BUILDING TRUST

PRODUCT DATA SHEET

Sika AnchorFix®-3+

HIGH-PERFORMANCE, 2-COMPONENT EPOXY ANCHORING ADHESIVE

DESCRIPTION

Solvent-free, thixotropic, 2-component, epoxy resin-based, high performance anchoring adhesive.

USES

Sika AnchorFix®-3+ 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
- Mechanical and electrical services installation (heating and ventilating, sanitary, etc)
- Anchoring of supports for ducting and equipment

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

In the following substrates:
- Concrete
- Hollow and solid masonry
- Steel
- 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®-3+ 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 concrete
- Non-sag, even overhead
- Styrene-free
- Shrinkage-free hardening
- Standard guns can be used (with the 250ml cartridge)
- Low odour
- Low wastage

APPROVALS / STANDARDS

- Bonded injection type anchor according to ETAG 001 Part 1 and 5 Option 7, ETA-14/0125, Declaration of Performance and provided with the CE marking.
- Anchoring product for reinforcing steel bar according to EN 1504-6:2006, Declaration of Performance 0204030100300000021001, certified by notified factory production control certification body 0921, certificate of conformity of the factory production control 0921-CPD-2056, and provided with the CE marking.
- Tested according to NF/AFNOR standard P 18-831

PRODUCT INFORMATION

Packaging	250 ml standard cartridge, 12 cartridges per box.

Colour

Component A	clear / translucent
Component B	grey
Component A+B mixed	light grey

Shelf Life

12 months from date of production
All Sika AnchorFix®-3+ 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 +5 °C and +30 °C. Protect from direct sunlight.

Density

Component A	~1.18 kg/l
Component B	~1.71 kg/l
Component A+B mixed	~1.45 kg/l

TECHNICAL INFORMATION

Compressive Strength (ASTM D 695-96)

Curing time	+5 °C	+23 °C	+40 °C
16 hours	~11 N/mm²	~94 N/mm²	~108 N/mm²
1 day	~17 N/mm²	~104 N/mm²	~115 N/mm²
3 days	~86 N/mm²	~112 N/mm²	~123 N/mm²
7 days	~89 N/mm²	~114 N/mm²	~127 N/mm²

Pull-Out Resistance (NF P 18-822)

Ultimate load	> 70 kN*
Slippage	< 0.6 mm

* Maximum load of the testing machine
Test parameters for anchoring of rebar in slabs:

Steel quality	B500B
Rebar diameter	12 mm
Drill hole diameter	22 mm
Anchoring depth	120 mm

Service Temperature (ETAG 001, Part 5)

Long term	-40 °C min. / +50°C
Short term (1–2 hours)	+50 °C

APPLICATION INFORMATION

Mixing Ratio

Component A : component B = 1 : 1 by volume

Layer Thickness

5 mm max.

Sag Flow

Non-sag, even overhead

Product Temperature

Sika AnchorFix®-3+ must be at a temperature of between +5 °C and +30 °C for application.

Ambient Air Temperature

0 °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

0 °C min. / +40 °C max.

Curing Time

Temperature	Open time - T_{gel}	Curing time - T_{cur}*
+35 °C – +40 °C	10 minutes	7 hours
+20 °C – +35 °C	15 minutes	14 hours
+10 °C – +20 °C	35 minutes	30 hours
+5 °C – +10°C	75 minutes	45 hours

Minimum cartridge temperature: +5 °C
* In wet concrete the curing time must be doubled.

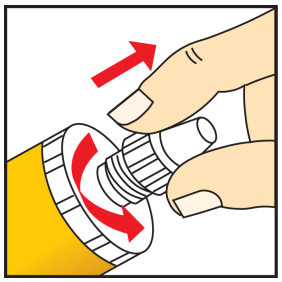
APPLICATION INSTRUCTIONS

SUBSTRATE QUALITY

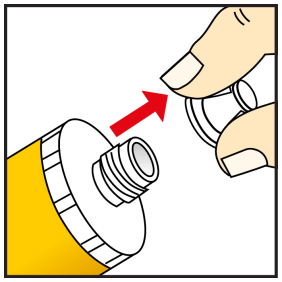
Mortar and concrete must be at the required strength. No need to be 28 days old.
Substrate strength (concrete, masonry, natural stone) must be verified.
Pull-out tests must be carried out if the substrate strength is unknown.
The anchor hole must always be clean, dry, free from oil and grease etc.
Loose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

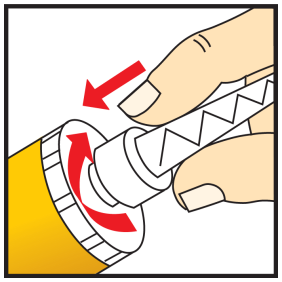
Getting the cartridge ready: 250 ml



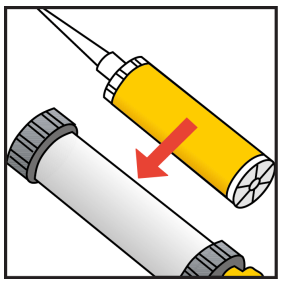
1. Unscrew the cap



2. Pull out the plug



3. Screw on the static mixer

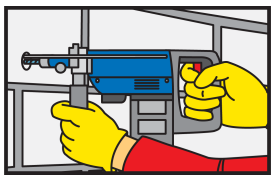


4. Place the cartridge into the gun and start application

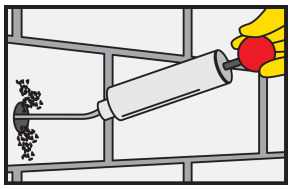
When the work is interrupted the static mixer can remain on the cartridge after the gun pressure has been relieved. If the resin has hardened in the nozzle when work is resumed, a new nozzle must be attached.

APPLICATION METHOD / TOOLS

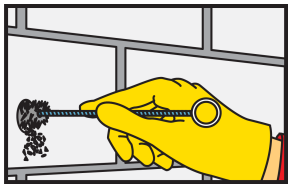
Anchors in solid masonry/concrete



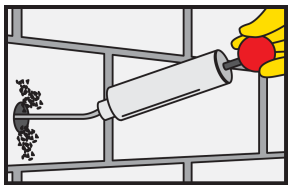
Drilling of hole with an electric drill to the diameter and depth required. Drill hole diameter must be in accordance with anchor size.



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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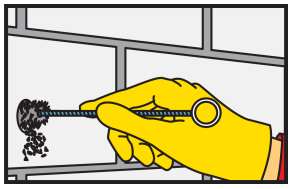

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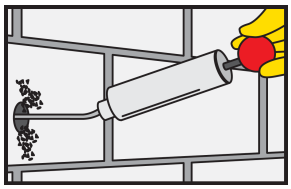

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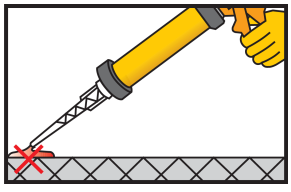
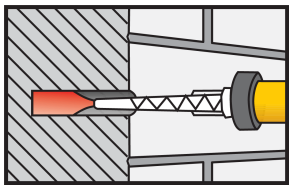
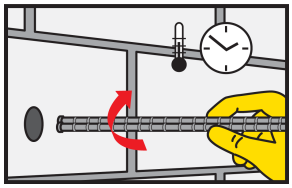


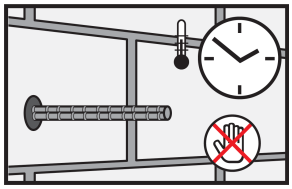
Pump approx. twice until both parts come out uniformly. Do not use this material. Release the gun pressure and clean the cartridge opening with a cloth.



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 open time.



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

CLEANING OF TOOLS

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

BASIS OF PRODUCT DATA

All technical data stated in this Product 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 performance of this product may vary from country to country. Please consult the local Product Data Sheet for the exact description of the application fields.

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. It may be necessary to adapt the above disclaimer to specific local laws and regulations. Any changes to this disclaimer may only be implemented with permission of Sika® Corporate Legal in Baar.

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