

Sikafloor®-261 (S)

4-component, self smoothing and broadcast epoxy based flooring system

Product Description

Sikafloor®-261 (S) is a four component, solvent free, low viscosity, high strength, ready to use self smoothing and broadcast system based on specially formulated epoxy resin.

Uses

- Self smoothing and broadcast surfacing for normal to medium heavy wear e.g. clean rooms, sanitary areas, canteens, assembly halls, work shops, production and storage areas, maintenance workshops, garages etc.
- The broadcast system is recommended for multi-storey and underground car parks, maintenance hangars and for wet process areas, e.g. beverage and food industry.

Characteristics / Advantages

- Excellent adhesion to substrate
- Good chemical and mechanical resistance
- Easy application
- Economical
- Liquid proof
- Solvent-free
- Glossy aesthetic finish
- Slip resistant surface possible (broadcast)
- Seamless / Joint free application possible
- Easily cleaned and maintained
- Does not support growth of bacteria and fungus
- Wide range of ~RAL colours (consult Sika® representative)

Product Data

Form

Appearance / Colours

Resin - Part A: hazy, liquid
Hardener - Part B: transparent, liquid
Filler – Part C: whitish, powder
Pigment – Part A1: RAL colour, paste

For available ~RAL colour refer current Sika® Flooring and Topping shade card.

In case of bright colour shades, colour variations may occur due to backfilling with quartz sand. Under direct sun light there may be some discolouration and colour variations; this has no influence on the function and performance of the coating.

Construction



Packaging**Sikafloor®-261 (S) 0.5 mm**

Component	Pack Size (kg)	Number of pack	Quantity (kg)
A	2	4	8
A1	0.35	4	1.4
B	1	4	4
C	2.5	4	10
TOTAL			23.4

Sikafloor®-261 (S) 1 mm

Component	Pack Size (kg)	Number of pack	Quantity (kg)
A	3.6	2	7.2
A1	0.45	2	0.9
B	1.8	2	3.6
C	8.1	2	16.2
TOTAL			27.9

Sikafloor®-261 (S) 2 mm

Component	Pack Size (kg)	Number of pack	Quantity (kg)
A	4	2	8
A1	0.5	2	1
B	2	2	4
C	10	2	20
TOTAL			33

Sikafloor®-261 (S) 3 mm

Component	Pack Size (kg)	Number of pack	Quantity (kg)
A	4	2	8
A1	0.5	2	1
B	2	2	4
C	11	2	22
TOTAL			35

Storage**Storage Conditions / Shelf-Life**

6 months from date of production if stored properly in original, unopened and undamaged sealed packaging in dry conditions at temperatures between +5°C and +35°C.

Technical Data**Chemical Base**

Epoxy

Density

Sikafloor®-261 (S) 0.5 mm
Mixed: 1.6kg/l
Sikafloor®-261 (S) 1 mm
Mixed: 1.8kg/l
Sikafloor®-261 (S) 2 mm
Mixed :1.8kg/l
Sikafloor®-261 (S) 3 mm
Mixed 1.80kg/l

All Density values at +27°C.

Solid Content

~ 100% (by volume) / ~ 100% (by weight)

Mechanical / Physical Properties

Compressive Strength

(According to IS 9162 – 1979)

Sikafloor®-261 (S) 0.5 mm	~48 N/mm ² (14 days/ +27°C)
Sikafloor®-261 (S) 1mm	~58 N/mm ² (14 days/ +27°C)
Sikafloor®-261 (S) 2mm	~58 N/mm ² (14 days/ +27°C)
Sikafloor®-261 (S) 3mm	~60 N/mm ² (14 days/ +27°C)

Flexural Strength

(According to IS 9162 – 1979)

Sikafloor®-261 (S) 0.5 mm	~38 N/mm ² (14 days/ +27°C)
Sikafloor®-261 (S) 1mm	~35 N/mm ² (14 days/ +27°C)
Sikafloor®-261 (S) 2mm	~35 N/mm ² (14 days/ +27°C)
Sikafloor®-261 (S) 3mm	~35 N/mm ² (14 days/ +27°C)

Tensile Strength

(According to ASTM D638M-89)

Sikafloor®-261 (S) 0.5 mm	~20N/mm ² (14 days/ +30°C)
Sikafloor®-261 (S) 1mm	~20 N/mm ² (14 days/ +30°C)
Sikafloor®-261 (S) 2mm	~20 N/mm ² (14 days/ +30°C)
Sikafloor®-261 (S) 3mm	~20 N/mm ² (14 days/ +30°C)

Bond Strength

> 1.5 N/mm² (failure in concrete)

(According to ISO 4624)

Shore D Hardness

70 (7 days / +27°C)

(According to DIN 53 505)

Abrasion Resistance

~ 0.35mm thickness loss

(According to IS 1237 – 1980 and IS 9162 - 1979)

Resistance

Chemical Resistance

Resistant to many chemicals. Please consult Sika® representative.

Thermal Resistance

Exposure*	Dry heat
Permanent	+50°C

*No simultaneous chemical and mechanical exposure.

System Information

System Structure

Levelling:

The rough surface need to be levelled first. Therefore use scrap coat or suitable Sikafloor product (Refer to PDS)

Self-smoothing system 0.4 – 0.75 mm:

Primer: 1 x Sikafloor®-93 EC Primer / Sikafloor®-94 Primer / Sikafloor®-161

Wearing course: 1 x Sikafloor®-261 (S) 0.5 mm

Self-smoothing system 0.90 – 1.5 mm:

Primer: 1 x Sikafloor®-93 EC Primer / Sikafloor®-94 Primer / Sikafloor®-161

Wearing course: 1 x Sikafloor®-261 (S) 1 mm

Self-smoothing system 1.75 – 2.5 mm

Primer: 1 x Sikafloor®-93 EC Primer / Sikafloor®-94 Primer / Sikafloor®-161

Wearing course: 1 x Sikafloor®-261 (S) 2 mm

Self-smoothing system 2.75 – 4 mm

Primer: 1 x Sikafloor®-93 EC Primer / Sikafloor®-94 Primer / Sikafloor®-161

Wearing course: 1 x Sikafloor®-261 (S) 3 mm

Broadcast system approx. 3 – 5 mm:

Primer*: 1 x Sikafloor®-93 EC Primer / Sikafloor®-94 Primer / Sikafloor®-161

Base coat: 1 x Sikafloor®-261 (S) 1 mm / Sikafloor®-261 (S) 2 mm

Broadcasting: quartz sand (0.4 - 0.7 mm) broadcast to excess

Seal coat: 2 x Sikafloor®-261 (S) 0.5 mm

In broadcast system there are possibilities of wide range of texture finishes. Practical trial should be carried out prior to large application for the required finish.

Application Details**Consumption / Dosage**

Coating System	Product	Consumption
TBM (Optional)	Sikafloor® EpoCem® System	Refer to PDS of Sikafloor®-81EpoCem® / Sikafloor®-82EpoCem®
Primer	Sikafloor®-93 EC Primer / Sikafloor®-94 Primer / Sikafloor®-161	~0.25 - 0.4 kg/m ²
Scrap coat (optional) (surface roughness < 2mm)	1pbw Sikafloor®-94 Primer / Sikafloor®-261 (S) + 1 pbw Silica flour	~1.5 kg/m ² /mm
Levelling (optional) Film thickness ~1.5 – 3.0 mm	Sikafloor®-91 SLS Sikafloor®-81 EpoCem®	~1.85 kg/m ² /mm ~4.5 kg/m ² /2mm
Self-smoothing wearing course (Film thickness 0.4 – 0.75 mm)	Sikafloor®-261 (S) 0.5 mm	~1.6 kg/m ² /mm
Self-smoothing wearing course (Film thickness 0.90 – 1.5 mm)	Sikafloor®-261 (S) 1 mm	~1.8 kg/m ² /mm
Self-smoothing wearing course (Film thickness 1.75 – 2.5 mm)	Sikafloor®-261 (S) 2 mm	~1.8 kg/m ² /mm
Self-smoothing wearing course (Film thickness 2.75 – 4 mm)	Sikafloor®-261 (S) 3 mm	~1.8 kg/m ² /mm
Broadcast system (Film thickness ~ 3.0 mm)	Sikafloor®-261 (S) 1mm + broadcasting quartz sand 0.4 -0.7 mm + 2 x Seal coat, Sikafloor®-261 (S) 0.5 mm	~1.8 kg/m ² /mm ~ 5 - 6 kg/m ² ~ 0.4 kg/m ² / coat
Broadcast system (Film thickness ~ 4.0 mm)	Sikafloor®-261 (S) 2 mm + broadcasting quartz sand 0.4 -0.7 mm + 2 x Seal coat, Sikafloor®-261(S) 0.5 mm	~ 3.6 kg/m ² ~ 5 - 6 kg/m ² ~ 0.4 kg/m ² / coat

These figures are theoretical and do not allow for any additional material due to surface porosity, surface profile, variations in level and wastage etc. It is always recommended to do a field trial prior to large scale application.

Substrate Quality

The concrete substrate must be sound and of sufficient compressive strength (minimum 20 N/mm²) with a minimum pull off strength of 1.5 N/mm².

The substrate must be clean, dry and free of all contaminants such as dirt, oil, grease, coatings and surface treatments, etc.

If in doubt, apply a test area first.

Substrate Preparation	<p>Concrete substrates must be prepared mechanically using abrasive blast cleaning, scarifying or grinding equipment to remove cement laitance and achieve an open textured surface.</p> <p>Weak concrete must be removed and surface defects such as blowholes and voids must be fully exposed.</p> <p>Repairs to the substrate, filling of blowholes/voids and surface levelling must be carried out using appropriate products from the Sikafloor®, Sikadur® and Sikagard® range of materials.</p> <p>The concrete or screed substrate has to be primed or levelled in order to achieve an even surface.</p> <p>High spots must be removed by e.g. grinding.</p> <p>All dust, loose and friable material must be completely removed from all surfaces before application of the product, preferably by brush and/or vacuum.</p>										
Application Conditions / Limitations	<table border="1"> <tr> <td data-bbox="311 667 576 696">Substrate Temperature</td> <td data-bbox="620 667 874 696">+8°C min. / +35°C max.</td> </tr> <tr> <td data-bbox="311 712 555 741">Ambient Temperature</td> <td data-bbox="620 712 874 741">+8°C min. / +35°C max.</td> </tr> <tr> <td data-bbox="311 757 533 815">Substrate Moisture Content</td> <td data-bbox="620 757 1442 875"> <p>≤ 4% moisture content.</p> <p>Test method: Sika®-Tramex meter / CM - measurement or Oven-dry-method.</p> <p>No rising moisture according to ASTM (Polyethylene sheet).</p> </td> </tr> <tr> <td data-bbox="311 891 555 920">Relative Air Humidity</td> <td data-bbox="620 891 767 920">80% r.h. max.</td> </tr> <tr> <td data-bbox="311 936 432 965">Dew Point</td> <td data-bbox="620 936 1527 1043"> <p>Beware of condensation!</p> <p>The substrate and uncured floor must be at least 3°C above dew point to reduce the risk of condensation or blooming on the floor finish.</p> </td> </tr> </table>	Substrate Temperature	+8°C min. / +35°C max.	Ambient Temperature	+8°C min. / +35°C max.	Substrate Moisture Content	<p>≤ 4% moisture content.</p> <p>Test method: Sika®-Tramex meter / CM - measurement or Oven-dry-method.</p> <p>No rising moisture according to ASTM (Polyethylene sheet).</p>	Relative Air Humidity	80% r.h. max.	Dew Point	<p>Beware of condensation!</p> <p>The substrate and uncured floor must be at least 3°C above dew point to reduce the risk of condensation or blooming on the floor finish.</p>
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Roll immediately in two directions with a spiked roller to ensure even thickness and to remove entrapped air.

Broadcast system:

Sikafloor®-261 (S) is poured, spread evenly by means of a serrated trowel. Then, level and remove any entrapped air with a spiked roller and after about 10 minutes (at +25°C) but before 20 minutes (at+25°C), broadcast with quartz sand, at first lightly and then to excess.

Seal coat (on broadcast finish):

Sealer coats can be applied by squeegee and then back-rolled (crosswise) with a short-piled roller.

Cleaning of Tools

Clean all tools and application equipment with Sika® Colma Cleaner or suitable thinner immediately after use. Hardened and/or cured material can only be removed mechanically.

Potlife

+30°C	~ 35 minutes
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Waiting Time / Overcoating

Before applying Sikafloor®-261 (S) on Sikafloor®-93 EC Primer / Sikafloor®-94 Primer / Sikafloor®-161 allow:

Substrate temperature	Minimum	Maximum
+10°C	24 hours	3 days
+20°C	12 hours	2 days
+30°C	6 hours	1 day

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

Notes on Application / Limitations

Do not apply Sikafloor®-261 (S) on substrates with rising moisture.

Do not blind the primer.

Freshly applied Sikafloor®-261 (S) must be protected from damp, condensation and water for at least 24 hours.

Avoid puddles on the surface with the primer.

For areas with limited exposure and normally absorbent concrete substrates priming is not necessary for broadcast systems.

Substrate of adjacent areas must always be prepared and cleaned thoroughly prior to application.

Floor cracks and joints require pre-treatment with a stripe of primer and Sikafloor®-81 EpoCem®. Treat as follows:

Static : Prefill and level with Sikadur® or Sikafloor® epoxy resin.

Dynamic (> 0.4mm): To be assessed on site and if necessary apply a stripe coat of elastomeric material or design as a movement joint.

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

For exact colour matching, ensure the Sikafloor®-261 (S) in each area is applied from the same control batch numbers.

Under certain conditions, underfloor heating or high ambient temperatures combined with high point loading, may lead to imprints in the resin.

If heating is required do not use gas, oil, paraffin or other fossil fuel heaters, these produce large quantities of both CO2 and H2O 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	~ 5 days	~ 10 days
+20°C	~ 24 hours	~ 3 days	~ 7 days
+30°C	~ 16 hours	~ 2 days	~ 5 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®-261 (S) must have all spillages removed immediately and must be regularly cleaned using rotary brush, mechanical scrubbers, scrubber dryer, high pressure washer, wash and vacuum techniques etc. using suitable detergents and waxes.

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.

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 products must test the product/s suitably 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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