DSA CODE AMENDMENT DEVELOPMENT

TRACKING

DSA Tracking Number:

Date Reviewed: October 22, 2026

Status: Draft

APPLICABLE CODE

Applicable Code Section(s): CBC, Part 4 CPC, Chapter 4 Plumbing Fixtures and Fixture Fittings

Topic: Minimum Plumbing Facilities Table Change the Note from 8 to 9 in Table 422.1

CURRENT CODE LANGUAGE

TABLE 422.1 MINIMUM PLUMBING FACILITIES[1]

Each building shall be provided with sanitary facilities, including provisions for persons with disabilities as prescribed by the Department Having Jurisdiction. [8] Table 422.1 applies to new buildings, additions to a building, and changes of occupancy or type in an existing building resulting in increased occupant load.

…

Notes:

…

[8] ***[BSC, DSA-AC, DSA-SS, HCD 1 & HCD 2, OSHPD 1, 2, 3, 4 & 5]*** *In accordance with Sections 1.8.7 and 301.3, the Authority …*

SUGGESTED TEXT OF PROPOSED AMENDMENT

TABLE 422.1 MINIMUM PLUMBING FACILITIES[1]

Each building shall be provided with sanitary facilities, including provisions for persons with disabilities as prescribed by the Department Having Jurisdiction. [~~8~~9] Table 422.1 applies to new buildings, additions to a building, and changes of occupancy or type in an existing building resulting in increased occupant load.

…

Notes:

…

[~~8~~9] ***[DSA-AC, DSA-SS]*** *In accordance with Sections 1.8.7 and 301.3, the Authority …*

CODE TEXT IF ADOPTED

TABLE 422.1 MINIMUM PLUMBING FACILITIES[1]

Each building shall be provided with sanitary facilities, including provisions for persons with disabilities as prescribed by the Department Having Jurisdiction. [9] Table 422.1 applies to new

buildings, additions to a building, and changes of occupancy or type in an existing building resulting in increased occupant load.

…

Notes:

…

*[9] **[DSA-AC, DSA-SS]** In accordance with Sections 1.8.7 and 301.3, the Authority …*

STATEMENT OF REASONS

DSA proposes to change Note 8 to 9 in Table 422.1. This is being done because the 2027 Uniform Plumbing Code now includes a Note 8.

DSA COMMENTS

DSA CODE AMENDMENT DEVELOPMENT

TRACKING

DSA Tracking Number:

Date Reviewed: October 22, 2026

Status: Draft

APPLICABLE CODE

Applicable Code Section(s): CBC, Part 5 CPC, Chapter 4, PLUMBING FIXTURES AND FIXTURE FITTINGS

Topic: Deletion of DSA-SS California Amendments from the Model Code Language

CURRENT CODE LANGUAGE

422.1.1 Fixture Calculations. The minimum number of fixtures shall be calculated at 50 percent male and 50 percent female …

Where all-gender fixtures are provided in addition to separate men's and women's facilities, those fixtures shall be included in determining the number of fixtures provided in an occupancy.[The 2027 model code adopted this California ammendment] ***[BSC & DSA-SS]*** *The substitution of a water closet for each urinal shall be permitted provided the total number of fixtures installed complies with Table 422.1.*

SUGGESTED TEXT OF PROPOSED AMENDMENT

422.1.1 Fixture Calculations. The minimum number of fixtures shall be calculated at 50 percent male and 50 percent female …

Where all-gender fixtures are provided in addition to separate men's and women's facilities, those fixtures shall be included in determining the number of fixtures provided in an occupancy. ~~***[BSC & DSA-SS]*** *The substitution of a water closet for each urinal shall be permitted provided the total number of fixtures installed complies with Table 422.1.*~~ The substitution of a water closet for each urinal shall be permitted provided the total number of fixtures installed complies with Table 422.1.

CODE TEXT IF ADOPTED

422.1.1 Fixture Calculations. The minimum number of fixtures shall be calculated at 50 percent male and 50 percent female …

Where all-gender fixtures are provided in addition to separate men's and women's facilities, those fixtures shall be included in determining the number of fixtures provided in an occupancy. The substitution of a water closet for each urinal shall be permitted provided the total number of fixtures installed complies with Table 422.1.

STATEMENT OF REASONS

DSA proposes to delete the California amendment language as this has been incorporated by IAPMO into the 2027 UPC model code.

DSA COMMENTS

DSA CODE AMENDMENT DEVELOPMENT

TRACKING

DSA Tracking Number:

Date Reviewed: October 16, 2026

Status: Draft

APPLICABLE CODE

Applicable Code Section(s): CBC, Part 5 CPC, Chapter 4, Plumbing Fixtures and Fixture Fittings

Topic: All gender toilet rooms in Pre K and K classrooms

CURRENT CODE LANGUAGE

422.2 Separate Facilities. Separate toilet facilities shall be provided for each sex.

Exceptions *[Not adopted for OSHPD 1, 2, 3, 4, & 5]:*

(1) …
(2) …
(3) …
(4) …

SUGGESTED TEXT OF PROPOSED AMENDMENT

422.2 Separate Facilities. Separate toilet facilities shall be provided for each sex.

Exceptions *[Not adopted for OSHPD 1, 2, 3, 4, & 5]:*

(1) …
(2) …
(3) …
(4) …
(5) …[The 2027 UPC added a 5th exemption]
(6) Separate facilities shall not be required where toilet rooms serve only kindergarten and preschool classrooms with fixtures designed for use by children ages 5 and under. Privacy compartments shall not be required in multi-user, all gender facilities.

CODE TEXT IF ADOPTED

422.2 Separate Facilities. Separate toilet facilities shall be provided for each sex.

Exceptions *[Not adopted for OSHPD 1, 2, 3, 4, & 5]:*

(1) …
(2) …
(3) …
(4) …

(5) …
(6) Separate facilities shall not be required where toilet rooms serve only kindergarten and preschool classrooms with fixtures designed for use by children ages 5 and under. Privacy compartments shall not be required in multi-user, all gender facilities.

STATEMENT OF REASONS

DSA proposes to clarify that all gender toilet rooms are permitted without privacy compartments within kindergarten and preschool classrooms, as required by CCR Title 22 Section 14030 Standards for Development of Plans for the Design and Construction of School Facilities (2) Kindergarten Classrooms (B) Kindergarten classrooms are designed to allow supervision of play yards … and all areas of the classroom. (G) Restrooms are self-contained within the classroom or within the kindergarten complex. This clarification is to avoid conflicting regulations for kindergarten facilities.

DSA COMMENTS

DSA CODE AMENDMENT DEVELOPMENT

TRACKING

DSA Tracking Number:

Date Reviewed: October 22, 2026

Status: Draft

APPLICABLE CODE

Applicable Code Section(s): Part 5 CPC, Chapter 15 - ALTERNATE WATER SOURCES FOR NONPOTABLE APPLICATIONS

Topic: ADOPTION OF CHAPTER 15

CURRENT CODE LANGUAGE

[DSA-SS currently does not adopt Chapter 15 of Part 5 California Plumbing code]

SUGGESTED TEXT OF PROPOSED AMENDMENT

DSA-SS proposes to adopt Chapter 15 of the 2027 UPC with existing California amendments carried forward into the 2028 edition of the CPC.

CODE TEXT IF ADOPTED

DSA-SS would adopt Chapter 15 of the 2027 UPC with existing California amendments carried forward into the 2028 edition of the CPC and the Adoption Matrix Table would reflect the adoption.

STATEMENT OF REASONS

DSA proposes to adopt Chapter 15 of the 2027 UPC and carry forward existing amendments. Adopting this Chapter will allow schools the ability to use alternate water sources for nonportable applications.

DSA COMMENTS

DSA CODE AMENDMENT DEVELOPMENT

TRACKING

DSA Tracking Number:

Date Reviewed: October 22, 2026

Status: Draft

APPLICABLE CODE

Applicable Code Section(s): Part 5 CPC, Chapter 16 – Nonpotable Rainwater Catchment Systems

Topic: Adoption of Chapter 16

CURRENT CODE LANGUAGE

[There is no current code language as DSA has not adopted Chapter 16.]

SUGGESTED TEXT OF PROPOSED AMENDMENT

DSA-SS proposes to adopt Chapter 16 of the 2027 UPC with existing California amendments carried forward into the 2028 edition of the CPC.

CODE TEXT IF ADOPTED

DSA-SS would adopt Chapter 16 of the 2027 UPC with existing California amendments carried forward into the 2028 edition of the CPC and the Adoption Matrix Table would reflect the adoption.

STATEMENT OF REASONS

DSA proposes to adopt Chapter 16 of the 2027 UPC, and carry forward existing amendments. Adopting this Chapter will allow schools the ability to use rain water on their campus.

DSA COMMENTS

This item is related to item 12 that allows the watering of nonfunctional turf with collected rain water.

DSA CODE AMENDMENT DEVELOPMENT

TRACKING

DSA Tracking Number:

Date Reviewed: October 22, 2026

Status: Draft

APPLICABLE CODE

Applicable Code Section(s): California Green Building Code, Title 24 Part 11, Chapter 2 Nonresidential Mandatory Measures

Topic: Adding definition of nonfunctional turf to Section 202-Definitions

CURRENT CODE LANGUAGE

None

SUGGESTED TEXT OF PROPOSED AMENDMENT

SECTION 202-DEFINITIONS

…

NONFUNCTIONAL TURF. Turf which does not provide a recreational function. Nonfunctional turf includes but is not limited to locations within street rights-of-way and parking lots and turf enclosed by fencing or other barriers to permanently preclude human access for recreation or assembly.

…

CODE TEXT IF ADOPTED

SECTION 202-DEFINITIONS

…

NONFUNCTIONAL TURF. Turf which does not provide a recreational function. Nonfunctional turf includes but is not limited to locations within street rights-of-way and parking lots and turf enclosed by fencing or other barriers to permanently preclude human access for recreation or assembly.

…

STATEMENT OF REASONS

DSA proposes to add the definition of nonfunctional turf as DSA is adding language to Chapter 5 to disallow the installation of nonfunctional turf, require that existing nonfunctional turf be removed or water nonfunctional turf with nonpotable water as described in Chapter 5.

DSA COMMENTS

DSA CODE AMENDMENT DEVELOPMENT

TRACKING

DSA Tracking Number:

Date Reviewed: October 16, 2026

Status: Draft

APPLICABLE CODE

Applicable Code Section(s): CBC, Part 11 CalGreen, Chapter 3, Table 301.4.2

Topic: Scoping

CURRENT CODE LANGUAGE

TABLE 301.4.2 – MANDATORY MEASURES FOR PUBLIC SCHOOLS AND COMMUNITY COLLEGES ON EXISTING SITES

Project type	New	Additions	Alteration
Building	Chapter 5[1]	5.106.5.6.5, 5.106.13, 5.304.3, 5.409, 5.506.3	5.106.5.6.5, 5.304.3, 5.409, 5.506.3
Site work	Chapter 5[1]	Chapter 5[1]	Chapter 5[1]
Parking facility	Chapter 5[1]	5.106.5.6.4, 5.106.12, 5.304.3	5.106.5.6.4, 5.304.3

1. Comply with Chapter 5 as adopted by DSA-SS.

5.106.8 Light pollution reduction. [N] *Outdoor lighting systems shall be designed and installed to comply with the following:*

5.303.3 Water conserving plumbing fixtures and fittings. *Plumbing fixtures (water closets and urinals) and fittings (faucets and showerheads) shall comply with the following:*

5.303.6 Standards for plumbing fixtures and fittings*. Plumbing fixtures and fittings shall be installed in accordance with the California Plumbing Code, and shall meet the applicable standards referenced in Table 1701.1 of the California Plumbing Code and in Chapter 6 of this code.*

5.408.1 Construction waste management. *Recycle and/or salvage for reuse a minimum of 65 percent of the nonhazardous construction and demolition waste in accordance with Section 5.408.1.1, 5.408.1.2 or 5.408.1.3; or meet a local construction and demolition waste management ordinance, whichever is more stringent*

5.408.1.1 Construction waste management plan. *Where a local jurisdiction does not have a construction and demolition waste management ordinance that is more stringent, submit a construction waste management plan that:*

SUGGESTED TEXT OF PROPOSED AMENDMENT

TABLE 301.4.2 – MANDATORY MEASURES FOR PUBLIC SCHOOLS AND COMMUNITY COLLEGES ON EXISTING SITES

Project type	New/Additions	~~Additions~~	Alteration
Building	Chapter 5[1]	~~5.106.5.6.5, 5.106.13, 5.304.3, 5.409, 5.506.3~~	5.101, 5.102, 5.105, 5.105.1, 5.106.4.2, 5.106.5.6.5, 5.106.8, 5.106.10,
			5.303.3, 5.303.6, 5.304.1 5.304.3,
			5.407, 5.408.1, 5.409,
			5.501.1, 5.502.1, 5.504.3, 5.504.4, 5.505, 5.506.3.1, 5.506.3
Site work	Chapter 5[1]	~~Chapter 5[1]~~	Chapter 5[1]
Parking facility	Chapter 5[1]	~~5.106.5.6.4, 5.106.12, 5.304.3~~	5.106.5.6.4, 5.304.3

1. Comply with Chapter 5 as adopted by DSA-SS.

5.106.8 Light pollution reduction. ~~[N]~~ *New Outdoor lighting systems or replaced light fixtures shall be designed and installed to comply with the following:*

5.303.3 Water conserving plumbing fixtures and fittings. *All new or replaced p~~P~~lumbing fixtures (water closets and urinals) and fittings (faucets and showerheads) shall comply with the following:*

5.303.6 Standards for plumbing fixtures and fittings*. All new or replaced ~~P~~plumbing fixtures and fittings shall be installed in accordance with the California Plumbing Code, and shall meet the applicable standards referenced in Table 1701.1 of the California Plumbing Code and in Chapter 6 of this code.*

5.408.1 Construction waste management. *Recycle and/or salvage for reuse a minimum of 65 percent of the nonhazardous construction and demolition waste in accordance with Section 5.408.1.1, 5.408.1.2 or 5.408.1.3; ~~or meet a local construction and demolition waste management ordinance, whichever is more stringent~~*

5.408.1.1 Construction waste management plan. *~~Where a local jurisdiction does not have a construction and demolition waste management ordinance that is more stringent,~~ ~~s~~Submit a construction waste management plan that:…*

CODE TEXT IF ADOPTED

[DSA-SS] **TABLE 301.4.2 – MANDATORY MEASURES FOR PUBLIC SCHOOLS AND COMMUNITY COLLEGES ON EXISTING SITES**

Project type	New/Additions	Alteration
Building	Chapter 5[1]	5.101, 5.102, 5.105, 5.105.1, 5.106.4.2, 5.106.5.6.5, 5.106.8, 5.106.10,
		5.303.3, 5.303.6 5.304.1, 5.304.3,
		5.407, 5.408.1, 5.409,
		5.501.1, 5.502.1, 5.504.3, 5.504.4, 5.505, 5.506.3.1, 5.506.3
Site work	Chapter 5[1]	Chapter 5[1]
Parking facility	Chapter 5[1]	5.106.5.6.4, 5.304.3

1. Comply with Chapter 5 as adopted by DSA-SS.

5.106.8 Light pollution reduction. *New Outdoor lighting systems or replaced light fixtures shall be designed and installed to comply with the following:*

5.303.3 Water conserving plumbing fixtures and fittings. *All new or replaced plumbing fixtures (water closets and urinals) and fittings (faucets and showerheads) shall comply with the following:*

***5.303.6 Standards for plumbing fixtures and fittings**. All new or replaced plumbing fixtures and fittings shall be installed in accordance with the California Plumbing Code, and shall meet the applicable standards referenced in Table 1701.1 of the California Plumbing Code and in Chapter 6 of this code.*

***5.408.1 Construction waste management.** Recycle and/or salvage for reuse a minimum of 65 percent of the nonhazardous construction and demolition waste in accordance with Section 5.408.1.1, 5.408.1.2 or 5.408.1.3;*
***5.408.1.1 Construction waste management plan.** Submit a construction waste management plan that:…*

STATEMENT OF REASONS

DSA proposes to add All CALGreen requirements to additions to buildings and parking facilities and some requirements for alteration projects.
Additions and alterations to projects have been exempt from most CALGreen requirements, this proposal seeks to eliminate this gap. While additions to projects will be required to meet all CALGreen requirements, alterations will only need to meet specific sections that will not place an undue cost on projects.
Additionally, we are removing language in section 5.408.1 that requires schools to follow local ordinances if more strict, we feel this is a conflict with statute and seek to repeal this language.

DSA COMMENTS

DSA CODE AMENDMENT DEVELOPMENT

TRACKING

DSA Tracking Number:

Date Reviewed: October 16, 2026

Status: Draft

APPLICABLE CODE

Applicable Code Section(s): CBC, Part 11 CALGreen, Chapter 5 Nonresidential Mandatory Measures

Topic: Bicycle Parking

CURRENT CODE LANGUAGE

5.106.4.2 Bicycle parking. [DSA-SS] For public schools and community colleges, comply with Sections 5.106.4.2.1 and 5.106.4.2.2.

5.106.4.2.1 Student bicycle parking. Provide permanently anchored bicycle racks conveniently accessed with a minimum of four two-bike capacity racks per new building.

5.106.4.2.2 Staff bicycle parking. Provide permanent, secure bicycle parking conveniently accessed with a minimum of two staff bicycle parking spaces per new building. Acceptable bicycle parking facilities shall be convenient from the street or staff parking area and shall meet one of the following:

1. Covered, lockable enclosures with permanently anchored racks for bicycles;
2. Lockable bicycle rooms with permanently anchored racks; or
3. Lockable, permanently anchored bicycle lockers.

SUGGESTED TEXT OF PROPOSED AMENDMENT

5.106.4.2 Bicycle parking. [DSA-SS] ~~For public schools and community colleges, comply with Sections 5.106.4.2.1 and 5.106.4.2.2.~~ Bicycle parking shall comply with Section 5.106.4.2.

5.106.4.2.1 Student bicycle parking. Provide a minimum of one student bicycle parking space for students 1st grade and above, in permanently anchored bicycle racks ~~conveniently accessed with a minimum of four two-bike capacity racks per new building~~ for every new classroom or instructional space over 800 square feet.

Exceptions:

1. New student bicycle parking spaces shall not be required where a minimum of one student bicycle parking spaces meeting the requirements of Section 5.106.4.2.1

2. Public schools and community colleges where fewer than 50 percent of enrolled students resided within a 2-mile radius of the campus for elementary grades, or within a 5-mile radius for all higher grades may reduce the required student bicycle parking by 50%.

5.106.4.2.2 Staff bicycle parking. Provide ~~permanent, secure bicycle parking conveniently accessed with~~ a minimum of ~~two staff bicycle parking spaces per new building~~ one staff bicycle parking space for every three new classrooms or instructional spaces over 800 square feet. No fewer than two bicycle parking spaces shall be provided. Acceptable bicycle parking facilities ~~shall be convenient from the street or staff parking area and~~ shall ~~meet~~ be one of the following:

1. Covered, lockable enclosures with permanently anchored racks for bicycles;

2. Lockable bicycle rooms with permanently anchored racks; or

3. Lockable, permanently anchored bicycle lockers.

Exception:

1. New staff bicycle parking spaces shall not be required where a minimum of one staff bicycle parking space meeting the requirements of Section 5.106.4.2.2.

CODE TEXT IF ADOPTED

5.106.4.2 Bicycle parking. [DSA-SS] Bicycle parking shall comply with Section 5.106.4.2.

5.106.4.2.1 Student bicycle parking. Provide a minimum of one student bicycle parking space for students 1st grade and above, in permanently anchored bicycle racks for every new classroom or instructional space over 800 square feet.

Exceptions:

1. New student bicycle parking spaces shall not be required where a minimum of one student bicycle parking spaces meeting the requirements of Section 5.106.4.2.1

2. Public schools and community colleges where fewer than 50 percent of enrolled students resided within a 2-mile radius of the campus for elementary grades, or within a 5-mile radius for all higher grades may reduce the required student bicycle parking by 50%.

5.106.4.2.2 Staff bicycle parking. Provide a minimum of one staff bicycle parking space for every three new classrooms or instructional spaces over 800 square feet. No fewer than two bicycle parking spaces shall be provided. Acceptable bicycle parking facilities shall be one of the following:

1. Covered, lockable enclosures with permanently anchored racks for bicycles;

2. Lockable bicycle rooms with permanently anchored racks; or

3. Lockable, permanently anchored bicycle lockers.

Exception:

1. New staff bicycle parking spaces shall not be required where a minimum of one staff bicycle parking space meeting the requirements of Section 5.106.4.2.2.

STATEMENT OF REASONS

DSA is proposing amendments to Section 5.106.4.2 to improve the application of bicycle-parking requirements when new classrooms or instructional spaces are added to a school campus. Under the proposed revision, bicycle-parking obligations would continue to be triggered by construction projects; however, the number of required spaces would be determined based on the total number of classrooms or instructional spaces across the entire campus rather than calculated per building. This approach establishes a campus-wide basis for the bicycle-parking count, providing a more consistent and representative metric.

The intent of the amendment is to ensure bicycle-parking requirements more accurately reflect the student population served by the campus. Under the current regulation, calculating the requirement per newly constructed building can result in either excessive or insufficient bicycle-parking installations, as buildings may contain widely varying numbers of classrooms. This has led to totals that do not correspond proportionally to actual bicycle-parking needs. The proposed update addresses this issue by ensuring that the number of spaces added corresponds to the scope of the construction project, while also capping the total requirement so it does not exceed what is appropriate for a fully built-out campus.

DSA also proposes to remove existing language requiring that bicycle racks be “conveniently accessed.” This provision has proven unenforceable, and the placement of bicycle parking is most appropriately determined by the district and the project designer based on the specific site configuration. The current wording has led to stakeholder misinterpretation, including assumptions that bicycle parking must be located near each building it serves rather than being consolidated in one location, which is also acceptable. Removing this language will support clearer implementation and allow districts to determine the most suitable location for bicycle-parking facilities.

In addition, the proposal introduces exceptions for rural schools and campuses located outside practical bicycling range. Campuses where fewer than 50 percent of students reside within two

miles for elementary grades or within five miles for secondary grades may reduce the required number of student bicycle-parking spaces by 50 percent. This exception enables reasonable and context-appropriate application of the bicycle-parking requirements in areas where bicycling is not a practical commuting option.

Matching updates are proposed for staff bicycle parking under Section 5.106.4.2.2. These revisions apply the same per-classroom methodology and provide an exception for campuses already offering staff bicycle-parking facilities equivalent to those required for a new campus build-out. This maintains consistency with the student bicycle-parking provisions and prevents duplicative or unnecessary additions to existing compliant facilities.

DSA further proposes to remove language stating that bicycle-parking facilities must be convenient from the street or staff parking area. This requirement is also unenforceable, and the optimal location for such facilities is best determined by the school district and designer based on campus-specific conditions and circulation patterns.

DSA COMMENTS

DRAFT

DSA CODE AMENDMENT DEVELOPMENT

TRACKING

DSA Tracking Number:

Date Reviewed: October 16, 2026

Status: Draft

APPLICABLE CODE

Applicable Code Section(s): CBC, Part 11 CALGreen, Chapter 5 Nonresidential Mandatory

Topic: Electric Vehicle Charging at Public Schools and Community Colleges

CURRENT CODE LANGUAGE

5.106.5.6 Electric vehicle (EV) charging at Public Schools and Community Colleges. [DSA-SS] vehicle infrastructure and electric vehicle charging stations shall comply with Section 5.106.5. and shall be provided in accordance with regulations in the *California Building Code and the California Electrical Code.*

Exceptions:

1. On a case-by-case basis where compliance with this section has been demonstrated to be not feasible based upon one of the following conditions, and with concurrence by the Division of the State Architect (DSA), compliance with Section 5.106.5.6 shall not be required
    a. Where there is no local utility power supply.
    b. Where the local utility is unable to supply adequate power.
    c. The installation of EVCS is impracticable.
2. Parking spaces accessible only by automated mechanical car parking systems are not required to comply with Section 5.106.5.6.

5.106.5.6.1 EV capable spaces. EV capable spaces shall be provided in accordance with Table 5.106.5.1 and the following requirements:

1. Raceways complying with the *California Electrical Code* and no less than 1-inch (25 mm) diameter shall be provided and shall originate at a service panel or a subpanel(s) serving the area and shall terminate in close proximity to the proposed location of the EV capable space and into a suitable listed cabinet, box, enclosure or equivalent. A common raceway may be used to serve multiple EV capable spaces.
2. A service panel or subpanel(s) shall be provided with panel space and electrical load capacity for a dedicated 208/240 volt, 40-ampere minimum branch circuits for each EV capable space, with delivery of 30-ampere minimum to an installed EVSE at each EVCS.
3. The electrical system and any on-site distribution transformers shall have sufficient capacity to supply full rated amperage at each EV capable space.
4. The service panel or subpanel circuit directory shall identify the reserved overcurrent protective device space(s) as “EV CAPABLE”. The raceway termination location shall be permanently and visibly marked as “EV CAPABLE.”.

TABLE 5.106.5.6.1

TOTAL NUMBER OF PARKING SPACES	NUMBER OF REQUIRED EV CAPABLE SPACES	NUMBER OF REQUIRED EVCS[2] (EV CAPABLE SPACES PROVIDED WITH EVSE)[2]
0-9	0	0
10-25	4	01
26-50	8	2
51-75	13	3
76-100	17	4
101-150	25	6
151-200	35	9
201 and over	20 percent of total[1]	25 percent of EV capable spaces [1]

1. Calculation for spaces shall be rounded up to the nearest whole number.
2. Each EVCS shall reduce the number of required EV capable spaces by the same number.

5.106.5.6.2 Electric vehicle charging stations (EVCS). EV capable spaces shall be provided with EVSE to create EVCS in the number indicated in Table 5.106.5.36.1 and shall comply with Section 5.106.5.6.2. EVCS shall be serviced by Level 2 or Direct Current Fast Charging (DCFC) EVSE, or with EVSE in any combination of Level 2 and DCFC. Accessible EVCS shall be provided in accordance with *California Building Code Chapter 11B*.

5.106.5.6.2.1 Reduced number of EV capable spaces. The installation of each DCFC EVSE shall be permitted to reduce the minimum number of required EV capable spaces indicated in Table 5.106.5.6.1 by five and reduce proportionally the required electrical load capacity to the service panel or subpanel.

5.106.5.6.2.2 Multiple Connectors. EVSE with multiple vehicle connectors capable of charging multiple EVs simultaneously shall be permitted if the electrical load capacity required by Section 5.106.5.36.1 for each EV capable space is accumulatively supplied to the EVSE.

5.106.5.6.2.3 Use of automatic load management systems (ALMS). ALMS shall be permitted for EVCS. installed in accordance with Section 5.106.5.6.2. When ALMS is installed, the required electrical load capacity specified in Section 5.106.5.36.1 for each EVCS may be reduced when serviced by an EVSE controlled by an ALMS. Each EVSE controlled by an ALMS shall deliver a minimum 30 amperes to an EV when charging one vehicle and shall deliver a minimum 3.3 kW while simultaneously charging multiple EVs.

5.106.5.6.3 EVCS alternative compliance. In lieu of compliance with Section 5.106.5.6.2, EVCS shall be provided with Level 1, Low Power Level 2, or Level 2, or any combination of Level 1, Low Power Level 2 or Level 2 EVSE such that the total power supplied by the combination of EVSE meets the minimum power indicated in Table 5.106.5.6.3, based on the total number of actual parking spaces in each parking facility.

5.106.5.6.4 EVCS for alterations of or additions to parking facilities. Alterations of or additions to parking facilities shall provide EVCS in compliance with Section 5.106.5.6.4. The installation of infrastructure for EV capable spaces required to be provided without EVSE shall not be required.

5.106.5.6.4.1 Alterations of and additions to parking facilities. EVCS shall be provided in accordance with the number indicated in Table 5.106.5.6.1 or minimum power indicated in Table 5.106.5.6.3 when the scope of work includes an increase in power supply to an electric panel serving light fixtures illuminating the parking area or when area containing parking spaces

is added to a parking facility. The number of required EVCS shall be based on the total number of existing and new parking spaces in the parking facility.

5.106.5.6.4.2 Alterations consisting of the installation of photovoltaic systems. EVCS shall be provided in accordance with the number indicated in Table 5.106.5.6.1 or maximum power indicated in Table 5.106.5.6.3 when a new photovoltaic system is installed in an existing parking facility.

5.106.5.6.5 Requirement to install EVSE. Level 2 EVSE shall be provided in all existing EV capable spaces to create EVCS when a project is required by *California Administrative Code* Section 4-309 to be submitted for plan approval to the Division of the State Architect. When EVSE is installed in existing EV capable spaces, accessible EVCS shall be provided in accordance with *California Building Code Chapter 11B*.

Exception: Projects in which improvements in parking areas consist only of accessibility improvements are not required to comply with Section 5.106.5.6.5

SUGGESTED TEXT OF PROPOSED AMENDMENT

5.106.5.6 Electric vehicle (EV) charging at Public Schools and Community Colleges. [DSA-SS] Electric vehicle infrastructure and electric vehicle charging stations shall comply with Section 5.106.5. and shall be provided in accordance with regulations in the *California Building Code and the California Electrical Code.*

Exceptions:

1. On a case-by-case basis where compliance with this section has been demonstrated to be not feasible based upon one of the following conditions, and with concurrence by the Division of the State Architect (DSA), compliance with Section 5.106.5.6 shall not be required
    a. Where there is no local utility power supply.
    b. Where the local utility is unable to supply adequate power.
    c. ~~The installation of EVCS~~ Where compliance with this section is impracticable.
2. Parking spaces accessible only by automated mechanical car parking systems are not required to comply with Section 5.106.5.6.
3. The total number of all new and existing EVSE on campus can be used to meet the requirements of 5.106.5.6.

~~**5.106.5.6.1 EV capable spaces.** EV capable spaces shall be provided in accordance with Table 5.106.5.1 and the following requirements:~~

~~1. Raceways complying with the *California Electrical Code* and no less than 1-inch (25 mm) diameter shall be provided and shall originate at a service panel or a subpanel(s) serving the area and shall terminate in close proximity to the proposed location of the EV capable space and into a suitable listed cabinet, box, enclosure or equivalent. A common raceway may be used to serve multiple EV capable spaces.~~

~~2. A service panel or subpanel(s) shall be provided with panel space and electrical load capacity for a dedicated 208/240 volt, 40-ampere minimum branch circuits for each EV capable space, with delivery of 30-ampere minimum to an installed EVSE at each EVCS.~~

~~3. The electrical system and any on-site distribution transformers shall have sufficient capacity to supply full rated amperage at each EV capable space.~~

~~4. The service panel or subpanel circuit directory shall identify the reserved overcurrent protective device space(s) as "EV CAPABLE". The raceway termination location shall be permanently and visibly marked as "EV CAPABLE.".~~

~~TABLE 5.106.5.6.1~~

~~TOTAL NUMBER OF PARKING SPACES~~	~~NUMBER OF REQUIRED EV CAPABLE SPACES~~	~~NUMBER OF REQUIRED EVCS[2] (EV CAPABLE SPACES PROVIDED WITH EVSE)[2]~~
~~0-9~~	~~0~~	~~0~~
~~10-25~~	~~4~~	~~01~~
~~26-50~~	~~8~~	~~2~~
~~51-75~~	~~13~~	~~3~~
~~76-100~~	~~17~~	~~4~~
~~101-150~~	~~25~~	~~6~~
~~151-200~~	~~35~~	~~9~~
~~201 and over~~	~~20 percent of total[1]~~	~~25 percent of EV capable spaces [1]~~

~~3. Calculation for spaces shall be rounded up to the nearest whole number.~~

~~4. Each EVCS shall reduce the number of required EV capable spaces by the same number.~~

~~**5.106.5.6.2 Electric vehicle charging stations (EVCS).** EV capable spaces shall be provided with EVSE to create EVCS in the number indicated in Table 5.106.5.36.1 and shall comply with Section 5.106.5.6.2. EVCS shall be serviced by Level 2 or Direct Current Fast Charging (DCFC) EVSE, or with EVSE in any combination of Level 2 and DCFC. Accessible EVCS shall be provided in accordance with *California Building Code Chapter 11B*.~~

~~**5.106.5.6.2.1 Reduced number of EV capable spaces.** The installation of each DCFC EVSE shall be permitted to reduce the minimum number of required EV capable spaces indicated in Table 5.106.5.6.1 by five and reduce proportionally the required electrical load capacity to the service panel or subpanel.~~

~~**5.106.5.6.2.2 Multiple Connectors.** EVSE with multiple vehicle connectors capable of charging multiple EVs simultaneously shall be permitted if the electrical load capacity required by Section 5.106.5.36.1 for each EV capable space is accumulatively supplied to the EVSE.~~

~~**5.106.5.6.2.3 Use of automatic load management systems (ALMS).** ALMS shall be permitted for EVCS. installed in accordance with Section 5.106.5.6.2. When ALMS is installed, the required electrical load capacity specified in Section 5.106.5.36.1 for each EVCS may be reduced when serviced by an EVSE controlled by an ALMS. Each EVSE controlled by an ALMS shall deliver a minimum 30 amperes to an EV when charging one vehicle and shall deliver a minimum 3.3 kW while simultaneously charging multiple EVs.~~

5.106.5.6.1~~3~~ Electric vehicle charging stations (EVCS)~~EVCS alternative compliance~~. ~~In lieu of compliance with Section 5.106.5.6.2,~~.EVCS shall be provided with Level 1, Low Power Level 2, ~~or~~ Level 2, DCFC, or any combination of each~~Level 1, Low Power, Level 2, or Level 2 EVSE~~ such that the total power supplied by the combination of EVSE meets the minimum power indicated in Table ~~5.106.5.6.3~~5.106.5.6.1, based on the total number of actual parking spaces in each parking facility. When DCFC is used at least 4KW shall be provided using any combination of level 1, Low Power Level 2, or level 2 chargers.

TABLE ~~5.106.5.6.3~~5.106.5.6.1	
NUMBER OF PARKING SPACES IN A PARKING FACILITY	MINIMUM TOTAL POWER (KVA) REQUIRED FOR EVCS
0–9	0
10–25	7

26–50	14
51–75	20
76–100	27
101–150	40
151–200	60
201 and over	Total required KVA = P × .05 × 6.6 Where P = Parking spaces in facility

5.106.5.6.42 EVCS for alterations of or additions to parking facilities. Alterations of or additions to parking facilities shall provide EVCS in compliance with Section 5.106.5.6.42. ~~The installation of infrastructure for EV capable spaces required to be provided without EVSE shall not be required.~~

5.106.5.6.42.1 Alterations of and additions to parking facilities. EVCS shall be provided in accordance with the~~ number indicated in Table 5.106.5.6.1 or~~ minimum power indicated in Table ~~5.106.5.6.3~~5.106.5.6.1. when the scope of work includes an increase in power supply to an electric panel serving light fixtures illuminating the parking area or when an area containing parking spaces is added to a parking facility. The ~~number of~~ power required for EVCS shall be based on the total number of existing and new parking spaces in the parking facility.

5.106.5.6.42.2 Alterations consisting of the installation of photovoltaic systems. EVCS shall be provided in accordance with the ~~number indicated in Table 5.106.5.6.1 or maximum~~ minimum power indicated in Table ~~5.106.5.6.3~~5.106.5.6.1 for parking spaces covered by the newly installed PV, when a new photovoltaic system is installed in an existing parking facility.

5.106.5.6.5~~5~~3 Requirement to install EVSE.

~~Level 2~~ EVSE shall be provided in the parking lot serving the project in ~~all~~ existing EV capable spaces to create EVCS when a new building is constructed or placed on site, or an addition/alteration project is required by *California Administrative Code* Section 4-309 to be submitted for plan approval to the Division of the State Architect. The number of EV capable spaces required to have EVSE provided shall be based on the total number of parking spaces in the parking facility that serves the building. This does not require more EVSE then existing EV Capable spaces.

~~. When EVSE is installed in existing EV capable spaces, accessible EVCS shall be provided in accordance with *California Building Code Chapter 11B*.~~

Exception: Projects in which improvements in parking areas consist only of accessibility improvements are not required to comply with Section 5.106.5.6.5

CODE TEXT IF ADOPTED

5.106.5.6 Electric vehicle (EV) charging at Public Schools and Community Colleges. [DSA-SS] Electric vehicle infrastructure and electric vehicle charging stations shall comply with Section 5.106.5. and shall be provided in accordance with regulations in the *California Building Code and the California Electrical Code.*

Exceptions:

4. On a case-by-case basis where compliance with this section has been demonstrated to be not feasible based upon one of the following conditions, and with concurrence by the Division of the State Architect (DSA), compliance with Section 5.106.5.6 shall not be required
    a. Where there is no local utility power supply.
    b. Where the local utility is unable to supply adequate power.
    c. Where compliance with this section is impracticable.
5. Parking spaces accessible only by automated mechanical car parking systems are not required to comply with Section 5.106.5.6.
6. The total number of all new and existing EVSE on campus can be used to meet the requirements of 5.106.5.6.

5.106.5.6.1 Electric vehicle charging stations (EVCS) EVCS shall be provided with Level 1, Low Power Level 2, Level 2, DCFC, or any combination of each such that the total power supplied by the combination of EVSE meets the minimum power indicated in Table
5.106.5.6.1, based on the total number of actual parking spaces in each parking facility.
When DCFC is used at least 4KW shall be provided using any combination of level 1, Low Power Level 2, or level 2 chargers.

TABLE 5.106.5.6.1	
NUMBER OF PARKING SPACES IN A PARKING FACILITY	MINIMUM TOTAL POWER (KVA) REQUIRED FOR EVCS
0–9	0
10–25	7
26–50	14
51–75	20
76–100	27
101–150	40
151–200	60
201 and over	Total required KVA = P × .05 × 6.6 Where P = Parking spaces in facility

5.106.5.6.42 EVCS for alterations of or additions to parking facilities. Alterations of or additions to parking facilities shall provide EVCS in compliance with Section 5.106.5.6.2.

5.106.5.6.42.1 Alterations of and additions to parking facilities. EVCS shall be provided in accordance with the minimum power indicated in Table 5.106.5.6.1. when the scope of work includes an increase in power supply to an electric panel serving light fixtures illuminating the parking area or when an area containing parking spaces is added to a parking facility. The power required for EVCS shall be based on the total number of existing and new parking spaces in the parking facility.

5.106.5.6.42.2 Alterations consisting of the installation of photovoltaic systems. EVCS shall be provided in accordance with the minimum power indicated in Table ~~5.106.5.6.3~~5.106.5.6.1 for parking spaces covered by the newly installed PV, when a new photovoltaic system is installed in an existing parking facility.

5.106.5.6.~~5~~3 Requirement to install EVSE.
~~Level 2~~ EVSE shall be provided in the parking lot serving the project in ~~all~~ existing EV capable spaces to create EVCS when a new building is constructed or placed on site, or an addition/alterationr project is required by *California Administrative Code* Section 4-309 to be submitted for plan approval to the Division of the State Architect. The number of EV capable spaces required to have EVSE provided shall be based on the total number of parking spaces in the parking facility that serves the building. This does not require more EVSE then existing EV Capable spaces.

Exception: Projects in which improvements in parking areas consist only of accessibility improvements are not required to comply with Section 5.106.5.6.5

STATEMENT OF REASONS

DSA proposes to alter the impractablity exception to make it clear that it applies to the entire section, not just specific parts. This has been needed as questions continue to arise on when this exception can be used.
Additionally adding an exception that allows for the overall EV count on a campus to be used to meet compliance is needed because some schools have all their EVCS in one parking lot,

and requiring them to put more in for new or additions to parking facilities was not the intent of the original code
DSA proposes to remove the prescriptive approach for EV charging and solely use the power or performance method. This method allows more options and flexibility when districts are choosing how to meet their needs.
DSA is amending language for what type of projects trigger requirements for EV capable spaces to have charging equipment installed. Currently we only require it for alterations to buildings, new language will require the parking facility that serves the project to install equipment in EV capable spaces meeting the requirement in the power method table.

DSA COMMENTS

DSA CODE AMENDMENT DEVELOPMENT

TRACKING

DSA Tracking Number:

Date Reviewed: October 16, 2026

Status: Draft

APPLICABLE CODE

Applicable Code Section(s): CBC, Part 11 CALGreen, Chapter 5 Nonresidential Mandatory Measures

Topic: Sign Lighting

CURRENT CODE LANGUAGE

None

SUGGESTED TEXT OF PROPOSED AMENDMENT

5.106.8.3 Sign lighting. [DSA-SS] All illuminated signs, including variable message signs, must be equipped with automated controls and programmed to turn off between 10:00 PM and 6:30 AM.

Exception. Scoreboards and similar signs for outdoor events that are not intended for continuous illumination are exempt from this requirement.

CODE TEXT IF ADOPTED

5.106.8.3 Sign lighting. [DSA-SS] *All illuminated signs, including variable message signs, must be equipped with automated controls and programmed to turn off between 10:00 PM and 6:30 AM.*

Exception. Scoreboards and similar signs for outdoor events that are not intended for continuous illumination are exempt from this requirement.

STATEMENT OF REASONS

DSA proposes to adopt Section *5.106.8.3. Local jurisdictions typically regulate sign lighting; however, DSA cannot compel schools to follow local ordinances. This proposal seeks to minimize light pollution during hours when most people will not be viewing the signs. DSA has received numerous complaints from community members, and local jurisdictions regarding uncontrolled signs.*

DSA COMMENTS

DSA CODE AMENDMENT DEVELOPMENT

TRACKING

DSA Tracking Number:

Date Reviewed: October 16, 2026

Status: Draft

APPLICABLE CODE

Applicable Code Section(s): CBC, Part 11 CALGreen, Chapter 5 Nonresidential Mandatory Measures

Topic: Shade Trees

CURRENT CODE LANGUAGE

5.106.12 Shade trees. [DSA-SS] Shade trees shall be planted to comply with Sections 5.106.12.1, 5.106.12.2 and 5.106.12.3. Percentages shown shall be measured at noon on the summer solstice. Landscape irrigation necessary to establish and maintain tree health shall comply with Section 5.304.6.

5.106.12.1 Surface parking areas. Shade tree plantings, minimum No. 10 container size or equal, shall be installed to provide shade over 50 percent of the parking area within 15 years.

Exceptions: Surface parking area covered by solar photovoltaic shade structures, or shade structures with roofing materials that comply with Table A5.106.11.2.2 in Appendix A5 shall be permitted in whole or in part in lieu of shade tree plantings.

5.106.12.2 Landscape areas. Shade tree plantings, minimum No. 10 container size or equal shall be installed to provide shade of 20 percent of the landscape area within 15 years.

Exception: Playfields for organized sport activity are not included in the total area calculation.

5.106.12.3 Hardscape areas. Shade tree plantings, minimum No. 10 container size or equal shall be installed to provide shade over 20 percent of the pedestrian hardscape area within 15 years.

Exceptions:

1. Walks, hardscape areas covered by solar photovoltaic shade structures or shade structures with roofing materials that comply with Table A5.106.11.2.2 in Appendix A5 shall be permitted in whole or in part in lieu of shade tree plantings.

2. Designated and marked play areas of organized sport activity are not included in the total area calculation.

SUGGESTED TEXT OF PROPOSED AMENDMENT

SECTION 202
DEFINITIONS

…

DRIVE AISLE. A vehicular way provided within a parking facility that connects vehicular entrances, parking spaces, electric vehicle charging stations, passenger loading zones and vehicular exits.

DRIVEWAY. A vehicular way providing access between a public way and a building, parking facility, or other off-street area. A driveway may provide access to drive aisles in a parking facility.

PEDESTRIAN HARDSCAPE. Any paved surface intended for pedestrian access, not including vehicular hardscape area, including but not limited to plazas, courtyards, walkways, blacktops, and sport courts, on improved surfaces such as concrete, asphalt, pavers or similar.

VEHICULAR HARDSCAPE. Any paved surface, not including parking structures, which is intended for vehicle access, including but not limited to parking spaces, driveways and drive aisles, on improved surfaces such as concrete, asphalt, pavers or similar.

…

5.106.12 Shade trees. [DSA-SS, BSC-CG] Shade trees shall be planted to comply with Sections 5.106.12.1, 5.106.12.2 and 5.106.12.3. Percentages shown shall be measured at noon on the summer solstice.

[DSA-SS] Landscape irrigation necessary to establish and maintain tree health shall comply with Section 5.304.6.

[BSC-CG] …

[DSA-SS, BSC-CG] Exceptions:

1. The site area under building roof overhangs or awnings shall be excluded from the total area calculation.

2. Areas where trees are not permitted by the *California Wildland-Urban Interface Code*.

5.106.12.1 ~~Surface parking~~ Vehicular hardscape areas. Shade tree plantings, minimum No. 10 container size or equal, shall be installed to provide shade over 50 percent of the ~~parking~~ vehicular hardscape area within 15 years.

Exceptions:

1. ~~Surface parking~~ Vehicular hardscape area ~~covered~~shaded by ~~solar photovoltaic shade structures, or shade~~ structures at noon on the summer solstice~~, or shade structures with roofing materials that comply with Table A5.106.11.2.2 in Appendix A5~~ shall be permitted ~~in whole or in part~~ in lieu of shade tree plantings for up to 75 percent of required shading.

2. Driveways, drive aisles used for bus or vehicular loading only, and drive aisles used for maintenance or emergency vehicle access only may be excluded from total area calculation. This exception does not apply to drive aisles also used as maneuvering space for parked vehicles.

3. Vehicular hardscape surfaces with materials having an initial SR value of at least 0.33 as measured in accordance with ANSI/CRRC S100 shall install shade tree plantings, minimum No. 10 container size or equal, providing shade over 25 percent of the area within 15 years.

5.106.12.2 Landscape areas. Shade tree plantings, minimum No. 10 container size or equal shall be installed to provide shade of 20 percent of the landscape area within 15 years.

Exception: Playfields for organized sport activity are not included in the total area calculation. This exception does not apply to spectator areas for organized sport activities and general play areas within school yards.

5.106.12.3 Pedestrian h~~H~~ardscape and natural or synthetic pedestrian surfacing areas. Shade tree plantings, minimum No. 10 container size or equal shall be installed to provide shade over ~~20~~50 percent of the pedestrian hardscape and natural or synthetic pedestrian surfacing area within 15 years. Pedestrian hardscape areas also used for emergency or maintenance vehicle access shall be included in this calculation.

Exceptions:

1. ~~Walks,~~ Pedestrian hardscape and natural or synthetic pedestrian surfacing areas ~~covered~~shaded by ~~solar photovoltaic shade~~ structures or shade sails at noon on the summer solstice ~~structures with roofing materials that comply with Table A5.106.11.2.2 in Appendix A5~~ shall be permitted ~~in whole or in part~~ in lieu of shade tree plantings for up to 50 percent of required shading.

2. Designated and marked play areas of organized sport activity, or the designated and marked play areas for track and field, stadium spectating, or swim facilities, are not included in the total area calculation. This

exception does not apply to play structures and general blacktop areas with game markings such as hopscotch, four-square, or similar playground features.

5.106.12.4 Shade tree removal. An alteration to an existing site shall maintain at a minimum the shaded area required for new construction in Section 5.106.12. Removal of existing shade trees shall be replaced by shade tree plantings on the site, minimum No. 10 container size or equal, providing equivalent shade within 15 years.

CODE TEXT IF ADOPTED

SECTION 202
DEFINITIONS

…

DRIVE AISLE. A vehicular way provided within a parking facility that connects vehicular entrances, parking spaces, electric vehicle charging stations, passenger loading zones and vehicular exits.

DRIVEWAY. A vehicular way providing access between a public way and a building, parking facility, or other off-street area. A driveway may provide access to drive aisles in a parking facility.

PEDESTRIAN HARDSCAPE. Any paved surface intended for pedestrian access, not including vehicular hardscape area, including but not limited to plazas, courtyards, walkways, blacktops, and sport courts, on improved surfaces such as concrete, asphalt, pavers or similar.

VEHICULAR HARDSCAPE. Any paved surface, not including parking structures, which is intended for vehicle access, including but not limited to parking spaces, driveways and drive aisles, on improved surfaces such as concrete, asphalt, pavers or similar.

…

5.106.12 Shade trees. [DSA-SS, BSC-CG] Shade trees shall be planted to comply with Sections 5.106.12.1, 5.106.12.2 and 5.106.12.3. Percentages shown shall be measured at noon on the summer solstice.

[DSA-SS] Landscape irrigation necessary to establish and maintain tree health shall comply with Section 5.304.6.

[BSC-CG] …

[DSA-SS, BSC-CG] Exceptions:

1. The site area under building roof overhangs or awnings shall be excluded from the total area calculation.

2. Areas where trees are not permitted by the *California Wildland-Urban Interface Code*.

5.106.12.1 Vehicular hardscape areas. Shade tree plantings, minimum No. 10 container size or equal, shall be installed to provide shade over 50 percent of the vehicular hardscape area within 15 years.

Exceptions:

1. Vehicular hardscape area shaded by structures at noon on the summer solstice shall be permitted in lieu of shade tree plantings for up to 75 percent of required shading.

2. Driveways, drive aisles used for bus or vehicular loading only, and drive aisles used for maintenance or emergency vehicle access only may be excluded from total area calculation. This exception does not apply to drive aisles also used as maneuvering space for parked vehicles.

3. Vehicular hardscape surfaces with materials having an initial SR value of at least 0.33 as measured in accordance with ANSI/CRRC S100 shall install shade tree plantings, minimum No. 10 container size or equal, providing shade over 25 percent of the area within 15 years.

5.106.12.2 Landscape areas. Shade tree plantings, minimum No. 10 container size or equal shall be installed to provide shade of 20 percent of the landscape area within 15 years.

Exception: Playfields for organized sport activity are not included in the total area calculation. This exception does not apply to spectator areas for organized sport activities and general play areas within school yards.

5.106.12.3 Pedestrian hardscape and natural or synthetic pedestrian surfacing areas. Shade tree plantings, minimum No. 10 container size or equal shall be installed to provide shade over 50 percent of the pedestrian hardscape and natural or synthetic pedestrian surfacing area within 15 years. Pedestrian hardscape areas also used for emergency or maintenance vehicle access shall be included in this calculation.

Exceptions:

1. Pedestrian hardscape and natural or synthetic pedestrian surfacing areas shaded by structures or shade sails at noon on the summer solstice shall be permitted in lieu of shade tree plantings for up to 50 percent of required shading.

2. Designated and marked play areas of organized sport activity, or the designated and marked play areas for track and field, stadium spectating, or swim facilities, are not included in the total area calculation. This exception does not apply to play structures and general blacktop areas

with game markings such as hopscotch, four-square, or similar playground features.

5.106.12.4 Shade tree removal. An alteration to an existing site shall maintain at a minimum the shaded area required for new construction in Section 5.106.12. Removal of existing shade trees shall be replaced by shade tree plantings on the site, minimum No. 10 container size or equal, providing equivalent shade within 15 years.

STATEMENT OF REASONS

DSA proposes to add an exception to Section 5.106.12, Shade Trees, to clarify that it is not the intent of this code section for site areas located directly beneath building roof overhangs or awnings to be included in the total area used for shade-tree calculations. DSA also proposes to add an exception to Section 5.106.12, Shade Trees, to conform to the defensible space requirements of the *California Wildland-Urban Interface Code.*

DSA proposes adding definitions to Section 202 and amending Section 5.106.12.1 to clarify shade-tree requirements for parking areas. The term “parking area” will be replaced with “vehicular hardscape area,” along with a new exception for vehicular hardscape areas not associated with parking, including driveways, drive aisles used solely for bus or passenger loading, and drive aisles used exclusively for maintenance or emergency-vehicle access. These new definitions and clarifications address frequent stakeholder confusion surrounding what constitutes a parking area and align the provisions with their original intent when introduced in the 2018 triennial code cycle, which focused primarily on parking spaces and their connecting drive aisles. School sites commonly incorporate bus drop-off loops and similar circulation areas that lack planting islands or fingers, making it impractical to achieve fifty percent shade coverage in those areas.

The exceptions for shade structures under Sections 5.106.12.1 and 5.106.12.3 are proposed to be amended to allow shaded areas provided by any type of structure to be used in lieu shade trees, and specifically including shade sails for pedestrian hardscape areas. Under the current code, this exception only applies to structures incorporating cool-roof materials or photovoltaic panels. DSA’s forthcoming cool-roof proposal will eliminate the need for shade-structure-specific cool-roof provisions. Although photovoltaic shade structures offer energy-saving benefits and contribute to reduced global emissions, they do not mitigate heat-island effect to a greater degree than other shade structures. DSA also proposes to replace the word “covered” with “shaded” under these exceptions, as “shaded” more precisely describes the condition intended, specifically the area receiving shade in the northern hemisphere at noon on the summer solstice.

In addition, DSA proposes to limit the degree to which shade structures may substitute for trees to ensure that the original intent of the code, which is to promote the significant heat island, air quality, and educational benefits of shade trees, is preserved. For vehicular hardscape areas, shade structures would be permitted to replace no more than 75 percent of the required shade trees, and for pedestrian hardscape areas, no more than 50 percent may

be replaced. These limits recognize that shade trees provide superior heat island mitigation through evapotranspiration and offer important co-benefits such as improved air quality and enhanced learning environments, which shade structures alone cannot fully provide.

DSA proposes an exception to Section 5.106.12.1 to allow the required tree-shaded area to be reduced from fifty percent to twenty-five percent when a high-SRI paving material is used. The primary intent of this code section in parking areas is to mitigate heat-island effect, which is most pronounced on asphalt surfaces. Although high-SRI materials do not provide the same level of mitigation as trees, which additionally cool through shade and evapotranspiration, the proposed exception would provide design flexibility while still supporting the underlying heat-island-reduction goals.

DSA proposes added language to the exception for shade trees in playfields used for organized sports activities under Section 5.106.12.2 to clarify that the exception does not apply to spectator areas or to general schoolyard landscaped or turf spaces.

DSA proposes to amend Section 5.106.12.3 to clarify that it applies to pedestrian hardscape areas rather than vehicular hardscape areas. The amended section will also apply to synthetic and natural playground surfacing, including pedestrian hardscape areas marked for fire-truck or maintenance-vehicle access. To support these clarifications, DSA proposes adding a definition for Pedestrian Hardscape to Section 202 to distinguish pedestrian-only paved surfaces from vehicular hardscape areas.

DSA proposes added language to the exception for shade trees in marked play areas used for organized sports activities under Section 5.106.12.3 to clarify that the exception also applies to marked track-and-field areas, stadium spectating areas, and swim facilities, and does not apply to play structures or general blacktop play areas.

DSA proposes to increase the shade tree requirement for pedestrian hardscape areas from twenty percent to fifty percent based on stakeholder feedback. This increase is intended to improve human comfort in densely populated outdoor areas, particularly blacktops, which are also substantial contributors to heat-island effect.

Lastly, DSA proposes to add Section 5.106.12.4, applicable to alterations. This new section would require the replacement of any shade trees removed from existing sites unless the site continues to meet the shaded-area requirements for new construction under Section 5.106.12. The intent of this requirement is to prevent the reduction of shade trees necessary for human comfort and mitigation of heat-island effect as temperatures continue to rise and the resilience of school sites becomes increasingly important. Replacement trees must be a minimum number-ten container size and capable of providing equivalent shade within fifteen years to the trees that are removed.

DSA COMMENTS

DSA CODE AMENDMENT DEVELOPMENT

TRACKING

DSA Tracking Number:

Date Reviewed: October 16, 2026

Status: Draft

APPLICABLE CODE

Applicable Code Section(s): CBC, Part 11 CALGreen, Chapter 5 Nonresidential Mandatory Measures

Topic: Decommissioned Landscape Areas

CURRENT CODE LANGUAGE

5.106.13 Minimum rehabilitated landscape area. [DSA-SS] An existing landscape area equal to a minimum 75 percent of the footprint area of the newly constructed building or addition to an existing building, which contains an existing irrigation system not in compliance with Section 5.304.6, shall be rehabilitated to comply with Section 5.304.6 and Section 5.106.12.

> **Exception:** Newly constructed buildings or additions to existing buildings less than 1,600 square feet.

SUGGESTED TEXT OF PROPOSED AMENDMENT

5.106.13 Minimum rehabilitated landscape area. [DSA-SS] An existing landscape area <u>on the campus</u> equal to a minimum 75 percent of the footprint area of the newly constructed building or addition to an existing building, which contains an existing irrigation system not in compliance with Section 5.304.6, shall be rehabilitated to comply with Section 5.304.6 and Section 5.106.12. <u>Where no landscape exists on campus for rehabilitation, a new planted landscape area shall be provided on campus equal to a minimum of 75 percent of the footprint area of the newly constructed building, complying with Section 5.304.6 and Section 5.106.12.</u>

> **Exception<u>s</u>:**
>
> <u>1.</u> Newly constructed buildings or additions to existing buildings less than 1,600 square feet.
>
> <u>2. New landscape area shall not be required where a planted landscape area equal to a minimum of 75 percent of the footprint area of all buildings on campus is provided meeting the requirements of Sections 5.304.6 and Section 5.106.12.</u>

<u>**5.106.13.1 Decommissioned landscapes.** Decommissioned landscape areas shall not be included when calculating the minimum rehabilitated landscape area at an existing facility.</u>

CODE TEXT IF ADOPTED

5.106.13 Minimum rehabilitated landscape area. [DSA-SS] An existing landscape area on the campus equal to a minimum 75 percent of the footprint area of the newly constructed building or addition to an existing building, which contains an existing irrigation system not in compliance with Section 5.304.6, shall be rehabilitated to comply with Section 5.304.6 and Section 5.106.12. Where no landscape exists on campus for rehabilitation, a new planted landscape area shall be provided on campus equal to a minimum of 75 percent of the footprint area of the newly constructed building, complying with Section 5.304.6 and Section 5.106.12.

Exceptions:

1. Newly constructed buildings or additions to existing buildings less than 1,600 square feet.

2. New landscape area shall not be required where a minimum of 75 percent of the footprint area of all buildings on campus is provided meeting the requirements of Sections 5.304.6 and Section 5.106.12.

5.106.13.1 Decommissioned landscapes. Decommissioned landscape areas shall not be included when calculating the minimum rehabilitated landscape area at an existing facility.

STATEMENT OF REASONS

DSA proposes to add verbiage to 5.106.13 requiring a new planted landscape area to be provided equal to a minimum of 75 percent of the footprint area of a newly constructed building on campuses where no landscape exists for rehabilitation. This is to address and curtail the urban heat island effect by minimizing unnecessary hardscape. Additionally, Assembly Bill 1642 (2023) calls for greening of schoolyards and “to prevent or mitigate the impacts of extreme heat in schools, including through nature-based solutions, such as increasing tree canopy cover, vegetation, and green space, and by modifying, removing, or replacing surfaces and materials to increase solar reflectance, promote evaporative cooling, increase permeability, or reduce the amount of heat absorbed.” This proposal does exactly this by requiring newly planted landscape areas where rehabilitation is not possible.

DSA also proposes to add section 5.106.13.1 to clarify that decommissioned landscape areas are not to be included when calculating the minimum rehabilitated landscape area at an existing facility as it does not meet the intent of MRLA. This is to address issues of confusion around this topic that have come up during plan review.

DSA COMMENTS

DSA CODE AMENDMENT DEVELOPMENT

TRACKING

DSA Tracking Number:

Date Reviewed: October 16, 2026

Status: Draft

APPLICABLE CODE

Applicable Code Section(s): CBC, Part 11 CALGreen, Chapter 5 Nonresidential Mandatory

Topic: Daylighting

CURRENT CODE LANGUAGE

[no current language adopted by DSA-SS]

SUGGESTED TEXT OF PROPOSED AMENDMENT

5.507.2.1 [DSA-SS] Daylighting requirement. *Classrooms shall meet the following requirements:*

1. *A combined total of at least 75 percent of the floor area shall be within one or more of the following:*
   A. *Primary sidelight daylight zone in accordance with California Energy Code Section 140.3.6(d), or*
   B. *The total floor area in the space is within a horizontal distance of 70 percent of the average ceiling height from the edge of rough opening of skylights.*

2. *The total skylight area is at least 3 percent of the total floor area in the space within a horizontal distance of 0.7 times the average ceiling height from the edge of rough opening of skylights; or the product of the total skylight area and the average skylight visible transmittance is no less than 1.5 percent of the total floor area in the space within a horizontal distance of 0.7 times the average ceiling height from the edge of rough opening of skylights.*
3. *All skylights shall have a glazing material or diffuser that has a measured haze value greater than 90 percent, tested according to ASTM D1003*

Exception 1: Classrooms that have a story directly above and covering the entire space.
Exception 2: Enclosed spaces where it is documented that permanent architectural features of the building, existing structures or natural objects block direct beam sunlight on at least half of the roof over the enclosed space for more than 1500 daytime hours per year between 8 a.m. and 4 p.m.
Exception 3: Spaces over 5000 square feet shall comply with California Energy Code section 140.3(c).

CODE TEXT IF ADOPTED

[DSA-SS] Daylighting requirement. *Classrooms shall meet the following requirements:*

4. *A combined total of at least 75 percent of the floor area shall be within one or more of the following:*
    - *C. Primary sidelight daylight zone in accordance with California Energy Code Section 140.3.6(d), or*
    - *D. The total floor area in the space is within a horizontal distance of 70 percent of the average ceiling height from the edge of rough opening of skylights.*

5. *The total skylight area is at least 3 percent of the total floor area in the space within a horizontal distance of 0.7 times the average ceiling height from the edge of rough opening of skylights; or the product of the total skylight area and the average skylight visible transmittance is no less than 1.5 percent of the total floor area in the space within a horizontal distance of 0.7 times the average ceiling height from the edge of rough opening of skylights.*
6. *All skylights shall have a glazing material or diffuser that has a measured haze value greater than 90 percent, tested according to ASTM D1003*

Exception 1: Classrooms that have a story directly above and covering the entire space.
Exception 2: Enclosed spaces where it is documented that permanent architectural features of the building, existing structures or natural objects block direct beam sunlight on at least half of the roof over the enclosed space for more than 1500 daytime hours per year between 8 a.m. and 4 p.m.
Exception 3: Spaces over 5000 square feet shall comply with California Energy Code section 140.3(c).

STATEMENT OF REASONS

Studies confirm a positive correlation between daylighting, environmental comfort, and student performance in educational settings. DSA energy code modeling has also shown increasing a building's glazing area yields little to no negative impact on energy expenditures.

DSA COMMENTS

DSA CODE AMENDMENT DEVELOPMENT

TRACKING

DSA Tracking Number:

Date Reviewed: October 16, 2026

Status: Draft

APPLICABLE CODE

Applicable Code Section(s): CBC, Part 11 CALGreen, Chapter 5 Nonresidential Mandatory

Topic: MWELO

CURRENT CODE LANGUAGE

5.304.6 Outdoor potable water use in landscape areas. For public schools and community colleges, landscape projects as described in Sections 5.304.6.1 and 5.304.6.2 shall comply with the California Department of Water Resources Model Water Efficient Landscape Ordinance (MWELO) commencing with Section 490 of Chapter 2.7, Division 2, Title 23, *California Code of Regulations*, except that the evapotranspiration adjustment factor (ETAF) shall be 0.65 with an additional water allowance for special landscape areas (SLA) of 0.35.

> **Exception:** Any project with an aggregate landscape area of 2,500 square feet or less may comply with the prescriptive measures contained in Section 492 of the MWELO.
>
> > **5.304.6.1 Newly constructed landscapes.** New construction projects with an aggregate landscape area equal to or greater than 500 square feet.
> >
> > **5.304.6.2 Rehabilitated landscapes.** Rehabilitated landscape projects with an aggregate landscape area equal to or greater than 1,200 square feet.

SUGGESTED TEXT OF PROPOSED AMENDMENT

5.304.6 Outdoor potable water use in landscape areas. ~~For p~~Public schools and community colleges ~~landscape projects as described in Sections 5.304.6.1 and 5.304.6.2~~ shall comply with the California Department of Water Resources Model Water Efficient Landscape Ordinance (MWELO) commencing with Section 490 of Chapter 2.7, Division 2, Title 23, *California Code of Regulations*.~~, except that the evapotranspiration adjustment factor (ETAF) shall be 0.65 with an additional water allowance for special landscape areas (SLA) of 0.35.~~

> ~~**Exception:** Any project with an aggregate landscape area of 2,500 square feet or less may comply with the prescriptive measures contained in Section 492 of the MWELO.~~
>
> > ~~**5.304.6.1 Newly constructed landscapes.** New construction projects with an aggregate landscape area equal to or greater than 500 square feet.~~
> >
> > **5.304.6.1~~.2~~ Rehabilitated landscapes.** Rehabilitated landscape projects with an aggregate landscape area ~~equal to or greater than 1,200 square feet.~~between

1,200 and 2,500 square feet or less shall comply with the prescriptive or performance requirements of the MWELO.

CODE TEXT IF ADOPTED

5.304.6 Outdoor potable water use in landscape areas. Public schools and community colleges shall comply with the California Department of Water Resources Model Water Efficient Landscape Ordinance (MWELO) commencing with Section 490 of Chapter 2.7, Division 2, Title 23, *California Code of Regulations* and this section.

5.304.6.1 Rehabilitated landscapes. Rehabilitated landscape projects with an aggregate landscape area between 1,200 and 2,500 square feet or less shall comply with the prescriptive or performance requirements of the MWELO.

STATEMENT OF REASONS

DSA proposes to amend the language of Section 5.304.6, Outdoor potable water use in landscape areas, for consistency with the Department of Water Resources MWELO, including all evapotranspiration adjustment factors (ETAF). MWELO updates include new definitions for landscape area (LA) and regular landscape areas (RLA), in which LA is equal to RLA plus special landscape areas (SLA).

DSA COMMENTS

DSA CODE AMENDMENT DEVELOPMENT

TRACKING

DSA Tracking Number:

Date Reviewed: October 22, 2026

Status: Draft

APPLICABLE CODE

CalGreen Chapter 5 Section(s): California Green Building Code, Title 24 Part 11, Chapter 5 Nonresidential Mandatory Measures

Topic: Elimination of Nonfunctional Turf or Use Non-potable Water

CURRENT CODE LANGUAGE

None

SUGGESTED TEXT OF PROPOSED AMENDMENT

SECTION 5.302—DEFINITIONS

5.302.1 Definitions. The following terms are defined in Chapter 2.

…

…

…

…

NONFUNCTIONAL TURF.

…

…

…

5.304.6 Outdoor potable water use in landscape areas…

~~On or after January 1, 2028, the use of potable water for irrigation of nonfunctional turf located on institutional properties such as public schools and community colleges, as specified in Water Code (WAT) 10608.14, shall be prohibited. See WAT Section 10608.12 for related definitions and 10608.14 for affected types of property, effective dates, duties and responsibilities for ensuring compliance.~~

Exception: …

5.304.6.1 New constructed landscapes…

5.304.6.2 Rehabilitated landscapes…

5.304.7 Nonfunctional turf. The installation of nonfunctional turf shall be prohibited.

5.304.7.1 Irrigation of existing nonfictional turf. The use of potable water for irrigation of existing nonfunctional turf located on institutional properties such as public schools and community colleges, as specified in Water Code (WAT) 10608.14, shall be prohibited. See

WAT Section 10608.12 for related definitions and 10608.14 for affected types of property, effective dates, duties and responsibilities for ensuring compliance.

5.304.7.2 Replacement of nonfunctional turf. When replacing nonfunctional turf with hardscape permeable pavement shall be used.

Exception: Irrigation of Nonfunctional turf. Nonfunctional turf is allowed to be irrigated with:

1. Disinfected tertiary recycled water that complies with Title 22 California Code of Regulations Section 60301.230, or

2. Nonpotable water from a rainwater catchment system that complies with the California Plumbing Code Chapter 16.

CODE TEXT IF ADOPTED

5.304.6 Outdoor potable water use in landscape areas…

Exception: …

5.304.6.1 New constructed landscapes…

5.304.6.2 Rehabilitated landscapes…

5.304.7 Nonfunctional turf. The installation of nonfunctional turf shall be prohibited.

5.304.7.1 Irrigation of existing nonfictional turf. The use of potable water for irrigation of existing nonfunctional turf located on institutional properties such as public schools and community colleges, as specified in Water Code (WAT) 10608.14, shall be prohibited. See WAT Section 10608.12 for related definitions and 10608.14 for affected types of property, effective dates, duties and responsibilities for ensuring compliance.

5.304.7.2 Replacement of nonfunctional turf. When replacing nonfunctional turf with hardscape permeable pavement shall be used.

Exception: Irrigation of Nonfunctional turf. Nonfunctional turf is allowed to be irrigated with:

1. Disinfected tertiary recycled water as specified in Title 22 of the California Code of Regulations (Division 4, Chapter 3, Section 60301 et seq.), or

2. Nonpotable water from a rainwater catchment system that complies with the California Plumbing Code Chapter 16.

STATEMENT OF REASONS

DSA proposes to amend Chapter 5 Nonresidential Mandatory Measures by adding the words Nonfunctional Turf to 5.302.1 Definitions and adding new requirements to Section 5.304—OUTDOOR WATER USE. This is being done to implement AB1572 that disallows the use of potable water on nonfunctional turf for schools starting January 1, 2028.

DSA COMMENTS

DSA CODE AMENDMENT DEVELOPMENT

TRACKING

DSA Tracking Number:

Date Reviewed: October 16, 2026

Status: Draft

APPLICABLE CODE

Applicable Code Section(s): Part 11 CALGreen, Chapter 5 Nonresidential Mandatory Measures

Topic: 5.407.2.2.1 Exterior door protection

CURRENT CODE LANGUAGE

5.407.2.2.1 Exterior door protection. Primary exterior entries shall be covered to prevent water intrusion by using nonabsorbent floor and wall finishes within at least 2 feet around and perpendicular to such openings plus at least one of the following:

1. An installed awning at least 4 feet in depth.
2. The door is protected by a roof overhang at least 4 feet in depth.
3. The door is recessed at least 4 feet.
4. Other methods which provide equivalent protection.

…

SUGGESTED TEXT OF PROPOSED AMENDMENT

5.407.2.2.1 Exterior door protection. Primary exterior entries shall be covered to prevent water intrusion by using nonabsorbent floor ~~and wall~~ finishes within at least 2 feet around and perpendicular to such openings plus at least one of the following:

1. An installed awning at least 4 feet in depth, and extending at least 1 foot horizontally beyond each side of the door opening.
2. The door is protected by a roof overhang at least 4 feet in depth.
3. The door is recessed at least 4 feet.
4. Other methods which provide equivalent protection.

…

CODE TEXT IF ADOPTED

407.2.2.1 Exterior door protection. Primary exterior entries shall be covered to prevent water intrusion by using nonabsorbent floor finishes within at least 1 foot around and perpendicular to such openings plus at least one of the following:

1. An installed awning at least 4 feet in depth, and extending at least 2 feet horizontally beyond each side of the door opening.
2. The door is protected by a roof overhang at least 4 feet in depth.
3. The door is recessed at least 4 feet.
4. Other methods which provide equivalent protection.

…

STATEMENT OF REASONS

DSA proposes to amend Section 5.407.2.2.1, Exterior Door Protection, to require awnings used for compliance to extend a minimum of one foot horizontally beyond both sides of the door opening. This added lateral coverage is necessary to better protect against wind-driven rain, which can reach the sides of the door even with sufficient overhead depth. Extending the awning helps prevent water intrusion at the door.

DSA also proposes to amend Section 5.407.2.2.1, Exterior Door Protection, to remove the requirement for nonabsorbent wall finishes at exterior entries. The moisture concerns associated with these conditions relate primarily to the floor surfaces, where water can be tracked in on shoes and absorbed. Because wall finishes do not contribute to moisture retention in this scenario, maintaining the requirement for nonabsorbent floor finishes alone is adequate to meet the intent of the section.

DSA COMMENTS

DSA CODE AMENDMENT DEVELOPMENT

TRACKING

DSA Tracking Number:

Date Reviewed: October 16, 2026

Status: Draft

APPLICABLE CODE

Applicable Code Section(s): Part 11, CALGreen, Chapter 5 Nonresidential Mandatory Measures

Topic: Embodied Carbon Reduction

CURRENT CODE LANGUAGE

SECTION 202
DEFINITIONS

…

SECTION 5.402—DEFINITIONS

5.402.1 Definitions. The following terms are defined in Chapter 2.

…

SECTION 5.409
EMBODIED CARBON REDUCTION

5.409.1 Scope.

Projects consisting of newly constructed building(s) with a combined floor area of 50,000 square feet or greater shall comply with either Section 5.409.3 or 5.409.4. Alteration(s) to existing building(s) where the combined altered floor area is 50,000 square feet or greater shall comply with Section 5.409.2, 5.409.3, or 5.409.4. Addition(s) to existing building(s) where the total floor area combined with the existing building(s) is 50,000 square feet or greater shall comply with Section 5.409.2, 5.409.3, or 5.409.4.

> **Exception:** Combined addition(s) to existing building(s) of two times the area or more of the existing building(s) is not eligible to meet compliance with Section 5.409.2.

5.409.2 Reuse of existing building option. …

5.409.3 Product GWP - prescriptive option. Each product that is permanently installed and listed in Table 5.409.3 shall have a Type III environmental product declaration (EPD), either product-specific or factory-specific.

5.409.3.1 Products shall not exceed the maximum GWP value specified in Table 5.409.3.

Exception: Concrete may be considered one product category to meet compliance with this section. A weighted average of the maximum GWP for all concrete mixes installed in the project shall be less than the weighted average maximum GWP allowed per Table 5.409.3 using Exception Equation 5.409.3.1. Calculations shall be performed with consistent units of measurement for the material quantity and the GWP value. For the purposes of this exception, industry-wide EPDs are acceptable.

Exception EQUATION 5.409.3.1

…

TABLE 5.409.3
PRODUCT GWP LIMITS

Buy Clean California Materials Product Category [1]	Maximum acceptable GWP value (unfabricated) ($GWP_{allowed}$)	Unit of Measurement
Hot-rolled structural steel sections	1.77	MT CO_2e/MT
Hollow structural sections	3.00	MT CO_2e/MT
Steel plate	2.61	MT CO_2e/MT
Concrete reinforcing steel	1.56	MT CO_2e/MT
Flat glass	2.50	MT CO_2e/MT
Light-density mineral wool board insulation	5.83	kg CO_2e/1 m^2
Heavy-density mineral wool board insulation	14.28	kg CO_2e/1 m^2

Concrete, Ready-Mixed [2, 3]

Concrete Product Category	Maximum GWP allowed value ($GWP_{allowed}$)	Unit of Measurement
up to 2499 psi	450	kg CO_2e/m^3
2500-3499 psi	489	kg CO_2e/m^3
3500-4499 psi	566	kg CO_2e/m^3
4500-5499 psi	661	kg CO_2e/m^3
5500-6499 psi	701	kg CO_2e/m^3
6500 psi and greater	799	kg CO_2e/m^3

Concrete, Lightweight Ready-Mixed [2]

Concrete Product Category	Maximum GWP allowed value ($GWP_{allowed}$)	Unit of Measurement
up to 2499 psi	875	kg CO_2e/m^3
2500-3499 psi	956	kg CO_2e/m^3
3500-4499 psi	1,039	kg CO_2e/m^3

DRAFT

1. Concrete High Early Strength ready-mixed shall be calculated at 130 percent of the Ready mixed concrete GWP allowed values for each product category.

5.409.3.1 Verification of compliance. Calculations to demonstrate compliance, Type III EPDs for products required to comply, if included in the project, and Worksheet WS-5 signed by the design professional of record shall be provided on the construction documents. Updated EPDs for products used in construction shall be provided to the owner at the close of construction and to the enforcement entity upon request. The enforcing agency may require inspection and inspection reports in accordance with Sections 702.2 and 703.1 during and at completion of construction to demonstrate substantial conformance. Inspection shall be performed by the design professional of record or third party acceptable to the enforcing agency.

5.409.4 Whole building life cycle assessment – performance option. Projects shall conduct a cradle-to-grave whole building life cycle assessment performed in accordance with ISO 14040 and ISO 14044, excluding operating energy, and demonstrating a minimum 10-percent reduction in global warming potential (GWP) as compared to a reference baseline building of similar size, function, complexity, type of construction, material specification, and geographic location that meets the requirements of the *California Energy Code* currently in effect. Software used to conduct the whole building life cycle assessment, including reference baseline building, shall have a data set compliant with ISO 14044, and ISO 21930 or EN 15804, and the software shall conform to ISO 21931 and/or EN 15978. The software tools and data sets shall be the same for evaluation of both the baseline building and the proposed building.

Notes:

1. Software for calculating whole building life cycle assessment is available for free at Athena Sustainable Materials Institute (https://calculatelca.com/software/impact-estimator/) and OneClick LCA-Planetary (www.oneclicklca.com/planetary). Paid versions include, but are not limited to, Sphera GaBi Solutions (gabi.sphera.com), SimaPro (simapro.com), One-Click LCA (www.oneclicklca.com), and Tally for Revit (apps.autodesk.com).
2. ASTM E2921-22 “Standard Practice for Minimum Criteria for Comparing Whole Building Life Cycle Assessments for Use with Building Codes, Standards, and Rating Systems” may be consulted for the assessment.
3. In addition to the required documentation specified in Section 5.409.4.3, Worksheet WS-9 may be required by the enforcing entity to demonstrate compliance with the requirements.

5.409.4.1 Building components. Building enclosure components included in the assessment shall be limited to glazing assemblies, insulation, and exterior finishes. Primary and secondary structural members included in the assessment shall be limited to footings and foundations, structural columns, beams, walls, roofs, and floors.

5.409.4.2 Reference study period. The reference study period of the proposed building shall be equal to the reference baseline building and shall be 60 years.

5.409.4.3 Verification of compliance. A summary of the GWP analysis produced by the software and Worksheet WS-4 signed by the design professional of record shall be

provided in the construction documents as documentation of compliance. A copy of the whole building life cycle assessment which includes the GWP analysis produced by the software, in addition to maintenance and training information, shall be included in the operation and maintenance manual and shall be provided to the owner at the close of construction. The enforcing agency may require inspection and inspection reports in accordance with Sections 702.2 and 703.1 during and at completion of construction to demonstrate substantial conformance. Inspection shall be performed by the design professional of record or third party acceptable to the enforcing agency.

SUGGESTED TEXT OF PROPOSED AMENDMENT

SECTION 202
DEFINITIONS

…

BIOGENIC CARBON. Greenhouse gas absorbed from the atmosphere by living organisms as they grow and then released back into the atmosphere through natural processes such as decomposition, but not fossilized or derived from fossil resources.

…

EMBODIED CARBON BUDGET (ECB). An embodied carbon intensity (ECI) value used as a maximum acceptable limit for determining a project's compliance with embodied carbon reduction requirements and expressed in $kgCO_2e/m^2$.

EMBODIED CARBON INTENSITY (ECI). The total global warming potential (GWP) of a building per gross floor area and expressed in $kgCO_2e/m^2$.

…

SECTION 5.402—DEFINITIONS

5.402.1 Definitions. The following terms are defined in Chapter 2.

…

BIOGENIC CARBON.

…

EMBODIED CARBON BUDGET (ECB).

EMBODIED CARBON INTENSITY (ECI).

…

SECTION 5.409
EMBODIED CARBON REDUCTION

5.409.1 Scope.

5.409.1.1 Nonresidential buildings [BSC-CG] …

5.409.1.2 Public schools and community colleges [DSA-SS] ~~Projects consisting of newly constructed building(s) with a combined floor area of 50,000 square feet or~~

~~greater shall comply with either Section 5.409.3 or Section 5.409.4. Alteration(s) to existing building(s) where the combined altered floor area is 50,000 square feet or greater shall comply with either Section 5.409.2, 5.409.3, or 5.409.4. Addition(s) to existing building(s) where the total floor area combined with the existing building(s) is 50,000 square feet or greater shall comply with either Section 5.409.2, Section 5.409.3, or Section 5.409.4.~~ Projects with a combined new and/or altered-building floor area of 25,000 square feet or greater shall comply with one of the following:

1. Reuse of existing building option in Section 5.409.2.

2. Product GWP – prescriptive option in Section 5.409.3.

3. Whole building life cycle assessment – performance option in Section 5.409.4.

Exception: Newly constructed buildings, and c~~C~~ombined addition(s) to existing building(s) of two times the area or more of the existing building(s), are not eligible to meet compliance with Section 5.409.2.

5.409.1.2.1 Site paving. Projects with a combined new site concrete area of 5,000 square feet or greater shall comply with Section 5.409.3 for all new site concrete and reinforcing steel.

5.409.2 Reuse of existing building option. …

5.409.3 Product GWP - prescriptive option. Each product that is permanently installed and listed in Table 5.409.3 shall have a Type III environmental product declaration (EPD), either product-specific or factory-specific.

Exception: Industry-wide EPDs are acceptable for concrete.

5.409.3.1 Products shall not exceed the maximum GWP value specified in Table 5.409.3.

Exception: Concrete may be considered one product category to meet compliance with this section. A weighted average of the maximum GWP for all concrete mixes installed in the project shall be less than the weighted average maximum GWP allowed per Table 5.409.3 using Exception Equation 5.409.3.1. Calculations shall be performed with consistent units of measurement for the material quantity and the GWP value. ~~For the purposes of this exception, industry-wide EPDs are acceptable.~~

Exception EQUATION 5.409.3.1

…

TABLE 5.409.3
PRODUCT GWP LIMITS

Buy Clean California Materials Product Category	Maximum ~~acceptable~~ GWP ~~value~~ for ~~(~~unfabricated~~)~~ product (Sum of modules A1, A2, and A3) ~~(GWP allowed)~~	Maximum GWP for fabricated product (A1 module only)	Unit of Measurement
Hot-rolled structural steel sections	~~1.77~~1.26	1.35	MT CO_{2e}/MT
Hollow structural sections	~~3.00~~2.14	2.29	MT CO_{2e}/MT
Steel plate	~~2.61~~1.86	1.99	MT CO_{2e}/MT
Concrete reinforcing steel	~~1.56~~0.94	0.97	MT CO_{2e}/MT
Flat glass	~~2.50~~1.79	N/A	MT CO_{2e}/MT
Light-density mineral wool board insulation	~~5.83~~3.35	N/A	kg CO_{2e}/~~1~~ m^2 at R_{SI}=1[2]
Heavy-density mineral wool board insulation	~~14.28~~8.53	N/A	kg CO_{2e}/~~1~~ m^2 at R_{SI}=1[2]

Concrete, Ready-Mixed [1]

Concrete Product Category	Maximum GWP ~~allowed~~ value (Sum of modules A1, A2, and A3) (GWP allowed)	Unit of Measurement
up to 2499 psi	~~450~~321	kg CO_{2e}/m^3
2500-3499 psi	~~489~~349	kg CO_{2e}/m^3
3500-4499 psi	~~566~~404	kg CO_{2e}/m^3
4500-5499 psi	~~661~~472	kg CO_{2e}/m^3
5500-6499 psi	~~701~~501	kg CO_{2e}/m^3
6500 psi and greater	~~799~~571	kg CO_{2e}/m^3

Concrete, Lightweight Ready-Mixed [1]

Concrete Product Category	Maximum GWP ~~allowed~~ value (Sum of modules A1, A2, and A3) (GWP allowed)	Unit of Measurement
up to 2499 psi	~~875~~625	kg CO_{2e}/m^3
2500-3499 psi	~~956~~683	kg CO_{2e}/m^3
3500-4499 psi	~~1,039~~742	kg CO_{2e}/m^3

[1]. Concrete High Early Strength ready-mixed shall be calculated at 130 percent of the Ready mixed concrete maximum GWP ~~allowed~~ values for each product category.

[2]. RSI=1 is equivalent to R-5.68 (imperial). Conversion formula: R-value = RSI × 5.678.

5.409.3.1 Verification of compliance. Calculations to demonstrate compliance, Type III EPDs for products required to comply, if included in the project, and Worksheet WS-5 signed by the design professional of record shall be provided on the construction documents. Updated EPDs for products used in construction shall be provided to the owner at the close of construction and to the enforcement entity upon request. The enforcing agency may require inspection and inspection reports in accordance with Sections 702.2 and 703.1 during and at completion of construction to demonstrate substantial conformance. Inspection shall be performed by the design professional of record or third party acceptable to the enforcing agency.

Exception [DSA-SS]: An authority having jurisdiction may substitute an alternative form in lieu of Worksheet WS-5.

5.409.4 Whole building life cycle assessment – performance option. Projects shall conduct a cradle-to-grave whole building life cycle assessment performed in accordance with ISO 14040 and ISO 14044, excluding operating energy, and shall demonstrate compliance with Section 5.409.4.1 carbon budget method, or Section 5.409.4.2 baseline building method. [The following language is moved to Section 5.409.4.2 with minor modifications]~~,~~ ~~demonstrating a minimum 10-percent reduction in global warming potential (GWP) as compared to a reference baseline building of similar size, function, complexity, type of construction, material specification, and geographic location that meets the requirements of the *California Energy Code* currently in effect~~ Software used to conduct the whole building life cycle assessment, ~~including~~ and reference baseline building if applicable, shall have a data set compliant with ISO 14044, and ISO 21930 or EN 15804, and the software shall conform to ISO 21931 and/or EN 15978. [The following language is moved to Section 5.409.4.2]~~The software tools and data sets shall be the same for evaluation of both the baseline building and the proposed building.~~

Exception: Biogenic carbon shall be excluded from the whole building life cycle assessment calculations.

Notes:

~~1. Software for calculating whole building life cycle assessment is available for free at Athena Sustainable Materials Institute (https://calculatelca.com/software/impact-estimator/) and OneClick LCA-Planetary (www.oneclicklca.com/planetary). Paid versions include, but are not limited to, Sphera GaBi Solutions (gabi.sphera.com), SimaPro (simapro.com), One-Click LCA (www.oneclicklca.com) and Tally for Revit (apps.autodesk.com).~~

1~~2~~. ASTM E2921-22 “Standard Practice for Minimum Criteria for Comparing Whole Building Life Cycle Assessments for Use with Building Codes, Standards, and Rating Systems” may be consulted for the assessment.

2~~3~~. In addition to the required documentation specified in Section 5.409. 4.5~~3~~, Worksheet WS-9 may be required by the enforcing entity to demonstrate compliance with the requirements.

5.409.4.1 Embodied carbon budget method. Demonstrate the building's embodied carbon intensity (ECI) does not exceed the embodied carbon budget (ECB) specified in Table 5.409.4.1. The building's ECB shall be the ECB of its primary occupancy group and shall not be determined using an area-weighted average of multiple occupancies. For the purpose of this section, the primary occupancy group shall be the occupancy representing the largest percentage of floor area of the building.

5.409.4.1.1 Embodied Carbon Intensity (ECI) Calculation. To determine the Embodied Carbon Intensity (ECI), divide the building's total Global Warming Potential (GWP) by gross floor area (GFA) in square meters (m^2). Parking areas within the building's perimeter shall not be included in the calculation.

5.109.4.1.1 EQUATION:

GWP/GFA (m^2) = ECI ($kgCO_2e/m^2$)

TABLE 5.409.4.1 – EMBODIED CARBON BUDGET (ECB)

Primary Occupancy Group	Maximum ECB	Unit of Measurement
Storage (S)	480	$kgCO_2e/m^2$
Education (E)	660	$kgCO_2e/m^2$
Business (B)	660	$kgCO_2e/m^2$
Assembly (A)	750	$kgCO_2e/m^2$
Factory and Industrial (F)	750	$kgCO_2e/m^2$
Hazard (H)	750	$kgCO_2e/m^2$
Institutional (I)	750	$kgCO_2e/m^2$
Mercantile (M)	750	$kgCO_2e/m^2$
Utility and Miscellaneous (U)	750	$kgCO_2e/m^2$

[The following language is moved from Section 5.409.4 with minor modifications.]
5.409.4.2 Baseline building method. Demonstrate ~~and demonstrating~~ a minimum 10 percent reduction in global warming potential (GWP) as compared to a reference baseline building of similar size, function, complexity, type of construction, material specification, and geographic location that meets the requirements of the *California Energy Code* currently in effect. The software tools and data sets shall be the same for evaluation of both the baseline building and the proposed building.

5.409.4.~~1~~3 Building components. Building enclosure components included in the assessment shall ~~be limited to~~ include, at a minimum, glazing assemblies, insulation, and exterior finishes. Primary and secondary structural members included in the

assessment ~~shall be limited to~~ include, at a minimum, footings and foundations, structural columns, beams, walls, roofs, and floors.

5.409.4.3.1 Previously used building materials or products that have been salvaged and then reused without substantial modification of their form shall have a GWP of zero for life cycle stages A1-A3. Such materials shall be minimally processed only, such as cleaning, repairing, resurfacing and resizing.

5.409.4.2~~3~~4 Reference study period. The reference study period of the proposed building shall be equal to the reference baseline building if applicable and shall be 60 years.

5.409.4.3~~4~~5 Verification of compliance. A summary of the GWP analysis produced by the software and Worksheet WS-4 signed by the design professional of record shall be provided in the construction documents as documentation of compliance. A copy of the whole building life cycle assessment which includes the GWP analysis produced by the software, in addition to maintenance and training information, shall be included in the operation and maintenance manual and shall be provided to the owner at the close of construction. The enforcing agency may require inspection and inspection reports in accordance with Sections 702.2 and 703.1 during and at completion of construction to demonstrate substantial conformance. Inspection shall be performed by the design professional of record or third party acceptable to the enforcing agency.

Exception [DSA-SS]: An authority having jurisdiction may substitute an alternative form in lieu of Worksheet WS-4.

CODE TEXT IF ADOPTED

SECTION 202
DEFINITIONS

…

BIOGENIC CARBON. Greenhouse gas absorbed from the atmosphere by living organisms as they grow and then released back into the atmosphere through natural processes such as decomposition, but not fossilized or derived from fossil resources.

…

EMBODIED CARBON BUDGET (ECB). An embodied carbon intensity (ECI) value used as a maximum acceptable limit for determining a project's compliance with embodied carbon reduction requirements and expressed in $kgCO_2e/m^2$.

EMBODIED CARBON INTENSITY (ECI). The total global warming potential (GWP) of a building per gross floor area and expressed in $kgCO_2e/m^2$.

…

SECTION 5.402—DEFINITIONS

5.402.1 Definitions. The following terms are defined in Chapter 2.

…

BIOGENIC CARBON.

…

EMBODIED CARBON BUDGET (ECB).

EMBODIED CARBON INTENSITY (ECI).

…

SECTION 5.409
EMBODIED CARBON REDUCTION

5.409.1 Scope.

5.409.1.1 Nonresidential buildings [BSC-CG] …

5.409.1.2 Public schools and community colleges [DSA-SS] Projects with a combined new and/or altered-building floor area of 25,000 square feet or greater shall comply with one of the following:

1. Reuse of existing building option in Section 5.409.2.

2. Product GWP – prescriptive option in Section 5.409.3.

3. Whole building life cycle assessment – performance option in Section 5.409.4.

Exception: Newly constructed buildings, and combined addition(s) to existing building(s) of two times the area or more of the existing building(s), are not eligible to meet compliance with Section 5.409.2.

5.409.1.2.1 Site paving. Projects with a combined new site concrete area of 5,000 square feet or greater shall comply with Section 5.409.3 for all new site concrete and reinforcing steel.

5.409.2 Reuse of existing building option. …

5.409.3 Product GWP - prescriptive option. Each product that is permanently installed and listed in Table 5.409.3 shall have a Type III environmental product declaration (EPD), either product-specific or factory-specific.

Exception: Industry-wide EPDs are acceptable for concrete.

5.409.3.1 Products shall not exceed the maximum GWP value specified in Table 5.409.3.

Exception: Concrete may be considered one product category to meet compliance with this section. A weighted average of the maximum GWP for all concrete mixes installed in the project shall be less than the weighted average maximum GWP allowed per Table 5.409.3 using Exception Equation 5.409.3.1. Calculations shall be performed with consistent units of measurement for the material quantity and the GWP value.

Exception EQUATION 5.409.3.1

…

TABLE 5.409.3
PRODUCT GWP LIMITS

Buy Clean California Materials Product Category	Maximum GWP for unfabricated product (Sum of modules A1, A2, and A3)	Maximum GWP for fabricated product (A1 module only)	Unit of Measurement
Hot-rolled structural steel sections	1.26	1.35	MT CO_{2e}/MT
Hollow structural sections	2.14	2.29	MT CO_{2e}/MT
Steel plate	1.86	1.99	MT CO_{2e}/MT
Concrete reinforcing steel	0.94	0.97	MT CO_{2e}/MT
Flat glass	1.79	N/A	MT CO_{2e}/MT
Light-density mineral wool board insulation	3.35	N/A	kg CO_{2e}/m^2 at R_{SI}=1[2]
Heavy-density mineral wool board insulation	8.53	N/A	kg CO_{2e}/m^2 at R_{SI}=1[2]

Concrete, Ready-Mixed [1]

Concrete Product Category	Maximum GWP value (Sum of modules A1, A2, and A3) ($GWP_{allowed}$)	Unit of Measurement
up to 2499 psi	321	kg CO_{2e}/m^3
2500-3499 psi	349	kg CO_{2e}/m^3
3500-4499 psi	404	kg CO_{2e}/m^3
4500-5499 psi	472	kg CO_{2e}/m^3
5500-6499 psi	501	kg CO_{2e}/m^3
6500 psi and greater	571	kg CO_{2e}/m^3

Concrete, Lightweight Ready-Mixed [1]

Concrete Product Category	Maximum GWP value (Sum of modules A1, A2, and A3) ($GWP_{allowed}$)	Unit of Measurement
up to 2499 psi	625	kg CO_{2e}/m^3
2500-3499 psi	683	kg CO_{2e}/m^3
3500-4499 psi	742	kg CO_{2e}/m^3

[1]. Concrete High Early Strength ready-mixed shall be calculated at 130 percent of the Ready mixed concrete maximum GWP values for each product category.

DRAFT

[2]. RSI=1 is equivalent to R-5.68 (imperial). Conversion formula: R-value = RSI × 5.678.

5.409.3.1 Verification of compliance. Calculations to demonstrate compliance, Type III EPDs for products required to comply, if included in the project, and Worksheet WS-5 signed by the design professional of record shall be provided on the construction documents. Updated EPDs for products used in construction shall be provided to the owner at the close of construction and to the enforcement entity upon request. The enforcing agency may require inspection and inspection reports in accordance with Sections 702.2 and 703.1 during and at completion of construction to demonstrate substantial conformance. Inspection shall be performed by the design professional of record or third party acceptable to the enforcing agency.

Exception [DSA-SS]: An authority having jurisdiction may substitute an alternative form in lieu of Worksheet WS-5.

5.409.4 Whole building life cycle assessment – performance option. Projects shall conduct a cradle-to-grave whole building life cycle assessment performed in accordance with ISO 14040 and ISO 14044, excluding operating energy, and shall demonstrate compliance with Section 5.409.4.1 carbon budget method, or Section 5.409.4.2 baseline building method. Software used to conduct the whole building life cycle assessment, and reference baseline building if applicable, shall have a data set compliant with ISO 14044, and ISO 21930 or EN 15804, and the software shall conform to ISO 21931 and/or EN 15978.

Exception: Biogenic carbon shall be excluded from the whole building life cycle assessment calculations.

Notes:

1. ASTM E2921-22 “Standard Practice for Minimum Criteria for Comparing Whole Building Life Cycle Assessments for Use with Building Codes, Standards, and Rating Systems” may be consulted for the assessment.

2. In addition to the required documentation specified in Section 5.409. 4.5, Worksheet WS-9 may be required by the enforcing entity to demonstrate compliance with the requirements.

5.409.4.1 Embodied carbon budget method. Demonstrate the building’s embodied carbon intensity (ECI) does not exceed the embodied carbon budget (ECB) specified in Table 5.409.4.1. The building’s ECB shall be the ECB of its primary occupancy group and shall not be determined using an area-weighted average of multiple occupancies. For the purpose of this section, the primary occupancy group shall be the occupancy representing the largest percentage of floor area of the building.

5.409.4.1.1 Embodied Carbon Intensity (ECI) Calculation. To determine the Embodied Carbon Intensity (ECI), divide the building’s total Global Warming Potential (GWP) by gross floor area (GFA) in square meters (m^2). Parking areas within the building’s perimeter shall not be included in the calculation.

5.109.4.1.1 EQUATION:

GWP/GFA (m^2) = ECI ($kgCO_2e/m^2$)

TABLE 5.409.4.1 – EMBODIED CARBON BUDGET (ECB)

Primary Occupancy Group	Maximum ECB	Unit of Measurement
Storage (S)	480	$kgCO_2e/m^2$
Education (E)	660	$kgCO_2e/m^2$
Business (B)	660	$kgCO_2e/m^2$
Assembly (A)	750	$kgCO_2e/m^2$
Factory and Industrial (F)	750	$kgCO_2e/m^2$
Hazard (H)	750	$kgCO_2e/m^2$
Institutional (I)	750	$kgCO_2e/m^2$
Mercantile (M)	750	$kgCO_2e/m^2$
Utility and Miscellaneous (U)	750	$kgCO_2e/m^2$

5.409.4.2 Baseline building method. Demonstrate a minimum 10 percent reduction in global warming potential (GWP) as compared to a reference baseline building of similar size, function, complexity, type of construction, material specification, and geographic location that meets the requirements of the *California Energy Code* currently in effect. The software tools and data sets shall be the same for evaluation of both the baseline building and the proposed building.

5.409.4.3 Building components. Building enclosure components included in the assessment shall include, at a minimum, glazing assemblies, insulation, and exterior finishes. Primary and secondary structural members included in the assessment include, at a minimum, footings and foundations, structural columns, beams, walls, roofs, and floors.

5.409.4.3.1 Previously used building materials or products that have been salvaged and then reused without substantial modification of their form shall have a GWP of zero for life cycle stages A1-A3. Such materials shall be minimally processed only, such as cleaning, repairing, resurfacing and resizing.

5.409.4.4 Reference study period. The reference study period of the proposed building shall be equal to the reference baseline building if applicable and shall be 60 years.

5.409.4.5 Verification of compliance. A summary of the GWP analysis produced by the software and Worksheet WS-4 signed by the design professional of record shall be provided in the construction documents as documentation of compliance. A copy of the whole building life cycle assessment which includes the GWP analysis produced by the software, in addition to maintenance and training information, shall be included in the

operation and maintenance manual and shall be provided to the owner at the close of construction. The enforcing agency may require inspection and inspection reports in accordance with Sections 702.2 and 703.1 during and at completion of construction to demonstrate substantial conformance. Inspection shall be performed by the design professional of record or third party acceptable to the enforcing agency.

Exception [DSA-SS]: An authority having jurisdiction may substitute an alternative form in lieu of Worksheet WS-4.

STATEMENT OF REASONS

DSA proposes to reduce the compliance threshold from projects with a combined new or renovated building area of 50,000 square feet to 25,000 square feet. Building characteristics data from the Commercial Buildings Energy Consumption Survey (CBECS) was analyzed and compared the number of all new buildings in the U.S. built in 2018 by size and by floorspace. A targeted analysis reflects 13% of all buildings are greater than 25,000 sf and account for 62,355,000 sf, which is 65% of the total building floorspace. Thus, targeting buildings greater than 25,000 sf yields the greatest reduction potential via total building area with the lowest number of buildings being targeted. Additionally, the study showed that the average education building size is 31,100 sf. Reducing the threshold to 25,000 sf will capture the average education building while still alleviating the impact on smaller projects.

DSA proposes to add the requirement for projects with combined new site concrete area of 5,000 square feet or greater to comply with the GWP limits in Table 5.409.3 for consistency with the intent of 5.409.3 to target the highest GWP materials for reduction. According to the 2021 Integrated Energy Policy Report Volume I-Building Decarbonization, produced by the California Energy Commission, “In new building projects, on average, up to 50 percent of total GHG emissions, considered over a 30-year building life, are from the embodied carbon associated with the initial construction, and nearly 70 percent of that is from just six materials—concrete and steel (by far the most significant), …”

DSA is proposing to clarify that the existing exception allowing the use of industry wide EPDs for concrete applies to all concrete mixes, and not only when a weighted average is used for compliance.

DSA proposes to add the fabricated maximum GWP limits to Table 5.409.3 which correspond with the unfabricated limits listed in the Table. This information is necessary for conformance with BCCA published Table 1, and with the most common EPD values published on the market.

DSA proposes to add clarifying language to Table 5.409.3 to specify that the GWP limits for mineral wool board insulation are based on RSI 1, consistent with the BCCA limits on which these limits are established. This clarification ensures that the GWP thresholds are applied correctly and uniformly rather than interpreted as applying to any R value. To further support accurate application of the table, DSA also proposes adding a footnote explaining how RSI values translate to R values, providing a straightforward reference for users applying the insulation criteria in practice.

DSA proposes to add an exception within the verification of compliance provisions to allow the authority having jurisdiction to use its own compliance verification form in place of the CALGreen worksheets. This ensures that documentation used for plan review aligns with DSAs established procedures and avoids duplicative or unused forms. In addition, DSA proposes to unadopt the CALGreen worksheets related to embodied carbon, as these worksheets are not utilized by projects under the authority of DSA.

DSA proposes to amend Life Cycle Assessment – performance option Section 5.409.4 to allow a carbon budget as a secondary option to the baseline building model. The carbon budget was proposed by the AIA sponsored stakeholder group Carbon Leadership Forum.

DSA proposes to add a definition for biogenic carbon and an exception to Section 5.409.4 to clarify what biogenic carbon is and that it shall not be included in the total GWP of a building's construction as compared to the established carbon budgets.

DSA proposes to remove nonregulatory Note 1 under Section 5.409.4, which lists examples of life cycle assessment software available on the market. Although intended as informational, the presence of this note may inadvertently suggest that DSA has evaluated, endorsed, or validated the listed software for demonstrating compliance with CALGreen requirements.

DSA proposes to revise the language in Section 5.409.4.3 Building Components to clarify that the components identified in this section should include, at minimum, the listed components rather than be limited to them.

DSA proposes to add an exception for salvaged building components to Section 5.409.4 to encourage the reuse of building materials and clarify that they do not contribute to the total GWP of a building's construction because their embodied carbon has already been accounted for in the original product life cycle and is not newly introduced into the project.

DSA proposes to reduce maximum GWP levels in the Product GWP Limits Table 5.409.3 to 125% of BCCA 2025 levels and NRMCA 2022 Benchmark levels to achieve California's decarbonization goals, as required by executive orders and legislation.

Executive Orders, Legislation and State Agency reports (background taken from the 2022 Intervening Code Cycle):

California law has established many climate action objectives, the rationale behind them, and assessment and management frameworks which taken together, mandate rapid and wide-ranging building sector decarbonization. Citations that follow are examples that broadly support the actions being proposed in this regulatory proposal.

Assembly Bill 32 (Nunez, Chapter 488, Statutes of 2006) known as the California Global Solutions Act requires California to reduce GHG emissions to 1990 levels by 2022. AB 32 also requires the California Air Resources Board (CARB) to develop a Scoping Plan to achieve carbon neutrality. Senate Bill 32 (Pavely, Chapter 249, Statutes of 2016) enhanced the statewide greenhouse gas emissions reduction to 40 percent below the 1990 level by 2030. CARB's May 10, 2022 draft 2022 Scoping Plan Update states the plan will "…assess progress towards achieving the Senate Bill 322030 target and lay out a path to achieve carbon neutrality no later than 2045. The 2022 Scoping Plan Update focuses on

outcomes needed to achieve carbon neutrality by assessing paths for clean technology, energy deployment, natural and working lands, and others, and is designed to meet the State's long-term climate objectives and support a range of economic, environmental, energy security, environmental justice, and public health priorities. The 2022 Scoping Plan Appendix F Building Decarbonization, acknowledges that as decarbonized buildings use less operational energy, addressing building materials and methods of construction lifecycle emissions becomes important. Therefore, reducing embodied carbon associated with building materials becomes increasingly important to address. Embodied carbon of buildings—referring to GHG emissions from extracting and manufacturing building materials—contributes at least 11 percent of all energy-related emissions annually world-wide. Studies may underestimate embodied carbon; a full life-cycle emissions assessment would include transportation and disposal of building materials. Embodied carbon can be reduced through cost-effective management practices including the optimal use of building materials with high-recycled or low-carbon products."

Senate Bill 1389 (Bowen, Chapter 568, Statutes of 2002) requires the California Energy Commission to, [C]onduct assessments and forecasts of all aspects of energy industry supply, production, transportation, delivery and distribution, demand, and prices. The Energy Commission shall use these assessments and forecasts to develop energy policies that conserve resources, protect the environment, ensure energy reliability, enhance the state's economy, and protect public health and safety." (Pub. Res. Code § 25301(a)). The 2021 Integrated Energy Policy Report (IEPR) provides information and policy recommendations on advancing a clean, reliable, and affordable energy system for all Californians. The 2021 Integrated Energy Policy Report Volume I-Building Decarbonization includes discussions about Embodied Carbon in building materials and the need for changes in CALGreen to address low-carbon design and construction criteria. https://www.energy.ca.gov/data-reports/reports/integrated-energy-policy-report/2022-integrated-energy-policy-report-update.

Assembly Bill 262 (Bonta, Chapter 816, Statutes of 2017) According to the Department of General Service's (DGS) Legislative Reports (ca.gov) "The BCCA was introduced as Assembly Bill (AB) 262 (Bonta, Chapter 816, Statutes of 2017). It addressed the greenhouse gases associated with the production of construction products used in California state public works projects. According to the author, the bill was meant to "level the playing field" and benefit those manufacturers who have made a conscious effort to lower greenhouse gas emissions in the production of materials. The bill was signed into law by Governor Edmund G. Brown Jr. on October 15, 2017. The BCCA was subsequently amended by AB 1817 (Ting, Chapter 37, Statutes of 2018) and AB 137 (Ting, Chapter 77, Statutes of 2021).

The BCCA targets carbon emissions associated with the manufacturing of structural steel, concrete reinforcing steel, flat glass, and mineral wool board insulation. State agencies that award contracts ("awarding authorities") are responsible for ensuring that these materials, when used in public works projects, do not have a GWP [global warming potential] that exceeds the limit set by DGS. The document used to establish the GWP limit (and ultimately determine compliance) is the EPD [environmental product declaration]."

Assembly Bill 2446 (Holden, Chapter 352, Statures of 2022) requires State Air Resources Board, by July 1, 2025, to develop, in consultation with specified stakeholders, a

framework for measuring and then reducing the average carbon intensity of the materials used in the construction of new buildings, including those for residential uses. The Legislative intent recognizes that in recent years, building decarbonization has become a growing priority for the state. As a result, the State Air Resources Board and State Energy Resources Conservation and Development Commission may include building decarbonization in future updates to the Scoping Plan and Integrated Energy Policy Report. The California Energy Code, Part 6 of Title 24, address energy and water efficiency requirements for the operation of newly constructed buildings, additions to existing buildings, and alterations to existing buildings. However, those standards do not address the construction phase of buildings, or the broader lifecycle impacts beyond direct energy and water inputs during the operation or use phase of the building.

Senate Bill 27 (Skinner, 2021) requires the California Natural Resources Agency (CNRA) is to create a Carbon Sequestration and Climate Resiliency Project Registry. The Registry is intended to facilitate funding of nature-based and direct air capture projects that deliver on California's climate goals.

Senate Bill 596 (Becker, Chapter 246 of the Statutes of 2021) established the intent of the Legislature that attaining net-zero or net-negative emissions of greenhouse gases from the cement and concrete sector become a pillar of the state's strategy for achieving carbon neutrality and develop a comprehensive strategy for the state's cement sector to achieve net zero-emissions of greenhouse gases used within the state as soon as possible, but no later than December 31, 2045.

Executive Order B-55-18, ordered a statewide goal to achieve carbon neutrality as soon as possible, but no later than 2045, and achieve and maintain net negative emissions thereafter.

Letter from the Office of the Governor to Chair of the California Air Resources Board July 22, 2022, "California is in the midst of a climate crisis. Drought, wildfire, and extreme heat have become everyday realities. We are compelled to do more… Buildings are a large source of carbon pollution, and decarbonization of California's buildings must be accelerated to achieve our climate targets."

DSA COMMENTS

Portions of these amendments are being co-adopted with BSC as indicated by agency banners.

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DSA CODE AMENDMENT DEVELOPMENT

TRACKING

DSA Tracking Number:

Date Reviewed: October 16, 2026

Status: Draft

APPLICABLE CODE

Applicable Code Section(s): Part 11 CALGreen, Chapter 5 Nonresidential Mandatory Measures

Topic: 5.504.4 Finish material pollutant control

CURRENT CODE LANGUAGE

5.504.4 Finish material pollutant control. Finish materials shall comply with Sections 5.504.4.1 through 5.504.4.6.

5.504.4.1 Adhesives, sealants and caulks. Adhesives, sealants and caulks used on the project shall meet the requirements of the following standards:

1. Adhesives, adhesive bonding primers, adhesive primers, sealants, sealant primers and caulks shall comply with local or regional air pollution control or air quality management district rules where applicable, or SCAQMD Rule 1168 VOC limits, as shown in Tables 5.504.4.1 and 5.504.4.2. Such products also shall comply with the Rule 1168 prohibition on the use of certain toxic compounds (chloroform, ethylene dichloride, methylene chloride, perchloroethylene and trichloroethylene), except for aerosol products as specified in subsection standard 2, below.

2. Aerosol adhesives, and smaller unit sizes of adhesives, and sealant or caulking compounds (in units of product, less packaging, which do not weigh more than one pound and do not consist of more than 16 fluid ounces) shall comply with statewide VOC standards and other requirements, including prohibitions on use of certain toxic compounds, of *California Code of Regulations*, Title 17, commencing with Section 94507.

TABLE 5.504.4.1—ADHESIVE VOC LIMIT[1,2]—Less Water and Less Exempt Compounds in Grams Per Liter

ARCHITECTURAL APPLICATIONS	CURRENT VOC LIMIT
…	…
Wood flooring adhesive	100

…	…
SPECIALTY APPLICATIONS	
PVC welding	510
CPVC welding	490
…	…
SUBSTRATE SPECIFIC APPLICATIONS	
Metal to metal	30
…	…

1. If an adhesive is used to bond dissimilar substrates together the adhesive with the highest VOC content shall be allowed.
2. For additional information regarding methods to measure the VOC content specified in this table, see South Coast Air Quality Management District Rule 1168, http://www.arb.ca.gov/DRDB/SC/CURHTML/R1168.PDF.

TABLE 5.504.4.2—SEALANT VOC LIMIT—Less Water and Less Exempt Compounds in Grams per Liter

SEALANTS	CURRENT VOC LIMIT
…	…
SEALANT PRIMERS	
…	…

Note: For additional information regarding methods to measure the VOC content specified in these tables, see South Coast Air Quality Management District Rule 1168.

5.504.4.3 Paints and coatings. Architectural paints and coatings shall comply with VOC limits in Table 1 of the ARB Architectural Coatings Suggested Control Measure, as shown in Table 5.504.4.3, unless more stringent local limits apply. The VOC content limit for coatings that do not meet the definitions for the specialty coatings categories listed in Table 5.504.4.3 shall be determined by classifying the coating as a Flat, Nonflat or Nonflat-High Gloss coating, based on its gloss, as defined in Subsections 4.21, 4.36 and 4.37 of the 2007 California Air Resources Board Suggested Control Measure, and the corresponding Flat, Nonflat or Nonflat-High Gloss VOC limit in Table 5.504.4.3 shall apply.

TABLE 5.504.4.3—VOC CONTENT LIMITS FOR ARCHITECTURAL COATINGS[2, 3] Grams of VOC per Liter of Coating, Less Water and Less Exempt Compounds

COATING CATEGORY	CURRENT LIMIT
…	…
Nonflat coatings	100
…	…
SPECIALTY COATINGS	

Aluminum roof coatings	400
…	…
…	…
Dry fog coatings	150
…	...
Fire resistive coatings	350
Floor coatings	100
Form-release compounds	250
…	…
Shellacs: Clear Opaque	 730 550
…	…
Stains	250
…	…
Waterproofing membranes	250
…	…

1. Grams of VOC per liter of coating, including water and including exempt compounds.
2. The specified limits remain in effect unless revised limits are listed in subsequent columns in the table.
3. Values in this table are derived from those specified by the California Air Resources Board, Architectural Coatings Suggested Control Measure, February 1, 2008. More information is available from the Air Resources Board.

5.504.4.3.1 Aerosol paints and coatings. Aerosol paints and coatings shall meet the PWMIR Limits for ROC in Section 94522(a)(3) and other requirements, including prohibitions on use of certain toxic compounds and ozone depleting substances, in Sections 94522(c)(2) and (d)(2) of *California Code of Regulations,* Title 17, commencing with Section 94520; and in areas under the jurisdiction of the Bay Area Air Quality Management District additionally comply with the percent VOC by weight of product limits of Regulation 8 Rule 49.

5.504.4.3.2 Verification. …

SUGGESTED TEXT OF PROPOSED AMENDMENT

5.504.4 Finish material pollutant control. Finish materials shall comply with Sections 5.504.4.1 through 5.504.4.6.

5.504.4.1 Adhesives, sealants and caulks. Adhesives, sealants and caulks used on the project shall meet the requirements of the following standards:

1. Adhesives, adhesive bonding primers, adhesive primers, sealants, sealant primers and caulks shall comply with ~~local or regional air pollution control or air quality management district rules where applicable, or SCAQMD Rule 1168 VOC limits, as shown in~~ Tables ~~5.504.4.1 and 5.504.4.2~~ 5.504.4.1(1) and 5.504.4.1(2). ~~Such products also shall comply with the Rule 1168 prohibition on the use of certain toxic compounds (chloroform, ethylene dichloride, methylene chloride, perchloroethylene and trichloroethylene), except for aerosol products as specified in subsection standard 2, below.~~

2. Aerosol adhesives, and smaller unit sizes of adhesives, and sealant or caulking compounds (in units of product, less packaging, which do not weigh more than one pound and do not consist of more than 16 fluid ounces) shall comply with statewide VOC standards and other requirements, including prohibitions on use of certain toxic compounds, of *California Code of Regulations*, Title 17, commencing with Section 94507.

TABLE 5.504.4.1(1)—ADHESIVE VOC LIMIT[1,2]—Less Water and Less Exempt Compounds in Grams Per Liter

ARCHITECTURAL APPLICATIONS	CURRENT VOC LIMIT
…	…
Wood flooring adhesive	~~100~~ 20
…	…
SPECIALTY APPLICATIONS	
PVC welding	~~510~~ 425
CPVC welding	~~490~~ 400
…	…
SUBSTRATE SPECIFIC APPLICATIONS	
Metal ~~to metal~~	30
…	…

1. If an adhesive is used to bond dissimilar substrates together the adhesive with the highest VOC content shall be allowed.
2. ~~For additional information regarding methods to measure the VOC content specified in this table, see~~ Values established in this table are based on South Coast Air Quality Management District (SCAQMD) Rule 1168~~,~~ ~~http://www.arb.ca.gov/DRDB/SC/CURHTML/R1168.PDF~~ (Amended November 4, 2022). Any subsequent amendments to the referenced document do not apply to this table.

TABLE 5.504.4.2~~1~~(2)—SEALANT VOC LIMIT[1]—Less Water and Less Exempt Compounds in Grams per Liter

SEALANTS	CURRENT VOC LIMIT
…	…

SEALANT PRIMERS	
…	…

1. Values established in this table are based on South Coast Air Quality Management District (SCAQMD) Rule 1168 (Amended November 4, 2022). Any subsequent amendments to the referenced document do not apply to this table.

~~Note: For additional information regarding methods to measure the VOC content specified in these tables, see South Coast Air Quality Management District Rule 1168.~~

5.504.4.2 Reserved.

5.504.4.3 Paints and coatings. Architectural paints and coatings shall comply with VOC limits in Table 1 of the ARB Architectural Coatings Suggested Control Measure, as shown in Table 5.504.4.3, unless more stringent local limits apply. The VOC content limit for coatings that do not meet the definitions for the specialty coatings categories listed in Table 5.504.4.3 shall be determined by classifying the coating as a Flat~~,~~ and Nonflat ~~or Nonflat-High Gloss coating~~, based on its gloss, as defined in Subsections ~~4.21, 4.36 and 4.37~~ 4.23 and 4.39 of the~~ 2007~~ May 2020 California Air Resources Board Suggested Control Measure, and the corresponding Flat, and Nonflat ~~or Nonflat-High Gloss~~ VOC limit in Table 5.504.4.3 shall apply.

TABLE 5.504.4.3—VOC CONTENT LIMITS FOR ARCHITECTURAL COATINGS[2, 3] Grams of VOC per Liter of Coating, Less Water and Less Exempt Compounds

COATING CATEGORY	CURRENT LIMIT
…	…
Nonflat coatings	~~100~~ 50
…	…
SPECIALTY COATINGS	
Aluminum roof coatings	~~400~~ 100
…	…
Building Envelope Coatings	50
…	…
Dry fog coatings	~~150~~ 50
…	...
Fire resistive coatings	~~350~~ 150
Floor coatings	~~100~~ 50
Form-release compounds	~~250~~ 100
…	…
Shellacs: Clear Opaque	 730 550
…	…
Stains:	

Exterior/dual Interior	~~250~~ 100 250
…	…
Waterproofing membranes	~~250~~ 100
…	…

1. Grams of VOC per liter of coating, including water and including exempt compounds.
2. The specified limits remain in effect unless revised limits are listed in subsequent columns in the table.
3. Values in this table are derived from those specified by the California Air Resources Board, Architectural Coatings Suggested Control Measure, ~~February 1, 2008~~ May 2020. More information is available from the Air Resources Board.

5.504.4.3.1 Aerosol paints and coatings. Aerosol paints and coatings shall meet the Product-Weighted Maximum Incremental Reactivity (PWMIR) ~~Limits~~ for ~~ROC~~ Reactivity limits (RL) in Section 94522(a)~~(3)~~ and other requirements, including prohibitions on use of certain toxic compounds and ozone depleting substances, in Sections ~~94522(c)(2)~~ 94522(d)(2) and ~~(d)(2)~~ 94522(e)(2) of *California Code of Regulations,* Title 17, commencing with Section 94520.~~; and in areas~~ Areas under the jurisdiction of the Bay Area Air Quality Management District shall ~~additionally~~ comply with the percent VOC by weight of product limits of Regulation 8 Rule 49.

5.504.4.3.2 Verification. …

CODE TEXT IF ADOPTED

5.504.4 Finish material pollutant control. Finish materials shall comply with Sections 5.504.4.1 through 5.504.4.6.

5.504.4.1 Adhesives, sealants and caulks. Adhesives, sealants and caulks used on the project shall meet the requirements of the following standards:

1. Adhesives, adhesive bonding primers, adhesive primers, sealants, sealant primers and caulks shall comply with Tables 5.504.4.1(1) and 5.504.4.1(2).

2. Aerosol adhesives, and smaller unit sizes of adhesives, and sealant or caulking compounds (in units of product, less packaging, which do not weigh more than one pound and do not consist of more than 16 fluid ounces) shall comply with statewide VOC standards and other requirements, including prohibitions on use of certain toxic compounds, of *California Code of Regulations*, Title 17, commencing with Section 94507.

TABLE 5.504.4.1(1)—ADHESIVE VOC LIMIT[1,2]—Less Water and Less Exempt Compounds in Grams Per Liter

ARCHITECTURAL APPLICATIONS	CURRENT VOC LIMIT
…	…

Wood flooring adhesive	20
…	…
SPECIALTY APPLICATIONS	
PVC welding	425
CPVC welding	400
…	…
SUBSTRATE SPECIFIC APPLICATIONS	
Metal ~~to metal~~	30
…	…

1. If an adhesive is used to bond dissimilar substrates together the adhesive with the highest VOC content shall be allowed.
2. Values established in this table are based on South Coast Air Quality Management District (SCAQMD) Rule 1168 (Amended November 4, 2022). Any subsequent amendments to the referenced document do not apply to this table.

TABLE 5.504.4.~~2~~1(2)—SEALANT VOC LIMIT[1]—Less Water and Less Exempt Compounds in Grams per Liter

SEALANTS	CURRENT VOC LIMIT
…	…
SEALANT PRIMERS	
…	…

1. Values established in this table are based on South Coast Air Quality Management District (SCAQMD) Rule 1168 (Amended November 4, 2022). Any subsequent amendments to the referenced document do not apply to this table.

5.504.4.2 Reserved.

5.504.4.3 Paints and coatings. Architectural paints and coatings shall comply with VOC limits in Table 1 of the ARB Architectural Coatings Suggested Control Measure, as shown in Table 5.504.4.3, unless more stringent local limits apply. The VOC content limit for coatings that do not meet the definitions for the specialty coatings categories listed in Table 5.504.4.3 shall be determined by classifying the coating as a Flat and Nonflat, based on its gloss, as defined in Subsections 4.23 and 4.39 of the May 2020 California Air Resources Board Suggested Control Measure, and the corresponding Flat, and Nonflat VOC limit in Table 5.504.4.3 shall apply.

TABLE 5.504.4.3—VOC CONTENT LIMITS FOR ARCHITECTURAL COATINGS[2, 3] Grams of VOC per Liter of Coating, Less Water and Less Exempt Compounds

COATING CATEGORY	CURRENT LIMIT
…	…
Nonflat coatings	50

…	…
SPECIALTY COATINGS	
Aluminum roof coatings	100
…	…
Building Envelope Coatings	50
…	…
Dry fog coatings	50
…	...
Fire resistive coatings	150
Floor coatings	50
Form-release compounds	100
…	…
Shellacs: Clear Opaque	 730 550
…	…
Stains: Exterior/dual Interior	 100 250
…	…
Waterproofing membranes	100
…	…

1. Grams of VOC per liter of coating, including water and including exempt compounds.
2. The specified limits remain in effect unless revised limits are listed in subsequent columns in the table.
3. Values in this table are derived from those specified by the California Air Resources Board, Architectural Coatings Suggested Control Measure, May 2020. More information is available from the Air Resources Board.

5.504.4.3.1 Aerosol paints and coatings. Aerosol paints and coatings shall meet the Product-Weighted Maximum Incremental Reactivity (PWMIR) for Reactivity limits (RL) in Section 94522(a) and other requirements, including prohibitions on use of certain toxic compounds and ozone depleting substances, in Sections 94522(d)(2) and 94522(e)(2) of *California Code of Regulations,* Title 17, commencing with Section 94520. Areas under the jurisdiction of the Bay Area Air Quality Management District shall comply with the percent VOC by weight of product limits of Regulation 8 Rule 49.

5.504.4.3.2 Verification. …

STATEMENT OF REASONS

DSA is proposing to amend the VOC content limits tables for adhesives, sealants and architectural coatings to align with the current limits of the SCAQMD Rule 1168, which the table values are based on.

This proposal is co-adopted with BSC.

DSA COMMENTS

This item is related to Items X and X.

DSA CODE AMENDMENT DEVELOPMENT

TRACKING

DSA Tracking Number:

Date Reviewed: October 16, 2026

Status: Draft

APPLICABLE CODE

Applicable Code Section(s): Part 11 CalGreen, Chapter 5 Nonresidential Mandatory Measures, Section 5.504.5 Filters

Topic: Repeal Duplicative Filters Section

CURRENT CODE LANGUAGE

5.504.5 Filters. In mechanically ventilated buildings, provide regularly occupied areas of the building with air filtration media for outside and return air that provides at least a Minimum Efficiency Reporting Value (MERV) of 13. MERV 13 filters shall be installed prior to occupancy, and recommendations for maintenance with filters of the same value shall be included in the operation and maintenance manual.

Exception: Existing mechanical equipment.

5.504.5.1 Labeling. Installed filters shall be clearly labeled by the manufacturer indicating the MERV rating.

SUGGESTED TEXT OF PROPOSED AMENDMENT

5.504.5 Filters. **[BSC-CG]** In mechanically ventilated buildings, provide regularly occupied areas of the building with air filtration media for outside and return air that provides at least a Minimum Efficiency Reporting Value (MERV) of 13. MERV 13 filters shall be installed prior to occupancy, and recommendations for maintenance with filters of the same value shall be included in the operation and maintenance manual.

Exception: Existing mechanical equipment.

5.504.5.1 Labeling. Installed filters shall be clearly labeled by the manufacturer indicating the MERV rating.

CODE TEXT IF ADOPTED

5.504.5 5.504.5 Filters. [BSC-CG] In mechanically ventilated buildings, provide regularly occupied areas of the building with air filtration media for outside and return air that provides at

least a Minimum Efficiency Reporting Value (MERV) of 13. MERV 13 filters shall be installed prior to occupancy, and recommendations for maintenance with filters of the same value shall be included in the operation and maintenance manual.

Exception: Existing mechanical equipment.

5.504.5.1 Labeling. Installed filters shall be clearly labeled by the manufacturer indicating the MERV rating.

STATEMENT OF REASONS

DSA proposes to repeal existing language in section 5.504.5. regarding filters in mechanically ventilated buildings including MERV 13 requirements. These requirements are duplicative with Title 24, Part 6 Energy Code Section 120.1(c) as well as Title 24, Part 4 California Mechanical Code Section 401.3 and repealing these requirements from CalGREEN will simplify design consideration for stakeholders and consolidate them to ensure contradictory language does not occur.

DSA COMMENTS

DSA CODE AMENDMENT DEVELOPMENT

TRACKING

DSA Tracking Number:

Date Reviewed: October 16, 2026

Status: Draft

APPLICABLE CODE

Applicable Code Section(s): Part 11 CalGreen, Chapter 5 Nonresidential Mandatory Measures, Section 5.508 Outdoor Air Quality

Topic: Clarifying CO2 sensor requirements.

CURRENT CODE LANGUAGE

5.506.3 Carbon dioxide (CO_2) monitoring in classrooms.

[DSA-SS] …

[BSC-CG] …

[DSA-SS, BSC-CG] The carbon dioxide monitor or sensor shall meet the following requirements:

1. The monitor or sensor shall be permanently affixed in a tamper-proof manner in each classroom between 3 and 6 feet (914 mm and 1829 mm) above the floor and at least 5 feet (1524 mm) away from doors and operable windows.

2. When the monitor or sensor is not integral to an Energy Management Control System (EMCS), the monitor or sensor shall display the carbon dioxide readings on the device. When the sensor is integral to an EMCS, the carbon dioxide readings shall be available to and regularly monitored by facility personnel.

3. A monitor shall provide notification through a visual indicator on the monitor when the carbon dioxide levels in the classroom exceed 1,100 ppm. A sensor integral to an EMCS shall provide notification to facility personnel through a visual and/or

audible indicator when the carbon dioxide levels in the classroom exceed 1,100 ppm.
4. The monitor or EMCS devices used to measure carbon dioxide levels shall maintain a record of previous data that includes at least the maximum carbon dioxide concentration measured.

5. The monitor or sensor used to measure carbon dioxide levels shall have the capacity to measure carbon dioxide levels with a range of 400 ppm to 2000 ppm or greater.

6. The monitor or sensor shall be certified by the manufacturer to be accurate within 75 ppm at 1,000 ppm carbon dioxide concentration and shall be certified by the manufacturer to require calibration no more frequently than once every 5 years.

SUGGESTED TEXT OF PROPOSED AMENDMENT

5.506.3 Carbon dioxide (CO_2) monitoring in classrooms.

[DSA-SS] …

[BSC-CG] …

[DSA-SS, BSC-CG] The carbon dioxide monitor or sensor shall meet the following requirements:

1. The monitor or sensor shall continuously display the carbon dioxide reading and be permanently affixed in a tamper-proof manner in each classroom between 3 and 6 feet (914 mm and 1829 mm) above the floor and at least 5 feet (1524 mm) away from doors and operable windows.

~~2. When the monitor or sensor is not integral to an Energy Management Control System (EMCS), the monitor or sensor shall display the carbon dioxide readings on the device. When the sensor is integral to an EMCS, or the carbon dioxide readings shall be available to and regularly monitored by facility personnel.~~

~~3~~2. ~~A~~The monitor or sensor shall provide notification through a visual indicator ~~on the monitor~~ in the space it serves when the carbon dioxide levels in the classroom exceed 1,100 ppm and. ~~A sensor integral to an EMCS shall provide notification to facility personnel through a visual and/or audible indicator when the carbon dioxide levels in the classroom exceed 1,100 ppm.~~

~~4. The monitor or EMCS devices used to measure carbon dioxide levels shall~~ maintain a record of previous data that includes at least the maximum carbon dioxide concentration measured.

~~5 The monitor or sensor used to measure carbon dioxide levels shall have the capacity to measure carbon dioxide levels with a range of 400 ppm to 2000 ppm or greater.~~3. The monitor or sensor shall be certified by the manufacturer to be accurate within 75 ppm at 1,000 ppm, require calibration no more frequently than once every five years, and have the capacity to measure carbon dioxide levels with a range of 400 ppm to 2000 ppm or greater.

~~6~~3. ~~The monitor or sensor shall be certified by the manufacturer to be accurate within 75 ppm at 1,000 ppm carbon dioxide concentration and shall be certified by the manufacturer to require calibration no more frequently than once every 5 years.~~

CODE TEXT IF ADOPTED

5.506.3 Carbon dioxide (CO_2) monitoring in classrooms.

[DSA-SS] …

[BSC-CG] …

[DSA-SS, BSC-CG] The carbon dioxide monitor or sensor shall meet the following requirements:

1. The monitor or sensor shall continuously display the carbon dioxide reading and be permanently affixed in a tamper-proof manner in each classroom between 3 and 6 feet (914 mm and 1829 mm) above the floor and at least 5 feet (1524 mm) away from doors and operable windows.

2. The monitor or sensor shall provide notification through a visual indicator in the space it serves when the carbon dioxide levels in the classroom exceed 1,100 ppm and maintain a record of previous data that includes at least the maximum carbon dioxide concentration measured.

3. The monitor or sensor shall be certified by the manufacturer to be accurate within 75 ppm at 1,000 ppm, require calibration no more frequently than once every five years, and have the capacity to measure carbon dioxide levels with a range of 400 ppm to 2000 ppm or greater.

STATEMENT OF REASONS

DSA proposes to revise section 5.506.3 to clarify CO_2 monitoring requirements. Current CO_2 monitoring requirements have been difficult for code users to meet with few manufacturers making products capable of meeting them. Additionally, the code language beyond the intent of producing a local alarm to notify occupants when CO_2 levels exceed safe levels. DSA proposes these changes to simplify the requirements to make them more achievable, better match them with similar code language for when a CO_2 sensor is required by the *California Energy Code*, and realign them with the original intent of this code section and CalSHAPE.

DSA COMMENTS

DSA CODE AMENDMENT DEVELOPMENT

TRACKING

DSA Tracking Number:

Date Reviewed: October 16, 2026

Status: Draft

APPLICABLE CODE

Applicable Code Section(s): Part 11 CalGreen, Chapter 5 Nonresidential Mandatory Measures

Topic: Require Cool Roof materials for all school buildings

CURRENT CODE LANGUAGE

5.106.11 Reserved.

SUGGESTED TEXT OF PROPOSED AMENDMENT

5.106.11 ~~Reserved~~Cool roof. [DSA-SS] Roofing products shall meet the requirements of Section 5.106.11.1.

5.106.11.1 Nonresidential buildings with low-sloped roofs. Nonresidential buildings with low-sloped roofs in climate zones 1 through 16 shall have a minimum aged solar reflectance of 0.63 and a minimum thermal emittance of 0.75 or a minimum solar reflectance index (SRI) of 75. Exceptions to these requirements in the *California Energy Code* shall not apply to schools and community colleges.

Exceptions:

1. Wood-framed roofs in climate zones 3 and 5 if the roof assembly has a U-factor of 0.034 or lower are not required to comply with Section 5.106.11.1.

2. Roof constructions with a weight of at least 25 lb/ft^2 over the roof membrane are not required to comply with Section 5.106.11.1.

3. Roofs greater than 70% covered by building integrated photovoltaic panels, building integrated solar thermal panels, or occupiable roof areas are not required to meet the minimum requirements for solar reflectance, thermal emittance, or SRI per Section 5.106.11.1.

CODE TEXT IF ADOPTED

5.106.11 Cool roof. [DSA-SS] Roofing products shall meet the requirements of Section 5.106.11.1.

5.106.11.1 Nonresidential buildings with low-sloped roofs. Nonresidential buildings with low-sloped roofs in climate zones 1 through 16 shall have a minimum aged solar reflectance of 0.63 and a minimum thermal emittance of 0.75 or a minimum solar reflectance index (SRI) of 75. Exceptions to these requirements in the *California Energy Code* shall not apply to schools and community colleges.

Exceptions:

1. Wood-framed roofs in climate zones 3 and 5 if the roof assembly has a U-factor of 0.034 or lower are not required to comply with Section 5.106.11.1.

2. Roof constructions with a weight of at least 25 lb/ft^2 over the roof membrane are not required to comply with Section 5.106.11.1.

3. Roofs greater than 70% covered by building integrated photovoltaic panels, building integrated solar thermal panels, or occupiable roof areas are not required to meet the minimum requirements for solar reflectance, thermal emittance, or SRI per Section 5.106.11.1.

STATEMENT OF REASONS

DSA proposes to add verbiage to section 5.106.11 requiring all school buildings to be built with cool roof materials in order to reduce the urban heat island effect. Cool roofs been shown to reduce the urban heat island effect by 1.5-2 degrees Celsius and achieve 10-40% energy savings over the lifecycle of the building depending on exact climatic conditions (Kolokotroni *et al., 2013*). Additionally, a 2015 CalEPA study titled “Creating and Mapping an Urban Heat Island Index for California” identified cool roofs as a level 4 mitigation measure against urban heat island effect. Having cool roof be a mandatory measure will contribute to resiliency as climate change progresses and has been shown to reduce peak cooling demand in buildings, which will decrease load on the power grid as the seasons become more intense and electricity demand continues to increase (Bamdad, 2023).

DSA COMMENTS

DSA CODE AMENDMENT DEVELOPMENT

TRACKING

DSA Tracking Number:

Date Reviewed: October 16, 2026

Status: Draft

APPLICABLE CODE

Applicable Code Section(s): Part 11 CalGreen, Chapter 5 Nonresidential Mandatory Measures, Section 5.508 OUTDOOR AIR QUALITY

Topic: CFC's and Halons Language Repeal

CURRENT CODE LANGUAGE

5.508.1 Ozone depletion and greenhouse gas reductions. Installations of HVAC, refrigeration and fire suppression equipment shall comply with Sections 5.508.1.1 and 5.508.1.2.

5.508.1.1 Chlorofluorocarbons (CFCs). Install HVAC, refrigeration and fire suppression equipment that do not contain CFCs.

5.508.1.2 Halons. Install HVAC, refrigeration and fire suppression equipment that do not contain Halons.

SUGGESTED TEXT OF PROPOSED AMENDMENT

5.508.1 Reserved. ~~**Ozone depletion and greenhouse gas reductions.** Installations of HVAC, refrigeration and fire suppression equipment shall comply with Sections 5.508.1.1 and 5.508.1.2.~~

~~**5.508.1.1 Chlorofluorocarbons (CFCs).** Install HVAC, refrigeration and fire suppression equipment that do not contain CFCs.~~

~~**5.508.1.2 Halons.** Install HVAC, refrigeration and fire suppression equipment that do not contain Halons.~~

CODE TEXT IF ADOPTED

5.508.1 Reserved.

STATEMENT OF REASONS

DSA proposes to repeal existing language in Section 5.508.1 and replace with a reserved designation, as the Federal Government already outlaws the use of CFC's and Halons.

BSC-CG is proposing to repeal Section 5.508.1 and its contents and to add the word Reserved the section numbering.

BSC-CG coordinated with the California Air Resources Board to determine the relevancy and application of Section 5.508.1 regarding the installation of HVAC and refrigeration equipment that do not contain Chlorofluorocarbons (CFCs) and Halons.

Based on information from ARB staff, CFC and halon system for new installations have been prohibited for a few decades. While there are still a small number of existing CFC/halon systems in operation that may allow recycled CFC's, they do not affect the requirements in Section 5.508.1 for new installations.

Repealing this existing code section will provide clarity for the code user by repealing vague, ambiguous and unnecessary code language.

DSA COMMENTS