



CITY OF SURREY – ELECTRICAL SECTION

Electrical Demand Load Calculation

Single Family Dwelling c/w Secondary Suite or Coach House

August 2017

This form will **not** be collected from site, and must be submitted with a CAF at the time of service connection request to e.inspections@surrey.ca. Current BC Electrical Code and BCSA Bulletin IB-EL 2014-01 Take Precedence

Permit # : _____ Address : _____ Date : _____

Contractor : _____ FSR : _____ FSR # : _____ Signature: _____

Size of SFD = _____ m²	Size of Suite/CH = _____ m²		
❖			
Basic load plus each 90m² of remainder or portion of x 1000w	(House) 5000 + _____	W	
1st Range _____ kw (up to 12 kw remainder @40%) (second range@ 25%)	(House) 6000+	_____	W
Electric Heating	(House)	_____	W
All Air Conditioning Loads	(House) @ 100%	_____	W
Any Electric Vehicle Charging equipment	(House) @ 100%	_____	W
Other loads (100% demand for tank-less water heaters, steamers, swimming pools, hot tubs and spas)	(House)	_____	W
House Feeder Conductor Type <input type="checkbox"/> (CU) <input type="checkbox"/> (AL) House Feeder Conductor Size _____ (kcmil/AWG)			
House Total (minimum demand 24 000w or calculated)	(House)	_____	W
❖			
Suite or CH – Basic load plus each 90m² of remainder or portion of x 1000w	(Suite/CH) 5000 + _____	W	
Range _____ kw (up to 12 kw remainder @40%)	(Suite/CH) 6000 + _____	W	
Any Electric Heating	(Suite/CH)	_____	W
Other loads	(Suite/CH)	_____	W
Suite Feeder Conductor Type <input type="checkbox"/> (CU) <input type="checkbox"/> (AL) Suite Feeder Conductor Size _____ (kcmil/AWG)			
Suite or CH Total (minimum demand 14 400w, Greater than 80 m ² 24 000w or calculated)	(Suite/CH)	_____	W
❖			
House Total Load (subtract heating load if used) = _____ W	@ 100%	_____	W
Suite/CH Total Load (subtract heating load if used) = _____ W	@ 65 %	_____	W
Total Demand with Heating = _____ Amp (Electric Heating 1 st 10KW@100% remainder @75%)	Service Conductor Type <input type="checkbox"/> (CU) <input type="checkbox"/> (AL) Service Conductor Size _____ (kcmil/AWG)		