

SEPTIC SYSTEM SIZING CHARTS

Use the charts below to complete the Design Worksheet on the following page.

SELECTING THE PROPER SIZE SYSTEM			
<i>No. of Bedrooms*</i>	<i>Fixture 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 either the bedroom count or the fixture count, whichever is greater, and the following formulas: **For Septic Tank Size**, multiply the number of bedrooms by 150, then multiply that total by 2.1. This will equal the minimum septic tank size in gallons. OR multiply the total fixture units by 25, then multiply that total by 2.1. **For System Daily Design Flow**: multiply the number of bedrooms by 150, this will equal the minimum Design Flow in gallons per day. OR multiply the total fixture units by 25.

Obtain perc rate from soil report. Use the chart below to determine Soil Absorption Rate (SAR). Then, use the Design Flow determined from the above chart. The formula used to determine the required square footage of disposal area is: DESIGN FLOW ÷ SAR. (Example: 600 ÷ 0.63 = 952 sqft)

DESIGN FLOW CALCULATION TABLE-TRENCH								
		Design Flow—Gallons per Day						
		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	1.2	375	500	625	750	875	1000	1125
3	1.1	409	545	682	818	955	1091	1227
4	1	450	600	750	900	1050	1200	1350
5	0.90	500	667	833	1000	1167	1333	1500
7	0.75	600	800	1000	1200	1400	1600	1800
10	0.63	714	952	1190	1429	1667	1905	2143
15	0.50	900	1200	1500	1800	2100	2400	2700
20	0.44	1023	1364	1705	2045	2386	2727	3068
25	0.40	1125	1500	1875	2250	2625	3000	3375
30	0.36	1250	1667	2083	2500	2917	3333	3750
35	0.33	1364	1818	2273	2727	3182	3636	4091
40	0.31	1452	1935	2419	2903	3387	3871	4355
45	0.29	1552	2069	2586	3103	3621	4138	4655
50	0.28	1607	2143	2679	3214	3750	4286	4821
55	0.27	1667	2222	2778	3333	3889	4444	5000
55 to <60	0.25	1800	2400	3000	3600	4200	4800	5400
60 to <120	0.20	2250	3000	3750	4500	5200	6000	6750
>120		NOT ALLOWED FOR CONVENTIONAL DISPOSAL						