

## PRODUCT DATA SHEET

# SikaCeram<sup>®</sup>-251 Flex

HIGH PERFORMANCE CEMENT-BASED TILE ADHESIVE C2TES1 CLASSIFIED

### DESCRIPTION

SikaCeram<sup>®</sup>-251 Flex is cementitious deformable adhesive with improved characteristics, slip-resistance and extended open time suitable for setting all kinds of tiles on floors and walls, inside and outside, for residential and commercial areas.  
The adhesive is classified as C2TES1.

### USES

SikaCeram<sup>®</sup>-251 Flex is suitable for bonding the following types of tiles:

- Large size ceramic tiles
- Porcelain, glass, granite, marble
- Agglomerated marbles, resin and non absorbent tiles

### CHARACTERISTICS / ADVANTAGES

- Deformability
- No vertical slipping
- Extended open time
- Creamy consistency

SikaCeram<sup>®</sup>-251 Flex can be used in indoor and outdoor applications, on floors and walls on the following surfaces:

- Gypsum or cement- based substrates
- Concrete, mortar beds, masonry, cementitious plaster
- Hollow Concrete Blocks
- Existing ceramic tiles, stone walls.

### PRODUCT INFORMATION

<b>Composition</b>	Cement based
<b>Packaging</b>	20 kg in paper bags
<b>Appearance / Colour</b>	Creamy white or grey powder
<b>Shelf life</b>	12 months from the date of production
<b>Storage conditions</b>	Stored properly in original, unopened and undamaged sealed packaging in dry conditions

## TECHNICAL INFORMATION

### Tensile adhesion strength

	Requirement	Test method
7 days	≥ 1.0 N/mm <sup>2</sup>	BS 1542
28 days	≥ 1.0 N/mm <sup>2</sup>	BS 1542
Extended open time (30 min.)	≥ 1.3 N/mm <sup>2</sup>	EN 1346

Density 1.65 Kg/ltr

## APPLICATION INFORMATION

Mixing ratio	3.6 - 4.8 l/20 kg
Consumption	Depending on the substrate surface's profile and roughness, as well as on the application technique . As a guide: 2.5 to 6.5 kg/sqm
Ambient air temperature	+5°C min. / +30°C max.
Substrate temperature	+5°C min. / +30°C max.
Pot Life	~ 2 hours 30 min (20°C)
Open Time	25 min. (20°C) Open time depends on temperature and conditions which can be various,so try by finger wetting properties of the adhesive.

## APPLICATION INSTRUCTIONS

### SUBSTRATE QUALITY / PRE-TREATMENT

Substrates must be properly cured, structurally sound, clean, dry and free of all contaminants such as dust, dirt, oil, grease, cement laitance, efflorescences, previous coatings and other surface treatments. Depending on the contaminants to remove, perform adequate preparation techniques, such as water-jet washing or sandblasting, in order to remove all traces of previous coatings which could reduce the product's adhesion on the substrate.

Cracked substrates must be sealed with epoxy resins.

When laying on unabsorbing or fairly absorbing substrates, such as old ceramics, stones, paints, check everything is safely adhered and stable and use degreasing/descaling products to properly clean the surface.

For applications under hot climates on absorbent substrates, adequately dampen the surface prior product use. However, avoid stagnant water on the surface, that shall not be moist to touch and not be dark-mat (wet surface appearance: saturated, with surface dry). The back side of the tiles should be free from dust and coatings

### MIXING

SikaCeram®-251 Flex should be added to the indicated water amount slowly while mixing with an electric low speed mixer until a homogeneous and lumps free mix is achieved. After blending, leave the product maturing 2 to 3 min and then briefly stir it prior the application. The obtained mix results in very creamy consistency, easily spreadable.

### APPLICATION

SikaCeram®-251 Flex is applied using a properly-sized notched trowel. Apply to the substrate with the flat side of the trowel. The amount of product should be enough to ensure complete wetting of the tile's rear. Apply additional adhesive with notch side of trowel held at 60° angle to the surface, combing in one direction. Tiling has to be carried out on fresh glue, exerting an adequate pressure to ensure contact with the adhesive, and thus the perfect bonding. In case a surface film is formed on the adhesive, it is necessary to wipe the trowel on the adhesive layer previously applied. Press tile firmly into place in a twisting action and beat it with a rubber mallet. Avoid application under direct sun beams exposure and/or strong wind. With some tile, back-buttering is advisable.

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## CURING

Protect the installed tiles from direct rain and strong sun for 5 to 7 days.

Wall and floor joints can be grouted after 48 hours with tile grout.

## CLEANING OF EQUIPMENT

Thoroughly clean all tools and equipments with water before the product has set, preferably immediately after use. Once hardened it can only be removed by mechanical means.

## FURTHER INFORMATION

The applicable recommendations, guidelines, European Standards, regulations and Safety Data Sheets are to be observed, together with the recognized architectural and engineering regulation.

## IMPORTANT CONSIDERATIONS

Make a test area prior to carry-ing out any work with natural stones tiles. Sika-Ceram®-251 Flex shall not be applied on the following cases:

- On metal surfaces and wood
- On old ceramic tiles outdoor
- For all cases not explicitly described.

## 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.

## 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.

## 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 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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### PRODUCT DATA SHEET

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