



**BADGER RECORDALL TURBO METER INSTALLATION REQUIREMENTS:**

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

1. A Strainer IS REQUIRED to ensure optimum flow conditioning and protection for the Turbo Series meter measuring element.
2. Turbine meters, with a strainer, REQUIRE a minimum of five (5) pipe diameters of straight pipe upstream of the meter (including the strainer).
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 check valve must 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.

"A"

Meter Size	Meter Lay Length	Turbine Meter-GPM	Max. Cont. Duty	Strainer Lay Length
3"	12"	4 - 550	450 GPM	7"
4"	14"	8 - 1250	1000 GPM	9"
6"	18"	15 - 2500	2000 GPM	9"
8"	20"	20 - 4500	3000 GPM	14"
10"	26"	30 - 7000	5500 GPM	16"

"B"

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

NOTE "D"  
-----2" Valve is ¼ turn ball valve w/ unthreaded drain cock after valve.

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.

**ADDITIONAL/MISC. REQUIREMENTS:**

- 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 TURBO SERIES METER  
STANDARD INSTALLATION