

Eco-render range: Duro Natural

15/9/10

Lime green *Eco-render Duro Natural* is a pure lime render/plaster undercoat for renovation and new build. The range is made with Natural Hydraulic Lime, natural sands and recycled aggregates.

General Information

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

Duro Natural does **not** contain 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 pure lime render or plaster is desired.

Availability

25kg bags, 40 per pallet shrink wrapped.

Coverage

Approximately 1.7kg per mm of thickness over 1m². One 25kg bag will cover approx. 1.5m² at 10mm thick. This does not include any allowance for wastage.

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. Ensure downspouts are not leaking on to the substrate.

Mixing

Add the whole bag of pre-mix into drum mixer carefully avoiding creating excessive dust. Add only 4-5 litres of clean water to each 25 kg sack. Mix for up to 10 min in mixer, or use a mechanical whisk for 2-3mins, stand for 10 minutes, then mix once more before application. Do not anything other than clean water.

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.

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

Reworking: up to 8 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.

a) Stipple and dubbing coats (optional)

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

b) Base coat and floating coats.

Apply an undercoat of ***Duro Natural*** between 9 to 12 mm thick directly to a prepared substrate. 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 undercoat may be applied after the previous has adequately cured. Ensure it is thinner than the first.

Key the final coat of ***Duro Natural***, whilst still green, with a "nail" or "devil" float before applying the topcoat.

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

Product Data

c) Topcoat

Apply **Lime green Natural Finish** (coloured), once the backing coats have had sufficient time to cure.

See separate datasheet for more details.

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, direct sun etc.

Adequate curing of decorative topcoat should be more stringent, ideally using a fully sheeted scaffold.

Full declaration of ingredients

20%+	Silica sands Limestone sands
1% to 20%	Natural Hydraulic Lime NHL3.5
0.1% to 1%	Clay
Below 0.1%	Cellulose (from plants) Tallow (from animals) Air entrainer (man made)
Others;	None

Test	Result	Standard info
Water Vapour Perm. Coefficient (μ)	5/20	EN1745*
Compressive strength @ 28 days N/mm ²	CSII	EN 1015-11
Capillary water absorption kg/m ² .min	W0	EN 1015-18
Fire class Euroclass	A1	EN 13501-1
Bulk Density (Dry) grams / litre	1600	EN1015-10
Thermal Conductivity w/m.K	0.54	EN1745*
Soluble salts content	<0.15%	
Modulus of elasticity @ 28 days Mpa	9000	

Health and 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.