BUILDING TRUST

PRODUCT DATA SHEET

Sika AnchorFix®-3001

HIGH PERFORMANCE, PROFESSIONAL EPOXY ANCHORING ADHESIVE

DESCRIPTION

Solvent-free, thixotropic, 2-component, epoxy resin-based, high performance anchoring adhesive for threaded rods and reinforcing bars in both cracked and un-cracked concrete.

USES

Sika AnchorFix®-3001 may only be used by experienced professionals.
For the fixing of non-expanding anchors in the following:
Structural work:
- Rebar / steel reinforcement anchoring in new and refurbishment works
- Threaded rods
- Bolts and special fastening / fixing systems

Metalwork, carpentry:
- Fixing of handrails, balustrades and supports
- Fixing of railings
- Fixing of window and door frames

In the following substrates:
- Concrete (cracked and un-cracked)
- Hollow and solid masonry
- Wood
- Hard natural and reconstituted 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®-3001 Adhesive must be tested by first applying the Product only to a sample area. Check in particular bond strength, surface staining and discoloration.

CHARACTERISTICS / ADVANTAGES

- Long Open Time
- Can be used in damp concrete
- High load capacity
- ETA to ETAG 001 for anchoring in cracked concrete
- ETA to ETAG 001 for rebar connections
- ESR to AC308 by ICC-ES, anchoring in cracked concrete for static, wind and earthquake loading
- ER to AC308 by IAPMO UES, anchoring in cracked concrete for static, wind and earthquake loading
- Drinking Water certified
- LEED Attestation available
- Fire resistance test report available
- Seismic testing available
- Styrene-free
- Excellent adhesion to the substrate
- Shrinkage-free hardening
- Standard guns can be used (with the 250ml cartridge)
- Low odour
- Low wastage

ENVIRONMENTAL INFORMATION

Sika AnchorFix®-3001 conforms on the LEED v2009 IEQc 4.1 Low Emitting Materials - Adhesives and Sealants, product category "Architectural Applications, Multipurpose construction adhesive"

APPROVALS / STANDARDS

- Bonded injection type anchor according to ETAG 001 Part 1 and 5 Option 7, ETA-14/0157, Declaration of Performance 020205010020000004 5034408, certified by notified product certification body 1020, certificate of constancy of performance 1020-CPD-090-032737, and provided with the CE marking.
- Post installed rebar connection according to ETAG 001 Part 1 and 5 TR 023, ETA 14/0368, Declaration of Performance 020205010020000004 5034408, certified by notified product certification body 1020, certificate of constancy of performance 1020-CPR-090-

032640, and provided with the CE marking.
- Post-installed adhesive anchor in concrete elements according to ICC-ES acceptance criteria AC308, ICC-ES Report No. ESR-3608.
- Post-installed adhesive anchor in concrete elements according to ICC-ES acceptance criteria AC308, IAPMO evaluation report No. 292
- Fire resistance of Sika AnchorFix-3001 injection systems in conjunction with concrete reinforcing bar and subject to fire exposure, Centre Scientifique et Technique du Bâtiment (CSTB), Report No. 26054326/B
- Drinking Water System Components NSF/ANSI 61, IAPMO, File No. K-8319

PRODUCT INFORMATION

Packaging	250 ml standard cartridge	12 cartridges per box pallet: 75 boxes
	400 ml side by side cartridge	12 cartridges per box pallet: 60 boxes
	600 ml side by side cartridge	12 cartridges per box pallet: 36 boxes
	1500 ml side by side cartridge	5 cartridges per box pallet: 46 boxes
Colour	Component A	off-white
	Component B	dark grey / black
	Component A+B mixed	grey
Shelf life	24 months from date of production All Sika AnchorFix®-3001 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 +10 °C and +25 °C. Protect from direct sunlight.	
Density	Component A	~1.2 kg/l
	Component B	~1.8 kg/l
	Component A+B mixed	~1.7 kg/l

TECHNICAL INFORMATION

Compressive Strength	~85 N/mm² (7 days, +20 °C)		(ASTM D 695)
Modulus of Elasticity in Compression	~5 000 N/mm² (7 days, +20 °C)		(ASTM D 695)
Tensile Strength in Flexure	~45 N/mm² (7 days, +20 °C)		(ASTM D 790)
Tensile Strength	~23 N/mm² (7 days, +20 °C)		(ASTM D 638)
Modulus of Elasticity in Tension	~5 500 N/mm² (7 days, +20 °C)		(ASTM D 638)
Service Temperature	Long term	-40 °C min. / +40 °C max.	(ETAG 001, Part 5)
	Short term (1–2 hours)	+80 °C	

APPLICATION INFORMATION

Mixing ratio	Component A : component B = 1 : 1 by volume
Layer Thickness	7 mm max.

Sag Flow	Non-sag, even overhead
Product Temperature	Sika AnchorFix®-3001 must be at a temperature of between +10 °C and +30 °C for application.
Ambient Air Temperature	+4 °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	+4 °C min. / +40 °C max.

Curing time

Temperature	**Open time - T_{gel}**	**Curing time - T_{cur}**
+40 °C	3 minutes	3 hours
+35 °C – +40 °C	4 minutes	4 hours
+30 °C – +35 °C	6 minutes	5 hours
+25 °C – +30 °C	8 minutes	6 hours
+22 °C – +25 °C	11 minutes	7 hours
+15 °C – +22 °C	15 minutes	8 hours
+10 °C – +15°C	20 minutes	12 hours
+4 °C – +9 °C	—*	24 hours

* Minimum cartridge temperature: +5 °C

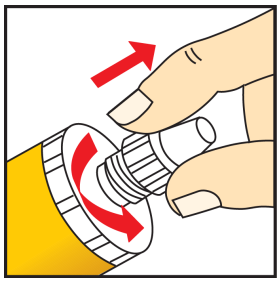
APPLICATION INSTRUCTIONS

SUBSTRATE QUALITY

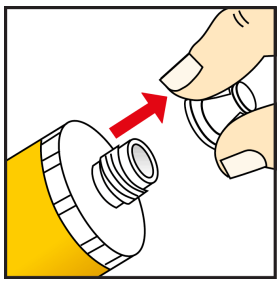
Mortar and concrete must be at the required strength.
No need to be 28 days old.
Substrate strength (concrete, masonry, natural stone) must be verified.
Pull-out tests must be carried out if the substrate strength is unknown.
The anchor hole must always be clean, dry, free from oil and grease etc.
Loose 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

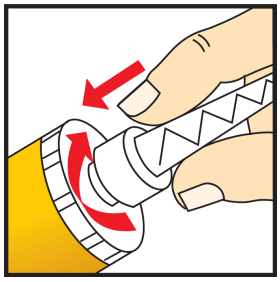
Getting the cartridge ready: 250 ml



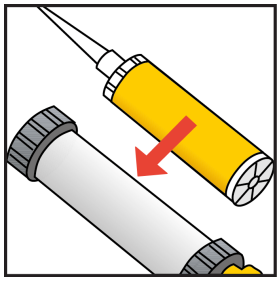
1. Unscrew the cap



2. Pull out the plug

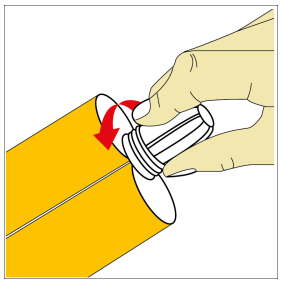


3. Screw on the static mixer

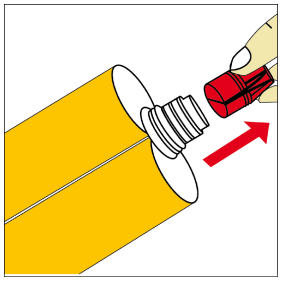


4. Place the cartridge into the gun and start application

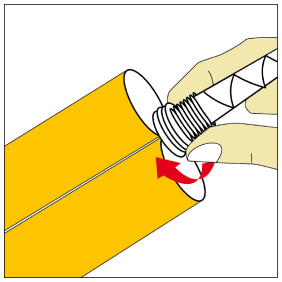
Getting the cartridge ready: 400ml, 600ml and 1500ml



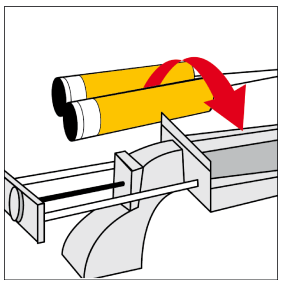
1. Unscrew the cap



2. Pull out the red plug



3. Screw on the static mixer

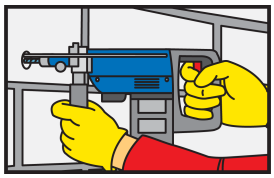


4. Place the cartridge into the gun and start application

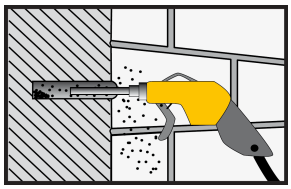
When the work is interrupted the static mixer can remain on the cartridge after the gun pressure has been relieved. If the resin has hardened in the nozzle when work is resumed, a new nozzle must be attached.

APPLICATION METHOD / TOOLS

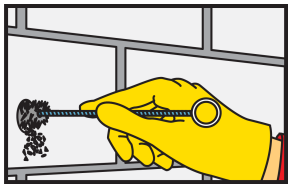
Anchors in solid masonry/concrete



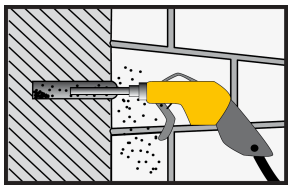
Drilling of hole with an electric drill to the diameter and depth required. Drill hole diameter must be in accordance with anchor size.



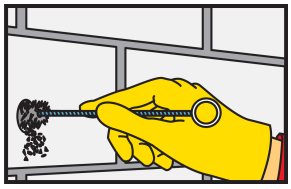
The drill hole must be cleaned with by compressed air, using an air lance, starting from the bottom of the hole. (at least 2x) until return air stream is free of noticed dust.
Important: use oil-free compressors, minimum pressure: 6 Bar (90 psi).



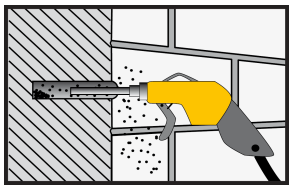
The drill hole must be thoroughly cleaned with the special steel brush (brush at least 2x). The diameter of the brush must be larger than the diameter of the drill hole



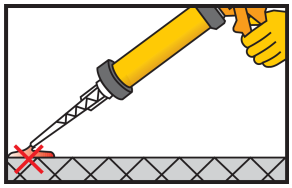
The drill hole must be then be cleaned again by compressed air, using an air lance, starting from the bottom of the hole. (at least 2x) until return air stream is free of noticed dust.
Important: use oil-free compressors, minimum pressure: 6 Bar (90 psi).



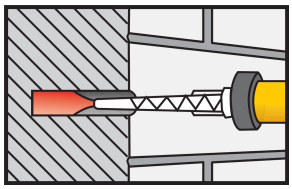
The drill hole must be thoroughly cleaned with the special steel brush (brush at least 2x). The diameter of the brush must be larger than the diameter of the drill hole.



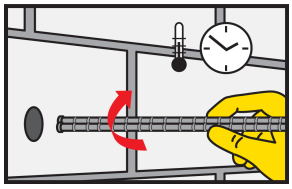
The drill hole must then be cleaned yet again by compressed air, using an air lance, starting from the bottom of the hole. (at least 2x) until return air stream is free of noticed dust.
Important: use oil-free compressors, minimum pressure: 6 Bar (90 psi).



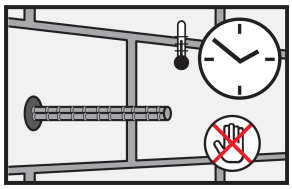
Pump approx. twice until both parts come out uniformly. Do not use this material. Release the gun pressure and clean the cartridge opening with a cloth.



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.



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.



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

Important Note: Anchors in hollow blocks: Use Sika AnchorFix®-1 for hollow blocks.

CLEANING OF TOOLS

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

FURTHER DOCUMENTS

For specific information on design refer to the separate documentation provided:
Technical Documentation Sika Sika AnchorFix®-3001 870 43 10

BASIS OF PRODUCT DATA

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

LOCAL RESTRICTIONS

Please note that as a result of specific local regulations the declared data and recommended uses for this product may vary from country to country. Please consult the local Product Data Sheet for the exact product data and uses.

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.

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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