



# Dwelling Unit Load Calculations

## Standard 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

**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. Application of Demand Factors (Table 220.42)**

**5a.** First 3,000 Volt-Amperes at 100% \_\_\_\_\_ 3000 VA

**5b.** Line 4 minus 3000 = \_\_\_\_\_

**5c.** If Line 5b > 117,000, then 117,000 x 35% = \_\_\_\_\_ VA

**5d.** If Line 5b < 117,000, then Line 5b x 35% = \_\_\_\_\_ VA

**5e.** If line 5b > 117,000, then Line 4 minus 120,000 = \_\_\_\_\_ x 25% = \_\_\_\_\_ VA

**5f. Net general lighting and small appliance load (5a+5c+5d+5e)** \_\_\_\_\_ VA

**6. Appliance load—Dwelling Unit(s) (220.53)**

*See table 430.248  
for full-load  
current if no  
nameplate rating.*


Nameplate-VA (Watts)


**6a.** Total (If less than four) \_\_\_\_\_ VA

**6a.** Total (If four or more) \_\_\_\_\_ x 75% = \_\_\_\_\_ VA

**7. Add Other Loads (Range, Dryer, Heat, A/C)**

(Use largest of coincident loads)

**7a.** Range load (Table 220.55) \_\_\_\_\_ VA

**7b.** Dryer load (Table 220.54) \_\_\_\_\_ VA

**7c.** \_\_\_\_\_ VA

**7d.** \_\_\_\_\_ VA

**7e.** 25% of Largest Motor from sec 6. or 7.(220.50) \_\_\_\_\_ (VA) x 25% = \_\_\_\_\_ VA

**7f. Total Calculated Load (Add 5f. thru 7e.)** \_\_\_\_\_ VA

**Minimum size of ungrounded (Hot) service conductors**

(Line 7f. above)VA ÷ 240 Volts = Amps

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

**8a.** Lighting and small appliance load (5f.) + 120 Volt appliance loads (6a.)= \_\_\_\_\_ VA

**8b.** Range load at 70%= \_\_\_\_\_ VA

**8c.** Dryer load larger of 5000 or nameplate Volt-amperes at 70%= \_\_\_\_\_ VA

**8d. Total for grounded service-entrance conductor** \_\_\_\_\_ VA

(Line 8d. above)VA ÷ 240 Volts= Amps