BUILDING TRUST

SYSTEMDATENBLATT

Sikafloor® MultiDur ET-31 ECF/V

Textured, electrostatically conductive, chemically resistant epoxy coating for vertical surfaces

BESCHREIBUNG

Sikafloor® MultiDur ET-31 ECF/V is a two part, textured, electrostatic conductive, coloured epoxy coating system with very high chemical resistance. "Total solid epoxy composition acc. to the test method Deutsche Bauchemie e.V. (German Association for construction chemicals)".

ANWENDUNG

Sikafloor® MultiDur ET-31 ECF/V ist nur für die Anwendung durch gewerbliche Verarbeiter bestimmt.

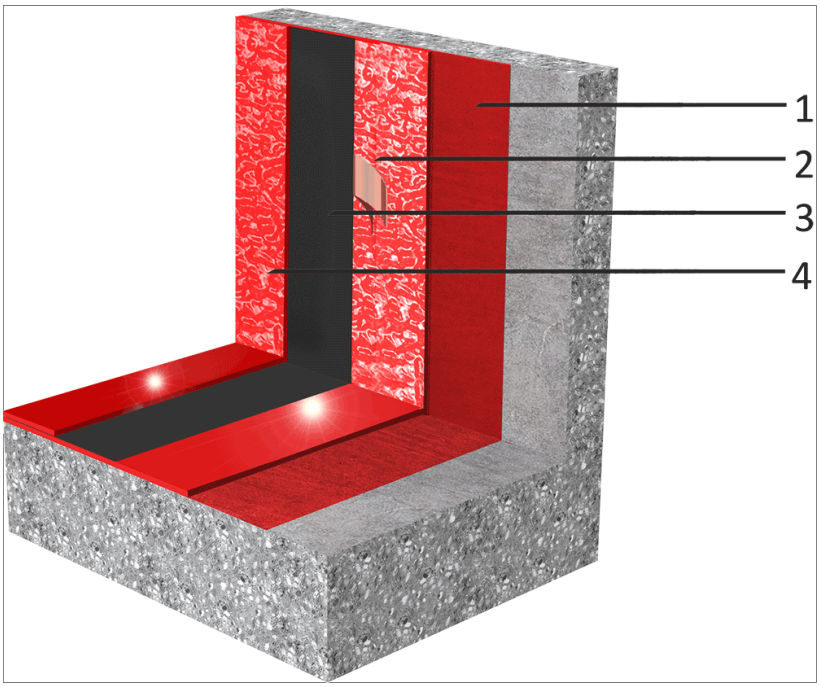
It is used as:
- Chemically highly resistant epoxy coating for vertical surfaces in concrete and screed surfaces in bund areas for the protection against water contaminating liquids (contact Sika technical service for specific information)
- Electrostatically conductive epoxy coating for vertical surfaces subject to chemical and mechanical exposure in production and storage facilities

PRODUKTMERKMALE/ VORTEILE

- Very high chemical resistance
- High mechanical resistance
- Impervious to liquids
- Abrasion resistant
- Electrostatically conductive
- Good sag resistance

SYSTEMINFORMATIONEN

Systemaufbau



1. Primer	Sikafloor®-156/-160/-161
2. Conductive undercoat + Earthing connection	Sikafloor®-381 ECF filled with 2.5 - 4.0 % Extender T + Sika® Earthing Kit
3. Conductive primer	Sikafloor®-220 W Conductive
4. Final conductive coating	Sikafloor®-381 ECF filled with 2.5 - 4.0 % Extender T

The system configurations as described must be fully complied with and may not be changed.

Chemische Basis System

Epoxy

Aussehen System

Orange peel textured, semi-gloss

Farbsystem

Almost unlimited choice of colour shades.
Due to the nature of carbon fibres providing the conductivity, it is not possible to achieve exact colour matching. With very bright colours (such as yellow and orange), this effect is increased. Under direct sun light there may be some variations and colour variation, this has no influence on the function and performance of the coating.

Nenndicke System

~ 1.5 mm

TECHNISCHE INFORMATIONEN

Elektrostatisches Verhalten

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.

ANWENDUNGSINFORMATIONEN

Materialverbrauch

Coating	Product	Consumption
Primer	Sikafloor®-156/-160/-161	1-2 x ~ 0.3 - 0.5 kg/m²
Scratch coat (if required)	Sikafloor®-156/-160/-161	Refer to PDS of Sikafloor®-156/-160/-161
Conductive undercoat	Sikafloor®-381 ECF filled with 2.5 - 4.0 % Extender T	1 x 1.25 kg/m²
Earthing connection	Sika® Earthing Kit	1 earthing point per approx. 200 -300 m², min. 2 per room.
Conductive primer	Sikafloor®-220 W Conductive	1 x 0.08 - 0.10 kg/m²
Final conductive coating	Sikafloor®-381 ECF filled with 2.5 - 4.0 % Extender T	1 x 1.25 kg/m²

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

Lufttemperatur

+10 °C min. / +30 °C max.

Relative Luftfeuchtigkeit

80 % r.h. max.

Taupunkt

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.

Untergrundtemperatur

+10 °C min. / +30 °C max.

Untergrundfeuchtigkeit

<4 % pbw moisture content.
Test method: Sika Tramex Meter, CM-measurement or Oven-Dry-Method.
No rising moisture according to ASTM (Polyethylene-sheet).

Wartezeit zwischen den Arbeitsgängen

Before applying Sikafloor®-381 ECF on Sikafloor®-156/160/161 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®-220 W Conductive on Sikafloor®-381 ECF allow:

Substrate temperature	Minimum	Maximum
+10 °C	48 hours	3 days
+20 °C	24 hours	2 days
+30 °C	12 hours	1 days

Before applying Sikafloor®-381 ECF 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.

Wartezeit bis zur Nutzung

Temperature	Foot traffic	Light traffic	Full cure
+10 °C	~ 24 hours	~ 3 days	~ 10 days
+20 °C	~ 18 hours	~ 2 days	~ 7 days
+30 °C	~ 12 hours	~ 1 days	~ 5 days

Note: Times are approximate and will be affected by changing ambient conditions

MESSWERTE

Alle technischen Daten, Maße und Angaben in diesem Datenblatt beruhen auf Labortests. Tatsächlich gemessene Daten können in der Praxis aufgrund von Umständen außerhalb unseres Einflussbereiches abweichen.

WEITERE DOKUMENTE

Please refer to:
- Sika® Method Statement Mixing and Application of Flooring Systems
- Sika® Method Statement Surface Evaluation & Preparation

WEITERE HINWEISE

- 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 apply the Sikafloor® MultiDur ET-31 ECF/V system on substrates in which significant vapour pressure may occur.
- Do not blind the primer.
- The freshly applied final conductive coating of the Sikafloor® MultiDur ET-31 ECF/V system must be protected from damp, condensation and water for at least 24 hours.
- Only start application of Sikafloor® conductive primer after the priming coat has dried tack-free all over. Otherwise there is a risk of wrinkling or impairing of the conductive properties.
- Under certain conditions, underfloor heating combined with high point loading, may lead to imprints in the resin.
- If heating is required do not use gas, oil, paraffin or other fossil fuel heaters, these produce large quantities of both CO_2 and H_2O water vapour, which may adversely affect the finish. For heating use only electric powered warm air blower systems.
- The incorrect assessment and treatment of cracks may lead to a reduced service life and reflective cracking - reducing or breaking conductivity.
- For exact colour matching, ensure the final conductive coating of the Sikafloor® MultiDur ET-31 ECF/V system in each area is applied from the same control batch numbers.
- Please note, that measuring results of the orange peel textured Sikafloor® MultiDur ET-31 ECF/V system may vary due to a difference in surface profile.
- The test person, ambient conditions, measurement equipment, cleanliness of the floor have a substantial influence on the measurement results.

All measurement values for the Sikafloor® MultiDur ET-31 ECF/V 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 m²	6 measurements
< 100 m²	10-20 measurements
< 1000 m²	50 measurements
< 5000 m²	100 measurements

In case of values lower/higher as required, additional measurements has to be carried out, approx. 30 cm around the point with insufficient readings. If the newly measured values are in accordance with the requirements, the total area is acceptable.
Installation of earthing points: Please refer to the Method Statement: “MIXING & APPLICATION OF FLOORING SYSTEMS”.
Numbers of earth connections: Per room at least 2 earthing points. The optimum number of earth connections depends on the local conditions and should be specified using available drawings.

ÖKOLOGIE, GESUNDHEITS- UND ARBEITSSCHUTZ

Vor der Verarbeitung der Produkte muss der Anwender die dazugehörigen, aktuellen Sicherheitsdatenblätter (SDB) lesen. Das SDB gibt Informationen und Hinweise zur sicheren Handhabung, Lagerung und Entsorgung von chemischen Produkten und enthält physikalische, ökologische, toxikologische sowie weitere sicherheitsrelevante Daten.

LÄNDERSPEZIFISCHE DATEN

Die Angaben in diesem Produktdatenblatt sind gültig für das von der Sika Deutschland CH AG & Co KG ausgelieferte Produkt. Bitte beachten Sie, dass Angaben in anderen Ländern davon abweichen können. Beachten Sie das im Ausland gültige Produktdatenblatt.

RECHTLICHE HINWEISE

Die vorstehenden Angaben, insbesondere die Vorschläge für Verarbeitung und Verwendung unserer Produkte, beruhen auf unseren Kenntnissen und Erfahrungen im Normalfall, vorausgesetzt die Produkte wurden sachgerecht gelagert und entsprechend der Vorgaben unserer jeweiligen Produktdatenblätter angewandt. Wegen der unterschiedlichen Materialien, Untergründen und abweichenden Arbeitsbedingungen kann eine Gewährleistung eines Arbeitsergebnisses oder eine Haftung, aus welchem Rechtsverhältnis auch immer, weder aus diesen Hinweisen, noch aus einer mündlichen Beratung begründet werden, es sei denn, dass uns insoweit Vorsatz oder grobe Fahrlässigkeit zur Last fällt. Hierbei hat der Anwender nachzuweisen, dass er schriftlich alle Informationen und Kenntnisse, die zur sachgemäßen und erfolgversprechenden Beurteilung durch Sika erforderlich sind, rechtzeitig und vollständig an Sika übermittelt hat. Der Anwender hat die Produkte auf ihre Eignung für den vorgesehenen Anwendungszweck eigenverantwortlich zu prüfen. Änderungen der Produktspezifikationen bleiben vorbehalten. Schutzrechte Dritter sind zu beachten. Im Übri-

gen gelten unsere jeweiligen Verkaufs-, Liefer-. und Zahlungsbedingungen, einzusehen und herunterzuladen unter www.sika.de. Es gilt das jeweils neueste Produktdatenblatt, das von uns angefordert oder im Internet unter www.sika.de heruntergeladen werden kann.

Sika Deutschland CH AG & Co KG
Kornwestheimer Straße 103 - 107
D - 70439 Stuttgart
Tel.: +49 711 8009-0
Fax: +49 711 8009-321
info@de.sika.com
www.sika.de