

PRODUCT DATA SHEET

SikaCeram[®]-88 EM

CEMENTITIOUS TILE ADHESIVE

DESCRIPTION

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

USES

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

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

- Ceramic, porcelain and homogeneous tiles
- All types of low and high absorption tiles

SikaCeram[®]-88 EM can be used on these substrates:

- Concrete and mortar
- Bricks

SikaCeram[®]-88 EM can be used on walls and floors. For external application, SikaCeram[®]-88 EM must be used with SikaLatex[®]-118 EM, and it is recommended that trials be carried-out first.

CHARACTERISTICS / ADVANTAGES

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

PRODUCT INFORMATION

Packaging	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	0.8 mm (EN 12192-1)

APPLICATION INFORMATION

Mixing Ratio	6.0–6.5 L of water per 25 kg bag
Consumption	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). As a guide, per m ² on flat surface:

Mosaics and small tiles	2.0–4.5 kg/m ²
Normal size tiles (20 cm x 20 cm)	4.5–9.0 kg/m ²

* This may only serve as a guideline. It is highly recommended to carry-out trial on site to determine the actual consumption per m².

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 approximately 20 minutes under normal temperature and humidity conditions. In unfavourable conditions, the open time may be shorter.
Adjustability Time	Once the tiles are placed into the mortar, they can be adjusted within ~20 minutes (at +20 °C).
Applied Product Ready for Use	At +25 °C
	Before jointing works
	Before opening to light foot traffic
	Before opening to full traffic
	Min. 24 hours
	Min. 24 hours
	Min. 7 days

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 EM, 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.

MIXING

Place about 80 % of the pre-measured clean water (depending on the consistency required) into a clean container and gradually add the whole bag of Sika-

Ceram[®]-88 EM 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 EM is now ready for use.

SikaCeram[®]-88 EM 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 EM.

APPLICATION

SikaCeram[®]-88 EM 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 EM onto the substrate using a notched trowel. SikaCeram[®]-88 EM 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 EM 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 EM is used for fixing absorbent / ceramic tiles up to a maximum size of 3 600 cm² (e.g. 60 cm x 60 cm) for indoor floors, up to 1 800 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.

FURTHER INFORMATION

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 for floors, and Sikasil®-129 Kitchen & Bathroom for walls.

IMPORTANT CONSIDERATIONS

- Follow the recommended water dosage when mixing SikaCeram®-88 EM.
- Apply only to sound, prepared substrates.
- Do not exceed the maximum layer thickness or go below the minimum layer thickness.
- When use in conjunction with SikaLatex®-118 EM, please ensure that all ratio of SikaLatex®-118 EM to SikaCeram®-88 EM are consistent. Please refer to SikaLatex®-118 EM product data sheet for more details.
- Protect freshly applied material from freezing 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.

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.

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Product Data Sheet

SikaCeram®-88 EM

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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 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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