



How to calculate sand volumes for full bag lime mixes!

Mortar mixes are always quoted as volume mixes, but as the relative bulk densities of lime binders differ, you need to measure lime binders by weight. The most accurate way of achieving this is by using full bags of lime binders as they are of a known weight (or accurately halved bags). The table below will help you determine the right amount of sand (in litres) for 4 different mix ratios for all the natural hydraulic lime binders currently available in the UK and RoI.

Qty Bags	Producer	Weight Kg	NHL	RBD	Mix Ratio 1:1.5	Mix Ratio 1:2	Mix Ratio 1:2.5	Mix Ratio 1:3
					Litres of Sand Required	Litres of Sand Required	Litres of Sand Required	Litres of Sand Required
1	Hanson	25	2	0.67	56	75	93	112
1	Hanson	25	3.5	0.72	52	69	87	104
1	Hanson	25	5	0.75	50	67	83	100
1	Singleton Birch	25	2	0.65	58	77	96	115
1	Singleton Birch	25	3.5	0.81	46	62	77	93
1	Singleton Birch	25	5	0.86	44	58	73	87
1	Otterbein	25	2	0.64	59	78	98	117
1	Otterbein	25	3.5	0.58	65	86	108	129
1	Otterbein	25	5	0.59	64	85	106	127
1	Roundtower	25	2	0.67	56	75	93	112
1	Roundtower GREY	25	3.5	0.85	44	59	74	88
1	Roundtower WHITE	25	3.5	0.72	52	69	87	104
1	Roundtower	25	5	0.75	50	67	83	100
1	Socli	25	2	0.67	56	75	93	112
1	Socli GREY	25	3.5	0.85	44	59	74	88
1	Socli WHITE	25	3.5	0.72	52	69	87	104
1	Socli	25	5	0.75	50	67	83	100
1	St Astier	25	2	0.58	65	86	108	129
1	St Astier	25	3.5	0.67	56	75	93	112
1	St Astier	25	5	0.79	47	63	79	95
1	Tarmac Blue Circle	25	3.5	0.58	65	86	108	129
1	Tarmac Blue Circle	25	5	0.59	64	85	106	127
1	Prompt	25	Natural Cement	1.1	34	45	57	68

Remember sand bulks when it is damp by as much as 10%, take this into account when measuring your sand. Saturated sand and bone dry sand have equal volumes. Note: Secil is sold by Singleton Birch in the UK.

Happy mixing!

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