BUILDING TRUST

PRODUCT DATA SHEET

SikaCeram®-205 Large

Cementitious tile adhesive for large tiles

DESCRIPTION

SikaCeram®-205 Large is a cementitious improved powdered, floor and wall adhesive for large ceramic tiles. Suitable for bonding all types of tiles.

USES

Bonding the following types of tiles:
- All kinds of medium, large-sized tiles
- Grès porcelain
- Ceramic
- Earthenware
- Porcelain
- Stoneware
- Terrazzo
- Unglazed

Bonding tiles for the following applications:
- Balconies
- Bathrooms
- Commercial / Residential environments
- Facades
- Heated floors (water systems)
- Kitchens
- Swimming pools
- Terraces
- Wet areas
- Overlaying existing indoor sound ceramic tiles or stones
- Overlaying existing indoor sound PVC sheet, linoleum and vinyl tiled floors
- Spot-gluing insulating panels made of polystyrene, polyurethane foam, rock or glass wool
- Interior and exterior use

CHARACTERISTICS / ADVANTAGES

- Layer thickness: 1–10 mm
- No vertical slip
- Extended open time
- Frost resistant
- Typical bonding substrates: Cementitious screed, concrete, plaster, ceramic tiles, vinyl tile / sheet, linoleum, calcium sulphate screed, gypsum fibre boards.

APPROVALS / CERTIFICATES

- CE Marking and Declaration of Performance to EN 12004 - Adhesives for ceramic tiles - C2 TE

PRODUCT INFORMATION

Product declaration	EN 12004: C2 TE
Composition	Portland cement, selected aggregates, water retention additives, re-dispersible polymer
Packaging	25 kg bag
Shelf life	12 months from date of production.
Storage conditions	Product must be stored in original, unopened and undamaged packaging in dry conditions at temperatures between +5 °C and +35 °C. Always refer to packaging.
Appearance and colour	Grey / white powder
Maximum grain size	D_{max}: 0,5 mm

TECHNICAL INFORMATION

Tensile adhesion strength	Initial	≥ 1,0 N/mm²	(EN 1348)
	Water immersion	≥ 1,0 N/mm²	
	Heat ageing	≥ 1,0 N/mm²	
	Freeze-Thaw cycles	≥ 1,0 N/mm²	
Slip resistance	≤ 0,5 mm		(EN 1308)

APPLICATION INFORMATION

Mixing ratio

Grey color: 6.0 - 6.50 litres of water per 25 kg bag
White color: 7.25 - 8.0 litres of water per 25 kg bag

Fresh mortar density

~1,6 kg/l

Consumption

Consumption is dependent on the substrate, surface profile, roughness, size of the tiles, the joints between them and application technique (i.e. single spreading / floating method or double spreading / buttering method).
As a guide for a single adhesive layer:

Size of tiles	Notched trowel size	Consumption
Small	6 mm	~2,5 kg/m²
Medium	8 mm	~3,5 kg/m²
Large	10 mm	~5 kg/m²

Layer thickness

10 mm max.

Ambient air temperature

+5 °C min. / +35 °C max.

Substrate temperature

+5 °C min. / +35 °C max.

Maturing time

~3 minutes

Pot Life

~6 hours

Open Time

≥ 0,5 N/mm² after 30 min (EN 1346)

Adjustability time

~50 minutes

Applied product ready for use

Use	Waiting time
Grouting floors / walkability	24–36 hours
Grouting walls	4–6 hours
Full traffic	~14 days
Water immersion	~21 days

Values determined in laboratory conditions: +23 °C ± 2 °C, R.H. 50 % ± 5 %.

Higher temperatures will reduce the indicated waiting time, lower temperatures increase waiting time.

BASIS OF PRODUCT DATA

All technical data stated in this Product Data Sheet are based on laboratory tests. Actual measured data may vary due to circumstances beyond our control.

IMPORTANT CONSIDERATIONS

- Gypsum plaster and anhydrite screed substrates must have a maximum moisture content of 0,5 %.
- Avoid application in direct sunlight and/or strong wind / draughts.
- Do not apply on metal or wood surfaces.
- Do not apply on existing exterior ceramic tiles.
- Do not add anything to the product that is not specified in this Product Data Sheet.
- Do not use for any applications that are not explicitly described in this Product Data Sheet.
- If a waterproofing layer is required under the tiles, cement-based and acrylic-based products are suitable for use under SikaCeram®-205 Large.

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.

APPLICATION INSTRUCTIONS

SUBSTRATE QUALITY / PRE-TREATMENT

- Cementitious substrates must be sufficiently cured and dried (2–6 weeks).
- All substrates must be structurally sound, able to support the weight of the new tiling and provide a firm and securely fixed background.
- Substrates must be clean, dry, free of any loose or friable particles, contaminants such as dust, dirt, oil, wax polish, grease, cement laitance or efflorescence.
- Use adequate mechanical preparation techniques to remove from the substrate, all traces of any materials that could reduce the product's adhesion to the substrate.
- To confirm adequate surface preparation and adhesion, carry out a small trial before full application.
- Any small surface defects and variations in level, profile, or around exposed aggregates. Prefill and level with an additional layer of SikaCeram®-205 Large to a maximum thickness of 10 mm, applied at least 24 hours before full adhesive application.
- For larger and thicker areas of substrate re-profiling and making good, use suitable mortars from Sika range.
- Identify cracks in the substrate and seal appropriately with Sikadur® epoxy resins.
- When laying tiles on non-absorbent or substrates with limited absorbency, such as existing ceramic tiles, painted surfaces etc. Check these surfaces are all sound, firm and securely bonded. Use suitable degreasing / descaling products to thoroughly and completely clean the substrate.
- For applications in hot climates / environments, or on absorbent substrates. Thoroughly pre-dampen the substrate immediately before product application. Avoid any ponding / standing water on the substrate. Surface must be saturated surface dry (SSD)
- For tiling in constantly damp or wet rooms, a suitable Sika® waterproofing product / systems must be applied to the substrate before tiling.

MIXING

Important: Avoid over-mixing to minimise air entrainment.
Requirement: Use a low speed electric single paddle mixer (<500 rpm) with spiral paddle for mixing.

1. Pour the recommended amount of clean cold water into a clean mixing container.
2. Gradually add SikaCeram®-205 Large powder to the water while mixing.
3. Mix thoroughly until a uniformly coloured, smooth mix is achieved.
4. Do not mix for 2–3 minutes to allow mixed product to ‘mature’.
5. Remix for ~30 seconds.

APPLICATION

Important: Apply sufficient adhesive to ensure adequate ‘wetting’ of the backs of the tiles.
Important: Coverage on the back of the tiles must be 100 %.
Important: Tiling must be carried out on freshly applied adhesive. Exert adequate pressure to ensure 100 % complete and uniform contact with the adhesive to achieve optimum adhesion.
Important: If a skin forms on the surface of the adhesive, immediately remove the adhesive layer with a trowel, discard material and apply a fresh layer of adhesive.
Note: For tiles > 900 cm² (30 × 30 cm), the double-spreading (buttering) technique is always recommended.

1. Apply sufficient adhesive to the prepared fixing surfaces with the appropriate trowel / comb or applicator to the required bed thickness.
2. Adjust tiles if required.
3. Clean off surplus adhesive from tile face and between tile joints before the adhesive has dried.

CLEANING OF EQUIPMENT

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

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.

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. Any changes to this disclaimer may only be implemented with permission of Sika® Corporate Legal in Baar.

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