



CITY OF FONTANA

BUILDING & SAFETY

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Requirements for One- and Two- Family Residential Electric Vehicle Charging Systems (EVCS)

FORM EVCS 1

ELECTRICAL REQUIREMENTS

For EVCS permit requirements for multi-family, commercial or industrial properties, see **FORM EVCS 2**.

LEVELS OF EV CHARGING

Two levels of electrical current—called VAC or “Volts Alternating Current”—are allowed in single-family and duplex residences:

Level 1 - 120 VAC - This is regular household voltage. It can charge a depleted battery in six to 10 hours, depending on the vehicle model.

Level 2 - 240 VAC - This voltage is the type that supports clothes dryers. It can charge a depleted battery in three to eight hours, depending on the vehicle model.

Be sure to research which level is right for your EV charging needs.

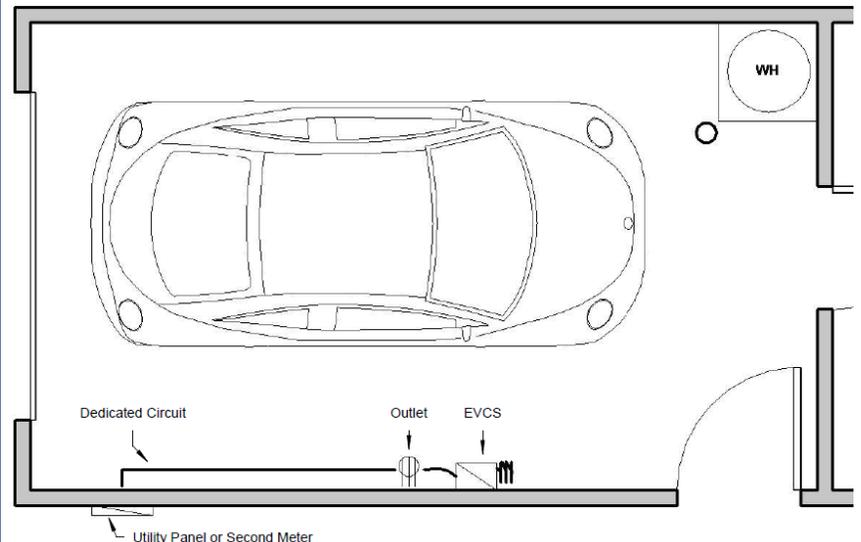
Before you install an electric vehicle charging system, you need to: Obtain a permit for electrical work and mechanical work if the manufacturer of the system specifies use of mechanical ventilation.

Include the following information on the floor plan:

| | |
|--|--|
| <ul style="list-style-type: none"> • EV Level (1 or 2) • UL listing number | <p>Specify the level of EV charging system to be installed: Level 1 or Level 2. Include the UL listing number or the listing number of another approved nationally recognized testing laboratory, in compliance with UL2202: “Standard for Electric Vehicle Charging System Equipment.”</p> |
| <ul style="list-style-type: none"> • Panel rating • EVCS charging load • Circuit size | <p>Specify the panel rating of the existing electrical service, for example, 200 amp service, at the residence. Indicate the EV charging system load and circuit size including conduit and conductors.</p> <p>Load calculations, per California Electrical Code Article 220, shall be provided for review when the service panel rating is 125 amperes or less. Electrical panel upgrades and electrical wiring shall be in conformance with the current edition of the California Electrical Code.</p> |
| <ul style="list-style-type: none"> • Will a second electric meter be installed? | <p>Indicate if a second electric meter and panel will be installed for EV charging. For more information on rates and special requirements contact SCE at 1-800-4EV-INFO.</p> |

• Show location of utility panel and EVCS

Show the location of the utility panel and EVCS. Be sure that the location is in accordance with the manufacturer’s written guidelines.



SAMPLE DRAWING