

**Discharge Rate Through Siphon (in gallons per minute [gpm])**

Head (feet)	Pipe Length (feet)											
	75			100			150			200		
	Pipe Diameter (inches)			Pipe Diameter (inches)			Pipe Diameter (inches)			Pipe Diameter (inches)		
	1 1/4	1 1/2	2	1 1/4	1 1/2	2	1 1/4	1 1/2	2	1 1/4	1 1/2	2
2	14	19	33	12	17	30	10	14	25	9	12	20
4	20	27	47	17	24	42	14	20	35	13	17	28
6	24	34	58	21	30	51	18	24	43	15	21	34
8	28	39	67	25	34	59	20	28	49	18	25	39
10	31	43	75	27	38	66	23	32	55	20	28	44
15	38	53	92	34	47	81	28	39	67	24	34	53
20	44	61	106	39	54	93	32	45	78	28	39	62
25	50	69	118	43	60	104	36	50	87	31	44	69

Notes:

1. This standard plan is an alternative water supply line to Form KS-ENG-408. It is a siphon and will require careful construction to prevent air leaks in the pipe and fittings. A siphon line should not be used if the vertical distance between the intake and filler pipe fitting exceeds 20 feet.
2. Intake elevation shall be a minimum of 2 feet above the maximum water level in the downstream tank.
3. Test the siphon for leakage before backfilling. Fill the pipe full of water by closing the downstream valve and hold for 24 hours. Repair any leaks--however small.
4. Fill in the pipe type, pipe and valve diameters, and quantities on the drawing.