



DEPARTMENT OF BUILDING & SAFETY
**RESIDENTIAL ELECTRICAL
 LOAD CALCULATIONS**

www.LasVegasNevada.gov/BuildingPermits
 Phone: (702) 229-6251 Fax: (702) 382-1240

Standard Calculation: Article 220 NEC

General Lighting Load 220.12

General Lighting Load Sq Ft _____ x 3 Volt Amps = _____ VA
 Small Appliance Circuits @ 1500 VA each, Min of 2 _____ (qty) = _____ VA
 Laundry (Washing Machine) circuit 1500 VA, Min of 1 _____ (qty) = _____ VA
Sub Tot (1) _____ VA

Application of Demand Factor (Table 220.42)

First 3,000 VA of Subtotal (1) at 100% ST = _____ VA
 Remainder of Subtotal (1) at 35% _____ = _____ VA
 If over 120,000 VA use 25% ST _____ = _____ VA
Sub Tot (2) _____ VA

Electrical Cooking Appliances. Use NEC Table 220-55

100% Nameplate Rating _____
 From Table 220.55 _____

 Dryer Load (220.54) 100% VA _____
Sub Tot (3) _____ VA

Heating or A/C 220.60

Total load for A/C Unit(s) _____
 Total Load for Supplemental Heating _____
 Total Load for Heat Pump _____
Sub Tot (4) _____ VA

Fixed Appliances 220.53

Disposer _____ Water Heater _____
 Compactor _____ Dishwasher _____
 Microwave _____
 (4 or more appliances, a demand of 75% is allowed) **Sub Tot 5a** _____ x _____
Sub Tot (5) _____ VA

EV Chargers - Article 625.41

EV Charger _____ (Continuous load, full circuit value) _____
Sub Tot (6) _____ VA

Miscellaneous Motor Loads 220.50

Largest Motor _____ + 25% LM _____
 Other loads (pool pump, spa, welder) _____
Sub Tot (7) _____ VA

Grand Total (2+3+4+5+6+7) _____ VA

Calculated Load (Grand Total/240) _____ AMPS

Panel Size _____

***If there is a subpanel, a separate Electrical Load Calculation is required.**