Ironstone
Mortars

Ironstone Basecoat Plaster
Data Sheet

Product
A professional grade dry ready mixed Natural Hydraulic Lime Plaster
Mix Ratio – 2:5
Binder Strength – Heidelberg Materials NHL 2
Aggregate 4mm down washed silica sand

Factory blended using graded kiln dried sand and Heidelberg Materials Natural Hydraulic Lime binder. Combined with carefully selected additives and alkaline resistant fibres to improve the renders physical and mechanical properties, whilst maintaining all the virtues of a pure Natural Hydraulic Lime plaster.

Usage
Suitable for coarse plaster coats typically known as scratch and float coats. For use internally in building conservation where the binder strength is appropriate for the host background / surface. The addition of the fibres provides reinforcement, improved tensile strength and assists to mitigate cracking, especially on high suction backgrounds.

Do not use this product if internally temperatures are below 5 degrees. Do not use this product in temperatures above 30 degrees.

Coverage
After mixing, a 25kg bag will produce approximately 15 litres of mortar. A single 25kg bag will cover 1.5m2 at 10mm thickness onto a flat wall.

Advantages
- Quality controlled production
- Features the feel of a modern plaster
- Significantly improved workability and reduced risk of shrinkage
- Slower drying; better curing
- Salt resistant

Colours
This product is entirely natural. The Ironstone Basecoat Plaster is made with an off-white sand which results in an off-white plaster when floated.

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Surface Preparation

Dense impervious backgrounds will require little to no dampening, whereas very porous backgrounds will require adequate dampening to prevent rapid drying. Ensure surfaces are clean and free of dust and other debris.

How to Mix

A 25kg bag of mortar will require 4 to 4.5 litres of clean water. Always avoid making the mix too wet, as this can promote shrinkage issues.

First add around 60-70% of the water followed by the Ironstone Basecoat Plaster and mix until the water is fully distributed, then add additional water to the desired consistency. Mix for 5 – 10 minutes. Ironstone Basecoat Render may be re-worked for up to 14hrs.

Whisk mixers are also suitable for use.

Like most lime renders and plasters this blend will benefit from quenching. Allow the mix to stand for 10 to 20 minutes after mixing before use.

Areas of Use

Our Ironstone Basecoat Plaster will be suitable for use onto masonry backgrounds with some suction. For application on to very smooth or highly porous backgrounds then a coat of Ironstone Bonding Coat should be applied first.

Wood wool render carrying boards like Celenit are also suitable substrates. When applying to render carrying boards the suction from the board should be adequately controlled before application. Apply two coats, the first coat should be applied in a 'two pass, one coat' system. Applying the first pass at 5mm then embed 4mm render mesh with a trowel then immediately recoat to give a total thickness of around 7mm. Apply a scratch coat without pulling through the mesh. Damp cure and protect for 7 days before applying a second coat at a target thickness of 5mm, finishing by float and optional sponging.

Coats

Ironstone Basecoat Plaster should be used as a minimum two coat system as a single coat application will ghost through the background.

How to Apply

Always wet a substrate, including previous render layers, to control suction before use. However, you don't want to be laying onto water sitting on the surface as this will act as a slip layer.

Dub out the wall to bring it roughly flat by filling pockets, voids or missing pointing with a relatively stiff mix. After dubbing out a shallow scratch coat should be applied to areas filled. Allow 48hrs for this to stiffen sufficiently to take the scratch coat. Keep these areas damp by misting until scratch coat is applied.

The scratch coat should be applied at a target thickness of 10-12mm, this should be scratched using a crosshatch pattern scratch to approximately 1/3 of the depth of the render. The more common wavy line scratch used on cement renders is not suitable for this type of material. This coat should be left for 7 days to build up strength to take the float coat. During this time the render should be damp cured by mist spraying, and protected from direct sunlight / drying winds, preferably with damp hessian.

The float coat should be applied at a target thickness of 8-10mm and should not be thicker than the scratch coat. This should be floated with a wooden or plastic float to compress the surface; lime renders should be stiffer than cement renders at time of floating and shouldn't drag under the float.

Optionally this can be sponged up after it's stiffened to give a smoother surface of this is to be the topcoat. If the Ironstone Finishing Render is to be applied, then this coat should be devil floated to give a light key and allowed to cure for 5-7 days. During this time the render should be damp cured by mist spraying and protected from direct sunlight.

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. Reseal part bags after opening if unused product present. Use within 6 months of manufacturing date (provided on each bag).

Performance

Test	Performance
Compressive strength Nmm2	**2.19**
Fresh Mortar Density Kg/m3	**1959.73**
Water Absorption Kg/m2	**1.74**
Flexural strength Nmm2	**.39**
Water Addition Rate ml per 1kg	**166.59**
Dried Mortar Density Kg/m3	**1780.98**
Air Entrainment %	**8.53**

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.**
R 66 Repeated exposure may cause skin dryness and cracking	**S24/25 Avoid contact with skin and eyes**
	S36 Wear suitable protective clothing

Declaration

Manufactured by Cornerstone Mortars to the requirements of BS EN 998-2:2016

All Ironstone products are CE marked and manufactured under an ISO9001:2015 accredited factory production control system.