



# Sikafloor® 381AS

## Coloured Highly Chemical Resistant Anti-Static Epoxy Resin Flooring System

### Technical Data Sheet

#### DESCRIPTION

**Sikafloor 381AS** is a two component, solvent free, coloured, highly chemically resistant anti-static epoxy resin flooring system, filled with sand to produce a self smoothing screed.

#### USES

- \* Explosion risk areas.
- \* Computer rooms.
- \* Electrical component production areas.
- \* Sensitive electronic component areas.
- \* Induction guided transport systems.
- \* Chemical storage areas.
- \* Solvent storage areas.
- \* Bund areas.
- \* Flammable liquid areas.
- \* Power plants.

#### ADVANTAGES

- \* Electrically conductive/anti-static.
- \* High mechanical resistance.
- \* Excellent chemical resistance.
- \* Impervious.
- \* Abrasion resistant.
- \* Fast curing.
- \* Solvent free.
- \* High durability.
- \* Jointless.
- \* Easy to maintain.

#### FLOOR COATING SYSTEM

<b>Primer:</b>	1 - 2 x <b>Sikafloor 156/157.</b>
<b>Anti-static layer:</b>	1 x <b>Sikafloor 220W.</b>
<b>Top coat:</b>	1 x <b>Sikafloor 381AS</b>
<b>Material consumption:</b>	Approx 1.8 kg/m <sup>2</sup> per mm (filled)

#### Technical Data (typical)

<b>Colour:</b>	Refer to colour swatch and current price list for availability and minimum order quantities.		
<b>Density (SG):</b>	Approx 1.6 kg/litre (unfilled) Approx 1.8 kg/litre (filled)		
<b>Volume solids:</b>	Approx 100%		
<b>Application temperatures &amp; humidity conditions:</b>	+10°C min, +30°C max (Substrate and ambient) RH 85% max		
<b>Substrate M.C. &amp; RH:</b>	≤4% by Wt or ≤75% RH		
<b>Application thickness:</b>	1.7 mm minimum 2.2 mm maximum		
<b>MECHANICAL PROPERTIES:</b>			
<b>Compressive strength:</b>	>90N/mm <sup>2</sup>		
<b>Tensile strength:</b>	>45 N/mm <sup>2</sup>		
<b>Elongation at break:</b>	2.5%		
<b>Abrasion resistance: (Taber)</b>	60 mg 		
<b>Shore D hardness:</b>	70		
<b>Electrical resistance (RA):</b>	10 <sup>4</sup> - 10 <sup>6</sup> Ohms		
<b>Heat resistance:</b>	Continuous exposure 50°C Short term exposure 120°C		
<b>CHEMICAL RESISTANCE:</b>	Refer to chart. (Consult Sika Ltd for additional information).		
<b>Additional application information:</b>	+10°C	+20°C	+30°C
<b>Pot life:</b>	60 mins	30 mins	20 mins
<b>Waiting time between coats:</b>			
min	24 hrs	18 hrs	6 hrs
max	48 hrs	24 hrs	12 hrs
<b>Final drying times:</b>			
Foot traffic:	2 days	18 hrs	12 hrs
Lightly serviceable:	3 days	2 days	1 day
Fully serviceable:	7 days	6 days	5 days

All above values are approximate.

## SURFACE PREPARATION

The cementitious substrate should be sound and of sufficient compressive strength. (Min 25 N/ mm<sup>2</sup>) . Minimum pull off strength 1.5 N/mm<sup>2</sup>.

The surfaces must be dry and free of all contaminants eg oils, grease, surface treatments and coatings etc. The substrate must be prepared mechanically to achieve an open textured fine gripping surface, free of cement laitance. Weak concrete should be removed and surface defects such as blowholes and voids must be fully exposed.

All dust, loose and friable material must be completely removed from all surfaces before application of the coating preferably by brush and vacuum.

Repairs to cementitious substrate and filling of blowholes levelling of irregularities etc should be carried out using an appropriate product from the **SikaDur**<sup>®</sup>, **Sikafloor**<sup>®</sup> or **SikaGard**<sup>®</sup> range of materials.

## MIXING

Prior to mixing, stir component A (resin), add all of component B (Hardener) and mix both components thoroughly with a low speed electric stirrer (300 - 400 rpm) for a minimum of 3 minutes until a uniform mix has been achieved. Add kiln dried quartz sand (0.1 - 0.3 mm F34 1 : 0.3 by wt) gradually while mixing then thoroughly mix for a further 2 minutes. Leave material to stand in container until the majority of air bubbles have dispersed.

## APPLICATION

Prior to application, confirm substrate moisture content and RH. If >4% by wt or >75% RH. **Sikafloor**<sup>®</sup> **EpoCem**<sup>®</sup> may be applied as a D.P.M. system

Pour **Sikafloor 381AS** onto tack free **Sikafloor 220W** and spread evenly with twin blade trowel to the required thickness. Roll immediately in two directions with spiked roller.

## IMPORTANT CONSIDERATIONS

- \* Construction joints require pre treatment with a stripe coat. Contact **Sika Ltd** for further details.
- \* Do not apply **Sikafloor 381AS** on substrates in which significant vapour pressure may occur.
- \* **Thinner C** is flammable. NO NAKED FLAMES.
- \* Always ensure good ventilation when using **Sikafloor 381AS** in a confined space.
- \* Freshly applied **Sikafloor 381AS** should be protected from damp, condensation and water for at least 24 hours.
- \* Rough surfaces should be levelled first as varying thickness of **Sikafloor 381AS** will affect conductivity.
- \* For inclined and vertical surface add 2% - 4% by wt of **Extender T**.
- \* Do not blind underlying layers.
- \* Do not use sand as filler for bund wall linings.
- \* Carbon fibres within the product may affect exact colour matching.

## CLEANING EQUIPMENT

Use **Thinner C**. Hardened material may have to be mechanically removed.

## PACKAGING

Refer to latest price list

## CONSUMPTION

Approximately 1.8 kg/m<sup>2</sup>/mm (filled). (These figures do not allow for surface porosity, profile or wastage). Maximum yield per pack - refer to latest price list.

## STORAGE AND SHELF LIFE

Minimum 1 year in sealed containers stored in dry warehouse conditions (+5°C - +25°C).

### Handling Precautions

Sika products are generally harmless provided that certain precautions normally taken when handling chemicals are observed. The materials must not, for instance, be allowed to come in contact with foodstuffs or food utensils and measures should also be taken to prevent the uncured materials from coming in contact with the skin, since people with particularly sensitive skin may be affected. The use of protective clothing, goggles, barrier creams and rubber gloves is required. The skin should be thoroughly cleaned at the end of each working period either by washing with soap and warm water or by using a resin-removing cream - the use of powerful solvents is to be avoided. Disposable paper towels - not cloth towels - should be used to dry the skin. Adequate ventilation of the working area is recommended. In case of accidental eye or mouth contact, flush with water - consult a doctor immediately. Health and Safety information on Sika Products is available and we strongly advise that this is read prior to their use. Sika products are for professional use and should be stored in sealed containers away from the reach of children.

### Important Note

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 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 proprietary rights of third parties must be observed. All orders are accepted subject to our current terms of sale and delivery. Users should always refer to the most recent issue of the Technical Data Sheet for the product concerned, copies of which will be supplied on request.

Please consult our Technical Sales Department for further information

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