

Checklist for Residential Electric Vehicle Charging Stations

January 2023

Submittal Checklist

- Completed building permit application. An application form is available online at: <https://www.elkgrovecity.org/building-safety-inspection-permits/building-forms-handouts-and-featured-articles>
- A site plan
- An electrical plan
- Equipment Manufacturer’s Installation Instructions

Electronic Submittal Requirements

- Each required document listed above shall be submitted in separate PDF attachments
- Attach the PDF attachments to your online eTrakit application. Registration is required to apply for permits using the eTrakit permit portal. If you are a Contractor, please use the link below to register:
https://cityofelkgrove.formstack.com/forms/contractor_online_inspection_registration_form
 All other applicants can register for a public account through the eTrakit site, please use the link below:
<https://elgr-trk.aspgov.com/eTRAKiT/publicUserAccount.aspx?action=npa>
 Once registered, you can access the eTrakit permit portal here: <https://elgr-trk.aspgov.com/eTRAKiT/>

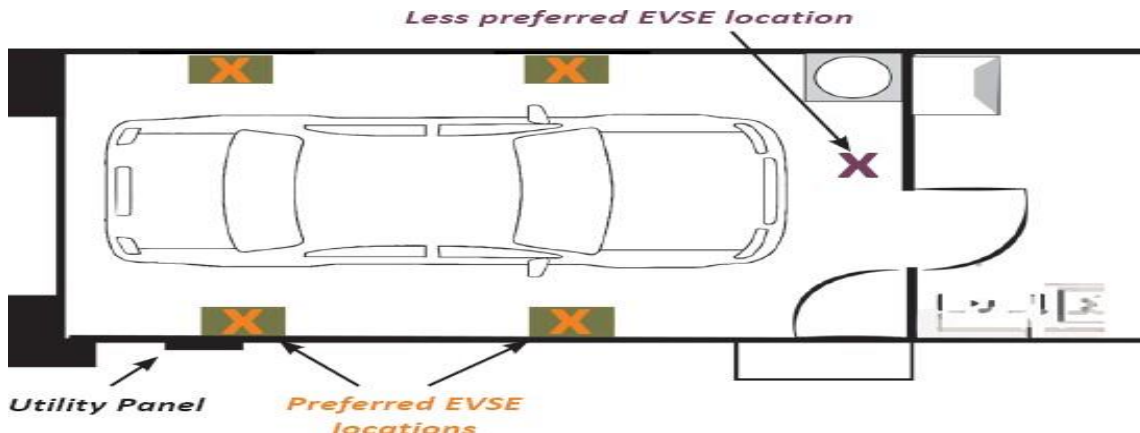
General Requirements

Level 1 EV Charging; (120V)

- Type of equipment being installed:
 NEMA 5-15
- Equipment Overcurrent Protection Rating:
 15A 20A
- Existing Electrical Service
 (If less than 150A see electrical load worksheet)
 100A
- Branch Circuit Distance:
 100 Feet or less
- Feet Conductor Size:
 #14 Cu #12 Cu

Level 2 EV Charging; (240V)

- Type of equipment being installed:
 NEMA 14-50
- Equipment Overcurrent Protection Rating:
 50A Other
- Existing Electrical Service
 (If less than 150A, see electrical load worksheet)
 125A 150A 200A
- Branch Circuit Distance:
 More than 100 Feet
- Feet Conductor Size:
 #6 Cu Other



Electric Load Worksheet

Address: _____ Date: _____

Main Electric Panel Service Size: Existing _____ (Amps) / New (if applicable) _____ (Amps)

Quantity of Existing Subpanels: _____ Quantity of New Subpanels: _____ Gas Furnace (Y/N) _____

Breaker Size(s) feeding subpanel(s)? _____ Wires Size(s) feeding subpanel(s)? _____

A. Calculate Habitable¹ Square Footage

_____ (Existing S.F.) + _____ (New S.F., if any) = _____ Total Habitable¹ Square Footage

B. Identify General Loads

General Lighting and Use Receptacles:	_____ Total Habitable ¹ SF	x 3	= _____	total watts
Kitchen Small Appliance Branch Circuits:	_____ (Quantity, Min. 2)	x 1500	= _____	total watts
Bathroom Small Appliance Branch Circuits:	_____ (Quantity, Min. 1)	x 1500	= _____	total watts
Range:	_____ (Nameplate Rating)	x 1	= _____	total watts
Oven:	_____ (Nameplate Rating)	x 1	= _____	total watts
Water Heater:	_____ (Nameplate Rating)	x 1	= _____	total watts
Dishwasher:	_____ (Nameplate Rating)	x 1	= _____	total watts
Garbage Disposal:	_____ (Nameplate Rating)	x 1	= _____	total watts
Washer:	_____ (Nameplate Rating)	x 1	= _____	total watts
Dryer:	_____ (Nameplate Rating)	x 1	= _____	total watts
Total Subpanel Load ² :	_____ (Combined Watts ²)	x 1	= _____	total watts
Motor Loads:	_____ (Nameplate Rating)	x 1	= _____	total watts
Other Loads:	_____ (Nameplate Rating)	x 1	= _____	total watts

Add total watts together (from above) = _____ Total B

C. Identify Largest of the Following Six Heating and Air Conditioning (HAC) Loads

Electric Thermal Storage:	_____ (Nameplate Rating)	x 1	= _____	total watts
Air Conditioning and Cooling:	_____ (Nameplate Rating)	x 1	= _____	total watts
Heat Pump (without any supplemental electric heating):	_____ (Nameplate Rating)	x 1	= _____	total watts
3 or Less (Separately Controlled) Electric Space Heating Units:	_____ (Nameplate Rating)	x 0.65	= _____	total watts
4 or more (Separately Controlled) Electric Space Heating Units:	_____ (Nameplate Rating)	x 0.40	= _____	total watts
Central Electric Space Heating System ³ :	_____ (Combined Nameplate Rating ³)		= _____	total watts

Enter single largest Heating and Air Conditioning Load (from above) = _____ Total C

D. Calculate Total Service Load

$$\frac{\text{Total B (from above)} - 10,000 \text{ watts} \times 0.40 + 10,000 \text{ watts} + \text{Total C (from above)}}{240} = \text{Total Amps}$$

Signature

Print Name

State License Number (if applicable)

¹Habitable square footage includes the floor area for each floor, calculated from the outside dimensions of the dwelling unit. It does not include open porches, garages, or unused or unfinished spaces not adaptable for future use.

²Add all subpanel loads here that are not already included elsewhere on this form.

³For Central Electric Space Heating Systems, add 100% of the heat pump compressor's nameplate rating plus 65% of the supplemental electric heating's nameplate rating. If the heat pump compressor is prevented from operating at the same time as the supplementary heat, it does not need to be added to the supplementary heat for the total central space heating load.