

NEC Standard Electrical Load Calculation for Single Family Dwellings

(Only for Service Ratings of 120/240V, 225 Amps Max)

Owner: _____ Location: _____

Total Floor Area of Dwelling (NEC 220.12) _____ SQFT.

Factor	Quantity	Volt Amperes (VA)
“General Lighting”		
1. General Lighting (SQFT X 3 VA/SQ FT (Table 220.12))	3 X sqft.	
2. Small Appliance Circuits (1500 VA per circuit) (NEC 220.52(A)) (minimum 2)	1500 X	
3. Laundry Circuit (1500 VA per circuit) (NEC 220.52(B))	1500 X	
4. Total General Lighting Load (Add lines 1, 2 & 3):		
5. First 3000 VA @ 100%:		3000
6. Total General Lighting Load – 3000 = _____ @ 35%=		
7. Net General Lighting Load (Per NEC 220.42) (Add lines 5 & 6):		
*Fixed Appliances(if insufficient space, use back):		
	YES	NO
• Garbage Disposal	<input type="checkbox"/>	<input type="checkbox"/>
• Bathroom Fan	<input type="checkbox"/>	<input type="checkbox"/>
• Microwave	<input type="checkbox"/>	<input type="checkbox"/>
• Dishwasher	<input type="checkbox"/>	<input type="checkbox"/>
• Other:	<input type="checkbox"/>	<input type="checkbox"/>
• Other:	<input type="checkbox"/>	<input type="checkbox"/>
Total		0
8. 3 or less Appliances, Total Appliance VA; 4 or more Appliances, 75% of Total Appliance VA (NEC 220.53):		
*Other Loads (including motors, EV charger(s), etc.)		
	YES	NO
9. Electric Range (8000VA or Nameplate)**	<input type="checkbox"/>	<input type="checkbox"/>
10. HVAC	<input type="checkbox"/>	<input type="checkbox"/>
11. Electric Oven	<input type="checkbox"/>	<input type="checkbox"/>
12. Electric Dryer (5000 VA minimum)**	<input type="checkbox"/>	<input type="checkbox"/>
13. Electric Vehicle Charger	<input type="checkbox"/>	<input type="checkbox"/>
14. Other:	<input type="checkbox"/>	<input type="checkbox"/>
15. Other:	<input type="checkbox"/>	<input type="checkbox"/>
16. 25% of largest motor (NEC 430.24)		
Total Service Load Volt-Amperes (VA) (Add lines 7, 8 & 9 thru 16) =		
Total Service Load Volt-Amperes / 240-volts = Amperes		
***Service Rating (Amperes)=		

- * For every “YES” answer, indicate VA rating of equipment
- ** Nameplate rating must be used if larger
- *** Service Rating shall be greater than or equal to the Service load

