

Document 4 – Backflow Prevention Program Qualified Persons

The Backflow Prevention Program will be delivered by qualified persons, which is necessary to ensure the site surveys, backflow device installations and annual testing will meet program requirements and address backflow risks.

Qualifications and training needed to conduct site surveys, install backflow devices and test devices are established in the CSA B64.10 standards. The Ontario Building Code also establishes requirements for the selection and installation of backflow devices.

The cross connection control training is accredited through the Ontario Water Works Association (OWWA) or the American Society of Sanitary Engineers (ASSE). The certification is valid for five years.

The following points describe how these requirements will be applied to the City's Backflow Prevention Program.

Site Surveyor Qualifications

A qualified person to conduct a site survey is a:

- Certified Cross Connection Control Specialist as per the Ontario Water Works Association, and
 - Licensed master plumber; or
 - Journeyman plumber, employed by a licensed plumbing contractor
- Professional engineer
- Certified engineering technologist under the direction of a professional engineer

Backflow Device Installer Qualifications

A qualified person to install, relocate or replace a backflow prevention device is a:

- Certified Cross Connection Control Specialist as per the Ontario Water Works Association, and
 - Licensed master plumber; or
 - Journeyman plumber, employed by a licensed plumbing contractor; or

- Apprentice plumber, employed by a licensed plumbing contractor and under supervision of a journeyman plumber or master plumber; or
- Industrial millwright licensed by the Ministry of Environment and Climate Change (MOECC) as a Water or Wastewater Operator ¹

Backflow Device Tester Qualifications

A qualified person to test and repair a backflow device is a:

- Certified Cross Connection Control Specialist as per the Ontario Water Works Association, and at least one of the following:
 - Professional engineer
 - Certified engineering technologist under the direction of a professional engineer
 - Licensed master plumber
 - Journeyman plumber, employed by a licensed plumbing contractor
 - Apprentice plumber, employed by a licensed plumbing contractor and under supervision of a journeyman plumber or master plumber
 - Industrial millwright²
 - Industrial millwright licensed by the MOECC as a Water or Wastewater Operator
 - Fire system sprinkler fitter (for fire protection systems)
 - Irrigation system installer (for lawn sprinkler systems)

Backflow device testers also need a current calibration certification through the National Institute for Standardization Technology for the test equipment to be used.

The following table summarizes the authorized functions for qualified persons.

¹ Industrial millwrights who are licensed by the MOECC as a Water or Wastewater Operator can install, replace, test and repair devices for water and wastewater systems.

² Industrial millwrights can test devices, but not repair them.

Table 1: Backflow Prevention Program Qualified Persons

Qualifications	Conduct a Site Survey³	Install or Replace a Backflow device	Test or Repair a Backflow Device⁴
Professional Engineer	✓		
Engineering Technologist ⁵	✓		
Licensed Master Plumber	✓	✓	✓
Journeyman Plumber ⁶	✓	✓	✓
Apprentice Plumber ⁷	✓	✓	✓
Industrial Millwright ⁸			✓
Industrial Millwright: Water/Wastewater ⁹		✓	✓
Irrigation System Installer ¹⁰			✓
Fire System Sprinkler Fitter ¹¹			✓

³ All qualified persons listed except professional engineers and engineering technologists require cross-connection control training and certification to conduct a site survey.

⁴ All qualified persons listed require cross-connection control training and certification to install, replace, test or repair backflow devices.

⁵ Engineering technologist needs to be under direction of a professional engineer.

⁶ Journeyman plumber employed by a licensed plumbing contractor.

⁷ Apprentice plumber needs to be under direction of a licensed or journeyman plumber.

⁸ Industrial millwright can test devices, but not repair them.

⁹ Includes industrial millwrights licensed by the MOECC as a Water or Wastewater Operator.

¹⁰ For irrigation systems.

¹¹ For fire protection systems.