

Electrical Load Calculation for Duplex or Duplex with Secondary Suite

Address:

Please complete the appropriate table cells and check boxes accordingly.

Revised March 6, 2025

2024 CE Code Rule 8-200 2) Rule 8-200 1) a)		A Dwelling Unit (Principal)	B Dwelling Unit (Principal)	C Secondary Suite	D Secondary Suite
Identifying the total living areas - Rule 8-110. 8-200 1) a):		m²	m²	m²	m²
i) a basic load of 5000 W for the first 90 m² or less of living area; plus					
ii) 1000 W for each 90 m² or portion thereof; plus					
iii) any electric space-heating loads using the demand factors from Section 62. 100% of the first 10kW, plus 75% for any amount over 10 kW; plus any air-conditioning loads with demand factor of 100%, subject to interlocks provided as per Rule 8-106 3); or any heat pump motor loads with demand factors as permitted in Section 28; plus Δ Electric boiler, duct heater, furnace: 100%;	Baseboard Heaters:				
	Air-conditioning:				
	Heat Pump:				
	Other:				
iv) any electric range load: 6000 W for a single range plus 40% of any amount by which the rating of the range exceeds 12 kW; plus					
v) any electric tankless water heaters or electric water heaters for steamers, swimming pools, hot tubs, or spas with a demand factor of 100%; plus					
vi) except as permitted by *Rule 8-106 11), any electric vehicle supply equipment loads with a demand factor of 100%; plus	100% EVSE:				
	*Deduction of EVSE loads:				
vii) A) 25% of the rating of each load with a rating in excess of 1500 W, if an electric range has been provided for, or vii) B) 100% of the combined load up to 6000 W, plus 25% of the combined load that exceeds 6000 W, if an electric range has not been provided for;	Dryer:				
	HWT:				
	Other:				
If principal dwelling unit & secondary suite are separately metered, load calculation as per 8-200 2); if a single utility meter is provided for dwelling unit & suite, load calculation as per 8-200 1) for basic loads plus electrical loads of units as if there is only one dwelling unit.		From column C/D: W	From column C/D: W	Add total unmetered load below to left column A/B	Add total unmetered load below to left column A/B
Total Calculated Loads		W	W	W	W
**Main Circuit Breaker – Amps		A	A	A	A
Type & size of service/feeder (AWG / kcmil Cu / Al)					
The calculated load for the consumer's service supplying the dwelling units above must be based on Rule 8-200 2): Excluding any electric vehicle supply equipment loads, any electric space-heating loads and any air-conditioning loads, calculate the total load of all the dwelling units using the Rule 8-202 3) a) i) to v); plus, the requirements of Rule 8-202 3) b) to e). Note: any electrical vehicle supply equipment loads, if they are supplied from a panelboard installed in a dwelling unit, with a demand factor of 100%.					
100% of the unit having the heaviest load: Rule 8-202 3) a) i); excluding any EVSE loads, electric space-heating loads, air-conditioning loads. (unit A / B)				Supplementary requirements and noteworthy details:	
65% of the unit having the same or next smaller load: Rule 8-202 3) a) ii); excluding any EVSE loads, electric space-heating loads, air-conditioning loads. (unit A / B)				*Rule 8-200 1) a) vi) applies to the service or feeder supplying a single dwelling only. See Rule 8-200 2).	
65% of the unit having the same or next smaller load: Rule 8-202 3) a) ii); excluding any EVSE loads, electric space-heating loads, air-conditioning loads (Suite C / D)				**Precise rating or next higher standard rating of O/C must be used, if not, size the service for the anticipated ampere rating of O/C devices.	
40% of the unit having the same or next smaller load: Rule 8-202 3) a) iii); excluding any EVSE loads, electric space-heating loads, air-conditioning loads (Suite C / D)				***Despite Rule 8-106 11), EVSE loads described in Rule 8-202 1) a) vii) are required to be excluded in accordance with Rule 8-200 2) a).	
Baseboard heating load, 100% of the first 10 kW				****Where EVSE loads are controlled by an EVEMS, the demand load for the EVSE shall be equal to the maximum load allowed by the EVEMS. i.e., If an EVEMS has a fixed rating of 50A is installed to Control 4 EVSE loads, then 50A must be used in EVSE load calculations in accordance with Section 8 of the CE Code.	
75% for any amount over 10 kW: Rule 8-202 3) b), Subject to Rule 8-106 3);				*****Where an Electric Vehicle Energy Management System (EVEMS) is used, the EVEMS must meet all the applicable conditions of CE Code Rule 8-106 11) and it must control the demand load for the EVSE in accordance CE Code Rule 8-500.	
Electric space-heating loads: Rule 8-202 3) b), Subject to Rule 8-106 3);				So far, a dedicated certification / product standard does not exist for the electrical equipment comprising EVEMS. "Approved" is defined by the CE Code. EVEMS equipment could be made approved by a Special Inspection to the CSA Model Field Evaluation Code, SPE 1000.	
Air-conditioning loads: Rule 8-202 3) c) iii), Subject to Rule 8-106 3);				ΔOther heating loads includes Heating cable sets, Heating panel sets, Heat pump auxiliary element, Patio heaters, Duct heaters, Electric furnace.	
Heat Pump Motor Loads: Rule 8-202 3) c) iii), Subject to Rule 8-106 3);				Provide actual air conditioner or heat pump motor loads: Calculate NAMEPLATES FLA x Volts = Watts	
Where interlocks are installed, determine the larger ac / heating load from above: Rule 8-106 3): larger load to be considered in the determination of the calculated load.				BC Hydro may restrict 400A services in some areas. When 2 supply services (2 drops) are provided by BC Hydro, submit separate load calculations with compliance of Rule 8-200 1) a) or b).	
100% of EVSE loads supplied from units' panel: ***As per Rule 8-202 1) a) vii);					
100% of EVSE loads (supplied from common EV panel): Rule 8-202 3) d), Subject to Rule 8-106 10) or 11); (House loads)		For loads not located in dwelling units			
****Determine the maximum EVSE load allowed by EVEMS: Rule 8-106 10). Rule 86-300 2);		For loads not located in dwelling units			
*****EVEMS Deduction of EVSE loads: As per Rule 8-106 11);		For loads not located in dwelling units			
75% of common house panel loads: Rule 8-202 3) e).		For loads not located in dwelling units			
Total Amps: A		Total Watts: W			
Ampacity Rating of the Service and Service Characteristics					
Service Ampacity:	A	Voltage:	V	Phase:	1 Ø 3W <input type="checkbox"/> 3 Ø 4W <input type="checkbox"/>
Type & size of conductors:	AWG/kcmil cu/Al	Overhead:	<input type="checkbox"/>	Underground:	<input type="checkbox"/> How many BC Hydro meters?

Electrical Contractor Name & License Number

Email

Phone Number

FSR Name & Registration Number

Signature

Date