

SIKADUR® ANCHORFIX-3

Sikadur Injection Gel FS; High modulus, high strength, smooth, epoxy paste anchoring adhesive



DESCRIPTION

Sikadur AnchorFix-3 is a 2-component, 100% solids, 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. (6mm) 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; 10.1 fl. oz. cartridge can be dispensed with a standard, good quality caulking gun.
- Moisture tolerant.
- Dynamic loading.

Packaging

10.1 fl. oz. (300 ml) caulk gun cartridge with static mixer;
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)	30 min.	36 hrs.
60°F (15°C)	20 min.	24 hrs.
73°F (23°C)	15 min.	24 hrs.
90°F (32°C)	10 min.	15 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. **Contact a physician with all cases if symptoms persist.**

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 containers. Dispose of in accordance with applicable local, state and federal regulations.

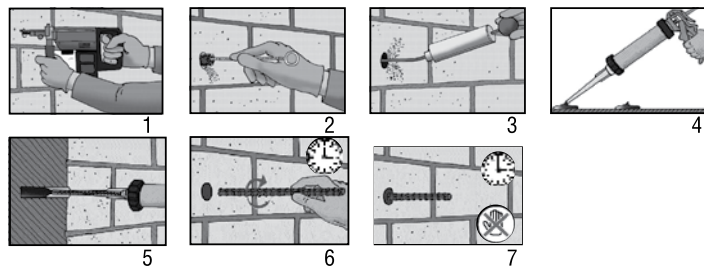
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Typical Data	
Shelf Life	Best when used within 24 months of manufacturing date
Storage Conditions	Store dry at 40°-95°F (4°-35°C). Condition material to 65°-85°F (18°-29°C) before using.
Color	Components 'A' + 'B' mixed: Uniform gray
Mixing Ratio	Component 'A' : Component 'B' = 1:1 by volume.
Consistency	Smooth, non-sag paste.
Tensile Properties: (ASTM D-638)	
14 day Tensile Strength	4,700 psi (32.4 MPa)
Elongation at Break	1.2%
Modulus of Elasticity	1.2 x 10 ⁵ psi (828 MPa)
Shear Strength (ASTM D-732)	
14 day Shear Strength	4,900 psi (33.8 MPa)
Water Absorption (ASTM D-570)	
7 day (24 hour immersion)	0.17%

Anchor Diameter (in.) (Continued)	Drill Bit Diameter (in.) (Continued)	Embedment Depth (in.) (Continued)	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.)
3/4	7/8	3	1,800	2,783	2,700
		6-3/4	5,280	7,035	4,800
		10-1/2	7,455	8,940	4,800
7/8	1	3-1/2	2,048	2,921	2,625
		7-7/8	6,128	7,905	6,900
		12-1/4	9,818	12,608	6,900
1	1-1/8	4	2,539	3,521	3,450
		9	7,455	10,639	9,375
		14	11,044	13,988	9,375
1-1/4	1-3/8	5	3,375	5,768	4,125
		11-1/4	9,923	15,735	13,500
		17-1/2	17,153	23,115	13,500



Methods of Use - Solid Base Material

1. Drill Hole
2. Blow clean
3. Brush 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.

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	649	833	863
		3-3/8	1,793	2,209	1,125
		5-1/4	2,625	2,884	1,125
1/2	9/16	2	900	2,029	1,275
		4-1/2	2,434	3,536	2,400
		7	3,915	4,958	2,400
5/8	3/4	2-1/2	1,294	1,763	1,800
		5-5/8	3,626	4,388	4,275
		8-3/4	5,779	6,893	4,275

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 jobsite 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 Min. >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	2,039	1,556
No. 4 (1/2")	5/8	4-1/2	2,708	2,085
No. 5 (5/8")	3/4	5-5/8	3,773	3,315
No. 6 (3/4")	7/8	6-3/4	4,935	5,260
No. 7 (7/8")	1	7-7/8	6,248	6,765
No. 8 (1")	1-1/8	9	9,034	9,970
No. 9 (1-1/8")	1-3/8	10-1/8	10,448	12,815
No. 10 (1-1/4")	1-1/2	11-1/4	13,886	15,660

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 jobsite 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.