

Amendments to - 2016 California Building Code

Proposed Building Regulations Updates

The City of San Diego proposes to adopt the 2016 California Building Code (CBC) with local amendments codified in chapter 14 Article 5 "Building Regulations". The proposed amendments are necessary due to local geological conditions and necessary for consistent code application as amended:

- **Issue 1.** Update building addressing information in Section 95.0209 for consistency with the IBC and IFC Section 501.2 and IRC Section R319. Subsection (b) is being modified to address large buildings where curb marking is not practical.
- **Issue 2.** Amendments to adopt 2016 CBC and correct editorial errors.
- **Issue 3.** Repeal regulations limiting the orientation of vents and types/sizes of vents in the very high fire hazard severity zone.
- **Issue 4:** Modify regulations for skylights located in the very high fire hazard severity zone
- **Issue 5.** Repeal requirements for residential clothes dryer exhaust in common shaft. 2016 CMC has been updated so requirements in Building Regulations and Mechanical Regulations are redundant.
- **Issue 6.** Relocate requirements on where to outline structural observations since the CBC Section has been renumbered.
- **Issue 7.** Update flood requirements in appendix J for consistency with the LDC.

For questions or comments regarding the proposed amendments please contact Ali Fattah, Senior Research Engineer, at 619-446-5092 and via e-mail at afattah@sanidiego.gov.

The Land Development Code encompasses chapters 11 through 15 of the San Diego Municipal Code and can be found at www.sandiego.gov.

The proposed changes to follow are to update the Building Regulations in the Land Development Code for consistency with the 2016 California Building Code and include additions to provide clarifications to State requirements and deletions for redundant or obsolete requirements in the LDC.

1. Issue # 1 : UPDATE BUILDING ADDRESSING REQUIREMENTS

Text as it appears in CBC, CRC and CFC

[F] 501.2 Address identification. New and existing buildings shall be provided with approved address identification. The address identification shall be legible and placed in a position that is visible from the street or road fronting the property. Address identification characters shall contrast with their background. Address numbers shall be Arabic numbers or alphabetical letters. Numbers shall not be spelled out. Each character shall be a minimum of 4 inches (102 mm) high with a minimum stroke width of 1/2 inch (12.7 mm). Where required by the fire code official, address identification shall be provided in additional approved locations to facilitate emergency response. Where access is by means of a private road and the building address cannot be viewed from the public way, a monument, pole or other approved sign or means shall be used to identify the structure. Address identification shall be maintained.

R319.1 Address identification. Buildings shall be provided with *approved* address identification. The address identification shall be legible and placed in a position that is visible from the street or road fronting the property. Address identification characters shall contrast with their background. Address numbers shall be Arabic numbers or alphabetical letters. Numbers shall not be spelled out. Each character shall be not less than 4 inches (102 mm) in height with a stroke width of not less than 0.5 inch (12.7 mm). Where required by the fire code official, address identification shall be provided in additional *approved* locations to facilitate emergency response. Where access is by means of a private road and the building address cannot be viewed from the public way, a monument, pole or other sign or means shall be used to identify the structure. Address identification shall be maintained.

Text as it would appear in the Land Development Code

§95.0209

Obtaining and Posting of Number

- (a) Address numbers allotted by the Building Official, Development Services Department shall be placed on buildings on the transom over the principal entrance or on some other place on the front of the building where the number may be visible from the street. Where required by the Fire Chief, address identification shall be provided in additional approved locations to facilitate emergency response. These numbers shall contrast with their background. Address numbers shall be Arabic numerals or alphabet letters. Numbers shall not be spelled out.
 - (1) For buildings used exclusively for residential purposes, such numbers shall be at least four (4) inches in height with a minimum stroke width of 0.5 inch.
 - (2) For buildings used exclusively or in part for commercial, industrial or institutional purposes, such numbers shall be a minimum of six (6) inches in height with a minimum stroke width of 0.5 inch.
- (b) In addition to address numbers required in Section 95.0209(a), address numbers identifying residential buildings complying with the California Residential code shall be permanently added to the side of the curb or on a public sidewalk located immediately in front of the main building on a site. The address number shall be placed in a manner to the satisfaction of the Building Official.
- (c) Where access is by means of a private road and the building address cannot be viewed from the public way, a monument, pole or other approved sign or means shall be used to identify the structure.
- (d) It shall be the duty of the lessee, occupant or owner, of any building to obtain the proper house number from the

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Building Official, Development Services Department and to place such number on the building in question as required by this Division. It shall be a violation of this Division to fail to so obtain and place the proper number. Address identification shall be maintained.

Reason: The proposed modification to Section 95.0209 of the Land Development Code is to incorporate changes made to Section 501.2 of the CBC and the California Fire Code and CRC Section R319.

- Large buildings or buildings with unusual configurations or buildings on sites containing multiple-buildings may require addition address signage.
- The numbers cannot be written or spelled out they need to be displayed in numerical format.

Curbside numbering was developed as a result of damage assessments after the cedar fire in 2004, however it was not apparent at the time that it is not a practical identification method for non-residential buildings or buildings that occupy an entire City block.

2. Issue 2: AMENDMENTS TO ADOPT 2016 CBC

Text as it appears in the Land Development Code

§145.0101 Purpose of the Building Regulations

- (a) The purpose of the Building Regulations is to establish minimum standards to safeguard health and safety, property and public welfare and to satisfy the purpose of the ~~2013~~ 2016 California Building Code as provided in Section 1.1.2 of the ~~2013~~ 2016 California Building Code.
- (b) The purpose of this section is not to create or otherwise establish or designate any particular class or group of persons who will or should be especially protected or benefited by the terms of this section.

§145.0103 Adoption of the California Building Code

- (a) The ~~2013~~ 2016 California Building Code, published ~~and amended~~ by the California Building Standards Commission (BSC), as amended by the State Department of Housing and Community Development (HCD 1, HCD 1/AC); the Division of the State Architect/Access and Compliance (DSA/AC); the State Office of Statewide Health Planning and Development (OSHDP3); and the State Fire Marshal (SFM) is adopted by reference, except as otherwise provided in Chapter 14, Article 5 of the Land Development Code, Divisions 2 through 36. A copy of the 2013 California Building Code is on file in the office of the City Clerk as Document No. OO-XXXX.

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- (b) When reference is made to the California Building Code, it shall be the ~~2013~~ 2016 California Building Code, California Code of Regulations Title 24, Part 2, as published by the California Building Standards Commission.
- (c) Each of the regulations, provisions, conditions, and terms of the ~~2013~~ 2016 California Building Code is made a part of Chapter 14, Article 5 as if fully set forth in the article except as otherwise provided in Divisions 2 through 36.
- (d) Numbering of Sections in Divisions 2 through 36 of this Article is cross referenced to Sections in the ~~2013~~ 2016 California Building Code.
- (e) The adoption of the ~~2013~~ 2016 California Building Code shall in no way limit, prohibit, impede, or prevent the City Council from adopting ordinances limiting or preventing the issuance of any type, number, or geographical distribution of permits for construction or demolition of any facility for which a permit is required.
- (f) The Building Official is authorized to enforce only those amendments made by the following state agencies:
 - (1) ~~California Building Standards Commission.~~
 - (2) The Department of Housing and Community Development for accessibility in privately funded housing and all housing (HCD 1 and HCD 1/AC).
 - (3) (2) Division of the State Architect, Access Compliance for accessibility in commercial buildings and publicly funded housing (DSA/AC).
 - (4) (3) Office of the State Fire Marshal (SFM).

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- (5) ~~(4)~~ Office of Statewide Health, Planning and Development requirements for licensed clinics and any freestanding building under a hospital license where outpatient clinical services are provided (OSHDP3).
- (6) ~~(5)~~ California Energy Commission energy efficiency standards (CEC).

Note: For Section 145.0104 updates see Issue # 2.

§145.0105 Modifications to the California Building Code Adopted by the City of San Diego

The following Sections or Subsections of the ~~2013~~ 2016 California Building Code are modified by the City of San Diego:

- (a) ~~Chapter 7, Ducts and Air Transfer Openings, Section 717.5.3 Exception 5.~~
- (b) Chapter 7A, Materials and Construction Methods for Exterior Wildfire Exposure, Section 705A.4, Roof Gutters.
- (c) Chapter 12, Interior Environment, ~~Section 1203.2.2;~~ Sound Transmission, Section 1207.
- (d) Chapter 15, Roofing and Roof Structures, Section 1505.1 General, Section 1505 Fire Classification, Section 1507.8 Wood Shingles, Section 1507.9 Wood Shakes, and Section 1510.1 General.
- (e) Chapter 16, Structural Design, Section 1607.7.2, Fire Truck and Emergency Vehicles; Establishment of Flood Hazard Areas, Section 1612.3.
- (f) Chapter 18, Soils and Foundations, Section 1803.2, 1803.5 and 1803.6.

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- (g) Chapter 19, Concrete, ~~Section 1908.1.9.~~
- (h) Appendix J, Grading, Section J101.2, Section J104.4.

§145.0106 Additions to the California Building Code Adopted by the City of San Diego

The following Sections and Subsections are added to the ~~2013~~ 2016 California Building Code by the City of San Diego:

Subsection (a) through (c) no change

- (d) Chapter 12, ~~Interior Environment, Section 1203.2.2;~~ Sound Transmission, Section 1207.5.
- (e) Chapter 15, Roofing and Roof Structures, Subsections 1505.1.5 and 1505.1.6, Sections 1507.16 and Subsections 1510.1.1 through 1510.1.5.
- (f) Chapter 16, Structural Design, Section 1607.2, Fire Trucks and Emergency Vehicle Live Load and 1612.3, Flood Loads.
- (g) Chapter 17, Structural Tests and Special Inspections, Section 1705.5.
- (h) Chapter 18, Soils and Foundations, Section 1803 Geotechnical Investigations, Subsections 1803.2.1, 1803.2.2, 1803.2.3, 1803.2 exceptions 2 through 4; 1803.5.11.1, 1803.5.11.2, 1803.5.13, 1803.5.13.1, 1803.5.13.2 and Table 145.1803.
- (i) Chapter 31, Special Construction, Section 3109 Swimming Pool Enclosures and Safety Devices, Subsections 3109.1.1, 3109.1.2, and 3109.4.1.10.

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- (j) Chapter 32, Encroachments into the Public Right-of-Way, Section 3203 Entrance Canopies, Subsections 3203.1 through 3203.6.
- (k) Chapter 33, Safeguards During Construction, Section 3303.7, Demolition and Removal Regulations.
- ~~(l) Chapter 37, Archaic Materials and Methods of Construction.~~

§145.0107 Adoption of Appendices to the California Building Code

The following Appendix Chapters of the ~~2013~~ 2016 California Building Code are adopted by the City of San Diego:

- (a) Appendix chapters specifically amended by a State agency listed in Section 145.0103 and identified in the adoption matrices of the ~~2013~~ 2016 California Building Code.

(Remainder of Section no change)

Reason: The proposed updates to Chapter 14 Article 5 Division 1 are necessary to adopt the 2016 California Building Code by reference.

- Section 145.0103 (f) (1) is being deleted since amendments adopted by the California Building Standards Commission are not enforced by the local Building Official since they apply to State owned or leased buildings.
- Section 145.0105 (a) is being repealed since the California Mechanical code now adopts regulations for combined residential dryer ducts so the reference to the to the Mechanical regulations in modified Section 717.5.3 is no longer necessary. Subsection (g) is deleted since the CBC addresses the anchorage of sill plates in light framed construction.
- Section 145.0106 (l) is being repealed since the URM regulations in added Chapter 37 are being repealed.

3. Issue 3: REPEAL REGULATIONS LIMITING THE ORIENTATION OF VENTS AND TYPES/SIZES OF VENTS IN THE VHFHSZ

Text as it appears in the Land Development Code

~~§145.0706 — Local Additions and Modifications to Section 706A “Vents” of the California Building Code~~

~~Subsection 706A.4 is added as follows pursuant to Section 145.0106 of the Land Development Code. 706A.4 Additional exterior wall, roof, and foundation ventilation opening requirements.~~

- ~~(a) — Individual ventilation openings shall not exceed 144 square inches.~~
- ~~(b) — Ventilation openings on structures located immediately adjacent to Brush Management Zone One, as defined in Section 142.0142 of the San Diego Municipal Code, shall not be directed toward Brush Management Zones as defined in Section 142.0142 of the San Diego Municipal Code.~~
- ~~(c) — Roof vents, dormer vents, gable vents, foundation ventilation openings, ventilation openings in vertical walls, or other similar ventilation openings shall be louvered and covered with metal mesh required by Section 706A.2, or other approved material that offers equivalent protection.~~
- ~~(d) — Turbine attic vents shall be equipped to allow one-way direction rotation only and shall not free spin in both directions.~~
- ~~(e) — Ventilation openings protected with vent openings that resist the intrusion of flame and embers, and which are listed by the State Fire Marshal, are exempt from complying with Section 145.0706(a) and (b).~~

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Reason: When the City of San Diego responded to the damage caused by the Cedar Fire of 2003 and the 2007 - Witch Creek-Guejito Fires a set of regulations were developed for buildings located within 300 ft of canyon rims, commonly referred to as the 200 ft buffer requirements. The building standards adopted by the city Council during the local Regulatory process in 2004 and 2008 were developed based on the International Wildland Urban Interface Code as well as recommendations by a blue ribbon commission formed to respond to the last fire. These building standards included limits on the use of vent openings into underfloor and attic spaces and other vent openings.

During the development of the 2013 and 2016 editions of the California Building Code, test standards were adopted to test vents and demonstrate that they prevent the intrusion of flames and embers through the vent openings. The California State Fire Marshal now lists vents that comply with those standards. The standards and listings did not exist in 2004 and 2008 and had prompted the adoption of prescriptive construction standards that prescribed size limitations, location limitations and limitations on the orientation and types of vents. The existing building standards as a result are no longer necessary and are proposed to be repealed.

4. Issue 4: MODIFY REGULATIONS FOR SKYLIGHTS LOCATED IN THE VERY HIGH FIRE HAZARD SEVERITY ZONE

Text as it appears in the Land Development Code

§145.0711 Local Additions to Section 711A “Additional Building Standards for Buildings Located in the Local Agency Very High Fire Hazard Severity Zone” of Chapter 7A of the California Building Code

Sections 711A.1 and 711A.2 are added as follows to Chapter 7A pursuant to Section 145.0106 of the San Diego Municipal Code.

Subsection (a) no change

- (b) 711A.2 Skylights. Glazing materials used in skylights, roofs, and sloped walls shall ~~be tempered glass or multilayered glass~~ shall comply with the glazing requirements in Section 708A.2.1 on buildings located within 300 feet, in any direction, of the boundary between Brush Management Zones One and Two, as defined in Section 142.0412 of the San Diego Municipal Code in the Very High Fire Hazard Severity as identified within the “Very High Fire Hazard Severity Zone Map –Local Responsibility Areas” adopted pursuant to Section 55.9401 of the San Diego Municipal Code.

Reason: The proposed update to Section 145.0711 (b) is part of a regular update to the regulations and for consistency with modifications to the 2016 CBC in Section 708A.2 proposed for adoption by the California Building Standards Commission on June 26, 2017 and effective at the local level on July 1, 2018. The existing regulation in the LDC was developed following the Cedar fire in 2004 based on proximity to canyon rims. Determining the location of brush management zones not located on the project site located within 300 ft of a

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brush management zone that can be on an adjoin lot is proving difficult and made obsolete by proposed State action.

5. Issue 5: REPEAL REQUIREMENTS FOR RESIDENTIAL CLOTHES DRYER EXHAUST IN COMMON SHAFT

Text as it appears in the Land Development Code

~~145.0717 — Local Additions and Modifications to Section 717 “Ducts and Air Transfer Openings” of the California Building Code~~

~~(a) — Section 717.5.3 Shaft enclosures, exception 5 is adopted with modifications pursuant to Section 145.0105 and additions pursuant to Section 145.0106 of the Land Development Code of the Land Development Code as follows.~~

~~(1) — Exception 5. Fire dampers and combination fire/smoke dampers are not required in kitchen and clothes dryer exhaust systems when installed in accordance with the California Mechanical Regulations of the Land Development Code.~~

Reason: The proposed modification to Section 717.5.3 exception 5 references the reference the requirements in amendments to Section 504.3 of the California Mechanical Code that is based on Section 504.8 of the International Mechanical Code. The 2016 CMC now addresses the issue and as a result Section §148.0504 is proposed to be repealed. As a result there is no need to reference the Mechanical Regulations.

6. Issue 6: RELOCATE REQUIREMENTS ON WHERE TO OUTLINE STRUCTURAL OBSERVATIONS

Text as it would appear in CBC

1704.3.1 Content of statement of special inspections. The statement of special inspections shall identify the following:

1. The materials, systems, components and work required to have special inspections or tests by the building official or by the registered design professional responsible for each portion of the work.
2. The type and extent of each special inspection.
3. The type and extent of each test.
4. Additional requirements for special inspections or tests for seismic or wind resistance as specified in Sections 1705.11, 1705.12 and 1705.13.
5. For each type of special inspection, identification as to whether it will be continuous special inspection, periodic special inspection or performed in accordance with the notation used in the referenced standard where the inspections are defined.
6. Where structural observation is required by Section 1704.6 of the California Building Code, the structural observation shall be included as a part of the statement of special inspections, shall name the individual or firms who are to perform the structural observation and shall describe the stages of construction at which structural observation is to occur.

Text as it would appear in the Land Development Code

**§145.4705-1704 Local Additions and Modifications to Section 1705 1704
“Statement of special Inspections” of the California
Building Code**

- (a) Section ~~1705.5~~1704.3.1 is adopted with modifications and additions added pursuant to Section 145.0105 and 145.0106 of the Land Development Code.
- (b) Add subsection 6 to Section 1704.3.1 ~~1705.5~~ as follows :

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6. Where structural observation is required by Section 1704.6 of the California Building Code, the structural observation shall be included as a part of the statement of special inspections, shall name the individual or firms who are to perform the structural observation and shall describe the stages of construction at which structural observation is to occur.

Reason: The proposed change is a clarification on where to display required structural observations on the plans. The 2016 CBC does not require that structural observations be outlined on the Statement of Special Inspections. The building inspector utilizes the statement to ensure that the required inspections are performed. New item # 6 also requires that the observer (typically the engineer of record), what stage of construction requires it.

7. Issue 7: UPDATE FLOOD REQUIREMENTS IN APPENDIX J

Text as it would appear in CBC

J101.2 Flood hazard areas. Unless the applicant has submitted an engineering analysis, prepared in accordance with standard engineering practice by a *registered design professional*, that demonstrates the proposed work will not result in any increase in the level of the base flood, grading, excavation and earthwork construction, including fills and embankments, shall not be permitted in *floodways* that are in *flood hazard areas* established in Section ~~1412.3~~ 145.1612 or Section 149.0322 of the Land Development Code, or in *flood hazard areas* where design flood elevations are specified but *floodways* have not been designated.

Text as it would appear in the Land Development Code

§145.3601 Local Modifications and Additions to Appendix Chapter J “Grading” of the California Building Code

- (a) Appendix J of the California Building Code is adopted by reference with additions and modifications pursuant to Sections 145.0105 and 145.0106 of the Land Development Code.
- (b) Section J101 and J104.4 ~~is~~ are adopted by reference with modifications pursuant to Section 145.0105 or additions pursuant to Section 145.0106 of the Land Development Code.
- (c) Section ~~J101~~ and Sections J105 through J111 are adopted by reference without change pursuant to Section 145.0103 of the Land Development Code.
- (d) Sections J102, J103, J104.1 through J104.3 and J105.1 are not adopted pursuant to Section 145.0104 of the Land Development Code.

§145.3602 Local Modifications to Section J 101 “General” of the California Building Code

- (a) Section J101.2 of the California Building Code is adopted with additions and modifications pursuant to Sections 145.0105 and 145.0106 of the Land Development Code.
- (b) Section J101.2 is modified as follows: J101.2 Flood hazard areas. Unless the applicant has submitted an engineering analysis, prepared in accordance with standard engineering practice by a *registered design professional*, that demonstrates the proposed work will not result in any increase in the level of the base flood, grading, excavation and earthwork construction, including fills and embankments, shall not be permitted in *floodways* that are in *flood hazard areas* established in Section 145.1612 or Section 149.0322 of the Land Development Code, or in *flood hazard areas* where design flood elevations are specified but *floodways* have not been designated.

§145.3603 3604 Local Modifications to Section J 104.4 “Liquefaction Study “of the ~~2010~~ California Building Code

(Remainder of Section no change)

Reason: The proposed addition of Section 145.3602 is necessary to link Section J101.2 to Building Regulation Section 145.1612 or Residential Building Regulation Section 149.0322; both Sections reference the additional regulations for construction in special flood hazard areas see Sections 143.0145 and 143.0146 of the Land Development Code. Section 145.3603 is being renumbered to coincide with the CBC Code Section.