



ELECTRICAL LOAD CALCULATION WORKSHEET

City of Lathrop
Building Department

390 Towne Centre Drive – Lathrop, CA 95330

Email: PermitOffice@ci.lathrop.ca.us

Phone #: (209) 941-7270

BASED ON THE CURRENT CALIFORNIA ELECTRICAL CODE (CEC), ARTICLE 220 OPTIONAL METHOD

Permit Number: _____ Property Address: _____

Contractor/Owner: _____ Date: _____

Phone Number: _____ Email: _____

Total Floor Area of Dwelling: _____ sqft. Size of Service Panel: _____ amps

	Quantity			Load (In Volt Amperes)	Results (in VA)	
GENERAL LIGHTING						
1. General Lighting		Sqft.		3 VA/Sqft		
2. Small Appliance		Each		1500 VA		
3. Laundry		Each		1500 VA		
4. Total General Lighting Load (Add Lines 1, 2, & 3)						
5. First 3000VA @ 100%					3000 VA	
6. Total General Lighting Load @ 35% = (Line 5 – Line 4) x 35% =						
7. Net General Lighting Load (Per CEC §220.42) (add Lines 5 & 6):						
FIXED APPLIANCES						
Dishwasher		Each		1200 VA or NPR		
Disposal		Each		900 VA or NPR		
Microwave		Each		1500 VA or NPR		
Water Heater		Each		4500 VA or NPR		
Freezer		Each		1200 VA or NPR		
Other: _____		Each		_____ VA		
Other: _____		Each		_____ VA		
8. 3 or less Appliances, Total Appliance (VA)						
4 or more Appliances, 75% of Total Appliance (VA) (Per CEC §220.53):						
OTHER LOADS (COOKING EQUIPMENT, MOTORS, EV CHARGERS, ETC.)						
9. Cook Top		Each		4000 VA or NPR		
10. Oven – Single		Each		8000 VA or NPR		
11. Oven - Double		Each		12000 VA or NPR		
12. Range		Each		12000 VA or NPR		
13. Dryer		Each		5000 VA min.		
14. Spa (Electrical)*		Each		25000 VA		
15. Pool		Each		4800 VA		
16. EV Charger		Each		_____ VA		
17. 25% of Largest Motor (Per CEC §430.24):						
Total Service Loads (Add Lines 7, 8, 9 – 17)						
First 8000 @ 100% (Per CEC §220.83(A)):					8000 VA	
Remainder @ 40%:						
TOTAL VA:						
AC @ 100%			Name Plate Rating:			
Total VA ÷ 230 volts:						
TOTAL LOAD:						amps

*If Spa has gas heater use load of 8000VA

NPR= Name Plate Rating, Loads are based on Averages and Minimums, if known load is available use NPR value