

Permit Number:

Note: EVCS is not subject to HOA approval and Plans will be approved with a maximum of one deficiency notice in compliance with AB1236 & AB 970

PERMIT APPLICATION AND PLAN REVIEW CHECKLIST FOR ELECTRIC VEHICLE CHARGING STATION (EVCS)

INSTRUCTIONS: This Checklist shall be used during a residential Electric Vehicle Charging Station (EVCS) installation permit application and plan review. If any discrepancies are found on the application and/or supplemental documentation, record the details of needed corrections on this sheet and provide to the applicant.

Check	Charging Station(s)	Associated Power Levels	
One	Proposed	(proposed circuit rating)	
	Level 1	110/120 volt alternating current (VAC) at 15 or 20 Amps	
	Level 2 - 3.3 kilowatt (low)	208/240 VAC at 20 or 30 Amps	
	Level 2 - 6.6kW (medium)	208/240 VAC at 40 Amps	
	Level 2 - 9.6kW (high)	208/240 VAC at 50 Amps	
	Level 2 - 19.2kW (highest)	208/240 VAC at 100 Amps	
	Other (provide detail)		

COMPLETED PERMIT APPLICATION: Application must include project address, parcel number, builder/owner name, contractor name, CSLB license number, phone numbers, email address.

□ EVCS MANUFACTURER'S SPECIFICATIONS

□ EVCS MANUFACTURER'S INSTALLATION INSTRUCTIONS

□ COMPLETED ELECTRICAL LOAD CALCULATION PER CEC¹ 220

 Based on the load calculation worksheet, is a new electrical service panel upgrade required²? Yes □ No □

If new service is required, it must be included on the permit application.

- 2) Is the charging circuit appropriately sized for a continuous load (125%)? Yes \Box No \Box
- If charging equipment proposed is a Level 2 9.6kW station with a circuit rating of 50 amps or higher, is a panelboard schedule and electrical calculation included with the single-line diagram? Yes □ No □ Not Applicable □

HALL OF ADMINISTRATION #1720

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¹ 2019 California Electrical Code. Article 220 Branch-Circuit, Feeder, and Service Calculations

² Load Calculation Worksheet review instructions: The size of the <u>existing</u> service MUST be <u>equal to or larger than</u> the <u>minimum required size</u> of main service breaker. If the existing service panel is **smaller** than the minimum required size of existing electrical services, then a new upgraded electrical service panel must be installed to handle the added electrical load from the proposed EVCS.

□ SITE PLAN & SINGLE LINE DRAWING

Site Plan (18"X24") must be fully dimensioned and drawn to scale showing the following:

- a. Location, size and use of all structures
- b. Location of all electrical equipment and the EVCS
- c. Location and type of mounting for charging system (625.50)
- 1) Is a site plan and electrical plan with a single-line diagram included with the permit application?

 $\mathsf{Yes} \Box \mathsf{No} \Box$

If mechanical ventilation requirements are triggered for indoor venting requirements (CEC 625.52), is a mechanical plan included with the permit application?
 Yes □ No □ Not Applicable □

COMPLIANCE WITH 2019 CALIFORNIA ELECTRCIAL CODE (TITLE 24, PART 3)

- 1) Does the electrical plan identify the amperage and location of existing electrical service panel? Yes □ No □
 - a. Does the existing panel schedule show room for additional breakers? Yes \Box No \Box
 - b. Are sizes for the conduit and conductor included? Yes \Box No \Box
- 2) Is the charging unit rated more than 60 amps or more than 150V to ground? Yes \Box No \Box
 - a. If rated >60 amps, are disconnecting means provided in a readily accessible location in line of site and within 50' of EVCS? (CEC 625.43) Yes □ No □
- 3) Does the charging equipment have product certification (listing) by a recognized qualified electrical testing laboratory? Yes □ No □
- 4) If trenching is required, is the trenching detail called out? Yes \Box No \Box
 - a. Is the trenching in compliance with electrical feeder requirements from structure to structure? (CEC 225) Yes □ No □
 - b. Is the trenching in compliance of minimum cover requirements for wiring methods or circuits? (18" for direct burial per CEC 300) Yes □ No □

COMPLIANCE WITH 2019 California Green Building Standards Code (CALGreen) FOR NEW CONSTRUCTION³ (TITLE 24, PART 11)

Is this project considered new construction? Yes □ No □
 If yes, plans must include installation of a listed raceway, adequate panel capacity and identification as "EV Capable" in compliance with Section 4.106.4.1 & 4.106.4.1.1)

³ 2019 California Green Buildings Standards Code. Title 24, Part 11, Section 4.106.4.1 & 4.106.4.1.1 One-and two-family dwellings

PERMIT APPLICATION AND PLAN REVIEW CHECKLIST FOR MULTI-UNIT DWELLINGS (MUD) AND COMMERCIAL ELECTRIC VEHICLE CHARGING STATION (EVCS)

INSTRUCTIONS: This checklist shall be used during a multi-unit dwelling and commercial Electric Vehicle Charging Station (EVCS) installation permit application and plan review. If any discrepancies are found on the application and/or supplemental documentation, record the details of needed corrections on this sheet and provide to the applicant.

Check	Charging Station(s)	Associated Power Levels	Typical Non-Residential
One	Proposed	(proposed circuit rating)	Charging Locations
	Level 1	110/120 volt alternating current (VAC) at 15 or 20 Amps	 Commercial office building
	Level 2 - 3.3kW (low)	208/240 VAC at 20 or 30 Amps	Multi-unit dwellings (MUD)
	Level 2 - 6.6kW (medium)	208/240 VAC at 40 Amps	 Commercial office building Public access
	Level 2 - 9.6kW (high)	208/240 VAC at 50 Amps	
	Level 2 - 19.2kW (highest)	208/240 VAC at 100 Amps	
	DC Fast Charging	440 or 480 VAC	 Public access
			 Large commercial office buildings or parks Hospitality & recreation
	Other (provide detail)		

Check type of Electric Vehicle Charging Station Proposed:

□ ELECTRIC VEHICLE CHARGING STATION MANUFACTURER'S SPECIFICATIONS □ EVCS MANUFACTURER'S INSTALLATION INSTRUCTIONS

□ COMPLETED ELECTRICAL LOAD CALCULATIONS PER CEC⁴ 220

 Based on the load calculation worksheet, is a new electrical service panel upgrade required⁵? Yes □ No □

If new service or upgrade is required, it must be included on the permit application.

- 2) Is the charging circuit appropriately sized for a continuous load (125%)? Yes
 No
- 3) If charging equipment proposed is a DC Fast Charging station or a Level 2 9.6kW station with a circuit rating of 50 amps or higher, is a panelboard schedule and electrical calculation included with the single-line diagram? Yes □ No □ Not Applicable □

¹⁾ Application must include project address, parcel number builder/owner name, contractor name, CSLB license number, phone numbers, email address.

⁴ 2019 California Electrical Code. Article 220 Branch-Circuit, Feeder, and Service Calculations

□ SITE PLAN & SINGLE LINE DRAWING

Site Plan (18"X24") must be fully dimensioned and drawn to scale showing the following:

- a. Location, size, and use of all structures
- b. Location of electrical equipment and the EVCS
- c. Type of mounting for charging system (625.50)
- d. Parking and circulation areas
- 1) Is a site plan and electrical plan with a single-line diagram included with the permit application?

 $\mathsf{Yes} \Box \mathsf{No} \Box$

If mechanical ventilation requirements are triggered for indoor venting requirements (CEC 625.52), is a mechanical plan included with the permit application?
 Yes □ No □ Not Applicable □

PLAN COMPLIANCE WITH 2019 CALIFORNIA ELECTRCIAL CODE (TITLE 24, PART 3)

- Does the electrical plan identify the amperage and location of existing electrical service panel? Yes □ No □
 - a. Does the existing panel schedule show room for additional breakers? Yes \Box No \Box
 - b. Are sizes for the conduit and conductors included? Yes \Box No \Box
- 2) Is the charging unit rated more than 60 amps or more than 150V to ground? Yes \Box No \Box
 - a. If yes to Q2, are disconnecting means provided in a readily accessible location in line of site and within 50' of EVCS? (CEC 625.43) Yes □ No □
- 3) Does the charging equipment have product certification (listing) by a recognized qualified electrical testing laboratory? Yes □ No □
- 4) If trenching is required, is the trenching detail called out? Yes \Box No \Box
 - a. Is the trenching in compliance with electrical feeder requirements from structure to structure? (CEC 225) Yes □ No □
 - b. Is the trenching in compliance of minimum cover requirements for wiring methods or circuits? (CEC 300.5) Yes □ No □

PLAN COMPLIANCE WITH 2019 MANDATORY CALGREEN CODE FOR NEW CONSTRUCTION AND CHAPTER 11B ACCESSIBILITY REQUIREMENTS

2019 CALGreen Mandatory EVCS Requirements for New Construction⁶

- 1) For **MUD EVCS**, do CALGreen EV Readiness installation requirements apply? Yes
 No
 - a. Do the plans demonstrate conformance with mandatory measures for 3% of total parking spaces, but no less than one, for new multifamily dwellings with 17+ units that must be EV capable per Section 4.106.4.2? Yes □ No □
- 2) For **Commercial EVCS**, do CALGreen EV Readiness installation requirements apply to this project? Yes □ No □
 - a. Do the plans demonstrate conformance with mandatory measures of 3% of parking spaces in lots with 51+ spaces being EV capable per Section 5.106.5.3? Yes □ No □

⁵ Load Calculation Worksheet review instructions: The size of the <u>existing</u> service MUST be <u>equal to or larger than</u> the <u>Minimum Required Size</u> of main service breaker. If the existing service panel is **smaller** than the minimum required size of existing electrical services, then a new upgraded electrical service panel must be installed in order to handle the added electrical load from the proposed EVCS.

2019 Chapter 11B Accessibility Requirements for Public and Common Use EVCS⁷

- Is there at least 1 EVCS parking stall out of 4 EVCS parking stalls that meet Chapter 11B accessibility dimension requirements for a van accessible parking space (144 inches wide with an adjacent access aisle)? Yes □ No □ Access aisles shall comply with Section 11B-302.
- 2) For parking stalls with 5 to 25 EVCS, is there 1 EVCS parking stalls that meets Chapter 11B accessibility dimension requirements for a van accessible parking space (144 inches wide with an adjacent access aisle) and 1 EVCS parking stall that meets the standard accessible parking space (108 inches wide with an adjacent access aisle)? Yes □ No □
- 3) Is the path of travel to the EVCS from the accessible parking stall demonstrated to be unobstructed? Yes □ No □
- 4) Is the accessible path of travel from the EVCS parking stall demonstrated to be with 200 feet of a main building entrance? Yes □ No □

NOTE: EVCS is not subject to association approval and Plans will be approved with a maximum of one deficiency notice in compliance with AB 1236 and AB 970.

⁶ 2019 California Green Buildings Standards Code. Title 24, Part 11, Section 4.106.4.2 *Multi-family dwellings and* Section 5.106.5.3 *Electric Vehicle (EV) Charging*

⁷ 2019 California Building Code. Title 24, Part 2, Chapter 11B Accessibility to Public Buildings, Public Accommodations, Commercial Buildings and Publicly Funded Housing, Section 228.3 Electric Vehicle Chargers