

## ELECTRICAL INSTALLATION PERMIT – HOMEOWNER

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**Note:** Technical Safety BC collects your personal information for the purpose of administering permits and other activities under the *Safety Standards Act* and may need to disclose this information to entities such as utilities, provincial agencies and municipalities. By submitting this form you are consenting to the disclosure described above.

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<b>Permit Number:</b>
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<b>A. PERMIT INFORMATION</b>					
Permit Type: <b>Electrical - Installation</b>			Work Class: (check one box only) <input type="checkbox"/> Home Owner Service Installation/Upgrade <input type="checkbox"/> Home Owner Addition/Modification/Alteration <b>Note: Addition/Alteration implies no change in the source capacity</b>		
<b>B. CONTACT INFORMATION (please PRINT clearly)</b>					
Applicant Name:		Cell:		Phone:	
Electrical Trade Qualification: <input type="checkbox"/> Yes <input type="checkbox"/> No		Specify Qualification:		Qualification No:	
E-Mail Address:			Preferred method of contact: <input type="checkbox"/> Email <input type="checkbox"/> Mail		
Unit or Suite No.	Civic No.:	Street Name:		Street Type:	Street Direction: N S E W
City:		Province:		Postal Code:	
<b>C. SITE INFORMATION (Site address if different from above)</b>					
Unit or Suite No.	Civic No.:	Street Name:		Street Type:	Street Direction: N S E W
City:		Province:		Postal Code:	
<b>D. ADDITIONAL INSTALLATION INFORMATION</b>					
<b>Occupancy Type:</b> (Choose one only)					
<input type="checkbox"/> Residential (Fully Detached Single Family) <input type="checkbox"/> Residential (Manufactured/Mobile Home) <input type="checkbox"/> Residential (Detached Building or Structure)					
Specific On-Site Location Details:			Description of work:		
Site Contact Name:		Site Contact Cell No:		Installation Value: \$	
Primary Service Volts (line to line): <input type="checkbox"/> <120 <input type="checkbox"/> 120 <input type="checkbox"/> 208 <input type="checkbox"/> 240			Primary Service Amps: <input type="checkbox"/> <15 <input type="checkbox"/> 15 <input type="checkbox"/> 20 <input type="checkbox"/> 30 <input type="checkbox"/> 40 <input type="checkbox"/> 60 <input type="checkbox"/> 70 <input type="checkbox"/> 100 <input type="checkbox"/> 125 <input type="checkbox"/> 150 <input type="checkbox"/> 200		
Phase <input type="checkbox"/> 1			Calculated Load / KVA (see * for calculation details): * For 1 Phase service, kVA = [Volts x Amps] / 1000		
Service Conductor Size:		Service Conductor Type: <input type="checkbox"/> Copper <input type="checkbox"/> Aluminum		Available Fault Current:	
Rating of Main Breaker:		Heating Load (kw):		Heating Source:	
<b>Homeowner scope of work:</b> Please select <b>only one</b> based on permit work class selected above					
Home Owner Service Installation/Upgrade: (up to a maximum of 5 inspections) <input type="checkbox"/> Installation of each residential service of ≤ 125A <input type="checkbox"/> Installation of each residential service of 126A-200A <input type="checkbox"/> Upgrade of each residential service up to and including 200A			Home Owner Addition/modification/alteration: (up to a maximum of 3 inspections) <input type="checkbox"/> Addition of one new circuit or modification of an existing circuit. <input type="checkbox"/> Alteration, not including service work, to existing residential service of ≤125A <input type="checkbox"/> Alteration, not including service work, to existing residential service of 126- 200A		
<b>E. FEE DECLARATION: (Refer to TECHNICAL SAFETY BC electrical fee schedule)</b>					
GST #: 87391 2802 RT0001					
Fee based on Service Type and Amps \$				<input type="checkbox"/> Double Permit Fee (only if assessed)	
<b>Note: Re-inspection fees may be assessed when an inspection of a previous non-compliance is performed and/or when the number of inspections included in the permit fee has been exceeded (minimum 1 hour)</b>					

**TERMS AND CONDITIONS OF THIS PERMIT ARE PRINTED ON THE NEXT PAGE**

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# ELECTRICAL INSTALLATION PERMIT TERMS AND CONDITIONS – HOMEOWNER

## General:

These terms and conditions are established to clarify certain requirements under the Safety Standards Act (the Act or SSA) and where applicable, to provide additional requirements for homeowners. The permit holder must have sufficient knowledge of these terms and conditions as well as the requirements under the Act to fulfill the obligations under this permit. The permit holder must comply with these terms and conditions. A safety officer may include additional terms and conditions when issuing a permit. The permit holder is bound by any additional terms and conditions, which have been set by a safety officer.

The permit holder must provide Technical Safety BC with complete, accurate and up to date information regarding the electrical work performed under this permit. The permit holder must notify the safety officer if there are any changes or additions to the information provided, or if there are any changes to the conditions under which this permit was obtained.

The permit holder is responsible for ensuring that all electrical work, performed at the site identified on this permit, is performed and installed in compliance with the Act. The permit holder agrees to immediately notify Technical Safety BC, in the event that the permit holder becomes aware of any work which could cause unsafe electrical work, or where work is being performed in violation of the Safety Standards Act.

This electrical installation permit is issued only for the permit holder's own fully detached dwelling. The dwelling must be, or intended to be, the permanent residence of the permit holder and may not contain a suite. If approved by a safety officer, this permit may also be issued for electrical work on an outbuilding which is located on the same property as the permit holder's primary residence or on a recreational property. The premises must be for the sole use of the permit holder (and immediate family). No electrical work may be performed if any part of the premises is, or is intended to be, used to provide income.

The permit holder must ensure that the safety officer has current contact information.

The permit holder must disclose the names and contact information of all persons who perform, or assist with the performance of, electrical work under this permit. No person, performing electrical work under this permit may receive remuneration of any kind, from any source, for this work.

**Permit fees cover only the number of inspections indicated on the permit.** If more inspections are required, the permit holder must have the permit amended or pay a fee, calculated at an hourly rate as set out in Technical Safety BC Fee Schedule: Electrical (Min. 1 hour charge per inspection). The permit holder will pay all fees and other costs, related to actions which may become necessary to enforce a requirement under this permit.

## Requesting Inspections:

The permit holder must request an inspection before:

- a) Any electrical work is concealed; or
- b) Connecting any circuits or equipment to an electrical supply.

The permit holder must not allow any electrical work to be concealed or connected to a supply, unless written authorization has been obtained from a safety officer.

**An inspection is required at least once in every 180 day period.** The permit holder must submit a request for inspection, from the Technical Safety BC, at least once during that period and make the premises available for an inspection by a safety officer.

The permit holder must request an electrical inspection under this permit by mailing or hand delivering to the nearest Technical Safety BC office a completed "Homeowner Inspection Request" form supplied by Technical Safety BC; or by submitting a request online at [www.technicalsafetync.ca](http://www.technicalsafetync.ca)

All Final Inspection requests must be written and mailed or hand delivered to the nearest Technical Safety BC office or submitted on-line.

## Inspections by Safety Officers:

If requested by a safety officer, the permit holder must make the premises available for inspection within the time frame specified by the safety officer. A safety officer may inspect any electrical wiring or equipment found on the premises and may require additional work to be performed if any wiring or equipment is found to be non-compliant with respect to minimum safety standards.

Where the permit holder disagrees with a decision made by a safety officer, a review by the safety manager may be requested. **A request for review must be submitted within 30 days of the date the decision was made**, by submitting the 'Safety Manager Review Request Form 1077' (available on Technical Safety BC website at [www.technicalsafetync.ca](http://www.technicalsafetync.ca)).

A permit may be suspended or revoked by a safety officer for any violation or breach of a requirement under this permit

This permit may be revoked if the premise is offered for sale prior to the completion of a final inspection and acceptance by the safety officer. If the premise is offered for sale, no electrical work is authorized.

## **Permit Holder Declaration:**

I \_\_\_\_\_, am the legal owner of the above premises and I hereby accept all terms and conditions which have been set on this permit. I acknowledge that I have read and understand these terms and conditions as well as the "Electrical Safety Homeowner Information Guide." I also confirm that, to the best of my knowledge, all of the information provided on this permit application is complete and accurate.

Checking this box and submitting this form to Technical Safety BC **via email** constitutes your authorization. This has the same effect as submitting a handwritten signature.

Signature:

Date:

## HOMEOWNER ELECTRICAL INSTALLATION APPLICATION QUESTIONNAIRE

**Note:** Technical Safety BC collects your personal information for the purpose of administering permits and other activities under the *Safety Standards Act* and may need to disclose this information to entities such as utilities, provincial agencies and municipalities. **By submitting this form you are consenting to the disclosure described above.** Any personal information collected is handled in accordance with the British Columbia *Freedom and Protection of Privacy Act*. If you have questions about the collection, use, or disclosure of this information, contact the Records, Information and Privacy Analyst for Technical Safety BC at 1 866 566 7233.

**To be completed by the homeowner, as a first level assessment:**

1. Are you the registered owner of the premises?	Yes <input type="checkbox"/> No <input type="checkbox"/>
2. Will you be performing the work at the premises?	Yes <input type="checkbox"/> No <input type="checkbox"/>
3. Is the premises a fully detached single family dwelling, garage or shed located on the property?	Yes <input type="checkbox"/> No <input type="checkbox"/>
4. Does a strata council manage the premises?	Yes <input type="checkbox"/> No <input type="checkbox"/>
5. Will anyone assist you with this work and receive compensation?  If yes, please provide name: _____ and relationship to you: _____	Yes <input type="checkbox"/> No <input type="checkbox"/>

<input type="checkbox"/> Checking this box and submitting this form to Technical Safety BC <b>via email</b> constitutes your authorization. This has the same effect as submitting a handwritten signature.	
Name:	Date:
Signature:	

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## HOMEOWNER'S CALCULATED LOAD DEMANDS

Please enter all requested information where applicable. Ratings and dimensions must include any existing, as well as new additions to the installation.

### Part 1 Identifying basic loads

**Area** (Please provide all areas in square meters. 1 sq. m. = 10.764 sq. ft)

- |   |                                       |  |  |
|---|---------------------------------------|--|--|
| 1 | Main Floor: (include attached garage) |  |  |
| 2 | Upper Floor:                          |  |  |
| 3 | Basement:                             |  |  |
| 4 | Detached Outbuilding (Garage, Shop)   |  |  |

#### Heating and Cooling

- |    |  |                              |                             |
|----|--|------------------------------|-----------------------------|
| 5  | Electric space heating (type and watts)                    |                              |                             |
| 6  | Does each room have a thermostat?                          | Yes <input type="checkbox"/> | No <input type="checkbox"/> |
| 7  | Electric Furnace, Boiler, etc. with one thermostat (watts) |                              |                             |
| 8  | Air Conditioning (volt-amps)                               |                              |                             |
| 9  | Sauna (watts)  |                              |                             |
| 10 | Outbuilding Heat (watts)                                   |                              |                             |
| 11 | Other Heating Loads (watts)                                |                              |                             |

Is it possible to run the heating and air conditioning at the same time?(the use of a load miser or other positive control is necessary to answer no) Explain if no:  Yes  No

#### Motor Loads

- 12 Motor loads ie. heat pump, hoist, swimming pool pump, shop compressor, etc.(do not include fractional Hp motors such as exhaust fans, fridges, freezers, garage doors, etc.) (amps)
- |    |  |  |  |
|----|--|--|--|
| a) |  |  |  |
| b) |  |  |  |
| c) |  |  |  |

#### Cooking

Is the primary source for cooking electric or gas? \_\_\_\_\_

- |    |                           |  |  |
|----|---------------------------|--|--|
| 13 | Electric Range (watts)    |  |  |
| 14 | Second Range (watts)      |  |  |
| 15 | Separate Oven (watts)     |  |  |
| 16 | Separate Cook Top (watts) |  |  |

#### Water Heaters, Shop Welder, Electric Vehicle Charging (added into calculation at 100% below)

- |    |                                   |  |   |
|----|-----------------------------------|--|---|
| 17 | Tankless Water Heater (watts)     |  | W |
| 18 | Steamer Water Heater (watts)      |  | W |
| 19 | Pool Water Heater (watts)         |  | W |
| 20 | Hot Tub Water Heater (watts)      |  | W |
| 21 | Spa Water Heater (watts)          |  | W |
| 22 | Electric Vehicle Charging (watts) |  | W |
| 23 | Welder, etc. in shop (watts)      |  | W |

**Loads Over 1500 Watts (added in at 25% if electric range is provided, otherwise added in at 100% up to 6kW plus 25% of additional loads in excess of 6kW)**

- 24 Clothes Dryer (watts) \_\_\_\_\_
- 25 Water Heater with Tank (watts) \_\_\_\_\_
- 26 Other loads (total watts of other loads) \_\_\_\_\_

**Part 2 Calculating the service and feeder sizes**

**Calculate Basic Area of dwelling (inside dimensions in sq. meters)**

- 27 100% of Main Floor Area from Line 1 \_\_\_\_\_
- 28 100% of Upper Floor Area from Line 2 \_\_\_\_\_
- 29 75% of Basement Area from Line 3 \_\_\_\_\_
- 30 **Total Calculated Area** \_\_\_\_\_

**Calculate basic load:**

- 31 1<sup>st</sup> 90 sq. meters from Line 30 \_\_\_\_\_ 5000 W
- 32 Add 1000 watts for each additional 90 sq. meters, or portion thereof \_\_\_\_\_
- 33 Total basic load (living space within dwelling) from Line 31 and 32 \_\_\_\_\_
- 34 Outbuilding Garage, Shop, @ 10 W/sq. m from Line 4 \_\_\_\_\_
- 35 **Total Basic Load (property)** from Line 33 and 34 \_\_\_\_\_ W

**Electric Range or combination of Wall Oven and Cooktop**

- 36 Add 6000 watts for the 1<sup>st</sup> 12 kw of the first range or combination wall oven and cook top. from Line 13 or 15 and 16 \_\_\_\_\_
- 37 Add 40% of the remainder in excess of 12kW on first range (if any) from Line 36 \_\_\_\_\_
- 37(A) **Total Electric Range** from Line 36 and 37 \_\_\_\_\_ W

**Other Loads**

Lines 14 to 16 and 24 to 26 @ 25% of total wattage if electric range or combination wall and cook top is provided **OR**

Lines 24 to 26 @ 100% for the first 6000W plus 25% of remainder if **no** electric range or combination wall oven and cook top is provided \_\_\_\_\_ W

**Water Heaters, Electric Vehicle Charging, Outbuilding Welders**

- 39 Lines 17 to 23 @ 100% \_\_\_\_\_ W

**Heating and Air Conditioning Load**

- 40 100% of the rating of an electric furnace from Line 7 \_\_\_\_\_
- 41 If each room has a separate thermostat:
- 42 Add 100% for the 1<sup>st</sup> 10,000 watts of electric heating from Line 5, 9 and 10 \_\_\_\_\_
- 43 Add 75% of heating load in excess of 10,000 watts from Line 42 less 10kW \_\_\_\_\_

**If thermostat has not been provided in each room:**

- 44 Add 100% of the other electric heating loads from Line 11 \_\_\_\_\_

**Air-Conditioning Loads**

- 45 Add 100% of the rating of any air conditioning (in volt-amps) if you answered yes above in Line 11. If the answer is no, only the greater of the heating or air conditioning loads need to be considered. from Line 8 \_\_\_\_\_

- 46 Add 125% of the full load rating of the of largest motor plus 100% of the remaining motors (Total amps) from Line 12 \_\_\_\_\_

- 48 **Total heating and cooling load** from Lines 40 to 45 \_\_\_\_\_ W

- 49 Total demand of all other loads: \_\_\_\_\_ W

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<b>50 Total demand (in watts)</b>	<b>Total Watts of Lines 35,37A,38,39,48,49</b>	W
<b>Total demand in amps</b>	<b>Total demand (in watts) / 240V plus Line 46</b>	W

**Service conductor size:** \_\_\_\_\_

**Main breaker size:** \_\_\_\_\_

**Note1: Regarding total square footage of dwelling.** (lines 1 and 2)

Rule 8-200(b) requires that the minimum service size be not less than

- (i) 100 A where the floor area, exclusive of basement floor area, is 80 m2 or more; or
- (ii) 60 A where the floor area, exclusive of basement floor area, is less than 80 m2.

**Note2: Adding loads to existing dwelling or outbuilding.**

When regulated equipment is being added to an existing dwelling, the above service calculation is required to ensure the added loads will not exceed the existing service size

Please identify the added loads by hi-lighting, circling or an asterisk in the right side of the page.

**Adding an outbuilding to an existing dwelling.**

Note 2 above must be applied.

Total demand (power) to the outbuilding is the sum of Line 34, plus the sum of all equipment contained in the building at 100%.

**Feeder conductor size:** Total demand (in Watts or VA) / 240V plus any motor loads in Amps = \_\_\_\_\_