



Development Services Department

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Help Line: (916) 808-5656

www.cityofsacramento.org/dsd



Electrical Load Calculation Worksheet N.E.C. 220.82

THIS SHALL BE ON THE JOB SITE AT ALL TIMES

SUBMIT TWO COPIES

Permit # _____

Date: _____

Contractor/Owner: _____

Job Address: _____

Total Sq. Ft. _____

Phone # _____

Email: _____

| Number | Item | Watts | Air Conditioning Example (not heat pump) |
|--------|---|-------|--|
| | Sq. Ft. @ 3 Watts per Sq. Ft - 220.12 | | Compressor 20 amps Fan 5 amps Unit Total Load = 25 amps x 240V Elec. Furnace @ N.P.R. = 6000 watts x 65% = 3900 watts Use 6000 watts since it is larger ----- Heat Pump Example Compressor 20 amps Fan 5 amps Unit Total Load = 25 amps x 240V = 6000 watts Aux. Heat Strip = 6000 watts x 65% = 3900 watts Total Heat Pump Load = 9900 watts Heat Pump Note: When doing load calculations where heat pumps are installed, the load for most heat pumps that are equipped with auxiliary heat strips will be larger under the demand for heat. For purposes of load calculations only, on heat pump compressor and fans use 65% of auxiliary heat load to show total heat pump |
| | 20 Amp. Appliance circuits @ 1500 watts each - 220.52(A) | | |
| | Range (Nameplate Rating = N.P.R.) | | |
| | Oven (N.P.R.) | | |
| | Cooking Units (N.P.R.) | | |
| | Water Heater (N.P.R.) | | |
| | Dishwasher (N.P.R.) | | |
| | Disposal (N.P.R.) | | |
| | Washer [(1500 watts min. N.E.C. 220.52(B))] | | |
| | Dryer [(5000 watts min. or N.P.R. if larger) N.E.C. 220.54] | | |
| | Motors (N.P.R.) | | |
| | Other (N.P.R.) | | |
| | Other (N.P.R.) | | |

| | |
|--|---|
| Air Conditioning Equipment Air Conditioning [cooling @ (N.P.R. x 100%)] = | Subtotal = _____ (Loss 1 st 10KW – 10,000 @ 100% = 10,000 Watts |
| Electrical Heating @ (N.P.R. x 65% = | Remainder @ 40% _____ @ 40% _____ Watts |
| NOTE: Use the largest load - Heat or Cool = | Total Air Cond. and/or heat pump load = _____ Watts |
| Heat pump (compressor & fans) x 100% = | Total Service Load = _____ Watts |
| Aux. Heat strips (or elect. furnace) x 65% = | Total Service Load _____ Watts ÷ 240V = _____ Amps |
| Total Heat Pump Load = | Service Size _____ |
| NOTE: Amps x Circuit Voltage = Watts | |