

NEC 220.83 - Residential Load Calculation

Version 2.1

Size of Utility Service: **200A** Main Panel Size: **200A** Service Disconnect: **200A** L1/L2 **240 V**

NEC 220.83(B) The general calculated load shall be not less than 100% of the first 8 kVA plus 40% of the remainder of

NEC 220.83(B)(1) "The calculated floor area shall not include open porches, garages, or unused ... spaces..."

Floor Area **3,618** square feet x 3VA/sq ft **10,854** VA

NEC 220.83(B)(2) "1500 volt-amperes for each 2-wire, 20-ampere small appliance branch circuit and each laundry branch

Small Appliance **6** circuits x 1500VA/circuit **9,000** VA

Laundry Circuit **1** circuits x 1500VA/circuit **1,500** VA

NEC 220.83(B)(3) "The nameplate rating of all appliances... ranges, wall-mounted ovens, counter-mounted cooking

Load (240V unless otherwise indicated)	Breaker	VA
Oven	50	9,600
	0	0
	0	0
	0	0
	0	0
	0	0
	0	0
120V FAU/Air Handler	20	1,500
120V Range Hood	20	1,500
	0	0
120V Spa Circuit	20	1,500
		14,100 total VA

Total of non air-conditioning loads: **35,454** total VA

First 8 kVA of load at 100% **8,000**

Remainder of load at 40% **10,982**

Adjusted total of non air-conditioning load **18,982** VA

NEC 220.83(B) "Heating and air-conditioning load..."

Sum of Electric Vehicle Charging Supply	60	11,520
Sum of A/C Equipment Units	80	13,440
Sum of Electric Furnaces	0	0

Total of A/C Loads and All Other Loads: **43,942** total VA

Total Proposed Calculated Load: **183.09 Amps**

