



CITY OF HENDERSON

Department of Building & Fire Safety

RESIDENTIAL ELECTRICAL LOAD CALCULATIONS

Owner _____ Date / /

Address _____ Prepared by _____

General Lighting Load Sq.Ft. _____ X 3 Volt Amps = _____ VA

Small Appliance Circuits at 1500 VA each x _____ (min. of two) = _____ VA

Laundry (Washing Machine) Circuit 1500 VA x _____ (min. of one) = _____ VA

Sub-Total = _____ VA

First 3,000 VA of Lighting, Small Appliance, Laundry Load at 100% = **3,000** VA

From 3,001 to 120,000 VA at 35% _____ X .35 = _____ VA

Over 120,000 VA use 25% _____ X .25 = _____ VA

Electrical Cooking Appliances, Use NEC Table 220-55

(Number of Appliances) _____ Demand _____ % x Total KW _____ (Column A) x 1,000 = _____ VA

(Number of Appliances) _____ Demand _____ % x Total KW _____ (Column B) x 1,000 = _____ VA

(Number of Appliances) _____ Demand _____ x Total KW _____ (Column C) x 1,000 = _____ VA

Dryer Load NEC Table 220-54 = _____ VA

(1) Sub-Total = _____ VA

Heating/Air Conditioning – List type and VA at 100%

(H) Heat Pump	(G) Gas + Cool	(S) Heat Strip	(A) Cir Fans
() _____	() _____	() _____	() _____
() _____	() _____	() _____	() _____
() _____	() _____	() _____	() _____
() _____	() _____	() _____	() _____

(2) Sub-Total = _____ VA

Fixed Appliances – If fewer than four units, use 100%. If four or more, use 75% of the nameplate rating.

Microwave	1500 VA x _____	Food Center	600 VA x _____
Compactor	1200 VA x _____	Hot Water	4500 VA x _____
Dishwasher	1200 VA x _____		VA x _____
Disposal	600 VA x _____		VA x _____
Cent Vacuum	1800 VA x _____		VA x _____

Appliance Subtotal _____ x **(100%) OR (75%)** **(3) Sub-Total** = _____ VA

Add 25% of the largest motor (typical AC compressor)

_____ X 25% LM _____ **(4) Sub-Total** = _____ VA

5) Spare 20amps x 240 volts Sub-Total = **4,800** VA

GRAND TOTAL (Add Sub-Totals (1), (2), (3), (4), (5)) = _____ VA

Total Volt Amps _____ Divide by 240 Volts = _____ Amps

Service Size _____ Grounding Electrode Conductor _____