

SYSTEM DATA SHEET

Sikafloor® MultiDur EB-56 ESD

Slip resistant conductive epoxy ESD flooring system

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 can be used in industrial buildings such as:

- Automotive facilities
- Electronic facilities and data centres
- Pharmaceutical facilities

Please note:

- The System may only be used by experienced professionals.
- 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 chemicals
- Electrostatically conductive
- High mechanical resistance
- Low VOC / AMC emissions

APPROVALS / CERTIFICATES

- 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	Layer	Product
	Primer or scratch coat	Sikafloor®-160 Sikafloor®-161
	Earthing connection	Sikafloor® Conductive Set
	Conductive primer	Sikafloor®-220 W Conductive
	Conductive wearing layer + Broadcast in excess	Sikafloor®-2350 ESD filled with 20 % 0.1–0.3 mm quartz sand + Silicone carbide 0.5–1.0. mm
	Top coat	Sikafloor®-2350 ESD
Composition	Epoxy	

Colour	Cured system colour	Available in the approximate colours RAL 1014, RAL 6000, RAL 6010, RAL 6020, RAL 6027, RAL 6034, RAL 7001 RAL 7005, RAL 7011, RAL 7021, RAL 7032, RAL 7035, RAL 7038, RAL 7040, RAL 7045, RAL 7047, RAL 9002
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Nominal thickness	2 mm to 3 mm
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TECHNICAL INFORMATION

Chemical resistance	Sikafloor®-2350 ESD provides the chemical resistance. Refer to Product Data Sheet.	
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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	$< 100 \text{ V}$	(IEC 61340-4-5)
System resistance	$R_G < 10^9 \Omega$	

Note: The System fulfils the requirements of ATEX 153.

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

IMPORTANT

ESD footwear requirements

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

Service temperature	Short-term, maximum 7 days	$+80 \text{ }^\circ\text{C}$
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IMPORTANT

Exposure to moist or wet heat

Sikafloor® broadcast systems with a minimum thickness of $\sim 3\text{--}4 \text{ mm}$, that use this product, can resist short-term moist or wet heat of up to $+80 \text{ }^\circ\text{C}$, if the exposure is only temporary (less than 1 hour). However, during exposure to moist or wet heat, do not also subject the Sikafloor® broadcast system to chemical and/or mechanical strain, as it may cause damage to the system.

APPLICATION INFORMATION

Consumption	Layer	Product	Consumption
	Primer or scratch coat	Sikafloor®-160 Sikafloor®-161	$\sim 0.3\text{--}0.5 \text{ kg/m}^2$
	Levelling	Sikafloor®-160 Sikafloor®-161	Refer to the individual Product Data Sheet.

Earthing connection	Sikafloor® Conductive Set	1 earthing point per ~200 m ² to 300 m ² . Min 2 per room
Conductive primer	Sikafloor®-220 W Conductive	1 × 0.08 - 0.10 kg/m ²
Conductive wearing layer + Broadcast in excess	Sikafloor®-2350 ESD filled with 20 % 0.1–0.3 mm quartz sand + Silicone carbide 0.5–1.0. mm	1 × ~1.1 kg/m ² + ~4–6 kg/m ²
Top coat	Sikafloor®-2350 ESD	~0.75–max. 0.85 kg/m ²

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 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 %		
Dew point	Refer to the individual Product Data Sheet.			
Substrate temperature	Minimum	+15 °C		
	Maximum	+30 °C		
Substrate moisture content	Refer to the individual Product Data Sheet.			
Waiting time to 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.			

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.

FURTHER INFORMATION

- Sika® Method Statement: Evaluation and preparation of surfaces for flooring 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.

APPLICATION INSTRUCTIONS

APPLICATION

ESD CONDUCTIVITY MEASUREMENTS

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

Ready applied area	Number of measurements
< 10 m ²	6
≥ 10 m ² and < 100 m ²	10 to 20
≥ 100 m ² and < 1000 m ²	50
≥ 1000 m ² and < 5000 m ²	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, 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 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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