

Spas, Hot Tubs, Whirlpools and Hydromassage Bathtubs

The purpose of this brochure is to explain to owners and builders the City of Burnaby's requirements for Spas, hot tubs, whirlpools and institutional hydromassage bathtubs.

"This information is provided for convenience only and is not in substitution of applicable City Bylaws or Provincial or Federal Codes or laws. You must satisfy yourself that any existing or proposed construction or other works complies with such Bylaws, Codes or other laws."

Other brochures related to this topic

- [Swimming Pools](#)

Building Requirements

If the tub or spa is not placed directly on the ground or a separate concrete foundation the supporting structure will require a building permit. Duplicate copies of sealed drawings, prepared by a qualified structural engineer or architect showing the supporting structure, are to be submitted with an application for a building permit prior to the commencement of any work. Letters of Assurance Schedule B relating to structural support must also be submitted. If a building permit is required then the siting requirements of the Burnaby Zoning Bylaw will apply to the proposed supporting structure.

These installations in exterior yard areas may constitute a hazard and the area should be enclosed within a non-climbable fence complying with Burnaby's Building and Zoning By-Laws not less than 1500 mm (5'-0") and not more than 1800 mm (6'-0") in height. Gates should be self-latching.

Electrical Requirements

Electrical work shall be installed under permit, in accordance with the B.C. Electrical Code and the current edition of Burnaby Electrical Bylaw.

An electrical inspection and approval is required before any electrical work may be concealed.

Special Terminology

Spa or hot tub means a hydromassage pool not intended to be filled and drained with each use, but designed for immersion of persons in heated water, circulated in a closed system. It usually has a filter, heater, pump and with or without a motor-driven blower.

Hydromassage bathtub means a permanently installed tub used for commercial or institutional purposes having an integral or remote water pump or air blower, and having a fill and drain water system. The requirements contained in this brochure are not intended to apply to “jet tubs” or “massage tubs” installed in residential dwelling units.

Package Unit or Equipment Skid means a unit composed of two or more of the following electrical devices for use with a spa, hot tub or whirlpool;

- Water Pump
- Heater
- Blower
- Associated Controls

A Leakage Current Collector is a device designed to provide a ground current path for the current originating from the devices in contact with the pool water.

General Electrical Requirements

A factory-built spa, hot tub or whirlpool in which the associated electrical components are a part of the tub, shall be CSA or equally approved as a complete assembly.

A Package Unit or Equipment Skid used with, but located at or remote from a spa, hot tub or whirlpool shall be approved as an assembly.

A field assembled spa, shall be installed in accordance with rules 68-408.

Metal parts of spas and hot tubs, shall be bonded together and to ground in accordance with rules 68-058 and 68-402.

Metal rings or bands used to secure staves of wooden tubs need not be bonded.

Controls for a spa or hot tub shall be located behind a barrier or shall be a minimum of 1.0 m horizontally from the spa, hot tub or whirlpool.

Receptacles for a spa, hot tub or whirlpool shall be installed in accordance with Rule 68-064.

Lighting fixtures installed within 3 m of the spa, hot tub or whirlpool water surface shall be protected by a Class A ground fault circuit interrupter.

Leakage Current Collectors

Leakage Current Collectors shall be:

- provided at the water inlet, and water outlet of the spa, hot tub, or whirlpool, such that all water entering or leaving the spa or tub equipment flows through the leakage current collector;

- electrically insulated from the spa or hot tub equipment;
- constructed of corrosion-resistant metal;
- provided with a copper lug brazed to the collector body;
- at least five times as long as the diameter of the collector body; and
- bonded to the control panel or main service ground with an insulated copper ground conductor not smaller than No. 6 AWG or;
- a device which provides equal protection when it is an integrated part of a spa or tub factory built for field installation or assembly.

Current collectors are not required in a system in which the only electrical component is a pump marked as an insulated wet end pump (which effectively seals the water from contact with any metallic part).

Hydromassage Bathtubs

A hydromassage bathtub (filled and drained with each use) shall be controlled by an on-off device, and shall be protected by a Class A ground fault circuit interrupter. The controls shall be located not less than 1.0 m (3.28 feet) horizontally away from the wall of the tub or shall be located behind a barrier, unless they are an integral part of an approved factory built tub.

Plumbing & Gas Requirements

Plumbing

Spas or tubs having potable water supply and/or waste pipe shall be installed under permit and shall be in accordance with Burnaby Plumbing By-Law and the latest B.C. Plumbing Code.

All drain and backwash lines shall discharge to either a:

- 24 inch diameter sump that is properly connected to a combined or sanitary sewer; or
- a 3 inch vented trap and stand pipe connected to the plumbing system.

The water in a spa or tub shall be separated:

- from any potable water supply by an approved backflow preventer to ensure that the water in the spa or tub system does not flow back into the potable water supply;
- by air gaps from the sewer or drainage system which it drains; and
- from a wading-pool or therapeutic pool recirculation system.

Drainage piping shall be laid at least 450 mm (18 inches) underground and potable water piping at least 600 mm (24 inches) underground.

Inspection and approval by a City plumbing inspector is required before potable water or waste water pipes may be concealed.

Gas

Gas fitting work shall be installed under permit and shall be in accordance with Burnaby Gas By-Law No. 7288 and the latest natural gas Installation Code.

An outdoor heater shall not be installed:

- under a sundeck, patio, porch, carport, roof or roof overhang of any kind, unless it is vented to code requirements above such an obstruction;
- within 3000 mm (10 feet) of an opening in a building;
- within 900 mm (3 feet) of adjacent construction;
- within 1500 mm (5 feet) of a meter or regulator vent;
- closer than 450 mm (18 inches) to any property line.

A room or enclosure containing a gas-fired heater shall:

- be accessible only from outdoors;
- be isolated from a habitable portion of a building;
- contain appliances which are properly vented to a point not less than 600 mm (2 feet) above the roof of the building;
- be provided with an adequate supply of combustion and ventilation air.

Chlorine and other filtering chemicals shall be stored in a space separate from a gas-fired equipment room and no direct access from the equipment room to the storage area is permitted.

A valved manual bypass shall be installed in the water circulating piping of a swimming pool heater.

A thermometer shall be installed in such a manner that the water temperature on the outlet side of the heat exchanger can be read.

Generally, a gas inspection is required:

- before covering underground gas piping;
- for the pressure test on the house piping; and
- after the appliance is operative.

Further Information

For more information please call the Building Department at 604-294-7130.

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