A pre mixed natural hydraulic lime and sand mortar. It is a general purpose mortar for building or pointing stone, brick and block, available in different strengths, sand grading's and colours.

General Information

Lambs Natural Lime mortar is a dry pre-bagged lime mortar made with St Astier pure natural hydraulic lime and including clay mineral pigments, tallow & plant cellulose where required. Four different sand textures are available.

<u>Texture</u>	Sand size	Minimum joint size
TF	approx. 1mm and down	4
F	approx. 2mm and down	6
M	approx. 3mm and down	10
Ashlar	approx. 0.5mm and down	3 to 5 max.

Lambs have wide range of colour options; a colour chart is available on back page or on www.lambsbricks.com

Packing and availability

Available in 25 kg paper bags or sealed one tonne bulk bags. Can be used with the mini silo system. All colours other than basic off white (AM) made to order.

Bulk density and consumption

Wet bulk density	1900kg/m3 +/-100.	
Repointing	20kg/m² stonework	7kg/m² brickwork.
Per 1m of wet mortar	building approx 1200-1800 bricks	
Per 1 tonne of dry mortar	building approximately 1000 bricks.	

Guidance on mortar choice

Mortar application	Natural Lime Mortar type
General solid masonry Dense masonry, parapets and lintels	Medium mortar Made with NH3.5 lime
Above roofline, below DPC incl. copings and cappings & earth retaining walls	Strong mortar Made with NHL5 lime

The correct specification for any mortar should consider the structural requirements, nature and condition of the background, site exposure, time of the year and type of finish required. Less porous masonry units and harsh climates require greater mortar strength.

Mixing

Add 25 kg of *Lambs Natural mortar* into a drum mixer, avoid creating excessive dust. 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. Lambs mortars may be reworked up to 8hrs. Please contact us for further information.



Application

Before pointing or building clean and remove all dust and loose material from joints and masonry, and <u>adequately dampen</u> dry or high suction surfaces. Pointing and building mortars should be finished the same day or the 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.

Curing

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 cool weather cover fresh mortar with protective sheeting to help avoid frost damage.

Full declaration of ingredients	
20%+	Silica sand Limestone sand
1% to 20%	Natural Hydraulic Lime (NHL3.5 or 5)
0.1% to 1%	Clay Mineral pigments
	Tallow (from animals)
Below 0.1%	Cellulose (from plants)
	Air entrainer (manmade)
Others;	None

Health & Safety

Risk Phrases

R36/37/38 Irritating to eyes, respiratory system, and skin. R66 Repeated exposure may cause skin dryness or cracking.

Safety phrases

S22 Do not breathe dust

S26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.





Performance

Product type	Strong mortar	Medium mortar
Compressive strength N/mm ² 28 days	1 to 2	0.5 to 1
Compressive strength N/mm ² 90 days	2 to 4	1 to 2
Flexural Strength N/mm ² @ 28 days	0.5 to 1	0.2 to 0.5
Resistance to Freeze Thaw / sulphates	High	Medium
Elasticity moduli MPa	9500	7300
Vapour exchange Gm air x m2 x hour x mmHg	0.5	0.6
Capillary water absorption kg(m ² .min ^{0.5})	<1.0	<1.0

Natural Hydraulic Limes (NHL) for site mixing	size	Price ex works
St Astier NHL3.5 Off White	25 kg bag	£POA
St Astier NHL5 Mushroom	30 kg bag	£POA

Consumption: between 10-12 bags of NHL and 1.7 tonnes of sand are required per m3 of mortar.

Pre Mixed Natural Hydraulic Mortar	<u>Size</u>	<u>Price</u>
Natural Mortar Standard Colors A to L. See colour sheet on back page	25 kg bag	£POA





Lambs Walden Mortar. Special mix for Philpot's Quarry	1,000 kg	£POA
	bulk bag	
Lambs Port Lime Mortar. Special mix in colour/texture DF		
Lambs Port Regent Mortar. Special mix in colour/texture KF		
Lambs Ashlar Mortar. Special Fine mix. For Stonework. D,K or other		
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- Two strengths available in all colours.
- i. "Strong" NHL5 for below DPC, above roof line and 'sky' faces.
- ii. Medium NHL3.5 strength mortar suitable for general purpose work.
 - Texture: Standard texture 'M' is <3mm sand suitable for 10mm joints, finer sands are available to order.
 - Pure Lime premixed mortars made with Natural Hydraulic Lime and aggregate.
 - Just add clean water and mix for 5-10 minutes.
 - 25kg mortar to 4/5 litres of water.
 - Bulk bags and pallet loads of 25 kg bags are subject to haulage costs or Palletways costs. Enquire at sales office.

Arch Mortar

Lambs Lime Putty Arch Mortar includes aggregate

10 kg tub

- Supplied in 10kg tubs. This product only requires stirring before use.
 - Suitable for arch joints of 2-6mm.
- A 4 course arch requires approximately 4-5 kg of Lambs Lime Putty Mortar.

Lambs Mature Lime Putty

Lambs Mature Lime Putty

5ltr tub

- Arches requiring 1-2 mm joints should be laid in Lambs Mature Lime Putty.
 - Dock voussoirs before laying.

Consumption

One 25kg bag will lay 25 bricks in a 10 mm joint, therefore one tonne will lay 1000 bricks.

In one m3 of mortar there are 65 x 25kg sacks equalling 1625kg

<u>Please note.</u>

Lambs can take no responsibility with regard to <u>estimated quantities and values</u>. The information stated is for guideline purposes only and it remains the customers responsibility at all times when ordering. We are unable to accept any returns of this type of product under any circumstances.



Deliveries	
a. Guaranteed deliveries dates/times	Not available under any circumstances
b. Delivery expected	An estimate at the time of ordering of when to expect delivery. Subject to change.
c. Delivery 48hr Standard	Delivered on an 18 tonne lorry in two working days following manufacture Unloaded to a flat area of hardstanding. Signature required on delivery.
d. Delivery Next Day	Delivered on an 18 tonne lorry in a working day following manufacture. Unloaded to a flat area of hardstanding (not gravel or mud). Signature required for the delivery. By request only.
e. Delivery am	As above, but delivered before 12 noon. By request only.
f. 7.5 tonne lorry	As above but on a 7.5 tonne lorry. By request only.
g. Hiab	Delivered on a 18 tonne hiab vehicle. By request only.
h. Artic	Artic delivery. Must have forklift on site.
i. Courier	Next working day via national courier such as DHL – requires signature.

Lime Mortar Joint Colours & Textures

- The colour of the joint will be effected by various factors
- A metal tool will give a tighter more polished finish
- A wood tool will give a more open texture and will expose some of the aggregate
- Tamping the surface with a bristle or churn brush after the initial set will expose the aggregate a give a conservation texture to the joint.
- Tamping the surface too soon can bring the fines to the surface creating a dense skin inhibiting the proper curing of the mortar.
- Once the surface of the mortar is firm (usually the next day) lightly scraping the surface to expose the aggregate can improve the appearance of the mortar and make the joints less visible.
- This process should not be undertaken before the surface has
- stiffened or mortar will be smeared onto the face of the stone
- Lambs Natural Lime Mortar is available in a standard range of 12 colours; further colours are available by arrangement.

Flush – smoothed with metal tool – scraped with wooden tool

Joint Shape	



Slightly recessed 1mm – conservation finish achieved by tamping with bristle brush.
 Tuck pointing – white lime putty applied to fresh lime bedding mortar by pointing specialist.
 It is strongly recommended that a site sample reference panel is constructed from the first delivery in order to establish the exact colour and shape of the mortar joint.

<u>Port Lime & Wealden mortars</u> can be supplied from Philpots Quarry, West Hoathly and are graded for use with these natural stones. Available in 25 kg bags from quarry stock, please phone to check we have stock.







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Standard Lime Mortar Colour Chart



This is a general indication of colour. No warranty is given or implied that the goods will all respects be equal to these images. A site sample panel should always be built. 25 Kg bags of these colours are available.

