

**INITIAL STATEMENT OF REASONS
FOR PROPOSED BUILDING STANDARDS
OF THE DIVISION OF THE STATE ARCHITECT (DSA-SS AND DSA-SS/CC)
REGARDING THE 2022 CALIFORNIA EXISTING BUILDING CODE
CALIFORNIA CODE OF REGULATIONS, TITLE 24, PART 10
(DSA-SS/CC 04/22)**

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, RATIONALE and BENEFITS

Government Code Section 11346.2(b)(1) requires a statement of specific purpose of each adoption, amendment, or repeal and the problem the agency intends to address and the rationale for the determination by the agency that each adoption, amendment, or repeal is reasonably necessary to carry out the purpose and address the problem for which it is proposed. The statement shall enumerate the benefits anticipated from the regulatory action, including the benefits or goals provided in the authorizing statute.

ITEM 1

Chapter 2: Definitions, Section(s) 201 – General

Subsection 201.3 – This amendment is revised to correct the reference to definitions in the California Administrative Code (Part 1) from Section 4-208 to Section 4-207.

CAC Recommendation:

Approve.

Agency Response:

Accept.

ITEM 2

Chapter 3: Provisions for All Compliance Methods, Section(s) 317 – Earthquake Evaluation and Design for Retrofit of Existing Buildings, 318 – Definitions, 319 – Seismic Criteria Selection for Existing Buildings

Subsection 317.2 – This amendment is revised to correct an unintended mistake in the 2021 Triennial Code Adoption Cycle. In the triennial rulemaking package, while changing the word “modifications” to “alterations” to align with the definition of terms in the regulation, DSA also mistakenly removed the qualifying descriptor “structurally connected” to the second item of the series: “additions”. The qualifier “structurally connected” is important to retaining the original meaning of the provision because additions that are not structurally connected are designed in accordance with the provisions for new buildings in the California Building Code (Part 2).

Subsection 318.1 – This amendment is revised to correct the reference to definitions in the California Administrative Code (Part 1) from Section 4-208 to Section 4-207.

Subsection 319.1.5 – This amendment is revised to clarify and ameliorate misunderstood code language and align its meaning with original intent.

Purpose: The proposed change intends to provide clarity in communicating permitted and prohibited wood light-frame systems in the lateral (seismic) force resisting systems in existing buildings under DSA jurisdiction.

Problem: As currently written, the provision can be (and has been) misunderstood to mean straight-sheathed diaphragms and/or shear walls are permitted in buildings that are not categorized as “light-frame construction”. For example, existing school buildings have been found with masonry or concrete wall construction in combination with wood framed roofs consisting straight-sheathed diaphragms. Some stakeholders have misunderstood the straight-sheathing to be permitted in this case because (in their reading) the presence of masonry or concrete walls removes the building from the “light-frame construction” categorization and thus the applicability of the provision.

A second misunderstanding of the current provision concerns the meaning of “in combination with” in the acceptable use of straight sheathing. While most stakeholders recognize this to mean “overlaid by”, some have argued this to mean the acceptability of a hybrid system where straight sheathing is permitted to resist seismic loads as long as one element of diagonal sheathing or structural panel sheathing exists somewhere in the building.

Rationale: The proposed code revision endeavors to clarify that straight sheathing is not permitted in any existing building type as the provision originally intended. In the example given above, a building with masonry or concrete walls is more vulnerable to the increased deflection and limited strength of a straight-sheathed diaphragm than fully wood-framed building that might be categorized as “light-frame construction” with unanimity. The performance of buildings of this type in the Northridge earthquake illustrated the critical nature of out-of-plane wall anchorage connections that would be subjected to greater deformation demands with a straight sheathed diaphragm. This understanding is evidence that the intent of the provision was not to exclude these building types from the straight sheathing prohibition.

The proposed code revision further replaces “in combination” with “when overlain” to clarify that the acceptable use of straight sheathing is only when it is overlaid with structural panel sheathing in accordance with the original intent of the provision. If the intent of the provision had been to permit the hybrid system as described above, it would have included quantitative limits to facilitate determination of when the hybrid system was acceptable. That is, the provision would have to define how much diagonal or structural panel sheathed area was required relative to the area of straight-sheathed elements relied upon to resist seismic forces. The absence of such quantified provisions is evidence that the original intent meant overlaid straight sheathing. The option for overlaying straight sheathing with diagonal sheathing is removed from the provision because it is not recognized by the national adopted standard, ASCE 41: Seismic Evaluation and Retrofit of Existing Buildings.

Benefit: Improved clarity of the provisions benefits all stakeholders, by reducing delay in the design, plan review, and approval processes that may result from misunderstandings.

Further Study: Clarifying revision of the first sentence has been proposed as recommended by the Code Advisory Committee, except that the phrase “in public schools” has been omitted. The phrase was not fundamental to the committee’s recommendation and is redundant with the title of the section (“Public schools.”) and the DSA-SS banner, which clearly define the scope of the regulation. The change of “assumed” to “relied upon” has been retained. One committee member spoke in favor of this change. A second

committee member spoke against the proposed wording while acknowledging that it was an improvement over the existing language without proposing a specific change.

CAC Recommendation:

Approve Sections 317.2 and 318.1.

Further Study Section 319.1.5.

Agency Response:

Accept. See above for additional explanation of Further Study.

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

Government Code Section 11346.2(b)(3) 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).

2021 IBC: International Building Code.

2021 IEBC: International Existing Building Code.

ASCE 7-16: Minimum Design Loads for Buildings and Other Structures

ASCE 41-17: Seismic Evaluation and Retrofit of Existing Buildings

STATEMENT OF JUSTIFICATION FOR PRESCRIPTIVE STANDARDS

Government Code Section 11346.2(b)(1) requires a statement of the reasons why an agency believes any mandates for specific technologies or equipment or prescriptive standards are required.

Health and Safety Code section 18941 requires consistency with state and nationally recognized standards for building construction in view of the use and occupancy of each structure to preserve and protect the public health and safety.

CONSIDERATION OF REASONABLE ALTERNATIVES

Government Code Section 11346.2(b)(4)(A) requires a description of reasonable alternatives to the regulation and the agency's reasons 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. It is not the intent of this paragraph to require the agency to artificially construct alternatives or describe unreasonable alternatives.

DSA did not identify nor determine any reasonable alternatives to the other proposed administrative regulations.

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

Government Code Section 11346.2(b)(4)(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.

There will be no adverse impact on small business.

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

Government Code Section 11346.2(b)(5)(A) requires the facts, evidence, documents, testimony, or other evidence on which the agency relies to support an initial determination that the action will not have a significant adverse economic impact on business.

The regulations proposed will have no overall cost impact on business, since they are equivalent to current requirements in the Code.

ASSESSMENT OF EFFECT OF REGULATIONS UPON JOBS AND BUSINESS EXPANSION, ELIMINATION OR CREATION

Government Code Sections 11346.3(b)(1) and 11346.5(a)(10)

DSA has assessed whether or not and to what extent this proposal will affect the following:

- A.** The creation or elimination of jobs within the State of California.
The Division of the State Architect did not identify any amended regulation that would lead to the creation or elimination of jobs.
- B.** The creation of new businesses or the elimination of existing businesses within the State of California.
The Division of the State Architect did not identify any amended regulation that would lead to the creation of new businesses nor elimination of existing businesses.
- C.** The expansion of businesses currently doing business within the State of California.
The Division of the State Architect did not identify any amended regulation that would lead to the expansion of businesses currently doing business with the State of California.
- D.** The benefits of the regulation to the health and welfare of California residents, worker safety, and the state's environment.
The Division of the State Architect did not identify any amended regulation that would have a significant positive or adverse impact.

ESTIMATED COST OF COMPLIANCE, ESTIMATED POTENTIAL BENEFITS, AND RELATED ASSUMPTIONS USED FOR BUILDING STANDARDS

Government Code Section 11346.2(b)(5)(B)(i) states if a proposed regulation is a building standard, the initial statement of reasons shall include the estimated cost of compliance, the estimated potential benefits, and the related assumptions used to determine the estimates.

The proposed changes to the regulations are editorial to provide clarity, and do not result in an increase to the cost of compliance in the application and implementation of the California Existing Building Code, since they are equivalent to current requirements.

DUPLICATION OR CONFLICTS WITH FEDERAL REGULATIONS

Government Code Section 11346.2(b)(6) 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.

These regulations do not duplicate or conflict with federal regulations.