

RESIDENTIAL WATER METER SIZING FORM

Contact Name: _____

Building Permit No.(if applicable): _____

Service Address: _____ Phone No.: _____

Email Address: _____

Legal Description: _____

Use of Facility: Residential _____

Property ID: _____

INSTRUCTIONS: This application must be signed by the property owner or authorized representative. Please complete the items below and submit one Water Meter Sizing Worksheet for each water meter on the property as applicable. Should you have any questions, please contact the Planning Department at (956) 565-3114. **Please Read Pg. 2 Review Process.**

Domestic Use Only ☐ Combined Domestic/Irrigation Use ☐

All listed fixture values are from IPC Table 103.3(2). Please include any unlisted fixtures in the Other rows below. Loads should be assumed by comparing the fixture to one listed that uses water in similar quantities and at similar rates.

2 DOMESTIC WATER DEMAND? YES ☒ NO ☐

Type of Fixture	Fixtures Proposed [QTY]	Existing Fixtures [QTY]	Total Fixtures	IPC Load Value	IPC Total Fixture Unit
All-in-one Bathtub/Shower			= 0	x 3.6	= 0
Shower (per head)			= 0	x 1.4	= 0
Bathtub (Private)			= 0	x 1.4	= 0
Bathtub (Public)			= 0	x 4	= 0
Kitchen Sink			= 0	x 1.4	= 0
Laundry Tray			= 0	x 1.4	= 0
Lavatory			= 0	x .7	= 0
Water Closet 1.6 GPF			= 0	x 2.2	= 0
Service Sink/Mop Basin			= 0	x 3	= 0
Urinal (3/4" Flush Valve)			= 0	x 5	= 0
Washing Machine (8 lb)			= 0	x 1.4	= 0
Dishwasher			= 0	x 1.4	= 0
Hose Bib (1/2")			= 2	x 5	= 10
Other:			= 0	x 1.0	= 0
			= 0	x 1.0	= 0
DOMESTIC WATER DEMAND FIXTURE UNIT TOTAL:					10.0
DOMESTIC WATER DEMAND FIXTURE UNIT TOTAL CONVERTED TO GPM:					14.6

Water meter approval methodology is based on the cumulative peak flow rates of the domestic and/or irrigation supply, in accordance with the Kamstrup maximum flow rate specifications for a ultrasonic water meter as shown in table 1.

Meter Size	Maximum Capacity (GPM)	Fixture Units
5/8"	25	35
3/4"	32	60
1"	55	140
1-1/2"	120	400
2"	160	500

(Ultrasonic Water Meter)

* For residential applications, 2 hose bibs shall always be counted.

**Table 1 - Meter Sizing above does not include irrigation water demand.

*** See Table 2 for Fixture Unit Count to GPM Conversions

3 SWIMMING POOL/SPA/TANK & OTHER MISCELLANEOUS WATER DEMAND? YES ☐ NO ☒

(If YES, Provide Area in Square Feet)

Swimming Pool/Spa/Tank: Please indicate how your swimming pool/spa/tank is to be filled: ☐ Hose Bib or ☐ Dedicated Line. If filled by hose bib, no additional water demand is assessed. If filled by dedicated water line, please provide the required flow rate in GPM: _____

Other Miscellaneous Water Demand: Attach detailed justification information sufficient to describe the water demand. Total proposed GPM: _____

SWIMMING POOL/SPA/TANK & OTHER MISCELLANEOUS WATER DEMAND TOTAL IN GPM: 0.0

4 IRRIGATION WATER DEMAND? YES ☐ NO ☒

Option A: State the measured flow rate for the largest separate zone of your irrigation system in GPM: _____

Option B: Describe the largest separate zone. Provide the number of sprinkler heads _____ and rated flow in GPM per head _____

to obtain a total flow rate in GPM: 0.0

IRRIGATION WATER DEMAND TOTAL IN GPM: 0.0

5 TOTAL WATER DEMAND in GPM (the sum of total GPM from above items 2, 3 and 4): 14.6

Verify the total water demand is within your existing meter's capacity, otherwise a meter upgrade may be required.

6 CERTIFICATION: I certify that the above water demand is the **TOTAL AMOUNT OF WATER DEMAND ON THE METER**. If I intend to create additional water demand on the property, I will inform Development Services prior to creating any additional water demand.

Applicant's Signature: _____ Date: _____

Print Name: _____

If this form is to be signed by an authorized representative, written evidence of authority to represent the applicant shall be provided.

WATER METER SIZING WORKSHEET ADDITIONAL INFORMATION - RESIDENTIAL

NOTES:

- ② A. Domestic Water Demand Calculation:** Complete the columns of the chart by supplying the quantity and type of fixtures being added, remaining, and/or removed. Accuracy of the fixture count is necessary to determine the appropriate meter size and GPM. Refer to Table 1 below for details on Meter Sizing.
- ② B. Fixtures Added:** In this column, list the number of new fixtures or the number of fixtures being added to an existing project under the appropriate fixture type.
- ② C. Existing Fixtures:** In this column, list the number of fixtures that will remain and/or that will be relocated during and preceding the construction phase of the project.
- ② D. Fixtures Removed if Applicable:** In this column, list the number of fixtures that are actually being removed which will create a reduction in the water demand. If water fixtures are being demolished, photographs of the water fixtures may be required to obtain the appropriate fixture unit credits.
- ② E. Fixture Unit Multiplier:** Each plumbing fixture is given a fixture unit value. 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.
- ③. Other Miscellaneous Water Demand:** There are some process water demands that are not listed, such as unusual water fixtures, custom equipment, etc. Each of these will be assessed on a case by case basis and assigned either a fixture unit value or demand in GPM. Refer to Table 2 above.

Table 2 IPC Table E103.3(3) Table For Estimating Demand							
Flow GPM	Fixture Units	Flow GPM	Fixture Units	Flow GPM	Fixture Units	Flow GPM	Fixture Units
3	1	18	16	41	90	208	1000
5	2	18.4	17	43.5	100	239	1250
6.5	3	18.8	18	48	120	269	1500
8	4	19.2	19	52.5	140	297	1750
9.4	5	19.6	20	57	160	325	2000
10.7	6	21.5	25	61	180	380	2500
11.8	7	23.3	30	65	200	433	3000
12.8	8	24.9	35	70	225	525	4000
13.7	9	26.3	40	75	250	593	5000
15.4	11	27.7	45	80	275		
16	12	29.1	50	85	300		
16.5	13	32	60	105	400		
17	14	35	70	124	500		
17.5	15	38.8	80	170	750		

All listed fixture values are from IPC Table 103.3(3). Please include any unlisted fixtures in the Other rows below. Loads should be assumed by comparing the fixture to one listed that uses water in similar quantities and at similar rates.

Review Process:

Sizing of water meters will be based upon the peak flow rate for the system. Please complete and submit this form along with proposed plumbing and irrigation plan(if combined system) for the service location to the Planning Department, 400 S. Ohio Ave, Mercedes, TX 78570. Submittals may also be sent via email to for New Accounts(Individual). If submitting electronically please thoroughly identify the address and project information. You may refer to our current Development Policy & Standards Manual for additional information regarding service line and meter sizing specifications.

City of Mercedes reserves the right to request a Water Meter Sizing Form to verify water capacity and demand requirements, and must be submitted and approved prior to accepting payment for Fees and executing a water service agreement.