



COMMERCIAL EV CHARGING SYSTEMS (EVCS) GUIDELINES

Building Department

390 Towne Centre Dr, Lathrop, CA 95330
Phone: (209) 941-7270

COMMERCIAL / NON-RESIDENTIAL ELECTRIC VEHICLE CHARGING SYSTEMS (EVCS) PERMITTING GUIDELINES & EXPEDITED PERMITTING ELIGIBILITY

These Guidelines clarify the Permitting Requirements for Commercial & Non-Residential Properties, as well as provide a basis for Expedited Permitting qualifications, for installations of Electric Vehicle Charging Systems (EVCS).

An Electrical Permit is required for an Electric Vehicle Charging System (EVCS) to be installed at any Commercial and Non-Residential Property. Depending on the type of EV being installed, a Foundation, Footing, or Anchorage Inspection will need to be conducted, and the Permit Type may change from an Electrical Permit to an Alteration Permit. All work shall be done in accordance with Article 625 of the current California Electric Code. There are separate requirements for Single-Family Homes, Multi-Family Homes, Hotels & Motels; please only refer to these Guidelines if you are planning to install an EVCS at a Commercial or Non-Residential Property.

A CA Licensed Electrical Contractor (C-10) shall be required to provide a preliminary consultation for permits, and the installation of the EVCS. Electrical Contractors have a specific California Contractor’s License designation, perform work such as placing installing, erecting, or connecting electrical appliances and components. General Contractors that have a “B” License cannot pull permits for work that is primarily electrical unless there are unrelated trades in the project with carpentry as the primary trade.

Installing EVCS for Commercial / Non-Residential – New Construction

As of 2024, with the 2022 Mid Cycle Amendments adopted for the CALGreen Code, there are requirements for New Construction in which installing EVCS is mandatory. CALGreen Chapter 5 mandatory measures for New Construction that must follow the Tables below:

TABLE 5.106.5.6.1

TOTAL NUMBER OF PARKING SPACES	NUMBER OF REQUIRED EV CAPABLE SPACES	NUMBER OF REQUIRED EVCS ²
0–9	0	0
10–25	4	1
26–50	8	2
51–75	13	3
76–100	17	4
101–150	25	6
151–200	35	9
201 and over	20 percent of total ¹	25 percent of EV capable spaces ¹

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.



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**TABLE 5.106.5.5.1
RACEWAY CONDUIT AND PANEL POWER REQUIREMENTS FOR MEDIUM- AND HEAVY-DUTY EVSE [N]**

BUILDING TYPE	BUILDING SIZE (SQ. FT.)	NUMBER OF OFF-STREET LOADING SPACES	ADDITIONAL CAPACITY REQUIRED (KVA) FOR RACEWAY & BUSWAY AND TRANSFORMER & PANEL
Grocery	10,000 to 90,000	1 or 2	200
		3 or Greater	400
	Greater than 90,000	1 or Greater	400
Manufacturing Facilities	10,000 to 50,000	1 or 2	200
	10,000 to 50,000	3 or Greater	400
	Greater than 50,000	1 or Greater	400
Office Buildings	10,000 to 135,000	1 or 2	200
	10,000 to 135,000	3 or Greater	400
	Greater than 135,000	1 or Greater	400
Retail	10,000 to 135,000	1 or 2	200
		3 or Greater	400
	Greater than 135,000	1 or Greater	400
Warehouse	20,000 to 256,000	1 or 2	200
		3 or Greater	400
	Greater than 256,000	1 or Greater	400

Installing EVCS for Commercial / Non-Residential – Additions / Alterations

As of 2024, with the 2022 Mid Cycle Amendments adopted for the CALGreen Code, there are new requirements for Additions and Alterations of existing buildings or parking facilities in which installing EVCS is mandatory. CALGreen Chapter 5 mandatory measures include:

- Existing buildings or parking facilities being modified by one of the following shall comply with Section 5.106.5.4.1 or 5.106.5.4. When EVSE is installed, accessible EVCS shall be provided in accordance with CBC Chapter 11B, Section 11B-228.3
 - When the scope of construction work includes an increase in power supply to an electric service panel as part of a parking facility or alteration
 - When a new PV system is installed, covering existing parking spaces
 - When Additions or Alterations to existing buildings are triggered pursuant to Section 301.3 and the scope of work includes an increase in power supply to an electric service panel
 - For Exceptions see CALGreen Code Section 5.106.5.4

Expedited Permitting Eligibility

As required by AB 1236 & AB 970, an Expedited Permitting Process is in place to minimize timelines of plan review and approvals for EVCS. Please refer to the Eligibility Checklist for Expedited Permitting section of these Guidelines.



COMMERCIAL EV CHARGING SYSTEMS (EVCS) GUIDELINES

Submittal Checklist for EVCS Permitting

Please refer to the General Building Permit Submittal Guidelines before submitting for Application, to avoid delays in the permitting process for your project.

When submitting for a Commercial / Non-Residential EVCS Permit, make sure to include all the following:

- A Completed Permit Application
- EV Charging System Information
 - EVSE System with UL Listed Number or other approved Nationally Recognized Testing Laboratory (NRTL), in compliance with UL2202, “Standard for Electric Vehicle (EV) Charging System Equipment”
- The Manufacturer’s Installation Guidelines
 - The Manufacturer’s Installation Guidelines **must** be available at the site for the Building Inspector
- Construction Plans including:
 - Site Plan, showing the property, service lines, and proposed location(s) of EVSE
 - Electrical Site Plan with
 - Single-Line Diagram Electrical Plan, showing the Service Size, EV Breaker Size, EV Conductor Size, Number of Conductors, and EVSE
 - Transformer, Main Service Equipment and Subpanels, and these must comply with requirements in Table 5.106.5.1.1 to accommodate dedicated circuits for future EVSE installations
 - Location(s) convenient to the spaces reserved for medium- and heavy-duty EV Charging Cabinets and Dispensers
 - Raceways or Busways that originate at the Main Service Panel or Subpanel that will serve the future medium- and heavy-duty EVSE locations and that will terminate in close proximity to these locations
- Accessibility Requirements per CBC Chapter 11B
- Electrical Load Calculations
- Equipment Schedule and EVSE Cutsheets
- Clarify EVSE Location and Wiring Method. EVSE shall be installed in accordance with the Manufacturer’s Guidelines and must be suitable for the location (indoor/outdoor)
- All new electrical wiring, including a Service Panel Upgrade, if necessary, shall be in conformance with the current California Electrical Code
- If the EVCS installation includes a Stationary Storage Battery System, the submittal will be required to be reviewed and inspected by the Fire Department as defined in the California Fire Code

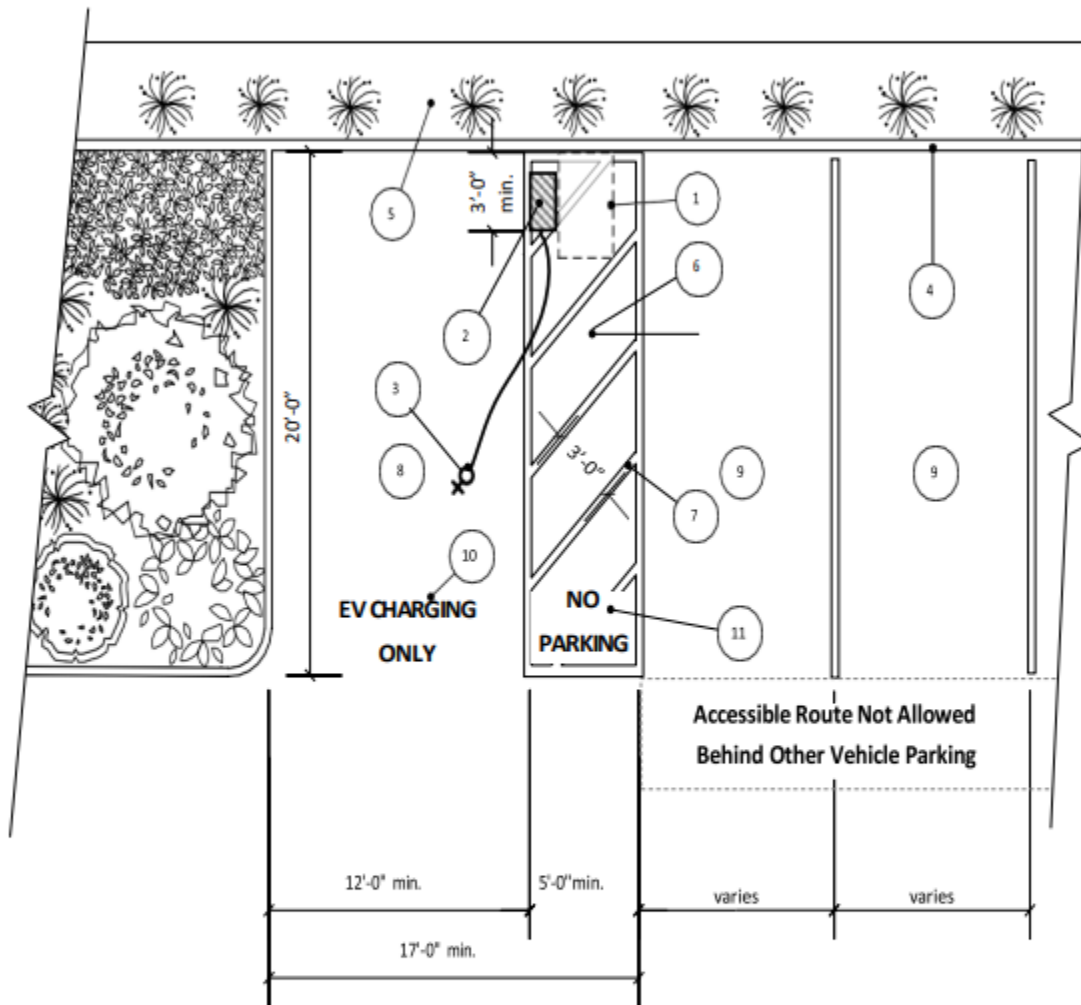


COMMERCIAL EV CHARGING SYSTEMS (EVCS) GUIDELINES

DIAGRAM 1

**Typical Single Electric Vehicle Charging Station Configuration
for an Existing Commercial Facility or Public Accommodation**

Current California Building Code Sections 11B-202.4, 11B-812 and 11B-228.3 for additional requirements.



- 1 30" x 48" clear space for parallel approach (CBC 11B-302).
- 2 Electric Vehicle Charging Station (EVCS) (see CBC 11B-228.3 & 11B-812 for requirements).
- 3 EVCS coupling (nozzle) and conductor.
- 4 Curb.
- 5 No International Symbol of Accessibility (ISA) sign or "Van Accessible" sign is required (see CBC 11B-812.8).
- 6 60" minimum width access aisle located on the passenger side of a van-accessible space and at the same level as the adjacent vehicle space (CBC 11B-812.7).
- 7 Contrasting border and 36" maximum on center diagonal hatched lines designating the access aisle. Access aisles borderlines and hatched lines for EVCS spaces shall not be blue (CBC 11B-812.7.2).
- 8 Minimum 144" wide by 216" long van accessible lined EVCS space (ISA sign and "Van Accessible" sign NOT required) (CBC 11B-812.6.1 and 11B-812.8).
- 9 EVCS parking space is not regulated by CBC 11B-812.
- 10 12" high "EV CHARGING ONLY" surface marking at the end of each EVCS space (CBC 11B-812.9).
- 11 12" high "NO PARKING" surface marking within the access aisle (CBC 11B-812.7.3).

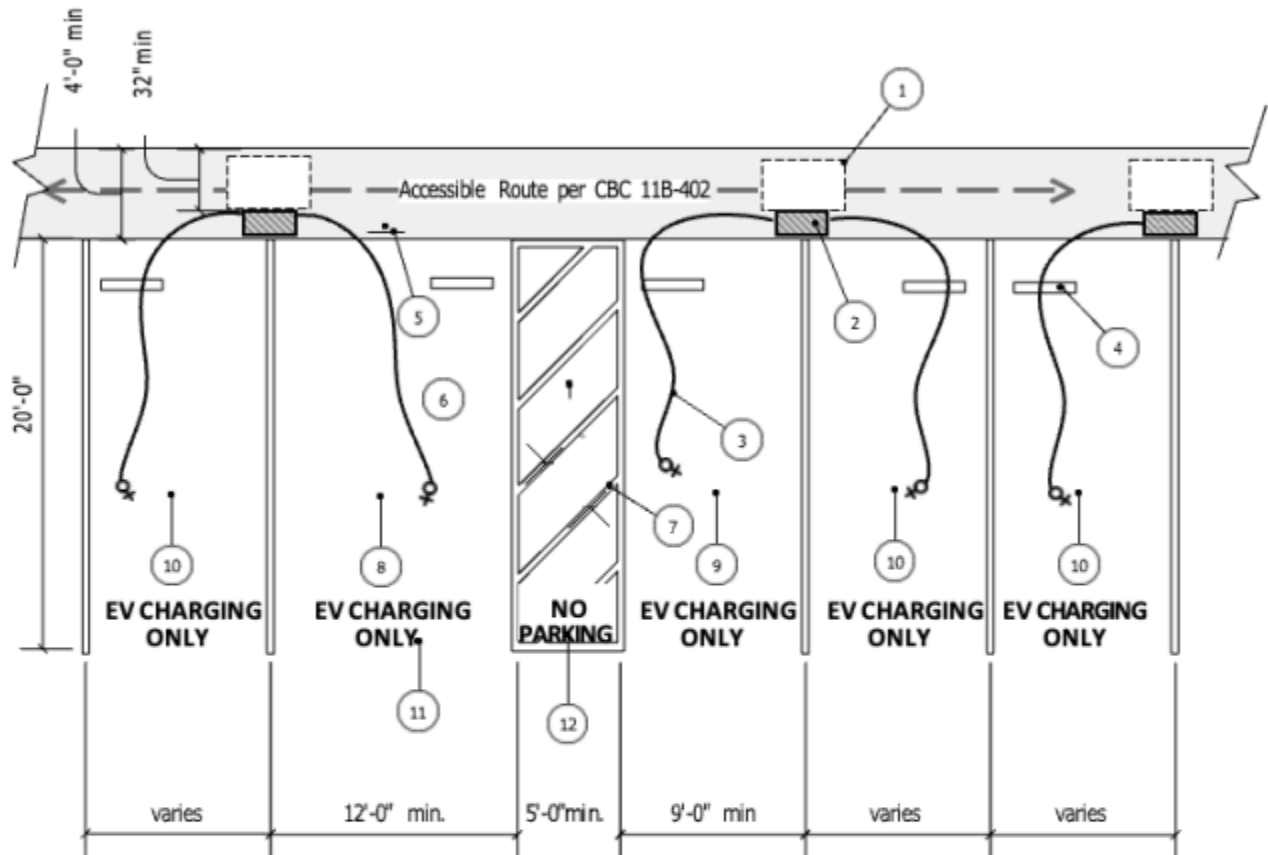


COMMERCIAL EV CHARGING SYSTEMS (EVCS) GUIDELINES

DIAGRAM 2

Typical Electric Vehicle Charging Station Configuration for Public Use

Current California Building Code Sections 11B-812 and 11B-228.3 for additional requirements.



- 1 30" x 48" clear space for parallel approach (CBC 11B-302).
- 2 Electric Vehicle Charging Station (EVCS) (see CBC 11B-228.3 & 11B-812 for requirements).
- 3 EVCS coupling (nozzle) and conductor.
- 4 Wheel stop.
- 5 70 sq. in reflectorized International Symbol of Accessibility (ISA) sign required at van accessible charging station when 5 or more EVCS spaces are provided. "Van Accessible" sign shall also be provided (see CBC 11B-812.8 for additional requirements).
- 6 60" minimum width access aisle located on the passenger side of a van accessible space and at the same level as the adjacent vehicle space (CBC 11B-812.7).
- 7 Contrasting border and 36" maximum on center diagonal hatched lines designating the access aisle. Access aisles borderlines and hatched lines for EVCS spaces shall not be blue (CBC 11B-812.7.2).
- 8 Minimum 144" wide by 216" long van accessible lined EVCS space (ISA sign and "Van Accessible" sign required) (CBC 11B-812.6.1 and 11B-812.8).
- 9 Minimum 108" wide by 216" standard accessible lined EVCS space (ISA sign not required unless 26 or more EVCS are provided) (CBC 11B-812.6.2).
- 10 EVCS parking space not regulated by CBC 11B-812.
- 11 12" high "EV CHARGING ONLY" surface marking at the end of each EVCS space (CBC 11B-812.9).
- 12 12" high "NO PARKING" surface marking within the access aisle (CBC 11B-812.7.3).



Building Department

COMMERCIAL EVCS EXPEDITED PERMITTING

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COMMERCIAL / NON-RESIDENTIAL ELECTRIC VEHICLE CHARGING SYSTEM (EVCS) ELIGIBILITY CHECKLIST FOR EXPEDITED PERMITTING

The purpose of this checklist is to determine the eligibility for expedited EVCS permitting. All questions requiring code compliance must comply to qualify for expedited review. If EVCS permit is eligible for expedited review, please submit this completed checklist along with your permit submittal.

Per AB 1236 and AB 970, Expedited Permitting has been established and specified turnaround times are given for EVCS Permitting. For Commercial / Non-Residential EVCS Permits, this timeline is shown below:

- **Application Completeness Check:**
 - 1 – 25 stations at a single site: 5 business days
 - 26 or more stations at a single site: 10 business days
- **Permit Issuance:**
 - 1 – 25 stations at a single site: 20 business days
 - 26 or more stations at a single site: 40 business days

These timelines are based on the specific binding timelines required by AB 970, for the review period of EVCS based on the size of the project. If the project does not qualify for Expedited Permitting, the Building Department’s Current Standard Turnaround Times will apply to review timelines.

Note that if submittals are deemed Incomplete, or do not meet the Chief Building Official’s minimal requirements of health and safety, it is the responsibility of the applicant to resubmit promptly, and turnaround times will be extended based on applicant resubmittal time.

Please complete this Checklist when submitting your application to request eligibility for Expedited Permitting.

Address: _____

TYPE OF CHARGING STATION(S)	POWER LEVELS (PROPOSED CIRCUIT RATING)	SELECT ONE
Level 1	110/120 volt alternating current (VAC) at 15 or 20 amps	
Level 2 – 3.3 kW (low)	208/240 VAC at 20 or 30 amps	
Level 2 – 6.6 kW (medium)	208/240 VAC at 40 amps	
Level 2 – 9.6 kW (high)	208/240 VAC at 50 amps	
Level 2 – 19.2 kW (highest)	208/240 VAC at 100 amps	
DC Fast Charging	440 or 480 VAC	
Other (Provide Detail)	Provide Rating:	

PERMIT APPLICATION	YES	NO
A. Does the Application include EVCS Manufacturer’s Specs and Installation Guidelines?		
B. Is the Application complete with the following information: Project Address, Applicant/ Owner/ Contractor Name, License #, Phone Number, Email, etc.?		



COMMERCIAL EVCS EXPEDITED PERMITTING

ELECTRIC LOAD CALCULATION WORKSHEET	YES	NO
C. Is an Electrical Load Calculation Worksheet included? (CEC 220)		
D. Based on the Load Calculation Worksheet, is a new electrical service panel upgrade required?		
1) If yes, do plans include the electrical service panel upgrade?		
E. Is the charging circuit appropriately sized for a continuous load of 125%? (CEC 210.20)		
F. If charging equipment proposed is a Level 2 – 9.6 kW station with a circuit rating of 50 amps or higher, is a completed circuit card with electrical calculations included with the Single-Line Diagram?		

SITE PLAN & SINGLE-LINE DIAGRAM	YES	NO
G. Is a Site Plan and Electrical Plan with a Single-Line Diagram included with the Application?		
1) If mechanical ventilation requirements are triggered for indoor venting requirements (CEC 625.52), is a Mechanical Plan included with the Application?		
H. Is the Site Plan fully dimensioned and drawn to scale?		
1) Showing location, size, and use of all structure		
2) Showing location of electrical panel to charging system		
3) Showing location of charging system and mounting		

COMPLIANCE WITH CALIFORNIA ELECTRICAL CODE (TITLE 24, PART 3)	YES	NO
I. Does the Plan include EVCS Manufacturer's Specs and Installation Guidelines?		
J. Does the Electrical Plan identify the amperage and location of existing electrical service panel?		
1) If yes, does the existing panel schedule show room for additional breakers?		
K. Is the charging unit rated more than 60 amps or more than 150V to ground?		
1) If yes, are disconnecting means provided in a readily accessible location in line of site and within 50' of EVCS? (CEC 625.43)		
L. Does the charging equipment have a Nationally Recognized Testing Laboratory (NRTL) Approved Listing Mark? (UL 2202/ UL 2200)		
M. If trenching is required, is the trenching detail called out?		
Check N/A if no trenching, Do not fill out last two questions below if N/A:		N/A
1) Is the trenching in compliance with electrical feeder requirements from structure to structure? (CEC 225)		
2) Is the trenching in compliance with minimum cover requirements for wiring methods or circuits? (18" for direct burial per CEC 300)		



COMMERCIAL EVCS EXPEDITED PERMITTING

COMPLIANCE WITH CALIFORNIA GREEN BUILDING STANDARDS CODE (TITLE 24, PART 11)	YES	NO
N. Do the CALGreen EV Readiness installation requirements apply to this project?		
1) Do the plans demonstrate conformance with CALGreen Table 5.106.5.3.1?		
2) Is the EVCS accessible in accordance with CBC Chapter 11B Section 11B-228.3?		
O. Do the plans clearly depict compliance with the accessible EVCS features?		
1) Do the plans identify the correct number and type of accessible EVCS stalls required in accordance with Table 11B-228.3.2.1?		
2) Do the plans detail compliance with the accessible EVCS features required by 11B-912 and Figure 11B-812.9?		

I certify that the above information is true and correct to the best of my knowledge, and that if my permit submittal is deemed ineligible for Expedited Permitting, then Current Standard Turnaround Times will be expected for review.

Name: _____ Relationship to Project: Property Owner Contractor

Phone #: _____ Email: _____

Signature: _____ Date: _____