EVCS Access California

New Accessibility Regulations for Electric Vehicle Charging Stations



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EV Charging California Goals

Executive Order B-16-2012:

- By 2015, California's major metropolitan areas will be able to accommodate ZEVs through infrastructure plans.
- By 2020, California's ZEV infrastructure will be able to support up to 1 million vehicles.
- By 2025, 1.5 million ZEVs will be on California's roadways with easy access to infrastructure



EV Charging Infrastructure Planning

2016 CALGreen Code

- Requires EV Infrastructure and EV Spaces for new:
 - Multifamily residential facilities
 - Nonresidential facilities
- Mandatory Measures for Multifamily Residential
 - Applies to new facilities of 17 dwelling units or more
 - EV spaces are calculated as 3% of parking spaces
 - At least one EV space shall be in a common use area and available for use by all residents
- Mandatory Measures for Non-Residential
 - Approximately 1 EV Space for every 10 parking spaces

EV Charging Federal Accessibility Requirements

State and Local Government Facilities, Public Accommodations, and Commercial Facilities, under the Americans with Disabilities Act (ADA)

- No federal accessibility standards specific to the design of EVCS exists, even though accessibility to EVCS is required.
- Legal precedents specify that lack of explicit scoping or technical requirements does not relieve ADA Title II and Title III entities from obligation to provide access.



EV Charging IBC Requirements

- ANSI A117.1 is standard used by most states in the IBC.
- 2018 IBC will continue to use ANSI A117.1 2009 which does not address EVCS.
- ANSI A117.1-2017 does not address scoping requirements. If adopted, jurisdiction must address scoping.
- ANSI A117.1-2017 states minimal technical requirements.
- No anticipated scoping or technical provisions for EVCS in the IBC until 2021 edition.

EV Charging Federal Accessibility Requirements

- United States Access Board guidance states that charging is not parking, and the number of accessible spaces serving charging stations must be determined separately from the required number of car and van parking spaces.
- Because the California regulatory process is similar to the regulatory process at the federal level, and absent specific scoping and technical requirements, agencies may use California requirements as equivalent facilitation.



EV Charging Stations CA Accessibility Requirements

CBC accessibility provisions are consistent with the following guidance provided by the US Access Board:

- Public and common use EVCS are charging spaces and not parking spaces.
- While an EV needs to be in a parked state to charge; charging, and not parking, is the primary purpose of an EVCS.
- EV charging is a service provided by the facility owner or public entity, and therefore must be accessible to individuals with disabilities.

EV Charging CBC Accessibility Regulations



2016 California Building Code Effective January 1, 2017

Link to DSA EVCS Regulations

or search "DSA EVCS"



EV Charging Stations CBC Accessibility Regulations

Definitions applicable to EVCS

Chapter 2, Section 202 Definitions

Scoping: What type and how many?

Chapter 11B, Division 2
 Section 11B-228.3 Electric Vehicle Charging Stations

Technical: Where located and how to make accessible?

Chapter 11B, Division 8
 Section 11B-812 Electric vehicle charging stations

EV Charging Stations Understanding Scoping

- Local zoning codes may vary, and some jurisdictions may permit a facility owner to meet parking requirements with a combination of parking and charging stations; however, the accessibility requirements to parking and EVCS under the CBC are separate and different.
- Scoping provisions for parking are in CBC 11B-208.
 Scoping provisions for EVCS are in CBC 11B-228.3.
- Technical provisions for parking are in CBC 11B-502.
 Technical provisions for EVCS are in CBC 11B-812.



EV Charging Stations CBC 11B-228.3 Scoping

Two exceptions to providing accessible EVCS

- EVCSs not available to general public (example: EVCS that charge public and private fleet vehicles) and intended for use by a designated vehicle or driver (example: EVCS assigned to an employee)
- In public housing facilities, EVCS intended for use by an EV owner or operator at their residence (space can be provided and assigned to the EVCS owner)



EV Charging Stations CBC 11B-228.3 Scoping

TABLE 11B-228.3.2.1

| Total Number | Minimum Number (by type) of EVCS Required to Comply with Section 11B-812 ¹ | | |
|---------------------------------------|--|--|--|
| of EVCS at a Facility ¹ | 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 |

Note: 1. 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.

EV Charging Stations CBC 11B-228.3 Scoping

New Construction and Alterations of EVCS

- When new EVCS are added to a site with existing EVCS, the total number of new and existing EVCS is used to determine the number of accessible EVCS per Table 11B-228.3.2.1.
- Technical provisions apply only to new and altered EVCS; the CBC does not require existing EVCS to be altered to meet the new technical requirements.
- Operable parts on all new and altered EV chargers must comply with the requirements of CBC 11B-309.4.

Accessible route requirements

- An accessible route shall be provided connecting the EV space to the EV charger that serves it.
- EVCS shall be designed so accessible routes are not obstructed by cables or other elements.
- EVCS that serve a particular building or facility shall be located on an accessible route to an accessible entrance.
- Where EVCS do not serve a particular building or facility, EVCS shall be located on an accessible route to an accessible pedestrian entrance of the EV charging facility.

EV Charger requirements

Operable parts and charging cord storage shall comply with requirements for:

- Clear floor space at EV charger
- Reach range requirements
- Operable parts requirements (EV connectors are not required to meet 5-pound activating force requirements)

Point-of-sale devices must comply with the required accessibility features.



Identification for accessibility

Installations of 1-4 EVCS

- No identification signs required
- While an accessible EV space is designed for accessibility, its use is available to everyone and not limited to those with access license plates or placards

Installations of 5-25 EVCS

 One van accessible EV space shall be identified with an ISA; the standard accessible EV space shall not be required to be identified with an ISA

Identification for accessibility

Installations of 26 or more EVCS

 All required van accessible and all required standard accessible shall be identified by an ISA

Ambulatory EVCS

Not required to be identified with an ISA

Drive-up EVCS

Not required to be identified with an ISA



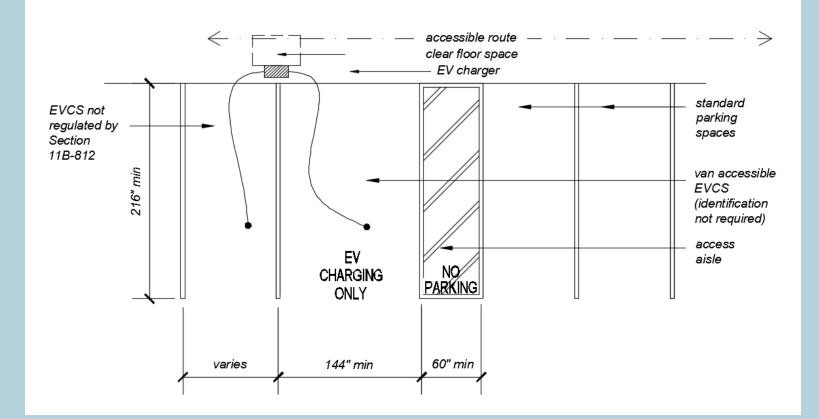
EV Charging Stations Time Limits for Charging

If properly signed per local ordinance, EV charging time limits can be applied to **all** users:

 Vehicles displaying accessible license plates or placards may **not** park for unlimited periods of time in an accessible EVCS identified by an ISA where the length of time is restricted or metered.

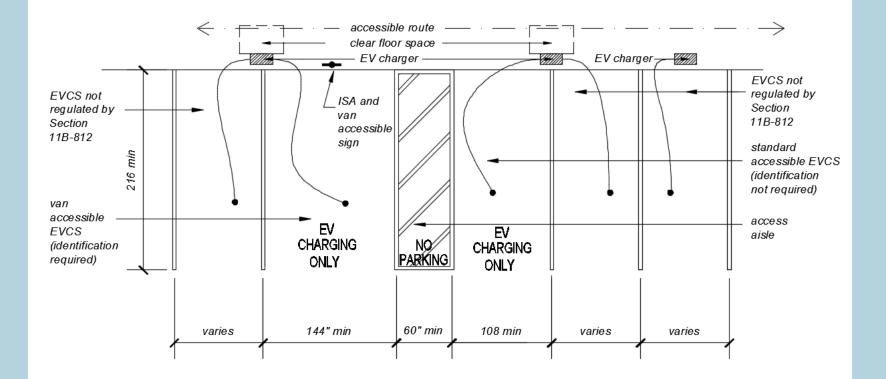


EV Charging Stations Sample Layout: Two EVCS

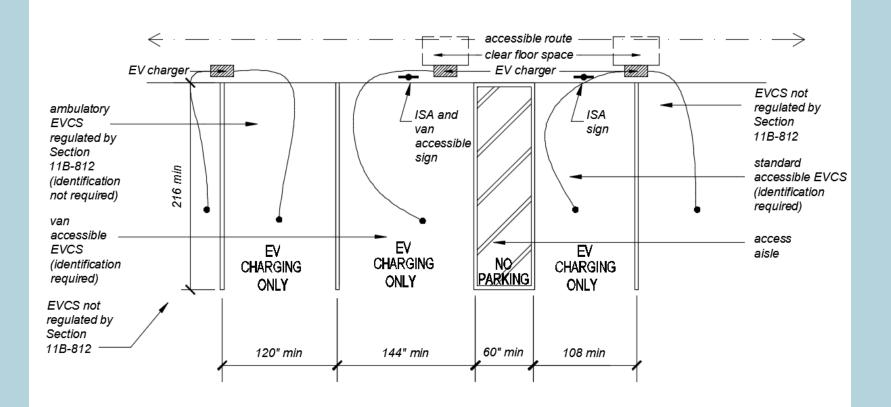




EV Charging Stations Sample Layout: Five EVCS



EV Charging Stations Sample Layout: 26+ EVCS





This presentation is intended to provide an overview of the requirements to plan for and provide accessibility to electric vehicle charging stations in California. The text of the regulations in the California Building Code are available through the Building Standards Commission website

www.bsc.ca.gov

Please direct questions regarding this presentation to: **Division of the State Architect** Ida A. Clair AIA LEED AP CASp Principal Architect ida.clair@dgs.ca.gov