

Limetec Hydraulic Lime Mortars –Compressive Strength

Mortar Mix Proportions

Limetec® Moderately Hydraulic Lime Mortar

Mix proportion 1:2½. Limetec® Moderately Hydraulic Mortar will reach HLM1 (class IV) at 28days and HLM2.5 (class III) at 91 days (good/high resistance to freezing & thawing, high resistance to sulfates).

For most types of conventional construction; cavity brickwork, blockwork and stonework.

Mortar Class	Lime : sand (vol/ vol)	BS 5628 Mortar Durability Designation	Hydraulic Lime Mix Designation	Typical Compressive Strength (N/mm2 @ 91 days)	Mortar Durability Class
Moderately hydraulic	1 : 2.25	(iv) at 28 days (iii) at 91 days	HLM 2.5	2.5 - 3	5-6

Limetec® Eminently Hydraulic Lime Mortar

Mix proportion 1:2. Limetec® Eminently Hydraulic Mortar will reach HLM3.5 (class III) at 28days and HLM5 (class II) at 91 days (high resistance to freezing & thawing, high resistance to sulfates).

For use where a higher level of durability is required: masonry exposed to severe weather such as chimneys, copings, parapets and below dpc work.

Mortar Class	Lime : sand (vol/ vol)	BS 5628 Mortar Durability Designation	Hydraulic Lime Mix Designation	Typical Compressive Strength (N/mm2 @ 91 days)	Mortar Durability Class
Eminently hydraulic	1 : 2	(iv) at 28 days (iii) at 91 days	HLM 5	5.0	7-8

Mortar Strength Designation

Whilst the strength of hydraulic lime mortars continue to develop over a period of time, laboratory test results are checked over fixed time scales of 56 and 91 days using 40 x 40 x 160mm prisms.

The strength of lime mortar in-situ is significantly greater than laboratory test results by a factor of around 2. This is due to the suction of the masonry dewatering the mortar during the early construction phase. Consequently laboratory results of mortar mixed with normal water contents will be reduced compared to the figures quoted above.