



ELECTRIC VEHICLE CHARGER INSTALLATION GUIDE

FOR ONE-TO-TWO FAMILY DWELLINGS

SUBMITTAL REQUIREMENTS

A permit is required for Level 1 and Level 2 electric vehicle charger installations, which must be obtained prior to the start of work. Approval is limited to health and safety review found under local, state, and federal laws.

One electronic set of plans, digitally signed by the designer/architect, contractor, or homeowner responsible for preparing the plans. All plans submitted shall be a minimum plan size of 11" x 17" and **must be legible** to facilitate digital imaging as a permanent record after the project is completed.

The following is a listing of the general code requirements based on the **2022** California Codes & Mountain View City Code. This handout is intended to provide general information. If you have questions, please contact the Building Division at (650) 903-6313 or email us at building@mountainview.gov

BASIC CODE REQUIREMENTS

1. **CEC.** Show compliance on the plans with the current California Electrical Code.
2. **SITE PLAN.** Provide a site plan showing the location of:
 - a. Existing or proposed structure(s) for which the electric vehicle charger shall be affixed.
 - b. Parcel dimensions and outline.
 - c. Label street(s) frontage and access.
 - d. Location and size (amps) of main service panel and location and size (amps) of subpanel, (E) and proposed.
 - e. Location of electric vehicle charger.
 - f. Pathway for electrical connection to EV.
 - g. Show on the plans a complete and clear scope of work.
3. **ELECTRICAL PLAN.** Provide a single line diagram showing the following items:
 - a. Existing or proposed main service panel size (amps) and panel schedule.
 - b. Dedicated circuit for electric vehicle charger.
 - c. Wiring method and sizing.
 - d. Grounding and disconnect.
 - e. All exterior electrical enclosures to be minimum 3R or similar.
4. **SYSTEM INFORMATION.** Provide manufacturers cut sheets and listing information for all components:
 - a. All UL listed equipment.
5. **LOAD CALCULATIONS:** Provide the load calculation breakdown showing compliance with:
 - a. Design your project using CEC Article 625 and NEC 220
 - b. Overcurrent protection for feeders and branch circuits supplying equipment shall be sized for continuous duty and shall have a rating of not less than 125 % of the maximum load equipment.
 - c. For equipment rated more than 60 amperes or more than 150 volts to ground, the disconnecting means shall be provided and installed in a readily accessible location. The disconnecting means shall be lockable open in accordance with 110.25.
6. **SERVICE DISCONNECTING.** Per section 8.51(C) & (D) of the MVCC the service disconnecting means for one family dwelling shall have a rating of not less than 200 amperes.

OTHER RELATED HANDOUTS

- Smoke Detector & Carbon Monoxide requirements
- Self-Certification - Smoke & Carbon Monoxide Detectors