

Silicone Aerated Concrete Coat 449

Silicon-Porenbetonbeschichtung 449

weather-resistant, water-vapor-permeable, water-repellent, highly filling, matt, white and colored, for exterior use

Properties

Weather-resistant, highly filling facade coating based on silicone resin emulsion and acrylate. White, matt, low-tension, saponification-resistant, driving-rain proof, water-vapor-permeable and resistant to industrial emissions. Silicone Aerated Concrete Coat 449 meets the requirements of the aerated concrete manufacturing industry. If required, Silicone Aerated Concrete Coat 449 can be ordered in "Protect Quality" – with film preservation against algae and fungal attack.

Field of application

For weather-resistant, durable surface protection and the design of exterior aerated concrete wall panels. Suitable for first and renovation coatings. Depending on the desired surface effect as a sludge coating or leveling structure.

On surfaces exposed to persistent moisture (depending on the location and construction) there is a risk of algae and fungal attacks. We recommend using a coating system in "Protect Quality" for these surfaces (follow the additional instructions at Notes).

Material description

Standard color shade: 0095 white.

Light color shades can be mixed with the Brillux Color System.

Further color shades on request. (light reflective value ≥ 30 .)

Gloss grade: matt

Base material: Silicone resin emulsion combined with acrylate copolymer dispersion

Density:
approx. 1.55–1.65 g/cm³

Water vapor permeability:
 S_d (H₂O) = 0.8 m

Water absorption coefficient:
w value = 0.02 kg/(m²·h^{0.5})

Packaging: 25 kg (can also be delivered in bulk)

Use

Thinning

With a little water, if necessary. As a sludge coating approx. 15% with water.

Tinting

Up to 0.2% with Mixol LW oxide types.

Compatibility

Only mixable with similar materials and those specified in this Data Sheet.

Application

Apply Silicone Aerated Concrete Coating 449 for the first application as a sludge coating with the block brush to fill the pores. Silicone Aerated Concrete Coating 449 may be applied optionally as a top coat with a block brush or lambswool roller. Depending on the desired surface appearance, it can be rolled seamlessly in one direction at the end e.g. with a foamed texturing roller (leveling structure).

It can alternatively also be applied mechanically with suitable equipment, e.g., funnel-shaped guns or a worm conveyor. In this case, Silicone Aerated Concrete Coating 449 will be sprayed on for the initial application and then applied with the block brush to fill the pores. Also texture the top coat applied by spray application seamlessly in accordance with the desired surface appearance.

Consumption

Ensure a minimum consumption of 1,800 g/m² (intermediate and top coat) for first coats on aerated concrete.

Approx. 700 g/m² for a renovation coating with one-time application.

Determine the exact consumption by means of a test application on the object to be coated.

Application temperature

Do not apply if air or object temperature is below +5°C.

Tool cleaning

Clean tools immediately after use with water.

Drying (+20 °C, 65 % relative humidity)

Recoat after approx. 12 hours. Allow longer drying times at lower temperatures and/or higher air humidity.

Storage

Store in a cool and frost-free location. Reseal opened containers tightly.

Declaration**Note**

Contains preservatives

Water pollution classification

Class 1, according to VwVwS.

Product code

M-DF02.

Comply with the specifications in the current Safety Data Sheet.

Coating build-up**Substrate preparation**

The substrate must be solid, dry, clean, load-bearing and free from efflorescence, sinter layers, separating agents, corrosion-promoting components or other intermediate layers affecting the adhesion. Check existing coatings for their suitability, load-bearing capacity and adhesive properties. Remove any coatings that are not intact or unsuitable with an appropriate procedure depending on the object and dispose of them in accordance with the regulations. Clean areas infested with fungus or algae thoroughly and then treat them with Universal Disinfectant 542 *. (* Use biocides safely. Always read the label and product information before use.) Prime the substrate in accordance with the requirements. Also see VOB Part C, DIN 18363, Section 3.

First coating on aerated concrete, exterior

Substrates	Prime coat ¹⁾	Filling	Intermediate coat	Top coat
White build-up: Untreated aerated concrete wall panels	Priming Concentrate ELF 938, 1:4 water-diluted		Silicone Aerated Concrete Coating 449 or Facade Brush-on Filler 444 as a sludge coating (Consumption: approx. 800 g/m ²)	Silicone Aerated Concrete Coating 449 as a sludge coating or leveling structure (Consumption: approx. 1,000 g/m ²)
Colorful build-up: Untreated aerated concrete wall panels (Light reflective value ≥ 30)				
White or colored build-up with filling: Untreated aerated concrete wall panels (Light reflective value ≥ 30)		Facade Hand Applying Light Filler 1883	Only with colored top coat Silicone Aerated Concrete Coating 449, matched to the color shade of the top coat (Consumption: approx. 400 g/m ²)	

¹⁾ Repair damaged areas with Facade Hand Applying Light Filler 1883 or Aerated Concrete Mortar 441, depending on requirements and prime with Lacryl Deep Penetrating Primer ELF 595 after sufficient drying.

Renovation coating on aerated concrete, exterior

Substrates	Prime coat ¹⁾	Intermediate coat	Top coat
Aerated concrete wall panels with intact aerated concrete coating without cracks	Concentrate ELF 938 depending on requirements, 1:4 water-diluted or Adhesion Primer ELF 3720	Silicone Aerated Concrete Coating 449 as a sludge coating depending on the object and the requirements	Silicone Aerated Concrete Coating 449
		Evocryl 200 depending on the object and the requirements	Evocryl 200
	Silicone Priming Paint 917 depending on the requirements	Silicone Facade Paint 918 depending on the object and the requirements	Silicone Facade Paint 918

¹⁾ Repair damaged areas with Facade Hand Applying Light Filler 1883 or Aerated Concrete Mortar 441, depending on the requirements and prime with Lacryl Deep Penetrating Primer ELF 595 after sufficient drying.

Joint formation

Fill joints with a sealing function which have to absorb larger deformations, e.g., connection joints between aerated concrete and other building materials, components and movement joints with PUR Sealant 382. The joint width to sealant depth ratio should be at most 1:1 or the sealant depth should be 80–100 % of the joint width. A three-point adhesion must be avoided. The DIN 18 540 "Seals of exterior wall joints in building construction with joint sealants" Part 1–3 does not apply to joints between aerated concrete components. However, it should be applied analogously for connection joints between aerated concrete assembly components and other components (e.g. frames, steel concrete supports, ceilings, walls). Please follow the additional instructions in Data Sheet 382.

Notes

Colored implementation

Implement colored coatings on aerated concrete with a light reflective value ≥ 30 .

Coherent surfaces

Only use material from the same batch on a contiguous area or mix the required material quantity.

Repairs

Repairs to the surface become more or less strongly apparent depending on the situation on the site. According to BFS Leaflet No. 25, Item 4.2.2.1, Section e, this is unavoidable.

Coating protection

Protect coatings from moisture penetration, e.g., rain, but also from excessively rapid dehydration, e.g. from strong winds, direct sunlight, etc. Do not apply to heated-up substrates. Use protective tarpaulines, as required.

Moisture exposure in interior areas

Additional water vapor retarding or vapor blocking measures must be taken in the event of significant moisture exposure in interior areas (rel. humidity higher than 70 %). Kitchens and bathrooms in apartment construction do not count among these areas.

As "Protect Quality"

The quality marked with "Protect" is provided with film preservation against algae and fungal attacks and should therefore only be used on exterior surfaces. The preservatives used minimize and/or delay the risk of algae and fungal attack. Coatings provided with film preservation must be applied with sufficient coating thickness. The current level of technical development cannot ensure permanent prevention of algae and fungal infestation.

Cracks and/or non load-bearing coatings

A standard coating build-up on aerated concrete with cracks and/or a non load-bearing coating cannot be specified at this time. Please contact the Brillux Consulting Service if you have any questions.

Further information

Follow the instructions in the data sheets of the products used.

Remark

This Data Sheet has been prepared taking into account the current applicable German laws, standards, specifications and codes of practice. All details have been translated from the current German version. The contents do not form a legal contract. The user and/or the purchaser is not released from the responsibility of checking that our products are suitable for the proposed use. In addition our Terms of Conditions and Payment apply.

When a new version of this Data Sheet appears with updated information the previous version no longer applies. The current version is available on our website.

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