

PRODUCT DATA SHEET

SikaCeram[®]-88

Cementitious tile adhesive

DESCRIPTION

SikaCeram[®]-88 is a one-pack premixed cementitious tile adhesive containing, cement, polymers, quartz minerals and additives, for bonding ceramic tiles and mosaics to floors and walls.

USES

SikaCeram[®]-88, is used for bonding ceramic tiles in continuous thin layers, up to 10 mm thick. Due to its excellent adhesion strength, it is used to replace the traditional method of bonding tiles (using cement and sand).

SikaCeram[®]-88 is suitable to bond the following types of tiles:

- Ceramic and mosaic tiles
- Porcelain tiles (SikaCeram[®]-88 shall be mixed with SikaLatex[®]-88 or SikaLatex[®]-118)

SikaCeram[®]-88 can be used on walls and floors internally, on these substrates:

- Concrete and mortar
- Bricks

CHARACTERISTICS / ADVANTAGES

- Easy to use with excellent workability
- Good adhesion to most common substrates (concrete, cementitious mortar, stone, bricks, etc.)
- Can be used with SikaLatex[®]-88 or SikaLatex[®]-118 to increase performance of the adhesive

PRODUCT INFORMATION

Composition	Cementitious mortar
Packaging	<ul style="list-style-type: none">▪ 20 kg bag▪ 25 kg bag
Appearance / Colour	Grey powder
Shelf Life	6 months from date of production
Storage Conditions	Store properly in original, unopened and undamaged sealed packaging in dry conditions. Not sensitive to frost.
Maximum Grain Size	1.2 mm (EN 12192-1)

TECHNICAL INFORMATION

Tensile Adhesion Strength	Standard condition	$\geq 0.5 \text{ N/mm}^2$	(EN 12004–2:2017, 8.3)
---------------------------	--------------------	---------------------------	------------------------

APPLICATION INFORMATION

Mixing Ratio	<ul style="list-style-type: none">4.4–4.8 L of water per 20 kg bag5.5–6.0 L of water per 25 kg bag												
Consumption	<p>This depends on the level, profile and surface roughness of the substrate, the size of the tiles and the technique of placing (simple placing or "back"-buttering).</p> <p>As a guide, in kilogram of powder per m² on flat surfaces:</p> <table><thead><tr><th>Tiles size</th><th>Coverage</th><th>Trowel size</th></tr></thead><tbody><tr><td>Mosaics and small tiles</td><td>~2.0–3.0 kg/m²</td><td>3 mm × 3 mm notched trowel</td></tr><tr><td>Normal size tiles (30 cm × 30 cm)</td><td>~5.0–5.5 kg/m²</td><td>6 mm × 6 mm notched trowel</td></tr><tr><td>Large size tiles up to 3600 cm² (internal floors)</td><td>~10.0–11.0 kg/m²</td><td>12 mm × 12 mm notched trowel</td></tr></tbody></table> <p>The consumption above may only serve as a guide. It is highly recommended to carry-out trials on site to determine the actual coverage.</p>	Tiles size	Coverage	Trowel size	Mosaics and small tiles	~2.0–3.0 kg/m ²	3 mm × 3 mm notched trowel	Normal size tiles (30 cm × 30 cm)	~5.0–5.5 kg/m ²	6 mm × 6 mm notched trowel	Large size tiles up to 3600 cm ² (internal floors)	~10.0–11.0 kg/m ²	12 mm × 12 mm notched trowel
Tiles size	Coverage	Trowel size											
Mosaics and small tiles	~2.0–3.0 kg/m ²	3 mm × 3 mm notched trowel											
Normal size tiles (30 cm × 30 cm)	~5.0–5.5 kg/m ²	6 mm × 6 mm notched trowel											
Large size tiles up to 3600 cm ² (internal floors)	~10.0–11.0 kg/m ²	12 mm × 12 mm notched trowel											
Layer Thickness	3 mm min. / 10 mm max.												
Ambient Air Temperature	+5 °C min. / +40 °C max.												
Substrate Temperature	+5 °C min. / +40 °C max.												
Open Time	Open time is ~20 minutes under normal temperature and humidity conditions. In unfavourable conditions, the open time may be shorter.												
Applied Product Ready for Use	At +25 °C Before jointing works <u>Min. 24 hours</u> Before opening to light foot traffic <u>Min. 24 hours</u> Before opening to full traffic <u>Min. 7 days</u>												
Adjustability Time	Once the tiles are placed into the mortar, they can be adjusted within ~20 minutes (at +20 °C).												

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

- When use in conjunction with SikaLatex®-88 / SikaLatex®-118, please ensure that all ratio of SikaLatex®-88 / SikaLatex®-118 to SikaCeram®-88 are consistent. Please refer to respective data sheet for more details.
- Protect freshly applied material from extreme conditions, rain, etc.
- Do not attempt to dampen down the adhesive on the floor/wall to extend the open time as this may affect the bond performance.

Expansion Joints

Expansion / movement joints must be provided to allow for movement between adjacent building components.

- Over existing joints
- Where two different substrates meet, e.g. timber and concrete
- Around fix elements on the floor, e.g. columns
- At internal vertical corners
- Around the perimeter of the floor
- At internal floors, where dimensions exceeds 9 m or 6 m when exposed to sunlight.
- At external floors where dimensions exceeds 4.5 m
- On wall surfaces 3–4.5 m apart vertically

The expansion / movement joints must not be less than 6 mm and not wider than 10 mm, and should go right through the adhesive bed to the substrate. It should be kept free from dirt and adhesive droppings. The joints should be filled with Sikaflex®-11 FC+ or Sikaflex® PRO-3.

ECOLOGY, HEALTH AND SAFETY

User must read the most recent corresponding Safety Data Sheets (SDS) before using any products. The SDS provides information and advice on the safe handling, storage and disposal of chemical products and contains physical, ecological, toxicological and other safety-related data.

APPLICATION INSTRUCTIONS

SUBSTRATE QUALITY / PRE-TREATMENT

- Ensure all concrete slabs are allowed to cure fully and have a wood float finish. Steel trowel finished concrete surfaces must be mechanically abraded prior to commencement of tiling works.
- Ensure all surfaces are sound, dry and free from excessive movement, oil, dust, grease, wax, curing compounds, release agents and any other loose or contaminating materials. All dust, loose and friable material must be completely removed from all surfaces before application of the SikaCeram®-88, preferably by brush and/or vacuum.
- Weak concrete and/or cement laitance must be removed. Repairs to the substrate, filling of blowholes / voids, etc. must be carried out using products from the SikaTop® or Sika® MonoTop® range of material.
- If the substrate is very porous, and/or if the temperature is high and the relative humidity is low, it is advisable to dampen down the substrate's surface with water (do not leave any standing water) or apply Sika® Primer-11 WMY. Please contact Sika's local representative for further information on the recommended primer for the specific substrate.
- The maximum variation in the level of the substrate must not exceed 5 mm for floors (using a 3 metres straight-edge) and 4 mm for walls (using a 2 metres straight-edge).
- Cementitious substrates must be at least 1 month old. All rendered surfaces must be allowed to cure for at least 7 days prior to the commencement of tiling works. Allow a waiting time of 24–48 hours if repair materials (e.g. SikaTop® / Sika® MonoTop®) are used to repair the substrate.
- All types of cement board / dry walls should be fixed in accordance with the manufacturer's instructions and the relevant standards.
- The recommended thickness for fibre cement sheets is 9 mm (minimum) for heavy duty commercial applications, and 6 mm (minimum) for underlay or wall / floor.
- The recommended thickness for compressed fibre cement sheets is 15 mm (minimum) for floor, and 9 mm (minimum) for wall.
- The recommended thickness for gypsum plaster-board sheets is 10 mm (minimum) for wall.

MIXING

Place about 80 % of the pre-measured clean water or SikaLatex®-88 / SikaLatex®-118 into a clean container and gradually add the whole bag of SikaCeram®-88 into it while continuously mixing. Add the remaining water until the desired consistency is obtained. Mix thoroughly for a minimum of 3 minutes.

Leave the material to stand in the container for a minimum of 5 minutes. Then, remix the material for another 15 seconds. SikaCeram®-88 is now ready for use. SikaCeram®-88 must be mechanically mixed using a forced action mixer or in a clean container using a drill and mixing paddle (< 500 rpm). Do not use a free fall concrete mixer to mix SikaCeram®-88.

APPLICATION

SikaCeram®-88 is applied using a notched trowel onto the substrate. Choose the size of trowel that will give the right thickness on the back of the tile.

After the surfaces of the substrate has been prepared, apply SikaCeram®-88 onto the substrate using a notched trowel. SikaCeram®-88 should be applied onto the substrate at a rate of 1 m² per installation. Applying at rates greater than this can result in skinning of adhesive before the tiles are laid. Once the adhesive is applied onto the substrate, ensure that skinning has not occurred prior to setting the tiles. If a surface film has developed, make a pass over the adhesive using a notched trowel. Rework the adhesive before setting the tiles within the open time. When setting the tiles into the adhesive, use the Tarver Method; press, slide perpendicular and slide return. This method will ensure that any air entrapped between the beads comes out easily at the ends. For tiles with lugs, grooves or uneven backing, it is required to back-butter the tile with adhesive before setting them down. The final bed thickness of SikaCeram®-88 should be at least 4 mm for wall and 8 mm for floor. Once the tiling works are completed, do not disturb the tiles for at least 6–8 hours.

As a guide:

SikaCeram®-88 is used for fixing absorbent / ceramic tiles up to a maximum size of 3600 cm² (e.g. 60 cm x 60 cm) for indoor floors, up to 1800 cm² (e.g. 30 cm x 60 cm) for indoor walls.

CLEANING OF TOOLS

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

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.

Sika Kimia Sdn. Bhd.

Lot 689, Nilai Industrial Estate,
71800 Nilai, Negeri Sembilan D.K.
Malaysia
Phone: +606-7991762
e-mail: info@my.sika.com
Website: www.sika.com.my



Product Data Sheet

SikaCeram®-88
December 2024, Version 06.01
021710101000000030

SikaCeram-88-en-MY-(12-2024)-6-1.pdf

