Construction

Sikafloor®-263 SL/264

Solvent Free, Coloured, Universal Epoxy Resin Based Flooring System

Description

Sikafloor®-263 SL/264 is a 2-component solvent free pigmented epoxy resin based flooring system. The material can be classified into three systems:

1. Sikafloor®-264: a high build roll on coat
2. Sikafloor®-263 SL: a smooth self levelling floor topping system
3. Sikafloor®-263 NS: an anti-slip self levelling floor topping system

Uses

As a high build roll on coating Sikafloor®-264 or self-levelling floor topping Sikafloor®-263 SL for:

- Food processing industry
- Chemical/pharmaceutical industry
- Power stations
- Plastics industry
- Laboratories and rooms subject to radiation
- Clean rooms, exhibition halls and showrooms
- Demonstration areas and training rooms
- Washrooms, cloakrooms

As an anti-slip self levelling floor topping Sikafloor®-263 NS for:

- Wet and dry process areas ie. Beverage industry, bottling plants, dairies, meat processing plant etc.
- Workshops and factories
- Warehouses, loading bays and ramps
- Hangars

For use on mineral-based substrates such as:

- Concrete
- Mortar
- Stone
- Epoxy Modified Mortars (EpoCem)

Advantages

- High mechanical properties
- Good abrasion resistance
- Good chemical resistance
- High durability
- Coloured
- Solvent free
- Jointless
- Easy and fast to apply
- Easily cleaned and maintained
- Waterproof

Storage and Shelf Life

Stored in original unopened containers within the temperature range of +5ºC to +30ºC this product will keep for a minimum of one (1) year.

Instructions for Use

Surface Preparation	Surfaces must be clean, dry and free from all traces of loose material, old coatings, curing compounds, release agents, laitance, oil and greases etc. Substrate compressive strength should be at least 25MPa, cohesive bond strength at least 1.5MPa and with moisture content below 4%. For Substrate Moisture content more than 4%, please refer to various priming options below. Structurally unsound layers and surface contaminants must be mechanically removed by abrasive blasting, blast-tracking or grinding. Substrates heavily impregnated with oil must be cleaned by torching or suitable solvent cleaning methods. To check that all traces of oil have been completely removed, sprinkle a few drops of water over the surface. If all water is quickly absorbed, the surface is sufficiently oil and grease free. If water forms into globules that remain on the surface, further thorough treatment of the substrate is necessary. Sikafloor®-263 SL when used as a self-levelling floor topping will not reprofile irregular substrates. For reprofiling defects on horizontal surfaces a suitable patching mortar is required. The patching mortar can be of epoxy or cementitious base depending on the scope, particular conditions and requirements of the work. Contact the Sika Technical Department for further information.
Priming	If Substrate moisture content is < 4%: Apply Sikafloor®-160 in accordance with the Product Data Sheet. For the best results and to minimise pin-holing in the primer and the top coat, apply the Sikafloor®-160 to substrates that are either decreasing in temperature or maintaining a constant temperature. If Substrate moisture content is > 4% and < 6% using Sika – Tramex Meter (at the time of application): Apply Sikafloor 161 (Which is Sikafloor 264 Neat Part A+B). Please note that the moisture content must be < 4% pbw using the CM – measurement or Oven Dry method. Substrates prone to rising moisture vapour (eg. slab on ground with no waterproof membrane underlay) or with a moisture content in excess of 6% should be treated with Sikagard®-720 EpoCem® or Sikafloor®-81 EpoCem®. These products provide a temporary moisture barrier so that the subsequent epoxy coating can fully cure and bond to the substrate without interference from rising moisture. Substrates treated with EpoCem products in accordance with the Technical Data sheets require no further priming once it's water content is less than 4%, prior to the application of Sikafloor®-263 SL/264.
Mixing	Prior to mixing, stir component A (resin) thoroughly. Add the pigment pack and all of component B (hardener) and mix components thoroughly with a low speed electric stirrer (300-400rpm) for a minimum of 3 minutes until a uniform mix has been achieved. For self-levelling floor toppings add the required quantity of Sikafloor®-263 filler gradually while continuing to mix, avoiding air entrapment in the manner of mixing. Mix until a homogenous consistency is achieved.
Cleaning	All equipment should be cleaned immediately after use with Sika Colma Cleaner. Hardened material will have to be mechanically removed. Wash soiled hands and skin thoroughly in hot soapy water.
Application	Prior to application, confirm substrate moisture content is below 4%, where the substrate moisture content is 4% - 6% use Sikafloor 161 in accordance with guidelines above. In case of moisture content more than 6% Sikafloor®-EpoCem® should be applied as a temporary moisture barrier. High build roll on coating Sikafloor®-264: Apply mixed Sikafloor®-264 onto unprimed substrate by brush or roller. For heavy duty service or for surfaces with abnormal absorbency, prime with Sikafloor®-160. Self Levelling Floor Topping Sikafloor®-263 SL: Pour mixed Sikafloor®-263 SL onto primed substrate and spread evenly to the required thickness with a notched trowel. Roll immediately in two directions with a spiked roller. Anti-slip Self Levelling Floor Topping Sikafloor®-263 NS: Apply Sikafloor®-263 SL: self levelling floor topping to primed or unprimed substrate depending on the condition of the substrate. Allow to partially cure and blind surface with kiln dried quartz sand as follows: ▪ For a slightly textured, antislip finish: Sikadur®-505. ▪ For a course-textured finish offering maximum grip: Sikadur®-501. ▪ Carborundum can also be used for high durability anti-slip finishes. Allow the Sikafloor®-263 SL to cure and remove loose sand by vacuum. Apply sealer coat of unfilled Sikafloor®-264 (part A + B) by short pile roller.

Floor Coating Systems and Consumption Rates

ROLL ON COATING (Sikafloor®-264)	
Two Coats	Sikafloor®-264 (Part A + B)
Material Consumption	Approx. 0.25-0.3 kg/m²/coat or 5-6 m^2/litre (two coats required)
SELF-LEVELLING FLOOR TOPPING (Sikafloor®-263 SL)	
Primer	Sikafloor®-160 (Part A + B)
Material Consumption	Approx. 0.3-0.5 kg/m² or 2-3 m²/litre
Top Coat	Sikafloor®-263 SL (Part A + B + C)
Floor Topping Thickness	1.6 mm to 3 mm
Material Consumption	Approx. 1.8 kg/m² or approx. 1m^2/litre/mm thickness
ANTI-SLIP SELF-LEVELLING FLOOR TOPPING (Sikafloor®-263 NS)	
Primer (optional)	Sikafloor®-160 (Part A + B)
Material Consumption	Approx. 0.3-0.5 kg/m² or 2-3 m²/litre
Base Coat	Sikafloor®-263 SL (Part A + B + C) minimum 1.0 mm thickness
Material Consumption	Approx. 1.8 kg/m² per mm or approx. 1m^2/litre/mm thickness (base coat)
Anti-Slip surface	Kiln dry quartz sand filler at 3-5 kg/m² (granular size to suit anti-slip requirements)
Seal Coat	Sikafloor®-264 (Part A + B)
Material Consumption	Approx. 0.6 kg/m² per coat or approx. 2.0 m²/litre (seal coat)

Technical and Physical Data

Form

Part A	Viscous liquid
Part B	Slightly viscous transparent liquid
Part C	Fine sand filler (Sikafloor®-Filler)

Density (23°C)

Sikafloor®-263 SL		Sikafloor®-264	
Part A	~ 1.50 kg/l	Part A	~ 1.64 kg/l
Part B	~ 1.00 kg/l	Part B	~ 1.00 kg/l
Mixed resin	~ 1.43 kg/l	Mixed resin	~ 1.40 kg/l
Filled resin 1 : 1	~ 1.84 kg/l		
All Density values at +23ºC			(DIN EN ISO 2811-1)

Mixing ratio

Sikafloor®-263 SL	Part A	Part B	Part C
Parts by mass	3.9	1	1 approx.
Parts by volume	2.5	1	2 approx.(loose poured volume)
Sikafloor®-264	Part A	Part B	
Parts by mass	3.8	1	
Parts by volume	2.4	1	

Mechanical Strength

Compressive strength EN 196-1 60 MPa, 28 days @ 23ºC

Abrasion resistance DIN 53109 70 mg (Taber Abraser), 8 days @ 23ºC
Shore D Hardness 77
Heat Resistance 80ºC Damp 120ºC Dry
(without chemical or mechanical exposure)

Thermal Resistance

Exposure*	Dry Heat
Permanent	+50ºC
Short term max. 7 d	+80ºC
Short term max. 12 h	+100ºC

Short term moist/wet heat* up to +80ºC where exposure is only occasional (steam cleaning etc.)
* No simultaneous chemical and mechanical exposure.

Potlife

Temperature	Time
+10ºC	~ 50 minutes
+20ºC	~ 25 minutes
+30ºC	~ 15 minutes

Waiting Time / Overcoating

Before applying Sikafloor®-263 SL on Sikafloor®160 allow:

Substrate temperature	Minimum	Maximum
+10ºC	24 hours	4 days
+20ºC	12 hours	2 days
+30ºC	6 hours	1 day

Before applying Sikafloor®-263 SL on Sikafloor®-263SL allow:

Substrate temperature	Minimum	Maximum
+10ºC	30 hours	3 days
+20ºC	24 hours	2 days
+30ºC	16 hours	1 day

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
+10ºC	~ 72 hours	~ 6 days	~ 10 days
+20ºC	~ 24 hours	~ 4 days	~ 7 days
+30ºC	~ 18 hours	~ 2 days	~ 5 days

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

Colour

Resin - part A: coloured, liquid
Hardener - part B: transparent, liquid

Extended colour range
Signal White RAL 9003, Beige RAL 1001, Light Grey RAL 7035, Window Grey RAL 7040, Koala Grey N45, Stone Grey RAL 7030, Dusty Grey RAL 7037, Dahlia Yellow RAL 1033, Ruby Red RAL 3003, Oxide Red RAL 3009, Sky Blue RAL 5015, Reed Green RAL 6013, Emerald Green RAL 6001, Traffic Black RAL 9017

See Sikafloor® Colour Chart

- All other standard RAL colours are available as per the RAL classics colour chart
- Colours are produced as close as possible to production standards
- Where colour shade is critical, a site trial is strongly recommended prior to proceeding with the work.
- Ensure that finishing and application techniques remain consistent to prevent colour variations

- Note that some bright colours may require additional pigment packs to prevent opacity
- Under direct sun light there may be some discolouration and colour variation; this has no influence on the function and performance of the coating.

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Packaging

Self Levelling Sikafloor®-263 SL

	33 kg Kit
Part A	13.09 kg
Pigment Pack	1 @ 1.15 kg
Part B	3.70 kg
Part C (filler)	15 kg*
Mixed Volume	18 Litres
	* Can vary between 15 - 18 kg depending on flow requirements

Roll Coat - Sikafloor®-264

	19.39 kg Kit
Part A	13.09 kg
Pigment Pack	2 @ 1.15 kg
Part B	4 kg
Mixed Volume	13.9 Litres

Note : All components are available in bulk packaging if required for site batching.

Chemical Resistance of Sikafloor-263 SL/264

Testing Time: 42 days permanent exposure (Sika Method)

Testing Group according to DIBT/medium

1	3- and 4- Star petrol	B	8	Aliphatic aldehyde	A
2	Jet fuel	A	9	10% acetic acid 20%acetic acid	A,D, B,D
3	Fuel oil	A	10	20% sulfuric acid	A,D
4	Aromatic hydrocarbons	B	11	20%caustic soda (sodium hydroxide)	A
5	Alcohols	B	12	Amine	C
6	Trichlordethylene	C	13	Aqueous solutions of organic detergents	A
7	Esters and ketones	C			

A = Resistant — Minor loss in hardness (0-20% Shore D), no formation of bubbles, no debonding, no/minor swelling.

B = Limited resistance — Moderate loss in hardness (20-40% Shore D), no formation of bubbles, no debonding, visible swelling.

C = Not resistant — Considerable loss in hardness (>40% Shore D), or formation bubbles, or loss of adhesion or partial/complete distruction of the coating.

D = Discolouration or loss of gloss

Important Notes

- Maximum delay between priming and application of Sikafloor®-263 SL/264 is 48 hours @ 20°C. Should this time be exceeded the primed surface must be lightly abraded and wiped with Sika Colma Cleaner prior to the application of Sikafloor®-263 SL/264.
- For cleaning and maintenance instructions contact the Sika Technical Department for further information.
- Component A must be thoroughly stirred with a mechanical mixer prior to batching.
- The substrate temperature should be at least 3°C above the dew point.
- Not to be applied to moist substrates (max. 4% moisture content) unless previously treated with EpoCem.
- As is common with most epoxy coatings, Sikafloor®-263 SL/264 will yellow and then chalk on exposure to UV radiation (sunlight). Areas indoors that receive direct sunlight exposure for some intervals during the day, such as those adjacent to doorways and windows can be overcoated within 48 hours of the application of the final coat with Sikafloor®-PU or Sikafloor®-PU WB.
- The amount of filler Sikafloor®-263 NS Part C that can be added to the Sikafloor®-263 NS (Part A + Part B) may alter depending on the ambient temperature.

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Handling Precautions	▪ Avoid contact with skin, eyes and avoid breathing in vapour. ▪ Wear protective gloves when mixing or using this product. ▪ If poisoning occurs contact a doctor or Poisons Information Centre. ▪ If swallowed DO NOT induce vomiting, give a glass of water. ▪ If skin contact occurs, wash immediately and thoroughly with soap and water. ▪ If in contact with eyes, hold eyes open, flood with water for at least 15 minutes and see a doctor.
Limits on Application	▪ Minimum air and substrate temperature +10°C. ▪ Maximum air and substrate temperature +30°C. ▪ Maximum air humidity 85% r.h. ▪ Substrate temperature must be at least 3°C greater than the dewpoint at the time of application. ▪ Where the moisture content of the substrate is greater than 4% EpoCem (Sikafloor®-81 EpoCem®, or Sikagard®-720 EpoCem®) is to be used as a temporary moisture barrier. ▪ A full Material Safety Data Sheet is available from Sika on request.
Important Notification	The information, and, in particular, the recommendations relating to the application and end-use of Sika's 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 of our terms and conditions of sale. Users should always refer to the most recent issue of the Australian version of the Technical Data Sheet for the product concerned, copies of which will be supplied on request. PLEASE CONSULT OUR TECHNICAL DEPARTMENT FOR FURTHER INFORMATION.