

## PRODUCT DATA SHEET

# Sika® Concrete Fix

High Modulus, High-Strength, Structural, Rapid Curing Epoxy, Smooth-Paste Adhesive

### DESCRIPTION

Sika® Concrete Fix is a 2-component, 100% solids, moisture-tolerant, high-modulus, high-strength, structural, smooth-paste epoxy adhesive. (Sika® Concrete Fix is also known as Sikadur-33)

### USES

As a structural adhesive for:

- Concrete elements
- Hard natural stone
- Ceramics, fibre cement
- Mortar, Bricks, Blocks, Masonry, render etc.
- Steel, Iron, Aluminium
- Wood
- Polyester, Epoxy

For concrete repairs

Interior, vertical and overhead repair of:

- Corners and edges
- Hole and void filling
- Joint arrises

Joint filling and crack sealing:

- Crack filling and sealing (non moving)

Metalwork, carpentry:

- Fixing and fastening of handrails, railings, balustrades and supports
- Fixing of window and door frames

For use in the following:

- Concrete
- Hard natural stone
- Solid rock
- Hollow and solid masonry
- Steel
- Wood

### CHARACTERISTICS / ADVANTAGES

- Can be used on damp concrete
- Excellent adhesion to the substrate
- Non-sag, also overhead
- High load capacity
- Shrinkage-free hardening
- Styrene-free
- Convenient easy mix ratio A : B = 1 : 1 by volume

### APPROVALS / CERTIFICATES

AS4020:2018 approved for use in potable Water applications.

### PRODUCT INFORMATION

<b>Composition</b>	Epoxy resin
<b>Packaging</b>	1 litre kit
<b>Shelf life</b>	24 months from date of production
<b>Storage conditions</b>	Store in original, unopened, sealed and undamaged packaging in dry conditions at temperatures between +5 °C and +30 °C. Protect from direct sunlight.
<b>Colour</b>	Concrete grey
<b>Density</b>	1.35 kg/litre (part A+B mixed)

<b>Consistency</b>	Smooth-paste adhesive		
<b>Compressive strength</b>	~ 50 N/mm <sup>2</sup> (14 days + 23°C)		
<b>Tensile strength</b>	10-15 MPa (14 days at +23 °C)		
<b>Tensile adhesion strength</b>	<b>Time</b>	<b>Substrate</b>	<b>Bond Strength</b>
	After 3 days	Dry Concrete	> 5 N/mm <sup>2</sup> *
	After 3 days	Damp Concrete	> 5 N/mm <sup>2</sup> *
	After 3 days	Steel Blast cleaned	> 10 N/mm <sup>2</sup>
	After 3 days	Brick Dry	> 1.5 N/mm <sup>2</sup> **
	* 100% concrete failure ** 100% brick failure		
<b>Coefficient of thermal expansion</b>	9.3x10 <sup>-5</sup> per °C (Temp. range +23 °C - +60 °C)		(EN 1770)
<b>Heat deflection temperature</b>	+49 °C (7 days at +23°C)		(EN 12614)
<b>Mixing ratio</b>	A : B = 1 : 1 by volume		
<b>Consumption</b>	1 litre/m <sup>2</sup> per mm of thickness		
<b>Layer thickness</b>	0.5mm min. / 10mm max.		
<b>Ambient air temperature</b>	+10 °C min. / +35 °C max.		
<b>Relative air humidity</b>	85% max. (at +25 °C)		
<b>Dew point</b>	Avoid condensation during dew point conditions. Substrate temperature during application must be at least 3°C above dew point.		
<b>Substrate temperature</b>	+10 °C min. / +35 °C max.		
<b>Substrate moisture content</b>	Can be damp but not "wet". No free standing water during application and curing.		
<b>Pot Life</b>	60 minutes (+23 °C)		
<b>Curing time</b>	<b>Temperature</b>	<b>Open Time</b>	<b>Curing Time</b>
	+10 °C	210 minutes	3 days *
	+20 °C	90 minutes	2 days *
	+35 °C	45 minutes	1 day *
	* To achieve approx. 80% of the performance		

## 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.

## IMPORTANT CONSIDERATIONS

- Minimum substrate and ambient temperature 4°C
- Do not thin. Addition of solvents will prevent proper cure.
- Material is a vapour barrier after cure
- Not for sealing and cracks under hydrostatic pressure at the time of 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

### SUBSTRATE QUALITY

Mortar and concrete must be older than 28 days. Adequate substrate strength (concrete, masonry, natural stone) must always be confirmed.

### SUBSTRATE PREPARATION

Surface must be clean and sound. It may be dry or damp, but free from standing water. Remove dust, laitance, grease, curing compounds, impregnations, waxes and any other contaminants.

#### Preparation Work

Concrete, natural stone, cement mortar and render: Clean, free from oils and grease, no loose or friable particles, no cement laitance.

Age of concrete 3 to 6 weeks (dependent on mix design and environment). Preparation: Blastcleaning

or grinding.  
Construction steel 37, V2 A steel: Free from oil, grease, rust or mill scale. Preparation: Blastcleaning or grinding. Avoid dew point conditions. If prepared steel is not to be used immediately, its surface must be coated with Sikagard®-62 to protect it.

Polyester, epoxy, ceramics:  
Free from oils and grease. Polyester epoxy: Grind, using coarse abrasive.  
Glass, ceramics: Grinding, do not apply to siliconised substrates.

## MIXING

Pre-mix each component. Proportion equal parts by volume of Component 'B' and Component 'A' into a clean pail. Mix thoroughly for 3 minutes with Sika paddle on low speed (400-600 rpm) drill until uniform in colour. Mix only the quantity that can be used within its potlife.

## APPLICATION METHOD / TOOLS

Apply Sika® Concrete Fix to the prepared substrate by trowel or gloved hand. Ensure the material is worked well (scrubbed) into the surface, this is particularly important on damp surfaces. There should be no standing water on concrete surfaces. If using Sika® Concrete Fix as an adhesive, coat both adherents and press into place (on vertical and overhead surfaces temporary support must be provided). The adhesive layer should not be less than 2 mm.

### To seal injection ports and crack for injection grouting

– Place the neat mixed material over the cracks to be pressure-injected and around each injection port. Allow sufficient time to set before pressure-injecting. Use Sikadur-52 Normal for the low-viscosity injection adhesive. Consult the Technical Data Sheet on this product for more information. Also contact Technical Services for additional information on pressure-injection grouting.

**To anchor bolts, dowels, pins** – Annular space around bolt should not exceed 3 mm, depth of embedment is typically 10-15 times the bolt diameter. Grout with neat Sika® Concrete Fix.

## CLEANING OF EQUIPMENT

Uncured material may be cleaned from application tools, etc. by using Sika Colma Cleaner (flammable solvent). Cured material can only be removed mechanically.

## LOCAL RESTRICTIONS

Please note that as a result of specific local regulations

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the declared data for this product may vary from country to country. Please consult the local Product Data Sheet for the exact product 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.

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### Product Data Sheet

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