Sacramento eMobility Collaborative:
Equity Subcommittee
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# History of the CALGreen New Construction Code for Residential EV Charging


**by Sacramento Electric Vehicle Association**

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# History of the CALGreen Code Requirements for EV Residential Charging in Four Parts

- Residential Single-Family Homes
- Residential Multi-Family Homes
- Hotels and Motels
- Additions and Alterations


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# History of CALGreen New Construction EV Charging Requirements for Single-Family Homes

| CalGreen Code Edition | 2013 | 2016 Intervening | 2019 Triennial | 2022 Triennial |
|---|---|---|---|---|
| Effective Date | Jan 1, 2014 | Jan 1, 2017 | Jan 1, 2020 | Jan 1, 2023 |
| Single Family, Duplexes & Townhomes with Attached Garage | • 100% EV Capable | • 100% EV Capable | • 100% EV Capable | • 100 EV Capable |

| CalGreen Code Edition | 2022 Intervening | 2025 Triennial |
|---|---|---|
| Effective Date | July 1, 2024 | Jan 1, 2026 |
| Single Family, Duplexes & Townhomes with Attached Garage | • 100% EV Capable | • 100% EV Capable |

EV Ready: A vehicle space for EV charging with a circuit from the electrical panel to a receptacle or charger, i.e. electrical panel with capacity, a breaker, and wiring from the panel to a receptacle or charger

EV Capable: A vehicle space to support EV charging with electrical panel space and capacity for a circuit and necessary raceways, i.e. no breaker, no wiring and no receptacle or charger

# History of CALGreen New Construction EV Charging Requirements for Multi-Family Homes

| CalGreen Code Edition | 2013 | 2016 Intervening | 2019 Triennial | 2022 Triennial |
|---|---|---|---|---|
| Effective Date | Jan 2014 | Jan 2017 | Jan 2020 | Jan 2023 |
| Requirements | • 3% of MFH parking spaces **EV Capable**,<br>• 1 EVCS* in common area parking<br>(*EVCS = Electric Vehicle Charging Station) | • 6% of MFH parking spaces **EV Capable**,<br>• 1 EVCS in common area parking | • 10% of MFH parking spaces **EV Capable**,<br>• 1 EVCS in common area parking | **<20 units**<br>• 25% of parking spaces **EV Ready**, minimum 20A branch circuit<br>• 10% of parking spaces **EV Capable**, minimum 40A branch circuit<br><br>**20+ Units**<br>• 5% of common parking spaces with **EV Charging Stations**, minimum 40A branch circuit<br>• 25% of parking spaces **EV Ready**, minimum 20A branch circuit<br>• 10% of parking spaces **EV Capable**, minimum 40A branch circuit<br>• ALMS allowed if minimums exceeded (Automatic Load Management Systems). |

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# History of CALgreen New Construction EV Charging Requirements for Multi-Family Homes

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| CalGreen Code Edition | 2022 Intervening | 2025 Triennial |
|---|---|---|
| **Effective Date** | **July 1, 2024** | **Jan 1, 2026** |
| **Requirements** | • **40%** of total parking spaces to have low power level 2 **EV Ready** receptacles, 20A min. branch circuit.<br>○ With assigned parking, EV Charging receptacles located in at least one assigned parking space per dwelling unit but need not exceed **40%** of the assigned parking spaces provided on site.<br>O **EV Ready** Charging receptacles connected to the dwelling unit electrical panel unless determined infeasible by builder/designer, subject to concurrence by AHJ (Authorities Having Jurisdiction).<br>• **10%** total parking spaces to have Level 2 **EV Chargers**<br>○ 40 A minimum branch circuit.<br>○ 50 % of EVSE shall have J1772 connectors<br>O Where common use or unassigned parking is provided, EV chargers to be located in common use or unassigned parking areas for use by all residents or guests.<br>• ALMS allowed when minimum numbers exceeded, 3.3 kW min circuit capacity to each charger. | • **Assigned Parking** – When the number of assigned parking spaces equals or exceeds the number of dwelling units, provide at **least one Low Power Level 2 EV Ready receptacle per parking space for each dwelling unit.**<br>• **Connect EV Ready Charging receptacles at assigned parking spaces to the dwelling unit's electrical panel,** unless determined infeasible by builder/designer, subject to concurrence by AHJ (Authorities Having Jurisdiction).<br>• **Unassigned Parking** - When the number of unassigned parking spaces equals or exceeds the number of dwelling units, provide at least one Low Power Level 2 **EV Ready** receptacle at an unassigned parking space for each dwelling unit. When the number of parking spaces is less than the number of dwelling units, every space shall have a Low Power Level 2 EV Ready receptacle.<br>• **25%** of unassigned or common parking spaces to have Level 2 EV Chargers:<br>○ 40 A minimum branch circuit.<br>○ J1772 or J3400 connectors.<br>O Available for use by all residents or guests.<br>• ALMS allowed when minimum numbers exceeded, 3.3 kW min circuit capacity to each charger. |

# History of CALgreen New Construction EV Charging Requirements for Hotels/Motels

| CalGreen Code Edition | 2013 | 2016 Intervening | 2019 Triennial | 2022 Triennial |
|---|---|---|---|---|
| Effective Date | Jan 2014 | Jan 2017 | Jan 2020 | Jan 2023 |
| Requirements | • No Hotel-motel requirements | • 6% of Hotel-motel parking spaces if greater than 16 units | • ~ 6% of Hotel-motel parking spaces, see sliding scale table | **Hotel, Motel <20 units**<br>• 25% of parking spaces EV Ready, minimum 20A branch circuit<br>• 10% of parking spaces EV Capable, minimum 40A branch circuit<br><br>**Hotel, Motel 20+ Units**<br>• 5% of parking spaces EV Charging Stations, minimum 40A branch circuit<br>• 25% of parking spaces EV Ready, minimum 20A branch circuit<br>• 10% of parking spaces EV Capable, minimum 40A branch circuit<br>• ALMS allowed if minimums exceeded (Automatic Load Management Systems). |

# History of CALgreen New Construction EV Charging Requirements for Hotels/Motels

| CalGreen Code Edition | 2022 Intervening | 2025 Triennial - Proposed |
|---|---|---|
| **Effective Date** | **July 1, 2024** | **Jan 1, 2026** |
| **Requirements** | • **40%** of total parking spaces shall have low power level 2 EV Charging receptacles, 20A min. branch circuit.<br>• **10%** total parking spaces to have Level 2 EV Chargers<br>○ 40 A minimum branch circuit.<br>○ 50 % of EVSE shall have J1772 connectors<br>• ALMS allowed with 3.3 kW minimum to each EVSE with a minimum circuit capacity of 40A. | • **40**% of total parking spaces to have Low Power Level 2 EV Charging receptacles, 20A min. branch circuit.<br>• **25%** total parking spaces to have Level 2 EV Chargers:<br>○ 40 A minimum branch circuit, J1772 or J3400 connectors.<br>• Automatic load management system allowed with 3.3 kW minimum to each EV charging station with a minimum branch circuit capacity of 40A and installed EV charging stations shall have a capacity of not less than 30A. |

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# History of CALgreen EV Charging Requirements for Additions or Alterations of Parking Facilities Serving Existing MFH, Hotels and Motels, Section 4.106.4.3

| CalGreen Code Edition | 2013 | 2016 Intervening | 2019 Triennial | 2022 Triennial |
|---|---|---|---|---|
| Effective Date | Jan 1, 2014 | Jan 1, 2017 | Jan 1, 2020 | Jan 1, 2023 |
| Single Family, Duplexes & Townhomes with Attached Garage | • Not Yet Addressed | • Not Yet Addressed | • Not Yet Addressed | • Not Yet Addressed |

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# History of CALgreen EV Charging Requirements for Additions or Alterations of Parking Facilities Serving Existing MFH, Hotels and Motels, Section 4.106.4.3

| 2022 Triennial | 2022 Intervening | 2025 Triennial |
|---|---|---|
| **Effective January 1, 2023** | **Effective July 1, 2024** | **Effective Jan 1, 2026** |
| • When new parking facilities are added, or electrical systems or lighting of existing parking facilities are added or altered and the work requires a building permit, ten (10) percent of the total number of parking spaces added or altered, shall be electric vehicle charging spaces (EV spaces) capable of supporting future Level 2 EVSE. | • When new parking facilities are added, or electrical systems or lighting of existing parking facilities are added or altered and the work requires a building permit, ten (10) percent of the total number of parking spaces added or altered shall be-EV capable-spaces-to support future Level 2 electric vehicle supply equipment. The service panel or subpanel circuit directory shall identify the overcurrent protection device space(s) reserved for future EV chargers as "EV CAPABLE". | • 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, unless determined as infeasible by the project builder or designer and subject to concurrence of the local enforcing agency.<br><br>• **Exception:** Where work requiring a permit is being performed for the installation of 120-volt electrical receptacle(s) for level 1 EV charging. |

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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, Part 2, here. The entire Calgreen code for EV charging, not just the 2024 update, is Part 11 and can be found here.

This historical 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.




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# Thank You!

## Sacramento Electric Vehicle Association – SacEV

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