



Water Service Installation

Bulletin # 44

Department of Planning and Land Services, July 2013
Division of Building Safety and Inspection for 2012 I Codes

Important Information Regarding Your Water Service Installation

All service pipe installed between the building and the water meter shall be installed in accordance with the following Uniform Plumbing Code (UPC) requirements.

INSPECTION

An open trench inspection and approval of the water service line from the meter or well site to the structure is required by Section 103.5.1. See UPC Sections 312 and 314 for details.

IMPORTANT!!! DO NOT cover the pipe until the installation has been approved by the Pierce County Inspector. Failure to do so will require exposing the pipe for inspection before the water service will be installed or activated.

WATER METER LOCATION

The location and access requirements for the water meter are set by the water purveyor.

PIPE DEPTH (UPC Section 609.1)

All service pipes leading from the building shall be buried not less than 12" below the average local frost depth of the proposed final grade, but in no case less than 12" below proposed final grade.

PIPE SIZE (UPC Section 610)

When making a determination as to the minimum water size and service pipe diameter to install, use Section 610.0, in no case should the service pipe be less than three-quarter inch (3/4").

- Please be advised that the Public Works Department of Pierce County does not allow the installation of the building's water service lines within their respective right-of-way. Additional information may be obtained by calling Pierce County Public Work, Franchise and Permits @ 253-798-7250.

Contact your water purveyor for additional requirements.

BUILDING SHUT-OFF VALVE (UPC Section 606.2)

In one and two-family dwellings and within individual dwelling units in apartments the installation of the shut-off valve must be accessible at all times. It should not be in a crawl space, ceiling or attic space, higher than five (5) feet above the finished floor elevation or behind another appliance.

BACKFLOW PREVENTION (WAC 51.56 UPC Section 603)

Approved backflow prevention assemblies must be installed in accordance with the requirements of Washington Administrative Code (WAC 246-290-490) and UPC Section 603. WAC 51.56.0600 requires coordination between Pierce County and the water purveyor for cross control requirements. For specific information, please call you water purveyor.

APPROVED WATER SERVICE LINE MATERIALS (UPC Table 604.1)

Material	Building Supply Pipe and Fittings	Water Distribution Pipe and Fittings	Referenced Standard(s) Pipe	Referenced Standard(s) Fittings
Asbestos-Cement	X*		ASTM C296,	
Brass	X	X	ASTM B43, ASTM B135	
Copper	X	X	ASTM B42, ASTM B75, ASTM B88, ASTM B251, ASTM B302, ASTM B447	ASME B16.15, ASME B16.18, ASME B16.22, ASME B16.26
CPVC	X	X	ASTM D2846, ASTM F441, ASTM F442	ASTM D2846, ASTM F437, ASTM F438, ASTM F439, ASTM F1970
Ductile-Iron	X	X	AWWA C151	ASME B16.4, AWWA C110, AWWA C153
Galvanized Steel	X	X	ASTM A53	
Malleable Iron	X	X		ASME B16.3
PE	X*		ASTM D2239, ASTM D2737, ASTM D3035, AWWA C901, CSA B137.1	ASTM D2609, ASTM D2683, ASTM D3261, ASTM F1055, CSA B137.1
PE-AL-PE	X	X	ASTM F1282, CSA B137.9	ASTM F1282, ASTM F1974, CSA B137.9
PE-RT	X	X	ASTM F 2769	ASTM F1807, ASTM F 2098, ASTM F 2159, ASTM F 2735, ASTM F 2769
PEX	X	X	ASTM F876 , ASTM F877, CSA B137.5, AWWA C904*	ASSE1061, ASTM F877, ASTM F1807, ASTM F1960, ASTM F1960, ASTM F1961, ASTM F2080, ASTM F2159, ASTM F2735, CSA B137.5
PEX-AL-PEX	X	X	ASTM F1281, CSA B137.10, ASTM F2262	ASTM F1281, ASTM F1974, ASTM F2434, CSA B137.10
PP	X	X	ASTM F2389, CSA B137.11	ASTM F2389, CSA B137.11
PVC	X*		ASTM D1785, ASTM D2241, AWWA C900	ASTM D2464, ASTM D2466, ASTM D2467, ASTM F1970
Stainless Steel	X	X	ASTM A269, ASTM A312	

* For Building Supply or cold-water applications.

SEPARATION REQUIREMENTS FROM OTHER UTILITIES

On-Site Sanitation (Septic) (Separation requirements are based on septic installation requirements of the Tacoma Pierce County Health Department.)

A horizontal separation of ten (10) feet must be maintained between water service lines and any part of an on-site sewage system including plumbing stub-out. Placement of a water service line closer than (10) feet to any component of the on-site sewage system requires the approval of the Tacoma-Pierce County Health Department. Any setback reduction will require express written approval from the Tacoma-Pierce County Health Department.

Sanitary Sewer (Separation requirements are based on building sewer installation requirements of the serving sewer utility.)

A horizontal separation of ten (10) feet must be maintained between water service lines and any part of the sanitary building sewer. When it is necessary to cross a sanitary building sewer, the water service pipe must be installed above the sewer a minimum vertical clearance of three (3') feet, measured from the invert of the water line to the crown of the sewer.

Utilities Allowed to be in a Common Trench with Water Service:

Electrical, Gas, Telephone, Cable, Television, Private Irrigation of Water Distribution Systems.

A recommended minimum separation of five (5) feet must be maintained between the water service pipe and any other utility, **except sanitary sewer which requires ten (10) feet**. A vertical separation between the water service pipe and all other utilities, except sanitary sewers, of six (6) inches is required.

NOTE: Within the service area for City of Tacoma Water, the installation of the customer's water service pipe, underground secondary electrical service, cable television, telephone, and gas will be allowed in a common trench with conditions. You must coordinate with the City of Tacoma.

MISCELLANEOUS NOTES

The customer is responsible for the installation and maintenance of the property side water service pipe from the meter to the residence.

It is the customer's responsibility to obtain any and all permits and easements that may be required to install and maintain the water service piping from the meter to the premises being served.

Pressure reduction valves must be installed in accordance with the Uniform Plumbing Code Section 602.8 when the static water pressure exceeds 80 P.S.I. The location of the pressure reduction valve must be accessible to the customer for maintenance and operation.

All pipe is to be installed according to the manufacturer's instructions and the UPC.

To avoid damages to your property, water purveyors normally will not turn on the water service unless the owner or a representative is present.