

Water tank properties							0°C – 500mm insulation		10°C – 500mm insulation		20°C – 500mm insulation		20°C – 300mm insulation		20°C – 200mm insulation											
Diameter	Height	Volume	Surface Area	Energy per °C (kWh)	Stored Heat:		10MWh		5MWh		10MWh		5MWh		10MWh		5MWh									
					Temp for 10000kWh	Temp at 5000kWh	Heat loss rate (W)	loss per day (kWh)	Heat loss rate (W)	loss per day (kWh)	Heat loss rate (W)	loss per day (kWh)	Heat loss rate (W)	loss per day (kWh)	Heat loss rate (W)	loss per day (kWh)	Heat loss rate (W)	loss per day (kWh)	Heat loss rate (W)	loss per day (kWh)						
4	4	50	75	59	205.5	120.3	775	18.6	453	10.9	737	17.7	416	10.0	699	16.8	378	9.1	1165	28.0	630	15.1	1749	42.0	945	22.7
4.5	4.5	72	95	83	154.8	94.9	738	17.7	453	10.9	691	16.6	405	9.7	643	15.4	357	8.6	1071	25.7	595	14.3	1607	38.6	893	21.4
5	5	98	118	115	122.3	78.7	720	17.3	463	11.1	662	15.9	404	9.7	603	14.5	346	8.3	1004	24.1	576	13.8	1507	36.2	864	20.7
5.5	5.5	131	143	152	100.6	67.8	717	17.2	483	11.6	646	15.5	412	9.9	574	13.8	341	8.2	957	23.0	568	13.6	1436	34.5	852	20.4
6	6	170	170	198	85.5	60.3	725	17.4	511	12.3	641	15.4	426	10.2	556	13.3	342	8.2	926	22.2	569	13.7	1390	33.3	854	20.5
6.5	6.5	216	199	252	74.7	54.9	744	17.9	546	13.1	644	15.5	447	10.7	545	13.1	347	8.3	908	21.8	578	13.9	1362	32.7	868	20.8
7	7	269	231	314	66.8	50.9	771	18.5	588	14.1	656	15.7	472	11.3	541	13.0	357	8.6	901	21.6	595	14.3	1351	32.4	892	21.4
7.5	7.5	331	265	387	60.9	47.9	807	19.4	635	15.2	674	16.2	503	12.1	542	13.0	370	8.9	902	21.7	617	14.8	1354	32.5	926	22.2
8	8	402	302	469	56.3	45.7	849	20.4	689	16.5	698	16.8	538	12.9	548	13.1	387	9.3	912	21.9	645	15.5	1369	32.9	967	23.2