



# CHECKLIST FOR RESIDENTIAL ELECTRIC VEHICLE CHARGING SYSTEMS

Project Address: \_\_\_\_\_

### Permit Submittal Requirement:

- Provide a completed checklist and apply for an “electrical” permit [online](#).
- Provide a completed [Electrical Load Calculation](#) for each panel, service conductor and feeder serving the EVSE branch circuit. (EXCEPTION: Not required where an Energy Management System is used)
- Provide EV charger equipment specifications / cut sheets / installation instructions.

### EV Charging System Information:

Level of EV Charging (check one):

- Level 1 (120V)                       Level 2 (240V)

Location of EV Charger (check one):

- Garage                                       Exterior                                       Other: \_\_\_\_\_

Type of Equipment Being Installed (check one):

- NEMA 14-50                                       Hardwired EVSE  
 NEMA 5-15                                       Other: \_\_\_\_\_  
 NEMA 5-20

EVSE Listing Information (check all that apply):

- UL listed  
 Other approved Nationally Recognized Testing Laboratory (NRTL) listed  
 Listing number: \_\_\_\_\_  
 Equipment complies with UL 2202, “Standard for Electric Vehicle Charging System Equipment”  
 J1772 standard EV coupler provided

### Electrical Information:

- Equipment Overcurrent Protection Rating:  20A     30A     40A     50A     Other: \_\_\_\_\_  
Existing Electrical Service:  100A     125A     150A     200A     Other: \_\_\_\_\_  
EVSE Supply From:  Main Panel     Subpanel  
Branch Circuit Distance:  100 feet or less     More than 100 feet  
Conductor Material:  Copper     Aluminum  
Conductor Type:  THHN/THWN-2     NM Cable     Other: \_\_\_\_\_  
Conductor Size:  #12AWG     #10AWG     #8AWG     #6AWG     Other: \_\_\_\_\_

## **Notes:**

- EVSE shall be installed in accordance with the manufacturer's installation guidelines.
- Equipment shall be installed in accordance with applicable code and listing requirements.
- Service conductors and feeders that supply the entire load to a single dwelling space in a one or two-family dwelling shall be permitted to have a reduced rating of 83% the calculated maximum load.
- A service panel upgrade, when required, shall conform to the California Electrical Code and requires a separate permit.
- Energy Management Systems shall conform to Article 750 of the California Electrical Code.
- Some manufacturers require a minimum 200A service.
- EV charger overcurrent protective device and conductors shall be sized as a continuous load.
- EVSE must be suitable for the installed environment, including indoor or outdoor use as applicable.
- Provide readily accessible & lockable disconnect within sight of EV chargers rated more than 60 amps.
- Electric Vehicle Supply Equipment (EVSE) consists of the connector, cord, and interface to utility power. Each automaker may have its own EVSE design.

