

## PRODUCT DATA SHEET

# SikaCeram<sup>®</sup>-203 Universal

ENHANCED PERFORMANCE, THIXOTROPIC, CEMENT BASED TILE ADHESIVE, C2TE CLASSIFIED ACCORDING TO EN 12004

### DESCRIPTION

Sikaceram<sup>®</sup>-203 Universal is an enhanced performance, Non slip, one-pack, premixed, white coloured, cementitious adhesive with extended open time, containing selected aggregates, special additives and polymers.

Sikaceram<sup>®</sup>-203 Universal can be used for tile bonding at a thickness layer up to 10mm, for external and internal applications, on horizontal and vertical surfaces.

### USES

SikaCeram<sup>®</sup>-203 Universal can be used for bonding the following types of ceramic tiles:

- Monocottura, bicottura ceramic tiles
- Medium and large sized tiles
- Artificial granite tiles (including grès porcelanato tiles)
- Cotto tiles and mosaic tiles
- Marble and natural stones (without any sensitivity against water)

SikaCeram<sup>®</sup>-203 Universal can be used on different substrate including:

- Concrete and mortar
- Existing marble tiles, mosaic and ceramic tiles
- Non-absorbing substrates (with suitable primer)

SikaCeram<sup>®</sup>-203 Universal can be used in floors in interior or exterior applications, in horizontal and vertical areas including:

- Kitchens, balconies, terraces
- Bathrooms, showers
- Areas with intense traffic.

### FEATURES

- Extended open time
- Highly thixotropic, no vertical slip
- Excellent adhesion to almost all types of substrates
- Fast application, easy to apply
- Weather resistant
- Applicable up to 10mm

### PRODUCT INFORMATION

<b>Composition</b>	Portland cement, selected aggregates, special additives and polymers
<b>Packaging</b>	20 kg bag
<b>Shelf life</b>	12 months from date of production
<b>Storage conditions</b>	Store properly in original unopened, sealed and undamaged packaging in dry conditions, at temperatures between +5 °C and +35 °C
<b>Appearance and colour</b>	Grey Powder
<b>Maximum grain size</b>	< 0.5 mm

<b>Density</b>	Fresh mortar density: ~1.60 kg/l (at +23°C)	
<b>Tensile adhesion strength</b>	≥ 1.0 N/mm <sup>2</sup> (Initial) ≥ 1.0 N/mm <sup>2</sup> (after Heat ageing) ≥ 1.0 N/mm <sup>2</sup> (after Water Immersion) ≥ 1.0 N/mm <sup>2</sup> (after Freeze/Thaw cycles)	
<b>Skid / slip resistance</b>	≤ 0.5 mm	
<b>Consumption</b>	The consumption depends on the surface profile and roughness of the substrate as well as on the size of the tiles and the placing technique simple placing (application to one surface only "notched trowel or floating method") or back-buttering (application to both surfaces "floating and buttering method").	
	Tile size	Trowel Size      Consumption
	Mosaic and small size tiles	6 mm      ~2 - 3 Kg/m <sup>2</sup>
	Normal size tiles	8 mm      ~3 - 4 Kg/m <sup>2</sup>
	Medium and large sized tiles	10 mm      ~4 - 5 Kg/m <sup>2</sup>
	Highly rough substrate	12-15 mm      ~5 - 7Kg/m <sup>2</sup>
<b>Layer thickness</b>	max. 10 mm	
<b>Ambient air temperature</b>	+5°C min. / +35°C max.	
<b>Mixing ratio</b>	4.3 - 5.0 L of water per 20 kg bag	
<b>Substrate temperature</b>	+5°C min. / +35°C max.	
<b>Pot Life</b>	~ 3 - 4 hours at +23 °C	
<b>Open Time</b>	≥ 30 minutes (tensile adhesion strength ≥ 0,5 N/mm <sup>2</sup> )	(EN 12004-2)
<b>Adjustability time</b>	~ 30 min. at +23°C	
<b>Applied product ready for use</b>	Before grouting on floor- light foot traffic	24 hours*
	Before grouting on wall	5-12 hours*
	Full traffic	14 days*

\* Values got at laboratory conditions: 23°C ± 2°C – R.H. 50% ± 5%. Higher temperatures reduce the indicated lapse time, oppositely, lower temperature increase them

## 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.

## FURTHER INFORMATION

- Do not exceed the recommended water dosage. Apply only to sound, suitably prepared substrates. Do not exceed the maximum layer thickness.
- Gypsum based substrates must have a minimum thickness of 10 mm and a maximum moisture content of 0.5%.
- If additional waterproofing underneath the tiles is required, then the following products can be used: SikaTop®Seal-107 FL-X, Sikalastic®-152, Sikalastic® 1K, Sika® SealTape-S.
- Protect freshly applied material from freezing conditions and rain, etc. for at least 24 hours.
- Pre-dampening of tiles is not required.

Please refer to the relevant product data sheets or contact our Technical Department.

## ECOLOGY, HEALTH AND SAFETY

## APPLICATION INSTRUCTIONS

### SUBSTRATE QUALITY / PRE-TREATMENT

In normal conditions, no primer is required when the product is applied on cementitious substrates, plaster, concrete, existing tiles, mosaic, marbles. In case of highly absorbent substrates, the following primers can be used:

Substrate	Use
Porous substrates (gypsumboards, cement boards, e.t.c.)	Sika Primer 11 W
PVC floors, linoleum, epoxy coating, gypsum renderings. e.t.c	Internal & external wall substrates
Pore sealing / adhesion promoter on non-porous substrates (e.g. old tiles)	SikaTop-10
Metal substrate	Sikafloor 156/161 (broadcasted with quartz sand)

In any other substrates, please consult with the technical department. For further information please refer

to the respective product data sheet of the primer used. 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 correctly aged. Any small gradients or bumps can be leveled and filled with a layer of SikaCeram®-203 Universal at a maximum thickness of 5 mm, applied at least 24 h before the laying process. For higher thickness, site-batched mortars prepared with SikaLatex® Max or Sika ViscoBond® or repair mortars Sika Mono- Top® or SikaRep® are to be used. In cases of demands for levelling the substrate, the self-leveling mortars from the Sika® Level range can be used.

### MIXING

Mix 20 kg bag with the necessary, above mentioned amount of water, using an electric mixer with a suitable mixing spiral at low speed (500 rpm maximum, in order to avoid air occlusion), in a clean bucket and until obtaining a smooth, lump-free paste. After mixing, leave the product to stand for 5 minutes and then briefly stir it again prior to application. The obtained mix will be very creamy, easily spreadable and highly thixotropic.

### APPLICATION

SikaCeram®-203 Universal 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 the fresh adhesive, exerting adequate pressure to ensure contact with the adhesive and thus the perfect adhesion. 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 already applied adhesive as this can impair the bonding process. Select the suitable trowel size depending on the tile size. SikaCeram®-203 Universal can be used for fixing low absorbance tiles of:

Tile size	Use
Up to 3.600cm <sup>2</sup> (e.g. 60cm x 60cm)	Internal & external floor substrates
Up to 2.100cm <sup>2</sup> (e.g. 60cm x 60cm)	Internal & external wall substrates

To lay tiles of total surface of 900 cm<sup>2</sup> (e.g. 30x30 cm) and larger, the double-spreading (floating and buttering) technique of adhesive application is always recommended.

### CLEANING OF EQUIPMENT

Removal of fresh remnants from tools and application equipment can be carried out using 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.