

**INITIAL STATEMENT OF REASONS
BUILDING STANDARDS
OF THE
STATE HISTORICAL BUILDING SAFETY BOARD
REGARDING PROPOSED CHANGES TO THE
CALIFORNIA HISTORICAL BUILDING CODE
CALIFORNIA CODE OF REGULATIONS, TITLE 24, PART 8**

**Amendments to
Chapter 8-7, Structural Regulations
Chapter 8-8, Archaic Materials and Methods of Construction**

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 AND RATIONALE:

(Government Code Section 11346.2 requires a statement of specific purpose of EACH adoption, amendment, or repeal and the rational the determination by the agency that EACH adoption, amendment, or repeal is reasonably necessary to carry out the purpose for which it is proposed.)

**CHAPTER 8-7
STRUCTURAL REGULATIONS**

1. **Section 8-701.1 Purpose.** The SHBSB is proposing to amend this section by adding the phrase “to the regular code” for clarity.
2. **Section 8-701.2 Intent.** The SHBSB is proposing to amend this section to change the focus from the CHBC as a whole to the structural chapter and adding clarifying language that focuses on the minimum level of building performance with the objective of preventing structural collapse.
3. **Section 8-703.1 Scope.** The SHBSB is proposing to amend this section by adding the word “lateral” after the word seismic to focus on the lateral force resisting elements of the survey.
4. **Section 8-703.2 Evaluation.** The SHBSB is proposing to amend this section by adding the word “Evaluation” as the title of the section.
5. **Section 8-704.1.** The SHBSB is proposing to amend this section by adding the phrase “building or” in front of the word structure for consistency. The term Qualified Historic Building or Property is defined and referenced throughout the CHBC.
6. **8-705.2 Wind and Seismic Loads.** The SHBSB is proposing to amend this section to set the limit for wind loads at 75% of the requirements in the regular code; this is consistent with the historical application of model code load requirements.
7. **Section 8-705.2.1.** The SHBSB is proposing to amend this section by changing the reference from “this code” to the “CHBC” and adding language addressing how strengthening measures are developed and presented. Language is added focusing on considering inelastic performance of structural members to maintain load carrying capacity during seismic loading.

8. **Section 8-706.1.** The SHBSB is proposing to amend this section by changing the section title from “Lateral Load” Regulations to “Seismic Forces.” The reference to the 1995 edition of the California Building Code is deleted from the section and replaced by the phrase “regular code requirements.” The remaining changes to this section address the change in model code reference from the Uniform Building Code (UBC) to the International Building Code (IBC). The design forces and allowable capacities of materials are changed from the UBC to the IBC, and the structural and materials chapters were amended to reflect those changes.
9. **Section 8-706.1.1.** This SHBSB is proposing to add this section to address the structural capability of an addition to 75% of the building’s base shear.
10. **Section 8-706.1.2.** The SHBSB is proposing to amend this section by repealing the reference to Appendix Chapter 1 of the Uniform Code for Building Conservation and replace it with reference to Appendix A, Chapter A1 of the International Existing Building Code, (IEBC), 2006 edition and replace the phrase “reasonably equivalent” with the word “Alternative.”
11. **Section 8-706.1.3.** The SHBSB is proposing the add this section in order to stress the importance of the detailing provisions of the lateral force resisting systems(s) as they relate to the load carrying capacity at increased lateral loads.
12. **Section 8-706.2.1.** The SHBSB is proposing to amend this section by changing the phrase “threaten life safety” to “life threatening injury.” This change in phrasing does not alter the intent of the section but adds clarity to the code.
13. **Section 8-706.5.** The SHBSB is proposing to amend this section by changing the word “investigated” to “evaluated” because it places the focus on the condition of the non-structural features and the potential impact on the structural system.

CHAPTER 8-8 ARCHAIC MATERIALS AND METHODS OF CONSTRUCTION

14. **Section 8-801.1. Purpose.** The SHBSB proposes to amend this section by repealing the word “properties” and replacing it with the word “structures,” placing the focus on the category of properties most applicable to the provision of this chapter.
15. **Section 8-802. General Engineering Approaches.** The SHBSB is proposing to amend this section by repealing the term “allowable stresses.” This leaves “Ultimate Strength” as the [ASCE/SEI 41-06]
16. **Section 8-804. Allowable Conditions for Specific Materials.** The terms “qualified” and Buildings or” are added to the first line of text to be consistent with the definition of “Qualified Historical Buildings or Structures” used throughout the code.
17. **Section 8-805.1. Existing Solid Masonry.** The SHBSB proposes to modify the reference to “ultimate strength” to be consistent with the change in Section 8-802. To repeal the reference to UBC Standard 21-6 as referenced in the 1997 UBC in the last sentence and add reference to *Appendix A, Chapter A1 of the International Existing Building Code (IEBC) 2006 edition, and as modified by the CHBC.*
18. **Section 8-805.2.1.** The SHBSB proposes to repeal the reference to the UCBC in the code text and add the 2006 IEBC.

19. **Section 8-805.2.2. Independent Wythe Stone Masonry.** The SHBSB proposes to repeal the reference to the UCBC in the first sentence and add the IEBC. The inclusion of “[A] reinforced concrete bond beam or equivalent structural element shall be provided at the top of all stone masonry walls” is added to the last sentence to enhance the capacity of the stone masonry wall to resist imposed forces.
20. **Section 8-805.2.3. Testing of Stone Masonry.** The SHBSB proposes to repeal the reference to “UBC Standard 21-6, as referenced in the 1997 UBC” and add “*the 2006 IEBC requirements for brick masonry,*” the current model code reference.
21. **Section 8-806.1.** The SHBSB proposes to add the phrase “*When undertaking a mandatory or voluntary retrofit, the following provisions should be considered.*” This reflects the need to address the following provisions of the Adobe section of the code.
22. **Section 8-806.2.** The SHBSB proposes to add the term “*Moisture*” is added to the section title. The code text is reworded to be clearer with respect to deterioration due to moisture penetration, and the application of protective measures appropriate to the enforcing agency.
23. **Section 8-806.3.** The SHBSB proposes to change the title of the section from “Requirements” to “Height to Thickness Ration.” The changes to this section address two issues specifically as they relate to the height to thickness ratio. First, if the adobe walls meet the specified requirements they need not be evaluated for out of plane failure. Additionally, if the criteria are not met additional strengthening measures may be appropriate. The sentence relating to sod or rammed earth walls is relocated to the end of the section.
24. **Section 8-806.4. Non Load-bearing Adobe.** The SHBSB proposes to change item three under section 806.3 to Section 8-806.4 and give it the title “Non Load-bearing Adobe.” It also adds the phrase “if necessary” to the end of the section. This adds emphasis to the need of evaluating non-bearing walls and gable end walls for out of plane failure.
25. **Section 8-806.5. Bond Beam.** The SHBSB proposes to change item number four under section 806.3 to section 8-806.5 and give it the title “Bond Beam,” and add “[W]here required” to the first sentence of the section. It also defines where a bond beam is required, at the top of adobe walls and at the second floor for two-story buildings. The term “or structures” is added to the sentence after the word buildings for consistency. It also adds the requirements for placing bond beams at the second floor of two story buildings or structures and directs that the bond beam structural element(s) shall be sufficient.
26. **Section 8-806.6. Repair or Reconstruction.** The SHBSB proposes to renumber section 8-806.4 to 8-806.7.
27. **Section 8-806.7. Shear Values.** The SHBSB proposes to renumber Section 8-806.5 to section 8-806.7. This section is also amended to specify the maximum “ultimate strength” (twelve pounds per square inch) for shear and repeal the phrase “with no increase for lateral forces.”
28. **Section 8-806.8. Mortar.** The SHBSB proposes to renumber section 8-806.6 to 8-806.8.
29. **Section 8-807.1. Existing Wood Diaphragms or Walls.** The SHBSB proposes to add the phrase “of the CHBC” to the last sentence of the section to clarify that the tables referenced in the section are of the CHBC.

30. **Section 8-809. Steel and Iron.** The SHBSB proposes to add the phrase “buildings or” before the word structures at the end of the first sentence of the section for clarity.
31. **Table 8-8-A. Strength Values for Existing Materials.** The SHBSB proposes to amend the title of the table by repealing the word “allowable” and adding the word “strength.” This is proposed due to the change to section 8-802 where “allowable stresses” is proposed for repeal. The loads listed in the table have been changed to be consistent with this strength designation consistent with section 8-802..
32. **Table 8-8-B. Strength Values of Materials Used in Conjunction with Existing Construction.** The SHBSB proposes to delete the word “allowable” in the title of the table and add the word “strength” so the table title now begins with Strength Values. The content of the table is amended to reflect the “ultimate strength” focus now contained in section 8-802.

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

(Government Code Section 11346.2(b)(2) requires an identification of each technical, theoretical, and empirical study, report, or similar document, if any, upon which the agency relies in proposing the regulation(s).)

The State Historical Building Safety Board relied on the International Existing Building Code (IEBC) 2006 edition.

CONSIDERATION OF REASONABLE ALTERNATIVES

(Government Code Section 11346.2(b)(3)(A) requires a description of reasonable alternatives to the regulation and the agency’s reason for rejecting those alternatives. In the case of a regulation that would mandate the use of specific technologies or equipment or prescribe specific action or procedures, the imposition of performance standards shall be considered as an alternate)

The California Historical Building Code is an alternative to the regular code applicable for use in the preservation, restoration, rehabilitation relocation or reconstruction of buildings or properties designated as qualified historical buildings or properties. No other alternatives are available.

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

(Government Code Section 11346.2(b)(3)(B) requires a description of any reasonable alternatives that have been identified or that have otherwise been identified and brought to the attention of the agency that would lessen any adverse impact on small business. Include facts, evidence, documents, testimony, or other evidence upon which the agency relies to support an initial determination that the action will not have a significant adverse impact on business.)

The California Historical Building Code (CHBC) is an alternative to the regular code applicable for use in the preservation, restoration, rehabilitation relocation or reconstruction of buildings or properties designated as qualified historical buildings or properties. The use of the CHBC is an alternative to small businesses when utilizing qualified historical buildings or properties.

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

(Government Code Section 11346.2(B)(4) requires the facts, evidence, documents, testimony, or other evidence on which the agency relies in to support an initial determination that the action will not have a significant adverse economic impact on business)

The California Historical Building Code (CHBC) is an alternative to the regular code applicable for use in the preservation, restoration, rehabilitation relocation or reconstruction of buildings or properties

designated as qualified historical buildings or properties. The use of the CHBC is an alternative to small businesses when utilizing qualified historical buildings or properties.

DUPLICATION OR CONFLICTS WITH FEDERAL REGULATIONS

(Government Code Section 113465.2(b)(5) requires a department, board, or commission within the Environmental Protection Agency, the Resources Agency, or the Office of the State Fire Marshal to describe its efforts, in connection with a proposed rulemaking action, to avoid unnecessary duplication or conflicts with federal regulations contained in the Code of Federal Regulations addressing the same issues. These agencies may adopt regulations different from these federal regulations upon a finding of one or more of the following justifications: (A) The differing state regulations are authorized by law and/or (B) The cost of differing state regulations is justified by the benefit to human health, public safety, public welfare, or the environment. It is not the intent of this paragraph to require the agency to artificially construct alternatives or to justify why it has not identified alternatives)

There are no federal regulations applicable to qualified historical buildings or properties.