BUILDING TRUST

SYSTEM DATA SHEET

Sikafloor® MultiFlex PS-35 ESD

Smooth, low VOC, polyurethane ESD flooring system

PRODUCT DESCRIPTION

Sikafloor® MultiFlex PS-35 ESD is a polyurethane, low VOC ESD flooring system. The system dissipates electrostatic charges (ESD) and protects personnel and sensitive equipment in electrostatic protected areas (EPA).

USES

Sikafloor® MultiFlex PS-35 ESD may only be used by experienced professionals.

The System is used in industrial buildings such as:
- Electronic facilities and data centres
- Microbiology and microchemistry production areas
- Automotive facilities

Please note:
The System may only be used for interior applications.

CHARACTERISTICS / ADVANTAGES

- Easy to apply
- Good resistance to UV exposure
- Good yellowing resistance
- Easy to refurbish, topcoat can be recoated
- Low maintenance
- Good resistance to specific chemicals
- Easy to refurbish, topcoat can be recoated

APPROVALS / STANDARDS

Reaction to fire EN 13501-1, Sikafloor® MultiFlex PS-35 ESD, Ghent, Test report No. 24-0829-01

SYSTEM INFORMATION

System Structure

Layer	Product
1. Primer	Sikafloor®-150 Plus, or Sikafloor®-151
2. Conductive primer + Earthing connection	Sikafloor®-220 W Conductive + Sikafloor® Conductive Set
3. Conductive base coat	Sikafloor® BC 375 N AS
4. ESD Topcoat	Sikafloor®-305 W ESD

System structure: The system structure described in the table must not be changed. Contact Sika Technical Service for information on choosing the right primer for your project.

Composition	Combination of epoxy and polyurethane
Appearance	Smooth matt finish
Colour	Available in various colour shades.
Nominal thickness	~1.5–2.0 mm

TECHNICAL INFORMATION

Tensile adhesion strength	≥ 1.5 MPa		(EN 1542)
Electrostatic Behaviour	Resistance to ground	$R_G < 10^9$ Ω	(IEC 61340-4-1)
	Typical average resistance to ground	$R_G < 10^5$–10^6 Ω	(EN 1081)
	Body voltage generation	< 100 V	(IEC 61340-4-5)
	System resistance	$R_G < 10^9$ Ω	(IEC 61340-4-5)

ESD MEASUREMENT CONDITIONS AND SPECIFICATIONS

All measurement values for the system stated in the System Data Sheet (except those referring to proof statements) were measured using the following equipment and ambient conditions:

Condition or Equipment	Specification
Size of ESD-footwear	42 (EU) (UK: 8; US: 8,5)
Test person weight	90 kg
Ambient conditions	+23 °C/50 %
Measuring device for measuring resistance to ground	Metriso 2000 or 3000 (Warmbier) or comparable
Surface resistance probe	Carbon Rubber electrode. Weight: 2,50 kgShore A (60 ±10)
Rubber pad hardness	Shore A (60 ±10)
Measuring device for measuring body voltage generation	Walking Test Kit WT 5000 (Warmbier) or comparable

ESD footwear requirements

The ESD shoes used in the EPA must have a resistance of < 5 MOhm according to IEC 61340-4-3 at climate class 1 (12 % relative humidity / +23 °C). In order to achieve charges of < 30 volts of human body charge during the walking test (at 12 % relative humidity / +23 °C), we recommend using the following ESD shoes: Weeger ESD clog, art. 48512-30, www.schuh-weeger.de.

Note: Measurement results can be affected by ESD clothing, ambient conditions, measurement equipment, cleanliness of the floor and the test personnel.

APPLICATION INFORMATION

Consumption

Layer	Product	Consumption
Primer	Sikafloor®-150 Plus, or Sikafloor®-151	1-2 × 0.3–0.5 kg/m²
Levelling (if required)	Sikafloor®-150 Plus, or Sikafloor®-151	Refer to the individual Product Data Sheet.
Earthing connection	Sikafloor® Conductive Set	1 Earthing Point per approx. 200–300 m², min. 2 per room
Conductive primer	Sikafloor®-220 W Conductive	1 × 0.08–0.10 kg/m²
Conductive base coat	Sikafloor® BC 375 N AS	1 × 2.0-2.5 kg/m²
ESD Topcoat	Sikafloor®-305 W ESD	1–2 × 0.18-0.2 kg/m²/layer diluted with 10% of water

Note: Consumption data is theoretical and does not allow for any additional material due to surface porosity, surface profile, variations in level, wastage or any other variations. Apply the product to a test area to calculate the exact consumption for the specific substrate conditions and proposed application equipment.

Ambient Air Temperature

Maximum	+30 °C
Minimum	+10 °C

Relative Air Humidity

Maximum	75% r.h.

Dew Point

Refer to the individual Product Data Sheet.

Substrate Temperature

Maximum	+30 °C
Minimum	+10 °C

Substrate Moisture Content

Refer to the individual Product Data Sheet.

Waiting Time / Overcoating

For the waiting time to overcoating of the primer, refer to the individual Product Data Sheet.
Before applying Sikafloor® BC 375 N AS on Sikafloor®-220 W Conductive, allow:

Temperature	Minimum	Maximum
+10 °C	~26 hours	~7 days
+20 °C	~17 hours	~5 days
+30 °C	~12 hours	~4 days

Before applying Sikafloor®-305 W ESD on Sikafloor® BC 375 N AS allow:

Temperature	Minimum	Maximum
+10 °C	~24 hours	~3 days
+20 °C	~16 hours	~48 hours
+30 °C	~8 hours	~36 hours

Before applying Sikafloor®-305 W ESD on Sikafloor®-305 W ESD allow:

Temperature	Minimum	Maximum
+10 °C	~48 hours	~10 days
+20 °C	~24 hours	~8 days
+30 °C	~16 hours	~7 days

Note: 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
+10 °C	~48 hours	~5 days	~10 days
+20 °C	~24 hours	~3 days	~8 days
+30 °C	~16 hours	~2 days	~7 days

Note: Times apply when the last layer of the system has been applied.

Times are affected by changing ambient conditions, particularly temperature and relative humidity.

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.

FURTHER DOCUMENTS

Refer to the following method statements:
- Sika Method Statement — Evaluation and preparation of surfaces for flooring systems
- Sika Method Statement — Sikafloor® Mixing and Application

ECOLOGY, HEALTH AND SAFETY

User must read the most recent corresponding Safety Data Sheets (SDS) before using any products. The SDS provides information and advice on the safe handling, storage and disposal of chemical products and contains physical, ecological, toxicological and other safety-related data.

APPLICATION INSTRUCTIONS

APPLICATION

INSTALLATION OF EARTHING POINTS

Refer to Sika Method Statement: Sika Method Statement — Sikafloor® Mixing and Application
Number of earthing connections per room: Minimum of 2 earthing connections. The optimum number of earthing connections depends on the local conditions and must be specified on drawings or other contract documentation.

ESD CONDUCTIVITY MEASUREMENTS

Recommended number of conductivity measurements is specified in the following table:

Ready applied area	Number of measurements
< 10 m²	6
≥ 10 m² and < 100 m²	10 to 20
≥ 100 m² and < 1000 m²	50
≥ 1000 m² and < 5000 m²	100

If the measurements yield values that are outside of the agreed specification, follow these steps:
1. Carry out one additional measurement within a radius of approximately 30 cm around the original measuring point.
If the value of the new measurement meets the agreed specification, the original measurement can be disregarded. If the value of the new measurement does not meet the agreed specification, repeat the measurement described above until the fulfilment of the requirements have been verified. If the requirements cannot be verified, contact Sika Technical Services.

LOCAL RESTRICTIONS

Please note that as a result of specific local regulations the performance of this product may vary from country to country. Please consult the local Product Data Sheet for the exact description of the application fields.

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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