

## Sikafloor®-304 W

2-part PUR matt seal coat part of the Sika ComfortFloor®  
Decorative and Sika ComfortFloor® Decorative Pro

Construction

<b>Product Description</b>	Sikafloor®-304 W is a two part waterbased, very low VOC, polyurethane, matt seal coat.
<b>Uses</b>	Matt seal coat for Sika ComfortFloor®-Systems
<b>Characteristics / Advantages</b>	Waterbased Very low odour Good UV resistance, non-yellowing Easy to clean
<b>Approval / Standards</b>	Fire classification acc. to EN 13501-1 Report No. 2008-B-3883/10, MPA Dresden Eurofins Emission tested according AgBB-scheme and DiBt guidelines (AgBB – Committee for Health-related Evaluation of Building Products, DiBt – German Institute for Building Technology). According ISO-16000, Report No. 769854C. Biological resistance certificate Sikafloor-304W CSM Statement of Qualification - ISO 846, very good - Report No. SI 1108-533 Fraunhofer IPA, Germany

### Product Data

#### Form

**Appearance / Colours** Sikafloor®-304 W is silky-matt after final curing.

**Packaging**

Part A:	6.0 kg
Part B:	1.5 kg
Part A+B:	7.5 kg ready to mix units

#### Storage

**Storage Conditions / Shelf Life**

Part A:	6 months from date of production
Part B:	12 months from date of production

If stored properly in original, unopened and undamaged sealed packaging in dry conditions at temperatures between +5°C and +30°C.

### Technical Data

**Chemical Base** PUR

**Density**

Part A:	~ 1.05 kg/l
Part B:	~ 1.13 kg/l
Mixed Resin:	~ 1.07 kg/l (diluted with 5 % Water)

All Density values at +23°C.



## Resistance

**Chemical Resistance** Resistant to many chemicals. Please ask for a detailed chemical resistance table.

**USGBC**  
**LEED Rating** Sikafloor®-304 W conforms to the requirements of LEED EQ Credit 4.2: Low-Emitting Materials: Paints & Coatings  
 EPA Reference Test Method 24 VOC Content < 100 g/l

## System Information

**System Structure** Sealing of Sika ComfortFloor® and Sika ComfortFloor® Pro:

Base coat: Sikafloor®-300 N  
 Sikafloor®-Colorchips < 3 mm (optional)  
 Matt seal coat: 1 x Sikafloor®-304 W

Sealing of smooth EP coatings:

Base coat: e.g. Sikafloor®-261/263 SL  
 Grinding with a black scotch grinding pad  
 Matt seal coat: 1 x Sikafloor®-304 W

## Application Details

### Consumption / Dosage

Coating System	Product	Consumption
Sealing of smooth surfaces	Sikafloor®-304 W	ca. 0.13 kg/m <sup>2</sup> /layer

These figures are theoretical and do not allow for any additional material due to surface porosity, surface profile, variations in level and wastage etc.

Lower consumption can cause roller marks, gloss differences and irregular surface structure, higher consumption result in water retention.

**Substrate Quality** The substrate must be clean, dry and free of all contaminants such as dirt, oil, grease, coatings and surface treatments, etc. Pull-off strength must be not less than 1.5 N/mm<sup>2</sup>. If in doubt, apply a test area first.

**Substrate Preparation** All dust, loose and friable material must be completely removed from all surfaces before application of the product, preferably by brush or vacuum.  
 Before applying Sikafloor®-304 W on a epoxy floor, e.g. Sikafloor®-264 the surface has to be prepared by grinding with a black scotch bride grinding pad.

## Application Conditions / Limitations

**Substrate Temperature** +10°C min. / +30°C max.

**Ambient Temperature** +10°C min. / +30°C max.

**Relative Air Humidity** 75% max.

During curing the humidity should not exceed 75 % max. Adequate fresh air ventilation must be provided to remove the excess moisture from the curing product.

**Dew Point** Beware of condensation!

The substrate and uncured floor must be at least 3°C above the dew point to reduce the risk of condensation or blooming on the floor finish.



## Application Instructions

**Mixing** Part A : part B = 80: 20 (by weight)

**Mixing Time**

Prior to mixing, stir part A mechanically. When all of part B has been added to part A, mix continuously for 3 minutes until a uniform mix has been achieved.

To achieve smoother surface 5 % water can be added.

After adding the water mix continuously for 1 minute. Wait one minute and then mix it up again for one minute.

The adding of water must be the same in every mix, if not it could slightly influence the matness and the texture.

Check the mixing result and the absence of lumps or agglomerates on a mixing blade.

To ensure thorough mixing pour materials into another container and mix again to achieve a consistent mix.

Over mixing must be avoided to minimise air entrainment.

**Mixing Tools** Sikafloor®-304 W must be thoroughly mixed using a electric stirrer or other suitable equipment.

**Application Method / Tools**

Prior to application confirm relative air humidity and dew point.

Divide the area to be coated into parts for the number of A + B units, to have consumption under control and to know how far to paint with each A + B mixture. The rollers should be wetted in the first area, which should be taken into account by pouring out some more material. The roller will absorb approx 0.3-0.5 kg coating a. With a small quantity mixed product, pre-coat the edge areas with brush and small roller. But never go further ahead then 10 minutes to the regular rolling, to obtain minimal visibility. Within the pot-life (as soon as possible) depending on the temperature 20 min (30°C) – 40 min (10°C) the product is poured and spread out on the substrate under observation of the coverage rate (+/- 130 g/m<sup>2</sup>). Attention: the end of the pot-life is not noticeable!

After pouring out, the material has to be spread in the pouring direction with the roller and with the same roller cross to pouring direction, covering approx. 1.35 m wide not overlapping the former lane, and backwards covering approx 1.45 m with a overlap of less than 5 cm. Porous spots where the skin of sub layer is "opened" by sanding such as after repairs, have to be pre-coated a few minutes before arriving there with the regular roll-out to minimise visibility. Then change to a short piled roller and extend the overlap, in a calm way to approx 10 - 20 cm. See to it that no glittering shiny spots will be left in the finished paint layer caused by paint pick-up from the surface by the roller.

Spray application:  
Sikafloor®-304 W can also be airless spray applied, e.g with a Airless-Membranpump SF 31 Wagner, tube length 15 m, inside diameter 6 mm, Jet 319, a white filter and a pressure of 180 bar (Machine)

A seamless finish can be achieved if a "wet" edge is maintained during application

**Cleaning of Tools** Clean all tools and application equipment with water immediately after use. Hardened and/or cured material can only be removed mechanically.

### Potlife

Temperature	Time
+10°C	~ 50 minutes
+20°C	~ 30 minutes
+30°C	~ 20 minutes

Caution: End of potlife is not noticeable.



## Waiting Time / Overcoating

Before applying Sikafloor®-304 W on Sikafloor®-300 N allow:

Substrate temperature	Minimum	Maximum
+10°C	30 hours	4 days
+20°C	24 hours	3 days
+30°C	16 hours	2 days

Before applying Sikafloor®-304 W on Sikafloor®-261/-263 SL allow:

Substrate temperature	Minimum	Maximum
+10°C	45 hours	4 days
+20°C	36 hours	3 days
+30°C	24 hours	2 days

Times are approximate and will be affected by changing ambient conditions particularly temperature and relative humidity.

## Notes on Application / Limitations

Freshly applied Sikafloor®-304 W must be protected from damp, condensation and water for at least 7 days (+20°C).

Unevenness of substrates as well as inclusions of dirt cannot be covered by thin sealers coats. Therefore substrate and adjacent areas must be cleaned thoroughly prior to application.

### Tools

Electric drill, mixing-blade, brushes and short piller rollers 10 up to 70 cm for surface area – amount depending on size of floor). Roller frames and telescopic extension handles, tape and spatula. Plastic sheeting for placement of wet rollers.

If heating is required do not use gas, oil, paraffin or other fossil fuel heaters, these produce large quantities of both CO<sub>2</sub> and H<sub>2</sub>O water vapour, which may adversely affect the finish. For heating use only electric powered warm air blower systems.

## Curing Details

### Applied Product ready for use

Temperature	Foot traffic	Light traffic	Full cure
+10°C	~ 30 hours	~ 48 hours	~ 6 days
+20°C	~ 16 hours	~ 24 hours	~ 4 days
+30°C	~ 12 hours	~ 18 hours	~ 3 days

Note: Times are approximate and will be affected by changing ambient conditions.

## Cleaning / Maintenance

### Methods

To maintain the appearance of the floor after application, Sikafloor®-304 W must have all spillages removed immediately and be regularly cleaned.

Please refer to the “General maintenance tips and recommended cleaning procedures” for the Sika ComfortFloor Systems.

## Value Base

All technical data stated in this Product Data Sheet are based on laboratory tests. Actual measured data may vary due to circumstances beyond our control.



**Local Restrictions** Please note that as a result of specific local regulations the performance of this product may vary from country to country. Please consult the local Product Data Sheet for the exact description of the application fields.

**Health and Safety Information** For information and advice on the safe handling, storage and disposal of chemical products, users shall refer to the most recent Material Safety Data Sheet containing physical, ecological, toxicological and other safety-related data.

**Legal Notes** The information, and, in particular, the recommendations relating to the application and end-use of Sika products, are given in good faith based on Sika's current knowledge and experience of the products when properly stored, handled and applied under normal conditions in accordance with Sika's recommendations. In practice, the differences in materials, substrates and actual site conditions are such that no warranty in respect of merchantability or of fitness for a particular purpose, nor any liability arising out of any legal relationship whatsoever, can be inferred either from this information, or from any written recommendations, or from any other advice offered. The user of the product must test the product's suitability for the intended application and purpose. Sika reserves the right to change the properties of its products. The proprietary rights of third parties must be observed. All orders are accepted subject to our current terms of sale and delivery. Users must always refer to the most recent issue of the local Product Data Sheet for the product concerned, copies of which will be supplied on request.

**CE Labelling** The harmonized European Standard EN 13 813 „Screed material and floor screeds - Screed materials - Properties and requirements“ specifies requirements for screed materials for use in floor construction internally.

Structural screeds or coatings, i.e. those that contribute to the load bearing capacity of the structure, are excluded from this standard.

Resin floor systems as well as cementitious screeds fall under this specification. They have to be CE-labelled as per Annex ZA. 3, Table ZA.1.5 and 3.3 and fulfil the requirements of the given mandate of the Construction Products Directive (89/106):

<b>CE</b>	
Sika Services AG Tüffenwies 16 CH-8048 Zurich Switzerland	
04 <sup>1)</sup>	
EN 13813 SR-B1,5	
Primer/Sealer (systems as per Product Data Sheet)	
Reaction to fire:	NPD <sup>2)</sup>
Release of corrosive substances (Synthetic Resin Screed):	SR
Water permeability:	NPD
Abrasion Resistance:	NPD <sup>1)</sup>
Bond strength:	B 1,5
Impact Resistance:	NPD
Sound insulation:	NPD
Sound absorption:	NPD
Thermal resistance:	NPD
Chemical resistance:	NPD

<sup>1)</sup> Last two digits of the year in which the marking was affixed.

<sup>2)</sup> No performance determined.



## CE Labelling

The harmonized European Standard EN 1504-2 „Products and systems for the protection and repair of concrete structures – Definitions, requirements, quality control and evaluation of conformity – Part 2 : Surface protection systems for concrete” gives specifications for products and systems used as methods for the various principles presented under EN 1504-9.

Products which fall under this specification have to be CE-labelled as per Annex ZA. 1, Tables ZA.1a to ZA 1g according to the scope and relevant clauses there indicated, and fulfil the requirements of the given mandate of the Construction Products Directive (89/106):

Here below indicated are the minimum performance requirements set by the standard. For the specific performance results of the product to the particular tests, please see the actual values above in the PDS.

<b>CE</b>	
0958	
BV Descol Kunststof Chemie Duurstedeweg 33007 NL – 7418 Deventer	
09 <sup>1)</sup>	
0958–CPD–1041	
EN 1504-2	
Surface Protection Product Coating <sup>2)</sup>	
Abrasion resistance (Taber test):	< 3000 mg
Permeability to CO <sub>2</sub> :	S <sub>D</sub> > 50 m
Permeability to water vapour:	Class III
Capillary absorption and permeability to water:	w < 0.1 kg/[m <sup>2</sup> x h <sup>0.5</sup> ]
Resistance to severe chemical attack: <sup>3)</sup>	Class II
Impact resistance:	Class I
Adhesion strength by pull-off test:	≥ 0.8 N/mm <sup>2</sup>
Fire Classification: <sup>4)</sup>	E <sub>fl</sub>

<sup>1)</sup> Last two digits of the year in which the marking was affixed.

<sup>2)</sup> Tested as part of system build-up Sikafloor®-161 / Sikafloor®-300 N / Sikafloor®-304 W.

<sup>3)</sup> For details please refer to Sikafloor® Chemical Resistance Chart.

<sup>4)</sup> Min. classification, please refer to the individual test certificate.



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Certificate No. EMS 4308



Certificate No. FM 12504