

SYSTEM DATA SHEET

Sikafloor® MultiDur ET-14 ECF

EPOXY SMOOTH TEXTURED CONDUCTIVE FLOOR COATING SYSTEM

PRODUCT DESCRIPTION

Sikafloor® MultiDur ET-14 ECF is an epoxy, smooth textured, electrostatically conductive flooring system. The system is designed to dissipate electrostatic charges in areas of high explosion risk.

USES

Sikafloor® MultiDur ET-14 ECF may only be used by experienced professionals.

Industrial resin flooring on cementitious substrates for:

- Normal up to medium heavy wear
- Automotive production plants
- Chemical production plants
- Laboratories
- Pharmaceutical production areas
- Fibre and textile production
- Explosive storage and handling areas
- Explosive dust environments
- Aircraft maintenance hangars
- Battery-charging rooms
- Computer / server rooms
- Interior use only

CHARACTERISTICS / ADVANTAGES

- Thickness ~0.6–0.8 mm
- Electrostatic conductive
- Good chemical and mechanical resistance
- Slip resistant
- Easy to clean
- Waterproof
- Smooth-textured semi-gloss surface finish

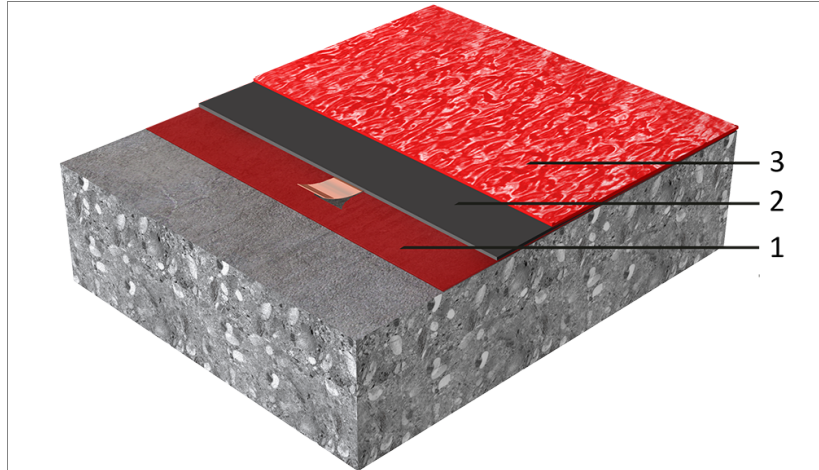
APPROVALS / STANDARDS

- CE Marking and Declaration of Performance to EN 1504-2 - Surface protection product for concrete - Coating
- CE Marking and Declaration of Performance to EN 13813 - Resin screed material for internal use in buildings
- Slip resistance acc. DIN 51130, Roxeler Baustoffprüfstelle, Test Report Nr. 020109-15-6, May 2016
- Material testing PV 3.10.7, Sikafloor®-262 AS N, HQM, Report No. 14-04-14201871-5

SYSTEM INFORMATION

System Structure

Sikafloor® MultiDur ET-14 ECF (~0.6–0.8 mm)



1. Primer + earthing connection	Sikafloor®-150/-151 + Sika® Earthing Kit
2. Conductive primer	Sikafloor®-220 W Conductive
3. Conductive wearing finish	Sikafloor®-262 AS N Thixo

Optional conductive wearing finish: Sikafloor®-262 AS N + 1.25 % Extender T + 2 % Sika® Thinner C

The system structure layers as described in table must not be changed

Composition

Epoxy

Appearance

Smooth, textured, semi-gloss

Colour

Available in many colours
Applied colours selected from colour charts will be approximate.
Colour deviations may occur due to carbon fibre filaments.
For colour matching: Apply colour sample and confirm selected colour under real lighting conditions.
When product is exposed to direct sunlight, there may be some discoloration and colour variation, this has no influence on the function and performance of the floor finish.

Nominal Thickness

~0,6–0,8 mm

TECHNICAL INFORMATION

Shore D Hardness	~77 (3 days / +23 °C)	(DIN 53 505)
Abrasion Resistance	~100 mg (CS 10/1000/1000) (7 days / +23 °C)	(EN ISO 5470-1 Taber Abraser Test)
Compressive Strength	~80 N/mm ² (28 days / +23 °C)	(EN 196-1)
Tensile Strength	~40 N/mm ² (28 days / +23 °C)	(EN 196-1)
Reaction to Fire	B _{fl}	(EN 13501-1)
Chemical Resistance	Resistant to many chemicals. Contact Sika Technical Services for additional information	
Thermal Resistance	Exposure*	Dry heat
	Permanent	+50 °C
	Short-term max. 7 days	+80 °C

Short-term moist/wet heat* up to +80 °C where exposure is temporary (i.e. during steam cleaning etc.)

*No simultaneous chemical and mechanical exposure.

USGBC LEED Rating	Conforms to the requirements of LEED EQ Credit 4.2: Low-Emitting Materials: Paints & Coatings SCAQMD Method 304-91 VOC Content < 100 g/l		
Skid / Slip Resistance	R9	(DIN 51130)	
Electrostatic Behaviour	Resistance to ground ¹	$R_g < 10^9 \Omega$	(IEC 61340-4-1)
	Typical average resistance to ground ²	$R_g < 10^6 \Omega$	(DIN EN 1081)

¹ In accordance with IEC 61340-5-1 and ANSI/ESD S20.20.
² Readings may vary, depending on ambient conditions (i.e. temperature, humidity) and measurement equipment.

APPLICATION INFORMATION

Consumption	Layer	Product	Consumption
	1. Primer	Sikafloor®-150/-151	1-2 x ~0.3-0.5 kg/m ²
	Levelling (if required)	Sikafloor®-150/-151 levelling mortar	Refer to PDS of Sikafloor®-150/-151
	Earthing connection	Sika® Earthing Kit	1 earthing point per ~200-300 m ² . 2 per room minimum
	2. Conductive primer	Sikafloor®-220 W Conductive	1 x 0.08-0.10 kg/m ²
	3. Conductive wearing finish	Sikafloor®-262 AS N Thixo, or Sikafloor®-262 AS N + 1.25% Extender T + 2 % Sika® Thinner C	1 x 0.75 kg/m ²

These figures are theoretical and do not allow for any additional material due to surface porosity, surface profile, variations in level or wastage etc.

Ambient Air Temperature	+10 °C min. / +30 °C max.		
Relative Air Humidity	80 % max.		
Dew Point	Beware of condensation. The substrate and uncured applied floor materials must be at least +3 °C above dew point to reduce the risk of condensation or blooming on the surface of the applied product.		
Substrate Temperature	+10 °C min. / +30 °C max.		
Substrate Moisture Content	≤4 % parts by weight. The following test methods can be used: Sika®-Tramex meter, CM - measurement or Oven-dry-method. No rising moisture according to ASTM (Polyethylene-sheet).		
Waiting Time / Overcoating	Before applying Sikafloor®-220 W Conductive on Sikafloor®-150/151 allow:		
	Substrate temperature	Minimum	Maximum
	+10°C	24 hours	4 days
	+20°C	12 hours	2 days
	+30°C	8 hours	1 days
	Before applying Sikafloor®-262 AS N Thixo on Sikafloor®-220 W Conductive allow:		
	Substrate temperature	Minimum	Maximum
	+10°C	26 hours	7 days
	+20°C	17 hours	5 days
	+30°C	12 hours	4 days

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

Times are approximate and will be affected by changing ambient conditions particularly temperature and relative humidity.

PRODUCT INFORMATION

Packaging	Refer to the individual Product Data Sheets
Shelf Life	Refer to the individual Product Data Sheets
Storage Conditions	Refer to the individual Product Data Sheets

MAINTENANCE

CLEANING

Refer to Information Manual: Sikafloor®-Cleaning Regime

FURTHER DOCUMENTS

- Sika Information Manual: Sikafloor®-Cleaning Regime
- Sika Information Manual: Mixing & Application of Flooring Systems
- Sika Information Manual: Evaluation and Preparation of Surfaces for Flooring Systems
- Individual Product Data Sheets within the flooring system

LIMITATIONS

- In addition to the Sikafloor® MultiDur ET-14 ECF flooring system, consideration must be given to providing employees working in an explosive atmosphere zoned area with anti-static clothing and footwear.
- Do not apply Sikafloor® MultiDur ET-14 ECF on substrates with rising moisture.
- Due to the nature of carbon fibres providing the conductivity, surface irregularities might be possible. This has no influence on the function and performance of the coating.
- Do not blind the primer.
- After application, all the products must be protected from damp, condensation and water for at least 24 hours.
- Only start application of Sikafloor® conductive primer after all the primer has dried tack-free. Otherwise there is a risk of 'wrinkling' affecting the conductive properties.
- Under certain conditions, under floor heating or high

ambient temperatures combined with high point loading, may lead to indentations in the resin.

- The incorrect assessment and treatment of cracks may lead to a reduced service life, reflective cracking and reducing or breaking the conductivity.
- For consistent colour matching, ensure the Sikafloor® MultiDur ET-14 ECF in each area is applied from the same control batch numbers.
- Measurement results can be affected by ESD clothing, ambient conditions, measurement equipment, cleanliness of the floor and test personnel.
- Measurement results on the textured surface may vary due to a difference in surface profile.

All measurement values for the Sikafloor® MultiDur ET-14 ECF system stated in the system data sheet (apart from the ones referring to proof statements) were measured under the following conditions:

Ambient conditions:	+23 °C/50 %
Measurement device for the Resistance to Ground:	Metriso 2000 (Warmbier) or comparable
Surface resistance probe:	Tripod electrode acc. DIN EN 1081

The number of conductivity measurements is strongly recommended to be as shown in the table below:

Ready applied area	Number of measurements
< 10 m ²	6
< 100 m ²	10-20
< 1000 m ²	50
< 5000 m ²	100

If values are lower/higher than required, additional measurements must be carried out, ~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.

Installation of earthing points: Refer to Sika® Method Statement: Mixing & Applications of Flooring Systems. Numbers of earth connections per room: Minimum of 2 earthing points. The optimum number of earth con-

nections depends on the local conditions and must be specified on available drawings or other contract documentation.

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.

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.

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.

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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