

Part D - Chamber Bed System

CHAMBER	Type of Chamber (Manufacturer)	
	Model	
	Width (inches)	
	Height (inches)	
	Length (inches)	
	Equivalent Area Per Unit (See Table - page 28)	<i>Box 11</i>
DESIGN	Required Minimum Infiltrative Surface Area (Leachfield sizing from page 4)	<i>Box 12</i>
	Minimum Number of Units	<i>Box 13</i>
		$\frac{\text{Min. Area}}{\text{(Box 12)}} \div \frac{\text{Equivalent Area}}{\text{(Box 11)}} = \frac{\text{Minimum Units}}{\text{Minimum Units}}$ <p style="text-align: right;">Must ROUND Up</p>
LAYOUT	Width of Bed (feet)	
	Length of Bed (feet)	
	Total Square Feet	
	<input type="checkbox"/> Complete Sheet D (page 27)	

Installer Information:

General Comments:

Sheet D

Chambered Bed Leachfield

This worksheet is for a bed type leachfield, using chambered units.
Where boxes appear, please supply the dimensions of your system.

Brand _____

Model _____

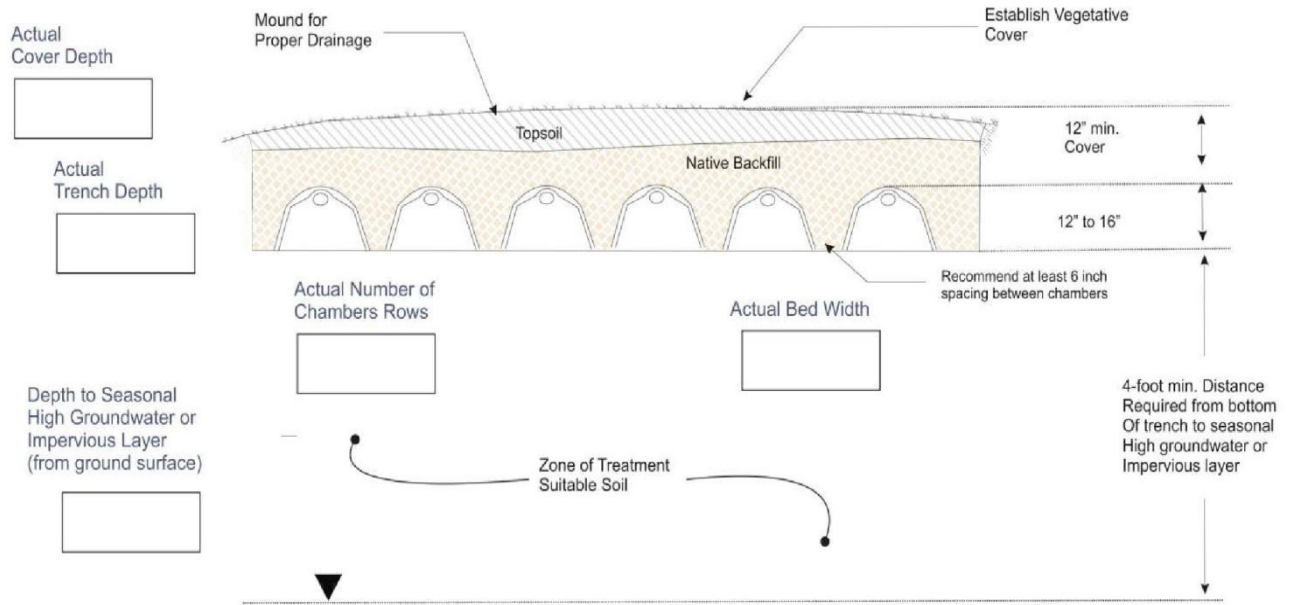
Dimensions

Length _____ Width _____

Number of sections required _____

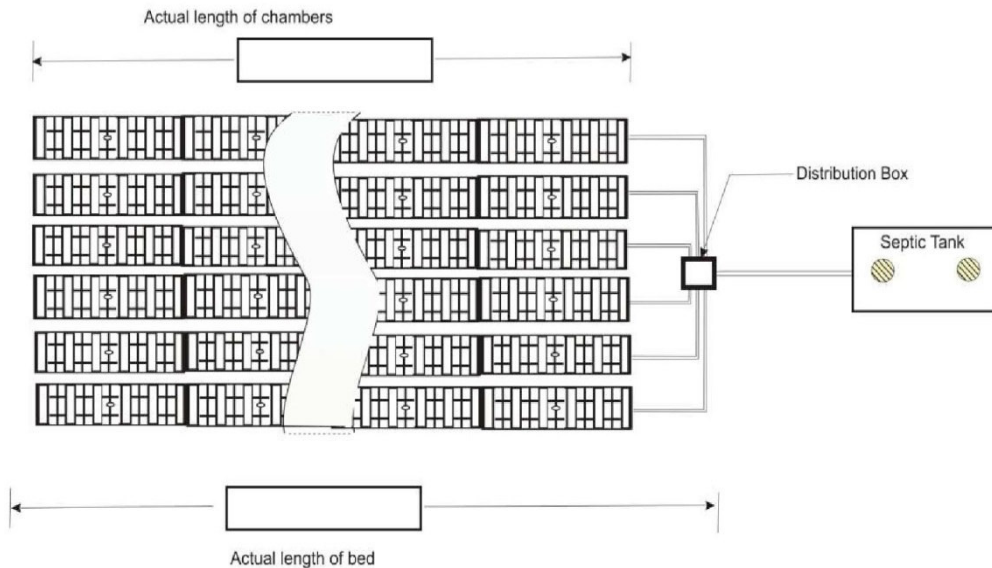
Height _____

Number of sections used _____



Notes:

1. A level flat surface is necessary for the chambers.
2. Scarify (rake) bottom and sidewall surfaces.
3. "Walk-in" fill to compact soil along the sides of the chamber.
4. Schedule 40 PVC pipe is required only for the inlet and outlet to the septic tank.
5. Recommend 6 inch spacing between chambers rows.



Drawn by: KJM
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Chamber Systems Equivalent Areas

Updated: 1/11/2017 by Sheridan County

For chamber bed systems, the total infiltration area shall be calculated based on the following formula:

$$\text{Total Infiltration Area} = L(E \times R)$$

L = Total length of bed R = Number of chamber rows

E = Effective bottom width of chamber (Multiply width of the chamber by factor of 1.43 to get effective bottom width)

(Multiply effective bottom width of chamber by number of chamber rows to get effective bottom width of bed)

R = Number of chamber rows

The factor of 1.43 incorporates a thirty percent (30%) reduction of the bottom area.

The total length is the number of chambers in a row multiplied by the length of one piece of chamber.

For chamber trenches, the total infiltration area shall be calculated based on the following formula:

$$\text{Total Infiltration Area} = L(E + 2S)$$

L = Total length of trench

E = Effective bottom width (Multiply width of the chamber by factor of 1.43 to get effective bottom width)

S = Sidewall height of 12 inches or less

The factor of 1.43 incorporates a thirty percent (30%) reduction of the bottom area.

The maximum credit for sidewall height shall not exceed twelve (12) inches even if the actual sidewall height exceeds twelve (12) inches. The sidewall height is the height of the slotted sidewall of the chamber or depth below the flow line of the inlet pipe, whichever is less.

The total length of the trench is the number of chambers in a row multiplied by the length of one piece of chamber.

Make & Model	Effective Dimensions (in.)			Equivalent Area	
	(Effective Length * Width * Louver Height)			Bed Layout	Trench Layout
INFILTRATOR Brand:	<i>length</i>	<i>width</i>	<i>height</i>	<i>sq. ft/unit</i>	<i>sq. ft/unit</i>
Quick4 Equalizer 24 (EQ24)	48.0	16.0	6.0	7.63	11.63
Quick4 Equalizer 36 (EQ36)	48.0	22.0	10.0	10.49	17.15
Quick4 Standard	48.0	34.0	8.0	16.21	21.54
Quick4 High Capacity	48.0	34.0	12.0	16.21	24.21
Quick4 Equalizer 24 Low Profile	48.0	16.0	6.0	7.63	11.63
HANCOR Brand:	<i>length</i>	<i>width</i>	<i>height</i>	<i>sq. ft/unit</i>	<i>sq. ft/unit</i>
Standard Unit (11" tall)	75.0	34.0	6.35	25.32	31.94
14" Tall High Capacity Unit	75.0	34.0	9.68	25.32	35.41
16" Tall High Capacity Unit	75.0	34.0	11.17	25.32	36.96
Bio 2 Chamber	86.0	15.0	9.03	12.81	23.60
Bio 3 Chamber	86.0	22.0	9.03	18.79	29.57
ARC 24	60.0	22.5	7.5	13.41	19.66
ARC 36	60.0	34.5	7.13	20.56	26.50
ARC 36HC	60.0	34.5	10.75	20.56	29.51
* Models not listed require pre-approval from Sheridan County					