

SILIKAL® RE 77 is a high-grade colourless, medium-viscosity, epoxy resin-based 2-component system.

Properties

- Less yellowing
- Resistant to chemicals
- Good inter-layer adhesion
- High quality
- Glossy

Areas of application

- Colourless, glossy top coat over sprinkled coloured sand or coloured chip surfaces
- Binder for 3 – 4 mm heavy-duty decorative mortar floors of coloured sand
- For interiors

Technical data

Mixing ratio	Component A (resin) = 100 parts by weight Component B (hardener) = 50 parts by weight
Specific weight (mixture)	1.10 kg/l
Minimum hardening 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 approx. 24 hours - Resistant to light mechanical stresses – after 2 – 3 days - Fully resistant to chemical and mechanical stresses – after 7 days
Consumption	approx. 0.4 – 0.8 kg/m ²

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.

If the product is used as a colourless top coat over decorative synthetic resin floors, you must make sure that the surfaces are no more than 48 hours old. You must also make sure that they are not dirty.

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.

- For a top coat, the material is distributed in an even, integral layer using the rubber trowel and then worked in cross-wise using the roller until the desired layer thickness is achieved. A second coat may be applied if a smooth surface is required. However, this second coat must be applied within 12 hours of earliest resistance to foot traffic.

Attention: The total thickness of the layers of the colourless top coat must not exceed 1 mm (1 kg/m²) even after several applications. A slight white colouration may be visible on darker surfaces.

- Smoothed coloured sand decorative topping: After both components have been mixed together, SILIKAL® CQ filler is added in the ratio 1 : 4 to 1 : 5 and mixed in thoroughly. The mortar obtained is initially applied to a thickness of 3 – 5 mm using a stripper trowel and subsequently compressed and smoothed with a smoothing trowel. The primed surface must be liberally sprinkled with quartz sand as otherwise the very dry mortar mixture will slide away during smoothing.

More SILIKAL® RE 77 resin can then be rolled on crosswise to provide a final colourless sealer.

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 decorative topping with SILIKAL® RE 77 resin.
4. Apply a colourless top coat with SILIKAL® RE 77.

Delivery form and shades

- 10 kg combination container
- 30 kg combination container

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 77 in the ready-to-use state is < 500 g/l.