

## **Electric Vehicle Charging Stations**

Accessibility Regulations for Public Buildings, Public Accommodations, Commercial Facilities, and Public Housing

#### California Building Code (CBC) Title 24 Part 2 Chapter 11B

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## EV Charging Stations CBC Chapter 11B

Steps to applying accessibility regulations accurately:

- 1. Read applicable definitions in Chapter 2 prior to applying scoping and technical requirements
- 2. Determine the total number of accessible EVCS per CBC 11B-228.3 based on the total number of EVCS provided.
- 3. Apply technical provisions for EVCS in CBC 11B-812.
- 4. If project is an alteration, determine *path of travel* improvements requirements in CBC 11B-202.4 Exception 10.



## EV Charging Stations CBC Chapter 11B

#### Two exceptions to providing accessible EVCS

- EVCS not available to general public <u>and</u> intended for use by a designated vehicle or driver (example: EVCS that are assigned to an employee; EVCS serving public or private fleet vehicles).
- 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

#### **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.



#### CBC 11B-228.3 Scoping

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

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

#### Notes:

 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.



#### **Accessible spaces**

#### Van accessible EV space

• 12' minimum width x 18' long, with 5' access aisle

Increased width of stall allows for flexibility of parking dependent upon charging port location on the vehicle. Access aisle required on passenger side.

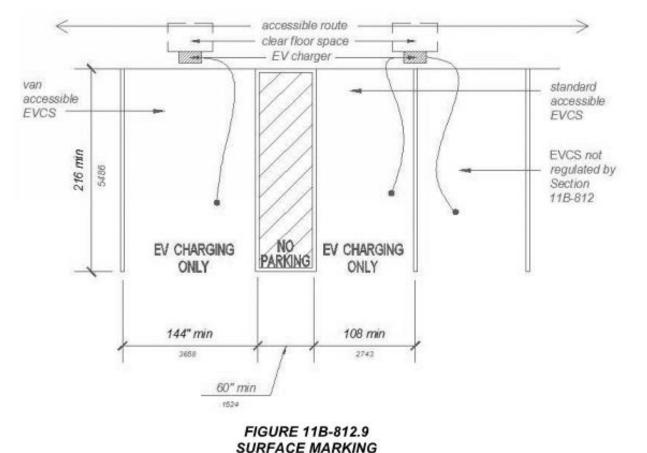
#### Standard accessible EV space

• 9' minimum width x 18' long, with 5' access aisle

Similar configuration to standard accessible parking space, and access aisle can be on driver or passenger side.



#### **Accessible spaces**





### **Accessible spaces**

#### Ambulatory accessible EV space

10' minimum width x 18' long, no access aisle

Additional width of space provides increased access for individuals with limited or temporary mobility challenges.

#### Drive-up accessible EV space

Similar to motor fuel pump island at filling stations



## **EV Charging Stations** CBC 11B-812 Technical

#### **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 Charging Stations CBC 11B-812 Technical

#### **EV Charger requirements serving accessible EVCS spaces**

- Charging cables cannot block the accessible route (may require cord storage).
- Clear floor space required at EV charger.
- Reach range requirements for operable parts.
- Operable parts requirements for maximum 5 lb. force (EV connectors are not required to meet 5-lb. activating force requirements).
- Point-of-sale devices must comply with of CBC 11B-812.10.3.



### CBC 11B-812 Technical

#### Identification for accessibility

Installations of 1-4 EVCS

- No identification signs required.
- While the 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.



#### CBC 11B-812 Technical

#### 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.



## Path of Travel Improvements

#### **CBC 11B-202.4 Exception 10:**

- When installing new EVCS at existing facilities where vehicle fueling, charging, parking or storage is a primary function, POTIs are limited to 20% of cost of work directly associated with the installation of EVCS. (example: EVCS in a parking structure when the parking structure does not serve a specific building)
- Alterations where installing new EVCS at existing facilities where vehicle fueling, charging, parking or storage is **not** a primary function, POTIs are not required. (example: EVCS serving a specific building)





#### DSA EVCS Webpage <u>https://www.dgs.ca.gov/DSA/Resources/Page-</u> <u>Content/Resources-List-Folder/Access-Compliance-</u> <u>Reference-Materials</u>

Then click on: Electric Vehicle Charging Station Accessibility

Includes:

Federal Resources and CBC Requirements EVCS Fact Sheet Summary EVCS PowerPoint and Video EVCS Frequently Asked Questions (FAQs)



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## Overview

- Volta stations installed in 140+ municipalities across the US
- Deep experience with CA EV accessibility
- We pay cost of equipment, install, maintenance
- Offer charging to public for free, funded by major sponsor brands
- Average station used 7 hours a day, 30K mi. given away per year
- Over 60 million EV miles given away



# Charging provider perspective

- Separate entity from site owner / operator
- Lease vehicle spaces
- 90% of projects are retrofits\*
- Projects need low impact to site
- Typical installation 2-4 EVCS



\*new development work steadily increasing

# Our approach

Full compliance with CBC CH11B when possible given scope limitations (11B-202.3exception#2)

Low impact & easy -

- Link to existing accessible elements
- Widen perpendicular vehicle spaces

High cost adders -

- EV space regrading
- Angled parking accessibility
- Hardscape work (e.g. ramps, curbs)

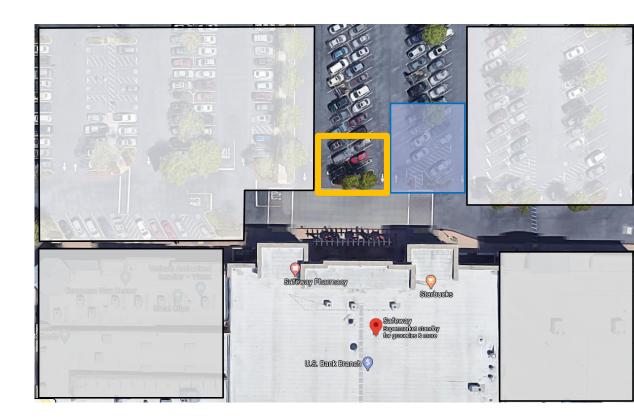
Out of scope or infeasible -

- Major parking surface regrading
- Building & path of travel improvements (11B-2024 exception#10)



## Tenant site

- Tenants have small footprint
- Existing accessible reserved parking uses key areas
- Parking spaces = \$\$\$



## Tenant site

- Angled parking is challenging
- Van accessible EVCS can consume 3 spaces
- Also manage issues on trees, landscaping and misperceptions of rules by clients



# Key areas for collaboration

- AB1236 and over-the-counter permitting
- Streamline permitting for DC Fast Charge
- Help us meet accessibility goals by interpreting rules to support charging installs AND access



## **VOLTA** Drive Forward

## **REIT** site

- Anchor tenants control large areas
- Less than 50% of total site available for install
- Project cannot affect tenant areas
- Volta must use space leftover

