

Electrical Load Calculation

Residential Electrical Load Calculation Canadian Electrical Code (CEC) Rule 8-200(2)

Project Information					
Primary Dwelling Address:		Secondary Dwelling Address (if applicable):		Primary Dwelling (larger dwelling)	Secondary Dwelling (if applicable - smaller dwelling)
Area of Dwelling units			m ²		m ²
1	Add basic load of 5000W for first 90m ² of total living area for each suite (90m ² = 969 sq. ft)		W		W
2	Add 1000W for each additional 90m ² + any portion in excess of 90m ² of living area for that suite		W		W
<i>*Notes: - Air Conditioning loads are entered in line 10 - All electric space heating loads are entered in line 11</i>					
3	Electric range - 6000W (+ 40% of any amount by which the NAMEPLATE rating range exceeds 12 kW)		W		W
<i>*Note: If separate wall oven and cooktop, or gas range installed. Apply Note 2 in line 6</i>					
4	Electric Water heaters at 100% of the NAMEPLATE rating (identify each one in a separate line)		W		W
	Fully Electric On-Demand Water Heater		W		W
	Hot tubs, pool heater		W		W
	Steam shower heater		W		W
	Jet tub heater		W		W
	Sauna		W		W
	Other:		W		W
5	Electric vehicle supply equipment		W		
<i>*Note: taken at 100% of the charge rate setting</i>					
6	Other Loads with a NAMEPLATE rating in excess of 1500 W - these loads are applied at:				
	Dryer		W		W
	Hot tub pool pumps total		W		W
	Wall oven - if no electric range or a gas range installed		W		W
	Electric Cooktop - if no electric range or a gas range installed		W		W
	Domestic Hot Water Tank		W		W
	Other:		W		W
	Other:		W		W
	Other:		W		W
<i>*Note 1: - 25% of nameplate rating if there is an electric range in that suite *Note 2: - 100% of the combined load up to 6000 W plus 25% of the combined load that exceeds 6000 W if no range has been provided for (gas range or wall oven and cooktop combination) - Identify each load in a separate line</i>					
7	TOTAL CALCULATED LOAD PER SUITE IN WATTS (Lines 1 to 6)		W		W
CALCULATED LOAD APPLIED TO THE SERVICE					
8	Larger dwelling unit @ 100%				W
9	Smaller Dwelling (if applicable) - @ 65%				W
10	All air conditioning loads @ 100% - no matter which suite they are installed				W
11	All electric heating loads @ 100% - no matter which suite they are installed				W
					W
					W
12	Sum of all Electric Heating Loads				W
13	Electrical heat interlocked with A/C				Y/N
	Greater of A/C or Electric loads - ONLY when A/C and electrical heat are interlocked				W
	Sum of all A/C and Electric heating loads - ONLY when A/C and electrical heat are NOT interlocked				W
<i>*Notes - Identify each heating load in a separate line (includes electric fireplaces and garage heaters) - If air conditioning and electric heat are NOT interlocked, Both A/C and heat values must be used</i>					
14	TOTAL CALCULATED LOAD IN WATTS				W
15	Divide line 14 by 240 for MAIN SERVICE AMPACITY REQUIRED				A
16	What is the existing installed service size installed at this building?				A
I have verified that the information contained within this document is correct					
Master Electrician Name:				Signature	
Master Electrician Number:					
Date:					
Phone No.		Email:			

*When a secondary suite is added to an existing property a service demand calculation must be completed and submitted as part of the permit application