

Adding a Pozzolan to Mortar

Lancaster Lime Works Mortars are non-hydraulic, that is, the mortar hardens by reacting with the carbon dioxide in the air and will not harden under water. However, in some situations, using an hydraulic mortar can be advantageous, such as in very damp conditions, where carbon dioxide is not present or where a faster set time is needed.

To make a non-hydraulic mortar into an hydraulic mortar, certain kinds of minerals can be added in small percentages. These additives are called pozzolans. The pozzolan that Lancaster Lime Works supplies will not adversely affect the breathability of the mortar.

Use the chart below to determine how much pozzolan to add to your mortar. Find the bucket size you have and follow the row across until you reach the column that corresponds to the percentage of pozzolan you want to add. Amounts are given in pounds and cups (lbs/cups). **Note:** The pozzolan will pack into the cup measure, thus increasing the weight. Therefore be careful to not pack the pozzolan into the measuring cup. The use of a scale is highly recommended.

	5%	10%	15%	20%	
1 Gallon	0.22	0.44	0.66	0.88	lbs.
	3.52 oz.	7.04 oz.	10.56 oz.	14.08 oz.	lbs./oz.
	1 1/4	2 1/2	3 3/4	4 2/3	cups
3.5 Gallon	0.77	1.54	2.31	3.08	lbs.
	12.32 oz.	1 lb., 8.64 oz.	2 lbs., 4.96 oz.	3 lbs., 1.28 oz.	lbs./oz.
	3 1/2	8	12 3/4	16	cups
5 Gallon	1.1	2.2	3.3	4.4	lbs.
	1 lb., 1.6 oz.	2 lbs., 3.2 oz.	3 lbs., 4.8 oz.	4 lbs., 6.4 oz.	lbs./oz.
	6 1/4	12 1/2	18 3/4	23 1/3	cups