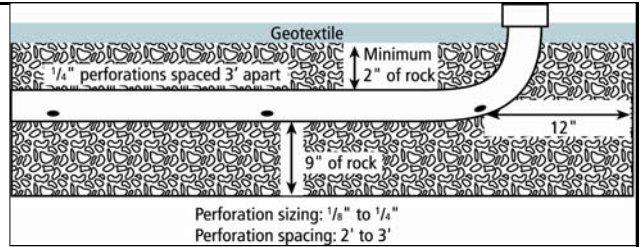


Pressure Distribution Worksheet - Draft

- Select *Number of Perforated Laterals*:
- Select *Perforation Spacing*: ft
- Select *Perforation Diameter*: inch
- Determine the *Number of Perforation Spaces*. Divide the *Length of Laterals* (Line 16) by the *Perforation Spacing* (Line 2) and round down to the nearest whole number.



Number of Perforation Spaces = ft ÷ ft = Spaces

- Number of Perforations per Lateral* is equal to 1.0 plus the *Number of Perforation Spaces* (Line 4).
Perforations Per Lateral = Spaces + 1 =

Check Table I to ensure that the number of perforations per lateral guarantees less than a 10% discharge variation.

Table I Maximum Number of Perforations Per Lateral to Guarantee <10% Discharge Variation																	
Perforation Spacing (Feet)	1/4 Inch Holes					Perforation Spacing (Feet)	3/16 Inch Holes					Perforation Spacing (Feet)	1/8 Inch Holes				
	Pipe Diameter (Inches)						Pipe Diameter (Inches)						Pipe Diameter (Inches)				
	1	1 1/4	1 1/2	2	3		1	1 1/4	1 1/2	2	3		1	1 1/4	1 1/2	2	3
2	10	13	18	30	60	2	12	18	26	46	87	2	21	33	44	74	149
2 1/2	8	12	16	28	54	2 1/2	12	17	24	40	80	2 1/2	20	30	41	69	135
3	8	12	16	25	52	3	12	16	22	37	75	3	20	29	38	64	128

- Total Number of Perforations* equals the *Number of Perforations per Lateral* (Line 5) multiplied by the *Number of Perforated Laterals* (Line 1).
 Perforations Per Lateral X Number of Perforated Laterals = Total Number of Perforations

Calculate the *Square Feet per Perforation*
Recommended value is 6-10 ft² per perforation. Does not apply to At-Grades

- Bed Area* = Bed Width (ft) X Bed Length (ft)
 ft X ft = ft²
- Square Foot per Perforation* = *Bed Area* (Line 7) divided by the *Total Number of Perforations* (Line 6).
 ft² ÷ perforations = ft²/perforations

- Select *Minimum Average Head*: ft
- Select *Perforation Discharge* (GPM) based on Table III: GPM per Perforation

Table II Volume of Liquid in Pipe		Table III Perforation Discharge (GPM)				
Pipe Diameter (inches)	Liquid Per Foot (Gallons)	Head (ft)	Perforation Diameter			
			1/8	3/16	7/32	1/4
1	0.045	1.0 ^a	0.18	0.41		0.74
1.25	0.078	2.0 ^b	0.26	0.59		1.04
1.5	0.110	5.0 ^c	0.41	0.93		1.65
2	0.170					
3	0.380					
4	0.661					

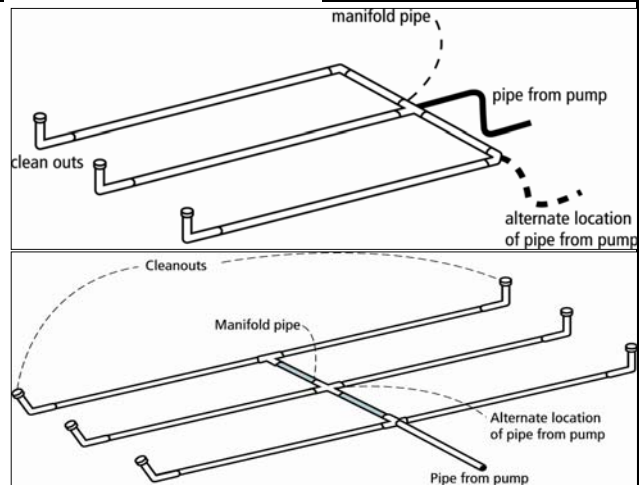
a: Use 1.0 for dwellings using 1/4 inch or 3/16 inch holes.
b: Use 2.0 for dwellings using 1/8 inch holes; or, for other establishments using 1/4 inch or 3/16 inch holes.
c: Use 5.0 for other establishments using 1/8 inch perforations.

- Determine required *Flow Rate* by multiplying the *Total Number of Perforations* (Line 6) by the *Perforation Discharge* (Line 10).
 Perforations X GPM per Perforation = GPM

- Select *Type of Manifold Connection* (End or Center):
- Select *Minimum Diameter* of laterals based on Table I: 1.00 in
- Determine *Volume of Distribution Piping*
- Pipe Diameter* of Distribution Pipe: in
- Volume of Liquid Per Foot of Distribution Piping Per Lateral*: Gallons

Length of Laterals = (Number of perfs - 1) x Spacing of perfs
(- 1) X ft = ft

Volume of Distribution Piping =
= [Number of Perforated Laterals (Line 1) X Length of Laterals (Line 16) X
(Volume of Liquid Per Foot of Distribution Piping (Line 15))]
 X ft X gal = Gallons



I hereby certify that I have completed this work in accordance with all applicable ordinances, rules and laws.

(Designer)

(Signature)

(License #)

(Date)