

## Eco-render range: Duro: Natural

16/2/2006

Lime green Eco-renders are a range of renders /plasters designed for renovation and new build. The range is based on St Astier Natural Hydraulic Limes and recycled aggregates.

### General Information

**Duro: Natural** is breathable, elastic and salt resistant.

**Duro: Natural** does **not** contain plastics such as PVA or acrylic, cement or PFA or any other materials containing toxins or which reduce breathability.

**Duro: Natural** is ideal for most old buildings or newer eco-friendly construction where a harder, denser render or plaster is required.

### Availability

April 2006. 22kg bags, 48 per pallet shrink wrapped – 1056 kg.

### Coverage

Approx 1.4kg per mm of thickness over 1m<sup>2</sup>. One 22kg bag will cover approx. 1.57m<sup>2</sup> at 10mm thick. This does not include any allowance for wastage.

### Mixing

Add the whole bag of pre-mix into drum or forced action mixer carefully avoiding creating excessive dust. Add only 4-5 litres of clean water to each 22 kg sack. Mix for upto 10 min in mixer or using a mechanical whisk for 2-3mins stand for 10 minutes then mix once more before application.

### Surface Preparation

Remove dust, surface contaminants and loose or friable existing render/plaster. Where necessary consolidate. Using PVA is not normally appropriate. Ensure Masonry is not waterproofed or painted.

### Application Guidelines

The number of coats is dependent on the surface to which the render is applied, the exposure of the building and the finish required. Please consult lime green for more information.

#### **Typical Minimum Thickness:**

- **2 Coat Render:** 14mm
- **3 Coat Render:** 20mm

**Temperatures:** above 5°C and below 30°C.

**Reworking:** 12 hours

**Further coats:** after 2 to 7 days, once the coat has stiffened / hardened, but is still 'green'.

**Curing:** cure each coat (see below) before further work.

#### 1) Backing Coats

##### Stipple Coat and Dubbing coats (optional)

Apply **Lime Green Natural Stipple** coat on dense impervious backgrounds (see datasheet). Dub out deep areas with **Duro: Natural** and key.

##### Base Coats

Apply a first coat of **Duro: Natural** between 9 to 12 mm thick directly to substrate, or to stipple or dubbing coat if they have been applied. Each coat must be scratched to give a good mechanical key before further coats are applied. If the substrate is too dry, dampen down the surface prior to coating. A second, intermediate coat may be applied after the first has adequately cured. Ensure it is thinner than the first.

N.B. For application to lath, please refer to Lime Green.

## Product Data

### 2) Finishing Coat

Key the previous coat, whilst still green, with a "nail" or "devil" float before applying the finishing coat.

Apply **Lime green Eco-render Natural Finish** or **St Astier Ecomortar** (in 24 colours), once the backing coats have had sufficient time to cure.

Finishing coats should be applied in a uniform 3-6mm thick layer with a laying trowel.

Avoid over working

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

Finish with wooden float and / or sponge.

### Curing

Prevent all coats from drying out too rapidly.

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

Protect from adverse conditions such as frost, rain etc.

Adequate curing of a final decorative coat should be more stringent, ideally using a fully sheeted scaffold when outside.

This product conforms to BS EN998

Estimated Performance data: t.b.c.

Test	Result	Standard info
Water Vapour Perm. Coefficient (u)	tbc	EN1015-19
Flexural Strength @ 28 days M/mm <sup>2</sup>	0.7	Tab.
Modulus of elasticity @ 28 days Mpa	9000	
Compressive strength @ 28 days N/mm <sup>2</sup>	CSII	Tab.
Capillary water absorption kg/m <sup>2</sup> .min	W1	Tab.
Adhesion N/mm <sup>2</sup>	tbc	EN1015-12
Bulk Density (Dry) grams / litre	1400	EN1015-10
Shrinkage @ 28 days mm/m	0.5	Tab.
Thermal Conductivity w/m.K	0.5	Tab.
Soluble salts content	< 0.15%	

### Health and safety

#### **Risk Phrases**

R36/37/38 Irritating to eyes, respiratory system and skin

R43 May cause sensitisation by inhalation and skin contact

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.