

## BUILDING PRODUCT INFORMATION SHEET

# Sika AnchorFix®-2020

## High performance professional anchoring adhesive

#### DESCRIPTION

Sika AnchorFix®-2020 is an epoxy acrylate, resin based, 2-part, thixotropic, fast curing, anchoring adhesive for anchoring threaded rods and reinforcing bars in both cracked and un-cracked concrete. For use in normal/moderate climate conditions.

#### **USES**

Fast curing anchoring adhesive 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)
- Solid masonry
- Wood
- Hard natural stone
- Solid rock

#### LIMITATIONS OF USE

A building element used for load bearing, bracing, structural support or other applications as defined in the NZBC, must be fastened in accordance with the specification / instructions from that elements manufacturer

When this product is used as an adhesive to bond embedded items, anchors and secondary structural elements into (cracked, or uncracked) concrete, as defined in Clause C17 of NZS: 3101 Part2: 2006, the specific anchoring / loading requirements must be calculated by a qualified Structural Engineer.

#### **FEATURES**

- Fast curing
- Standard sealant guns can be used
- High load capacity
- Good adhesion to substrate
- Suitable for cracked concrete
- Suitable for contact with drinking water
- Seismic tested (C1 & C2)
- Non-sag including overhead
- Styrene-free
- Low emissions
- Low wastage

## **APPROVALS / CERTIFICATES**

- Post-Installed Adhesive Anchors in Concrete Elements IBC/ IRC, Sika AnchorFix®-2020, IAPMO UES, Evaluation report No. 601
- ETA-22/0893. For details see accompanying documents, EAD 330499-01-0601: 2018, 1020: Bonded injection type anchor for use in cracked and uncracked concrete
- ETA-22/0893. For details see accompanying documents, EAD 330087-01-0601: 2018,1020: Post installed rebar connections
- Certificate for contact with drinking water NSF/ANSI/CAN 61
  File No. K-8319

#### PRODUCT INFORMATION

Product identifier	Sika AnchorFix®-2020
Place of manufacture	Overseas

#### NZ BUILDING PRODUCT INFORMATION SHEET

Packaging	300 ml standard cartridge	12 cartridges per box	
		pallet: 75 boxes	
Shelf life	12 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 +5 °C and +25 °C. Always refer to packaging.		
Colour	Part A	White	
	Part B	Black	
	A+B mixed	Grey	
Density	~1.70 kg/l (Part A)		
	~1.55 kg/l (Part B)		
	~1.69 kg/l (A+B mixed)		

## **TECHNICAL INFORMATION**

Compressive strength	~70 N/mm2 (7 days, +20 °C)	(ASTM D 695)	
Modulus of elasticity in compression	~7 000 N/mm2 (7 days, +20 °C)	(ASTM D 695)	
Flexural strength	~29 N/mm2 (7 days, +20 °C)	(ASTM D 790)	
Tensile strength	~15 N/mm2 (7 days, +20 °C)	(ASTM D 638)	
Service temperature	Long term	-40 °C min. / +50 °C max	
	Short term (1-2 hours)	+80 °C	

## **SYSTEM INFORMATION**

**System structure** 

Ancillary products:

- Sika AnchorFix® Cleaning Pump
- Sika AnchorFix® Hole Cleaning Brushes Steel
- Sika AnchorFix® Static Mixers -Nozzles

## **APPLICATION INFORMATION**

Mixing ratio	Part A : Part B = 10 : 1 by volume			
Layer thickness	~5 mm max.	~5 mm max.		
Sag flow	Non-sag, including overh	Non-sag, including overhead		
Product temperature	+5 °C min. / +30 °C max.	+5 °C min. / +30 °C max.		
Ambient air temperature	+5 °C min. / +30 °C max.	+5 °C min. / +30 °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. / +30 °C max.	+5 °C min. / +30 °C max.		
Curing time	Temperature	Open time - T <sub>gel</sub>	Curing time - T <sub>cur</sub>	
	+30 °C - +35 °C	2 minutes	30 minutes	
	+25 °C - +30 °C	4 minutes	40 minutes	
	+20 °C - +25 °C	5 minutes	50 minutes	
	+15 °C - +20 °C	6 minutes	75 minutes	
	+10 °C - +15 °C	8 minutes	85 minutes	
	+5 °C - +10 °C*	10 minutes	145 minutes	

NZ BUILDING PRODUCT INFORMATION SHEET



#### MANUFACTURER AND IMPORTER INFORMATION

Manufacturer information	Address	Sika Supply Centre AG
		Industriestrasse 26
		6060, Sarnen
		Switzerland
Importer information	Address	Sika (NZ) Limited
		85-91 Patiki Road
		Avondale, Auckland 1026
		New Zealand
	Phone number	0800 745 269
	Website	https://nzl.sika.com/
	Email address	info@nz.sika.com
	NZBN	9429000018791

#### **BUILDING CODE INFORMATION**

#### **Building Code clauses**

B1 Structure: Performance Clauses B1.3.1, B1.3.2, B1.3.3 (b, f, g, h) B1.3.4

B2 Durability: Performance clause B2.3.1-(a) not less than 50 years

F2 Hazardous Building Materials: Performance clause F2.3.1

#### Building Code compliance statements

Performance B1.3.1, B1.3.2, 1.3.3 (b,f,g,h) B1.3.4: This Sika AnchorFix product has a certified European Technical Assessment: Product Area Code 33, and it has been seismic tested for C1 and C2 classifications. It has been evaluated in accordance with B1/VM1. When used as an adhesive to bond embedded items, anchors and secondary structural elements into (cracked, or uncracked) concrete, as defined in Clause C17 of NZS: 3101 Part2: 2006, and the specific anchoring / loading requirements have been calculated by a suitably qualified Structural Engineer, it contributes to meeting the preceding B1 Structure performance clauses

Performance B2.3.1 (a) 50 years: This product has been evaluated in accordance with B2/VM1. It meets this durability requirement and will remain serviceable for 50 years, or more, when installed and maintained in accordance with the relevant Sika technical literature. nzl.sika.com. According to Sika's "Service Improvement" records, maintained within its ISO9001:2015 Quality Management System, this product has performed successfully since it was introduced in 2023.

Performance F2.3.1: This product meets this requirement when used and applied in accordance with Sika's installation instructions and does not present a health hazard to people occupying or using the building. Refer to the Sika Product Technical Data sheet and product Safety Data Sheet nzl.sika.com for further information if required

#### **BASIS OF PRODUCT DATA**

All technical data in this document are based on laboratory tests. Actual measured data may vary due to circumstances beyond our control.

#### IMPORTANT CONSIDERATIONS

Natural stone and solid rock properties vary particular with regard to strength, composition and porosity. For each application, the suitability of Sika AnchorFix®-2020 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**

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.

#### APPLICATION INSTRUCTIONS

#### **DESIGN REQUIREMENTS**

For assistance with the design requirements needed for embedded structural anchoring refer to the relevant Sika "Technical Documentation" for this product which is located at nzl.sika.com

NZ BUILDING PRODUCT INFORMATION SHEET



#### MIXING

#### GETTING THE CARTRIDGE READY

1. Unscrew the cap.



2. Cut the film.



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**

#### i Note

#### Test if the Product is suitable for the substrate

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.

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

#### ANCHORS IN SOLID MASONRY OR CONCRETE

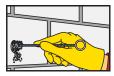
Drill hole with an electric drill to the diameter and depth required. Drill hole diameter must be in accordance with anchor size



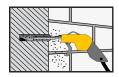
2. The drill hole must be cleaned with oil free compressed air using an air lance, pressure: 6 Bar (90 psi). Start from the bottom of the hole and clean minimum 2 x until return air stream is free of dust



3. 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



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



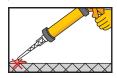
5. The drill hole must be thoroughly cleaned again as stage 3



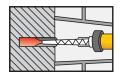
6. The drill hole must be cleaned again as stage 2 & 4



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



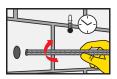
8. Inject the adhesive into the drill hole, starting from the bottom and slowly pull out the static mixer while extruding the resin into the hole. Avoid entrapping air. For deep holes use extension tubing



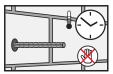
9. Insert the anchor with a rotary motion into the filled drill hole within the adhesive open time. Some of the adhesive must flow out of the hole

#### NZ BUILDING PRODUCT INFORMATION SHEET





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



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

#### 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, dry, 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.

## **CLEANING OF EQUIPMENT**

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

#### MAINTENANCE REQUIREMENTS

There are no maintenance requirements for this Sika product

#### **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 the 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. 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.

The building product/building product line is not subject to warning or ban under section 26 of the Building Act 2004.

Sika (NZ) Limited

85-91 Patiki Road Avondale, Auckland 1026 New Zealand 0800 745 269 www.sika.co.nz

NZ BUILDING PRODUCT INFORMATION SHEET

