

How to choose an appropriate backflow preventer.

Below are examples of backflow preventers approved by the Canadian Standards Association. Consult with your contractor to obtain a complete list of available backflow preventers.

Testable Backflow Preventers



Pressure Vacuum Breaker

Reduced Pressure Assembly



Double Check Valve Assembly

Non-Testable Backflow Prevention Devices



Hose Connection Vacuum Breaker



Atmospheric Vacuum Breaker



Dual Check Valve

A clean water supply is OUR responsibility, compliance is YOURS.

Property owners are responsible for ensuring compliance with the City of Markham's Backflow Prevention By-Law. All work, including surveying cross connections, testing installed backflow preventers and recommending new installations, replacements or upgrades must be performed by a qualified person.

Compliance is mandatory.

Markham is actively requiring property owners to comply with the Backflow Prevention By-Law. Failure to comply with the By-Law will result in fines as well as legal action. It is every property owner's responsibility to ensure compliance.



Preserving Markham's drinking water one glass at a time.

Keeping Markham's drinking water SAFE.

NEED MORE INFORMATION ABOUT BACKFLOW PREVENTION?
PLEASE SEE BY-LAW # 2012-27
MARKHAM'S BACKFLOW PREVENTION PROGRAM.

CALL: 905-475-4862
EMAIL: BACKFLOW@MARKHAM.CA
OR VISIT WWW.MARKHAM.CA
(SEARCH FOR "BACKFLOW")

BACKFLOW PREVENTION PROGRAM

Important information for
Industrial,
Commercial,
Institutional,
Multi-Residential Property Owners



Compliance with Markham's Backflow Prevention By-Law

The property owner is responsible for ensuring compliance with the City of Markham's Backflow Prevention By-Law.

All work, including surveying cross connections at private water system, testing of installed backflow preventers and recommending new installations, replacements or upgrades, must be performed by a "Qualified Person". Markham administers a "Qualified Person" Registration Program and posts a list of "Qualified Persons" at www.markham.ca. Search: Backflow Prevention.

Please note that all qualified persons operate independently from the City of Markham. Check references, insurance and discuss costs before proceeding with any work.

A "Qualified Person" means a private contractor with qualifications as defined by the Backflow Prevention By-law and is permitted to carry out cross connection control functions in Markham.

Information Request Form

All property owners are required to complete and submit the City's prescribed information request form providing information regarding tenants, businesses and activities on the property.

Cross Connection Control Survey

A Cross Connection Control Survey must be performed by a "Qualified Person" and includes all cross connections and identifies any existing cross connection protection. If existing protection will not prevent a backflow incident, the "Qualified Person" will recommend an acceptable backflow preventer.

Backflow Preventer Testing & Inspection

All backflow preventers installed on your property shall be inspected and tested to demonstrate they are in good working condition.

Corrective Actions on Cross Connection Control Deficiencies

All cross connection control deficiencies identified through the Survey or the Testing Reports should be corrected. Corrective actions such as: installation of a new backflow preventer(s), upgrade, repair or replacement of existing backflow preventer(s), should be completed.

Not only is it the right thing to do, IT'S THE LAW.

To safeguard Markham's drinking water system, the City of Markham's BACKFLOW PREVENTION BY-LAW was passed in 2007 and updated in February 2012. This by-law requires all Industrial, Commercial, Institutional (ICI), and Multi-Residential property owners to survey cross connections in their water systems, test their backflow preventers and install or repair any required backflow preventers at their own expense. This By-Law is now being strictly enforced.

Program requirements

All ICI and Multi-Residential property owners in Markham must complete the following at their own expense:

- An Information Request Form for their properties
- A Cross Connection Control Survey of their water systems. The survey must be updated once every 5 years or whenever there is a change in property use.
- Annual testing and inspection of their backflow preventers
- Installation upgrades, replacement, or repairs of any required backflow preventers

All Forms/Reports related to the above must be completed and endorsed by the property owner and qualified person prior to submission to the City of Markham's Environmental Services Department. Forms can be found at: www.markham.ca. Search: Backflow Prevention.

What is a cross connection?

A cross connection is any connection between a potable water system and any source of pollution or contamination.

Typical cross connections

Most cross connections include a direct connection of the drinking water supply to any of the following:

- Auxiliary water supplies
- Boilers (such as hydronic and steam)
- Cooling towers and chillers
- Fire sprinkler systems
- Industrial fluid systems and compressors
- Laboratory equipment (such as medical and industrial)
- Lawn irrigation and sprinkler systems
- Processing tanks
- Solar heating systems
- Standpipe systems
- Swimming pools
- Wash basins and service sinks
- Water re-circulating systems

What is backflow? And why is it a problem?

Backflow occurs when normal water flow to a customer's premise is interrupted and begins to flow in the opposite direction back into the shared water supply system.

When backflow occurs, contaminants such as chemicals, pathogens and non-potable water may be drawn into the City water supply system and result in contamination of the water we drink. This situation can be prevented by the installation of a Backflow Preventer(s). It's simple, relatively inexpensive and safeguards Markham's drinking water supply.

