

CROSS CONNECTION CONTROL PROGRAM



For more information

Environmental Services
403-342-8750
crossconnections@reddeer.ca



To support industrial, commercial, institutional and multi-residential property owners, The City of Red Deer administers a cross connection control program.

This program:

- Maintains a database of facilities, building owners and backflow prevention assemblies installed within the building along with a test history of each assembly and inspection notes.
- Maintains a database of certified testers and installers of backflow prevention assemblies.
- Ensures equipment used by all certified installers and testers is calibrated annually.
- Conducts cross connection inspections of new and existing buildings within The City of Red Deer.
- Notifies customers of past-due annual testing requirements.

Typical Cross Connections

Cross connections are typically made by connecting the drinking water supply directly with the following plumbing systems, fixtures and apparatus:

- wash basins and service sinks
- lawn irrigation and sprinkler systems
- laboratory equipment (e.g. medical, industrial, etc.)
- processing tanks
- industrial fluid systems and compressors
- boilers (e.g. hydronic, steam, etc.)
- water recirculating systems
- cooling towers and chillers
- swimming pools
- solar heat systems
- fire sprinkler systems
- stand pipe fire systems
- reclaimed water systems
- auxiliary water supplies
- water conditioners



reddeer.ca/city-services



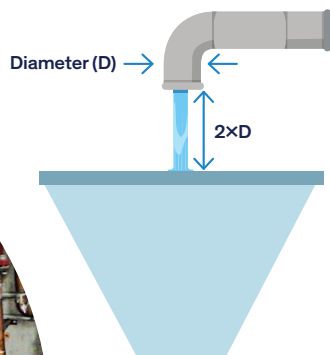
Water Consumption

Improper plumbing connections on private property can contaminate the public drinking water supply with harmful chemicals and bacteria, and the property owner and/or occupants could be held liable for damages.

An improper plumbing connection can be a public health hazard if it is a cross connection between drinking water and a contaminated source. A cross connection is any temporary, permanent or potential link that allows, or may allow backflow to occur. To protect your drinking water, eliminate all avoidable cross connections and ensure they are protected against backflow by installing approved cross connection control devices in accordance with the National Plumbing Code and the Utility Bylaw 3606-2018.

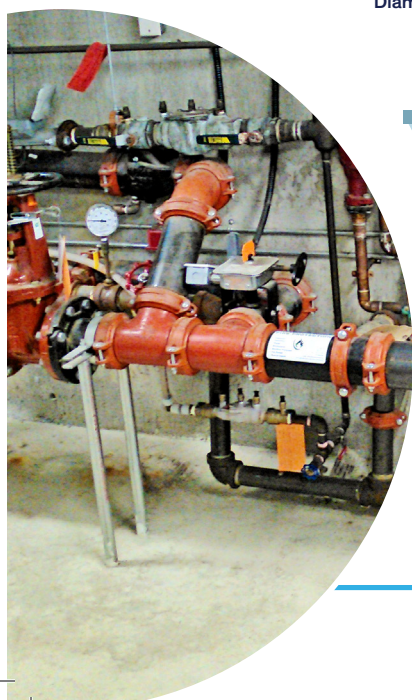


Approved Air Gap (AAG)



Diameter (D) →

2×D



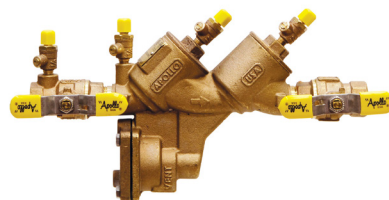
Hose Connection Vacuum Breaker (HCVB)



Double Check Valve Assembly (DCVA)



Pressure Vacuum Breaker (PVB)



Reduced Pressure Principle Backflow Prevention Assembly (RP Assembly)

Backflow

Harmful chemicals and bacteria can backflow through an unprotected cross connection when the flow within the plumbing reverses direction.

Backflow is the flowing back or reversal of the normal direction of flow in either the public water system or a customer's plumbing system.

Backflow is caused by back pressure or back siphonage. Backflow created by back pressure can be produced by a heating system or any other system that operates at a higher pressure than the public water supply.

Backflow created by back siphonage can be produced by undersized piping or by an interruption of the water supply during plumbing or water utility repairs.

Since all water supplies are subject to backflow, they need to be protected by approved cross connection control devices.



Backflow Protection

All industrial, commercial and institutional (ICI) customers are required to eliminate or protect against the cross connections that exist on their property. Owners or occupants are required to have a premises-isolating cross connection control device installed on their incoming water service at the water meter location. This device must then be tested at the time of installation and annually thereafter by a certified tester.

To protect the health and safety of your personnel and the general public within your facility, it's advisable to have a journeyman plumber and certified cross connection control tester, conduct an on-site hazard assessment survey to eliminate or provide backflow protection against any unprotected cross connections.

Violation Ticket

If a customer does not eliminate or control cross connections, the property owner or occupant could receive a violation ticket pursuant to the Provincial Offences Procedures Act, R.S.A. 2000 C. P-24. In accordance with the Utility Bylaw 3606-2018, if a customer fails to comply with an order requiring the installation, testing, or repair of a cross connection control device, their water service could be shut off until the situation has been remedied.