

**Product Data Sheet**  
Edition 8.2005  
Identification no. 386-29S  
Sikadur AnchorFix-4

# Sikadur® AnchorFix-4

## Sikadur Injection Gel

High modulus, high strength, smooth, epoxy paste  
anchoring adhesive

**Description** Sikadur Anchor Fix-4 is a 2-component, solvent-free, moisture-tolerant, high-modulus, high-strength, structural epoxy. When mixed it gives a smooth, non-abrasive, paste adhesive. It conforms to the current ASTM C-881 and AASHTO M-235 specifications.

**Where to Use**

- Structural crack repairs not exceeding 1/4 in. (6 mm) width.
- Mechanical grouting. . . bolts, dowels, pins, machine and 'robotic' base plates, bearing pads, etc.
- Waterproofing tunnels, cable vaults, tanks, basements, etc.
- Re-anchoring of veneer masonry.
- Wood-truss repairs.
- Preventive maintenance – grout large cracks on new or existing structures to seal off reinforcing steel from the elements of corrosion.
- Anchor grouting . . . bolts, dowels, pins, and special fasteners in concrete and masonry.
- As a pick-proof sealant around windows, doors, lock-ups etc. inside correctional facilities.

**Advantages**

- ICC/ICBO ER 6182.
- High strength.
- Styrene-free.
- Low odor.
- Low waste.
- Can be dispensed/mixed with a 1:1 mixing gun.
- Moisture tolerant.
- Seismic and wind loading.

**Packaging** 22 fl. oz. (650 ml) side- by- side cartridge with static mixer; 55 fl. oz. (1,628 ml) side-by-side cartridge, Hi-Flow static mixer sold separately - (product code 0386M55).

Gel and Curing Times	Application Temperature	Gel Time	Cure Time
	40° F (4° C)	60 min.	48 hrs.
60° F (15° C)	45 min.	36 hrs.	
73° F (23° C)	35 min.	24 hrs.	
90° F (32° C)	20 min.	24 hrs.	

**Caution** **Warning: Component 'A': IRRITANT, SENSITIZER.** Contains epoxy resins and talc. Eye irritant. May cause skin/respiratory irritation. Prolonged and/or repeated contact with skin may cause allergic reaction/sensitization. Ingestion may adversely affect GI tract. **Warning:** When cured with Component and sanded, may result in exposure to a chemical known to the State of California to cause cancer.  
**Warning: Component 'B': IRRITANT, SENSITIZER.** Contains amines and talc. Contact with skin and eyes causes severe irritation and burns. May cause corneal damage or blindness. Eye/skin irritant. Possible skin and respiratory sensitization/allergic reaction with prolonged exposure. May cause respiratory irritation. Harmful if aspirated into lungs. Overexposure can also cause kidney, and/or CNS effects. Harmful if swallowed. Deliberate concentration of vapors for inhalation purposes may be harmful or fatal. **Warning:** When cured with Component 'A' and sanded, may result in exposure to chemical known to the State of California to cause cancer.

**Components 'A' and 'B'**

**First Aid** **Eyes:** flush eyes with water for at least 15 minutes. Contact a physician. **Skin:** wash with soap and water. Remove contaminated clothing. **Inhalation:** move person to fresh air. **Ingestion:** do not induce vomiting. **In all cases if symptoms persist, contact a physician.**

**Handling and Storage** Avoid contact. Wear protective equipment (chemical resistant gloves/goggles/clothing). Use with adequate general and mechanical exhaust ventilation. In the absence of adequate ventilation, use a properly fitted NIOSH approved respirator. Wash thoroughly after handling product. Remove contaminated clothing and launder before reuse. Exposure to heat builds pressure in closed container. Uncured material can be removed with solvent. Follow solvent manufacturer's warnings and instructions for use. Cured material can only be removed mechanically. Store in cool, dry, well ventilated area away from heat sources. Store at 40°-95°F (4°-35°C). Keep cartridge tightly closed. In case of spill, wear suitable protective equipment (chemical resistant clothing/gloves/goggles). Ventilate area. In the absence of adequate ventilation, use a properly fitted NIOSH respirator. Contain spill and collect with absorbent material and transfer to sealed

**Typical Data**

<b>Shelf Life</b>	Best when used within 24 months of manufacturing date.	
<b>Storage Conditions</b>	Store dry at 40°-95°F (4°-35°C). <b>Condition material to 65°-85°F (18°-29°C) before using.</b>	
<b>Color</b>	Component 'A' + 'B' mixed: uniform gray.	
<b>Mixing Ratio</b>	Component 'A' : Component 'B' = 1:1 by volume.	
<b>Consistency</b>	Smooth, non-sag paste.	
<b>Tensile Properties: (ASTM D-638)</b>		
14 day	Tensile Strength	4,300 psi (29.7 MPa)
	Elongation at Break	1.3%
	Modulus of Elasticity	4.1 x 10 <sup>5</sup> psi (2,829 MPa)
<b>Shear Strength (ASTM D-732)</b>		
14 day	Shear Strength	3,700 psi (25.5 MPa)
<b>Water Absorption (ASTM D-570)</b>		
7 day	(24 hour immersion)	0.11%



Anchor Diameter (in.)	Drill Bit Diameter (in.)	Embedment Depth (in.)	Allowable Tensile Bond Strength Min. 2,000 psi (13.8 MPa) Concrete (lbs.)	Allowable Tensile Bond Strength Min. 4,000 psi (27.5 MPa) Concrete (lbs.)	Allowable Shear Load ≥ 2,000 psi (13.8 MPa) Concrete (lbs.)
3/8	7/16	1-1/2	865	1,110	1,150
		3-3/8	2,390	2,945	1,500
		5-1/4	3,500	3,845	1,500
1/2	9/16	2	1,200	2,705	1,700
		4-1/2	3,245	4,715	3,200
		7	5,220	6,610	3,200
5/8	3/4	2-1/2	1,725	2,350	2,400
		5-5/8	4,835	5,850	5,700
		8-3/4	7,705	9,190	5,700
3/4	7/8	3	2,400	3,710	3,600
		6-3/4	7,040	9,380	6,400
		10-1/2	9,940	11,920	6,400
7/8	1	3-1/2	2,730	3,895	3,500
		7-7/8	8,170	10,540	9,200
		12-1/4	13,090	16,810	9,200
1	1-1/8	4	3,385	4,695	4,600
		9	9,940	14,185	12,500
		14	14,725	18,650	12,500
1-1/4	1-3/8	5	4,500	7,690	5,500
		11-1/4	13,230	20,980	15,500
		17-1/2	22,870	30,820	15,500

## Load Capacities - Threaded Rod

- 1) For additional information on Sikadur AnchorFix-4 performance, consult ICC/ ICBO ES, Inc. Evaluation Report 6182.
- 2) Allowable loads are based on a minimum safety factor of 4. Higher factors of safety may be warranted depending on actual application and job site conditions.
- 3) Minimum concrete base material thickness must be 1.5 times the anchor embedment depth.
- 4) Allowable load of adhesive anchor must be the lesser of bond or steel strength.

**\*\*For information on the effects of Anchor Spacing and Edge Distance on adhesive anchor performance, please contact Sika's Technical Service Department.**

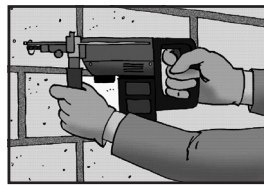
Rebar Size (Diameter)	Drill Bit Diameter (in.)	Embedment Depth (in.)	Allowable Tensile Bond Strength ≥ 2,000 psi (13.8 MPa) Concrete (lbs.)	Allowable Shear Load ≥ 2,000 psi (13.8 MPa) Concrete (lbs.)
No. 3 (3/8")	1/2	3-3/8	2,785	2,075
No. 4 (1/2")	5/8	4-1/2	3,610	2,775
No. 5 (5/8")	3/4	5-5/8	5,030	4,415
No. 6 (3/4")	7/8	6-3/4	6,580	7,015
No. 7 (7/8")	1	7-7/8	8,330	9,015
No. 8 (1")	1-1/8	9	12,085	13,285
No. 9 (1-1/8")	1-3/8	10-1/8	13,930	17,075
No. 10 (1-1/4")	1-1/2	11-1/4	18,515	20,865

## Load Capacities - Reinforcing Bar

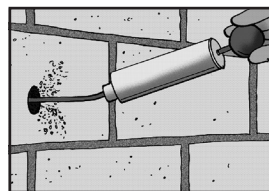
- 1) For additional information on Sikadur AnchorFix-4 performance, consult ICC/ICBO ES, Inc. Evaluation Report 6182.
- 2) Allowable loads are based on a minimum safety factor of 4. Higher factors of safety may be warranted depending on actual application and job site conditions.
- 3) Minimum concrete base material thickness must be 1.5 times the anchor embedment depth.
- 4) Allowable load of adhesive anchor must be the lesser of bond or steel strength.

**\*\*For information on the effects of Anchor Spacing and Edge Distance on adhesive anchor performance, please contact Sika's Technical Service Department.**

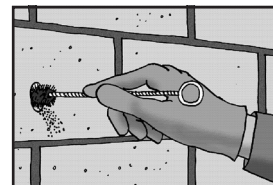
## Methods of Use - Solid Base Material



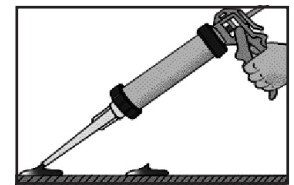
1. Drill Hole



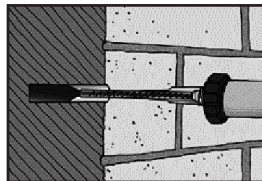
2. Blow Clean



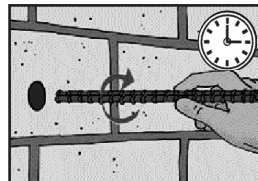
3. Brush Clean and Blow Clean Again



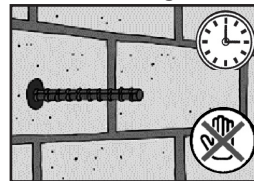
4. Pump Dispensing Gun for Proper Mixture



5. Insert Nozzle and Pump Gun



6. Insert Anchor



7. Leave undisturbed until cure time

**\*\*For information on installing adhesive anchors in Hollow or questionable base materials, please contact Sika's Technical Service Department.**

KEEP CONTAINER TIGHTLY CLOSED  
NOT FOR INTERNAL CONSUMPTION

CONSULT MATERIAL SAFETY DATA SHEET FOR MORE INFORMATION

KEEP OUT OF REACH OF CHILDREN  
FOR INDUSTRIAL USE ONLY

Sika warrants this product for one year from date of installation to be free from manufacturing defects and to meet the technical properties on the current Technical Data Sheet if used as directed within shelf life. User determines suitability of product for intended use and assumes all risks. Buyer's sole remedy shall be limited to the purchase price or replacement of product exclusive of labor or cost of labor.

NO OTHER WARRANTIES EXPRESS OR IMPLIED SHALL APPLY INCLUDING ANY WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. SIKA SHALL NOT BE LIABLE UNDER ANY LEGAL THEORY FOR SPECIAL OR CONSEQUENTIAL DAMAGES. SIKA SHALL NOT BE RESPONSIBLE FOR THE USE OF THIS PRODUCT IN A MANNER TO INFRINGE ON ANY PATENT OR ANY OTHER INTELLECTUAL PROPERTY RIGHTS HELD BY OTHERS.

Visit our website at [www.sikaconstruction.com](http://www.sikaconstruction.com)

1-800-933-SIKA NATIONWIDE

Regional Information and Sales Centers. For the location of your nearest Sika sales office, contact your regional center.

**Sika Corporation**  
201 Polito Avenue  
Lyndhurst, NJ 07071  
Phone: 800-933-7452  
Fax: 201-933-6225

**Sika Canada Inc.**  
601 Delmar Avenue  
Pointe Claire  
Quebec H9R 4A9  
Phone: 514-697-2610  
Fax: 514-694-2792

**Sika Mexicana S.A. de C.V.**  
Carretera Libre Celaya Km. 8.5  
Corregidora, Queretaro  
C.P. 76920 A.P. 136  
Phone: 52 42 25 0122  
Fax: 52 42 25 0537

QUALITY  
ISO 9001  
9002  
ACHIEVEMENT

Quality Certification Numbers: Lyndhurst: FM 69711 (ISO 9000), FM 70421 (QS 9000), Marion: FM 69715, Kansas City: FM 69107, Santa Fe Springs: FM 69408

Sika and Sikadur are registered trademarks. Made in USA. Printed in USA.