



Commercial EV Charging Stations (EVCS)

Permits are required for electric vehicle charging station installation. All work shall be in conformance with **Article 625 of the 2019 California Electric Code** and **Section 11B-812 of the 2019 California Building Code**. Before the permit is applied for, it is necessary to evaluate the electrical service to verify if it will be adequate for the new demands of the charging device. In some situations, the electric service panel will need to be upgraded to accommodate the new charger. An upgraded electric service panel will require an additional permit.

- STEP 1: Determine the type of charging system to install.** Either a **Level 1** charger that is 120 volts alternating current; a **Level 2** charger that is 240 volts alternating current; or a **Level 3**, 3 Phase system.

- STEP 2: Visit the Permit Center to obtain your permit.** An electrical permit is required for an EV charging station to be installed. The following information is required for a permit:
 - Plans for EVCS system shall be prepared by a licensed individual familiar with these installations.
 - A site plan identifying the location of the installation of the Electric Vehicle Charging Station (EVCS) and installation instructions from the manufacture.
 - List relevant property information, such as existing parking counts and ratios. Show new and existing parking spaces.
 - Clearly show where the charging unit is located within the parking garage or parking lot.
 - If the electric vehicle charging equipment is in an area subject to vehicular damage, an adequate barrier shall be installed such as bollards or curbs. Show these protections on the plans and details.
 - EV charging station information: All Levels of EVCS systems with UL listed number or other approved nationally recognized testing laboratory, in compliance with UL2202.
 - Panel upgrade and electrical wiring shall be in conformance with 2019 California Electrical Code.
 - Identify if a second electrical meter is required to be installed because of electric utility rate for EV charging station.

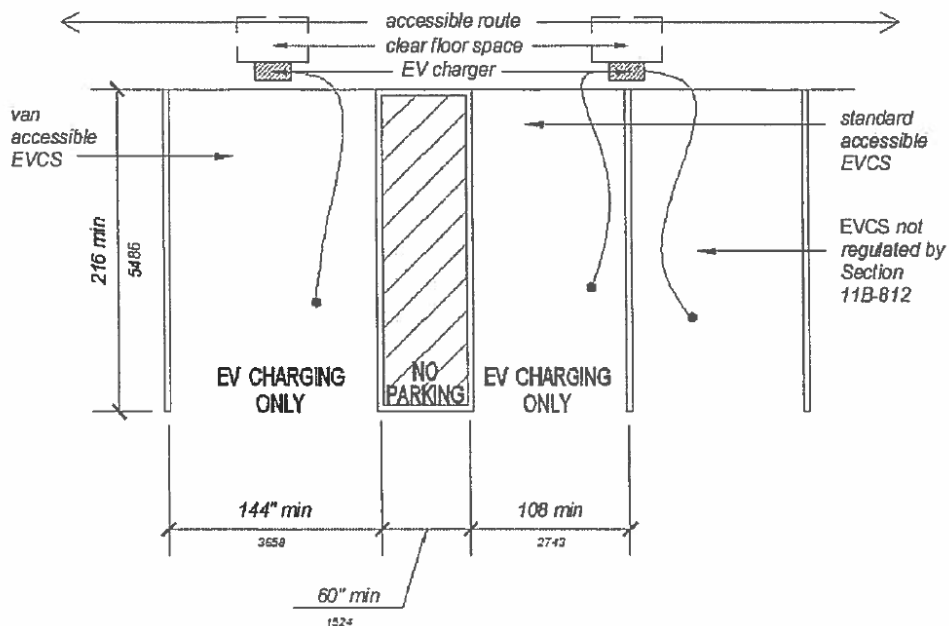
**TABLE 11B-228.3.2.1
ELECTRIC VEHICLE CHARGING STATIONS FOR PUBLIC USE AND COMMON USE**

TOTAL NUMBER OF EVCS AT A FACILITY*	MINIMUM NUMBER (by type) OF EVCS REQUIRED TO COMPLY WITH SECTION 11B-812*		
	Van Accessible	Standard Accessible	Ambulatory
1 to 4	1	0	0
5 to 25	1	1	0
26 to 50	1	1	1
51 to 75	1	2	2
76 to 100	1	3	3
101 and over	1, plus 1 for each 300, Or fraction thereof, over 100	3, plus 1 for each 60, Or fraction thereof, over 100	3, plus 1 for each 50, Or fraction thereof, over 100

*Where an EV charger can simultaneously charge more than one vehicle, the number of EVCS provided shall be considered equivalent to the number of electric vehicles that can be simultaneously charged.

STEP 3: Accessibility Requirements (California Building Code, Chapter 11B)

- All **signage** shall comply with the 2019 California Building Code, Chapter 11B, Division 7
- Vehicle spaces, access aisles serving them, and vehicular routes serving them shall provide a **vertical clearance of 98" minimum** (11B-812.4).
- Access aisles** shall adjoin an accessible route. Two vehicle spaces shall be permitted to share a common access aisle with a **minimum width of 60"** (11B-812.7) and shall extend the full required length of the vehicle.
- Vehicle space width** shall **provide for the path of travel to the charger** that is identified on the plans.
- Indicate the **size of the accessible EV charging parking space**, its access aisle and other accessible requirements. These items shall comply with the 2019 California Building Code (CBC), Chapter 11B, Sections 11B-812.6.1 through 11B-812.6.4. Show all layout details and key dimensions.
- The **charger shall comply with all accessibility requirements** such as reach ranges. Provide details on the plans that demonstrate compliance with the 2019 CBC, Section 11B-812 for the operable parts of the system.



STEP 4: Schedule an inspection and have the following on site for review:

- Inspectors Copy of Permit, Approved Plans, Installation Instructions and Electrical Load Calculations Worksheet** completed.
- No work shall be concealed before it is inspected.**
- All electrical conduit or wiring shall be installed and inspected** prior to concealing.
- Electric disconnect for the EVCS shall be within sight** of charger or **lockout tag installed on the breaker.**
- Contractor shall be present** at time of inspection with appropriate **torque wrench** to verify proper torque of all electrical connections and breakers.
- Label EVCS Breaker** on Electrical Service Panel.
- A **final inspection** shall be scheduled after all work for the **installation is completed** and **parking lot is striped.**