BUILDING TRUST
CONSTRUIRE LA CONFIANCE

PRODUCT DATA SHEET

Sika AnchorFix®-3001

High-strength, high-load capacity and low-VOC, pure epoxy anchoring adhesive with extended workingtime

PRODUCT DESCRIPTION

Sika AnchorFix®-3001 is a two component, pure epoxy anchoring adhesive. Using high quality, low-VOC and styrene-free technology, Sika AnchorFix®-3001 has been specifically designed to provide a high-strength, user-friendly and versatile adhesive for use in dry, wet or flooded conditions and on or into numerous base materials. The anchoring adhesive is suitable for medium and heavy loads in both structural and non-structural applications.

WHERE TO USE

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

- Anchoring of rebar or threaded rods in solid base materials (concrete, stone, fully grouted block)
- Grouting horizontally, vertically and overhead (refer to Limitations), where slow-setting allows extended working time
- Suitable for deeper and scattered holes or applications where a fast-turnaround is not needed
- Suitable for use as a 'pick-proof' sealant in secure or holding suites and similar facilities (horizontal use only)
- Grouting in external environments and where applications are subject to dynamic loads and vibrations
- Anchoring structural steel to concrete, safety barriers, balcony stanchions, canopies, signs, hand rails, racking, machinery, masonry supports, stadium seats, reinforcing and starter bars

CHARACTERISTICS / ADVANTAGES

- Styrene- free and low-VOC
- Versatile material allows application as adhesive and anchoring gel
- Sets up in dry, wet or flooded conditions
- Cures without exhibiting expansion pressures
- Extended open and gel times accommodate anchoring in deep and scattered holes
- Permits anchors close to free edges
- Suitable for chemical anchors, threaded bars and reinforcing steel
- Performs in both cracked and non-cracked concrete
- Resistant to a wide range of chemicals, including aqueous solutions of aluminum chloride at saturation, aluminium nitrate at 10 % concentration, jet fuel, diesel fuel, domestic kerosene and many other substances at 75 °C (167 °F) while retaining at least 80 % of physical values (See Chemical Resistance Guide).
- Supports high loads

APPROVALS / CERTIFICATES

- ESR to AC308 by ICC-ES (ESR-3608): approved for cracked and uncracked concrete
- ANSI/NSF Standard 61 approved for contact with potable water by IAPMO-R&T (file N-7858).
- Meets ASTM C881 (Standard Specification for Epoxy-Resin-Base Bonding Systems for Concrete Type I & IV, Class C, grade 3).
- Product qualified by The Road Authority (TRA) and approved by the Ministry of Transportation of Ontario (MTO) as listed in the 9.30.25 prequalification list for Stuctural Dowel Adhesives - Acrylic and Epoxy Resins.
- Ministère des Transports et de la Mobilité Durable du

Québec (MTMD) approved.
- Product recognized by the British Columbia Ministry of Transportation (BC MoT).

PRODUCT INFORMATION

Packaging	250 mL (8.4 US fl. oz) UVL cartridge/12 per case 600 mL (20.2 US fl. oz) side by side cartridges/12 per case	
Colour	Bronze	
Shelf Life	24 months if stored properly in original and unopened packaging and in cool and dry conditions, out of direct contact with sunlight.	
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 (50 and 77 °F).	
Density	1.7 kg/L	(ASTM D1875)
Volatile organic compound (VOC) content	4.5 g/L	(SCAQMD Rule 1168)

TECHNICAL INFORMATION

Compressive Strength	24 hours	59 MPa (8500 psi)	(ASTM D695)
	7 days	85 MPa (12 300 psi)	
Modulus of Elasticity in Compression	7 days	5 GPa	(ASTM D695)
Tensile Strength in Flexure	1 day	6.6 %	(ASTM D638)
	7 days	5.9 %	
Tensile Strength	1 day	18 MPa (2610 psi)	(ASTM D638)
	7 days	23.5 MPa (3400 psi)	
Modulus of Elasticity in Tension	1 day	5.7 GPa	(ASTM D638)
	7 days	5.5 GPa	
Electrical Resistivity	5.1×10^9 Ω.cm @ 500 V 5.4×10^9 Ω.cm @ 1000 V 5.3×10^9 Ω.cm@ 2000 V 5.0×10^9 Ω.cm@ 4000 V		
Design Considerations	**Design Data** Please consult Specification Documents (available through contact with Sika Canada) for design data including anchorage, lap and splice lengths, ultimate tensile loads and shear stresses and fire resistance information.		
Heat Deflection Temperature	7 days	49 °C (120 °F)	(ASTM D790)

APPLICATION INFORMATION

Mixing Ratio	A:B = 1:1 by volume

Open Time	Resin & substrate temperature	Working time	Loading time
	* 5→ 10 °C (41→ 50 °F)	-	24 h
	10→ 15 °C (50→ 59 °F)	20 min	12 h
	15→ 20 °C (59→ 68 °F)	15 min	8 h
	20→ 25 °C (68→ 77 °F)	11 min	7 h
	25→ 30 °C (77→ 86 °F)	8 min	6 h
	30→ 35 °C (86→ 95 °F)	6 min	5 h
	35→ 40 °C (95→ 104 °F)	4 min	4 h
	40 °C (104 °F)	3 min	3 h

**Adhesive maintained at 10 °C (50 °F) minimum.*

SYSTEMS

CSC MasterFormat®	03 64 23 (07 92 16) EPOXY INJECTION GROUTING

BASIS OF PRODUCT DATA

Product properties are typically averages, obtained under laboratory conditions. Reasonable variations can be expected on-site due to local factors, including environment, preparation, application, curing and test methods. Properties tested at 20 °C (68 °F) and 50 % R.H. unless stated otherwise.

LIMITATIONS

- Sika AnchorFix®-3001 is not intended as a cosmetic or decorative material and when anchoring into porous substrates or reconstituted stone, staining may occur. Where this is of concern, consult Sika Canada for advice and carry out discrete trial applications before proceeding.
- Store and pre-condition material to above 10 °C (50 °F) to ease application when using manual dispensers; the higher the temperature the easier to dispense (a maximum storage and pre-conditioning temperature of 22 °C (71 °F) is recommended as working time is significantly reduced at this temperature and above).
- Minimum age of concrete must be 28 days, depending on curing conditions.
- Do not thin; solvents will prevent proper cure.
- Use for overhead anchoring applications only with written confirmation from Sika Canada.
- Standard and quality of dispenser will impact upon ease of extrusion, especially when using manual equipment; ensure the mechanical advantage is appropriate, pistons are correctly aligned and even pressure is achievable.
- Sika AnchorFix®-3001 must only be applied on or into frost-free substrates.

ENVIRONMENT, HEALTH & 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.

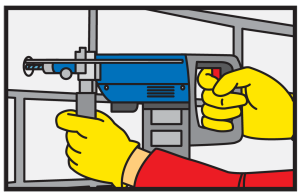
APPLICATION INSTRUCTIONS

SUBSTRATE QUALITY

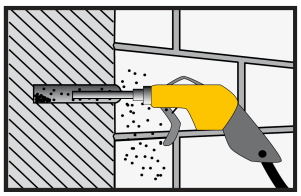
Surfaces must be clean and sound. Surfaces/holes may be dry, damp or wet. Remove dust, laitance, grease, oil, curing compounds, impregnations, waxes, foreign particles and disintegrated materials. Substrate strengths must be verified, with pull-out tests being conducted if strength is unknown.

APPLICATION METHOD / TOOLS

Anchors in solid masonry/concrete

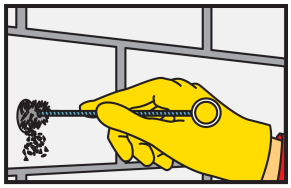


Drilling of hole with an electric drill to the diameter and depth required. Drill hole diameter must be in accordance with anchor size.

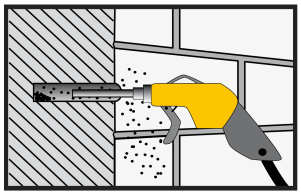


The drill hole must be cleaned with by compressed air, using an air lance, starting from the bottom of the hole. (at least 2x) until return air stream is free of noticed dust.

Important: use oil-free compressors, minimum pressure: 6 Bar (90 psi).

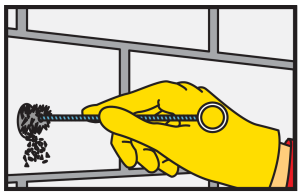


The drill hole must be thoroughly cleaned with the special steel brush (brush at least 2x). The diameter of the brush must be larger than the diameter of the drill hole



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).



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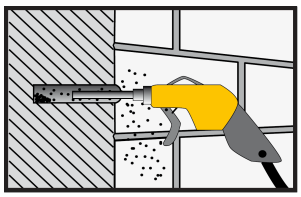
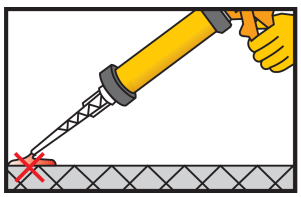
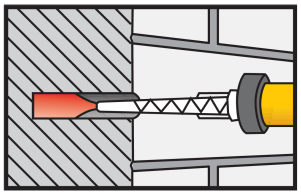


The drill hole must then be cleaned yet again by compressed air, using an air lance, starting from the bottom of the hole. (at least 2x) until return air stream is free of noticed dust.

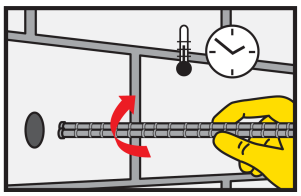
Important: use oil-free compressors, minimum pressure: 6 Bar (90 psi).



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.

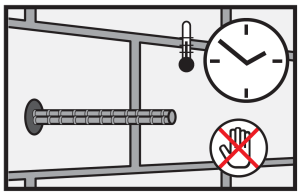


Inject the adhesive into the hole, starting from the bottom, while slowly drawing back the static mixer.In any case avoid entrapping air. For deep holes, extension tubing can be used.



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.

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

CLEAN UP

Collect with absorbent material. Dispose of in accordance with local disposal regulations. Uncured material can be removed with Sika® Epoxy Cleaner. Cured 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 recommendations, or from any other advice offered. The information contained herein does not relieve the user of the products from testing them for the intended application and purpose. 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 or may be downloaded from our website at: www.sika.ca

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