



Dwelling Unit Load Calculations

Optional Calculation

1. General Lighting Loads (220.12) _____ sq. ft. x 3 VA = _____ VA
 Minimum number of circuits
 _____ VA ÷ 120 Volts = _____ Amps
 _____ Amps ÷ 15 or 20 amp ckts. = _____ ckts

2. Small Appliance Branch Circuits (220.52(B)) _____ x 1500 VA = _____ VA
 (Minimum of two required)

3. Laundry Equipment Load (220.52(A)) _____ x 1500 VA = _____ VA

4. Total General Lighting, Small Appliance and Laundry Circuit Load (1. + 2. + 3.) _____ VA

5. Nameplate Rating of Appliances Per 220.82(B)(3):

Range	_____ VA
Dryer	_____ VA
Dishwasher	_____ VA
Disposal	_____ VA
Water Heater	_____ VA
_____	_____ VA
_____	_____ VA
5a. Total of Nameplate Ratings	_____ VA

6. Apply Demand Factors (220.82(B))

	6a. First 10,00 VA at 100%	_____ 10,000 VA
6b. Lines 4 + 5a. minus 10,000 VA = _____ x 40%		_____ VA
6c. Subtotal with calculated demand (Lines 6a. + 6b.)		_____ VA

7. Heating or Air Conditioning Load (Choose Largest)

A/C units or heat pumps @ 100%	_____	
Thermal storage, other cont. heat @ 100%	_____	
Central heat & heat strips in heat pumps @ 65%	_____	
Heating units (3 or less @ 65%)	_____	
Heating units (4 or more @ 40%)	_____	
7a. Largest of above listed loads		_____ VA
7b. <u>Total Calculated Load (6c. + 7a.)</u>		_____ VA

Minimum size of ungrounded (Hot) service conductors
 (Line 7b. above)VA ÷ 240 Volts = _____ Amps

8. Minimum Size of Grounded (Neutral) Service Entrance Conductors

8a. 3000 VA + (((Line 4.) - 3000VA) x 35%)		_____ VA
8b. Range load at 70% =		_____ VA
8c. Dryer load larger of 5000 or nameplate Volt-amperes at 70% =		_____ VA
8d. Total of 120 volt appliance loads from section 5. above		_____ VA
8e. Total for grounded service-entrance conductor (8a. thru 8d.)		_____ VA
(Line 8e. above)VA ÷ 240 Volts =		_____ Amps