

Product Data Sheet:

Natural Ironstone Lime Mortar

Pre mixed, factory blended, Ionic natural hydraulic lime and selected, blended, kilned dried sand mortar. The mortars also contain selective additives for improved physical and mechanical properties without compromise to the virtues of a genuine lime mortar. This general purpose mortar can be used for building or pointing stone and brick. Available in different strengths: NHL3.5 and NHL5.

General Information

Ironstone Natural mortar is a dry pre-mixed lime mortar made with Ionic pure and natural hydraulic lime. The lime is blended with Nosterfield and Leighton Buzzard high quality sands, 2.8mm down, to achieve a workable mortar, with a unique colour and texture.

Packaging and storage

This product is supplied in 25 kg polythene lined paper bags. Pallets contain 40 x 25kg bags. This product should be stored in unopened bags clear of the ground in dry conditions and protected from damp. Use with 7 months from the date of manufacture.

Coverage

After mixing a 25kg bag will produce approximately 13-14 litres of mortar. Repointing: Stonework 25kg m² stonework; Brickwork 7kg m². Rebuilding: 1 kg of dried product per brick, or 1.5 tonnes will produce 1 metre cubed of mortar.

Deciding the strength of mortar to use

Solid 9" brick and solid, as opposed to cavity, stone walls should be constructed with a medium strength mortar made with Ionic Old White NHL3.5 lime

Ridge tiles, copings, parapets, retaining walls and walls below DPC should be built or pointed with a strong mortar made with Ionic NHL5 lime

If you are unsure of the correct specification of mortar to use please contact Womersley's and we will consider, the type of stone or brick, site exposure, the time of the year and type of finish required and suggest the most appropriate mortar type. Very exposed sites and denser stone require stronger NHL5 mortars.

Preparation

Before pointing remove all dust and loose material from joints and clean down masonry and brickwork, leaving the wall damp, but not wet, before repointing will help curing and allow easy cleaning off of dropped mortar.

Mixing

Mixing can take place in drum or paddle mixes. Use between 4 to 6 litres of clean water. Add the water in slowly, using just enough to achieve the correct workability. Mix for 10 min. Ironstone mortars may be reworked up to 4hrs and benefit from being left to fatten up after mixing. Please contact us for further information.

User Guidelines

Lime pointing and building mortars should be finished, after stippling back, the same day or the following day in cooler weather. Lime mortars take longer to set than cement, but need the same care in use and to be protected from adverse weather for the first 24 hours. 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. Ironstone hydraulic lime mortars do not cure as quickly as modern cement mixes. To achieve their full strength they require proper curing. Mortars must be protected against the effects of strong sunlight, drying winds, heavy rain and frost. In hot weather dampen down cover with damp hessian sheets. In cold wet weather cover newly applied mortar with hessian or bubble wrap and protective plastic sheeting to protect from freeze/thaw damage.

Performance

Ironstone Mortar	NHL3.5 Old White Binder	NHL5 Binder
Compressive strength N/mm ² 28 days	0.5 – 1.0	1.0 - 2
Compressive strength N/mm ² 91 days	1.0 - 2.0	2.0 – 4.0
Flexural Strength N/mm ² @ 28 days	0.2 – 0.5	0.5 – 1.0
Resistance to Freeze Thaw / sulphates	Medium	High
Elasticity moduli MPa	7500	9500
Vapour exchange Gm air x m ² x hour x mmHg	0.6	0.5
Capillary water absorption kg(m ² .min ^{0.5})	<1.0	<1.0

Health and Safety

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