

## PRODUCT DATA SHEET

# Sika AnchorFix®-3001

Epoxy high performance chemical anchoring material



### DESCRIPTION

Sika AnchorFix®-3001 is an epoxy resin based, 2-part, thixotropic, 1:1 mixing ratio, high performance anchoring material. It is specifically designed for anchoring threaded rods and reinforcement bars in both cracked and un-cracked dry or damp concrete. Suitable to use in hot and tropical climatic conditions.

### USES

Sika AnchorFix®-3001 may only be used by experienced professionals.

Anchoring material for 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

- Handrails, balustrades and supports
- Railings
- Window and door frames

#### Substrates

- Concrete (cracked and un-cracked)
- Hollow and solid masonry
- Wood
- Natural and reconstituted stone
- Solid rock

### 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
- Seismic tested (C1)
- Suitable for contact with drinking water
- Fire resistant
- Styrene-free
- Good adhesion to the substrate
- Shrinkage-free hardening
- Standard sealant guns can be used (250 ml cartridge)
- Low wastage

### SUSTAINABILITY

- Conformity with LEED v4 MRc 2 (Option 1): Building Product Disclosure and Optimization – Environmental Product Declarations
- Conformity with LEED v4 MRc 4 (Option 2): Building Product Disclosure and Optimization - Material Ingredients

### APPROVALS / CERTIFICATES

- CE Marking and Declaration of Performance to ETA 14/0157, based on ETAG 001 Part 1 and Part 5 - Bonded injection type anchor for use in cracked and un-cracked concrete
- CE Marking and Declaration of Performance to ETA 14/0368, based on ETAG 001 Part 1 and Part 5 - Post installed rebar connections
- Adhesive Anchors for Cracked and Un-cracked Concrete IBC/IRC, Sika AnchorFix®-3001, ICC-ES, Evaluation report No. ESR-3608
- Drinking Water System Components NSF/ANSI 61, Sika AnchorFix®-3001, IAPMO R&T, Certificate No. K-8319
- Fire Testing ISO 834-1, Sika AnchorFix®-3001, CSTB, Test report No. 26054326/B

## PRODUCT INFORMATION

Composition	Epoxy	
Packaging	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
Colour	Part A	off-white
	Part B	dark grey / black
	A+B mixed	grey
Shelf life	24 months from date of production	
Storage conditions	The product must be stored in original, unopened and undamaged sealed packaging in dry conditions at temperatures between +10 °C and +25 °C. Always refer to packaging.	
Density	A+B mixed	~1,49 kg/l

## TECHNICAL INFORMATION

Compressive strength	~85 N/mm <sup>2</sup> (7 days, +20 °C)	(ASTM D 695)
Modulus of elasticity in compression	~5 000 N/mm <sup>2</sup> (7 days, +20 °C)	(ASTM D 695)
Tensile strength in flexure	~45 N/mm <sup>2</sup> (7 days, +20 °C)	(ASTM D 790)
Tensile strength	~23 N/mm <sup>2</sup> (7 days, +20 °C)	(ASTM D 638)
Modulus of elasticity in tension	~5 500 N/mm <sup>2</sup> (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

## SYSTEMS

System structure	Ancillary products: <ul style="list-style-type: none"><li>▪ Sika AnchorFix® Flexible Extensions</li><li>▪ Sika AnchorFix® Hole Cleaning Brushes-Steel</li><li>▪ Sika AnchorFix® Static Mixers -Nozzles</li><li>▪ Sika AnchorFix® Straight Extensions</li><li>▪ Sika AnchorFix® Perforated Sleeves</li></ul>
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## APPLICATION INFORMATION

Mixing ratio	Part A : Part B = 1 : 1 by volume
Layer thickness	~7 mm max
Sag flow	Non-sag, including overhead
Product temperature	10 °C min. / +30 °C max.
Ambient air temperature	+5 °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	+5 °C min. / +40 °C max.

## Curing time

Temperature	Open time - T <sub>gel</sub>	Curing time - T <sub>cur</sub>
+40 °C	3 minutes	3 hours
+35 °C to +40 °C	4 minutes	4 hours
+30 °C to +35 °C	6 minutes	5 hours
+25 °C to +30 °C	8 minutes	6 hours
+20 °C to +25 °C	11 minutes	7 hours
+15 °C to +20 °C	15 minutes	8 hours
+10 °C to +15 °C	20 minutes	12 hours
+5 °C to +10 °C	—*	24 hours

\* Minimum cartridge temperature: +10 °C

## 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.

## FURTHER INFORMATION

- For specific information on design refer to: Technical Documentation Sika AnchorFix®-3001 870 43 10
- Sika Method Statement: Sika AnchorFix®
- Sika AnchorFix®: Approvals

## IMPORTANT CONSIDERATIONS

- Natural / reconstituted stone and solid rock properties vary particular with regard to strength, composition and porosity. For each application, the suitability of Sika AnchorFix®-3001 must be tested for bond strength, surface staining and discoloration by first applying the product to a sample area before full project application.

## ECOLOGY, HEALTH AND SAFETY

User must read the most recent corresponding Safety Data Sheets (SDS) before using any products. The SDS provides information and advice on the safe handling, storage and disposal of chemical products and contains physical, ecological, toxicological and other safety-related data.

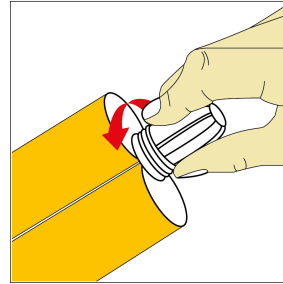
## APPLICATION INSTRUCTIONS

### SUBSTRATE QUALITY

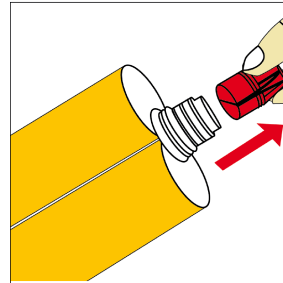
Mortar and concrete must be at the required design strength.  
Substrate tensile / compressive strengths (concrete, masonry, natural stone) must be confirmed by testing. The anchor hole must always be clean, free from oil and grease etc.  
Loose particles must be removed from the holes. Threaded rods and rebar's must be cleaned thoroughly and free from dirt, oil, grease, corrosion products or any other substances and particles which could affect adhesion.

## MIXING

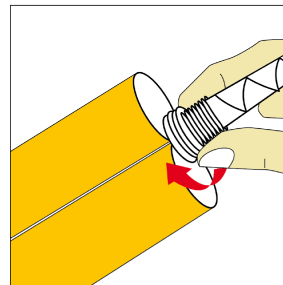
### Preparing cartridge: 400 ml and 600 ml



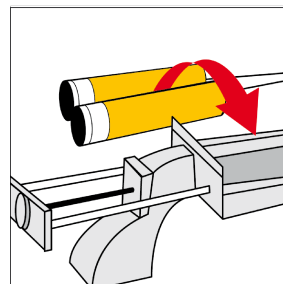
1. Unscrew the cap



2. Pull out the red plug



3. Screw on the static mixer



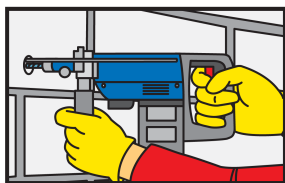
4. Place the cartridge into the application gun ready for use

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

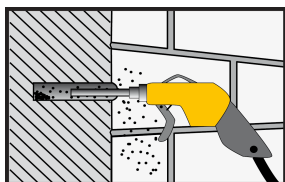
## APPLICATION METHOD / TOOLS

Reference must be made to further documentation where applicable, such as relevant method statement, application manual and installation or working instructions.

### Anchors in solid masonry/concrete



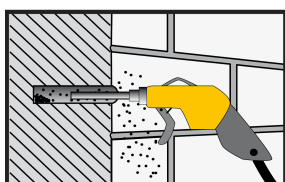
1. Drill hole with an electric drill to the diameter and depth required. Drill hole diameter must be in accordance with anchor size



2. The drill hole must be cleaned with oil free compressed air using an air lance, pressure: 6 Bar (90 psi). Start from the bottom of the hole and clean minimum 2x until return air stream is free of dust



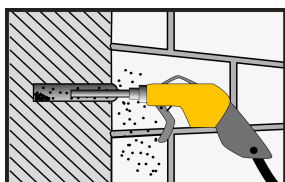
3. The drill hole must be thoroughly cleaned with the special steel brush (at least 2x). The diameter of the brush must be larger than the diameter of the drill hole



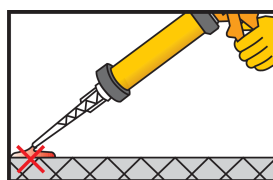
4. The drill hole must be cleaned again as stage 2



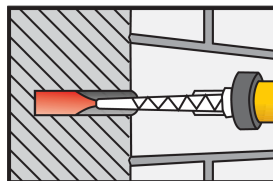
5. The drill hole must be thoroughly cleaned again as stage 3



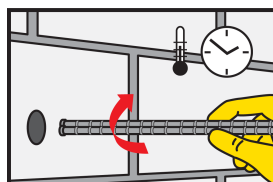
6. The drill hole must be cleaned again as stage 2 & 4



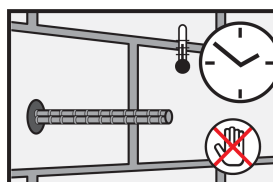
7. Pump gun at least 2x until both parts are extruded as a one consistent colour. Do not use this material. Release the gun pressure and clean the static mixer opening with a cloth



8. Inject the anchoring material into the drill hole, starting from the bottom and slowly pull out the static mixer while extruding the resin into the hole. Avoid entrapping air. For deep holes use extension tubing



9. Insert the anchor with a rotary motion into the filled drill hole within the anchoring material open time. Some of the anchoring material must flow out of the hole



10. During the resin hardening time the anchor must not be moved or loaded

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

### CLEANING OF EQUIPMENT

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

### 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 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.

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ISO 9001: Sika UAE LLC,  
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Sika Qatar LLC  
ISO 14001: Sika UAE LLC,  
Sika Gulf B.S.C. (c),  
Sika Saudi Arabia Co. Ltd  
OHSAS: Sika UAE LLC,  
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All products are supplied  
under a management  
system certified to conform  
to the requirements of the  
quality, environmental and  
occupational health &  
safety standards ISO 9001,  
ISO 14001 and OHSAS  
18001.

### Product Data Sheet

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