

**INITIAL EXPRESS TERMS
FOR
PROPOSED BUILDING STANDARDS
OF THE
DIVISION OF THE STATE ARCHITECT - STRUCTURAL SAFETY (DSA-SS AND DSA-SS/CC)

REGARDING PROPOSED CHANGES TO
2019 CALIFORNIA EXISTING BUILDING CODE
CALIFORNIA CODE OF REGULATIONS, TITLE 24, PART 10**

(The State agency shall draft the regulations in plain, straightforward language, avoiding technical terms as much as possible and using a coherent and easily readable style. The agency shall draft the regulation in plain English. A notation shall follow the express terms of each regulation listing the specific statutes authorizing the adoption and listing specific statutes being implemented, interpreted, or made specific. (PART 1 – ADMINISTRATIVE CODE)

LEGEND FOR EXPRESS TERMS

1. Existing California amendments or code language being modified are in italics when they appear in the model code text: 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 Repealed text: All such language appears in ~~strikeout~~.

INITIAL EXPRESS TERMS

CHAPTER 1
SCOPE AND ADMINISTRATION

Adopt and/or codify specific sections as amended below:

PROPOSED ADOPTION	DSA-SS	DSA-SS/CC		Comments
Adopt entire chapter				
Adopt entire chapter with amendments listed below				
Adopt only those sections listed below	X	X		
<i>Division I -California Administration</i>				
1.1	X	X		
1.9.2	X	X		
1.9.2.1	X			

1.9.2.2		X		
101.8.1	X	X		
102.1	X	X		
102.2	X	X		
102.3	X	X		
102.4	X	X		
102.5	X	X		
104.9	X	X		
104.10	X	X		
104.11	X	X		
106.1	X	X		
<u>106.2.5</u>	X	X		DSA amendment in Section 106.2.6 added to IEBC in 106.2.5
106.2.6	X	X		
<u>109.3.6</u>	X	X		DSA amendment in Section 109.3.7.1 added to IEBC in 109.3.6
109.3.7.1	X	X		

***DIVISION I
CALIFORNIA ADMINISTRATION***

...

***SECTION 1.1
GENERAL***

...

***SECTION 1.9
DIVISION OF THE STATE ARCHITECT***

1.9.1 Division of the State Architect – Access Compliance [Reserved]

...

1.9.2 Division of the State Architect—Structural Safety.

1.9.2.1 DSA-SS Division of the State Architect-Structural Safety.

Application—Public elementary and secondary schools, community colleges and state-owned or state-leased essential services buildings.

Enforcing agency—The Division of the State Architect— Structural Safety (DSA-SS) has been delegated the responsibility and authority by the Department of General Services to review and approve the design and observe the construction of public elementary and secondary schools, community colleges and state-owned or state-leased essential services buildings.

Authority cited—Education Code Section 17310 and 81142 and Health and Safety Code Section 16022.

Reference—Education Code Sections 17280 through 17317, and 81130 through 81147 and Health and Safety Code Sections 16000 through 16023.

1.9.2.1.1 Applicable administrative standards.

1. Title 24, Part 1, California Code of Regulations:

- 1.1. Sections 4-301 through 4-355, Group 1, and Sections 4-401 through 4-435, Group 2, Chapter 4, for public elementary and secondary schools and community colleges.
- 1.2. Sections 4-201 through 4-249, Chapter 4, for state-owned or state-leased essential services buildings.

2. Title 24, Part 2, California Code of Regulations: [applies to public elementary and secondary schools, community colleges and state-owned or state-leased essential services building(s)]:

- 2.1. Sections 1.1 and 1.9.2.1 of Chapter 1, Division I.
- 2.2. Sections ~~101.8.1~~, 102.1, 102.2, 102.3, 102.4, 102.5, ~~104.9~~, ~~104.10~~, ~~104.11~~, 106.1, ~~106.2.6~~, 107.2.5, ~~109.3.7.1~~, and 110.3.6 of Chapter 1, Division II.

3. Title 24, Part 10, California Code of Regulations: [applies to public elementary and secondary schools, community colleges and state-owned or state-leased essential services building(s)]:

- 3.1. Sections 1.1 and 1.9.2.1 of Chapter 1, Division I.
- 3.2. Section 101.8.1, 106.2.5, 109.3.6 of Chapter 1, Division II.

1.9.2.1.2 Applicable building standards. California Building Standards Code, Title 24, Parts 2, 3, 4, 5, 6, 9, 10, 11 and 12, California Code of Regulations, for school buildings, community colleges and state-owned or state-leased essential service buildings.

The provisions of Title 24, Part 10, as adopted and amended by the Division of the State Architect—Structural Safety [DSA-SS], shall apply to the applications listed in Section 1.9.2.1.

The Division of the State Architect—Structural Safety [DSA-SS] adopts the following building standards in Title 24, Part 10:

Chapters 1, 3 and ~~4~~5.

1.9.2.1.3 Amendments. Division of the State Architect—Structural Safety amendments in this code appear preceded with the acronym [DSA-SS].

Exceptions:

1. Chapter 3, Sections 317-323—DSA-SS adopts these sections without the use of the DSA-SS acronym.

1.9.2.2 DSA-SS/CC Division of the State Architect- Structural Safety/Community Colleges

Application—Community Colleges. The Division of the State Architect has been delegated the authority by the Department of General Services to promulgate alternate building standards for application to community colleges, which a community college may elect to use in lieu of standards promulgated by DSA-SS in accordance with Section 1.9.2.1.

Enforcing agency—Division of the State Architect- Structural Safety/Community Colleges (DSA-SS/CC)

The Division of the State Architect has been delegated the authority by the Department of General Services to review and approve the design and oversee construction of community colleges electing to use the alternative building standards as provided in this section.

Authority cited—Education Code Section 81053.

Reference—Education Code Sections 81052, 81053, and 81130 through 81147.

1.9.2.2.1 Applicable administrative standards.

1. Title 24, Part 1, California Code of Regulations:

1.1. Sections 4-301 through 4-355, Group 1, and Sections 4-401 through 4-435, Group 2, Chapter 4.

2. Title 24, Part 2, California Code of Regulations:

2.1. Sections 1.1 and 1.9.2.2 of Chapter 1, Division I.

2.2. Sections ~~101.8.1, 102.1, 102.2, 102.3, 102.4, 102.5, 104.9, 104.10, 104.11, 106.1, 106.2.6, 107.2.5, 109.3.7.1, and 110.3.6~~ of Chapter 1, Division II.

3. Title 24, Part 10, California Code of Regulations: [applies to public elementary and secondary schools, community colleges and state-owned or state-leased essential services building(s)]:

3.1. Sections 1.1 and 1.9.2.1 of Chapter 1, Division I.

3.2. Section 101.8.1, 106.2.5, 109.3.6 of Chapter 1, Division II.

1.9.2.2.2 Applicable building standards. California Building Standards Code, Title 24, Parts 2, 3, 4, 5, 6, 9, 10, 11 and 12, California Code of Regulations.

The provisions of Title 24, Part 10, as adopted and amended by the Division of the State Architect—Structural Safety/Community Colleges [DSA-SS/CC], shall apply to the applications listed in Section 1.9.2.2.

The Division of the State Architect-Structural Safety/Community Colleges [DSA-SS/CC] adopts the following building standards in Title 24, Part 10:

Chapters 1, 3 and ~~4-5~~.

1.9.2.2.3 Amendments. Division of the State Architect—Structural Safety/Community Colleges amendments in this code appear preceded with the acronym [DSA-SS/CC].

Exceptions:

1. Chapter 3, Sections 317-323—DSA-SS/CC adopts these sections without the use

of the DSA-SS/CC acronym.

...

DIVISION II

SCOPE AND ADMINISTRATION

(All existing California amendments that are not revised below shall continue without change)

...

101.8.1 Maintenance. *[DSA-SS, DSA-SS/CC] Buildings and structures, and parts thereof, shall be maintained in a safe and sanitary condition. Devices or safeguards which are required by this code shall be maintained in conformance with the code edition under which installed. The owner or the owner's designated agent shall be responsible for the maintenance of buildings and structures. The requirements of this chapter shall not provide the basis for removal or abrogation of fire protections and safety systems and devices in existing structures.*

...

[A] 106.2.5 Exterior balconies and elevated walking surfaces. Where the scope of work involves balconies or other elevated walking surfaces exposed to water from direct or blowing rain, snow or irrigation, 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.

~~**106.2.6 Exterior balconies and elevated walking surfaces.** *[BSC, DSA-SS, DSA-SS/CC, HCD 1, HCD 2] Where the scope of work involves a balcony or other elevated walking surfaces exposed to water from direct or blowing rain, snow, or irrigation, 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*~~

...

[A] 109.3.6 Weather-exposed balcony and walking surface waterproofing. Where the scope of work involves balconies or other elevated walking surfaces exposed to water from direct or blowing rain, snow or irrigation, and the structural framing is protected by an impervious moisture barrier, all elements of the impervious moisture barrier system shall not be concealed until inspected and approved.

Exception: Where special inspections are provided in accordance with section 1705.1.1, Item 3, of the California Building Code.

...

~~**109.3.7.1 Weather exposed balcony and walking surface waterproofing.** *[BSC, DSA-SS, DSA-SS/CC, HCD 1, HCD 2] Where the scope of work involves a balcony or other elevated walking surfaces exposed to water from direct or blowing rain, snow, or irrigation, and the structural framing is protected by an impervious moisture barrier, all elements of the impervious moisture barrier system shall not be concealed until inspected and approved.*~~

~~**Exception:** *Where special inspections are provided in accordance with section 1705.1.1, Item 3,*~~

of the California Building Code.

...

Notation for [DSA-SS]

Authority: Education Code § 17310 and 81142, and H&S Code §16022.

Reference: Education Code §§ 17280 through 17317, and 81130 through 81147, and Health and Safety Code §§16000 through 16023.

Notation for [DSA-SS/CC]

Authority: Education Code § 81053.

Reference: Education Code §§ 81052, 81053, and 81130 through 81147.

...

**CHAPTER 3
PROVISIONS FOR ALL COMPLIANCE METHODS**

Adopt specific sections as amended below:

PROPOSED ADOPTION	DSA-SS	DSA-SS/CC	Comments
Adopt entire chapter			
Adopt entire chapter with amendments listed below			
Adopt only those sections listed below	X	X	
301.1 exceptions <u>2</u>	X		
301.1 exceptions <u>3</u>		X	
<u>303.1</u>	<u>X</u>	<u>X</u>	
<u>303.2</u>	<u>X</u>	<u>X</u>	
<u>304.1</u>	<u>X</u>	<u>X</u>	
317	X	X	
318	X	X	
319	X	X	
320	X	X	
321	X	X	
322	X	X	
323	X	X	

--	--	--	--

SECTION 301 ADMINISTRATION

301.1 General. The repair, alteration, change of occupancy, addition or relocation of all existing buildings shall comply with Section 301.2, 301.3, or 301.4.

Exceptions:

~~21.~~ **(Reserved for BSC)**

32. Public school buildings [DSA-SS] *The provisions of Sections 317 through 323 establish minimum standards for earthquake evaluation and design for the rehabilitation of existing buildings for use as public school buildings under the jurisdiction of the Division of the State Architect-Structural Safety (DSA-SS, refer to Section 1.9.2.1) where required by Sections 4-307 and 4-309(c) of the California Administrative Code.*

The provisions of Sections 317 through 323 also establish minimum standards for earthquake evaluation and design for rehabilitation of existing public school buildings currently under the jurisdiction of DSA-SS.

43. Community college buildings. [DSA-SS/CC] *The provisions of Sections 317 through 323 establish minimum standards for earthquake evaluation and design for the rehabilitation of existing buildings for use as community college buildings under the jurisdiction of the Division of the State Architect-Structural Safety/Community Colleges (DSA-SS/CC, refer to Section 1.9.2.2) where required by Sections 4-307 and 4-309(c) of the California Administrative Code.*

The provisions of Sections 317 through 323 also establish minimum standards for earthquake evaluation and design for rehabilitation of existing community college buildings currently under the jurisdiction of DSA-SS/CC.

SECTION 303 STRUCTURAL DESIGN LOADS AND EVALUATION AND DESIGN PROCEDURES

[BS] 303.1 Live loads. Where an addition or alteration does not result in increased design live load, existing gravity load carrying structural elements shall be permitted to be evaluated and designed for live loads approved prior to the addition or alteration. If the approved live load is less than that required by Section 1607 of the International Building Code, the area designated for the nonconforming live load shall be posted with placards of approved design indicating the approved live load. Where the addition or alteration results in increased design live load, the live load required by Section 1607 of the International Building Code shall be used.

[BS] 303.2 Snow loads on adjacent buildings. Where an alteration or addition changes the potential snow drift effects on an adjacent building, the code official is authorized to enforce Section 7.12 of ASCE 7.

...

SECTION 304 IN-SITU LOAD TESTS

[BS] 304.1 General. Where used, in-situ load tests shall be conducted in accordance with Section 1708 of the International Building Code.

...

SECTION 317 EARTHQUAKE EVALUATION AND DESIGN FOR RETROFIT OF EXISTING BUILDINGS

317.1 Purpose.

317.1.1 *(Reserved for BSC).*

317.1.2 Public school buildings. [DSA-SS] The provisions of Sections 317 through 323 establish minimum standards for earthquake evaluation and design for the rehabilitation of existing buildings for use as public school buildings under the jurisdiction of the Division of the State Architect-Structural Safety (DSA-SS), refer to Section 1.9.2.1.

The provisions of Section 317 through 323 also establish minimum standards for earthquake evaluation and design for rehabilitation of existing public buildings currently under the jurisdiction of DSA-SS.

317.1.2.1 Reference to other chapters. For public schools, where reference within this chapter is made to sections in Chapters 16, 17, 18, 19, 21 or 22, of the California Building Code, the provisions in Chapters 16A, 17A, 18A, 19A, 21A and 22A, of the California Building Code, respectively shall apply instead.

317.1.3 Community college buildings. [DSA-SS/CC] The provisions of Sections 317 through 323 establish minimum standards for earthquake evaluation and design for the rehabilitation of existing buildings for use as community college buildings under the jurisdiction of the Division of the State Architect-Structural Safety/Community Colleges (DSA-SS/CC), refer to Section 1.9.2.2.

The provisions of Section 317 through 323 also establish minimum standards for earthquake evaluation and design for rehabilitation of existing community college buildings currently under the jurisdiction of DSA-SS/CC.

317.1.3.1 Reference to other chapters. For community colleges, where reference within this chapter is made to sections in Chapters 17 or 18, of the California Building Code, the provisions in Chapters 17A and 18A, of the California Building Code respectively shall apply instead.

317.2 Scope. All modifications, structurally connected additions and/or repairs to existing structures or portions thereof shall, at a minimum, be designed and constructed to resist the effects of seismic ground motions as provided in this section. The structural system shall be evaluated by a registered design professional and, if not meeting or exceeding the minimum seismic design performance requirements of this section, shall be retrofitted in compliance with these requirements.

Exception: Those structures for which Section 317.3 determines that assessment is not required, or for which Section 317.4 determines that retrofit is not needed, then only the requirements of Section 317.11 apply.

317.3 Applicability.

317.3.1 (Reserved for BSC).

317.3.2 Public school buildings. [DSA-SS] For public schools, the provisions of Section 317 apply when required in accordance with Sections 4-307 and 4-309(c) of the California Administrative Code.

317.3.3 Community college buildings. [DSA-SS/CC] For community colleges, the provisions of Section 317 apply when required in accordance with Sections 4-307 and 4-309(c) of the California Administrative Code.

...

317.5 Minimum seismic design performance levels for structural and nonstructural components. Following the notations of ASCE 41, the seismic requirements for design and assessment are based upon a prescribed Earthquake Hazard Level (BSE-1N, BSE-2N, BSE-1E, BSE-R or BSE-C), a specified structural performance level (S-1 through S-5) and a non-structural performance level (N-A through N-DE). The minimum seismic performance criteria are given in Table 317.5 according to the Building Regulatory Authority and the Risk Category as determined in Chapter 16 of the California Building Code, or by the regulatory authority. The building shall be evaluated in accordance with a Tier 3 Systematic Evaluation and Retrofit per ASCE 41 Chapter 6 for both the Level 1 and Level 2 performance levels, and the more restrictive requirements shall apply.

Exception: If the floor area of an addition is greater than the larger of 50 percent of the floor area of the original building or 1,000 square feet (93 m²), then the Table 317.5 entries for BSE-R (or BSE-1E) and BSE-C are replaced by BSE-1N and BSE-2N, respectively.

TABLE 317.5 SEISMIC PERFORMANCE REQUIREMENTS BY BUILDING REGULATORY AUTHORITY AND RISK CATEGORY.

Building Regulatory Authority	Risk Category	PERFORMANCE CRITERIA	
		Level 1	Level 2
(Reserved for BSC)			
(Reserved for BSC)			
Division of the State Architect - (DSA-SS)	I	BSE-1N, S-3, N-B	BSE-2N, S-5, N-D
Division of the State Architect - (DSA-SS)	II, III	BSE-1N, S-2, N-B	BSE-2N, S-4, N-D
Division of the State Architect - (DSA-SS)	IV	BSE-1N, S-2, N-A	BSE-2N, S-4, N-D
Division of the State Architect - (DSA-SS/CC)	I, II	BSE-1E, S-3, N-C	BSE-2N, S-5, N-D
Division of the State Architect - (DSA-SS/CC)	III	BSE-1E, S-3, N-B	BSE-2N, S-5, N-D
Division of the State Architect - (DSA-SS/CC)	IV	BSE-1E, S-2, N-B	BSE-2N, S-4, N-D

ASCE 41 provides acceptance criteria (e.g. m, rotation) for Immediate Occupancy (S1), Life Safety (S3), and Collapse Prevention (S5), and specifies in Sections 2.3.1.2.1 and 2.3.1.4.1 the method to interpolate values for S-2 and S-4, respectively.

For nonstructural components, N-A corresponds to the Operational level, N-B to the Position Retention, and N-C to the Life Safety level, N-D to the Hazards Reduced, and N-DE to the Not Considered.

2. Buildings evaluated and retrofitted to meet the requirements for a new building, Chapter 16 of the California Building Code, in accordance with the exception in Section 319.1, are deemed to meet the seismic performance requirements of this section.

...

SECTION 318 DEFINITIONS

318.1. In addition to the definitions given in Section 202, for the purposes of Sections 317 through 323, certain terms are defined as follows:

...

BSE-C RESPONSE ACCELERATION PARAMETERS (Reserved for BSC).

BSE-R RESPONSE ACCELERATION PARAMETERS (Reserved for BSC).

...

N-A, N-B, N-C, N-D, N-E are seismic nonstructural component performance measures as defined in ASCE 41. N-A corresponds to the highest performance level, and N-CD the lowest, while N-DE is not considered.

...

SECTION 319 SEISMIC CRITERIA SELECTION FOR EXISTING BUILDINGS

319.1 Basis for evaluation and design. This section determines what technical approach is to be used for the seismic evaluation and design for existing buildings. For those buildings or portions of buildings for which Section 317 requires action, the procedures and limitations for the evaluation of existing buildings and design of retrofit systems and/or repair thereof shall be implemented in accordance with this section.

One of the following approaches must be used:

1. Method A of Section 320;
2. Method B of Section 321, with independent review of a peer reviewer as required in Section 322; or
3. For state-owned buildings only, the use of one of the specific procedures listed in Section 319.1.1.

When Method B is chosen it must be approved by the building official, and, where applicable, by the peer reviewer. All referenced standards in ASCE 41 shall be replaced by referenced standards listed in Chapter 35 of the California Building Code.

Exceptions:

1. (Reserved for BSC).
2. [DSA-SS & DSA-SS/CC] For public schools and community colleges constructed to the requirements of California Building Code, 2007-2013 or later edition, that code is permitted to be

used in place of those specified in Section 319.1 provided the building complies with Seismic Design Category D or higher.

...

319.9 Nonstructural component requirements. Where the nonstructural performance levels required by Section 317, Table 317.5 are N-**CD** or higher, mechanical, electrical and plumbing components shall comply with the provisions of ASCE 41, Chapter 13, Section 13.2.

Exception: Modifications to the procedures and criteria may be made subject to approval by the building official, and concurrence of the peer reviewer if applicable. All reports and correspondence shall also be forwarded to the building official.

...

Notation for [DSA-SS]

Authority: Education Code § 17310 and 81142, and H&S Code §16022.

Reference: Education Code §§ 17280 through 17317, and 81130 through 81147, and Health and Safety Code §§16000 through 16023.

Notation for [DSA-SS/CC]

Authority: Education Code § 81053.

Reference: Education Code §§ 81052, 81053, and 81130 through 81147.

**CHAPTER 4
PRESCRIPTIVE COMPLIANCE METHOD REPAIRS**

Adopt and/or codify entire chapter as amended below:

PROPOSED ADOPTION	DSA-SS	DSA-SS/CC	Comments
Adopt entire chapter			
Adopt entire chapter with amendments listed below			
Adopt only those sections listed below	*	*	
403.3	✗	✗	
403.3.1	✗	✗	

....

**SECTION 403
ALTERATIONS**

...

~~**403.3 Existing structural elements carrying gravity load.** Any existing gravity load carrying structural element for which an alteration causes an increase in design gravity load of more than 5 percent shall be strengthened, supplemented, replaced or otherwise altered as needed to carry the increased gravity load required by the *California Building Code* for new structures. Any existing gravity load carrying structural element whose gravity load carrying capacity is decreased as part of the alteration shall be shown to have the capacity to resist the applicable design gravity loads required by the *California Building Code* for new structures.~~

~~**403.3.1 Design live load.** Where the alteration does not result in increased design live load, existing gravity load carrying structural elements shall be permitted to be evaluated and designed for live loads approved prior to the alteration. If the approved live load is less than that required by Section 1607 of the *California Building Code*, the area designed for the nonconforming live load shall be posted with placards of approved design indicating the approved live load. Where the alteration does result in increased design live load, the live load required by Section 1607 of the *California Building Code* shall be used.~~

...

Notation for [DSA-SS]

Authority: Education Code § 17310 and 81142, and H&S Code §16022.

Reference: Education Code §§ 17280 through 17317, and 81130 through 81147, and Health and Safety Code §§16000 through 16023.

Notation for [DSA-SS/CC]

Authority: Education Code § 81053.

Reference: Education Code §§ 81052, 81053, and 81130 through 81147.

CHAPTER 5
PRESCRIPTIVE COMPLIANCE METHOD

Adopt and/or codify entire chapter as amended below:

PROPOSED ADOPTION	DSA-SS	DSA-SS/CC	Comments
Adopt entire chapter			
Adopt entire chapter with amendments listed below			
Adopt only those sections listed below	<u>X</u>	<u>X</u>	
503.3	<u>X</u>	<u>X</u>	

...

SECTION 503 ALTERATIONS

...

[BS] 503.3 (Formerly 403.3) Existing structural elements carrying gravity load.

Any existing gravity load-carrying structural element for which an alteration causes an increase in design dead, live or snow load, including snow drift effects, of more than 5 percent shall be replaced or altered as needed to carry the gravity loads required by the International Building Code for new structures. Any existing gravity load-carrying structural element whose gravity load-carrying capacity is decreased as part of the alteration shall be shown to have the capacity to resist the applicable design dead, live and snow loads including snow drift effects required by the International Building Code for new structures.

Exceptions:

1. Buildings of Group R occupancy with not more than five dwelling or sleeping units used solely for residential purposes where the altered building complies with the conventional light-frame construction methods of the International Building Code or the provisions of the International Residential Code.
2. Buildings in which the increased dead load is due entirely to the addition of a second layer of roof covering weighing 3 pounds per square foot (0.1437 kN/m²) or less over an existing single layer of roof covering.

[DSA-SS, DSA-SS/CC] Exception 2 is not permitted.

...

Notation for [DSA-SS]

Authority: Education Code § 17310 and 81142, and H&S Code §16022.

Reference: Education Code §§ 17280 through 17317, and 81130 through 81147, and Health and Safety Code §§16000 through 16023.

Notation for [DSA-SS/CC]

Authority: Education Code § 81053.

Reference: Education Code §§ 81052, 81053, and 81130 through 81147.