ECOMORTAR®
SUSTAINABLE PURE LIME MORTARS

TECHNICAL DATA SHEET

ECOMORTAR® R100

RESURFACING

THE BENEFITS

- STRONG BOND ON LOW ABSORPTION SUBSTRATES
- FINE BASE PLASTER FOR SMOOTH FINISHES
- SURFACE HOMOGENISATION & RESURFACING
- LOW SHRINKAGE

20 KG | **BS EN 998-1** | **TYPE CR**

SUITABLE FOR

> Interior and exterior usage.
> Waterproofed surfaces, painted surfaces,metal, masonry, terracotta, ceramic tiles,plasterboards, drywall, cement renders.

Before applying, always make an adhesion test on a small area.

PACKAGING

> 20 kg bag
> 48 bags per pallet (960 kg pallet)

PRODUCT COMPOSITION

Render/plaster based on Saint-Astier® lime, fine sand (0-0.6 mm) and specific additives. Does not contain any cement or other pozzolanic components.

SHELF LIFE & GUARANTEE

One year from production date if protected in the original packaging and stored in dry conditions.
Manufacturer civil responsibility.

by SAINT-ASTIER
LIME, LIFELONG EXCELLENCE

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PERFORMANCE

ESSENTIAL SPECIFICATION	ECOMORTAR® R100	Units
Dry density	1,200 to 1,400	kg/m^3
Water retention	86 to 90	%
Shrinkage	< 1	mm/m
Compressive strength at 28 days	4 to 5	MPa
Thermal conductivity	0.76	W/(m.K)
Elasticity modulus	6,000 to 8,000	MPa
Vapour permeability	0,71	g/(m^2.hour.mmHg)
Capillarity	0,8 to 1	g/(m^2.min$^{-1/2}$)
Bonding strength	> 1	MPa

MIXING

Mix for 4 to 5 minutes with a whisk mixer (450 to 500 rpm). High-speed mixers (more than 500 rpm) are not recommended as they can over-mix the product and modify its performance. Manual mixing is not recommended.

WATER ADDITION

4.25 to 4.75 litres per 20 kg.

CONSUMPTION/THICKNESS

1.6 kg per mm of thickness per m².
Maximum thickness : 10 mm.

WORKING TEMPERATURE

Not below 8°C or above 30°C. Dampen the substrates the day before and prior to application, allow the surface water to be reabsorbed. Avoid rapid drying due to high temperatures and/or strong winds by covering and curing with a light water mist as necessary. Protect wet mortars from frost for at least 10 days after application. Reseal open bags as soon as possible.

HEALTH & SAFETY

Consult safety data sheet for each product before use. Special care should be taken to prevent dust from becoming airborne. The use of ventilation and wet methods are recommended. Always use appropriate safety equipment (gloves, mask, safety shoes...).

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RESURFACING

SUITABLE SUBSTRATES

Indoors

> Can be applied directly to gypsum plasterboards, aerated concrete block, blocks, hemp blocks and hempcrete, etc.
> Paint or resin plasters (provided good adhesion) and after an adhesion test.
> For bricks, concrete and cement blocks preparation of the substrate may be required depending on the condition and flatness of the surface.

Outdoors

> Heterogeneous substrates
> Old gypsum-based substrates or old lime renders

UNSUITABLE SUBSTRATES

> Fragile or non-adhesive substrates.
> Wallpaper.
> E.T.I. (External Thermal Insulation) substrates.
> Water-repellent substrates, silicate substrates and epoxy plasters.
> Substrates that have undergone a negative adhesion test.
> Substrates sensitive to moisture due to capillarity.

ADHESION TEST

1. Apply 1 square metre of EcoMortar® R100 at 3 mm thickness.
2. Embed a glass mesh (4mm*4mm), allowing 20 to 30 cm of the mesh to hang below the application area.
3. Apply a finishing coat over the application area at 2 mm thickness and leave to dry.
4. After 7 days, roll a broomstick over the 20 to 30 cm of loose mesh and then try to pull the mesh out. If the ECOMORTAR® R100 remains in place, the adhesion test is positive and application can continue. If the mesh and the ECOMORTAR® can be pulled off, the adhesion test is negative and the ECOMORTAR® R100 will not adhere to the support material.

PREPARATION OF THE SUBSTRATE

> Always carry out a suitability test of the substrate.
> The substrate must be stable, clean and flat.
> Clean any paints and resin plasters that are still in good condition with a suitable cleaning agent. Loose, flaking or powdery parts should be removed.
> Passivate and protect metal parts and then use a mesh.
> When applying the ECOMORTAR® R100, the surface (excluding some plasterboard) must be slightly dampened with a water mist.
> The substrate must not be saturated at the time of application as this greatly reduces the adhesion.

APPLICATION AND FINISHING

MANUAL APPLICATION

Application without reinforcement mesh

> Apply with a trowel in one or two layers of 2 to 4 mm. The maximum overall thickness of the layers is 10 mm.

Application with reinforcement mesh

> Apply a first layer of 3 to 6 mm. Embed a 4x4mm mesh and apply a second layer of 2 to 4 mm as soon as the first coat has firm up..

Finishing

> Respect a drying time of 7 days per 10 mm (maximum). ECOMORTAR® R100 can be left in it's natural state or painted with a mineral paint such as lime paint.

CHAUX DE SAINT-ASTIER®

The characteristics and indications are the result of intensive work by our technical department, always respecting the general technical standards of construction. Our recommendations on application and characteristics are intended to assist in the choice of our product but do not constitute any contractual legal relationship. In particular, they do not exonerate the user or the technical management from the obligation to check the suitability of the product for its use. In the event of mixing the mortar with other products (aggregates, pigments or other elements), Chaux de Saint-Astier cannot be held responsible for any possible damage.

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