

1.0 GENERAL

1.1 Scope

This specification covers the installation requirements for domestic water meters, backflow prevention equipment, and isolation valving within buildings having a water service connected to the City of Regina water system.

1.2 Related Sections

1.2.1 Section 15151 - Water Meters and Encoder Registers

1.2.2 Section 15403 - Backflow Prevention Devices

2.0 PRODUCTS

2.1 Water Meters and Meter Interface Units (MIU)

2.1.1 Water meters and meter interface units are supplied and installed by the City of Regina

2.1.2 The City of Regina will determine the size of the water meter(s). A water meter sizing application may be required prior to selection. This application must be completed a minimum of ten business days prior to the date the meter or spacer is required.

2.2 Meter Spacers

2.2.1 Upon completion and submission of a Meter Sizing Form by the Applicant for Service or his representative to the City of Regina, a meter size and type will be determined for installation in the facility. To facilitate the fabrication of piping for this installation a meter spacer will be provided to the Applicant or his representative by the City of Regina. The meter spacer is to be left in place in the piping for retrieval by the City of Regina at the time of meter installation.

2.3 Isolating Valves

2.3.1 Provide isolating valves, lockable type where indicated, in accordance with the requirements stated on the applicable Standard Drawing(s).

2.4 Piping materials and installation must comply with these standards.

City of Regina Water Bylaw 8942, and The National Plumbing Code of Canada. Provide additional piping support as required to eliminate strain on meter(s) and components.

3.0 EXECUTION

3.1 Workmanship

3.1.1 Complete all plumbing work in conformance with the current edition of the National Plumbing Code and Saskatchewan Plumbing and Drainage Regulations.

3.2 Access

3.2.1 Ensure that building space provided for installation and maintenance access to metering and backflow prevention equipment is in accordance with the requirements shown and stated in the Standard Construction Specifications and Standard Drawings.

3.2.2 Water meter(s) and MIU (transmitter) module(s) are the property of the City of Regina. Alterations/modifications of this equipment or installation is prohibited, these must be installed on the exterior of the building. This includes any third-party devices installed in conjunction.

3.2.3 Water meter(s) and MIU (transmitter) module(s) must not be concealed and remain accessible for servicing at all times.

4.0 INSTALLATION REQUIREMENTS

4.1 Connections or tees prior to a water meter are strictly prohibited. Only a fire sprinkler system is permitted prior to the meter. The meter(s) must be located within two meters of the water service entry point.

4.2 Water Meters

4.2.1 Water meter adapters installed by the owner. For 15mm (5/8") to 25mm (1"), use threaded tailpieces (City supplied). For 38mm (1-1/2") and larger use appropriate flange (owner supplied). Contact the water meter program for details.

- 4.2.2 Water meter(s) valves must be within 300mm of the water meter (valves for meters in excess of 50mm (2") may be placed immediately out of the required pipe diameter spacing) and must also be located within the same common space (no obstructions).
- 4.2.3 Water meter(s) must not be utilized to support piping or any other components of the water distribution system. The piping must be supported and capable of supporting the water meter and components without supporting the meter itself. The piping must be secured to maintain the space required to facilitate the installation/servicing of the meter.
- 4.2.4 Water meter(s) to be installed in an area where spillage is not objectionable. Where meters are larger than 1" it is preferred to have a floor drain or another type of drain as close as practical to the meter.
- 4.2.5 The water meter(s) must be installed as per manufacturer's recommendations. Meters may be installed in either a horizontal or vertical orientation for meters up to and including 50mm.
- 4.2.6 The water meter(s) must be mounted clear from walls. Maintain a minimum clearance around the water meter of 460mm and a minimum clearance of one meter with no obstruction(s) in front of the meter. The minimum centreline to wall for 15mm (5/8") to 50mm (2") meters is 150mm. For meters larger than 50 mm, refer to the manufacturer's specifications or contact the Water Meter Program for details.

4.3 Water Meter Transmitter

MIU (transmitter) module supplied and installed by the City of Regina. Leave 200 mm wide X 300mm high spacing for each MIU module. The MIU location shall be installed to the exterior as follows:

- 1m-2m above finished grade
- 0.6m minimum clearance from overhead objects
- Minimum 0.15m above or 0.5m horizontal from other utilities (electrical, gas, etc.)

4.3.1 A wire or conduit is required for all water meters, as indicated below.

MIU wiring supplied and installed by owner. One wire required for each meter. Wire type shall be 3 conductor, solid #22 AWG with black, red, and green colour conductors. Leave minimum 0.6m slack wire at both meter and MIU module locations.

Owner supplied and installed 21mm conduit from location of meter(s) to location of MIU(s). One conduit required per maximum 5 meters. City to supply and install MIU wiring.

4.4 A bypass for water meters 1” and smaller requires approval prior to installation. Approved bypasses must be equipped with a tamper-proof factory lockable valve.

4.5 Bypasses for all sizes of irrigation meters are not allowed.

4.6 At the discretion of the City of Regina, a lock(s) may be placed on any unmetered service connections or connections removed from service. These connections must be equipped with a tamper-proof factory lockable valve. Tampering with or removing any of these or any other City of Regina property is subject to penalty.

4.7 Control valves (including backflow prevention devices) serving a fire sprinkler system must be secured with locks or supervised in the open position. All components of the fire system must comply with NFPA standards, The National Fire Code of Canada, and the City of Regina fire bylaw 2018-49. Contact the Regina Fire & Protective Services for additional information.

5.0 BUILDINGS WITH MORE THAN ONE WATER METER

5.1 All water service lines near the water meter must be clearly identified to show the location or area served prior to the installation of the meter. A tag must be securely attached to the control valve handle of the meter/space served. Irrigation services must also be identified. The tag shall be metallic or plastic with engraved letters/numbers no less than 5mm (3/16”) in height. Laminated printed paper tags will also be accepted providing they remain affixed with normal operation of the valve.

5.2 In some multiple meter installations, the 2-meter distance may be exceeded providing the meters are as close as practical to the water service entry point and are located in an accessible common area of the premises to which the public does not have access.