CITY OF BLOOMINGTON MINNESOTA

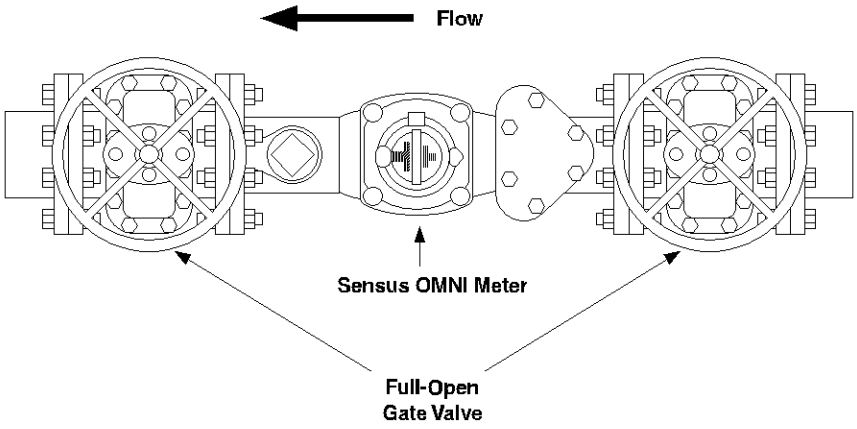
Commercial and Industrial Water Meter Installation Information Handout

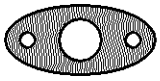
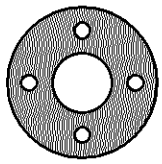
Setting and installation of 1-1/2, 2 and 3 inch meters

Contact Utilities for meters larger than 3 inches.

- Meters must be set to be easily removed for repair or replacement.
- Meters shall be installed at the point of entry of the service into the building in a mechanical/utility room adjacent to a floor drain.
- A valve must be placed on the inlet and outlet side of the meter. Valves shall be full flow. ***Do not use angle, butterfly or globe valves.***
- All meters shall be installed no higher than three feet above the finished slab to the piping centerline and shall be clear of all adjacent obstructions by at least 12 inches. The clearance in front of the meter shall be at least 24 inches and the clearance above the meter shall be at least 48 inches.
- All meters shall be mounted in a horizontal position and shall be supported by the adjacent piping. Piping connected to 1-1/2 inch and larger meters shall be supported directly adjacent to the meter and no piping shall place a transverse or longitudinal load on the meter.

Commercial industrial meter setting detail



Meter size	Meter lay length	Threaded flanges furnished by the City
1-1/2”	13”	
2”	17”	
3”	19”	

Inspections

Call Utilities for a meter inspection and water turn on after you have the meter set and the curb stop/service valve up to grade.

Utilities contacts

Monday - Friday, 7 a.m. - 3:30 p.m.

Utilities Outside Inspections

952-563-8777

Travis Schlangen

Customer Service Specialist (Inspector)

952-563-8775

Eric Schoon

Customer Service Supervisor

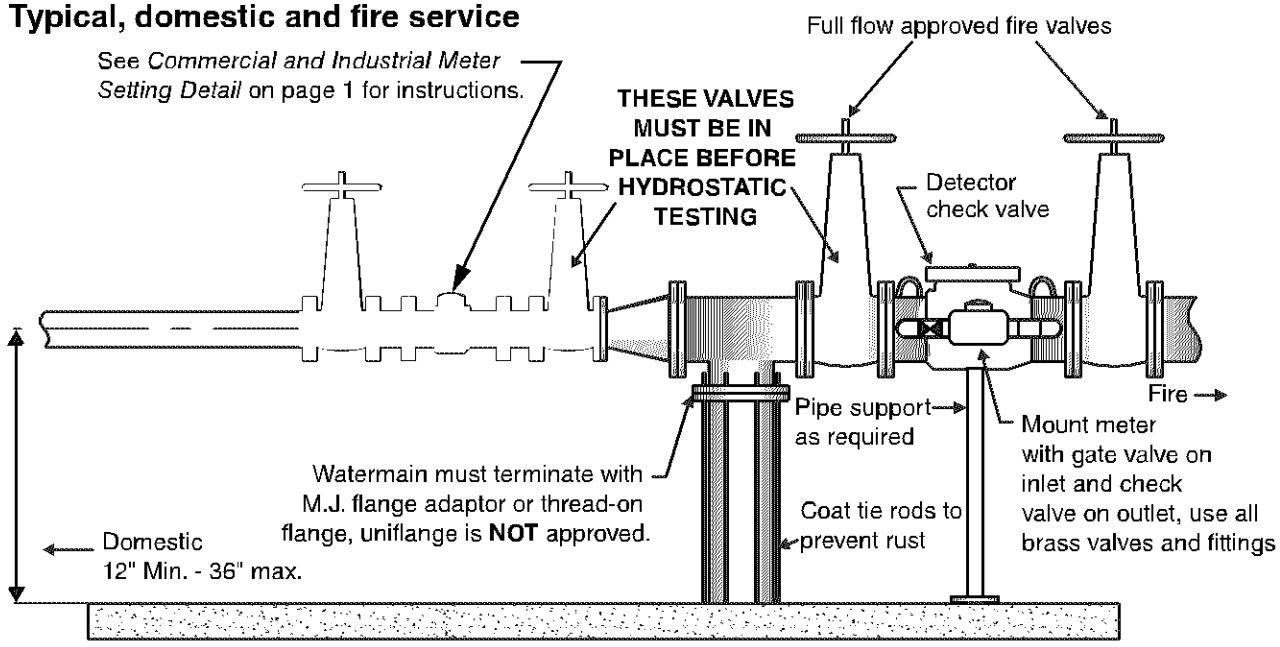
952-563-4909

Note: If you have any questions about setting meters, please call Utilities at 952-563-8777 BEFORE plumbing meter.

Fire service and detector meter

Note: Detector check meters must have a gate valve on the inlet and a check on the outlet.

Typical, domestic and fire service



Note: *All pipe and fittings larger than 2 inches in diameter shall be epoxy or cement mortar lined in accordance with AWWA C104 or AWWA C116.*

Service with diameter of 4 inches or greater

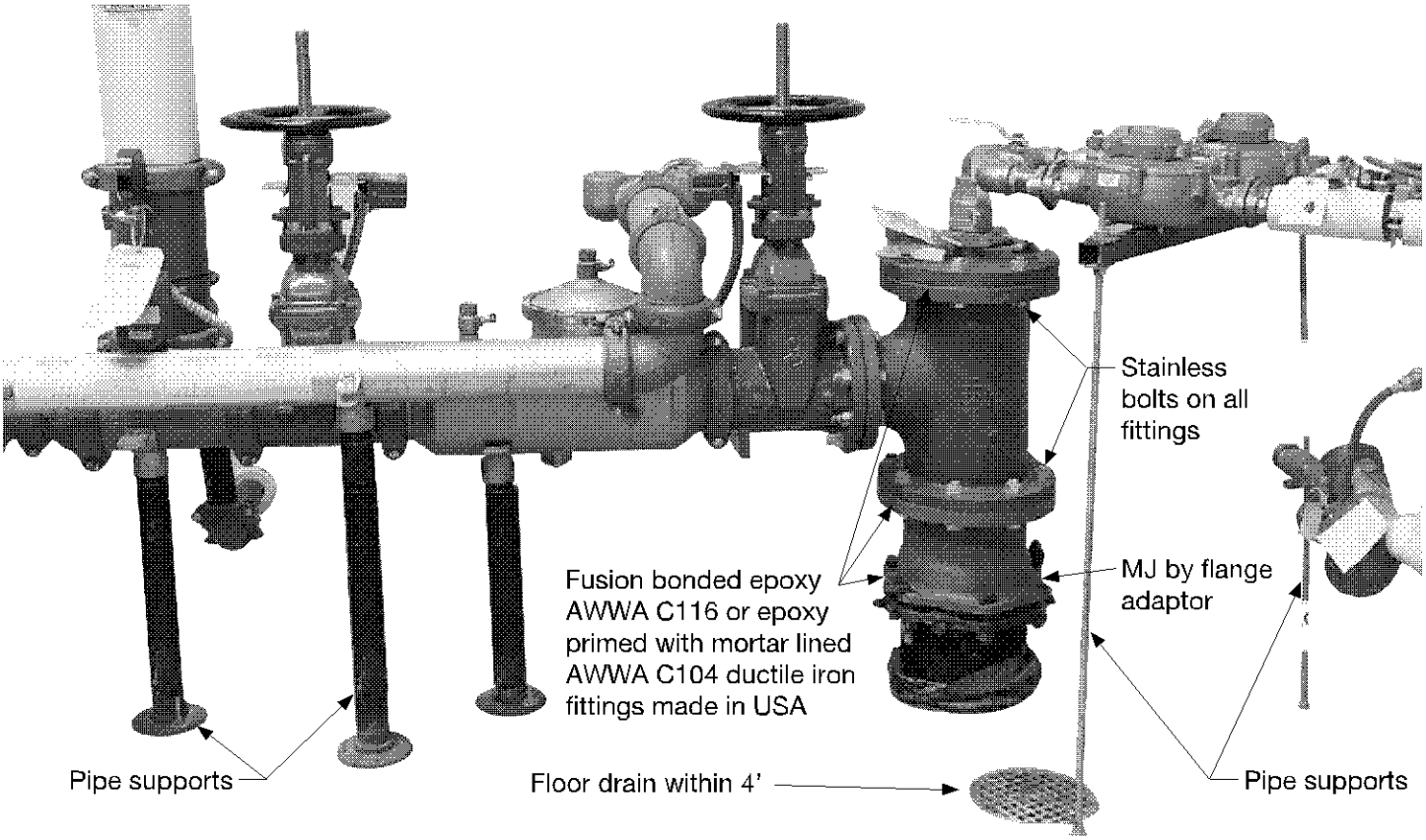
If your project includes a water service into a building for domestic use, combination fire/domestic or dedicated fire service 4 inches diameter or greater, the following shall apply:

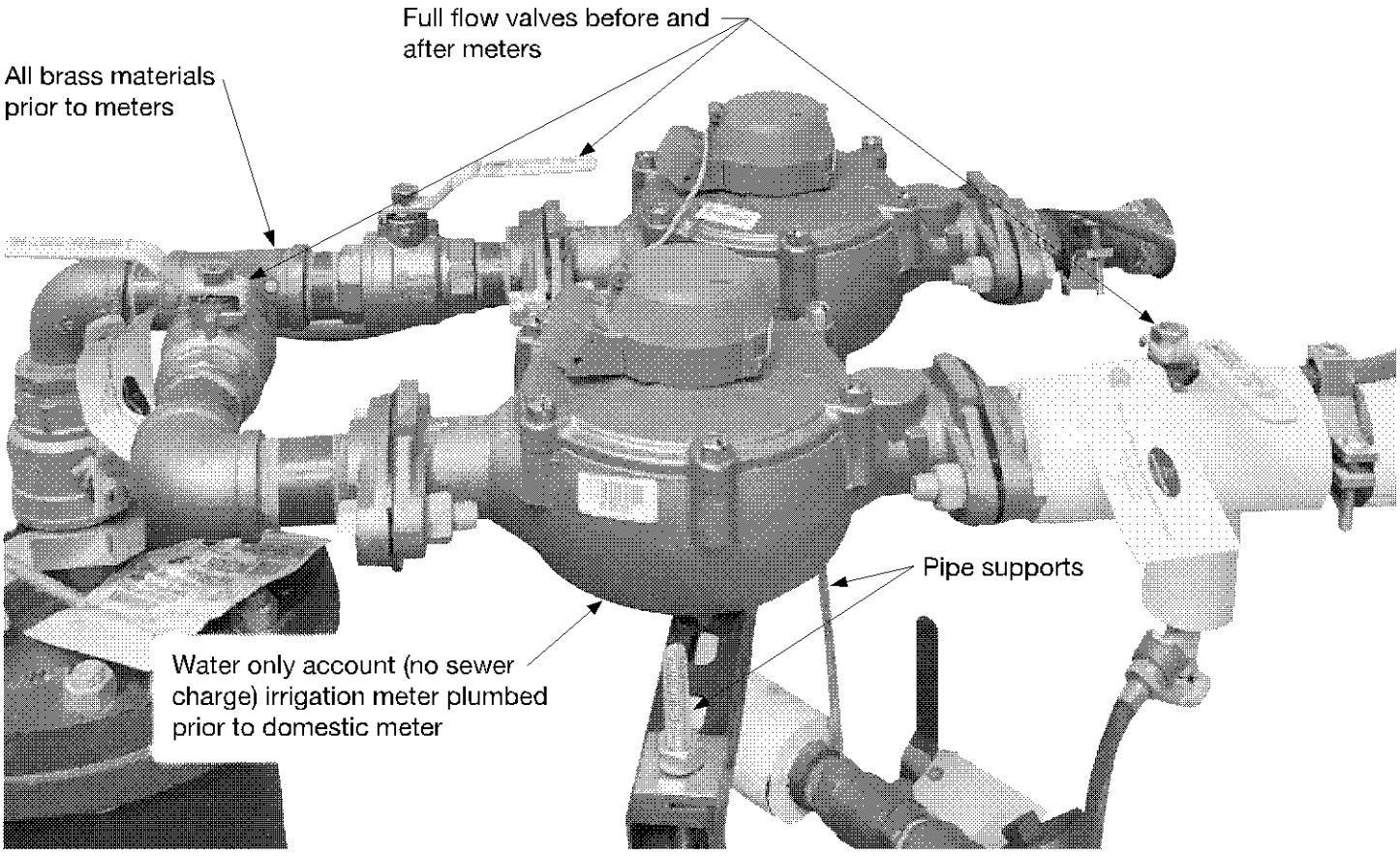
- At the water service pipe's point of entry into the building, the pipe shall be fitted with a thread-on flange, or an MJ x flange adapter in such manner that the service flange face is no less than 12 inches from the finished floor.
- All fittings (tees, bends, nipples and companion flanges) between service flange face and the fire service equipment and/or the domestic water meters shall be stainless steel, brass or mortar-lined ductile iron per ANSI IAWWA C104/A21.4, or epoxy coated ductile iron per ANSI/AWWA C116/A21.16. (No uncoated cast or gray iron, galvanized iron, black iron or steel will be allowed.) .
- Ductile iron tees, bends, reducers and companion flanges must be inspected by City of Bloomington Utilities inspectors prior to assembly.
- City of Bloomington Utilities inspectors will not approve hydrostatic testing of 4 inch or larger services into buildings until conforming fittings and interior service valves have been installed.

American National Standard Institute (ANSI) and American Water Works Association (AWWA) Codes

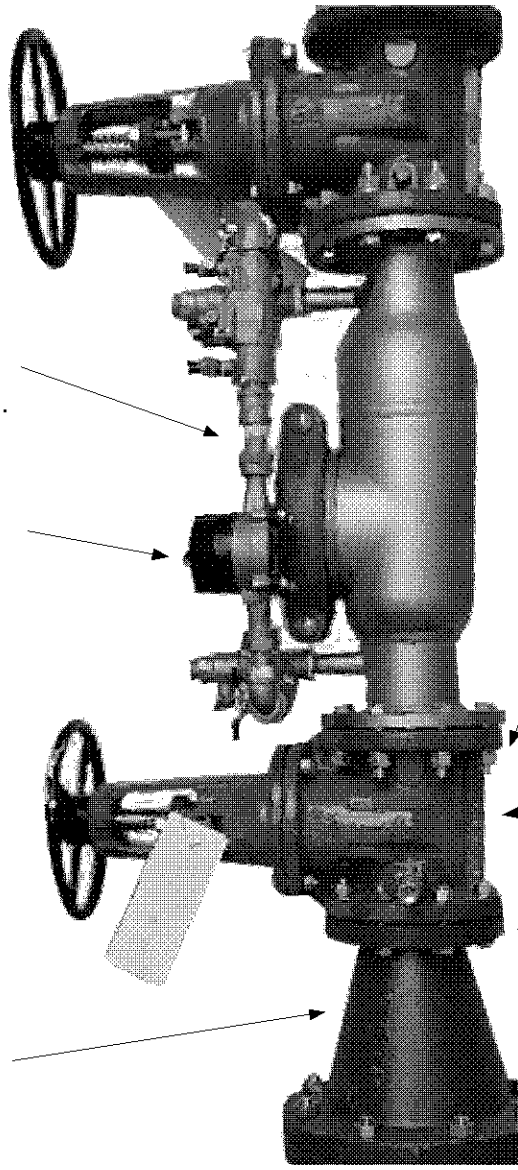
ANSI/AWWA C104/A21.4 defines the minimum requirements for shop-applied, cement-mortar lining for ductile iron pipe and ductile-iron and gray-iron fittings for water service. The purpose of the protective coating is to prevent tuberculation of pipe and fittings, interior corrosion, and to preserve flow characteristics and water quality. Cement mortar linings for water service pipe and fittings has been in use since 1922.

ANSI/AWWA C116/A21.16 defines protective fusion-bonded epoxy coatings for the interior and exterior surfaces of ductile-iron and gray-iron fittings for water service. The purpose of the coating is to prevent internal and external corrosion, interior tuberculation, and to preserve flow characteristics and water quality. This standard was adopted and has been in use since 1998.


Stainless bolts on all fittings
Fusion bonded epoxy AWWA C116 or epoxy primed with mortar lined AWWA C104 ductile iron fittings made in USA
MJ by flange adaptor
Pipe supports
Floor drain within 4'
Pipe supports


Full flow valves before and after meters
All brass materials prior to meters
Pipe supports
Water only account (no sewer charge) irrigation meter plumbed prior to domestic meter

Fire riser detail - vertical or horizontal



Bypass plumbing materials brass, copper or stainless steel.

DCDA to be ASSE 1048 listed for use with Badger Model 25 5/8 X 3/4 meter, installer to submit listing prior to installation.

All fittings AWWA C104 mortar lined epoxy primed or AWWA C116 epoxy coated and made in USA.

Inlet OS&Y needs to be installed prior to hydrostatic testing.

OS&Y required on inlet side of DCDA.

Stainless steel bolts on all fittings prior to DCDA.

Stainless bolts

Indicated by 304, 316 and THE markings.