

Sikafloor®-261hs

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

Product Description	Sikafloor®-261hs is a four components, solvent free, low viscosity, high strength, high gloss ready to use self smoothing and broadcast system based on specially formulated epoxy resin.
Uses	<ul style="list-style-type: none">■ 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	<ul style="list-style-type: none">■ Excellent adhesion to substrate■ Good chemical and mechanical resistance■ Easy application■ Better Pot life■ Economical■ Impervious■ Solvent-free■ High Glossy aesthetic finish■ Slip resistant surface possible (broadcast & Textured)■ 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.



Packaging

Sikafloor®-261hs 0.5 mm

Component	Pack Size (kg)	Number of pack	Quantity (kg)
A	3.2	2	6.4
A1	0.48	2	0.96
B	1.92	2	3.84
C	4.4	2	8.8
TOTAL			20.0

Sikafloor®-261hs 1 mm

Component	Pack Size (kg)	Number of pack	Quantity (kg)
A	3.2	2	6.4
A1	0.48	2	0.96
B	1.92	2	3.84
C	7.6	2	15.2
TOTAL			26.4

Sikafloor®-261hs 2 mm

Component	Pack Size (kg)	Number of pack	Quantity (kg)
A	3.2	2	6.4
A1	0.48	2	0.96
B	1.92	2	3.84
C	8.4	2	16.8
TOTAL			28.0

Sikafloor®-261hs TC

Component	Pack Size (kg)	Number of pack	Quantity (kg)
A	3.2	2	6.4
A1	0.48	2	0.96
B	1.92	2	3.84
C	2.7	2	5.4
TOTAL			16.6

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®-261hs 0.5 mm
Mixed: 1.6kg/l
Sikafloor®-261hs 1 mm
Mixed: 1.7kg/l
Sikafloor®-261hs 2 mm
Mixed :1.7kg/l
Sikafloor®-261hs TC
Mixed 1.7kg/l
All Density values at +27°C.

Solid Content

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

Mechanical / Physical Properties

Compressive Strength

(According to ASTM C 579)

Sikafloor®-261hs 0.5 mm	~60 N/mm ₂ (14 days/ +27°C)
Sikafloor®-261hs 1.0 mm	~65 N/mm ₂ (14 days/ +27°C)
Sikafloor®-261hs 2.0 mm	~67 N/mm ₂ (14 days/ +27°C)

Flexural Strength

(According to DIN EN 196)

Sikafloor®-261hs 0.5 mm	~48 N/mm ₂ (14 days/ +27°C)
Sikafloor®-261hs 1.0 mm	~45 N/mm ₂ (14 days/ +27°C)
Sikafloor®-261hs 2.0 mm	~45 N/mm ₂ (14 days/ +27°C)

Tensile Strength

(According to ISO 527)

Sikafloor®-261hs 0.5 mm	~18 N/mm ₂ (14 days/ +27°C)
Sikafloor®-261hs 1.0 mm	~16 N/mm ₂ (14 days/ +27°C)
Sikafloor®-261hs 2.0 mm	~16 N/mm ₂ (14 days/ +27°C)

Bond Strength

> 1.5 N/mm² (failure in concrete)

(According to DIN EN 1542)

Shore D Hardness

75 (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 needs 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®-261hs 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®-261hs 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®-261hs 2 mm

Broadcast system approx. 1.5 – 3 mm:

Primer*:	1 x Sikafloor®-93 EC Primer / Sikafloor®-94 Primer / Sikafloor®-161
Base coat:	1 x Sikafloor®-261hs TC
Broadcasting:	quartz sand (0.4 - 0.7 mm) broadcast to excess
Seal coat:	2 x Sikafloor®-261hs TC

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®-82 EpoCem®
Primer	Sikafloor®-93 EC Primer / Sikafloor®-94 Primer / Sikafloor®-161	~0.25 - 0.4 kg/m ²
Levelling (optional) Film thickness ~1.5 – 3.0 mm	Sikafloor®-291	~2.20kg/m ² /mm
Self-smoothing wearing course (Film thickness 0.4 – 0.75 mm)	Sikafloor®-261hs 0.5 mm	~1.6 kg/m ² /mm
Self-smoothing wearing course (Film thickness 0.90 – 1.5 mm)	Sikafloor®-261hs 1 mm	~1.8 kg/m ² /mm
Self-smoothing wearing course (Film thickness 1.75 – 2.5 mm)	Sikafloor®-261hs 2 mm	~1.8 kg/m ² /mm
Broadcast system (Film thickness ~ 3.0 mm)	Sikafloor®-261hs TC + broadcasting quartz sand 0.4 -0.7 mm + Seal coat, Sikafloor®-261hs TC	~0.5-0.8 kg/m ² /mm ~ 2 - 5 kg/m ² ~ 0.5-0.8 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

Concrete substrates must be prepared mechanically using abrasive blast cleaning, scarifying or grinding equipment to remove cement laitance and achieve an open textured surface.

Weak concrete must be removed and surface defects such as blowholes and voids must be fully exposed.

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.

The concrete or screed substrate has to be primed or levelled in order to achieve an even surface.

High spots must be removed by e.g. grinding.

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

Application Conditions / Limitations

Substrate Temperature	+8°C min. / +35°C max.
Ambient Temperature	+8°C min. / +35°C max.
Substrate Moisture Content	≤ 4% moisture content. Test method: Sika®-Tramex meter / CM - measurement or Oven-dry-method. No rising moisture according to ASTM D 4263(Polyethylene sheet).
Relative Air Humidity	80% r.h. max.
Dew Point	Beware of condensation! 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.

Application Instructions

Mixing	Sikafloor®-261hs 0.5 mm Mixing ratio: Part A : Part A1 : Part B : Part C = 3.2 : 0.48 : 1.92 : 4.4 Sikafloor®-261hs 1 mm Mixing ratio: Part A : Part A1 : Part B : Part C = 3.2 : 0.48 : 1.92 : 7.6 Sikafloor®-261hs 2 mm Mixing ratio: Part A : Part A1 : Part B : Part C = 3.2 : 0.48 : 1.92 : 8.4 Sikafloor®-261hs TC Mixing ratio: Part A : Part A1 : Part B : Part C = 3.2 : 0.48 : 1.92 : 2.7
Mixing Time	Prior to mixing, stir part A mechanically. Add part A1 into part A and mix till uniform colour is achieved. Add part B to this mixed uniform coloured mixture (A+A1) and mix continuously for 2 minutes until a uniform mix has been achieved. When above have been mixed, add part C and mix for a further 3 minutes until a uniform mix has been achieved. 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®-261hs must be thoroughly mixed using a low speed electric stirrer (300 - 400 rpm) or other suitable equipment.
Application Method / Tools	Prior to application, confirm substrate moisture content, r.h. and dew point. If > 4% moisture content, Sikafloor® EpoCem® may be applied as a Temporary Moisture Barrier (TMB) system. <i>Levelling / patching:</i> Rough surfaces need to be levelled first. Therefore use suitable Sikafloor® levelling or patching products (see PDS). <i>Wearing course smooth:</i> Sikafloor®-261hs is poured, spread evenly by means of a serrated trowel. Roll immediately in two directions with a spiked roller to ensure even thickness and to remove entrapped air. <i>Broadcast system:</i> Sikafloor®-261hs is poured, spread evenly by means of a serrated trowel/English uniformly. 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. <i>Seal coat (on broadcast finish):</i> 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	~ 40 minutes
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Waiting Time / Overcoating

Before applying Sikafloor®-261hs 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®-261hs on substrates with rising moisture.

Do not blind the primer.

Freshly applied Sikafloor®-261hs 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®-261hs in each area is applied from the same control batch numbers.

Under certain conditions, under floor 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 hs 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.



Sika India Pvt. Ltd.
Commercial Complex II
620, Diamond Harbour Road
Kolkata, 700 034, India

Phone +91 33 2447 2448/2449
Telefax +91 33 2468 8688/2665
www.sika.in
info@in.sika.com