

PRODUCT DATA SHEET

SikaCeram[®]-100

GENERAL PURPOSE, CEMENTITIOUS TILE ADHESIVE FOR THIN BED APPLICATION

DESCRIPTION

SikaCeram[®]-100 is a one-pack premixed, polymer containing 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 of high absorption ceramic tiles, earthenware, extruded and refined porcelain tiles (only indoor)
- Industrial environment, wet areas (bathrooms, kitchens, balconies, terraces, etc.)
- Suitable for indoor floor and wall applications, as well as external floor applications.
- Suitable for moisture tolerant natural stone
- Suitable for application above concrete, mortar, bricks and plaster

PRODUCT INFORMATION

Composition	Portland cement, selected aggregates and additives
Packaging	20 kg bag
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.
Appearance and colour	Grey or white powder
Maximum grain size	0.5 mm

FEATURES

- Very good adhesion
- Easy to mix and use
- Excellent workability and pot life
- Water resistant
- Non toxic
- Single component system

CERTIFICATES AND TEST REPORTS

SikaCeram[®]-100 follows the main requirements of EN 12004 for class C2 E.

TECHNICAL INFORMATION

Tensile adhesion strength	w/p = 0.225	Value	Requirement EN 12004, class C2	(EN 1348)
	Initial	≥ 1.2 N/mm ²	≥ 1 N/mm ²	
	After Water Im- mersion	≥ 1.2 N/mm ²	≥ 1 N/mm ²	
	After Heat Aging	≥ 1.2 N/mm ²	≥ 1 N/mm ²	
System structure	In normal conditions on cement based substrate, no primer is required. However, for very high absorbent substrates (e.g. drywalls) or non-absorbent substrates, please contact Sika Technical Department for recommendation.			

APPLICATION INFORMATION

Mixing ratio	Add 4.0 - 4.5 L of water per 20 kg bag of powder		
Fresh mortar density	~ 1.70 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 1 m ² area approximately 1.4 kg of powder is required. One 20 kg bag will cover approximately 4.7–2.8 m ² at 3–5 mm thickness. For small sized tiles (side ≤30 cm), use small squared notch size trowel (4-6 mm) and progressively increases for medium tiles (side ≤45 cm, trowel 6-8mm) or large tiles (side ≤60 cm, trowel 8-10 mm). These figures are theoretical and do not allow for any additional material due to surface porosity, surface profile, variations in level, wastage or any other variations. Apply product to a test area to calculate the exact consumption for the specific substrate conditions and proposed application equipment.		
Layer thickness	Min. 3 mm Max. 5 mm (Locally up to 12 mm thickness possible, for leveling purpose)		
Ambient air temperature	+5 °C min. / +35 °C max.		
Substrate temperature	+5 °C min. / +35 °C max.		
Pot Life	~2 hours (+23 °C)		
Open Time	~30 min (+23 °C) (EN 1346) (Classification E as per EN 12004)		
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	
	Values determined in laboratory conditions: +23 °C ± 2 °C, R.H. 50 % ± 5 %. Higher temperatures will reduce the indicated waiting times, lower temperatures increase waiting time. Times are approximate and will be affected by changing ambient conditions particularly 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.

IMPORTANT CONSIDERATIONS

- Protect from adverse weather conditions, such as extremely high or low temperatures, rain, direct exposure to sun, wind, etc. for at least 24 hours from application.
- Avoid application in direct sunlight and/or strong wind / draughts.
- Make a test area prior to carrying out any work with natural stones.
- 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 needs to be applied, please contact Sika Technical Department.
- For application above waterproofing layers, please contact Sika Technical Department.

SikaCeram®-100 shall not be applied on the following cases:

- On metal surfaces and wood
- On old ceramic tiles
- On water immersed areas for example swimming pools.
- For stone wares and porcelain tiles in large size (side > 60 cm)
- For external walls

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

- 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®-100, 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®-100 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.

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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ISO 9001, 14001, 45001 –
Lloyd's Register
Sika S.A.C. LLC
Sika International Chemicals LLC
ISO 9001, 14001, 45001 – SGS
Sika Gulf S.S.C. O.
ISO 9001, 14001 – SGS
Sika Saudi Arabia Limited

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 ISO 45001.



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