



# METER SIZE VERIFICATION FORM

FOR METERS SIZED  
LARGER THAN TWO INCHES  
(Per AWWA Manual M22, 2<sup>nd</sup> Ed.)

STEP 1: Complete Project and Applicant Information.

Name of Development Project \_\_\_\_\_

Address of Development Project \_\_\_\_\_

Applicant Contact Name \_\_\_\_\_ Title \_\_\_\_\_

Contact Phone Number \_\_\_\_\_ Contact E-mail \_\_\_\_\_

STEP 2: For Lines 1-19, enter the number of fixtures in Column B, then multiply Column A by Column B and enter the product in Column C.

Line No.	Fixture	COLUMN A Fixture Value @ 60 PSI		COLUMN B No. of Fixtures	=	COLUMN C Total Fixture Value
1	Bathtub	8	x		=	
2	Bedpan Washers	10	x		=	
3	Bidet	2	x		=	
4	Dental Unit	2	x		=	
5	Drinking Fountain - Public	2	x		=	
6	Kitchen Sink	2.2	x		=	
7	Lavatory Sink	1.5	x		=	
8	Showerhead (Shower Only)	2.5	x		=	
9	Service Sink	4	x		=	
10	Toilet . . . . . Flush Type	35	x		=	
11	. . . . . Tank Valve	4	x		=	
12	Urinal . . . . . Pedestrian Flush Valve	35	x		=	
13	. . . . . Wall Flush Valve	16	x		=	
14	Wash Sink (Each Set of Faucets)	4	x		=	
15	Dishwasher	2	x		=	
16	Washing Machine	6	x		=	
17	Hose Connections (50 ft Wash Down) . . . . . 1/2 in.	5	x		=	
18	. . . . . 5/8 in.	9	x		=	
19	. . . . . 3/4 in.	12	x		=	

STEP 3: Add Column C values for Lines 1-19.

20 Combined Fixture Value Total

STEP 4: Given the Combined Fixture Value (Line 20) and project type, enter Peak Demand from Table 1. Interpolate if necessary.

21 Customer Peak Demand (from Table 1)  gpm

STEP 5: Enter the expected Working Pressure at the meter on Line 22 and use Table 2 to determine the Pressure Adjustment Factor.

22 Working Pressure at the Meter  psi

23 Pressure Factor (from Table 2)

STEP 6: Calculate Peak Demand by multiplying Pressure Adjustment Factor (Line 23) by Customer Peak Demand (Line 21).

24 Customer Peak Demand  gpm

STEP 7: Include irrigation demands by multiplying Landscaped Area (Line 25) by Flow Rate Factor (check one). Enter product on Line 26.

25 Square footage of Landscaped Area  s.f.

Check One: Flow Rate Factor = 0.0116 for spray irrigation systems

Flow Rate Factor = 0.0040 for rotary irrigation systems

26 Irrigation Demand = Flow Rate Factor x Landscaped Areas (s.f.)  gpm

**FORM CONTINUED ON REVERSE**

STEP 8: List additional Fixed Demands on Lines 27-29, then add Maximum Demands from Lines 27-29 on Line 30.

Other Fixtures/Demands not included in Fixture List		Min. Sustained/Continuous	Average	Maximum	
27	Description _____				gpm
28	Description _____				gpm
29	Description _____				gpm
30	Total Maximum Demands for All Additional Fixed Loads				_____ gpm

STEP 9: Calculate Total Fixed Demand by adding Customer Peak Demand (Line 24), Irrigation (Line 26), and Fixed Loads (Line 30).

31	Total Fixed Demand	_____ gpm
----	--------------------	-----------

STEP 10: Given Total Fixed Demand (Line 31), use Table 3 to determine Meter Size.

32	Meter Size for Project	_____ in.
----	------------------------	-----------

**TABLE 1:**

**Water Flow Demand Per Fixture Value**

**Type 1** = Hotels, Shopping Centers, Restaurants, Schools, Public Buildings, Hospitals - Domestic Only (no irrigation)

**Type 2** = Apartments, Condominiums, Motels, Trailer Parks - Domestic Only (no irrigation)

**Type 3** = Residential Suburb - Domestic Use

Combined Fixture Value	Peak Demand [gpm]		
	Type 1	Type 2	Type 3
50	43.5	20.5	
100	49.5	23.5	
150	55.0	26.5	
200	60.5	29.5	
250	65.5	32.5	
300	70.5	35.5	
350	75.5	38.5	
400	80.0	41.0	
450	84.5	44.0	
500	88.5	46.5	
550	92.5	49.0	
600	96.0	51.0	
650	99.5	52.5	
700	103.5	54.5	
750	106.5	55.5	
800	109.8	57.0	
850	112.5	58.0	
900	115.5	59.0	
950	118.0	59.5	
1,000	120.5	60.0	
1,050	123.5	61.0	
1,100	125.5	62.0	
1,150	127.5	63.0	
1,200	129.8	64.0	
1,250	132.0	65.0	
1,300	134.0	66.0	
1,500	137.5	66.3	
2,000	146.3	70.0	
2,500	152.5	73.8	
3,000	156.3	77.5	
3,500	160.0	80.0	
4,000	162.5	83.8	
4,500	166.3	86.3	
5,000	170.0	90.0	225.0
5,500	172.5	93.8	236.3
6,000	176.3	97.5	247.5
6,500	180.0	100.0	257.5
7,000	183.8	103.8	268.8
7,500	186.3	107.5	278.8
8,000	190.0	110.0	290.0
8,500	192.5	113.8	300.0
9,000	196.3	116.3	312.5
9,500	200.0	120.0	322.5
10,000	202.5	122.5	333.8
10,500	206.3	127.5	345.0
11,000	208.8	128.8	355.0
11,500	212.5	133.8	366.3
12,000	215.0	137.5	376.3
12,500	220.0	140.0	388.8
13,000	222.5	142.5	400.0

**TABLE 2:**

**Pressure Adjustment Factor**

Working Pressure at Meter Discharge [psi]	Pressure Adjustment Factor
35	0.74
40	0.80
50	0.90
60	1.00
70	1.09
80	1.17
90	1.25
100	1.34

**TABLE 3:**

**Meter Size Given Total Demand**

Total Fixed Demand [gpm]	Meter Size
0-30	3/4"
31-50	1"
51-100	1-1/2"
101-160	2"
161-350	3"
351-600	4"
601-1350	6"
1350-1600	8"

**FOR ACWD USE ONLY**

ACWD No. _____
Job No. (if known): _____
Initial                  Date
App. Rec. By: _____
App. Rev. By: _____
Log Entry By: _____
Remarks: _____