

PRODUCT DATA SHEET

SikaCeram[®]-249 Easy

High performance water repellent tile adhesive for highly demanding applications



DESCRIPTION

SikaCeram[®]-249 Easy is a flexible, high performance water repellent cementitious tile adhesive with high polymer content, selected aggregates, special additives and admixtures. Its specially enhanced formulation is based on two new SikaCeram[®] technologies, SikaCeram[®] Easy Technology for improving application comfort of the tile setter and SikaCeram[®] WR Technology for providing Water Repellency to construction substrates and durable protection against efflorescence damage.

USES

SikaCeram[®]-249 Easy can be used in layers of up to 20 mm for both external and internal applications on horizontal and vertical surfaces, ensuring high performance and excellent workability for bonding all type and sizes of ceramic tiles, such as:

- Monocottura, bicottura ceramic tiles
- Large format thin tiles
- All types of mosaic tiles
- Clinker, cotto tiles
- Artificial granite tiles (including grès porcelanato tiles)
- Marble and natural stones (without any sensitivity against water)

SikaCeram[®]-249 Easy can be used on several substrates including:

- Concrete and mortars
- Lime and cement based plasters and renders
- Cement boards, plasterboards, e.t.c. (with suitable primer)
- Flexible cementitious waterproofing mortars (e.g. Sikalastic[®]-1K)
- Synthetic, resin based in water dispersion, ready to use liquid waterproofing mortars (e.g. Sikalastic[®]-260 Stop Aqua)
- Flexible waterproofing and decoupling membrane

- sheets (e.g. SikaCeram[®] Sealing Membrane A or W)
- Impact noise insulation sheets
- Existing marble layers, mosaic and ceramic tiles (with suitable primer)

SikaCeram[®]-249 Easy is ideal for tile bonding in high demanding applications, such as:

- Wet room areas (e.g. kitchens, bathrooms, saunas, spas, e.t.c.)
- Balconies, terraces
- Swimming pools, tanks
- Facades
- Areas with underfloor heating
- Areas with intense circulation (heavy traffic floors)

FEATURES

- Enhanced formulation based on two new SikaCeram[®] Technologies
- Creamy consistency and outstanding workability based on SikaCeram[®] Easy Technology
- SikaCeram[®] Water Repellent Technology guarantees protection against water absorption, preventing efflorescence damage
- Highly deformable flexible mortar
- Secure adhesion performance, excellent wettability of the tiles
- Extended open time
- Highly thixotropic, no vertical slip
- Very low VOC emissions contributing to good indoor air quality
- Applicable up to 20 mm
- Part of certified Sika's Tile Adhesive Systems in combination with flexible waterproofing products and flexible membrane sheets

SUSTAINABILITY

- VOC Emission Classification Gev Emission EC1^{PLUS}
- VOC content: Meets SCAQMD Rule 1168
- Contributes towards satisfying Environmental Quality (EQ) Credit: Low Emitting Materials under LEED v4.1

CERTIFICATES AND TEST REPORTS

CE Marking and Declaration of Performance according to EN 12004-1 - Adhesives for ceramic tiles

PRODUCT INFORMATION

| | |
|------------------------------|--|
| Product declaration | CE-marking and Declaration of Performance as Improved deformable cementitious adhesive with reduced slip and extended open time, C2TES1 according to EN 12004-1:2017, based on assessment by notified laboratory and factory production control. |
| Composition | Portland cement, selected aggregates, special additives and polymers |
| Packaging | 23 kg bag |
| Shelf life | 12 months from date of production |
| Storage conditions | Store properly in original unopened, sealed and undamaged packaging in dry conditions, at temperatures between +5°C and +35°C. |
| Appearance and colour | Powder, white |
| Maximum grain size | ~ 0,5 mm |
| Density | Fresh mortar density: ~ 1.50 kg/l (at +20°C) |

TECHNICAL INFORMATION

| | | |
|----------------------------------|---|--------------|
| Transverse deformation | ≥2.5 mm | (EN 12004-2) |
| Tensile adhesion strength | ≥1.0 N/mm ² (Initial) ≥1.0 N/mm ² (after Heat Ageing) ≥1.0 N/mm ² (after Water Immersion) ≥1.0 N/mm ² (after Freeze/Thaw cycles) | (EN 12004-2) |
| Slip resistance | ≤0.5 mm | (EN 12004-2) |

APPLICATION INFORMATION

| Mixing ratio | 5,9 – 6,7 L of water per 23 kg bag | | | | | | | | | | | | | | | |
|--|---|------------------------|-------------|-------------|-----------------------------------|------|------------------------|---|------|------------------------|--|-------|------------------------|------------------|----------|------------------------|
| Consumption | Consumption is always dependent on substrate's surface profile and roughness by the size of the tiles as well as on the application technique (single adhesive layer or with an additional "buttering" layer on the back of the tiles). As a guide: <table><thead><tr><th>Tile size</th><th>Trowel size</th><th>Consumption</th></tr></thead><tbody><tr><td>Small size tiles and mosaic tiles</td><td>6 mm</td><td>~2-3 kg/m²</td></tr><tr><td>Normal size tiles (20x20 cm - 45x45 cm)</td><td>8 mm</td><td>~3-4 kg/m²</td></tr><tr><td>Medium and large size tiles (e.g. 60x120 cm)</td><td>10 mm</td><td>~4-5 kg/m²</td></tr><tr><td>Very large tiles</td><td>12-15 mm</td><td>~5-7 kg/m²</td></tr></tbody></table> | Tile size | Trowel size | Consumption | Small size tiles and mosaic tiles | 6 mm | ~2-3 kg/m ² | Normal size tiles (20x20 cm - 45x45 cm) | 8 mm | ~3-4 kg/m ² | Medium and large size tiles (e.g. 60x120 cm) | 10 mm | ~4-5 kg/m ² | Very large tiles | 12-15 mm | ~5-7 kg/m ² |
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| Layer thickness | max. 20 mm | | | | | | | | | | | | | | | |
| Ambient air temperature | +5 °C min. / +35 °C max. | | | | | | | | | | | | | | | |
| Substrate temperature | +5 °C min. / +35 °C max. | | | | | | | | | | | | | | | |
| Pot Life | ~3-4 hours at +23 °C | | | | | | | | | | | | | | | |
| Open Time | ≥30 minutes (tensile adhesion strength ≥0.5 N/mm ²) | (EN 12004-2) | | | | | | | | | | | | | | |

Adjustability time

~30 min. at +23 °C

Applied product ready for use

Before grouting on floor – light foot traffic 24* hours

Before grouting on wall 5-12* hours

Full traffic ~14* days (21* days in tanks and swimming pools)

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

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 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: Sikalastic®-152 HP, Sikalastic®-1K HP, Sikalastic®-260 Stop Aqua, Sika® SealTape S, Sika® SealTape F & SikaCeram® Sealing Membranes.
- For demanding applications (e.g. swimming pools), use under the tile adhesive flexible waterproofing products according to EN 14891 (e.g. Sikalastic®-1K HP, class CM01P, or flexible waterproofing sheet, SikaCeram® Sealing Membrane A).
- In case of marble application, it is always essential to carry out a sample test of the material, since marbles and natural stones characteristics vary.
- Do not exceed the maximum water dosage. Apply on sound, properly prepared substrates. Do not exceed the maximum thickness
- Protect freshly applied material from freezing conditions and rain, etc. for at least 24 hrs.
- Pre-dampening of tiles is not required.
- When movement stresses are expected (e.g. new screeds not properly aged or tiles with no dimensional stability), it is highly recommended to use SikaCeram®-249 Easy in combination with high tear resistance, flexible sheet, SikaCeram® Sealing Membrane A.

Please, refer to the relevant product data sheet or consult Sika Technical Services.

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**

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 | Primer |
|---|--|
| Absorbent substrates (Gypsum boards, cement boards, cementitious screed, plaster or anhydrite screed, e.t.c.) | Sika® Primer-11 W+ Sikafloor®-01 Primer |
| Pore sealing / adhesion promoter on non-porous substrates (e.g. old tiles) | SikaTop®-10 Sikafloor®-02 Primer |

In any other substrates, please consult our 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®-249 Easy applied at least 24 h before the laying process. For higher thickness, repair mortars from Sika MonoTop® or SikaRep® range products can be used. In case of levelling the substrate, self-leveling mortars from Sika-floor® Level range can be used.

MIXING

Mix 23 kg bag with the necessary, above mentioned amount of water, using an electric mixer with a suitable mixing spiral at low speed, in a clean bucket and until obtaining a smooth, lump-free paste. After mixing, leave the product to stand for 5 min and then briefly stir it again prior to application. The obtained mix has a very creamy consistency and is easy to apply and spread.

APPLICATION

SikaCeram®-249 Easy 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 while the adhesive is still fresh, exerting adequate pressure to ensure full contact with the adhesive, and thus perfect bonding. In case a surface film is formed on the adhesive layer, it is necessary to "wipe" the trowel on it. Avoid wetting with water the already applied adhesive, as this can impair the bonding process.

In highly demanding applications (e.g. large sized thin tiles), complete wetting of the back of the tile should be ensured. In that case, the double-spreading (floating and buttering) technique 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

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.

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Product Data Sheet

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