended to read as follows:

SECTION R112

BUILDING AND FIRE BOARD OF APPEALS

R112.1 General. In order to hear and decide appeals of orders, decisions or determinations made by the building official or the fire code official relative to the application and interpretation of this code, there shall be and is hereby created a joint building and fire board of appeals in accordance with Section 113 of Volume IA of this Code (hereinafter referred to as the "board"). The building official shall be an ex officio member of said board but shall have no vote on any matter before the board. The board of appeals shall be appointed by the governing body and shall hold office at its pleasure. The board shall adopt rules of procedure for conducting its business, and shall render all decisions and findings in writing to the appellant with a duplicate copy to the building official.

SECTION IB-18. Chapter 1 Division II Section R113.1 of Volume IB of the Glendale Building and Safety Code, 2017, is hereby amended to read as follows:

R113.1 Unlawful acts. It shall be unlawful for any person, firm or corporation to erect, construct, alter, extend, repair, move, remove, demolish, or occupy, or maintain any building, structure or equipment regulated by this code, or cause same to be done, in conflict with or in violation of any of the provisions of this code. Maintenance of a building or structure which was unlawful at the time it was constructed and which would be unlawful under this Code if constructed after the effective date of such Code, shall constitute a continuing violation of such Code.

SECTION IB-19. Chapter 1 Division II Section R113.4 of Volume IB of the Glendale Building and Safety Code, 2017, is hereby amended to read as follows:

R113.4 Violation penalties. Any person who violates a provision of this code or fails to comply with any of the requirements thereof or who erects, constructs, alters or repairs a building or structure in violation of the approved construction documents or directive of the building official, or of a permit or certificate issued under the provisions of this code, shall be subject to penalties as prescribed by law deemed guilty of a misdemeanor and shall be punishable by a fine of not more than \$1,000 or by imprisonment of not more than 6 months, or by both such fine and imprisonment. Such penalty and imprisonment shall not preclude the imposition of any other administrative or judicial civil, or criminal remedies under state, federal or local laws.

SECTION IB-20. Chapter 1 Division II Section R114.1 of Volume IB of the Glendale Building and Safety Code, 2017, is hereby amended to read as follows:

R114.1 Notice to owner or the owner's authorized agent. Upon notice from the building official that work on any building or structure is being prosecuted contrary to the provisions of this code or other laws or ordinances of this jurisdiction or in an unsafe and dangerous manner, such work shall be immediately stopped. The stop work order shall be in writing and shall be given to the owner of the property involved, or to the owner's authorized agent or to the person performing the work and shall state the conditions under which work will be permitted to resume.

SECTION IB-21. Chapter 1 Division II Section R114.2 of Volume IB of the Glendale Building and Safety Code, 2017, is hereby amended to read as follows:

R114.2 Unlawful continuance. Any person who shall continue any work in or about the structure 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 guilty of a misdemeanor. Such work shall constitute a continuing violation of this Code.

SECTION IB-22. Chapter 1 Division II Section R115 of Volume IB of the Glendale Building and Safety Code, 2017, is hereby added to read as follows:

SECTION R115

UNSAFE STRUCTURES AND EQUIPMENT

<u>unsafe</u>, insanitary or deficient because of inadequate means of egress facilities, inadequate light and ventilation, or which constitute a fire hazard, or are otherwise

dangerous to human life or the public welfare, or that involve illegal or improper occupancy or inadequate maintenance, shall be deemed an unsafe condition. Unsafe structures shall be taken down and removed or made safe, as the building official deems necessary and as provided for in this section. A vacant structure that is not secured against entry shall be deemed unsafe.

R115.2 Record. The building official shall cause a report to be filed on an unsafe condition. The report shall state the occupancy of the structure and the nature of the unsafe condition.

R115.3 Notice. If an unsafe condition is found, the building official shall serve on the owner, agent or person in control of the structure, a written notice that describes the condition deemed unsafe and specifies the required repairs or improvements to be made to abate the unsafe condition, or that requires the unsafe structure to be demolished within a stipulated time. Such notice shall require the person thus notified to declare immediately to the building official acceptance or rejection of the terms of the order.

R115.4 Method of service. Such notice shall be deemed properly served if a copy thereof is

(a) delivered to the owner personally; (b) sent by certified or registered mail addressed to

the owner at the last known address with the return receipt requested; or (c) delivered in

any other manner as prescribed by local law. If the certified or registered letter is returned

showing that the letter was not delivered, a copy thereof shall be posted in a conspicuous

place in or about the structure affected by such notice. Service of such notice in the foregoing

manner upon the owner's agent or upon the person responsible for the structure shall

constitute service of notice upon the owner.

R115.5 Restoration. The structure or equipment determined to be unsafe by the building official is permitted to be restored to a safe condition. To the extent that repairs, alterations or additions are made or a change of occupancy occurs during the restoration of the structure, such repairs, alterations, additions or change of occupancy shall comply with the requirements of Section 105.2.2 and Existing Building Code of Volume IC of this Code. **R115.6 Non-Compliance.** Upon failure to comply with the order within the time specified herein, and if no appeal has been properly and timely filed, the building official shall file in the office of the County Recorder a certificate describing the property and certifying (i) that the building is an unsafe building and (ii) that the owner has been notified. Whenever the corrections ordered shall thereafter have been completed or the building demolished so that it no longer exists as an unsafe building on the property described in the certificate, the building official shall file a new certificate with the County Recorder certifying that the building has been demolished or all required corrections have been made so that the building is no longer unsafe, whichever is appropriate.

R115.7 Vacated Buildings. Any unsafe building ordered vacated in accordance with this section shall not be reoccupied until the unsafe conditions have been eliminated. Each such vacated building shall be locked and otherwise secured against entry and the building official shall post thereon a placard stating: "DO NOT ENTER, UNSAFE TO OCCUPY, CITY OF GLENDALE." Such notice shall remain posted until the required repairs, demolition or removal are completed. Such notice shall not be removed without written permission of the building official and no person shall enter the building except for the purpose of making the required repairs or of demolishing the building.

SECTION IB-23. Chapter 1 Division II Section R116 of Volume IB of the Glendale Building and Safety Code, 2017, is hereby added to read as follows:

SECTION R116

CONSTRUCTION TOILET FACILITIES

R116 Temporary Construction Toilets. Toilet Facilities Required. No person shall commence or proceed with the erection, construction, alteration, repair, raising, adding to, removal, or demolition of any building or structure unless adequate, suitable, sanitary toilet facilities under the control of such person are provided for the use of any person employed or working upon such building or structure. Such toilet facilities shall be located upon or within a reasonable distance of the lot, premises, or site upon which such work is being done. In no case shall the line of travel to any facility exceed 500 feet (153 M). Toilets may not be placed on the public way.

R116.1 Toilet Standards. Every toilet shall be of water flush type and shall be connected to a public sewer or private sewage disposal system built in accordance with the provisions of the Plumbing Code. All toilet structures shall be self-closing; the toilet floor shall be smooth, and screened ventilation shall be provided for the toilet compartment.

Where workmen are employed during night hours, the toilet building shall be provided with artificial light. In lieu of flush water closets approved chemical toilets may be provided. Toilets may not be located within 10' (3054 mm) of a property line.

SECTION IB-24. Chapter 1 Division II Section R117 of Volume IB of the Glendale Building and Safety Code, 2017, is hereby added to read as follows:

SECTION R117

ON SITE CONSTRUCTION TRASH AND DEBRIS CONTROL

R117 On Site Construction Trash and Debris Control Facilities Required.

No person shall commence or proceed with erection, construction, alteration, repair, raising, adding to, removal, or demolition of any building or structure unless adequate, suitable on site trash and debris control facilities under the control of such person are provided for the use of any person employed or working upon such building or structure. On site trash and debris control shall consist of at least a roll off 523 ft³ (15m³) bin. The container shall be emptied often enough so that no storage of trash is outside the bin. The bin shall be removed from the site after the building has passed final inspection or within thirty (30) days of the expiration of the building permit.

Exception: Additions, less than 900 ft ² (84m²), and alterations to Group R,

Division 3 occupancies and Group U occupancies need not provide a roll off bin

but must store trash and debris in the rear yard in quantities less than 10 ft (3m)

wide by 10 ft (3m) long by 4 ft (1.2m) high. All trash and debris whether or not in

containers shall be kept 3 ft (912mm) from adjacent property lines.

SECTION IB-25. Chapter 1 Division II Section R118 of Volume IB of the Glendale Building and Safety Code, 2017, is hereby added to read as follows:

SECTION R118

DISASTER REPAIR AND RECONSTRUCTION

R118.1 Intent. This section establishes standards and regulations for the expeditious repair and reconstruction of structures damaged as a result of a disaster for which a local emergency has been declared by the City Council. This section does not allow exemptions from the Building, Fire, Electrical, Mechanical, Plumbing, other Codes, or standards.

R118.2 Applications of Provisions.

R118.2.1 The provisions of this section are applicable following each disaster when a local emergency has been declared by the City Council to all buildings and structures of all occupancies regulated by the City of Glendale. The Council may extend the provisions as necessary.

R118.2.2 When approved by the building official, the requirements of this section may be waived in favor of repair recommendations included in an engineering evaluation as defined in Section R118.3.

R118.3 DEFINITIONS. For the purpose of this Section R118, the following definitions apply:

R118.3.1 "ARCHITECT" means an individual licensed by the State of California to practice architecture as defined in the State of California Business and Professions Code.

R118.3.2 "CIVIL ENGINEER" means an individual registered by the State of

California to practice civil engineering as defined in the State of California Business and

Professions Code.

R118.3.3 "CURRENT CODE" means the edition of the California Residential Code, published by the International Code Council, as adopted by the City of Glendale as the Glendale Building and Safety Code, as amended. The edition of said Glendale Building and Safety Code to be applied shall be that edition in effect at the time of the declaration of a local emergency by the City Council.

R118.3.4 "ENGINEERING EVALUATION" means an evaluation of a damaged building or structure, or suspected damaged building or structure, performed under the direction of a structural engineer, civil engineer, or architect retained by the owner of the building or structure. Engineering evaluations shall, at a minimum, contain recommendations for repair with appropriate opinion of construction cost for those repairs.

R118.3.5 "REPLACEMENT VALUE" means the dollar value, as determined by the building official, of replacing the damaged structure with a new structure of the same size, construction material and occupancy on the same site.

efined in the State of California Business and Professions Code. R118.3.7 "VALUE"

OF REPAIR" means the dollar value, as determined by the building official, of making the necessary repairs to the damaged building.

R118.4 Repair Criteria.

R118.4.1 Abatement of Dangerous Buildings shall be in accordance with the provisions of Chapter 1 Division II, Section R115.

R118.4.2 Building and structures of all occupancies which have been damaged as a result of a disaster, except as otherwise noted, shall be repaired in accordance with the following criteria:

1. When the estimated value of repair does not exceed ten percent (10%) of the replacement value of the structure, the damaged portion(s) may be restored to their pre-disaster condition.

Exception: When the damaged elements include suspended ceiling systems, the ceiling system shall be repaired and all bracing required by current code shall be installed.

- 2. When the estimated value of repair is greater than ten percent (10%) but less than fifty percent (50%) of the replacement value of the structure, the damaged elements, as well as all critical ties, supported elements and supporting elements associated with the damaged elements, shall be repaired and/or brought into conformance with the structural requirements of the current Code.
- 3. When the estimated value of repair is fifty percent (50%) or more of the replacement value of the structure, the entire structure shall be brought into conformance with the structural requirements of the current Code.
- 4. In Group R, Division 3 occupancies, the repair value of damaged

chimneys shall be excluded from the computation of percentage of replacement value. Damaged chimneys shall be repaired in accordance with Chapter 1 Division II, Section 118.5.

R118.5 Repair Criteria for Chimneys.

R118.5.1 All damaged chimneys must be repaired or reconstructed to comply with the requirements of Section 2113 of the Glendale Building and Safety Code, 2017. Damaged portions of chimneys shall be removed in accordance with the following criteria:

- 1. When the damaged portion of the chimney is located between the roof line and the top of the chimney, the damaged portion shall be removed to the roof line provided the roof and ceiling anchorage are in sound condition.
- 2. For a single-story structure in which the damaged portion of the chimney is below the roof line or the damaged portion extends from above the roof line to below the roof line, the chimney shall be removed to the top of the fire box.
- 3. For a multi-story structure, the damaged portion of the chimney shall be removed from the top to a floor line where sound anchorage is found.
- 4. In any structure where the firebox has been damaged, the entire chimney and firebox shall be removed to the foundation. If this foundation is in sound condition, the firebox and chimney may be reconstructed using the existing foundation. If the foundation has been damaged, the foundation shall be removed and replaced.

R118.5.2 Where existing conditions preclude the installation of all anchorage required by Section 2113 of Volume IA of this Code, alternate systems may be used in accordance with the alternate methods and materials provisions of said Code when approved by the building official. Such alternate systems shall be designed and detailed by a structural engineer, civil engineer, or architect.

R118.6 Repair Criteria for Unreinforced Masonry Buildings and Structures.

R118.6.1 All buildings as described in Appendix Chapter A1, Section A102.1 of the

California Existing Building Code of Volume IC of the Glendale Building and Safety

Code that are damaged shall be repaired and strengthened in accordance with provisions

of Chapter 1 Division II, Section R118.4.

118.6.2 Unreinforced masonry buildings damaged less than 50% shall be repaired in accordance with California Existing Building Code, Appendix Chapter A1, Seismic Strengthening Provisions for Unreinforced Masonry Bearing Wall Buildings of Volume IC of this Code.

SECTION IB-26. Chapter 1 Division II Section R119 of Volume IB of the Glendale Building and Safety Code, 2017, is hereby added to read as follows:

SECTION R119

SANDBLASTING

R119.1. Sandblasting: Definition. As used in this article, unless the context expressly indicates otherwise, "sandblasting" shall mean the use of air, steam or water containing sand to clean, grind, or cut hard surfaces.

R119.2. Dry Sandblasting. Dry sandblasting is prohibited unless authorized by special permission from the building official endorsed upon a permit. Permission for dry sandblasting may be granted only when it is not possible to employ wet sandblasting. When dry sandblasting is permitted, the building official may impose such reasonable and related conditions as he or she may deem necessary for the protection of the public and the adjacent property.

R119.3. Use of Canvas. Sandblasting operations shall, at all times, be separated from all adjacent property by canvas or other suitable barrier to prevent the splashing or blowing of water and/or sand thereupon.

R119.4. Stoppage of Work. The building official may order the immediate stoppage of sandblasting for failure to comply with any provision of this chapter. Failure of any person to comply immediately with such order shall constitute a misdemeanor.

SECTION IB-27. Chapter 1 Division II Section R120 of Volume IB of the Glendale Building and Safety Code, 2017, is hereby added to read as follows:

SECTION R120

PROTECTION OF PEDESTRIANS

R120.1 Protections required. Pedestrians shall be protected during construction, remodeling and demolition activities as required by this section. Signs shall be provided to direct pedestrian traffic.

R120.2 Walkways. A walkway shall be provided for pedestrian travel in front of every construction and demolition site unless the applicable governing authority authorizes the sidewalk to be fenced or closed. Walkways shall be of sufficient width to accommodate the pedestrian traffic, but in no case shall they be less than 5 feet (1524 mm) in width.

Walkways shall be provided with a durable walking surface. Walkways shall be accessible in accordance with the California Building Code Chapter 11A or 11B as applicable, and shall be designed to support all imposed loads and in no case shall the design live load be less than 150 pounds per square foot (psf) (7.2 kN/m²).

SECTION IB-28. Section R301.1.3.1 of Volume IB of the Glendale Building and Safety Code, 2017, is hereby amended to read as follows:

R301.1.3.1 California licensed architect or engineer.

All construction documents submitted for permit shall be approved and stamped by a California licensed architect or engineer.

Exception: When the building official determines, based upon a review of the construction documents submitted, that the scope of work is minor in nature.

When any portion of any structure deviates from substantial compliance with conventional framing requirements for woodframe construction found in this code, the building official shall require the construction documents to be approved and stamped by a California licensed architect or engineer for that irregular or non-conforming portion of work. Notwithstanding other sections of law, the law establishing these provisions is found in Business and Professions Code Sections 5537 and 6737.1.

SECTION IB-29. Section R301.1.3.2 of Volume IB of the Glendale Building and Safety Code, 2017, regarding engineered design for woodframe structures greater than two-stories, is hereby repealed.

R301.1.3.2 Woodframe 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 woodframe construction more than two stories

and basement in height. Notwithstanding other sections of law, the law establishing these provisions is found in Business and Professions Code Sections 5537 and 6737.1.

SECTION IB-30. Section R301.1.3.3 of Volume IB of the Glendale Building and Safety Code, 2017, regarding engineered design for structures other than woodframe, is hereby repealed.

R301.1.3.3 Structures other than woodframe. The building official shall require floor, wall or roof ceiling structural elements in dwellings designed of cold formed steel, concrete, masonry or structural insulated panels prescribed by this code to be approved and stamped by a California licensed architect or engineer. Notwithstanding other sections of law, the law establishing these provisions is found in Business and Professions Code Sections 5537 and 6737.1.

SECTION IB-31. Section R301.1.4 of Volume IB of the Glendale Building and Safety Code, 2017, is hereby added to read as follows:

R301.1.4 Seismic design provisions for buildings constructed on or into slopes steeper than one unit vertical in three units horizontal (33.3 percent slope).

The design and construction of new buildings and additions to existing buildings when constructed on or into slopes steeper than one unit vertical in three units horizontal (33.3 percent slope) shall comply with Section 1613.9 of volume IA of this Code.

SECTION IB-32. Table R301.2(1) of Volume IB of the Glendale Building and Safety Code, 2017, is hereby amended to read as follows:

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

	WIND DEGLEN					SUBJECT TO DAMAGE							
	WIND DESIGN					FROM							
			Special	Wind-									
GROUND			wind	borne	SEISMIC		Frost		WINTER	ICE BARRIER		AIR	MEAN
SNOW	Speed ^d	Topographic	region ^l	debris	DESIGN		line		DESIGN	UNDERLAYMENT	FLOOD	FREEZING	ANNUAL
LOAD	(mph)	effects ^k		zone ^m	CATEGORY ^f	Weatheringa	depth ^b	Termite ^c	TEMP ^e	REQUIRED ^h	HAZARDS ^g	INDEX ⁱ	TEMP ^j
<u>0</u>	<u>110</u>	<u>No</u>	No	<u>No</u>	See Footnote f	Negligible	<u>12 in.</u>	N/A	<u>47º</u> F	<u>No</u>	See Footnote g	None	<u>63.9</u>

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

- a. Weathering may require a higher strength concrete or grade of masonry than necessary to satisfy the structural requirements of this code. The weathering column shall be filled in with the weathering index (i.e., "negligible," "moderate" or "severe") for concrete as determined from the Weathering Probability Map [Figure R301.2(3)]. The grade of masonry units shall be determined from ASTM C 34, C 55, C 62, C 73, C 90, C 129, C 145, C 216 or C 652.
- b. The frost line depth may require deeper footings than indicated in Figure R403.1(1).
 The jurisdiction shall fill in the frost line depth column with the minimum depth of footing below finish grade.
- c. The jurisdiction shall fill in this part of the table to indicate the need for protection depending on whether there has been a history of local subterranean termite damage.
- d. The jurisdiction shall fill in this part of the table with the wind speed from the basic wind speed map [FigureR301.2(4)A]. Wind exposure category shall be determined on a site-specific basis in accordance with Section R301.2.1.4.
- e. *Temperatures* shall be permitted to reflect local climates or local weather experience as determined by the building official.

- f. The jurisdiction shall fill in this part of the table with the seismic design category determined from Section R301.2.2.1. See Mapped acceleration and other seismic design parameters at the USGS Web site.
- 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.

The City of Glendale (Community No. 065030) has participated as a regular member in the NFIP since August 31, 1984 Date of the Flood Insurance Study: September 26, 2008 FIRM Numbers, Dates:

06037C1095E, September 30, 2005

06037C1125F, September 30, 2005

06037C1335E, September 30, 2005

06037C1345E, September 30, 2005

06037C1375E, September 30, 2005

06037C1610E, September 30, 2005

06037C1626E, September 30, 2005

- h. In accordance with Sections R905.1.2, R905.4.3.1, R905.5.3.1, R905.6.3.1, R905.7.3.1 and R905.8.3.1, where there has been a history of local damage from the effects of ice damming, the jurisdiction shall fill in this part of the table with "YES." Otherwise, the jurisdiction shall fill in this part of the table with "NO."
- i. The jurisdiction shall fill in this part of the table with the 100-year return period air freezing index (BF-days) from Figure R403.3(2) or from the 100-year (99%) value on the National Climatic Data Center data table "Air Freezing Index- USA Method (Base 32°)" at www.ncdc.noaa.gov/fpsf.html.

- j. The jurisdiction shall fill in this part of the table with the mean annual temperature from the National Climatic Data Center data table "Air Freezing Index-USA Method (Base 32°F)" at www.ncdc.noaa.gov/fpsf.html.
- k. In accordance with Section R301.2.1.5, where there is local historical data documenting structural damage to buildings due to topographic wind speed-up effects, the jurisdiction shall fill in this part of the table with "YES." Otherwise, the jurisdiction shall indicate "NO" in this part of the table.
- In accordance with Figure R301.2(4)A, where there is local historical data
 documenting unusual wind conditions, the jurisdiction shall fill in this part of the
 table with "YES" and identify any specific requirements. Otherwise, the jurisdiction
 shall indicate "NO" in this part of the table.
- m. In accordance with Section R301.2.1.2.1, the jurisdiction shall indicate the wind-borne debris wind zone(s). Otherwise, the jurisdiction shall indicate "NO" in this part of the table.

SECTION IB-33. Section R301.2.2.2.5 of Volume IB of the Glendale Building and Safety Code, 2017, is hereby amended to read as follows:

R301.2.2.2.5 Irregular buildings. The seismic provisions of this code shall not be used for irregular structures located in Seismic Design Categories C, D₀, D₁ and D₂. Irregular portions of structures shall be designed in accordance with accepted engineering practice to the extent the irregular features affect the performance of the remaining structural system. When the forces associated with the irregularity are resisted by a structural system designed in accordance with accepted engineering practice, design of the remainder of the building

shall be permitted using the provisions of this code. A building or portion of a building shall be considered to be irregular when one or more of the following conditions occur:

 Where exterior shear wall lines or braced wall panels are not in one plane vertically from the foundation to the uppermost story in which they are required.

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

- 1. Floor joists are nominal 2 inches by 10 inches (51 mm by 254 mm) or larger and spaced not more than 16 inches (406 mm) on center.
- 2. The ratio of the back span to the cantilever is at least 2 to 1.
- 3. Floor joists at ends of braced wall panels are doubled.
- 4. For wood-frame construction, a continuous rim joist is connected to ends of all cantilever joists. When spliced, the rim joists shall be spliced using a galvanized metal tie not less than 0.058 inch (1.5 mm)

 (16gage) and 11/2, inches (38 mm) wide fastened with six 16d nails on each side of the splice or a block of the same size as the rim joist of sufficient length to fit securely between the joist space at which the splice occurs fastened with eight 16d nails on each side of the splice; and
- 5. Gravity loads carried at the end of cantilevered joists are limited to uniform wall and roof loads and the reactions from headers having a span of 8 feet (2438 mm) or less.

2. Where a section of floor or roof is not laterally supported by shear walls or braced wall lines on all edges.

Exception: Portions of floors that do not support shear walls or braced wall panels above, or roofs, shall be permitted to extend no more than 6 feet (1829 mm) beyond *a* shear wall or braced wall line.

3. When the end of a braced wall panel occurs over an opening in the wall below-and ends at a horizontal distance greater than 1 foot (305mm) from the edge of the opening. This provision is applicable to shear walls and braced wall panels offset n plane and to braced wall panels offset out of plane as permitted by the exception to Item 1.

Exception: For wood light-frame wall construction, one end of a braced wall panel shall be permitted to extend more than 1 foot (305 mm) over an opening not more than 8 feet (2438 mm) wide in the wall below provided that the opening includes a header in accordance with the following:

- 5. The building width, loading condition and framing member species limitations of Table R602.7(1) shall apply; and
- 6. Not less than one 2 x 12 or two 2 x 10 for an opening not more than 4 feet (1219mm) wide; or
- 7. Not less than two 2 x 12 or three 2 x 10 for an opening not more than 6 feet (1829 mm) wide; or
- 8. Not less than three 2 x 12 or four 2 x 10 for an opening not more than 8 feet (2438 mm) wide; and

9.

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

- 4. Where an opening in a floor or roof exceeds the lesser of 12 feet (36.58 mm) or 50 percent of the least floor or roof dimension.
- 5. When portions of a floor level are vertically offset.

Exceptions:

- Framing supported directly by continuous foundations at the perimeter of the building.
- 2. For wood light-frame construction, floors shall be permitted to be vertically offset when the floor framing is lapped or tied together as required by Section R502.6.1.
- Where shear walls and braced wall lines do not occur in two perpendicular directions.
- 7. Where stories above grade plane partially or completely braced by wood wall framing in accordance with Section R602 or cold-formed steel wall framing in accordance with Section R603 include masonry or concrete construction. When this irregularity applies, the entire *story* shall be designed in accordance with accepted engineering practice.

Exception: Fireplaces, chimneys and masonry veneer as permitted by this code.

SECTION IB-34. Section R301.2.2.3.8 of Volume IB of the Glendale Building and Safety Code, 2017, is hereby added to read as follows:

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/m) or less.

SECTION IB-35. Section R302.1.1 of Volume 1B of the Glendale Building and Safety Code, 2014, is hereby added to read as follows:

R302.1.1 Construction on contiguous lots under same ownership or occupancy. In those cases where lots, or portions of lots, contiguous to one another are owned or occupied by the same person, such lots, or portions of lots, may be considered one lot for the purpose of enforcing Section R302.1, Table R302.1(1), R302.1(2) and Table R302.6 of this Code, In such event, the owner of said lots shall be required to execute and record a covenant and agreement with the City to the satisfaction of the building official on a form approved by the City Attorney. Said covenant and agreement shall, among other things, provide that said lots or portions of lots shall remain as one parcel and the owner

thereof shall not sell, transfer or in any way sever any portion of said lots or portions of lots independently from the remaining lots or portions of lots until or unless released from the covenant and agreement by the city. Said covenant and agreement shall be recorded by the Los Angeles County Recorder, shall run with the lot or portions of lots, and shall be binding upon the owner, future owners, encumbrancers, successors, heirs, and assigns. An easement for right of way purposes shall not constitute ownership or occupancy under this Section R302.1.1. The building official is hereby authorized to execute such agreements on behalf of the City.

SECTION IB-36. Section R313 of Volume IB of the Glendale Building and Safety Code, 2017, regarding automatic sprinkler systems is hereby repealed in its entirety and is hereby replaced with the following:

SECTION R313

AUTOMATIC FIRE SPRINKLER SYSTEMS

R313.1 Where required. Approved automatic sprinkler systems in new and existing buildings and structures shall be provided in accordance with this section.

R313.2 New occupancies. An automatic sprinkler system shall be installed in all new occupancies.

R313.3 Existing occupancies. An automatic sprinkler system shall be installed and maintained in all existing occupancies and new sections of any existing building whenever alterations exceed fifty percent (50%) of the replacement value, as determined by the building official. Alteration values shall be cumulative with each application for a building permit within the previous five years.

SECTION IB-37. Section R314.6 of Volume IB of the Glendale Building and Safety Code, 2017, regarding smoke alarm power source is hereby amended to read as follows.

R314.6 Power source. Single-station smoke alarms shall receive their primary power from the building wiring provided that such wiring is served from a commercial source and shall be equipped with a battery backup. Smoke alarms with integral strobes that are not equipped with battery backup shall be connected to an emergency electrical system. Smoke alarms shall emit a signal when the batteries are low. Wiring shall be permanent and without a disconnecting switch other than as required for overcurrent protection.

Exceptions:

- 1. Smoke alarms are permitted to be solely battery operated in existing buildings where no construction is taking place. In buildings constructed under editions of the Glendale Building and Safety Code prior to the 1992 edition, smoke alarms other than those located in the corridor or area giving access to each sleeping area are permitted to be solely battery operated provided no construction or construction requiring a permit not exceeding \$1000 has taken place, and alterations or repairs do not result in the removal of interior walls or ceiling finishes exposing the structure, unless there is an attic, crawl space or basement available which could provide access for building wiring without the removal of interior finishes.
- 2. Smoke alarms are permitted to be solely battery operated in buildings that are not served from a commercial power source. Group R Division 3 occupancies in existence prior to 1973 may utilize smoke alarms that are solely battery

- powered provided no construction or construction requiring a permit, not exceeding \$1000 has taken place, and alterations or repairs do not result in the removal of interior walls or ceiling finishes exposing the structure, unless there is an attic, crawl space or basement available which could provide access for building wiring without the removal of interior finishes.
- 3. Smoke alarms are permitted to be solely battery operated in existing areas of buildings undergoing alterations or repairs that do not result in the removal of interior walls or ceiling finishes exposing the structure, unless there is an attic, crawl space, or basement available which could provide access for building wiring without the removal of interior finishes. Smoke alarms that receive their primary power from the building's existing wiring from a commercial source may remain in service without being provided with battery backup. Any smoke alarm that is replaced for any reason shall be provided with battery backup.
- 4. Smoke alarms are permitted to be solely battery operated where repairs or alterations are limited to the exterior surfaces of dwellings, such as the replacement of roofing or siding, or the addition or replacement of windows or doors, or the addition of a porch or deck.
- 5. Smoke alarms are permitted to be solely battery operated when work is

 limited to the installation, alteration or repairs of plumbing or mechanical

 systems or the installation, alteration or repair of electrical systems which do

 not result in the removal of interior wall or ceiling finishes exposing the

 structure.

SECTION IB-38. Section R319.1 of Volume IB of the Glendale Building and Safety Code, 2017, regarding address numbers is hereby amended to read as follows.

R319.1 Address numbers. Buildings shall be provided with approved address identification. The address identification shall be legible and placed in a position that is visible from the street or road fronting the property. Address identification characters shall contrast with their background. Address numbers shall be Arabic numbers or alphabetical letters. Numbers shall not be spelled out. Each character shall be not less than 4 inches (102mm) in height with a stroke width of not less than 0.5 inch (12.7 mm). Where required by the fire code official, address identification shall be provided in additional approved locations to facilitate emergency response. Where access is by means of a private road and the building address cannot be viewed from the public way, a monument, pole or other sign or means shall be used to identify the structure. Address identification shall be maintained. Address numbers shall be illuminated in an approved manner.

SECTION IB-39. Section R401.1 of Volume IB of the Glendale Building and Safety Code, 2017, is hereby 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 all 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 be designed in accordance with accepted engineering practice.

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.

SECTION IB-40. Section R401.4 of Volume IB of the Glendale Building and Safety Code, 2017, is hereby amended to read as follows:

R401.4 Soil tests. Where quantifiable data created by accepted soil science methodologies indicate expansive, compressible, shifting or other questionable soil characteristics are likely to be present, the building official shall determine whether to require a soil test to determine the soil's characteristics at a particular location. Geotechnical report shall be shall be required for all new construction including new buildings, additions and accessory structures. Any testing shall be done by an approved agency using an approved method.

Exceptions:

1. Buildings and structures not located in the Wildland Urban Interface (WUI) areas, seismic hazard zone, Alquist-Priolo zone or adjacent to slopes greater

than 3 units horizontal to 1 unit vertical, and all 1-story additions less than 500 square feet or ancillary structures less than 500 square feet. The foundation design and footings shall comply with the following:

- a. Soils bearing value shall be a maximum of 1500 pounds per square foot.
- b. The footing shall be a minimum of 18" wide with a minimum 24"

embedment into natural grade or certified fill. One (1) #4 continuous

horizontal reinforcement bar shall be located at the top, at the middle and

at the bottom of the new footing.

SECTION IB-41. Section R401.5 of Volume 1B of the Glendale Building and Safety Code, 2017, is hereby added to read as follows:

R401.5 Grading. Grading requirements shall be in compliance with Appendix J, GRADING, of Volume IA of this Code.

SECTION IB-42. Section R402.1 of Volume IB of the Glendale Building and Safety Code, 2017, wood foundation systems, is hereby repealed.

R402.1 Wood foundations. Wood foundation systems shall be designed and installed in accordance with the provisions of this code.

R402.1.1 Fasteners. Fasteners used below *grade* to attach plywood to the exterior side of exterior *basement* or crawl-space wall studs, or fasteners used in knee wall construction, shall be of Type 304 or 316 stainless steel. Fasteners used above *grade* to attach plywood and all lumber-to-lumber fasteners except those used in knee wall construction shall be of Type 304 or 316 stainless steel, silicon bronze, copper, hot-dipped galvanized (zinc coated) steel nails, or hot-tumbled galvanized (zinc coated)

steel nails. Electro-galvanized steel nails and galvanized (zinc coated) steel staples shall not be permitted.

R402.1.2 Wood treatment. All lumber and plywood shall be pressure preservative treated and dried after treatment in accordance with AWPA UI (Commodity Specification A, Use Category 4B and Section 5.2), and shall bear the *label* of an accredited agency. Where lumber and/or plywood is cut or drilled after treatment, the treated surface shall be field treated with copper naphthenate, the concentration of which shall contain a minimum of 2 percent copper metal, by repeated brushing, dipping or soaking until the wood absorbs no more preservative.

SECTION IB-43. Section R403.1.2 of Volume IB of the Glendale Building and Safety Code, 2017, is hereby amended to read as follows:

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

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

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

SECTION IB-44. Figure R403.1(2) of Volume IB of the Glendale Building and Safety Code, 2017, regarding permanent wood foundation basement wall section, is hereby repealed.

SECTION IB-45. Figure R403.1(3) of Volume IB of the Glendale Building and Safety Code, 2017, regarding permanent wood foundation crawl space section, is hereby repealed.

SECTION IB-46. Section R403.1.3.6 of Volume IB of the Glendale Building and Safety Code, 2017, regarding use of plain concrete for isolated concrete footings, is hereby repealed.

R403.1.3.6 Isolated concrete footings. In detached one—and two-family dwellings that are three stories or less in height and constructed with stud bearing walls, isolated plain concrete footings supporting columns or pedestals are permitted.

SECTION IB-47. Section R403.1.5 of Volume IB of the Glendale Building and Safety Code, 2017, is hereby amended to read as follows:

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 or 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.

RECOMMEND: a > b
b \leq 2'0"

MIN. 2-#4 REBAR (TOP & BOTTOM)

BOTTOM PLATE (TYP.)

GRADE

STEPPED FOUNDATIONS

FIGURE R403.1.5 STEPPED FOOTING

SECTION IB-48. Section R404.2 of Volume IB of the Glendale Building and Safety Code, 2017, regarding wood foundation walls, is hereby repealed.

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).

R404.2.1 Identification. Load-bearing lumber shall be identified by the grade mark of a lumber grading or inspection agency which has been approved by an accreditation body that complies with DOC PS 20. In lieu of a grade mark, a certificate of inspection issued by a lumber grading or inspection agency meeting the requirements of this section shall be accepted. Wood structural panels shall conform to DOC PS 1 or DOC PS 2 and shall be identified by a grade mark or certificate of inspection issued by an approved agency.

R404.2.2 Stud size. The studs used in foundation walls shall be 2-inch by 6-inch (51 mm by 152 mm) members. When spaced 16 inches (406 mm) on center, a wood species with an F_b-value of not less than 1,250 pounds per square inch (8619 kPa) as listed in AF&PA/NDS shall be used. When spaced 12 inches (305 mm) on center, an F_b of not less than 875 psi (6033 kPa) shall be required.

R404.2.3 Height of backfill. For wood foundations that are not designed and installed in accordance with AWC PWF, the height of backfill against a foundation wall shall not exceed 4 feet (1219 mm). When the height of fill is more than 12 inches (305 mm) above the interior grade of a crawl space or floor of a *basement*, the thickness of the plywood sheathing shall meet the requirements of Table R404.2.3.

R404.2.4 Backfilling. Wood foundation walls shall not be backfilled until the basement floor and first floor have been constructed or the walls have been braced. For crawl space construction, backfill or bracing shall be installed on the interior of the walls prior to placing backfill on the exterior.

R404.2.5 Drainage and dampproofing. Wood foundation basements shall be drained and dampproofed in accordance with Sections R405 and R406, respectively.

R404.2.6 Fastening. Wood structural panel foundation wall sheathing shall be attached to framing in accordance with Table R602.3(1) and Section R402.1.1.

SECTION IB-49. Table R404.2.3 of Volume IB of the Glendale Building and Safety Code, 2017, regarding plywood grade and thickness of wood foundation construction, is hereby repealed.

SECTION IB-50. Section R501.1 of Volume IB of the Glendale Building and Safety Code, 2017, is hereby amended to read as follows:

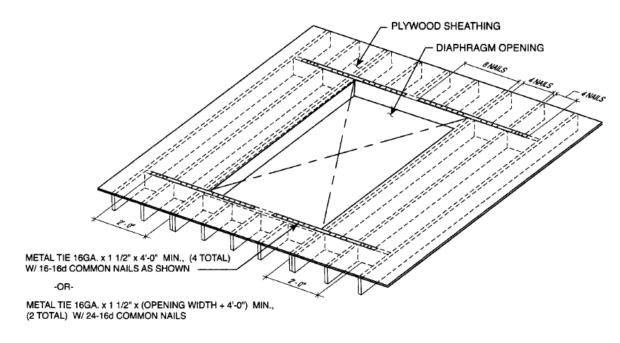
R501.1 Application. The provisions of this chapter shall control the design and construction of the floors for buildings, including the floors of attic spaces used to house mechanical or plumbing fixtures and equipment. Mechanical or plumbing fixtures and equipment shall be attached (or anchored) to the structure in accordance with Section R301.2.2.3.8

SECTION IB-51. Section R503.2.4 of Volume IB of the Glendale Building and Safety Code, 2017, is hereby added 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.

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SECTION IB-52. Figure R503.2.4 of Volume IB of the Glendale Building and Safety Code, 2017, is hereby added as follows:



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

FIGURE R503.2.4

OPENINGS IN HORIZONTAL DIAPHRAGMS

- a. <u>Blockings shall be provided beyond headers.</u>
- b. Metal ties not less than 0.058 inch [1.47 mm (16 galvanized gage)] by 1.5 inches

 (38 mm) wide with eight 16d common nails on each side of the header-joist

 intersection. The metal ties shall have a minimum yield of 33,000 psi (227 MPa).
- Openings in diaphragms shall be further limited in accordance with Section R301.2.2.2.5.

SECTION IB-53. Section R503.3 of Volume IB of the Glendale Building and Safety Code, 2017, regarding particleboard, is hereby repealed.

R503.3 Particleboard.

R503.3.1 Identification and grade. Particleboard shall conform to ANSI A208.1 and shall be so identified by a grade mark or certificate of inspection issued by an approved agency.

R503.3.2 Floor underlayment. Particleboard floor underlayment shall conform to Type PBU and shall not be less than 1/4 inch (6.4 mm) in thickness.

R503.3.3 Installation. Particleboard underlayment shall be installed in accordance with the recommendations of the manufacturer and attached to framing in accordance with Table R602.3(l).

SECTION IB-54. Section R602.3.2 of Volume IB of the Glendale Building and Safety Code, 2017, is hereby amended to read as follows:

R602.3.2 Top plate. Wood stud walls shall be capped with a double top plate installed to provide overlapping at corners and intersections with bearing partitions. End joints in top plates shall be offset at least 24 inches (610 mm). Joints in plates need not occur over studs. Plates shall be not less than 2-inches (51 mm) nominal thickness and have a width at least equal to the width of the studs.

Exception: In other than Seismic Design Category D_0 , D_1 or D_2 , a 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 in-line 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 (25mm).
- 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.

SECTION IB-55. Table R602.3.2 of Volume IB of the Glendale Building and Safety Code, 2017, is hereby amended to read as follows:

TABLE R602.3.2 SINGLE TOP-PLATE SPLICE CONNECTION DETAILS

	TOP-PLATE SPLICE LOCATION					
CONDITION	Corners and in	ersecting walls	Butt joints in straight walls			
	Splice plate size	Minimum nails each side of joint	Splice plate size	Minimum nails each side of joint		
Structures in SDC A-C; and in SDC D_0 , D_1 and D_2 with braced wall line spacing less than 25 feet	3" × 6" × 0.036" galvanized steel plate or equivalent	(6) 8d box $(2^{1}/_{2}^{"} \times 0.113")$ nails	3' × 12" × 0.036" galvanized steel plate or equivalent	(12) 8d box $(2^{1}/_{2}^{"} \times 0.113^{"})$ nails		
Structures in SDC D_0 , D_1 and D_2 , with braced wall line spacing greater than or equal to 25 feet	3" × 8" by 0.036" galvanized steel plate or equivalent	$\frac{(9) \text{ 8d box}}{(2^{1} + 2^{2}) \times 0.113^{2}}$ nails	3' × 16" × 0.036" galvanized steel plate or equivalent	(18) 8d box (2 ¹ / ₂ " × 0.113") nails		

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

SECTION IB-56. Table R602.3(1) of Volume IB of the Glendale Building and Safety Code, 2017, is hereby amended to read as follows:

(TABLE ON FOLLOWING PAGE)

TABLE R602.3(1) FASTENING SCHEDULE

	FASIE	NING SCHEDULE	Ţ		
ITEM	DESCRIPTION OF BUILDING ELEMENTS	OF FASTENER®, b, c	SPACING AND LOCATION		
		Roof			
1	Blocking between ceiling joists or rafters to top plate	4-8d box $(2^1/_2" \times 0.113")$ or 3-8d common $(2^1/_2" \times 0.131")$; or 3-10d box $(3" \times 0.128")$; or 3-3" $\times 0.131"$ nails	Toe nail		
2	Ceiling joists to top plate	4-8d box $(2^{1}/_{2}" \times 0.113")$; or 3-8d common $(2^{1}/_{2}" \times 0.131")$; or 3-10d box $(3" \times 0.128")$; or 3-3" $\times 0.131"$ nails	Per joist, toe nail		
3	Ceiling joist not attached to parallel rafter, laps over partitions [see Sections R802.3.1, R802.3.2 and Table R802.5.1(9)]	4-10d box (3" × 0.128"); or 3-16d common (3 ¹ / ₂ " × 0.162"); or 4-3" × 0.131" nails	Face nail		
4	Ceiling joist attached to parallel rafter (heel joint) [see Sections R802.3.1 and R802.3.2 and Table R802.5.1(9)]	Table R802.5.1(9)	Face nail		
5	Collar tie to rafter, face nail or $1^1/4'' \times 20$ ga. ridge strap to rafter	4-10d box (3" × 0.128"); or 3-10d common (3" × 0.148"); or 4-3" × 0.131" nails	Face nail each rafter		
6	Rafter or roof truss to plate	3-16d box nails (3 ¹ / ₂ "×0.135"); or 3-10d common nails (3"×0.148"); or 4-10d box (3"×0.128"); or 4-3"×0.131" nails	2 toe nails on one side and 1 toe nai on opposite side of each rafter or truss ¹		
7	Roof rafters to ridge, valley or hip rafters or roof rafter	4-16d $(3^{1}/_{2}" \times 0.135")$; or 3-10d common $(3^{1}/_{2}" \times 0.148")$; or 4-10d box $(3" \times 0.128")$; or 4-3" $\times 0.131$ " nails			
	to minimum 2" ridge beam	3-16d box 3 ¹ / ₂ " × 0.135"); or 2-16d common (3 ¹ / ₂ " × 0.162"); or 3-10d box (3" × 0.128"); or 3-3" × 0.131" nails	End nail		
		Wall			
		16d common $(3^1/_2" \times 0.162")$	24" o.c. face nail		
8	Stud to stud (not at braced wall panels)	10d box (3" × 0.128"); or 3" × 0.131" nails	16" o.c. face nail		
9	Stud to stud and abutting studs at intersecting wall corners (at braced wall panels)	16d box (3 ¹ / ₂ " × 0.135"); or 3" × 0.131" nails	12" o.c. face nail		
	(at oraced wan paners)	16d common (3 ¹ / ₂ " × 0.162")	16" o.c. face nail		
10	Built-up header (2" to 2" header with 1/2" spacer)	16d common (3 ¹ / ₂ " × 0.162")	16" o.c. each edge face nail		
10	Bunt-up header (2 to 2 header with 72 spacer)	$16d \text{ box } (3^{1}/_{2}" \times 0.135")$	12" o.c. each edge face nail		
11	Continuous header to stud	5-8d box (2 ¹ / ₂ " × 0.113"); or 4-8d common (2 ¹ / ₂ " × 0.131"); or 4-10d box (3" × 0.128")	Toe nail		
		16d common (3 ¹ / ₂ " × 0.162")	16" o.c. face nail		
12	Top plate to top plate	10d box (3" × 0.128"); or 3" × 0.131" nails	12" o.c. face nail		
13	Double top plate splice for SDCs A-D $_2$ with seismic braced wall line spacing < 25'	8-16d common (3 ¹ / ₂ " × 0.162"); or 12-16d box (3 ¹ / ₂ " × 0.135"); or 12-10d box (3" × 0.128"); or 12-3" × 0.131" nails	Face nail on each side of end joint (minimum 24" lap splice length each side of end joint)		
	Double top plate splice SDCs D_0 , D_1 , or D_2 ; and braced wall line spacing $\geq 25'$	12-16d (3 ¹ / ₂ " × 0.135")	- cach side of end joint)		

(continued)

TABLE R602.3(1)—continued FASTENING SCHEDULE

ITEM	DESCRIPTION OF BUILDING ELEMENTS	NUMBER AND TYPE OF FASTENER®, B, C	SPACING AND LOCATION
		16d common (3 ¹ / ₂ " × 0.162")	16" o.c. face nail
14	Bottom plate to joist, rim joist, band joist or blocking (not at braced wall panels)	16d box (3 ¹ / ₂ " × 0.135"); or 3" × 0.131" nails	12" o.c. face nail
15	Bottom plate to joist, rim joist, band joist or blocking (at braced wall panel)	3-16d box (3 ¹ / ₂ " × 0.135"); or 2-16d common (3 ¹ / ₂ " × 0.162"); or 4-3" × 0.131" nails	3 each 16" o.c. face nail 2 each 16" o.c. face nail 4 each 16" o.c. face nail
16	Top or bottom plate to stud	4-8d box $(2^1/," \times 0.113")$; or 3-16d box $(3^1/," \times 0.135")$; or 4-8d common $(2^1/," \times 0.131")$; or 4-10d box $(3" \times 0.128")$; or 4-3" $\times 0.131"$ nails	Toe nail
		3-16d box $(3^{1}/_{2}" \times 0.135")$; or 2-16d common $(3^{1}/_{2}" \times 0.162")$; or 3-10d box $(3" \times 0.128")$; or 3-3" \times 0.131" nails	End nail
17	Top plates, laps at corners and intersections	3-10d box $(3" \times 0.128")$; or 2-16d common $(3^{1}/_{2}" \times 0.162")$; or 3-3" × 0.131" nails	Face nail
18	1" brace to each stud and plate	3-8d box $(2^1/_2" \times 0.113")$; or 2-8d common $(2^1/_2" \times 0.131")$; or 2-10d box $(3" \times 0.128")$; or 2 staples $1^3/_4"$	Face nail
19	$1" \times 6"$ sheathing to each bearing	3-8d box $(2^1/_2" \times 0.113")$; or 2-8d common $(2^1/_2" \times 0.131")$; or 2-10d box $(3" \times 0.128")$; or 2 staples, 1" crown, 16 ga., $1^3/_4$ " long	Face nail
20	$1'' \times 8''$ and wider sheathing to each bearing	3-8d box $(2^{1}/_{2}" \times 0.113")$; or 3-8d common $(2^{1}/_{2}" \times 0.131")$; or 3-10d box $(3" \times 0.128")$; or 3 staples, 1" crown, 16 ga., $1^{3}/_{4}$ " long Wider than $1" \times 8"$ 4-8d box $(2^{1}/_{2}" \times 0.113")$; or 3-8d common $(2^{1}/_{2}" \times 0.131")$; or	Face nail
		3-10d box (3" × 0.128"); or 4 staples, 1" crown, 16 ga., 1 ³ / ₄ " long	
		Floor	
21	Joist to sill, top plate or girder	4-8d box $(2^1/_2" \times 0.113")$; or 3-8d common $(2^1/_2" \times 0.131")$; or 3-10d box $(3" \times 0.128")$; or 3-3" \times 0.131" nails	Toe nail
		8d box (2 ¹ / ₂ " × 0.113")	4" o.c. toe nail
22	Rim joist, band joist or blocking to sill or top plate (roof applications also)	8d common (2 ¹ / ₂ "× 0.131"); or 10d box (3"× 0.128"); or 3"× 0.131" nails	6" o.c. toe nail
23	1"×6" subfloor or less to each joist	3-8d box $(2^1/_2" \times 0.113")$; or 2-8d common $(2^1/_2" \times 0.131")$; or 3-10d box $(3" \times 0.128")$; or 2 staples, 1" crown, 16 ga., $1^3/_4$ " long	Face nail

(continued)

TABLE 602.3(1) FASTENING SCHEDULE—continued

ITEM	DESCRIPTION OF BUILDING ELEMENTS	NUMBER AND TYPE OF FASTENER ^{a, b, c}	SPACING AND	LOCATION		
		Floor				
24	2" subfloor to joist or girder	3-16d box (3 ¹ / ₂ "× 0.135 "); or 2-16d common (3 ¹ / ₂ "× 0.162 ")	Blind and	face nail		
25	2 "planks (plank & beam—floor & roof)	3-16d box (3 ¹ / ₂ "× 0.135 "); or 2-16d common (3 ¹ / ₂ "× 0.162 ")	At each beari	ng, face nail		
26	Band or rim joist to joist	3-16d common (3 ¹ / ₂ "× 0.162") 4-10 box (3 "× 0.128"), or 4-3 "× 0.131 "nails; or 4-3 "× 14 ga. staples, ⁷ / ₁₆ "crown	End i	nail		
		20d common (4 "× 0.192"); or	Nail each layer as f at top and bottom a	ollows: 32 " o.c. nd staggered.		
27	Built-up girders and beams, 2-inch lumber	10d box (3 "× 0.128"); or 3 "× 0.131 "nails	24 "o.c. face nail at staggered on oppos	top and bottom ite sides		
2.	layers	And: 2-20d common (4 "× 0.192"); or 3-10d box (3 "× 0.128"); or 3-3 "× 0.131 "nails	Face nail at ends an	nd at each splice		
28	Ledger strip supporting joists or rafters	4-16d box (3 ¹ / ₂ "× 0.135"); or 3-16d common (3 ¹ / ₂ "× 0.162"); or 4-10d box (3 "× 0.128"); or 4-3 "× 0.131 "nails	At each joist or 1	after, face nail		
29	Bridging to joist	2-10d (3 "× 0.128")	Each end,	toe nail		
			SPACING OF FASTENERS			
ITEM	DESCRIPTION OF BUILDING ELEMENTS	NUMBER AND TYPE OF FASTENER ^{a, b, c}	Edges (inches) ^h	Intermediate supports ^{c, e} (inches)		
	Wood structural panels, subfloor, roof an [see Table R602.3(3) for	d interior wall sheathing to framing and particleboard v wood structural panel <i>exterior</i> wall sheathing to wall fr	vall sheathing to frami raming]	ng		
	3/8 "_ 1/2 "	6d common (2 " \times 0.113 ") nail (subfloor, wall) ⁱ 8d common (2 ¹ / ₂ " \times 0.131 ") nail (roof)	6	12 ^f		
31	¹⁹ / ₃₂ "-1"	8d common nail $(2^{1}/_{2}" \times 0.131")$	6	12 ^f		
32	11/8 " - 11/4 "	10d common (3 " \times 0.148 ") nail; or 8d ($2^{1}/_{2}$ " \times 0.131 ") deformed nail	6	12		
		Other wall sheathing ^g	•	•		
33	1/2 "structural cellulosic fiberboard sheathing	$1^{1}/_{2}$ "galvanized roofing nail, $^{7}/_{16}$ "head diameter, or 1 "crown staple 16 ga., $1^{1}/_{4}$ "long	3	6		
34	²⁵ / ₃₂ "structural cellulosic fiberboard sheathing	$1^{3}/_{4}$ "galvanized roofing nail, $^{7}/_{16}$ "head diameter, or 1 "crown staple 16 ga., $1^{1}/_{4}$ "long	3	6		
35 ¹	¹ / ₂ "gypsum sheathing ^d	$1^{1}/_{2}$ "galvanized roofing nail; staple galvanized, $1^{1}/_{2}$ "long; $1^{1}/_{4}$ "screws, Type W or S	7	7		
36 ^{<u>j</u>}	⁵ / ₈ "gypsum sheathing ^d	$1^{3}/_{4}$ "galvanized roofing nail; staple galvanized, $1^{5}/_{8}$ " long; $1^{5}/_{8}$ " screws, Type W or S	7	7		
Wood structural panels, combination subfloor underlayment to framing						
37	³ / ₄ "and less	6d deformed (2 " \times 0.120 ") nail; or 8d common (2 $^{1}/_{2}$ " \times 0.131 ") nail	6	12		
37	³ / ₄ "and less ⁷ / ₈ "-1"	6d deformed (2 "× 0.120") nail; or 8d common ($2^{1}/_{2}$ "× 0.131") nail 8d common ($2^{1}/_{2}$ "× 0.131") nail; or 8d deformed ($2^{1}/_{2}$ "× 0.120") nail 10d common (3 "× 0.148") nail; or 8d deformed ($2^{1}/_{2}$ "× 0.120") nail	6	12		

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

Notes to Table R602.3(1):

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

- a. Nails are smooth-common, box or deformed shanks except where otherwise stated. Nails used for framing and sheathing connections shall have mini average bending yield strengths as shown: 80 ksi for shank diameter of 0.192 inch (20d common nail), 90 ksi for shank diameters larger than 0.142 inch bi larger than 0.177 inch, and 100 ksi for shank diameters of 0.142 inch or less.
- b. Staples are 16 gage wire and have a minimum $\frac{7}{16}$ -inch on diameter crown width.
- c. Nails shall be spaced at not more than 6 inches on center at all supports where spans are 48 inches or greater.
- d. Four-foot-by-8-foot or 4-foot-by-9-foot panels shall be applied vertically.
- e. Spacing of fasteners not included in this table shall be based on Table R602.3(2).
- f. Where the ultimate design wind speed is 130 mph or less, nails for attaching wood structural panel roof sheathing to gable end wall framing shall be spaced 6 inches on center. Where the ultimate design wind speed is greater than 130 mph, nails for attaching panel roof sheathing to intermediate supports shall be spaced 6 inches on center for minimum 48-inch distance from ridges, eaves and gable end walls; and 4 inches on center to gable end wall framing.
- g. Gypsum sheathing shall conform to ASTM C1396 and shall be installed in accordance with GA 253. Fiberboard sheathing shall conform to ASTM C208. Fiberboard sheathing shall conform to ASTM C 208.
- h. Spacing of fasteners on floor sheathing panel edges applies to panel edges supported

by framing members and required blocking and at floor perimeters only. Spacing of fasteners on roof sheathing panel edges applies to panel edges supported by framing members and required blocking. Blocking of roof or floor sheathing panel edges perpendicular to the framing members need not be provided except as required by other provisions of this code. Floor perimeter shall be supported by framing members or solid blocking.

- i. Where a rafter is fastened to an adjacent parallel ceiling joist in accordance with this schedule, provide two toe nails on one side of the rafter and toe nails from the ceiling joist to top plate in accordance with this schedule. The toe nail on the opposite side of the rafter shall not be required.
- j. Use of staples in braced wall panels shall be prohibited in Seismic Design Category $\underline{D}_0, \underline{D}_1, \text{ or } \underline{D}_2$.

SECTION IB-57. Table R602.3(2) of Volume IB of the Glendale Building and Safety Code, 2017, is hereby amended to read as follows:

(TABLE ON FOLLOWING PAGE)

TABLE R602.3(2) ALTERNATE ATTACHMENTS TO TABLE R602.3(1)

NOMINAL		SPACING° (OF FASTENERS
MATERIAL			INTERMEDIATE
THICKNESS	DESCRIPTION ^{a, b} OF FASTENER	EDGES	SUPPORTS
(inches)	AND LENGTH (inches)	(inches)	(inches)
Wood structural	panels subfloor, roof ^g and wall sheathing	g to framing and ∣	particleboard wall
	sheathing to framing ^f		
Up to 1/2	0.097-0.099 Nail 2 1/4	3	6
19/32 and 5/8	0.113 Nail 2	3	6
	0.097- 0.099 Nail 2 1/4	4	8
23/32 and ³ / ₄	0.097-0.099 Nail 2 1/4	4	8
1	0.113 Nail 2 1/4	3	6
1	0.097-0.099 Nail 2 1/2	4	8
NOMINAL		SPACING° C	F FASTENERS
MATERIAL			
THICKNESS	DESCRIPTION a, b OF FASTENER AND	Edges	Body of panel d
(inches)	LENGTH (inches)	(inches)	(inches)
Floor	underlayment; plywood-hardboard- partic	leboard †-fiber-ceı	ment ^h
	Fiber-cement		
	3d, corrosion resistant, ring shank nails		
	(finished flooring other than tile)	3	6
	Staple 18 ga., 7/8 long, 1/4 crown (finished		
	flooring other than tile)	3	6
1/4	1 ¹ / ₄ long x .121 shank x .375 head diameter		
	corrosion resistant (galvanized or stainless		
	steel) roofing nails (for tile finish)	8	8
	1 ¹ / ₄ long, No. 8 x .375 head diameter,		
	ribbed wafer-head screws (for tile finish)	8	8
	Plywood		
	1 1/4 ring or screw shank nail -minimum		
	12 1/2 ga. (0.099") shank diameter	3	6
1/4 and 5/16	Staple 18 ga., 7/8, 3/16 crown width	2	5
11/32, 3/8, 15/32, and	1 1/4 ring or screw shank nail -minimum		
1/2	12 1/2 ga. (0.99") shank diameter	6	8 ^e
	1 1/2 ring or screw shank nail-minimum		
19/32, 5/8, 23/32 and	12 1/2 ga (0.099") shank diameter	6	8
3/4	Staple 16 ga. 1 1/2	6	8
	Hardboard ^f		
	1 1/2 long ring-grooved underlayment nail	6	6
	4d cement-coated sinker nail	6	6
0.200	Staple 18 ga., 7/8 long (plastic coated)	3	6

Notes to Table R602.3(2):

For SI: 1 inch =25.4 mm

- a. Nail is a general description and may be T-head, modified round head or round head.
- b. Staples shall have a minimum crown width of 7/16-inch on diameter except as noted. Use of staples in roof, floor, subfloor, and braced wall panels shall be prohibited in Seismic Design Category D₀, D₁, or D₂.
- c. Nails or staples shall be spaced at not more than 6 inches on center at all supports where spans are 48 inches or greater. Nails or staples shall be spaced at not more than 12 inches on center at intermediate supports for floors.
- d. Fasteners shall be placed in a grid pattern throughout the body of the panel.
- e. For 5-ply panels, intermediate nails shall be spaced not more than 2 inches on center each way.
- f. Hardboard underlayment shall conform to ANSI/AHA A135.4.
- g. Specified alternate attachments for roof sheathing shall be permitted where the ultimate design wind speed is less than 130 mph. fasteners attaching wood structural panel roof sheathing to gable end wall framing shall be installed using the spacing listed for panel edges.
- h. Fiber-cement underlayment shall conform to ASTM C1288 or ISO 8336,
 Category C.

SECTION IB-58. Section R602.10.2.3 of Volume IB of the Glendale Building and Safety Code, 2017, is hereby amended to read as follows:

R602.10.2.3 Minimum number of braced wall panels. Braced wall lines with a length of 16 feet (4877 mm) or less shall have a minimum of two braced wall panels of any length or one braced wall panel equal to 48 inches (1219 mm) or more. Braced wall lines greater than 16 feet (4877 mm) shall have a minimum of two braced wall panels. No braced wall panel shall be less than 48 inches in length in Seismic Design Category D_0 , D_1 , or D_2 .

SECTION IB-59. TABLE R602.10.3(3) of Volume IB of the Glendale Building

and Safety Code, 2017, is hereby amended to read as follows:

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

SOIL CLASS D ^b WALL HEIGHT = 10 FEET 10 PSF FLOOR DEAD LOAD 15 PSF ROOF/CEILING DEAD LOAD BRACED WALL LINE SPACING ≤ 25 FEET			MINIMUM TOTAL LENGTH (FEET) OF BRACED WALL PANELS REQUIRED ALONG EACH BRACED WALL LINE [®]					
Seismic Design Category	Story Location	Braced Wall Line Length (feet)	Method LIB°	Method GB ^e	Methods DWB, SFB, PBS, PCP, HPS, CS-SFB	Method WSP	Methods CS-WSP, CS-G	
		10	2.5	2.5	2.5	1.6	1.4	
	. \triangle	20	5.0	5.0	5.0	3.2	2.7	
	$\wedge \triangle \Box$	30	7.5	7.5	7.5	4.8	4.1	
		40	10.0	10.0	10.0	6.4	5.4	
		50	12.5	12.5	12.5	8.0	6.8	
		10	NP	4.5	4.5	3.0	2.6	
	. \triangle	20	NP	9.0	9.0	6.0	5.1	
C (townhouses only)	\triangle	30	NP	13.5	13.5	9.0	7.7	
(townhouses only)		40	NP	18.0	18.0	12.0	10.2	
		50	NP	22.5	22.5	15.0	12.8	
		10	NP	6.0	6.0	4.5	3.8	
		20	NP	12.0	12.0	9.0	7.7	
		30	NP	18.0	18.0	13.5	11.5	
		40	NP	24.0	24.0	18.0	15.3	
		50	NP	30.0	30.0	22.5	19.1	
		10	NP	2.8 <u>5.6</u>	-2.8- <u>5.6</u>	1.8	1.6	
		20	NP	-5.5- 11.0	-5.5 - <u>11.0</u>	3.6	3.1	
	$\wedge \triangle \Box$	30	NP	- 8.3 - 16.6	8.3 16.6	5.4	4.6	
		40	NP	-11.0 -22.0	11.0 -22.0	7.2	6.1	
		50	NP	13.8 <u>27.6</u>	13.8 <u>27.6</u>	9.0	7.7	
		10	NP	-5.3 NP	-5.3 <u>NP</u>	3.8	3.2	
	. \triangle	20	NP	- <u>10.5</u> - NP	10.5 - NP	7.5	6.4	
D_0	$\triangle \vdash$	30	NP	- <u>15.8</u> - <u>NP</u>	15.8 NP	11.3	9.6	
		40	NP	-21.0 NP	21.0 <u>NP</u>	15.0	12.8	
		50	NP	-26.3- NP	-26.3 – <u>NP</u>	18.8	16.0	
		10	NP	-7.3- NP	7.3 <u>NP</u>	5.3	4.5	
	\triangle	20	NP	-14.5 NP	14.5 <u>NP</u>	10.5	9.0	
	\vdash	30	NP	21.8 NP	-21.8 NP	15.8	13.4	
		40	NP	-29.0- NP	-29.0- NP	21.0	17.9	
		50	NP	36.3 NP	-36.3 NP	26.3	22.3	

(continued)

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

- SOIL CLASS D^b
- WALL HEIGHT = 10 FEET
- 10 PSF FLOOR DEAD LOAD
- 15 PSF ROOF/CEILING DEAD LOAD
 BRACED WALL LINE SPACING ≤ 25 FEET

MINIMUM TOTAL LENGTH (FEET) OF BRACED WALL PANELS REQUIRED ALONG EACH BRACED WALL LINE⁸

Seismic Design Category	Story Location	Braced Wall Line Length (feet) ^c	Method LIB ^d	Method GB ^f	Methods DWB, SFB, PBS, PCP, HPS, CS- SFB ^Q	Method WSP	Methods CS-WSP, CS-G
		10	NP	3.0 <u>6.0</u>	3.0 <u>6.0</u>	2.0	1.7
		20	NP	6.0 <u>12.0</u>	6.0 <u>12.0</u>	4.0	3.4
		30	NP	9.0 <u>18.0</u>	9.0 <u>18.0</u>	6.0	5.1
		40	NP	12.0 <u>24.0</u>	12.0 <u>24.0</u>	8.0	6.8
		50	NP	15.0 30.0	15.0 <u>30.0</u>	10.0	8.5
	\wedge	10	NP	6.0 <u>NP</u>	6.0 <u>NP</u>	4.5	3.8
		20	NP	12.0 <u>NP</u>	12.0 <u>NP</u>	9.0	7.7
D_1		30	NP	18.0 <u>NP</u>	<u>18.0 NP</u>	13.5	11.5
		40	NP	24.0 <u>NP</u>	24.0 <u>NP</u>	18.0	15.3
		50	NP	30.0 NP	30.0 <u>NP</u>	22.5	19.1
	^	10	NP	8.5 <u>NP</u>	8.5 <u>NP</u>	6.0	5.1
		20	NP	17.0 <u>NP</u>	17.0 NP	12.0	10.2
	I H	30	NP	25.5 <u>NP</u>	25.5 <u>NP</u>	18.0	15.3
		40	NP	34.0 <u>NP</u>	34.0 <u>NP</u>	24.0	20.4
		50	NP	42.5 <u>NP</u>	42.5 <u>NP</u>	30.0	25.5
		10	NP	4.0 <u>8.0</u>	4.0- <u>8.0</u>	2.5	2.1
		20	NP	8 .0 - 16.0	8 .0 - <u>16.0</u>	5.0	4.3
		30	NP	1 2.0 24.0	1 2.0 -24.0	7.5	6.4
		40	NP	1 6.0 32.0	1 6.0 32.0	10.0	8.5
		50	NP	2 0.0 - 40.0	2 0.0 -40.0	12.5	10.6
		10	NP	7.5 <u>NP</u>	7.5 <u>NP</u>	5.5	4.7
		20	NP	15.0 <u>NP</u>	15.0 NP	11.0	9.4
		30	NP	22.5 NP	22.5 NP	16.5	14.0
		40	NP	30.0 NP	30.0 <u>NP</u>	22.0	18.7
D_2		50	NP	37.5 <u>NP</u>	37.5 <u>NP</u>	27.5	23.4
	_	10	NP	NP	NP	NP	NP
		20	NP	NP	NP	NP	NP
	I H	30	NP	NP	NP	NP	NP
		40	NP	NP	NP	NP	NP
		50	NP	NP	NP	NP	NP
		10	NP	NP	NP	7.5	6.4
	Colomba con 11 h al con	20	NP	NP	NP	15.0	12.8
	Cripple wall below one- or two-story dwelling	30	NP	NP	NP	22.5	19.1
	300, 400	40	NP	NP	NP	30.0	25.5
		50	NP	NP	NP	37.5	31.9

a. Linear interpolation shall be permitted.

b. Wall bracing lengths are based on a soil site class "D." Interpolation of bracing length between the S_{da} values associated with the seismic design categories shall be permitted when a site-specific S_{da} value is determined in accordance with Section 1613.3 of the International Building Code.

c. Where the braced wall line length is greater than 50 feet, braced wall lines shall be permitted to be divided into shorter segments having lengths of 50 feet or less, and the amount of bracing within each segment shall be in accordance with this table.

d. Method LIB shall have gypsum board fastened to not less than one side with nails or screws in accordance with Table R602.3(1) for exterior sheathing or Table R702.3.5 for interior gypsum board. Spacing of fasteners at panel edges shall not exceed 8 inches.

e. Method CS-SFB does not apply in Seismic Design Categories D_0 , D_1 and D_2 .

<u>f.</u> Methods GB and PCP braced wall panel h/w ratio shall not exceed 1:1 in SDC D₀, D₁ or D₂. Methods DWB, SFB, PBS, and HPS are not permitted in SDC D₀, D₁ or D₂.

SECTION IB-60. TABLE R602.10.4 of Volume IB of the Glendale Building

and Safety Code, 2017, is hereby amended to read as follows:

TABLE R602.10.4 BRACING METHODS ¹

			BRACING METH	CONNECTION CRITERIA ^a			
ME	THODS, MATERIAL	MINIMUM THICKNESS	FIGURE	Fasteners	Spacing		
	LIB Let-in-bracing	1 × 4 wood or approved metal straps at 45° to 60° angles for		Wood: 2-8d common nails or 3-8d (2 ¹ / ₂ " long x 0.113" dia.) nails	Wood: per stud and top and bottom plates		
	net in brueing	maximum 16" stud spacing		Metal strap: per manufacturer	Metal: per manufacturer		
	DWB Diagonal wood boards	3/4"(1" nominal) for maximum 24" stud spacing		2-8d (2 ¹ / ₂ " long × 0.113" dia.) nails or 2 - 1 ³ / ₄ " long staples	Per stud		
	WSP Wood	31."	8d common (2 1/2"x0.1	anel edge Table R602.3(3)	6" edges 12" field		
	structural panel (See Section R604)	<u>15/32"</u>	8d common (2.1/2"v0.131)	nails Interior sheathing per edge Table R602.3(1) or R602.3(2)	Varies by fastener 6" edges 12" field		
ethod	BV-WSP ^t Wood Structural Panels with Stone or Masonry Veneer (See Section R602.10.6.5)	7 ₁₆ "	See Figure R602.10.6.5	8d common (2 ¹ / ₂ " × 0.131) nails	4" at panel edges 12" at intermediate supports 4" at braced wall panel end posts		
Intermittent Bracing Method	SFB Structural fiberboard sheath- ing	¹ / ₂ " or ²⁵ / ₃₂ " for maximum 16" stud spacing		$1^1 l_2$ " long × 0.12" dia. (for $^1 l_2$ " thick sheathing) $1^3 l_4$ " long × 0.12" dia. (for $^{25} l_{32}$ " thick sheathing) galvanized roofing nails or 8d common ($2^1 l_2$ " long × 0.131" dia.) nails	3" edges 6" field		
ntermit	GB	1		Nails or screws per Table R602.3(1) for exterior locations	For all braced wall panel locations: 7"		
1	Gypsum board	1/2"		Nails or screws per Table R702.3.5 for interior locations	edges (including top and bottom plates) 7" field		
	PBS Particleboard sheathing (See Section R605)	3/8" or 1/2" for maximum 16" stud spacing		For ½, ", 6d common —(2" long × 0.113" dia.) nails —For ½,", 8d common —(2½," long × 0.131" dia.) nails	-3" edges 6" field		
	PCP Portland cement plaster	See Section R703.6 for maximum 16" stud spacing		1 ¹ / ₂ " long, 11 gage, ⁷ / ₁₆ " dia. head nails or ⁷ / ₈ " long, 16 gage staples ⁹	6" o.c. on all framing members		
	HPS Hardboard panel siding	⁷ / ₁₆ " for maximum 16" stud spacing		0.092" dia., 0.225" dia. head nails with length to accommodate 1 ¹ / ₂ " penetration into studs	4" edges 8" field		
	ABW Alternate braced wall	3/ ₈ "		See Section R602.10.6.1	See Section R602.10.6.1		

(continued)

TABLE R602.10.4—continued BRACING METHODS ¹

Γ.	METUODO MATERIAL MINIMUM TURO		THODS, MATERIAL MINIMUM THICKNESS FIGURE		CONNECTION CRITERIA ³			
	METHODS, MATERIAL	MINIMUM THICKNESS	FIGURE	Fasteners	Spacing			
g Methods	PFH Portal frame with hold-downs	³/ ₈ ″		See Section R602.10.6.2	See Section R602.10.6.2			
Intermittent Bracing Methods	PFG Portal frame at garage	7/ ₁₆ "	with a the	See Section R602.10.6.3	See Section R602.10.6.3			
	CS-WSP Continuously sheathed	-3/ ₈ "-	8d common (2 1/2"x0.131) i 3/8" edge distance to panel	nails Exterior sheathing peredge Table R602.3(3)	6" edges 12" field			
	wood structural panel	80	common (2 1/2"x0.131) nails 3" edge distance to panel edg	Interior sheathing per- Table R602.3(1) or R602.3(2)	Varies by fastener 6" edges 12" field ——			
Continuous Sheathing Methods	CS-G ^{3, c} Continuously sheathed wood structural panel adjacent to garage openings	-3/₈"- 15/32"		See Method CS-WSP	See Method CS-WSP			
ious Shea	CS-PF Continuously sheathed portal frame	- ⁷ / ₁₆ 15/32"		See Section R602.10.6.4	See Section R602.10.6.4			
Continu	CS-SFB ⁴ Continuously sheathed structural fiberboard	¹ / ₂ " or ²⁵ / ₃₂ " for maximum 16" stud spacing		$1^{1}/_{2}$ " long × 0.12" dia. (for $^{1}/_{2}$ " thick sheathing) $1^{3}/_{4}$ "long × 0.12" dia. (for $^{25}/_{32}$ " thick sheathing) galvanized roofing nails or 8d common $(2^{1}/_{2}$ " long × 0.131" dia.) nails	3" edges 6" field			

For SI: 1 inch = 25.4 mm, 1 foot = 305 mm, 1 degree = 0.0175 rad, 1 pound per square foot = 47.8 N/m², 1 mile per hour = 0.447 m/s.

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

b. Applies to panels next to garage door opening where supporting gable end wall or roof load only. Shall only be used on one wall of the garage. In Seismic Design Categories D₀, D₁ and D₂, roof covering dead load shall not exceed 3 psf.

c. Garage openings adjacent to a Method CS-G panel shall be provided with a header in accordance with Table R602.5(1). A full-height clear opening shall not be permitted adjacent to a Method CS-G panel.

d. Method CS-SFB does not apply in Seismic Design Categories D_0 , D_1 and D_2 .

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

 $[\]underline{\mathbf{f.}} \ \underline{\mathbf{Methods}} \ \underline{\mathbf{GB}} \ \underline{\mathbf{and}} \ \underline{\mathbf{PCP}} \ \underline{\mathbf{braced}} \ \underline{\mathbf{wall}} \ \underline{\mathbf{panel}} \ \underline{\mathbf{h/w}} \ \underline{\mathbf{rate}} \ \underline{\mathbf{not}} \ \underline{\mathbf{CD_0}}, \underline{\mathbf{D_1}}, \ \underline{\mathbf{or}} \ \underline{\mathbf{D_2}}, \underline{\mathbf{Methods}} \ \underline{\mathbf{LIB}}, \underline{\mathbf{DWB}}, \underline{\mathbf{SFB}}, \underline{\mathbf{PBS}}, \underline{\mathbf{HPS}}, \ \underline{\mathbf{and}} \ \underline{\mathbf{PFG}} \ \underline{\mathbf{are}} \ \underline{\mathbf{not}} \ \underline{\mathbf{permitted}} \ \underline{\mathbf{in}} \ \underline{\mathbf{SDC}} \ \underline{\mathbf{D_0}}, \underline{\mathbf{D_1}}, \ \underline{\mathbf{or}} \ \underline{\mathbf{D_2}}, \underline{\mathbf{D_1}}, \underline{\mathbf{or}} \ \underline{\mathbf{D_2}}, \underline{\mathbf{D_2}}$

g. Use of staples in braced wall panels shall be prohibited in SDC D0, D1, or D2.

SECTION IB-61. TABLE R602.10.5 of Volume IA of the Glendale Building

and Safety Code, 2017, is hereby amended to read as follows:

TABLE R602.10.5 MINIMUM LENGTH OF BRACED WALL PANELS

	NGTH OF		MUM LENG (inches)			CONTRIBUTING LENGTH	
	METHOD ible R602.10.4)		1	Wall Height			(inches)
		8 feet	9 feet	10 feet	11 feet	12 feet	
DWB, WSP, SFB, 1	PBS, PCP, HPS, BV-WSP	48	48	48	53	58	Actual ^b
	GB	48	48	48	53	58	Double sided = Actual Single sided = $0.5 \times$ Actual
	LIB	55	62	69	NP	NP	Actual ^b
ABW	SDC A, B and C, ultimate design wind speed < 140 mph	28	32	34	38	42	48
	$\begin{array}{c} \mathrm{SDC}\ \mathrm{D}_0,\ \mathrm{D}_1\ \mathrm{and}\ \mathrm{D}_2,\ \mathrm{ultimate}\\ \mathrm{design}\\ \mathrm{wind}\ \mathrm{speed}<140\ \mathrm{mph} \end{array}$	32	32	34	NP	NP	
PFH	Supporting roof only	16 <u>24</u>	16 <u>24</u>	16 <u>24</u>	18c 24c	20° 24°	48
	Supporting one story and roof	24	24	24	27 ^c	29°	48
PFG		24	27	30	$33_{\rm q}$	36 ^d	1.5 × Actual ^b
CS-G		24	27	30	33	36	Actual ^b
CS-PF	SDC A, B and C	16	18	20	22 ^e	24 ^e	$1.5 \times Actual^b$
C3-1 F	SDC D_0 , D_1 and D_2	16 <u>24</u>	18 <u>24</u>	20 <u>24</u>	22e 24e	24e	Actual ^b
	Adjacent clear opening height (inches)						
	≤ 64	24	27	30	33	36	
	68	26	27	30	33	36	
	72	27	27	30	33	36	
	76	30	29	30	33	36	
	80	32	30	30	33	36	
	84	35	32	32	33	36	
	88	38	35	33	33	36	
	92	43	37	35	35	36	
	96	48	41	38	36	36	
CS-WSP, CS-SFB	100	_	44	40	38	38	
	104	_	49	43	40	39	Actual ^b
	108	_	54	46	43	41	
	112	_	-	50	45	43	
	116	_	_	55	48	45	
	120	_	_	60	52	48	
	124	_		_	56	51	
	128	_	_	_	61	54	
	132	_	_	_	66	58	
	136	_	_	_	_	62	
	140	_	_	_	1—	66	
	144	_	_	_	_	72	

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

NP = Not Permitted.

a. Linear interpolation shall be permitted.

b. Use the actual length where it is greater than or equal to the minimum length.

c. Maximum header height for PFH is 10 feet in accordance with Figure R602.10.6.2, but wall height shall be permitted to be increased to 12 feet with pony wall.

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

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

SECTION IB-62. Figure R602.10.6.1 of Volume IB of the Glendale Building

and Safety Code, 2017, is hereby amended to read as follows:

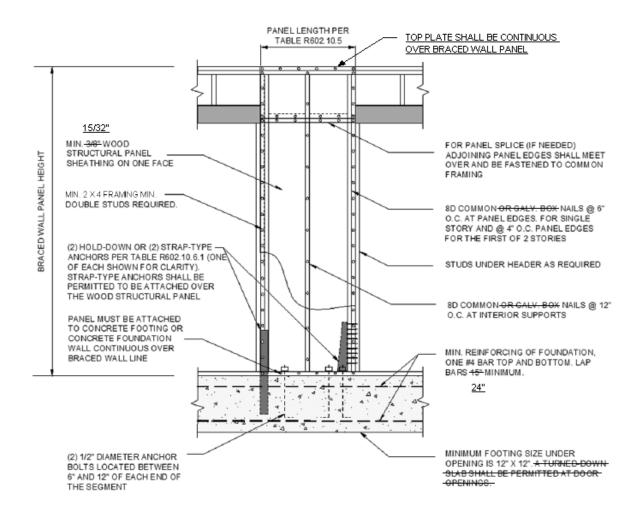
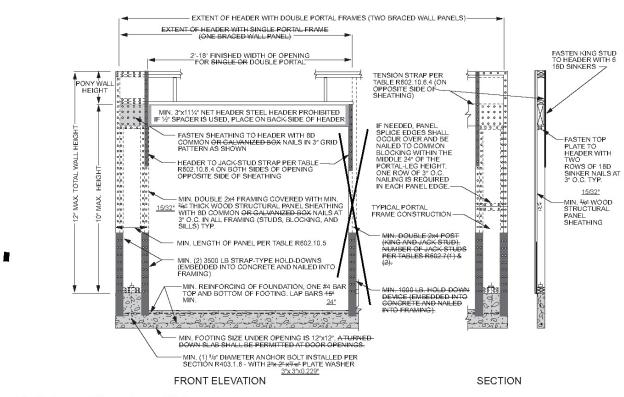


FIGURE R602.10.6.1
METHOD ABW—ALTERNATE BRACED WALL PANEL

SECTION IB-63. Figure R602.10.6.2 of Volume IB of the Glendale Building

and Safety Code, 2017, is hereby amended to read as follows:

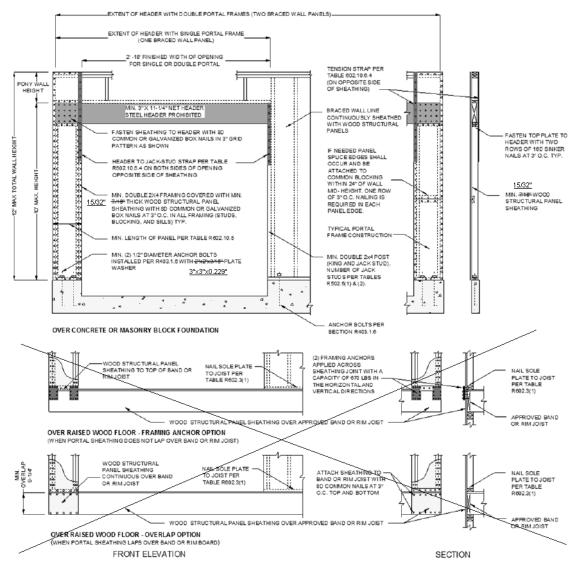


For SI: 1 inch = 25.4 mm, 1 foot = 304.8 mm.

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

SECTION IB-64. Figure R602.10.6.4 of Volume IB of the Glendale Building

and Safety Code, 2017, is hereby amended to read as follows:



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

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

SECTION IB-65. Section R606.4.4 of Volume IB of the Glendale Building and Safety Code, 2017, is hereby amended to read as follows:

R606.4.4 Parapet walls. Unreinforced solid masonry parapet walls shall be not 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 D₀, D₁ or D₂, or on townhouses in Seismic Design Category C shall be reinforced in accordance with Section R606.12.

SECTION IB-66. Section R606.12.2.2.3 of Volume IB of the Glendale Building and Safety Code, 2017, is hereby 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(2)—R606.11(3) and in accordance with the following:

1. Horizontal reinforcement. Horizontal joint reinforcement shall consist of at least two longitudinal W1.7 wires spaced not more than 16 inches (406 mm) for walls greater than 4 inches (102 mm) in width and at least one longitudinal W1.7 wire spaced not more than 16 inches (406 mm) for walls not exceeding 4 inches (102 mm) in width; or at least one No. 4 bar spaced not more than 48 inches (1219 mm). Where two longitudinal wires of joint reinforcement are used, the space between these wires shall be the widest that the mortar joint will accommodate.

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

SECTION IB-67. Section R803.2.4 of Volume IB of the Glendale Building and Safety Code, 2017, is hereby added as follows:

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

SECTION IB-68. Section R902.1 of Volume 1B of the Glendale Building and Safety Code, 2017, is hereby amended to read as follows:

R902.1 Roofing covering materials. Roofs shall be covered with materials as set forth in Sections R904 and R905. A minimum Class A and B or C roofing shall be installed in areas designated by this section or where the edge of the roof is less than 3 feet (914 mm) from a lot line. Class A and B and C roofing required by this section to be listed shall be tested in accordance with UL 790 or ASTM E108. The roof-covering assembly includes the roof deck, underlayment, interlayment, insulation and covering which is assigned a roof covering classification. No wood roof covering material shall be installed. See Section 327 for roofing requirements in Wildland Urban Interface Fire Areas (also known as High Fire Hazard Areas).

Exceptions:

 Class A roof assemblies include those with coverings of brick, masonry and exposed concrete roof deck.

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- Class A roof assemblies include ferrous or copper shingles or sheets, metal sheets
 and shingles, clay or concrete roof tile, or slate installed on noncombustible
 decks.
- 3. Class A roof assemblies include minimum 16 ounces per square foot copper sheets installed over combustible decks.
- 4. Class A roof assemblies include slate installed over underlayment over combustible decks.

SECTION IB-69. Section R902.1.3 of Volume 1B of the Glendale Building and Safety Code, 2017, is hereby amended to read as follows:

R902.1.3 Roof coverings in all other areas. The entire roof covering of every existing structure where more than 50 percent of the total roof area is replaced within any one-year period, the entire roof covering of every new structure, and any roof covering applied in the alteration, repair or replacement of the roof of every existing structure, shall be a fire-retardant roof covering that is at least Class \in \underline{B} . No wood roof covering shall be installed.

SECTION IB-70. Section R902.4 of Volume 1B of the Glendale Building and Safety Code, 2017, is hereby amended to read as follows:

R902.4 Rooftop-mounted photovoltaic panels and modules. Rooftop-mounted photovoltaic panel *systems* installed on or above the roof covering shall be tested, listed and identified with a fire classification in accordance with UL 1703. Class A, or B or C photovoltaic panels and modules shall be installed *areas designated by this section*, in jurisdictions designated by law as requiring their use, or where the edge of the roof is less than 3 feet (914 mm) from a lot line.

SECTION IB-71. Section R905.3.7 of Volume 1B of the Glendale Building and Safety Code, 2017, is hereby amended to read as follows:

R905.3.7 Application. Tile shall be applied in accordance with this chapter and the manufacturer's installation instructions, based on the following:

- 1. Climatic conditions.
- 2. Roof slope.
- 3. Underlayment system.
- 4. Type of tile being installed.

Clay and concrete roof tiles shall be fastened in accordance with this section and the manufacturer's installation instructions. Perimeter tiles shall be fastened with not less than one two fasteners per tile. Tiles with installed weight less than 9 pounds per square foot (0.4 kg/m²) require not less than one two fasteners per tile regardless of roof slope. Clay and concrete roof tile attachment shall be in accordance with the manufacturer's installation instructions where applied in areas where the ultimate design wind speed exceeds 130 miles per hour (58 m/s) and on buildings where the roof is located more than 40 feet (12 192 mm) above grade. In areas subject to snow, not less than two fasteners per tile are required. In other areas, clay and concrete roof tiles shall be attached in accordance with Table R905.3.7.

TABLE R905.3.7 CLAY AND CONCRETE TILE ATTACHMENT

SHEATHING	ROOF SLOPE	NUMBER OF FASTENERS
Solid without battens	All	One Two per tile
Spaced or solid with battens and slope <5:12	Fasteners not required	_
Spaced sheathing without battens	5:12 \le slope < 12:12	One Two per tile/every other row
	12:12 ≤ slope < 24:12	One Two per tile

SECTION IB-72. Section R908.7 of Volume IB of the Glendale Building and Safety Code, 2017, is hereby added to read as follows:

R908.7 Roof sheathing. When finish roofing material is removed to the existing space sheathing, a minimum of 3/8 inch (9 mm) thick plywood sheathing shall be installed. See Section R337 for roof coverings permitted in the Wildland Urban Interface Fire Areas (also known as High Fire Hazard Areas). The new sheathing shall comply with the requirements of Section R803. The sheathing shall be installed such that the edges align over rafters and individual spaced sheathing boards. The sheathing shall be attached to the existing spaced sheathing with 6d common nails at 6 inches (147 mm) on center at supported edges and 6d common nails at 12 inches (294 mm) on center at intermediate supports.

SECTION IB-73. Section R918.1.7 of Volume IB of the Glendale Building Code, 2017, is hereby added to read as follows:

R918.1.7 Structural fire-resistance. The structural frame and roof construction supporting the load imposed upon the roof by the photovoltaic panels/modules shall comply with the requirements of Table R302.1(1), R302.1(2) and Table R302.6.

SECTION IB-74. Section R1001.3.1 of Volume IB of the Glendale Building and Safety Code, 2017, is hereby amended to read as follows:

R1001.3.1 Vertical reinforcing. For chimneys up to 40 inches (1016 mm) wide, four No. 4 continuous vertical bars <u>adequately anchored into the concrete foundation</u> shall be placed between wythes of solid masonry or within the cells of hollow unit masonry and grouted in accordance with Section R606. Grout shall be prevented from bonding with the flue liner so that the flue liner is free to move with thermal expansion. For chimneys more than 40 inches (1016 mm) wide, two additional No. 4 vertical bars adequately anchored into the concrete foundation shall be provided for each additional flue incorporated into the chimney or for each additional 40 inches (1016 mm) in width or fraction thereof.

SECTION IB-75. Appendix H, PATIO COVERS, of the California Residential Code, 2016 edition, published and copyrighted by the International Code Council is hereby adopted into Volume IB of the Glendale Building and Safety Code, 2017, by reference as further amended herein, into the Glendale Building and safety Code, 2017, and by such reference, is incorporated herein as if fully set forth.

SECTION IB-76. Appendix H, Section AH105.1 of Volume IB of the Glendale Building and Safety Code, 2017, is hereby amended to read as follows:

AH105.1 Design loads. Patio covers shall be designed and constructed to sustain, within the stress limits of this code, all dead loads plus a vertical live load of not less than 10 pounds per square foot (0.48 lN/m²) except that snow loads shall be used where such snow loads exceed this minimum. Such covers shall be designed to resist the minimum wind loads set forth in Section R301.2.1. Solar energy systems shall not be installed on patio covers designed by this Section.

SECTION IB-77. Appendix Chapter A1 SEISMIC STRENGTHENING PROVISIONS FOR UNREINFORCED MASONRY BEARING WALL BUILDINGS of the CALIFORNIA EXISTING BUILDING CODE is hereby adopted by reference to apply to residential occupancies and to that extent is incorporated into Volume IB of the Glendale Building and Safety Code, 2017.

VOLUME IC. EXISTING BUILDING STANDARDS

SECTION IC-1. Volume IC of the Glendale Building and Safety Code, 2017, is amended as hereinafter provided.

SECTION IC-2. Chapter 1 Division II Section 104.10.2 of Volume IC of the Glendale Building and Safety Code, 2017, is hereby added to read as follows:

104.10.2 Fire code official concurrence. For those cases which may affect fire or life safety, the building official shall obtain the concurrence of the fire code official.

SECTION IC-3. Chapter 1 Division II Section 104.11.3 of Volume IC of the Glendale Building and Safety Code, 2017, is hereby added to read as follows:

104.11.3 Fire code official concurrence. For those cases which may affect fire or life safety, the building official shall obtain the concurrence of the fire code official.

SECTION IC-4. Chapter 1 Division II Section [A] 105.1 of Volume IA of the Glendale Building and Safety Code, 2017, is hereby amended to read as follows:

[A] 105.1 Permit Required. Any owner or authorized agent who intends to repair, add to, alter, relocate, demolish, or change the occupancy of a building or to repair, install, add, alter, remove, convert, or replace any electrical, gas, mechanical, or plumbing systems, the installation of which is regulated by this code, or to cause any such work to be done, shall first make application to the building official and obtain the required permit. Parking lots shall not be paved, improved, striped, or restriped unless a separate permit for each parking lot has first been obtained from the building official.

Exception: A separate permit shall not be required to pave, improve, stripe, or restripe a parking lot when such work is included in the scope of another project for which a building permit has been issued and when the design of such parking lot was included in the plan check review of such project.

SECTION IC-5. Chapter 1 Division II Section [A] 105.2 of Volume IC of the Glendale Building and Safety Code, 2017, is hereby amended to read as follows:

[A] 105.2 Work exempt from permit. Exemptions from permit requirements of this code shall not be deemed to grant authorization for any work to be done in any manner in violation of the provisions of this code or any other laws or ordinances of this jurisdiction. Permits shall not be required for the following:

Building:

- 1. <u>Platforms</u>, sidewalks and driveways not more than 30 inches (762 mm) above adjacent grade, and not over any basement or story below and are not part of an accessible route.
- 2. Painting, papering, tiling, carpeting, cabinets, counter tops and similar finish work.
- 3. Temporary motion picture, television and theater stage sets and scenery.
- 4. Shade cloth structures constructed for nursery or agricultural purposes, not including service systems.
- 5. Window awnings supported by an exterior wall that do not project more than 54 inches (1372 mm) from the exterior wall and do not require additional support of Group R-3 and U occupancies.

6. Nonfixed and movable cases, counters and partitions not over 69 inches 5 feet 9 inches (1753 mm) in height.

Electrical:

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

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

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.

Gas:

- 1. Portable heating appliance.
- 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 this code.
- 5. Replacement of any part that does not alter its approval or make it unsafe.
- 6. Portable evaporative cooler.
- 7. Self-contained refrigeration system containing 10 pounds (4.54 kg) or less of refrigerant and actuated by motors of 1 horsepower (746 W) or less.

Plumbing:

- 1. The stopping of leaks in drains, water, soil, waste or vent pipe; provided, however, that if any concealed trap, drain pipe, water, soil, waste or vent pipe becomes defective and it becomes necessary to remove and replace the same with the new material, such work shall be considered as new work and a permit shall be obtained and inspection made as provided in this code.
- 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.
- [A] 105.2.1 Emergency repairs. Where equipment replacements and repairs must be performed in an emergency situation, the permit application shall be submitted within the next working business day to the <u>eode building</u> official.
- [A] 105.2.2 Repairs. Application or notice to the eode <u>building</u> official is not required for ordinary repairs to structures and items listed in Section 105.2. Such repairs shall not include the cutting away of any wall, partition, or portion thereof, the removal or cutting 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.

[A] 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.

SECTION IC-6. Chapter 1 Division II Section [A] 105.3 of Volume IC of the Glendale Building and Safety Code, 2017, is hereby amended to read to read as follows: [A] 105.3 Application for permit. To obtain a permit, the applicant shall first file an application therefor in writing on a form furnished by the Department of Building Safety for that purpose. Such application shall:

- 1. Identify and describe the work in accordance to Chapter 3 to be covered by the permit for which application is made.
- Describe the land on which the proposed work is to be done by legal description, street address, or similar description that will readily identify and definitely locate the proposed building or work.
- 3. Indicate the use and occupancy for which the proposed work is intended.
- 4. Be accompanied by construction documents and other information as required in Section 106.3.
- 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 code building official.
- 8. Pay plan review and permit fees as required by this Chapter 1 Division II Volume

 1A.

SECTION IC-7. Chapter 1 Division II Section [A] 105.3.2 of Volume IC of the Glendale Building and Safety Code, 2017, is hereby amended to read as follows:

[A] 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 one-year after the date of filing, unless such application has been pursued in good faith or a permit has been issued; except that the code building official is authorized to grant one or more extensions of time for additional periods not exceeding 90 days-180 days each. The extension shall be requested in writing and justifiable cause demonstrated.

SECTION IC-8. Chapter 1 Division II Section 105.3.3 of Volume IC of the Glendale Building and Safety Code, 2017, is hereby added to read as follows:

105.3.3 Plan review fees. When submittal documents are required by Chapter 1 Division II, Section 105.3, a plan review fee shall be paid at the time of submitting the submittal documents for plan review. The plan review fees specified in this section are separate fees from the permit fees specified in Chapter 1 Division, Section [A] 108.2 and are in addition to the permit fees. When submittal documents are incomplete or changed so as to require additional plan review, or when the project involves deferred submittal items as defined in Chapter 1 Division II, Section [A] 106.3.4, an additional plan review fee shall be charged at a rate specified by resolution.

SECTION IC-9. Chapter 1 Division II Section [A] 105.5 of Volume IC of the Glendale Building and Safety Code, 2017, is hereby amended to read as follows:

[A] 105.5 Expiration. Every permit issued shall become invalid unless the work on the site authorized by such permit is commenced within 180 days after its issuance, or if the work authorized on the site by such permit is suspended or abandoned for a period of 180 days after the time the work is commenced. Work shall be considered suspended or abandoned if the building official determines that substantial work has not been performed within the time specified above. Substantial work shall be construed to mean:

- Measurable work such as, but not limited to, the addition of footings, structural members, flooring, wall covering, etc.
- 2. The work mentioned in subsection 1 of this Section [A] 105.5 above must constitute 20% of the value of the work for which the permit was issued in any 180 day period for Group R, Division 3 occupancies and 10% for all other occupancies.

Before such work can be recommenced, a new permit shall be first obtained to do so, and the fee therefore shall be one half the amount required for a new permit for such work, provided no changes have been made or will be made in the original plans and specifications for such work, and provided further that such suspension or abandonment has not exceeded one year. In order to renew action on a permit after expiration, the permittee shall pay a new permit fee and may be required to comply with all applicable new regulations at the time of issuance. The building official is authorized to grant, in writing, one or more extensions of time, for periods not more than 180 days each. The extension shall be requested in writing and justifiable cause demonstrated.

SECTION IC-10. Chapter 1 Division II Section 105.8 of Volume IC of the Glendale Building and Safety Code, 2017, is hereby added to read as follows:

105.8 Responsibility of permittee. Building permits shall be presumed by the city to incorporate all of the work that the applicant, the applicant's agent, employees and/or contractors shall carry out. Said proposed work shall be in accordance with the approved plans and with all requirements of this code and any other laws or regulations applicable thereto. No city approval shall relieve or exonerate any person from the responsibility of complying with the provisions of this code nor shall any vested rights be created for any work performed in violation of this code.

SECTION IC-11. Chapter 1 Division II Section [A] 106.6 of Volume IC of the Glendale Building and Safety Code, 2017, is hereby amended to read as follows:

[A] 106.6 Design professional in responsible charge. It shall be required that all documents submitted for review the building official shall be prepared by a registered design professional. Where it is required that documents be prepared by a registered design professional, the code official shall be authorized to require the owner or the owner's authorized agent to engage and designate on the building permit application a registered design professional who shall act as the registered design professional in responsible charge. If the circumstances require, the owner or the owner's authorized agent shall designate a substitute registered design professional in responsible charge who shall perform the duties required of the original registered design professional in responsible charge. The code official shall be notified in writing by the owner or the owner's authorized agent if the registered design professional in responsible charge is changed or is unable to continue to perform the duties. The registered design

professional in responsible charge 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, the inspection program shall name the individual or firms who are to perform structural observation and described the stages of construction at which structural observation is to occur.

Exception: The building official may waive the requirements for a registered design professional when, after reviewing the submitted plans it is determined that the work is minor in nature.

SECTION IC-12. Chapter 1 Division II Section [A] 108.4 of Volume IC of the Glendale Building and Safety Code, 2017, is hereby amended to read as follows:

[A] 108.4 Work commencing before permit issuance. Any person who commences any work before obtaining the necessary permits shall be subject to an additional fee established by the code official that shall be in addition to the required permit fees. in addition to the normally established permit fee, equal to 100% of such normally established permit fee, or as otherwise determined by the building official.

SECTION IC-13. Chapter 1 Division II Section [A] 109.3.5 of Volume IC of the Glendale Building and Safety Code, 2017, is hereby amended to read as follows:

[A] 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.

Exception: Gypsum board that is not part of a fire-resistance-rated assembly, a or a shear assembly or a sound transmission control assembly.

SECTION IC-14. Chapter 1 Division II Section 109.3.8.1 of Volume IC of the Glendale Building and Safety Code, 2017, is hereby added to read as follows:

<u>109.3.8.1 Structural observation</u>. For structural observation, see Section 1704 of Volume IA of the Glendale Building and Safety Code, 2017.

SECTION IC-15. Chapter 1 Division II Section 109.7 of Volume IA of the Glendale Building and Safety Code, 2017, is hereby added to read as follows:

109.7 Reinspections. A reinspection fee may be assessed for each inspection or reinspection when such portion of work for which inspection is called is not complete or when corrections called for are not made.

This section shall not be interpreted as requiring reinspection fees the first time a job is rejected for failure to comply with the requirements of this code, but as controlling the practice of calling for inspections before the job is ready for such inspection or reinspection.

Reinspection fees may be assessed when the approved plans and inspection card are not readily available to the inspector, for failure to provide access on the date for which inspection is requested, or deviation from plans requiring the approval of the Building Official.

To obtain a reinspection, the applicant shall pay the re-inspection fee in accordance with a fee schedule adopted by this jurisdiction.

In instances where reinspection fees have been assessed, no additional inspection of the work will be performed until the required fees have been paid.

SECTION IC-16. Chapter 1 Division II Section R112 and all subsections thereof of Volume IC of the Glendale Building and Safety Code, 2017, is hereby amended to read as follows:

SECTION R112

BUILDING AND FIRE BOARD OF APPEALS

R112.1 General. In order to hear and decide appeals of orders, decisions or determinations made by the <u>building code</u> official <u>or the fire code official</u> relative to the application and interpretation of this code, there shall be and is hereby created a <u>joint building and fire</u> board of appeals in accordance with Section 113 of Volume IA of this Code (hereinafter referred to as the "board"). The board of appeals shall be appointed by the governing body and shall hold office at its pleasure. The board shall adopt rules of procedure for conducting its business.

SECTION IC-17. Chapter 1 Division II Section [A] 113.1 of Volume IC of the Glendale Building and Safety Code, 2017, is hereby amended to read as follows:

[A] 113.1 Unlawful acts. It shall be unlawful for any person, firm or corporation to repair, alter, extend, add, move, remove, demolish, or change the occupancy of any building or equipment regulated by this code or cause same to be done in conflict with or in violation of any of the provisions of this code. Maintenance of a building or structure which was unlawful at the time it was constructed and which would be unlawful under this Code if constructed after the effective date of such Code, shall constitute a continuing violation of such Code.

SECTION IC-18. Chapter 1 Division II Section [A] 113.4 of Volume IC of the Glendale Building and Safety Code, 2017, is hereby amended to read as follows:

[A] 113.4 Violation penalties. Any person who violates a provision of this code or fails to comply with any of the requirements thereof or who repairs or alters or changes the occupancy of a building or structure in violation of the approved construction documents or directive of the eode building official or of a permit or certificate issued under the provisions of this code shall be subject to penalties as prescribed by law deemed guilty of a misdemeanor and shall be punishable by a fine of not more than \$1,000.00 or by imprisonment for a term of not more than 6 months, or by both such fine and imprisonment. Such penalty and imprisonment shall not preclude the imposition of any other administrative or judicial civil or criminal remedies under state, federal or local laws.

SECTION IC-19. Chapter 1 Division II Section [A] 114.1 of Volume IC of the Glendale Building and Safety Code, 2017, is hereby amended to read as follows:

[A] 114.1 Authority. Whenever the <u>code building</u> official finds any work regulated by this code being performed in a manner either contrary to the provisions of this code <u>or other laws or ordinances of this jurisdiction</u> or dangerous or unsafe, the <u>code building</u> official is authorized to issue a stop work order.

SECTION IC-20. Chapter 1 Division II Section [A] 114.3 of Volume IC of the Glendale Building and Safety Code, 2017, is hereby amended to read as follows:

[A] 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 guilty of a misdemeanor.

SECTION IC-21. Chapter 1 Division II Section 115.6 of Volume IC of the Glendale Building and Safety Code, 2017, is hereby added to read as follows:

115.6 Non-Compliance. Upon failure to comply with the order within the time specified herein, and if no appeal has been properly and timely filed, the building official shall file in the office of the County Recorder a certificate describing the property and certifying (i) that the building is an unsafe building and (ii) that the owner has been notified.

Whenever the corrections ordered shall thereafter have been completed or the building demolished so that it no longer exists as an unsafe building on the property described in the certificate, the building official shall file a new certificate with the County Recorder certifying that the building has been demolished or all required corrections have been made so that the building is no longer unsafe, whichever is appropriate.

SECTION IC-22. Chapter 1 Division II Section 115.7 of Volume IC of the Glendale Building and Safety Code, 2017, is hereby added to read as follows:

115.7 Vacated Buildings. Any unsafe building ordered vacated in accordance with this section shall not be reoccupied until the unsafe conditions have been eliminated. Each such vacated building shall be locked and otherwise secured against entry and the building official shall post thereon a placard stating: "DO NOT ENTER, UNSAFE TO OCCUPY, CITY OF GLENDALE." Such notice shall remain posted until the required repairs, demolition or removal are completed. Such notice shall not be removed without written permission of the building official and no person shall enter the building except for the purpose of making the required repairs or of demolishing the building.

SECTION IC-23. Chapter 1 Division II Section 118 of Volume IC of the Glendale Building and Safety Code, 2017, is hereby added to read as follows:

SECTION 118

CONSTRUCTION TOILET FACILITIES

commence or proceed with the erection, construction, alteration, repair, raising, adding to, removal, or demolition of any building or structure unless adequate, suitable, sanitary toilet facilities under the control of such person are provided for the use of any person employed or working upon such building or structure. Such toilet facilities shall be located upon or within a reasonable distance of the lot, premises, or site upon which such work is being done. In no case shall the line of travel to any facility exceed five hundred feet (500') (153 M). Toilets may not be placed on the public way.

118.1 Toilet Standards. Every toilet shall be of water flush type and shall be connected to a public sewer or private sewage disposal system built in accordance with the provisions of the Plumbing Code. All toilet structures shall be self-closing; the toilet floor shall be smooth, and screened ventilation shall be provided for the toilet compartment. Where workmen are employed during night hours, the toilet building shall be provided with artificial light. In lieu of flush water closets approved chemical toilets may be provided. Toilets may not be located within 10' (3054 mm) of a property line.

SECTION IC-24. Chapter 1 Division II Section 119 of Volume IC of the Glendale Building and Safety Code, 2017, is hereby added to read as follows:

SECTION 119

ON SITE CONSTRUCTION TRASH AND DEBRIS CONTROL

119 On Site Construction Trash and Debris Control Facilities Required.

No person shall commence or proceed with erection, construction, alteration, repair, raising, adding to, removal, or demolition of any building or structure unless adequate, suitable on site trash and debris control facilities under the control of such person are provided for the use of any person employed or working upon such building or structure. On site trash and debris control shall consist of at least a roll off 523 ft³ (15m³) bin. The container shall be emptied often enough so that no storage of trash is outside the bin. The bin shall be removed from the site after the building has passed final inspection or within thirty (30) days of the expiration of the building permit.

Exception: Additions, less than 900 ft ² (84m²), and alterations to Group R,

Division 3 occupancies and Group U occupancies need not provide a roll off bin

but must store trash and debris in the rear yard in quantities less than 10 ft (3m)

wide by 10 ft (3m) long by 4 ft (1.2m) high. All trash and debris whether or not

in containers shall be kept 3 ft (912mm) from adjacent property lines.

SECTION IC-25. Chapter 1 Division II Section 120 of Volume IC of the Glendale Building and Safety Code, 2017, is hereby added to read as follows:

SECTION 120

DISASTER REPAIR AND RECONSTRUCTION

120.1 Intent. This section establishes standards and regulations for the expeditious repair and reconstruction of structures damaged as a result of a disaster for which a local emergency has been declared by the City Council. This section does not allow exemptions from the Building, Fire, Electrical, Mechanical, Plumbing, other Codes, or standards.

120.2 Applications of Provisions.

- 120.2.1 The provisions of this section are applicable following each disaster when a local emergency has been declared by the City Council to all buildings and structures of all occupancies regulated by the City of Glendale. The Council may extend the provisions as necessary.
- 120.2.2 When approved by the building official, the requirements of this section may be waived in favor of repair recommendations included in an engineering evaluation as defined in Section 119.3.
- 120.3 Definitions. For the purpose of this section 120, the following definitions apply:
 120.3.1 "Architect" means an individual licensed by the State of California to
 practice architecture as defined in the State of California Business and Professions
 Code.

- 120.3.2 "Civil Engineer" means an individual registered by the State of

 California to civil engineering architecture as defined in the State of California

 Business and Professions Code.
- 120.3.3 "Current Code" means the edition of the California Building Code,
 published by the International Conference of Building Officials, as adopted by the
 City of Glendale as the Glendale Building and Safety Code, as amended. The
 edition of said Glendale Building and Safety Code to be applied shall be that
 edition in effect at the time of the declaration of a local emergency by the City
 Council.
- 120.3.4 "Engineering Evaluation" means an evaluation of a damaged building or structure, or suspected damaged building or structure, performed under the direction of a structural engineer, civil engineer, or architect retained by the owner of the building or structure. Engineering evaluations shall, at a minimum, contain recommendations for repair with appropriate opinion of construction cost for those repairs.
- <u>120.3.5</u> "Replacement Value" means the dollar value, as determined by the new building official, of replacing the damaged structure with a new structure of the same size, construction material and occupancy on the same site.
- 120.3.6 "Structural Engineer" means an individual registered by the State of California to practice structural engineering and to use the title structural engineer as defined in the State of California Business and Professions Code.
- 120.3.7 "Value of Repair" means the dollar value, as determined by the building official, of making the necessary repairs to the damaged building.

120.4 Repair Criteria.

- <u>120.4.1</u> Abatement of Dangerous Buildings shall be in accordance with the provisions of Chapter 1 Division II, Section 116.
- 120.4.2 Building and structures of all occupancies which have been damaged as a result of a disaster, except as otherwise noted, shall be repaired in accordance with the following criteria:
 - 1. When the estimated value of repair does not exceed ten percent (10%) of the replacement value of the structure, the damaged portion(s) may be restored to their pre-disaster condition.
 - Exception: When the damaged elements include suspended ceiling systems, the ceiling system shall be repaired and all bracing required by current code shall be installed.
 - 2. When the estimated value of repair is greater than ten percent (10%) but less than fifty percent (50%) of the replacement value of the structure, the damaged elements, as well as all critical ties, supported elements and supporting elements associated with the damaged elements, shall be repaired and/or brought into conformance with the structural requirements of the current Code.
 - 3. When the estimated value of repair is fifty percent (50%) or more of the replacement value of the structure, the entire structure shall be brought into conformance with the structural requirements of the current Code.

4. In Group R, Division 3 occupancies, the repair value of damaged chimneys shall be excluded from the computation of percentage of replacement value. Damaged chimneys shall be repaired in accordance with Chapter 1Division II, Section 120.5.

120.5 Repair Criteria for Chimneys.

- 120.5.1 All damaged chimneys must be repaired or reconstructed to comply with the requirements of Section 2113 of the Glendale Building and Safety Code,

 2017. Damaged portions of chimneys shall be removed in accordance with the following criteria:
 - 1. When the damaged portion of the chimney is located between the roof line and the top of the chimney, the damaged portion shall be removed to the roof line provided the roof and ceiling anchorage are in sound condition.
 - 2. For a single-story structure in which the damaged portion of the chimney is below the roof line or the damaged portion extends from above the roof line to below the roof line, the chimney shall be removed to the top of the fire box.
 - 3. For a multi-story structure, the damaged portion of the chimney shall be removed from the top to a floor line where sound anchorage is found.
 - 4. In any structure where the firebox has been damaged, the entire chimney and firebox shall be removed to the foundation. If this foundation is in sound condition, the firebox and chimney may be reconstructed using the existing foundation. If the foundation has been damaged, the foundation shall be removed and replaced.

120.5.2 Where existing conditions preclude the installation of all anchorage required by Section 2113 of the current Code, alternate systems may be used in accordance with the alternate methods and materials provisions of the current Code when approved by the building official. Such alternate systems shall be designed and detailed by a structural engineer, civil engineer, or architect.

120.6 Repair Criteria for Unreinforced Masonry Buildings and Structures.

120.6.1 All buildings as described in Appendix Chapter A1, Section A102.1 of the California Existing Building Code of Volume IC of the Glendale Building and Safety Code that are damaged shall be repaired and strengthened in accordance with provisions of Chapter 1 Division II, Section 120.4.

120.6.2 Unreinforced masonry buildings damaged less than 50% shall be repaired in accordance with California Existing Building Code, Appendix Chapter A1, Seismic Strengthening Provisions for Unreinforced Masonry Bearing Wall Buildings of Volume IA of this Code.

SECTION IC-26. Chapter 1 Division II Section 121 of Volume IC of the Glendale Building and Safety Code, 2017, is hereby added to read as follows:

SECTION 121

SANDBLASTING

<u>121.1. Sandblasting: Definition.</u> As used in this article, unless the context expressly indicates otherwise, "sandblasting" shall mean the use of air, steam or water containing sand to clean, grind, or cut hard surfaces.

- 121.2. Dry Sandblasting. Dry sandblasting is prohibited unless authorized by special permission from the building official endorsed upon a permit. Permission for dry sandblasting may be granted only when it is not possible to employ wet sandblasting. When dry sandblasting is permitted, the building official may impose such reasonable and related conditions as he or she may deem necessary for the protection of the public and the adjacent property.
- 121.3. Use of Canvas. Sandblasting operations shall, at all times, be separated from all adjacent property by canvas or other suitable barrier to prevent the splashing or blowing of water and/or sand thereupon.
- **121.4. Stoppage of Work.** The building official may order the immediate stoppage of sandblasting for failure to comply with any provision of this chapter. Failure of any person to comply immediately with such order shall constitute a misdemeanor.

SECTION IC-27. Section 402.1 of Volume IC of the Glendale Building and Safety Code, 2017, is hereby amended to read as follows:

402.1 General. [BSC & HCD] Additions to any building or structure shall comply with the requirements of the California Building Code or California Residential Code, as applicable, for new construction. Alterations to the existing building or structure shall be made to ensure that the existing building or structure together with the addition are no less conforming to the provisions of the California Building Code or California Residential Code, as applicable, than the existing building or structure was prior to the addition. An existing building together with its addition shall comply with the height and area provisions of Chapter 5 of the California Building Code or the height provisions of Chapter 3 of the California Residential Code, as applicable. Whenever alterations

Official, the Building Official may require that all portions of the building be brought up to the standards of the current California Building Code or California Residential Code.

Exception: [BSC] For state-owned buildings, including those owned by the University of California and the California State University and the Judicial Council, the requirements of Section 402.3 and 402.4 are replaced by the requirements of Section 317 through 322.

SECTION IC-28. Section 403.1 of Volume IC of the Glendale Building and Safety Code, 2017, is hereby amended to read as follows:

403.1 General. Except as provided by Section 401.2 or this section, alteration to any building or structure shall comply with the requirements of the *California Building Code* or *California Residential Code*, as applicable, for new construction. Alterations shall be such that the existing building or structure is no less conforming to the provisions of the *California Building Code or California Residential Code*, as applicable, than the existing building or structure was prior to the alteration. Whenever alterations exceed fifty percent (50%) of the replacement value, as determined by the Building Official, the Building Official may require that all portions of the building be brought up to the standards of the current California Building Code or California Residential Code.

Exceptions:

An existing stairway shall not be required to comply with the
requirements of Section 1011 of the *California Building Code* where
the existing space and construction does not allow a reduction in pitch
or slope.

- 2. Handrails otherwise required to comply with Section 1011.11 of the *California Building Code* shall not be required to comply with the requirements of Section 1014.6 of the *California Building Code* regarding full extension of the handrails where such extensions would be hazardous due to plan configuration.
- 3. [BCS] For state-owned buildings, including those owned by the

 University of California and the California State University and the

 judicial council, the requirements of Section 403.3 through 403.4 are

 replaced by the requirements of Section 317 through 322.

SECTION IC-29. Section 406.1 of Volume IC of the Glendale Building and Safety Code, 2017, is hereby amended to read as follows:

<u>windows</u> shall be required for new installations- <u>and shall comply with the provisions as</u>
<u>specified within Chapter 7A of the California Building Code.</u>

SECTION IC-30. Section 406.3 of Volume IC of the Glendale Building and Safety Code, 2017, is hereby amended to read as follows:

406.3 Replacement window emergency escape and rescue openings. Where windows are required to provide emergency escape and rescue openings in Group R-2 and R-3 occupancies, replacement window shall be exempt from comply with the requirements of Section 1030.2, 1030.3 and 1030.5 provided the replacement window meets the following conditions: of the California Building Code and Section R310 and R312 of the California Residential Code.

- 1. The replacement window is the manufacturer's largest standard size window that will fit within the existing frame or existing rough opening. The replacement window shall be permitted to be of the same operating style as the existing window or a style that provides for an equal or greater window opening area than the existing window.
- 2. The replacement of the window is not part of a change of occupancy.

 Where the replacement window emergency escape and rescue opening is modified to create a larger opening and impacts the lateral design of the existing building or structure, a registered design professional shall be required to provide construction documents and structural calculations to justify the existing and/or modified lateral design unless waived by the building official.

SECTION IC-31. Section 1501.6.1 of Volume IC of the Glendale Building and Safety Code, 2017, is hereby amended to read as follows:

[BS] 1501.6.1 Walkways. A walkway shall be provided for pedestrian travel in front of every construction and demolition site unless the applicable governing authority authorizes the sidewalk to be fenced or closed. Walkways shall be of sufficient width to accommodate the pedestrian traffic, but in no case shall they be less than 4-5 feet (1219 1524 mm) in width. Walkways shall be provided with a durable walking surface. Walkways shall be accessible in accordance with *Chapter 11A* or 11B of the *California Building Code*, *as applicable*, and shall be designed to support all imposed loads and in no case shall the design live load be less than 150 pounds per square foot (psf) (7.2 kN/m²).

SECTION IC-32. Section 1501.6.7.1 of Volume IC of the Glendale Building and Safety Code, 2017, is hereby added to read as follows:

1501.6.7.1 Shoring. The sidewalk and street shall be protected from caving and settlement by shoring conforming to the safety orders issued by the Division of Occupational Safety and Health, Department of Industrial Relations.

SECTION IC-33. Section 1501.8 of Volume IC of the Glendale Building and Safety Code, 2017, is hereby added to read as follows:

of public works in accordance with the provisions of the Glendale Municipal Code for making an excavation within a public street, sidewalk, parkway or public property.

When any portion of a public sidewalk is to be excavated, the holder of the permit shall construct a substantial temporary walkway not less than five (5) feet (1524 mm) in width for pedestrian travel over the areas to be excavated or around the same.

SECTION IC-34. Section 1501.9 of Volume IC of the Glendale Building and Safety Code, 2017, is hereby added to read as follows:

1501.9. Protection of Obstructions. No person excavating, refilling or obstructing any public sidewalk, street, alley or roadway in the city shall fail or neglect to place barriers at each end and at all necessary places along any such excavations or obstructions to prevent accidents and no such person shall fail or neglect to display and maintain amber lights from sunset to sunrise at each end and at all necessary places along any such excavation or obstructions run across or substantially across any sidewalk, street, alley, or roadway, such amber lights at such places shall be placed not more than five (5) feet (1524 mm)apart. If, in any case, the director of public works shall designate any

particular locations for barriers or require additional light, such barriers or lights shall be placed and maintained at those locations designated. If any permittee fails to perform the duties herein before defined, the director of public works may cause the same to be performed, at the expense of the permittee, or if a deposit has been made pursuant to the Glendale Municipal Code, 1995, then the expense of such performance may be deducted there from to the extent said deposit is sufficient, and if insufficient, then the remaining amount may be charged against the permittee.

SECTION IC-35. Section 1503.4 of Volume IC of the Glendale Building and Safety Code, 2017, is hereby added to read as follows:

1503.4 Street Use Permits

1503.4.1 Permits generally. No person shall use or occupy or obstruct any portion of any sidewalk, street, alley or roadway for storing materials for building purposes, for mixing concrete or mortar, or for any purpose incidental thereto, or for the construction of walkways, fences or canopies in accordance with the provisions of this code, unless a street use permit has been first obtained from the director of public works to do so, and at least one-half of the width of the sidewalk, or a width to be designated by the director of public works of the street, alley or roadway is at all times kept free and clear of all obstructions.

1503.4.2 Street use permit to be posted. The street use permit required by this Section 3308.3 shall at all times during such use, occupancy or obstruction, be conspicuously posted on or near the sidewalk, street, alley or roadway used, occupied or obstructed.

1503.4.3 Term of permit; removal of obstructions. Any permit required by this Section 3308.3 shall be granted for not longer than sixty (60) days. Upon completion of

and the street and sidewalk restored to their original condition to the satisfaction of the director of public works. If any permittee fails or neglects to so remove, repair and restore within three (3) days after being notified by the director of public works in person or by letter, the director of public works may cause such removal, repairs and restoration to be done at the expense of the permittee.

1503.4.4 Application for street use permits. All applications for street use permits required by this Section 3308.3 shall be in writing and made to the building and safety section and shall be in writing and shall be accompanied by a fee for services provided hereunder which shall be established or modified by resolution of the City Council. The schedule for such fees shall remain on file and be available in the office of the traffic and transportation administrator.

SECTION IC-36. Section 1503.5 of Volume IA of the Glendale Building and Safety Code, 2017, is hereby added to read as follows:

1503.5 Mixing Mortar on Public Property. The mixing or handling of mortar, concrete or other material on public property, when authorized by the director of public works under a street use permit issued under Section 1503.4 of this Code, shall be done in a mechanical mixer or in a tight box in such a manner as to prevent dripping or splashing on public property.

VOLUME II. PLUMBING STANDARDS

SECTION II-1. Volume II of the Glendale Building and Safety Code, 2017, is amended as hereinafter provided.

SECTION II-2. Chapter 1 Division II Section 104.5 of Volume II of the Glendale Building and Safety Code, 2017, is amended to read as follows:

104.5 Fees. Fees for permits, investigation, and other fees for services shall be assessed in accordance with the provisions of this section and as set forth in the fee schedule Table 104.5. The fees are to be determined and adopted by this jurisdiction. established or modified by resolution of the City Council. The schedule for such fees shall remain on file and be available in the office of the building official. The building official shall review the fees charged for such services at least once annually and shall, with the approval of the City Manager, recommend changes to the Council when the costs for such services make it appropriate.

SECTION II-3. Chapter 1 Division II Section 104.3.2 of Volume II of the Glendale Building and Safety Code, 2017, is amended to read as follows:

104.3.2 Plan Review Fees. Where a plan or other data is required to be submitted by Section 104.3.1, a plan review fee shall be paid at the time of submitting plans and specifications for review.

The plan review fees for plumbing work shall be determined and adopted at a rate specified by this jurisdiction resolution of the City Council.

The plan review fees specified in this subsection are separate fees from the permit fees specified in Section 104.5.

Where plans are incomplete or changed so as to require additional review, an additional fee shall be charged at the rate shown in Table 104.5 at a rate specified by resolution.

SECTION II-4. Chapter 1 Division II Section 105.2.6 of Volume II of the

Glendale Building and Safety Code, 2017, is hereby amended to read as follows:

105.2.6 Reinspections. A reinspection fee may shall be permitted to be assessed for each inspection or re-inspection when where such portion of work for which inspection is called is not complete or when required corrections called for are have not been made.

This section provision shall not be interpreted as requiring reinspection fees the first time a job is rejected for failure to comply be in accordance with the requirements of this code, but as controlling the practice of calling for inspections before the job is ready for such inspection or reinspection.

Reinspection fees <u>may</u> shall be <u>permitted to be</u> assessed <u>when</u> where the approved plans and inspection card are not readily available to the inspector, for failure to provide access on the date for which inspection is requested, or <u>deviation</u> for <u>deviating</u> from plans requiring the approval of the <u>Authority Having Jurisdiction</u> Building Official.

To obtain a reinspection, the applicant shall file an application therefore in writing upon a form furnished for that purpose and pay the re-inspection fee in accordance with a fee schedule adopted by this jurisdiction Table 104.5.

In instances where reinspection fees have been assessed, no additional inspection of the work will be performed until the required fees have been paid.

Section II-5. Chapter 1 Division II Section 107.0 of Volume II of the Glendale Building and Safety Code, 2017 is amended to read as follows:

107.0 Building and Fire Board of Appeals.

107.1 General. In order to hear and decide appeals of orders, decisions, or determinations made by the Authority Having Jurisdiction relative to the application and interpretations of this code, there shall be and is hereby created a Board of Appeals consisting of members who are qualified by experience and training to pass upon matters pertaining to plumbing design, construction, and maintenance and the public health aspects of plumbing systems and who are not employees of the jurisdiction. The Authority Having Jurisdiction shall be an ex-officio member and shall act as secretary to said board but shall have no vote on any matter before the board. The Board of Appeals shall be appointed by the governing body and shall hold office at its pleasure. The board shall adopt rules of procedure for conducting its business, and shall render all decisions and findings in writing to the appellant with a duplicate copy to the Authority Having Jurisdiction, the building official or the fire code official relative to the application and interpretations of this code, there shall be and is hereby created a joint Building and Fire Board of Appeals in accordance with Chapter 1 Division II Section 113 of Volume IA of this Code.

SECTION II-6. Section 815 of Volume II of the Glendale Building and Safety Code, 2017, is hereby added to read as follows:

815. Water Softener Using Dry Wells for Discharge. Water softener systems using dry wells for the discharge of effluents are prohibited.

Exception: Systems with regeneration cycles discharging quantities of total dissolved solids that do not exceed those stipulated in the water quality objectives set by the Regional Water Quality Control Board when approved by the building official.

VOLUME III. MECHANICAL STANDARDS

SECTION III-1. Volume III of the Glendale Building and Safety Code, 2017, is amended as hereinafter provided.

SECTION III-2. Chapter 1 Division II Section 104.3.2 of Volume III of the Glendale Building and Safety Code, 2017, is amended to read as follows:

104.3.2. Plan Review Fees. Where a plan or other data is required to be submitted in accordance with Section 104.3.1, a plan review fee shall be paid at the time of submitting construction documents for review.

The plan review fees for mechanical system work shall be determined and adopted by this jurisdiction. charged at a rate specified by resolution of the City Council.

The plan review fees specified in this subsection are separate fees from the permit fees specified in Section 104.5.

Where plans are incomplete or changed so as to require additional plan review, an additional plan review fee shall be charged at the rate shown in Table 114.1. a rate specified by resolution of the City Council.

SECTION III-3. Chapter 1 Division II Section 104.5 of Volume III of the Glendale Building and Safety Code, 2017, is hereby amended to read as follows:

104.5 Fees. Fees shall be assessed in accordance with the provisions of this section and set forth in the fee schedule, Table 104.5. The fees are to be determined and adopted by this jurisdiction. Fee for permits, investigation and other fees for services shall be established or modified by resolution of the City Council. The schedule for such fees shall remain on file and be available in the office of the building official. The building official shall review the fees at least once annually and shall, with the approval

of the City Manager, recommend changes to the council when the costs for such services make it appropriate.

SECTION III-4. Chapter 1 Division II Section 105.2.6 of Volume III of the Glendale Building and Safety Code, 2017, is hereby amended to read as follows:

105.2.6 Reinspections. A reinspection fee may shall be permitted to be assessed for each inspection or re-inspection when where such portion of work for which inspection is called is not complete or when required corrections called for are have not been made.

This section provision shall not be interpreted as requiring reinspection fees the first time a job is rejected for failure to comply be in accordance with the requirements of this code, but as controlling the practice of calling for inspections before the job is ready for such inspection or reinspection.

Reinspection fees <u>may</u> shall be <u>permitted to be</u> assessed <u>when</u> where the approved plans and inspection card are not readily available to the inspector, for failure to provide access on the date for which inspection is requested, or <u>deviation</u> for deviating from plans requiring the approval of the <u>Authority Having Jurisdiction</u> Building Official.

To obtain a reinspection, the applicant shall file an application therefore in writing upon a form furnished for that purpose and pay the re-inspection fee in accordance with a fee schedule adopted by this jurisdiction Table 104.5.

In instances where reinspection fees have been assessed, no additional inspection of the work will be performed until the required fees have been paid.

SECTION III-5. Chapter 1 Division II Section 107.0 of Volume III of the Glendale Building and Safety Code, 2017, is hereby amended to read as follows:

107.0 Building and Fire Board of Appeals.

107.1. General. In order to hear and decide appeals of orders, decisions or determinations made by the Authority Having Jurisdiction relative to the application and interpretations of this code, there shall be and is hereby created a Board of Appeals consisting of members who are qualified by experience and training to pass upon matters pertaining to mechanical system design, construction, and maintenance and the public health aspects of mechanical systems and who are not employees of the jurisdiction. The Authority Having Jurisdiction shall be an ex-officio member and shall act as secretary to said board but shall have no vote upon a matter before the board. The Board of Appeals shall be appointed by the governing body and shall hold office at its pleasure. The board shall adopt rules of procedure for conducting its business and shall render decisions and findings in writing to the appellant with a duplicate copy to the Authority Having Jurisdiction the building official or the fire code official relative to the application and interpretations of this code, there shall be and is hereby created a joint Building and Fire Board of Appeals in accordance with Chapter 1 Division II Section 113 of Volume IA of this Code.

VOLUME IV. ELECTRICAL STANDARDS

SECTION IV-1. Volume IV of the Glendale Building and Safety Code, 2017, is amended as hereinafter provided.

SECTION IV-2. Section 90.10 of Volume IV of the Glendale Building and Safety Code, 2017, is hereby added to read as follows:

equipment shall be in conformity with provisions of this Code, and shall be in conformity with approved standards for safety to life and property. Listing, labeling or marking, as conforming to the standards of Underwriters Laboratories, Inc., the American National Standard Institute, Inc., the United States Bureau of Mines, or any nationally recognized testing organization approved by the building official, shall be prima facie evidence of conformity with approved standards for safety to life and property

- (A) Alternate materials and methods of construction. The provisions of this Code

 are not intended to prevent the use of any material or method of construction

 not specifically prescribed by this Code, provided any such alternate has been approved as hereinafter provided.
- (B) The building official may approve any such alternate provided the building official finds that the material, method, or work offered is for the purpose intended at least the equivalent of that prescribed in this code in quality, strength, effectiveness, durability and safety.
- (C) The building official shall require that sufficient evidence be submitted to substantiate any claims that may be made regarding its quality, strength, effectiveness, durability and safety.

SECTION IV-3. Section 90.11 of Volume IV of the Glendale Building and Safety Code, 2017 is hereby added to read as follows:

90.11 Revocation of approval for use. Any approval granted by the building official may be revoked if the electrical materials, devices, or appliances are found to be hazardous to life and property for the purpose used or intended or do not conform with the standards under which said materials, devices, or appliances were approved for use.

SECTION IV-4. Section 90.12 of Volume IV of the Glendale Building and Safety Code, 2017 is added to read as follows:

90.12 Building and Fire Board of Appeals. In order to hear and decide appeals of orders, decisions and determinations made by the building official relative to the application and interpretation of this code, there shall be and is hereby created a joint Building and Fire Board of Appeals in accordance with Chapter 1 Division II, Section 113 of Volume IA of this code.

SECTION IV-5. Article 91 of Volume IV of the Glendale Building and Safety Code, 2017 is added to read as follows:

ARTICLE 91

ENFORCEMENT

91.1. Enforcement.

The provisions of this Section 91.1 shall be as contained in Volume IA of this Code.

91.2. Unsafe Electrical Wiring.

- (A) Public Nuisance. Notwithstanding any other provisions of this Code, all electrical service to any electric wiring devices, appliances, or equipment which is found to be dangerous to life or property because they are defective or improperly installed or used is, for the purpose of this section, unsafe electrical wiring. All such unsafe electrical wiring is hereby declared to be a public nuisance and shall be abated by replacement, repair, or removal in accordance with the procedure specified in subsection (B).
- (B) Notice and Order. The building official shall first give a notice and order directed to the owner of record of the building or premises. The notice and order shall be as contained in Chapter 1 Division II Section 116.3 of Volume IA of this Code.
- (C) Manner of Giving Notice. The notices required by Section 91.2(B) shall be given in the manner described in Chapter 1 Division Section 116.4 of Volume IA of this Code.
- (D) Authority to Disconnect Electric Service. The building official shall have

the authority to cut or disconnect any wire in cases of emergency for safety to life or property or where such wire may interfere with the work of the fire department. The building official is hereby authorized to disconnect or order discontinuance of electrical service to any electric wiring devices, appliances or equipment upon expiration of the time fixed by the order of the building official pursuant to subsection (B) of this Section 91.2, when such wiring, device, appliances or equipment is maintained or used in violation of that order.

91.3. Violations and Penalties. Notwithstanding any other provisions of this Code, no person shall install, alter, use or maintain any wiring, devices, appliances or equipment in violation of any of the provisions of this Code. Maintenance of electric wiring, devices, appliances or equipment which was unlawful at the time altered or installed, and which would be unlawful under this Code if altered or installed after the effective date of this Code shall constitute a continuing violation. Penalties for violating any of the provisions of this Code shall be contained in Chapter 1 Division II Section 114.4 of Volume IA of this Code.

SECTION IV-6. Article 92 of Volume IV of the Glendale Building and Safety Code, 2017, is hereby added to read as follows:

ARTICLE 92

PERMITS AND FEES

- 92.1. Installation Permit Required. Notwithstanding any other provisions of this

 Code, no electric wiring devices, appliances or equipment shall be installed within or on
 any building, structure or premises nor shall any alteration or addition be made in any
 such existing wiring, devices, appliances or equipment without first securing a permit
 therefor from the building official except that no permit shall be required in the following
 cases:
 - (a) The replacement of lamps or the connection of a portable appliance to suitable receptacles which have been permanently installed.
 - (b) The installation, alteration or repair of wiring, devices, appliances or equipment for the operation of signals or the transmission of intelligence, where such wiring, devices, appliances or equipment operates at a voltage not exceeding twenty-five volts between conductors, except as otherwise required in this Code.
 - (c) The installation, alteration or repair of electric wiring, devices, appliances and equipment installed by or for a public service corporation, including the Water and Power division of the City, 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.

- (d) The installation of temporary wiring for testing electrical apparatus or equipment.
- (e) Electric wiring expressly declared to be exempt from the provisions of this article by any other provisions hereof.
- (f) Installation of any portable motor or other portable appliance energized by means of a cord or cable having an attached block end where such cord or cable is permitted by other provisions of this Code.
- (g) Repair of any fixed motor or other appliance, or replacement of the same by another motor or appliance of the same rating and in the same location.
- (h) Christmas tree or similar tree lighting.
- (i) Repair or replacement of current-carrying parts of any switch, contractor or control device.
- (j) Repair of any over current device or lamp holder, or replacement of the same
 by another over current device or lamp holder of the same rating and in the
 same location.
- (k) Repair or replacement of electrodes of transformers for signs or marquees.
- (1) Repair or replacement of cords or cables or cord pendants allowed by other provisions of this Code.
- (m) Taping of joints.
- (n) Removal of electric wiring.
- (o) Any similar minor repair or replacement determined by the building official not to involve any hazard to life or property.

The foregoing exemptions from permit requirements shall not be deemed to permit or allow any electric wiring to be done in a manner contrary to other provisions of this Article.

- **92.2. Application.** The provisions of this Section 92.2 shall be as provided in Volume IA of this Code.
- **92.3. Approval of Deviations.** The provisions of this Section 92.3 shall be as provided in Volume IA of this Code.
- **92.4.** Expiration of Permits. The provisions of this Section 92.4 shall be as provided in Volume IA of this Code.
- **92.5. Fees**. The provisions of this Section 92.5 shall be as provided in Volume IA of this Code.
- **92.6. Used Materials**. Previously used materials shall not be reused in any work without written approval obtained in advance from the building official.
- **92.7. Inspection of Installation Notice to be Given: Time of Inspection**. The provisions of this Section 92.7 shall be as provided in Volume IA of this Code.
- **92.8. Approval Generally**. The provisions of this section 92.8 shall be as provided in Volume IA of this Code.
- 92.9. For Temporary Use. When the building official authorizes the connection and use of temporary wiring, such permission shall be issued to expire at a time to be stated therein and shall be revocable by the building official if he or she finds that the connection and use of the temporary work is dangerous to life or property or that the work is defective or defectively installed.

- 92.10. For Parts of Incomplete Installation. Preliminary approval may be granted authorizing the connection and use of certain specified portions of an incomplete installation. Such authorization shall be revocable by the building official if he or she finds that the connection and use of the portion of the incomplete installation are dangerous to life or property or that the portions previously authorized for use are defective or defectively installed.
- 92.11. Wiring to be Hidden from View. When any part of a wiring installation is to be hidden from view by the permanent placement of parts of the building the person installing the wiring shall notify the building official and such parts of the wiring installations shall not be concealed until they have been inspected and approved by the building official provided that on large installations where the concealment of parts of the wiring proceeds continuously the person installing the wiring shall cause inspections to be made periodically during the progress of the work. The building official shall have the power to remove or require the removal of any obstruction that prevents proper inspection of any electrical equipment.
- **Requirements.** Except where work is done under a maintenance electrician's permit, no person shall make connection from a source of electrical energy or supply electric service to any electric wiring devices, appliances, or equipment for the installation of which a permit is required unless such person shall have obtained satisfactory evidence that such wiring devices, appliances or equipment is in all respects in conformity with all applicable legal provisions.

92.13. Disconnection and Reconnection to Power Source. No person shall make connections from a source of electrical energy or supply electrical service to any electric wiring devices, appliances or equipment which has been disconnected or ordered to be disconnected by the building official or the use of which has been ordered by the building official to be discontinued until an approval has been obtained from the building official authorizing the reconnection and use of such wiring devices, appliances or equipment.

The building official shall notify the serving utility of such order to discontinue use.

SECTION IV-7. Section 690.86 of Volume IV of the Glendale Building and Safety Code, 2017, is hereby added to read as follows:

690.86. Solar photovoltaic panels/modules. Solar photovoltaic panels/modules shall comply with the requirements of this code, Volume IA and Volume IB of the Glendale Building and Safety Code, 2017.

VOLUME V. HOUSING STANDARDS

SECTION V-1. Volume V of the Glendale Building and Safety Code, 2017, is amended as hereinafter provided.

SECTION V-2. Section 203 of Volume V of the Glendale Building and Safety Code, 2017, is hereby amended to read as follows:

SECTION 203

HOUSING ADVISORY AND APPEALS BOARD BUILDING AND FIRE BOARD OF APPEALS

203.1. General. In order to hear and decide appeals of orders, decisions or determinations made by the building official relative to the application and interpretations of this Code, there shall be and is hereby created a housing advisory and appeals board consisting of members who are qualified by experience and training to pass upon matters pertaining to building construction and who are not employees of the jurisdiction. The building official shall be an ex officio member and shall act as secretary to said board but shall have no vote upon any matter before the board. The housing advisory and appeals board shall be appointed by the governing body and shall hold office at its pleasure. The board shall adopt rules of procedure for conducting its business and shall render all decisions and finding in writing to the appellant with a duplicate copy to the building official. Appeals to the board shall be processed in accordance with the provisions contained in Section 1201 of this Code. Copies of all riles of procedure adopted by the board shall be delivered to the building official, who shall make them accessible to the public joint Building and Fire Board of Appeals in accordance with Chapter 1 Division II Section 113 of Volume IA of this Code (hereinafter referred to as the "board").

203.2. Limitations of Authority. The housing advisory and appeals board shall have no authority relative to interpretation of the administrative provisions of this code and the board shall not be empowered to waive requirements of this code.

SECTION V-3. Section 1101.2 of Volume V of the Glendale Building and Safety Code, 2017, is hereby amended to read as follows:

- **1101.2. Notice and Order.** The building official shall issue a notice and order directed to the record owner of the building. The notice and order shall contain the following:
 - 1. The street address and a legal description sufficient for identification of the premises upon which the building is located.
 - 2. A statement that the building official has found the building to be substandard unsafe, with a brief and concise description of the conditions found to render the building dangerous under the provisions of Section 202 of this code unsafe.
 - A statement of the action required to be taken as determined by the building official.
 - 3.1. If the building official has determined that the building or structure must be repaired, the order shall require that all required permits be secured therefore and the work physically commenced within such time (not to exceed 60 days from the date of the order) and completed within such time as the building official shall determine is reasonable under all of the circumstances.
 - 3.2. If the building official has determined that the building or structure must be vacated, the order shall require that the building or structure shall be vacated

- within a certain time from the date of the order as determined by the building official to be reasonable.
- 3.3. If the building official has determined that the building or structure must be demolished, the order shall require that the building be vacated within such time as the building official shall determine reasonable (not to exceed 60 days from the date of the order), that all required permits be secured therefore within 60 days from the date of the order and that the demolition be completed within such time as the building official shall determine is reasonable.
- 4. Statements advising that if any required repair or demolition work (without vacation also being required) is not commenced within the time specified, the building official (i) will order the building vacated and posted to prevent further occupancy until the work is completed and (ii) may proceed to cause the work to be done and charge the costs thereof against the property or its owner.
- 5. Statements advising (i) that any person having any record title or legal interest in the building may appeal from the notice and order or any action of the building official to the housing advisory and appeals board Building and Fire Board of Appeals, provided the appeal is made in writing as provided in this Code, and filed with the building official within 30 days from the date of service of such notice and order, and (ii) that failure to appeal will constitute a waiver of all right to an administrative hearing and determination of the matter.

VOLUME VI. FIRE STANDARDS

SECTION VI-1. Volume VI of the Glendale Building and Safety Code, 2017, is amended as hereinafter provided.

SECTION VI-2. Chapter 1, Part 2, ADMINISTRATIVE PROVISIONS, of the International Fire Code, 2015 edition, published and copyrighted by the International Code Council, and portions of which have been amended by the State Fire Marshal, is hereby adopted by reference into Volume VI of the Glendale Building and Safety Code, 2017, and by such reference, is incorporated herein as if fully set forth.

SECTION VI-3. Section 104.1.1 of Volume VI of the Glendale Building and Safety Code, 2017, is hereby added to read as follows:

Environmental Protection Agency as a Certified Unified Program Agency (CUPA), and is thereby responsible for the implementation and enforcement of regulations and guidelines for the CUPA as described in Section 104.1.1.1. Additionally, the Glendale Fire Department is responsible for the implementation and enforcement of regulations and guidelines for the Industrial Waste Discharge Program as described in Section 104.1.1.2.

104.1.1.1 CUPA Unified Programs. The following CUPA Programs are included in the scope of the Glendale Fire Department's CUPA authority:

- Hazardous materials handling, release response plans and inventory Disclosure program (business plans).
- 2. California Accidental Release Prevention (CalARP) Program.
- 3. Underground storage tank program pursuant to Health and Safety Code Section 25283 and as that section may be subsequently amended.

- 4. Aboveground Petroleum Storage Act (APSA) requirements for spill prevention, control and countermeasure (SPCC) plans pursuant to Health and Safety Code Sections 25502(a)(1) and 25404 and as those sections may be subsequently amended.
- 5. Hazardous waste generator and onsite hazardous waste treatment (tiered permitting)
 Programs pursuant to Health and Safety Code Sections 25502(a)(1) and 25404 and as
 those sections may be subsequently amended..
- 6. California fire code hazardous material management plans and hazardous material inventory statements pursuant to this Volume VI of the Glendale Building and Safety Code, 2017.

104.1.1.2 Industrial waste discharge control program. The Glendale Fire Department is responsible for the implementation and enforcement of regulations and guidelines to govern the discharge of industrial waste to the sanitary sewer and storm drain systems pursuant to Glendale Municipal Code, 1995, Chapter 13.40, Article V, and as said chapter may be subsequently amended. For the purposes of this Volume VI, "Industrial Waste Control Program" means a program to control the discharge of industrial waste to the sanitary sewer system, treatment plant, and/or storm drain system that could interfere with the operations of said systems and could cause blockage and plugging of pipelines and interfere with normal operation of pumps.

SECTION VI-4. Section [A] 105.6 of Volume VI of the Glendale Building and Safety Code, 2017, is hereby amended to read as follows:

[A] 105.6 Required operational permits.

The *fire code official* is authorized to issue operational permits for the operations set forth in Sections 105.6.1 through 105.6.49105.6.50.

SECTION VI-5. Section 105.6.50 of Volume VI of the Glendale Building and Safety Code, 2017, is hereby added to read as follows:

105.6.50 Additional operational permits. In addition to the permits required by Section 105.6, the following operational permits shall be obtained from the *fire code official*:

- 1. General use permit. A general use permit for any activity or operation not specifically addressed in this article, which in the judgment of the *fire code official*, is possible or likely to produce conditions hazardous to life or property.
- 2. Helicopter operations. Helicopter landing at other than an approved airport, heliport or helistop, or use of a helicopter for the purpose of lifting equipment, supplies or any material.

Exceptions:

- 1. Filming companies when operating with an approved filming permit;
- 2. Emergency operations by a governmental agency or other approved agency.
- 3. Occupancies, buildings, and uses. An operational permit is required for various occupancies, buildings, and uses as established or modified by the City Council.

SECTION VI-6. Section [A] 105.7 of Volume VI of the Glendale Building and Safety Code, 2017, is hereby amended to read as follows:

[A] 105.7 Required construction permits. The fire code official is authorized to issue construction permits for work as set forth in Sections 105.7.1 through 105.7.18105.7.19.

SECTION VI-7. Section 105.7.19 of Volume VI of the Glendale Building and Safety Code, 2017 is hereby added to read as follows:

105.7.19 Additional construction permits. In addition to the permits required by Section 105.7, the following construction permits shall be obtained from the *fire code official*:

- Landscaping, irrigation, fuel modification. To install or alter landscaping and irrigation,
 or to perform fuel modification of hazardous vegetation in the Wildland Urban Interface
 Fire Areas (also known as High Fire Hazard Areas). See Chapter 49 of this Volume VI of
 the Glendale Building and Safety Code, 2017.
- 2. Plan checks and field inspections when required by the *fire code official* and not otherwise addressed in this chapter.

SECTION VI-8. Section [A] 108 of Volume VI of the Glendale Building and Safety Code, 2017 is hereby amended to read as follows:

SECTION 108

BUILDING AND FIRE BOARD OF APPEALS

[A] 108.1 Board of appeals established. In order to hear and decide appeals of orders, decisions or determinations made by the <u>building official</u> or the <u>fire code official</u> relative to the application and interpretation of <u>all volumes of</u> this code, there shall be and is hereby created a <u>joint building and fire</u> board of appeals <u>in accordance with Section 113 of Volume I of this Code</u> (hereinafter referred to as the "board"). The board of appeals shall be appointed by the governing

body and shall hold office at its pleasure. The *fire code official* shall be an ex officio member of said board but shall not have a vote on any matter before the board. The board shall adopt rules of procedure for conducting its business, and shall render all decisions and findings in writing to the appellant with a duplicate copy to the *fire code official*.

[A] 108.2 Limitations on authority. An application for appeal shall be based on a claim that the intent of this code or the rules legally adopted hereunder have been incorrectly interpreted, the provisions of this code do not fully apply, or an equivalent method of protection or safety is proposed. The board shall not have authority to waive requirements of this code.

[A] 108.3 Qualifications. The board of appeals shall consist of members who are qualified by experience and training to pass on matters pertaining to hazards of fire, explosions, hazardous conditions or *fire protection systems*, and are not employees of the jurisdiction.

SECTION VI-9. Section [A] 109.4 of Volume VI of the Glendale Building and Safety Code, 2017, is hereby amended to read as follows:

[A] 109.4 Violation penalties. The provisions of this Section 109.4 shall be as provided in Section 114.4 of Volume I of this Code. With the exception of cost recovery for abatement of public nuisances arising from hazardous vegetation and fuel management which is set forth in Chapter 4906 of this Volume VI, the recovery of administrative costs for enforcement of this Code shall be made pursuant to Chapter 2.90 of the Glendale Municipal Code, 1995, or as may be subsequently amended. Persons who shall violate a provision of this code or shall fail to comply with any of the requirements thereof or who shall erect, install, alter, repair or do work in violation of the approved construction documents or directive of the fire code official, or of a permit or certificate used under provisions of this code, shall be guilty of a [SPECIFY OFFENSE], punishable by a fine of not more than [AMOUNT] dollars or by imprisonment not

exceeding [NUMBER OF DAYS], or both such fine and imprisonment. Each day that a violation continues after due notice has been served shall be deemed a separate offense.

[A] 109.4.1 Abatement of violation. In addition to the imposition of the penalties herein described, the *fire code official* is authorized to institute appropriate action to prevent unlawful construction or to restrain, correct or abate a violation; or to prevent illegal occupancy of a structure or premises; or to stop an illegal act, conduct of business or occupancy of a structure on or about any premises.

SECTION VI-10. Section [A] 113.3 of Volume VI of the Glendale Building and Safety Code, 2017, is hereby amended to read as follows:

[A] 113.3 Work commencing before permit issuance. A person who commences any work, activity or operation regulated by this code before obtaining the necessary permits shall be subject to an additional fee double the amount of the permit fee as established by the applicable governing authority, which shall be in addition to the required permit fees.

SECTION VI-11. Section 113.6 of Volume VI of the Glendale Building and Safety Code, 2017, is hereby added to read as follows:

113.6 Fees for services; establishment; review. The *fire code official* is authorized to collect fees for services established or modified by resolution of the City Council. The *fire code official* shall review the fees charged for such services at least once annually and may, with the approval of the City Manager, recommend changes to the council when the costs for such services make it appropriate.

SECTION VI-12. Section 113.7 of Volume VI of the Glendale Building and Safety Code, 2017, is added to read as follows:

113.7 False alarms or nuisance alarms. The *fire code official* is authorized to assess a service charge, as set forth by resolution, against the person owning or responsible for an alarm system when a fire department response occurs as a result of the third *false alarm* or *nuisance alarm* at the same address or location within any twelve month period, and for each subsequent *false* alarm or *nuisance alarm* thereafter, or against any person who intentionally, or in violation of the law reports, or causes to be reported, a *false alarm* or *nuisance alarm* to any department of the City of Glendale.

SECTION VI-13. Section 202 of Volume VI of the Glendale Building and Safety Code, 2017, is hereby amended to amend the definition of false alarm to read as follows:

FALSE ALARM. The willful and knowing initiation or transmission of a signal, message or other notification of an event of fire when no such danger exists, or the activation of any fire alarm system due to malfunction, mechanical or electrical defect, improper operation or procedure by any person, or a false oral or written report to any department of the City of Glendale that an emergency exists requiring immediate or emergency response by the Glendale Fire Department.

SECTION VI-14. Chapter 3, GENERAL REQUIREMENTS, of the International Fire Code, 2015 edition, published and copyrighted by the International Code Council, is hereby adopted by reference into Volume VI of the Glendale Building and Safety Code, 2017, and by such reference, is incorporated herein as if fully set forth.

SECTION VI-15. Section 307.4.3 of Volume VI of the Glendale Building and Safety Code, 2017, is hereby amended to read as follows:

307.4.3 Portable outdoor fireplaces. Portable outdoor fireplaces shall be used in accordance with the manufacturer's instructions and shall not be operated within 15 feet (3048 mm) of a structure or combustible material.

Exceptions: 1. Portable outdoor fireplaces used at one and two-family *dwellings* located outside of a wildland-urban interface fire area, when used in accordance with the manufacturer's instructions.

2. Portable outdoor fireplaces used at one- and two-family dwellings located within a wildland-urban interface fire area, when such portable outdoor fireplaces are located at least 15 feet (4572 mm) from a structure, combustible material or vegetation. Such outdoor fireplaces shall be used in accordance with the manufacturer's instructions.

SECTION VI-16. Section 307.4.4 of Volume VI of the Glendale Building and Safety Code, 2017, is hereby added to read as follows:

307.4.4 "Red-flag" and other high fire risk conditions. Open burning, including recreational fires and fires within portable outdoor fireplaces, shall not be permitted on "red-flag" or other days which pose a high fire risk as determined by the fire code official.

SECTION VI-17. Section 308.1.5 of Volume VI of the Glendale Building and Safety Code, 2017, is hereby amended to read as follows:

308.1.5 Location near combustibles. Open flames such as from candles, lanterns, kerosene heaters and, gas-fired heaters, barbecues, fire-pits and similar devices shall not be located within a wildland-urban interface fire area, on or near decorative material-or, on or near similar combustible materials or within 10 feet (3048 mm) of combustible construction.

Exceptions: 1. Open-flame cooking devices complying with section 308.1.4 of this code shall be permitted provided a minimum separation of 10 feet (3048 mm) from vegetation is maintained.

2. Approved open-flame heating devices shall be permitted for one- and two-family dwellings, provided a minimum separation of 10 feet (3048 mm) from vegetation is maintained.

SECTION VI-18. Section 503, FIRE APPARATUS ACCESS ROADS, of the International Fire Code, 2015 edition, published and copyrighted by the International Code Council, is hereby adopted by reference into Volume VI of the Glendale Building and Safety Code, 2017, and by such reference, is incorporated herein as if fully set forth.

SECTION VI-19. Section 504.6 of Volume VI of the Glendale Building and Safety Code, 2017, is hereby added to read as follows:

504.6 Door signage. When required by the fire code official, interior and exterior doors shall be provided with permanent signs to facilitate fire department emergency access. Signage shall be approved by the fire code official.

SECTION VI-20. Section 901.1.1 of Volume VI of the Glendale Building and Safety Code, 2017, is hereby added to read as follows:

901.1.1 Aesthetics. Fire-protection systems and equipment shall be designed with attention given to aesthetics. The fire code official shall be authorized to require changes in design or installation with respect to the aesthetics of any installation upon plan review and upon field inspection and acceptance.

SECTION VI-21. Section 901.6 of Volume VI of the Glendale Building and Safety Code, 2017, is hereby amended to read as follows:

901.6 Inspection, testing and maintenance. Fire detection, alarm, and extinguishing systems, mechanical smoke exhaust systems, and smoke and heat vents, critical equipment, fire rated assemblies, egress system components, and related equipment and appurtenances shall be maintained in an operative condition at all times, and shall be replaced or repaired where defective. The fire code official is authorized to require periodic inspection, testing and certification of all such systems, equipment and appurtenances. Personnel and concerns shall be qualified to perform the inspection, testing, and certification in accordance with Table 901.6. In addition to provisions of the applicable test standards, the required certifications shall be provided to the fire code official upon request or submitted to the fire code official at least annually or as otherwise specified in Table 901.6. Nonrequired fire protection systems and equipment shall be inspected, tested and maintained as for required systems, or removed with approval of the fire code official.

All fire alarm systems, fire detection systems, automatic sprinkler or extinguishing systems, communication systems, and all other equipment, material or systems required by these regulations shall be maintained in an operable condition at all times in accordance with this code and California Code of Regulations, Title 19, Division 1. Upon disruption or diminishment of the fire protective qualities of such equipment, material or systems, immediate action shall be instituted to effect a reestablishment of such equipment, material or systems to their original normal and operational condition.

SECTION VI-22. Table 901.6 of Volume VI of the Glendale Building and Safety Code, 2017, is hereby added to read as follows:

TABLE 901.6 REQUIRED TESTING, TESTER QUALIFICATIONS, AND CERTIFICATION SUBMITTAL INTERVALS

		TESTER	REQUIRED MINIMUM TESTING FREQUENCIES (b)				FREQUENCY TO SUBMIT
		QUALIFICATIONS(a)	Semi- annual	Annual	Triennial	Every 5 years	REPORTS TO GLENDALE FIRE DEPT. (c)
ENGINEERED FIXED EXTINGUISHING SYSTEM							
Dry Chemical System		2, 6	X				Annually
Carbon Dioxide System		2, 6		X			Annually
Halogenated System		2, 6	X				Annually
Clean Agent System		2, 6		X			Annually
Wet Chemical Extinguishing System		2, 6	X				Annually
STANDPIPE SYSTEMS		2, 6		X		X	Annually
AUTOMATIC FIRE SPRINKLER SYSTEMS		2, 6		X		X	Annually
FIRE ALARM SYSTEMS, MONITORING SYSTEMS		9	Frequency ranges from quarterly to annually depending upon equipment; see NFPA 72				Annually
MISCELLANEO	OUS						
Commercial Cooking Equipment	Fire Protection Systems	2, 6	X				Annually
	Duct Cleaning		Frequency ranges from 1 month to 12 months; see NFPA 96				
Private Fire Hydrants		2, 10		X			Annually
Single Station Smoke Alarms		3, 7		X			Annually
Fire Extinguishers		6		X			
Smoke Control System	Dedicated	4	X				Annually
	Non- Dedicated	4		X			Annually
Emergency and Standby Power Systems		3		X			Annually
Electrical Buss Ducts	Torque and Electrical Testing	3			X		Triennially
	Infrared Testing	3		X			Annually
Fire Doors and Shutters		5, 8		X			Annually
Fire Escapes		8		X			Annually

- a. Other concerns or individuals may be qualified to test and certify subject to approval of the fire code official.
- b. The testing frequencies listed herein are intended as a convenient summary based on the applicable standards. The applicable standards shall always govern if there is any conflict. It is important to note that many standards mandate inspections by the owner or other qualified personnel on more frequent bases than shown herein. It is not the intent to supersede, modify, or reduce the requirements found in the applicable standards.
- c. Reports of tests and certifications need not be submitted to the Glendale Fire Department more frequently than annually, unless specifically requested by the fire code official.
 - 2. State Licensed Fire Protection Contractor (C-16)
 - 3. State Licensed Electrical Contractor (C-10)
- 4. State Licensed HVAC Contractor (C-20)
 - 5. May be performed by Owner
 - 6. Licensed by the State Fire Marshal
 - 7. 25 or less units, qualified owner may perform test
- 8. State Licensed General Contractor (A or B)
 - 9. State Licensed Electrical Contractor (C-10) and, for systems installed after 1989, holding the U.L. Certificate for the building fire alarm system
 - 10. State Licensed Plumbing Contractor (C-36)

SECTION VI-23. Section 901.11 of Volume VI of the Glendale Building and Safety Code, 2017, is hereby added to read as follows:

901.11 Critical equipment.

901.11.1 Definitions. Critical Equipment. Such mechanical and electrical equipment necessary for the operation of life safety systems, or any other equipment needed to meet the fire and life safety requirements of a building. Examples of critical equipment include, but are not limited to, emergency generator systems, smoke control systems, fire pumps, etc.

901.11.2 Locations. Critical equipment shall be located as close as practical to the ground floor, but not be located on floors above the ground floor.

Exceptions:

- 1. Equipment that by function must be located above the ground floor.
- 2. When approved by the fire code official.

901.11.3 Supervision. All critical equipment shall be provided with a means of supervision, including electronic supervision, lockouts, and other means as approved by the fire code official.

901.10.4 Ventilation. When the proper operation of critical equipment is dependent upon ventilation, the ventilation system shall be so arranged as to ensure continuous reliable operation.

Ducts shall be provided within rated shafts without fire or smoke dampers that may impact equipment operation.

901.11.5 Signage and graphics.

901.11.5.1 General. Critical equipment in buildings shall be identified with permanent signage indicating the equipment is critical for fire and life safety, identify the system and component appropriately, and any other pertinent information such as contacting the building engineer prior to servicing, lock-out/tag-out procedures, etc. Signage shall be approved by the fire code official.

901.11.5.2 Shut-offs. All service disconnects, circuit breakers, control valves, or other means of disconnection shall be identified with signage in accordance with Section 901.11.5.1

901.11.5.3 System graphics. Custom made, permanent system graphics shall be provided which show the system in schematic, identifying main component locations, a narrative system description, matrix of operations, and any other pertinent notes and instructions for firefighters.

The graphics shall be specifically designed for responding firefighting and inspections.

Additional information may be required to accommodate routine maintenance and testing personnel. All graphics shall be approved by the fire code official.

SECTION VI-24. Section 903.2.20 of Volume VI of the Glendale Building and Safety Code, 2017, regarding where automatic sprinkler systems are required, is hereby added to read as follows:

903.2.20 Where required. Notwithstanding other provisions of the code, *approved automatic* sprinkler systems in new and existing buildings and structures shall be provided in accordance with this section.

Exceptions:

- 1. When approved by the fire code official, spaces or areas in telecommunications buildings used exclusively for telecommunication equipment, associated electrical power distribution equipment, batteries and standby engines, provided those spaces or areas are equipped throughout with an automatic fire alarm system and are separated from the remainder of the building by fire barriers consisting of not less than one-hour fire-resistance-rated walls and two-hour fire-resistance-rated floor/ceiling assemblies.
- 2. Automatic fire sprinkler protection for fixed guideway transit systems shall comply with Section 903.2.20.17.

903.2.20.1 New occupancies. An automatic sprinkler system shall be installed in all new occupancies.

Exceptions:

- 1. Group B, Group F Divisions 1 and 2, and Group M occupancies, less than 1000 total square feet (92.9 m²).
- 2. Group S Division 1 occupancies not classified as motor vehicle repair garages less than 1000 total square feet (92.9 m²).
- 3. Group S Division 2 occupancies not classified as parking garages less than 1000 total square feet (92.9 m²).
- 903.2.20.2 Existing occupancies. An automatic sprinkler system shall be installed and maintained in all existing occupancies as follows:
 - 1. Throughout existing and new sections of any existing building whenever total additions result in an increase of more than 1000 square feet (92.9 m²) in the total floor area, including mezzanines or additional stories, regardless of ownership. Additions shall be cumulative with each application for building permit within the previous five years.

Exception: Group R, Division 3 occupancies.

2. Throughout existing and new sections of any existing building whenever alterations exceed fifty percent (50%) of the replacement value, as determined by the building official. Alteration values shall be cumulative with each application for a building permit within the previous five years.

Exception: Expenditures for tenant improvements, maintenance and repairs such as interior and exterior painting, carpeting, interior window coverings, drapes, movable partitions, surface re-roofing or plumbing, mechanical and electrical repairs.

3. Throughout existing and new sections of any existing building for which there is an occupancy classification change to a more hazardous use, as determined by the fire code official or building official.

4. Throughout any existing Group R Division 2 occupancy being subdivided to condominium units.

5. Existing high-rise buildings, "Existing high-rise buildings," as defined in Volume I shall have an automatic sprinkler system installed and operational throughout.

6. Existing mid-rise buildings. Existing mid-rise buildings shall have an automatic fire sprinkler system installed and operational throughout. For the purpose of this section, "mid-rise building" means any building six or more stories in height or more than 55 feet (16,764 mm) in height and not defined as a high-rise building. Measurement shall be from the underside of the roof or floor above the topmost occupiable space to the lowest fire apparatus access road level or building access, whichever is lower.

Exception: Open parking garages.

7. Existing low-rise building. Existing low-rise buildings shall have an automatic fire sprinkler system installed and operational throughout. For the purpose of this section, "low-rise building" means any building four or more stories in height but less than 55 feet (16,764 mm) in height from the lowest level of Fire Department access.
Measurement shall be from the underside of the roof or floor above the topmost occupiable space to the lowest fire apparatus access road level or building access, whichever is lower.

Exception: Open parking garages.

903.2.20.2.1 Notification, recordation, enforcement, and standards.

Notification, recordation, enforcement and standards addressed in this Section 903.2.20.2.1 shall be enforced by the fire code official to ensure compliance with Section 903.2.20.2, subsections 6, 7, and 8.

- 1. Notification. Whenever, pursuant to Section 903.2.20.2, the fire code official determines by inspection that a building does not conform to the minimum requirements of Section 903.2.20.2, subsection 6, 7 or 8, the fire code official shall prepare a fire/life safety notice in writing that the building be repaired and modified to conform to the minimum requirements of said Sections. The notice shall specify in what manner the building fails to meet the minimum requirements of Section 903.2.20.2, subsection 6, 7, or 8. It shall direct that plans be submitted, and that necessary permits be obtained not later than one (1) year after the service of the notice, and that necessary corrections be completed not later than three (3) years thereafter for work required under Section 903.2.20.2, subsection 6, not later than four (4) years thereafter for work required under Section 903.2.20.2, subsection 7 and not later than five (5) years thereafter for work required under Section 903.2.20.2, subsection 8. The notice shall be transmitted by the fire code official for enforcement purposes. The fire code official shall serve the notice either personally or by certified or registered mail upon the owner as shown on the last equalized assessment roll and upon the person, if any, in real or apparent charge or control of the building. The provisions of this Section 903.2.20.2.1 are not intended to prevent the fire code official from also making a determination or issuing an order regarding failure to comply with Section 903.2.20.2, subsection 6, 7, or 8.
- 2. Recordation. At the time that the fire code official serves the aforementioned order or notice, the fire code official shall file with the Office of the County Recorder, a certificate stating that the subject building does not meet the minimum fire safety requirements of Section

903.2.20.2, subsection 6, 7, or 8 and that the owner thereof has been so notified. After all necessary corrective work has been performed; the fire code official shall file with the Office of the County Recorder, a certificate terminating the status of the subject building as nonconforming to the minimum fire safety requirements of Section 903.2.20.2, subsection 6, 7, or 8.

3. Enforcement. If the owner or other person in charge and control of the subject building fails to comply with the aforementioned order or notice within the time periods set forth in Section 903.2.20.2.1, such person is guilty of a misdemeanor punishable by a fine or by imprisonment or both. A person is guilty of a separate offense each day during which he or she commits, continues or permits a violation of Section 903.2.20.2, subsection 6, 7, or 8.
The fire code official shall also order that the building owner or other person in charge and control post a notice of non-conformance. The notice shall be placed in a conspicuous area of the building until all required corrective work has been completed.

SECTION VI-25. Section 903.3.1.2 of Volume VI of the Glendale Building and Safety Code, 2017, regarding NFPA 13R sprinkler systems in Group R occupancies, is hereby repealed.

SECTION VI-26. Section 914.3.2 of Volume VI of the Glendale Building and Safety Code, 2017 is hereby amended to read as follows:

914.3.2 Secondary water supply. An automatic secondary on-site water supply having a *usable* capacity *of* not less than the hydraulically calculated sprinkler demand, including the hose stream requirement for a duration of not less than 30 minutes, or the fire pump's listed flow at 100% for a duration of not less than 30 minutes, whichever is greater, shall be provided for high-rise buildings *and Group I-2 occupancies having occupied floors located more than 75 ft above the lowest level of fire department vehicle access* assigned to Seismic Design Category C, D, E or F

as determined by the California Building Code. An additional fire pump shall not be required for the secondary water supply unless needed to provide the minimum design intake pressure at the suction side of the fire pump supplying the automatic sprinkler system. The secondary water supply shall have a useable capacity of not less than the hydraulically calculated sprinkler demand plus 100 GPM for the inside hose stream, allowance, for a duration of not less than 30 minutes or as determined by the occupancy hazard classification in accordance with NFPA 13, whichever is greater. The Class I standpipe system demand shall not be required to be included in the secondary on-site water supply calculations. In no case shall the secondary on-site water supply be less than 15,000 gallons.

Exception: Existing buildings.

SECTION VI-27. Section 906.8 of Volume VI of the Glendale Building and Safety Code, 2017 is hereby amended to read as follows:

906.8 Cabinets. Cabinets used to house portable fire extinguishers shall not be locked.

Exceptions:

- Where portable fire extinguishers subject to malicious use or damage are provided with a means of ready access.
- In Group I-3 occupancies and in mental health areas in Group I-2 occupancies, access
 to portable fire extinguishers shall be permitted to be locked or to be located in staff
 locations provided the staff has keys.

In new construction, fire extinguishers shall be located within recessed or semi-recessed cabinets.

In existing occupancies, fire extinguishers shall be located within recessed or semi-recessed cabinets when required by the fire code official. Cabinets should be mounted at no higher than

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four feet (1219 mm) above the floor to the top of the cabinet. Fire extinguishers shall be mounted with the brackets or hangers within the cabinets.

Exception: Surface mounted cabinets may be installed when construction material makes recessing the cabinet impracticable.

SECTION VI-28. Section 906.9.1 of Volume VI of the Glendale Building and Safety Code, 2017, is hereby amended to read as follows:

906.9.1 Extinguishers weighing 40 pounds or less. Portable fire extinguishers having a gross weight not exceeding 40 pounds (18kg) shall be installed so that their tops are not more than 5 feet (1524 mm)48 inches (1219 mm) above the floor.

SECTION VI-29. Section 907.6.6 of Volume VI of the Glendale Building and Safety Code, 2017, is hereby amended to read as follows:

907.6.6 Monitoring. Fire alarm systems required by this chapter or by the *California Building Code* shall be monitored by an approved supervising station in accordance with NFPA 72 and this section. Supervising stations shall be listed by Underwriters Laboratories, Inc., or approved equal.

Exception: Monitoring by a supervising station is not required for

- 1. Single- and multiple-station smoke alarms required by Section 907.2.11.
- 2. Group I-3 occupancies shall be monitored in accordance with Section 907.2.6.3.
- 3. Automatic sprinkler systems in one-and two-family dwellings.

SECTION VI-30. Section 907.10 of Volume VI of the Glendale Building and Safety Code, 2017, is hereby added to read as follows:

907.10 Certification, Maintenance Contract, Identification of Certificated Systems.

907.10.1 Certification. The permittee shall provide, at no cost to the fire department, a copy of a serially numbered certificate issued to the permittee by Underwriters Laboratories, Inc., or approved equal, certificating the system. The certificate shall include the following: the name and address of the protected property; type of system(s); components used; area covered; name and address of alarm service company; and the issue and expiration dates. Certification shall be required for all new systems and for all existing systems that produce three or more false alarm activations within a 12-month period, or systems that become unreliable due to dilapidation or deterioration. The copy of the certificate shall be presented to the fire code official prior to the final inspection. A certificate shall be maintained for the life of the system. The permittee, certificate holder, and maintenance contract holder shall be one and the same unless otherwise approved by the fire code official.

Exception: Group R Division 3 occupancies.

907.10.2 Maintenance contract. The permittee shall provide, at no cost to the fire department, a copy of a minimum one year maintenance contract, signed by the building owner, prior to final inspection. The permittee, certificate holder, and maintenance contract holder shall be one and the same unless otherwise approved by the fire code official. A maintenance contract shall be maintained for the life of the system.

Exception: Group R Division 3 occupancies.

907.10.3 Identification of certificated systems. All existing and new fire alarm systems for which an Underwriters Laboratories, Inc., or approved equal, certificate has been required shall

be identified with an approved, tamper resistant label on the fire alarm control panel. The label shall, at a minimum, show the following: certificate number; the name, address, phone number, listing number, and California contractor's license number of the certificate holder; the date of certification and date certification expires; a warning statement to the effect that no person or entity is authorized to perform any work on the system without the express permission and authorization of the contractor/certificate holder, and that the certification may be voided in such case; a statement that a valid certificate is required to be in effect for the life of the system, and; a statement that by order of the fire code official the label shall not be removed.

SECTION VI-31. Section 913.7 of Volume VI of the Glendale Building and Safety Code, 2017, is hereby added to read as follows:

913.7 Fire pumps and pump rooms.

913.7.1 Pump sizing. Fire pumps shall be sized to meet the required demands based upon 100% of the listed pump capacity.

913.7.2 Pump room. All fire pumps shall be located in a dedicated room. The room shall not be used for any other equipment or use.

913.7.3 High rise buildings. A minimum of two fire pumps independently driven shall be provided for all new high-rise buildings. The pumps shall be arranged and controlled so as to automatically switch should one fail. Each pump shall be provided with a secondary power supply as approved by the fire code official. One or both pumps shall receive their water directly from the municipal water supply.

SECTION VI-32. Section 914.3.1 of Volume VI of the Glendale Building and Safety Code, 2017, is hereby amended to read as follows:

914.3.1 <u>Combination Aautomatic sprinkler / standpipe</u> system. Buildings and structures shall be equipped throughout with an <u>combination</u> automatic sprinkler/<u>standpipe</u> system in accordance with Section 903.3.1.1 and a secondary water supply where required by in accordance with Section 914.3.2, and the policies of the fire code official. Standpipes shall provide for a looped redundant sprinkler supply at each floor level. A sprinkler water-flow alarm-initiating device and a control valve with a supervisory signal-initiating device shall be provided at each of the lateral connections to the risers on each floor.

Exception: An automatic sprinkler system shall not be required in open parking garages in accordance with Section 406.5 of the California Building Code.

SECTION VI-33. Table 1004.1.2 of Volume I of the Glendale Building and Safety Code, 2017 is hereby adopted by reference as [B] Table 1004.1.2 of Volume VI of the Glendale Building and Safety Code, 2017, and by such reference, is incorporated herein as if fully set forth.

SECTION VI-34. TABLE 1006.2.1 of Volume I of the Glendale Building and Safety Code, 2017 is hereby adopted by reference as [B] Table 1006.2.1 of Volume VI of the Glendale Building and Safety Code, 2017, and by such reference, is incorporated herein as if fully set forth.

SECTION VI-35. Section 1032 of Volume VI of the Glendale Building and Safety Code, 2017, is hereby added to read as follows:

1032 Special egress graphics.

1032.1 General. When required by the fire code official, a special egress graphics package shall be incorporated into new and existing structures. Such structures may include parking structures, warehouses, high-rise buildings, mid-rise buildings, complex projects, or when required by the fire code official. The package may include one or more of the following.

- 1. Oversized exit identification. Signs or graphics shall be provided to assist in identification of exits, and shall be so designed and installed so as to be visible to occupants from a distance of not less than 300 feet (91,440 mm).
- 2. Supplemental egress graphics. Supplemental egress graphics shall be provided to assist in the orderly and safe evacuation or relocation of people. Such graphics shall be performance based and include way-finding to identify egress paths and termination points.
- 3. Means of egress finishes. Means of egress shall be painted and / or otherwise finished with building-standard finishes, or as otherwise approved by the fire code official.

SECTION VI-36. Section 1103.8.3 of Volume VI of the Glendale Building and Safety Code, 2017, is hereby amended to read as follows:

1103.8.3 Power source. Single-station smoke alarms shall receive their primary power from the building wiring provided that such wiring is served from a commercial source and shall be equipped with a battery backup. Smoke alarms with integral strobes that are not equipped with battery backup shall be connected to an emergency electrical system. Smoke alarms shall emit a

signal when the batteries are low. Wiring shall be permanent and without a disconnecting switch other than as required for overcurrent protection.

Exceptions:

- 1. Smoke alarms are permitted to be solely battery operated in existing buildings where no construction is taking place. In buildings constructed under editions of the Glendale Building and Safety Code prior to the 1992 edition, smoke alarms other than those located in the corridor or area giving access to each sleeping area are permitted to be solely battery operated provided no construction or construction requiring a permit not exceeding \$1000 has taken place, and alterations or repairs do not result in the removal of interior walls or ceiling finishes exposing the structure, unless there is an attic, crawl space or basement available which could provide access for building wiring without the removal of interior finishes.
- 2. Smoke alarms are permitted to be solely battery operated in buildings that are not served from a commercial power source. Group R Division 3 occupancies in existence prior to 1973 may utilize smoke alarms that are solely battery powered provided no construction or construction requiring a permit, exceeding \$1000 has taken place, and alterations or repairs do not result in the removal of interior walls or ceiling finishes exposing the structure, unless there is an attic, crawl space or basement available which could provide access for building wiring without the removal of interior finishes.
- 3. Smoke alarms are permitted to be solely battery operated in existing areas of buildings undergoing alterations or repairs that do not result in the removal of interior walls or ceiling finishes exposing the structure, unless there is an attic, crawl space, or

basement available which could provide access for building wiring without the removal of interior finishes. Smoke alarms that receive their primary power from the building's existing wiring from a commercial source may remain in service without being provided with battery backup. Any smoke alarm that is replaced for any reason shall be provided with battery backup.

- 4. Smoke alarms are permitted to be solely battery operated where repairs or alterations are limited to the exterior surfaces of dwellings, such as the replacement of roofing or siding, or the addition or replacement of windows or doors, or the addition of a porch or deck.
- 5. Smoke alarms are permitted to be solely battery operated when work is limited to the installation, alteration or repairs of plumbing or mechanical systems or the installation, alteration or repair of electrical systems which do not result in the removal of interior wall or ceiling finishes exposing the structure.

SECTION VI-37. Section 2007.9 of Volume VI of the Glendale Building and Safety Code, 2017, is hereby added to read as follows.

2007.9 General design parameters. High-rise emergency landing facilities shall include the following features:

- 1. A clear unobstructed landing and take-off area located at the highest roof level with a minimum dimension of 100 feet by 100 feet (30,480 mm by 30,480 mm), and a touch-down pad area having a minimum dimension of 50 feet by 50 feet (15,240 mm by 15,240 mm).
- 2. If the roof has no parapet wall, and the perimeter of the touch-down pad is not considered to be a safe distance from the edge of the building roof, a barrier shall be provided. A guardrail,

- safety net, or other restrictive barrier shall be considered around the perimeter of the roof, in the area of the touch-down pad, in such a manner so as to not restrict or reduce the pad area.
- 3. If the touch-down area is located on an elevated platform exceeding 30 inches (762 mm) in height, a barrier shall be provided as in Section 2007.9, subsection 2, around the perimeter of the platform.
- 4. Two (2) stairs with a width of at least 44 inches (1118 mm) shall be provided for egress and access to the landing touch-down area. Stairs shall be designed and installed in compliance with the requirements of Volume I. Stairs shall be located so helicopter personnel will have visual contact with persons using the stairs as best practicable to the satisfaction of the fire code official.
- 5. Lighting on the roof shall be provided along the entire path between each exit enclosure and the landing facility. Lighting shall meet the requirements of Sections 1006 through 1006.3.1
- 6. Landing facility appurtenances such as wind indicating devices and landing area lighting shall be approved by the fire code official.
- 7. Permanent marking shall be provided to identify the building address and maximum weight limit on the landing and takeoff pad.

SECTION VI-38. Section 4904.3 of Volume VI of the Glendale Building and Safety Code, 2017, is hereby added to read as follows:

4904.3 Very High Fire Hazard Severity Zones in LRA. The City of Glendale hereby designates Very High Fire Hazard Severity Zones as designated by the Director of the California Department of Forestry and Fire Protection and as depicted on a map entitled Very High Fire Hazard Severity Zones in LRA, dated February 27, 2008, or as said map is subsequently amended, and retained on file at the Office of the State Fire Marshal, and more readily available at: http://www.fire.ca.gov/fire_prevention/fire_prevention_wildland_zones.php. This map is

intended to supersede other maps previously adopted by the City of Glendale designating high fire hazard areas.

SECTION VI-39. Section 4906 of Volume VI of the Glendale Building and Safety Code, 2017, is hereby amended to read as follows:

SECTION 4906

HAZARDOUS VEGETATION AND FUEL MANAGEMENT

- 4906.1 General. Hazardous vegetation and fuels shall be managed to reduce the severity of potential exterior wildfire exposure to buildings and to reduce the risk of fire spreading to buildings as required by applicable laws and regulations.
- 4906.2 Application. Buildings and structures located in the following areas shall maintain the required hazardous vegetation and fuel management:
- 1. All unincorporated lands designated by the State Board of Forestry and Fire Protection as

 State Responsibility Area (SRA) including:
- 1.1. Moderate Fire Hazard Severity Zones
- 1.2. High Fire Hazard Severity Zones
- 1.3. Very-High Fire Hazard Severity Zones
- 2. Land designated as Very High Fire Hazard Severity Zone by cities and other local agencies.
- 4906.3 Requirements. Hazardous vegetation and fuels around all applicable buildings and structures shall be maintained in accordance with the following laws and regulations:
- 1. Public Resources Code Section 4291.
- 2. California Code of Regulations, Title 14, Division 1.5, Chapter 7, Subchapter 3, Section 1299 (see guidance for implementation "General Guideline to Create Defensible Space").
- 3. California Government Code Section 51182.
- 4. California Code of Regulations, Title 19, Division 1, Chapter 7, Subchapter 1, Section 3.07. Y:\DWhiting\SP CC | Item 2 for Dave\[4\] GBSC_2017_Volume VI_110116.doc

4906.1 Management of hazardous vegetation.

4906.1.1 Statement of legislative intent and purpose. It is the objective of this section to promote and protect the public health, safety and welfare by recognizing that there exists within the City of Glendale a potentially hazardous fire situation created by grass, weeds, shrubs, and trees which are in such condition and location as to provide a ready fuel supply to augment the spread or intensity of fire. It is the intent of this Section 4906 to provide minimum standards to safeguard life, property and the public welfare by insuring that hazardous vegetation or refuse is removed and that all grass, weeds, shrubs, and trees are properly maintained so as to not create a fire hazard within the community, while maintaining sufficient vegetation for aesthetic and soil erosion control purposes. It is the further intent that this Section 4906 apply on a year-round basis to ensure the removal and/or proper maintenance of grass, weeds, shrubs, trees and refuse in order to prevent the spread or intensity of fire within the community. Of particular concern is the need to provide adequate "defensible space" in the urban/wildland interface area of the city, referred to as the Wildland Urban Interface Fire Areas (also known as High Fire Hazard Areas). For purposes of this Section 4906, "defensible space" is that space within 100 feet (30 480 mm) of a building or structure where vegetation capable of causing a fire to spread must be modified to slow the rate and intensity of an advancing wildfire to provide access by fire and other emergency personnel to defend the building or structure from the threat of fire. **4906.1.2 Prohibition.** No person who has any ownership or possessory interest in, or control of a parcel of land shall allow to exist thereon any hazardous vegetation, which, by reason of proximity to a building or structure, constitutes a fire hazard. For purposes of this Section 4906,

"hazardous vegetation" means refuse, grass, weeds, shrubs, trees, or other vegetation which, in

the opinion of the fire code official, are in such condition and location, or by the unique

characteristics of a species, as to provide a ready fuel supply to augment the spread or intensity of a fire.

<u>4906.1.3 Specific requirements.</u> In order to provide sufficient defensible space, each person who has any ownership or possessory interest in, or control of, a parcel of land shall do all of the following:

4906.1.3.1 General. Remove from the property all hazardous vegetation, except as otherwise provided herein, if such hazardous vegetation is within 100 feet (30 480 mm) of a building, within ten (10) feet (3048 mm) of a combustible fence, or within ten (10) feet (3048 mm) of any portion of any highway, street, alley, or driveway improved or used for vehicular travel or other vehicular purposes. Distances up to 200 feet (60 960 mm) or greater from a building or structure, 25 feet or greater from a combustible fence, or 25 feet or greater from a highway, street, alley, or driveway, may be necessary as determined by the fire code official. This shall not require the removal of trees, ornamental shrubbery or plants which are used as ground cover, provided such are landscape materials that are properly irrigated and maintained and do not provide a ready fuel supply to augment the spread or intensity of a fire.

4906.1.3.2 Landscaping, irrigation, and fuel modification.

4906.1.3.2.1 When required. Landscaping, irrigation, and/or fuel modification plans and specifications shall be required to be submitted to the fire code official for any property upon which a building permit application has been submitted in the Wildland Urban Interface Fire Areas (also known as High Fire Hazard Areas).

Exception: When, in the opinion of the fire code official, the scope of work and/or the site conditions are such that plans and specifications are not deemed necessary.

- 4906.1.3.2.2 Permits. Permits are required for landscaping, irrigation, or fuel modification of hazardous vegetation in the Wildland Urban Interface Fire Areas (also known as High Fire Hazard Areas). See Chapter 1 Section 105.6.48.
- 4906.1.3.2.3 Plans and specifications. Plans and specifications shall be submitted to the fire code official for review and approval prior to the issuance of a building permit or the installation or alteration of landscaping and irrigation in the Wildland Urban Interface Fire Areas (also known as High Fire Hazard Areas) or fuel modification of hazardous vegetation in the Wildland Urban Interface Fire Areas (also known as High Fire Hazard Areas).
- <u>4906.1.3.2.4 Inspections.</u> All work performed under permit and approved plans in accordance with Section 4906.1.3.2 shall be inspected in accordance with conditions of the approval and Chapter 1.
- 4906.1.3.3 Adjacent to building--5 feet. Keep all trees, shrubs, and other vegetation or portions thereof, adjacent to or overhanging any building or structure free of dead limbs, branches, and other combustible matter.
- 4906.1.3.4 Roof clearance. Maintain five (5) feet (1524 mm) of vertical clearance between roof surfaces and portions of trees or shrubs overhanging any building or structure.
- 4906.1.3.5 Chimney clearance. Maintain no less than ten (10) feet (3048 mm) of vertical and horizontal clearance between the outlet of a chimney or stovepipe and any overhanging portions of trees or shrubs.
- 4906.1.3.6 Roof surface. Properly maintain the roofs of all buildings or structures free of leaves, needles, twigs, and other combustible matter.
- 4906.1.3.7 Adjacent to building 30 feet. Properly maintain all hazardous grass, weeds, and small shrubs within 30 feet (9144 mm) of any building or structure. Hazardous grass, weeds and

small shrubs must be maintained less than three (3) inches (76 mm) high. Remove all large native shrubs.

4906.1.3.8 Roads. Maintain trees and large native shrubs, and all hazardous grass, weeds and small shrubs, within 10 feet (3048 mm) of that portion of any highway, street, alley, or driveway which is improved or used for vehicle travel or other vehicular purposes (except for designated fire roads), so that no leafy foliage, twigs, or branches are within six (6) feet (1828 mm) of the ground (but no more than 1/3 of the crown).

4906.1.3.9 Combustible fences. Maintain all hazardous vegetation located within ten (10) feet (3048 mm) of any combustible fence.

within 100 feet (30 480 mm) of any building or structure. Native grass and small shrubs may be retained on steep slopes (greater than 30% incline) to stabilize the soil and prevent erosion, but may not exceed a height of 18 inches (457 mm). Large native specimen shrubs should be retained where possible, but no closer than an average of 18 feet (5486 mm) apart. Remove all dead foliage, twigs or branches, or live branches within three (3) feet (914 mm) of the ground, from mature trees and shrubs (but no more than 1/3 of the crown).

4906.1.3.11 Cut vegetation and refuse. Remove and/or safely dispose of all cut vegetation and hazardous refuse. Cut grass may be left on the slope to protect the soil if it lays down within three (3) inches (76 mm) of the ground. Cut vegetation may be chipped or mulched and left on the slope up to a depth of 12 inches (30 mm).

4906.1.3.12 Soil erosion control. If the abatement of hazardous vegetation results in the exposure of bare mineral soil, or the soil is exposed to such an extent that increased soil erosion would be likely, or the fire code official determines that the abatement has been excessive and

poses a threat to the public health, safety or welfare, irrigation and landscaping or a suitable erosion control structure must be provided to establish effective soil erosion control.

<u>4906.1.3.13 Minimum requirements</u>. Nothing contained in this section shall be deemed to preclude the fire code official from requiring more than the minimum specific requirements set forth above when the fire code official determines that conditions exist that necessitates greater fire protection measures.

4906.1.3.14 Notice for property owner to abate a public nuisance. The Council finds that hazardous vegetation prohibited under Section 4906.1.3 increases the danger of fire and thus constitutes a public nuisance. If such condition exists, the fire code official shall give written notice to the owner of record and a copy of said notice to any other person with possessory interest in the property, to abate the nuisance within 30 days from the date the notice was sent. The notice shall be sent by certified mail and shall state that the owner is required to abate the nuisance and that if the nuisance is not abated, the city may take further action which may include but is not limited to the following actions: (1) the city, or its contractor, may enter upon the parcel of land and remove or otherwise eliminate or abate the nuisance, (2) upon completion of such work the cost thereof, including administrative costs, shall become a special assessment against that parcel, and (3) upon city council confirmation of the assessment and recordation of said notice, a lien shall attach to the parcel to be collected on the next regular property tax bill levied against the parcel.

4906.2 Abatement and cost recovery procedure.

<u>4906.2.1 Commencement of abatement proceeding.</u> Whenever the fire code official determines that a public nuisance exits, and following mailing of the notice under Section 4906.1.3.14, the abatement proceedings shall commence.

4906.2.2 Abatement proceeding-service of notice of city's intent to abate a public nuisance.

In the event the owner or any other person with possessory interest in the property fails to abate hazardous vegetation pursuant to notice given under Section 4906.1.3.14, the fire code official shall notify the owner of record of the affected property as shown on the latest equalized tax assessment roll, by certified mail, that the city intends to abate the public nuisance. A copy of said notice shall also be mailed to any other person with possessory interest in the property. Said notice shall be sent not less than 15 days prior to the date of the city's proposed abatement. The fire code official shall also post a copy of said notice in a conspicuous location on the property. Failure of any owner or other party having possessory interest in the property to receive a notice hereunder, shall not affect the validity of said notice nor any proceeding taken hereunder, provided that the procedure for service of notice has been followed. The notice of intention shall be in substantially the following form:

NOTICE OF INTENTION

TO ABATE PUBLIC NUISANCE

(Name and address of owner of the land)

"As owner shown on the last equalized assessment roll of the land located at (address), you are hereby notified that the undersigned, pursuant to the Glendale Building and Safety Code, 2017, Volume VI, Section 4906 determined that there exists upon said land or building the following condition which constitutes a public nuisance pursuant to the provisions of the Glendale Building and Safety Code, 2017, Volume VI, Section 4906.

"You are hereby notified to abate said nuisance within 15 days from the date of mailing of this notice, and upon your failure to do so, the same will be abated by whatever action necessary by the city and the costs thereof, together with administrative costs, assessed to you as owner of the land on which said public nuisance is located.

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"As owner of the land on which said public nuisance is located, you are hereby notified that you may, within 10 days after the mailing of this notice of intention, request in writing to the fire code official a public hearing to contest the finding of the public nuisance on said property. If such a request is not received by the fire code official within such 10 day period, the fire code official shall have the authority to abate said public nuisance and assess the costs as aforesaid without a public hearing. You may submit a sworn written statement within such 10 day period setting forth your position and intentions regarding the public nuisance on said property with your reasons for denial and such statement shall be construed as a request for hearing at which your presence is not required. You may appear in person at any hearing requested by you or, in lieu thereof, may present a sworn written statement aforesaid in time for consideration at such hearing."

Notice Mailed

(Date)

4906.2.3 Appeals. The owner of the substandard property may appeal the finding of the fire code official by submitting within a ten (10) day period from the date of the mailing of the Notice, to the fire code official, a written request for a hearing before the Building and Fire Board of Appeals.

Fire Chief

4906.2.4 Abatement--appeals. Appeals under this section shall be held before the Building and Fire Board of Appeals, which shall hear all facts and testimony it deems pertinent. The facts and testimony may include testimony on the condition of the property and circumstances related to the nuisance. The owner of the land may appear in person at the hearing or present a sworn written statement in time for consideration at the hearing. The Building and Fire Board of

Appeals may impose such conditions and take such other action as it deems appropriate to carry out the purpose of the provisions of this section. The decision of the Building and Fire Board of Appeals may be appealed to the city council pursuant to the Uniform Appeals Procedure, Chapter 2.88, Glendale Municipal Code, 1995.

4906.2.5 Procedure. If any order of the Building and Fire Board of Appeals made pursuant to Section 4906 is not complied with within the period designated by the Board, the fire code official may then cause such work to be done to the extent necessary to eliminate the public nuisance and other substandard conditions determined to exist by the Board and the cost of such work shall be assessed to the property as set forth in California Government Code Section 38773.5 and as that section may subsequently be amended.

4906.2.6 Emergency procedures. Notwithstanding any other provision in Section 4906, when in the opinion of the fire code official, a substandard structure or substandard property is an immediate hazard to life and property, and the fire code official makes written findings to the effect that abatement of such hazard requires action, the fire code official may then cause such work to be done to the extent necessary to eliminate the hazard. The fire code official shall attempt to contact the property owner, to the extent possible, to inform the owner of the work to be done and request said owner's assistance or immediate voluntary removal of the hazard. At the time or shortly thereafter the work is performed, the fire code official shall post a notice and mail to the property owner a statement of the nature of the work performed. Any individual aggrieved by the action of the fire code official under this section, may appeal the determination of the action to the Building and Fire Board of Appeals as set forth in Section 4906.2.4 herein except that the appeal shall be filed within ten (10) days from the date of mailing the notice of work performed.

4906.2.7 Costs. The costs involved in the correction of substandard conditions in any action to abate a nuisance shall be charged against the owner of the property. In addition to the above costs, an administrative processing fee established by resolution of the council of the City of Glendale, shall be assessed against each parcel for fire department costs associated with abatement. An additional inspection fee shall be established by resolution of the council of the City of Glendale for charges related to inspection services for identification of hazardous vegetation. The schedule for such fees shall be maintained on file in the fire department. The fire code official shall review the fees at least once annually, and shall recommend changes to the council when the costs for the services make it appropriate. The fire code official shall notify all parties concerned by certified mail as to the amount of such assessment resulting from such work. If the total assessment determined as provided for in this section is not paid within thirty (30) days after mailing of such notice, such charges shall be placed as a special assessment on the tax bill for the property pursuant to the procedure set forth in Section 38773.5 of the California Government Code and as that section by subsequently be amended. If applicable, an award of attorney's fees to a prevailing party shall also be assessed.

abatement work or taking any actions to correct substandard conditions, the fire code official shall cause to be recorded with the County Recorder a "Notice of Special Assessment Lien."

Such notice shall summarize the work performed, the cost and date of completion.

4906.2.9 Collection of costs by lien not exclusive remedy. The Council declares that it is the intent of the City of Glendale to collect costs charged against the city after performing any public nuisance or hazard abatement work or correcting substandard conditions by lien or any other legal remedies.

4906.2.9.1 Owner costs. Re-inspection and administrative fees to ascertain code compliance for overdue abatement of previously noticed or cited violations shall be charged against the owner. **4906.2.9.2** Notice of public hearing on lien. If the amount of such expenses as shown in such statement is not paid to the fire code official within thirty (30) days after such notice, the fire code official shall prepare a written notice to the owner of the property upon which the city intends to file a lien. Upon preparation of such notice, the fire code official shall present same to the city council, and the city council shall forthwith, by resolution, fix a time and place for a public hearing on such notice. The fire code official shall cause a copy of such notice to be served on the owner of the property not less than ten (10) days prior to the time fixed for such hearing. Mailing a copy of such notice to the owner of the property at the address listed in the most recent property ownership records provided to the city by the County Assessor as of the date the fire code official causes notice to be sent by certified mail and shall comprise proper service. Service shall be deemed complete at the time of deposit in the United States mail. At the public hearing as scheduled above, the city council will hear all noticed or affected property owners who would be obligated to pay the abatement and related costs incurred by the city. The city council shall confirm the appropriateness of persons to be held responsible for the noticed abatement charges and report to the fire code official its final determinations of liability concerning the affected parties. Charges confirmed by the city council and not paid within five (5) days of the public hearing date will be subject to lien and collection procedures as provided below.

4906.2.9.3 Recording of lien. The fire code official shall record in the Office of the County Recorder of the County of Los Angeles, State of California, a certificate substantially in the following form:

"NOTICE OF SPECIAL ASSESSMENT LIEN"

Pursuant to authority vested in me by the Glendale Building and Safety Code, 2017, California, I
did on the day of , , cause a condition to be abated or chargeable action to occur
on the hereinafter-described real property at the expenses of the owner thereof, in the amount of
\$. Said amount has not been paid nor any part thereof, and the City of Glendale does
hereby claim a lien upon the hereinafter-described real property in said amount. The same shall
be a lien upon the said real property until said sum, with interest thereon from the date of
recordation of this lien in the office of the County Recorder of the County of Los Angeles, State
of California, and such other charges as may be set by resolution of the city council, has been
paid in full. The real property hereinabove mentioned and upon which a lien is claimed is that
certain parcel of land lying and being in the City of Glendale, County of Los Angeles, State of
California, and particularly described as follows:
Assessor's Parcel Number
Dated this day of , .
Fire Chief, City of Glendale

4906.2.10 Method of collection. With the confirmation of the report by the city council, the hazard abatement charges contained therein that remain unpaid by the owner of the subject property shall constitute a special assessment against said property as it has received the special benefit of city abatement services. The same shall be a lien against the property described therein until the amount thereof, plus accrued interest, has been paid in full. The amount of such lien shall draw interest thereon at a rate as established by resolution of the city council from and after the date of the recording of said notice of the contents thereof. Such charges shall be collected, along with city administrative and re-inspection fees, at such time as are established by the

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County Assessor for inclusion on the next property tax roll. The fire code official shall turn over to the County Assessor for inclusion in the next property tax assessment the total sum of unpaid hazard abatement charges consisting of the abatement costs, administrative and re-inspection fees, as set by resolution of the city council. Thereafter, said assessment may be collected at the same time and in the same manner as ordinary municipal taxes are collected and shall be subject to the same penalties and the same procedure of sale as provided for ordinary delinquent municipal taxes. The special assessment shall be on parity and the same priority as general property taxes.

4906.2.11 Other abatement procedures. The provisions of this section shall not in any manner limit or restrict the city from enforcing city ordinances or abating public nuisances in any other manner provided by law.

4906.3 Unusual circumstances. If the fire code official determines that difficult terrain, danger of erosion or other unusual circumstances make strict compliance with the clearance of vegetation provision of this chapter undesirable or impractical, enforcement thereof may be suspended and reasonable alternative measures shall be provided.

SECTION VI-40. Section 4908 of Volume VI of the Glendale Building and Safety Code, 2017, is hereby added to read as follows:

SECTION 4908

CONTROL AND USE OF HAZARDOUS FIRE AREAS

4908.1 Scope. The unrestricted use of grass-, brush- or tree-covered land in hazardous fire areas is a potential menace to life and property from fire and resulting erosion. Safeguards to prevent the occurrence of fires and to provide adequate fire-protection facilities to control the spread of

fire that might be caused by recreational, residential, commercial, or industrial activities conducted in hazardous fire areas shall be in accordance with this Section 4908.

4908.2 Definitions. [Reserved.]

4908.3 Permits. The fire code official is authorized to stipulate conditions for permits. Permits shall not be issued when public safety would be at risk, as determined by the fire code official.

4908.4 Restricted entry. The fire code official shall determine and publicly announce when hazardous fire areas shall be closed to entry and when such areas shall again be opened to entry. Entry on and occupation of hazardous fire areas, except public roadways, inhabited areas or established trails and camp sites which have not been closed during such time when the hazardous fire area is closed on entry, is prohibited.

Exceptions:

- Residents and owners of private property within hazardous fire areas and their invitees and guests going to or being upon their lands.
- Entry, in the course of duty, by peace or police officers, and other duly authorized
 public officers, members of a fire department and members of the United States
 Forest Service.

4908.5 Trespassing on posted property.

4908.5.1 General. When the fire code official determines that a specific area within a hazardous fire area presents an exceptional and continuing fire danger because of density of natural growth, difficulty of terrain, proximity to structures or accessibility to the public, such areas shall be closed until changed conditions warrant termination of closure. Such areas shall be posted as hereinafter provided.

4908.5.2 Trespassing. Entering and remaining within areas closed and posted is prohibited.

Exception: Owners and occupiers of private or public property within closed and posted areas and their guests or invitees, and local, state and federal public officers and their authorized agents acting in the course of duty.

4908.6 Smoking. Lighting, igniting or otherwise setting fire to or smoking tobacco, cigarettes, pipes or cigars in hazardous fire areas is prohibited.

Exception: Places of habitation or within the boundaries of established smoking areas or campsites as designated by the fire code official.

4908.7 Spark Arresters. Chimneys in conjunction with fireplaces, barbecues, incinerators or heating appliances in which solid or liquid fuel is used, upon buildings, structures or premises located within 200 feet (60960mm) of hazardous fire areas, shall be provided with a spark arrester constructed with heavy wire mesh or other noncombustible material with openings not to exceed ½ inch (12.7mm).

4908.8 Tracer bullets, tracer charges, rockets and model aircraft. Tracer bullets and tracer charges shall not be possessed, fired or caused to be fired into or across hazardous fire areas.

Rockets, model planes, gliders and balloons powered with an engine, propellant or other feature liable to start or cause fire shall not be fired or projected into or across hazardous fire areas.

4908.9 Explosives and blasting. Explosives shall not be possessed, kept, stored, sold, offered for sale, given away, used, discharged, transported or disposed of within hazardous fire areas except by permit from the fire code official.

4908.10 Fireworks. Fireworks shall not be used or possessed in hazardous fire areas. The fire code official is authorized to seize, take, remove or cause to be removed fireworks.

4908.11 Apiaries. Lighted and smoldering material shall not be used in connection with smoking bees in or upon hazardous fire areas except by permit from the fire code official.

4908.12 Outdoor fires. Outdoor fires shall not be built, ignited or maintained in or upon hazardous fire areas, except by permit from the fire code official.

Exception: Outdoor fires within habited premises or designated campsite where such fires are built in permanent barbecue, portable barbecue, outdoor fire place, incinerator or grill and are a minimum of 30 feet (9144 mm) from grass-, brush-, or tree covered area.

Permits shall incorporate such terms and conditions that will reasonably safeguard public safety and property. Outdoor fires shall not be built, ignited, or maintained in or upon hazardous fire areas under the following conditions:

- 1. When high winds are blowing;
- When a person age 17 or older is not present at all times to watch and tend such fire;
 or
- 3. When public announcement is made that open burning is prohibited.

 Permanent barbecues, portable barbecues, outdoor fireplaces, or grills shall not be used for the disposal of rubbish, trash or combustible waste material.

4908.13 Incinerators, firepits, and fireplaces. Incinerators, firepits, outdoor fireplaces, permanent barbecues and grills shall not be built, installed or maintained in hazardous fire areas without prior approval of the fire code official. Incinerators, outdoor fireplaces, permanent barbecues and grills shall be maintained in good repair and in safe condition at all times.

Openings in such appliances shall be provided with an approved spark arrester, screen, or door.

Exception: When approved, unprotected openings in barbecues and grills necessary for proper functioning.

<u>4908.14 Dumping.</u> Garbage, cans, bottles, papers, ash, refuse, trash, rubbish or combustible waste material shall not be placed, deposited or dumped in or upon hazardous fire areas or in, upon or along trails roadways or highways in hazardous fire areas.

Exception: Approved public and private dumping areas.

4908.15 Disposal of ashes. Ashes and coals shall not be placed, deposited or dumped in or upon hazardous fire areas.

Exceptions:

- 1. In the hearth or an established fire pit, camp stove or fireplace.
- 2. In a noncombustible container with a tight fitting lid, which is kept or maintained in a safe location not less than ten (10) feet (3048 mm) from combustible vegetation.
- 3. Where such ashes or coals are buried and covered with one (1) foot (304.8 mm) of mineral earth not less than 25 feet (7620 mm) from combustible vegetation or structures.

4908.16 Use of fire roads and firebreaks. Motorcycles, motor scooters and motor vehicles shall not be driven or parked upon, and trespassing is prohibited upon, fire roads or firebreaks beyond the point where travel is restricted by cable, gate or sign, without the permission of the property owner. Vehicles shall not be parked in a manner in which obstructs the entrance to a fire road or firebreak.

Exception: Public officers acting within their scope of duty.

Radio and television aerials, guy wires thereto, and other obstructions shall not be installed or maintained on fire roads or firebreaks unless located 16 feet (4877 mm) or more above such fire road or firebreak.

4908.17 Use of motorcycles, motor scooters and motor vehicles. Motorcycles, motor scooters and motor vehicles shall not be operated within hazardous fire areas, without a permit by the fire code official except upon clearly established public or private roads. Permission from the property owner shall be presented when requesting a permit.

4908.18 Tampering with fire department locks, barricades and signs. Locks, barricades, seals, cables, signs and markers installed within hazardous fire areas, by or under the control of the fire code official, shall not be tampered with, mutilated, destroyed or removed. Gates, doors, barriers and locks installed by or under the control of the fire code official shall not be unlocked.

4908.19 Liability for damage. The expense of fighting fire that results from a violation of this chapter shall be charged against the person whose violation of this chapter caused the fire.

Damages caused by such fires shall constitute a debt of such person and are collectable by the fire code official in the same manner as in the case of an obligation under contract expressed or implied.

SECTION VI-41. Appendix B Section B105.2 of Volume VI of the Glendale Building and Safety Code, 2017, is hereby amended to read as follows:

B105.2 Buildings other than one- and two-family dwellings. The minimum fire-flow and flow duration for buildings other than one- and two-family dwellings shall be as specified in Table B105.1.

Exceptions: 1. A reduction in required fire-flow of up to 7550 percent, as approved, is allowed when the building is provided with an approved automatic sprinkler system installed in accordance with Section 903.3.1.1 or 903.3.1.2. The resulting fire-flow shall not be less than 1,500 gallons per minute (5678 L/min) for the prescribed duration as specified in Table B105.1.

- 2. [SFM] Group B, S-2 and U occupancies having a floor area not exceeding 1,000 square feet, primarily constructed of noncombustible exterior walls with wood or steel roof framing, having a Class A roof assembly, with uses limited to the following or similar uses:
- 2.1. California State Parks buildings of an accessory nature (restrooms).
- 2.2. Safety roadside rest areas, (SRRA), public restrooms.
- 2.3. Truck inspection facilities, (TIF), CHP office space and vehicle inspection bays.
- 2.4. Sand/salt storage buildings, storage of sand and salt.

SECTION VI-42. Appendix C Table C105.1 of Volume VI of the Glendale Building

and Safety Code, 2017 is hereby amended to read as follows:

TABLE C105.1--NUMBER AND DISTRIBUTION OF FIRE HYDRANTS

FIRE-FLOW REQUIREMENT (gpm) X 3.785 for L/min.	MINIMUM NO. OF HYDRANTS	AVERAGE SPACING BETWEEN HYDRANTS (feet) a, b, c	MAXIMUM DISTANCE FROM ANY POINT ON STREET OR ROAD FRONTAGE TO A HYDRANT d X 304.8 for mm	
		71 307.0 101 Hilli		
1,750 or less	1	500 300	250	
2,000-2,250	2	$450\overline{300}$	225	
2,500	3	$450\overline{300}$	225	
3,000	3	400 <u>300</u>	225	
3,500-4,000	4	350 <u>300</u>	210	
4,5005,000	5	300^{a}	180	
5,500	6	300^{a}	180	
6,000	6	250 ^a	150	
6,500-7,000	7	250 ^a	150	
7,500 or more	8 or more ⁵	200 <u>a</u>	120	

a. Reduce by 100 feet (30 480 mm) for dead-end streets or roads.

b. Where streets are provided with median dividers which cannot be crossed by firefighters pulling hose lines, or arterial streets are provided with four or more traffic lanes and have a traffic count of more than 30,000 vehicles per day, hydrant spacing shall average 500 feet (152.4m) on each side of the street and be arranged on an alternating basis up to a fire-flow requirement of 7,000 gallons per minute (26 495 L/min.) and 400 feet (122 m) for higher fire-flow requirements.

c. Where new water mains are extended along streets where hydrants are not needed for protection of structures or similar fire problems, fire hydrants shall be provided at not less than 1,000-foot (305 m) spacing to provide for transportation hazards.

d. Reduce by 50 feet (15 240 mm) for dead-end streets or roads.

e. One hydrant for each 1,000 gallons per minute (3785 L/min.) or fraction thereof.

SECTION VI-43. Appendix D, FIRE APPARATUS ACCESS ROADS, of the International Fire Code, 2015 edition, published and copyrighted by the International Code Council, are hereby adopted by reference into Volume VI of the Glendale Building and Safety Code, 2017, and by such reference, are incorporated herein as if fully set forth.

VOLUME VII. SECURITY STANDARDS

SECTION VII-1. Volume VII of the Glendale Building and Safety Code, 2017 is hereby adopted to read as follows:

- 1. Title. This Code shall be referred to and cited as Volume VII of the Glendale Building and Safety Code, 2017.
- 2. Purpose. The purpose of this Code is to provide minimum standards to safeguard property and public welfare by regulating and controlling the design, construction, quality of materials, use and occupancy, location and maintenance of all buildings and structures within the City of Glendale as required in Section 14051 of the California Penal Code relating to Building Security.

3. Scope.

- 3.1. New Construction. The provisions of this Code shall apply to new construction and to additions or alterations to existing buildings and structures except as specifically provided by this Code.
- 3.2. Existing Multiple Family Dwellings. Existing multiple family dwelling units which are converted to privately owned family units (condominiums or cooperatives) shall comply with the provisions of Section 14 (Special Residential Building Provisions) in this Code.
- 3.3 Exemption. Any building as defined in Volume IA, IB and

 Title 19 California Administrative Code, requiring special type releasing

 latching, or locking devices, other than described herein, shall be exempt from the provisions hereof relating to locking devices of interior and exterior doors.

4. Definitions. For the purpose of this Code certain terms are defined as follows:

APPROVED. Approved shall mean certified as meeting the requirements of this Code
by the enforcing authority or its authorized agents, or by other officials designated by law
to give approval on a particular matter dealt with by the provisions of this Code with
regard to a given material, mode of construction, piece of equipment or device.

AUXILIARY LOCKING DEVICE. Auxiliary Locking Device shall mean a secondary locking system added to the primary locking system to provide additional security.

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

BOLT PROJECTION OR BOLT THROW. Bolt projection or bolt throw shall mean the distance from the edge of the door, at the bolt center line to the farthest point on the bolt in the projected position.

BURGLARY RESISTANT GLAZING. Burglary resistant glazing shall mean those materials as defined in Underwriter's Laboratory (U.L.) Bulletin 972.

<u>COMMERCIAL BUILDING.</u> Commercial building shall mean a building, or portion thereof used for a purpose other than for a dwelling.

COMPONENT. Component, as distinguished from a part, shall mean a subassembly which combines with other components to make up a total door or window assembly. For example, the primary components of a door assembly include: door, lock, hinges, jamb/wall, jamb/strike and wall.

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

<u>CYLINDER CORE OR CYLINDER PLUG.</u> Cylinder core or cylinder plug shall mean the central part of a cylinder containing the keyway, which is rotated by the key to operate the lock mechanism.

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

DEADBOLT. Deadbolt shall mean a lock bolt which does not have a spring action as opposed to a latch bolt, which does. Deadbolts shall conform to the requirements of locks or latches prescribed in Volume IA and IB of this Code and shall comply with Grade1 ANSI-designation deadbolt locks.

DEAD LATCH OR DEADLOCKING LATCH BOLT. Dead latch or deadlocking latch bolt shall mean a spring actuated latch bolt having a beveled end and incorporating a plunger which, when depressed, automatically locks the projected latch bolt against return by end pressure.

DEMISING WALL. A common wall that separates one tenant's space from another or from the building's common areas shall be constructed from the floor to the roof or floor deck above.

DOOR ASSEMBLY. Door assembly shall mean a unit composed of a group of parts or components which make up a closure for an opening to control passageway through a wall. For the purposes of this Code, a door assembly consists of the following parts:

door, hinges, locking device or devices, operation contacts (such as handles, knobs, push plates), miscellaneous hardware and closures, the frame, including the head, threshold and jambs plus the anchorage divides to the surrounding wall and a portion of the surrounding wall extending 36 inches (914mm) from each side of the jambs and 26 inches (660mm) from the head.

DOOR STOP. Door stop shall mean that projection along the top and sides of a door jamb which checks the door's swinging action.

DOUBLE CYLINDER DEADBOLT. Double cylinder deadbolt shall mean a deadbolt lock which can be activated only by a key on both the interior and exterior.

DWELLING. Dwelling shall mean a building or portion thereof designed primarily for residential occupancy, including single family and multiple family dwellings.

ENFORCING AUTHORITY. Enforcing authority shall mean the agency or person having the responsibility for enforcing the provisions of this volume.

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

<u>FULLY TEMPERED GLASS.</u> Fully tempered glass shall mean those materials meeting or exceeding ANSI standard Z 97.1 - Safety Glazing.

JAMB. Jamb shall mean the vertical members of a door frame to which the door is secured.

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

KEY-IN-KNOB. Key-in-knob shall mean a lockset having the key cylinder and other lock mechanisms contained in the knob.

LATCH OR LATCH BOLT. Latch or latch bolt shall mean a beveled, spring-actuated bolt which may or may not have a deadlocking device.

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

LOCKING DEVICE. Locking device shall mean a part of a window assembly which is intended to prevent movement of the movable sash, which may be the sash lock or sash operator.

MULTIPLE FAMILY DWELLING. Multiple family dwelling shall mean a building or portion thereof designed for occupancy by two or more families living independently of each other, including hotels, motels, apartments, duplexes and townhouses.

PANIC HARDWARE. Panic hardware shall mean a latching device on a door assembly for use when emergency egress is required due to fire or other threat to life safety.

Devices shall be designed so that they will facilitate the safe egress of people in case of an emergency when a pressure not to exceed 15 lbs. (66.72N) is applied to the releasing device in the direction of exit travel. Such releasing devices are bars or panels extending not less than two-thirds of the width of the door and placed at heights suitable for the service required, not less than 30 inches (762mm) or more than 44 inches (1118mm) above the floor.

PART. Part, as distinguished from component, shall mean a unit (or subassembly) which combines with other units to make up a component.

PRIMARY LOCKING DEVICE. Primary locking device shall mean the single locking system on a door or window unit whose primary function is to prevent unauthorized intrusion.

PRIVATE OR SINGLE FAMILY DWELLING. Private or single family dwelling shall mean a building designed exclusively for occupancy by one family.

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

SASH. Sash shall mean an assembly of stiles, rails, or mullions assembled into a single frame which supports the glazing material. A fixed sash is one which is not intended to be opened. A movable sash is intended to be open.

SILL. Sill shall mean the lowest horizontal member of a window frame.

SINGLE CYLINDER DEADBOLT. Single cylinder deadbolt shall mean a deadbolt lock which is activated from the outside by a key and from the inside by a knob, thumbturn, lever, or similar mechanism.

SOLID CORE DOOR. Solid core door shall mean a door composed of solid wood or composed of compressed wood equal in strength to solid wood construction.

STILE. Stile shall mean a vertical framing member of a window or door.

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

SWINGING DOOR. Swinging door shall mean a door hinged at the stile or at the head and threshold.

<u>U.L. LISTED.</u> U.L. Listed shall mean tested and listed by Underwriter's Laboratory, <u>Inc.</u>

WINDOW ASSEMBLY. Window assembly shall mean a unit which includes a window and the anchorage between the window and the wall.

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

- 5. Enforcement Provisions. The enforcing authority is directed to administer and enforce the provisions of this Code. The enforcing authority shall be the building official as defined in Volume IA of this Code.
- 6. Right of Entry. The enforcing authority shall have the right, and is hereby authorized and empowered, to enter or go on or about any building as provided by Chapter 1

 Division II Section [A] 104.6 of Volume IA of this Code.
- 7. Violations and Penalties. It shall be unlawful for any person, firm or corporation to erect, construct, enlarge, alter, move, improve, convert, demolish, equip, use, occupy or maintain any building or structure in the City of Glendale, or cause same to be done, contrary to or in violation of any of the provisions of this Code.
- **8. Exemptions, Appeals.** Appeals of orders, decisions or determinations made by the building official relative to the applications and interpretations of this Code shall be in accordance with Chapter I Division II Section 113 of Volume IA of this Code.

- 9. Alternate Materials and Methods of Construction. The provisions of this Volume are not intended to prevent the use of any material or method of construction not specifically prescribed herein, provided any such alternate has been approved by the enforcing authority or as provided in Section 5, nor is it the intention of this Volume to exclude any similarly approved sound method or structural design or analysis not specifically provided for in this Volume. Materials, methods of construction, or structural design limitations provided for in this Volume are to be used unless an exception is granted by the enforcing authority. Such alternate materials or methods may be approved provided it is found that the proposed design is satisfactory and the material and method of work is, for the purpose intended, at least equivalent to that prescribed in this Code in quality, strength, effectiveness, burglary resistance, durability and safety. 10. Keying Requirements. Upon occupancy by the owner or proprietor, each single unit in a tract or commercial development, constructed under the same general plan, shall have locks using combinations which are interchange free from locks used in all other separate dwellings, proprietorships or similar distinct occupancies. A certificate from the lock supplier declaring that all locks supplied to the project are keyed separately shall be acceptable as complying with the above requirements.
- 11. Frames, Jambs, Strikes, Hinges: Installation and Construction. Installation and construction of frames, jambs, strikes and hinges shall be as follows:
 - 1. Door Jambs. Door jambs shall be installed with solid backing in such a manner that no voids exist between the strike side of the jamb and the frame opening for a vertical distance of six (6) inches (153mm) each side of the strike.

- 2. Framing. In wood framing, horizontal blocking shall be placed between studs at door lock height for three (3) stud spaces each side of the door openings.

 Jambs shall have solid backing against sole plates.
- 3. Door Stops. Door stops on wooden jambs for in-swinging doors shall be of one piece construction with the jamb. Jambs for all doors shall be constructed or protected so as to prevent violation of the strike.
- 4. Strike Plate. The strike plate for deadbolts on all wood frame doors shall be constructed of minimum sixteen (16) U.S. gauge steel, bronze, or brass and secured to the jamb by a minimum of two screws.
- **5. Hinges.** Hinges for out-swinging doors shall be equipped with non-removable hinge pins or a mechanical interlock to preclude removal of the door from the exterior by removing the hinge pins.
- 12. Windows/Sliding Glass Doors; Requirements. The following requirements must be met for windows and sliding glass doors:
 - 1. Exterior Window; Exemptions. Except as otherwise specified in Section 14

 (Special Residential Building Provisions), and Section 15 (Special Commercial Building Provisions) all openable exterior windows and sliding glass doors shall comply with the tests as set forth in Section 16 (Performance Testing).
 - 2. Louvered Windows. Louvered windows shall not be used when any portion of the window is less than 12 feet (3658mm) vertically or 6 feet (1829mm) horizontally from an accessible surface or any adjoining roof, balcony, landing, stair tread, platform, or similar structure.

- **13. Garage-Type Doors.** Rolling overhead, solid overhead, swing or sliding accordion garage-type doors shall conform to the following standards:
 - 1. Wood Doors. Wood doors shall have panels a minimum of five-sixteenths (5/16) inch (8mm) in thickness with the locking hardware being attached to the support framing.
 - 2. Aluminum Doors. Aluminum doors shall be a minimum thickness of .0215 inches (.546mm) and riveted together a minimum of eighteen (18) inches (458mm) on center along the outside seams. There shall be a full width horizontal beam attached to the main door structure which shall meet the pilot, or pedestrian access, door framing within three (3) inches (76mm) of the strike area of the pilot or pedestrian access door.
 - 3. Fiberglass Doors. Fiberglass doors shall have panels a minimum density of six (6) ounces per square foot (1831 gram/m²) from the bottom of the door to a height of seven (7) feet (2134mm). Panels above seven (7) feet (2134mm) and panels in residential structures shall have a density not less than five (5) ounces per square foot (1526 grams/m²).
 - **4.** Cylinder Locks. Doors utilizing a cylinder lock shall have a minimum five (5) pin tumbler operation with the locking bar or bolt extending into the receiving guide a minimum of one (1) inch (25.4mm).
 - 5. Wide Doors, Receiving Points. Doors that exceed sixteen (16) feet (4877mm) in width shall have two lock receiving points; or, if the door does not exceed nineteen (19) feet (5791mm), a single bolt may be used if placed in the center of

the door with the locking point located either at the floor or door frame header; or, torsion spring counter balance type hardware may be used.

- 6. Electrically Operated Doors. Except in a residential building, doors secured by electrical operation shall have a keyed-switch to open the door when in a closed position, or by a signal locking device.
- 7. Slide Bolt Assemblies. Doors with slide bolt assemblies shall have frames a minimum of .120 inches (3mm) in thickness, with a minimum bolt diameter of one-half (½) inch (13mm) and protrude at least one and one-half (1-1/2) inches (38mm) into the receiving guide. A bolt diameter of three-eights (3/8) inch (10mm) may be used in a residential building. The slide bolt shall be attached to the door with non-removable bolts from the outside. Rivets shall not be used to attach slide bolt assemblies.
- 8. Padlock(s). Except in a residential building, padlock(s) used with exterior mounted slide bolt(s) shall have a hardened steel shackle locking both at heel and toe and a minimum five pin tumbler operation with a non-removable key when in an unlocked position. Padlock(s) used with interior mounted slide bolt(s) shall have a hardened steel shackle with a minimum four pin tumbler operation. A certificate of verification from the contractor/owner declaring that he has advised the occupant of the padlock requirements of this section shall be acceptable as complying with the above requirements.

14. Special Residential Building Provisions.

14.1. Swinging Exterior Doors. Except for vehicular access doors, all exterior swinging doors of any residential building and attached garages, including the

door leading from the garage area into the dwelling unit shall be equipped as follows:

- 1. Wood Doors. All wood doors shall be of solid core construction with a minimum thickness of one and three-fourths (1-3/4) inches (45mm), or with panels not less than nine-sixteenths (9/16) inch (15mm) thick. **2. Locks.** A single or double door shall be equipped with a single cylinder deadbolt lock. The bolt shall have a minimum projection of one (1) inch (25.4mm) and be constructed so as to repel cutting tool attack. The deadbolt shall have an embedment of at least three-fourths (3/4) inch (19mm) into the strike receiving the projected bolt. The cylinder shall have a cylinder guard, a minimum of five pin tumblers, and shall be connected to the inner portion of the lock by connecting screws of at least one fourth (1/4) inch (6.3mm) in diameter. All installation shall be done so that the performance of the locking device will meet the intended antiburglary requirements. A dual locking mechanism constructed so that both deadbolt and latch can be retracted by a single action of the inside door knob, or lever, may be substituted provided it meets all other specifications for locking devices.
- 3. Double Doors. The inactive leaf of double doors shall be equipped with metal flush bolts having a minimum embedment of five-eights (5/8) inch (16mm) into the head and threshold or the door frame.

- 4. Glazing. Glazing in exterior doors or within forty (40) inches

 (1016mm) of any locking mechanism shall be of fully tempered glass or rated burglary resistant glazing.
- 5. Wide Angle Viewer. Except where clear vision panels are installed, all front exterior doors shall be equipped with a wide angle (180⁰) door viewer.
- **14.2.** Address Number and Identifying Data. Address numbers and other identifying data shall be displayed as follows:
 - 1. Address Number. All residential dwellings shall display an address number in a prominent location on the street side of the residence in such a position that the number is easily visible to approaching emergency vehicles. The numerals shall be no less than four (4) inches (102mm) in height and shall be of a contrasting color to the background to which they are attached. In addition, any multi-family residence which affords vehicular access to the rear through any driveway, alleyway or parking lot shall also display the same numbers on the rear of the building. (See also Volume VI Section 505.1)
 - 2. Multiple Family Dwelling; Illuminated Diagrams and Identification

 Numbers. There shall be positioned at each entrance of a multiple family

 dwelling complex an illuminated diagrammatic representation of the

 complex which shows the location of the viewer, the unit designations

 within the complex, each unit that is a "non smoking" unit (as governed by

 Chapter 8.52 of the Glendale Municipal Code, 1995, or any successor

legislation), the smoking permitted area authorized under Section 8.52.130 of the GMC and the complex's exits, stairwells, elevators, fire alarm annunciator panels, and standpipes. In addition, each individual unit within the complex shall display a prominent identification number, not less than four (4) inches (102mm) in height, which is easily visible to approaching vehicular and/or pedestrian traffic. In addition, any multiple family dwelling which affords vehicular access to the rear through any driveway, alleyway or parking lot shall also display the same numbers on the rear of the building.

- **14.3. Lighting; Multiple Family Dwellings.** Lighting in multiple family dwellings shall be as follows:
 - 1. Aisles, Passageways and Recesses. Aisles, passageways and recesses related to and within the building complex shall be illuminated with an intensity of at least twenty-five hundredths (.25) of a footcandle (2.7 lux) at the ground level during the hours of darkness. Lighting devices shall be protected by weather and vandalism-resistant covers.
 - 2. Parking Structures, Parking Lots and Carports. Parking structures, parking lots and carports shall be provided with a minimum of two (2) foot-candles (21.5 lux) of light on the parking surface during the hours of darkness. Lighting devices shall be protected by weather and vandalism-resistant covers.

15. Special Commercial Building Provisions.

- 15.1. Swinging Exterior Doors; Construction and Glazing. Swinging exterior glass doors, wood or metal doors with glass panels, and solid wood or metal doors of commercial buildings shall be constructed or protected as follows:
 - 1. Wood Doors Construction. Wood doors shall be of solid core construction with a minimum thickness of one and three-fourths (1-3/4) inches (45mm). Wood panel doors with panels less than one (1) inch (25.4mm) thick shall be covered on the inside with a minimum sixteen (16) U.S. gauge sheet steel, or its equivalent, which is to be attached with screws on minimum six (6) inch (153mm) centers. Hollow steel doors shall be a minimum of sixteen (16) U.S. gauge steel and have sufficient reinforcement to maintain the designed thickness of the door when any locking device is installed; such reinforcement being able to restrict collapsing of the door around any locking device.
 - 2. Glazing, Iron or Steel Grills. Except when double cylinder deadbolts are utilized, any glazing within 40 inches (1016mm) of any door locking mechanism shall be constructed or protected as follows:
 - 2.1. Fully tempered glass or rated burglary resistant glazing; or
 - 2.2. Iron or steel grills of at least one-eighth (1/8) inch (3mm)

 material with a minimum two (2) inches (52mm) mesh

 secured on the inside of the glazing may be utilized; or
 - 2.3. The glazing shall be covered with iron bars of at least one-half (½) inch (13mm) round or one inch by one-fourth inch (1" x 1/4") (24.5mm x 7mm) flat steel material, spaced not

- more than five (5) inches (122mm) apart, secured on the inside of the glazing.
- 2.4. Items 2.2 and 2.3 above shall not interfere with the

 operation of opening windows if such windows are

 required to be openable by the Glendale Building and

 Safety Code, 2014.
- 15.2. Swinging Exterior Doors, Equipment and Construction. All swinging exterior wood and steel doors of commercial buildings shall be equipped as follows:
 - 1. Deadbolts. A single or double door shall be equipped with a double or single cylinder deadbolt. The bolt shall have a minimum projection of one (1) inch (25.4mm) and be constructed so as to repel cutting tool attack. The deadbolt shall have an embedment of at least three-fourths (3/4) inch (19mm) into the strike receiving the projected bolt. The cylinder shall have a cylinder guard, a minimum of five pin tumblers, and shall be connected to the inner portion of the lock by connecting screws of at least one-fourth (1/4) inch (7mm) in diameter. The provisions of the preceding paragraph do not apply where (1) panic hardware is required, or (2) an equivalent device is approved by the building official.
 - **2. Construction and Equipment.** Double doors shall be constructed and equipped as follows:
 - 2.1. The inactive leaf of double door(s) shall be equipped with metal flush bolts having a minimum embedment of five-eighths (5/8) inch (16mm) into the head and threshold of the door frame.

- 2.2. Double doors shall have an astragal constructed of steel a minimum of
 .125 inch (3mm) thick which will cover the opening between the doors.
 The astragal shall be a minimum of two (2) inches (51mm) wide, and
 extend a minimum of one (1) inch (25.4mm) beyond the edge of the
 door to which it is attached. The astragal shall be attached to the outside
 of the active door by means of welding or with non-removable bolts
 spaced apart on not more than ten (10) inch (254mm) centers.
- **15.3. Aluminum Door Equipment.** Aluminum frame swinging doors of commercial buildings shall be equipped as follows:
 - The jamb on all aluminum frame swinging doors shall be so constructed or
 protected to withstand 1600 pounds (7117N) of pressure in both a vertical
 distance of three (3) inches (76mm) and a horizontal distance of one (1) inch
 (25.4mm) each side of the strike, so as to prevent violation of the strike.
 - 2. A single or double door shall be equipped with a double cylinder deadbolt with a bolt projection exceeding one (1) inch (25.4mm), or a hook shape or expanding dog bolt that engages the strike sufficiently to prevent spreading. The deadbolt lock shall have a minimum of five pin tumblers and a cylinder guard.
- 15.4. Panic Hardware. Panic hardware in commercial buildings, whenever otherwise required by this Code or Title 19, California Administrative Code, shall be installed as follows:
 - 1. Panic hardware shall contain a minimum of two (2) locking points on each door; or

- 2. On single doors, panic hardware may have one locking point which is not to be located at either the top or bottom rails of the door frame. The door shall have an astragal constructed of steel .125 inch (3mm) thick which shall be attached with non-removable bolts to the outside of the door. The astragal shall extend a minimum of one (1) inch (25.4mm) beyond the edge of the door to which it is attached.
- 3. Double doors containing panic hardware shall have an astragal attached to the doors at their meeting point which will close the opening between them, but not interfere with the operation of either door.
- with a metal guide track at top and bottom and a cylinder lock and/or padlock with a hardened steel shackle which locks at both heel and toe, and a minimum five pin tumbler operation with non-removable key when in an unlocked position. The bottom track shall be so designed that the door cannot be lifted from the track when the door is in a locked position.
- 15.6. Office Buildings; Doors to Suites. In office buildings with multiple occupancy, all entrance doors to individual office suites shall meet the construction and locking requirements for exterior doors.
- 15.7. Accessible Windows. Windows in commercial buildings shall be deemed accessible if less than twelve (12) feet (3658mm) above the ground. Accessible windows having a pane exceeding ninety-six (96) square inches (61935mm²) in an area with the smallest dimension exceeding six (6) inches (153mm) and not visible from a public

thoroughfare (including any street, alleyway or sidewalk supported and maintained through public funds) shall be protected in the following manner.

- 1. Fully tempered glass or burglary resistant glazing; or
- 2. The following window barriers may be used but shall be secured with non-removable bolts:
 - 2.1. Inside or outside iron bars of at least one-half (½) inch (13mm) round or one by one-quarter (1 x 1/4) inch (25.4mm x 7mm) flat steel material, spaced not more than five (5) inches (127mm) apart and securely fastened; or
 - 2.2. Inside or outside iron or steel grills of at least one-eighth (1/8) inch (3mm) material with not more than a two (2) inch (51mm) mesh and securely fastened.
- 3. If a side or rear window is of the type that can be opened, it shall, where applicable, be secured on the inside with either a slide bar, bolt, crossbar, auxiliary locking device, and/or padlock with hardened steel shackle and a minimum four pin tumbler operation.
- 4. The protective bars or grills shall not interfere with the operation of opening windows if such windows are required to be openable by this Code.
- 15.8. Exterior Transoms. All exterior transoms exceeding ninety-six (96) square inches (61935mm²) on the side and rear of any commercial building or premises used for business purposes shall be protected by one of the following:
 - 1. Fully tempered glass or rated burglary resistant glazing; or

- 2. The following barriers may be used but shall be secured with non-removable bolts:
 - 2.1. Outside iron bars of at least one-half (½) inch (13mm) round or one by one-quarter (1 x 1/4) inch (25.4mm x 7mm) flat steel material, spaced no more than five (5) inches (127mm) apart and securely fastened; or
 - 2.2. Outside iron or steel grills of at least one-eighth (1/8) inch (3mm) with not more than a two (2) inches (51mm) mesh and securely fastened.
- 3. The protective bars or grills shall not interfere with the operation of opening the transoms if such transoms are required to be openable by this Code or Title 19, California Administrative Code.
- **15.9. Roof Openings**. Roof openings of commercial buildings shall be equipped as follows:
 - 1. All skylights on the roof of any building or premise used for business purposes shall be provided with:
 - 1.1. Rated burglary resistant glazing; or
 - 1.2. Iron bars of at least one-half (½) inch (13mm) round or one by one-fourth (1 x 1/4) inch (25.4mm x 7mm) flat steel material under the skylight and securely fastened; or
 - 1.3. A steel grill of at least one-eighth (1/8) inch (3mm) material with a maximum two (2) inches (51mm) mesh under the skylight and securely fastened.
 - 2. All hatchway openings on the roof of any building or premises used for business purposes shall be secured as follows:

- 2.1. If the hatchway is of wooden material, it shall be covered on the inside with at least sixteen (16) U.S. gauge sheet metal, or its equivalent, attached with screws.
- 2.2. The hatchway shall be secured from the inside with a slide bar or slide bolts.
- 2.3. Outside hinges on all hatchway openings shall be provided with non-removable pins when using pin-type hinges.
- 3. All air duct or air vent openings exceeding ninety-six (96) square inches

 (61935mm²) on the roof or exterior walls of any building or premises used for business purposes shall be secured by covering the same with either of the following:
 - 3.1. Iron bars of at least one-half (½) inch (13mm) round or one by onefourth (1 x 1/4) inch (25.4mm x 7mm) flat steel material spaced no more than five (5) inches (127mm) apart and securely fastened; or
 - 3.2. Iron or steel grills of at least one-eighth (1/8) inch (3mm) material with a maximum two (2) inches (51mm) mesh and securely fastened.
 - 3.3. If the barrier is on the outside, it shall be secured with bolts which are non-removable from the exterior.
 - 3.4. The above (3.1 and 3.2) must not interfere with venting requirements

 creating a potentially hazardous condition to health and safety or conflict

 with the provisions of this Code or Title 19, California Administrative

 Code.

Exceptions:

- Air duct openings covered by mechanical equipment weighing more than 200 lbs. (890N) or sufficiently anchored with duct access(es) sufficiently secured.
- 2. A security system approved by the building official.
- 15.10. Permanent Ladders. Permanently affixed ladders leading to roofs of commercial buildings shall be fully enclosed with sheet metal to a height of ten feet (3048mm). This covering shall be locked against the ladder with a case hardened hasp, secured with non-removable screws or bolts. Hinges on the cover will be provided with non-removable pins when using pin-type hinges. If a padlock is used, it shall have a hardened steel shackle, locking at both heel and toe, and a minimum five pin tumbler operation with non-removable key when in an unlocked position.
- **15.11. Address Numbers, Identifying Data, and Illumination**. The following standards shall apply to lighting, address identification and parking areas:
 - 1. The address number of every commercial building shall be illuminated during the hours of darkness so that it shall be easily visible from the street. The numerals in these numbers shall be no less than six (6) inches (153mm) in height and be of a color contrasting to the background. In addition, any business which affords vehicular access to the rear through any driveway, alleyway or parking lot shall also display the same numbers on the rear of the building.
 - 2. All exterior commercial doors, during the hours of darkness, shall be illuminated with a minimum of one (1) footcandle (10.796 lux) of light. All exterior bulbs shall be protected by weather and vandalism-resistant covers.

3. Parking structures, open parking lots and access thereto, providing more than ten parking spaces and for use by the general public, shall be provided with a maintained minimum of one (1) footcandle (10.769 lux) of light on the parking surface from dusk until the termination of business every operating day.

16. Performance Testing.

- 16.1. Responsibility of Owner. It shall be the responsibility of the owner or his or designated agent, of a building or structure falling within the provisions of this Volume, to provide the enforcing authority with a written specification performance test report indicating that the materials utilized meet the minimum requirements.
- 16.2. Proof of Compliance. Whenever there is sufficient evidence of compliance with the provisions of this Volume or evidence that any material or any construction does not conform to the requirements of this Volume, or in order to substantiate claims for alternate materials or methods of construction, the enforcing authority may require tests as proof of compliance to be made at the expense of the owner or his agent by any agency which is approved by the enforcing authority.
- 16.3. Verification. Specimens shall be representative, and the construction shall be verified by assembly drawings and bill of materials. Two complete sets of manufacturer or fabricator installation instructions and full-size or accurate scale templates for all items and hardware shall be included.

16.4. Testing Methods. The enforcing authority shall establish and adopt testing methods which shall substantially meet the minimum standards in the most recent edition of the California Building Code.

VOLUME VIII.

COMMERCIAL AND INDUSTRIAL PROPERTY MAINTENANCE CODE

SECTION VIII-1. Volume VIII of the Glendale Building and Safety Code, 2017, is hereby adopted to read as follows:

10. PURPOSE. The Council of the City of Glendale has determined that the economic vitality of the City is directly impacted by the visual character and physical condition of its commercial and industrial neighborhoods. It is the purpose of this code to provide minimum standards for maintenance of properties in these districts, improve community appearance, and to protect the public health, safety and welfare of individuals who live, work, shop and/or operate business within and surrounding these districts.

The goals of this code are to promote an attractive business community that will help serve the economic and social interests of the City, to enhance the value of all commercial and industrial property and promote the overall economic development within the City by preventing commercial and industrial properties from becoming blighted resulting in diminution in the enjoyment, use, and property values of properties in and around the commercial and industrial areas. In adopting this code, it is the Council's intention to set forth maintenance standards for commercial and industrial properties.

20. SCOPE. The standards set forth in this code shall apply to all lots and parcels in all commercial and industrial zoning districts, as defined in Title 30 of the Glendale Municipal Code, 1995 ("GMC") and all structures located on such real property.

30. DEFINITIONS. For the purpose of this code, the following words and phrases shall have the following meanings:

"COMMERCIAL LANDSCAPING AREAS" shall be as defined by Title 30 of the GMC or as a "condition of approval" of a discretionary action in any commercial, commercial/industrial or industrial zone.

"VISUALLY OPAQUE" shall mean material that does not allow the viewing of images through it.

and directed to enforce the provisions of this code. For such purposes the building official shall have the powers of a law enforcement officer. The building official shall have the power to render interpretations of this code and to adopt and enforce rules and supplemental regulations in order to clarify the application of its provisions.

50. MAINTENANCE OF PROPERTY, GENERALLY. All property, buildings and structures or portions thereof shall be maintained in clean, and neat condition, in good repair and free of graffiti.

It is unlawful and deemed a public nuisance for any person owning, leasing, occupying or managing any commercial, commercial/industrial or industrial zoned property to maintain property contrary to this code.

determined to be an unsafe building in accordance with Chapter 1 Division II Section

116, Volume IA, Glendale Building and Safety Code, 2017; or any building or portion

thereof, or the premises on which the same is located, in which there exists any of the

following listed conditions shall be deemed and hereby is declared to be a substandard

building and a violation of this code:

- 1. Any building, structure or portion thereof that is dilapidated, dangerous, abandoned, partially destroyed, or unsafe as defined in the Glendale Building and Safety Code, 2017, resulting from decay, damage, faulty construction or arrangement, fire, wind, earthquake, flood old age or neglect, inadequate exits, human or mechanical damage, or improper occupancy;
- 2. Any building, structure or portions thereof on which the condition of the paint has become so deteriorated as to permit decay, excessive checking, cracking, peeling, chalking, dry rot, warping, or termite infestation;
- 3. Any building, structure, wall or fence on which graffiti has been placed which is visible from a public street;
- 4. Any premises, building or portions thereof that are unsanitary. Unsanitary conditions shall include, but not be limited to, infestation of insects, vermin or rodents, rubbish, trash or debris maintained in any doorway or vestibule, lack of adequate garbage and rubbish storage and removal facilities, and/or lack of or improper connection to required sewage disposal system;
- 5. All electrical service to any electrical wiring devices, appliance, or equipment which is found to be dangerous to life or property because they are defective or improperly installed or used;
- 6. Plumbing which was installed in violation of GMC requirements in effect at the time of installation or which has not been maintained in a sanitary and safe operating condition;
- 7.a. All mechanical systems, materials and appurtenances, both existing and new equipment which were installed in violation of the code edition under which

- installed and/or not maintained in proper operating condition in accordance with the original design and in a safe and hazard free condition.
- b. Screening devices used to obstruct the view of such devices which are not maintained in a clean and neat condition;
- c. Any equipment and/or screening device or part thereof that is defective, broken,
 damaged, or weathered;
- 8. Any building or portions thereof which has faulty weather protection which shall include, but not be limited to, deteriorated or ineffective waterproofing of exterior walls, roofs, foundations or floors, parapets, including broken windows or doors, defective or lack of weather protection for exterior wall coverings, including lack of paint, or weathering due to lack of paint or other protective covering, or broken, rotted, split, or buckled exterior wall coverings or roof coverings and damaged or non-functioning drainage structures;
- 9. Any building, premises or portions thereof, device, apparatus, equipment,
 combustible waste or vegetation which is in such a condition as to cause a fire or
 explosion or provide a ready fuel to augment the spread and intensity of fire or
 explosion arising from any cause; or
- 10. Except as provided in Title 30 of the GMC, the accumulation of weeds, vegetation, junk, abandoned or inoperable motor vehicles, dead organic matter, debris, garbage, offal, rat harborages, stagnant water, combustible materials or similar materials on a premises or property;
- 11. Inadequate or inoperative night and security lighting on a premises or property.

70. DECLARATION OF SUBSTANDARD PROPERTY. Whenever the building official or his or her designee(s) finds that a substandard condition(s) exist on any property covered by this code, he or she shall declare the building, structure, and/or premises as substandard and require the owner to complete repairs, removal or clearing of such condition(s) within the time set forth in a notification to the property owner of the substandard conditions. All notices and orders to the property owner shall be issued and recorded pursuant to Chapter 11, Volume V, Glendale Building and Safety Code, 2017.

80. VACANT OR UNOCCUPIED BUILDINGS OR STRUCTURES. Vacant or unoccupied buildings or structures, and the property on which they are constructed, shall be continuously maintained to the standards set forth in this code.

90. PREMISES, GENERALLY. Premises of commercial, commercial/industrial and industrial zoned properties shall be maintained free of dirt, litter and debris.

Entryways, porticos, alcoves and vestibules shall be maintained free of dirt, litter and debris.

Windows and window displays shall be clean. Temporary window signs and display materials as permitted by Title 30 of the GMC which have become faded, torn or in disrepair are prohibited.

Awnings must be in good repair. Awnings which are faded or torn or on which lettering is becoming detached, faded or in poor repair are prohibited.

A violation of Section 90 shall be deemed an infraction punishable as provided in Section 1.20 and 1.24 of the GMC.

100. CONSTRUCTION SITES. Work must proceed in a timely manner pursuant to Chapter 1 Division II Section 105.5, Volume IA of the Glendale Building and Safety Code, 2017.

The accumulation of dirt, litter, debris, and equipment in or on the adjoining street, and/or sidewalk during construction shall be prohibited, unless otherwise permitted pursuant to a City of Glendale permit.

110. SIGNS. All signs and sign structures erected or placed on properties within the Commercial and Manufacturing Zones shall be maintained in a good and safe structural condition, shall be painted on all exterior parts at least as often as required to prevent fading, chipping, peeling and rusting, and shall be maintained in good condition and appearance as specified in Section 30.33 of the GMC.

A violation of Section 110 shall be deemed an infraction punishable as provided in Section 1.20 and 1.24 of the GMC.

120. LANDSCAPING AND IRRIGATION. All planting material and planting beds shall be permanently maintained in a clean, orderly and healthy manner at all times, pursuant to requirements set forth in Title 30 of the GMC. Any landscaping that is not in a healthy or living state shall be replaced. If a landscape plan is part of any City approval, the replacement of such planting material shall be in accordance with the approved landscaping plan. Proposals to modify an approved landscaping plan, which has been in effect for more than two years, may be reviewed and approved by the Director of Community Development, without the necessity of returning to the Design Review Board or other permitting authority. For those commercial or industrial properties within a redevelopment project area, any of the modifications under the

conditions set forth above, may be reviewed and approved by the Director of Community

Development.

No landscaping shall be permitted in areas where such landscaping in any way endangers the health, or public safety by creating a traffic hazard, by obstructing vision, or which is detrimental or harmful to the use of surrounding properties.

All irrigation systems shall be maintained in good repair and working condition.

Said systems shall be adjusted so as not to spray across or into any sidewalk, driveway, and/or street.

Violation of Section 120 shall be deemed an infraction punishable as provided in section 1.20 and 1.24 of the GMC.

130. PARKWAYS AND PUBLIC RIGHTS-OF-WAY. All sidewalks and parkways located adjacent to and adjoining commercial or industrial properties shall be maintained free of junk, trash, debris, litter, painted or inked survey marks (after the work is completed or work in connection therewith), appliances, furniture, overgrown and unpruned privately owned trees and shrubs, weeds and grass in excess of six (6) inches in height, by the owner or the responsible party in control of such property. Landscaping in parkways shall be permanently maintained in a clean, orderly and healthy manner at all times, pursuant to requirements set forth in Chapter 8.32 of the GMC.

structures and their surfaces shall be maintained in a clean, and neat condition and in good repair free of junk, trash, debris, litter, weeds, appliances, furniture, and abandoned or inoperable motor vehicles. All drainage structures shall be maintained and operable and free of standing water. All parking stalls shall be clearly identified with paint or

other approved striping materials on the surface of the parking area. All parking lot improvements, including the striping of stalls, appropriate signing and lighting, shall be permanently maintained pursuant to Chapter 30.32 of the GMC.

The following conditions or activities are prohibited:

- The repair or servicing of any type of vehicles in any parking lot or structure,
 except as expressly permitted by the GMC;
- 2. The use of required parking spaces during regular business hours, for storage of commercial or other vehicles, including but not limited to, busses, trailers, recreational vehicles, boats and motor homes, except as otherwise expressly permitted by the GMC, or as incident to the use permitted on the site;
- 3. Vehicles of any type, parked or stored for sale on any parking lot or vacant parcel except in conjunction with a bona fide vehicle sales agency.
 A violation of section 140 shall be deemed an infraction punishable as provided in Section 1.20 and 1.24 of the GMC.
- 150. LOADING AREAS. All loading areas must be maintained free and clear of junk, trash, debris, appliances, furniture or any other items. Loading areas shall be maintained in a clean and neat condition, free of any refuse that might attract or harbor rodents, vermin and/or insects.
- 160. OUTSIDE STORAGE AREAS. Except as provided in Title 30 of the GMC, there shall be no outside storage of tools, equipment, supplies, materials or merchandise at any time in any commercial or commercial/industrial zoning district. Temporary sheds, tents, awnings and the like are prohibited.

170. REFUSE CONTAINERS AND STORAGE AREAS. Refuse storage containers and enclosures shall be maintained in the following manner:

- All refuse and refuse containers shall be stored within an approved storage area or within an enclosed building;
- 2. All refuse storage areas shall be maintained in a clean and neat manner and refuse shall not project above the height of said enclosure; and
- All refuse storage areas shall be readily accessible to the users they serve as well as for collection operations.
- 4. All refuse containers shall be maintained so as to be free of graffiti. All refuse containers shall be securely covered, maintained in good repair, with no jagged or torn metal, and sealed so as not to leak liquid waste.

180. UNIMPROVED PROPERTY. Unimproved real property in any commercial, commercial/industrial or industrial zoning district shall be maintained in such a manner so as to not be a detriment to other nearby properties and not adversely affect the public's health, safety and welfare. Unimproved property shall be maintained in a clean and neat manner free of junk, trash, debris, litter, abandoned or inoperable vehicles, stagnant water, abandoned excavations, appliances and furniture, vegetation that is not in a healthy or living state and overgrown vegetation. Living vegetation shall be maintained so as not to exceed an overall height of six (6) inches except for trees and shrubs that are exempt from this requirement. Vehicles of any type shall not be parked or stored for sale on any parking lot or vacant or unimproved parcel except in conjunction with a bona fide vehicle sales agency.

190. ALTERNATIVE ACTIONS AVAILABLE. Nothing in this code shall be deemed to prevent the City from beginning a civil, criminal and/or administrative proceeding to abate the public nuisance or from pursuing the above remedies individually or collectively or pursuing any other means available to the City under the provisions of applicable ordinances or State law or as alternatives to or in conjunction with the proceedings herein set forth.

200. VIOLATIONS. Unless otherwise stated, the owner or other entity having charge or control of any structure or real property located in a commercial or industrial zoning district who maintains such structure or real property in violation of the provisions of this article is guilty of a misdemeanor.

VOLUME IX. GREEN BUILDING STANDARDS

SECTION IX-1. Volume IX of the Glendale Building and Safety Code, 2017, is amended as hereinafter provided.

SECTION IX-2. Section 301.1 of Volume IX of the Glendale Building and Safety Code, 2017, is hereby amended to read as follows:

301.1 Scope. Buildings <u>and structures</u> shall be designed to include the green building measures specified as mandatory in the application checklist contained in this code. Voluntary green building measures are also included in this code the application checklists and may be included in the design and construction of structures covered by this code, but are not required unless adopted by a city, county, or city and county as specified in Section 101.7.

SECTION IX-3. Section 4.106.4 of Volume IX of the Glendale Building and Safety Code, 2017, is hereby added to read as follows:

4.106.4 Water permeable surfaces. Permeable paving is utilized for the parking, walking or patio surfaces in compliance with the following.

Not less than 20 percent of the total on-grade, residential uncovered parking, walking or patio surfaces shall be permeable.

Exceptions:

 The primary driveway, primary entry walkway and entry porch or landing shall not be included when calculating the area required to be a permeable surface. 2. Required accessible routes for persons with disabilities as required by
California Code of Regulations, Title 24, Part 2, Chapter 11A and/or Chapter
11B as applicable.

SECTION IX-4. Section 4.202 of Volume IX of the Glendale Building and Safety Code, 2017, is hereby reserved:

SECTION 4.202

DEFINITIONS

(Reserved)

SECTION IX-5. Section 4.203 of Volume IX of the Glendale Building and Safety Code, 2017, is hereby reserved:

SECTION 4.203

BUILDING ENVELOPE

(Reserved)

SECTION IX-6. Section 4.204 of Volume IX of the Glendale Building and Safety Code, 2017, is hereby added to read as follows:

SECTION 4.204

RENEWABLE ENERGY

4.204.1 Space for future solar installation. All new low-rise residential buildings, including additions that increases the building's conditioned area shall provide a minimum of 250 square feet of unobstructed roof area facing within 30° of south is provided for future solar collector or photovoltaic panels. Rough-in penetrations through the roof surface within 24 inches (610 mm) of the boundary of the unobstructed roof area are provided for electrical conduit-and water piping.

Exceptions:

- 1. For roofs with an area of less than 1000 square feet, the unobstructed space may be reduced to 25% of the roof area.
- Buildings designed and constructed with an active solar water-heating or photovoltaic system are exempt from this requirement.
- 3. Where it is not feasible to provide one contiguous area due to the roof configuration, two unobstructed roof areas with a minimum combined area of 250 square feet may be provided.
- 4. Buildings designed with a green roof making it unfeasible to provide this area are exempt from this requirement.

4.204.2 Future access for solar systems. A minimum one-inch (25.4 mm) electrical conduit is provided from the electrical service equipment to an accessible location in the attic or other location approved by the enforcing agency.

SECTION IX-7 Section 4.509 Volume IX of the Glendale Building and Safety Code, 2017, is hereby added to read as follows:

SECTION 4.509

NATURAL LIGHT AND VENTILATION

4.509.1 Natural light. The minimum net glazed area shall not be less than 10 percent of the floor area of the room served.

4.509.2 Natural ventilation. The minimum openable area to the outdoors shall be 5 percent of the floor area being ventilated.

SECTION IX-8. Section 5.202 of Volume IX of the Glendale Building and Safety Code, 2017, is hereby reserved:

SECTION 5.202

DEFINITIONS

(Reserved)

SECTION IX-9. Section 5.203 of Volume IX of the Glendale Building and Safety Code, 2017, is hereby added to read as follows:

SECTION 4.203

BUILDING ENVELOPE

(Reserved)

SECTION IX-10. Section 5.204 of Volume IX of the Glendale Building and Safety Code, 2017, is hereby added to read as follows:

SECTION 5.204

RENEWABLE ENERGY

5.204.1 Space for future solar installation. All newly constructed low-rise and high-rise multi-family buildings, hotel/motel occupancies, non-residential buildings, building addition of 1,000 sf or greater, and/or building alterations with a permit valuation of \$200,000 or above shall provide a minimum of 80 square feet of each building with roof areas less than or equal to 10,000 square feet or no less than 160 square feet for each building with roof areas greater than 10,000 square feet of unobstructed roof area facing within 30° of south is provided for future solar water-heating or photovoltaic systems.

Rough-in penetrations through the roof surface within 24 inches (610 mm) of the boundary of the unobstructed roof area are provided for plumbing or electrical conduit.

5.204.2 Prewiring for future solar. Install conduit from the building roof or eave to a location within the building identified as suitable for future installation of a charge controller (regulator) and inverter.

5.204.1.1 Off-grid prewiring for future solar. If battery storage is anticipated, conduit should run to a location within the building that is stable, weather-proof, insulated against very hot and very cold weather and isolated from occupied spaces.

Passed by four-fiftl	ns $(4/5^{ths})$ vote of the $(4/5^{ths})$	Council of the City of Glendale on the
day of	, 2016.	
ATTEST:		Mayor
City Clerk		

STATE OF CALIFORNIA COUNTY OF LOS ANGELES CITY OF GLENDALE)) SS.)
I, ARDASHES KASSAK	HIAN, City Clerk of the City of Glendale, certify that
the foregoing Ordinance No	was passed by a four-fifths (4/5 ^{ths}) vote of the
Council of the City of Glendale, C	California, at a regular meeting held on the
day of, 2016	6, and that the same was passed by the following vote:
Ayes:	
Noes:	
Abstain:	
Absent:	
	-
	City Clerk