BUILDING TRUST

SYSTEM DATA SHEET

Sikafloor® MultiDur EB-56 ESD

Slip resistant conductive epoxy ESD flooring system

PRODUCT DESCRIPTION

Sikafloor® MultiDur EB-56 ESD is an epoxy ESD flooring system with a slip resistant textured finish. The system is designed to dissipate electrostatic charges (ESD) and protect sensitive equipment in electrostatic protected areas (EPA).

USES

Sikafloor® MultiDur EB-56 ESD may only be used by experienced professionals.

The System is used in industrial buildings such as:
- Automotive facilities
- Electronic facilities and data centres
- Pharmaceutical facilities

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

CHARACTERISTICS / ADVANTAGES

- Provides reliable and long-lasting ESD protection
- Functional finish with slip-resistant properties
- Good resistance to specific chemicals
- Electrostatically conductive
- Very good mechanical resistance
- Low VOC emissions
- Low Airborne Molecular Contaminants (AMC) emissions

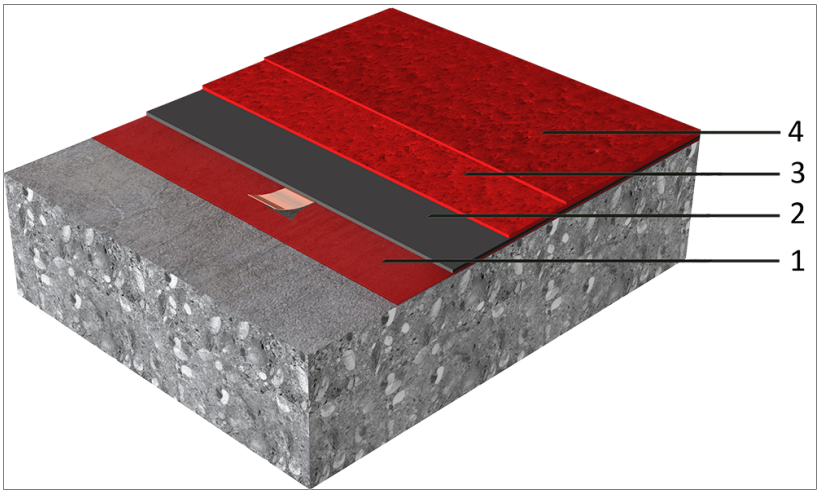
APPROVALS / STANDARDS

- Determination of anti-slip properties DIN 51130, TZUS, Report No. 030-062173
- Fire Classification report EN 13501-1, GHENT, Report No. CR 21-0970-01

SYSTEM INFORMATION

System Structure

Sikafloor® MultiDur EB-56 ESD



Layer	Product
Primer	Sikafloor®-150 Plus, or Sikafloor®-151
Earthing Connection	Sikafloor® Conductive Set
Conductive Primer	Sikafloor®-220 W Conductive
Conductive wearing layer	Sikafloor®-2350 ESD filled with 20 % 0.1–0.3 mm quartz sand
Broadcast in excess	Broadcast in excess with Sika F20 or Sika F25 Aggregate
Top coat	Sikafloor®-2350 ESD

Contact Sika Technical Service for information on choosing the right primer for your project.

Composition

Epoxy

Colour

Please refer to the Product Data Sheet of Sikafloor®-2350 ESD for the available colour options.

Nominal thickness

2 mm to 3 mm

TECHNICAL INFORMATION

Tensile adhesion strength

≥ 1.5 MPa (EN 1542)

Chemical Resistance

Laboratory-defined resistance to many individual chemicals. Before pro?ceeding, contact Sika Technical Service for specific information.

Electrostatic Behaviour

Resistance to ground	$R_G < 10^9\ \Omega$	(IEC 61340-4-1)
Typical average resistance to ground	$R_G < 10^5–10^6\ \Omega$	
Body voltage generation	< 100 V	(IEC 61340-4-5)
System resistance	$R_G < 10^9\ \Omega$	

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 kg
Rubber pad hardness	Shore A (60 ±10)
Measuring device for measuring body voltage generation	Walking Test Kit WT 5000 (Warmbier) or comparable

IMPORTANT
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.

Service Temperature

Short-term, maximum 7 days	+80 °C

IMPORTANT
Exposure to moist or wet heat
Sikafloor® broadcast systems with a minimum thickness of ~3–4 mm, that use this Product, can resist short-term moist or wet heat of up to +80 °C if the exposure is only temporary (less than 1 hour). While the Product is exposed to temperatures up to +80 °C, simultaneous mechanical or chemical strain may cause damage to the Product.

1. Do not expose the Product to chemical or mechanical strain at elevated temperatures

APPLICATION INFORMATION

Consumption

Layer	Product	Consumption
Primer or scratch coat	Sikafloor®-150 Plus, or Sikafloor®-151	~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	Refer to the individual Product Data Sheet.
Conductive Primer	Sikafloor®-220 W Conductive	0.08 - 0.10 kg/m²
Conductive wearing layer	Sikafloor®-2350 ESD filled with 20 % 0.1–0.3 mm quartz sand	1 × ~1.1 kg/m²
Broadcast	Broadcast in excess with Sika F20 or F25 Conductive Aggregate	~4–6 kg/m²
Top coat	Sikafloor®-2350 ESD	0.75–0.85 kg/m²

Note: Consumption data is theoretical and does not account for additional material due to surface porosity, surface profile, variations in level, wastage, or other factors. 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	+ 15 °C

Relative Air Humidity

Maximum	80 % r.h.

Waiting Time / Overcoating

For the waiting time to overcoating of the primer, refer to the individual Product Data Sheet.
Before applying Sikafloor®-2350 ESD on Sikafloor®-220 W Conductive, allow:

Temperature	Minimum	Maximum
+15 °C	~26 hours	~7 days
+20 °C	~17 hours	~5 days
+30 °C	~12 hours	~4 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
+15 °C	~48 hours	~3 days	~7 days
+20 °C	~24 hours	~48 hours	~4 days
+30 °C	~16 hours	~36 hours	~3 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 — Sikafloor® and Sikagard® evaluation and preparation of surfaces
- 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

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:
- 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, you may repeat the measurement described above, until the fulfilment of the requirements have been verified. If the requirements cannot be verified, contact Sika technical services.

INSTALLATION OF EARTHING POINTS
Refer to Sika Method Statement: Mixing & Application of Flooring Systems.
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.

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.

SIKA LIMITED
Watchmead
Welwyn Garden City
Hertfordshire, AL7 1BQ
Tel: 01707 394444
Web: www.sika.co.uk
Twitter: @SikaLimited