

ELECTRIC VEHICLE CHARGING SYSTEM CHECKLIST

Single-Family Residential

An electrical permit is required for an Electric Vehicle (EV) charging system to be installed in the garage or carport of a single-family residential dwelling. Electric Vehicle Supply Equipment (EVSE) consists of the connector, cord, and interface to utility power. The interface between the EVSE and utility power is typically directly hard-wired to the control device, and each automaker has its own EVSE design. A J1772 Standard EV coupler should be utilized for all installations. Consistent with the adopted ordinance and State law, applications will be approved administratively upon compliance with the safety requirements of the State building code, and will not be subject to discretionary approvals by third parties such as home owners associations.

The following information is required with the application for a permit:

- Completed [Building Permit Application](#).
- EV charging system information: Level 1 or 2, EVSE system with UL listed number or other approved Nationally Recognized Testing Laboratory (NRTL), in compliance with UL2202, "Standard for Electric Vehicle (EV) Charging System Equipment."
- Existing electrical service panel size and location at the residence. Include EVSE load and circuit size. A load calculation is required if the existing service is less than 200 Amp and or if the EV Charger circuit is over 30 Amp. *Note: some manufacturers require a minimum service size of 200A.* Identify if a second electric meter is being installed, and check with PG&E for their requirements.
- Clarify EVSE location and wiring method. EVSE shall be installed in accordance with manufacturer's guideline and must be suitable for the location (indoor/outdoor).
- The manufacturer's installation guideline **must** be available at the site for the inspector.
- All new electrical wiring, including a service panel upgrade if necessary, shall be in conformance with the 2019 California Electrical Code.

Typical installation criteria for a EVSE installation:

