

CALIFORNIA BUILDING STANDARDS COMMISSION
January 11, 2023
CALGREEN EV WORKSHOP #3
Agenda Item 2e (Mandatory & Voluntary)

DRAFT EXPRESS TERMS
CALIFORNIA GREEN BUILDING STANDARDS CODE,
(CALGreen), PART 11,
CALIFORNIA BUILDING STANDARDS CODE,
TITLE 24, CALIFORNIA CODE OF REGULATIONS

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

LEGEND for EXPRESS TERMS

- Existing amendments appear upright
- Amendments appear underlined
- Repealed California language appears ~~upright and in-strikeout~~

CHAPTER 5
NONRESIDENTIAL MANDATORY MEASURES
Division 5.1 – PLANNING AND DESIGN
SECTION 5.106, SITE DEVELOPMENT

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AGENDA ITEM 2e (Mandatory)

RATIONALE:

BSC-CG is proposing to amend Table 5.106.5.3.1 and Table 5.106.5.3.6. The specific amendments to the mandatory requirements in the tables are as follows:

Table 5.106.5.3.1 (EV capable spaces) BSC-CG is proposing to amend EV column 3 to increase the EVCS requirements for parking spaces between 10-25 actual parking spaces from 0 to 2. For more than 25 parking spaces, the number of required EVCS will be increased by 100 percent which doubles the requirement. For 201 and over actual parking spaces, the number of required EVCS will be based on the calculated number in column 2 multiplied by 50 percent in column 3 (increased from 25 percent). As proposed, the calculated EVCS numbers and percentages would be doubled and would be deducted from the EV capable spaces shown in column 2. Basically, the proposal would maintain the required 20 percent EV capable spaces but would double the required number or percentage of installed chargers. This change would create a balance of 50 percent EV capable and 50 percent EVCS. Further changes to Table 5.106.5.3.1 include removing the words “EV capable space provided with EVSE” from the title in column 3. Footnote 2 is being amended to clarify that each EVCS shall reduce the number of required EV capable spaces by the same number. To address office and retail buildings specifically, a new column 4 is being added to the table specific to these occupancies with an increased required number of EVCS. This proposal would increase the required number of EVCS to 75 percent of the EV capable spaces shown in column 2. For 201 and over actual parking spaces, the increase will be

based on the calculated number in column 2 multiplied by 75 percent. To clarify that column 4 is independent from column 3, the words “Other Than Office & Retail” were added to the title.

Table 5.106.5.3.6 (Power allocation method) BSC is proposing to make similar amendments, as noted above, based on the power allocation method. Footnote 3 is being changed to specify that the maximum allowed kVA to be utilized for EV capable spaces is 50 percent (reduced from 75 percent). This change doubles the available kVA required to be used for EVCS which creates a scenario where 50 percent of the kVA can be used for EV capable spaces and remaining 50 percent for EVCS.

To address office and retail building specifically, a new column 4 is being added to the table for these occupancies with increased required kVA power allocation for EVCS. This proposal would increase the required number of EVCS for those occupancies. Footnote 5 is being added to set the maximum kVA power allowed to be utilized for EV capable spaces to 25 percent. As a result of the added footnote, the proposed change would reduce the total kVA that can be used for EV capable spaces (rated at 6.6kVA) to 25 percent of the total available kVA. This change leaves 75 percent of the available kVA required to be used for EVCS. For 201 and over actual parking spaces, the maximum kVA allowed for EV capable is based on the calculated number using the formula in column 4 and multiplying the number by 25 percent (as stated in footnote 5), which leaves 75 percent required kVA available for EVCS. To clarify that column 4 is independent from column 3, the words “Other Than Office & Retail” were added to the title.

These amendments are consistent with the proposed changes made to Table 5.106.5.3.1 mentioned above.

These proposed changes are meant to address the comments received at the recent CEVW #1 workshop held October 19, 2023, and CEVW #2 workshop held on November 28, 2023. Similar comments were mentioned in various prior CEVW workshops during the 2022 Intervening Code Adoption Cycle expressing the need for additional installed chargers to fill the gap between multifamily EV charging with supplemental workplace charging for those occupancies.

These proposed changes are to address the need for additional installed chargers for nonresidential occupancies and the need for increased number of installed chargers for office and retail buildings. These increased number and percentages of EVCS will help in meeting the EV goals set for California by favoring the installation of actual chargers during new construction.

EXPRESS TERMS:

[Changes are shown in underline and/or strikeout for all code sections below]

Section 5.106 SITE DEVELOPMENT, Section 5.106.5.3

5.106.5.3 Electric vehicle (EV) charging. [N] [BSC-CG] Construction to provide...
California Electrical Code. [No change to text.]

Exceptions: *[No change to text.]*

5.106.5.3.1 EV capable spaces. [N] EV capable spaces ... the following requirements: *[No change to text.]*

Note: *[No change to text.]*

TABLE 5.106.5.3.1

| TOTAL NUMBER OF ACTUAL PARKING SPACES | NUMBER OF REQUIRED EV CAPABLE SPACES | <u>Other Than Office & Retail</u> | <u>Office & Retail</u> |
|---------------------------------------|--|--|--|
| | | NUMBER OF REQUIRED EVCS ^{2 & 3} (EV CAPABLE SPACES PROVIDED WITH EVSE) ^{2 & 3} | NUMBER OF REQUIRED EVCS ^{2, 3} |
| 0-9 | 0 | 0 | <u>0</u> |
| 10-25 | 4 | 0 <u>2</u> | <u>3</u> |
| 26-50 | 8 | 2 <u>4</u> | <u>6</u> |
| 51-75 | 13 | 3 <u>6</u> | <u>8</u> |
| 76-100 | 17 | 4 <u>8</u> | <u>13</u> |
| 101-150 | 25 | 6 <u>12</u> | <u>19</u> |
| 151-200 | 35 | 9 <u>18</u> | <u>26</u> |
| 201 and over | 20 percent of actual parking spaces ¹ | 25 <u>50</u> percent of EV capable spaces ¹ | <u>75 percent of EV capable spaces¹</u> |

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.

5.106.5.3.2 Electric vehicle charging stations (EVCS). EV capable spaces...shall be provided. *[No change to text.]*

One EV charger...EV charger. *[No change to text.]*

5.106.5.3.2.1 Receptacle Configurations. *[See Item 2c]*

5.106.5.3.2.2 EV Charger Connectors. *[See Item 2c]*

5.106.5.3.2.4 3The installation of...panel or subpanel. *[No change to text.]*

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 5.106.5.3.1 by one.

5.106.5.3.2.4.1 Raceway Capacity Requirements. *[See Item 2d]*

5.106.5.3.3 Use of automatic load management systems (ALMS). ALMS shall be permitted...multiple EVs. *[No change to text.]*

5.106.5.3.4 Accessible electric vehicle charging station (EVCS). When EVSE is installed, ...11B Section 11B-228.3. *[No change to text.]*

5.106.5.3.5 Electric vehicle charging station signage. Electric vehicle charging stations shall be identified by signage or pavement markings in compliance with Caltrans Traffic Operations Policy Directive 13-01 (Zero Emission Vehicle Signs and Pavement Markings) or its successor(s).

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.

TABLE 5.106.5.3.6

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

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.

APPENDIX A5
NONRESIDENTIAL VOLUNTARY MEASURES
Division A5.1 – PLANNING AND DESIGN
SECTION A5.106, SITE DEVELOPMENT

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AGENDA ITEM 2e (Voluntary)

RATIONALE: BSC-CG is proposing to amend Table A5.106.5.3.1 Tier 1 (EV capable spaces), and Table A5.106.5.3.2 Tier 1 (Power allocation method), Table A5.106.5.3.3 Tier 2 (EV capable spaces), and Table A5.106.5.3.4 Tier 2 (Power allocation method). The specific amendments to the 4 voluntary compliance tables correlate directly to amendments proposed to the mandatory requirements in Table 5.106.5.3.1 (EV capable spaces) and Table 5.106.5.3.6 (Power allocation method).

Table A5.106.5.3.1 Tier 1 (EV capable spaces) BSC-CG is proposing to amend EV column 3 to increase the EVCS requirements for parking spaces between 0-9 actual parking spaces from 0 to 1. For more than 25 parking spaces, the number of required EVCS will be increased substantially. For 201 and over actual parking spaces, the number of required EVCS will be based on the calculated number in column 2 multiplied by 50 percent in column 3 (increased from 33 percent). As proposed, the calculated EVCS numbers and percentages would be proportionately increased and would be deducted from the EV capable spaces shown in column 2. Basically, the proposal would maintain the required 30 percent EV capable spaces but would substantially increase the required number or percentage of installed chargers. This change would create a balance of 50 percent EV capable and 50 percent EVCS. Further changes to Table A5.106.5.3.1 include removing the words “EV capable space provided with EVSE” from the title in column 3. Footnote 2 is being amended to clarify that each EVCS shall reduce the number of required EV capable spaces by the same number. To address office and retail buildings specifically, a new column 4 is being added to the table specific to these occupancies with an increased required number of EVCS. This proposal would increase the required number of EVCS to 75 percent of the EV capable spaces shown in column 2. For 201 and over actual parking spaces, the increase will be based on the calculated number in column 2 multiplied by 75 percent. To clarify that column 4 is independent from column 3, the words “Other Than Office & Retail” were added to the title.

Table A5.106.5.3.2 Tier 1 (Power allocation method) BSC is proposing to make similar amendments, as noted above, based on the power allocation method. Footnote 3 is being changed to specify that the maximum allowed kVA to be utilized for EV capable spaces is 50 percent (reduced from 67 percent). This change substantially increases the available kVA required to be used for EVCS which creates a scenario where 50 percent of the kVA can be used for EV capable spaces and remaining 50 percent for EVCS.

To address office and retail building specifically, a new column 4 is being added to the table for these occupancies with increased required kVA power allocation for EVCS. This proposal would increase the required number of EVCS for those occupancies. Footnote 5 is being added to set the maximum kVA power allowed to be utilized for EV capable spaces to 25 percent. As a result of the added footnote, the proposed change would reduce the total kVA that can be used for EV capable spaces (rated at 6.6kVA) to 25 percent of the total available kVA. This change leaves 75 percent of the available

kVA required to be used for EVCS. For 201 and over actual parking spaces, the maximum kVA allowed for EV capable is based on the calculated number using the formula in column 4 and multiplying the number by 25 percent (as stated in footnote 5), which leaves 75 percent required kVA available for EVCS. To clarify that column 4 is independent from column 3, the words “Other Than Office & Retail” were added to the title.

Table A5.106.5.3.3 Tier 2 (EV capable spaces) BSC-CG is proposing to amend EV column 3 to increase the EVCS requirements for parking spaces between 0-9 actual parking spaces from 0 to 2. For more than 25 parking spaces, the number of required EVCS will be increased substantially. For 201 and over actual parking spaces, the number of required EVCS will be based on the calculated number in column 2 multiplied by 50 percent in column 3 (increased from 33 percent). As proposed, the calculated EVCS numbers and percentages would be increased and would be deducted from the EV capable spaces shown in column 2. Basically, the proposal would maintain the required 45 percent EV capable spaces but would substantially increase the required number or percentage of installed chargers. This change would create a balance of 50 percent EV capable and 50 percent EVCS. Further changes to Table A5.106.5.3.1 include removing the words “EV capable space provided with EVSE” from the title in column 3. Footnote 2 is being amended to clarify that each EVCS shall reduce the number of required EV capable spaces by the same number. To address office and retail buildings specifically, a new column 4 is being added to the table specific to these occupancies with an increased required number of EVCS. This proposal would increase the required number of EVCS to 75 percent of the EV capable spaces shown in column 2. For 201 and over actual parking spaces, the increase will be based on the calculated number in column 2 multiplied by 75 percent. To clarify that column 4 is independent from column 3, the words “Other Than Office & Retail” were added to the title.

Table A5.106.5.3.4 Tier 2 (Power allocation method) BSC is proposing to make similar amendments, as noted above, based on the power allocation method. Footnote 3 is being changed to specify that the maximum allowed kVA to be utilized for EV capable spaces is 50 percent (reduced from 75 percent). This change substantially increases the available kVA required to be used for EVCS which creates a scenario where 50 percent of the kVA can be used for EV capable spaces and remaining 50 percent for EVCS.

To address office and retail building specifically, a new column 4 is being added to the table for these occupancies with increased required kVA power allocation for EVCS. This proposal would increase the required number of EVCS for those occupancies. Footnote 5 is being added to set the maximum kVA power allowed to be utilized for EV capable spaces to 25 percent. As a result of the added footnote, the proposed change would reduce the total kVA that can be used for EV capable spaces (rated at 6.6kVA) to 25 percent of the total available kVA. This change leaves 75 percent of the available kVA required to be used for EVCS. For 201 and over actual parking spaces, the maximum kVA allowed for EV capable is based on the calculated number using the formula in column 4 and multiplying the number by 25 percent (as stated in footnote 5), which leaves 75 percent required kVA available for EVCS. To clarify that column 4 is independent from column 3, the words “Other Than Office & Retail” were added to the title.

The amendments to the voluntary tables mentioned above are consistent with the proposed changes made to mandatory requirements of Table 5.106.5.3.1 EV (EV capable) and Table 5.106.5.3.6 (Power allocation method).

These proposed changes are meant to address the comments received at the recent CEVW #1 workshop held October 19, 2023, and CEVW #2 workshop held on November 28, 2023. Similar comments were mentioned in various prior CEVW workshops during the 2022 Intervening Code Adoption Cycle expressing the need for additional installed chargers to fill the gap between multifamily EV charging with supplemental workplace charging for those occupancies.

These proposed changes address the need for additional installed chargers for nonresidential occupancies and the need for increased number of installed chargers for office and retail buildings. These increased number and percentages of EVCS will help in meeting the EV goals set for California by favoring the installation of actual chargers during new construction.

EXPRESS TERMS:

Chapter A5, DIVISION A5.106 PLANNING AND DESIGN, Section A5.106 SITE DEVELOPMENT

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* and the *California Electrical Code*.

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 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 for the permitted use of Level 2 or Direct Current Fast Charger (DCFC) to create EVCS. Refer to Section 5.106.3.2.1 for the allowed use of DCFC to comply with both EV capable spaces and Level 2 EVSE. Refer to Section 5.106.5.3.3 for the allowed use of Automatic Load Management System (ALMS).

TABLE A5.106.5.3.1 Tier 1

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

A5.106.5.3.2 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 A5.106.5.3.1 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

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

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.

A5.106.5.3.3Tier 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 for the permitted use of Level 2 or Direct Current Fast Charger (DCFC) to create EVCS. Refer to Section 5.106.3.2.1 for the allowed use of DCFC to comply with both EV capable spaces and Level 2 EVSE. Refer to Section 5.106.5.3.3 for the allowed use of Automatic Load Management System (ALMS).

TABLE A5.106.5.3.3 Tier 2

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

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.

A5.106.5.3.4 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

| TOTAL NUMBER OF ACTUAL PARKING SPACES | MINIMUM TOTAL kVA @ 6.6 kVA | <u>Other Than Office & Retail</u> | <u>Office & Retail</u> |
|---------------------------------------|---|--|---|
| | | TOTAL kVA REQUIRED IN ANY COMBINATION OF EV CAPABLE ^{3, 4} , LOW POWER LEVEL 2, LEVEL 2 ^{1, 2} , OR DCFC | TOTAL kVA REQUIRED IN ANY COMBINATION OF EV CAPABLE ^{4 & 5} , LOW POWER LEVEL 2, LEVEL 2 ^{1, 2} , OR DCFC |
| 0-9 | 28.8 | 28.8 | <u>28.8</u> |
| 10-25 | 76.8 | 76.8 | <u>76.8</u> |
| 26-50 | 163.2 | 163.2 | <u>163.2</u> |
| 51-75 | 268.8 | 268.8 | <u>268.8</u> |
| 76-100 | 384 | 384 | <u>384</u> |
| 101-150 | 547.2 | 547.2 | <u>547.2</u> |
| 151-200 | 758.4 | 758.4 | <u>758.4</u> |
| 201 and over | 45 percent of actual parking spaces x 6.6 | Total required kVA = P x .45 x P x 6.6 Where P=Parking spaces in facility | Total required kVA = P x .45 x 6.6 Where 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 & Safety Code Sections 18930.5 and 18941.10.

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