

SILCOR® 280

High Chemical Resistant Protective Lining

Product Description

Silcor 280 is a two-component solvent-free novolac epoxy coating, which is designed to provide protection to concrete and steel structures in aggressive chemical conditions.

Color

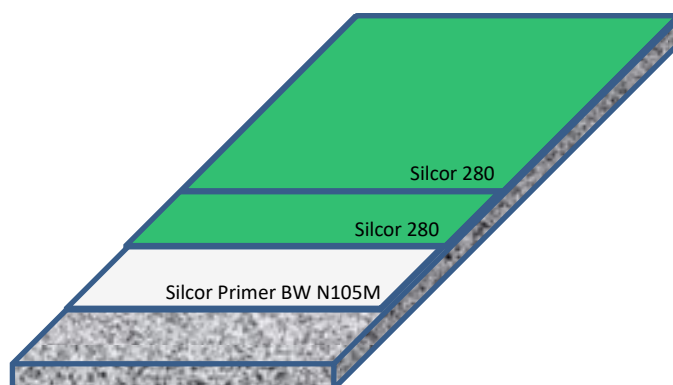
- Standard color RAL7040 grey
- Also available in RAL K5 Classic Colour

Finishing

- Gross

Features

- Solvent free, low odor and V.O.C
- High chemical resistance to wide range of chemicals
- Abrasion resistant, against medium traffic and trolley movement.
- Hard wearing floors finish



Typical Properties

Mixed Density at 28°C	Approx. 1.4 ± 0.05 g/ml
Pot Life at 30°C	30 mins
Tensile Strength	25 N/mm ²
28-day Compressive Strength	55 N/mm ²
Flexural Strength	35 N/mm ²
Shore D Hardness	75 - 82
Adhesion to Concrete	> 2 N/mm ² (Concrete failure)
ASTM D 4060 -10 Taber Abraser Wear Index in mg/1000 revolutions	37mg

Specifications are subject to change without notification. Results shown are typical but reflect laboratory test procedures conducted in laboratory conditions. Actual field performance will depend on installation methods, site conditions and use environment.

Supply

Packaging Size	Available in 5 Kg set and 10 Kg set Part A : Part B 4 Kg / 8 Kg : 1 Kg / 2 Kg
Shelf Life	12 months storage in dry condition Store off ground, under tarps or otherwise protected from rain and ground moisture. Ambient temperature 10°C to 30°C

Ancillary Components

- Silcor 400 EM SYSTEM – Epoxy mortar system which consists of Silcor Primer SF, Silcor 400 EM epoxy mortar and Silcor 401 EMS scratch coat
- Silcor Primer BW N105M epoxy primer

Application

Surface Preparation

Substrate concrete or screed should be a minimum of compressive strength 25N/mm² and adhesive pull-off strength of minimum 1.5N/mm². The substrate should be enclosed grind for the floor. The wall needs to be durable and properly skimmed for a smooth finish. The substrate should be clean and free from laitance, oil, dust, loose constituents, paint residues, chemicals, algae and other contamination should be removed. The substrate should be dry and free from ground water pressure. If substrate moisture exceeded 4%, apply Silcor 400 EM SYSTEM (compressive strength 60N/mm²) up to 4-5mm thick as a moisture barrier.

The substrate must be prepared by vacuum shot blasting, rough contaminations to remove by grinding. Cracks and hollows should be properly remedied. Prepare grooves 3mm wide x 3mm deep at all edges, bay joints columns, doorways and drains for anchoring purpose.

Primer

To inhibit pin-holes and seal dusty, porous surfaces, apply Silcor Primer BW N105M epoxy primer at 0.2 Kg/m² depends on the substrate porosity and condition and allow to cure. Use SILCOR Primer BW N105M to seal damp concrete.

Application to highly porous substrates while substrate temperature is increasing may result in concrete outgassing and pinhole formation in primer. This can be reduced or prevented by priming substrates in the late afternoon or evening, when concrete temperature is stable or falling.

Application

Stir Part A mix for 30 seconds by using a suitable electrical stirrer (with 750-watt High power mixer), then add all of Part B. Mix Part A and Part B together thoroughly for 2 minutes until it achieves a homogeneous mix.

Application of Silcor 280 could start after SILCOR Primer BW N105M is cured within 8 to 12 hours. Apply Silcor 280 within the pot life (working time), spread the mixture by brush or roller and set it to the correct depth or required thickness. Immediately release the air/bubble by using spike roller.

Application ambient conditions

Do not apply when the relative humidity exceeds 90% or when the surface to be coated is less than 5% above the dew point. Do not apply temperatures below 5°C and temperatures above 40°C.

Curing Time

	15°C	25°C	32°C
Human traffic	24hrs	20hrs	18hrs
Light traffic	36hrs	30hrs	24hrs
Full chemicals cure	10days	7days	7days

Consumption (mixed)

Minimum 2 coat are required with a consumption of 0.2 Kg/m² per coat of 0.14mm thick. Consumption will vary dependant on the nature of the substrate, its porosity and material wastages.

Maintenance

Regular cleaning using a single or double headed rotary scrubber with alkaline detergent is recommended.

Cleaning

All tools and equipment may be cleaned with a water and strong detergent solution or suitable solvent before material hardens.

Health and Safety

Users must read and understand the product label and Safety Data Sheets (SDSs) for each system component before use. All users should acquaint themselves with this information prior to working with the material. Carefully read detailed precaution statements on the product labels and SDSs before use. The most current SDSs can be obtained from the local GCP representative.

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