

The following information describes estimated maximum GPM flows from certain typical fixtures and appliances. Estimates do not consider "water saving" devices. The "fixture count" columns are factors to be used to determine estimated flow rate requirement for homes, apartments and commercial facilities. Other types of equipment not listed below, but present on the premises must be also considered in the analysis.

A	ESTIMATED FLOW RATE (gpm)	"RESIDENTIAL" FIXTURE UNITS	"PUBLIC" FIXTURE UNITS
FIXTURE / APPLIANCE			
Lavatory	4	1	2
Bathtub	6	2	4
Shower Head	5	2	4
Toilet (with flush tank)	3	3	5
Toilet (with flush meter)	15	6	10
Urinal (with flush tank)	3	---	3
Urinal (with flush meter)	10	---	5
Kitchen Sink	5	2	4
Dishwasher	2	1	3 ¹
Laundry Tray / Service Sink	5	3	3
Automatic Clothes Washer	5	2	4 ¹
Drinking Water Faucet / Water Fountain	.75	.25	.50

NOTE 1: Check with manufacturer of appliance or consult specifications manual for exact flow rate.

B	Flow RATES (gpm)	TOTAL USAGE (gallons)	NUMBER of BATHROOMS in the HOME			
			1	1^{1/2}	2-2^{1/2}	3-4
OUTLETS						
Shower / Bath Tub	5	35	35	35	53	70
Lavatory Sink	4	2	2	4	6	8
Toilet	4	5	5	10	15	20
Kitchen Sink	5	3	3	3	3	3
Automatic Washer	5	35	--	18	18	18
Dishwasher	2	14	--	--	3	3
Seven Minute *Peak Demand	--	--	45	70	98	122
Minimum Sized Pump Required	--	--	7 gpm	10 gpm	14 gpm	17 gpm
Minimum Treatment Equipment Reqd.	--	--	5 gpm	6 gpm	7 gpm	10 gpm

* Peak demand can occur several times during morning and evening.

NOTE 1: It is always better to have larger flow rate capacity treatment equipment if the pump capacity is available for backwashing.

NOTE 2: Chart B was adapted from *Ground Water Age* magazine, December 1991, page 22.