BUILDING TRUST

SYSTEM DATA SHEET

Sikafloor® MultiDur ES-24 ECF

Smooth, conductive, low-VOC epoxy flooring system

DESCRIPTION

Sikafloor® MultiDur ES-24 ECF is a coloured, electrostatically conductive, low-VOC epoxy flooring system.

USES

Sikafloor® MultiDur ES-24 ECF may only be used by experienced professionals.

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

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

CHARACTERISTICS / ADVANTAGES

- Electrostatically conductive
- Good resistance to specific chemicals
- Good mechanical resistance
- Low maintenance
- Impermeable to liquids

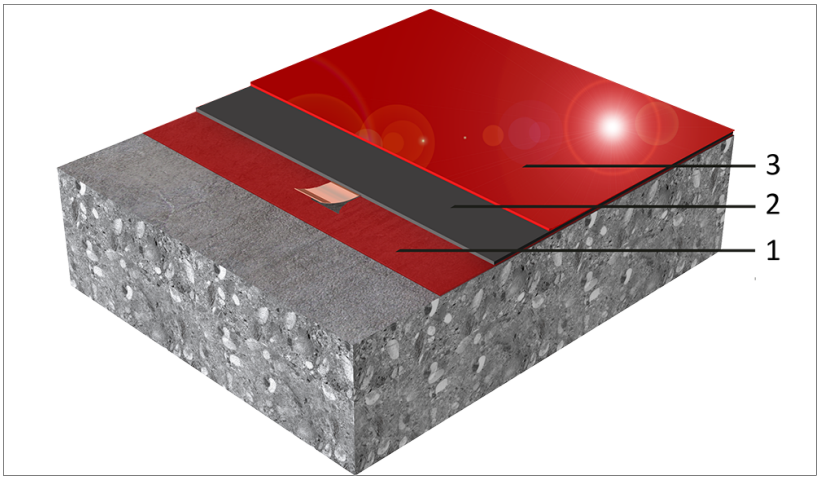
APPROVALS / STANDARDS

- Sikafloor MultiDur ES-24 ECF Fire classification report

SYSTEM INFORMATION

System Structure

Sikafloor® MultiDur ES-24 ECF



	Layer	Product
1.	Primer	Sikafloor®-150 Sikafloor®-151 Sikafloor®-156 Sikafloor®-161 Contact Sika Technical Service for information on choosing the right primer for your project.
2.	Conductive primer + Earthing connection	Sikafloor®-220 W Conductive + Sikafloor® Conductive Set
3.	Conductive wearing layer	Sikafloor®-262 AS N

IMPORTANT
System structure
The system structure as described in the table must not be changed.

Composition	Epoxy	
Appearance	Smooth, semi-gloss finish	
Colour	Cured system colour	Available in various colour shades.
Nominal Thickness	~1.0–1.5 mm	

TECHNICAL INFORMATION

Tensile Adhesion Strength	≥ 1.5 MPa	(EN 1542)
Reaction to Fire	Class B_{fl}-s1	(EN 13501-1)
Electrostatic Behaviour	Resistance to ground: $R_G < 10^9$ Ω Typical average resistance to ground: $R_G < 10^5$–10^6 Ω	(IEC 61340-4-1)

ECF 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 and 50 % r.h.
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)

Measurement results during testing
Note: If values are lower or higher than required, carry out additional measurements about 30 cm around the point where the faulty readings are located. If the re-measured values are in accordance with the requirements, the total area is acceptable. If the requirements cannot be verified, contact Sika Technical Services.

APPLICATION INFORMATION

Consumption

Layer	Product	Consumption
Primer	Sikafloor®-150 Sikafloor®-151 Sikafloor®-156 Sikafloor®-161	1–2 × 0.3–0.5 kg/m²
Levelling	Sikafloor®-150 Sikafloor®-151 Sikafloor®-156 Sikafloor®-161	Refer to the individual Product Data Sheet.
Conductive primer	Sikafloor®-220 W Conductive	1 × 0.08–0.10 kg/m²
Earthing connection	Sikafloor® Conductive Set	1 earthing point per approx. 200–300 m², min. 2 per room
Option 1: Conductive wearing layer	Sikafloor®-262 AS N Filled with Sikafloor® Filler-1	Min. 2.25 kg Binder + 0.25 kg Sikafloor® Filler-1. Max. 2.0 kg Binder + 0.5 kg Sikafloor® Filler-1
Option 2:Conductive wearing layer	Sikafloor®-262 AS N Filled with quartz sand F34	Min. 2.25 kg Binder + 0.25 kg quartz sand F34 Max. 1.75 kg Binder + 0.75 kg quartz sand F34

The filling grade varies on the air temperature at application, lower temperatures require less filling.
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

+10 °C min. / +30 °C max.

Relative Air Humidity

80 % r.h. max.

Dew Point

Refer to the individual Product Data Sheet.

Substrate Temperature

+10 °C min. / +30 °C max.

Substrate Moisture Content

Refer to the individual Product Data Sheet.

Waiting Time / Overcoating

Before applying Sikafloor®-220 W Conductive on the primer layer allow:

Temperature	Minimum	Maximum
+10 °C	~17 hours	~4 days
+20 °C	~9 hours	~48 hours
+30 °C	~7 hours	~24 hours

Before applying Sikafloor®-262 AS N 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

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	~30 hours	~5 days	~10 days
+20 °C	~24 hours	~3 days	~7 days
+30 °C	~16 hours	~2 days	~5 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

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.

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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