BY-PASS

(PERMANENT)

UPSTREAM

REQUIRED CLEAR SPACE -REQUIRED **CLEAR SPACE** 2" METER TEST PIPING Σ DRAIN COCK WAL TWO (2) DIAMETERS TO OUTSIDE ("E"). FIVE (5) DIAMETERS OF STRAIGHT PIPE OF STRAIGHT PIPE "ח" <u>*</u> (MINIMUM) (NOTE 5) (MINIMUM) (NOTE 2) BYPASS VALVE CLOSED 48" MIN. 24" MIN DURING METER USE DOWNSTREAM APPROX **INLET VALVE** OUTLET VALVE

BADGER RECORDALL COMPOUND METER INSTALLATION REQUIREMENTS:

COMPOUND METER

DRAIN

REQUIRED

FLOOR

(SEE TABLE "A")

(For additional installation information see http://www.badgermeter.com)

- 1. A Strainer IS REQUIRED to ensure optimum flow conditioning and protection for the Compound Series meter measuring element.
- 2. Compound meters, with a strainer, REQUIRE a minimum of five (5) pipe diameters of straight pipe upstream of the meter (including the strainer), based on meter diameter.
- 3. Only full open port valves should be used upstream of meter. Any valve can be used downstream.
- 4. DO NOT install pressure reducing devices or check valves upstream of the meter.
- 5. A test connection must be installed a minimum of two (2) pipe diameters downstream of the meter, based on meter diameter. A check valve must also be installed downstream of the meter to prevent surging or backflow. A spring or weighted check valve may be used, if necessary.
- 6. Unweighted check valves MUST be located at least three (3) pipe diameters downstream of the meter.
- 7. Pressure reducing devices and externally weighted check valves MUST be located at least five (5) pipe diameters downstream of the meter.
- 8. Must install 1-IN minimum conduit raceway.

STRAINER[®]

(SEE TABLE "B")

9. All valves are the responsibility of the property owner, and should be in good working order.

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Meter Size	Meter Lay Length	Strainer Lay Length
3"	17"	7"
4"	20"	9"

24"

"A"

3 PIPE DIAMETERS MIN. (UNWEIGHTED CHECK VALVE)

5 PIPE DIAMETERS MIN. (WEIGHTED CHECK VALVE)

(SEE INSTALLATION NOTES 5-7)

NOTE "C" -----By-pass required, one size smaller allowed.

NOTE "D" -----2" Valve is ½ turn ball valve w/ unthreaded drain cock after valve.

"B"

9"

NOTE "E" -----NO PVC piping permitted through exterior wall penetration/connection point.
Two-inch piping at test connection point must be threaded.
Test connection point shall be accessible within 100-feet of test truck.

30"

DRAIN

REQUIRED

SUPPORTS

FLOOR

ADDITIONAL REQUIREMENTS:

CHECK VALVE (NOTE 5)

- ----- Contractor to furnish manufacturer-approved NSF-61 flanges w/ bolts and gaskets.
- -----NO insulation or covering will be permitted on meters or flanges.
- -----Meter and associated valves shall be located in the same room where the water service first enters the building.
- -----Electrical bonding shall be located so as not to restrict removal of meter flange bolts.
- -----All meters shall be so located that they shall be protected from obstructions and permit ready access for reading, inspection, and servicing, such location to be designated or approved by the water utility.

CITY OF MADISON WATER UTILITY

NOT TO SCALE

BADGER RECORDALL COMPOUND METER STANDARD INSTALLATION