

**BUILDING TRUST** 

# PRODUCT DATA SHEET SikaCeram<sup>®</sup>-240 Rapid

# GREY, CEMENTITIOUS FAST SETTING FLOOR AND WALL TILE ADHESIVE

# CE

# DESCRIPTION

SikaCeram<sup>®</sup>-240 Rapid is a grey polymer modified, cementitious, fast setting, frost resistant floor and wall tile adhesive with reduced slip. For small, medium ceramic tiles in residential and commercial wet and dry environments. Suitable for bonding all types of ceramic to all types of absorbent/non – absorbent construction material substrates. Layer thickness <10,0 mm. Indoor and outdoor use. EN 12004: Classification - C2 FT. Product can also be used for spot-fixing indoor insulating panels.

# USES

Bonding the following types of tiles:

- All kinds of medium tiles
- Grès porcelain
- Ceramic
- Earthenware
- Glazed
- Porcelain
- Stoneware
- Terrazzo
- Unglazed

Bonding tiles for the following applications:

- Balconies
- Bathrooms
- Residential/commercial environments
- Facades
- Heated floors (water systems)
- Kitchens
- Swimming pools
- Terraces
- Wet areas
- Overlaying existing indoor sound ceramic tiles or stones

# **CHARACTERISTICS / ADVANTAGES**

- Fast
- Bonding floor and wall tiles
- Frost resistant
- No vertical slip, high slump resistance and grab
- Smooth application
- Typical bonding substrates: Anhydrite, cementitious, ceramic, gypsum
- Spot-fixing indoor insulating panels of polystyrene,
- polyurethane foam and glass / rock wool
- Low emissions
- Suitable for heated floors (water systems)

# **APPROVALS / CERTIFICATES**

CE Mark and Declaration of Permformance according to EN 12004-1 – Adhesives for tiles

# **PRODUCT INFORMATION**

Composition	Portland cements, selected aggregates, water retention additives, re-dis- persible polymer	
Packaging	25 Kg bag	
Appearance / Colour	Grey powder	
Shelf life	6 months from date of production.	

Product Data Sheet SikaCeram®-240 Rapid July 2019, Version 02.01 020404020010000178

Storage conditions	Product must be stored in original, unopened and undamaged sealed pack- aging in dry conditions at temperatures between +5 °C and +35 °C. Always refer to packaging.
Maximum Grain Size	Dmax: 0,5 mm
Product Declaration	CE-marking and Declaration of Performance as Quick setting powder ad- hesive with a high polymeric content for fixing ceramic tiles, Class C2FT, ac- cording to EN 12004-1:2017, based on assessment by notified laboratory and factory production control.

### **TECHNICAL INFORMATION**

Tensile Adhesion Strength	< 6 hours	≥ 0,5 N/	′mm²	(EN 12004-2)
	Initial	≥ 1,0 N/	′mm²	
	Water immersion	≥ 1,0 N/	′mm²	
	Heat ageing	≥ 1,0 N/mm <sup>2</sup>		
	Freeze-thaw cycles	≥ 1,0 N/	/mm <sup>2</sup>	
Slip Resistance	≤ 0,5 mm		(EN 12004-2)	
SYSTEMS				
System Structure	For the following substrates a primer shall be used:			
	Substrate		Primer	
	Calcium aluminate substrates		Sika <sup>®</sup> Primer-11W <sup>+</sup> (1:1)	
	(gypsum, plaster or calc screed)	ium sulfate	Sikafloor <sup>®</sup> -01 Primer	(1:1)
	Non and low absorbent	substrate	Sika <sup>®</sup> Primer-21W	

(linoleum, existing vinyl tiled floors)

Existing ceramic tiles

#### **APPLICATION INFORMATION**

Mixing Ratio	~ 6 litres of water per 25 kg bag		(24 % ± 1 %)		
Fresh Mortar Density	~1,5 kg/l				
Consumption	Consumption is dependent on the substrate, surface profile, roughness, size of the tiles, the joints between them and application technique. As a guide for a single adhesive layer :				
	Size of tiles	Notched trowel size	Consumption		
	Small	6 mm	~2 - 3 kg/m <sup>2</sup>		
	Medium	8 mm	~3 - 4 kg/m <sup>2</sup>		
	Large	10 mm	~5 - 6 kg/m <sup>2</sup>		
	These figures are theoretical and do not allow for any additional material due to surface porosity, surface profile, variations in level or wastage etc.				
Layer Thickness	10 mm max.				
Ambient Air Temperature	min. +5 °C, max. +35 °C				
Substrate Temperature	min. +5 °C, max. +35 °C				
Pot Life	~30 min. at 23 °C				
Open Time	$\geq$ 10 minutes (tensile adhesion strength $\geq$ 0,5N/mm <sup>2</sup> ) (EN 12004-2				
Curing Treatment	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				

 Product Data Sheet

 SikaCeram®-240 Rapid

 July 2019, Version 02.01

 020404020010000178



**BUILDING TRUST** 

Sikafloor®-02 Primer

SikaTop<sup>®</sup>-10

Use	Waiting time
Grouting floors / walkability	4–6 hours
Grouting walls	2 hours
Full traffic	Approx. 48 hours

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

# **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 stable and securely fixed background. Surfaces shall 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 should 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<sup>®</sup>-240 Rapid to a maximum thickness of **5mm**, applied at least 24 hours before full adhesive application. For higher thickness, site-batched mortars prepared with SikaLatex<sup>®</sup> Max or Sika ViscoBond<sup>®</sup> or repair mortars Sika MonoTop<sup>®</sup> or SikaRep<sup>®</sup> are to be used. In cases of demands for levelling the substrate, the self-leveling mortars from the Sika<sup>®</sup> Level range can be used. Cracks in substrates must be identified and sealed appropriately e.g. with Sikadur<sup>®</sup> epoxy resins.
- 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 applications in hot climates / environments, or on absorbent substrates, thoroughly pre-dampen the surface immediately prior to product application.
   Avoid any ponding / standing water on the surface.
   Surface must not be damp to touch.
- For tiling in constantly damp or wet rooms, then a suitable Sika<sup>®</sup> waterproofing product / systems should be applied to the substrate before tiling.

#### MIXING

Pour the recommended amount of clean cold water into a suitable, clean mixing container.

While stirring, slowly add SikaCeram<sup>®</sup>-240 Rapid powder to the water and then mix thoroughly using a low speed (~500 rpm) electric drill mixer until the material is fully mixed and lump free. Avoid entraining air into the mix by over mixing. Allow the mixed product to 'mature' for 2–3 minutes before remixing for 30 seconds.

The finished mix should have a creamy consistency, uniformly coloured and it is easy to apply and spread.

#### APPLICATION

SikaCeram<sup>®</sup>-240 Rapid is applied using a suitable notched trowel. Apply sufficient adhesive to the prepared fixing surface with the appropriate trowel and comb to the required bed thickness. Apply sufficient product to ensure adequate 'wetting' of the backs of the tiles.

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<sup>®</sup>-240 Rapid 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®-240 Rapidis suitable for laying absorbent and non-absorbent tiles indoors without any size or support limits. On cementitious substrates, SikaCeram®-240 Rapid is ideal for laying non-absorbent tiles indoors up to 7000 cm<sup>2</sup> (e.g.  $80 \times 80$  cm) and for tiles outdoors up to 3600 cm<sup>2</sup> (e.g. 60 × 60 cm). For tiles > 900 cm<sup>2</sup> (e.g. 30 x 30 cm), the double-spreading (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.

# IMPORTANT CONSIDERATIONS

- Gypsum plaster and anhydrite screed substrates must have a maximum moisture content of 0,5 %.
- If a waterproofing layer is required under the tiles, cement and acrylic-based systems are suitable for use under SikaCeram<sup>®</sup>-240 Rapid.
- For application and consumption details of other system products, refer to the respective Product Data Sheets.
- For natural stone tiles always carry out a small test application first.
- Avoid application in direct sunlight and/or strong wind / draughts.
- Do not apply on metal or wood surfaces
- Do not add anything to the product that is not specified in this Product Data Sheet.



Product Data Sheet SikaCeram®-240 Rapid July 2019, Version 02.01 020404020010000178

**BUILDING TRUST** 

Do not use for any applications not explicitly described in this Product Data Sheet.

# **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.

## 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.

# 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.

# **LEGAL NOTES**

The information, and, in particular, the recommendations relating to the application and enduse 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 Hellas ABEE

15 Protomagias Str. 14568 Kryoneri Attica-Greece Tel.: +30 210 8160 600 Fax: +30 210 8160 606 www.sika.gr | sika@gr.sika.com



Product Data Sheet SikaCeram®-240 Rapid July 2019, Version 02.01 020404020010000178

SikaCeram-240Rapid-en-GR-(07-2019)-2-1.pdf



**BUILDING TRUST**