

PRODUCT DATA SHEET

SikaScreed[®]-220 (SA)

PRE-MIXED BONDED CEMENT SCREED

DESCRIPTION

SikaScreed[®]-220 (SA) is a one part cement based screed. For levelling and smoothing of uneven floors applied as bonded screed.
Suitable for use in hot and tropical conditions.

USES

- Suitable for applications as bonded screed
- Suitable for indoor and outdoor applications
- Suitable for residential and office buildings
- Typical uses are in commercial, residential and domestic properties etc.
- Base layer for the final surface treatment of floors (e.g. ceramic tiles, stone, other floor coverings)
- For dry and wet non-aggressive environments

FEATURES

- Good workability
- Good compaction
- Ready to use
- Good finishing

PRODUCT INFORMATION

Composition	Cement, sand and suitable additives
Packaging	25 kg bag
Shelf life	12 months from the date of production
Storage conditions	Stored properly in original, unopened and undamaged packaging in dry conditions at temperatures between +5 °C and +30 °C. Protect from direct sunlight, heat and moisture.
Appearance and colour	Grey powder
Maximum grain size	5 mm

TECHNICAL INFORMATION

Compressive strength	w/p=0.11 @(+25°C) & RH 50%	(ASTM C109)
	~10 N/mm ²	1 Day
	~20 N/mm ²	7 Days
	~30 N/mm ²	28 Days
Flexural-strength	w/p=0.11 (+25°C)	EN 13892-2
	~7 N/mm ²	28 Days

APPLICATION INFORMATION

Mixing ratio	w/p= 0.10 – 0.12 (2.5 – 3.0 L for 25 kg bag)
Fresh mortar density	~ 2.2 kg/l
Consumption	~20 kg/m ² /10 mm This figure is theoretical and does not include for any additional material required due to surface porosity, surface profile, variations in level and wastage etc.
Layer thickness	min. 30 mm max.120 mm
Ambient air temperature	+5 °C min. / +35 °C max.
Relative air humidity	< 75 %
Substrate temperature	+5 °C min. / +35 °C max.
Pot Life	~45 min (+25°C and 50% r.h.) The temperature will affect the pot life. Application at temperatures above +25°C will reduce the pot life and the working time. Temperatures below +25°C will increase pot life and extend working time.
Waiting time to overcoating	Suitable to be covered with ceramic covering after 24 hours*. When covering Sikafloor®-255 Screed with other coverings and natural stones, always ensure the moisture content has achieved the required value for the covering product, as the waiting will vary with the application thickness and ambient humidity. (Refer to the covering Product Data Sheet and relevant standards) *Note: Times are approximate.

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.

IMPORTANT CONSIDERATIONS

- When temperature is higher than 35°C, working area should be covered to prevent the direct sun effects. Water can be cooled down by using clean ice.
- Protect the floor screed after levelling from direct-sunlight, wind and rain.
- Do not use where negative hydrostatic pressure is evident (i.e. rising damp)
- Only for residential use (no heavy traffic, etc.).
- Raw material-related variations in the color, texture, pores on the surface are in mineral systems (floorlevelling compounds) normal and no reason for

complaint.

- Also under certain circumstances (drafts, sunlight, low humidity, etc.) fine "hairline cracks" can be expected.
- Do not mix SikaScreed®-220 (SA) with cement or other cementitious product.
- Do not add extra water or other ingredients.
- Mix only full bags for best results.

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

SUBSTRATE QUALITY / PRE-TREATMENT

- The concrete substrates must be sound and of sufficient compressive strength (> 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, for example dirt, oil, grease, coatings and surface treatments etc.
- If in doubt, apply a test area first. Weak concrete must be removed and surface defects such as blow holes and voids must be fully exposed.
- Cement laitance, paints or other surface treatment agents must be completely removed.
- Suitable methods for surface preparation are high pressure water jetting or abrasive blast cleaning. Grinding is not sufficient.
- Other pre-treatments such as scarifying, milling, etc. must be combined with a jet/blast method to eliminate the remaining structural faults and to remove cement laitance and achieve an open and sound textured surface.
- Pre-requisite for a good bond between the substrate and levelling screed is an appropriate roughness of the substrate. The mean surface roughness should be as large as possible, but at least 1 mm.
- Repairs to the substrate, filling of blowholes/voids must be carried out using appropriate products from SikaTop®, Sika MonoTop®, Sikafloor®, Sikadur® or Sikagard® range of materials.
- All dust, loose and friable material must be completely removed from all surfaces before application of the product, preferably by brush or vacuum.
- Substrate must be pre-dampened with sufficient water (warning: no standing water/puddles) to a saturated, surface dry condition (SSD).
- A suitable bonding slurry primer need to be used. 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 relevant national standard.

Priming:

- Apply Sikabond® DV as a bonding slurry mixed with cement to prepared concrete surface as a bonding and priming layer.

Or

- Sikafloor®-01 Primer: (dilution 1 kg Sikafloor®-01 Primer : 3 L water) application by brush or roller, approximate consumption 70 g/m² (210 g/m² diluted with water). Please refer to the relevant Product Data Sheet for recommended applications and details.

MIXING

Add cold water according to the desired consistency into a clean mixing vessel before slowly adding the SikaScreed®-220 (SA) powder.

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SikaScreed®-220 (SA) should be mixed by using low speed electric mixer (approximate 300–400 rpm). It is recommended to use a double disc stirring paddle or spiral mix paddle for 3 minutes or until the mix is free of lumps. For large areas forced action mixer or rotating pan mixers are recommended. Mixed product should have semi-dry consistency without excess water. In case of higher water temperature, the water could be cooled down using clean ice.

APPLICATION

The homogeneously mixed mixture is evenly applied in the required thickness to the pre-made guide strips, and after sufficient compaction, the surface is smoothed with a hand trowel or even mechanically. Conventional concrete reinforcement or steel mesh reinforcement can be used with SikaScreed®-220 (SA).

CLEANING OF EQUIPMENT

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

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 exact product data and uses.

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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All products are supplied under a management system certified to conform to the requirements of the quality, environmental and occupational health & safety standards as follows:
ISO 9001:2015, ISO 14001:2015, ISO 45001:2018
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