

Water Storage Chart

This is the size of tank and how many BTUs you can store by the rise in temp.			This is how long the water storage will heat the house , after the boiler goes out, by the heat loss. To figure heat loss, 30 btu per sq.ft. is a good starting point (2000 sqft. would be 60,000 btu/hr.) *									
gal	rise in temp.	Stored btu	hrs. reserve @10k btu	hrs. reserve @20k btu	hrs. reserve @ 30k btu	hrs. reserve @ 40k btu	hrs. reserve @ 50k btu	hrs. reserve @ 60k btu	hrs. reserve @ 70k btu	hrs. reserve @ 80k btu	hrs. reserve @ 90k btu	hrs. reserve @100k btu
500	30	124,500	12.4	6.2	4.2	3.1	2.5	2.1	1.8	1.6	1.4	1.2
500	40	166,000	16.6	8.3	5.5	4.2	3.3	2.8	2.4	2.1	1.8	1.7
500	50	207,500	20.8	10.4	6.9	5.2	4.1	3.5	2.9	2.6	2.3	2.1
500/1000	60/30	249,000	25	12.5	8.3	6.2	5	4.2	3.6	3.1	2.8	2.5
1000	40	332,000	33.2	16.6	11	8.3	6.6	5.5	4.7	4.2	3.6	3.3
1000	50	415,000	41.5	20.7	13.8	10.4	8.3	6.9	5.9	5.1	4.6	4.2
1000/2000	60/30	498,000	50	24.9	16.6	12.5	9.9	8.3	7.1	6.2	5.5	5
2000	40	664,000	66.4	33.2	22.1	16.6	13.3	11.1	9.5	8.3	7.2	6.6
2000	50	830,000	83	41.5	27.6	20.8	16.6	13.8	11.8	10.4	9.2	8.3
2000	60	996,000	99.6	49.8	32.2	24.9	20	16.6	14.2	12.5	11	10
This is how many hrs. it will take a boiler to heat the tank up to temp.												
Stored btu	boiler output Kw / btu hr.	hrs to load tank		Stored btu	boiler btu output	hrs to load tank		Stored btu	boiler btu output	hrs to load tank		
124,000	18Kw / 61k	2		249,000	32Kw / 109k	2.3		498,000	60Kw / 206k	2.4		
	25Kw / 85k	1.5			40Kw / 136k	1.8			80Kw / 275k	1.8		
	32Kw / 109k	1.1			60Kw / 206k	1.2		664,000	18Kw / 61k	10.9		
	40Kw / 136k	0.9			80Kw / 275k	0.9			25Kw / 85k	7.8		
	60Kw / 206k	0.6		332,000	18Kw / 61k	5.4			32Kw / 109k	6.1		
	80Kw / 275k	0.5			25Kw / 85k	3.9			40Kw / 136k	4.9		
166,000	18Kw / 61k	2.7			32Kw / 109k	3			60Kw / 206k	3.2		
	25Kw / 85k	1.9			40Kw / 136k	2.4			80Kw / 275k	2.4		
	32Kw / 109k	1.5			60Kw / 206k	1.6		830,000	18Kw / 61k	13.6		
	40Kw / 136k	1.2			80Kw / 275k	1.2			25Kw / 85k	9.7		
	60Kw / 206k	0.8		415,000	18Kw / 61k	6.8			32Kw / 109k	7.6		
	80Kw / 275k	0.6			25Kw / 85k	4.8			40Kw / 136k	6		
207,500	18Kw / 61k	3.4			32Kw / 109k	3.8			60Kw / 206k	4		
	25Kw / 85k	2.4			40Kw / 136k	3			80Kw / 275k	3		
	32Kw / 109k	1.9			60Kw / 206k	2		996,000	18Kw / 61k	16.3		
	40Kw / 136k	1.5			80Kw / 275k	1.5			25Kw / 85k	11.7		
	60Kw / 206k	1		498,000	18Kw / 61k	8.2			32Kw / 109k	9.1		
	80Kw / 275k	0.8			25Kw / 85k	5.8			40Kw / 136k	7.3		
249,000	18Kw / 61k	4.1			32Kw / 109k	4.5			60Kw / 206k	4.8		
	25Kw / 85k	2.9			40Kw / 136k	3.7			80Kw / 275k	3.6		
*You should have a qualified person do a heat loss calculation to determine your heating requirements.												