

PRODUCT DATA SHEET

SikaCeram[®]-706

(formerly MasterTile[®] 706)

HIGH PERFORMANCE, EPOXY BASED TILE ADHESIVE

DESCRIPTION

A two-component, epoxy resin based adhesive for permanent bedding of all types of tiles, natural stones, glass mosaics and agglomerates. Suitable for use in hot and tropical climatic conditions.

USES

SikaCeram[®]-706 is used wherever a high degree of chemical resistance and high mechanical properties are required.

Areas of application:

- For indoor and outdoor use
- For walls and floors
- For chemical-resistant and water-impermeable laying of wall and floor coverings made of ceramic tiles, mosaic as well as bricks on renders, cement screeds, concrete and timber chipboards
- For ceramic coverings in dairies and bakeries, soft drink industries, Industrial and canteen kitchens, butcheries, slaughter houses, fat processing industries, battery rooms, galvanization, electrical substations and plants rooms, dye works, bleaching works, tanneries, paper mills, laboratories and hospitals
- For laying of ceramic tiles in swimming pools, hot springs, baths in hospitals as well as for ceramic tiles in shower facilities or wellness areas
- For ceramic tiles in administration buildings, hotels, schools, toilets, sewage plants, sewers, cattle stabling and for stairs exposed to de-icing salt

FEATURES

- Non-absorbent and easy to clean
- Resistant to chemicals, a variety of acids, lye, grease and oil
- Water impermeable and water vapour barrier, protects moisture-sensitive substrates from water and moisture
- High wear resistance, resistant to rolling and grinding loads, insensitive to cleaning by steam jet
- Will not support bacterial growth in kitchens and swimming pools
- Crack-free curing and shrinkage free setting
- Resistant to frost and weathering, multi-purpose use for vertical, horizontal, external and internal applications
- High mechanical strength, low modulus of elasticity and therefore superior to cement-based joint grouts
- Workable and easy to apply
- Almost odourless, no unpleasant odour during the application
- Tools and equipment can be cleaned in warm water

CERTIFICATES AND TEST REPORTS

SikaCeram[®]-706 meets the requirements of EN 12004 for class R2T.

PRODUCT INFORMATION

Composition	Epoxy resin with fine fillers
Packaging	5 kg combined unit (Part A + Part B)
Shelf life	12 months from date of production
Storage conditions	Store in undamaged, original sealed packaging in dry conditions at temperatures between +5°C and +30°C. Protect from direct sunlight, heat and moisture.
Colour	White and Grey
Density	~1.55 kg/l (mixed, at +25°C)

TECHNICAL INFORMATION

Service temperature	+60°C max.
Chemical resistance	Excellent resistance to most aqueous systems including sewage, urine, salt water, dilute acids, oils and fats. For further information, please contact Sika's sales representative.

APPLICATION INFORMATION

Consumption	<p>Consumption and coverage depends on the surface profile and roughness of the substrate, size and reverse profile of the tiles and the placing technique (simple placing "floating" or back to back "buttering-floating"). As a guide for simple placing technique:</p> <table><thead><tr><th>Required notch size:</th><th>Quantity of mixed material:</th></tr></thead><tbody><tr><td>4 mm</td><td>~1.7 kg/m²</td></tr><tr><td>6 mm</td><td>~2.5 kg/m²</td></tr><tr><td>8 mm</td><td>~3.2 kg/m²</td></tr><tr><td>Solid bed application</td><td>~1.6 kg/mm thickness</td></tr></tbody></table> <p>For small sized tiles (side ≤30 cm), use small squared notch size trowel (4-6 mm) and progressively increases for medium tiles (side ≤45 cm, trowel 6-8 mm) or large tiles (side ≤60 cm, trowel 8-10 mm). These figures are theoretical and do not allow for any additional material due to surface porosity, surface profile, variations in level, wastage or any other variations. Apply product to a test area to calculate the exact consumption for the specific substrate conditions and proposed application equipment.</p>	Required notch size:	Quantity of mixed material:	4 mm	~1.7 kg/m ²	6 mm	~2.5 kg/m ²	8 mm	~3.2 kg/m ²	Solid bed application	~1.6 kg/mm thickness
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4 mm	~1.7 kg/m ²										
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8 mm	~3.2 kg/m ²										
Solid bed application	~1.6 kg/mm thickness										
Layer thickness	Min. 2 mm When using multiple units, one after the other, do not mix the following unit until the previous one has been used in order to avoid a reduction in handling time.										
Ambient air temperature	+10°C min. / +35°C max.										
Dew point	Beware of condensation. Substrate temperature during application must be at least 3°C above dew point.										
Substrate moisture content	< 5 % pbw moisture content. Test method: Sika®-Tramex meter, CM - measurement or Oven-dry-method. No rising moisture according to ASTM D4263 (Polyethylene-sheet).										
Open Time	<table><thead><tr><th>Temperature and relative humidity:</th><th>Open Time:</th></tr></thead><tbody><tr><td>+25°C and 50 % r.h.</td><td>~60 min.</td></tr><tr><td>+40°C and 50 % r.h.</td><td>~30 min.</td></tr></tbody></table>	Temperature and relative humidity:	Open Time:	+25°C and 50 % r.h.	~60 min.	+40°C and 50 % r.h.	~30 min.				
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Curing time

Normally reactive resin products require at least 7 days curing at 25°C to achieve the specified performance and service expectations. At lower temperatures the curing period will be extended.

Application time

Application:

Working time

Cleaning / Emulsifying

Time:

~45 minutes

~20 - 30 minutes

Values determined in laboratory conditions: +23°C ± 2°C, R.H. 50 % ± 5 %.

Higher temperatures will reduce the indicated waiting times, lower temperatures will increase the indicated waiting time.

Applied product ready for use

Use:

Wall grouting

Floor grouting

Light foot traffic

Waiting time:

~4 hours

~16 hours

~16 hours

Values determined in laboratory conditions: +23°C ± 2°C, R.H. 50 % ± 5 %.

Higher temperatures will reduce the indicated waiting times, lower temperatures will increase the indicated waiting time.

BASIS OF PRODUCT DATA

- All technical data stated in this Data Sheet are based on laboratory tests. Actual measured data may vary due to circumstances beyond our control.
- Internal Reference - Version: MBS_CC-UAE/Tile_706_06_15/v1/12_19

FURTHER INFORMATION

General Method Statement (GMS)

IMPORTANT CONSIDERATIONS

- Protect from adverse weather conditions, such as extremely high or low temperatures, rain, direct exposure to sun, wind, etc. for at least 24 hours from application.
- Vertical fixing of tiles with the SikaCeram®-706 is possible, large format very heavy tiles may need additional support to prevent slippage.
- Avoid application in direct sunlight.
- Always perform a test on cleanability and staining before bonding natural stone or any type of tile with absorbent or porous surface.
- Use a soft felt to emulsify the product while cleaning in case tiles with structured surface.
- Always perform a preliminary test on cleanability if applying on tiles in colour contrast.
- Do not partially mix. Mix only full sets.
- Do not add fillers, water or solvents.
- For application above waterproofing layers, please contact Sika's Technical Department.
- Movement joints where appropriate should be filled with suitable sealant from Sika's range, for normal practices refer to the BS Standard 5385.
- Tiling should be in accordance with relevant international Codes of Practice.
- Generally, exposure to high exterior temperatures of 40°C will have some effect on the tiles and pot life of the adhesive.

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

Mortar and concrete should be older than 28 days (depends on minimal requirement of strengths).

Verify the substrate strength (concrete, masonry, natural stone).

The substrate surface (all types) must be clean, dry and free from contaminants such as dirt, oil, grease, existing surface treatments and coatings, etc.

The substrate must be sound and all loose particles must be removed.

SUBSTRATE PREPARATION

Concrete, mortar, stone, bricks: Substrates must be sound, dry, clean and free from laitance, ice, grease, oils, old surface treatments or coatings and all loose or friable particles must be removed to achieve a laitance and contaminant free, open textured surface. Must be cleaned and prepared thoroughly to an acceptable quality. Any necessary repair work should be carried out prior to tiling. Avoid dew point conditions.

MIXING

SikaCeram®-706 must be mixed with a suitable drill and mixing paddle. Add Part A and Part B and mix until a uniform colour and consistency are obtained. Avoid aeration while mixing. Mix only that quantity which can be used within its pot life.

APPLICATION

Bedding

Apply the mixed SikaCeram®-706 to the substrate using a suitably sized notch trowel i.e: 4 mm, 6 mm or 8 mm, depending on the size and thickness of the tile. Solid bed fixing can be achieved by back buttering the tile with a thin layer of SikaCeram®-706 before fixing into the notched bed. Ensure that the size of the area can be tiled within the pot life of the SikaCeram®-706.

Tiling

Tiles should be pressed into place and properly aligned when bedded, ensure at least 80% of the tile back is in contact with the adhesive. A minimum tile joint width of 2 mm must be left for the grouting and 3 mm where thicker tiles are used.

CLEANING OF EQUIPMENT

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

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 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.

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ISO 9001, 14001, 45001 – SGS
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ISO 9001, 14001 – SGS
-Sika Saudi Arabia Limited
ISO 9001, 14001 – TÜV
-Sika MB Construction Chemicals LLC
-Master Builders Solutions LLC

All products are supplied under a management system certified to conform to the requirements of the quality, environmental and occupational health & safety standards ISO 9001, ISO 14001 and ISO 45001.



Product Data Sheet

SikaCeram®-706

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