

PRODUCT DATA SHEET

SikaCeram[®]-102 SA

GENERAL PURPOSE, CEMENTITIOUS TILE ADHESIVE FOR THIN BED APPLICATION FOR SMALL AND MEDIUM TILES

DESCRIPTION

SikaCeram[®]-102 SA is one-pack premixed adhesive consisting of high resistance cements, selected silicon/quartz mineral charges and specific additives, used as thin bed tile adhesive for permanent fixing of ceramic tiles. It is ready to use with the addition of water.

Suitable for use in hot and tropical climatic conditions.

USES

- Suitable for bonding high absorption ceramic tiles
- Indoor application without primer over concrete, cement mortars, bricks
- Suitable for floor and wall applications
- Suitable for moisture tolerant natural stone

CHARACTERISTICS / ADVANTAGES

- Very good adhesion to most substrates (concrete, cementitious mortar, stone, bricks)
- Easy to mix and use
- Excellent workability and thixotropic consistency
- Single component system
- Minimized sagging with small format tiles

APPROVALS / CERTIFICATES

SikaCeram[®]-102 SA follows the main requirements of EN 12004 class C1 T and complies to the requirements of ANSI 118.4 for shear strength.

PRODUCT INFORMATION

Composition	Portland cement, selected aggregates
Packaging	20, 50 kg bag
Appearance / Colour	Grey or white powder
Shelf life	12 months minimum 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.

TECHNICAL INFORMATION

Tensile Adhesion Strength	w/p = 0.23	Value	Requirement EN 12004, class C1	(EN 12004-2)
	Initial	≥ 0.5 N/mm ²	≥ 0.5 N/mm ²	

APPLICATION INFORMATION

Mixing Ratio	Add 4.6 to 4.8 L clean water per 20 kg bag of powder	
Fresh Mortar Density	~1.50 kg/l (25 °C)	
Consumption	The consumption depends on the surface profile and roughness of the substrate and on the size of the tiles and the placing technique (simple placing "floating" or back to back "buttering-floating"). As a guide: For 1 mm thickness over 1m ² area approximately 1.5 kg of material. One 20 kg bag will cover approximately 5.5 - 8.3 m ² at 3 - 2 mm thickness.	
Layer Thickness	Min. 2 mm Max. 5 mm (locally up to 12mm thickness possible, for leveling purpose)	
Ambient Air Temperature	+5 °C min. / +35 °C max.	
Substrate Temperature	+5 °C min. / +35 °C max.	
Pot Life	~45 min. (23 °C)	
Open Time	≥ 20 min. (23 °C)	(12004-2)
Adjustability Time	≥ 20 min. (23 °C)	
Applied Product Ready for Use	Floor tiles can be grouted	After 24 - 36 h
	Wall tiles can be grouted	After 4 - 6 h
	Full traffic / use	After 14 d
	Times are approximate and will be affected by changing ambient conditions particularly temperature and relative humidity.	

APPLICATION INSTRUCTIONS

SUBSTRATE QUALITY / PRE-TREATMENT

- Substrates must be properly cured, structurally sound, free of any loose or friable particles, clean, dry and free of any contaminants such as dust, dirt, oil, grease, cement laitance or efflorescence.
- Depending on the substrate condition and contaminants to be removed from the surface, perform adequate preparation techniques, such as water-jet washing or blastcleaning, in order to remove all traces of any materials that could reduce the product's adhesion to the substrate.
- Any small surface defects and variations in level, profile, or around exposed aggregates for example, can be prefilled and levelled with an additional layer of SikaCeram®-102 SA, to a maximum thickness of 12 mm, applied at least 24 h before laying the ceramic tiling. For larger and thicker areas of surface reprofiling and making good, appropriate mortars from the SikaRep®, Sika MonoTop® or Sikafloor® Level range should be used. Cracks in substrates must be identified and sealed appropriately e.g. with Sikadur epoxy resins.
- For applications in hot climates / environments and / or on absorbent substrates, thoroughly pre-dampen the surface immediately prior to the product application, but avoid any ponding / standing water on the surface, which must not be damp to touch and not with a dark-matt / wet surface appearance i.e. it must be saturated surface dry (SSD).
- For tiling in frequently damp or wet rooms, a suitable Sika® waterproofing product / system should be applied before the tiling.

MIXING

Mix 20 kg bag with the necessary, above mentioned, amount of water, using an electric blender with a suitable mixing spiral at low speed, in a clean bucket, and up to obtain a smooth paste free of lumps. Use a blender at 500 rpm maximum; do not mix at faster rate because of mechanical strength decay of the cured product. After blending, leave the product curing for 5 minutes in the mixing container and then briefly stir the mix prior to application. The obtained mix results very creamy, easily spreadable and thixotropic.

APPLICATION

SikaCeram®-102 SA is applied using notched trowel. The amount of product should be enough to ensure complete wetting of the tiles' rear. Tiling has to be carried out on fresh glue, exerting an adequate pressure to ensure contact with the adhesive, and thus the perfect bonding. In case a surface film is formed on the adhesive, it is necessary to wipe the trowel on the adhesive layer previously applied. Avoid wetting with water the adhesive already applied, it damages the adhesive.

CLEANING OF EQUIPMENT

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



IMPORTANT CONSIDERATIONS

- For wet areas a water resistant SikaCeram® tile adhesive should be used.
- Protect freshly applied material from rain, wind, etc.
- Make a test area prior to carrying out any work with natural stone tiles.
- White version of tile adhesive is recommended for translucent natural stone tiles.
- It is not usually necessary to pre-dampen the tiles.
- For gypsum board substrate, primer need to be applied, please contact Sika Technical Department.

SikaCeram®-102 SA shall not be applied on the following cases:

- On metal surfaces and wood
- On old ceramic tiles
- On water immersed areas
- Non adsorbent tiles like stone ware and porcelain
- Large tiles (side > 60 cm)

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 uses.

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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ISO 9001: Sika UAE LLC,
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ISO 14001: Sika UAE LLC,
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OHSA: Sika UAE LLC,
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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 ISO 9001,
ISO 14001 and OHSA
18001.

