

## Non Hydraulic lime mortar

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Pre mixed non hydraulic lime and sand mortars for use in plastering, building and rendering, where a very soft, "breathable" flexible mortar is appropriate. Fibre reinforced plasters available. Site specific or specifier and customer designed mixes welcomed.

### General Information

Lime green Non Hydraulic lime mortars are a range of specialist mortars for building conservation, made with very soft air-setting CL90 lime, *sometimes known as fat lime*. Available in 25 kg bags and 0.4m<sup>3</sup> reusable mortar bags.

Special mixes to order can include coarser sands and special aggregates.

### Types of Non-hydraulic Mix

**Mortar:** for repointing & masonry work.

**Basecoat:** "coarse stuff" construction, pointing, render base coats and coarse finishing coats.

**Basecoat + Fibres:** as above but with alkali resistant glass fibres.

**Float Finish:** fine mortar joints, sponge and float finished coats on plasters/renders

**Fine Finish:** extra fine finish topcoat plaster.

### Coverage

**Average bulk density:** 1950-2100 kg per m<sup>3</sup>.

**Repointing:** 20kg/m<sup>2</sup> stonework: 7kg/m<sup>2</sup> brickwork.

**Bedding:** Per 1m<sup>3</sup> of mortar: building 1000-1800 bricks.

**Plastering / Rendering:** 100m<sup>2</sup>@10 mm.

All figures are approximate

### Mixing

Rework before use. Add premix into drum or preferably a forced action pan mixer. Add just enough additional water to suit, mix for at least 15min. Excessive amounts of water in the mix

produce greater shrinkage and more friable mortars.

**Pozzolans or gypsum:** add just before use if required

**Animal hair:** add just before use for plaster re-enforcement. The weight of re-enforcement is critical and depends on application, type, length and quality of re-enforcement used. Typically at least 5.5 kg per m<sup>3</sup>.

Animal hair and lime must not be wet stored.

### Mix Selection

Selection of mortar should take into account any structural requirements: the porosity and strength of the background and any special local environmental considerations (e.g. prevailing wind, frequency of frosts, location etc). Non hydraulic lime mortars are not suitable for cavity wall construction.

Some situations will require the addition of a pozzolan. Dense or impervious masonry, cool climates and damp weather will slow the set of these mortars considerably. The durability of non hydraulic lime mortars will be proportional to climate. Where pozzolans are used site trials may be necessary to determine the correct mix.

### Surface Preparation

Remove dust, surface contaminants and loose or friable existing plaster / render / mortar. Where necessary consolidate. Using PVA is not normally appropriate. Wooden lath should be stored dry and wetted just before application of the plaster. Ensure Masonry is not waterproofed or painted. Adequately dampen dry or high suction surfaces.

# Product Data

## Application Guidelines

**Temperatures:** above 8°C and below 30°C

**Reworking:** indefinite if stored airtight

**Further coats:** Temperature and climate dependent. Once the previous coat has stiffened and hardened, but while it is still 'green'. Can be 3 to 14 days.

### 1) Bedding and repointing

Dampen brick or stone before use. **Lime green Non-hydraulic Mortar** is suitable for ½" (12mm) joints. Use **Lime Green Fine Finish** for very tight joints of around ¼" (6mm) or less.

Ensure careful curing until product has set.

### 2) Plaster and Render Basecoat

#### a) Stipple and dub coats (Optional)

On uneven masonry apply a dub coat. On dense impervious masonry use a stipple coat. Consult us for more information.

#### b) Solid Background Scratch Coat

Apply a scratch coat of **Lime green Basecoat** or **Basecoat + fibres** directly to the substrate, or dubbing / stipple coat if applied. If the substrate is dry, damp down the surface prior to coating.

#### c) Lath Background Scratch Coat

Fibre reinforcement is vital on laths. Use **Lime green Basecoat + Fibres**, or add animal hair to **Lime green Basecoat just before use**. These products are not suitable for EML unless gauged with pure Gypsum. Please consult us.

#### d) Floating coat

Optional for masonry backgrounds. Apply **Lime green Basecoat** at least 6mm thick to the well keyed scratch coat once it has cured.

#### e) Finish Coats

Apply **Lime green Trowel Finish** or **Lime green Float Finish** once the previous coat has cured.

Apply in uniform 3 – 6mm layer.

Avoid over working

Do not apply water to the surface of the finishing coat when floating.

Finish with wooden float and / or sponge.

## Curing

Prevent all work from drying out too rapidly.

Lightly spray work with water if it is hot or the product is drying too quickly.

Protect from adverse conditions such as frost, rain etc. until set & hardened.

Adequate curing is **vital** to the success of the product. Fully sheeted scaffolds should be considered for render.

## Painting

Approx. average of 1.5 days drying per mm of plaster / render thickness before painting.

Breathable paints should be used for compatibility: e.g. St Astier Lime paints, Aglaia, Beeck's mineral paints or Lime green Limewash.

## Consult us when using mineral paint

### **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.

S24/25 Avoid contact with skin and eyes

S36 Wear suitable protective clothing

This is not a specification. Trials should be undertaken on old surfaces & backgrounds to ensure compatibility. Lime plasters do not set or perform like gypsum or cement based materials