

# Product Data Sheet: Natural Lime Mortar

9/09/2014

Pre mixed natural hydraulic lime and sand mortar. A general purpose mortar for building or pointing stone, brick and block: available in different strengths, sand gradings and colours.

## General Information

Lime Green Natural mortar is a dry pre-mixed lime mortar made with St Astier pure and natural hydraulic lime and including pigments where required.

Three different sand textures are available:

- SG (approx 1mm down)
- RG (approx 2mm down)
- CG (approx 3mm down)

Lime Green has a wide range of colour options. Product samples may be ordered.

## Packaging

Available in 25 kg bags or sealed one tonne bulk bags. All colours and textures other than off white (CG20) are made to order. Please call for lead times.

## Coverage

**Repointing:** 20kg m<sup>2</sup> stonework; 7kg m<sup>2</sup> brickwork.

1 kg of dried product per brick, or 1.5 tonnes will produce 1 metre cubed of mortar.

## Which Mortar?

Mortar Application	Natural Lime Mortar Grade
General solid brick and stone walls, parapets and lintels	Medium mortar Made with <b>NHL3.5</b> lime
Above roofline, below DPC incl. copings and cappings, earth retaining walls	Strong mortar Made with <b>NHL5</b> lime
The correct specification for any mortar should consider the structural requirements, the nature and condition of the background, site exposure, the time of the year and type of finish required. Less porous masonry units and harsh climates require greater mortar strength.	

## Surface Preparation

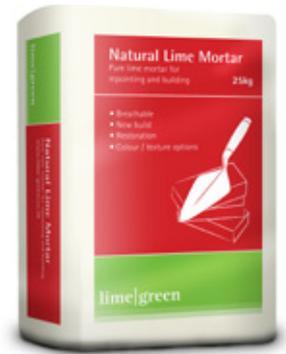
Before pointing or building, clean and remove all dust and loose material from joints and masonry, and adequately dampen dry on high suction surfaces.

## How to Mix

Slowly add 25 kg of Lime Green Natural mortar into a drum mixer. Add only 4 to 5 litres of clean water. Pour the water in slowly as the product mixes, using just enough to achieve the correct workability. Mix for 3 to 10 min. Lime Green mortars may be reworked up to 8hrs. Please contact us for further information.

## How to Apply

Pointing and building mortars should be finished the same day or the following day in cooler periods. Lime mortars require longer curing times than cement, but the methods and principles of application are similar. When pointing or laying hard impervious masonry and / or during damp cool weather lime mortars may take a few weeks before being fully able to resist frosts. Do not use in temperatures less than 5 °C or over 30°C.



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## Curing and Why

Hydraulic lime mortars do not set as quickly as modern cement based materials; hydraulic lime starts to set once water is added and also hardens by reacting with carbon dioxide which is a slow process. Strength and long term durability are achieved over months, not days. Success relies on proper curing of the mortar. Protect the mortar against the effects of drying winds, strong sunlight, rain and frost. In warm weather gently mist spray with water after application and cover if required with damp hessian sheets. In cold weather cover fresh mortar with protective sheeting to help avoid frost damage.

## Performance

Product Type	Strong Mortar	Medium Mortar
Compressive strength N/mm <sup>2</sup> 28 days	1.0 to 2.0	0.5 to 1.0
Compressive strength N/mm <sup>2</sup> 91 days	2.0 to 4.0	1.0 to 2.0
Flexural Strength N/mm <sup>2</sup> @ 28 days	0.5 to 1.0	0.2 to 0.5
Resistance to Freeze Thaw / sulphates	High	Medium
Elasticity moduli MPa	9500	7300
Vapour exchange Gm air x m <sup>2</sup> x hour x mmHg	0.5	0.6
Capillary water absorption kg(m <sup>2</sup> .min0.5)	<1.0	<1.0

Declaration of Ingredient	
+20%	Silica sand Limestone sand
1% to 20%	Natural Hydraulic Lime (NHL 2, 3,5 or 5)
0.1% to 1%	Clay Mineral pigments (optional) Tallow (from animals)
Below 0.1%	Cellulose (from plants) Air entrainer (man made)
Other	None

Health and Safety	
Risk Phrases	Safety Phrases
R36/37/38 Irritating to eyes, respiratory system and skin	S22 Do not breathe dust
R66 Repeated exposure may cause skin dryness or cracking	S26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
	S24/25 Avoid contact with skin and eyes
	S36 Wear suitable protective clothing

This is not a specification. Trials should be undertaken on old surfaces & backgrounds to ensure compatibility. Lime plasters do not set or perform like gypsum or cement based materials