

## What device do I install?

All water meters should have a device to prevent backflow, however the more dangerous the backflow the more complex the device that is needed. Properties are classified into three degrees of risk and this will determine the type of backflow device required.

- **High Risk** sites are properties that use or produce products of a toxic or bacterial nature that may cause death or serious illness if leaked into the main water supply.

Examples of high risk sites are hospitals, mortuaries, chemical plants, cooling towers, air conditioners and hairdressing salons.

Backflow device: Reduced pressure backflow device (must be tested annually).

- **Medium Risk** sites can endanger health if backflow occurs.

Examples of medium risk sites are public swimming pools and commercial laundries.

Backflow device: Double check valve backflow device (must be tested annually).

- **Low Risk** sites are properties that could cause a nuisance by colour, odour, or taste but do not endanger health.

An example is most residential homes.

Backflow device: Air gap separation or hose vacuum break valve (non-testable).



# Backflow Prevention

Protecting the Safety of Our Drinking Water

[www.metrowater.co.nz](http://www.metrowater.co.nz)

For more information,  
please contact Metrowater

Freephone  
0800 FOR WATER  
(0800 367 928)

or visit  
[www.metrowater.co.nz](http://www.metrowater.co.nz)

### Metrowater Limited

Cnr Mt Eden & Mt Albert Roads, Three Kings 1042, Auckland.  
PO Box 27 060, Mt Roskill 1440, Auckland, New Zealand.





Metrowater is committed to delivering safe, high quality drinking water to the residents of Auckland City.

## What is backflow?

Backflow is a potential source of contamination that can affect the quality of our drinking water. It is the undesired, reverse flow of water from within the plumbing system on a property. It may be caused by back siphonage, back pressure or a combination of both. It can result in contaminants being drawn into the drinking water system through cross connections.

**Back siphonage** occurs when a temporary drop in water pressure occurs and contaminated water is siphoned into the drinking water system. This may be caused when there is an interruption of the water supply due to nearby fire-fighting, repairs or breaks in the water supply mains.

**Back pressure backflow** occurs when pressure in the private water supply is greater than the mains pressure and the water is forced back into the mains water supply system. This can be caused by high pressure pumps, temperature increases in boilers, elevated tanks or other pressure producing systems.

**A cross connection** is a physical connection between a drinking water system and some other environment which could allow a backflow of contaminants to enter the drinking water. This could be a pipe connecting a customer's drinking system to the heating/cooling system, fire system or irrigation system.

## Why is backflow prevention required?

Backflow prevention is required to protect the water supply and therefore the health of those consuming and using water. Activities on your property may involve using substances which, if consumed, may cause death or injury.

The Building Act 2004 requires all buildings to have a safe and adequate water supply. If there is any likelihood of contamination from a cross-connection, an approved backflow prevention device is required to eliminate it, ensuring that all end users are protected against contaminated water.

The Health Act 1956, and particularly the Health (Drinking Water) Amendment Act 2007, mandates Metrowater to enforce backflow prevention, whether the hazard is new or historic.

## How can backflow be avoided?

Backflow is prevented by installing a boundary backflow prevention device at the service connection(s). A properly working and maintained backflow device will ensure water flows safely by trapping water that begins to flow the wrong way.

## What are my responsibilities?

It is the property owner's responsibility to ensure that the correct boundary device is installed at their water connection(s).

Boundary devices must be tested annually and results submitted to Metrowater.

High risk\* properties must have their boundary devices tested annually by Metrowater. Non-compliant properties are automatically re-classified as high risk. There is a charge associated with this annual testing, please contact us or visit [www.metrowater.co.nz](http://www.metrowater.co.nz) for details.

Medium and low risk\* properties may be tested by an independently qualified person (IQP (backflow)) of the property owner's choosing.

Property owners must maintain their boundary device(s).

Metrowater reserves the right to rectify or upgrade a faulty device to reduce risks to the water network. Reasonable costs for this work will be recovered from the property owner.

\* For more information on risk ratings, see 'What device do I install?'

## What is backflow?

