

Per Article 220 National Electrical Code

1. General Lighting Load.

_____ ft² @ 3VA per ft² = _____ VA

2. Small Appliance Load.

(Minimum of two 20-ampere branch-circuits)

_____ branch-circuits @ 1500 VA each = _____ VA

3. Laundry Branch Circuit.

(Minimum of one 20-ampere branch-circuits)

_____ branch-circuits @ 1500 VA each = _____ VA

4. Total General Lighting, Small Appliance, and Laundry Load.

Lines 1+2+3 = _____ VA

5. Net Computed General Lighting, Small Appliance, and Laundry Loads. (less ranges, oven, and “fastened-in-place” appliances.)

a. First 3000 VA @ 100% = _____ 3000VA

b. Line 4 _____ - 3000= _____ @ 35% = _____ VA

Total a + b = _____ VA

6. Electric Range, Wall-Mounted Ovens, Counter-Mounted Cooking Units. (NEC Table 220.55)

= _____ VA

7. Electric Clothes Dryer.

(5000 VA or Nameplate, whichever is greater)

= _____ VA

8. Electric Furnace, Air Conditioner, Heat Pump.

= _____ VA

9. Net Computed General Lighting, Small Appliances, Laundry, Ranges, Ovens, Cooktop Units, HVAC.

Lines 5+6+7+8 = _____ VA

10. List “Fastened-in-Place” Appliances in addition to Electric Ranges, Electric Clothes Dryers, Electric Space Heating and Air-Conditioning Equipment.

| <u>Appliance:</u> | <u>VA Load:</u> |
|-------------------------------------|-------------------|
| Water Heater: | = _____ VA |
| Dishwasher: | = _____ VA |
| Microwave: | = _____ VA |
| Garage Door Opener: | = _____ VA |
| 2 nd Garage Door Opener: | = _____ VA |
| Food Waste Disposer: | = _____ VA |
| Water Pump: | = _____ VA |
| Gas-fired Furnace: | = _____ VA |
| Sump Pump: | = _____ VA |
| Other: _____ | = _____ VA |
| _____ | = _____ VA |
| _____ | = _____ VA |
| _____ | = _____ VA |
| Total | = _____ VA |

11. Apply 75% Demand Factor if four or more “Fastened-in-Place” Appliances.

If Less Than Four, Figure @ 100%.

Do not include electric ranges, electric clothes dryers, electric space heating or air-conditioning equipment.

Line 10 Total: _____ × 0.75 = _____ VA

12. Total Computed Load.

(Lighting, Small Appliance, Ranges, Dryer, HVAC, “Fastened-in-Place” Appliances)

Line 9 _____ + Line 11 _____ = _____ VA

13. Add 25% of Largest Motor.

_____ × 0.25 = _____ VA

14. Grand Total Line 12 + Line 13. = _____ VA

15. Continuous Duty Appliances = _____ VA

Hot tubs/Vehicle Chargers (Based on Ampere rating of the appliance or load served)

16. Minimum Ampacity for Underground Service-Entrance Conductors.

Amperes = Line 14 ÷ 240V = _____ amperes