

PRODUCT DATA SHEET

SikaCeram[®]-255

Cement base high performance adhesive with no vertical slip and extended open time for fixing Vitrified Tiles, Glass Mosaic and Natural Stone. C2TE classified according to EN 12004

PRODUCT DESCRIPTION

SikaCeram[®]-255 is one-pack adhesive consisting of high resistance cements, high polymer content, selected silicon/quartz mineral charges and specific additives.

It can create adhesive layers up to 10 mm thickness. It is suitable for porcelain, glass mosaic and natural stone on Vertical and Horizontal surface.

USES

- Laying all kind of vitrified tiles, glass mosaic and natural stone.
- Laying marble and natural stone, provided not sensitive to water
- Indoor and outdoor, on walls and floors
- Indoor over-tiling applications on old tiles, without primer
- Suitable for applications where high performance is demanded, such as swimming pools, industrial and heavy trafficked floors

CHARACTERISTICS / ADVANTAGES

- No vertical slipping
- Extended open time
- Application upto 10 mm thick

TESTS

APPROVAL / STANDARDS

One-pack improved cement base adhesive. Particularly suitable for Vitrified and natural stones. Use on heating floor surfaces, industrial floors and swimming pools. EN12004 class C2TE.

PRODUCT DATA

FORM	Grey and White powder
PACKAGING	25 kg bag
STORAGE / SHELF LIFE	12 months from date of production if stored properly in undamaged original sealed packaging, in dry cooled conditions.

TECHNICAL DATA

CHEMICAL BASE	Portland cement, selected aggregates, water retention additives and re-dispersible polymer.		
LAYER THICKNESS	10 mm max		
POT LIFE	~3-4 hours at 23°C		
OPEN TIME	~30 minutes at 23°C	(EN 1346)	
ADJUSTABILITY TIME	~40 minutes at 23°C		
CURING DETAILS	Applied product ready for use:		
	Before floor grouting - light foot Traffic		24-36 hours
	Before wall grouting		4- 6 hours

MECHANICAL / PHYSICAL PROPERTIES

	Value Grey	Value White	Requirement EN 12004	Test Method
Initial Tensile Bond	1.9 N/mm ²	1.8 N/mm ²	≥ 1.0 N/mm ²	EN 1348
Tensile Bond after Heat Action	1.2 N/mm ²	1.2 N/mm ²	≥ 1.0 N/mm ²	EN 1348
Tensile Bond after water immersion	1.4 N/mm ²	1.5 N/mm ²	≥ 1.0 N/mm ²	EN 1348
Slip Resistance	≤ 0.5 mm	≤ 0.5 mm	≤ 0.5 mm	EN 1308

APPLICATIONS DETAILS

CONSUMPTION / DOSAGE	The consumption is dependent on the surface profile and roughness of the substrate as well as on the size of the tiles and the application technique (double-spreading, in thin-bed consistency, or single-spreading, in flow-bed consistency). As a guide, in kilograms of powder per m ² : 1.2 kg / m ² / mm of thickness
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SUBSTRATE QUALITY	The substrate must be cement laitance free, clean and free from dirt, oil, grease or other contaminants and loose or friable particles. The substrate must be perfectly flat, sound and free from parts easily removed, non-deformable and correctly aged. Any small gradients or bumps can be levelled/filled with a layer of SikaCeram-255 in a maximum thickness of 5 mm, applied at least 24 hours before laying the ceramic coating. For builds greater than 10mm thick, use the appropriate Sika MonoTop® or Sika® Level product(s).
SUBSTRATE PREPARATION/PRIMING	SikaCeram-255 is applied directly on plasters and cementitious substrates, cement-lime mortars, concrete, plasterboard, floater finished concrete and old ceramic floors.
SUBSTRATE TEMPERATURE	+5°C min; +35°C max
AMBIENT TEMPERATURE	+5°C min; +35°C max

APPLICATION INSTRUCTIONS

MIXING RATIO	~6.5-7 ltrs of water (26%-28%) for 25kg of SikaCeram-255 Grey ~6.75-7.25 ltrs of water (27%-29%) for 25kg of SikaCeram-255 White
MIXING	Mix the contents of a 25 kg bag with the required amount of water (as specified above), using an electric mixer and a suitable mixing spiral at low speed, in a clean bucket. Do not exceed a mixing speed of 500 rpm as doing so may reduce the final strength of the cured product. Mix to obtain a smooth paste free of lumps. After mixing, leave the product for 5-10 minutes, and then briefly stir the mixture prior to application. This should result in a very creamy, easily spreadable, and highly thixotropic adhesive.
APPLICATION METHOD/TOOLS	SikaCeram-255 is applied using a notched trowel. The amount of product should be enough to ensure complete wetting of the tile. Tiling has to be carried out on fresh adhesive, exerting an adequate pressure to ensure contact with the adhesive to form a full bond. If a surface film has formed on the adhesive, it is necessary to trowel over the previously applied adhesive layer. Avoid wetting the adhesive already applied with water. To lay tiles sized 900 cm ² (e.g. 30 x 30 cm) or larger, the double-spreading (buttering) thin-bed consistency or single-spreading flow-bed consistency techniques of adhesive application is always recommended. If the substrate is very porous, if the temperature is high and/or the relative humidity low, it is advisable to dampen the surface. Do not leave any standing water.
CLEANING OF TOOLS	Clean all tools and application equipment with water immediately after use. Hardened material can only be mechanically removed.
NOTES ON APPLICATION / LIMITATIONS	SikaCeram®-255 shall not be applied in the following cases: <ul style="list-style-type: none"> • On metal surfaces and wood

VALUE BASE

All technical data stated in this Product Data Sheet is based on laboratory tests. Actual measured data may vary due to circumstances beyond our control. Values achieved in laboratory conditions: 23°C ± 2°C – R.H. 50% ± 5%. Higher temperatures reduce the indicated lapse time, oppositely, lower temperatures increase them.

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.

HEALTH AND SAFETY INFORMATION

For information and advice on the safe handling, storage and disposal of chemical products, users shall refer to the most recent Material Safety Data Sheet 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. It may be necessary to adapt the above disclaimer to specific local laws and regulations.

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