## **ENGINEERING INFORMATION -DEMAND WEIGHTS**

Table 5 - Suggested allowances for decrease in capacity of ferrous pipes

Estimated load (gpm)	Recommended allowances to be applied to estimated load or to capacity of new ferrous pipe to provide for aging								
	Noncaking		Slightly caking		Caking, moderately bad		Caking, very bad		
	To capacity	To load	To capacity	To load	To capacity	To load	To capacity	To load	
	%	%	%	%	%	%	%	%	
0.0 to 2.5	- 20	+ 25	- 40	+ 60	- 60	+ 150	- 80	+ 400	
2.6 to 5.0	- 20	+ 25	- 35	+ 50	- 55	+ 130	- 75	+ 300	
5.1 to 10	- 20	+ 25	- 30	+ 45	- 55	+ 110	- 65	+ 200	
11 to 8	- 20	+ 25	- 30	+ 45	- 50	+ 100	- 65	+ 200	
19 to 37	- 20	+ 25	- 30	+ 40	- 45	+ 80	- 60	+ 150	
38 to 56	- 20	+ 25	- 30	+ 40	- 40	+ 65	- 60	+ 150	
57 to 100	- 20	+ 25	- 25	+ 35	- 35	+ 50	- 55	+ 125	
111 to 175	- 20	+ 25	- 25	+ 35	- 35	+ 50	- 55	+ 125	
176 to 310	- 20	+ 25	- 25	+ 35	- 30	+ 45	- 50	+ 100	
311 to 635	- 20	+ 25	- 25	+ 35	- 30	+ 45	- 50	+ 100	
636 to 1150	- 20	+ 25	- 25	+ 35	- 30	+ 45	- 50	+ 100	
1151 to 1870	- 20	+ 25	- 25	+ 35	- 30	+ 45	- 50	+ 100	

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Table 6 - Demand weights of fixtures in fixture units 1

Fixture of group <sup>2</sup>	Occupancy	Type of supply control	Weight in fixture units <sup>3</sup>	
Water closet	Public	Flush valve	10	
water closet	Public	Flush tank	5	
Pedestal urinal	Public	Flush valve	10	
Stall or wall urinal	Public	Flush valve	5	
Stan of wan urman	Public	Flush tank	3	
Lavatory	Public	Faucet	2	
Bathtub	Public	Faucet	4	
Shower head	Public	Mixing valve	4	
Service sink	Office, etc.	Faucet	3	
Kitchen sink	Hotel or restaurant	Faucet	4	
Water closet	Private	Flush valve	6	
water closet	Private	Flush tank	6 3	
Lavatory	Private	Faucet	1	
Bathtub	Private	Faucet	2	
Shower head	Private	Mixing valve	2	
Dothers on cross	Private	Flush valve for closet	8	
Bathroom group	Private	Flush tank for closet	6	
Separate shower	Private	Mixing valve	2	
Kitchen sink	Private	Faucet	2	
Laundry trays (1-3)	Private	Faucet	3	
Combination fixture	Private	Faucet	3	

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 <sup>1</sup> For supply outlets likely to impose continuous demands, estimate continuous supply separately and add to total demand for fixtures.
2 For Fixtures not listed, weights may be assumed by comparing the fixture to a listed one using water in similar quantities and at similar rates.
3 The given weights are for total demand. For fixtures with both hot- and cold-water supplies, the weights for maximum separate demands may be taken as 3/4 the listed demand for the supply.

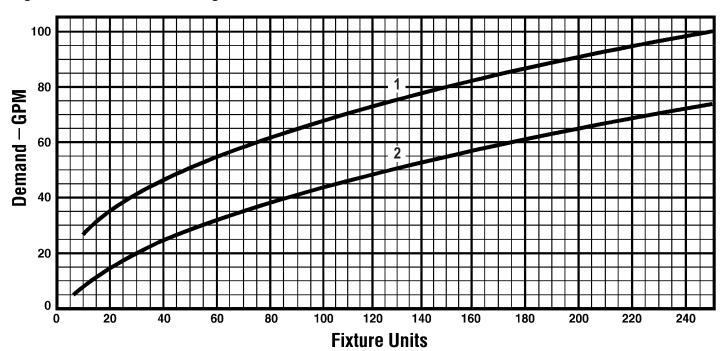
Figure 8 - Chart of demand weights in fixture units

Type of building as to number and kind of fixtures	Kinds of fixtures			Total fixture units 1		Total demand 2	
	Bathrooms	Kitchen sinks or combination fixtures	Groups of 1 to 3 laundry trays	With flush valves for water closets	With flush tanks for water closets	With flush valves for water closets	With flush tanks for water closets
	Number	Number	Number	Number	Number	gpm	gpm
A	1	1	0	10	8	27	6
В	1	1	1	13	11	30	8
С	2	1	1	21	17	36	12
D	3	2	1	31	25	42	17
Е	4	4	2	46	38	49	24
F	8	8	3	89	73	64	36
G	16	16	4	172	140	84	52

<sup>&</sup>lt;sup>1</sup> Total fixture units from Table 6.

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Figure 8 - Chart of demand weights in fixture units



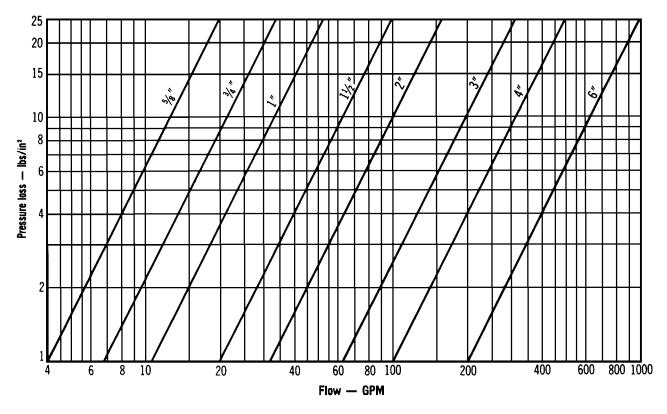
No. 1 For system predominantly for flush valves

No. 2 For system predominantly for flush tanks

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<sup>&</sup>lt;sup>2</sup> Total demand from Figure 8.

Table 9 - Pressure losses in water meters



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