APPROVED BY THE CALIFORNIA BUILDING STANDARDS COMMISSION
December 17, 2024

# FINAL EXPRESS TERMSFOR PROPOSED BUILDING STANDARDSOF THE CALIFORNIA BUILDING STANDARDS COMMISSIONREGARDING THE 2025 CALIFORNIA GREEN BUILDING STANDARDS CODE,CALIFORNIA CODE OF REGULATIONS, TITLE 24, PART 11(BSC 03/24)

The state agency shall draft the regulations in plain, straightforward language, avoiding technical terms as much as possible and using a coherent and easily readable style. The agency shall draft the regulation in plain English. A notation shall follow the express terms of each regulation listing the specific statutes authorizing the adoption and listing specific statutes being implemented, interpreted, or made specific (Government Code Section 11346.2(a)(1)).

If using assistive technology, please adjust your settings to recognize underline, strikeout and ellipsis.

## LEGEND for EXPRESS TERMS (California only codes - Parts 1, 6, 8, 11, 12)

* Existing California amendments appear upright
* Amended or new California amendments appear underlined
* Repealed California language appears ~~upright and in strikeout~~
* Ellipses ( ...) indicate existing text remains unchanged

## FINAL EXPRESS TERMS

[The California Building Standards Commission (BSC) proposes to bring forward existing California amendments in the 2022 California Green Building Standards Code for adoption into the 2025 California Green Building Standards Code with the following modifications.]

### ITEM 1CHAPTER 5 NONRESIDENTIAL MANDATORY MEASURES*DIVISION 5.1 – PLANNING AND DESIGN*SECTION 5.106 SITE PLANNINGSection 5.106.4.1 Bicycle parking [with subsections]

**5.106.4 Bicycle parking.** For buildings within the authority of California Building Standards Commission as specified in Section 103, comply with Section 5.106.4.1. For buildings within the authority of the Division of the State Architect pursuant to Section 105, comply with Section 5.106.4.2**.**

**5.106.4.1 Bicycle parking. [BSC-CG]** Comply with Sections 5.106.4.1.1 and 5.106.4.1.2; or meet the applicable local ordinance, whichever is stricter.

#### ITEM 1-1

**5.106.4.1.1 Short-term bicycle parking.** If the new project or an addition or alteration is anticipated to generate visitors ~~traffic~~, provide permanently anchored bicycle racks within 200 feet of the visitors’ entrance, readily visible to passers-by, for ~~5~~ 20 percent of the peak daily ~~new~~ visitors ~~motorized vehicle parking spaces being added~~, with a minimum of one two-bike capacity rack.

**~~Exception:~~** ~~Additions or alterations which add nine or less visitor vehicular parking spaces.~~

#### ITEM 1-2

**5.106.4.1.2 Long-term bicycle parking.** *[Relocated from Section 5.106.4.1.5 below]* Acceptable bicycle parking facility for Sections 5.106.4.1.2.1, 5.106.4.1.2.2 and 5.106.4.1.2.3 shall be conveniently located near the street 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.

Calculations for bicycle parking requirements shall be rounded up to the nearest whole number.

**5.106.4.1.2.1** For new buildings with tenant spaces, ~~that have 10 or more tenant-occupants,~~ provide secure bicycle parking for ~~5~~ 10 percent of the tenant-occupants, ~~vehicular parking spaces~~ with a minimum of one bicycle parking facility.

**5.106.4.1.~~3.~~2.2**. For additions or alterations, ~~that add 10 or more tenant-occupant~~ ~~vehicular parking spaces,~~ provide secure bicycle parking for ~~5~~ 10 percent of the tenant-occupants ~~vehicular parking spaces~~ being added, with a minimum of one bicycle parking facility.

**5.106.4.1.~~4.~~2.3.** For new shell buildings in phased projects, provide secure bicycle parking for ~~5~~ 10 percent of the anticipated tenant-occupants, ~~vehicular parking spaces~~ with a minimum of one bicycle parking facility.

*[Relocated to Section 5.106.4.1.2 above]*

**~~5.106.4.1.5~~** ~~Acceptable bicycle parking facility for Sections 5.106.4.1.2, 5.106.4.1.3 and 5.106.4.1.4 shall be convenient from the street 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.~~

**~~Note:~~** ~~Additional information on recommended bicycle accommodations may be obtained from Sacramento Area Bicycle Advocates.~~

#### Notation:

Authority: Health and Safety Code Sections 18930.5 and 18944.19

Reference(s): Health and Safety Code Sections 18930.5 and 18944.19

### ITEM 2Section 5.106.5.3 Electric vehicle (EV) charging

#### ITEM 2-1

**5.106.5.3 Electric vehicle (EV) charging. [N] [BSC-CG]** Construction to provide electric vehicle infrastructure and facilitate electric vehicle charging shall comply with Section 5.106.5.3.1 EV capable spaces, Section 5.106.5.3.2 Electric vehicle charging stations and associated Table 5.106.5.3.1, or Section 5.106.5.3.6 Electric vehicle charging stations (EVCS)-Power allocation method and associated Table 5.106.5.3.6, 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 the local enforcing agency has determined compliance with this section is not feasible based upon one of the following conditions:

* + 1. Where there is no local utility power supply.
		2. Where the local utility is unable to supply adequate power.
		3. Where there is evidence suitable to the local enforcement agency substantiating that additional local utility infrastructure design requirements, directly related to the implementation of Section 5.106.5.3, may adversely impact the construction cost of the project.

~~2. Parking spaces accessible only by automated mechanical car parking systems are not required to comply with this code section.~~

2. Areas of parking facilities served by parking lifts, including but not limited to, automated mechanical-access open parking garages as defined in the *California Building Code*; or parking facilities otherwise incapable of supporting electric vehicle charging.

#### Notation:

Authority: Health and Safety Code Sections 18930.5 and 18941.10.

Reference(s): Health and Safety Code Sections 18930.5 and 18941.10.

### ITEM 3Table 5.106.5.3.1 EV Capable spaces

#### ITEM 3-1

**TABLE 5.106.5.3.1
EV Capable spaces and EVCS**

| **TOTAL NUMBER OF ACTUAL PARKING SPACES** | **NUMBER OF REQUIRED EV CAPABLE SPACES** | **Other thanOffice and Retail****NUMBER OF REQUIRED EVCS** **~~(EV CAPABLE SPACES PROVIDED WITH EVSE)~~ 2, 3** | **Office and Retail****NUMBER OF REQUIRED EVCS 2, 3** |
| --- | --- | --- | --- |
| ~~0~~ 1-9 | 0 | 0 | 0 |
| 10-25 | 4 | ~~0~~ 2 | 3 |
| 26-50 | 8  | ~~2~~ 4  | 6 |
| 51-75 | 13 | ~~3~~ 6 | 8 |
| 76-100 | 17  | ~~4~~ 8  | 13 |
| 101-150 | 25  | ~~6~~ 12 | 19 |
| 151-200 | 35 | ~~9~~ 18 | 26 |
| 201 and over | 20 percent of actual parking spaces 1 | ~~25~~ 50 percent of EV capable spaces 1 | 75 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.
~~The number of required EVCS (EV capable spaces provided with EVSE) in column 3 count toward the total number of required EV capable spaces shown in column 2.~~

3. At least one Level 2 EVSE shall be provided.

#### Notation:

Authority: Health and Safety Code Sections 18930.5 and 18941.10.

Reference(s): Health and Safety Code Sections 18930.5 and 18941.10.

### ITEM 4Section 5.106.5.3.2 Electric vehicle charging stations (EVCS) [with subsections]

**5.106.5.3.2 Electric vehicle charging stations (EVCS).** EV capable spaces shall be provided with electric vehicle supply equipment (EVSE) to create EVCS in the number indicated in Table 5.106.5.3.1. The EVCS required by Table 5.106.5.3.1 shall be provided with Level 2 EVSE or DCFC as permitted in Section 5.106.5.3.2.~~1~~3. At least one Level 2 EVSE shall be provided.

One EV charger with multiple connectors capable of charging multiple EVs simultaneously shall be permitted if the electrical load capacity required by Section 5.106.5.3.1 for each EV capable space is accumulatively supplied to the EV charger.

#### ITEM 4-1

**5.106.5.3.2.1 Receptacle Configurations.**  208/240V EV charging receptacles shall comply with one of the following configurations:

1. For 20-ampere receptacles, NEMA 6-20R
2. For 30-ampere receptacles, NEMA 14-30R
3. For 50-ampere receptacles, NEMA 14-50R

#### ITEM 4-2

**5.106.5.3.2.2 EV Charger Connectors.** EV chargers shall be equipped with SAE J1772 with a maximum output 240 Volts AC or SAE J3400 connectors.

When using level 2 SAE J3400 SAE connectors, supplied by a 480 V 3-phase service, at least 20 percent of the EV charger connectors shall be SAE J1772 with a maximum output 240 Volts AC.

**5.106.5.3.2.~~1~~ 3** The installation of each DCFC EVSE shall be permitted to reduce the minimum number of required EV capable spaces without EVSE or EVCS with Level 2 EVSE by five, and reduce proportionally the required electrical load capacity to the service panel or subpanel.

#### ITEM 4-3

5.106.5.3.2.~~2~~ 4 The installation of two Low Power Level 2 EV charging receptacles shall be permitted to reduce the minimum number of required EV capable spaces without EVSE in Table 5.106.5.3 by one.

**5.106.5.3.2.4.1 Raceway Capacity Requirements.** To allow for future upgrades to the electrical conductors serving low power Level 2 charging receptacles, the listed raceway serving such receptacles shall be sized to allow the installation of a dedicated 208/240-volt 40-ampere branch circuit. Where no raceway is used, the conductors shall be sized to accommodate a 208/240-volt 40-ampere receptacle.

#### Notation:

Authority: Health and Safety Code Sections 18930.5 and 18941.10

Reference(s): Health and Safety Code Sections 18930.5 and 18941.10

### ITEM 5Table 5.106.5.3.6 EVCS–Power allocation method

**5.106.5.3.6** **Electric vehicle charging stations (EVCS)–power allocation method.** The power allocation method may be used as an alternative to the requirements in Section 5.106.5.3.1, Section 5.106.5.3.2 and associated Table 5.106.5.3.1. Use Table 5.106.5.3.6 to determine the total power in kVA required based on the total number of actual parking spaces.

Power allocation method shall include the following:

1. Use any kVA combination of EV capable spaces, low power Level 2, Level 2 or DCFC EVSEs.
2. At least one Level 2 EVSE shall be provided.

#### ITEM 5-1

**TABLE 5.106.5.3.6**
**EVCS–Power allocation method**

| **TOTAL NUMBER OF ACTUAL PARKING SPACES** | **MINIMUM TOTAL kVA @ 6.6 kVA** | **Other than Office and Retail****TOTAL kVA REQUIRED IN ANY COMBINATION OFEV CAPABLE 3, 4,LOW POWER LEVEL 2,LEVEL 2 1, 2, OR DCFC** | **Office and Retail****TOTAL kVA REQUIRED IN ANY COMBINATION OFEV CAPABLE 4, 5,LOW POWER LEVEL 2, LEVEL 2 1, 2, OR DCFC** |
| --- | --- | --- | --- |
| ~~0~~ 1-9 | 0 | 0 | 0 |
| 10-25 | 26.4  | 26.4 | 26.4  |
| 26-50 | 52.8 | 52.8  | 52.8  |
| 51-75 | 85.8 | 85.8  | 85.8  |
| 76-100 | 112.2 | 112.2  | 112.2  |
| 101-150 | 165 | 165  | 165  |
| 151-200 | 231 | 231  | 231  |
| 201 and over | 20 percent of actual parking spaces x 6.6 | Total required kVA =P x .20 x 6.6Where P=Parking spaces in facility | Total required kVA =P x .20 x 6.6Where P=Parking spaces in facility |

1. Level 2 EVSE @ 6.6 kVA minimum.
2. At least one Level 2 EVSE shall be provided.
3. Maximum allowed kVA to be utilized for EV capable spaces is ~~75~~ 50 percent.
4. If EV capable spaces are utilized, they shall meet the requirements of Section 5.106.5.3.1 EV capable spaces.
5. For Office and Retail buildings the maximum allowed kVA to be utilized for EV capable spaces is 25 percent.

#### Notation:

Authority: Health and Safety Code Sections 18930.5 and 18941.10.

Reference(s): Health and Safety Code Sections 18930.5 and 18941.10.

### ITEM 6Section 5.106.5.3.6 Electric vehicle charging stations (EVCS)–power allocation method [with subsections]

#### ITEM 6-1

**5.106.5.3.6.1 Receptacle Configurations.** 208/240V EV charging receptacles shall comply with one of the following configurations:

1. For 20-ampere receptacles, NEMA 6-20R.
2. For 30-ampere receptacles, NEMA 14-30R.
3. For 50-ampere receptacles, NEMA 14-50R.

#### ITEM 6-2

**5.106.5.3.6.2 EV Charger Connectors.** EV chargers shall be equipped with SAE J1772 with a maximum output 240 Volts AC or SAE J3400 connectors.

When using level 2 SAE J3400 connectors, supplied by a 480 V 3-phase service, at least 20 percent of the EV charger connectors shall be SAE J1772 with a maximum output 240 Volts AC.

#### ITEM 6-3

**5.106.5.3.6.3 Raceway Capacity Requirements.** To allow for future upgrades to the electrical conductors serving low power Level 2 charging receptacles, the listed raceway serving such receptacles shall be sized to allow the installation of a dedicated 208/240-volt 40-ampere branch circuit. Where no raceway is used, the conductors shall be sized to accommodate a 208/240-volt 40-ampere receptacle.

#### Notation:

Authority: Health and Safety Code Sections 18930.5 and 18941.10.

Reference(s): Health and Safety Code Sections 18930.5 and 18941.10.

### ITEM 7Section 5.106.5.4.2 Existing buildings or parking areas with previously installed EV capable infrastructure [A]

**5.106.5.4** **Additions or alterations to existing buildings or parking facilities [A]. [BSC-CG]** Existing buildings or parking facilities being modified …

**5.106.5.4.1 Existing buildings or parking areas without previously installed EV capable infrastructure** **[A].** When EV capable infrastructure …

#### ITEM 7-1

**5.106.5.4.2 Existing buildings or parking areas with previously installed EV capable infrastructure [A].** When EV capable infrastructure is available at an existing parking facility or building, and the parking facility or building is undergoing an addition or alteration listed in Section 5.106.5.4, construction shall include electric vehicle charging in compliance with either Section 5.106.5.3 and associated Table 5.106.5.3.1, or Section 5.106.5.3.6 and associated Table 5.106.5.3.6. Install EVCS at all existing EV capable spaces, utilizing the existing ~~EV capable~~ allocated power and infrastructure for the total number of actual parking spaces being added or altered, prior to adding any new EV capable spaces. If the area being added or altered exceeds the existing EV capable capacity, allocated power and infrastructure, provide additional EV charging as needed to comply with this section.

#### Notation:

Authority: Health and Safety Code Sections 18930.5 and 18941.10.

Reference(s): Health and Safety Code Sections 18930.5 and 18941.10.

### ITEM 8CHAPTER 5 NONRESIDENTIAL MANDATORY MEASURES*DIVISION 5.3 – WATER EFFICIENCY AND CONSERVATION*SECTION 5.303 INDOOR WATER USE

#### ITEM 8-1

**5.303.3.4.6 Pre-rinse spray valve.** When installed, Commercial Pre-Rinse Spray Valves shall meet the requirements in the *California Plumbing Code, Section 420.3.* *~~California Code of Regulations~~*~~, Title 20 (Appliance Efficiency Regulations), Section 1605.1(h)(4) Table H‑2, Section 1605.3(h)(4)(A), and Section 1607(d)(7), and shall be equipped with an integral automatic shutoff.~~

**~~FOR REFERENCE ONLY:~~** ~~The following table and code section have been reprinted from the~~ *~~California Code of Regulations~~*~~, Title 20 (Appliance Efficiency Regulations), Section 1605.1(h)(4) and Section 1605.3(h)(4)(A).~~

**~~TABLE H-2
STANDARDS FOR COMMERCIAL PRE-RINSE SPRAY VALVES MANUFACTURED ON OR AFTER JANUARY 28, 2019.~~**

| **~~Product Class~~** ~~[spray force in ounce force (ozf)]~~ | **~~Maximum Flow Rate~~** ~~(gpm)~~ |
| --- | --- |
| ~~Product Class 1 (≤ 5.0 ozf)~~ | ~~1.00~~ |
| ~~Product Class 2 (> 5.0 ozf and ≤ 8.0 ozf)~~ | ~~1.20~~ |
| ~~Product Class 3 (> 8.0 ozf)~~ | ~~1.28~~ |

~~Title 20 Section 1605.3(h)(4)(A): Commercial pre-rinse spray valves manufactured on or after January 1, 2006, shall have a minimum spray force of not less than 4.0 ounces-force (ozf) [113 grams-force (gf)].~~

#### Notation:

Authority: Health and Safety Code Section 18930.5.

Reference(s): Health and Safety Code Section 18930.5.

### ITEM 9CHAPTER 5 NONRESIDENTIAL MANDATORY MEASURES*DIVISION 5.5 – ENVIRONMENTAL QUALITY*SECTION 5.504 POLLUTANT CONTROLSection 5.504.1 Temporary ventilation

#### ITEM 9-1

**5.504.1 Temporary ventilation****.** The permanent HVAC system shall only be used during construction if necessary to condition the building or areas of addition or alteration within the required temperature range for material and equipment installation. If the HVAC system is used during construction, use return air filters with a Minimum Efficiency Reporting Value (MERV) of ~~8,~~ 13, based on ASHRAE 52.2. ~~1999, or an average efficiency of 30 percent based on ASHRAE 52.1-1992.~~ Replace all filters immediately prior to occupancy, or, if the building is occupied during alteration, at the conclusion of construction.

#### Notation:

Authority: Health and Safety Code Section 18930.5

Reference(s): Health and Safety Code Section 18930.5

### ITEM 10SECTION 5.506 INDOOR AIR QUALITYSection 5.506.4 Carbon dioxide (CO2) monitoring in classrooms. [BSC-CG]

**…**

**5.506.3 Carbon dioxide (CO2) monitoring in classrooms. [DSA-SS]** Each public K-12 school classroom ... requirements:

1. The monitor or sensor … windows.

…

6. The monitor or sensor … five years.

#### ITEM 10-1

**5.506.4 Carbon dioxide (CO2) monitoring in classrooms. [BSC-CG]** Newly constructed projects and qualifying additions and alterations (per scope in Section 301.3) for University of California, California State University, and private school classrooms, lecture and post-secondary classrooms shall be equipped with a carbon dioxide monitor or sensor that meets the following requirements:

1. The monitor or sensor shall be permanently affixed in a tamper-proof manner in each classroom between three and six feet above the floor and at least five feet 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 exceeds 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 exceeds 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 five years.

#### Notation:

Authority: Health and Safety Code Section 18930.5 and Educational Code Section 17661

Reference(s): Health and Safety Code Section 18930.5 and Educational Code Section 17661

### ITEM 11CHAPTER 6 REFERENCED ORGANIZATIONS AND STANDARDSSection 601.1

**601.1** This chapter lists the organizations and standards that are referenced in various sections of this document. The standards are listed according to the promulgating agency of the standard.

#### ITEM 11-1

| **ORGANIZATION** | **STANDARD** | **REFERENCED SECTION** |
| --- | --- | --- |
| … | … | … |
| **ASHRAE** American Society of Heating, Refrigerating and Air-Conditioning Engineers, Inc. |  |  |
| ~~1791 Tullie Circle, NE Atlanta, GA 30329~~ 180 Technology Parkway NWPeachtree Corners, GA 30092www.ashrae.org | ~~52.1-92~~52.2-~~2007~~ 2017~~62.2~~~~90.1~~ | ~~A5.504.1~~~~202~~ 5.504.1~~A5.504.1~~~~5.108.8~~ |
| … | … | … |

#### Notation:

Authority: Health and Safety Code Sections 18928.1 and 18930.5

Reference(s): Health and Safety Code Sections 18928.1 and 18930.5

### ITEM 12APPENDIX A5 NONRESIDENTIAL VOLUNTARY MEASURES*DIVISION A5.1 – PLANNING AND DESIGN*SECTION A5.106 SITE DEVELOPMENTSection A5.106.5.3.1 Tier 1 with Table A5.106.5.3.1 Tier 1 EV capable spaces andSection A5.106.5.3.2 Tier 1 Electric vehicle charging stations (EVCS)—Power allocation method with associated Table A5.106.5.3.2

**A5.106.5.3 Electric vehicle (EV) charging. [N]** Construction shall comply with Section A5.106.5.3.1 Tier 1 or A5.106.5.3.3 Tier 2, and in accordance with regulations in the *California Building Code* andthe *California Electrical Code.*

#### ITEM 12-1

**A5.106.5.3.1 Tier 1.** Comply with Section 5.106.5.3.1 EV capable spaces, Section 5.106.5.3.2 Electric vehicle charging stations and associated Table A5.106.5.3.1, ~~Tier 1,~~ or comply with Section A5.106.5.3.2 Tier 1 Electric vehicle charging stations (EVCS)—Power allocation method and associated Table A5.106.5.3.2. ~~Tier 1.~~

Refer to Section 5.106.5.3.2 …

**TABLE A5.106.5.3.1
Tier 1 EV capable spaces and EVCS**

| **TOTAL NUMBER OF ACTUAL PARKINGSPACES** | **~~TIER 1~~ NUMBER OF REQUIRED EV CAPABLE SPACES** | **Other thanOffice and RetailNUMBER OF REQUIRED EVCS ~~(EV CAPABLE SPACES PROVIDED WITH EVSE)~~****2**, **3** | **Office and Retail****NUMBER OF REQUIRED EVCS 2, 3** |
| --- | --- | --- | --- |
| ~~0~~ 1-9 | 2 | ~~0~~ 1 | 2 |
| 10-25 | 5 | ~~2~~ 3 | 4 |
| 26-50 | 11 | ~~4~~ 6 | 8 |
| 51-75 | 19 | ~~5~~ 10 | 14 |
| 76-100 | 26 | ~~9~~ 13 | 20 |
| 101-150 | 38 | ~~13~~ 19 | 29 |
| 151-200 | 53 | ~~18~~ 27 | 40 |
| 201 and over | 30 percent of actual parking spaces 1 | ~~33~~ 50 percent of EV capable spaces 1 | 75 percent of EV capable spaces 1 |

1. Calculation for spaces shall be rounded up to the nearest whole number.
2. ~~The number of required EVCS (EV capable spaces provided with EVSE) in column 3 count toward the total number of required EV capable spaces shown in column 2.~~ Each EVCS shall reduce the number of required EV capable spaces by the same number.
3. At least one Level 2 EVSE shall be provided.

#### ITEM 12-2

**A5.106.5.3.2 Tier 1** **Electric vehicle charging stations (EVCS)—Power allocation method.** The power allocation method may be used as an alternative to the requirements in Section 5.106.5.3.1, Section 5.106.5.3.2, and associated Table A5.106.5.3.1. ~~Tier 1.~~ Use Table A5.106.5.3.2 ~~Tier 1~~ to determine the total power in kVA required based on the total number of actual parking spaces.

Power allocation method shall include the following:

1. Use any kVA combination of EV capable spaces, Low Power Level 2, Level 2 or DCFC EVSEs.
2. At least one Level 2 EVSE shall be provided.

**TABLE A5.106.5.3.2
Tier 1** **EVCS–Power allocation method**

| **TOTAL NUMBER OF ACTUAL PARKING SPACES** | **MINIMUM TOTAL kVA @ 6.6 kVA** | **Other than Office and Retail****TOTAL kVA REQUIRED IN ANY COMBINATION OFEV CAPABLE 3, 4,LOW POWER LEVEL 2,LEVEL 2 1, 2, OR DCFC** | **Office and Retail****TOTAL kVA REQUIRED IN ANY COMBINATION OFEV CAPABLE 4, 5,LOW POWER LEVEL 2, LEVEL 21, 2, OR DCFC** |
| --- | --- | --- | --- |
| ~~0~~ 1-9 | 13.2 | 13.2 | 13.2 |
| 10-25 | 33  | 33  | 33  |
| 26-50 | 72.6 | 72.6 | 72.6 |
| 51-75 | 125.4 | 125.4 | 125.4 |
| 76-100 | 171.6 | 171.6 | 171.6 |
| 101-150 | 250.8 | 250.8 | 250.8 |
| 151-200 | 349.8 | 349.8 | 349.8 |
| 201 and over | 30 percent of actual parking spaces x 6.6 | Total required kVA =P x .30 x 6.6Where P=Parking spaces in facility | Total required kVA =P x .30 x 6.6Where P=Parking spaces in facility |

1. Level 2 EVSE @ 6.6 kVA minimum.
2. At least one Level 2 EVSE shall be provided.
3. Maximum allowed kVA to be utilized for EV capable spaces is ~~67~~ 50 percent.
4. If EV capable spaces are utilized, they shall meet the requirements of Section 5.106.5.3.1 EV capable spaces.

5. For Office and Retail buildings the maximum allowed kVA to be utilized for EV capable spaces is 25 percent.

#### Notation:

Authority: Health and Safety Code Sections 18930.5 and 18941.10

Reference(s): Health and Safety Code Sections 18930.5, 18931.7 and 18941.10

### ITEM 13Section A5.106.5.3.3 Tier 2 with Table A5.106.5.3.3 Tier 2 EV capable spaces andSection A5.106.5.3.4 Tier 2 Electric vehicle charging stations (EVCS)—power allocation method with associated Table A5.106.5.3.4

#### ITEM 13-1

**A5.106.5.3.3 Tier 2.** Comply with Section 5.106.5.3.1 EV capable spaces, Section 5.106.5.3.2 Electric vehicle charging stations and associated Table A5.106.5.3.3, ~~Tier 2,~~ or Section A5.106.5.3.4 Electric vehicle charging stations (EVCS)—Power allocation method and associated Table A5.106.5.3.4. ~~Tier 2.~~

Refer to Section 5.106.5.3.2 …

**TABLE A5.106.5.3.3
Tier 2 EV capable spaces and EVCS**

| **TOTAL NUMBER OF ACTUAL PARKING SPACES** | **~~TIER 2~~ NUMBER OF REQUIRED EV CAPABLE SPACES** | **Other than Office and Retail****~~TIER 2~~ NUMBER OF REQUIRED EVCS** **~~(EV CAPABLE SPACES PROVIDED WITH EVSE)~~ 2**, **3** | **Office and Retail****NUMBER OF REQUIRED EVCS 2, 3** |
| --- | --- | --- | --- |
| ~~0~~ 1-9 | 3 | ~~0~~ 2 | 2 |
| 10-25 | 8 | ~~3~~ 4 | 6 |
| 26-50 | 17 | ~~6~~ 9 | 13 |
| 51-75 | 28 | ~~9~~ 14 | 21 |
| 76-100 | 40 | ~~13~~ 20 | 30 |
| 101-150 | 57 | ~~19~~ 29 | 43 |
| 151-200 | 79 | ~~26~~ 40 | 59 |
| 201 and over | 45 percent of actual parking spaces1 | ~~33~~ 50 percent of EV capable spaces 1 | 75 percent of EV capable spaces1  |

1. Calculation for spaces shall be rounded up to the nearest whole number.
2. ~~The number of required EVCS (EV capable spaces provided with EVSE) in column 3 count toward the total number of required EV capable spaces shown in column 2.~~ Each EVCS shall reduce the number of required EV capable spaces by the same number.
3. At least one Level 2 EVSE shall be provided.

#### ITEM 13-2

**A5.106.5.3.4 Tier 2 Electric vehicle charging stations (EVCS)—Power allocation method.** The Power allocation method may be used as an alternative to the requirements in Section 5.106.5.3.1, Section 5.106.5.3.2, and associated Table A5.106.5.3.3. ~~Tier 2.~~ Use Table A5.106.5.3.4 ~~Tier 2~~ to determine the total power in kVA required based on the total number of actual parking spaces.

Power allocation method shall include the following:

1. Use any kVA combination of EV capable spaces, Low Power Level 2, Level 2 or DCFC EVSEs.
2. At least one Level 2 EVSE shall be provided.

**TABLE A5.106.5.3.4
Tier 2** **EVCS–Power allocation method**

| **TOTAL NUMBER OF ACTUAL PARKING SPACES** | **MINIMUM TOTAL kVA @ 6.6 kVA** | **Other than Office and Retail****TOTAL kVA REQUIRED IN ANY COMBINATION OFEV CAPABLE 3, 4,LOW POWER LEVEL 2,LEVEL 2 1, 2, OR DCFC** | **Office and Retail****TOTAL kVA REQUIRED IN ANY COMBINATION OFEV CAPABLE 4, 5,LOW POWER LEVEL 2, LEVEL 2 1, 2, OR DCFC** |
| --- | --- | --- | --- |
| ~~0~~ 1-9 | ~~28.8~~ 19.8 | ~~28.8~~ 19.8 | 19.8 |
| 10-25 | ~~76.8~~ 52.8  | ~~76.8~~ 52.8  | 52.8  |
| 26-50 | ~~163.2~~ 112.2 | ~~163.2~~ 112.2 | 112.2 |
| 51-75 | ~~268.8~~ 184.8 | ~~268.8~~ 184.8 | 184.8 |
| 76-100 | ~~384~~ 264.0 | ~~384~~ 264 | 264 |
| 101-150 | ~~547.2~~ 376.2 | ~~547.2~~ 376.2 | 376.2 |
| 151-200 | ~~758.4~~ 521.4 | ~~758.4~~ 521.4 | 521.4 |
| 201 and over | 45 percent of actual parking spaces x 6.6 | Total required kVA =P x .45 x 6.6Where P=Parking spaces in facility | Total required kVA =P x .45 x 6.6Where P=Parking spaces in facility |

1. Level 2 EVSE @ 6.6 kVA minimum.
2. At least one Level 2 EVSE shall be provided.
3. Maximum allowed kVA to be utilized for EV capable spaces is ~~75~~ 50 percent.
4. If EV capable spaces are utilized, they shall meet the requirements of Section 5.106.5.3.1 EV capable spaces.

5.\_For Office and Retail buildings the maximum allowed kVA to be utilized for EV capable spaces is 25 percent.

#### Notation:

Authority: Health and Safety Code Sections 18930.5 and 18941.10.

Reference(s): Health and Safety Code Sections 18930.5, 18931.7 and 18941.10.

### ITEM 14APPENDIX A5 NONRESIDENTIAL VOLUNTARY MEASURES *DIVISION A5.6 – VOLUNTARY TIERS*Table A5.601 Nonresidential buildings: Green Building Standards Code Proposed Performance Approach

#### ITEM 14-1

**TABLE A5.601 NONRESIDENTIAL BUILDINGS:
Green Building Standards Code Proposed Performance Approach**

*Note: This table is intended only as an aid …*

|  |  |  |  |
| --- | --- | --- | --- |
| **CATEGORY** | **ENVIRONMENTAL PERFORMANCE GOAL** | **TIER 1** | **TIER 2** |
| **All** | Minimum Mandatory(See Mandatory Checklist) | Meet all of the provisions of Chapter 5 (See Tier 1 Checklist) | Meet all of the provisions of Chapter 5 (See Tier 2 Checklist) |
| **DIVISION 5.1****Planning and Design** | Reuse of existing building | See Section A5.105.1 and Section A5.105.2 requirements  | See Section A5.105.1 and Section A5.105.2 requirements |
| Designated Parking forFuel Efficient Vehicles(Tier 1 and Tier 2 only) | Approx. 35% of total spaces | Approx. 50% of total spaces |
| Electric Vehicle Charging | Approx. 30% of total spaces | Approx. 45% of total spaces |
| Cool Roof to Reduce Heat Island Effect | Roof Slope < 2:12 SRI 75Roof Slope > 2:12 SRI 16 | Roof Slope < 2:12 SRI 82Roof Slope > 2:12 SRI 27 |
|  | 1 additional Elective from Division A5.1 | 3 additional Electives from Division A5.1 |
| **…** | **…** | **…** | **…** |
| **DIVISION 5.4****Material Conservation and Resource Efficiency** | Recycled Content | Utilize recycled content materials for 10% of total material cost | Utilize recycled content materials for 15% of total material cost |
| Construction Waste Reduction | At least 65% reduction | At least 80% reduction |
| Cradle-to-GraveWhole Building Life Cycle Assessment | See Section A5.409.1, Section A5.409.2 and Section A5.409.2.3 requirements | See Section A5.409.1, Section A5.409.2 and Section A5.409.2.3 requirements |
| Product GWP compliance – prescriptive path | See Section A5.409.1, Section A5.409.3.2, Table 5.409.3 and Table A5.409.3 requirements | See Section A5.409.1, Section A5.409.3.2, Table 5.409.3 and Table A5.409.3 requirements  |
|  | 1 additional Electivefrom Division A5.4 | 3 additional Electivesfrom Division A5.4 |
| **…** | **…** | **…** | **…** |

#### Notation:

Authority: Health and Safety Code Section 18930.5

Reference(s): Health and Safety Code Sections 18930.5 and 18931.7

### ITEM 15A5.602 through A5.602.2CALGreen VERIFICATION GUIDELINESMANDATORY and VOLUNTARY MEASURES CHECKLISTS

[These checklist tables will be updated based on the final proposed code updates for both the mandatory and voluntary code sections.]

#### ITEM 15-1

**A5.602
*CALGreen* VERIFICATION GUIDELINES****MANDATORY MEASURES CHECKLIST**

**CHAPTER 5 DIVISIONS**

***DIVISION 5.1 Planning and Design***

| **REQUIREMENT** | **SECTION TITLE** | **CODE SECTION** | **Y** | **N/A** | **O** | **PLAN SHEET, SPEC, OR ATTACH REFERENCE** |
| --- | --- | --- | --- | --- | --- | --- |
| … | … |  |  |  |  |  |
| Mandatory | Long-term bicycle parking | 5.106.4.1.2 through 5.106.4.1.~~5~~ 2.3 |  |  |  |  |
| Mandatory | Electric vehicle (EV) charging [N] with Section 5.106.3.1, 5.106.5.3.2 and associated Table 5.106.5.3.1 ORPower Allocation Method:Section 5.106.5.3.6 and associated Table 5.106.5.3.6  | 5.106.5.3.1,Table 5.106.5.3.1,5.106.5.3.2,5.106.5.3.2.1, 5.106.5.3.2.2, 5.106.5.3.2.3, 5.106.5.3.2.4, 5.106.5.3.3, 5.106.5.3.4 and 5.106.5.3.5.OR 5.106.5.3.6,Table 5.106.5.3.6, 5.106.5.3.6.1,5.106.5.3.6.2, 5.106.5.3.6.3,5.106.5.3.3, 5.106.5.3.4 and 5.106.5.3.5. |  |  |  |  |
| … | … | … |  |  |  |  |

**…**

***DIVISION 5.5 Environmental Quality***

| **REQUIREMENT** | **SECTION TITLE** | **CODE SECTION** | **Y** | **N/A** | **O** | **PLAN SHEET, SPEC, OR ATTACH REFERENCE** |
| --- | --- | --- | --- | --- | --- | --- |
| **…** | **…** | **…** |  |  |  |  |
| Mandatory | Carbon dioxide (CO2) monitoring | 5.506.2 |  |  |  |  |
| Mandatory | Carbon dioxide (CO2) monitoring in classrooms [BSC-CG] | 5.506.4 |  |  |  |  |
| **…** | **…** | **…** |  |  |  |  |

#### ITEM 15-2

**A5.602.1
*CALGreen* VERIFICATION GUIDELINES
TIER 1 CHECKLIST**

**CHAPTER 5 DIVISIONS**

***DIVISION 5.1 Planning and Design***

| **REQUIREMENT** | **SECTION TITLE** | **CODE SECTION** | **Y** | **N** | **O** | **PLAN SHEET, SPEC, OR ATTACH REFERENCE** |
| --- | --- | --- | --- | --- | --- | --- |
| … | … | … |  |  |  |  |
| *Tier 1 prerequisite* | *Electric vehicle (EV) charging [N] with Section 5.106.3.1, 5.106.5.3.2 and associated Table A5.106.5.3.1 Tier 1* *OR**Power Allocation Method:**Section A5.106.5.3.2 and associated Table A5.106.5.3.2 Tier 1* | *5.106.5.3.1,5.106.5.3.2,5.106.5.3.2.1, 5.106.5.3.2.2, 5.106.5.3.2.3, 5.106.5.3.2.4, 5.106.5.3.3, 5.106.5.3.4, 5.106.5.3.5 and* *Table A5.106.5.3.1 Tier 1*OR *A5.106.5.3.2, andTable A5.106.5.3.2 Tier 15.106.5.3.3, 5.106.5.3.4 , ~~and~~ 5.106.5.3.5,**5.106.5.6,**5.106.5.3.6.1, 5.106.5.3.6.2 and 5.106.5.3.6.3,* |  |  |  |  |
| **…** | **…** | **. . .**  |  |  |  |  |

**…**

***DIVISION 5.5 Environmental Quality***

| **REQUIREMENT** | **SECTION TITLE** | **CODE SECTION** | **Y** | **N/A** | **O** | **PLAN SHEET, SPEC, OR ATTACH REFERENCE** |
| --- | --- | --- | --- | --- | --- | --- |
| … | … | … |  |  |  |  |
| Mandatory | Carbon dioxide (CO2) monitoring | 5.506.2 |  |  |  |  |
| Mandatory | Carbon dioxide (CO2) monitoring in classrooms [BSC-CG] | 5.506.4 |  |  |  |  |
| **…** | **…** | **…** |  |  |  |  |

#### ITEM 15-3

**A5.602.2
*CALGreen* VERIFICATION GUIDELINES
TIER 2 CHECKLIST**

**CHAPTER 5 DIVISIONS**

***DIVISION 5.1 Planning and Design***

| **REQUIREMENT** | **SECTION TITLE** | **CODE SECTION** | **Y** | **N** | **O** | **PLAN SHEET, SPEC, OR ATTACH REFERENCE** |
| --- | --- | --- | --- | --- | --- | --- |
| … | … | … |  |  |  |  |
| *Tier 2 prerequisite* | *Electric vehicle (EV) charging [N] with Section 5.106.3.1, 5.106.5.3.2 and associated Table A5.106.5.3.3 Tier 2* *OR**Power Allocation Method:**Section A5.106.5.3.4 and associated Table A5.106.5.3.4 Tier 2* | *5.106.5.3.1, 5.106.5.3.2,5.106.5.3.2.1, 5.106.5.3.2.2, 5.106.5.3.2.3, 5.106.5.3.2.4, 5.106.5.3.3, 5.106.5.3.4, 5.106.5.3.5 andTable A5.106.5.3.3 Tier 2**OR* *A5.106.5.3.4 and Table A5.106.5.3.4 Tier 2,5.106.5.3.3, 5.106.5.3.4 , ~~and~~ 5.106.5.3.5,5.106.5.3.6, 5.106.5.3.6.1, 5.106.5.3.2 and 5.106.5.3.6.3,*  |  |  |  |  |
| **…** | **…** | **. . .**  |  |  |  |  |

**…**

***DIVISION 5.5 Environmental Quality***

| **REQUIREMENT** | **SECTION TITLE** | **CODE SECTION** | **Y** | **N/A** | **O** | **PLAN SHEET, SPEC, OR ATTACH REFERENCE** |
| --- | --- | --- | --- | --- | --- | --- |
| … | … | … |  |  |  |  |
| Mandatory | Outside air delivery | 5.506.1 |  |  |  |  |
| Mandatory | Carbon dioxide (CO2) monitoring | 5.506.2 |  |  |  |  |
| Mandatory | Carbon dioxide (CO2) monitoring in classrooms [BSC-CG] | 5.506.4 |  |  |  |  |
| Mandatory | Acoustical control(with exception) | 5.507.4 |  |  |  |  |
| … | … | … |  |  |  |  |

#### Notation:

Authority: Health and Safety Code Section 18930.5

Reference(s): Health and Safety Code Sections 18930.5 and 18931.7.