

BUILDING PRODUCT INFORMATION SHEET

SikaCeram® StarGrout

Epoxy floor / wall tile coloured adhesive and grout

DESCRIPTION

SikaCeram® StarGrout is a 2-part, epoxy floor / wall tile coloured adhesive and grout. It has a smooth glossy finish which provides a durable chemical resistant surface for demanding applications and high cleanliness requirements.

USES

Bonding the following types of tiles:

- Ceramic
- Glass
- Wood
- Marble and other natural stones

Bonding and grouting tiles for the following applications:

- Swimming pools (including sea-water pools)
- Thermal pools
- Turkish baths
- Private and public bathrooms
- Commercial / Industrial / Residential kitchens
- Dairies
- Tanneries
- Paper-mills
- Laboratories
- Slaughterhouses
- Interior and exterior use

FEATURES

- Grout joint range: 1–15 mm
- Good chemical resistance
- Very good workability
- Easy application
- Easy to clean joints
- Tough
- Very low water absorption
- Stain resistant
- Frost proof
- Mould-inhibiting
- Abrasion resistant

LIMITATIONS OF USE

The product is not a substitute for any mechanical fixings that are specified by the manufacturer of the element being bonded

SUSTAINABILITY

VOC emission classification GEV-Emicode EC1PLUS, license number 9008/20.10.00

APPROVALS / CERTIFICATES

CE Marking and Declaration of Performance to EN 12004 - Adhesives for ceramic tiles. Classification: R2 T

PRODUCT INFORMATION

Product identifier	SikaCeram® StarGrout Overseas	
Place of manufacture		
Product declaration ■ EN 12004: Adhesives for ceramic tiles. Class: R2 T		
	■ EN 13888: Grout for tiles. Class: RG	
Composition	Epoxy resin, quartz aggregates and special additives	
Packaging	3 kg container (Parts A+B).	

NZ BUILDING PRODUCT INFORMATION SHEET

Refer to current price list for packaging variations. Shelf life 24 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 +30 °C. Always refer to packaging. Appearance and colour Part A Coloured paste Part B Viscous liquid Part C (optional) Glitter particles Colours: White Manhattan Ash Light grey Anthracite Jasmine Beige Caramel Dark brown Total black Maximum grain size D_{max}: 0.2 mm TECHNICAL INFORMATION Abrasion resistance ≤ 250 mm³ (EN 12808-2) Compressive strength After dry storage ≥ 45 N/mm² (EN 12808-3) After freeze/thaw cycles ≥ 45 N/mm² Flexural strength (EN 12808-3) After dry storage ≥ 30 N/mm² After freeze-thaw cycles ≥ 30 N/mm² **Tensile adhesion strength** (EN 12003) Initial ≥ 3.0 N/mm² Water immersion \geq 2.0 N/mm² Thermal shock ≥ 2.0 N/mm² Shrinkage (EN 12808-4) ≤ 2 mm/m Skid / slip resistance ≤ 0.5 mm (EN 1308) -20 °C min. / +100 °C max. Service temperature **Water absorption** (EN 12808-4) After 240 min $\leq 0.1 \,\mathrm{g}$ **Chemical resistance** Resistant to many chemicals. Contact Sika Technical Services for additional information Joint width 1-15 mm APPLICATION INFORMATION **Mixing ratio** Part A : Part B = 94 : 6 Optional: 90g of glitter particles ~1.7 kg/l Fresh mortar density Consumption Tile adhesive Consumption is dependent on the substrate, surface profile, roughness, size of the tiles, the joints between them and application technique. (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 $\sim 2 \text{ kg/m}^2$ Medium 8 mm $\sim 2.5 \text{ kg/m}^2$

10 mm

NZ BUILDING PRODUCT INFORMATION SHEET

Large

SikaCeram® StarGrout 12/12/2024 File version 1.0 021720301000000011



 \sim 3 kg/m²

These figures are theoretical and do not allow for any additional material due to surface porosity, surface profile, variations in level or wastage etc.

Tile grout

The consumption is dependent on the size of the tiles, joint width and depth.

As a guide, consumption is indicated in following table and is expressed in g/m^2

Tile Size	Joint width			
Centimetres	1 mm	5 mm	10 mm	15 mm
Glass mosaic	519			
5 × 5 × 0.4	264	1180	2078	2 776
10 × 10 × 0.6	201	948	1770	2 487
15 × 15 × 0.9	202	971	1853	2 655
20 × 20 × 0.9	152	737	1422	2 060
30 × 30 × 1	113	553	1079	1580
30 × 60 × 1	<u>85</u>	417	818	1204
50 × 50 × 1	68	335	660	976
60 × 120 × 1.1	47	231	459	681

These figures are theoretical and do not allow for any additional material due to surface porosity, surface profile, variations in level or wastage etc.

Consumption can also be calculated using the following formula:

 $\mathbf{S} \times [(\mathbf{a}+\mathbf{b}+\mathbf{l})/(\mathbf{a}+\mathbf{l})(\mathbf{b}+\mathbf{l})] \times \mathbf{l} \times \mathbf{h} \times \mathbf{d} \times 10000$

S = Whole surface (m²)

a, b = Tile size (cm)

I = Joint size (cm)

h = Tile thickness (cm)

Substrate temperature +10 °C min. / +30 °C max. Pot Life ~45 min
Substrate temperature +10 °C min. / +30 °C max.
6 hadron to the control of the contr
Ambient air temperature +10 °C min. / +30 °C max.

Waiting time	Before grouting on floor tiles laid with:	Waiting time
	Normal-setting adhesive	24-36 hours
	Fast-setting adhesive	4-6 hours
	Thick-bed (traditional) adhesive	8–10 days
	Before grouting on wall tiles laid with:	
	Normal-setting adhesive	4-6 hours
	Fast-setting adhesive	2 hours

Above times are indicative. Always consult the appropriate tile adhesive Product Data Sheet.

Applied	product	ready	for use
---------	---------	-------	---------

Use	Waiting time
Pedestrian traffic	24–36 hours
Full traffic	~7 days
Water immersion	~7days

Values determined in laboratory conditions: +23 °C \pm 2 °C, R.H. 50 % \pm 5 %. Higher temperatures will reduce the indicated waiting time, lower temperatures lower temperatures increases waiting time.

MANUFACTURER AND IMPORTER INFORMATION

Manufacturer information Address

Sika Italia S.p.a, Via Luigi Einaudi 6,

NZ BUILDING PRODUCT INFORMATION SHEET



		20068 Peschiera Borromeo,	
		Milan, Italy	
Importer information	Address	Sika (NZ) Limited	
		85-91 Patiki Road	
		Avondale, Auckland 1026	
		New Zealand	
	Phone number	0800 745 269	
	Website	https://nzl.sika.com/	
	Email address	info@nz.sika.com	
	NZBN	9429000018791	

BUILDING CODE INFORMATION

Building Code clauses

Note: This product, on its own, is not within the scope of the NZ Building Code. However, when it is used as part of an impervious floor or wall lining system (E3/AS1) or with other building elements that must comply with the NZ Building Code, and it is used in accordance with that material supplier's specification and Sika's technical literature, it will contribute to meeting the requirements of the following clauses:

B1 Structure: Performance clauses B1.3.1, B1.3.2, B1.3.3 (a,b,j,q), B1.3.4

B2 Durability: Performance clause B2.3.1 - (b) 15 years

E3 Internal Moisture: Performance Clauses E3.3.3, E3.3.4, E3.3.5, E3.3.6

F2 Hazardous Building Materials: Performance clause F2.3.1

Building Code compliance statements

Performance B1.3.1, B1.3.2, B1.3.3 (a, b, j, q) B1.3.4: When used as an adhesive this product contributes to meeting the loading requirements that bonded lining elements are subjected to, as a result of self-weight, imposed in-use gravity loading, impact, and the effects of creep and shrinkage over time.

Performance B2.3.1 (b) 15 years: This product has been evaluated in accordance with B2/VM1. It meets this durability requirement and will remain serviceable for 15 years, or more, when installed and maintained in accordance with the relevant Sika technical literature. nzl.sika.com. According to Sika's "Service Improvement" records, maintained within its ISO9001:2015 Quality Management System, this product has performed successfully since it was introduced in 2017.

Performance E3.3.3, E3.3.4, E3.3.5, E3.3.6: When this product is used as an adhesive to bond ceramic or stone tiles, with a maximum moisture content of 6%, onto a Sika liquid applied membrane, or as a grout between the tile joints, it contributes to meeting the Clause E3 Internal Moisture requirements for impervious linings, in accordance with E3/AS1

Performance F2.3.1: This product meets this requirement when used and applied in accordance with Sika's installation instructions and does not present a health hazard to people occupying or using the building. Refer to the Sika Product Technical Data sheet and product Safety Data Sheet nzl.sika.com for further information if required

BASIS OF PRODUCT DATA

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

IMPORTANT CONSIDERATIONS

- For natural stone tiles, always carry out a preliminary test application first.
- Avoid application in direct sunlight and/or strong wind / draughts.

- Do not use on marble or natural stone tiles if they are susceptible to discolouration.
- Refer to tile manufacturer's instructions for guidance on providing expansion joints.
- When coloured grout is applied for aesthetics such as on polished porcelain or natural stone tiles, always carry out cleanability testing on a small area prior to full application.
- Ensure grout has set sufficiently before carrying out the tile cleaning procedure to avoid grout being removed from joint.
- The addition of glitter particles in the grout can have an impact on the final colour of the joint. Carry out a preliminary test prior to use to check final finishing.

NZ BUILDING PRODUCT INFORMATION SHEET



- Colours may be slightly different than shown on colour charts or samples. When colour considerations are critical, Sika recommends a mock-up or test to be carried out prior to selection and application. Also be aware that due to it's chemical nature, epoxy grouts (particularly light colours), may be inclined to discolour or yellow.
- Do not use for any applications that are not explicitly described in this Product Data Sheet.

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

DESIGN REOUIREMENTS

If the building elements to be bonded are within the scope of the NZ Building Code then the bonding instructions of the manufacturer / supplier of those elements must be followed

EOUIPMENT

Mixing

Electric single paddle mixer (< 500 rpm) with spiral paddle

Application

- Notched trowel
- Trowel
- Rubber blade
- Sponge
- Soft cloth
- Grout finishing tool

MIXING

SikaCeram® StarGrout is a reactive product. It sets from a chemical reaction between the 2 parts, A and B. It is therefore essential these parts are thoroughly mixed at the correct mixing ratio.

Prior to mixing all parts, mix Part A (resin) briefly using an electric single paddle mixer with a spiral paddle. Mix liquid and all the coloured pigment until a uniform colour has been achieved.

Add part B (hardener) to part A and mix parts A+B continuously until a uniformly coloured smooth consistency mix has been achieved. Mix full units only.

For a glitter effect finish to the tile grout, add the glitter particles to the fully mixed paste and mix until completely dispersed.

APPLICATION

Tile Adhesive

SikaCeram® StarGrout is applied using a suitable notched trowel.

Apply sufficient adhesive to the prepared fixing surface with the appropriate trowel / comb to the required bed thickness. Apply sufficient product to ensure adequate 'wetting' of the backs of the tiles.

NZ BUILDING PRODUCT INFORMATION SHEET

SikaCeram® StarGrout 12/12/2024 File version 1.0 021720301000000011

Tiling must to be carried out on freshly applied adhesive, exerting adequate pressure to ensure 100% complete and uniform contact with the adhesive to achieve optimum adhesion.

If a skin forms on the surface of the adhesive, immediately remove the adhesive layer with the trowel, discard material and apply a fresh layer of SikaCeram® StarGrout adhesive.

Adjust tiles if required.

Clean off surplus adhesive from tile face and between tile joints before the adhesive has dried.

After the required waiting time apply the appropriate grout into the tile joints.

SikaCeram® StarGrout is suitable for laying absorbent and non-absorbent tiles indoors without any size or support limits.

On cementitious substrates, SikaCeram® StarGrout can be used for laying non-absorbent tiles outdoors up to 10 000 cm 2 (e.g. 60 × 120 cm). On non-heated floors and indoor applications up to 7000 cm^2 (e.g. 80×80 cm). For facade application, mechanical clamps are recommended.

For tiles > 900 cm² (e.g. 30 x 30 cm), the double-spreading (buttering) technique is always recommended.

Tile Grout

Check adhesive has fully set before grouting.

SikaCeram® StarGrout is applied using an appropriate rubber

Completely fill and compact the joints uniformly.

Using the same spreader/ float, remove excess grout from the tile surfaces moving the tool diagonally across the joints.

After grouting, use a damp sponge or sponge float to clean the tile surfaces. Clean sponge regularly with clean water. For tiles with a textured surface, use a soft wet cloth to emulsify the grout while cleaning.

For final cleaning use a new sponge with clean water.

General information

Protect from adverse weather conditions, such as extremely high or low (freezing) temperatures, rain, direct exposure to sun, for at least 12-24 hours from application.

CLEANING OF EQUIPMENT

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

SUBSTRATE QUALITY

Tile adhesive

The substrate can be one of the following materials:

Cementitious, gypsum, paint coating, tiles, metal, glass fibre reinforced plastic.

For other types of substrates, contact Sika Technical Services for additional information before use

Cementitious substrates must be sufficiently cured and dried (2-6 weeks).



All substrates must be structurally stable, able to support the weight of the new tiling and provide a firm and securely fixed background. Surfaces must be clean, dry, free of any loose or friable particles, contaminants such as dust, dirt, oil, wax polish, grease, cement laitance or efflorescence.

Depending on the substrate condition and contaminants to be removed from the surface, use adequate preparation techniques to remove 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 can be prefilled and levelled with an additional layer of SikaCeram® StarGrout to a maximum thickness of 5 mm, applied at least 24 hours before full adhesive application. For larger and thicker areas of surface re-profiling and making good, use suitable mortars from the Sika MonoTop® or Sikafloor® Level range.

When laying tiles on non-absorbent or substrates with limited absorbency, such as existing ceramic tiles, painted surfaces etc. Check to confirm these surfaces are all stable, firmly and securely bonded. Then use suitable degreasing / descaling products to thoroughly and completely clean the surface.

For tiling in constantly damp or wet rooms, a suitable Sika® water-proofing product / system must be applied to the substrate before tiling.

Tile grouting

Check joints are dry, clean, clear of excess adhesive, contaminants and tile joint spacers. Remove from joint before grout application.

MAINTENANCE REQUIREMENTS

For maintenance of impervious wall and floor lining systems that have been installed to enable compliance with Clause E3/AS1, refer to the supplier of the system installed

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. 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.

The building product/building product line is not subject to warning or ban under section 26 of the Building Act 2004.

Sika (NZ) Limited

85-91 Patiki Road Avondale, Auckland 1026 New Zealand 0800 745 269 www.sika.co.nz

NZ BUILDING PRODUCT INFORMATION SHEET

