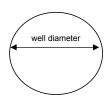
## Well Plugging Materials List

Notes: All surface cement, etc. should be removed and brick or tile broken up down 4' before calling out the Sanitarian. If it can be made small enough to go down without bridging and causing dead air space it may be put down the well. Otherwise it should be removed. The routine method is fill sand/gravel to one foot below water level then a bentonite plug, then fill sand/gravel to the four foot level where the casing or brick stops and is removed then another bentonite plug, then up to one or two feet from the surface with sand/gravel. Finish with clean soil and mound it up so that water will run off.



First find your diameter of well below then get either pounds or tons per foot of material plus needed Bentonite. For cisterns use the formula D x D (in ft.) x .7854 x H x 111 = pounds of material.

Well diameters 3 to 18" use pea gravel for fill, 19" and larger use sand for fill material.

Well Diameter	Pounds Per Foot	Tons Per Foot	Bentonite
3"	5.449	0.00272	One bag for every 50' of depth
4"	9.687	0.00484	
5"	15.136	0.00757	
6"	21.796	0.01090	
7"	29.666	0.01483	
8"	38.748	0.01937	
9"	49.040	0.02452	
10"	60.544	0.03027	
11"	73.258	0.03663	
12"	87.183	0.04359	
13"	102.319	0.05116	
14"	118.666	0.05933	
15"	136.223	0.06811	
16"	154.992	0.07750	
17"	174.971	0.07790	
18"			\ \
	196.162	0.09808	
19"	218.563	0.10928	3 bags at water level, and
20"	242.175	0.12109	4 bags at 4' level
21"	266.998	0.01335	
22"	293.032	0.14652	<u> </u>
23"	320.276	0.16014	<b>*</b>
24"	348.732	0.17437	4 bags at water level, and
25"	378.398	0.18920	5 bags at 4' level
26"	409.276	0.20464	1
27"	441.364	0.22068	
28"	474.663	0.23733	
29"	509.173	0.25459	▼
30"	544.894	0.27245	5 bags at water level, and
31"	581.825	0.29091	6 bags at 4' level
32"	619.968	0.30998	
33"	659.321	0.32966	
34"	699.886	0.34994	
35"	741.661	0.37083	+
36"	784.647	0.39232	6 bags at water level, and
37"	828.844	0.41442	7 bags at 4' level
38"	874.252	0.43713	1 bags at 4 level
39"	920.870	0.46044	
40"	968.700	0.48435	
40 41"	1017.740	0.46433	↓
41"	1017.740	0.53400	7 bags at water level, and
42 43"		0.55973	8 bags at 4' level
43 44"	1119.454		o bays at 4 level
	1172.127	0.58606	
45"	1226.011	0.61301	
46"	1281.105	0.64055	↓
47"	1337.411	0.66871	O have at wester level as 1
48"	1394.928	0.69746	8 bags at water level, and
49"	1453.655	0.72683	9 bags at 4' level
50"	1499.891	0.74994	
60"	2159.822	1.07991	1
72"	3110.174	1.55508	▼