City of Manteca



Building Safety 1215 W Center Street, Suite 201 Manteca, CA 95337 209.456.8550

Residential Electric Vehicle Charging Permits

For Residential Electric Vehicle Charging Permits, the process is completely electronic. This allows for submittals to be done at the convenience of your location and any time.

The electronic permit submittal can be done by utilizing our GoPost portal under the "electronic Permit Submittals" section of our website:

https://www.manteca.gov/departments/development-services/building-safety/building-permits

PERMIT SUBMITTAL REQUIREMENTS:

- City of Manteca Forms: All forms can be found at link above: Documents→Forms & Applications
 - o Building Permit Application
 - o Building Permit Issuance Application
 - o Electronic Signature Disclosure
 - o Owner-Builder Form (if applicable)
- Site Plan Show the locations of structure(s) where proposed equipment is to be located
- Load Calculations Provide electrical service load calculations to show there is capacity for new electrical loads.
- Specification Sheets Provide specification sheets for all proposed equipment

PROCESS TIME & COST:

• Once a complete permit application and payment has been received, the review time is five working days. An average cost for an EVCS permit is approximately \$425.00 but may vary depending on the cost and scope of work.

INSPECTIONS:

Once permit is issued, work can initiate. Work under permit requires an inspection to be conducted. Inspection requests are done through our online portal. The City Building Inspectors provide next business day inspections if request is received on a working day before 3:30PM.

The link below provides our work calendar, instructions and additional information.

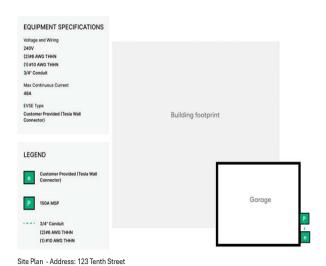
- https://www.manteca.gov/departments/development-services/building-safety/inspections
 The link below will take you directly to the scheduling portal:
 - https://logos-esuite.ci.manteca.ca.us/eSuite.Permits/WelcomePage.aspx

Once final inspection is passed, you can start utilizing your new Electric Vehicle Charger.

Example of Site Plan

Example of Specification Sheets





Gen 3 Wall Connector Manual

48A Single Phase

Example of Load Calculations

220.83 Existing Dwelling Unit

This section shall be permitted to be used to determine if the existing <u>service</u> or <u>feeder</u> is of sufficient capacity to serve additional loads. Where the <u>dwelling unit</u> is served by a 120/240-volt or 208Y/120-volt, 3-<u>wire service</u>, it shall be permissible to calculate the total load in accordance with <u>220.83(A)</u> or (B).

(A) Where Additional Air-Conditioning Equipment or Electric Space-Heating Equipment Is Not to Be Installed The following percentages shall be used for existing and additional new loads.

First 8 kVA of load at Remainder of load at 40

Load calculations shall include the following:

- General lighting and general-use
 receptacles at 33 volt-amperes/m2 or 3
 volt-amperes/ft2 as determined by 220.12
- 1500 volt-amperes for each 2-wire, 20ampere small-appliance branch circuit and each laundry <u>branch circuit</u> covered in 210.11(C)(1) and (C)(2)
- 3. The nameplate rating of the following:
 - All <u>appliances</u> that are <u>fastened in place</u>, permanently connected, or located to be on a specific circuit
 - b. Ranges, wall-mounted ovens, countermounted cooking units
 - Clothes dryers that are not connected to the laundry <u>branch circuit</u> specified in item (2)
 - d. Water heaters

CEC Code Section: 220.83
Property Address:
Treehouse Project ID:

Standard permanently fastened loads			
Solar	Yes	-	N/A for LC
Garbage Disposal	Yes	-	756
Dishwasher	Yes	•	1,200
Microwave	Yes	*	1,500
Dryer	Yes	~	5,000
	Total		8,456

A/C & Heating		Breaker size	Breaker type	HVAC VA
A/C	~	50 -	240	9,600
Furnace	•	15 🕶	120	1,440

Additional permanently fastened loads				
Appliance type		Breaker size	Breaker type	Addl. VA
Unknown	*	50 *	240	9,600
Oven	-	30 🕶	240	5,760
Pool	+	50 ▼	240	9,600
	-	¥	240	0
	*	•	240	C
	•	•	240	C
	•	•	240	C
	•		240	0
0	•	•	240	C
		•	240	C
	•	•	240	0
	•	-	240	0

Home SF	3,120
Year Built	2006
Panel Capacity	200 ~

Without EVSE		
Permanently fastened total	33,416	
General Use	9,360	
2 kitchen, 1 laundry	4,500	
Total General Load	47,276	
General Load Factor	23,710	
HVAC	9,600	
Total VA	33,310	
Load Calc	139	

Circuit Amperage	60 -
EVSE Amperage to add>	48

New Load Calc with E	New Load Calc with EVSE		
Permanently fastened total	47,816		
General Use	9,360		
2 kitchen, 1 laundry	4,500		
Total General Load	61,676		
General Load Factor	29,470		
HVAC	9,600		
Total VA	39,070		
Load Calc	163		
PASS			