



Clark County Department Of Building

SFR, Main Electrical Service/Sub Panel

Calculation Worksheet

Standard Calculation :Article 220 NEC

1. General Lighting Load [Table 220.12]

_____ Sq. ft x 3 VA/ft² = _____ VA (a)
 Small Appliance Circuits: (220.52(A))
 _____ Circuits @ 1500 VA = _____ VA (b)
 (min of 2) Laundry [220.52(B)] = _____ VA (c)
 Sub Total: (a+b+c) = _____ VA (d)
 Application of Demand Factor (Table 220.42)
 First 3,000VA at 100% = _____ VA
 (≤120,000) Remainder of _____ @35% = _____ VA
 (>120,000) Remainder of _____ @25% = _____ VA
 Sub Total: _____ VA = _____ VA (1)

2. Fixed Appliances [220.53]

Disposer _____ VA
 Water Heater _____ VA
 Dishwasher _____ VA
 Compactor _____ VA
 Microwave _____ VA
 Other appliances _____ VA
 Sub Total: _____ (e) @ _____ = _____ VA (2)
 (4 or more appliances, a demand factor of 75% may be used)

3. Dryer [220.54 - Minimum 5000VA or nameplate if larger]

_____ VA @ _____ = _____ VA (3)

4. Cooking Equipment [Table 220.55] Notes

Col A _____ VA @ _____ = _____ VA
 Col B _____ VA @ _____ = _____ VA
 Col C _____ VA @ _____ = _____ VA
 Total: _____ VA (f) Total: _____ VA = _____ VA (4)
 (may be reduced per Table 220.55)

5. Heating or A/C [220.60]

Total load for Supplemental Heating Unit (i) = _____ VA
 Total load for A/C Unit (ii) = _____ VA
 Total load for Heat pump (iii) = _____ VA
 Largest load of (i)+(iii) or (ii)+(iii) = _____ @ 100% = _____ VA (5)

6. Largest Motor [220.50]

Φ _____ VA @ 25% _____ = _____ VA (6)

7. Other loads: (i.e.. pool pump, spa, welder)

_____ VA = _____ VA (7)
 Add 20 Amps at 240 volts = _____ VA = _____ VA (8)
 (SFR Only)

Total: Add line (1) through (8) = _____ VA (9)

Calculated Load for Service = Line (9)/240

= _____ **Amps**



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Optional calculation: Article 220.82 NEC

1. General Load [220.82(B)(1-4)	from line d =	_____	
2. Fixed Appliances	from line e =	_____	
3. Dryer	from line 3 =	_____	
4. Cooking Equipment	from line f =	_____	
	Sub Total: (d+e+3+f) =	=====	
	First 10,000 VA @ 100%	_____	(g)
	Remaining _____ VA @ 40%	_____	(h)
5. Heating or A/C	line 5 =	_____	(i)
7. Other Loads:	from line 7 =	_____	(k)
Add 20 Amps at 240 volts	line 8 =	_____	(j) [SFR Only]
	Total: (g+h+i+J+k) =	=====	VA 10)
	Calculated Load for Service =	Line (10)/240	
	=	_____	Amps