



Presby Environmental, Inc.

The Next Generation of Wastewater Treatment Technology

143 Airport Rd., Whitefield, NH 03598
Tel: 800-473-5298 Fax: 603-837-9864
www.PresbyEnvironmental.com

Project: _____ Date: _____

1) Daily Design Flow = _____ Bedrooms or GPD, Perc Rate = _____ MPI, Soil Class = _____

A) Presby Pipe Required from Table (below) = _____ ft

Enviro-Septic® Table A – Pipe Required

Perc rate Min/Inch	Number of Bedrooms						Commercial Per 100 GPD
	2	3	4	5	6	Add'l Room	
1-9	140	210	280	350	420	70	50
10-13	140	210	280	350	420	70	55
14-19	140	210	280	350	420	70	60
20-30	140	210	280	350	420	70	65
31-40	140	210	280	350	420	70	70
41-50	150	225	300	375	450	75	75
51-60	160	240	320	400	480	80	80

Consult design manual for systems 61 – 90 MPI

B) Daily Design Flow (if over 500) _____ GPD ÷ 500 = _____ Sections (round up to whole number). Note: multiple beds required when flow is greater than 500 GPD for 61-90 MPI

C) Pipe Required (from 1A) _____ ft ÷ _____ #of Sections (1B) = _____ ft / section min.

D) Row spacing required (Table B) = _____ ft Row spacing provided: _____ ft

Enviro-Septic® Table B

Percentage of System Slope	Percolation Rate Min/Inch					
	1-10	11-20	21-30	31-40	41-50	51-60
0-10%	1.5'	1.5'	1.75'	2.0'	2.5'	3.0'
11-15%	1.5'	1.75'	2.0'	2.25'	2.75'	3.25'
16-20%	1.75'	2.0'	2.25'	2.5'	3.0'	3.5'
21-25%	2.0'	2.25'	2.5'	2.75'	3.25'	3.75'

2) System Sand Bed Area (SSBA) required:

A) System Sand Bed Area required Table D (1 – 60 MPI) = _____ sq. ft.

B) System Sand Bed Area required (61 – 90 MPI) @ 0.25 GPD/sq. ft. = _____ sq. ft.



Presby Environmental, Inc.

The Next Generation of Wastewater Treatment Technology

143 Airport Rd., Whitefield, NH 03598
Tel: 800-473-5298 Fax: 603-837-9864
www.PresbyEnvironmental.com

Table D – Minimum Sand bed Area Size (sq. ft.)

PERC RATE*	2 BEDROOM 220 GPD				3 BEDROOM 330 GPD				4 BEDROOM 440 GPD				5 BEDROOM 550 GPD			
	SOIL CLASS				SOIL CLASS				SOIL CLASS				SOIL CLASS			
	I	II	III	IV	I	II	III	IV	I	II	III	IV	I	II	III	IV
1-5	400	400			400	400			400	440			446	550		
6	400	400			400	400			400	440			471	550		
7	400	400			400	400			400	440			485	550		
8	400	400			400	400			400	440			500	550		
10		400				400				440				550		
15		400	400			400	535			471	714			589	892	
20		400	400			400	582			498	776			623	971	
25		400	400			495	600			660	800			825	1000	
30		400	455			600	683			800	910			1000	1138	
40			528				792				1056				1320	
50			660	660			990	990			1320	1320			1650	1650
60			880	880			1320	1320			1760	1760			2200	2200

PERC RATE*	6 BEDROOM 660 GPD				ADD'L. BEDROOM 110 GPD				COMMERICAL PER 100 GPD			
	SOIL CLASS				SOIL CLASS				SOIL CLASS			
	I	II	III	IV	I	II	III	IV	I	II	III	IV
1-5	535	660			89	110			81	100		
6	566	660			94	110			86	100		
7	582	660			97	110			88	100		
8	600	660			100	110			91	100		
10		660				110				100		
15		707	1070			117	178			107	162	
20		747	1165			124	194			113	176	
25		990	1200			165	200			150	182	
30		1200	1366			200	227			182	207	
40			1584				264				240	
50			1980	1980			330	330			300	300
60			2640	2640			440	440			400	400

*When percolation rate is between those listed in Table D, the next slower rate shall be used for design purposes.

3) System Slope = _____ % (1-60 MPI = 25% max., 61-90 MPI systems see tables in manual)

Table E: Allowable System Slope (61-90 MPI)

Perc. Rate Range (MPI)	System Slope Max. (%)
61-70	15
71-80	10
81-90	5

4) Presby Pipe

A) Presby Pipe Row Length to be used = _____ ft (1-60 MPI 100 ft max., 61-90 MPI per Table G)

B) Pipe Used ($\geq 1A$) _____ ft ÷ Row Length _____ ft = _____ Rows
(Note: number of rows must be whole number when divided by number of serial sections required from 1C)

C) Row Length _____ ft + 2 ft = _____ ft System Sand Bed Length (SSBL)

D) ($<10\%$ 1-60 MPI) SSBA = _____ sq. ft. ÷ SSBL (4C) _____ ft - 2 ft = _____ Pipe Layout Width min.



Presby Environmental, Inc.

The Next Generation of Wastewater Treatment Technology

143 Airport Rd., Whitefield, NH 03598
Tel: 800-473-5298 Fax: 603-837-9864
www.PresbyEnvironmental.com

(>10% 1-60 MPI) SSBA = _____ sq. ft. ÷ SSBL (4C) _____ ft - 5 ft = _____ Pipe Layout Width min.

E) Pipe Layout Width from Table C = _____ ft when using _____ ft Row Spacing

Line Length/Ft		Table C: Length and Width Linear Feet of Enviro-Septic®													
	20	40	60	80	100	120	140	160	180	200	220	240	260	280	300
20	40	60	80	100	120	140	160	180	200	220	240	260	280	300	320
25	50	75	100	125	150	175	200	225	250	275	300	325	350	375	400
30	60	90	120	150	180	210	240	270	300	330	360	390	420	450	480
35	70	105	140	175	210	245	280	315	350	385	420	455	490	525	560
40	80	120	160	200	240	280	320	360	400	440	480	520	560	600	640
45	90	135	180	225	270	315	360	405	450	495	540	585	630	675	720
50	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800
55	110	165	220	275	330	385	440	495	550	605	660	715	770	825	880
60	120	180	240	300	360	420	480	540	600	660	720	780	840	900	960
65	130	190	260	325	390	455	520	585	650	715	780	845	910	975	1040
70	140	210	280	350	420	490	560	630	700	770	840	910	980	1050	1120
75	150	225	300	375	450	525	600	675	750	825	900	975	1050	1125	1200
80	160	240	320	400	480	560	640	720	800	880	960	1040	1120	1200	1280
85	170	255	340	425	510	595	680	765	850	935	1020	1105	1190	1275	1360
90	180	270	360	450	540	630	720	810	900	990	1080	1170	1260	1350	1440
95	190	285	380	475	570	665	760	855	950	1045	1140	1235	1330	1425	1520
100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600
# of Lines	2	3	4	5	6	7	8	9	10	11	12	13	14	15	
Ctr to Ctr Spacing															
1.50	2.50	4.00	5.50	7.00	8.50	10.00	11.50	13.00	14.50	16.00	17.50	19.00	20.50	22.00	23.50
1.75	2.75	4.50	6.25	8.00	9.75	11.50	13.25	15.00	16.75	18.50	20.25	22.00	23.75	25.50	27.25
2.00	3.00	5.00	7.00	9.00	11.00	13.00	15.00	17.00	19.00	21.00	23.00	25.00	27.00	29.00	31.00
2.25	3.25	5.50	7.75	10.00	12.25	14.50	16.75	19.00	21.25	23.50	25.75	28.00	30.25	32.50	34.75
2.50	3.50	6.00	8.50	11.00	13.50	16.00	18.50	21.00	23.50	26.00	28.50	31.00	33.50	36.00	38.50
2.75	3.75	6.50	9.25	12.00	14.75	17.50	20.25	23.00	25.75	28.50	31.25	34.00	36.76	39.50	42.25
3.00	4.00	7.00	10.00	13.00	16.00	19.00	22.00	25.00	28.00	31.00	34.00	37.00	40.00	43.00	46.00
3.25	4.25	7.50	10.75	14.00	17.25	20.50	23.75	27.00	30.25	33.50	36.75	40.00	43.25	46.50	49.75
3.50	4.50	8.00	11.50	15.00	18.50	22.00	25.50	29.00	32.50	36.00	39.50	43.00	46.50	50.00	53.50
3.75	4.75	8.50	12.25	16.00	19.75	23.50	27.25	31.00	34.75	38.50	42.25	46.00	49.75	53.50	57.25
4.00	5.00	9.00	13.00	17.00	21.00	25.00	29.00	33.00	37.00	41.00	45.00	49.00	53.00	57.00	61.00
4.25	5.25	9.50	13.75	18.00	22.25	26.50	30.75	35.00	39.25	43.50	47.75	52.00	56.25	60.50	64.75
4.50	5.50	10.00	14.50	19.00	23.50	28.00	32.50	37.00	41.50	46.00	50.50	55.00	59.50	64.00	68.50
4.75	5.75	10.50	15.25	20.00	24.75	29.50	34.25	39.00	43.75	48.50	53.25	58.00	62.75	67.50	72.25
5.00	6.00	11.00	16.00	21.00	26.00	31.00	36.00	41.00	46.00	51.00	56.00	61.00	66.00	71.00	76.00
Layout Width/Ft.															

5) System Sand Bed Dimensions

A) Calculate System Sand Bed Length (SSBL):

Row Length _____ ft + 2 ft = _____ ft System Sand Bed Length (SSBL)

B) Calculate System Sand Bed Width (SSBW):

1) SSBA (from 2) _____ sq ft ÷ _____ ft SSBL = _____ ft SSBW min.



Presby Environmental, Inc.

The Next Generation of Wastewater Treatment Technology

143 Airport Rd., Whitefield, NH 03598

Tel: 800-473-5298 Fax: 603-837-9864

www.PresbyEnvironmental.com

- 2) Pipe Layout Width = _____ ft + 2 ft = _____ ft SSBW needed to cover all Presby Pipes
- 3) Beds >10% Slope: PLW = _____ ft + 5 = _____ ft SSBW with System Sand Extension
- 4) System Sand Bed Width used = _____ ft (B1, B2 or B3 above - whichever is larger)

C) System Sand Bed Area Provided (SSBA):

SSBL (from A) = _____ ft x _____ ft SSBW (from B4) = _____ sq ft SSBA provided

Notes: _____

6) System Illustration (optional):