



Ironstone

Mortars

Caring for your older building
Natural Breathable Sustainable Durable

Ironstone Chalk NHL 5 Lime Mortar Data Sheet

Product

Multi-purpose, dry ready mixed Lime Mortar (just add water)

Mix Ratio – 2:2.5

Binder Strength – NHL 5

Factory blended Natural Hydraulic Lime Mortar with eminently strong NHL 5 binder from Heidelberg Materials Socli blended with kiln dried Grit and River sand, which are 4mm down. The sands are prewashed to remove sediment before being dried.

Usage

Suitable for applications in building conservation where the binder strength is appropriate for the host background / surface.

Coverage

After mixing, a 25kg bag will produce approximately 14.5 litres of mortar.

Advantages

- Quality controlled production
- Consistency of mix ratio
- Significantly improved workability and reduced risk of shrinkage
- Improved and even cure which offers an improved bond with the substrate.
- Extended working and finishing time.
- Can be used on high suction backgrounds.

Colours

This product is entirely natural.

Surface Preparation

Before pointing or building , clean and remove all dust and loose material from joints and masonry.

Where necessary the background should be adequately dampened to promote adhesion/bond with the host surface.

How to Mix

Slowly add 25kg of Ironstone 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 5 – 10 minutes. Ironstone mortars may be re-worked for up to 8hrs.

Always avoid making the mortar too wet as this can promote shrinkage. Whisk mixers are also suitable for use.

It is possible for settlement to occur in the bag in transit, hence if mixing a part bag ensures the contents are thoroughly blended prior to mixing with water.

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.

Curing and Why

Natural Hydraulic Lime (NHL) mortars do not set as quickly as modern cement based products. NHL starts to set once water is added and hardens by reacting with carbon dioxide which is a slow process. Strength and long term durability are achieved over months, not days. 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. In cold weather cover fresh mortar with protective layers of hessian to help avoid frost damage.

Packaging

Available in 25kg polythene lined paper bags or sealed one tonne bulk bags. The paper used is suitable for recycling.

Storage

This product should be stored in dry conditions, in unopened bags and clear from the ground. Use within 6 months of manufacturing date (provided on each bag).

Performance

Test	Performance
Compressive Strength Nmm2	2.83
Fresh Mortar Density Kg/m3	1820
Water Absorption Kg/m3	1.59
Flexural Strength Nmm2	0.327333
Water Addition Rate ml per 1kg	154
Dried Mortar Density Kg/m3	1732.83
Air Entrainment %	14.50

Health and Safety

Risk Phrases	Safety Phrases
R36/37/38 Irritating to eyes, respiratory system and skin	S22 Do not breathe dust
R43 Contact with wet mortar may cause irritation, dermatitis and/or burns	S26 In case contact with eyes, rinse immediately with plenty water and seek medical advice
R66 Repeated exposure may cause skin dryness and cracking	S24/25 Avoid contact with skin and eyes
	S36 Wear suitable protective clothing