

## **CITY OF PICO RIVERA**

BUILDING DIVISION 6615 PASSONS BLVD. PICO RIVERA, CA 90660 (562) 801-4360 www.pico-rivera.org

<b>EVSE CHECKLIST</b>			
BD SECTION	072 FORM NUMBER		2022 CODE CYCLE
01/01/2017 EFFECTIVE DATE		RE	03/2018 EVISION DATE

## CHECKLIST FOR PERMITTING ELECTRIC VEHICLES AND ELECTRIC VEHICLE SERVICE EQUIPMENT (EVSE)

Please complete the following information related to permitting and installation of Electric Vehicle Service Equipment (EVSE) as a supplement to the application for a building permit. This checklist contains the technical aspects of EVSE installations and is intended to help expedite permitting and use for electric vehicle charging.

Upon this checklist being deemed complete, a permit shall be issued to the applicant. However, if it is determined that the installation might have a specific adverse impact on public health or safety, additional verification will be required before a permit can be issued.

This checklist substantially follows the "Plug-In Electric Vehicle Infrastructure Permitting Checklist" contained in the Governor's Office of Planning and Research "Zero Emission Vehicles in California: Community Readiness Guidebook" and is purposed to augment the guidebook's checklist.

Job Address:	Permit No.		
	-Family (Condominium) ommercial (Multi-Businesses)		
Location and Number of EVSE to be Installed:			
Garage Parking Level(s) Parking Lot	Street Curb		
Description of Work:			

Applicant Name:			
Applicant Phone & email:			
Contractor Name:	License Number & Type:		
Contractor Phone & email:			
Owner Name:			
Owner Phone & email:			
EVSE Charging Level: ☐ Level 1 (120V)	☐ Level 2 (240V) ☐ Level 3 (480V)		
Maximum Rating (Nameplate) of EV Service Equipment = kW			
Voltage EVSE = V Manufacturer of EVSE:			
Mounting of EVSE: ☐ Wall Mount ☐ Pole Pedestal Mount ☐ Other			
System Voltage: □ 120/240V, 1φ, 3W □ 120/208V, 3φ, 4W □ 120/240V, 3φ, 4W □ 277/480V, 3φ, 4W □ Other			
Rating of Existing Main Electrical Service Equipment = Amperes			
Rating of Panel Supplying EVSE (if not directly from Main Service) = Amps			
Rating of Circuit for EVSE: Amps / Poles			
AIC Rating of EVSE Circuit Breaker (if not Single Family, 400A) = A.I.C. (or verify with Inspector in field)			

			ted Demand Load o	
Connected	ł Load of Existinզ	g Panel Supplyin	g EVSE =	Amps
Calculated	Load of Existing	g Panel Supplyin	g EVSE =	Amps
	oad of Existing P Demand Load Rea		Supplying EVSE = ric Utility)	Amps
Total Load (Existi	ing plus EVSE Lo	oad) =	Amps	
For Single Family	Dwellings, if Ex	isting Load is no	known by any of th	e above methods
then the Calculate	ed Load may be	estimated using	the "Single-Family F	Residential
Permitting Applica	ation Example" ir	n the Governor's	Office of Planning a	nd Research
"Zero Emission V	ehicles in Califor	rnia: Community	Readiness Guidebo	ok"
https://www.opr.c	a.gov			
EVSE Rating	Amps	x 1.25 =	Amps = N	linimum Ampacity
EVSE Rating of EVSE Conduct			Amps = N	linimum Ampacity
of EVSE Conduct	tor = #	AWG	Amps = N	
of EVSE Conduct	tor = #	AWG	ctors = #	
of EVSE Conduct	tor = # /: Size of Existin · - : Size of Ex	AWG	ctors = # nductor	AWG or kcm
of EVSE Conduct For Single-Family	tor = # /: Size of Existin · - : Size of Ex Supplying EV	AWG  g Service Conductisting Feeder Co	ctors = # nductor = #	AWG or kcm
of EVSE Conduct For Single-Family	tor = #  /: Size of Existin  - : Size of Ex  Supplying EV  (or Verify with  nat the information e and that any care	AWG  ag Service Conductisting Feeder Co SE Panel  Inspector in field on presented is a	ctors = # nductor = # ) true and correct rep	AWG or kcm AWG or kcmi

## **ELECTRIC VEHICLE CHARGER – LOAD CALCULATION ESTIMATOR**

USE THIS FORM TO ESTIMATE IF AN EXISTING ELECTRICAL SERVICE WILL HANDLE THE EXTRA LOAD FROM A VEHICLE CHARGER. (Loads shown are rough estimates; actual loads may vary – for a more precise analysis, use the nameplate ratings for appliances and other loads and consult with a trained electrical professional.)

Check Applicable Loads	Description of Load	Typical Usage	Watts Used		
	GENERAL LIGHTING AND RECEPTACLE OUTLET CIRCUITS				
	Square Footage of House X 3	3 watts/sq. ft.			
	KITCHEN CIRCU	ITS			
	Kitchen Circuits	3,000 watts			
	Electric Oven	2,000 watts			
	Electric Stove Top	5,000 watts			
	Microwave	1,500 watts			
	Garbage disposal under kitchen sink	1,000 watts			
	Automatic dish washer	3,500 watts			
	Garbage compactor	1,000 watts			
	Instantaneous hot water at sink	1,500 watts			
	LAUNDRY CIRCU	IITS			
	Laundry circuit	1,500 watts			
	Electric clothes dryer	4,500 watts			
	HEATING AND AIR CONDITIONING CIRCUITS				
	Central heating and air conditioning	6,000 watts			
	Window mounted air conditioning	1,000 watts			
	Whole-house or attic fan	500 watts			
	Central electric furnace	8,000 watts			
	Evaporative cooler	500 watts			
OTHER ELECTRICAL LOADS					
	Electric water heater (storage type)	4,000 watts			
	Electric tankless water heater	15,000 watts			
	Swimming pool or spa	3,500 watts			
	Other (describe)				
	Other (describe)				
	Other (describe)				
ELECTRIC VEHICLE CHARGER CIRCUIT					
	Electric vehicle charger wattage rating				
		TOTAL WATTS USED			

INSTRUCTIONS: Using the "TOTAL WATTS USED" number from the previous page, check the appropriate line across to determine the minimum required size of the electrical service panel shown in column 3. In column 4, write the size of your existing service panel (main breaker size). If your existing service panel (column 4) is smaller than the minimum required size of the existing service (column 3), then you will need to install a new upgraded electrical service panel to handle the added electrical load from the proposed electric vehicle charger.

1	2	3	4
Check the appropriate line	Total watts used (from previous page)	Minimum required size of existing 240-volt electrical service panel (Main breaker size)	Identify the size of your existing main service breaker (Amps)*
	Up to 48,000	100 amps	
	48,001 to 63,000	125 amps	
	63,001 to 78,000	150 amps	
	78,001 to 108,000	200 amps	
	108,001 to 123,000	225 amps	

<sup>\*</sup>Note that the size of your <u>existing</u> service (column 4) MUST be <u>equal to or larger than</u> the minimum <u>required</u> size (column 3) or a new larger electrical service panel will need to be installed in order to satisfy the electrical load demand of the EV charger.

## STATEMENT OF COMPLIANCE

By my signature, I attest that the information provided is true and accurate.

Job Address:		
	(Print job address)	
Signature:		
	(Signature of applicant)	(Date)

In addition to this document, you will also need to provide a copy of the manufacturer's installation literature and specifications for the electric vehicle charger you are installing.

Note: This is a <u>voluntary</u> compliance alternative and you may wish to hire a qualified individual or company to perform a thorough evaluation of your electrical service capacity in lieu of this alternative methodology. Use of this electrical load calculation estimate methodology is at the user's risk and carries no implied guarantee of accuracy. Users of this methodology and these forms are advised to seek professional assistance in determining the electrical capacity of a service panel.