

Domestic and Commercial Water Service Installation and Inspection Criteria

PERMIT REQUIREMENTS

All water service pipes between the building and the water meter shall be permitted, installed, and inspected in accordance with the following requirements as a condition of receiving water service.

Inspection is required for the entire length of water service piping outside the building before it is backfilled. This requirement includes all or part of the water service piping that is newly installed or is being replaced or repaired. Where local static water pressure is more than 80 psi, an approved pressure regulator must be installed.

Fire Protection System water supplies are subject to different requirements and a separate permit from the Tacoma Fire Department is required. Contractors working on fire protection water supplies must be Level U Licensed with the State of Washington and also have a City of Tacoma Fire Protection License. For questions, call 253-591-5740.

If using a branch connection for any purpose other than Domestic Water, such as Fire Protection, Irrigation Systems, built-in pool, etc., backflow prevention is required by Code. See *Water Quality Inspection and Backflow Prevention under Branch Line Connections*.

WATER SERVICE INSPECTION

1. Inspection and acceptance of the property side water service pipe in an open trench is required.
2. Inspections shall be scheduled 24 hours in advance and may be coordinated with another required inspection.
3. Request inspection by online at www.TacomaPermits.org or by calling (253) 591-5030.
4. The Water Service Inspection is separate from the Water Quality Inspection.

E-PERMITS

[ePermits](#) are available for the repair of existing residential water services – Residential is defined as single-family, duplex, or townhouse buildings or structures of 1-2 units

The ePermit Water Connection Repair (ERWTR) – is available for the repair of the existing water line serving a residential structure. This is the line between the meter and the house. This does not include interior water line work within the house.

TRENCH AND PIPE BURY REQUIREMENTS

1. All outside water service pipe must have no less than 2 feet of bury depth throughout including hillsides, slopes, rockeries etc.
2. Connection of water service pipe is on the private side of the water meter and to the City's union only.
3. All plastic water service pipes must have blue insulated copper tracer wire attached to it that terminates at each end of the non-metallic piping above ground, Tracer wire must be no less than 18 AWG with insulation approved for direct bury installations.
4. A brass-bodied valve with key or hand wheel shall be located within two feet of building foundation in an approved valve box or enclosure.
5. Plastic pipe not approved for use through a foundation wall, will need 2 foot of approved material stubbed out to connect to the water service pipe.
6. An interior shut off shall be installed in an accessible location.
7. If water service line is in excess of one hundred lineal feet, a shut off valve shall be installed within five feet of meter.



Note: This Tip Sheet does not substitute for codes and regulations.

The applicant is responsible for compliance with all codes and regulations, whether or not described in this document.

More information: City of Tacoma, Planning and Development Services | www.tacomapermits.org (253) 591-5030

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TTY or STS users please dial 711 to connect to Washington Relay Services.

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SEPARATION REQUIREMENTS

1. Sanitary Sewer: A horizontal separation of ten feet & eighteen inch vertical separation at all crossings, with sanitary always below shall be maintained between water service lines and any part of a septic system or sanitary sewer lateral. Department of Ecology requirements 78-05 must be adhered to if site conditions do not allow minimum separations.
2. A minimum horizontal separation of five feet and minimum vertical separation of six inches shall be maintained between all utilities.

TESTING REQUIREMENTS

1. Test residential water service using line pressure for a minimum of 15 minutes as witnessed by the City Inspector.
2. Test commercial water service at 1.5 times line pressure or 100 psi for a minimum of 30 minutes as witnessed by the City Inspector.

APPROVED MATERIALS

All building supply pipe shall be an approved pipe material and be ¾" or larger and have an NSF or ASTM stamp approval stenciled on the pipe by the manufacturer.

1. Polyethylene: UPC & NSF approved, PE3408, SDR7 200 psi rating
2. Copper: Type L (blue stencil) or Type K (green stencil)
3. PVC: Schedule 40, psi 200
4. Galvanized: approved but not recommended
5. PEX tubing must be stamped ASTM – F876 or ASTM – F877 approved for yard service per UPC
6. Ductile Iron class 52

PIPE FITTINGS

1. Polyethylene (PE) flexible pipe - You must use cast brass compression or insert fittings on PE pipe.
2. Insert fittings must have flat surfaces for wrench tightening between the ribbed end and the male iron pipe threads. The insert end of the brass fittings shall be fastened with two stainless steel clamps installed in opposing directions. Or use Mueller Instatite or other approved compression fittings for flexible polyethylene pipe.
3. Fittings on copper pipe – You must use cast brass or sweat fittings.

BRANCH LINE CONNECTIONS

1. Shut off valves must be installed on all branch services within two feet of the tee.
2. Branch line connections shall be made with same pipe type material as the water service pipe.
3. No branch connections allowed within eighteen inches of meter.

WATER QUALITY INSPECTION AND BACKFLOW PREVENTION

1. The Water Quality Inspection is separate from the Water Service Inspection
2. Water Quality Inspection covers all backflow assemblies and devices
3. All irrigation system connections must have a shut off valve and approved backflow protection.
4. All required shut off valves shall be accessible.

A separate Water Quality Permit is required from Tacoma Water Department and additional information is available online at www.mytpu.org/about-tpu/services/water/about-tacoma-water/water-quality/, or by contacting Water Quality at (253) 502-2815.



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