BUILDING TRUST

BUILDING PRODUCT INFORMATION SHEET

Sika AnchorFix®-1

Fast curing anchoring adhesive

DESCRIPTION

Solvent and styrene free based, two-component polyester anchoring adhesive.

USES

As a fast curing anchoring adhesive for all grades of:

- Rebars / reinforcing steel
- Threaded rods
- Bolts and special fastening systems
- Concrete
- Hollow and solid masonry
- Hard natural stone*
- Solid rock*

* These substrates may vary greatly, in particular with regard to strength, composition and porosity. Therefore, for each application the suitability of Sika AnchorFix®-1 Adhesive must be tested by first applying Sika AnchorFix®-1 Adhesive only to a sample area. Check in particular bond strength, surface staining and discolouration.

LIMITATIONS OF USE

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

A building element used for load bearing, bracing, structural support or other applications as defined in the NZBC, must be fastened in accordance with the specification / instructions from that elements manufacturer

This is a general bonding / anchoring product for miscellaneous items and is not to be used as a structural adhesive to bond embedded items, anchors and secondary structural elements into (cracked, or uncracked) concrete, as defined in Clause C17 of NZS: 3101 Part2: 2006. For suitable products, or further information phone 0800SIKANZ, or refer to nzl.sika.com.

FEATURES

- Fast curing
- Standard guns can be used
- Can be used at low temperatures
- High load capacity
- ETA Approval available
- Non-sag, even overhead
- Styrene-free
- Low odour
- Low wastage

APPROVALS / CERTIFICATES

- Injection system for use in masonry according to ETAG 029, ETA-12/0227, Declaration of Performance 020403010010000001 5034408, certified by notified product certification body 0679, certificate of constancy of performance 0679-DPD-0777, and provided with the CE marking
- Bonded injection type anchor for non cracked concrete according to ETAG 001 annex 1 and 5, ETA-13/0720, Declaration of Performance 020403010010000001 5034408, certified by notified product certification body 1020, certificate of constancy of performance 1020-CPD-090-029816, and provided with the CE marking.

PRODUCT INFORMATION

Product identifier	Sika AnchorFix®-1
Place of manufacture	Overseas

Packaging	150 ml standard cartridge	20 cartridges per box
	300 ml standard cartridge	12 cartridges per box
Shelf life	12 months from date of production All Sika AnchorFix®-1 cartridges have the expiry date printed on the label.	
Storage conditions	Stored properly in original, unopened, sealed and undamaged packaging in dry conditions at temperatures between +5 °C and +25 °C. Protect from direct sunlight.	
Colour	Component A:	white
	Component B:	black
	Component A+B mixed:	light grey
Density	~1.63 kg/l (component A+B mixed)	

TECHNICAL INFORMATION

Compressive strength	~60 N/mm² (7 days, +20 °C)	(ASTM D 695)
Modulus of elasticity in compression	~3 500 N/mm² (7 days, +20 °C)	(ASTM D 695)
Flexural strength	~28 N/mm² (7 days, +20 °C)	(ASTM D 790)
Tensile strength	~12 N/mm² (7 days, +20 °C)	(ASTM D 638)
Modulus of elasticity in tension	~4 500 N/mm² (7 days, +20 °C)	(ASTM D 638)
Temperature resistance	Long term	+50 °C
	Short term (1–2 hours)	+80 °C
Glass transition temperature	+60 °C	(DIN EN ISO 6721-1)
Design considerations	For details about adhesive anchoring design refer to the separate documentation provided: "Technical Documentation Sika AnchorFix®-1" Ref: 870 43 01	

APPLICATION INFORMATION

Mixing ratio	Component A : component B = 10 : 1 by volume
Layer thickness	3 mm max.
Sag flow	Non-sag, even overhead
Product temperature	Sika AnchorFix®-1 must be at a temperature of between +5 °C and +40 °C for application.
Ambient air temperature	-10 °C min. / +40 °C max.
Dew point	Beware of condensation. Substrate temperature during application must be at least 3 °C above dew point.
Substrate temperature	-10 °C min. / +40 °C max.

Curing time

Temperature	Open time - T_{gel}	Curing time - T_{cur}
+30 °C	4 minutes	35 minutes
+25 °C – +30 °C	4 minutes	40 minutes
+20 °C – +25 °C	5 minutes	50 minutes
+10 °C – +20 °C	6 minutes	85 minutes
+5 °C – +10 °C	10 minutes	145 minutes
+5 °C	18 minutes	145 minutes
–10 °C [1,2]	30 minutes	24 hours

1 Minimum cartridge temperature: +5 °C

2 This application is not covered by the scope of the product ETA or any other approval.

MANUFACTURER AND IMPORTER INFORMATION

Manufacturer information	Address	Sika Supply Centre AG Industriestrasse 26 6060, Sarnen Switzerland
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-(a) not less than 50 years F2 Hazardous Building Materials: Performance clause F2.3.1
Building Code compliance statements	Performance B2.3.1 (a) 50 years: This product has been evaluated in accordance with B2/VM1. It meets this durability requirement and will remain serviceable for 50 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 2001. 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.

FURTHER DOCUMENTATION

For design details, please refer to the separate documentation provided:Technical Documentation Sika AnchorFix®-1 Ref: 870 43 01

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

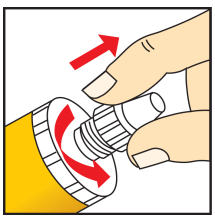
SUBSTRATE QUALITY

- Mortar and concrete must be at the required strength. No need to be 28 days old.
- Substrate strength (concrete, masonry, natural stone) must be verified.
- Pull-out tests must be carried out if the substrate strength is unknown.
- The anchor hole must always be clean, dry, free from oil and grease etc.
- Loose particles must be removed from the holes.
- Threaded rods and rebars have to be cleaned thoroughly from any oil, grease or any other substances and particles such as dirt etc.

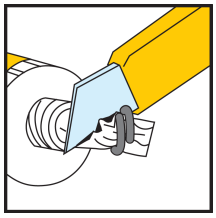
MIXING

GETTING THE CARTRIDGE READY

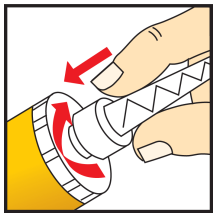
1. Unscrew the cap.



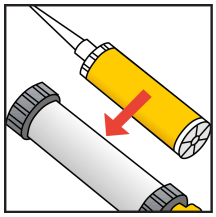
2. Cut the film.



3. Screw on the static mixer.



4. Place the cartridge into the dispenser and start application.



When the work is interrupted the static mixer can remain on the cartridge after the gun pressure has been relieved.

If the resin has hardened in the nozzle when work is resumed, a new nozzle must be attached.

APPLICATION

Note

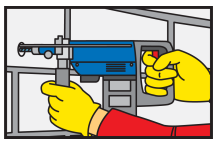
Test if the Product is suitable for the substrate

Due to the variety of possible substrates, the Product's suitability for the substrate must be confirmed before application, particularly in terms of desired bond strength, composition, porosity, potential surface staining or discolouration.

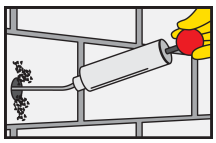
a) Test the Product's suitability in a sample area.

ANCHORS IN SOLID MASONRY OR CONCRETE

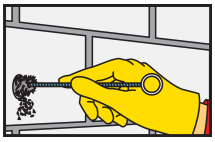
1. Drilling of hole with an electric drill to the diameter and depth required. Drill hole diameter must be in accordance with anchor size.



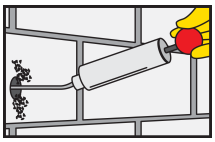
2. The drill hole must be cleaned with a blow pump or by compressed air, starting from the bottom of the hole. (at least 2x) Important: use oil-free compressors.



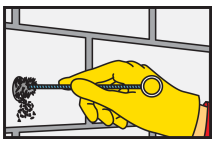
3. The drill hole must be thoroughly cleaned with the special steel brush (brush at least 2x). The diameter of the brush must be larger than the diameter of the drill hole.



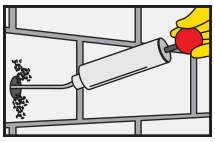
4. The drill hole must be cleaned with a blow pump or by compressed air, starting from the bottom of the hole. (at least 2x) Important: use oil-free compressors.



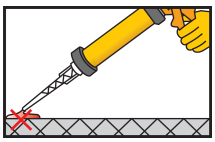
5. The drill hole must be thoroughly cleaned with the special steel brush (brush at least 2x). The diameter of the brush must be larger than the diameter of the drill hole.



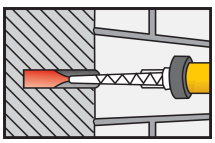
6. The drill hole must be cleaned with a blow pump or by compressed air, starting from the bottom of the hole. (at least 2x) Important: use oil-free compressors.



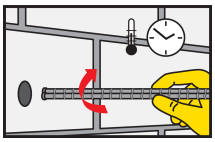
7. Pump approx. twice until both parts come out uniformly. Do not use this material. Release the gun pressure and clean the cartridge opening with a cloth.



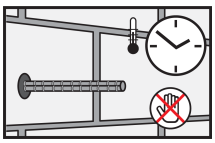
8. Inject the adhesive into the hole, starting from the bottom, while slowly drawing back the static mixer.In any case avoid entrapping air. For deep holes extension tubing can be used.



9. Insert the anchor with a rotary motion into the filled drill hole. Some adhesive must come out of the hole. Important: the anchor must be placed within the open time.

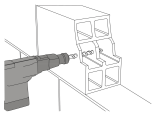


10. During the resin hardening time the anchor must not be moved or loaded. Wash tools immediately with Sika® Thinner C. Wash hands and skin thoroughly with warm soap water.

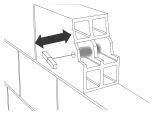


ANCHORS IN HOLLOW BLOCKS

1. Drilling of hole with an electric drill to the diameter and depth required. Drill hole diameter must be in accordance with anchor-and perforated sleeve size. Note: with hollow material do not use rotary hammer drills..

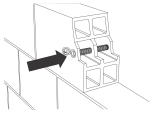


2. The drill hole must be thoroughly cleaned with a round brush (brush at least 1x). The diameter of the brush must be larger than the diameter of the drill hole.

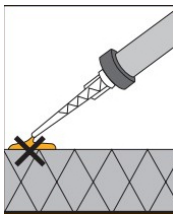


3. The drill hole must be cleaned after each cleaning step with a blow pump or by compressed air, starting from the bottom of the hole (pump at least 1x). Important: use oil-free compressors.

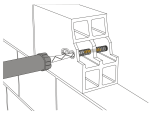
4. Insert the perforated sleeve completely into the drill hole.



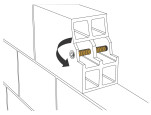
5. Pump approx. twice until both parts come out uniformly. Do not use this material. Release the gun pressure and clean the cartridge opening with a cloth.



6. Inject the adhesive into the perforated sleeve, starting from the bottom, while slowly drawing back the static mixer. In any case avoid entrapping air.



7. Close the cap from the perforated sleeve to avoid some escape of the resin during entering the steel rod.



8. Insert the anchor with a rotary motion into the filled perforated sleeve. Use the adequate steel rod size. Important: the anchor must be placed within the open time.

9. During the resin hardening time the anchor must not be moved or loaded. Wash tools immediately with Sika® Thinner C. Wash hands and skin thoroughly with warm soap water.

CLEANING OF EQUIPMENT

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

MAINTENANCE REQUIREMENTS

There are no maintenance requirements for this Sika product

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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