

South Jordan Meter and Distribution Pipe Sizing



Static Pressure psi (Water pressure): _____

WSFU (Water-Supply Fixture-Unit): _____

Maximum Developed Length:
(Length from water meter to most remote fixture) _____

Elevation above Source:
(Elevation from water main to highest fixture) _____

Pressure reducing valve (PRV) (80% of static pressure): _____

Equipment loss (Water softener = -5): _____

$$\frac{\text{_____}}{\text{(Static pressure)}} \times \frac{0.80}{(80\%)} = \frac{\text{_____}}{\text{(Sub-total)}}$$

$$\frac{\text{_____}}{\text{(Sub-total)}} - \frac{\text{_____}}{\text{(1/2 Elevation)}} - \frac{\text{_____}}{\text{(Equip. loss)}} = \frac{\text{_____}}{\text{(Total psi)}}$$

TABLE AP201.1

Meter Size = $\frac{3}{4}$ " or 1" (circle one)

Required Distribution pipe size = 1 $\frac{1}{4}$ " or 1" (circle one)

WSFU TABLE P2903.6

FIXTURE	QUANTITY	X	COMBINED =	TOTAL
Bathtub (with/without overhead shower head)			1.4	
Clothes washer			1.4	
Dishwasher			1.4	
Full-bath group with bathtub (with/without showerhead) or shower stall			3.6	
Half-bath group (water closet and lavatory)			2.6	
Hose bibb (sillcock)			2.5	
Kitchen group (dishwasher and sink with or without food-waste disposer)			2.5	
Kitchen sink			1.4	
Laundry group (clothes washer standpipe and laundry tub)			2.5	
Laundry tub			1.4	
Lavatory			0.7	
Shower stall			1.4	
Water closet (tank type)			2.2	
TOTAL WSFU				

TABLE P2903.6
WATER-SUPPLY FIXTURE-UNIT VALUES FOR VARIOUS PLUMBING FIXTURES AND FIXTURE GROUPS

TYPE OF FIXTURES OR GROUP OF FIXTURES	WATER-SUPPLY FIXTURE-UNIT VALUE (w.s.f.u.)		
	Hot	Cold	Combined
Bathtub (with/without overhead shower head)	1.0	1.0	1.4
Clothes washer	1.0	1.0	1.4
Dishwasher	1.4	—	1.4
Full-bath group with bathtub (with/without shower head) or shower stall	1.5	2.7	3.6
Half-bath group (water closet and lavatory)	0.5	2.5	2.6
Hose bibb (sillcock) ^a	—	2.5	2.5
Kitchen group (dishwasher and sink with or without food-waste disposer)	1.9	1.0	2.5
Kitchen sink	1.0	1.0	1.4
Laundry group (clothes washer standpipe and laundry tub)	1.8	1.8	2.5
Laundry tub	1.0	1.0	1.4
Lavatory	0.5	0.5	0.7
Shower stall	1.0	1.0	1.4
Water closet (tank type)	—	2.2	2.2

For SI: 1 gallon per minute = 3.785 L/m.

a. The fixture unit value 2.5 assumes a flow demand of 2.5 gpm, such as for an individual lawn sprinkler device. If a hose bibb or sill cock will be required to furnish a greater flow, the equivalent fixture-unit value may be obtained from this table or [Table P2903.6\(1\)](#).

TABLE AP201.1
MINIMUM SIZE OF WATER METERS, MAINS AND DISTRIBUTION PIPING BASED ON WATER SUPPLY FIXTURE UNIT VALUES (w.s.f.u.)

METER AND SERVICE PIPE (inches)	DISTRIBUTION PIPE (inches)	MAXIMUM DEVELOPMENT LENGTH (feet)									
		40	60	80	100	150	200	250	300	400	500
Pressure Range 40 to 49 psi		40	60	80	100	150	200	250	300	400	500
³ / ₄	¹ / ₂ ^a	3	2.5	2	1.5	1.5	1	1	0.5	0.5	0.5
³ / ₄	³ / ₄	9.5	9.5	8.5	7	5.5	4.5	3.5	3	2.5	2
³ / ₄	1	32	32	32	26	18	13.5	10.5	9	7.5	6
1	1	32	32	32	32	21	15	11.5	9.5	7.5	6.5
³ / ₄	1 ¹ / ₄	32	32	32	32	32	32	32	27	21	16.5
1	1 ¹ / ₄	80	80	80	80	65	52	42	35	26	20
1 ¹ / ₂	1 ¹ / ₄	80	80	80	80	75	59	48	39	28	21
1	1 ¹ / ₂	87	87	87	87	87	87	87	78	65	55
1 ¹ / ₂	1 ¹ / ₂	151	151	151	151	151	130	109	93	75	63
2	1 ¹ / ₂	151	151	151	151	151	139	115	98	77	64
1	2	87	87	87	87	87	87	87	87	87	87
1 ¹ / ₂	2	275	275	275	275	275	275	264	238	198	169
2	2	365	365	365	365	365	349	304	270	220	185
2	2 ¹ / ₂	533	533	533	533	533	533	533	528	456	403

METER AND SERVICE PIPE (inches)	DISTRIBUTION PIPE (inches)	MAXIMUM DEVELOPMENT LENGTH (feet)									
		40	60	80	100	150	200	250	300	400	500
Pressure Range 50 to 60 psi		40	60	80	100	150	200	250	300	400	500
3/4	1/2 ^a	3	3	2.5	2	1.5	1	1	1	0.5	0.5
3/4	3/4	9.5	9.5	9.5	8.5	6.5	5	4.5	4	3	2.5
3/4	1	32	32	32	32	25	18.5	14.5	12	9.5	8
1	1	32	32	32	32	30	22	16.5	13	10	8
3/4	1 1/4	32	32	32	32	32	32	32	32	29	24
1	1 1/4	80	80	80	80	80	68	57	48	35	28
1 1/2	1 1/4	80	80	80	80	80	75	63	53	39	29
1	1 1/2	87	87	87	87	87	87	87	87	82	70
1 1/2	1 1/2	151	151	151	151	151	151	139	120	94	79
2	1 1/2	151	151	151	151	151	151	146	126	97	81
1	2	87	87	87	87	87	87	87	87	87	87
1 1/2	2	275	275	275	275	275	275	275	275	247	213
2	2	365	365	365	365	365	365	365	329	272	232
2	2 1/2	533	533	533	533	533	533	533	533	533	486

METER AND SERVICE PIPE (inches)	DISTRIBUTION PIPE (inches)	MAXIMUM DEVELOPMENT LENGTH (feet)									
		40	60	80	100	150	200	250	300	400	500
Pressure Range Over 60		40	60	80	100	150	200	250	300	400	500
3/4	1/2 ^a	3	3	3	2.5	2	1.5	1.5	1	1	0.5
3/4	3/4	9.5	9.5	9.5	9.5	7.5	6	5	4.5	3.5	3
3/4	1	32	32	32	32	32	24	19.5	15.5	11.5	9.5
1	1	32	32	32	32	32	28	28	17	12	9.5
3/4	1 1/4	32	32	32	32	32	32	32	32	32	30
1	1 1/4	80	80	80	80	80	80	69	60	46	36
1 1/2	1 1/4	80	80	80	80	80	80	76	65	50	38
1	1 1/2	87	87	87	87	87	87	87	87	87	84
1 1/2	1 1/2	151	151	151	151	151	151	151	144	114	94
2	1 1/2	151	151	151	151	151	151	151	151	118	97
1	2	87	87	87	87	87	87	87	87	87	87
1 1/2	2	275	275	275	275	275	275	275	275	275	252
2	2	365	368	368	368	368	368	368	368	318	273
2	2 1/2	533	533	533	533	533	533	533	533	533	533

For SI: 1 inch = 25.4, 1 foot = 304.8 mm, 1 pound per square inch = 6.895 kPa.

a. Minimum size for building supply is a 3/4-inch pipe.