



Caring for your older building  
Natural Breathable Sustainable Durable

## **Ironstone Chalk Lime Mortar Data Sheet**

### **Product**

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

Mix Ratio – 2:5

Binder Strength – NHL 3.5

Factory blended Natural Hydraulic Lime Mortar with NHL 3.5 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 24 hours	0.5 N/mm <sup>2</sup>
Compressive Strength 7 days	2.1 N/mm <sup>2</sup>
Compressive Strength 28 days	4.5 N/mm <sup>2</sup>
Flexural Strength 28 days	0.5-1 N/mm <sup>2</sup>
Resistance to freeze thaw	Medium
Elasticity Moduli MPa	7300
Vapour exchange Gm air x m <sup>2</sup> x hour x mmHG	0.6
Capillary water adsorption kg/m <sup>2</sup> .min <sup>0.5</sup> )	<1.0

## 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



Manufactured in the UK in partnership with  
Heidelberg Materials Socli  
Ironstone products are CE marked and  
manufactured under an ISO9001:2015  
accredited Factory Production Control System



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