

City of Calabasas Building and Safety Division Electrical Service Load Calculations For Existing Dwelling Units

| Address: | Sq. Footage of House: |
|---------------------------|-----------------------|
| Calculations Prepared By: | Date: |

| LOAD ITEM | QUANTITY | Х | WATTS (VA) | TOTAL |
|---|-------------------------|------|---------------|-------|
| A. General Load Circuits (CEC 220.42 & 220.52): | 1 | | , , | |
| General Lighting Circuits | sq. ft. | Х | 3 | VA |
| Small Appliance Circuits (2 min.) | | Х | 1500 | VA |
| Laundry Circuits | | Х | 1500 | VA |
| | Subtotal of G | VA | | |
| First 3,000 Watts at 100% | 3,000 @ 100%: | | VA | |
| Next 3,001 to 120,000 Watts at 35% | 3,001 to 120,000 @ 35%: | | VA | |
| Total Watts A (| General lighting | Dema | nd Load): | VA |
| B. Appliance Loads (CEC 220.53): | | | | |
| Fixed Appliance Circuits: | | | | |
| Refrigerator | | X | 1200 | VA |
| Microwave | | X | 1600 | VA |
| Dishwasher | | Х | 1200 | VA |
| Garbage Disposal | | Χ | 1000 | VA |
| Freezer | | Х | | VA |
| Electric Water Heater (3750VA min) | | Χ | | VA |
| Whole House Attic Fan | | Χ | | VA |
| Vent Fan | | Χ | | VA |
| Garage Door Opener | | X | | VA |
| Pool Light | | Х | | VA |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |

| LOAD ITEM | QUANTITY | Х | WATTS | TOTAL | |
|---|--------------------------------|--------|------------|-------|--|
| | | | | | |
| If there are <u>less than</u> 4 appliances, then use (T | otal Appliance L | oads 2 | X 100%) = | VA | |
| If there are <u>4 or more</u> appliances, then use (| Total Appliance | Loads | X 75%) = | VA | |
| То | tal Watts B (App | liance | Loads) = | VA | |
| C. Full-Load Equipment Circuits (CEC 220.50, 220.5 | 1, 220.54, & 220. ¹ | 55) | | | |
| Mechanical Circuits: (Use only largest load) | | | | | |
| Electric Heater or Heat Pump (7200VA min) | | Χ | | VA | |
| Air Conditioner * | | Χ | | VA | |
| Electric Clothes Dryer | | Χ | 5000 | VA | |
| Electric Cooking Appliance*** | | X | 3500 X 0.8 | VA | |
| Hydro-Massage Bathtub ** | | X | | VA | |
| Pool Equipment: | | | | | |
| Pump Motor (Filter) ** | | Х | | VA | |
| Pump Motor (Booster) ** | | Х | | VA | |
| Pump Motor (Other) ** | | Х | | VA | |
| Pool/Spa Aerator ** | | X | | VA | |
| Pool Sweep ** | | Х | | VA | |
| Electric Vehicle Charger/Outlet | | Х | | VA | |
| | | Х | | VA | |
| Total Watts C (Full-Load Equipment Circuits X 100%) = | | | | | |
| | | | | | |
| D. Electrical Load Calculations | | | | | |
| Total Watts (Section A + B + C) = | | | | VA | |
| Total Amps (Total Watts divided by 240 Volts) | | | | А | |
| Size of Electrical Service Equipment (Amps) | | | | А | |
| Proposed Size of New Electrical Service (Amps) | | | А | | |

^{*} Air Conditioner (FLA X 240 Volts Watts)

Full-Load Currents in Amperes Single-Phase Alternating-Current Motors

| <u>HP</u> | <u>115V</u> | <u>230V</u> |
|-----------|-------------|-------------|
| 1/6 | 4.4 | 2.2 |
| 1/4 | 5.8 | 2.9 |
| 1/3 | 7.2 | 3.6 |
| 1/2 | 9.8 | 4.9 |
| 1/4 | 13.8 | 6.9 |
| 1 | 16.0 | 8.0 |
| 11/2 | 20.0 | 10.0 |
| 2 | 24.0 | 12.0 |

NOTES:

FLA = Full-Load Amps

^{**} Pump Motor, Aerator and Pool Sweep (Amps x 240 Volts = Watts)

^{***} Electric Cooking appliances follow table CEC 220.55.

^{1) 240} Volts x Amps = Watts (VA)

Watts ÷ 240 Volts = **Amps**

²⁾ This schedule is based on the California Electrical Code and is intended as a guide for preparing electrical load calculations. However, due to various conditions that exist on individual projects, this format may not meet code requirements for your project. If you have any questions regarding the use of this form, or electrical load calculations, the Building Division can provide assistance upon request.