

## SYSTEM DATA SHEET

# Sikafloor® MultiDur ET-16 ECC

Slip resistant coloured epoxy floor coating system for damp substrates

SIKA NZ  
APPROVED  
CONTRACTOR  
ONLY

### DESCRIPTION

Sikafloor® MultiDur ET-16 ECC is a coloured rigid epoxy floor covering with textured properties based on epoxy resins for industrial floors on damp substrates.

Sikafloor® MultiDur ET-16 ECC is an epoxy coloured resin based slip resistant floor coating system that can provide a hard wearing, seamless, low maintenance textured gloss finish on damp substrates. For normal - medium wear conditions. Thickness ~ 2–4mm. Internal use.

### USES

Sikafloor® MultiDur ET-16 ECC 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 and loading ramps.
- Multi-storey and underground car park decks, maintenance hangars and wet process areas, e.g. beverage and food industry
- Floors where slip resistance and easy cleanability is required

### CHARACTERISTICS / ADVANTAGES

- Seamless
- Slip resistant
- Good mechanical resistance
- Good chemical resistance
- Medium thermal shock resistance
- Fast and easy application
- Thermal expansion properties similar to concrete
- Good bond to green or hardened damp or dry concrete
- Good early and final mechanical strengths

- Good resistance to water and oils
- For internal use
- Will not corrode steel reinforcement

### ENVIRONMENTAL INFORMATION

- Conformity with LEED v4 MRc 2 (Option 1): Building Product Disclosure and Optimization – Environmental Product Declarations - Sikafloor®-80 EpoCem Primer
- Conformity with LEED v2009 IEQc 4.2: Low-Emitting Materials - Paints and Coatings - Sikafloor®-80 EpoCem Primer, Sikafloor®-81 EpoCem
- IBU Environmental Product Declaration (EPD) available - Sikafloor®-80 EpoCem Primer, Sikafloor®-81 EpoCem, Sikafloor®-264 N Thixo

### APPROVALS / STANDARDS

- CE Marking and Declaration of Performance to EN 1504-2 - Surface protection product for concrete - Coating - Sikafloor®-81 EpoCem®, Sikafloor®-264 N Thixo
- CE Marking and Declaration of Performance to EN 1504-3 - Concrete repair product for structural repair - Sikafloor®-81 EpoCem®
- CE Marking and Declaration of Performance to EN 13813 - Resin screed material for internal use in buildings - Sikafloor®-81 EpoCem®, Sikafloor®-264 N Thixo
- Coating compatibility test AA-0244, Sikafloor®-264 N, BMW Group, Report No. 170211291
- Conformity test EN 1504-2, Sikafloor®-81 EpoCem, Sika, Approval No. 2116-CPD-0101
- Conformity test EN 1504-3, Sikafloor®-81 EpoCem, Sika, Approval No. 2116-CPD-0101
- Fire testing EN 13501-1, Sikafloor®-81 EpoCem, MPA Dresden, Report No. 041706
- Fire testing EN 13501-1, Sikafloor®-81 EpoCem, Hoch, Report No. KB-Hoch-170138
- Fire testing EN 13501-1, Sikafloor®-264 N Thixo,

#### SYSTEM DATA SHEET

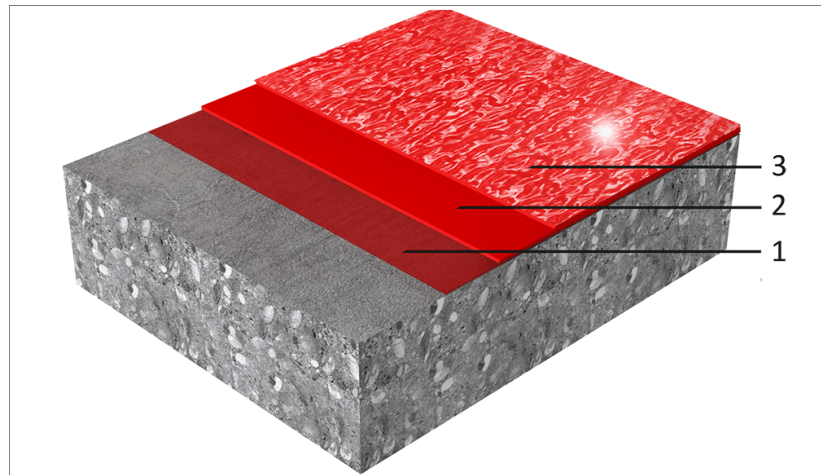
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- Hoch, Report No. KB-Hoch-170622
- Fire testing ISO 11925-2, Sikafloor®-264 N Thixo, Hoch, Report No. PB-Hoch-170620
- Fire testing ISO 9239-1, Sikafloor®-264 N Thixo, Hoch, Report No. PB-Hoch-170621
- Migration test EN 23270, Sikafloor®-81 EpoCem, kiwa, Report No. P 8740a
- Indirect contact to foodstuff (EU) 1935/2004, Sikafloor®-264 N Sikafloor®-264 N LO, Fesenius Bericht, Test report No. 3419034-01
- Outgassing behavior VOC/SVOC ISO 14644-8, Sikafloor®-264 N, CSM Statement of Qualification, Fraunhofer IPA, Report No. SI 1709-952
- Particle emission ISO 14644-1, Sikafloor®-264 N, CSM Statement of Qualification, Fraunhofer IPA Report No. SI 1709-952
- Reaction to fire classification according to DIN EN 13501-1, Sikafloor®-151 + Sikafloor®-264 N, Bfl-s1
- Reaction to fire classification according to DIN EN 13501-1, Sikafloor®-151 + Sikafloor®-264 N + Sikafloor®-264 N Thixo
- Sliding test DIN 51130, Sikafloor®-81 EpoCem, Roxeler, Certificate No. 020044-17-7
- Sliding test DIN 51130, Sikafloor®-264 N Thixo, Roxeler, Certificates No. 020044-17-19, 020044-17-2, 020044-17-20, 020044-17-3, 020044-17-4
- Sliding test DIN 51131, Sikafloor®-81 EpoCem, Roxeler, Certificates No. 020044-17-7a, 020044-17-8a
- Sliding test DIN 51131, Sikafloor®-264 N Thixo, Roxeler, Certificate No. 020044-17-20a, 020044-17-2a, 020044-17-3a, 020044-17-4a, 020044-17-9a
- Various tests EN 13892, Sikafloor®-81 EpoCem, Hartl, Report No. 1-27679/1
- Various tests EN 1504, Sikafloor®-81 EpoCem, SCERT, Certificate No. 2116-CPD-0101
- Various tests EN 1504-2, Sikafloor®-81 EpoCem, Applus, Report No. 09/349-963
- Various tests EN 1504-3, Sikafloor®-81 EpoCem, Applus, Report No. 09/351-965
- Water permeability test DIN 1048-5, Sikafloor®-81 EpoCem, Polymer Institut, Report No. P 3439

## SYSTEM INFORMATION

### System Structure

### Sikafloor® MultiDur ET-16 ECC



Layer	Product
1. Primer	Sikafloor®-80 EpoCem Primer
2. Levelling screed	Sikafloor®-81 EpoCem®
3. Top coat	1-2 × Sikafloor®-264 N Thixo

<b>Composition</b>	Epoxy
<b>Appearance</b>	Textured, slip resistant, gloss finish
<b>Colour</b>	Available in a range of colours.
<b>Nominal thickness</b>	~2-4mm

## TECHNICAL INFORMATION

<b>Shore D Hardness</b>	~76 (7 days / +23 °C)	(DIN 53 505)
<b>Tensile Adhesion Strength</b>	> 1,5 MPa (failure in concrete)	(ISO 4624)
<b>Chemical Resistance</b>	Sikafloor®- 264 N Thixo provides the chemical resistance. Refer to Product Data Sheet.	

<b>Thermal Resistance</b>	<b>Exposure*</b>	<b>Dry heat</b>
	Permanent	+50 °C
	Short-term max. 7 days	+80 °C
	Short-term max. 12 hours	+100 °C
Short-term moist/wet heat* up to +80 °C where exposure is only occasional (i.e.during steam cleaning etc.) *No simultaneous chemical and mechanical exposure.		
<b>Skid / Slip Resistance</b>	R9	(DIN 51130)

## APPLICATION INFORMATION

<b>Consumption</b>	Refer to "System Structure"			
	Sikafloor® MultiDur ET-16 ECC (~2–4 mm)			
	<b>Layer</b>	<b>Product</b>	<b>Consumption</b>	
	1. Primer	1 × Sikafloor®-80 Epo-Cem Primer	~0.3–0.5 kg/m <sup>2</sup>	
2. Levelling screed	1 × Sikafloor®-81 Epo-Cem®	~2.25 kg/m <sup>2</sup> /mm		
3. Top coat	1–2 × Sikafloor®-264 N Thixo	~0.5–0.8 kg/m <sup>2</sup> per layer		
<b>Ambient Air Temperature</b>	+10 °C min. / +30 °C max.			
<b>Relative Air Humidity</b>	80 % max.			
<b>Dew Point</b>	Beware of condensation. The substrate and uncured floor products must be at least +3 °C above the dew point to reduce the risk of condensation or blooming on the surface of the applied product.			
<b>Substrate Temperature</b>	+10 °C min. / +30 °C max.			
<b>Substrate Moisture Content</b>	Can be applied on green or damp concrete, with no standing water. Although the system can be applied onto green concrete surfaces (> 24 hours), it is advised to allow at least 3 days for early shrinkage of concrete to occur in order to prevent concrete shrinkage cracks from appearing on the screed and top coat.			
<b>Waiting Time / Overcoating</b>	Before applying Sikafloor®-81 EpoCem® on Sikafloor®-80 EpoCem Primer allow:			
	<b>Substrate temperature</b>	<b>Minimum</b>	<b>Maximum</b>	
	+10 °C	12 hours	24 hours	
	+20 °C	6 hours	12 hours	
	+30 °C	4 hours	6 hours	
	Sikafloor®-81 EpoCem® can be overcoated with vapour impermeable coatings when the surface moisture content <4 % parts by weight Not earlier than :			
	<b>Substrate Temperature</b>	<b>Waiting Time</b>		
	+10 °C	48 hours		
	+20 °C	24 hours		
	+30 °C	24 hours		
	Times are approximate and will be affected by changing ambient conditions particularly temperature and relative humidity.			
<b>Applied Product Ready for Use</b>	<b>Temperature</b>	<b>Foot traffic</b>	<b>Light traffic</b>	<b>Full cure</b>
	+10 °C	~72 hours	~6 days	~10 days
	+20 °C	~24 hours	~4 days	~7 days
	+30 °C	~18 hours	~2 days	~5 days
	Times are approximate and will be affected by changing ambient conditions particularly temperature and relative humidity.			

## 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: Sikafloor®-Cleaning Regime
- Sika® Method Statement: Mixing & Applications of Flooring Systems
- Sika® Method Statement: Evaluation and Preparation of Surfaces for Flooring Systems
- Individual Product Data Sheets within the flooring system

## LIMITATIONS

- Always ensure adequate fresh air ventilation when using Sikafloor® MultiDur ET-16 ECC in confined spaces to avoid curing problems.
- After application, the products must be protected from damp, condensation and water for at least 24 hours.
- Under direct sun radiation there may be some discoloration and colour deviation, this has no influence on the function and performance of the coating.
- Construction joints and existing static surface cracks in substrate require pre-treating with a stripe coat by prefilling and levelling to seal against loss of material through the joint or cracks before full layer application. Use Sikadur® or Sikafloor® resins.
- 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 Thixo 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 temporary heating is required do not use gas, oil, paraffin or other fossil fuel heaters, these produce large quantities of both CO<sub>2</sub> and H<sub>2</sub>O 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.

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