



Water Meter Sizing per AWWA M22, Third Edition

Project: \_\_\_\_\_  
 STRAP #(s): \_\_\_\_\_  
 Address: \_\_\_\_\_  
 City: \_\_\_\_\_ State: \_\_\_\_\_ Zip Code: \_\_\_\_\_  
 Type of Occupancy: \_\_\_\_\_

Fixture	Fixture Value 60 psi		No. of Fixtures		Fixture Value
Bathtub	8	x		=	
Bedpan Washers	10	x		=	
Bidet	2	x		=	
Dental Unit	2	x		=	
Drinking Fountain – Public	2	x		=	
Kitchen Sink	2.2	x		=	
Lavatory	1.5	x		=	
Showerhead (Shower Only)	2.5	x		=	
Service Sink	4	x		=	
Toilet – Flush Valve	35	x		=	
– Tank Type	4	x		=	
Urinal – Pedestal Flush Valve	35	x		=	
– Wall Flush Valve	16	x		=	
Wash Sink (Each Set of Faucets)	4	x		=	
Dishwasher	2	x		=	
Washing Machine	6	x		=	
Hose (50 ft. Wash Down) – ½ in.	5	x		=	
– ⅝ in.	9	x		=	
– ¾ in.	12	x		=	
Combined Fixture Total					

Water-flow Demand per Fixture Value from Figure 4-2 or 4-3 x Pressure Adjustment Factor = \_\_\_\_\_ gpm  
 (For Residual Pressures at Fixture Outlet from 60-80 psi, Pressure Adjustment Factor is 1.00 per Table 4-3)

Add Irrigation – \_\_\_\_\_ Sections\* x 1.16 or 0.40† = \_\_\_\_\_ gpm  
 – \_\_\_\_\_ Hose Bibs x Fixture Value x \_\_\_\_\_ Press. Adj. Factor = \_\_\_\_\_ gpm

\*100 ft<sup>2</sup> area = 1 section †Spray systems – Use 1.16; Rotary systems – Use 0.40



Added Fixed Load = \_\_\_\_\_ gpm  
**TOTAL FIXED DEMAND = \_\_\_\_\_ gpm**

Meter size chosen per BSU Meter Options Table = \_\_\_\_\_ in.

Engineer of Record: \_\_\_\_\_  
 (signature)

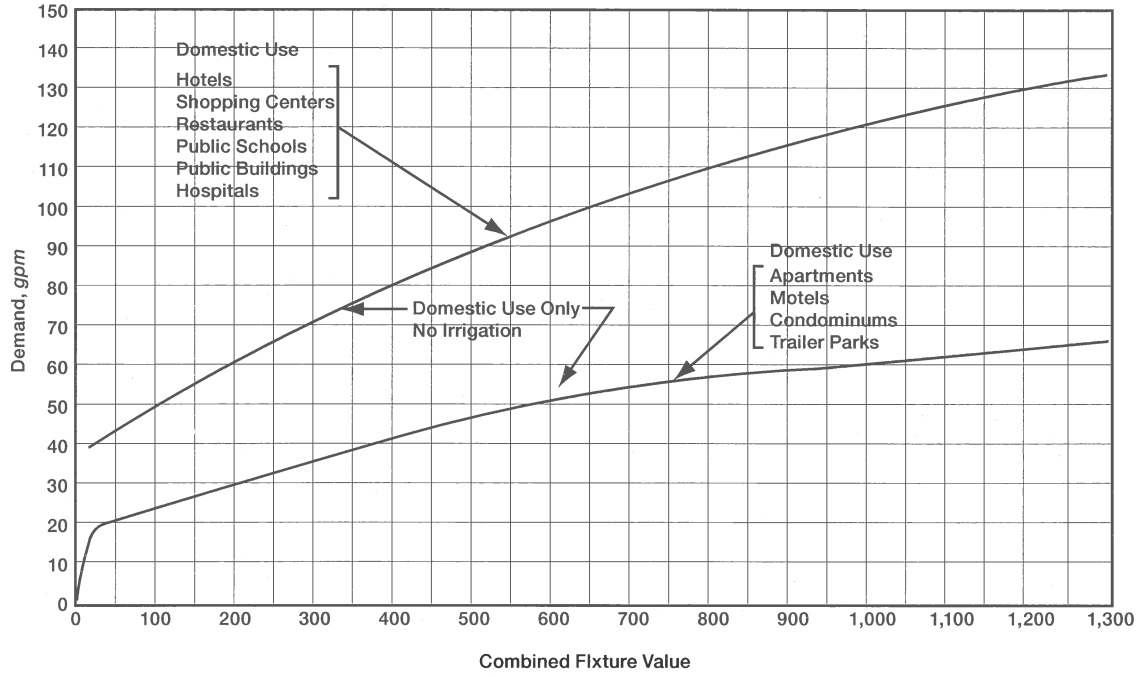


Figure 4-2 Water-flow demand per fixture value—enlarged scale from Figure 4-1

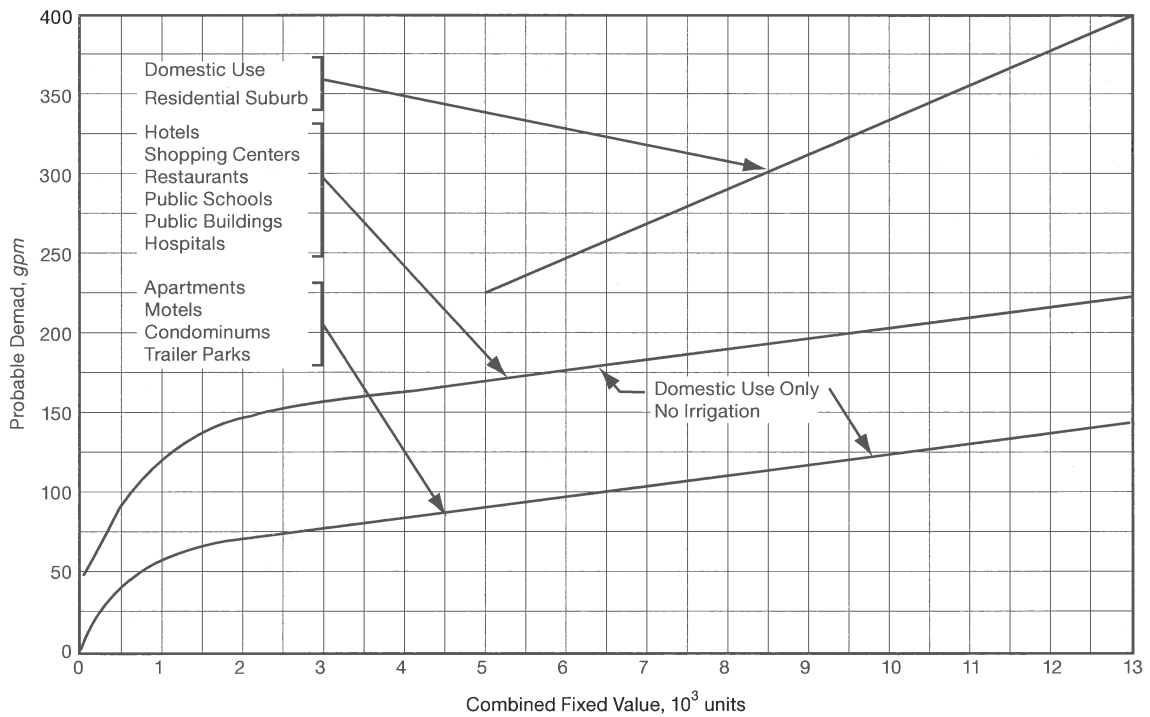


Figure 4-3 Water-flow demand per fixture value

**Table 4-3 Example of fixture value adjustment for pressure (based on Figure 4-6)**

Kitchen Faucet Fixture Value Adjustment			
Residual Pressure at Fixture Outlet, <i>psi</i>	Baseline Flow Rate at 60 <i>psi</i>	Actual Flow Rate at Residual Pressure (Fixture Value)	Pressure Adjustment Factor
15	1.8	1.0	0.56
20	1.8	1.1	0.61
25	1.8	1.2	0.67
30	1.8	1.3	0.72
35	1.8	1.4	0.78
40	1.8	1.5	0.83
50	1.8	1.7	0.94
60	1.8	1.8	1.00
70	1.8	1.8	1.00
80	1.8	1.8	1.00

**Bonita Springs Utilities, Inc.**  
**Meter Options**  
(meters 2" and smaller are installed by BSU)

Mueller Systems, LLC Magnetic Drive Positive Displacement Nutating Disc Meters

<b>Model</b>	<b>Size</b>	<b>Typ. Operating Range</b>	<b>Low Flow</b>	<b>Max. Continuous Operation</b>
420 Bronze Meter w/ Solid State Register (SSR) & 18" Nicor Connector	¾"x¾"	0.5...20 gpm	0.125 gpm	15 gpm
452 Bronze w/ bronze bottom w/ Solid State Register (SSR) & 18" Nicor Connector	1"	2...50 gpm	0.75 gpm	35 gpm
562 D w/ Solid State Register (SSR) & 18" Nicor Connector	1½"	5...100 gpm	1.5 gpm	50 gpm
572 D w/ Solid State Register (SSR) & 18" Nicor Connector	2"	8...160 gpm	2 gpm	80 gpm

Mueller Systems, LLC Electromagnetic Flow Meters (need to be set up to read 99,999,999 before turning over)

<b>Model</b>	<b>Size</b>	<b>Low Flow</b>	<b>Mid Flow</b>	<b>High Flow</b>	<b>Intermittent High Flow</b>
Hersey HbMAG w/ Solid State Register (SSR) & 18" Nicor Connector & AMR/AMI Reading Systems	3"	0.5 gpm	2.75 gpm	550 gpm	825 gpm
	4"	.75 gpm	4.5 gpm	880 gpm	1320 gpm
	6"	1.5 gpm	11.25 gpm	2200 gpm	3300 gpm
	8"	2 gpm	17.5 gpm	3465 gpm	5200 gpm