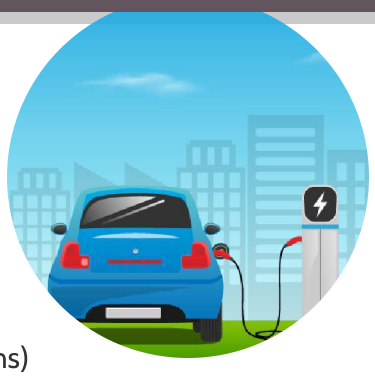
GUIDE

Electric Vehicle Parking and Infrastructure Requirements

Updated August 2023

This guide is intended to help developers, property owners and property managers to understand the electric vehicle charging requirements for new construction or modifications to existing development. The guide is consistent with the Elk Grove Municipal Code and the 2022 California Green Building Standards Code ("CALGreen", Title 24, Part 11). More detailed information is provided in CALGreen and the California Electrical Code.



Types of EV Charging Equipment

Level 1 — Residential
- Adds 3 to 5 miles of range per hour
- Standard 120V outlet

Low Power Level 2 — Residential & Commercial
- Adds 20-40 miles of range per hour
- 20 ampere minimum circuit
- 240V outlet or hardwired

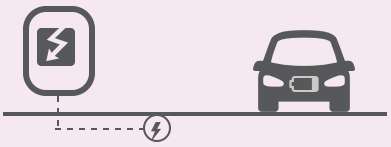
Level 2 — Residential & Commercial
- Adds 20-40 miles of range per hour
- 40 ampere minimum circuit
- 240V outlet or hardwired

DCFC — Commercial
- Adds 60-100 miles of range per 20 minutes
- 480V outlet

DCFC = Direct Current Fast Charger

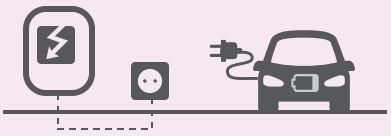
EV Compliance Levels (Definitions)

EV Capable



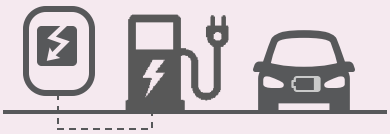
A vehicle parking space with electrical panel space and load capacity to support a branch circuit and necessary raceways, both underground and/or surface mounted, to support EV charging

EV Ready



Means an EV capable space, terminating in a receptacle or a charger

EVSE Installed



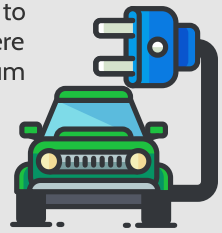
Means an EV ready space with installation of electric vehicle supply equipment (EV chargers), Level 2 or DCFC

Residential & Hotel/Motel

Residential EV parking requirements are included in CALGreen 4.106.4

Single Family, Duplexes and Townhouses with Attached Private Garage.

An EV Capable space in each garage. Installation needs to include a 40-ampere 208/240-volt minimum dedicated branch circuit.



Mutli-Family, Hotels/Motels, Residential Parking Facility

Development Size	EV Capable Spaces	Spaces EV Ready for Future EVSE	EVSE Installed
Less than 20 Units/Guest Rooms	10% of total capable of supporting future Level 2 EVSE	25% of total equipped with low-power Level 2 EV charging receptacles	N/A
20 or More Units/Guest Rooms	10% of total capable of supporting future Level 2 EVSE	25% of total equipped with low-power Level 2 EV charging receptacles	5% of total installed with Level 2 EVSE
Alterations of Existing Parking Facilities*	10% of new spaces capable of supporting future Level 2 EVSE	N/A	N/A

*alterations which involve the addition of new parking spaces will need to meet this requirement.

Non-Residential (Other than Hotel/Motel)

Non-Residential EV parking requirements are included in CALGreen 5.106.5

Total Number of Actual Parking Spaces	Number of Required EV Capable Spaces	Number of EV Capable Spaces with EVSE Installed
0-9	0	0
10-25	4	0
26-50	8	2
51-75	13	3
76-100	17	4
101-150	25	6
151-200	35	9
201 and over	20% of total parking spaces	25% of EV capable spaces

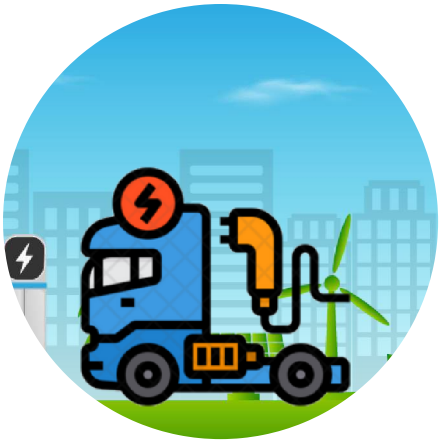
New non-residential projects must include dedicated EV parking spaces that include both EVSE installed and EV capable spaces. The number of EV Capable and EVSE Installed depends on the number of parking stalls, as shown in the table.

- The EVSE installed may be provided by any combination of level 2 and DCFC, with at least one level 2 required.
- The installation of each DCFC EVSE shall be permitted to reduce the minimum number of required EV capable spaces without EVSE by 5.
- The number of required EVSE installed spaces also count toward the number of EV capable spaces. For example, a parking lot with 200 spaces will require 9 EVSE installed and an additional 26 EV capable spaces, for a total of 35 EV spaces.
- Calculations for spaces are rounded up to the nearest whole number.

Medium- and Heavy-Duty

Medium and heavy-duty EVSE requirements are included in CALGreen 5.106.5.4

Warehouses, grocery stores and retail stores with off-street loading spaces will also need to comply with requirements that support the future installation of medium and heavy-duty EVSE. Based on the number of off-street loading spaces required for the development, additional capacity is required for raceway or busway and transformer and panel to allow for the future EVSE installation.



Per the EGMC 23.58.110: Off-street loading requirements for Commercial uses: One space for first 10,000 SF and one space for each additional 35,000 SF. The table below reflects these requirements.

Grocery & Retail

Building Size (SF)	Required Number of Off-Street Loading Spaces	Additional Capacity Required (KVA)
10,000 to 79,999	1 or 2	200
80,000 or more	3 or more	400

Per the EGMC 23.58.110: Off-street loading requirements for Industrial uses: One space for first 10,000 SF and one space for each additional 20,000 SF. The table below reflects these requirements.

Warehouse

Building Size (SF)	Required Number of Off-Street Loading Spaces	Additional Capacity Required (KVA)
10,000 to 49,999	1 or 2	200
50,000 or more	3 or more	400

KVA - kilovolt-ampere, or 1,000 volt-amperes

Exemptions

On a case-by-case basis, the City may determine EV charging and infrastructure are not feasible where there is no local utility power supply, where the local utility is unable to supply adequate power, or where the off-site power supply costs would be prohibitively expensive. Such determination shall be made by the designated approving authority for the subject project based upon a recommendation, if made, by the electrical service provider. Accessory Dwelling Units that are not subject to additional parking requirements are also exempt.