BUILDING TRUST

PRODUCT DATA SHEET

# Sikafloor®-377

Polyurethane crack-bridging self-smoothing flooring resin

## PRODUCT DESCRIPTION

Sikafloor®-377 is a 2-part polyurethane, coloured, low-viscosity flooring resin for medium to heavy wear conditions. It provides a hard-wearing finish and a slip-resistant finish when broadcast with different aggregate grades.

## USES

Sikafloor®-377 installation works to be carried out only by Sika Approved Contractors. Please observe information given by Product Data Sheets.

The Product is used as a:
- Broadcast slip-resistant wearing course with crack-bridging properties

The Product is used for:
- Interior and exterior use

Please note:
- The Product may only be used by experienced professionals.

## CHARACTERISTICS / ADVANTAGES

- Seamless
- Good crack-bridging ability
- Good mechanical resistance
- Low sensitivity to moisture during application
- Impermeable to liquids
- Smooth matt finish
- Low maintenance
- Easy to apply
- Low VOC emissions

## ENVIRONMENTAL INFORMATION

- Contributes towards satisfying Indoor Environmental Quality (EQ) Credit: Low-Emitting Materials under LEED® v4
- Contributes towards satisfying Materials and Resources (MR) Credit: Building product disclosure and optimization — Environmental Product Declarations under LEED® v4
- Environmental Product Declaration (EPD) in accordance with EN 15804. EPD independently verified by Institut für Bauen und Umwelt e.V. (IBU)

## APPROVALS / STANDARDS

- CE marking and declaration of performance based on EN 13813:2002 Screed material and floor screeds — Screed material — Properties and requirements — Synthetic resin screed material
- CE marking and declaration of performance based on EN 1504-2:2004 Products and systems for the protection and repair of concrete structures — Surface protection systems for concrete — Coating

## PRODUCT INFORMATION

| | | |
|---|---|---|
| **Chemical Base** | Polyurethane | |
| **Packaging** | Container Part A | 20.25 kg |
| | Container Part B | 4.75 kg |
| | Container Part A + Part B | 25.0 kg |
| | Refer to the current price list for available packaging variations. | |
| **Shelf Life** | 12 months from date of production | |

| | |
|---|---|
| **Storage Conditions** | The Product must be stored in original, unopened and undamaged sealed packaging in dry conditions at temperatures between +5 °C and +30 °C. Always refer to packaging.<br>Refer to the current Safety Data Sheet for information on safe handling and storage. |

| | | |
|---|---|---|
| **Appearance / Colour** | Part A | coloured |
| | Part B | clear |
| | Cured appearance | Smooth, matt finish |
| | Cured colour | Beige |

| | | | |
|---|---|---|---|
| **Density** | Mixed Product | 1.38 kg/l (filled resin) | (EN ISO 2811-1) |

| | |
|---|---|
| **Solid content by mass** | 100 % |
| **Solid content by volume** | 100 % |

## TECHNICAL INFORMATION

| | | |
|---|---|---|
| **Tensile adhesion strength** | > 1.5 N/mm² (failure in concrete) | (EN 1542) |

## APPLICATION INFORMATION

| | | |
|---|---|---|
| **Mixing Ratio** | Part A : Part B (by weight) | 81 : 19 |
| **Consumption** | Filled | 1.4 kg/m² per mm |
| **Product Temperature** | Maximum | +30 °C |
| | Minimum | +10 °C |
| **Ambient Air Temperature** | Maximum | +30 °C |
| | Minimum | +10 °C |
| **Relative Air Humidity** | Maximum | 80 % r.h. |
| **Dew Point** | Beware of condensation. The substrate and uncured applied product must be at least +3 °C above dew point to reduce the risk of condensation on the surface of the applied product. | |
| **Substrate Temperature** | Maximum | +30 °C |
| | Minimum | +10 °C |
| **Substrate Moisture Content** | Refer to the individual primer Product Data Sheet. | |
| **Pot Life** | +10 °C | 40 minutes |
| | +20 °C | 30 minutes |
| | +30 °C | 20 minutes |

**Waiting Time / Overcoating**

Before applying a top coat over broadcast Sikafloor®-377, allow:

| Temperature | Minimum | Maximum |
|---|---|---|
| +10 °C | 24 hours | No maximum waiting time |
| +20 °C | 12 hours | No maximum waiting time |
| +30 °C | 5 hours | No maximum waiting time |

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

**Applied Product Ready for Use**

| Temperature | Foot traffic | Light traffic | Full cure |
|---|---|---|---|
| +10 °C | 24 hours | 3 days | 9 days |
| +20 °C | 12 hours | 2 days | 5 days |
| +30 °C | 8 hours | 1 day | 3 days |

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

## VALUE BASE

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

## FURTHER DOCUMENTS

Refer to the following method statements:
- Sika Method Statement — Sikafloor® and Sikagard® evaluation and preparation of surfaces
- Sika Method Statement — Sikafloor® mixing and application

## ECOLOGY, HEALTH AND SAFETY

Local safety regulations must be observed and it advisable to wear PPI when working with this product with particular attention paid to cutting and handling. Transportation Class: The product is not classified as hazardous good for transport. Disposal: The material is recyclable. Disposal must be according to local regulations. Please contact your local Sika sales organisation for more information.

**Regulation (EC) No 1907/2006 (REACH) - Mandatory training**

As from 24 August 2023 adequate training is required before industrial or professional use of this product. For more information and a link to the training visit https://irl.sika.com/en/knowledge-hub-sika-ireland/pu-training.html.

## APPLICATION INSTRUCTIONS

### EQUIPMENT

MIXING EQUIPMENT
- Electric double paddle mixer (>700 W, 300 to 400 rpm)

APPLICATION EQUIPMENT
- Pin leveller
- Trowels, including serrated
- Spiked roller

### SUBSTRATE QUALITY

IMPORTANT

**Incorrect treatment of cracks**

The incorrect assessment and treatment of cracks may lead to a reduced service life and reflective cracking.

TREATMENT OF JOINTS AND CRACKS

Construction joints and existing static surface cracks in substrate require pre-treating before full layer application. Use Sikadur® or Sikafloor® resins.

SUBSTRATE CONDITION

Cementitious substrates must be structurally sound and of sufficient compressive strength (minimum 25 N/mm²) with a minimum tensile strength of 1.5 N/mm².

Substrates must be clean, dry and free of all contaminants such as dirt, oil, grease, coatings, laitance, surface treatments and loose friable material.

### SUBSTRATE PREPARATION

MECHANICAL SUBSTRATE PREPARATION

IMPORTANT

**Surface defects due to voids in the substrate**

Voids and blow holes in the substrate will result in surface weakness and damage to the covering product if not repaired during the preparation process.

1. Fully expose blow holes and voids during surface preparation to identify the required repairs.
1. Remove weak cementitious substrates.
2. Prepare cementitious substrates mechanically using abrasive blast cleaning, planing or scarifying equipment to remove cement laitance.
3. Before applying thin layer resins, remove high spots by grinding.
4. Use industrial vacuuming equipment to remove all dust, loose and friable material from the application surface before applying the Product.
5. Use products from the Sikafloor®, Sikadur® and Sikagard® range of materials to level the surface or fill cracks, blow holes and voids.

Contact Sika® Technical Services for additional information on products for levelling and repairing defects.

SUBSTRATE PREPARATION OF NON-CEMENTITIOUS SUBSTRATES

For information on substrate preparation of non-cementitious substrates, contact Sika technical services.

## MIXING

1. Mix Part A (resin) until the coloured pigment is dispersed and a uniform colour is achieved.
2. Add Part B (hardener) to Part A.
3. IMPORTANT Do not mix excessively. Mix Part A + B continuously for ~3 minutes until a uniformly coloured mix is achieved.
4. Add the quartz sand and mix for a further 2 minutes until a uniform mix has been achieved.
5. To ensure thorough mixing, pour materials into another container and mix again to achieve a smooth and uniform mix.
6. During the final mixing stage, scrape down the sides and bottom of the mixing container with a flat or straight edge trowel at least once to ensure complete mixing.

## APPLICATION

IMPORTANT
**Strictly follow installation procedures**
Strictly follow installation procedures as defined in Method Statements, application manuals and working instructions which must always be adjusted to the actual site conditions.
IMPORTANT
**Protect from moisture**
After application, protect the Product from damp, condensation and direct water contact for at least 24 hours.
IMPORTANT
**Uncured material reacts with water**
Uncured material reacts with water of any kind, which leads to foaming.
1. During the application, wear head and wrist bands to avoid sweat falling onto the uncured material.

IMPORTANT
**No application on rising moisture**
Do not apply on substrates with rising moisture.
IMPORTANT
**Damaged finish due to heating with fossil fuel heaters**
Fossil fuel heaters powered by gas, oil or paraffin produce large quantities of both carbon dioxide and water vapour, which may adversely affect the finish.
1. For temporary heating, use only electrically powered warm air blower systems. Do not use gas, oil, paraffin or other fossil fuel heaters.

IMPORTANT
**Surface exposure**
Do not leave the surface of the Product exposed, application of a seal coat is mandatory.
SELF-SMOOTHING WEARING LAYER
1. Pour the mixed Product onto the substrate.
   Note: The consumption is specified in Application Information.
2. Apply the Product evenly over the surface with a serrated trowel.
3. To achieve a smooth finish, smooth the surface with the flat side of a trowel.
4. Back roll the surface in two directions at right angles with a steel spike roller.

SLIP-RESISTANT BROADCAST LAYER
1. Pour the mixed Product onto the prepared substrate.
2. Apply the Product evenly over the surface with a serrated trowel.
3. Back roll the surface in two directions at right angles with a steel spike roller.
4. Broadcast the surface with quartz sand or silicon carbide, lightly at first, then to excess.
   Note: The aggregate is dependant on the system build-up. Refer to the relevant System Data Sheet.
5. Allow the Product to initially cure and use vacuum extraction equipment to remove all loose sand.

## CLEANING OF TOOLS

Clean all tools and application equipment with Sika® Thinner C immediately after use. Hardened material can only be removed mechanically.
To prevent the nozzle from blocking, regularly clean the spraying equipment during application.

## LOCAL RESTRICTIONS

Note that as a result of specific local regulations the declared data and recommended uses for this product may vary from country to country. Consult the local Product Data Sheet for the exact product data and uses.

## 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.

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