



City of El Cajon  
 Building Division  
 200 Civic Center Way  
 El Cajon, CA 92020  
 Phone: 441-1726 / 1727

## CIRCUIT CARD AND LOAD SUMMARY (CEC 2007)

\*\*\*This card must be filled out and available at the service equipment for the rough inspection\*\*\*

Address _____								Permit Number _____							
Owner _____				Phone _____				APN _____							
Contractor _____				Phone _____				Area in Sq. Ft. _____							
PANEL _____				A.I.C _____				VOLTS _____				0 _____ WIRE _____			
LOCATION	CKT	BKR SIZE	WIRE		MISC	LGT	REC	REC	LTG	MISC	WIRE		BKR SIZE	CKT	LOCATION
			SIZE	TYPE							TYPE	SIZE			
	1													2	
	3													4	
	5													6	
	7													8	
	9													10	
	11													12	
	13													14	
	15													16	
	17													18	
	19													20	
	21													22	
	23													24	
	25													26	
	27													28	
	29													30	
	31													32	
	33													34	
	35													36	
	37													38	
	39													40	
	41													42	

MAIN:  \_\_\_\_\_ AMP BKR/FUSE  MLO  
 BUS: \_\_\_\_\_ AMP  
 Service entrance or feeder conductors:  
 A) Size: No. \_\_\_\_\_ B) Type:  CU  AL  
 C) Insulation: \_\_\_\_\_ D) Conduit Size: \_\_\_\_\_  
 Service ground/bond:  
 A) Size: No. \_\_\_\_\_ B) Type:  CU  AL  
 C) Clamp location(s):  
 \_\_\_ UFER 250.52a.3 & 250.66b \_\_\_ Water Pipe 250.52a 1  
 \_\_\_ Ground Rod 250.52.5 \_\_\_\_\_

Computed Load \_\_\_\_\_ AMPS  
*See Calculation Worksheet on Back*

Branch circuits required:  
 A) Lighting circuits/ 220.12  
 B) Two small appliance circuits 210.52b 1-3  
 C) Laundry circuit 210.52 f  
 D) Central heating equipment 422.12  
 E) Bathroom 210.52(d)

Remarks \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

GFCI locations 210.8 & 680  
 Bathroom(s) \_\_\_\_\_ Kitchens \_\_\_\_\_  
 Garage(s) \_\_\_\_\_ Hydromassage tub \_\_\_\_\_  
 Outdoors \_\_\_\_\_ Other \_\_\_\_\_

I certify that all terminations have been torqued in accordance with manufactures instructions and that the work shown on this circuit card represents the full extent of the work performed under this permit.

Signed \_\_\_\_\_ Date \_\_\_\_\_

**SINGLE FAMILY DWELLING  
ELECTRICAL SERVICE LOAD CALCULATIONS**

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**OPTIONAL METHOD NEC 220.80 & 82**

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*As an alternative method, the STANDARD METHOD  
Found in ARTICLE 220 of the National Electric Code, may be used*

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**1. GENERAL LIGHTING LOADS**

Dwelling \_\_\_\_\_ sq. ft. x 3 VA = \_\_\_\_\_ VA  
Small appliance loads (220.3) 1500 VA x \_\_\_\_\_ circuits = \_\_\_\_\_ VA  
Laundry load (220.52) 1500 VA x \_\_\_\_\_ circuits = \_\_\_\_\_ VA  
**General Lighting Total \_\_\_\_\_ VA**

**2. COOKING EQUIPMENT LOADS – Nameplate Value**

Range \_\_\_\_\_ VA = \_\_\_\_\_ VA  
Cooktop \_\_\_\_\_ VA = \_\_\_\_\_ VA  
Oven(s) \_\_\_\_\_ VA = \_\_\_\_\_ VA  
**Cooking Equipment Total \_\_\_\_\_ VA**

**3. ELECTRIC DRYER 220.54 (Nameplate, 5000 VA minimum)**

Dryer \_\_\_\_\_ VA = \_\_\_\_\_ VA  
**Dryer Total \_\_\_\_\_ VA**

**4. FIXED APPLIANCE LOADS 230-30(b3)**

Dishwasher = 422.16(2) \_\_\_\_\_ VA  
Disposal = 422.16b(1) \_\_\_\_\_ VA  
Compactor = 422.16(2) \_\_\_\_\_ VA  
Water Heater = 220.82c3 \_\_\_\_\_ VA  
Hydromassage = 680.70 \_\_\_\_\_ VA  
Built-in Vacuum = 412.15 \_\_\_\_\_ VA  
\_\_\_\_\_ = \_\_\_\_\_ VA  
**Fixed appliance Total \_\_\_\_\_ VA**

**5. OPTIONAL SUBTOTAL (Add all of the above totals)**

\_\_\_\_\_ VA

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**6. APPLYING DEMAND FACTORS – TABLE 220-30**

First 10,000 VA x 100% = 10,000 VA

Optional Subtotal (from line 5) { Remaining \_\_\_\_\_ VA x 40% = \_\_\_\_\_ VA

**7. HEATING OR AC LOAD – TABLE 220-80**

Larger of the Heating or AC Load = \_\_\_\_\_ VA

**8. OPTIONAL LOADS TOTAL ( Add totals from lines 6 and 7) =**

\_\_\_\_\_ VA

**9. MINIMUM SERVICE SIZE = Optional Loads Total =**

240 volt

\_\_\_\_\_ Ampere

*(Please put total on front of card under Computed Load)*