

#### **BUILDING TRUST**

# PRODUCT DATA SHEET

# SikaTile®-510 Mega Lite

# A LIGHT WEIGHT, SILICA FREE CEMENT-BASED FLEXIBLE TILE ADHESIVE THAT PROVIDES ULTI-MATE PERFORMANCE FORMUALTED WITH LIGHTWEIGHT GLASS TECHNOLOGY

# **DESCRIPTION**

- SikaTile®-510 Mega Lite is a highly flexible, one component, sand and Silica free, tile and stone adhesive formulated with Lightweight Glass
- Technology for a smooth, easy to trowel application.
- SikaTile®-510 Mega Lite unique formula is low VOC, sand free and contains no respirable Crystalline Silica making if safer to use than a traditional sanded cement-based tile adhesives.
- SikaTile®-510 Mega Lite is suitable for intenal and external, wall and floor applications including submerged applications such as pools and spas.
- SikaTile®-510 Mega Lite superior non-sag and slip resistance for large heavy tiles and nonslump properties to eliminate tile lipage.
- SikaTile®-510 Mega Lite is light in colour making it suitable for white and translucent natural stone.

# **USES**

- SikaTile®-510 Mega Lite is suitable for both thinbed and thick-bed tile and stone applications up to 19mm layer thickness.
- SikaTile®-510 Mega Lite superior non sag formulation provide excellent hanging ability over wall substrates as well as superior non slump properties to eliminate tile lippage.

#### Suitable tile types include;

- Large format Ceramic, and Porcelain tiles
- Natural stone including marble, limestone, granite, sandstone, and slate not sensitive to moisture\*
- Agglomerates / Terrazzo tiles not sensitive to moisture\*
- Glass tiles & Mosaic tiles
- Thin porcelain panels\*
- Thin brick slips
- \*not suitable for resin backed tiles or stone, seek Sika technical advice for these installations.

#### Suitable substrates include:

- Concrete
- Cement-based screeds & renders
- Plasterboard (internal only)
- Fibre cement sheeting / Ceramic tile underlay
- Compressed cement boards
- Auto-aerated concrete
- Sika under tile waterproofing membranes
- Sika approved acoustic underlayment's
- Under tile heating systems
- Other construction boards designed to receive tiling

#### **FEATURES**

- Lightweight Glass Technology
- Crystalline Silica free
- Excellent bond strength
- Highly flexible, S2 performance
- AS ISO 13007 C2TES2 Classification
- Non-slump adhesive to assist in fixing large format tiles and stones and minimise tile lippage
- light colour, suitable for translucent and white natural stone
- Light weight aggregate is made from 100% recycled glass
- Low VOC

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#### PRODUCT INFORMATION

Product declaration	C2TES2 as per AS ISO 13007	
Packaging	13.5kg paper bags / 64 bags per pallet	
Shelf life	If unopened 12 months from date of manufacture.	
Storage conditions	Store in dry cool conditions off ground and out of direct sunlight. High humidity will reduce shelf life.	
Appearance and colour	White powder	

# APPLICATION INFORMATION

Mixing ratio	6 - 6.5 Litres of water per 13.5kg bag		
Consumption	Notched trowel size	Approximate coverage	
	6mm	12m <sup>2</sup>	
	10mm	7.5m <sup>2</sup>	
	Coverage is to be used as a guide only, as surface flatness, and application technique can impact coverage.		
Pot Life	3 Hours at 23°C and 50% relative humidity.		
Open Time	30 Minutes at 23°C & 50% relative humidity		
Adjustability time	Up to 1 hour dependant on substrate porosity.		
Applied product ready for use	Application	Wait time	
	Prior to grouting	24 hours	
	Prior to wet area service	3 days	
	Prior to filling pools & spas with wa-	21 days	
	ter		
	Values are determined at 23°C & 50% relative humidity in laboratory conditions.  Hot climates will reduce times and cold climate will extend wait times.		

# **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.

# **IMPORTANT CONSIDERATIONS**

- SikaTile®-510 Mega Lite cannot be used directly over tongue n groove timber flooring, particle board, plywood, medium density fibre board, or Masonite
- SikaTile®-510 Mega Lite is not suitable for fixing moisture sensitive tile or stone.
- SikaTile®-510 Mega Lite cannot be used over solvent based polyurethane waterproof membranes.
- Mechanical fixing techniques are required when fixing externally at heights above 2.7 meters high.
- The performance of cement based adhesive will be compromised when tiling in temperatures below 5°C and above 35°C.
- Efflorescence is beyond the control of the manufacturer due to external influences beyond our control.
- Not suitable for resin backed tile & stone, contact Sika® for further advice.
- Contact Sika® for advice if further information is required or for applications not mentioned in this doc-

ument.

# **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 stirrer attachment
- Mixing Buckets
- Notched trowel

#### SUBSTRATE QUALITY

- Substrate deflection, all substrates under loads must not exceed of L/360 for tiles and L/720 for stone applications.
- Substrates must be properly cured, structurally sound, free from loose or friable particles, clean, dry



- and free from contaminates 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, can be prefilled and levelled with an additional layer of SikaTile®-510 Mega Lite to a maximum thickness of 15mm, applied at least 24 hours prior to tiles being laid. for larger areas of surface correction use appropriate Sika MonoTop® or Sikafloor® level range should be used. Cracks in substrates must be identified and sealed / treated appropriately.
- For tiling wet areas, a suitable Sika approved waterproof membrane should be used prior to tiling.

# **CONCRETE SUBSTRATES:**

• Early aged concrete shall be a minimum 10 days old. Concrete shall be left with open surface - steel trowel finishes are generally acceptable if they accept water penetration. Wood float and broom finishes are preferred where possible. 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:**

- Must be installed in accordance with applicable standards.
- SikaTile®-510 Mega Lite can be used over early aged mortar beds / screeds. Screeds must be 24 hours old per 40mm of thickness prior to tiling.

#### **SHEETED SUBSTRATES:**

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

#### **SURFACE PREPARATION**

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

Refer to the primer product datasheet for additional information.

#### **MIXING**

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

## **APPLICATION**

Tiles shall be fixed in accordance with 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 maximum coverage requirements. Apply the adhesive with the notched trowel in a single direction. While pressing the tile into the wet adhesive, break the adhesive ridges with the tile to fully bed the tile into the adhesive to eliminate voids in the bond.
- 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.
- Movement, Expansion, and Control joints must be installed in accordance with applicable standards.
- For tile over tile applications use SikaTile 015 NPP primer prior to application. Ensure existing tiles are soundly fixed and free from defect. Gloss finish or polished tiles need mechanical preparation prior to priming with SikaTile 015 NPP.

#### **CLEANING OF EQUIPMENT**

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 declared data for this product may vary from country to country. Please consult the local Product Data Sheet for the exact product 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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