

# PRODUCT DATA SHEET

# Sikafloor® Level FO-id

CEMENTITIOUS SCREED, FOR QUICK OVERCOATING RESIN FLOORS. FOR USE 5 – 10 MM

# **DESCRIPTION**

Sikafloor® Level FO-id is a one part, polymer modified, pumpable self levelling, fast setting, cementitious screed for the levelling and smoothing of interior floors. It is suitable as wearing course or it can be overcoated to provide it with additional chemical or mechanical protection.

### **USES**

Sikafloor® Level FO-id can be applied manually or by pump to level floors at a thicknes between 5 - 10 mm.

- Suitable for industrial interior applications.
- Will provide a quickly overcoat able surface prior to the application of epoxy, polyurethane or PMMA resins

# **CHARACTERISTICS / ADVANTAGES**

- Good air release
- Fast application because of the good low and cohesion of the fresh product.
- Can be pour by pump or manual application.
- Fast drying even at low temperature and high relative humidity conditions.
- Capable of leveling surface from 5 up to 10 mm.
- Low shrinkage.
- Good bond and compaction.
- Maintains good workability and joint healing throughout its pot life
- Good hardness.

# PRODUCT INFORMATION

Composition	Polymer modified	Polymer modified normal hardening cement		
Packaging	25 kg bags	25 kg bags		
Appearance / Colour	Powder / Grey			
Shelf life		6 months from date production if stored properly in original unopened, and undamaged sealed packaging.		
Storage conditions	Stored in dry cond	Stored in dry conditions at temperatures between +18 °C and +30 °C.		
Density	~2.01 kg/L ± 0.03	~2.01 kg/L ± 0.03 (fresh mortar)		
TECHNICAL INFORMATI	ON			
Compressive Strength	1 day	~3.0 N/mm²	(ASTM C-109)	
	7 days	~18.0 N/mm <sup>2</sup>		
	28 days	~27.0 N/mm <sup>2</sup>		
Tensile Strength in Flexure	1 day	~1.0 N/mm²	(ASTM C-293)	
	28 days	~6.0 N/mm²		

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#### **SYSTEMS**

System Structure	Priming Sika® Latex diluted with water and mix with cement (1:1:1). For high porous concrete surface, an epoxy resin like Sikafloor®-155 WN can be used. Levelling
	Apply to the required thickness 5 – 10 mm.

# **APPLICATION INFORMATION**

Consumption	$^{\sim}1.6\pm0.05$ kg/m²/mm (powder) This figure is theoretical and does not include for any additional material required due to surface porosity, surface profile, variations in level or wastage etc.		
Layer Thickness	5 mm min. / 10 mm max. Aggregate addition is not recommended to increase the application thickness.		
Ambient Air Temperature	+10 °C min. / +35 °C max.  For increased surface strength and better bond of the floor finish when using water based adhesives, it is recommended for best results to apply the mortar at ambient and substrate temperatures between 15 °C and 25 °C.		
Relative Air Humidity	< 75% max.		
Substrate Temperature	+10 °C min. / +35 °C max.		
Substrate Pre-Treatment	There must be no rising moisture prior to the dampening operation according to ASTM D 4263 (Polyethylene-sheet test).		
	Surface Moisture (TRAMEX)		
	1 day : ~4.0 %		
	3 days : ~3.0 %		
Pot Life	~30 minutes (at +27 °C/50% r.h.) The temperature will affect the pot life. Application at temperatures above +27 °C will reduce the pot life and the working time. Temperatures below +27 °C will increase the pot life and extend the working time.		
Waiting Time / Overcoating	Suitable for overcoating with impermeable or moisture sensitive floors after drying (max. 4% moisture); normally reached after 24 hours in 5 mm thick. Times are approximate and at +27 °C and 50% r.h. and thus will be affected by changing substrate and ambient conditions, particularly the temperature and relative humidity.  When over coating Sikafloor® Level FO-id always ensure the moisture content has achieved the required value for the coating product, as the waiting time will vary with the application thickness and ambient humidity. (Refer to the top coat product data sheet).		
Applied Product Ready for Use	Foot traffic ~24 h Fully serviceable ~7 d		
	Note: Times are appoximate and will be affected by changing substrate and ambient conditions, particularly the temperature and relative humidity.		

# **APPLICATION INSTRUCTIONS**

# **SUBSTRATE QUALITY / PRE-TREATMENT**

The concrete substrate must be sound and of sufficient compressive strength (min. 25 N/mm²) with a minimum pull off strength of 1.5 N/mm². The surface must be clean, dry and free of all contaminants e.g. dirt, oils, grease, coatings, and surface treatments etc. If in doubt apply a test area first.

# **SUBSTRATE PREPARATION**

Concrete substrates must be prepared mechanically using abrasive blast cleaning or scarifying equipment to remove cement laitance and achieve an open textured surface.

Weak concrete must be removed and surface defects such as blow holes and voids must be fully exposed. Repairs to the substrate, filling of blowholes/voids must be carried out using Sika®Monotop®, Sikafloor®, SikaDur® and Sikagard® range of materials.

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All dust, loose and friable material must be completely removed from all surfaces before application of the product, preferable by brush and/or vacuum.

#### **MIXING**

When mixing manually add the dry powder (25 kg) into a container with the clean water. The water required is 5.75 L per 25 kg bag or mortar-powder. After mixture, please test the flow first, if the flow is too high or lower than specification, please reduce or increase water dosage.

#### **Mixing Time**

Mix thoroughly for a minimum of 3 minutes.

#### Flow Table

~250 mm (ASTM C230/C230M) (3 minutes, at +27 °C/60% R.H)

#### **Mixing Tools**

Use an electric stirrer (<500 rpm).

#### **APPLICATION**

Pour the mixed material onto the prepared surface and apply by trowel or pin screed rake to the required thickness. Roll thoroughly with a spike roller in two directions to remove any entrapped air.

# **CLEANING OF EQUIPMENT**

Clean all tools and application equipment with water immediately after use.

Hardened / cured material can only be removed mechanically.

# **IMPORTANT CONSIDERATIONS**

- Very absorbent substrates must be saturated with water or primed to prevent loss of the mixing water into the substrate and which can cause problems such as shrinkage, the appearance of surface pores or weak and dusty surfaces etc.
- Do not mix with other cement or cement based screed.
- Freshly applied Sikafloor® Level FO-id must be protected from damp, condensation and water for at least 24 hours.
- Do not exceed the recommended water dosage.
- Do not add more water when the product is starting to set.
- Do not exceed the recommended thicknesses.
- Temperatures below +27 °C and high ambient relative humidity extend the drying times.
- Not suitable for slopes or inclines >1.0 %.

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- Protect from direct sunlight, hot or strong winds and extremes of temperature just after application, to avoid cracking or crazing.
- When overcoating additional mechanical preparation may be required to remove any cement laitance which may have formed during application.

#### **BASIS OF PRODUCT DATA**

All technical data stated in this Data Sheet are based on laboratory tests. Actual measured data may vary due to circumstances beyond our control.

# **LOCAL RESTRICTIONS**

Note that as a result of specific local regulations the declared data and recommended uses for this product may vary from country to country. Consult the local Product Data Sheet for the exact product data and

# **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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