

PRODUCT DATA SHEET

Sika AnchorFix®-2+ Arctic

Anchoring adhesive for medium to high loads

PRODUCT DESCRIPTION

Solvent- and styrene-free, epoxy acrylate-based, 2-component anchoring adhesive for arctic/cold climate conditions.

WHERE TO USE

Sika AnchorFix®-2+ Arctic may only be used by experienced professionals.

As a fast curing anchoring adhesive for all grades of:

- Rebars / reinforcing steel
- Threaded rods
- Bolts and special fastening systems
- Concrete
- Solid masonry
- Steel

Prior to any application, the suitability of the Sika AnchorFix® Adhesive for the substrate in terms of the desired bond strength, and for the prevention of surface staining or discolouration, must be confirmed by testing in a sample area. This is due to the wide variation of possible substrates, particularly in terms of strength, composition and porosity:

- Hard natural stone
- Solid rock

CHARACTERISTICS / ADVANTAGES

- Fast curing
- Applicable with standard guns
- Medium to high load capacity
- Suitable for cracked concrete
- Non-sag, even overhead
- Styrene-free
- Low odour
- Low wastage

APPROVALS / CERTIFICATES

 Waiting to be approved by Ministère des Transports du Québec (MTQ), the Ministry of Transportation of Ontario (MTO) and the British Columbia Ministry of Transportation (BC MoT).

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PRODUCT INFORMATION

Packaging	300 mL standard cartridge 12 cartridges			
	825 mL side-by-side cartridge	6 cartridges per b	OX	
Shelf Life	12 months from date of production All Sika AnchorFix®-2+ Arctic 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 0 °C and +25 °C (+32 °F and +77 °F). Protect from direct sunlight.			
Colour	Component A:	light grey		
	Component B: black			
	Component A+B mixed: light grey			
Density	1.60–1.75 kg/L (component A) 1.45–1.50 kg/L (component B) 1.65–1.75 kg/L (component A+B mixed)			
TECHNICAL INFORMATION				
Compressive Strength	80 MPa (11 600 psi) (ASTM after 7 days at +20 °C (+68 °F)		(ASTM D695)	
Modulus of Elasticity in Compression	5 000 MPa (725 189 psi) (ASTM I after 7 days at +20 °C (+68 °F)		(ASTM D695)	
Tensile Strength in Flexure	40 MPa (5 802 psi) (AST after 7 days at +20 °C (+68 °F)		(ASTM D790)	
Tensile Strength	15 MPa (2 176 psi) (ASTN after 7 days at +20 °C (+68 °F)		(ASTM D638)	
Modulus of Elasticity in Tension	5 000 MPa (725 189 psi) (ASTM after 7 days at +20 °C (+68 °F)		(ASTM D638)	
Service Temperature	Long term	-40 °C min. to +50 °C max. -40 °F min. to +122 °F max.	(European testing - ETAG 001, part 5)	
	Short term (1–2 hours)	<u>+80 °C (+176 °F)</u>	_	
SYSTEMS				
System Structure	For design details, please refer to the separate documentation provided: "Technical Documentation Sika AnchorFix®-2+ Arctic" Ref: 870 43 05			
APPLICATION INFORMATION				
Mixing Ratio	Component A : component B = 10 : 1 by volume			
Layer Thickness	5 mm max.			
Sag Flow	Non-sag, even overhead			
Product Temperature	Sika AnchorFix®-2+ Arctic must be conditioned at a temperature of between 0 °C and +20 °C (+32 °F and +77 °F) for application.			
Ambient Air Temperature	−25 °C to +20 °C max.			

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	-13 F tO +08 F III dx.	−13 °F to +68 °F max.			
Dew Point		Beware of condensation. Substrate temperature during application must be at least 3 °C above opoint.			
Substrate Temperature	−25 °C to +20 °C max. -13 °F to +68 °F max.				
Curing Time	Temperature	Open time - T _{gel}	Curing time - T _{cur}		
	+20 °C (+68 °F)	100 seconds	20 minutes		
	+10 °C to +20 °C (+50 °F to +68 °F)	2.5 minutes	50 minutes		
	+5 °C to +10 °C (+41 °F to +50 °F)	5 minutes	50 minutes		
	0 °C to +5 °C (+32 °F to +41 °F)	10 minutes	75 minutes		
	-5 °C to 0 °C * (+23 °F to +32 °F)	15 minutes	100 minutes		
	-10 °C to -5 °C * (+14 °F to +23 °F)	15 minutes	12 hours		
	-25 °C ** (-13 °F)	15 minutes	36 hours		

**This application is not covered by the scope of any official approval

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.

OTHER DOCUMENTS

For design details, please refer to the separate documentation provided:

Technical Documentation Sika AnchorFix®-2+ Arctic 870 43 05"

LIMITATIONS

- 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, it is recommended that Sika Canada be consulted for advice and discrete trial applications be undertaken and assessed before proceeding.
- Store material to above 0 °C (32 °F) and for ease of application by manual dispensers, precondition to higher temperatures, i.e., the higher the temperature the easier to dispense. Take into consideration reduced working times.
- Minimum age of concrete must be 28 days, depending on curing conditions.
- Do not thin; solvents will prevent proper cure.
- Ensure that the cartridge is correctly prepared: the

threaded cap removed, the top of bag in the cartridge firmly pulled with pliers until resistance and cut flush with the threaded opening, the static nozzle firmly screwed onto the threaded opening, but not over tightened so as to damage the nozzle.

- Do not use in overhead applications without the express written approval of Sika Canada Inc.
- 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.
- Must only be applied on or into substrates when they are frost-free.

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

Mortar and concrete must be older than 28 days. Substrate strength (concrete, masonry, natural stone)

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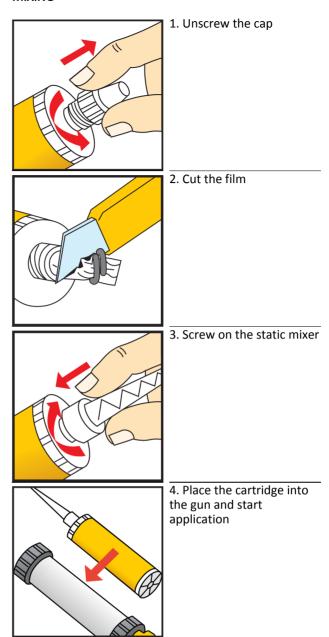
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must be verified. Pull-out tests must be carried out if the substrate strength is unknown. The anchor hole must always be clean, dry, free from oil, grease and other contaminants. Loose particles must be removed from the holes.

Threaded rods and rebars have to be cleaned thoroughly from any oil, grease or any other substances and particles such as dirt etc.

MIXING



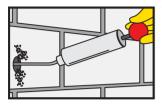
When the work is interrupted the static mixer can remain on the cartridge after the gun pressure has been relieved. If the resin has hardened in the nozzle when work is resumed, a new nozzle must be attached.

APPLICATION METHOD / TOOLS

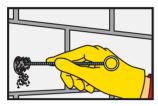
Anchors in solid masonry/concrete:



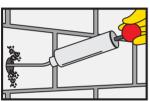
Drilling of hole with an electric drill to the diameter and depth required. Drill hole diameter must be in accordance with anchor size



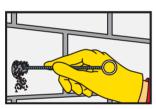
The drill hole must be cleaned with a blow pump or by compressed air, starting from the bottom of the hole (at least 2x). Important: use oil-free compressors.



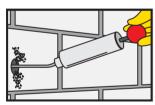
The drill hole must be thoroughly cleaned with the special steel brush (brush at least 2x). The diameter of the brush must be larger than the diameter of the drill hole.



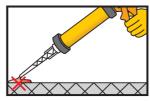
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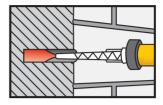
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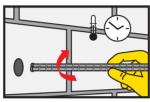
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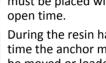
Pump approx. twice until both parts come out uniformly. Do not use this material. Release the gun pressure and clean the cartridge opening with a cloth.

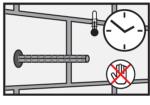


Inject the adhesive into the hole, starting from the bottom, while slowly drawing back the static mixer. In any case avoid entrapping air. For deep holes extension tubing can be used.



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





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

CLEAN UP

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

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 enduse 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

Sika Canada Inc.

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Other locations

Boisbriand (Quebec) Brantford; Cambridge; Sudbury; Toronto (Ontario) Edmonton (Alberta) Surrey (British Columbia)

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