

Raso R 140

Polymer-modified smoothing mortar, fibre-reinforced, based on hydraulic binders, selected sand, specific additives, for interior and exterior use, certified as GP mortar according to the UNI 998-1 standard, formulated for smoothing rough plaster and EPS white and graphite, cork, multi-layer or multi-component insulating panels. Also suitable for bonding and smoothing cellular blocks.

Raso R 140 is a polymer-modified smoothing mortar, fine or medium-fine textured render, for interior and exterior use, based on hydraulic binders, selected sand, specific natural additives. Formulated in the R&D laboratories of **Licata S.p.A.**, it is characterised by easy workability, thixotropy and high wettability. The presence of redispersible resins increases the elasticity, binding power and resistance to aggressive external agents of this product. **Raso R 140** is ideal for the smoothing, both indoors and outdoors, of traditional or premixed rough plaster, insulating panels (polystyrene, EPS, cork, multi-layer, etc.), before decorating with paint, specular finishes and synthetic and mineral coatings. **Raso R 140** is also certified as GP mortar according to the **UNI EN 998-1** standard.



MAIN FIELDS OF USE

Raso R 140 is used to smooth fine or medium-fine textured render for the most common substrates used in the building industry, such as

- EPS, graphite EPS or XPS insulating panels (only for low plinth strips)
- Cement/concrete-based renders
- Masonry
- Cellular blocks
- Prefabricated or cast-in-place concrete
- Autoclaved aerated concrete
- Old paint and coatings provided they are clean, thick and well anchored to the substrate

To apply to different substrates, please contact our technical department.

CHARACTERISTICS

- Universal product: thanks to its special composition, **Raso R 140** adheres to the most commonly used substrates in the building industry.
- Good workability. The combination of fluidity, rheology and a good open time is obtained by using latest-generation additives.
- Excellent thixotropy: **Raso R 140** is characterised by excellent thixotropy and wettability, so it is ideal for application both vertically and overhead.
- Fibre-reinforced. The special HOT fibres give the product continuous reinforcement, increasing flexural strength and minimising hygrometric shrinkage and thus, the appearance of hairline cracks and splits.
- Excellent aesthetic finish. Selected inert fillers with a maximum grain size of < 0.5 mm, < 0.8 mm and < 1.2 mm make **Raso R 140** an ideal substrate for subsequent decoration with paint, specular finishes and both synthetic and mineral coatings.



APPLICATION METHOD

Preparation of substrate

Mechanically remove any flaking or easily detached parts. Thoroughly clean the application area so that it is free of dust, residue from surface treatments, such as detergents, oily substances, disarming agents, mineral or organic grease, wax, traces of chalk or salt. Very dusty or crumbly surfaces should be treated beforehand with the specific consolidating primer **Nano Primer**. Any holes or large cracks must be repaired with **Repair 250 N/R** or **450**.

Preparing the mixture

You need 5.5-6 litres of clean water (UNI EN 1008) for every 25-kg bag (or 22-24% density).

Pour the product into a clean container with $\frac{3}{4}$ of the mixing water. Mix for about 3 minutes with a low-speed mixer, gradually adding the remaining water until you obtain a thixotropic, uniform, lump-free mixture. For the best application, leave the mixture to rest for a few minutes. Do not divide the packages up into partial mixtures.

If the product is stored in open, partially used sacks, it may not meet the technical characteristics outlined in this document.

Application

Apply at least two coats with a spatula within 60 minutes of mixing at a distance of 2 to 24 hours depending on the weather conditions. Each layer must not be more than 2 mm thick. Finish with a sponge float, spraying with water and/or wetting the tool. Do not apply **Raso R 140** on substrates that have a film of water on the surface, are completely dry or in extreme conditions, such as walls exposed to full sun or frozen.

Unfavourable weather conditions, dry wind, high temperatures or highly absorbent substrates may reduce the open time of the mixture, so it is important to constantly check that the mortar does not form a film, stirring as required. A damp substrate helps extend the open time of the mixture, however, it is not advisable to further wet the mortar once mixed.

Raso R 140 will be sufficiently cured for subsequent decoration after no less than one week at a T of: +20 °C $\pm$ 1 and RH: 70% $\pm$ 5.

On specific substrates, such as thermal blocks in cellular concrete (gasbeton), etc. which can be smoothed directly without applying a layer of render, to prevent cracking, it is strongly recommended, before the final coat, to insert **licatatherm 160** mesh in vertical strips, overlapping it along the side edges by at least 10 cm.

Make sure that the ambient temperature, that of the substrate and product during application is between +5 °C and +35 °C.

PRODUCT INFORMATION

Appearance	Grey or white powder
Particle size	< 0.5 mm; 0.8 mm; 1.2 mm
Powder consumption	4 to 5 kg/m ² (1.15 kg/m ² per mm of thickness)
Mixing water	22-24% of the weight of the powder
Workability time at 20 °C	~ 60 minutes
Application thickness per coat	about 2 mm
Application temperature	From +5 °C to +35 °C
Storage	9 months (grey) and 12 months (white) in a dry, protected place in unopened package at temperatures between +5 °C and +35 °C
Packaging	25 kg
pH of mixture	approx. 11

PERFORMANCE according to UNI EN

Characteristic	Test method	Legal requirement	Performance
Dry density in bulk	EN 1015-10		1400-1500 kg/m ³
Compressive strength	EN 1015-11	CSI - CS IV	CS II
Adhesion	EN 1015-12		≥ 0.11 MPa-FP:B
Capillary absorption	EN 1015-18	W0-W2	W0
Water vapour permeability coefficient (μ)	EN 1015-19		≤ 9
Thermal conductivity (λ)	EN 1745		< 0.5 W/mK
Euroclass fire resistance	EN 13501-1		A1

WARNINGS

- Product for professional use.
- Alkaline material: protect eyes and skin during application.
- After use, wash tools with water while the mixture is still fresh.
- The ambient temperature and humidity rate influence the workability, setting and drying times.
- Take care of the product's curing period for at least 24 hours after applying, protect the fresh mortar from rapid drying, direct sunlight, strong wind and heavy rain.

SAFETY

Please consult the safety data sheet for information about product disposal, storage and usage.

NOTES

This data sheet replaces and voids all previous versions.

The indications and specifications given in this document are based on our current technical and scientific knowledge. They should, however, be considered as purely indicative because we have no control over the conditions in which the product will be used. The purchaser must, therefore, check that the product is suitable for his specific requirements. Our sales and technical network guarantees rapid consultancy services and is at your disposal for any clarifications and questions you may have about the use and application of **Licata SpA** products.

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