

Guidance notes

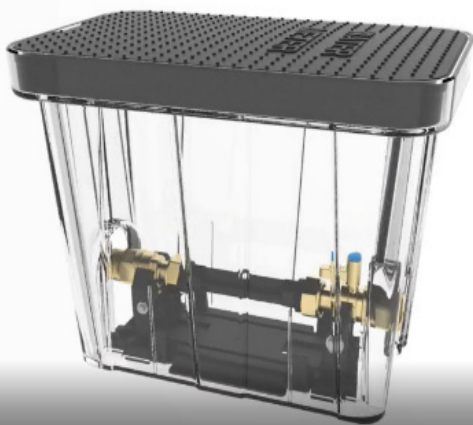
Water meter connections

Meter connections are the point of sale of water to our customers

The connection is where ownership and responsibility of the water assets change hands from the utility to the customer

We must deliver safe water from this point and in turn prevent unsafe water from entering back into the system

Meters tell us how much water we've produced and delivered, as well as how much water is unaccounted for.



Types of connections

- Domestic connection – a connection of up to 25mm diameter for household use
- Multi-unit domestic connection – a multiple meter bank of up to six meters for households situated down a joint owner access lane
- Commercial with separate domestic connection – typically used where a small building has mix-use water needs, such as living quarters above of a retail building
- Large customer connections with joint fire supply – the fire suppression system is combined with the water use for either commercial or domestic use, such as an apartment block
- Large customer connection with separate fire supply – the fire suppression system is separate from the water supply to either domestic or commercial use
- Large customer with domestic and commercial needs plus fire supply

Typical connection features from which meters are installed

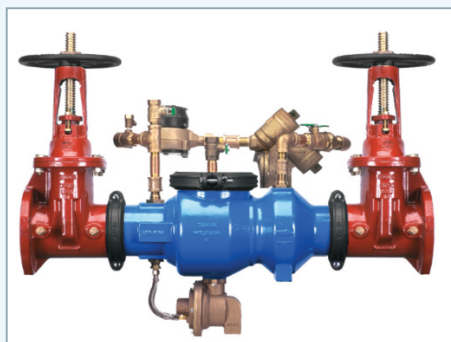
- The connection is made onto a watermain located in public land through a lateral connection
- The connection can be isolated at the metering point, and on the tapping point from the main supply
- Larger laterals such as commercial buildings or private housing developments require additional isolation on both sides of the lateral to minimise supply impact during mains outages
- All supplies into private property are metered and protected with a suitable backflow prevention device
- Typical meter installations are underground, but some may be installed above ground or another suitable location if the meter installation becomes too large to be situated within the road corridor

What to watch out for

! You need to check with us that the desired water demand can be supplied (size of the meter connection). This usually happens through the resource consent process.

! The type of land use and ownership models influence the type of meter connection and its layout.

! We may refuse to connect you if suitable backflow prevention is not in place.



Key standards

Design

- CoP-01 water chapter of the land development code of practice
- MS Material supply
- 7363 CAD manual

Construction

- CG Civil construction
- ME Mechanical construction
- MS Material supply

Commissioning and handover

- CoP-03 Commissioning code of practice
- 7363 CAD manual
- AI series for asset information

Quality assurance

- Compliance policy
- Construction QA templates

Disclaimer

This guideline is provided as information only and should not be relied on for technical or contractual instruction.

Guidance notes *continued*

Water meter connections

Why we connect at the property boundary and not inside private property, right of ways or joint owner access lanes

- Pressure mains and in particular water, are not covered in legislation under our powers of entry and customer obligations
- An easement would be required for entry which Watercare no longer accepts as a result of increased long-term maintenance cost and the associated difficulties with rights of entry
- Right of ways and joint owner access lanes are not constructed to the same quality as public roads and does not provide for adequate clearances leading to premature failure, difficult and costly access

Minimising customer impact and meters in the road

- We provide clear distinction between private and public ownership
- We seek to limit the impact of long customer leads in private access ways by limiting the total number of meters supplied for a multi-meter box
- Where multi-meter arrangements are not suitable, a single private main with a joint private ownership under a legal instrument such as body-corporate, unit title agreement, or shared responsibility included in the access way is required. Watercare can still provide separate billing of sub-meters in most instances.
- Often long private pipeline extensions require additional private firefighting infrastructure that must also be metered. Watercare seeks to minimise these instances by discussing layouts with developers

Standard meter connection solutions

Our standard solutions provide several typical connection scenarios. These scenarios allow for effective installation and better control of connection costs. Alternative installation solutions increase the cost of the connection. Alternative connection details may be rejected if such a connection places a burden on our customers or does not meet our obligations under the LGA and the conditions of the Auckland water and wastewater bylaw.

Useful links:

www.watercare.co.nz/Water-and-wastewater/Building-and-developing/Engineering-standards-framework

www.aucklanddesignmanual.co.nz/regulations/codes-of-practice

<http://www.legislation.govt.nz/act/public/2009/0032/latest/DLM2044909.html>

www.watercare.co.nz

Applying to make a meter connection

What is needed before a connection can be made

- Appropriate legal instrument in place for the shared private pipe connections and arrangement made with Watercare for separate billing
- Connections fees have been paid
- Public pipe, if new, must be pressure tested and disinfected before meter connections can commence
- The private pipe we are connecting to, must have passed pressure testing and disinfection testing
- Backflow prevention device in place (Note: Watercare installs these for households)

Who makes the meter connection?

- The request to connect is made with Watercare's connection team
- The meter connection to our system is made by Watercare



Handover

Once our contractor has completed the meter installation, the customers' plumbing professional may connect the supply on the private side and will be ready for use

Legalities

Our obligations under the Local Government Act 2009

- Manage operations efficiently, keeping overall cost at a minimum with undertakings maintaining long-term asset integrity
- Not pay dividends or distribute surplus
- Regard for public safety in relation to our structures

Water and wastewater bylaw

- Any new assets vested or to be connected must comply with our relevant codes of practice and standards
- We are not required to accept any vesting or connections that do not comply
- Protection of the water supply and wastewater networks as necessary to achieve obligations

Nuisances

- Our operations and infrastructure may not cause certain nuisances under the Health Act such as odour and noise.

