

Residential and Non-Residential Checklist for Permitting Electric Vehicle Charging Stations (EVCS)



CITY OF BRISBANE
Community
Development
Department
50 Park Place,
Brisbane, CA 94005

Get an electrical permit before you install a Level 1, 2, 3, or 4 charging station.

See **BMC Chapter 15.84** for the requirements of electric vehicle infrastructure as part of new development.

DEFINITIONS

Levels of electrical current are called VAC or "Volts Alternating Current."

Level 1 - 120 VAC - Level 1 refers to using a standard house outlet to charge an EV.

Level 2 - 240 VAC - This voltage is the type that supports ovens and other large appliances.

Level 3 - 480 VAC - Also called DC fast chargers, these chargers use a 480 plug to provide direct current (DC) electricity to the battery. They are not allowed on residential properties.

Level 4 - Supercharger - This charging system is currently limited to Tesla vehicles. Tesla Corporation installs these chargers at commercial sites.

| | | |
|--|---|--|
| Job Address: | | Permit No. |
| <input type="checkbox"/> Single-Family <input type="checkbox"/> Duplex <input type="checkbox"/> Multiple-Family <input type="checkbox"/> Commercial/Industrial <input type="checkbox"/> Mixed-Use <input type="checkbox"/> Public Right-of-Way | | |
| Location and Number of EVCS to be Installed: | | |
| Garage _____ | | Parking Level(s) _____ |
| Parking Lot _____ | | Street Curb _____ |
| Description of Work: | | |
| Applicant Name: | | |
| Applicant Phone: | | |
| Applicant Email: | | |
| Contractor Name: | | |
| License Number & Type: | | |
| Contractor Phone: | | |
| Contractor Email: | | |
| Owner Name: | | |
| Owner Phone: | | |
| Owner Email: | | |
| Manufacturer of EVCS: | | |
| EVCS Charging Level: | | Mounting of EVCS: |
| <input type="checkbox"/> Level 1 (120V) | | <input type="checkbox"/> Wall Mount |
| <input type="checkbox"/> Level 2 (240V) | | <input type="checkbox"/> Pole/Pedestal Mount |
| <input type="checkbox"/> Level 3 (480V) | | <input type="checkbox"/> Other _____ |
| <input type="checkbox"/> Level 4 (Supercharger) | | Voltage EVCS = _____ V |
| Max Rating (Nameplate) of EV Service Equipment = _____ kW | | |
| System Voltage: <input type="checkbox"/> 120/240V, 1 ϕ , 3W <input type="checkbox"/> 120/208V, 3 ϕ , 4W <input type="checkbox"/> 120/240V, 3 ϕ , 4W <input type="checkbox"/> 277/480V, 3 ϕ , 4W <input type="checkbox"/> Other: | Rating of Existing Main Electrical Service Equipment = _____ Amperes | |
| | Rating of Panel Supplying EVCS (if not directly from Main Service) = _____ Amps | |
| | Rating of Circuit for EVCS: ____ Amps / ____ Poles | |
| | AIC Rating of EVCS Circuit Breaker (if not Single Family, 400A) = _____ A.I.C. | |

(continued)

Specify either:

Connected Load of existing panel supplying EVCS: _____ Amps

Calculated Load of existing panel supplying EVCS: _____ Amps

Documented Demand Load of existing panel supplying EVCS
(Provide Demand Load Reading from Electric Utility): _____ Amps

Total Load (Existing plus EVCS Load) = _____ Amps

For Single Family Dwellings, if Existing Load is not known by any of the above methods, then the Calculated Load may be estimated using the "Single-Family Residential Permitting Application Example" in the Governor's Office of Planning and Research "Zero Emission Vehicles in California: Community Readiness Guidebook" <https://www.opr.ca.gov>

EVCS Rating _____ Amps x 1.25 = _____ Amps =
Minimum Ampacity of EVCS Conductor/Wire Size = # _____ AWG

For Single-Family:

| | | |
|--|------|---|
| Size of Existing Service Supplying EVCS Panel = | -OR- | Size of Existing Feeder Conductors = |
| # _____ AWG or kcmil | | # _____ AWG or kcmil |

I hereby acknowledge that the information presented is a true and correct representation of existing conditions at the job site and that any causes for concern as to life-safety verifications may require further substantiation of information.

Signature of Permit Applicant: _____

Date: _____

Tips:

1. **Grading and Drainage** - Do not alter existing stormwater treatment systems, including bioswales and retention basins, unless necessary; minimize any such alterations. Show any grading or drainage work on the site plan.
2. **Landscaping** - Any displaced landscaping may be required to be restored or replaced. Avoid removing trees.
3. **Lighting** - Show proposed lighting on the site plan.
4. **Parking** - Provide the number of required and existing parking spaces on the site.
 - * If the number of required parking spaces plus the number of EV charging stations to be installed is less than the number of existing parking spaces provided on the site, the EV charging stations may be signed as "EV Charging Station Only."
 - * If the number of required parking spaces plus the number of EV Charging Stations to be installed exceeds the number of existing parking spaces provided on the site, the EV Charging Stations must be signed to allow either EV Charging or parking.
5. **Accessibility** - Show compliance with California Building Code (2019) Chapter 11B-228.3 and 11B-812 for accessibility requirements and Chapter 11B, Table 11B-228.3.2.1 for minimum number of Accessible EV Charging Stations.
 - * **Alternative:** If the installation of Accessible EV Charging Stations per CBC 11B-228.3 creates an unreasonable hardship or is technically infeasible, accessible stations may be installed at existing accessible parking spaces containing the International Symbol of Accessibility (ISA) on the site. When the number of accessible stations installed equals 100% of the existing Accessible Parking Spaces required by Chapter 11B - Table 11B-208.2, no additional accessible charging stations will be required on the existing parking facility.
6. **Equipment Anchorage** - Show required equipment support and anchorage.

Electrical Plan Requirements. Please include the following information:

1. Compliance with the 2019 California Electrical Code and Brisbane Municipal Code.
2. For electrical service panels affected by the addition of the charging stations, show: existing load, added load, and revised calculated load.
3. Calculated loads of chargers are considered continuous loads. The overcurrent device must have a rating of not less than 125% of the maximum load.

Does your electric vehicle charging station installation require a permit from the Planning Department?

- Any charging station project that will modify existing landscaping, circulation, parking restriping, or other site work may need to get a permit from the Planning Division.
- For questions about building permits, codes, inspections or plan review, call (415) 508-2120 or visit the Community Development Department at 50 Park Place, Brisbane, CA 94005.
<https://www.brisbaneca.org/cd>