

SYSTEM DATA SHEET

Sikafloor® MultiDur ES-21

SMOOTH UNICOLOUR EPOXY FLOOR COVERING

PRODUCT DESCRIPTION

Sikafloor® MultiDur ES-21 is a smooth coloured rigid system for flooring applications

USES

Sikafloor® MultiDur ES-21 may only be used by experienced professionals.

Self-smoothing system for concrete and cement screeds with normal up to medium heavy wear e.g. storage and assembly halls, maintenance workshops, garages, loading ramps etc.

CHARACTERISTICS / ADVANTAGES

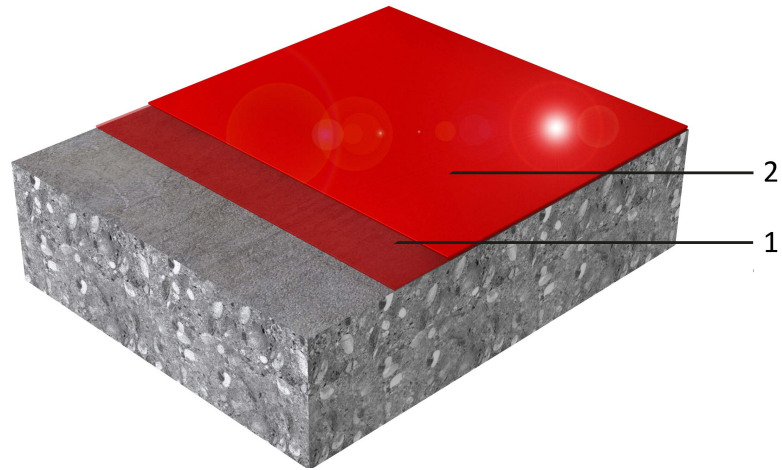
- Good chemical and mechanical resistance
- Good wear and abrasion resistance
- Easy application
- Liquid proof
- Gloss finish
- Easy cleanability
- Colour options

APPROVALS / STANDARDS

- Particle emission certificate Sikafloor-264 N CSM Statement of Qualification – ISO 14644-1, class 3– Report No. SI 1709-952.
- Outgassing emission certificate Sikafloor-264 N: CSM Statement of Qualification – ISO 14644-8, class 6,5 - Report No. SI 1709-952.
- Fire classification in accordance with EN 13501-1, Report-No KB-Hoch-170625, Hoch Fladungen, Germany, May 2017.
- Fire classification in accordance with EN 13501-1, Report-No KB-Hoch-170619, Hoch Fladungen, Germany, May 2017.
- Certificate of conformity for indirect food contact, Fresenius Institute,- Report No. 3419034-01, Germany, November 2017

SYSTEM INFORMATION

System Structure



Layer	Product
1. Primer	Sikafloor®-150 /-151
2. Wearing coat	Sikafloor®-264 N

Composition	Epoxy
Appearance	Smooth gloss finish
Colour	Almost unlimited choice of colour shades
Nominal Thickness	~1.5–3.0 mm

TECHNICAL INFORMATION

Shore D Hardness	~76 (7 days / +23 °C)	(DIN 53 505)
Abrasion Resistance	~35 mg (CS 10/1000/1000) (7 days / +23 °C)	(DIN 53 109 Taber Abraser Test)
Resistance to Impact	~10 Nm (14 days / +23 °C / 50 %)	(ISO 6272)
Compressive Strength	~50 N/mm ² (28 days / +23 °C, Resin filled 1:0.9 with F34)	(EN 196-1)
Tensile Strength	~20 N/mm ² (28 days / +23 °C, Resin filled 1:0.9 with F34)	(EN 196-1)
Tensile Adhesion Strength	> 1.5 N/mm ² (failure in concrete)	(ISO 4624)
Reaction to Fire	Bfl-S1	(DIN EN 13501-1)
Chemical Resistance	Resistant to many chemicals. Contact Sika technical service for specific advice.	
Thermal Resistance	Exposure*	Dry heat
	Permanent	+50 °C
	Short-term max. 7 d	+80 °C
	Short-term max. 12 h	+100 °C

Short-term moist/wet heat* up to +80 °C where exposure is only occasional

(steam cleaning etc.)

*No simultaneous chemical and mechanical exposure.

APPLICATION INFORMATION

Consumption	Sikafloor® MultiDur ES-21 system (~ 1.5–3.0 mm)			
	Coating System	Product	Consumption	
	Primer	1 × Sikafloor®-150/-151	~ 0.3–0.5 kg/m ²	
	Wearing coat	1 pbw Sikafloor®-264 N filled with up to 1 pbw quartz sand (0.06–0.3 mm) depending on the temperature.	Maximum 1.9 kg/m ² /mm	
Product Temperature	Please refer to the individual Product Data Sheet			
Ambient Air Temperature	+10 °C min. / +30 °C max.			
Relative Air Humidity	80 % r.h. max.			
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	+10 °C min. / +30 °C max.			
Substrate Moisture Content	≤ 4% parts by weight Test method: Sika®-Tramex meter, CM - measurement or Oven-dry-method. No rising moisture according to ASTM (Polyethylene-sheet).			
Waiting Time / Overcoating	Before applying Sikafloor®-264 N on Sikafloor®-150/-151 allow:			
	Substrate Temperature	Minimum	Maximum	
	+10 °C	24 hours	3 days	
	+20 °C	12 hours	2 days	
	+30 °C	8 hours	1 day	
Applied Product Ready for Use	Temperature	Foot Traffic	Light Traffic	Full Cure
	+10 °C	~72 hours	~6 days	~10 days
	+20 °C	~24 hours	~4 days	~7 days
	+30 °C	~18 hours	~2 days	~5 days

PRODUCT INFORMATION

Packaging	Please refer to the individual Product Data Sheets
Shelf Life	Please refer to the individual Product Data Sheets
Storage Conditions	Please refer to the individual Product Data Sheets

MAINTENANCE

CLEANING

Refer to the Information Manual Sikafloor®- Cleaning Regime

FURTHER DOCUMENTS

- Sika® Information Manual Mixing & Applications of Flooring systems
- Sika® Information Manual Evaluation and Preparation of Surfaces for Flooring systems

LIMITATIONS

- Do not apply Sikafloor® MultiDur ES-21 on substrates with rising moisture.
- Freshly applied Sikafloor® MultiDur ES-21 must be protected from damp, condensation and water for at least 24 hours.
- The incorrect assessment and treatment of cracks may lead to a reduced service life and reflective cracking.
- For exact colour matching, ensure the Sikafloor®-264 N in each area is applied from the same control batch numbers.
- Under certain conditions, underfloor heating or high ambient temperatures 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 CO₂ and H₂O water vapour, which may adversely affect the finish. For heating use only electric powered warm air blower systems.

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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