SILIKAL® RE 55

EP primer and mortar resin

SILIKAL® RE 55 is a high-grade universal, colourless, low-viscosity, epoxy resin-based 2-component system.

Properties

- Can be universally used as a primer, scratch coat or surfacing mortar
- Outstanding adhesion
- High compressive strength
- Low viscosity

Areas of application

- Priming, levelling
- Reprofiling, manufacture of synthetic resin mortars
- For medium to high mechanical stresses
- For cement-bonded substrates
- For interiors

Technical data

Mixing ratio	Component A (resin) = 2 parts by weight Component B (hardener) = 1 part by weight
Specific weight (mixture)	1.10 kg/l
Solid content	> 99 weight % (works standard)
Minimum curing temperature	+10 °C (room and floor temperature) Note the dew point!
Optimum processing temperature	+15 to +25 °C
Pot life at +20 °C	30 min
Curing time at +20 °C	- Treatable/resistant to work/foot traffic – after 8 – 12 hours - Resistant to light mechanical stresses – after 2 – 3 days - Fully resistant to chemical and mechanical stresses – after 7 days
Consumption	Primer: approx. 0.25 – 0.35 kg/m² Scratch coat: approx. 0.6 kg/m²

High temperatures reduce and low temperatures lengthen all times given. The consistency, degree of filling and consumption will vary. Generally a temperature change of 10 °C will result in the times given halving or doubling.

Substrate

Cement-bonded substrates must be sound, dry and free of laitance, loose parts, oil, dust, grease and substances which could act as releasing agents.

Suitable measures must be taken to prepare the surface, e.g. by shot blasting and/or milling, so that the listed requirements are met.

The cohesive strength of the substrate must be at least 1.5 N/mm². The moisture content of the surface to be coated must not exceed 4.5 CM %. Moisture penetration through the rear must be permanently excluded.

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Advice on application

Components A and B are supplied in the correct ratio for mixing. The entirety of the hardener (comp. B) is added to the basic component (comp. A). Mixing is done by a machine (agitator at 300 - 400 rpm) and should last for at least 3 minutes until a homogeneous, non-streaky mixture is obtained. The mixed material must be poured into a clean pail and mixed again briefly.

- In priming the material is applied using a trowel, stopping knife or roller to give an even, sealed surface. If the substrate is very porous a second primer coat or scratch coat is recommended.
- The priming filler is applied as a scratch coat using a trowel, metal or rubber squeegee to close up the pores. It is absolutely essential where self-levelling coatings will be applied to substrates that are rough and porous. A second scratch coat may be required on very porous substrates.

  Scratch primer compound:
  1 part by weight of SILIKAL® RE 55 : 1 part by weight of quartz sand mixture (50 % quartz powder, 50 % quartz sand 0.1 – 0.4 mm).
- The EP mortar is used for repairing ruptures in cement-bonded screeds or to produce synthetic resin screeds. Work the mortar wet in wet onto the primed substrate immediately after mixing, level with the lath and compact and smooth out with the smoothing trowel.

  Synthetic resin mortar:
  1 part by weight of SILIKAL® RE 55 : 8.0 – 12.0 parts by weight of quartz sand mixture
  (10 % quartz powder, 35 % quartz sand 0.09 – 0.2 mm, 55 % quartz sand 0.7 – 1.2 mm)

  After curing the porous EP screed should be sealed up again with a scratch primer coat.

  Do not apply at temperatures below +10 °C and with relative humidity above 75 %. To ensure good air exchange (dry air), provide ventilation and aeration during the drying and hardening phase. Between the individual operations it is absolutely essential that no moisture or contamination is allowed to penetrate.

  Always heed the danger warnings and safety advice shown on the container and follow the regulations laid down by the relevant employers' liability insurance association. Refer to the safety data sheet for further information on the physical, toxicological and ecological properties of the product.

Building up the coating

1. Prepare the substrate.
2. Apply a primer or scratch coat of SILIKAL® RE 55
3. Apply a top coat.

Delivery form and shades

• 10 kg combination container
• 30 kg combination container
• 3 x 200 kg drum combination (3 drum units: 2 x component A + 1 x component B)
Transparent

Light fastness

All epoxy resin-based products will tend to yellow. This does not affect the mechanical properties of the cured coating.

Shelf life

1 year if stored in the unopened original container in a cool (< 25 °C), dry and frost-free location.
Do not expose to direct sunlight!

Equipment cleaning

The tools must be washed thoroughly with a suitable solvent immediately after use.

Labelling

Giscode: RE 1
A component: Irritant, hazardous to the environment.
B component: Corrosive.

EU Directive 2004/42/EC (VOC Paints Directive)

The maximum VOC content permitted in EU Directive 2004/42 (product category IIA/j type Lb) in the ready-to-use state is 500 g/l (limit 2010).
The maximum VOC content of SILIKAL® RE 55 in the ready-to-use state is < 500 g/l VOC.

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