

Septic System Sizing Charts for Leach Bed Disposal

Use the charts below to complete the Design Worksheet.

SELECTING THE PROPER SIZE SYSTEM			
<i>No. of Bedrooms*</i>	<i>Fixture Unit Count</i>	<i>Minimum Septic Tank Size (gallons)</i>	<i>System Daily Design Flow (gallons per day)</i>
1	7 or less	1000	150
	more than 7	1000	300
2	14 or less	1000	300
	more than 14	1000	450
3	21 or less	1000	450
	more than 21	1250	600
4	28 or less	1250	600
	more than 28	1500	750
5	35 or less	1500	750
	more than 35	2000	900
6	42 or less	2000	900
	more than 42	2500	1050
7	49 or less	2500	1050
	more than 49	3000	1200
8	56 or less	3000	1200
	more than 56	3000	1350

**For a single residence with more than 8 bedrooms, use the following formulas to determine the septic tank size and the daily design flow. Use the greater of the two results for the Design Flow and Tank Size.*

Daily Design Flow: multiply the number of **bedrooms** by 150 OR multiply the **fixture unit count** by 25 (use the greater of the two daily design flow calculations for the design of the system).

Septic Tank Size: multiply the number of **bedrooms** by 150, then multiply the total by 2.1 OR multiply the **fixture unit count** by 25, then multiply the total by 2.1.

Obtain the Percolation Rate or Soil Absorption Rate (SAR) from the soils report. Using the SAR and the Design Flow from the above chart, determine the Required Square Footage of Disposal Area from the chart below.

$$\text{Design Flow (GPD)} \div \text{SAR (GPD/SQFT)} = \text{Required Square Footage of Disposal Area}$$

Example: 600 ÷ 0.6 = 1000 SQFT

Disposal Area Calculation Table (Leach Bed)								
Design Flow (GPD)		450	600	750	900	1050	1200	1350
Perc Rate (min/inch)	SAR (gpd/sqft)	Required Square Footage of Disposal Area						
<1		NOT ALLOWED FOR CONVENTIONAL DISPOSAL						
1 to <3	0.93	484	645	806	968	1129	1290	1452
3	0.73	616	822	1027	1233	1438	1644	1849
4	0.67	672	896	1119	1343	1567	1791	2015
5	0.60	750	1000	1250	1500	1750	2000	2250
	0.53	850	1132	1415	1698	1981	2264	2547
7	0.50	900	1200	1500	1800	2100	2400	2700
10	0.42	1071	1429	1786	2143	2500	2857	3214
	0.40	1125	1500	1875	2250	2625	3000	3375
15	0.33	1364	1818	2273	2727	3182	3636	4091
20	0.29	1552	2069	2586	3103	3621	4138	4655
25	0.27	1667	2222	2778	3333	3899	4444	5000
30	0.24	1875	2500	3125	3750	4375	5000	5625
35	0.22	2045	2727	3409	4091	4773	5455	6136
40	0.21	2143	2857	3571	4286	5000	5714	6429
45	0.20	2250	3000	3750	4500	5250	6000	6750
50	0.19	2368	3158	3947	4737	5526	6316	7105
55	0.18	2500	3333	4167	5000	5833	6667	7500
55 to <60	0.17	2647	3529	4412	5294	6176	7059	7941
60 to <120	0.13	3642	4615	5769	6923	8077	9231	10385
>120		NOT ALLOWED FOR CONVENTIONAL DISPOSAL						