

PRODUCT DATA SHEET

SikaTile®-405 Lite

A FLEXIBLE, PREMIUM, SAND AND SILICA FREE, TILE AND STONE ADHESIVE WITH LIGHTWEIGHT GLASS TECHNOLOGY FOR A SMOOTH, EASY TO TROWEL APPLICATION

DESCRIPTION

SikaTile®-405 Lite is a flexible, premium, sand and Silica free, tile and stone adhesive with Lightweight Glass Technology for a smooth, easy to trowel application.

SikaTile®-405 Lite superior non-sag and slip resistance for large heavy tiles and non-slump properties to eliminate tile lipage.

SikaTile®-405 Lite is ideal for internal and external, for wall and floor applications.

SikaTile®-405 Lite is white in colour making it suitable for fixing white and translucent natural stone.

USES

SikaTile®-405 Lite is suitable for both thin-bed and thick-bed tile and stone applications up to 10mm layer thickness.

- Suitable for residential & commercial applications
- Thin and thick-bed tiling applications up to 10mm thick
- Wall & floor applications
- Internal and external applications
- Sika approved under-tile waterproofing systems
- Under-tile heating systems
- Sika approved acoustic reduction underlayment's

Suitable substrates include;

- Concrete
- Compressed cement boards*
- Cement-based screeds and renders
- Ceramic tile underlay / Fibre cement sheeting*
- Existing ceramic tiles (primed with SikaTile 015 NPP)
- Autoclaved aerated concrete / AAC
- Other suitable construction boards designed to receive tile & stone.

**refer to board manufacturer strict installation instructions for further details and load limits*

Suitable tile types include;

- Ceramic & Porcelain tiles
- Natural stone (not sensitive to moisture)
- Agglomerates / Terrazzo / Man made stone (not sensitive to moisture)
- Mosaic tiles
- Quarry & Vitrified tiles

CHARACTERISTICS / ADVANTAGES

- Lightweight Glass Technology made from 100% recycled glass.
- Excellent coverage, The coverage of a 13.5kg bag of SikaTile®-405 Lite is equivalent to a traditional 25kg bag of sanded adhesive, due to the Lightweight Glass Technology
- Crystalline Silica free formulation
- Sand free formulation
- AS ISO 13007 - C2TES1 classification
- Smooth easy trowel application
- Excellent non slump performance
- Versatile, internal & external applications
- White in colour making it suitable for light and translucent natural stone
- Low VOC

PRODUCT INFORMATION

Product Declaration	C2TES1 as per AS ISO 13007
Packaging	13.5kg paper bags
Shelf Life	if unopened 12 months from date of manufacture
Storage Conditions	Store in dry cool conditions, off ground out of direct sunlight. High humidity will reduce shelf life.

APPLICATION INFORMATION

Mixing Ratio	6 - 7 Litres of water per 13.5 kg bag	
Consumption	Notched trowel size	Approximate coverage per bag
	6mm	11m ²
	10mm	6.5m ²
<i>Coverage shall be used as a guide only due to surface profile and application technique.</i>		
Pot Life	2.5 hours at 23°C and 50% relative humidity.	
Open Time	30 minutes at 23°C and 50% relative humidity.	
Applied Product Ready for Use	Application	Approximate wait time
	Grouting / Light foot traffic	24 hours
	Wet area service	3 days
	Full service	3-5 days
<i>Values determined at laboratory conditions: 23°C, & 50% RH. Higher temperatures will reduce wait times and lower temperatures will increase wait times. Site condition will impact wait times.</i>		

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.

LIMITATIONS

- Application shall be undertaken in accordance with Australian Standards
- SikaTile®-405 Lite is not suitable for use with moisture sensitive stone.
- SikaTile®-405 Lite is not suitable for direct use over timber substrates, over sheet with a suitable underlay or screed.
- Mechanical fixing methods are recommended when used externally about 2.7 meters.
- Efflorescence is beyond the control of the manufacturer due to external influences beyond our control.
- SikaTile®-405 Lite is not suitable for direct application over solvent based coatings and membranes.
- Contact Sika Australia for further information or applications not mentioned in the document.

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.

APPLICATION INSTRUCTIONS

EQUIPMENT

- Personal protective equipment
- mixing drill with stirring attachment
- Mixing buckets

SUBSTRATE QUALITY

- All substrates must meet minimum deflection requirements outlined in the Australia standards.
- Substrates must be properly cured, structurally sound, free from loose or friable particles, clean, dry and free from contaminants such as dust, dirt, oil, grease, curing compounds, laitance or efflorescence.
- Dependant on the substrate condition and contamination to be removed from the surface, perform adequate preparation techniques such as water blasting, scarification, or blast cleaning in order to remove all traces of any materials that could reduce

the products adhesion to the substrate.

- Any small defects in surface variations in level, profile or around exposed aggregates for example, Surface correction use appropriate Sika MonoTop® repair mortar or Sikafloor® level range should be used. Cracks in substrates must be identified and sealed / treated appropriately. For areas that require a waterproofing membrane, a suitable Sika approved under-tile waterproof membrane should be used prior to tiling.

Concrete substrates

- Concrete shall be dry and adequately cured. Concrete shall be left with open surface - steel trowel finishes are generally acceptable if they accept water penetration.
- All traces of curing compounds, sealers, release agents, coatings, dust, dirt, oil, and any other contaminate that may inhibit the adhesion must be removed prior to tiling. Concrete must accept water and be free from Laitence.

Cement Mortar Beds / Screeds

- Screeds shall be installed in accordance with Australian Standards.
- Early aged screeds shall be a minimum of 24 hours old per 40mm of thickness (at 22°C & 50% relative humidity).

Sheeted / Board substrates

- All boards / sheets / underlays must be installed as per manufacturer's instructions and specifically designed for tiling.

SUBSTRATE PREPARATION

Substrate priming

Application	Primer
Porous substrates	SikaTile 010 Secure Prime
Non porous substrates	SikaTile 015 NPP

- Substrates that have a under-tile waterproofing membrane do not require a primer. Adhesive shall be applied direct to the waterproofing membrane.
- Other Sika branded porous primers designed for tiling applications may be used to prime substrates.
- Refer to specific primer details on the relevant product datasheet.

MIXING

- Pour cool fresh water into a clean mixing container before slowly adding the adhesive powder.
- Mix with a mixing drill for approximately 2-3minutes to achieve a smooth lump free homogenous lump free mixture
- Allow the mixture to Stand for 5-10 minutes, then stir for an additional 2 minutes without adding any additional water.
- Restirring the mixture may be necessary during the adhesives pot-life.

APPLICATION

- Tiles shall be fixed in accordance with the relevant Australian standards.
- Ensure the backs of the tiles are clean and free from dust and contaminates.
- Apply the adhesive to the substrate with the appropriately sized trowel to achieve coverage requirement on both substrate and the back of the tile. Tiles may require "back-buttering" to achieve minimum coverage requirements.
- Apply the adhesive with the notched trowel in a single direction.
- Place the tile into the wet adhesive, break the ridges with the tile to fully bed the tile into the adhesive. It is advisable to periodically check the back of the tiles to ensure adequate adhesive coverage is achieved in accordance with Australian Standards.
- Only apply as much adhesive that can be covered by the tiles prior the adhesive skinning. If skinning occurs prior to placement of tiles remove and replace.
- Remove any excess adhesive from the face of the tiles with a damp sponge and ensure grout joints are clean and free from excess adhesive and uniform depth.

CLEANING OF TOOLS

Tools and equipment can be cleaned with water while the adhesive is still wet.

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. It may be necessary to adapt the above disclaimer to specific local laws and regulations. Any changes to this disclaimer may only be

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in Baar.

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