

Sika® Ceram-101 (Formerly Sika® Tile Fix 5)

General Purpose, Non-shrink Cementitious Tile Adhesive for Thin Bed Application

Product Description	Sika® Ceram-101 is a cementitious, non shrink, polymer containing thin bed tile adhesive used for permanent fixing of tiles. It is ready to use with the addition of water. It, can be used for bonding of tiles internally (vertical and horizontal). Suitable for use in tropical and hot climatic conditions.
Uses	Sika® Ceram-101 is suitable for bonding the following types of high absorption tiles: <ul style="list-style-type: none">■ Ceramic, natural and artificial stone tiles■ All types of high absorption ceramic tiles except those with very low absorption, such as glazed stoneware. Sika® Ceram-101 can be used on substrates including: <ul style="list-style-type: none">■ Concrete■ Cement Mortars■ Bricks
Advantages	<ul style="list-style-type: none">■ Very good adhesion to most of the substrates (concrete, cementitious mortar, stone, bricks...)■ Easy to use with excellent workability and thixotropic consistency■ Good bond strengths■ Non Toxic

Product Data

Form	Grey powder
Packaging	25 kg bag
Storage	Store in a dry area between 5°C and 35°C. Protect from direct sunlight.
Storage Conditions / Shelf-Life	12 months minimum from date of production if stored properly in original unopened, sealed and undamaged packaging.
Technical Data	
Chemical Base	Cementitious mortar modified with polymers.
Density (at 25°C)	Fresh mortar density: ~ 1.80 kg/lt
Pot life (at 25°C)	Approximately 40 minutes
Layer Thickness	Minimum 2mm Maximum 5mm



Mechanical / Physical Properties

Mechanical Strengths (28 day) (w/p = 0.20)

Compressive strength: ~ 12.0 N/mm²
Adhesion (pull-off): ~ 1.7 N/mm² (substrate failure)

System Information

Application Details

Consumption

The consumption depends on the surface profile and roughness of the substrate and on the size of the tiles and the placing technique (simple placing or back-back-“buttering”).
One 25 kg bag will cover approximately 5.6 – 8.2 m² at 3- 2 mm thickness.

Substrate Quality

The substrate must be structurally sound, cement laitance free, clean and free from dirt, oil, grease or other contaminants and loose or friable particles.

Substrate Preparation / Priming

Weak concrete and/or cement laitance must be removed by suitable mechanical means such as abrasive blast cleaning; high pressure water jetting (minimum 150 bar); scabbling or needle gunning. On “new” or smooth faced concrete, surfaces should be sand blasted.

Repairs to the substrate, filling of blowholes/voids etc. must be carried out using appropriate products from the Sika® Rep range of materials or with using on site produced mortars improved with Sika® Latex. Allow a waiting time of 24 to 48 hours before placing the tilestiling.

All dust, loose and friable material must be completely removed from all surfaces before application of the product, preferably by brush and/or vacuum.

In normal conditions, no primer is required. Use clean, cool water to pre-dampen the substrate especially if the substrate is very porous and if the temperature is high and relative humidity low - do not leave any standing water.

Variations in level must be less than 5 mm, measured with a 2 metre straight edge. If necessary, the substrate should be levelled prior to application.

Application Conditions / Limitations

Substrate Temperature

Minimum: +5°C
Maximum: +35°C

Ambient Temperature

Minimum: +5°C
Maximum: +40°C

Application Instructions

Mixing

Add about 5.5 – 6.0 litres clean, cold water to a 25 kg bag. Mix mechanically using a forced action mixer or slow speed drill (< 500 rpm) and mixing paddle for at least 3 minutes until a homogeneous mix, free of lumps is achieved. Do **NOT** use a normal free fall concrete mixer. Do not mix more material than can be used within the open time.

Leave material to stand in mixing container until the majority of bubbles have dispersed (minimum 2 minutes). Then remix the material for 15 seconds - the product is now ready for use.

Application Method / Tools

Apply **Sika®Ceram-101** at 2 - 3 mm thickness directly to the concrete substrate, using a notched trowel and spread the mortar evenly over the area to be tiled. Cover only an area that can be tiled within 15 - 30 minutes.

Apply with “V”-notched trowels for small tiles.

Apply with square notched trowel for bigger tiles.

Press tiles firmly into the mortar with a twisting action to ensure optimum adhesion.

Cleaning of Tools

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

Rectification Time

Once the tiles are set into the mortar, they can be adjusted for up to approximately 10 minutes (at +25°C)

Notes on Application / Limitations

Cementitious substrates must be strong enough for application of the tiles and the substrates should not continue to shrink after the installation of the tile. Do not exceed the recommended water dosage. Apply only to sound, prepared substrates. Do not exceed maximum layer thicknesses. If additional waterproofing underneath the tiles is required, then the following products can be used: SikaTop® Seal-107, Sika® Lastic-150, etc. Refer to the relevant product data sheet for more information. Protect freshly applied material from rapid drying due to heat, wind etc. and from contact with water or other liquids before the mortar has hardened. It is not necessary to pre-dampen the tiles.

Curing Details

Applied Product ready for use (at +25°C)	Before for jointing / grouting works	Min. 24 hours
	Before opening to light foot traffic	Min. 24 hours
	Before opening to full traffic	Min. 14 days

Notes

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.

Health and Safety Information

For information and advice on the safe handling, storage and disposal of chemical products, users should refer to the most recent Material Safety Data Sheet 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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