

# RESIDENTIAL ELECTRICAL LOAD CALCULATIONS

## Lighting Loads

220-12 Living area sq. ft. \_\_\_\_\_ x 3 volt amperes per sq. ft. = \_\_\_\_\_ VA  
 220.52A Two small appliance circuits (required) x 1500VA = 3000 VA  
 220.52B Laundry circuit(s) \_\_\_\_\_ x 1500VA = \_\_\_\_\_ VA  
 220.52A Additional small appliance circuit(s) \_\_\_\_\_ x 1500VA = \_\_\_\_\_ VA  
 Lighting Load Sub-total = \_\_\_\_\_ VA

220.42 First 3000 volt-amperes of lighting loads @ 100% = 3000 VA  
 From 3001 to 120000 VA @ \_\_\_\_\_ 35% = \_\_\_\_\_ VA  
 Remainder over 120000 VA @ \_\_\_\_\_ 25% = \_\_\_\_\_ VA  
 Lighting Load Total Volt-Amperes = \_\_\_\_\_ VA (A)

220.55 Household Cooking Appliances  
 (Use table 220-55) Number of Appliances \_\_\_\_\_ = \_\_\_\_\_ VA  
 Cooking Units Total Volt-Amperes = \_\_\_\_\_ (B)

220-53 Appliance Loads (nameplates)

Microwave	1500 VA x _____	= _____	VA
Compactor	1200 VA x _____	= _____	VA
Dishwasher	1200 VA x _____	= _____	VA
Disposal	600 VA x _____	= _____	VA
Central Vacuum	1800 VA x _____	= _____	VA
_____	_____ VA x _____	= _____	VA
_____	_____ VA x _____	= _____	VA
	Appliance Sub-Total	= _____	VA

Appliance Sub-Total \_\_\_\_\_ x \_\_\_\_\_ % = \_\_\_\_\_ Volt-Amperes (C)  
 (Less than 4 units x 100%, 4 or more units x 75%)

220-54 Dryer-5000 VA or nameplate (whichever is greater) = \_\_\_\_\_ VA (D)  
 422-10A Water Heater (nameplate) x 125% = \_\_\_\_\_ VA (E)  
 220-14 Pool/Spa motor loads: Sum all plus 25% of largest = \_\_\_\_\_ VA (F)  
 Add totals of (A) (B) (C) (D) (E) (F) Total Volt-Amperes = \_\_\_\_\_  
 Total Volt-Amperes/240 = \_\_\_\_\_ Amps (G)

220-14C Largest cooler, A/C or heating load  
 \_\_\_\_\_ KVA \_\_\_\_\_ Volts x 125% = \_\_\_\_\_ Amps (H)

Total Service (G) + (H) = \_\_\_\_\_ AMPS



## ELECTRICAL LOAD CALCULATIONS

**HELP FOR THE HOMEOWNER  
LA PALMA BUILDING AND SAFETY**

*Paul Melby, CBO*

Building Official

6/4/12

Date

Date: 4/5/11

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