

## SYSTEM DATA SHEET

# Sikafloor® Terrazzo EM-10

Low VOC, coloured epoxy Terrazzo Flooring System

### PRODUCT DESCRIPTION

Sikafloor® Terrazzo EM-10 is a decorative, highly mechanically resistant, low VOC flooring System. When applied as a mortar, the mixture of natural marble aggregates and coloured epoxy binder forms a seamless layer that can be ground and polished to a high gloss finish. The System provides high durability and ease of maintenance for heavily trafficked commercial and public areas.

### USES

Sikafloor® Terrazzo EM-10 may only be used by experienced professionals.

The System can be used in commercial and public buildings and areas such as:

- Airports
- Railway and metro stations
- Schools and Universities
- Healthcare facilities and hospitals
- Residential areas and homes

Please note:

- The System may only be used by experienced professionals.
- The System may only be used for interior applications.

### CHARACTERISTICS / ADVANTAGES

- 18 standard colours make it easy to select your personal choice, and combined with a wide range of aggregates, the System can be customised to endless design possibilities.
- Stays in good condition throughout its lifetime, requiring minimal cleaning and maintenance.
- System build up provides a crack free, seamless floor.
- Low VOC emissions.
- Good yellowing resistance.
- Aesthetically pleasing.

### ENVIRONMENTAL INFORMATION

- Conformity with LEED v4 MRc 2 (Option 1): Building Product Disclosure and Optimization — Environmental Product Declarations.
- Conformity with LEED v4 EQc 2: Low-Emitting Materials.
- Conformity with LEED v4 MRc 4 (Option 2): Building Product Disclosure and Optimization — Material Ingredients.

### APPROVALS / STANDARDS

- Fire Classification Report, EN 13501-1, Ghent University, Report No. 21-0010-02.
- Slip Resistance, DIN 51130, Roxeler, Certificate No. 020048-21-3, 020048-21-4.
- Slip Resistance, DIN 51131, Roxeler, Certificate No. 020048-21-3a, 020048-21-4a.
- Thermal Resistance EN 12664, TFI, Report No. 21-000448-01.

## SYSTEM INFORMATION

<b>System Structure</b>	Primer or Scratch Coat	Sikafloor®-150 Sikafloor®-151 Sikafloor®-1590
	Reinforcement and Crack-bridging Layer	Sikafloor®-150 + Sika® Reemat Premium
	Wearing Layer	Sikafloor®-169 coloured or Sikafloor®-2640 Sikafloor®-011 Terrazzo Marble Dust Sikafloor®-001 Terrazzo Aggregate Mix
NOTE: According to the defined colour formulation, applied as mortar or broadcast, then power floated, ground and polished.		
<b>Appearance</b>	Cured System appearance	Matt or gloss finish depending on polishing and final surface treatment
<b>Colour</b>	Cured System colour	Dependent on the chosen aggregate and epoxy binder colour
NOTE: When the System is exposed to direct sunlight, there may be some discolouration and colour variation. This has no influence on the function and performance of the floor finish.		
<b>Nominal thickness</b>	9 to 11 mm	

## TECHNICAL INFORMATION

<b>Shore D Hardness</b>	Cured 7 days at +23 °C	D90	(EN ISO 868)
<b>Resistance to wearing</b>	AR <sub>0.5</sub>		(EN 13892-4)
<b>Resistance to Impact</b>	IR4 ( Class I≥4 Nm) 7 days at +23 °C		(EN ISO 6272-1)
<b>Compressive Strength</b>	Cured 7 days at +23 °C	73 N/mm <sup>2</sup>	(EN 13892-2)
<b>Flexural Strength</b>	Cured 7 days at +23 °C	20 N/mm <sup>2</sup>	(EN 13892-2)
<b>Tensile adhesion strength</b>	Cured 7 days at +23 °C	2.4 N/mm <sup>2</sup>	(EN 1542)
<b>Crack Bridging Ability</b>	Static	A2 (20 °C) width of crack > 0.25 mm	(EN 1062-7)
<b>Reaction to Fire</b>	Class B <sub>f1</sub> -s1		(EN 13501-1)
<b>Chemical Resistance</b>	Refer to the chemical resistance of Sikafloor®-169/-2640 NOTE: The exposed aggregates can be affected through various chemicals. A surface finish of an acrylic dispersion as a protection and maintenance layer is recommended.		
<b>Skid / Slip Resistance</b>	R 11; V 4		(DIN 51130)
	Sliding friction coefficient	μ = 0,22	(DIN 51131)
<b>Thermal resistance</b>	R <sub>10</sub> = 0.0283 m <sup>2</sup> K/W, R <sub>23</sub> = 0.0279 m <sup>2</sup> K/W		(EN 12664)

## APPLICATION INFORMATION

Consumption		Mortar Application	
Layer	Product	Consumption	
Primer or Scratch Coat	Sikafloor®-150	~0.3 – 0.5 kg/m <sup>2</sup>	
	Sikafloor®-151		
	Sikafloor®-1590		
Reinforcement & Crack-bridging Layer	Sikafloor®-150	~0.8 kg/m <sup>2</sup>	
	Sika® Reemat Premium		–
	Sikafloor®-150		~0.5 kg/m <sup>2</sup>
Wearing Layer	Sikafloor®-169 or Sika-floor®-2640	~6 kg/m <sup>2</sup> ~20 – 25 kg/m <sup>2</sup> ~6 kg/m <sup>2</sup>	
	Sikafloor®-001 Terrazzo Aggregate Mix		
	Sikafloor®-011 Terrazzo		
	Marble Dust		
Pore-filling after Grinding	Sikafloor®-169 coloured or Sikafloor®-2640	~0.04 – 0.08 kg/m <sup>2</sup>	
		Broadcast Layer Application	
Layer	Product	Consumption	
Primer or Scratch Coat	Sikafloor®-150	~0.3 – 0.5 kg/m <sup>2</sup>	
	Sikafloor®-151		
	Sikafloor®-1590		
Reinforcement & Crack-bridging Layer	Sikafloor®-150	~0.8 kg/m <sup>2</sup>	
	Sika® Reemat Premium		–
	Sikafloor®-150		~0.5 kg/m <sup>2</sup>
	Sikafloor®-001 Terrazzo Aggregate Mix		~2 kg/m <sup>2</sup>
Wearing Layer	Slurry of Sikafloor®-169 coloured or Sikafloor®-2640 filled 1:1 to 1:1.2 with Sikafloor®-011 Terrazzo Marble Dust	~7 – 9 kg/m <sup>2</sup>	
Aggregate Broadcast	Sikafloor®-001 Terrazzo Aggregate Mix	~19 – 23 kg/m <sup>2</sup>	
Pore-filling after Grinding	Sikafloor®-169 coloured or Sikafloor®-2640	~0.04 – 0.08 kg/m <sup>2</sup>	
<p>NOTE: The two application variants will look slightly different side by side.</p> <p>NOTE: Consumption data is theoretical and does not allow for any additional material due to surface porosity, surface profile, variations in level, wastage or any other variations. Apply the product to a test area to calculate the exact consumption for the specific substrate conditions and proposed application equipment.</p> <p>NOTE: The consumption may vary due to temperature differences and sieve curve in the aggregate mix. A mock-up trial is needed to define the dedicated consumption of all materials.</p>			
Ambient Air Temperature	Minimum	+10 °C	
	Maximum	+30 °C	
Relative Air Humidity	Maximum	80 %	
Dew Point	Refer to the individual Product Data Sheet.		
Substrate Temperature	Minimum	+10°C	
	Maximum	+30°C	
Substrate Moisture Content	Refer to the individual Product Data Sheet.		

## Waiting Time / Overcoating

Before applying Sikafloor®-169 or Sikafloor®-2640 on Sikafloor®-150/-151/-1590, allow:

Temperature	Minimum	Maximum
+10 °C	~36 hours	~4 days
+20 °C	~12 hours	~48 hours
+30 °C	~8 hours	~24 hours

NOTE: 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	~48 hours	~6 days
+20 °C	~16 hours	~24 hours	~4 days
+30 °C	~12 hours	~18 hours	~3 days

NOTE: Times apply when the last layer of the System has been applied. Times are affected by changing ambient conditions, particularly temperature and relative humidity.

## 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.

## FURTHER DOCUMENTS

- Sika® Method Statement: Evaluation and preparation of surfaces for flooring systems.

## LIMITATIONS

### Indentations

IMPORTANT: Under certain conditions, underfloor heating or high ambient temperatures combined with high point loading, may lead to indentations in the resin.

## ECOLOGY, HEALTH AND SAFETY

User must read the most recent corresponding Safety Data Sheets (SDS) before using any products. The SDS provides information and advice on the safe handling, storage and disposal of chemical products and contains physical, ecological, toxicological and other safety-related data.

## APPLICATION INSTRUCTIONS

### APPLICATION

#### Application by trained personnel

IMPORTANT: The application of this System must only be carried out by Sika® trained and approved contractors, experienced in this type of application.

#### Temporary heating

IMPORTANT: If temporary heating is required, do not use gas, oil, paraffin or other fossil fuel heaters. These produce large quantities of both carbon dioxide and water vapour, which may adversely affect the finish.

1. For heating, use only electric powered warm air blower systems.

#### Protecting the material after application

IMPORTANT: After application, protect the System from damp, condensation and direct water contact for at least 24 hours.

#### Aggregates influence floor colour

IMPORTANT: The aggregates used in this System are natural products and will vary in colour and shade. The aggregates will influence the final floor colour.

#### Pre-trials

IMPORTANT: Before the application, perform project specific mix design pre-trials. These should enable adjustments to the mix to achieve an acceptable final appearance, establish production rates, predict pinhole frequency and finalise aggregate and binder consumption.

## 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.

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