

SYSTEM DATA SHEET

Sikafloor® MultiDur ES-21

Smooth coloured epoxy floor system

SIKA NZ
APPROVED
CONTRACTOR
ONLY

DESCRIPTION

Sikafloor® MultiDur ES-21 is a 2-part epoxy coloured resin based self-smoothing floor finish that can provide a hard wearing, seamless, low maintenance, smooth gloss finish. For medium - heavy wear conditions. Thickness 1.5 – 3.0 mm. Internal use.

USES

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

- On concrete and cementitious screeds with normal up to medium heavy wear e.g. storage and assembly halls, maintenance workshops, garages, loading ramps etc.

CHARACTERISTICS / ADVANTAGES

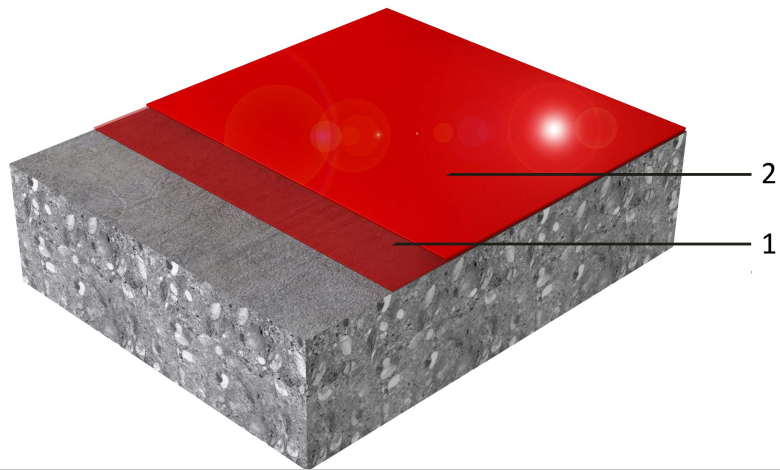
- Seamless and hygienic
- Good chemical and mechanical resistance
- Good wear and abrasion resistance
- Easy application
- Waterproof
- Gloss finish
- Easy cleanability
- Low maintenance

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, Institut Fresenius, Report No. 3419034-01, Germany, November 2017

SYSTEM INFORMATION

System Structure



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

Composition	Epoxy
Appearance	Smooth gloss finish
Colour	Available in many colours
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)
Flexural 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 information.	
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 layer	1 pbw Sikafloor®-264 N filled with up to 1 pbw quartz sand (0.1–0.3 mm) or Sika® Aggregate-508	Maximum 1.9 kg/m ² /mm. Resin + quartz sand	
Product Temperature	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 Using Sikafloor®-150 ≤ 6% parts by weight 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 product warranty.			
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

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

- Sika® Method Statement Mixing & Applications of Flooring systems
- Sika® Method Statement 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 indentations 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.

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.

MAINTENANCE

CLEANING

Refer to the Method Statement Sikafloor®- Cleaning Regime

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



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