## Permit Application Correction Sheet for

## Residential Electric Vehicle Charging Station

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| --- | --- | --- |
| Check One | Type of Charging Station(s) Proposed | Power Levels  (proposed circuit rating) |
|  | Level 1 | 110/120 volt alternating current (VAC) at 15 or 20 Amps |
|  | Level 2 - 3.3 kilowatt (kW) (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) |  |

**INSTRUCTIONS:** This Correction Sheet 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 Correction Sheet and provide to the applicant. Highlight or cite Correction Sheet section and item number in correction summary.

**Section 1: PERMIT APPLICATION**

1. Is the permit application complete with the following information: Project address, parcel #, builder/owner name, contractor name, valid contractor license #, phone numbers and any other requirement? Yes  No
2. Does the application include electric vehicle charging station manufacturer's specs and installation guidelines? Yes  No

**Section 2: ELECTRICAL LOAD CALCULATION WORKSHEET**

1. Is an electrical load calculation worksheet included? (CEC[[1]](#footnote-1) 220) Yes  No
2. Based on the load calculation worksheet, is a new electrical service panel upgrade required[[2]](#footnote-2)? Yes  No 
   1. If yes to Q2, do plans include the electrical service panel upgrade? Yes  No
   2. If yes to Q2, is the SDG&E work order included with permit application? Yes  No
3. I the charging circuit appropriately sized for a continuous load (125%)? Yes  No
4. If charging equipment proposed is a Level 2 - 9.6kW station with a circuit rating of 50 amps or higher, is a completed circuit card with electrical calculations included with the single-line diagram? Yes  No  Not Applicable

**Section 3: SITE PLAN & SINGLE LINE DRAWING**

1. Is a site plan and electrical plan with a single-line diagram included with the permit application? Yes  No 
   1. If mechanical ventilation requirements are triggered for indoor venting requirements (CEC 625.29 (D)), is a mechanical plan included with the permit application? Yes  No
2. Is the site plan fully dimensioned and drawn to scale? Yes  No 
   1. Showing location, size, and use of all structures? Yes  No
   2. Showing location of electrical panel to charging system? Yes  No
   3. Showing type of charging system and mounting? Yes  No
   4. Is the type of mounting for charging system included if the charging system is not wall-mounted? Yes  No  Not Applicable

**Section 4: COMPLIANCE WITH 2013 CALIFORNIA ELECTRCIAL CODE (TITLE 24, PART 3)**

1. Does the plan include EVCS manufacturer's specs and installation guidelines? Yes  No
2. Does the electrical plan identify the amperage and location of existing electrical service panel? Yes  No 
   1. If yes to Q2, does the existing panel schedule show room for additional breakers? Yes  No
   2. Are sizes for the conduit and conductor included? Yes  No
3. Is the charging unit rated more than 60 amps or more than 150V to ground? Yes  No 
   1. If yes to Q3, are disconnecting means provided in a readily accessible location in line of site and within 50’ of EVCS? (CEC 625.23) Yes  No
4. Does the charging equipment have a Nationally Recognized Testing Laboratory (NRTL) approved listing mark? (UL 2202/UL 2200) Yes  No
5. If trenching is required, is the trenching detail called out? Yes  No 
   1. Is the trenching in compliance with electrical feeder requirements from structure to structure? (CEC 225) Yes  No
   2. Is the trenching in compliance of minimum cover requirements for wiring methods or circuits? (18” for direct burial per CEC 300) Yes  No

**Section 5:** **COMPLIANCE WITH 2013 MANDATORY CALGREEN CODE FOR NEW CONSTRUCTION**

2013 CALGreen Mandatory EVCS Requirements for New Construction[[3]](#footnote-3)

1. Do CALGreen EV Readiness installation requirements apply to this project? Yes  No 
   1. Should be identified during plan review. (4.106.4.1 &4.106.4.1.1)
   2. 2016 CALGreen proposed mandatory EVCS requirements for new construction (If approved, effective January 1, 2017)

**CORRECTION(S) SUMMARY:**

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## Permit Application and Plan Review Correction Sheet for

## Multi-Unit Dwellings (MUD) Electric Vehicle Charging Station

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| Check One | Type of Charging Station(s) Proposed | Power Levels  (proposed circuit rating) |
|  | Level 1 | 110/120 volt alternating current (VAC) at 15 or 20 Amps |
|  | Level 2 - 3.3 kilowatt (kW) (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 |
|  | DC Fast Charging | 440 or 480 VAC |
|  | Other (provide detail) |  |

**INSTRUCTIONS:** This Correction Sheet shall be used during a multi-unit dwelling 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 Correction Sheet and provide to the applicant. Highlight or cite Correction Sheet section and item number in correction summary.

**Section 1: PERMIT APPLICATION**

1. Is the permit application complete with the following information: Project address, parcel #, builder/owner name, contractor name, valid contractor license #, phone numbers and any other requirement? Yes  No

**Section 2: ELECTRICAL LOAD CALCULATION WORKSHEET**

1. Is an electrical load calculation worksheet included? (CEC[[4]](#footnote-4) 220) Yes  No
2. Based on the load calculation worksheet, is a new electrical service panel upgrade required[[5]](#footnote-5)? Yes  No 
   1. If yes to Q2, do plans include the electrical service panel upgrade? Yes  No
   2. If yes to Q2, is the SDG&E work order included with permit application? Yes  No
3. Is the charging circuit appropriately sized for a continuous load (125%)? Yes  No

**Section 3: SITE PLAN**

1. Is a site plan and electrical plan with a single-line diagram included with the permit application? Yes  No 
   1. If mechanical ventilation requirements are triggered for indoor venting requirements (CEC 625.29 (D)), is a mechanical plan included with the permit application? Yes  No
2. Is the site plan fully dimensioned and drawn to scale? Yes  No 
   1. Showing location, size, and use of all structures? Yes  No
   2. Showing location of electrical panel to charging system? Yes  No
   3. Showing type of charging system and mounting? Yes  No
   4. Is the type of mounting for charging system included if the charging system is not wall-mounted? Yes  No  Not Applicable

**Section 4: COMPLIANCE WITH 2013 CALIFORNIA ELECTRCIAL CODE (TITLE 24, PART 3)**

1. Does the plan include EVCS manufacturer's specs and installation guidelines? Yes  No
2. Does the electrical plan identify the amperage and location of existing electrical service panel? Yes  No 
   1. If yes to Q2, does the existing panel schedule show room for additional breakers? Yes  No
   2. Are sizes for the conduit and conductor included? Yes  No
3. Is the charging unit rated more than 60 amps or more than 150V to ground? Yes  No 
   1. If yes to Q3, are disconnecting means provided in a readily accessible location in line of site and within 50’ of EVCS? (CEC 625.23) Yes  No
4. Does the charging equipment have a Nationally Recognized Testing Laboratory (NRTL) approved listing mark? (UL 2202/UL 2200) Yes  No
5. If trenching is required, is the trenching detail called out? Yes  No 
   1. Is the trenching in compliance with electrical feeder requirements from structure to structure? (CEC 225) Yes  No
   2. Is the trenching in compliance of minimum cover requirements for wiring methods or circuits? (18” for direct burial per CEC 300) Yes  No

**Section 5: COMPLIANCE WITH 2013 MANDATORY CALGREEN CODE FOR NEW CONSTRUCTION AND CHAPTER 11B ACCESSIBILITY REQUIREMENTS**

2013 CALGreen Mandatory EVCS Requirements for New Construction[[6]](#footnote-6)

1. Do CALGreen EV Readiness installation requirements apply to this project? Yes  No 
   1. Should be identified during plan review (4.106.4.2)
   2. 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? Yes  No 2016 CALGreen proposed mandatory requirements for new construction include measures for 5% of total parking spaces, but no less than one, for new multifamily dwellings with 17+ units that must be EV capable (If approved, effective January 1, 2017)

2016 Chapter 11B Proposed EVCS Requirements (to go in effect January 1, 2017)[[7]](#footnote-7)

1. 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 
   1. 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

**CORRECTION(S) SUMMARY:**

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

## Permit Application and Plan Review Correction Sheet for

## Non-Residential Electric Vehicle Charging Station

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| --- | --- | --- | --- |
| Check One | Type of Charging Station(s) Proposed | Power Levels  (proposed circuit rating) | Typical NON-RES 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 * Commercial office building * Public access |
|  | 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 |
|  | DC Fast Charging | 440 or 480 VAC | * Public access * Large commercial office buildings or parks * Hospitality & recreation |
|  | Other (provide detail) |  |  |

**INSTRUCTIONS:** This Correction Sheet shall be used during a non-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 Correction Sheet and provide to the applicant. Highlight or cite Correction Sheet section and item number in correction summary.

**Section 1: PERMIT APPLICATION**

1. Is the permit application complete with the following information: Project address, parcel #, builder/owner name, contractor name, valid contractor license #, phone numbers and any other requirement? Yes  No

**Section 2: ELECTRICAL LOAD CALCULATION WORKSHEET**

1. Is an electrical load calculation worksheet included? (CEC[[8]](#footnote-8) 220) Yes  No
2. Based on the load calculation worksheet, is a new electrical service panel upgrade required[[9]](#footnote-9)? Yes  No 
   1. If yes to Q2, do plans include the electrical service panel upgrade? Yes  No
   2. If yes to Q2, is the SDG&E work order included with permit application? Yes  No
3. Is the charging circuit appropriately sized for a continuous load (125%)? Yes  No
4. 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 completed circuit card with electrical calculations included with the single-line diagram? Yes  No  Not Applicable

**Section 3: SITE PLAN**

1. Is a site plan and electrical plan with a single-line diagram included with the permit application? Yes  No 
   1. If mechanical ventilation requirements are triggered for indoor venting requirements (CEC 625.29 (D)), is a mechanical plan included with the permit application? Yes  No  Not Applicable
2. Is the site plan fully dimensioned and drawn to scale? Yes  No 
   1. Showing location, size, and use of all structures? Yes  No
   2. Showing location of electrical panel to charging system? Yes  No
   3. Showing type of charging system and mounting? Yes  No
   4. Is the type of mounting for charging system included if the charging system is not wall-mounted? Yes  No  Not Applicable

**Section 4: COMPLIANCE WITH 2013 CALIFORNIA ELECTRCIAL CODE (TITLE 24, PART 3)**

1. Does the plan include EVCS manufacturer's specs and installation guidelines? Yes  No
2. Does the electrical plan identify the amperage and location of existing electrical service panel? Yes  No 
   1. If yes, does the existing panel schedule show room for additional breakers?
   2. Are sizes for the conduit and conductor included? Yes  No
3. Is the charging unit rated more than 60 amps or more than 150V to ground? Yes  No 
   1. If yes, are disconnecting means provided in a readily accessible location in line of site and within 50’ of EVCS? (CEC 625.23) Yes  No
4. Does the charging equipment have a Nationally Recognized Testing Laboratory (NRTL) approved listing mark? (UL 2202/UL 2200) Yes  No
5. If trenching is required, is the trenching detail called out? Yes  No 
   1. Is the trenching in compliance with electrical feeder requirements from structure to structure? (CEC 225) Yes  No
   2. Is the trenching in compliance of minimum cover requirements for wiring methods or circuits? (18” for direct burial per CEC 300) Yes  No

**Section 5: COMPLIANCE WITH 2013 MANDATORY CALGREEN CODE FOR NEW CONSTRUCTION AND CHAPTER 11B ACCESSIBILITY REQUIREMENTS**

2013 CALGreen Mandatory EVCS Requirements for New Construction[[10]](#footnote-10)

1. Do CALGreen EV Readiness installation requirements apply to this project? Yes  No 
   1. Should be identified during plan review (5.106.5.3)
2. Do the plans demonstrate conformance with mandatory measures of 3% of parking spaces in lots with 51+ spaces being EV capable? Yes  No  Not Applicable 
   1. 2016 CALGreen proposed mandatory requirements for new construction include measures for 6% of total parking spaces in lots with 10+ spaces being EV capable (If approved, effective January 1, 2017)

2016 Chapter 11B Proposed EVCS Requirements (to go in effect January 1, 2017)[[11]](#footnote-11)

1. 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 
   1. 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

**CORRECTION(S) SUMMARY:**

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

1. 2013 California Electrical Code. Article 220 Branch-Circuit, Feeder, and Service Calculations [↑](#footnote-ref-1)
2. **Load Calculation Worksheet review instructions:** The size of the existing service MUST be equal to or larger than the Minimum Required Size 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. [↑](#footnote-ref-2)
3. 2013 California Green Buildings Standards Code. Title 24, Part 11, Section 4.106.4.1 &4.106.4.1.1 *One-and two family dwellings* [↑](#footnote-ref-3)
4. 2013 California Electrical Code. Article 220 Branch-Circuit, Feeder, and Service Calculations [↑](#footnote-ref-4)
5. **Load Calculation Worksheet review instructions:** The size of the existing service MUST be equal to or larger than the Minimum Required Size 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. [↑](#footnote-ref-5)
6. 2013 California Green Buildings Standards Code. Title 24, Part 11, Section 4.106.4.2 *Multi-family dwellings* [↑](#footnote-ref-6)
7. 2016 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* [↑](#footnote-ref-7)
8. 2013 California Electrical Code. Article 220 Branch-Circuit, Feeder, and Service Calculations [↑](#footnote-ref-8)
9. **Load Calculation Worksheet review instructions:** The size of the existing service MUST be equal to or larger than the Minimum Required Size 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. [↑](#footnote-ref-9)
10. 2013 California Green Buildings Standards Code (CALGreen). Title 24, Part 11, Section 5.106.5.3 *Electric Vehicle (EV) Charging* [↑](#footnote-ref-10)
11. 2016 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* [↑](#footnote-ref-11)