



City of Revelstoke Water Meter Installation Guide

Water meters will be provided by the Public Works department.

Please call 250-837-2001 or email works@revelstoke.ca to schedule a meter pick up time. Please provide Public Works with your Building Permit Number.

Neptune MACH 10 Ultrasonic Meter

1. The meter is designed to measure potable water in one direction only.
2. The meter must read all potable water used by the property, including irrigation.
3. The meter must be installed in a horizontal pipeline with the register facing upward. It should be placed in an area protected from freezing and securely fastened to prevent movement.
4. **Remote Readout Locations**
 - a. The remote readout should face the street or access road, ensuring unimpeded year-round access. Remotes must not be located behind fences, locked gates, or in any area with restricted access.
5. Shut-off valves must be installed on both sides of the meter to allow for easy removal, repairs, and replacement without undue inconvenience to the customer.
6. Follow the installation and setup instructions provided in the Neptune MACH 10 Residential Ultrasonic Meter Installation and Maintenance Guide. [Neptune MACH 10 Guide](#).
7. Once the meter is installed, the owner must contact the City of Revelstoke, providing the Engineering Department with the completed Water Meter Installation Form.
8. See [Advanced Operational Insights](#). for Operational information.

Installation V5 R900

1. Follow the R900 MIU Installation and Maintenance Guide. [R900 Guide \(PDF\)](#).
2. Pay special attention to:
 - a. Ensuring the installation area is clear of snow and debris.
 - b. Positioning the meter to face the street or access road, preferably 4-5 ft off ground, and near the electrical meter.
 - c. Using 22/3 wire (22 gauge / 3 wire).
3. If Public Works does not have a R900 in stock, complete all steps up to R900 connection ensuring all wiring is complete, including external wiring.

Water Meter System Installation



Pressure Reducing Valve (PRV)

As per Sentence 7.6.3.3 (1) of the 2006 BC Building Code, a pressure-reducing valve is required where static pressure may exceed 550 kPa (80 psi). This device limits maximum static pressure to protect the plumbing system and fixtures from damage.

Backflow Preventer

Subsection 7.6.2 of the 2006 BC Building Code requires the installation of an approved backflow preventer. For single-family residential service, a dual check valve (DuC) meets this requirement.

Thermal Expansion

When a check valve, pressure reducing valve, or backflow preventer is installed in the service pipe, a "closed system" is created. Provisions must be made for thermal expansion.

Sentence 7.6.1.11.(1) requires protection against thermal expansion. To accommodate pressure increases caused by thermal expansion in a closed system, one of the following should be installed:

- A suitably sized diaphragm tank designed for use within a potable water system; or
- An auxiliary thermal expansion relief valve (TER valve) conforming to CAN/CSA-B125, "Plumbing Fittings," set at a pressure of 550 kPa (80 psi) or less and designed for repeated use.

Water Meter Inspection

Building Officials will inspect water meters during their scheduled Occupancy Inspections. At that time, the meter must be fully functional, ready for use, and capable of recording data for the City.