Detailed Summary of California's 2025 Building Code: Updates for Residential, Hotel and Motel, and Non-residential EV Charging Infrastructure

After stakeholder meetings and public workshops, the staff of the California Department of Housing and Community Development (HCD) and the Building Standards Commission (BSC) proposed, and the Building Standards Commission approved on December 17, 2024, upgraded EV charging requirements to the Calgreen building code for new construction of residential multi-family dwellings (MFD), hotels and motels, and non-residential facilities. The updated requirements are summarized below and the code changes will become effective on January 1, 2026.

The approved changes by HCD for residential multi-family dwellings (MFD), hotels and motels can be viewed here; and the approved changes by BSC for non-residential facilities can be viewed here. For definitions of EV Ready, EV Capable, Low Power Level 2 and Level 2, see the definitions section of the Title 24 California Building Code, Chapter 2, here. The entire Calgreen code for EV charging, not just the 2024 update, is Part 11 and can be found here.

For cities and counties that wish to go beyond the minimum mandatory requirements, the code also describes "**voluntary**" measures that can be adopted as part of a local reach code. Once adopted, these voluntary measures become mandatory within the city's or county's area of jurisdiction. The provisions available for adoption as "voluntary" measures are identified as such in this summary.

Mandatory for Multi-Family Homes with EV Ready Parking Spaces with Receptacles

1. **Assigned Parking for Multifamily Parking Facilities**

    a. When parking spaces are **assigned** and the number of parking spaces is **equal to or greater than** the number of dwelling units, ". . . at least one low power Level 2 EV charging receptacle shall be provided at an assigned parking space for each dwelling unit." i.e. 100% of dwelling units with an assigned parking space will have an EV charging receptacle.

    b. Where the number of **assigned** parking spaces is **less than** the number of dwelling units, ". . . all assigned parking spaces shall be provided with

one low power Level 2 EV charging receptacle." i.e. 100% of assigned parking spaces will have an EV charging receptacle.

2. **Unassigned Parking for Multifamily Parking Facilities**

    a. When parking spaces are **unassigned** and the number of parking spaces is **equal to or is greater than** the number of dwelling units, ". . . at least one low power Level 2 EV charging receptacle shall be provided at an unassigned parking space for each dwelling unit." i.e. 100% access for every unit.

    b. Where the number of **unassigned** parking spaces is **less than** the number of dwelling units, ". . . all unassigned parking spaces shall be provided with one low power Level 2 EV charging receptacle." i.e. 100% of spaces will have EV charging receptacles.

3. **Assigned and Unassigned Parking for Multifamily Parking Facilities**

    a. Where multifamily buildings are provided with both **assigned and unassigned** parking spaces **equal to or greater than** the number of dwelling units, at least one low power Level 2 EV charging receptacle shall be provided for each dwelling unit at either the assigned or unassigned parking space, but not both.

    b. When there is a combination of **assigned and unassigned** parking, and the number of parking spaces is **less than** the number of dwelling units, "...every parking space shall be provided with one Low Power Level 2 EV Ready charging receptacle." i.e. 100% of spaces will have EV charging receptacles.

4. **Unassigned or Common Use Parking for Multifamily Parking Facilities**

    a. When there are **common use or unassigned parking** spaces **in excess of the number of dwelling units,** twenty-five (25) percent of unassigned or common use parking spaces not already provided with low power Level 2 EV charging receptacles, pursuant to section 4.106.4.2.2 (1), shall be equipped with Level 2 EV chargers and shall be made available for use by all residents or guests.

5. **Receptacle Power Source.** EV charging receptacles in multifamily parking facilities at **assigned** parking spaces shall be provided with a dedicated branch circuit connected to the dwelling unit's electrical panel.
6. **Exceptions -** There is a general exception clause for the assigned and unassigned MFH parking provisions that reads as follows:

    a. Exception: 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.

    Use of this exception requires concurrence by the Building Official or Agency Having Jurisdiction.

7. **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

8. **EV Charger Connectors**. EV chargers shall be equipped with SAE J1772 or J3400 connectors.

9. **Automatic Load Management (ALMS) -** An automatic load management system may be used to reduce the maximum required electrical capacity to each space served by the ALMS. The electrical system and any on-site distribution transformers shall have sufficient capacity to deliver at least 3.3 kW simultaneously to each EV charging station (EVCS) served by the ALMS. The branch circuit shall have a minimum capacity of 40 amperes, and installed EV chargers shall have a capacity of not less than 30 amperes.

10. **Parking Lifts** - There is a specific exception for parking lifts. There is also a broader exception for "parking facilities otherwise incapable of supporting electric vehicle charging", which is usually determined on a case-by-case basis through discussions with and concurrence by the Building Official.

Tier 1 Voluntary Code Provisions for Multi-Family Homes

1. When there are **common use or unassigned** parking spaces **in excess of the number of dwelling units**, 40% of those spaces shall have EVSE (rather than only 25%).

Source:

Item 2, section 4.106.4.2.2 of the Express Terms for Part 11 of the Title 24 Code of Regulations for EV charging infrastructure at MFD are at the following link: https://www.hcd.ca.gov/sites/default/files/docs/building-standards/building-code-dev-adoption/2024-calgreen-part-11-45-day-express-terms.docx

Mandatory Code Provisions For Hotels and Motels

1. 65% of parking spaces shall have EV charging (40% low power L2 EV Ready receptacles and 25% Level 2 EVSE).
2. An automatic load management system (ALMS) may be used to reduce the maximum required electrical capacity to each space served by the ALMS. The electrical system and any on-site distribution transformers shall have sufficient capacity to deliver at least 3.3 kW simultaneously to each EV charging station (EVCS) served by the ALMS.
3. The branch circuit shall have a minimum capacity of 40 amperes, and installed EV chargers shall have an output capacity of not less than 30 amperes.

Tier 1 Voluntary Code Provisions for Hotels and Motels:

1. 100% of parking spaces shall have EV charging (rather than only 65%) with 60% low power L2 EV Ready receptacles and 40% Level 2 EVSE available for use by all residents or guests.

Source:

Item 3 section 4.106.4.2.6 of the Express Terms for Part 11 of the Title 24 Code of Regulations for EV charging infrastructure are at the following link: https://www.hcd.ca.gov/sites/default/files/docs/building-standards/building-code-dev-adoption/2024-calgreen-part-11-45-day-express-terms.docx

Mandatory Code Provisions for Electric Vehicle Charging for Additions and Alterations of Parking Facilities Serving Existing Multi-Family Homes, Hotels and Motels.

1. When existing parking facilities are altered or new parking spaces are added to existing parking facilities, and the work requires a building permit, each parking space added or altered shall have access to either a low power Level 2 EV charging receptacle or Level 2 EV charger.
2. Exception: Where work requiring a permit is being performed for the installation of 120-volt electrical receptacle(s) for level 1 EV charging.

Source:

Item 4 section 4.106.4.3 of the Express Terms for Part 11 of the Title 24 Code of Regulations for EV charging infrastructure re additions or alternations at MFD are at the following link: https://www.hcd.ca.gov/sites/default/files/docs/building-standards/building-code-dev-adoption/2024-calgreen-part-11-45-day-express-terms.docx

Note: In all cases exceptions are allowed for MFD, hotel and motel permit applications when the project builder or designer determines compliance to be infeasible, subject to concurrence of the local enforcing agency.

These new construction requirements, when adopted by the Building Standards Commission, will become **effective on January 1st, 2026**.

Mandatory Measures for Non-Residential Facilities

1. The current exception eliminating any requirements for EV charging for parking spaces accessible by only an automated mechanical car parking system is being retained. The language is being modified for consistency with a similar exception in HCD's provisions for Residential, Hotel and Motel facilities.

2. The updated code maintains the requirement for mandatory EV capable spaces, provides new requirements for the installation of EV Charging Stations at Office and Retail occupancies. It also increases the required number or percentage of installed EV charging stations for "Other than Office or Retail" occupancies, which creates a balance of approximately 50 percent EV capable and 50 percent EVCS.

3. The updated code requires specified 208/240-volt EV charging receptacle configurations for 20, 30 and 50 ampere receptacles using a NEMA standard. A new code Section 5.106.5.3.2.2 requires EV charger connectors to have either a

SAE J1772 with a maximum output 240 Volts AC or SAE J3400 NACS (North American Charging Standard) connector for nonresidential parking facilities.

4. In a new section, 5.106.5.3.2.4.1, raceway capacity requirements have been increased to allow for future upgrading of low power Level 2 receptacles to Level 2. A listed raceway must have the capability to accommodate a dedicated 208/240-volt 40-ampere branch circuit.

5. Table 5.106.5.3.6 Power Allocation Method has been amended by adding a title, a fourth column, amending related footnote 3 and adding new footnote 5, as follows:

    a. “Power allocation method” is added to the table title for clarity.

    b. Column 4 is being added to the table to specifically address Office and Retail occupancies. The maximum power allowed to be allocated to EV Capable spaces is reduced from 50 percent to 25 percent of the total power budget, per Note 5. This effectively increases the power to be allocated to installed EVCS.

    c. Note 3 applies to Column 3 (other than office and retail) and is amended to reduce the maximum allowed kVA for EV capable spaces from 75 percent to 50 percent. This effectively increases the power to be allocated to installed EVCS.

6. New code Section 5.106.5.3.6.1 establishes Receptacle Configuration standards. The proposal will require specified 208/240-volt EV charging receptacle configurations for 20, 30 and 50 ampere receptacles using a NEMA standard.

7. New code Section 5.106.5.3.6.2 for EV charger connectors requires EV chargers for nonresidential parking facilities to have a connector that meets either the SAE J1772 with a maximum output of 240V or SAE J3400 NACS (North American Charging Standard) standard. When using Level 2 SAE J3400 connectors, supplied by a 480V 3-phase service, at least 20 percent of the EV charger connectors shall be SAE J1772.

8. In a new section, 5.106.5.3.6.3, raceway capacities have been increased to allow for future upgrading of low power Level 2 receptacles to Level 2. A listed raceway must have the capability to accommodate a dedicated 208/240-volt 40-ampere branch circuit.

9. For existing buildings undergoing additions or alterations with previously installed EV capable infrastructure, Section 5.106.5.4.2 is being amended to provide clarity that all existing EV capable spaces must be upgraded to EVCS prior to any new EV capable spaces being added.

Voluntary Code Provisions for Non-residential Facilities

1. Voluntary Tier 1 **Table A5.106.5.3.1 EV capable spaces and EVCS** is amended with the addition of a title and a fourth column and amending related Note 2.

    a. "EV capable spaces and EVCS" is added to the table title for clarity.

    b. The update maintains the 30 percent of required EV capable spaces for Tier 1. For Other than Office and Retail occupancies, the required number of installed charging stations increases to approximately 50 percent of the number of EV capable spaces.

    c. To address Office and Retail buildings specifically, BSC added column 4 (Office and Retail) to increase the EVCS requirements specific to those occupancies. The required number of EVCS increased to approximately 75 percent of the EV capable spaces shown in Column 2.

    d. For 201 and over actual parking spaces, the required number of EVCS in Column 4 is approximately 75% of the calculated number of EV Capable Spaces in Column 2.

    e. To clarify that Office and Retail in column 4 is independent from Other Than Office and Retail in Column 3, the words "Other than Office & Retail" were added to the Column 3 heading title.

2. Voluntary Tier 1 **Table A5.106.5.3.2 Electric vehicle charging stations (EVCS)—power allocation method** is amended with the addition of a title and a fourth column, amending related Note 3, and adding new Note 5.

    a. "EVCS–Power allocation method" is added to the table title for clarity.

    b. The update maintains the power required for the various ranges of the Total Number of Parking Spaces in Column 1. When the number of parking spaces exceeds 200, the power required is based on 30% of the number of parking spaces multiplied by 6.6 kVA.

c. Column 4 (Office and Retail) has been added to the Table to specifically address Office and Retail buildings. To further clarify that column 4 is independent from column 3, the words “Other than Office & Retail” were added to the Column 3 heading title.

d. For buildings other than Office and Retail, the maximum power allocated to EV Capable spaces has been reduced by Footnote 3 from 67 percent to 50 percent of the total available kVA. This increases the power available for EVCS by 50 percent.

e. Note 5 is being added to set the maximum power allocated for Office and Retail in Column 4 for EV Capable spaces to 25 percent of the available kVA.

3. Voluntary Tier 2 **Table A5.106.5.3.3 EV capable spaces and EVCS** is amended with the addition of a title and a fourth column and amending related Note 2.

   a. “EV capable spaces and EVCS” is added to the table title for clarity.

   b. The update maintains the 45 percent of required EV capable spaces for Tier 2. For Other than Office and Retail occupancies, the required number of installed charging stations increases from approximately 33 percent to 50 percent of the number of EV capable spaces. This change creates a balance of approximately 50 percent EV capable and 50 percent EVCS.

   c. To address Office and Retail buildings specifically, Column 4 (Office and Retail) has been added to increase the EVCS requirements specific to those occupancies. The required number of EVCS increased to approximately 75 percent of the EV capable spaces shown in Column 2.

   d. To address Other than Office and Retail for 201 and over actual parking spaces, the increase is based on the calculated number of EV Capable Spaces in column 2 multiplied by 75 percent in column 3.

   e. To clarify that Office and Retail in column 4 is independent from Other than Office and Retail in column 3, the words “Other than Office & Retail” were added to the column 3 heading title.

4. Voluntary Tier 2 **Table A5.106.5.3.4 Electric vehicle charging stations (EVCS)—Power allocation method** is being amended with the addition of a title and a fourth column, amending related Note 3, and adding new Note 5.

    a. “EVCS Power allocation method” is added to the table title for clarity.

    b. The update maintains the power required for the various ranges of the Total Number of Parking Spaces in Column 1. When the number of parking spaces exceeds 200, the power required is based on 45% of the number of parking spaces multiplied by 6.6 kVA.

    c. Column 4 (Office and Retail) has been added to the Table to specifically address Office and Retail buildings. To further clarify that Office and Retail in column 4 is independent from Other than Office and Retail in column 3, the words “Other than Office & Retail” were added to the Column 3 heading title.

    d. For buildings other than Office and Retail, the maximum power allocated to EV Capable spaces has been reduced by Footnote 3 from 67 percent to 50 percent of the total available kVA. This increases the power available for EVCS by 50 percent.

    e. Note 5 is being added to limit the maximum power allowed for Office and Retail in Column 4 for EV capable spaces to 25 percent of the available kVA.

This summary is an effort to interpret updates to the CalGreen Part 11 2025 Building Standards Code related to Electric Vehicle Charging. Code users shall rely upon their own judgement and determinations of the Agency Having Jurisdiction for any project utilizing the code provisions summarized above.