BUILDING TRUST

SYSTEM DATA SHEET

Sikafloor® MultiDur EB-31 ECF

Slip-resistant unicolour electrostatically conductive epoxy flooring system with high chemical resistance

AVAILABLE ON INDENT ORDER ONLY

SIKA NZ APPROVED CONTRACTOR ONLY

DESCRIPTION

Sikafloor® MultiDur EB-31 ECF is a slip-resistant, coloured epoxy flooring system.

USES

Sikafloor® MultiDur EB-31 ECF may only be used by experienced professionals.

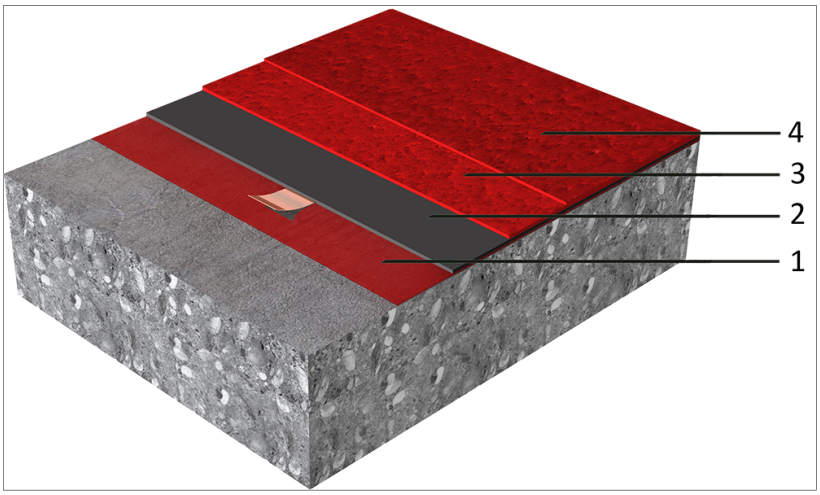
The System is used for:
- Bunding areas
- Chemical and processing facilities
- Automotive facilities

CHARACTERISTICS / ADVANTAGES

- Electrostatically conductive
- Impermeable to liquids
- Good resistance to abrasion
- Very good mechanical resistance
- Very good resistance to specific chemicals

SYSTEM INFORMATION

System Structure



	Layer	Product
1.	Primer	Sikafloor®-150 Sikafloor®-151 Contact Sika NZ for information on choosing the right primer for your project.
2.	Conductive primer & Earthing connection	Sikafloor®-220 W Conductive + Sikafloor® Conductive Set
3.	Conductive base coat & broadcast	Sikafloor®-381 ECF (unfilled), broadcast to excess with silicone carbide 0.5-1.0 mm.
4.	Top coat	Sikafloor®-381 + 5 % by weight Sika® Thinner C

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

Composition	Epoxy	
Appearance	Slip resistant, semi-gloss finish	
Colour	Cured system colour	Available in various colour shades.
Nominal thickness	2 mm to 2.5 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	

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 reults during testing
Note: If values are lower or higher than required, additional measurements have to be carried out 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.

APPLICATION INFORMATION

Consumption

Layer	Product	Consumption
Primer	Sikafloor®-150 Sikafloor®-151	1-2 × 0.3–0.5 kg/m²
Levelling (if required)	Sikafloor®-150 Sikafloor®-151	Refer to the individual Product Data Sheet
Earthing connection	Sikafloor® Conductive Set	1 earthing point per approx. 200 m², min. 2 per room
Conductive primer	Sikafloor®-220 W Conductive	1 × 0.08–0.10 kg/m²
Conductive base coat and broadcast	Sikafloor®-381 ECF (unfilled) Broadcast to excess with silicone carbide 0.5-1.0 mm.	1 × 1.6 kg/m² 4.0-6.0 kg/m²
Top coat	Sikafloor®-381 + 5 % by weight Sika® Thinner C	1 × 0.75-0.85 kg/m²

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	+10 °C

Relative Air Humidity

Maximum	80 % r.h.

Dew Point

Beware of condensation!
The substrate and uncured floor must be at least 3 °C above dew point to reduce the risk of condensation or blooming on the floor finish.

Substrate Temperature

Maximum	+30 °C
Minimum	+10 °C

Substrate Moisture Content	≤ 4% pbw using Sikafloor®-150 ≤ 6% pbw using Sikafloor®-151 Test method: Sika®-Tramex meter, CM - measurement or Oven-dry-method. No rising moisture according to ASTM (Polyethylene-sheet). Osmosis caused by rising moisture or incorrect primer application is not covered by the product warranty.

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 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

LIMITATIONS

For exact colour matching, ensure the Sikafloor®-381 ECF in each area is applied from the same control batch numbers.

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 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.
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. It may be necessary to adapt the above disclaimer to specific local laws and regulations. Any changes to this disclaimer may only be implemented with permission of Sika® Corporate Legal in Baar.

Sika (NZ) Limited
85-91 Patiki Road
Avondale, Auckland 1026
New Zealand
0800 745 269
www.sika.co.nz