

Advantages

- Highly flexible and UV-resistant
- Free of isocyanates, phthalates and solvents
- Short curing times
- Usable from > +5 °C
- Good adhesion on very different substrates
- Suitable for vertical and inclined surfaces
- Economical and safe

Material

SILIKAL® Simflex 300 is a thixotropic liquid plastic (FLK) with a silane-modified polymer (SMP) basis.

The coating cures by means of the humidity or can be cured more quickly by means of SILIKAL® Simflex Activator.

Use

SILIKAL® Simflex 300 is a thixotropic, easy to apply, waterproof membrane/coating for sealing horizontal, vertical and inclined surfaces against pressing and non-pressing water. The sealant is always to be applied on the side of the building facing the water.

The main areas of application as a sealant are versatile, both in structural and civil engineering as well as in new construction and renovation.

- Over large areas in underground and above-ground areas
- Construction joints
- Pipe lead-throughs
- Connection joints
- Material transitions
- As roof sealing over large areas
- As grouting for horizontal movement joints

SILIKAL® Simflex 300 can be applied at temperatures from > 5 °C to +35 °C on the following substrates:

- Concrete
- Mortars and plasters
- Bricks, sand-lime bricks
- Roof tiles
- PB liner sheets
- Metals
- EPDM films*
- Glass fibre reinforced polyester
- PVC*
- Wood and wood fibreboards

* Specific adhesion test required.

Properties

SILIKAL® Simflex 300 results in a highly flexible membrane that bridges cracks and maintains its properties even at low temperatures of -20 °C. The main properties are:

- High crack bridging properties, even at -20 °C
- UV-resistant and weatherproof
- Waterproof against pressing water as a permanent water load
- High resistance to chemicals
- Good adhesion on different substrates
- Processing possible at temperatures from +5 °C
- Short work steps possible by means of adding activator
- Non-shrinking

SILIKAL® Simflex 300

1-component, thixotropic, waterproof and flexible SMP liquid plastic
for sealing horizontal and vertical surfaces



Pretreatment of the substrate

The surface to be sealed must be dry or matt moist, free of dust, grease and oil as well as firm and load-bearing. Cement sludge and loose constituent elements are to be removed completely with shot-peening or the like.

With very porous substrates a suitable primer is to be used.

Mixing

SILIKAL® Simflex 300 is ready-to-use and can be applied directly from the container.

The curing can be accelerated by adding the activator.

Addition of SILIKAL® Simflex Activator to 1 kg SILIKAL® Simflex 300:

| Temperature | Addition of activator % w/w | Addition of activator to 1 kg | Pot life approx. min. |
|-------------|-----------------------------|-------------------------------|-----------------------|
| +20 °C | 2.0 | 20 g | 60 |
| +30 °C | 2.0 | 20 g | 30 |

Processing

SILIKAL® Simflex 300 is put on with a brush, putty knife, roller or rubber blade depending on the application.

In the event of changes of material, joints, upstands and splays as well as highly stressed surfaces due to movements and/or permanent water load, a suitable non-woven material or fabric lining is to be incorporated between the 1st and 2nd layer.

If SILIKAL® Simflex 300 is processed over a large area, the coating is to be aerated when freshly applied with a spiked roll.

With applications over a large area, the concrete substrate must be at least 28 days old and/or have max. 4.5 % moisture content (CM method).

Cleaning

The tools are to be cleaned directly after use. Acetone, for example, is a suitable cleaning agent.

Consumption

| Load | Recommended overall application amount | Overall coat thickness (approx.) |
|--------------------|--|----------------------------------|
| Non-pressing water | 3.0 kg/m ² | 2.0 mm |
| Pressing water | 4.0 kg/m ² | 3.0 mm |

Note:

The condition of the substrate as well as the processing conditions are to be taken into account. Depending on the substrate roughness the consumption may change accordingly.

Packaging

16 kg bucket.

Storage

Good for 12 months when stored in a cool, dry place in the original containers.

The optimal storage temperature is +15 to +20 °C.

Safety advice

Information on safely handling the product can be found in the current safety data sheet under www.silikal.de.

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Characteristics of Simflex 300 as supplied

| Property | Measuring method | Approx. value |
|--------------------|------------------|---------------------------------|
| Density D_4^{20} | | 1.47 g/cm ³ ± 0.05 g |
| Colour | | Grey |
| Consistency | | Thin |

Characteristics of Simflex 300 in the hardened state

| Property | Measuring method | Approx. value |
|---|------------------|----------------------|
| Volume change | | not specified |
| Shore-D | DIN 53 505 | 35 units |
| Elongation at break | | ≥ 300 % |
| Pot life without activator | | 30 min. |
| Through-hardening after 24 h without activator: after 48 h | | ≥ 2.5 mm ≥ 3.5 mm |
| Pot life with activator at +20 °C | | 60 min. |
| Through-hardening with activator | | ≥ 5 h |
| Temperature resistance | | -40 °C to +90 °C |
| Application temperature | | ≥ 5 °C to +35 °C |
| Object temperature | | ≥ 5 °C to +35 °C |

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Silikal product information

March 2013
Data sheet SILIKAL® SF 300
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