

BUILDING PRODUCT INFORMATION SHEET

SikaTile[®]-440 Opti-Cure

A RAPID SETTING TILE AND STONE ADHESIVE WITH PATENTED DUST LESS[®] TECHNOLOGY

DESCRIPTION

- SikaTile[®]-440 Opti-Cure is a multi-purpose rapid setting cement-based tile and stone adhesives with patented DUST LESS[®] technology which reduces airborne dust in the mixing phase by up to 80%, improving air quality, less mess and faster clean up.
- SikaTile[®]-440 Opti-Cure rapid setting formulation is suitable for grouting and light foot traffic after 2-3 hours (timing impacted by climate and environment).
- SikaTile[®]-440 Opti-Cure unique formulation is suitable for laying most types of tiles, natural stone, agglomerates, terrazzo, and man made stone.
- SikaTile[®]-440 Opti-Cure is exceptionally smooth and creamy to spread with high performance non slump capabilities for large format tile and stone applications

USES

SikaTile[®]-440 Opti-Cure can be used for thin-bed tile and stone applications and medium-bed applications up to 10m bed thickness.

SikaTile[®]-440 Opti-Cure is suitable for wall and floor applications both internal and externally.

Suitable tile types include.

- Ceramic and porcelain tiles.
- Glass tiles and mosaics
- Natural Stone* including marble, granite, limestone, basalt etc
- Agglomerates*, terrazzo* and man made stone*
- Class A & B tested stone* in accordance with EN14617-12

*Sika recommends conducting a site test to evaluate compatibility of the stone with the adhesive due to influences beyond Sika's control.

Suitable substrates include:

- Concrete
- Cement-based screeds and renders
- Compressed cement boards*
- Cement sheeting*/Ceramic Tile underlay*
- Existing tiles with SikaTile 015 Prep n Prime
- Light weight construction boards suitable for tiling applications*
- Suitable Sika under tile waterproofing membranes
- Under tile heating systems
- Gypsum plasterboard (internal only)
- Sika approved acoustic underlayments *refer to board manufacture instructions for further details and load limits.

FEATURES

- Rapid setting, ready for grouting and light foot traffic after 2-3 hours.
- Patented DUST LESS[®] Technology that reduces airborne dust in the mixing phase by up to 80%
- C2TFS1 flexible performance
- Smooth creaming formulation for ease application
- Suitable for early aged screeds
- Exceptional non slump properties making it suitable for fixing large format tile and stone.
- Low VOC

LIMITATIONS OF USE

The product is not a substitute for any mechanical fixings that are specified by the manufacturer of the element being bonded

PRODUCT INFORMATION

Product identifier	SikaTile®-440 Opti-Cure
Place of manufacture	Overseas
Product declaration	C2TFS1 as per AS ISO 13007.
Packaging	20kg Bags
Shelf life	9 months from date of manufacture if unopened.
Storage conditions	Store in dry, cool conditions, out of direct sunlight. High humidity will reduce shelf life.
Appearance and colour	white to cream colour

APPLICATION INFORMATION

Mixing ratio	5 - 5.5 litres of water per 20kg bag	
Consumption	Notched Troewl Size	Approximate coverage
	6mm	8-9m ²
	10mm	5-6m ²
	Consumption is dependent on substrate surface profile, and application technique use chart as a guide only.	
Pot Life	45 minutes at 23°C & 50% relative humidity. Restirring the adhesive during its pot life may be required.	
Open Time	20 minutes, at 23°C & 50% relative humidity. Measured in laboratory conditions.	
Applied product ready for use	USE	WAIT TIME
	Grouting or foot traffic	2-4 hours
	Return to wet area service	24 hours
	Values determined at laboratory conditions 23°C & 50% RH. Higher temperatures will reduce times and lower temperatures will increase times.	

MANUFACTURER AND IMPORTER INFORMATION

Manufacturer information	Address	Sika Australia Pty Ltd 55 Elizabeth St Wetherill Park, Sydney NSW, Australia
Importer information	Address	Sika (NZ) Limited 85-91 Patiki Road Avondale, Auckland 1026 New Zealand
	Phone number	0800 745 269
	Website	https://nzl.sika.com/
	Email address	info@nz.sika.com
	NZBN	9429000018791

BUILDING CODE INFORMATION

Building Code clauses

Note: This product, on its own, is not within the scope of the NZ Building Code. However, when it is used as part of an impervious floor or wall lining system (E3/AS1) or with other building elements that must comply with the NZ Building Code, and it is used in accordance with that material supplier's specification and Sika's technical literature, it will contribute to meeting the requirements of the following clauses:

B1 Structure: Performance clauses B1.3.1, B1.3.2, B1.3.3 (a, b, j, q), B1.3.4

B2 Durability: Performance clause B2.3.1 - (b) 15 years

E3 Internal Moisture: Performance Clauses E3.3.3, E3.3.4, E3.3.5, E3.3.6

F2 Hazardous Building Materials: Performance clause F2.3.1

Building Code compliance statements

Performance B1.3.1, B1.3.2, B1.3.3 (a, b, j, q) B1.3.4: When used as an adhesive this product contributes to meeting the loading requirements that bonded lining elements are subjected to, as a result of self-weight, imposed in-use gravity loading, impact, and the effects of creep and shrinkage over time.

Performance B2.3.1 (b) 15 years: This product has been evaluated in accordance with B2/VM1. It meets this durability requirement and will remain serviceable for 15 years, or more, when installed and maintained in accordance with the relevant Sika technical literature. nzl.sika.com. According to Sika's "Service Improvement" records, maintained within its ISO9001:2015 Quality Management System, this product has performed successfully since it was introduced in 2024.

Performance E3.3.3, E3.3.4, E3.3.5, E3.3.6: When this product is used as an adhesive to bond ceramic or stone tiles, with a maximum moisture content of 6%, onto a Sika liquid applied membrane, or as a grout between the tile joints, it contributes to meeting the Clause E3 Internal Moisture requirements for impervious linings, in accordance with E3/AS1

Performance F2.3.1: This product meets this requirement when used and applied in accordance with Sika's installation instructions and does not present a health hazard to people occupying or using the building. Refer to the Sika Product Technical Data sheet and product Safety Data Sheet nzl.sika.com for further information if required

BASIS OF PRODUCT DATA

All technical data in this document are based on laboratory tests. Actual measured data may vary due to circumstances beyond our control.

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

DESIGN REQUIREMENTS

If the building elements to be bonded are within the scope of the NZ Building Code then the bonding instructions of the manufacturer / supplier of those elements must be followed

In accordance with NZBC E3 Internal Moisture and with reference to E3/AS1 impervious linings and floor coverings, the adhesive for ceramic or stone tiles must be specified by the tile manufacturer (supplier) as part of their system deemed to be suitable for the required application.

EQUIPMENT

- Clean mixing buckets
- Mixing drill with stirrer attachment
- Notched trowels

SUBSTRATE QUALITY

- Substrate deflection: all substrates under loads must not exceed L/360 for tile & L/720 for stone applications.
- Substrates must be properly cured, structurally sound, free from friable particles, clean, dry, and free from contaminants such as dirt, dust, oil, 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 etc to remove all traces of contaminants.
- For tiling wet areas, a suitable Sika approved waterproof membrane shall be used prior to tiling and allow to dry prior to application.

Concrete Floors: Allow 28 days for concrete to cure.

Concrete shall be left with an open surface - steel trowel finishes are generally acceptable if they accept water. Remove all traces of curing compound, surface sealers, dirt, oil, and any other contaminate that may inhibit the adhesion. **Cement-based Screeds:** Must be installed as per AS 3958 The installation of ceramic and

NZ BUILDING PRODUCT INFORMATION SHEET

SikaTile®-440 Opti-Cure
13/12/2024 File version 1.0
02171010200000915

stone tiles **Sheeted substrates:** All boards / underlays must be installed as per the manufacturer's instructions and specifically designed for tiling.

SUBSTRATE PREPARATION

All substrates shall be primed with a suitable Sika primer. Do not prime over waterproofing membranes, apply the adhesive directly over the membrane. **Porous substrates:** SikaTile 010 Secure Prime
Non porous substrates: SikaTile 015 Prep n Prime.

Refer to specific instructions on primer product datasheets.

MIXING

Pour cool clean water into a clean mixing pail before slowly adding the adhesive powder. Mix with a mixing drill with stirrer attachment for approximately 2-3 minutes to achieve a smooth lump free homogenous mixture. Allow the mixture to stand for 2 minutes then restir for an additional minute without adding any water. Restirring the mixture may be necessary during the pot life of the adhesive.

APPLICATION

- All tiles and stone shall be fixed in accordance with relevant AS 3958 The installation of ceramic and stone tiles.
- Ensure the backs of tiles and clean and free from dust and contaminates prior to laying.
- Apply the adhesive to the substrate with the appropriately sized notched trowel to achieve minimum coverage requirements.
- Ensure large tiles and all stone are back-buttered with the adhesive to ensure full coverage is achieved in accordance with AS3958.
- Apply the adhesive in a single direction. While pressing the tile or stone into the wet adhesive, break the ridges with the tile to fully bed the tile into the adhesive.
- Allow adhesive to dry and set prior to grouting.
- It is advisable to periodically check the backs of tiles to ensure adequate coverage is achieved in accordance with the standards.

CLEANING OF EQUIPMENT

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

MAINTENANCE REQUIREMENTS

The building element being bonded, and the bonding substrate must both be maintained in accordance with each of their manufacturers instructions

For maintenance of impervious wall and floor lining systems that have been installed to enable compliance with Clause E3/AS1, refer to the supplier of the system installed

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 the 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. It may be necessary to adapt the above disclaimer to specific local laws and regulations. Any changes to this disclaimer may only be implemented with permission of Sika® Corporate Legal in Baar.

The building product/building product line is not subject to warning or ban under section 26 of the Building Act 2004.

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