

## PRODUCT DATA SHEET

# SikaCeram<sup>®</sup>-250 StarFix

Cementitious normal setting floor and wall tile adhesive

### PRODUCT DESCRIPTION

SikaCeram<sup>®</sup>-250 StarFix is a cementitious, normal setting, deformable, frost resistant floor and wall tile adhesive with reduced slip and extended open time. For residential, industrial and commercial wet and dry environments. Suitable for bonding all types of ceramic, marble and natural stone tiles to all types of absorbent / non-absorbent construction material substrates.

### USES

#### Bonding the following types of tiles:

- Ceramic
- Earthenware
- Glazed
- Porcelain
- Stoneware
- Terrazo
- Unglazed

#### Bonding tiles for the following applications:

- Balconies
- Bathrooms
- Commercial / Residential environments
- Existing indoor tiles
- Heated floors
- Kitchens
- Leisure centres
- Storage areas
- Terraces
- Wet areas
- Overlaying existing firmly fixed interior ceramic tiles
- Interior and exterior use

### CHARACTERISTICS / ADVANTAGES

- Layer thickness: 1–5 mm
- Deformable
- Extended open time
- Frost resistant
- Smooth application
- Typical bonding substrates: Cementitious screed, concrete, plaster, ceramic tiles, calcium sulphate screed, gypsum fibre boards.

### ENVIRONMENTAL INFORMATION

- VOC emission classification GEV-Emicode EC1<sup>PLUS</sup>

### APPROVALS / STANDARDS

- CE Marking and Declaration of Performance to EN 12004 - Adhesives for Tiles - C2 TE S1

## PRODUCT INFORMATION

Product Declaration	EN 12004: C2 TE S1
Chemical Base	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 sealed packaging in dry conditions at temperatures between +5 °C and +35 °C. Always refer to packaging.
Appearance / Colour	Grey powder

## TECHNICAL INFORMATION

Transverse deformation	$\geq 2,5 \text{ mm}$	(EN 12002)	
Tensile adhesion strength	Initial	$\geq 1 \text{ N/mm}^2$	(EN 1348)
	Water immersion	$\geq 1 \text{ N/mm}^2$	
	Heat ageing	$\geq 1 \text{ N/mm}^2$	
	Freeze-Thaw cycles	$\geq 1 \text{ N/mm}^2$	
Slip resistance	$\leq 0,5 \text{ mm}$	(EN 1308)	

## SYSTEM INFORMATION

System Structure	For the following substrates, a primer must be used:	
	<b>Substrate</b>	<b>Primer</b>
	Absorbent substrate (cementitious screed, plaster, concrete)	Sika® Primer-11W+ (1:3) Sikafloor®-01 Primer (1:3) Sikafloor®-03 Primer
	Non and low absorbent substrate (existing ceramic tiles, linoleum, existing vinyl tiled floors)	Sika® Primer-21W Sikafloor®-02 Primer
	Calcium sulphate substrate (gypsum, gypsum fibre boards, calcium sulphate screed)	Sika® Primer-11W+ (1:1) Sikafloor®-01 Primer (1:1) Sikafloor®-03 Primer
	(1:3 or 1:1) denotes primer dilution with water. Primer : Water	

## APPLICATION INFORMATION

Mixing Ratio	7,5 L of water per 25 kg bag (30 % $\pm$ 1 %)												
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 :												
	<table><thead><tr><th>Size of tiles</th><th>Notched Trowel size</th><th>Consumption</th></tr></thead><tbody><tr><td>Small</td><td>6 mm</td><td>~2,1 kg/m<sup>2</sup></td></tr><tr><td>Medium</td><td>8 mm</td><td>~2,6 kg/m<sup>2</sup></td></tr><tr><td>Large</td><td>10 mm</td><td>~3,1 kg/m<sup>2</sup></td></tr></tbody></table>	Size of tiles	Notched Trowel size	Consumption	Small	6 mm	~2,1 kg/m <sup>2</sup>	Medium	8 mm	~2,6 kg/m <sup>2</sup>	Large	10 mm	~3,1 kg/m <sup>2</sup>
Size of tiles	Notched Trowel size	Consumption											
Small	6 mm	~2,1 kg/m <sup>2</sup>											
Medium	8 mm	~2,6 kg/m <sup>2</sup>											
Large	10 mm	~3,1 kg/m <sup>2</sup>											
Layer Thickness	5 mm max.												
Ambient Air Temperature	+5 °C min. / +35 °C max.												

<b>Substrate Temperature</b>	+5 °C min. / +35 °C max.	
<b>Pot Life</b>	~4 hours at +20 °C	
<b>Open Time</b>	≥ 0,5 N/mm <sup>2</sup> after 30 minutes	(EN 1346)
<b>Applied Product Ready for Use</b>	<b>Use</b>	<b>Waiting time</b>
	Grouting - floors including foot traffic	~24 hours indoors ~48 hours out-doors

## VALUE BASE

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

## LIMITATIONS

- Gypsum plaster and anhydrite screed substrates must have a maximum moisture content of 0,5 %.
- For natural stone tiles, always carry out a preliminary test application first.
- Do not apply on existing exterior ceramic tiles.
- Do not apply on metal or wood surfaces.
- 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®-250 StarFix.

## ECOLOGY, HEALTH AND SAFETY

Local safety regulations must be observed and it advisable to wear PPI when working with this product with particular attention paid to cutting and handling.

Transportation Class: The product is not classified as hazardous good for transport. Disposal: The material is recyclable. Disposal must be according to local regulations. Please contact your local Sika sales organisation for more information.

## APPLICATION INSTRUCTIONS

### SUBSTRATE QUALITY / PRE-TREATMENT

- The substrate can be one of the following materials: Cementitious screed, concrete, plaster, ceramic tiles, calcium sulphate screed, gypsum fibre boards.
- 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.
- Smooth surfaces must be roughened lightly to improve adhesion.
- 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®-250 StarFix to a maximum thickness of 5 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 the Sika MonoTop® or Sikafloor® Level 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 not be damp to touch.
- 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 (300–400 rpm) with spiral paddle for mixing.

1. Pour the recommended amount of clean cold water into a clean mixing container.
2. Gradually add SikaCeram®-250 StarFix 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 SikaCeram®-250 StarFix adhesive.

Note: SikaCeram®-250 StarFix is suitable for laying absorbent and non-absorbent tiles indoors without any size or support limits.

Note: On cementitious substrates, SikaCeram®-250 StarFix can be used for laying non-absorbent tiles outdoors up to 10 000 cm<sup>2</sup> (e.g. 60 × 120 cm). On walls, non-heated floors and indoor applications up to 7000 cm<sup>2</sup> (e.g. 80 × 80 cm).

Note: For tiles > 900 cm<sup>2</sup> (e.g. 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 TOOLS

Clean all tools and application equipment with water immediately after use. Hardened 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 the 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.

### SIKA IRELAND LIMITED

Ballymun Industrial Estate  
Ballymun  
Dublin 11, Ireland  
Tel: +353 1 862 0709  
Web: [www.sika.ie](http://www.sika.ie)  
Twitter: @Sikalreland



### Product Data Sheet

SikaCeram®-250 StarFix  
April 2022, Version 05.01  
021710102000000235

SikaCeram-250StarFix-en-IE-(04-2022)-5-1.pdf

