

BUILDING STANDARDS COMMISSION

2525 Natomas Park Drive, Suite 130
Sacramento, California 95833-2936
(916) 263-0916 FAX (916) 263-0959



February 24, 2014

Raymond Tao
Building Official
City of La Verne
3660 D Street
La Verne, CA 91750

RE: Ordinance #1042

Dear Mr. Tao:

This letter is to advise you of our determination regarding the referenced ordinance with express findings received from your agency on January 9, 2014.

Our review finds the submittal to contain one ordinance modifying provisions of the 2013 California Building Standards Code in Title 24, California Code of Regulations (code), and express findings complying with Health and Safety Code §§17958.7 and 18941.5. The code modification is accepted for filing and is enforceable. This letter attests only to the satisfaction of the cited law for filing of local code amendment supported by an express finding with the Commission. The Commission is not authorized by law to evaluate the merit of the code modification or the express finding.

Local modifications to the code are specific to a particular edition of the code. They must be readopted and filed with the Commission in order to remain in effect when the next triennial edition of the code is published.

On a related matter, should your city receive and ratify Fire Protection District ordinances making modifications to the code, be advised that Health and Safety Code §13869.7(c) requires such ratified ordinances and express findings to be filed with the Department of Housing and Community Development, Division of Codes and Standards, State Housing Law Program, rather than this Commission. Also, ordinances making modifications to the energy efficiency standards of the code may require approval from the California Energy Commission pursuant to Public Resources Code §25402.1(h)(2).

If you have any questions or need any further information, you may contact me at (916) 263-0916.

Sincerely,

A handwritten signature in blue ink that reads "Enrique M. Rodriguez".

Enrique M. Rodriguez
Associate Construction Analyst

cc: Chron
Local Filings



CITY OF LA VERNE CITY HALL

3660 "D" Street, LaVerne, California 91750

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CITY OF LA VERNE
STANDARDS COMMISSION

January 6, 2014

Mr. Jim McGowan
Executive Director
California Building Standards Commission
2525 Natomas Park Dr., Suite 130
Sacramento, California 95833

**RE: City of La Verne, 2013 California Building Standards Code
Local Modifications Filing**

Mr. McGowan:

The City of La Verne has adopted the current Building, Plumbing, Mechanical, Electrical, Residential, Fire and Green Standards Codes of the State of California with local modification based on local climatic, geological, and topographic conditions as per CA Health & Safety Code (H&SC) 17958.7.

The City of La Verne has recommended changes and modifications to the Codes and have advised that certain said changes and modifications to the 2013 Editions of the California Building, Plumbing, Mechanical, Fire, and Electrical Codes are reasonably necessary due to local conditions in the City of La Verne and have further advised that the remainder of said changes and modifications are of an administrative or procedural nature, or concern themselves with subjects not covered by the Code or are reasonably necessary to safeguard life and property within the City of La Verne. Some of these administrative changes are prior municipal amendments that have been adopted but are updated for the current code references only. The summary of findings may be found in the attachment of the ordinance.

The enclosed City Urgency Ordinance 1042 for the Building, Plumbing, Mechanical, Fire, & Electrical adoption are for your files.



General Administration 909/596-8726 • Water Customer Service 909/596-8744 • Parks & Community Services 909/596-8700
Public Works 909/596-8741 • Finance 909/596-8716 • Planning 909/596-8706 • Building 909/596-8713
Fax 909/596-8737

If additional information is desired please telephone this office at (909) 594-9702.

Sincerely,

Raymond Tao
Building Official

URGENCY ORDINANCE NO. 1042

1 AN URGENCY ORDINANCE OF THE CITY COUNCIL OF THE CITY OF
2 LA VERNE ADOPTING BY REFERENCE, PURSUANT TO GOVERNMENT
3 CODE SECTION 50022.2, THE CALIFORNIA BUILDING CODE (TITLE 26
4 BUILDING CODE OF THE LOS ANGELES COUNTY CODE), THE
5 CALIFORNIA ELECTRICAL CODE (TITLE 27 ELECTRICAL CODE OF THE
6 LOS ANGELES COUNTY CODE), THE CALIFORNIA PLUMBING CODE
7 (TITLE 28 PLUMBING CODE OF THE LOS ANGELES COUNTY CODE), THE
8 CALIFORNIA MECHANICAL CODE (TITLE 29 MECHANICAL CODE OF THE
9 LOS ANGELES COUNTY CODE), THE CALIFORNIA RESIDENTIAL CODE
10 (TITLE 30 RESIDENTIAL CODE OF THE LOS ANGELES COUNTY CODE),
11 THE CALIFORNIA GREEN BUILDING CODE (TITLE 24 PART 11 OF THE
12 CALIFORNIA BUILDING STANDARDS CODE), THE CALIFORNIA FIRE
13 CODE (TITLE 24, PART 9) AND ADOPTING LOCAL AMENDMENTS
14 THERETO

15
16 THE CITY COUNCIL OF THE CITY OF LA VERNE DOES ORDAIN AS
17 FOLLOWS:

18 Section 1. Section 15.04.010 of the La Verne Municipal Code is hereby
19 amended to read:

20 **15.04.010 Adoption of County Codes and California Building Standards**
21 **Codes by reference.**

22 A. The City adopts by reference, except as provided in this chapter,
23 those certain codes known and designated as THE 2013 CALIFORNIA
24 BUILDING CODE (TITLE 26 BUILDING CODE OF THE LOS ANGELES
25 COUNTY CODE, 2014 EDITION), THE 2013 CALIFORNIA ELECTRICAL
26 CODE (TITLE 27 ELECTRICAL CODE OF THE LOS ANGELES COUNTY
27 CODE, 2014 EDITION), THE 2013 CALIFORNIA PLUMBING CODE (TITLE 28
28 PLUMBING CODE OF THE LOS ANGELES COUNTY CODE, 2014 EDITION),
THE 2013 CALIFORNIA MECHANICAL CODE (TITLE 29 MECHANICAL
CODE OF THE LOS ANGELES COUNTY CODE, 2014 EDITION), THE 2013
CALIFORNIA RESIDENTIAL CODE (TITLE 30 RESIDENTIAL CODE OF THE
LOS ANGELES COUNTY CODE, 2014 EDITION), as adopted by the Los
Angeles County Board of Supervisors on November 26, 2013 AND THE 2013
CALIFORNIA GREEN BUILDING CODE (TITLE 24 PART II OF THE
CALIFORNIA BUILDING STANDARDS CODE) and such codes, as amended,
shall be the uniform building laws of the city.

B. One copy of the County of Los Angeles Building, Electrical,
Plumbing, Mechanical, and Residential codes, and the California Green Building

Code has been deposited in the office of the Building Official and shall be at all times maintained by the Building Official for use and examination by the public.

1 C. The editions of the County of Los Angeles codes referenced in
2 Section 15.04.010 shall supersede and replace editions previously adopted. The
3 codes adopted by reference by Section 15.04.010 shall take effect on January 1,
4 2014, and shall apply to all projects submitted for plan check on or after that
5 date.

6 D. See Section 15.32.010 for adopted Fire Code by the City of La
7 La Verne.

8 **Section 2.** References to "The 2010 California Building Code as
9 amended by Title 26 Building Code of the Los Angeles County Code (Adopted
10 November 23, 2010 by the Los Angeles County Board of Supervisors)" in
11 Sections 15.24.010, 15.24.040 and throughout the La Verne Municipal Code are
12 hereby amended to read as follows:

13 The 2013 California Building Code as amended by Title 26 Building Code
14 of the Los Angeles County Code (Adopted November 26, 2013 by the Los
15 Angeles County Board of Supervisors)

16 **Section 3.** Section 15.04.080 of the City of La Verne Municipal Code of
17 hereby amended to read as follows:

18 **Section 15.04.080 Penalty**

19 Every person violating any provision of the 2013 California Building Code
20 as amended by Title 26 Building Code of the Los Angeles Code, the 2013
21 California Electrical Code as amended by Title 27 Electrical Code of the Los
22 Angeles County Code, the 2013 California Plumbing Code as amended by Title
23 28 Electrical Code of the Los Angeles County Code, or the 2013 California
24 Mechanical Code as amended by Title 29 Los Angeles County Mechanical Code,
25 or the California Residential Code as amended by Title 30 Residential Code of
26 the Los Angeles County Code and the California Green Building Code of Title 24
27 Part 11 of the California Building Standards Code adopted by reference by
28 Section 15.04.010 or violating any provision of any permit or license granted
thereunder, or any rules or regulations promulgated pursuant thereto, is guilty of
a misdemeanor. Upon conviction thereof he or she shall be punishable by a fine
not to exceed one thousand dollars or imprisonment not to exceed six months, or
by both such fine and imprisonment. The imposition of such penalty for any
violation shall not excuse the violation or permit it to continue. Each day that a
violation occurs shall constitute a separate offense.

29 **Section 4.** Section 15.24.010 of the La Verne Municipal Code is hereby
30 amended to read as follows:

1 **Section 15.24.010 General Requirements**

2 Notwithstanding any other provisions of the building code and appendix or
3 the hillside overlay zone requirements to the contrary, the roof of any new
4 building, the roof of any addition to any existing structure, and the re-roofing of
5 any existing structure, and the re-roofing of any existing building as described by
6 Section 15.24.040 of this chapter shall have a roof covering as classified in
7 Section 1505 of the 2013 California Building Code as amended by Title 26
8 Building Code of the Los Angeles County code (adopted November 26, 2013, by
9 the Los Angeles County Board of Supervisors), as adopted by the City, except
10 that no form of wood shall be used as the covering material. In cases of historical
11 preservation which require the use of original types of material, permission may
12 be granted based upon alternative protection measures approved by the City's
13 Building Official and Fire Chief.

14 **Section 5.** Section 15.24.040 of the La Verne Municipal Code is hereby
15 amended to read as follows:

16 **Section 15.24.040 Reroofing**

17 All reroofing must comply with the following requirements:

18 A. Any reroofing which exceeds twenty-five percent of the roof
19 covering of any building or structure in any twelve-month period shall conform to
20 the requirements of this code.

21 B. If the existing roof of a structure is wood shingle, any nonwooden
22 roof covering required by subsection A of this section may be placed over the
23 existing wooden shingle roof, unless:

24 1. The existing roof material consists of three or more layers of roof
25 covering and the addition of the nonwooden roof covering would exceed three
26 layers; or

27 2. The existing roof material exceeds the weight limits on roof
28 members set out in Chapter 16 of the 2013 California Building Code as amended
by Title 26 Building Code of the Los Angeles County code (adopted November
23, 2013 by the Los Angeles County board of supervisors); or

3. The application conflicts with the requirements of Section 1507 of
the Building Code of the County of Los Angeles

Section 6. Section 15.28.060 of the La Verne Municipal Code is hereby
amended to read as follows:

1 **Section 7.** Section 15.04.095 of the La Verne Municipal Code is hereby
2 amended to read:

3 **15.04.095 Section 903.2 of building and fire codes amended.**

4 A. Section 903.2 of the Los Angeles County Building Code, and the
5 California Fire Code (2013 Edition) as adopted by the city, is amended as
6 follows:

7 Except for Group U occupancy groups, a fire sprinkler system is required in the
8 following locations:

9 In all new institutional, educational, commercial, industrial buildings, or other
10 uses as determined by the Fire Marshal, and in additions to existing institutional
11 commercial, industrial buildings, or other uses as determined by the Fire
12 Marshal, where the addition brings the total floor area to five thousand square
13 feet or more. The total floor area of buildings shall be computed without regard to
14 separation walls and floor of less than four-hour construction without openings. In
15 the event that an automatic fire-extinguishing system is required by the particular
16 occupancy of the building, the five thousand square foot threshold for additions
17 shall be inapplicable.

18 In all new residential construction in the Hillside Development Overlay Zone as
19 set forth in Chapter 18.68 of the La Verne Municipal Code, residential or quick
20 response sprinkler heads shall be installed throughout the entire structure. This
21 requirement shall not be applicable to projects which:

- 22 1. Have been approved prior to the effective date of the ordinance
23 codified in this section; and
- 24 2. Have specific fire suppression requirements imposed as
25 conditions of approval.

26 B. Enforcement of the provisions of the ordinance codified in this section
27 is delegated to the fire chief or his or her authorized representative.

28 C. Exceptions listed in this section shall not apply where contrary to the
statement listed in subsection A of this section.

Section 8. Section 15.04.110 of the La Verne Municipal Code is hereby
added to create a new section with the following:

Section 15.04.110 Expansive Soils.

 “Section 1809.4 of the California Building Code is amended to read as
follows:

1 **1809.4 Foundations on expansive soil.** Unless otherwise specified by
2 a registered geotechnical engineer, foundation systems within the City of La
3 Verne are considered to be on expansive soil and shall be constructed in a
4 manner that will minimize damage to the structure from movement of the soil.
5 Slab-on-grade and mat-type footings for buildings located on expansive soils
6 may be designed in accordance with the provisions of Section 1808.6.2 or such
7 other engineering design based upon geotechnical recommendation as approved
8 by the Building Official. Where such an approved method of construction is not
9 provided, foundations and floor slabs shall comply with the following
10 requirements:

- 11 (i) Depth of foundations below the natural and finish grades
12 shall be not less than 24 inches for exterior and 18 inches for
13 interior foundations.
- 14 (ii) Exterior walls and interior bearing walls shall be supported
15 on continuous foundation.
- 16 (iii) Foundations shall be reinforced with at least two continuous
17 one-half-inch diameter deformed reinforcing bars top and
18 bottom. Two bars shall be placed within four inches of the
19 bottom of the foundation and two within four inches of the
20 top of the foundation.
- 21 (iv) Concrete floor slabs on grade shall be cast on a four-inch fill
22 of coarse aggregate or on a moisture barrier membrane. The
23 slabs shall be at least three and one-half inches thick and
24 shall be reinforced with welded wire mesh or deformed
25 reinforcing bars. Welded wire mesh shall have a cross-
26 sectional area of not less than five-hundredths square inch
27 per foot each way. Reinforcing bars shall have a diameter of
28 not less than three-eighths inch and be spaced at intervals
not exceeding 24 inches each way.
- (v) The soil below an interior concrete slab shall be saturated
with moisture to a depth of 18 inches prior to casting the
concrete.

21 **Section 9.** Chapter 15.32 of the La Verne Municipal Code is hereby
22 amended to read:

23 **15.32.010 Fire code adopted by reference.**

24 With the exception of the additions, deletions and amendments set forth in this
25 Chapter, Part 9 of Title 24 of the California Code of Regulations, comprising the
26 California Fire Code 2013 Edition, which incorporates and amends the

1 International Fire Code 2012 Edition, published by the International Code
2 Council, including Appendices Chapter 4, B, C, D, and I, and the International
3 Fire Code standards, is hereby adopted by reference as the Fire Code of the City
4 of La Verne.

5 A copy of such code is now on file in the office of the City Clerk.

6 **15.32.020 Definitions.**

7 Wherever the word "jurisdiction" is used in the California Fire Code (2013
8 Edition), it is the City of La Verne. Wherever the words "fire code official" are
9 used they shall be held to mean the fire chief or his or her lawful designee.

10 **15.32.030 Storage of explosives and blasting agents.**

11 The storage of explosive material and blasting agents, as defined in Chapter
12 2 of the California Fire Code (2013 Edition), is prohibited in all areas of the city.

13 **15.32.040 Fireworks prohibited.**

14 The sale, possession or use of all types of fireworks is prohibited throughout the
15 city except when a permit is issued, in advance, by the Fire Chief or his or her
16 designee for such uses as special effects, group entertainment or other uses in
17 accordance with Chapter 56 of the California Fire Code (2013 Edition). Fireworks are
18 defined in Chapter 2 of the California Fire Code (2013 Edition) and include all forms of
19 the devices, including, but not limited to, "safe and sane fireworks," firecrackers, sky
20 rockets, sparklers, fountains and other common fireworks.

21 **15.32.050 Gates.**

22 Standardized access for locked gate developments:

23 A. All vehicular security gates shall be automatic and accessible for the
24 fire department by using a radio control device and a master key for overriding
25 the system in the event of a radio failure. The design of the gates and controls
26 shall be in accordance with city standards and approved by the fire department.

27 B. All pedestrian security gates for residential complex with three or more
28 units shall be accessible for the fire department by using a master key. The type
of lock shall be in accordance with city standards and approved by the fire
department.

15.32.060 Appeals.

Whenever the fire chief disapproves an application or refuses to grant a
permit applied for, or when it is claimed that the provisions of the code do not
apply or that the true intent and meaning of the code have been misconstrued or
wrongly interpreted, the applicant may appeal from the decision of the fire chief
to the La Verne City Council within thirty days from the date of the decision
appealed as provided for in Section 108 of the California Fire Code (2013
Edition).

15.32.070 New materials, processes or occupancies.

The city manager, the fire chief and the chief of the bureau of fire prevention shall act as a committee as required in Section 108 of the California Fire Code (2013 Edition) to determine and specify, after giving affected persons an opportunity to be heard, any new materials, processes or occupancies for which permits are required in addition to those now enumerated in said code. The chief of the bureau of fire prevention shall post such list of new materials, processes and occupancies requiring permits in a conspicuous place at the bureau of fire prevention and shall distribute copies thereof to interested persons.

15.32.080 Penalty.

Every person violating any provision of the California Fire Code (2013 Edition) as adopted by reference by Section 15.32.010, or of any permit or license granted there under, for any rules or regulations promulgated pursuant thereto, is guilty of a misdemeanor. Upon conviction thereof he shall be punishable by a fine not to exceed one thousand dollars or imprisonment not to exceed six months, or by both such fine and imprisonment. The imposition of such penalty for any violation shall not excuse the violation or permit it to continue. Each day that a violation occurs shall constitute a separate offense. In addition to any other remedies or penalties, the fire department may bring a civil suit to enjoin any violation of the provisions of the fire code.

Section 10. Section 15.36.040 of the La Verne Municipal Code is hereby amended to add the following:

Section 15.36.040 Substantial Remodels in the Very High Severity Fire Zone.

"Section R327.1.3 of the California Residential Code is amended to restate exemption 4 as follows:

- 4. Additions to and remodels of buildings originally constructed prior to the applicable application date that do not affect more than 90% of the existing structure. Modifications to more than 90% of the existing structure shall be considered a new structure.

Section 11. Sections 15.36.010 to 15.36.030 of the La Verne Municipal Code are hereby deleted.

Section 12. Chapter 15.37 of the La Verne Municipal Code is hereby amended to read the following:

Chapter 15.37 VERY HIGH FIRE HAZARD SEVERITY ZONE REGULATIONS

buildings, with no more than three dwelling units on a single parcel, and any number of accessory buildings.

1 "Dwelling unit" means any building or portion thereof which contains living
2 facilities, including provisions for sleeping, eating, cooking and/or sanitation for
not more than one family.

3 "Greenbelts" means a facility or land-use, designed for a use other than fire
4 protection, which will slow or resist the spread of a wildfire and includes parking
5 lots, irrigated or landscaped areas, golf courses, parks, playgrounds, maintained
vineyards, orchards or annual crops that do not cure in the field.

6 "Hammerhead/T" means a roadway that provides a "T" shaped, three-point
7 turnaround space for emergency equipment, being no narrower than the road
that serves it.

8 "Hydrant" means a valved connection of a water supply/storage system,
9 having at least one two and one-half inch outlet, and one four-inch outlet, with
male American National Fire Hose Screw Threads (NH) used to supply fire
10 apparatus and hoses with water.

11 "Occupancy" means the purpose for which a building, or part thereof, is
used or intended to be used.

12 "One-way road" means a minimum of one traffic lane width designed for
traffic flow in one direction only.

13 "Roads, streets, private lanes" means vehicular access to more than one
14 parcel; access to any industrial or commercial occupancy, or vehicular access to
a single parcel with more than two buildings or four or more dwelling units.

15 "Roadway" means any surface designed, improved, or ordinarily used for
16 vehicle travel.

17 "Same practical effect" means an exception or alternative with the capability
of applying accepted fire suppression strategies and tactics, and provisions for
18 firefighter safety, including:

- 19 1. Access for emergency fire equipment;
- 20 2. Safe civilian evacuation;
- 21 3. Signing that avoids delays in emergency equipment response;
- 22 4. Available and accessible water to effectively attack fire or defend a
structure from fire; and
- 23 5. Fuel modification sufficient for civilian and firefighter safety.

24 "Structure" means that which is built or constructed, an edifice or building of
any kind, or any piece of work artificially built up or composed of parts joined
together in some definite manner.

25 "Traffic lane" means the portion of a roadway that provides a single line of
26 vehicle travel.

1 "Turnaround" means a roadway, unobstructed by parking, which allows for a
2 safe opposite change of direction for emergency equipment. Design of such area
3 may be a hammerhead/T or terminus bulb.

4 "Turnouts" means a widening in a roadway to allow vehicles to pass.

5 "Vertical clearance" means the minimum specified height of a bridge or
6 overhead projection above the roadway. (Ord. 930 § 1 (part), 1999)

7
8 **15.37.050 Modifications to the Los Angeles County Building Code, as
9 adopted by the City of La Verne.**

10 The Los Angeles County Building Code 2014 Edition as adopted by the city
11 pursuant to Sections 15.04.010 and 15.32.010 of the La Verne Municipal Code
12 are amended as follows:

13 A. Add the following new subsection to Los Angeles County Building
14 Code:

15 Section 107.2.6. Fire Protection Information on Plans and Specifications in
16 Wildland-Urban Interface Fire Area When Requested by the Fire Department. In
17 addition to all other relevant provisions of this code and the California Fire Code,
18 appendices and amendments thereto, a vicinity plan, scale no smaller than one
19 inch equals forty feet, shall be submitted to and approved by the fire department
20 prior to the issuance of a grading permit or, if no grading permit is to be issued,
21 prior the issuance of a building permit. The plan shall show the following:

- 22 1. All existing and proposed private and public streets on the
23 proposed development property and within three hundred feet of the
24 property line of the proposed development, and so identified, with
25 street width dimensions.
- 26 2. The location and identification of all existing and proposed fire
27 hydrants within three hundred feet of the property line of the
28 proposed development. The water supply shall meet the fire flow
requirements as set forth in the latest adopted edition of the I.F.C.
and Los Angeles County Building Code, and amendments thereto.
3. The location, occupancy classification, and use of abutting
properties.
4. Preliminary fuel modification plans for all improvements in areas
containing combustible vegetation shall be submitted to and
approved by the fire department concurrent with the submittal for
approval of any project requiring discretionary approval by the city.
Final fuel modification plans shall be submitted to and approved by
the fire department prior to the issuance of a grading permit. The
plans shall consider the criteria set forth in the Fuel Modification Plan
Guidelines for Very High Fire Hazard Severity Zones.

1 B. Add the following new definition to Los Angeles Building Code Section
2 702A—Definitions.

3 Very High Fire Hazard Severity Zone. All territory as established by the
4 Director of California Department of Forestry and Fire Protection, is hereby
5 determined to be within the Very High Fire Hazard Severity Zone due to the
6 areas containing the type and condition of vegetation, topography, weather and
7 structure density to increase the possibility of conflagration fires.

8 **15.37.070 Special building standards for very high fire hazard zone.**

9 A. Chapter 7A of the California Building Code is amended by the addition
10 of the following:

11 Building Standards. Building and structures hereafter constructed, or relocated
12 into very high fire hazard severity zones shall, in addition to the requirements of
13 the Los Angeles County Building Code and any other local ordinances, meet the
14 following construction requirements.

15 1. Roofs. All new structures, and every existing structure where
16 twenty-five percent or more of the total area of the existing building is
17 re-roofed within any one-year period within a very high fire hazard
18 severity zone shall not be wood and have at least a Class A fire
19 retardant roof.

20 2. Underfloor Areas (Attached Structure). When the attached
21 structure is located and constructed so that the structure or any
22 portion thereof projects over a descending slope surface, the area
23 below the structure shall have all underfloor areas enclosed to within
24 six inches (152 mm) of the ground, with exterior walls in accordance
25 with Section 703.2.

26 3. Walls. Detached accessory structures located less than fifty feet
27 (15,240 mm) from a building containing habitable space shall have
28 exterior walls constructed with materials approved for one-hour-rated
fire-resistive construction, or constructed with noncombustible
materials on the exterior side.

Underfloor Areas (Detached Structure). When the detached
structure is located and constructed so that the structure or any
portion thereof projects over a descending slope surface, the area
below the structure shall have all underfloor areas enclosed to within
six inches (152 mm) of the ground, with exterior walls in accordance
with Section 703.2.

Section 13. This Ordinance shall take effect on January 1, 2014 and shall apply to all projects submitted for plan check on or after that date.

1 **Section 14.** The City Council finds and determines that this URGENCY
2 Ordinance is exempt from the California Environmental Quality Act pursuant to
3 State CEQA Guidelines §15061(b)(3) as a project that has no potential for
4 causing a significant effect to the environment. The City Council further finds and
5 determines that the local amendments to the California Building Code Standards
6 set forth in this Ordinance are reasonably necessary because of local climatic,
7 geological, and topographical conditions, in that a significant portion of the City is
8 located in hillside and slope areas, is located within a Very High Fire Hazard
9 Severity Zone, prone to expansive soils, and is located near known fault lines.

7 **Section 15.** The City Council finds and determines that this URGENCY
8 Ordinance is adopted as an urgency ordinance pursuant to Government Code
9 Section 36937(b) and is required for the immediate preservation of the public
10 health, safety, and welfare, in that (1) the City is required to adopt the 2013
11 Edition of the California Building Codes no later than December 31, 2013, the
12 City regularly adopts by reference the Los Angeles County Building Codes, the
13 County did not adopt the updated Los Angeles County Building Codes until
14 November 23, 2013, and the meeting of the City Council of the City of La Verne
15 at which this URGENCY Ordinance is adopted is the only meeting of the City
16 Council remaining prior to December 31, 2013; (2) it is essential that this
17 URGENCY Ordinance be adopted and take effect immediately upon its adoption
18 to insure that updated building codes, which are essential to the public health,
19 safety, and welfare of the residents of the City of La Verne and the public in
20 general, are effective so as to avoid development of buildings and other
21 structures and improvements under outdated building codes which would pose a
22 threat to the public health, safety, and welfare; and (3) immediate effectiveness
23 of the updated building codes will assure that new standards in the areas of
24 building construction, life/fire safety, handicap accessibility, electrical and
25 plumbing requirements, and the other areas covered by the updated building
26 codes are met on an immediate basis, all of which is necessary to preserve the
27 public health, safety, and welfare.

19 **Section 16.** If any section, subsection, subdivision, paragraph, sentence,
20 clause or phrase, or portion of this URGENCY Ordinance is, for any reason, held
21 to be unconstitutional or invalid or ineffective by any court of competent
22 jurisdiction, such decision shall not affect the validity or effectiveness of the
23 remaining portions of this URGENCY Ordinance or any part thereof. The City
24 Council hereby declares that it would have adopted this URGENCY Ordinance
25 and each section, subsection, subdivision, paragraph sentence, clause, or
26 phrase of this URGENCY Ordinance irrespective of the fact that one or more
27 sections, subsections, subdivisions, paragraphs, sentences, clauses, or phrases
28 be declared unconstitutional or invalid or ineffective. To this end the provisions
of this URGENCY Ordinance are declared to be severable.

1 **Section 17.** The City Clerk shall cause this URGENCY Ordinance to be
2 processed according to law.

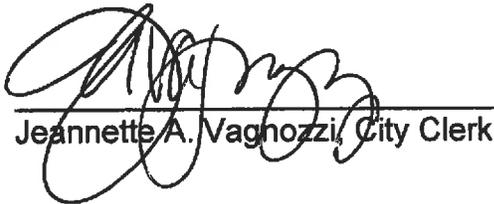
3 **Section 18.** The City Clerk shall file a certified copy of this URGENCY
4 Ordinance with the California Building Standards Commission.

5 **APPROVED and ADOPTED this 16th day of December, 2013.**

6 

7 Mayor Pro Tem Charlie Rosales

8 **ATTEST:**

9 
10
11 Jeannette A. Vagnozzi, City Clerk

12 I, Jeannette A. Vagnozzi, City Clerk, City of La Verne, California, do hereby
13 certify that the foregoing **Ordinance No. 1042** was adopted as an urgency action
14 at a regular meeting of the City Council duly held on the 16th day of **December,**
15 **2013,** and duly passed and adopted by said city council and thereupon duly
16 signed by the Mayor and attested by the City Clerk, and passed and adopted by
17 the following vote:

18	AYES:	Council Members: 1	Ingels, Carder, Redman, and Mayor Pro Tem Charlie Rosales
19	NOES:	Council Members:	None.
20	ABSENT:	Council Members:	Mayor Kendrick.
21	ABSTAIN:	Council Members:	None.

22 
23 Jeannette A. Vagnozzi, City Clerk

Agenda Report

CITY OF LA VERNE
City Engineer

APPROVED BY CITY COUNCIL
AT ITS MEETING OF:

DATE: December 16, 2013

DATE: December 16, 2013

TO: Honorable Mayor & City Council

FROM: Dominic C. Milano, City Engineer

SUBJECT: ADOPTION OF LOS ANGELES COUNTY BUILDING CODE
THE CALIFORNIA FIRE CODE AND THE CALIFORNIA GREEN
BUILDING CODE BY REFERENCE

AGENDA SUMMARY:

The adoption of the Los Angeles County Building Code, the 2013 California Green Buildings Standards Code, and the California Fire Code are necessary under the California Health and Safety Code. These codes are established to provide the City of La Verne with the minimum construction and property maintenance standards that promote the health and welfare of the general public to make buildings more efficient in the use of materials and energy, and to reduce environmental impact during and after construction. Since the County recently amended these codes, it is necessary for the City to adopt these changes. Due to the State's deadline of January 1, 2014, these standards must be adopted by urgency ordinance.

RECOMMENDATION:

It is recommended that the City Council adopt Ordinance No. 1042, an urgency ordinance adopting Title 26 – Building Code of the Los Angeles County Code, Title 27 – Electrical Code of the Los Angeles County Code, Title 28 – Plumbing Code of the Los Angeles County Code, Title 29 – Mechanical Code of the Los Angeles County Code Title 30 – Residential Code of the Los Angeles County Code, Title 24 Part 11 – California Green Building Code, Title 24 Part 9 – California Fire Code, and the City of La Verne amendments to portions of these codes also known as the 2013 California Building Standards Code, by reference, with certain changes and modifications, and making revisions thereto.

BACKGROUND:

Section 17958 of the California Health and Safety Code requires that the latest California Building Standards Codes apply to local construction 180 days after they become effective at the State level. The California Building Standards Commission has adopted the 2013 Edition of the California Building Codes.

State Law requires that these Codes become effective at the local level on January 1, 2014. State Law requires that local amendments to the California Building Standards Codes be enacted only when an express finding is made that such modifications or changes are reasonably necessary because of local climatic, geological, or topographic conditions.

The City of La Verne has previously adopted the Los Angeles County Building Codes by reference. These codes contain essential amendments and additions to the International Building Codes and the State of California Building Code. Included in these amendments are the administrative portions of the laws as well as such important chapters for grading and substandard properties. The State of California now has adopted the 2013 Edition of the California Building Code and has made specific findings based on local climatic, topographical, and/or geological conditions. As in past code adoptions, the City of La Verne has used the County code adoption process to make those findings for its local amendments and has adopted the County codes by reference. The County codes were not approved by the County Board of Supervisors until November 26, 2013. Once again, the County adoption schedule did not allow sufficient time for the City to follow its standard process of first and second reading of the ordinance and a 30-day effective period. Therefore, in order for the City to adopt the County codes by reference and meet the January 1, 2014 effective date, the City must adopt its new codes by urgency ordinance.

While staff is proposing the adoption of the California Building Standards as amended by Los Angeles County, staff is not recommending adopting the California Green Building Standards Code as amended by Los Angeles County (Title 31 of the Los Angeles County Code).

The Los Angeles County amendments to the California Green Building Code include the County's Water Efficient Landscape Ordinance. The City has already adopted its own Water Efficient Landscape Ordinance based on the California Department of Water Resources model amongst other revision. As a result, the City is not adopting their amendments and only adopting the 2013 California Green Building Code alone with no amendments.

The proposed ordinance will adopt by reference portions of the 2013 California Building Code Series. In an effort to provide consistency within the Los Angeles Basin and provide the public locally applicable and efficient codes, the Los Angeles County Department of Public Works joined efforts with a number of cities in Los Angeles County to undergo thorough examinations of previous and proposed amendments. Many of the local amendments to the Codes are based on the model language generated by the Los Angeles Regional Uniform Code Program (LARUCP).

Agenda Report
Adoption of Los Angeles County
Building Code by Reference
Page 3 of 3

The ordinance will amend Titles 26 (Building Code), 27 (Electrical Code), 28 (Plumbing Code), 29 (Mechanical Code), and 30 (Residential Code) to reflect the most critical and necessary County amendments required because of local climatic, geological, or topographical conditions, as well as the California Green Building Code and California Fire Code. The amendments have been prepared by the Los Angeles County Department of Public Works in accordance with Sections 17958 and 18941.5 of the California Health and Safety Code with the findings clearly delineated for each of the proposed amendments in a chart which is set forth in Section 31 of the Los Angeles County ordinance (attached for reference). The ordinance does not adopt Title 31 (Green Building Standards Code) of the Los Angeles Code but adopts the 2013 California Green Building Standards Code without amendments. The last City update to the State Building Standards Code was approved by the City Council in 2011.

Attachment: Section 31 of Los Angeles County Ordinance Findings

SECTION 103. The provisions of this ordinance contain various changes, modifications, and additions to the 2013 California Building Code. Some of those changes are administrative in nature in that they do not constitute changes or modifications to requirements contained in the building standards published in the California Building Standards Code.

Pursuant to California Health and Safety Code sections 17958.5, 17958.7, and 18941.5, the Board of Supervisors hereby expressly finds that all of the changes and modifications to requirements contained in the building standards published in the California Building Standards Code contained in this ordinance, which are not administrative in nature, are reasonably necessary because of local climatic, geological, for topographical conditions in the County of Los Angeles as more particularly described in the table set forth below.

BUILDING CODE AMENDMENTS

Code Section	Condition	Explanation of Amendment
701A.1	Climatic	Clarifies the application of Chapter 7A to include additions, alterations, and/or relocated buildings. Many areas of the County have been designated as Fire Hazard Severity Zones due to low humidity, strong winds, and dry vegetation. Additions, alterations, and/or relocated buildings have the same fire risk as new buildings.
701A.3	Climatic	Clarifies the application of Chapter 7A to include additions, alterations, and/or relocated buildings. Many areas of the County have been designated as Fire Hazard Severity Zones due to the increased risk of fire caused by low humidity, strong winds, and dry vegetation. Additions, alterations, and/or relocated buildings have the same fire risk as new buildings.
701A.3.1	Climatic	Clarifies the application of Chapter 7A to include additions, alterations, and/or relocated buildings. Many

Code Section	Condition	Explanation of Amendment
		areas of the County have been designated as Fire Hazard Severity Zones due to the increased risk of fire caused by low humidity, strong winds, and dry vegetation. Additions, alterations, and/or relocated buildings have the same fire risk as new buildings.
703A.5.2 & 703A.5.2.2	Climatic	Disallows the use of wood-shingle/wood-shake roofs due to the increased risk of fire in the County caused by low humidity, strong winds, and dry vegetation in high fire severity zones.
704A.3	Climatic	Disallows the use of wood-shingle/wood-shake roofs due to the increased risk of fire in the County caused by low humidity, strong winds, and dry vegetation in high fire severity zones.
705A.2	Climatic	Disallows the use of wood-shingle/wood-shake roofs and requires the use of Class A roof covering due to the increased risk of fire in the County caused by low humidity, strong winds, and dry vegetation in high fire severity zones.
1029.4	Geological	The greater Los Angeles/Long Beach region is a densely populated area having buildings constructed over and near a vast array of earthquake fault systems capable of producing major earthquakes, including but not limited to the recent 1994 Northridge Earthquake. The proposed amendment is intended to prevent occupants from being trapped in a building and to allow rescue workers to easily enter after an earthquake.
1507.3.1	Geological	Section amended to require concrete and clay tiles to be installed over solid structural sheathing boards only, due to the increased risk of significant earthquakes in the County. The changes in Section 1507.3.1 are needed because there were numerous observations of tile roofs pulling away from wood framed buildings following the 1994 Northridge Earthquake. Where sheathing beneath the tile roofs was not nailed adequately or the nails were not attached on each side of each tile or the nail just pulled out over a period of time because the shank of the nails were smooth. The Structural Engineers Association of Southern California ("SEAOSC") and the Los Angeles City Joint Task Force committee findings indicated significant problems with tile roof due to inadequate design and/or construction. Therefore, the amendment is

Code Section	Condition	Explanation of Amendment
		needed to needed to minimize such occurrences in the event of future significant earthquakes.
Table 1507.3.7	Geological	Table amended to require proper anchorage for clay or concrete tiles from sliding or rotating due to the increased risk of significant earthquakes in the County. Design provisions developed based on detailed study of the 1994 Northridge and the 1971 Sylmar earthquakes need to be incorporated into the local building code.
1613.6 through 1613.6.1	Geological	The inclusion of the importance factor in this equation has the unintended consequence of reducing the minimum seismic separation distance for important facilities such as hospital, school, police, and fire station, etc., from adjoining structures. The deletion of the importance factor from Equation 16-44 will ensure that a safe seismic separation distance is provided. This amendment is a continuation of an amendment adopted during previous code adoption cycles, and is necessary due to the increased risk of significant earthquakes in the County.
1613.6.2	Geological	Observed damages to one- and two-family dwellings of light frame construction after the Northridge Earthquake may have been partially attributed to vertical irregularities common to this type of occupancy and construction. In an effort to improve quality of construction and incorporate lessons learned from studies after the Northridge Earthquake, the modification to ASCE 7-05 Section 12.2.3.1 by limiting the number of stories and height of the structure to two stories will significantly minimize the impact of vertical irregularities and concentration of inelastic behavior from mixed structural systems. This amendment is a continuation of an amendment adopted during previous code adoption cycles, and is necessary due to the increased risk of significant earthquakes in the County.
1613.6.3	Geological	A SEAOSC and Los Angeles City Joint Task Force investigated the performance of concrete and masonry construction with flexible wood diaphragm failures after the Northridge earthquake. It was concluded at that time that continuous ties are needed at specified spacing to control cross grain tension in the interior of the diaphragm. Additionally, subdiaphragm shears need to be limited to control combined orthogonal stresses within the

Code Section	Condition	Explanation of Amendment
		<p>diaphragm. Recognizing the importance and need to continue the recommendation made by the task force, but also taking into consideration the improved performance and standards for diaphragm construction today, a proposal to increase the continuous tie spacing limit to 40 ft in lieu of 25 ft and to use 75 percent of the allowable code diaphragm shear to determine the depth of the sub-diaphragm in lieu of the 300 plf is deemed appropriate and acceptable. The Los Angeles region is within a very active geological location. The various jurisdictions within this region have taken additional steps to prevent roof or floor diaphragms from pulling away from concrete or masonry walls. This decision was made due to the frequency of this type of failure during the past significant earthquakes. This amendment is a continuation of an amendment adopted during previous Code adoption cycles.</p>
1613.7	Geological Topographical	<p>Section is added to improve seismic safety of buildings constructed on or into hillsides. Due to the local topographical and geological conditions of the sites within the Los Angeles region and their probabilities for earthquakes, this technical amendment is required to address and clarify special needs for buildings constructed on hillside locations. A SEAOSC and Los Angeles City Joint Task Force investigated the performance of hillside building failures after the Northridge earthquake. Numerous hillside failures resulted in loss of life and millions of dollars in damage. These criteria were developed to minimize the damage to these structures and have been in use by both the City and County of Los Angeles for several years with much success. This amendment is a continuation of an amendment adopted during previous Code adoption cycles.</p>
1704.5	Geological	<p>The language in Sections 1704.5 of the California Building Code permits the owner to employ any registered design professional to perform structural observations with minimum guidelines. However, it is important to recognize that the registered design professional responsible for the structural design has thorough knowledge of the building he/she designed. By requiring the registered design</p>

Code Section	Condition	Explanation of Amendment
		<p>professional responsible for the structural design or their designee who were involved with the design to observe the construction, the quality of the observation for major structural elements and connections that affect the vertical and lateral load resisting systems of the structure will greatly be increased. Additional requirements are provided to help clarify the role and duties of the structural observer and the method of reporting and correcting observed deficiencies to the building official. This amendment is a continuation of an amendment adopted during previous Code adoption cycles, and is necessary due to the increased risk of significant earthquakes in the County.</p>
1704.5.1	Geological	<p>With the higher seismic demand placed on buildings and structures in this region, the language in Sections 1704.5.1 Item 3 of the California Building Code would permit many low-rise buildings and structures with complex structural elements to be constructed without the benefit of a structural observation. By requiring a registered design professional to observe the construction, the quality of the observation for major structural elements and connections that affect the vertical and lateral load resisting systems of the structure will greatly be increased. An exception is provided to permit simple structures and buildings to be excluded. This amendment is a continuation of an amendment adopted during previous Code adoption cycles, and is necessary due to the increased risk of significant earthquakes in the County.</p>
1705.3 and Table 1705.3	Geological	<p>Results from studies after the 1994 Northridge Earthquake indicated that a significant portion of the damages were attributable to lack of quality control during construction resulting in poor performance of the building or structure. Therefore, the amendment restricts the exceptions to the requirement for special inspection. This amendment is a continuation of an amendment adopted during previous Code adoption cycles, and is necessary due to the increased risk of significant earthquakes in the County.</p>
1705.11	Geological	<p>In Southern California, very few detached one- or two-family dwellings not exceeding two stories above grade plane are built as "box-type" structures, specially for those</p>

Code Section	Condition	Explanation of Amendment
		<p>in hillside areas and near the oceanfront. Many with steel moment frames or braced frames, and or cantilevered columns can still be shown as "regular" structures by calculations. With the higher seismic demand placed on buildings and structures in this region, the language in Sections 1705.11 Item 3 of the California Building Code would permit many detached one- or two-family dwellings not exceeding two stories above grade plane with complex structural elements to be constructed without the benefit of special inspections. By requiring special inspections, the quality of major structural elements and connections that affect the vertical and lateral load resisting systems of the structure will greatly be increased. The exception should only be allowed for detached one- or two-family dwellings not exceeding two stories above grade plane assigned to Seismic Design category A, B, and C.</p>
1807.1.4	Climatic Geological	<p>No substantiating data has been provided to show that a wood foundation is effective in supporting buildings and structures during a seismic event while being subject to deterioration caused by the combined detrimental effect of constant moisture in the soil and wood-destroying organisms. Wood retaining walls, when they are not properly treated and protected against deterioration, have performed very poorly and have led to slope failures. Most contractors are typically accustomed to construction in dry and temperate weather in the Southern California region and are not generally familiar with the necessary precautions and treatment of wood that makes it suitable for both seismic events and wet applications. The proposed amendment takes the necessary precautionary steps to reduce or eliminate potential problems that may result by using wood foundations that experience relatively rapid decay due to the fact that the region does not experience temperatures cold enough to destroy or retard the growth and proliferation of wood-destroying organisms. This amendment is a continuation of an amendment adopted during previous Code adoption cycles, and is necessary due to the increased risk of significant earthquakes in the County.</p>
1807.1.6	Geological	<p>With the higher seismic demand placed on buildings and</p>

Code Section	Condition	Explanation of Amendment
		<p>structures in this region, it is deemed necessary to take precautionary steps to reduce or eliminate potential problems that may result by following prescriptive design provisions that do not take into consideration the surrounding environment. Plain concrete performs poorly in withstanding the cyclic forces resulting from seismic events. In addition, no substantiating data has been provided to show that under-reinforced foundation walls are effective in resisting seismic loads and may potentially lead to a higher risk of failure. It is important that the benefit and expertise of a registered design professional be obtained to properly analyze the structure and take these issues into consideration. This amendment is a continuation of an amendment adopted during previous Code adoption cycles.</p>
1809.3	Geological	<p>With the higher seismic demand placed on buildings and structures in this region, it is deemed necessary to take precautionary steps to reduce or eliminate potential problems that may result for under-reinforced footings located on sloped surfaces. Requiring minimum reinforcement for stepped footings is intended to address the problem of poor performance of plain or under-reinforced footings during a seismic event. This amendment is a continuation of an amendment adopted during previous Code adoption cycles.</p>
1809.7 and Table 1809.7	Geological	<p>No substantiating data has been provided to show that under-reinforced footings are effective in resisting seismic loads and may potentially lead to a higher risk of failure. Therefore, this amendment requires minimum reinforcement in continuous footings to address the problem of poor performance of plain or under-reinforced footings during a seismic event. With the higher seismic demand placed on buildings and structures in this region, it is deemed necessary to take precautionary steps to reduce or eliminate potential problems that may result by following prescriptive design provisions for footings that do not take into consideration the surrounding environment. It was important that the benefit and expertise of a registered design professional be obtained to properly analyze the structure and take these factors into consideration. This amendment reflects the</p>

Code Section	Condition	Explanation of Amendment
		<p>recommendations by the SEAOSC and the Los Angeles City Joint Task Force that investigated the poor performance observed in the 1994 Northridge Earthquake. This amendment is a continuation of an amendment adopted during previous Code adoption cycles.</p>
1809.12	Climatic Geological	<p>No substantiating data has been provided to show that timber footings are effective in supporting buildings and structures during a seismic event while being subject to deterioration caused by the combined detrimental effects of constant moisture in the soil and wood-destroying organisms. Timber footings, when they are not properly treated and protected against deterioration, have performed very poorly. Most contractors are typically accustomed to construction in dry and temperate weather in the Southern California region and are not generally familiar with the necessary precautions and treatment of wood that makes it suitable for both seismic events and wet applications. The proposed amendment takes the necessary precautionary steps to reduce or eliminate potential problems that may result by using timber footings that experience relatively rapid decay due to the fact that the region does not experience temperatures cold enough to destroy or retard the growth and proliferation of wood-destroying organisms. This amendment is a continuation of an amendment adopted during previous Code adoption cycles, and is necessary due to the increased risk of significant earthquakes in the County.</p>
1905.1 and 1905.1.3	Geological	<p>The design provision for wall pier detailing was originally introduced by SEAOC in 1987 to legacy Uniform Building Code (UBC) and was included in the 1988 UBC through the 1997 UBC (2002 CBC). The wall pier detailing provision prescribed under Section 1905.1.4 was intended for high seismic zones equivalent to current Seismic Design Category D, E, or F. Section 1905.1.3 was added as a complement of wall pier detailing in Seismic Design Category C (formerly seismic zones 2A and 2B under the legacy model code). ACI 318 Commentary R 21.1.1 emphasized "it is essential that structures assigned to higher Seismic Design Categories possess a higher degree of toughness," and further encourages practitioners to use special structural wall systems in</p>

Code Section	Condition	Explanation of Amendment
		<p>regions of high seismic risk. ASCE 7 Table 12.2-1 permits intermediate precast structural wall system in Seismic Design Category D, E, or F. Current Section 1905.1.3 is not limited to just structures assigned to Seismic Design Category C. The required shear strength under 21.3.3, referenced in Section 21.4.6, is based on V_u under either nominal moment strength or two times the code prescribed earthquake force. The required shear strength in 21.6.5.1, referenced in Section 21.9.8.2 (IBC 1905.1.4), is based on the probable shear strength, V_e under the probable moment strength, M_{pr}. In addition, the spacing of required shear reinforcement is 8 inches on center under current Section 21.4.6 instead of 6 inches on center with seismic hooks at both ends under Section 21.9.8.2. Requirement of wall pier under Section 21.9.8.2 would enhance better ductility. The current practice in commercial buildings constructed using precast panel wall systems is to have large window and door openings and/or narrow wall piers. Wall panels varying up to three stories high with openings resembles a wall frame which is not currently recognized under any of the defined seismic-force resisting systems other than consideration of structural wall systems. Conformance to special structural wall system design and detailing of wall piers ensures minimum life safety performance in resisting earthquake forces for structures in Seismic Design Category D, E, or F. The modification separates wall piers designed for structures assigned to Seismic Design Category C from those assigned to Seismic Design Category D, E, or F. This amendment is a continuation of an amendment adopted during previous Code adoption cycles, and is necessary due to the increased risk of significant earthquakes in the County.</p>
1905.1.8	Geological	<p>This amendment requires minimum reinforcement in continuous footings to address the problem of poor performance of plain or under-reinforced footings during a seismic event. This amendment reflects the recommendations by the SEAOSC and the Los Angeles City Joint Task Force that investigated the poor performance observed in 1994 Northridge Earthquake. This amendment is a continuation of an amendment</p>

Code Section	Condition	Explanation of Amendment
		adopted during previous Code adoption cycles, and is necessary due to the increased risk of significant earthquakes in the County.
1905.1.10 through 1905.1.12	Geological	This amendment is intended to carry over critical provisions for the design of concrete columns in moment frames from the UBC. Increased confinement is critical to the integrity of such columns and these modifications ensure that it is provided when certain thresholds are exceeded. In addition, this amendment carries over from the UBC a critical provision for the design of concrete shear walls. It essentially limits the use of very highly gravity-loaded walls from being included in the seismic load resisting system, since their failure could have catastrophic effect on the building. Furthermore, this amendment was incorporated in the Code based on observations from the 1994 Northridge Earthquake. Rebar placed in very thin concrete topping slabs has been observed in some instances to have popped out of the slab due to insufficient concrete coverage. This modification ensures that critical boundary and collector rebars are placed in sufficiently thick slabs to prevent buckling of such reinforcements. This amendment is a continuation of an amendment adopted during previous Code adoption cycles, and is necessary due to the increased risk of significant earthquakes in the County.
2304.9.1 and Table 2304.9.1	Geological	Due to the high geologic activities in the Southern California area and the expected higher level of performance on buildings and structures, this proposed local amendment limits the use of staple fasteners in resisting or transferring seismic forces. In September 2007, limited cyclic testing data was provided to the ICC Los Angeles Chapter Structural Code Committee showing that stapled wood structural shear panels do not exhibit the same behavior as nailed wood structural shear panels. The test results of stapled wood structural shear panels appeared much lower in strength and drift than nailed wood structural shear panel test results. Therefore, the use of staples as fasteners to resist or transfer seismic forces shall not be permitted without being substantiated by cyclic testing. This amendment is a continuation of a similar amendment adopted during previous Code

Code Section	Condition	Explanation of Amendment
		adoption cycles, and is necessary due to the increased risk of significant earthquakes in the County.
2304.11.7	Climatic Geological	<p>No substantiating data has been provided to show that wood used in retaining or crib walls is effective in supporting buildings and structures during a seismic event while being subject to deterioration caused by the combined detrimental effect of constant moisture in the soil and wood-destroying organisms. Wood used in retaining or crib walls, when it is not properly treated and protected against deterioration, has performed very poorly. Most contractors are typically accustomed to construction in dry and temperate weather in the Southern California region and are not generally familiar with the necessary precautions and treatment of wood that makes it suitable for both seismic events and wet applications. The proposed amendment takes the necessary precautionary steps to reduce or eliminate potential problems that may result by using wood in retaining or crib walls that experience relatively rapid decay due to the fact that the region does not experience temperatures cold enough to destroy or retard the growth and proliferation of wood-destroying organisms. This amendment is a continuation of an amendment adopted during previous Code adoption cycles, and is necessary due to the increased risk of significant earthquakes in the County.</p>
2305.4	Geological	<p>The overdriving of nails into the structural wood panels still remains a concern when pneumatic nail guns are used for wood structural panel shear wall nailing. Box nails were observed to cause massive and multiple failures of the typical 3/8-inch thick plywood during the 1994 Northridge Earthquake. The use of clipped head nails continues to be restricted from use in wood structural panel shear walls where the minimum nail head size must be maintained in order to minimize nails from pulling through sheathing materials. Clipped or mechanically driven nails used in wood structural panel shear wall construction were found to perform much worse in previous wood structural panel shear wall testing done at the University of California Irvine. The existing test results indicated that, under cyclic loading, the wood structural panel shear walls were less energy absorbent and less</p>

Code Section	Condition	Explanation of Amendment
		ductile. The panels reached ultimate load capacity and failed at substantially less lateral deflection than those using same size hand-driven nails. This amendment reflects the recommendations by the SEAOSC and the Los Angeles City Joint Task Force that investigated the poor performance observed in 1994 Northridge Earthquake. This amendment is a continuation of an amendment adopted during previous Code adoption cycles, and is necessary due to the increased risk of significant earthquakes in the County.
2305.5	Geological	Many of the hold-down connectors currently in use do not have any acceptance report based on dynamic testing protocol. This amendment continues to limit the allowable capacity to 75% of the acceptance report value to provide an additional factor of safety for statically tested anchorage devices. Cyclic forces imparted on buildings and structures by seismic activity cause more damage than equivalent forces which are applied in a static manner. Steel plate washers will reduce the additional damage which can result when hold-down connectors are fastened to wood framing members. This amendment reflects the recommendations by the SEAOSC and the Los Angeles City Joint Task Force that investigated the poor performance observed in the 1994 Northridge Earthquake. This amendment is a continuation of an amendment adopted during previous Code adoption cycles, and is necessary due to the increased risk of significant earthquakes in the County.
2306.2	Geological	The SEAOSC and the Los Angeles City Joint Task Force that investigated the damages to buildings and structures during the 1994 Northridge Earthquake recommended reducing allowable shear values in wood structural panel shear walls or diaphragms that were not substantiated by cyclic testing. That recommendation was consistent with a report to the Governor from the Seismic Safety Commission of the State of California recommending that code requirements be "more thoroughly substantiated with testing." The allowable shear values for wood structural panel shear walls or diaphragms fastened with staples are based on monotonic testing and do not take into

Code Section	Condition	Explanation of Amendment
		<p>consideration that earthquake forces load shear wall or diaphragm in a repeating and fully reversible manner. In September 2007, limited cyclic testing was conducted by a private engineering firm to determine if wood structural panels fastened with staples would exhibit the same behavior as wood structural panels fastened with common nails. The test result revealed that wood structural panels fastened with staples appeared to be much lower in strength and stiffness than wood structural panels fastened with common nails. It was recommended that the use of staples as fasteners for wood structural panel shear walls or diaphragms not be permitted to resist seismic forces in structures assigned to Seismic Design Category D, E and F unless it can be substantiated by cyclic testing. Furthermore, the cities and unincorporated areas within the Los Angeles region have taken extra measures to maintain the structural integrity of the framing of shear walls and diaphragms designed for high levels of seismic forces by requiring wood sheathing be applied directly over the framing members and prohibiting the use of panels placed over gypsum sheathing. This amendment is intended to prevent the undesirable performance of nails when gypsum board softens due to cyclic earthquake displacements and the nail ultimately does not have any engagement in a solid material within the thickness of the gypsum board. This amendment continues the previous amendment adopted during the 2007 Code adoption cycle.</p>
2306.3 and 2307.2	Geological	<p>The SEAOSC and the Los Angeles City Joint Task Force that investigated the damages to buildings and structures during the 1994 Northridge Earthquake recommended reducing allowable shear values in wood structural panel shear walls or diaphragms that were not substantiated by cyclic testing. That recommendation was consistent with a report to the Governor from the Seismic Safety Commission of the State of California recommending that code requirements be "more thoroughly substantiated with testing." The allowable shear values for wood structural panel shear walls or diaphragms fastened with stapled nails are based on monotonic testing and do not take into consideration that earthquake forces load shear wall or</p>

Code Section	Condition	Explanation of Amendment
		<p>diaphragm in a repeating and fully reversible manner. In September 2007, limited cyclic testing was conducted by a private engineering firm to determine if wood structural panels fastened with stapled nails would exhibit the same behavior as wood structural panels fastened with common nails. The test result revealed that wood structural panel fastened with stapled nails appeared to be much lower in strength and stiffness than wood structural panels fastened with common nails. It was recommended that the use of stapled nail as fasteners for wood structural panel shear walls or diaphragms not be permitted to resist seismic forces in structures assigned to Seismic Design Category D, E and F unless it can be substantiated by cyclic testing. Furthermore, the cities and unincorporated areas within the Los Angeles region have taken extra measures to maintain the structural integrity of the framing of shear walls and diaphragms designed for high levels of seismic forces by requiring wood sheathing be applied directly over the framing members and prohibiting the use of panels placed over gypsum sheathing. This amendment is intended to prevent the undesirable performance of nails when gypsum board softens due to cyclic earthquake displacements and the nail ultimately does not have any engagement in a solid material within the thickness of the gypsum board. This amendment continues the previous amendment adopted during the 2007 Code adoption cycle, and is necessary due to the increased risk of significant earthquakes in the County.</p>
2308.3.4	Geological	<p>With the higher seismic demand placed on buildings and structures in this region, interior walls can easily be called upon to resist over half of the seismic loading imposed on simple buildings or structures. Without a continuous foundation to support the braced wall line, seismic loads would be transferred through other elements such as non-structural concrete slab floors, wood floors, etc. The purpose of this amendment is to limit the use of the exception to structures assigned to Seismic Design Category A, B or C where lower seismic demands are expected. Requiring interior braced walls be supported by continuous foundations is intended to reduce or eliminate the poor performance of buildings or structures. This</p>

Code Section	Condition	Explanation of Amendment
		amendment is a continuation of an amendment adopted during previous Code adoption cycles, and is necessary due to the increased risk of significant earthquakes in the County.
2308.9.3.1, 2308.9.3.2 and Figure 2308.9.3.2	Geological	<p>The SEAOSC and the Los Angeles City Joint Task Force that investigated the damages to buildings and structures during the 1994 Northridge Earthquake recommended reducing allowable shear values in wood structural panel shear walls or diaphragms that were not substantiated by cyclic testing. That recommendation was consistent with a report to the Governor from the Seismic Safety Commission of the State of California recommending that code requirements be "more thoroughly substantiated with testing." The allowable shear values for wood structural panel shear walls or diaphragms fastened with stapled nails are based on monotonic testing and do not take into consideration that earthquake forces load shear wall or diaphragm in a repeating and fully reversible manner. In September 2007, limited cyclic testing was conducted by a private engineering firm to determine if wood structural panels fastened with stapled nails would exhibit the same behavior as wood structural panels fastened with common nails. The test result revealed that wood structural panel fastened with stapled nails appeared to be much lower in strength and stiffness than wood structural panels fastened with common nails. It was recommended that the use of stapled nail as fasteners for wood structural panel shear walls or diaphragms not be permitted to resist seismic forces in structures assigned to Seismic Design Category D, E and F unless it can be substantiated by cyclic testing. Furthermore, the cities and unincorporated areas within the Los Angeles region have taken extra measures to maintain the structural integrity of the framing of shear walls and diaphragms designed for high levels of seismic forces by requiring wood sheathing be applied directly over the framing members and prohibiting the use of panels placed over gypsum sheathing. This amendment is intended to prevent the undesirable performance of nails when gypsum board softens due to cyclic earthquake displacements and the nail ultimately does not have any engagement in a solid material within</p>

Code Section	Condition	Explanation of Amendment
		the thickness of the gypsum board.
Table 2308.12.4	Geological	This amendment specifies minimum sheathing thickness and nail size and spacing so as to provide a uniform standard of construction for designers and buildings to follow. This is intended to improve the performance level of buildings and structures that are subject to the higher seismic demands placed on buildings or structure in this region. This proposed amendment reflects the recommendations by the SEAOSC and the Los Angeles City Joint Task Force that investigated the poor performance observed in 1994 Northridge Earthquake. This amendment is a continuation of an amendment adopted during previous Code adoption cycles, and is necessary due to the increased risk of significant earthquakes in the County.
2308.12.5	Geological	Due to the high geologic activities in the Southern California area and the expected higher level of performance on buildings and structures, this amendment limits the use of staple fasteners in resisting or transferring seismic forces. In September 2007, limited cyclic testing data was provided to the ICC Los Angeles Chapter Structural Code Committee showing that stapled wood structural shear panels do not exhibit the same behavior as nailed wood structural shear panels. The test results of stapled wood structural shear panels appeared much lower in strength and drift than nailed wood structural shear panel test results. Therefore, the use of staples as fasteners to resist or transfer seismic forces shall not be permitted without being substantiated by cyclic testing. This amendment is a continuation of a similar amendment adopted during previous Code adoption cycles.
3401.10.1 to 3401.10.3	Geological	The greater Los Angeles/Long Beach region is a densely populated area having buildings constructed over and near a vast array of fault systems capable of producing major earthquakes, including but not limited to the recent 1994 Northridge Earthquake. The purpose of the amendments is to prevent inadequate construction or bracing to resist horizontal forces, thus becoming a hazard to life or property in the event of an earthquake.
3401.11	Geological	The greater Los Angeles/Long Beach region is a densely populated area having buildings constructed over and

Code Section	Condition	Explanation of Amendment
		near a vast array of fault systems capable of producing major earthquakes, including but not limited to the recent 1994 Northridge Earthquake. The purpose of the amendment is to save lives in the event of an earthquake when panics occur and glass shatters.
J101.1	Geological Topographical Climate	This Section is revised to include erosion and sediment control measures to address the complex and diverse set of soil types and geologic conditions that exist in the Los Angeles County region.
J103.1 – J103.2	Geological Topographical Climate	Sections revised to provide adequate control of grading operations typical to the Los Angeles County region due to the complex and diverse set of soil types, climates, and geologic conditions that exist in the Los Angeles County region.
J104.2.1 – J104.4	Geological Topographical Climate	Sections revised or added to provide adequate control of grading operations typical to the Los Angeles County region due to the complex and diverse set of soil types, climates, and geologic conditions that exist in the Los Angeles County region.
J105.1- J105.14	Geological Topographical Climate	Sections revised or added to provide adequate control of grading operations typical to the Los Angeles County region due to the complex and diverse set of soil types, climates, and geologic conditions that exist in the Los Angeles County region.
J106.1	Geological Topographical Climate	Section revised to require more stringent cut slope ratios to address the complex and diverse set of soil types and geologic conditions that exist in the Los Angeles County region.
J107.1- J107.7	Geological Topographical Climate	Sections revised to provide more stringent fill requirements for slope stability, and settlement due to the complex and diverse set of soil types, climates, and geologic conditions which exist in the Los Angeles County region.
J107.8 – J107.9	Geological Topographical Climate	Sections revised to provide more stringent inspection and testing requirements for fill slope stability due to the complex and diverse set of soil types, climates, and geologic conditions which exist in the Los Angeles County region.
J108.1 – J108.4	Geological Topographical Climate	Sections revised to provide more stringent slope setback requirements to address the complex and diverse set of soil types, climates, and geologic conditions which exist in

Code Section	Condition	Explanation of Amendment
		the Los Angeles County region.
J109.1 – J109.3	Geological Topographical Climate	Sections revised to provide more stringent drainage and terracing requirements to address the complex and diverse set of soil types, climates, and geologic conditions which exist in the Los Angeles County region.
J109.5	Geological Topographical Climate	Subsection added to provide for adequate outlet of drainage flows due to the diverse set of soil types, climates, and geologic conditions which exist in the Los Angeles County region.
J110 - J110.8.5	Geological Topographical Climate	Sections revised or added to provide for State requirements of storm water pollution prevention and more stringent slope planting, and slope stability requirements to control erosion due to the complex and diverse set of soil types, climates, and geologic conditions that exist in the Los Angeles County region.
J111	Geological Topographical Climate	Section revised to reference additional standards for soils testing due to the complex and diverse set of soil types, climates, and geologic conditions that exist in the Los Angeles County region.

[TITLE262013CSCC]

SECTION 9. The provisions of this ordinance contain additions to the 2013 Edition of the California Electrical Code. Some of these changes are administrative in nature in that they do not constitute changes or modifications to requirements contained in the building standards published in the California Electrical Code.

Pursuant to California Health and Safety Code sections 17958.5, 17958.7, and 18941.5, the Board of Supervisors hereby expressly finds that the additions to requirements contained in the building standards published in the California Electrical Code contained in this ordinance, which are not administrative in nature, are reasonably necessary because of local climatic, geological, or topographical conditions in the County of Los Angeles as more particularly described in the table set forth below.

ELECTRICAL CODE AMENDMENTS

CODE SECTION	CONDITION	EXPLANATION
690.19	Geological	Emergency situations caused by seismic events may require the disconnection of electrical power in a building. Presently, the CEC does not require a disconnecting means for conductors for multi-arrayed solar photovoltaic systems.

SECTION 10. This ordinance shall become operative on January 1, 2014.

[TITLE272013SCC]

Title 20 - Sanitary Sewer and Industrial Waste of the Los Angeles County Code. Where applicable, Section 1120 may be used with prior approval of the Authority Having Jurisdiction.

SECTION 15. The provisions of this ordinance contain various changes, modifications, and additions to the 2013 Edition of the California Mechanical Code. Some of these changes are administrative in nature in that they do not constitute changes or modifications to requirements contained in the building standards published in the California Mechanical Code.

Pursuant to California Health and Safety Code sections 17958.5, 17958.7, and 18941.5, the Board of Supervisors hereby expressly finds that all of the changes and modifications to requirements contained in the building standards published in the California Building Standards Code contained in this ordinance, which are not administrative in nature, are reasonably necessary because of local climatic, geological, or topographical conditions in the County of Los Angeles as more particularly described in the table set forth below.

TABLE

MECHANICAL CODE AMENDMENTS		
CODE SECTION	CONDITION	EXPLANATION
501.1	Climatic	Additional Health Department requirements are necessary due to local air quality concerns.
508.4.1.5	Climatic	Due to high temperature and dry conditions in Southern California, grease laden combustibles are a high fire hazard.

MECHANICAL CODE AMENDMENTS		
CODE SECTION	CONDITION	EXPLANATION
510.1.6	Geological	High geologic activities, such as seismic events, in the Southern California area necessitates this local amendment for bracing and support.
603.2	Geological	High geologic activities, such as seismic events, in the Southern California area necessitates this local amendment for bracing and support.
1119.4	Geological	High geologic activities, such as seismic events, in the Southern California area necessitates this local amendment to reduce damage and potential for toxic refrigerant release during a seismic event caused by shifting equipment and to minimize impacts to the sewer system in such an event.

SECTION 16. This ordinance shall become operative on January 1, 2014.

[TITLE292013CSCC]

UL Underwriters Laboratories, Inc., 333 Pfingsten Road, Northbrook, IL
60062-2096.

SECTION 23. The provisions of this ordinance contain various changes, modifications, and additions to the 2013 Edition of the California Plumbing Code. Some of these changes are administrative in nature in that they do not constitute changes or modifications to requirements contained in the building standards published in the California Building Standards Code.

Pursuant to California Health and Safety Code sections 17958.5, 17958.7, and 18941.5, the Board of Supervisors hereby expressly finds that all of the changes and modifications to requirements contained in the building standards published in the California Building Standards Code contained in this ordinance, which are not administrative in nature, are reasonably necessary because of local climatic, geological, or topographical conditions in the County of Los Angeles as more particularly described in the table set forth below.

PLUMBING CODE AMENDMENTS

CODE SECTION	CONDITION	EXPLANATION
721.3	Geological Topographical	To allow for the proper operation of existing Los Angeles County sewer infrastructure and establish consistency with Title 20 – Utilities of the Los Angeles County Code, Division 2 (Sanitary Sewers and Industrial Waste) due to local soil conditions and topography.

CODE SECTION	CONDITION	EXPLANATION
728.1 to 728.6	Geological Topographical	To allow for the proper operation of existing Los Angeles County sewer infrastructure and establish consistency with Title 20 – Utilities of the Los Angeles County Code, Division 2 (Sanitary Sewers and Industrial Waste) due to local soil conditions and topography.
Table H 1.7	Geological, Topographical,	To establish more restrictive requirements for protection of local groundwater due to local soil conditions.
Table H 2.1(1)	Geological, Topographical	To establish more restrictive requirements for protection of local groundwater due to local soil conditions, sewer capacity, and sewage treatment.
Table H 2.1(2)	Geological, Topographical	To establish consistency with requirements of the County Health Department for sewer capacity and sewage treatment due to local soil conditions.
Table H 2.1(3)	Geological, Topographical	To establish consistency with requirements of the County Health Department for sewer capacity and sewage treatment due to local soil conditions.
Section H 3.1	Geological, Topographical,	To establish more restrictive requirements for protection of local groundwater due to local soil conditions.
Section H 4.3	Geological, Topographical	To establish more restrictive requirements for protection of local groundwater due to local soil conditions.
Section H 6.5	Geological, Topographical	To establish more restrictive requirements for protection of local groundwater due to local soil conditions.
Section H 6.8	Geological, Topographical	To establish more restrictive requirements for protection of local groundwater due to local soil conditions.

CODE SECTION	CONDITION	EXPLANATION
Section H 7.2	Geological, Topographical	To establish more restrictive requirements for protection of local groundwater due to local soil conditions.
Section H 10.1	Geological	To establish more restrictive requirements to prevent earth movement based on local soil and seismic conditions.
Section H 11.6	Geological	To establish more restrictive requirements to prevent earth movement based on local soil and seismic conditions.

SECTION 24. This ordinance shall become operative on January 1, 2014.

[TITLE282013CSCC]

Code Section	Condition	Explanation of Amendment
R301.1.3.2	Geological	<p>Los Angeles County is prone to seismic activity due to the existence of active faults in the Southern California area. After the 1994 Northridge Earthquake, the Wood Frame Construction Joint Task Force recommended that the quality of wood frame construction needs to be greatly improved. One such recommendation identified by the Task Force is to improve the quality and organization of structural plans prepared by the engineer or architect so that plan examiners, building inspectors, contractors, and special inspectors may logically follow and construct the presentation of the seismic force-resisting systems in the construction documents. For buildings or structures located in Seismic Design Category D₀, D₁, D₂, or E that are subject to a greater level of seismic forces, the requirement to have a California licensed architect or engineer prepare the construction documents is intended to minimize or reduce structural deficiencies that may cause excessive damage or injuries in wood frame buildings. Structural deficiencies such as plan and vertical irregularities, improper shear transfer of the seismic force-resisting system, missed details or connections important to the structural system, and the improper application of the prescriptive requirements of the California Residential Code can be readily addressed by a registered design professional.</p>
R301.1.4	Geological Topographical	<p>This technical amendment is for buildings constructed on hillsides. Due to the local topographical and geological conditions of the sites within the greater Los Angeles region and their susceptibility to earthquakes, this amendment is required to address and clarify special needs for buildings constructed on hillside locations. A joint Structural Engineers Association of Southern California (SEAOSC) and Los Angeles City Joint Task Force investigated the performance of hillside building failures after the Northridge earthquake. Numerous hillside failures resulted in loss of life and millions of dollars in damage. These criteria were developed to minimize the damage to these structures and have been in use by the City and County of Los Angeles for several years.</p>
R301.2.2.2.5	Geological	<p>Los Angeles County is prone to seismic activity due to the existence of active faults in the Southern California area. Due to the high geologic activities in the Southern</p>

Code Section	Condition	Explanation of Amendment
		California area and the expected higher level of performance on buildings and structures, this local amendment limits the type of irregular conditions as specified in the 2013 California Residential Code. Such limitations are recommended to reduce structural damages in the event of an earthquake. The cities and County of the Los Angeles region have taken extra measures to maintain the structural integrity of the framing of the shear walls and all associated elements when designed for high levels of seismic loads.
R301.2.2.3.8	Geological	Los Angeles County is prone to seismic activity due to the existence of active faults in the Southern California area. Due to the high geologic activities in the Southern California area and the expected higher level of performance on buildings and structures, this local amendment limits the potential anchorage and supporting frame failure resulting from additional weight. There is no limitation for weight of mechanical and plumbing fixtures and equipment in the International Residential Code. Requirements from ASCE 7 and the International Building Code would permit equipment weighing up to 400 lbs. when mounted at 4 feet or less above the floor or attic level without engineering design. Where equipment exceeds this requirement, it is the intent of this proposed amendment that a registered design professional be required to analyze if the floor support is adequate and structurally sound.
Table R302.1(2)	Climatic	This amendment will not allow unprotected openings (openings that do not resist the spread of fire) to be in the exterior wall of a residential building that is located on a property line. This amendment is necessary due to local climatic conditions. During the hot, dry weather conditions of late summer in combination with the Santa Ana winds creates an extreme fire danger. Residential buildings with unprotected openings located on a property line will allow the spread of fire from the inside of the building to adjacent properties and likewise from exterior properties to the interior of the building.
R327.1.1	Climatic	Clarifies the application of Chapter R327 to include additions, alterations, and/or relocated buildings. Many areas of the County have been designated as Fire Hazard Severity Zones due to low humidity, strong winds, and dry

Code Section	Condition	Explanation of Amendment
		vegetation. Additions, alterations, and/or relocated buildings have the same fire risk as new buildings.
R327.1.3	Climatic	Clarifies the application of Chapter R327 to include additions, alterations, and/or relocated buildings. Many areas of the County have been designated as Fire Hazard Severity Zones due to the increased risk of fire caused by low humidity, strong winds, and dry vegetation. Additions, alterations, and/or relocated buildings have the same fire risk as new buildings.
R327.1.3.1	Climatic	Clarifies the application of Chapter R327 to include additions, alterations, and/or relocated buildings. Many areas of the County have been designated as Fire Hazard Severity Zones due to the increased risk of fire caused by low humidity, strong winds, and dry vegetation. Additions, alterations, and/or relocated buildings have the same fire risk as new buildings.
R327.3.5.2	Climatic	Disallows the use of wood-shingle/wood-shake roofs due to the increased risk of fire in the County caused by low humidity, strong winds, and dry vegetation.
R327.3.5.2.2	Climatic	Disallows the use of wood-shingle/wood-shake roofs due to the increased risk of fire in the County caused by low humidity, strong winds, and dry vegetation.
R327.4.3	Climatic	Disallows the use of wood-shingle/wood-shake roofs due to the increased risk of fire in the County caused by low humidity, strong winds, and dry vegetation in High Fire Severity Zones.
R327.5.2	Climatic	Disallows the use of wood-shingle/wood-shake roofs and requires the use of Class A roof covering due to the increased risk of fire in the County caused by low humidity, strong winds, and dry vegetation in High Fire Severity Zones.
R401.1	Geological	Los Angeles County is prone to seismic activity due to the existence of active faults in the Southern California area. Wood foundations, even those that are preservative-treated, encounter a higher risk of deterioration when contacting the adjacent ground. The required seismic anchorage and transfer of lateral forces into the foundation system necessary for 2-story structures and foundation walls could become compromised at varying states of wood decay. In addition, global structure overturning moment and sliding resistance is reduced when utilizing

Code Section	Condition	Explanation of Amendment
		wood foundations as opposed to conventional concrete or masonry systems. However, non-occupied, single-story storage structures pose significantly less risk to human safety and should be able to utilize the wood foundation guidelines specified in this Chapter.
R403.1.2 R403.1.3 R403.1.5 Figure R403.1.5	Climatic Geological	Los Angeles County is prone to seismic activity due to the existence of active faults in the Southern California area. These proposed amendments require minimum reinforcement in continuous footings and stepped footings to address the problem of poor performance of plain or under-reinforced footings during a seismic event. These amendments reflect the recommendations by SEAOSC and the Los Angeles City Joint Task Force that investigated the poor performance observed in the 1994 Northridge Earthquake. These proposed amendments are a continuation of an amendment adopted during previous code adoption cycles. Interior walls can easily be called upon to resist over half of the seismic loading imposed on simple buildings or structures. Without a continuous foundation to support the braced wall line, seismic loads would be transferred through other elements such as non-structural concrete slab floors, wood floors, etc. Requiring interior braced walls be supported by continuous foundations is intended to reduce or eliminate the poor performance of buildings or structures.
R404.2	Climatic Geological	No substantiating data has been provided to show that wood foundations are effective in supporting structures and buildings during a seismic event while being subject to deterioration caused by presence of water in the soil as well as other materials detrimental to wood foundations. Wood foundations, when they are not properly treated and protected against deterioration, have performed very poorly and have led to slope failures. Most contractors are typically accustomed to construction in dry weather in the Southern California region and are not generally familiar with the necessary precautions and treatment of wood that makes it suitable for both seismic events and wet applications. With the higher seismic demand placed on buildings and structures in this region, coupled with the dryer weather conditions here as oppose to the northern and eastern part of the country, it is the intent of this proposal to take the necessary precautionary steps to

Code Section	Condition	Explanation of Amendment
		reduce or eliminate potential problems that may result from the use of wood footings and foundations that does not take into consideration the conditions of this surrounding environment.
R501.1	Geological	Due to the high geologic activities in the Southern California area and the expected higher level of performance on buildings and structures, this local amendment limits the potential anchorage and supporting frame failure resulting from additional weight. There is no limitation for weight of mechanical and plumbing fixtures and equipment in the International Residential Code. Requirements from ASCE 7 and the International Building Code would permit equipment weighing up to 400 lbs. when mounted at 4 feet or less above the floor or attic level without engineering design. Where equipment exceeds this requirement, it is the intent of this proposed amendment that a registered design professional be required to analyze if the floor support is adequate and structurally sound.
R503.2.4	Geological	Section R502.10 of the Code does not provide any prescriptive criteria to limit the maximum floor opening size nor does Section R503 provide any details to address the issue of shear transfer near larger floor openings. With the higher seismic demand placed on buildings and structures in this region, it is important to ensure that a complete load path is provided to reduce or eliminate potential damages caused by seismic forces. Requiring blocking with metal ties around larger floor openings and limiting opening size is consistent with the requirements of Section R301.2.2.2.5.
R602.3.2	Geological	Los Angeles County is prone to seismic activity due to the existence of active faults in the Southern California area. The cities and County of the Los Angeles region have taken extra measures to maintain the structural integrity of the framing of the shear walls when designed for high levels of seismic loads by eliminating single top plate construction. The performance of modern day braced wall panel construction is directly related to an adequate load path extending from the roof diaphragm to the foundation system. This proposed amendment is a continuation of an amendment adopted during the previous code adoption cycle.

Code Section	Condition	Explanation of Amendment
Table R602.3(1)	Geological	<p>Los Angeles County is prone to seismic activity due to the existence of active faults in the Southern California area. In September 2007, limited cyclic testing data was provided to the ICC Los Angeles Chapter Structural Code Committee showing that stapled wood structural shear panels do not exhibit the same behavior as the nailed wood structural shear panels. As a matter of fact, the test results of the stapled wood structural shear panels appeared much lower in strength and drift than the nailed wood structural shear panel test results. Therefore, the use of staples as fasteners for shear walls sheathed with other materials shall not be permitted without being substantiated by cyclic testing. This proposed amendment is a continuation of an amendment adopted during the previous Code adoption cycle.</p>
Table R602.3(2)	Geological	<p>Los Angeles County is prone to seismic activity due to the existence of active faults in the Southern California area. In September 2007, limited cyclic testing data was provided to the ICC Los Angeles Chapter Structural Code Committee showing that stapled wood structural shear panels do not exhibit the same behavior as the nailed wood structural shear panels. As a matter of fact, the test results of the stapled wood structural shear panels appeared much lower in strength and drift than the nailed wood structural shear panel test results. Therefore, the use of staples as fasteners for shear walls sheathed with other materials shall not be permitted without being substantiated by cyclic testing. This proposed amendment is a continuation of an amendment adopted during the previous Code adoption cycle.</p>
Table R602.10.3(3)	Geological	<p>Due to the high geologic activities in the Southern California area and the expected higher level of performance on buildings and structures, this local amendment continues to reduce/eliminate the allowable shear values for shear walls sheathed with lath, plaster or gypsum board. The poor performance of such shear walls sheathed with other materials in the 1994 Northridge Earthquake was investigated by SEAOSC and the Los Angeles City Joint Task Force. The cities and County of the Los Angeles region have taken extra measures to maintain the structural integrity of the framing of the shear walls when designed for high levels of seismic loads.</p>

Code Section	Condition	Explanation of Amendment
Table R602.10.4	Geological	<p>3/8" thick 3 ply-plywood shear walls experienced many failures during the Northridge Earthquake. This proposed amendment specifies minimum WSP sheathing thickness and nail size and spacing so as to provide a uniform standard of construction for designers and buildings to follow. This is intended to improve the performance level of buildings and structures that are subject to the higher seismic demands placed on buildings or structure in this region. This proposed amendment reflects the recommendations by SEAOSC and the Los Angeles City Joint Task Force that investigated the poor performance observed in 1994 Northridge Earthquake. In September 2007, cyclic testing data was provided to the structural code committee showing that stapled wood structural shear panels do not exhibit the same behavior as the nailed wood structural shear panels. In addition, the test results of the stapled wood structural shear panels appeared much lower in strength and drift than the nailed wood structural shear panel test results. This proposed amendment is a continuation of an amendment adopted during the previous Code adoption cycle.</p>
Table R602.10.5	Geological	<p>Los Angeles County is prone to seismic activity due to the existence of active faults in the Southern California area. The poor performance of such shear walls sheathed in the 1994 Northridge Earthquake was investigated by SEAOSC and the Los Angeles City Joint Task Force. The cities and County of the Los Angeles region have taken extra measures to maintain the structural integrity with respect to the "maximum shear wall aspect ratios" of the framing of the shear walls when designed for high levels of seismic loads. This proposed amendment is consistent with the shear wall aspect ratio provision of Section 4.3.4 of AF&PA SDPWS-2008.</p>
Figure R602.10.6.1	Geological	<p>3/8" thick 3 ply-plywood shear walls experienced many failures during the Northridge Earthquake. The poor performance of such shear walls sheathed in the 1994 Northridge Earthquake was investigated by SEAOSC and the Los Angeles City Joint Task Force. Box nails were observed to cause massive and multiple failures of the typical 3/8" thick 3 ply-plywood during the Northridge Earthquake. The cities and County of the Los Angeles region have taken extra measures to maintain the</p>

Code Section	Condition	Explanation of Amendment
		structural integrity of the framing of the shear walls when designed for high levels of seismic loads. The performance of modern day braced wall panel construction is directly related to an adequate load path extending from the roof diaphragm to the foundation system. This proposed amendment continues amendments adopted during the previous Code cycles for the California Building Code.
Figure R602.10.6.2	Geological	3/8" thick 3 ply-plywood shear walls experienced many failures during the Northridge Earthquake. The poor performance of such shear walls sheathed in the 1994 Northridge Earthquake was investigated by SEAOSC and the Los Angeles City Joint Task Force. The cities and County of the Los Angeles region have taken extra measures to maintain the structural integrity of the framing of the shear walls when designed for high levels of seismic loads. Box nails were observed to cause massive and multiple failures of the typical 3/8-inch thick plywood during the Northridge Earthquake. The proposal to change the minimum lap splice requirement is consistent with Section 12.16.1 of ACI 318-11. This proposed amendment is a continuation of an amendment adopted during the previous Code adoption cycles.
Figure R602.10.6.4	Geological	3/8" thick 3 ply-plywood shear walls experienced many failures during the Northridge Earthquake. The poor performance of such shear walls sheathed in the 1994 Northridge Earthquake was investigated by SEAOSC and the Los Angeles City Joint Task Force. The cities and County of the Los Angeles region have taken extra measures to maintain the structural integrity of the framing of the shear walls when designed for high levels of seismic loads. The proposal in which "washers shall be a minimum of 0.229 inch by 3 inches by 3 inches in size" is consistent with Section R602.11.1 of the California Residential Code and Section 2308.12.8 of the California Building Code. This proposed amendment is a continuation of an amendment adopted during the previous code adoption cycle.
R602.10.9.1	Geological	Los Angeles County is prone to seismic activity due to the existence of active faults in the Southern California area. The performance of modern day braced wall panel

Code Section	Condition	Explanation of Amendment
		construction is directly related to an adequate load path extending from the roof diaphragm to the foundation system. Interior braced wall panels, therefore, are also directly dependent upon the adequacy of the foundation system. In addition, the proposed amendment for Section R403.1.2 specifies that all exterior walls and required interior braced wall panels in buildings shall be supported with continuous footings.
R606.2.4	Geological	Los Angeles County is prone to seismic activity due to the existence of active faults in the Southern California area. The addition of the word "or" will prevent the use of unreinforced parapets in Seismic Design Category D ₀ , D ₁ or D ₂ , or on townhouses in Seismic Design Category C.
R606.12.2.2.3	Geological	Los Angeles County is prone to seismic activity due to the existence of active faults in the Southern California area. Reinforcement using longitudinal wires for buildings and structures located in high seismic areas are not as ductile as deformed rebar. Having vertical reinforcement closer to the ends of masonry walls help to improve the seismic performance of masonry buildings and structures.
R803.2.4	Geological	Section R802 of the Code does not provide any prescriptive criteria to limit the maximum size of roof openings, nor does Section R803 provide any details to address the issue of shear transfer near larger roof openings. With the higher seismic demand placed on buildings and structures in this region, it is important to ensure that a complete load path is provided to reduce or eliminate potential damage caused by seismic forces. Requiring blocking with metal ties around larger roof openings and limiting the size of openings is consistent with the requirements of Section R301.2.2.2.5.
R1001.3.1	Geological	Los Angeles County is prone to seismic activity due to the existence of active faults in the Southern California area. The performance of fireplaces/chimneys without anchorage to the foundation has been observed to be inadequate during major earthquakes. The lack of anchorage to the foundation results in overturn or displacement.

SECTION 49. This ordinance shall become operative on January 1, 2014.

[TITLE302013CSCC]