



ECOMORTAR®
SUSTAINABLE PURE LIME MORTARS

TECHNICAL DATA SHEET

ECOMORTAR® R50

PREPARATION / RESURFACING PLASTER
INTERNAL USE

THE BENEFITS

- + BONDS WITH LOW ABSORPTION SUBSTRATES
- + HIGH ELASTICITY
- + FINE BASE PLASTER FOR SMOOTH FINISHES
- + LOW SHRINKAGE



**20
KG**

**BS EN
998-1**

**TYPE
CR**

SUITABLE FOR

- > Internal use only.
 - > Waterproofed surfaces, painted surfaces, metal, masonry, terracotta, plasterboards, drywall, cement renders, insulation boards.
- Before applying, always make an adhesion test on a small area.
For stronger adherence, use ECOMORTAR® R100.

PACKAGING

- > 20 kg bag
- > 48 bags per pallet (1T pallet)

PRODUCT COMPOSITION

Render/plaster based on Saint-Astier® lime, fine sand (0-0.6mm) 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



PERFORMANCE

ESSENTIAL SPECIFICATION	EcoMortar® R50	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)(tabulated)
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 20kg bags.

CONSUMPTION/THICKNESS

1.6kg per mm of thickness per m².

Maximum overall 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 by covering and curing with a light water mist as necessary. 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...).





SUITABLE SUBSTRATES

Without reinforcement mesh

- > Can be applied directly to drywall, plasterboard, on bricks, blocks.
- > For bricks, concrete and cement blocks: preparation of the substrate may be required, depending on the condition and flatness of the surface.

With reinforcement mesh

- > Heterogeneous substrates
- > Old gypsum plaster, old lime plasters or cement plasters
- > Hemp lime plasters (indoors)
- > Paint or resin plasters
- > Insulation boards approved by the Saint-Astier® Technical Dept.

Always perform an adhesion test prior to application.

ADHESION TEST

1. Apply 1 square metre of ECOMORTAR® R50 at 3 mm thickness.
2. Embed a glass mesh (4x4 mm), 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, then let the mix 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® R50 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® R50 will not adhere to the support material.

In case of negative result, a test can be done with ECOMORTAR® R100 or the defective background could be removed before to proceed to a new test.

PREPARATION 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. A 4x4 mm mesh must be embedded in the plaster.
- > When applying the ECOMORTAR® R50, the surface (excluding plasterboard) must be slightly damp with a water mist.
- > The substrate must not be saturated (water film on surface) at the time of application as this greatly reduces the adhesion.

APPLICATION AND FINISHING

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® R50 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.