

SYSTEM DATA SHEET

Sikafloor® MultiFlex PB-55 UV

Multi layer elastic waterproof polyurethane UV stable membrane car park and podium decking system

DESCRIPTION

Sikafloor® MultiFlex PB-55 UV is an elastic polyurethane, coloured, UV resistant, dynamic crack-bridging, slip-resistant and waterproof car park decking system. It provides a hard wearing, seamless, chemical resistant, low maintenance, slip resistant finish for use in exposed deck applications requiring a high degree of crack bridging performance. Varying thickness's can be achieved from 4,0 –6,0 mm. Internal and external use.

USES

Sikafloor® MultiFlex PB-55 UV may only be used by experienced professionals.

- Exposed Car Park Decks and Roofing Structures
- Podium Decks where Trafficable Water Proofing is Required
- Wet Room Applications for Public Facilities, Bathrooms and Toilets.
- Pedestrian Bridge Deck Applications.

CHARACTERISTICS / ADVANTAGES

- Waterproof
- Resistant to UV exposure
- Dynamic crack bridging properties
- High mechanical resistance
- Good chemical resistance
- Good abrasion resistance
- Textured gloss finish
- Low dirt pick up
- Easy cleanability
- Seamless
- Slip and skid resistant surface
- Scratch resistant surface
- Easy application
- Low maintenance

SUSTAINABILITY

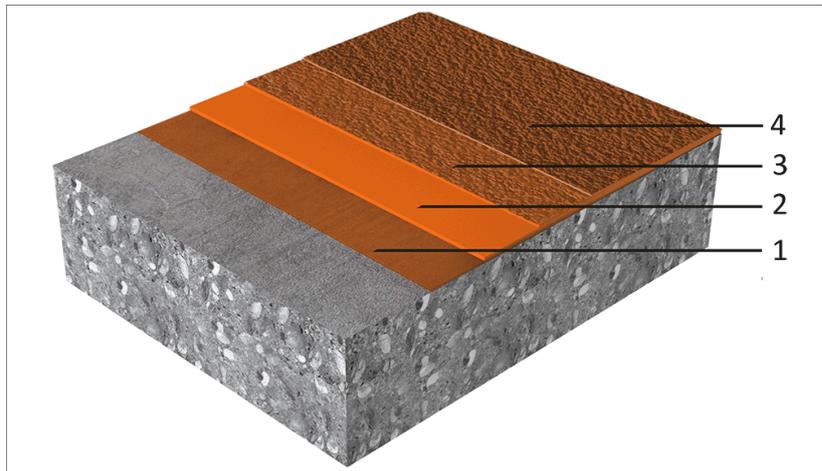
- Conformity with LEED v2009 IEQc 4.2: Low-Emitting Materials - Paints and Coatings

APPROVALS / CERTIFICATES

- CE Marking and Declaration of Performance to EN 1504-2 - Surface protection product for concrete - Coating - Sikafloor®-160, Sikafloor®-161, Sikafloor®-376, Sikafloor®-359 N
- CE Marking and Declaration of Performance to EN 13813 - Resin screed material for internal use in buildings - Sikafloor®-160, Sikafloor®-161, Sikafloor®-376, Sikafloor®-359 N
- Coating system DAfStb Test Class OS 11 EN 1504-2, Sikafloor®MultiFlex PB-55 UV, kiwa, Test report No. P 11284-1b
- Reaction to Fire Classification DIN EN 13501-1, Sikafloor®MultiFlex PB-55 UV, Hoch, Classification report No. KB-Hoch-180049-2

SYSTEM INFORMATION

System structure



Layer	Product
1. Primer	Sikafloor®-160/-161 + Aggregate broadcast 0,4–0,8 mm
2. Membrane	Sikafloor®-376
3. Wearing layer	Sikafloor®-377 (filled 1:0.4 with Sikafloor Filler) + Aggregate broadcast 0,4–0,8 mm
4. Seal Coat	Sikafloor®-377 Tinted
5. Top Coat	Sikafloor 359N

Composition	Polyurethane
Appearance	Textured, slip resistant, matt finish
Colour	Available in many colours
Nominal thickness	~4–6 mm

TECHNICAL INFORMATION

Shore A hardness	~60 (14 days/+23 °C)	(DIN 53505)
Abrasion resistance	< 3000 mg (CS 10/1000/1000)	(DIN 53109)
Resistance to wearing	AR 0,5	(DIN EN 13813)
Resistance to impact	Class I	(SO 6272)
Tensile strength	~11 N/mm ²	(EN 53504)
Tensile adhesion strength	> 1,5 N/mm	(EN 1542)
Crack bridging ability	Class B3,2 (-20 °C)	(EN 1062-7)
Reaction to fire	Cfl-s1	(EN 13501-1)
Chemical resistance	Sikafloor® MultiFlex PB-55 UV always has to be sealed with Sikafloor®-359 N. Refer to the chemical resistance of Sikafloor®-359 N.	
Permeability to water vapour	Class III	(EN ISO 7783-1)
Capillary absorption	w < 0,01 kg/(m ² ·h ^{0.5})	(EN 1062-3)
Skid / slip resistance	R12/V4 P5	(DIN 51130) (AS 4586:2013)

APPLICATION INFORMATION

Consumption	Layer	Product	Consumption
	1. Primer	Sikafloor® 160/-161 + Aggregate broadcast 0,4–0,8 mm	~0,4 kg/m ² /layer ~1,0 kg/m ²
	2. Membrane	Sikafloor®-376	~1,9 kg/m ² /1.5mm: Total consumption
	3. Wearing layer	Sikafloor®-377 (filled 1:0.4 with Sikafloor Filler) + Aggregate broadcast 0,4–0,8 mm	~2.2 kg/m ² /1.5mm: Sikafloor 377 Mixture (filled 1:0.4 with Sika- floor Filler) ~6,0–8,0 kg/m ² Selected broadcast Material
	4. Seal Coat	Sikafloor 377 (Tinted)	~0,7-0.9 kg/m ²
	5. Top Coat	Sikafloor®-359 N	~0,2- 0.25 kg/m ²

(1) Depends on roughness depth Rz (all values at +23 °C)

- Rz = 0,0: ~1,9 kg/m²
- Rz = 0,5: ~2,5 kg/m²
- Rz = 1,0: ~3 kg/m²

(2) Depends on temperature

- +23 °C: Filling 1:0,5 with quartz sand 0,1–0,3 mm
- < +15 °C: Filling 1:0,4 with quartz sand 0,1–0,3 mm

These figures are theoretical and do not allow for any additional material due to surface porosity, surface profile, variations in level or wastage etc.

NB: A second coat of primer maybe required to ensure a pore free and sealed surface

Material temperature	+10 °C min. / +30 °C max.		
Ambient air temperature	+10 °C min. / +30 °C max.		
Relative air humidity	80 % max.		
Dew point	The substrate and uncured floor products must be at least +3 °C above dew point to reduce the risk of condensation or surface damage of the floor finish.		
Substrate temperature	+10 °C min. / +30 °C max.		
Substrate moisture content	≤4 % parts by weight Test method: Sika®-Tramex meter, CM - measurement or Oven-dry-method. No rising moisture according to ASTM (Polyethylene-sheet).		
Applied product ready for use	Temperature	Foot traffic	Light traffic
	+10 °C	~24 hours	~3 days
	+20 °C	~12 hours	~2 days
	+30 °C	~5 hours	~1 days
	Full cure		
			~7 days
			~5 days
			~4 days
	Times are approximate and will be affected by changing ambient and substrate conditions		

BASIS OF PRODUCT DATA

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.

Flooring Systems

- Sika® Method Statement: Evaluation and Preparation of Surfaces for Flooring Systems
- Individual Product Data Sheets within the flooring system

FURTHER INFORMATION

- Sika® Method Statement: Sikafloor®-Cleaning Regime
- Sika® Method Statement: Mixing & Applications of

IMPORTANT CONSIDERATIONS

- Freshly applied Sikafloor® products must be protected from damp, condensation and water for at least 24 hours.
- Uncured material reacts in contact with water (foaming).
- During application care must be taken that no sweat drops onto the fresh Sikafloor® products. Wear head and wrist bands.
- For exact colour matching, ensure the Sikafloor® product in each area is applied from the same control batch numbers.
- If temporary 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.

ECOLOGY, HEALTH AND SAFETY

For information and advice on the safe handling, storage and disposal of chemical products, users shall refer to the most recent Safety Data Sheet (SDS) containing physical, ecological, toxicological and other safety-related data.

SUBSTRATE QUALITY

The substrate should meet the minimum requirements of 25mpa compressive and 1.5mpa minimum pull of value: Please refer to the Sika Work Method Statement: Evaluation and Preparation of Surfaces for Flooring Systems

SUBSTRATE PREPARATION

The concrete surface should be suitably prepared by Captive Shot Blasting or Diamond Grinding to achieve a CSP 3 then vacuum cleaned to remove all dust and surface contaminants, all curing agents should be fully removed, Please refer to the Sika Work Method Statement: Evaluation and Preparation of Surfaces for Flooring Systems.

Reglets should be cut next to drains and live edge terminations to ensure a secure and waterproof transition.

MIXING

Please refer to the Sika Work Method Statement: Mixing & Application of Flooring Systems: Please refer to individual Product Data Sheets for further information.

APPLICATION

All products should be mixed in accordance with the Sika Work Method Statement: Mixing & Application of Flooring Systems

1. CombiFlex: Installation of Sika CombiFlex System if required at parapets, walls and expansion joints as required by the project. Please seek advice from the Sika Technical Department to ensure the correct system is used for your specific application.

2. Patching: Static cracks and surface defects should be repaired using SikaDur 33 Epoxy paste or other epoxy repair method subject to size and rectification required, all repairs should be finished smooth and flush with the concrete substrate: Please consult the Sika Technical Department for further details or information.

3. Priming: An evaluation should be conducted to determine if double priming may be required, once priming is completed the surface should be completely sealed with no presence of pinholes to ensure substrate outgassing does not continue in later applications. For ramps and falls extra broadcast material should be applied to slow the rate of flow for when the membrane is to be applied

Single Primer Applications: Mix and apply the Sikafloor 160 or 161 via a squeegee at the required thickness and back roll once applied to make even, Fill all pin holes and uneven surfaces, while still wet lightly broadcast the required washed and dried sand aggregate. Do not add thinners.

Double Primer Applications:

1st Application: Mix and apply Sikafloor 160 via a squeegee at the required thickness and back roll once applied to make even. Fill all pin holes and uneven surfaces.

2nd Application: Mix and apply the Sikafloor 161, Sikafloor filler can be added to the Sikafloor 161 at various addition rates to create a "Scratch Coat" mix

to aid in filling of pinholes and uneven surfaces: Apply the Sikafloor 161 by a squeegee at the required thickness and back roll once applied to make even, ensure to fill all pin holes and uneven surfaces, while still wet lightly broadcast the required washed and dried aggregate. Do not add thinners.

4. Membrane: Mix the Sikafloor 376 and apply with a V-Notch Squeegee to a minimum coverage of 1.5mm, a hand trowl can be used for edge, joint and drain, terminations, once installed a Spike Roller or 10-12mm Nap paint roller should be used to even out the applied Sikafloor 376 to remove squeegee marks and trowel edges to ensure a consistent and even coverage.

5. Wearing Course: Mix the Full kit of Sikafloor 377 for 1 minute, then add between 7-10kg of Sikafloor filler and mix for a further 2 minutes (Addition rate is adjustable, subject to site and ambient conditions) apply with a V-Notch Squeegee to a minimum coverage of 1.5mm, a hand trowl can be used for edge, joint and drain, terminations, once installed a Spike Roller or 10-12mm Nap paint roller should be used to even out the applied Sikafloor 377 to remove squeegee marks and trowel edges to ensure a consistent and even coverage. Using Rounded Tip Spike Shoes, Broadcast the Sikafloor 377 with the Selected aggregate to refusal, there should be no glossy or bald spots.

Top Coats: NB: For best results the application of top coats should be completed in 2 x applications, a sealer coat and final finish top coat, Sikafloor 377 Tinted can be used for the first sealer coat in order to keep costs down, with the final finish top coat of Sikafloor 359N required to provide UV stability.

4: Sealer Coat: After sweeping and vacuuming to remove excess sand, Mix the Sikafloor 377 with the addition of 2 x 1.15kg Color Packs in the required color, Do not add fillers to the sealer coat. Apply with a medium rubber squeegee, working across the face, back and forth in single smooth motions, Using a 10- 12mm Nap Painters roller, back roll the floor to remove any drips and heavy applied material, once material has been evened out, use the un-loaded roller to "lay off the floor" taking care to lay the floor off in a single direction, working across the flooring edge from end to end in a single smooth motion. Failure to lay the floor off in an effective manner may result in a patchy or uneven finish,

5: Final UV stable Top Coat Mix the Sikafloor 359 and apply with a medium rubber squeegee, working across the face, back and forth in single smooth motions, Using a 10- 12mm Nap Painters roller, back roll the floor to remove any drips and heavy applied material, once material has been evened out, use the un-loaded roller to "lay off the floor" taking care to lay the floor off in a single direction, working across the

flooring edge from end to end in a single smooth motion. Failure to lay the floor off in an effective manner may result in a patchy or un-even finish.

MAINTENANCE

CLEANING

Refer to Sika® Method Statement: Sikafloor®-Cleaning Regime

LOCAL RESTRICTIONS

Please note that as a result of specific local regulations the declared data for this product may vary from country to country. Please consult the local Product Data Sheet for the exact product 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 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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System Data Sheet

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