

**EXPRESS TERMS
FOR
PROPOSED BUILDING STANDARDS
OF THE
OFFICE OF STATEWIDE HEALTH PLANNING AND DEVELOPMENT**

**REGARDING PROPOSED CHANGES TO
2007 CALIFORNIA BUILDING CODE
CALIFORNIA CODE OF REGULATIONS, TITLE 24, PART 2, VOLUME 2, STRUCTURAL**

LEGEND FOR EXPRESS TERMS

1. Existing California amendments or code language being modified: All such language appears in *italics*, modified language is underlined.
2. New California amendments: All such language appears underlined and in italics.
3. Repealed text: All such language appears in ~~strikeout~~.

EXPRESS TERMS

CHAPTER 16A – STRUCTURAL DESIGN

SECTION 1602A – DEFINITIONS AND NOTATIONS

1602A.1 Definitions. The following words and terms shall, for the purposes of this chapter, have the meanings shown herein.

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ALTERNATIVE SYSTEM. [OSHPD 1 & 4] *Alternative materials, design and methods of construction in accordance with Section 104.11 of Appendix Chapter 1, Section 11.1.4 of ASCE 7 or structural design criteria and approved by the enforcement agency.*

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SECTION 1614A - MODIFICATIONS TO ASCE 7

1614A.1 General. The text of ASCE 7 shall be modified as indicated in Sections 1614A.1.1 through 1614A.1.31.

...

1614A.1.3 ASCE 7, Table 12.2 -1. Modify ASCE 7 Table 12.2-1 as follows:

A. BEARING WALL SYSTEMS

5. Intermediate Precast Shear Walls – Not permitted by OSHPD.

14. Light-framed walls with shear panels of all other materials – Not permitted by OSHPD and DSA-SS.

B. BUILDING FRAME SYSTEMS

2. Steel eccentrically braced frames, non-moment-resisting connections at columns away from links - Not permitted by OSHPD.

4. Ordinary steel concentrically braced frames – Not permitted by OSHPD.

9. Intermediate Precast Shear Walls – Not permitted by OSHPD.

24. Light-framed walls with shear panels of all other materials – Not permitted by OSHPD and DSA-SS.

25. Buckling-restrained braced frames, non-moment-resisting beam-column connections – Not permitted by OSHPD.

27. Special steel plate shear wall – Not permitted by OSHPD.

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1614A.1.7 Reserved. ASCE 7, Section 12.8.1.1. Modify ASCE 7 Section 12.8.1.1 by replacing equation 12.8-5 as follows:

$$C_s = 0.03 \qquad (12.8-5)$$

...

1614A.1.13 ASCE 7, Section 13.6.1. Modify ASCE 7 Section 13.6.1 by adding Sections 13.6.1.1 & 13.6.1.2 as followings:

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13.6.1.2 **Trapeze Assemblies.** All trapeze assemblies supporting pipes, ducts and conduit shall be braced to resist the forces and relative displacements per ASCE 7 Chapter Section 13, considering the total weight of the elements on the trapeze.

1614A.1.14 ASCE 7, Section 13.6.7. Modify ASCE 7 Section 13.6.7 by the following:

Requirements of this section shall also apply for $I_p = 1.5$.

1614A.1.17 Reserved. ASCE 7, Section 15.4.1. Modify ASCE 7, Section 15.4.1 by replacing Equations 15.4-1 and 15.4-3 as follows:

$$C_s = 0.17 \qquad (15.4-1)$$
$$C_s = 0.06 \qquad (15.4-3)$$

...

Notation

Authority: Health & Safety Code §1226, 1275, 129790 & 129850 and Government Code §11152.5

Reference: Health & Safety Code §1226, 1275, 129790 & 129850

CHAPTER 17A - STRUCTURAL TESTS AND SPECIAL INSPECTIONS

SECTION 1714A- PRECONSTRUCTION LOAD TESTS

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1714A.5.2 Exterior windows and door assemblies not provided for in Section 1714A.5.1.

Exterior window and door assemblies shall be tested in accordance with ASTM E 330. Exterior window and door assemblies containing glass shall comply with Section 2403. The design pressure for testing shall be calculated in accordance with Chapter 16A. Each assembly shall be tested for 10 seconds at a load equal to 1.5 times the design pressure.

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Notation

Authority: Health & Safety Code §1226, 1275, 129790 & 129850 and Government Code §11152.5

Reference: Health & Safety Code §1226, 1275, 129790 & 129850

CHAPTER 19A – CONCRETE

SECTION 1917A - EXISTING CONCRETE STRUCTURES

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1917A.2. [OSHPD 1 & 4] Crack Repair By Epoxy Injection. Crack repair by epoxy injection of concrete and masonry member shall conform to all requirements of ACI 503.7.

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Notation

Authority: Health & Safety Code §1226, 1275, 129790 & 129850 and Government Code §11152.5

Reference: Health & Safety Code §1226, 1275, 129790 & 129850

CHAPTER 21A- MASONRY

SECTION 2107A

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2107A.12 ACI 530/ASCE 5/TMS 402, Section 2.3.7, maximum reinforcement percentage. Add the following text to Chapter 2:

2.3.7 Maximum reinforcement percentage. *All reinforced masonry components* that are subjected to in-plane forces shall have a maximum reinforcement ratio, ρ_{max} , not greater than that computed as

follows:

$$\rho_{\max} = \frac{nf'_m}{2f_y \left(n + \frac{f_y}{f'_m} \right)}$$

(Equation 21A-3)

Notation

Authority: Health & Safety Code §1226, 1275, 129790 & 129850 and Government Code §11152.5

Reference: Health & Safety Code §1226, 1275, 129790 & 129850

CHAPTER 35 - REFERENCED STANDARDS

ACI	American Concrete Institute P.O. Box 9094 Farmington Hills, MI 48333-9094	
Standard reference number	Title	Referenced in code section number
<u>503.7-07</u>	<u>Specification for Crack Repair by Epoxy Injection.</u>	<u>1917A.2</u>
...		
ASCE/SEI	American Society of Civil Engineers Structural Engineering Institute 1801 Alexander Bell Drive Reston, VA 20191-4400	
Standard reference number	Title	Referenced in code section number
7-05	Minimum Design Loads for Buildings and Other Structures including Supplement No. 1 & 2 and excluding Chapter 14 and Appendix 11A	1602.1, 1604.3, 1604.10, 1605.1, 1605.2.2, 1605.3.1.2, 1605.3.2, 1605.4, 1607.11.1, 1608.1, 1608.2, 1609.1.1, 1609.1.2, 1609.3, 1609.5.1,

1609.5.3, 1611.2, 1612.2,
1613.1, 1613.2, Table
1613.5.3(1), Table 1613.5.3(2),
1613.5.6, 1613.5.6.1,
1613.5.6.2, 1613.6, 1613.6.1,
1613.6.2, 1614A, 1801.2.1,
1802.2.7, 2205.2.1, 2205.3,
2205.3.1, 2208.1, 2305.1.5,
2305.2.5, 2305.3.1, 2306.4.5,
Table 2306.4.5, Table 2308.10.1

41-06

*Seismic Rehabilitation of Existing Buildings
including Supplement No. 1*

3403.2.3, 3403A.13, 3415.5,
.415.6, 3415.8, 3417.2, 3417.5,
3417.7, 3417.9

Notation

Authority: Health & Safety Code §1226, 1275, 129790 & 129850 and Government Code §11152.5

Reference: Health & Safety Code §1226, 1275, 129790 & 129850

APPENDIX CHAPTER 1 - ADMINISTRATION

SECTION 104 - DUTIES AND POWERS OF BUILDING OFFICIAL

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104.11 Alternative materials, design and methods of construction and equipment. The provisions of this code are not intended to prevent the installation of any material or to prohibit any design or method of construction not specifically prescribed by this code, provided that any such alternative has been approved. An alternative material, design or method of construction shall be approved where the building official finds that the proposed design is satisfactory and complies with the intent of the provisions of this code, and that the material, method or work offered is, for the purpose intended, at least the equivalent of that prescribed in this code in quality, strength, effectiveness, fire resistance, durability and safety.

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104.11.4 [For OSHPD 1 & 4] Earthquake monitoring instruments. *The enforcement agency may require earthquake monitoring instruments for any building that receives approval of an alternative system for the Lateral Force Resisting System (LFRS). There shall be a sufficient number of instruments to characterize the response of the building during an earthquake and shall include at least one tri-axial free field instrument or equivalent. A proposal for instrumentation and equipment specifications shall be forwarded to the enforcement agency for review and approval. The owner of the building shall be responsible for the implementation of the instrumentation program. Maintenance of the instrumentation and removal / processing of the records shall be the responsibility of the enforcement agency or its designated agent.*

Notation

Authority: Health & Safety Code §1226, 1275, 129790 & 129850 and Government Code §11152.5

Reference: Health & Safety Code §1226, 1275, 129790 & 129850