

A service demand calculation is required as part of an Electrical Permit application for dwelling and accessory buildings. Complete either Section A or Section B, depending on your dwelling type.

When the calculated demand indicates that an increase of the service is required from a 100 A to 200 A, you must contact a Safety Codes Officer to discuss available options.

Principal Dwelling Address _____ Subdivision _____

Legal description Lot _____ or Condo unit _____ Block _____ Plan _____

(if applicable) Quarter _____ Section _____ Township _____ Range _____ Meridian 4 _____

Secondary Suite Address (if applicable) _____

Garden Suite Address (if applicable) _____

Electrical Master Name _____ Certificate Number _____

email _____ Phone Number _____
 Electrical Master Electrical Master

Section A – Complete if Electrical Permit application is for a Dwelling and Accessory Building(s) and there is NO Secondary Suite or Garden Suite on the property

CEC Rule Single Dwellings	Ground and 2 nd Floor	Basement	Accessory Building	Notes
Rule 8-200 - Minimum ampacity of service feeder conductors from a main supplying a single dwelling shall be based on the greater of item A or B	m ² @ 100%	m ² @ 75%	m ² @ 100%	Area in m ² (1 square meter = 10.764 square feet)
Item A				Contractor must provide accurate m ² as calculated from the information in the Building or Development Permit, for the purpose of CEC Rule 8-110 26-402(1) 26-724(a) The service panelboard in any dwelling cannot be in a closet, bathroom, stairway or undesirable location.
(1)(a)(i) a basic load of 5000 W for the first 90 m ² of living area (see Rule 8-110); plus				
(1)(a)(ii) an additional 1000 W for each 90 m ² or portion thereof in excess of 90 m ² ; plus				
(1)(a)(iii) any electric space-heating loads (Section 62); plus				
(1)(a)(iii) any A/C @ 100%, plus				
(1)(a)(iv) single electric range: 6000 W + 40% of any amount by which the rating of the range exceeds 12 kW; plus				
(1)(a)(v) any electric tankless water heaters or electric water heaters for steamers, swimming pools, hot tubs or spas @ 100%; plus				
(1)(a)(vi) electric vehicle charging equipment loads @ 100%; plus				
(1)(a)(vii) additional loads: any loads provided for that have a rating >1500 W @ 25% if an electric range has been provided for; or, if no electric range provided, @ 100% of the combined load up to 6000 W, +25% the combined load that >6000 W.				
Item B				
(1)(b)(i) 24,000 W where the floor area, exclusive of the basement floor area, is 80m ² or more; or (1)(b)(ii) 14,400 W where the floor area, exclusive of the basement floor area, is less than 80m ²				
Total Calculated Load (W)	Watts	Watts	Watts	Watts
Each Main Breaker, O/C	Amps	Amps	Amps	Amps
Types and size of consumer's service conductors	AWG/kcmil Cu/Al	AWG/kcmil Cu/Al	AWG/kcmil Cu/Al	AWG/kcmil Cu/Al

Planning and Development Services, 2001 Sherwood Drive, Sherwood Park, AB T8A 3W7

Section B - Complete if Electrical Permit application is for a Dwelling WITH a Secondary Suite or Garden Suite on the property

CEC Rule	Principal m ²	Secondary m ²	Garden m ²	Notes
Rule 8-200(2) Minimum ampacity of service feeder conductors from a main supplying two or more dwelling units; plus				Area in m ² (1 square meter = 10.764 square feet)
(1)(a)(i) a basic load of 5000 W for the first 90 m ² of living area (see Rule 8-110); plus				Contractor must provide accurate m ² as calculated from the information in the Building or Development Permit, for the purpose of CEC Rule 8-110 26-402(1) 26-724(a) The service panelboard in any dwelling cannot be in a closet, bathroom, stairway or undesirable location. Main service panelboard must be located within the principal dwelling or common area. Branch circuits from a panelboard within the principal dwelling or secondary suite must not be located and connected to outlets or electrical equipment in an accessory building or garden suite.
(1)(a)(ii) an additional 1000 W for each 90 m ² or portion thereof in excess of 90 m ² ; plus				
(1)(a)(iii) any electric space-heating loads (Section 62); plus				
(1)(a)(iii) any A/C (Rule 8-106(3)); plus				
(1)(a)(iv) single electric range: 6000 W + 40% of any amount by which the rating of the range exceeds 12 kW; plus				
(1)(a)(v) any <u>electric</u> tankless water heaters or <u>electric</u> water heaters for steamers, swimming pools, hot tubs or spas @ 100%; plus				
(1)(a)(vi) electric vehicle charging equipment loads @ 100%; plus				
(1)(a)(vii) additional loads: any loads provided for that have a rating >1500 W @ 25% if an electric range has been provided for; <u>or</u> , if no electric range provided, @ 100% of the combined load up to 6000 W, +25% the combined load that >6000 W.				
OR				
(1)(b)(i) 100 A where the floor area, exclusive of the basement floor area, is 80m ² or more; <u>or</u>				
(1)(b)(ii) 60 A where the floor area, exclusive of the basement floor area, is less than 80m ²				
Total Calculated Load (W)		Watts	Watts	Watts
Each Main Breaker, O/C		Amps	Amps	Amps
Types and size of consumer's service conductors		AWG/kcmil Cu/Al	AWG/kcmil Cu/Al	AWG/kcmil Cu/Al

CEC Rule 8-200 (2)	Demand Application			
Rule 8-200(2)(a) excluding any electric space-heating and A/C loads, calculated load of unit with heaviest load @ 100% (Rule 8-202(3)(a)(i)), plus load of next two units @ 65% (Rule (3)(a)(ii))	100% Principal dwelling		The size of a consumer's service conductors between the supply authority point of attachment and meter base is to be based on the calculated load obtained from Subrule (1)(a) or (b) and 8-202(3)(a)(i) to (ii); <u>plus</u> 8-202(3)(b) & (c). The main bus of the meter base must comply with Rule 8-200(2) & (1).	
	65% LWH Secondary and Garden			
Rule 8-200(2)(a)(b) and 8-202(3)(b)(c). Electric space-heating loads (Section 62, subject to Rule 8-106(4)) and 100% A/C loads (subject to 8-106(4))	Electric space-heating loads			
	A/C loads			
Total Calculated Load Principal, Secondary and Garden (W)	Watts	Amps	Size and Type of Service Conductors AWG/kcmil	Meter Size

I have verified that the information contained within this document is correct.

Name (Print)

Signature

Date (yyyy-mm-dd)

Collection and use of personal information

Personal information is being collected under the authority of s. 33 (c) of the *Freedom of Information and Protection of Privacy Act* and will be used in the management and administration of Strathcona County's planning and permitting process information related to your permit application and/or permit(s) issued may be disclosed as allowed or required by law. If you have any questions about the collection, use or disclosure of your personal information, contact Coordinator, Development Services, Planning and Development Services, Strathcona County at 780-464-8080.