

# INITIAL STATEMENT OF REASONS

## FOR PROPOSED BUILDING STANDARDS OF THE

### CALIFORNIA BUILDING STANDARDS COMMISSION (CBSC)

#### REGARDING THE ADOPTION OF THE 2012 INTERNATIONAL BUILDING CODE (IBC), FOR USE AS THE 2013 CALIFORNIA BUILDING CODE (CBC), TITLE 24, PART 2

#### ADOPT AND AMEND NEW MODEL CODE FOR USE IN CALIFORNIA AS TITLE 24, PART 2

The Administrative Procedure Act (APA) requires that an Initial Statement of Reasons be available to the public upon request when rulemaking action is being undertaken. The following information required by the APA pertains to this particular rulemaking action:

**STATEMENT OF SPECIFIC PURPOSE, PROBLEM AND RATIONALE:  
REPEAL THE 2009 INTERNATIONAL BUILDING CODE (IBC) AND ADOPT THE 2012 INTERNATIONAL BUILDING CODE (IBC) AND CORRELATE REFERENCES TO CHAPTER 35.**

**Title 24, Part 2, Volume 1, Volume 2**

**The specific purpose** of this action is to repeal the 2010 CBC, which is based on the 2009 International Building Code, and all of CBSC's amendments thereto. This action proposes to adopt the 2012 IBC, most recent edition of the model code, within one year of its publication. This proposed action is to separate statutory administrative provisions for state agencies from administrative provisions which can be adopted by local jurisdictions.

**The specific rationale** for this action is to meet the requirements of Health and Safety Code (H & SC) §§18928 and 18934.5, which assures that the latest building regulations for those occupancies under CBSC's authority. It meets criteria (3), in the public interest, and (7), incorporation of model codes, of H & SC §18930(a), as well as to clarify administrative provisions for occupancies under the authority of state agencies and those under the authority of local jurisdictions. It is justified by criteria (1), reduction of conflict, and (3), in the public interest, of H & SC 18930(a).

**CARRY FORWARD EXISTING AMENDMENTS TO THE 2010 IBC IN §§ Chapter 1, Sections 1.1 through 1.2 with existing amendments as shown in Division I, 1205.6, 1205.6.1, 1603.1.9, 1612.5, 1613.1.2, 1613.3.1, 1704.2.3, 1712.1 (1707.1), 2503.1, 3109.4.4, 3401.1, 3401.1, 3401.7, 3401.8, 3403.1 exception, 3404.1 exception 3, 3405.1 exception, 3417.1.1, 3417.2 exception, 3417.3.1, 3417.4, 3417.6, 3417.7, 3417.8, 3417.9, 3417.10, 3417.11, 3418.1, table 3417.5, 3419.1, 3419.1, 3419.1.2, 3419.3, 3419.3, 3419.4, 3419.5, 3419.6, 3419.7, 3419.7.1, 3419.7.2, 3417.7.3, 3417.7.4, 3417.7.5, 3417.7.6, 3419.8, 3419.9, 3419.10, 3419.10.1, 3419.10.2, 3419.10.2.1, 3419.10.2.2, 3419.11, 3419.12, 3419.12.1, 3419.12.1.1, 3420.1, 3421.1, 3421.2, 3421.2.1, 3421.2.2, 3421.2.3, 3421.2.4, 3422.1, 3422.3, 3422.3.1, 3422.3.2, 3422.3.3, 3422.3.4, 3422.3.3, 3422.3.4, 3422.3.5, 3422.4, 3422.6, 3422.3.3.**

#### AMENDMENTS:

**CHAPTER 1, ADMINISTRATION, Division 1, Section 1.1.3.2 State-Regulated Buildings, Structures, and Applications and Section 1.1.11 Format; and Division II, SCOPE AND ADMINISTRATION, introductory statement.**

*Purpose:*

To delete references in the regulatory language of the codes to the Matrix Adoption Tables located at the beginning of each chapter and replace where needed with non-regulatory notes.

*Problem, Rationale and Benefit:*

In the past, some code users have interpreted content of the Matrix Adoption Tables as a regulatory part of the codes, and some agencies have used tables as explanatory tools accompanying code change proposals. The agency tables and the published ones are intended to be illustrative only and are superseded by any language in agency proposals and published codes. In addition, both agency and published versions often contain erroneous entries, such as "Xs" in wrong boxes or sections numbered incorrectly.

To clarify the non-regulatory nature of the Matrix Adoption Tables and lead code users to understand them as roadmaps only for the codes, references in code language to the tables should be deleted. References imply incorporation into the code, which is not the intent of the otherwise useful tables.

Deleting these references from the codes will clarify the effective use of the codes for users and should mitigate any future challenges by those code users who find errors in the tables.

**Title 24, Part 2, Volume 1  
CHAPTER 2, DEFINITIONS**

**RETROFIT-Editorial, definition was relocated from 2010 CBC code chapter 34.**

**Title 24, Part 2, Volume 1  
CHAPTER 12, INTERIOR ENVIRONMENT**

**1203.2 Attic spaces-** Amendment deleted because it was incorporated in 2012 model code.

**Title 24, Part 2, Volume 1  
CHAPTER 15, ROOF ASSEMBLIES AND ROOF TOP STRUCTURES**

*CAC Recommendation:* Section: 1509.7.1 At the SDLF CAC meeting July 17, 2012 the CAC members recommended CBSC coordinate the exception for Wind Resistance with DSA-SS. CBSC concurred with the CAC.

**Title 24, Part 2, Volume 2  
CHAPTER 16, STRUCTURAL DESIGN**

**Sections: 1613.5, 1613.5.1 and 1613.5.2 Modifications to ASCE 7.**

**Rationale:** BSC proposes to amend ASCE 7 by adopting the above referenced sections into the 2013 California Building Code. Ballasted PV systems are rooftop systems which rely on weight and friction to resist wind and seismic forces without having a positive attachment to the roof. These systems have emerged as an attractive technology especially for large flat rooftops as they reduce costs and limit unnecessary roof penetrations. Currently ASCE 7 is silent on this technology, does not contain a definition and does not make allowances for the approval of these systems. Current requirements do not adequately address this technology and require rooftop equipment to be anchored to the roof. While this requirement is appropriate for conventional roof top equipment such as air conditioning equipment, it prohibits ballasted systems from being unrestrained which conflicts with the intended design and installation of these systems. This proposed amendment provides a definition for ballasted photovoltaic systems and will allow local government to approve such systems if they are inclined to accept the weight and friction methodology.

*CAC Recommendation:* 1613.5.2 At the SDLF CAC meeting July 17, 2012 the CAC members recommended CBSC add "solar photovoltaic" to the Ballasted Photovoltaic System definition for clarity. CBSC concurred with the CAC.

**1613.6.9. Exceptions for nonstructural components-** Amendment deleted because ASCE 7-10 had been revised to essentially match this amendment.

**1613.6.10 Exceptions for nonstructural components--** Amendment deleted because ASCE 7-10 had been revised to essentially match this amendment.

**Title 24, Part 2, Volume 2  
CHAPTER 18, SOILS AND FOUNDATIONS**

**1803.5.12 Seismic Design Categories D through F-** Amendment deleted because it was incorporated in 2012 model code.

**Title 24, Part 2, Volume 2  
CHAPTER 19, CONCRETE**

**1908.1.2 ACI 318, Section 21.1.1 Item h:** (Renumbered in 2012 CBC, 1905.1.2 ACI 318, Section 21.1.1)- Amendment deleted because ACI 318-11 Section 21.1.1.7 (g) requires special precast walls (tilt ups that exceed intermediate precast wall requirements) to comply with ACI 318-11 Section 21.10. ACI 318-11 Section 21.10.2 states that special precast walls must comply with both the special concrete wall provisions of ACI 318-11 Section 21.9 and the intermediate precast wall connection provisions in ACI 318-11 Sections 21.4.2 and 21.4.3. So, essentially, ACI 318-11 Section 21.10.2 states the same thing as this old 2010 CBC amendment.

**1908.1.3 ACI 318, Section 21.4-** (Renumbered in 2012 CBC 1905.1.3 ACI 318, Section 21.4)- Amendment deleted because it was incorporated in 2012 model code.

**1908.1.9.1 ACI 318, Section D3.3. –** (Renumbered in 2012 CBC, 1905.1.9 ACI 318, Section D3.3)- Amendment deleted because ACI 318-11 Section D3.3.2 address plastic hinge regions. 2012 IBC Section 1905.1.9 Exception 2 addresses wood sill bolt anchorage with essentially the same provisions as this section.

**Title 24, Part 2, Volume 2  
CHAPTER 23, WOOD**

**2305.1.4 Sill plate anchor bolts-** Amendment deleted because 2012 IBC Section 1905.1.9 Exception 2 addresses wood sill bolt anchorage with essentially the same provisions as this section.

**Title 24, Part 2, Volume 2  
CHAPTER 34, EXISTING STRUCTURES**

**Section 3402.1-RETROFIT-**Editorial, definition deleted because it was relocated to 2012 model code chapter 2.

**Section 3417.5 –** Editorial revision to align with model code terminology of risk category instead of occupancy category. New amendment to revised ground motions in ASCE 41 to the 2008 USGS ground motions maps so the ground motions for new buildings in ASCE 7 and those for existing buildings in ASCE 41 are aligned.

**CAC Recommendation:** *At the SDLF CAC meeting July 17, 2012 the CAC members recommended BSC coordinate Basic Safety Earthquake 2 language with DSA-SS. CBSC concurred with the CAC and edited the language.*

**Section 3418.1 –** Editorial revision to coordinate with DSA adoption of Section 3402, and editorial revisions to correct section references. Under BSE-C and BSE-R definitions, delete allowance of using mapped values to determine acceleration parameters since 2008 USGS ground motion mapping does not include probabilistic return periods that can be interpolated to different return periods using the method outlined in ASCE 41, thereby requiring site specific response spectrums to develop BSE-C and BSE-R acceleration parameters.

**CAC Recommendation:** *At the SDLF CAC meeting July 17, 2012 the CAC members recommended BSC coordinate BSE-C Response & BSE-R Response language with DSA-SS. CBSC concurred with the CAC and edited the language.*

**TECHNICAL, THEORETICAL, AND EMPIRICAL STUDY, REPORT, OR SIMILAR DOCUMENTS:**

- 2012 IBC: International Building Code.
- ASCE 7-10: Minimum Design Loads for Buildings and Other structures.

- ACI 318-11: Building Code Requirements for Structural Concrete and Commentary.
- AISC 341-10: Seismic Provisions for Structural Steel Buildings

Adoption of the latest edition of the model code is mandated by H & SC §18928.

#### **STATEMENT OF JUSTIFICATION FOR PRESCRIPTIVE STANDARDS**

The Health & Safety Code, Section 18928, mandates this proposed action to adopt the International Building code by reference. Model codes contain prescriptive standards that provide clarity to code users and also performance standards, the compliance with which must be justified to the enforcing authority.

#### **CONSIDERATION OF REASONABLE ALTERNATIVES**

A reasonable alternative to amending all of the IBC references is to amend them in a single, general reference statement in the administrative provisions of the CBC. This alternative was rejected, because if a code user were to miss such a general statement, he or she may read unamended references elsewhere in the CBC and follow conflicting regulations in codes not adopted for use in California.

#### **REASONABLE ALTERNATIVES THE AGENCY HAS IDENTIFIED THAT WOULD LESSEN ANY ADVERSE IMPACT ON SMALL BUSINESS.**

No alternatives were identified that would lessen any adverse impact on small business. Adoption of the latest edition of the model code is mandated by H & SC §18928.

#### **FACTS, EVIDENCE, DOCUMENTS, TESTIMONY, OR OTHER EVIDENCE OF NO SIGNIFICANT ADVERSE IMPACT ON BUSINESS.**

CBSC did not identify facts, evidence, documents, testimony, or other evidence to make an initial determination of no significant adverse economic impact on business.

#### **DUPLICATION OR CONFLICTS WITH FEDERAL REGULATIONS**

There are no federal regulations concerning state agency adoption and amendment of model codes. Those provisions are found in H & SC §§18928 and 18929.1.