

CUSTOMER REFERENCE GUIDE – UNDERGROUND RESIDENTIAL SERVICES

The Canadian Electrical Code specifies that the supply end of a service shall be installed in a location satisfactory to both the Electrical Inspection Department and the Supply Authority (BC Hydro). The service connection point must allow BC Hydro safe access for service installation, maintenance and the meter access at all times. The following summarizes BC Hydro requirements with respect to underground services and electric meters.

Before a service connection can be scheduled, you will need to complete a BC Hydro Underground Residential declaration on-line for each service address you want energized. The declaration is your confirmation that BC Hydro crews have safe and unobstructed access to the meter base. BC Hydro staff must verify the submitted information is complete and correct before an Electric Service Order can be scheduled for connection.

To complete the declaration you will need the service address(es) and MyHydro on-line account. If you don't already have an on-line account, go to BCHydro.com and select Sign Up. Once set up, your on-line account can be used to submit new requests and monitor their progress.

The following summarizes BC Hydro requirements with respect to underground services and meters.

Installation Requirements (BC Hydro Engineering Standards 54 S1-01)

The contractor/customer is responsible for the supply and installation of conduit which meets the requirements of the Canadian Electrical Code and BC Hydro's standards as follows:

1. The duct must be gray, 75 mm (3.0 in) diameter, rigid DB2 PVC.
2. The duct must have a minimum of 900 mm (3.0 ft) of cover.
3. The duct must be installed between a 150 mm pit run base and 300 mm of pit cover as per BCH ES-54 Standard.
4. If the total number of bends installed between BC Hydro's duct stub-off and the meter base exceeds a composite angle of 135 degrees, a pull box may be required. To discuss the type of pull box required, please call 1-877-520-1355 between 8:00 AM and 4:00 PM., Monday to Friday and ask to speak to a designer in your area.
5. The minimum radius of any conduit bend must be 900 mm (3.0 ft)
6. All underground service conduits must be drained at the building entrance as per the Canadian Electrical Code.
7. A 3 mm minimum (#8) polypropylene pull string must be installed in the service conduit, tied securely at the meter based enclosure and to the string in the BC Hydro stub-off. To avoid delays and return trip charges, please ensure the pull string is not glued or jammed between the duct joints.
8. The duct trench must be in a direct line of sight and as near as possible, from the meter base to the BC Hydro duct stub-off and must be graded to the depth of that stub off point.

Service Length & Location

The total allowable cable length, from the project property line to the meter base, is 30 m (100 ft). If the cable length exceeds 30 m (100 ft) and is approved by BC Hydro, an extra length charge will apply.

The location of the service entrance shall be:

1. In a direct line of sight with BC Hydro's service duct stub off, and;
2. On the wall of the building facing the power supply; or,

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3. No further than 1.0 m (3 ft) back from that wall on either side.

If you cannot meet the requirements of the preferred service location, please call our Service Representative by calling 1-877-520-1355 during the hours of 8:00 AM to 4:00 PM Monday to Friday (Pacific Standard Time) and ask to speak to a designer in your area.

IMPORTANT: Your requested connection date will only be honoured after BC Hydro office staff have verified the information you submitted is complete and correct. If BC Hydro crews find any deficiencies or discrepancies at the time of the scheduled connection, and the meter could not be installed, you will be billed a Call Back charge. A new connection date will be scheduled once you have submitted a new declaration and it has been verified as correct and complete.

METER INFORMATION – GENERAL

Only one service connection (or “supply service” per the Canadian Electrical Code) will be provided to a residential dwelling. Typically, the number of meters installed for various types of dwellings is as noted to the right. <u>A maximum of four socket meters, connected to one supply service, are allowed to be installed.</u> BC Hydro’s tariff definition of a single family dwelling (SFD) is a self-contained unit including sleeping quarters, a kitchen, a bathroom or alternative living quarters acceptable to BC Hydro.	Type of Dwelling	Number of Meters
	House – one SFD	1
	House with a suite – two SFDs	2
	Duplex – two SFDs	2
	Triplex – three SFDs	3
	Fourplex – Four SFDs	4

Meter Location: For the latest requirements, visit the BC Hydro website at www.bchydro.com: and search on [Requirements for Secondary Voltage Revenue Metering](#) (750 V and less).

All residential socket type meters must be installed within 1.0 m (3 ft)) and have unobstructed clearance in front of BC Hydro’s meter for clear and safe access at all times for BC Hydro representatives. This includes safe access into private property roads, gates and bridges. Safe access on private property includes any bridge, culvert crossing larger than 2.0 m (7 ft) in diameter or other structures such as cattle guards in the road, BC Hydro will require an Engineer’s assurance of the crossing and load restriction before a service connection is scheduled.

Meters must be installed between 1.5 m (5 ft) and 1.8 m (6 ft) above finished grade. Meters cannot be installed inside carports, garages, breezeways, or any part of the structure that may potentially be enclosed or within 1.0 m (3 ft) of a natural gas relief discharge device or vent, or 3 m (10 ft) of a propane gas relief discharge device or vent.

If a site has more than one meter base, the meters must be clearly and permanently marked as determined by the municipality (i.e. Address or Main, Suite A, Suite B, etc...)

CALL BEFORE YOU DIG: BC ONE CALL

Before digging or excavating, make a free telephone call to locate any underground electrical infrastructure. Call 604-257-1940 in the Lower Mainland, or 1-800-474-6886 toll-free outside of the Lower Mainland.