

## Electrical Load Calculation for Apartment, Multiplex and similar building

**Address:** \_\_\_\_\_

Please complete the appropriate table cells and check boxes accordingly.

March 3, 2025

2024 CE Code Rule 8-202	1 Dwelling Unit	2 Dwelling Unit	3 Dwelling Unit	4 Dwelling Unit	5 Dwelling Unit	6 Dwelling Unit
Identifying the total living areas - <b>Rule 8-110. 8-202 1 a)</b> : i) 3500 W basic load for the first 45 m <sup>2</sup> or less of living area; plus ii) 1500 W for the second 45 m <sup>2</sup> or portion thereof; plus iii) 1000 W for each 90 m <sup>2</sup> or portion of the remaining area; plus	m <sup>2</sup>	m <sup>2</sup>	m <sup>2</sup>	m <sup>2</sup>	m <sup>2</sup>	m <sup>2</sup>
iv) any electric space-heating loads using the demand factors from <b>Section 62</b> , 100% of the first 10 kW, plus 75% for any amount over 10 kW; plus any air-conditioning loads with demand factor of 100%, subject to interlocks as per <b>Rule 8-106 3)</b> ▲ Electric boiler, duct heater, furnace: 100%	Baseboard Heat:					
	Heat Pump:					
	Air-conditioning:					
	Other:					
v) any electric range load: 6000 W for a single range plus 40% of any amount which the rating of the range exceeds 12 kW; plus vi) any electric tankless water heaters or electric water heaters for steamers, swimming pools, hot tubs, or spas with a demand factor of 100%; plus						
vii) any electrical vehicle supply equipment loads, if they are supplied from a panelboard installed in a dwelling unit with a demand factor of 100%; plus	100% EVSE:					
viii) A) 25% of the rating of each load with a rating in excess of 1500 W, if an electric range has been provided for; viii) B) 25% of the rating of each load with a rating in excess of 1500 W plus 6000 W, if an electric range has not been provided for; or	Dryer:					
	HWT:					
	Other:					
<b>Total Calculated Loads</b>	W	W	W	W	W	W
<b>*Main Circuit Breaker – Amps</b>	A	A	A	A	A	A
<b>Type &amp; size of service/feeder</b> (AWG / kcmil Cu / Al)						
<b>The calculated load for the consumer's service supplying the dwelling units shall be based on CE Code Rule 8-202 3):</b>						
100% of the unit having the heaviest load: <b>Rule 8-202 3) a) i)</b> ; excluding any EVSE loads, electric space-heating loads, air-conditioning loads.						<b>Supplementary requirements and noteworthy details:</b>  *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. **Despite Rule 8-106 11), EVSE loads described in Rule 8-202 1) a) vii) are required to be excluded in accordance with Rule 8-202 3) a). ***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.  <div style="border: 1px solid black; padding: 2px; margin: 5px 0;">             ← For more than 6 units, follow Rule 8-202 3) a) iv), add loads here.           </div> ****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.  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.  ▲Other heating loads includes heating cable sets, heating panel sets, heat pump auxiliary element, patio heaters, duct heaters, electric furnace.  ▲▲ CE Code Rule 8-202 4) requires that the ampacity of feeder conductors from a service supplying loads not located in dwelling units shall be not less than the rating of the equipment installed with demand factors as permitted by this Code. Provide actual air conditioner or heat pump motor loads: Calculate NAMEPLATES FLA x Volts = Watts When electrical installation is designed by an electrical engineer, submit the electrical drawings incorporated with load calculation.
65% of the unit having the same or next smaller load: <b>Rule 8-202 3) a) ii)</b> ; excluding any EVSE loads, electric space-heating loads, air-conditioning loads.						
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40% of the unit having the same or next smaller load: <b>Rule 8-202 3) a) iii)</b> ; excluding any EVSE loads, electric space-heating loads, air-conditioning loads.						
40% of the unit having the same or next smaller load: <b>Rule 8-202 3) a) iii)</b> ; excluding any EVSE loads, electric space-heating loads, air-conditioning loads.						
25% of the unit having the same or next smaller load: <b>Rule 8-202 3) a) iv)</b> ; excluding any EVSE loads, electric space-heating loads, air-conditioning loads.						
25% of the unit having the same or next smaller load: <b>Rule 8-202 3) a) iv)</b> ; excluding any EVSE loads, electric space-heating loads, air-conditioning loads.						
100% of the first 10 kW of baseboard heating load, 75% for any amount over 10 kW: <b>Rule 8-202 3) b)</b> , Subject to Rule 8-106 3);						
100% Electric space-heating loads: <b>Rule 8-202 3) b)</b> , Subject to Rule 8-106 3);						
100% Air-conditioning loads: <b>Rule 8-202 3) c) iii)</b> , Subject to Rule 8-106 3);						
100% Heat Pump Motor Loads: <b>Rule 8-202 3) c) iii)</b> , Subject to Rule 8-106 3);						
Where interlocks are installed, determine the larger ac / heating load from above: <b>Rule 8-106 3)</b> ; smaller load not to be considered in the determination of the calculated load						
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): <b>Rule 8-202 3) d)</b> , Subject to Rule 8-106 10) or 11); (House loads) ***Determine the maximum EVSE load allowed by EVEMS: <b>Rule 8-106 10)</b> , <b>Rule 86-300 2)</b> ; ****EVEMS Deduction of EVSE loads: As per <b>Rule 8-106 11)</b> ;						
75% of common house panel loads: <b>Rule 8-202 3) e)</b> , ▲▲ <b>Rule 8-202 4)</b> .						
<b>Total Amps:</b>	<b>A</b>	<b>Total Watts:</b>			<b>W</b>	
<b>Ampacity Rating of the Service and Service Characteristics:</b>						
Service Ampacity:	A	Voltage:	V	Phase:	1 Ø 3W <input type="checkbox"/>	3 Ø 4W <input type="checkbox"/>
Type & size of conductors: <small>(AWG / kcmil Cu / Al)</small>		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 \_\_\_\_\_