

# CITY OF LONG BEACH

## BEAC PUBLIC HEARING 3 AMENDMENTS

### LOCAL ADOPTION OF THE LATEST CALIFORNIA BUILDING STANDARDS CODE AND UNIFORM HOUSING CODE

May 16, 2022

This document includes text using the “Track Changes” feature of Microsoft Word. It is used to distinguish between existing Municipal Code text and revised text. Deletions are represented by ~~strikeout~~ language, and insertions represented by language. Please note the color of the altered text is not significant, and only indicates a different editor made the changes.

#### PREPARED BY



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For an electronic version of this document, visit our website at [longbeach.gov/lbds/building/plan-review-service/code/](https://longbeach.gov/lbds/building/plan-review-service/code/).

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**FOOTNOTE:**

1. E = Existing chapter with no changes  
 A = Altered chapter  
 D = Deleted chapter  
 \* = These items are included only for a Title clarification

**Please note:** Only chapters and their associated sections with known amendments being presented at the May BEAC meeting are included in this document. Chapters and sections with additional anticipated amendments, to be presented at a future BEAC meeting, have been excluded from the table of contents and this document, as a whole, and will be addressed in the supporting documentation for upcoming BEAC meetings. The use of ellipses (...) in this document represent the omission of text within a chapter or section.

Omitted text is anticipated to remain unchanged and may be found in the 2020 Long Beach Municipal Code at [https://library.municode.com/ca/long\\_beach/codes/municipal\\_code](https://library.municode.com/ca/long_beach/codes/municipal_code).

**RATIONALE AND FINDINGS:**

A description of the specific rationale and findings for the amendments referenced in this document can be found in the separate “Findings” document prepared for BEAC Public Hearing 3.

**PROPOSED AMENDMENTS:**

18.01.030 – Scope.

The provisions of this title shall apply to:

1. The site preparation and the construction, alteration, relocation, enlargement, replacement, repair, equipment, use and occupancy, location, maintenance, removal and demolition of every building or structure or ~~appertunances~~appurtenances connected or attached to such buildings and structures within the City, except work located primarily in a public way, as regulated by Title 14, other than pedestrian protection structures required by ~~Chapter 32~~Section 3306 of the California Building Code adopted in Chapter 18.40, public utility, towers and poles, mechanical equipment not specifically regulated in this title, and hydraulic flood control structures.

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18.05.030 – Construction documents.

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A. Information on building or structure required.

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6. Where balconies or other walking surfaces have weather-exposed surfaces, and the structural framing is protected by an impervious moisture barrier, the construction documents shall include details for all elements of the impervious moisture barrier system. The construction documents shall include manufacturer's installation instructions.

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B. Information on mechanical required.

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6. The construction documents shall show the following:
  - a. Construction documents shall be of sufficient clarity to show that the proposed mechanical installation will conform to the provisions of this title, municipal code or other ordinances of the City or laws and statutes of the State.
  - b. Layout for each floor with dimensions of all working spaces and a legend of all symbols used.
  - c. Location, size and materials of all air ducts, air inlets and air outlets.
  - d. Location of all fans, warm-air furnaces, boilers, absorption units, refrigerant compressors and condensers and the weight of all pieces of such equipment weighing ~~two-four~~ two-four hundred (~~200400~~) pounds or more.

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18.07.050 – Required inspections.

- A. Building. The Building Official, upon notification as specified in Section 18.07.030, shall make the inspections set forth in subsection, if applicable.

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5. Types IV-A, IV-B and IV-C construction protection inspection. In buildings of Types IV-A, IV-B and IV-C construction, where connection fire-resistance ratings are provided by wood cover calculated to meet the requirements of Section 2304.10.1 of the California Building Code adopted in Chapter 18.40, inspection of the wood cover shall be made after the cover is installed, but before any other coverings or finishes are installed.

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1443. Final inspection. Final inspection shall be made after all work required by the permit is completed and prior to occupancy. If located in a flood hazard area, flood hazard documentation required in Chapter 16 and Appendix G of the California Building Code adopted in Chapter 18.40, or Chapter 3 of the California Residential Code adopted in Chapter 18.41, as applicable, shall be submitted to the Building Official prior to final inspection.

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#### 18.40.340 – Amend CBC Section 1704.6—Structural observations.

Section 1704.6 of the California Building Code is amended to read as follows:

1704.6 Structural observations. Where required by the provisions of Section 1704.6.1, ~~1704.6.2 or 1704.6.3~~, the owner or the owner’s authorized agent shall employ a structural observer to perform structural observations. The structural observer shall visually observe representative locations of structural systems, details and load paths for general conformance to the approved construction documents. Structural observation does not include or waive the responsibility for the inspections or special inspections in Chapter 18.07 of the Long Beach Municipal Code or the special inspections in Section 1705 or other sections of this code. The structural observer shall be one of the following individuals:

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

~~The requirement for structural observation shall be noted and prominently displayed on the front sheet of the approved plans and incorporated into the general notes on the approved plans.~~

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

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

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

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18.40.530 – Amend CBC Section 2306.2—Wood-frame diaphragms.

Section 2306.2 of the California Building Code is amended to read as follows:

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

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

The allowable shear values in Tables 2306.2(1) and 2306.2(2) are permitted to be increased 40 percent for wind design.

Wood structural panels ~~s diaphragms~~ used to resist seismic diaphragm forces in structures assigned to Seismic Design Category D, E or F shall be applied directly to the framing members.

Exception: Wood structural panels ~~s diaphragms~~ are permitted to be fastened over solid lumber planking or laminated decking, provided the panel joints and lumber planking or laminated decking joints do not coincide.

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18.40.650 – Amend CBC Section G101.3—Flood hazard scope.

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18.40.660 – Amend CBC Section G101.4—Flood hazard violation.

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18.40.670 – Add CBC Section G101.~~65~~65—Flood hazard disclaimer of liability.

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18.40.680 – ~~Add Amend~~ CBC Section G101.~~56~~56—Flood hazard designation of local floodplain administrator.

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18.40.690 – Amend CBC Section G10~~32~~32.1—Flood hazard general.

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18.40.700 – Amend CBC Section G10~~32~~32.2—Flood hazard establishment.

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18.40.710 – Add CBC Section G10~~32~~32.3—Flood hazard interpretation of FIRM boundaries.

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18.40.720 – Amend CBC Section G10~~43~~43.3—Flood hazard determination of design flood elevation.

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18.40.730 – Amend CBC Section G10~~43~~.5—Flood hazard floodway encroachment.

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18.40.740 – Amend CBC Sections G10~~43~~.6 and G10~~43~~.6.1—Flood hazard watercourse alteration and engineering analysis.

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18.40.750 – Amend CBC Section G10~~43~~.7—Flood hazard alterations in coastal areas.

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18.40.760 – Add CBC Section G10~~43~~.~~110~~—Flood hazard letter of map revision.

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18.40.770 – Amend CBC Section G10~~54~~.4—Flood hazard expiration.

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18.40.780 – Amend CBC Section G10~~65~~.1—Flood hazard general variance.

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18.40.790 – Amend CBC Section G10~~65~~.2—Flood hazard records.

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18.40.800 – Amend CBC Section G10~~56~~.7—Flood hazard conditions for issuance.

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18.40.810 – Amend CBC Section G~~102204~~.1—Flood hazard general definitions.

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18.41.170 – Amend CRC Section R602.10.2.3—Minimum number of braced wall panels.

Section R602.10.2.3 of the California Residential Code is amended to read as follows:

R602.10.2.3 Minimum number of braced wall panels. Braced wall lines with a length of 16 feet (4877 mm) or less shall have ~~not less than a minimum of~~ two braced wall panels of any length or one braced wall panel equal to 48 inches (1219 mm) or more. Braced wall lines greater than 16 feet (4877 mm) shall have ~~not less than a minimum of~~ two braced wall panels. In Seismic Design Category D<sub>0</sub>, D<sub>1</sub>, or D<sub>2</sub>, No braced wall panel shall have a contributing length ~~be~~ less than 48 inches in length or as required in Section R602.10.3, whichever is greater. ~~in Seismic Design Category D<sub>0</sub>, D<sub>1</sub>, or D<sub>2</sub>.~~

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18.71.060 – Dynamic lateral analysis procedure.

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- C. Mathematical model. The three-dimensional mathematical model of the physical structure shall represent the spatial distribution of mass and stiffness of the structure to an extent which is adequate for the calculation of the significant features of its dynamic response. All concrete and masonry elements shall be included in the model of the physical structure.

EXCEPTION: Concrete or masonry partitions that are adequately isolated from the concrete frame members and the floor above.

Cast-in-place reinforced concrete floors with span-to-depth ratios less than three (3) to one (1) may be ~~assumed to be idealized as~~ rigid diaphragms. Other floors, including floors constructed of precast elements with or without a reinforced concrete topping, ~~shall be analyzed~~ in conformance with ASCE 7-~~16~~ Section 12.3.1.3 ~~to determine if they may~~ ~~must~~ be ~~considered idealized~~ as flexible diaphragms. ~~All other floors not permitted to be idealized as rigid or flexible diaphragms shall be analyzed considering~~ the effective in-plane stiffness of the diaphragm, including effects of cracking and discontinuity between precast elements, shall be considered as described in ASCE 7-16 Section 12.3.1. Ramps that interconnect floor levels shall be modeled as having mass appropriately distributed on that element. The lateral stiffness of the ramp may be calculated as having properties based on the uncracked cross section of the slab exclusive of beams and girders.

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