

PRODUCT DATA SHEET

SikaCeram[®]-216

HIGH PERFORMANCE, POLYMER CONTAINING, WATER RESISTANT CEMENTITIOUS TILE ADHESIVE



DESCRIPTION

SikaCeram[®]-216 is a high performance, one-pack, polymer containing, water resistant, 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. Suitable for use in hot and tropical climatic conditions.

USES

- Suitable for bonding of high absorption ceramic tiles, earthenware, extruded and refined porcelain tiles
- Suitable for bonding of large size tiles used in industrial environment, wet areas, swimming pools, facades
- Suitable for bathrooms, kitchens, balconies, terraces, etc.
- Indoor and outdoor application over concrete, cement mortars, bricks and plaster
- For horizontal and vertical areas
- Suitable for moisture tolerant natural stone
- Suitable to tile directly on various Sika waterproofing products

CHARACTERISTICS / ADVANTAGES

- Very good adhesion
- Easy to mix and use
- Excellent workability and thixotropic consistency
- Water resistant
- Extended open time
- Single component system
- No sagging

SUSTAINABILITY

SikaCeram[®]-216 is certified according "Low Emitting Materials as per Al Sa'fat - Dubai Green Building Evaluation System" by Dubai Central Laboratory (DCL) certificate No. CL17020432

APPROVALS / CERTIFICATES

SikaCeram[®]-216 follows the requirements of EN 12004 class C2 TE and complies to the requirements of ANSI 118.4 for shear strength.

PRODUCT INFORMATION

Composition	Portland cement, selected aggregates and polymers
Packaging	25 kg and 40 kg bag
Appearance / Colour	Grey and 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
Maximum Grain Size	~0.6 mm

TECHNICAL INFORMATION

Tensile Adhesion Strength	grey w/p = 0.29	Value	Requirement EN 12004, class C2	(EN 12004-2)
	white w/p = 0.30			
	Initial	≥ 1.2 N/mm ²	≥ 1.0 N/mm ²	
	After water immersion	≥ 1.1 N/mm ²	≥ 1.0 N/mm ²	
	After heat ageing	≥ 1.0 N/mm ²	≥ 1.0 N/mm ²	
Slip Resistance	Value	Requirements	(EN 12004-2)	
	w/p=0.29	EN 12004-1, class T		
	≤ 0.5 mm	≤ 0.5 mm		

SYSTEMS

System Structure	In normal conditions no primer is required. However for uncommon substrates please refer to Sika Technical Department.
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APPLICATION INFORMATION

Mixing Ratio	Grey: 7.0 to 7.5 L of water / 25 kg bag, 11.2 to 12.0 L of water / 40 kg bag White: 7.25 to 7.75 L of water / 25 kg bag, 11.6 to 12.4 L of water / 40 kg bag	
Consumption	Powder consumption and coverage depends on the surface profile and roughness of the substrate, size and reverse profile of the tiles and the placing technique (simple placing "floating" or back to back "buttering-floating").	
	Required notch size:	Quantity of powder per m²
	4mm	~1.60 kg/m ²
	6mm	~2.20 kg/m ²
	8mm	~2.70 kg/m ²
	10mm	~3.40 kg/m ²
	Solid bed application	~1.35 kg/mm thickness
	Approximate coverage per 25kg bag:	
	Required notch size:	Approximate coverage:
	4mm	~15.60 m ²
6mm	~11.40 m ²	
8mm	~9.30 m ²	
10mm	~7.40 m ²	
	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. 2 mm Max. 5 mm on vertical areas Max. 10 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	~5 h (23 °C)	
Open Time	~30 min. (23 °C)	(EN 12004-2)
Adjustability Time	~40 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
		After 21 d - for swimming pools

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®-216, 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.
- When laying tiles on non-absorbent or substrates with limited absorbency, such as existing ceramic tiles, painted surfaces etc., check to confirm that these surfaces are all firmly and securely bonded and stable, then use suitable degreasing/descaling products to thoroughly and completely clean the surface.
- 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 25 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 to stand and 'mature' 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®-216 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 of the already applied adhesive, 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

- Protect freshly applied material from rain, wind, etc..
- 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 usually not necessary to pre-dampen the tiles.
- For gypsum boards, primer need to be applied, please contact Sika Technical Department.

SikaCeram®-216 shall not be applied on following cases:

- On metal surfaces and wood
- On old outdoor ceramic tiles
- For large stone ware / porcelain 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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Sika Saudi Arabia Co. Ltd,
Sika Qatar LLC
ISO 14001: Sika UAE LLC,
Sika Gulf B.S.C. (c),
Sika Saudi Arabia Co. Ltd
OHSAS: Sika UAE LLC,
Sika Gulf B.S.C. (c)

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 OHSAS
18001.

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