

FLOW RATE AS A FUNCTION OF PRESSURE HEAD AND HOLE DIAMETER IN DRILLED PVC PIPE

<u>Pressure Head</u>		<u>Drilled Hole Diameter (inches)</u>					
		<u>3/32*</u>	<u>1/8**</u>	<u>5/32</u>	<u>3/16</u>	<u>7/32</u>	<u>1/4</u>
(feet)	(PSI)	Flow Rate (gallons per minute)					
1	0.43	0.10	0.18	0.29	0.42	0.56	0.74
2	0.87	0.15	0.26	0.41	0.59	0.80	1.04
3	1.30	0.18	0.32	0.50	0.72	0.98	1.28
4	1.73	0.21	0.37	0.58	0.83	1.13	1.48
5	2.16	0.23	0.41	0.64	0.93	1.26	1.65
6	2.60	0.25	0.45	0.70	1.02	1.38	1.81

*This size is not recommended.

**Not recommended for entire system, and only for relatively clear effluents.

$$Q = 449 CA (2gh)^{1/2}$$

Where: Q = flow per orifice (gpm)
 $C = 0.6$ for sharp-edged orifices
 A = cross-sectional area of orifice (ft^2)
 g = gravitational constant = $32.2 ft/sec^2$
 h = pressure head (ft)

$$Q = 1697.97 d^2 h^{1/2}$$

Where: Q = flow per orifice (gpm)
 d = diameter of orifice (ft^2)
 h = pressure head (ft)

$$Q = 11.79 d^2 h^{1/2}$$

Where: Q = flow per orifice (gpm)
 d = diameter of orifice (inches)
 h = pressure head (ft)