# APPROVED BY THE CALIFORNIA BUILDING STANDARDS COMMISSION

# JULY 13, 2020

FINAL EXPRESS TERMS  
FOR PROPOSED BUILDING STANDARDS  
OF THE DIVISION OF THE STATE ARCHITECT–STRUCTURAL SAFETY/ COMMUNITY COLLEGE (DSA-SS/CC)  
REGARDING THE 2019 CALIFORNIA GREEN BUILDING STANDARDS CODE,  
CALIFORNIA CODE OF REGULATIONS, TITLE 24, PART 11

(DSA-SS/CC 04-19)

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* Repealed California language appears ~~upright and in strikeout~~
* Ellipsis (…) indicate existing text remains unchanged

**FINAL EXPRESS TERMS**

# ITEM 1: ELECTRIC VEHICLE INFRASTRUCTURE

## SECTION 5.106

## SITE DEVELOPMENT

**...**

**5.106.5.3 Electric vehicle (EV) charging. [N] ...**

**...**

**5.106.5.3.1 Single charging space requirements [N]**

When only a single **...**the following:

1....

2....

3....

4....

5....

**5.106.5.3.2 Multiple charging space requirements. [N]**

When multiple charging spaces **...**thefollowing:

1....

2....

3....

4....

5....

**5.106.5.3.3. Charging space calculation. [N]** Table 5.106.5.3.3 shall be used to **determine ...**

**...**

**TABLE 5.106.5.3.3**

| **TOTAL NUMBER OF**  **ACTUAL PARKING SPACES** | **NUMBER OF REQUIRED EV CHARGING SPACES** |
| --- | --- |
| 0-9 | 0 |
| 10-25 | ~~1~~ 2 |
| 26-50 | ~~2~~ 4 |
| 51-75 | ~~4~~ 7 |
| 76-100 | ~~5~~ 9 |
| 101-150 | ~~7~~ 13 |
| 151-200 | ~~10~~ 18 |
| 201 and over | ~~6~~ 10 percent of total1 |

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

**...**

**5.106.5.3.5 [N] Future charging spaces.**

Future charging spaces qualify as **...**clean air vehicles.

Note: Future electric vehicle charging spaces shall count toward the total parking spaces required by the local enforcing agencies.

**…**

**Notation:**

Authority*: Education Code Section 17310 and 81142*

Reference *–* *Education Code Sections 17280 through 17317, and 81130 through 8114*

# ITEM 2: LIGHT POLLUTION REDUCTION

**...**

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

1. The minimum requirements in the *California Energy Code* **...;** and
2. Backlight (B) ratings as defined in IES TM-15-11 **...;**
3. Uplight and Glare ratings **...**and
4. Allowable BUG ratings not exceeding those shown in Table 5.106.8 **...,** or

Comply with a local ordinance lawfully enacted pursuant to Section 101.7, whichever is more stringent.

**Exceptions: ~~[N]~~**

1. Luminaires that qualify as exceptions in Sections 130.2(b) and 140.7 of the *California Energy Code*.
2. Emergency lighting.
3. Building façade **...**
4. Custom lighting features **...**
5. Luminaires with less than 6,200 initial luminaire lumens.

**5.106.8.1** **Facing – Backlight.** Luminaires within 2MH of a property line shall be oriented so that the nearest property line is behind the fixture, and shall comply with the backlight rating specified in Table 5.106.8 based on the lighting zone and distance to the nearest point of that property line.

**Exception:** **Corners.** If two property lines (or two segments of the same property line) have equidistant points to the luminaire, then the luminaire may be oriented so that the intersection of the two lines (the corner) is directly behind the luminaire. The luminaire shall still use the distance to the nearest point(s) on the property lines to determine the required backlight rating.

**5.106.8.2** **Facing – Glare.** For luminaires covered by 5.106.8.1, if a property line also exists within or extends into the front hemisphere within 2MH of the luminaire then the luminaire shall comply with the more stringent glare rating specified in Table 5.106.8 based on the lighting zone and distance to the nearest point on the nearest property line within the front hemisphere.

**Notes:**

1. **~~[N]~~**See also *California Building Code*, Chapter 12, Section 1205.7 for college campus lighting requirements for parking facilities and walkways.
2. Refer to Chapter 8 (Compliance Forms, Worksheets and Reference Material) for IES TM-15-11 Table A-1, *California Energy Code* Tables 130.2-A and 130.2-B.
3. Refer to the *California Energy Code* for requirements for additions and alterations.

**TABLE 5.106.8 [N]**

**MAXIMUM ALLOWABLE BACKLIGHT, UPLIGHT AND GLARE (BUG) RATINGS1,2**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **ALLOWABLE RATING**  **Maximum Allowable Backlight Rating (B)** | **LIGHTING ZONE LZ0** | **LIGHTING ZONE LZ1** | **LIGHTING ZONE LZ2** | **LIGHTING ZONE LZ3** | **LIGHTING ZONE LZ4** |
| **Maximum Allowable Backlight Rating ~~3~~  (B)** |  |  |  |  |  |
| Luminaire greater than 2 mounting heights (MH) from property line | N/A | No Limit | No Limit | No Limit | No Limit |
| Luminaire back hemisphere is 1 – 2 MH from property line | N/A | B2 | B3 | B4 | B4 |
| Luminaire back hemisphere is 0.5 – 1 MH from property line | N/A | B1 | B2 | B3 | B3 |
| Luminaire back hemisphere is less than 0.5 MH from property line | N/A | B0 | B0 | B1 | B2 |

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **ALLOWABLE RATING**  **Maximum Allowable Uplight Rating (U)** | **LIGHTING ZONE LZ0** | **LIGHTING ZONE LZ1** | **LIGHTING ZONE LZ2** | **LIGHTING ZONE LZ3** | **LIGHTING ZONE LZ4** |
| **Maximum Allowable Uplight Rating (U)** |  |  |  |  |  |
| For area lighting ~~4~~ 3 | N/A | U0 | U0 | U0 | U0 |
| For all other outdoor lighting, including decorative luminaires | N/A | U1 | U2 | U3 | U4 |

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **ALLOWABLE RATING**  **Maximum Allowable Glare Rating(G)** | **LIGHTING ZONE LZ0** | **LIGHTING ZONE LZ1** | **LIGHTING ZONE LZ2** | **LIGHTING ZONE LZ3** | **LIGHTING ZONE LZ4** |
| **Maximum Allowable Glare Rating ~~5~~  (G)** |  |  |  |  |  |
| Luminaire greater than 2 MH from property line | N/A | G1 | G2 | G3 | G4 |
| Luminaire front hemisphere is 1 – 2 MH from property line | N/A | G0 | G1 | G1 | G2 |
| Luminaire front hemisphere is 0.5 – 1 MH from property line | N/A | G0 | G0 | G1 | G1 |
| Luminaire front hemisphere is less than 0.5 MH from property line | N/A | G0 | G0 | G0 | G1 |

1. IESNA Lighting Zones 0 are not applicable; refer to Lighting Zones as defined in the *California Energy Code* and Chapter 10 of the *California Administrative Code*.
2. For property lines that abut public walkways, bikeways, plazas and parking lots, the property line may be considered to be 5 feet beyond the actual property line for purpose of determining compliance with this section. For property lines that abut public roadways and public transit corridors, the property line may be considered to be the centerline of the public roadway or public transit corridor for the purpose of determining compliance with this section.

~~3. If the nearest property line is less than or equal to two mounting heights from the back hemisphere of the luminaire distribution, the applicable reduced Backlight rating shall be met.~~

1. ~~4 .~~ General lighting luminaires in areas such as outdoor parking, sales or storage lots shall meet these reduced ratings. Decorative luminaires located in these areas shall meet U-value limits for “all other outdoor lighting.”

~~5. If the nearest property line is less than or equal to two mounting heights from the front hemisphere of the luminaire distribution, the applicable reduced Glare rating shall be met.~~

**...**

**Notation:**

Authority: Education Code Section 17310 and 81142

Reference – Education Code Sections 17280 through 17317, and 81130 through 8114

# ITEM 3: PRE-RINSE SPRAY VALVES

## SECTION 5.303

## INDOOR WATER USE

**...**

**5.303.3.4.5 Metering faucets for wash fountains.** Metering faucets **...**

**Note:** Where complying faucets **...**

**...**

**5.303.3.4.6 Pre-rinse spray valve.** When installed, shall meet the requirements in the *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 & Safety Code Sections 18930.5. and 18940.5*

Reference *– Health & Safety Code Sections 18930.5 and 18940.5.*

**ITEM 4: POLLUTANT CONTROL**

## SECTION 5.504

## POLLUTANT CONTROL

**...**

**5.504.4.4 Carpet systems.** ~~All carpet installed in the building interior shall meet at least one of the following testing and product requirements:~~

1. ~~Carpet and Rug Institute’s Green Label Plus Program;~~
2. ~~Compliant with the VOC-emission limits and testing requirements specified in the California Department of Public Health Standard Method for the Testing and Evaluation of Volatile Organic Chemical Emissions from Indoor Sources Using Environmental Chambers, Version 1.1, February 2010 (also known as CDPH Standard Method V1.1 or~~ *~~Specification 01350);~~*
3. ~~NSF/ANSI 140 at the Gold level or higher;~~
4. ~~Scientific Certifications Systems Sustainable Choice; or~~
5. ~~Compliant with the Collaborative for High Performance Schools California (2014 CA-CHPS) Criteria and listed in the CHPS High Performance Product Database.~~

All carpet installed in the building interior shall meet the requirements of the California Department of Public Health, “Standard Method for the Testing and Evaluation of Volatile Organic Chemical Emissions from Indoor Sources using Environmental Chambers,” Version 1.2, (January 2017) (Emission testing method for California Specification 01350).

(See [California Department of Public Health’s website](https://www.cdph.ca.gov/Programs/CCDPHP/DEODC/EHLB/IAQ/Pages/VOC.aspx#material) for certification programs and testing labs.)

https://www.cdph.ca.gov/Programs/CCDPHP/DEODC/EHLB/IAQ/Pages/VOC.aspx#material

**5.504.4.4.1 Carpet cushion.** All carpet cushion installed in the building interior shall meet the requirements of the ~~Carpet and Rug Institute’s Green Label program.~~ California Department of Public Health, “Standard Method for the Testing and Evaluation of Volatile Organic Chemical Emissions from Indoor Sources Using Environmental Chambers,” Version 1.2, (January 2017) (Emission testing method for California Specification 01350).

(See [California Department of Public Health’s website](https://www.cdph.ca.gov/Programs/CCDPHP/DEODC/EHLB/IAQ/Pages/VOC.aspx#material) for certification programs and testing labs.)

https://www.cdph.ca.gov/Programs/CCDPHP/DEODC/EHLB/IAQ/Pages/VOC.aspx#material

**...**

**5.504.4.6 Resilient flooring systems.** ~~For 80 percent of floor area receiving resilient flooring, installed resilient flooring shall meet at least one of the following:~~

1. ~~Certified under the Resilient Floor Covering Institute (RFCI) FloorScore program;~~
2. ~~Compliant with the VOC-emission limits and testing requirements specified in the California Department of Public Health’s 2010 Standard Method for the Testing and Evaluation Chambers, Version 1.1, February 2010;~~
3. ~~Compliant with the Collaborative for High Performance Schools California (2014 CA-CHPS) Criteria and listed in the CHPS High Performance Product Database; or~~
4. ~~Products certified under UL GREENGUARD Gold (formerly the Greenguard Children’s & Schools Program).~~

Where resilient flooring is installed, at least 80 percent of floor area receiving resilient flooring shall meet the requirements of the California Department of Public Health, “Standard Method for the Testing and Evaluation of Volatile Organic Chemical Emissions from Indoor Sources using Environmental Chambers,” Version 1.2, (January 2017)(Emission testing method for California Specification 01350).

(See [California Department of Public Health’s website](https://www.cdph.ca.gov/Programs/CCDPHP/DEODC/EHLB/IAQ/Pages/VOC.aspx#material) for certification programs and testing labs.)

https://www.cdph.ca.gov/Programs/CCDPHP/DEODC/EHLB/IAQ/Pages/VOC.aspx#material

**...**

**Notation: for [DSA-SS]**

Authority: *Education Code Sections 17310 and 81142, and Health and Safety C ode Section 16002*

Reference(s): *Education Code Sections 17280 through 17317. 81130 through 81147 and Health & Safety Code Section 1600 through 16203*

**Notation: for [DSA-SS/CC]**

Authority: *Education Code 81053*

Reference(s): *Education Code Sections 81052, 81053, and 81130 through 81147*