BUILDING TRUST

PRODUCT DATA SHEET

Sika AnchorFix®-3001

Epoxy high performance chemical anchoring adhesive

DESCRIPTION

Sika AnchorFix®-3001 is a two-part, epoxy resin, thixotropic anchoring adhesive. It is used for anchoring threaded rods and reinforcement bars in both cracked and un-cracked, dry and damp concrete.

USES

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

Sika AnchorFix®-3001 is used as an anchoring adhesive for fixing non-expanding anchors in the following substrates:
- Handrails, balustrades and supports
- Railings
- Around window and door frames
- Cracked or uncracked concrete
- Hollow and solid masonry
- Wood
- Solid rock

Sika AnchorFix®-3001 is used as a fast-curing anchoring adhesive for the following objects:
- Threaded rods
- Reinforcing steel
- Bolts and special fastening systems

Please note:
- The Product may only be used by experienced professionals.

FEATURES

- Long open time
- Very good load capacity
- Suitable for use in dry, wet, and flooded holes
- ETA based on working life of 50 years or 100 years
- ETA to EAD 330087-01-0601 for post installed rebar connections
- ETA to EAD 330499-01-0601 for threaded rods in uncracked concrete
- Tested fire performance for post-installed rebar
- Seismic testing C1 available
- Can be used in hammer-drilled, dustless-drilled and diamond-core-drilled bore holes
- Suitable for cracked and uncracked concrete
- Suitable for contact with drinking water
- Thixotropic: non-sag in vertical and overhead applications
- Styrene-free
- Low odour
- Low wastage

SUSTAINABILITY

- Contributes towards satisfying Indoor Environmental Quality (EQ) Credit: Low-Emitting Materials under LEED® v4 — 1–3 points
- Complies with the requirements of AgBB including the LCI-values (June 2021) for use in the indoor environment.

CERTIFICATES AND TEST REPORTS

- CE marking and declaration of performance based on European Technical Assessment ETA-14/0157. ETA issued on the basis of EAD 330499-01-0601 Bonded fasteners for use in concrete.
- CE marking and declaration of performance based on European Technical Assessment ETA 14/0368. ETA issued on the basis of EAD 330087-01-0601 Systems for post-installed rebar connections with mortar
- Evaluation Report, Sika AnchorFix®-3001, ICC-ES, Report No. ESR-3608
- Fire Testing ISO 834-1, Sika AnchorFix®-3001, CSTB, Test report No. 26054326/B
- Drinking Water System Components NSF/ANSI 61, Sika AnchorFix®, IAPMO R&T, Certificate No. K-8319

PRODUCT INFORMATION

Composition	Epoxy resin	
Packaging	250 ml standard cartridge	12 cartridges per box 75 boxes per pallet
	400 ml side-by-side cartridge	12 cartridges per box 60 boxes per pallet
	600 ml side-by-side cartridge	12 cartridges per box 36 boxes per pallet
	1500 ml side-by-side cartridge	5 cartridges per box 46 boxes per pallet
	Refer to the current price list for available packaging variations.	
Colour	Part A	off white
	Part B	dark grey / black
	Part A+B	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 the packaging.	
Density	1.49 kg/L	(ISO 1183-1)

TECHNICAL INFORMATION

Compressive strength	Cured 7 days at +20 °C	74 N/mm²	(ASTM D695)
Modulus of elasticity in compression	Cured 7 days at +20 °C	5 000 N/mm²	(ASTM D695)
Flexural-strength	Cured 7 days at +20 °C	15 N/mm²	(ASTM D790)
Tensile strength	Cured 7 days at +20 °C	23 N/mm²	(ASTM D638)
Modulus of elasticity in tension	Cured 7 days at +20 °C	5 500 N/mm²	(ASTM D638)

Service temperature (EAD 330499-01-0601)

Time	Minimum	Maximum
Long term	-40 °C	+50 °C
Short term (up to 2 hours)	-	+80 °C

APPLICATION INFORMATION

Mixing ratio	Part A : Part B	1 : 1 by volume
Layer thickness	Maximum	7 mm
Sag flow	Non-sag, even overhead	
Material temperature	Maximum	+30 °C
	Minimum	+10 °C
Ambient air temperature	Maximum	+40 °C
	Minimum	+5 °C
Dew point	Beware of condensation. Substrate temperature during application must be at least +3 °C above dew point.	

Substrate temperature	Maximum	+40 °C
	Minimum	+5 °C

Curing time

Temperature	Open time - T_{gel}	Curing time - T_{cur} T_{cur} is doubled for wet concrete
+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

SYSTEM INFORMATION

System structure

Ancillary products:
- Sika AnchorFix® Flexible Extensions
- Sika AnchorFix® Hole Cleaning Brushes Steel
- Sika AnchorFix® Static Mixers / Nozzles
- Sika AnchorFix® Straight Extensions
- Sika AnchorFix® Perforated Sleeves

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 DOCUMENTATION

For design details, refer to the following technical documentation: 870 43 10 Technical Documentation Sika AnchorFix®-3001 (10 / 2017) 3

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 PREPARATION

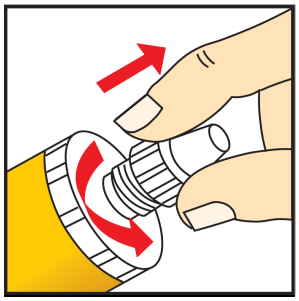
Mortar and concrete must be older than 28 days.
Verify the substrate strength (concrete, masonry, natural stone). Perform pull-out tests if the substrate strength is unknown.
Make sure that the anchor hole is clean, dry, free from oil and grease. Remove loose particles from the anchor hole.
Clean threaded rods and reinforcement bars thoroughly. Remove oil, grease or any other substances and particles such as dirt.

Natural stone, reconstituted stone, and solid rock vary significantly in terms of strength, composition, and porosity.
For each application, the suitability of the Product must be tested for bond strength, surface staining and discoloration by applying the Product to a sample area before full project application.

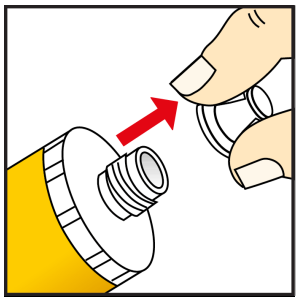
MIXING

PREPARING THE CARTRIDGE

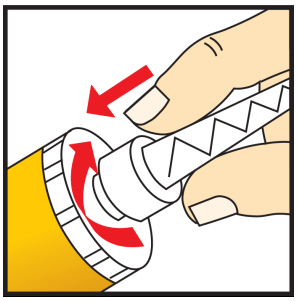
1. Unscrew the cap.



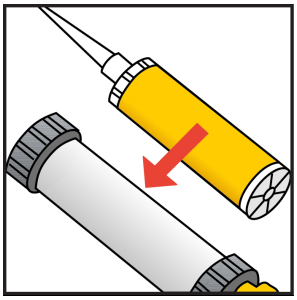
2. Pull out the plug.



3. Screw on the static mixer.

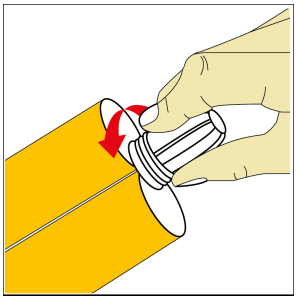


4. Place the cartridge into the dispenser and start application

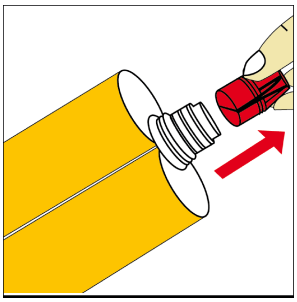


PREPARING THE DOUBLE CARTRIDGE

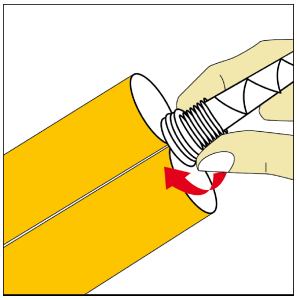
1. Unscrew the cap.



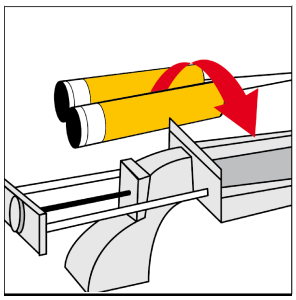
2. Pull out the red plug.



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

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.

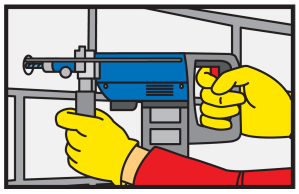
Test if the Product is suitable for the substrate

Note: 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.

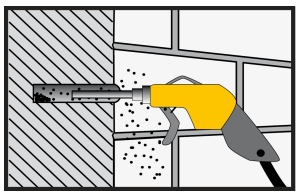
1. Test the Product's suitability in a sample area.

ANCHORS IN SOLID MASONRY OR CONCRETE

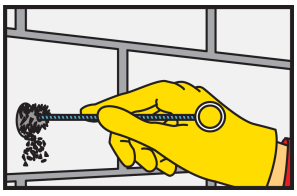
1. IMPORTANT Make sure that the drill hole diameter is in accordance with the anchor size. Drill a hole with an electric drill to the diameter and depth specified in the Technical Documentation listed in the section Further Information.



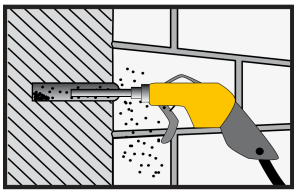
2. IMPORTANT Use oil-free compressors. Clean the drill hole with an air lance, pressure: 6 Bar (90 psi), starting from the bottom of the hole. Note The hole must be cleaned a minimum of two times until return air stream is free of dust.



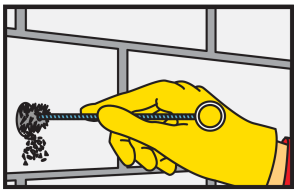
3. Thoroughly clean the drill hole with the steel brush. Note The diameter of the brush must be larger than the diameter of the drill hole and the hole must be cleaned a minimum of two times.



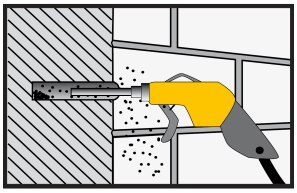
4. IMPORTANT Use oil-free compressors. Clean the drill hole with an air lance, pressure: 6 Bar (90 psi), starting from the bottom of the hole. Note The hole must be cleaned a minimum of two times until return air stream is free of dust.



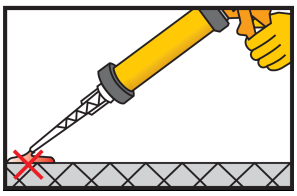
5. Thoroughly clean the drill hole with the steel brush. Note The diameter of the brush must be larger than the diameter of the drill hole and the hole must be cleaned a minimum of two times.



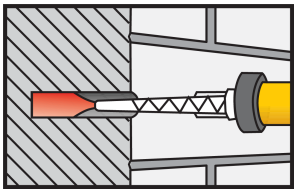
6. IMPORTANT Use oil-free compressors. Clean the drill hole with an air lance, pressure: 6 Bar (90 psi), starting from the bottom of the hole. Note The hole must be cleaned a minimum of two times until return air stream is free of dust.



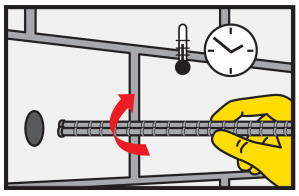
7. Pump the Product until both parts come out uniformly. Release the gun pressure and clean the cartridge nozzle with a cloth.



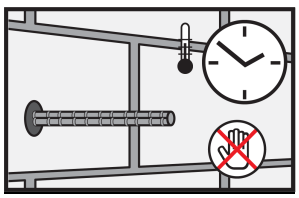
8. IMPORTANT Do not entrap air into the hole. Inject the Product into the hole starting from the bottom while slowly drawing back the static mixer. Note For deep holes extension tubing can be used.



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



10. Do not load or move the anchor during the hardening time.



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.