



Pagosa Area Water and Sanitation District
 100 Lyn Ave. / P.O. Drawer 4610, Pagosa Springs, CO 81157
 PHONE: (970) 731-2691 FAX: (970) 731-2693

Account Number: _____
 Permit Number: _____

COMMERCIAL WATER METER SIZING WORKSHEET

Date: _____
 Name of Property Owner: _____
 Name of Contact Person: _____
 Name of Business (if applicable): _____

Contact Person Phone Number: _____
 Work: _____
 Cell: _____

Property Location
 Street Address: _____
 Subdivision: _____ Block: _____ Lot: _____

Type of Fixture	Fixtures in New Structure	+	Fixtures in Existing Structure	-	Fixtures Removed	=	Total Fixtures	x	Fixture Unit Multiplier (choose ONE per row)		=	Total Fixture Unit Value
									General Use	Heavy Use Assembly		
Bar Sink		+		-		=		x	3.0		=	
Bathroom sink, each set of faucets		+		-		=		x	2.0		=	
Clinic sink		+		-		=		x	8.0		=	
Clothes Washer, domestic (8 lb)		+		-		=		x	3.0		=	
Clothes Washer, domestic (15 lb)		+		-		=		x	4.0		=	
Dental unit, cuspidor		+		-		=		x	1.0		=	
Dishwasher, domestic		+		-		=		x	1.5		=	
Drinking fountain or water cooler		+		-		=		x	0.5	0.8	=	
Hose bibb		+		-		=		x	2.5		=	
Hose bibb, each additional		+		-		=		x	1.0		=	
Kitchen sink, hotel or restaurant		+		-		=		x	4.0		=	
Laundry sink		+		-		=		x	2.0		=	
Lawn sprinkler, each full head		+		-		=		x	1.0		=	
Service sink or mop basin		+		-		=		x	3.0		=	
Shower		+		-		=		x	2.0		=	
Shower, continuous use		+		-		=		x	5.0		=	
Toilet, 1.6 GPF gravity tank		+		-		=		x	2.5	4.0	=	
Toilet, 3.5 GPF gravity tank		+		-		=		x	5.0	7.0	=	
Urinal, 1.0 GPF		+		-		=		x	3.0	5.0	=	
Urinal, greater than 1.0 GPF		+		-		=		x	5.0	6.0	=	
Urinal, flush tank		+		-		=		x	3.0	4.0	=	
Washfountain, circular spray		+		-		=		x	4.0		=	
Other (Describe)		+		-		=		x			=	
Other (Describe)		+		-		=		x			=	
Fixture Unit Subtotal:												

For explanations, see 1997 Uniform Plumbing Code and 2006 International Plumbing Code

Other Water Requirements: See Table E103.3(3)

Fixture Description: _____ GPM: _____ Number: _____ Calculated Fixture Units: _____
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Total Fixture Units:

I affirm that the information given is correct. I acknowledge that the approval given for minimum meter size and maximum water capacity is based solely on the information provided above, and such determination is at the discretion of the Pagosa Area Water and Sanitation District. Any deviation under construction will require resubmission of corrected data for determination of adequacy of meter size.

Required Signatures:
 Signature (Design Engineer) _____ Date Signed _____
 Signature (Owner/Agent) _____ Date Signed _____

Instructions for the completion of Water Meter Sizing Worksheet

Matrix to Determine Meter Size and Water Demand

Complete the columns of the matrix by supplying the quantity and type of fixtures being added, remaining and/or removed. (Note: Relocated fixtures are considered "remaining" since there is no change in demand.) Accuracy of the fixture count is necessary to determine the appropriate meter size and Equivalent Units.

Fixtures in New Structure

In the "Fixtures in New Structure" column, list the number of new fixtures or the number of fixtures being added to an existing project under the appropriate fixture type.

Fixtures in Existing Structure

In the "Fixtures in Existing Structure" column, list the number of fixtures that will remain or that will be relocated during the construction phase of the project.

Fixtures Removed

In the "Fixtures Removed" column, list the number of fixtures that are actually being removed which will create a reduction in the water demand. Note: Replacing a sink with a new sink or a hose bibb with a new hose bibb, etc, does not constitute "Removed"; they are considered as "Fixtures in Existing Structure" (unless replacement is by fixtures of lower-flow capacity).

Other Water Requirements

There are some process water demands that are not listed, such as car washes. Each of these will be assigned a fixture unit count based upon its GPM demand. Make sure this information is provided.

Fixture Unit Multiplier

Each plumbing fixture is given a fixture unit value based upon the 1997 Uniform Plumbing Code. Fixture units are used for water meter sizing purposes. The unit count for each fixture is determined by multiplying the number of each fixture type by the appropriate number in the multiplier column. Only ONE multiplier should be chosen per row.

GENERAL USE: Applies to business, commercial, industrial and assembly occupancies other than those defined under "Heavy Use." Included are the public and common areas in hotels, restaurants and multi-dwelling buildings.
HEAVY USE: Applies to toilet facilities in occupancies that place a heavy, but intermittent, time-based demand on water supply system, such as schools, auditoriums, stadiums, race courses, theaters and similar occupancies where queuing is likely to occur during periods of peak use.

Lawn Sprinkler Heads

Add all 1/4, 1/2, 3/4 and full irrigation heads to determine the total number of full sprinkler heads. For example, two 1/4 heads and one 1/2 head will equal one full head.

GPM (Gallons per Minute)

When any water requirement is listed by GPM demand, fixture unit count will be determined by using the 2006 Uniform Plumbing Code Table E103.3(3) - Table For Estimating Demand

FOR OFFICE USE ONLY - TO BE COMPLETED BY PAWSD STAFF

WATER USER FEES - COMMERCIAL USERS (effective June 10, 2008)

Required Service Size and Equivalent Units Chart			
Fixture Unit Count	Meter Size	# Equivalent Units*	GPM**
0-30	5/8"	1	20
30.5-52	3/4"	1.5	30
52.5-127	1"	2.5	50
128-375	1.5"	5	100
376-700	2"	8	180
701-1950	3"	16	320
1951-3700	4"	25	500
3,701-8,200	6"	50	1,000

*EU designation represents hydraulic capacity ratio of meter size, as set forth by AWWA Manual M-6

**With approximate flow of 60 psi at meter

Monthly Basic Service Assessment***			
Meter Size	EU	Water	Water/Wastewater
5/8"	1	\$12	\$35
3/4"	1.5	\$18	\$52.50
1"	2.5	\$30	\$87.50
1.5"	5	\$60	\$175
2"	8	\$96	\$560
3"	16	\$192	\$560
4"	25	\$300	\$875
6"	50	\$600	\$1,750

*** does not include usage rates

FIXTURE COUNT TOTAL (from pg.1): _____

CORRESPONDING METER SIZE: _____

EU FOR BILLING: _____

EU CREDIT (if applicable): < _____ >

EU FOR FEE ASSESSMENT: _____

BASIC SERVICE FEE: \$ _____

CIF/WRF FEE: \$ _____

NOTES / COMMENTS:

Prepared By: _____ Date: _____

PLEASE NOTE: FEE SCHEDULES ARE SUBJECT TO CHANGE