



RESIDENTIAL ELECTRICAL LOAD CALCULATION

Address: _____ Date: _____

A. Building Habitable Square Footage: _____ x 3 = _____ **Total A watts**

B. General Loads:

Kitchen Branch Circuits	_____	(quantity, min. 2) x 1500	=	_____	total watts
Bathroom Branch Circuit	_____	(quantity, min. 1) x 1500	=	_____	total watts
Range/Cooktop/Oven	_____	(NamePlate Rating)	=	_____	total watts
Range/Cooktop Oven	_____	(NPR)	=	_____	total watts
Microwave	_____	(NPR)	=	_____	total watts
Dishwasher	_____	(NPR)	=	_____	total watts
Garbage Disposal	_____	(NPR)	=	_____	total watts
Clothes Washer	_____	(quantity) x 1500	=	_____	total watts
Clothes Dryer	_____	(greater of: 5000 or NPR)	=	_____	total watts
Pool/Spa	_____	(NPR)	=	_____	total watts
Other Loads	_____	(NPR)	=	_____	total watts
Other Loads	_____	(NPR)	=	_____	total watts

Add all total watts in section B = _____ **Total B watts**

C. Heating, Air-Conditioning, and Electric Vehicle Charging:

Air Conditioning #1	_____	(NPR) x 1	=	_____	total watts
Air Conditioning #2	_____	(NPR) x 1	=	_____	total watts
Mini-Split/Heat Pump #1	_____	(NPR) x 1	=	_____	total watts
Mini-Split/Heat Pump #2	_____	(NPR) x 1	=	_____	total watts
Electric Space-Heating Units	_____	(combined NPRs) x 0.65	=	_____	total watts
Electric Water Heater	_____	(NPR) x 1	=	_____	total watts
EV Charging Equipment	_____	(NPR) x 1	=	_____	total watts

Add all total watts in section C = _____ **Total C watts**

Add Total A: _____ + Total B: _____ = _____ **Total D watts**

Apply General Load Reduction Factor [CEC 220.82(B)]:

Total D: _____ - 10,000 watts x 0.40 + 10,000 watts = _____ **Total E watts**

Total E: _____ + Total C: _____ ÷ 240 Volts = _____ **Total Amps Service Load**

Existing Service Size: _____ Amps

Signature – Electrical Contractor/Qualified Person: _____ x