BUILDING TRUST

PRODUCT DATA SHEET

# SikaLevel®-528

(formerly MasterTop® 528)

COMMERCIAL GRADE, SELF-SMOOTHING, CEMENTITIOUS FLOOR UNDERLAYMENT

## DESCRIPTION

SikaLevel®-528 is one part, polymer modified, pumpable, self-smoothing, fast hardening cementitious underlayment for the levelling and smoothening of interior floors, prior to the application of the final floor finish.
Suitable for use in hot and tropical climate conditions.

## USES

SikaLevel®-528 can be applied manually or by pump to level floors at a thickness between 2 and 30 millimeter, prior to the subsequent finishing with ceramic or stone tiles, resin overlays,vinyl, carpets, etc.
SikaLevel®-528 is suitable to be used for:

- Levelling of both large and small surfaces
- Finishing of undulated floors
- Refurbishing of old floors
- Typical uses are in commercial, residential and domestic properties, etc.

## CHARACTERISTICS / ADVANTAGES

- Easy to use, only add water
- Highly fluid and cohesive mix
- Easy to place by pumping or by manual application
- Rapid strength gain for fast installation of floor coverings
- Low tension
- Good bond and compaction
- Fast hardening and quick drying
- Ready for foot traffic after 3-4 hours
- Return to service in 24 hours

## APPROVALS / STANDARDS

SikaLevel®-528 follows the main requirements of EN 13813, class **CT-C20-F4-B1,0**

## PRODUCT INFORMATION

| | |
|---|---|
| **Packaging** | 20 kg bag |
| **Shelf Life** | 12 months from date of production |
| **Storage Conditions** | Store in undamaged, unopened, original sealed packaging in dry conditions, at temperatures between +5°C and +35°C. Protect from direct sunlight, heat and moisture. |
| **Density** | ~2.06 kg/l (Mixed, at 25°C) |

## TECHNICAL INFORMATION

| | | |
|---|---|---|
| **Compressive Strength** | ≥ 20 N/mm² (C20) | (EN 13892-2:2002) |
| **Tensile Strength in Flexure** | ≥ 4 N/mm² (F4) | (EN 13892-2:2002) |
| **Tensile Adhesion Strength** | ≥ 1.0 N/mm² (B1,0) | (EN 13892 -8:2002) |
| **Shrinkage** | < 0.3 mm/m | (EN 13454-2:2003) |

## APPLICATION INFORMATION

| | |
|---|---|
| **Consumption** | ~2.1 kg of powder per m² per mm thickness.<br>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. |
| **Yield** | ~9.5 L / 20 kg bag |
| **Layer Thickness** | min. 2 mm<br>max. 30 mm |
| **Ambient Air Temperature** | min. +5°C / max. +35°C |
| **Relative Air Humidity** | 80 % max. |
| **Mixing Ratio** | 3.5 L of water per 20 kg bag |
| **Dew Point** | Beware of condensation!<br>The substrate and uncured floor must be at least 3°C above dew point to reduce the risk of condensation, blooming or laitance on the floor finish. |
| **Substrate Temperature** | min. +5°C / max. +35°C |
| **Substrate Moisture Content** | < 4 % pbw moisture content.<br>Test method: Sika®-Tramex meter, CM - measurement or Oven-dry-method. No rising moisture according to ASTM (Polyethylene-sheet). |
| **Pot Life** | ~30 minutes<br>Note: At 25°C and 50% RH. Times are approximate and will be affected by changing substrate and ambient conditions, particularly the temperature and relative humidity. |
| **Setting Time** | 70 - 100 min (EN 13454-2:2003)<br>Note: At 25°C and 50% RH. Times are approximate and will be affected by changing substrate and ambient conditions, particularly the temperature and relative humidity. |
| **Waiting Time / Overcoating** | When covering the SikaLevel®-528 always ensure the moisture content has achieved the required value for the product to cover, as the waiting time will vary with the application thickness and ambient humidity. (Refer to the covering product data sheet) |
| **Applied Product Ready for Use** | Foot traffic: ~3 hours<br>Lightly servicable: ~24 hours<br>Note: At 25°C and 50% RH. Times are approximate and will be affected by changing substrate and ambient conditions, particularly the temperature and relative humidity. |

## 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.
- Internal Reference - Version: MBS_CC-UAE/ Top_528_11_05/v2/07_16/v3/09_19/v4/07_21

## LIMITATIONS

- Not suitable for exterior applications or where moisture is present. Use SikaLevel®-522 for external application.
- Do not apply on substrates with rising moisture. If rising moisture can occur, an effective damp proof membrane must be applied and be in compliance with the relevant national standard.
- Requirements defined in relevant valid standards, guidelines and data sheets apply.
- Use full surface leveling with a minimum layer thickness of 5 mm when covered with parquet.
- Protect from direct sunlight, hot or strong winds and extreme temperatures, to avoid cracking or crazing.

## 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.

## APPLICATION INSTRUCTIONS

### SUBSTRATE QUALITY

Substrate must be clean and free of oil, sealers, curing compounds, paint, polymer coatings, dust or other foreign (contaminating) matter.
Remove all weak or broken pieces of concrete. If necessary, employ mechanical cleaning methods and equipment. If sealers, paint, polymer coatings or curing compounds are present on concrete substrate, remove with mechanical shotblasting equipment.
Voids and cracks (water pipes, holes, drainage pipes etc) should be filled to prevent seepage through to lower levels. Consult with your local Sika Technical Representative for product recommendations.
Joints from the base slab should always be mirrored in topping. Cut the topping directly above joints in the base slab, to avoid random cracking.

### SUBSTRATE PREPARATION

**PRIMING:**
The substrate shall be saturated with SikaCeram® P 302 diluted with water in 1:1 ratio. Use min. 0.2 L of the diluted primer for the initial priming. Allow to dry until a transparent film has been formed. Absorbent / porous substrates should be primed twice. The second coat shall be approx. 0.07 L / m² of the diluted primer. Application by brush or roller. Please refer to the relevant Product Data Sheet for recommended applications and details.

### MIXING

Mechanical mixing is required for SikaLevel®-528. For small areas, a slow speed stirrer of not more than 600 rpm fitted with a helical paddle, is suitable. Mixing time is 3 minutes.
Place the required quantity of water into the mixing vessel. Whilst mixing, slowly add the powder to the water within 2 minutes then mix for a further 1 minute. Allow mixed SikaLevel®-528 to stand for 3 minutes and then remix for 1 minute prior to application. Use chilled water at high temperatures for longer application time.
For improved efficiency and continuous production of SikaLevel®-528, it is recommended to use at least two mixing buckets.
For larger applications, the use of a suitable mechanical mixer/pump unit is recommended.

### APPLICATION

Pour mixture over substrate or pump through a suitable pump to desired thickness.
Whether pouring from a mixing vessel or using a mechanical mixer with an application hose, the discharge point should be approximately 200 mm from the floor to prevent splashing and air entrapment. Progress should be steady and even. Application should take place continuously into the preceding wet material to ensure even thickness and flow. Do not make new edges and 'fill in' the middle.
The fresh wet topping can be rolled immediately with a suitable long spiked roller to release all air retained within the underlayment. Do not roll material that has been applied for more than 2-3 minutes.

### CURING TREATMENT

SikaLevel®-528 is self-curing, but as with all cementitious products in hot weather, take adequate measures to protect it from exposure to direct sunlight and hot winds. DO NOT use water spray or liquid membrane curing compounds, as these may affect the surface texture or prevent bonding of subsequent adhesives used with floor coverings.

### CLEANING OF TOOLS

Clean all tools and application equipment with water immediately after use. Hardened / cured material can only be removed mechanically.

## 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.

**Sika South Africa (Pty) Ltd**
9 Hocking Place,
Westmead, 3608
South Africa
Phone +27 31 792 6500
www.sika.co.za