BUILDING TRUST

BUILDING PRODUCT INFORMATION SHEET

Sikafloor®-400 N Elastic

1-part PUR highly elastic coating

DESCRIPTION

Sikafloor®-400 N Elastic is a one part, highly elastic, solvent containing, UV resistant, coloured, moisture curing polyurethane resin coating.

USES

Sikafloor®-400 N Elastic is used as:

- Smooth or slip resistant, UV resistant, waterproof, crack-bridging coating for concrete and cementitious screed substrates
- For light to medium mechanical exposure
- For balconies, terraces, footbridges, stairways etc.
- As the top coat in the Sika Ground Water Protection System (I N) for Bund Containment Areas

FEATURES

- Highly elastic
- Crack-bridging
- Waterproof
- UV resistant, non-yellowing
- Weather resistant
- Abrasion resistant with normal use
- Slip resistant surfaces are possible

APPROVALS / CERTIFICATES

- Synthetic resin screed material for floor screeds according to EN 13813:2002, Declaration of Performance 02080501001000000011008, certified by notified factory production control body 0921 and provided with the CE mark
- Coating for concrete protection according to EN 1504-2:2004, Declaration of Performance 02080501001000000011008, certified by notified factory production control body 0921 and provided with the CE mark
- Approval for “Ground Water Protection System”, Z-59.12-4, DIBt, Germany, July 2008.

PRODUCT INFORMATION

Product identifier	Sikafloor®-400 N Elastic	
Place of manufacture	Overseas	
Composition	PUR	
Packaging	18 kg units	
Shelf life	6 months from date of production	
Storage conditions	The packaging must be stored properly in original, unopened and undamaged sealed packaging, in dry conditions at temperatures between +5 °C and +30 °C.	
Appearance and colour	Coloured liquid. Almost unlimited choice of colour shades.	
Density	~ 1.6 kg/l	(DIN EN ISO 2811-1)
Solid content by mass	~ 88 %	
Solid content by volume	~ 77 %	

TECHNICAL INFORMATION

Abrasion resistance	30 mg (CS 10/1000/1000)	(8 days / +23 °C)	(DIN 53109)
Tensile strain at break	At +23 °C	~320 %	(DIN 53504)
	At -20 °C	~70 %	

Temperature resistance

Exposure*	**Dry heat**
Permanent	+50 °C
Short-term max. 7d	+80 °C
Short-term max. 8h	+100 °C

*No simultaneous chemical and mechanical exposure.

Chemical resistance

Resistant to many chemicals. Contact Sika technical service. Attention: Wine, coffee, some leaves and flower petals etc. may cause surface discolouration. This will have no effect on the product performance and durability.

SYSTEM INFORMATION

Systems

System for light wear (layer thickness: 0.3 - 0.5mm):

- Primer: 1 x Sikafloor®-400 N Elastic diluted with 10 wt.-% Sika® Thinner C
- Seal Coat: 1 x Sikafloor®-400 N Elastic

System for medium wear (layer thickness: 0.7 - 1.2mm):

- Primer: 1 x Sikafloor®-156
- Coating: 1 x Sikafloor®-400 N Elastic

System for medium wear + Surface Design (layer thickness: 0.9 - 1.4mm):

- Primer: 1 x Sikafloor®-156
- Coating: 1 x Sikafloor®-400 N Elastic lightly broadcast with coloured Chips
- Seal coat: 1 x SikaGlaze® PU Matt or Gloss

System for high wear (layer thickness: 1.5 - 2.0mm):

- Primer: 1-2 x Sikafloor®-156 / -161 broadcast to excess with Sika® Aggregate-501
- Seal coat: 1 x Sikafloor®-400 N Elastic

System for high wear + Surface Design (layer thickness: 1.5 - 2.0mm):

- Primer: 1-2 x Sikafloor®-156 / -161
- Coating: 1 x Sikafloor®-400 N Elastic, broadcast to excess with coloured quartz sand 0.3 - 0.8 mm
- Seal coat: 1-2 x SikaGlaze® PU Matt or Gloss

Coving / Skirtings (> 4% slope):

Coating: Sikafloor®-400 N Elastic + 1.5 - 2 wt.-% Extender T

Top coat of the Sika Ground Water Protection System (similar to certified system I N)(layer thickness: ~1.0mm):

- Primer: 1-2 x Sikafloor®-156
- Coating: 1 x Sikafloor®-400 N Elastic

Note: The system configurations as described must be fully complied with and may not be changed. Please also refer to notes under “Chemical Resistance”.

APPLICATION INFORMATION

Consumption	0.4 - 1.5 kg/m²/mm depending on the application. Please refer to the respective System Data Sheet.
Ambient air temperature	+10 °C min. / +30 °C max.
Relative air humidity	80 % r.h. max.

	35 % min. (below +20 °C: 45 % min.)
Dew point	Beware of condensation!The substrate and uncured floor must be at least 3 °C above dew point to reduce the risk of condensation or blooming on the floor finish.
Substrate temperature	+10 °C min. / +30 °C max.
Substrate moisture content	< 4 % pbw moisture content.Test method: Sika®-Tramex meter, CM - measurement or Oven-dry-method.No rising moisture according to ASTM (Polyethylene sheet).
Pot Life	The material in opened containers should be applied immediately. With open containers surface film formation will happen within 1-2 hours. High temperatures and high air humidity will accelerate curing significantly.

Curing time

Before overcoating Sikafloor®-400 N Elastic allow:

Substrate temperature	Minimum	Maximum
+10 °C	36 hours	5 days
+20 °C	24 hours	3 days
+30 °C	16 hours	2 days

Times are approximate and will be affected by changing ambient conditions particularly temperature and relative humidity.

Applied product ready for use

Temperature (r.h. 50%)	Rain resistant	Foot traffic	Full cure
+10 °C	~15 hours	~1 - 2 days*	~7 - 14 days*
+20 °C	~5 hours	~6 - 24 hours*	~5 - 9 days*
+30 °C	~3 hours	~4 - 18 hours*	~3 - 5 days*

*Strongly influenced by layer thicknessNote: Times are approximate and will be affected by changing ambient conditions

MANUFACTURER AND IMPORTER INFORMATION

Manufacturer information	Address	Sika Deutschland GmbH Kornwestheimer Strasse 103-107, 70439 Stuttgart, Germany
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	B2 Durability: Performance clause B2.3.1 - (c) 5 years C3 Fire Affecting Areas Beyond the Fire Source. Performance clause C3.4(b) F2 Hazardous Building Materials: Performance clause F2.3.1 G3 Food Preparation and Prevention of Contamination: Performance clause G3.3.2 (a) (b)
Building Code compliance statements	Performance B2.3.1 - (c) 5 years. This product has been assessed in accordance with B2/VM1. It achieves this durability requirement and will remain serviceable for 5 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 2003.

Performance C3.4(b) The installed system has been fire tested in accordance with ISO 9239-1 : 2010. It has a critical radiant flux that exceeds 4.5 kW/m2 and can be used in all areas of the building, as defined in this clause.

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

Performance G3.3.2 (a) (b). This product / system has been tested and certified for use in "indirect" food applications in accordance with LFGB food grade testing, based on European Framework Regulation (EC) No. 1935/2004. It does not cause changes in the foods composition, smell or taste.

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.

FURTHER DOCUMENTATION

Cleaning & Maintenance

Please refer to "CLEANING & MAINTENANCE OF SIKAFLOOR INSTALLATIONS".

IMPORTANT CONSIDERATIONS

Do not apply Sikafloor®-400 N Elastic on substrates with rising moisture. Freshly applied Sikafloor®-400 N Elastic must be protected from damp, condensation and water for at least 24 hours. Prior to overcoating with Sikafloor®-400 N Elastic, the priming coats must have cured tack-free. Do not use for interior applications. Always apply during falling temperatures. If applied during rising temperatures “pin holing” may occur from rising air. The incorrect assessment and treatment of cracks may lead to a reduced service life and reflective cracking.For exact colour matching, ensure the Sikafloor®-400 N Elastic in each area is applied from the same control batch numbers. Under certain conditions high ambient temperatures combined with high point loading may lead to imprints in the resin. If heating is required do not use gas, oil, paraffin or other fossil fuel heaters, these produce large quantities of both CO_2 and H_2O water vapour, which may adversely affect the finish. For heating use only electric powered warm air blower systems.

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

This product is part of a system that includes primers and other associated products. For full design information refer to the relevant Sika literature avaialbale at nzl.sika.com. For further information or support phone 0800SIKANZ

INSTALLATION REQUIREMENTS

This system of products may only be installed by a Sika trained and approved applicator. For further information contact 0800SIKANZ

SUBSTRATE QUALITY

The surface must be clean, dry and free of all contaminants such as dirt, oil, grease, coatings and surface treatments. All dust, loose and friable material must be completely removed from all surfaces before application of the product, preferably by vacuum. Pull of strength shall not be less than 1.5 N/mm^2. If in doubt apply a test area first.

MIXING

Prior to use stir Sikafloor®-400 N Elastic mechanically for 3 minutes. If required the Sika® Thinner C or Extender T should be added into the Sikafloor®-400 N Elastic until a uniform mix has been achieved. Over mixing must be avoided to minimise air entrainment.

Mixing Tools:

Sikafloor®-400 N Elastic must be thoroughly mixed using a low speed electric stirrer (300 - 400 rpm) or other suitable equipment.

APPLICATION

Prior to application, confirm substrate moisture content, relative humidity and dew point.As a primer Sikafloor®-400 N Elastic can be applied by brush, roller or squeegee and as a coating Sikafloor®-400 N Elastic is poured and spread evenly with a trowel.

CLEANING OF EQUIPMENT

Clean all tools and application equipment with Sika® Thinner C immediately after use. Hardened and/or cured material can only be removed mechanically.

MAINTENANCE REQUIREMENTS

For full cleaning instructions refer to the document "Cleaning and Maintenance Recommendations for Sika Floor Installations" available on www.sika.nz.

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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