

City Of Methuen Cross Connection Program

CROSS CONNECTION CONTROL REGULATIONS AND GUIDELINES

The following information will outline the Cross Connection Control Regulations of the City Of Methuen cross connection program. This information will serve as a guideline for the submittal of piping schematics and diagrams for the approval of backflow prevention devices to be installed and for the actual installation of such devices.

Unprotected or improperly protected Cross Connections are prohibited under the City Of Methuen Water Use Regulations and Commonwealth of Massachusetts Drinking Water Regulations governing Cross Connections (310-CMR-22.22).

Water Use Regulations define a Cross Connection as:

“any actual or potential connection between a distribution pipe of potable water supplied by the public water system and any waste pipe , soil pipe, sewer, drain or any other unapproved source. Without limiting the generality of the foregoing, the term Cross Connection shall also include any bypass arrangement, jumper connection, removal section, swivel or changeover connection and any other temporary or permanent connections through which backflow can or may occur.”

PERMIT INSTRUCTIONS

A Device Design Data Sheet must be submitted prior to any installation and the submittal must, at a minimum, include a piping diagram showing the method of protection to be used. The piping diagram shall show the incoming water line, the separation of domestic and process water, the type, size, manufacturer, and model number of the backflow device to be used and all clearances involved in the installation of the backflow device. A filled-out Device Design Data Sheet, complete with all appropriate signatures and license numbers, must accompany the piping diagram. If the plans meet all the requirements, you will receive a letter of approval from this office to install the devices within a 30-day period. After installation, you must call this office to arrange for an initial test of the device, any other test conducted prior to this initial test will be invalid. The initial test of the device ensures proper installation and operation.

General installation procedures for a backflow prevention device are as follows:

1. The Reduced Pressure Backflow Preventer or Double Check Valve Assembly and shut-off valves SHALL BE installed in a horizontal line with the following minimum clearances:
 - a. 30 to 53 inches above the finished floor
 - b. 12 inches from the wall.

- c. Vertical orientation of a backflow prevention device SHALL NOT BE allowed regardless of manufacturer's suggestions or specifications unless such orientation is specifically granted .
- 2. The Reduced Pressure Backflow Preventer SHALL BE provided with an air gap not less than twice the Diameter of the relief port opening between the relief valve opening and the relief valve drain line.
- 3. The water lines affected MUST BE shut down during normal business hours and after reasonable notice to permit testing, inspection, and maintenance of the backflow device. If it is not possible to meet this requirement, it will be necessary to provide a by-pass line equipped with the same type of backflow prevention device. The backflow prevention device SHALL BE installed so as to provide EASY ACCESS for testing, inspection and maintenance purposes.
- 4. All low point drains on the water line situated upstream of (before) a Reduced Pressure Backflow Preventer should not be hose babb connections. If there are Hose Bibb Connections upstream, they SHALL BE provided with an Atmospheric or Hose Bibb type Vacuum Breaker.
- 5. Backflow Prevention Devices SHALL NOT BE installed below grade. If a backflow prevention device is to be installed outdoors, it must be protected from freezing, flooding, mechanical damage, and vandalism.
- 6. A Backflow Prevention Device must be installed by a Massachusetts Licensed Plumber or Sprinkler Fitter under permits issued by the City of Methuen Inspectional Services Department
Jim Quinlan 978-983-8625

The piping diagrams MUST BE reviewed and approved BEFORE the physical mechanical work is started. Once the piping schematics are approved, they MAY NOT BE CHANGED without permission.

Unprotected or improperly protected cross connections are considered to be a direct violation of the Regulations Governing the Use of the Water Distribution Facilities for the City of Methuen MA.

Violations shall be subject to all appropriate fines and penalties up to and including termination of water service. In addition, unprotected or improperly protected cross connections are a direct violation of Section #22 of the "Drinking Water Regulations of Massachusetts. General Laws, Chapter #111 Section #160 prescribes a fine of \$500 and/or one year in jail for each willful violation of a Drinking Water Regulation promulgated by the Massachusetts Department of Environmental Protection. Also, any violation of MaDEP Regulations shall be subject to the Administrative Penalty Provision of Massachusetts State Law #10-CMR-500.

BACKFLOW PREVENTION DEVICE DESIGN DATA SHEET

I. Owner's Name _____

Address _____

II. FACILITY

Name _____

B. Address _____

C. Contact Person/Agent _____

D. Telephone Number of Facility Contact Person _____

E. New or Existing Facility? _____

F. General description of the type of business or activities carried out at this facility: _____

III. DEVICE DATA

A. Manufacturer _____ Model No. _____

B. RPBP _____ DCVA _____

C. Size _____

D. Hot or Cold Water Unit _____

E. Location of Device _____

F. Bypass Arrangement (Y/N)? _____

G. From what type of containment is the water supply protected?

H. How many other Reduced Pressure Backflow Preventers (RPBP) and Double Valve Assemblies (DCVA) are located in this building? _____

Check

I. Type of Gate valve _____
Gate valves for fire systems must be UL or FM approved.

Please Use One Form For Each Device

IV. DEVICE MAINTENANCE AND TESTING SCHEDULES

Describe the maintenance and testing schedule of the above device(s) (please refer to 310 CMR 22.22)

V. CROSS CONNECTION PLAN SUBMITTAL REQUIREMENTS

A. Plumbing Plan:

1. Complete title block (name of facility, address, date, preparer, scale, etc.)
2. Schematic or blueprint of plumbing system (at least 9 X 11"), using accepted symbols and nomenclature, detailing:
 - a. Clearances in device installations
 - b. Location of upstream and downstream shutoff valves
 - c. Make, model, size and alignment of device
 - d. Location of potable water lines
 - e. System, source, or equipment fed downstream of devices, complete with information on the secondary system (operating pressure, chemical treatment, etc.).

When installations of devices involve large or complex plumbing systems, formal prints must be submitted with Professional Engineers stamp, subject to the discretion of the reviewing authority.

Submitted by: _____

Company: _____

Date: _____

Telephone: _____

Fax No: _____

Owner/Agent Signature: _____ Date: _____