Nitobond EC



constructive solutions

Two-parts epoxy bonding agent

Uses

Adhesive compound is a specially formulated epoxy resin adhesive for anchoring, bonding prefabricated elements such as bridge segments.

Permanent installation of reinforcement starter bars, foundation bolt, railway track.

Advantages

- Excellent adhesive
- Fast cure
- Chemical resistance
- Easy to use

Description

Adhesive compound is an epoxy resin based products with special fine fillers. The components differ in colour thus allowing visual assessment of mixing.

Properties

- Colour : Grey

Mixed density (kg/m³): 1880

- Pot life (mins) : 60 at 25°C

45 at 30°C

Compressive Strength (N/mm²)

1 days 60 3 days 70 80 7 days

 Tensile Strength (N/mm²) BS 6319 part 7, 1985

7 days

 Flexural Strength (N/mm²) BS 6319 part 3, 1990

7 days

Bond Strength-Slant Shear (N/mm²)

BS 6319 part 4, 1990 : 7 days

(failure of concentrate)

Instruction For Use

Surface Preparation

Concrete should be mechanically sound, dry and free from oil or grease, laitance and dust. A dry grit blast surface is recommended for optimum adhesion.

Bar should be deformed. This will ensure good bond between bar and adhesive compound.

Bar should be degreased and any mill seak or flaky rust removed.

Mixing

The contents of hardener should be added to the base can and mixed for three minutes (minimum) with a paddle and slow speed heavy duty drill, ensuring the side are scraped down. A uniform grey colour should be obtained.

Application

Precast Element

The mix adhesive should be applied at the required thickness to both faying surfaces with a serrated trowel or other suitable spreader.

Anchoring

The mixed grout should be poured or pumped steadily into the prepared anchor holes. The anchor bar should then be pressed into the hole to the required depth. Slight agitation of the bar will greatly assist in achieving a complete bond.

The bar should be left undisturbed in the required position until the adhesive compound hardened fully.

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Table

		Number of bolts in 200 mm (bonded length) deep holes												
Hole diameter		Bolt size	12 mm		58° 16 mm		3/4" 20 mm		1" 25 mm		1 ^{14*} 32 mm		1 ^{1/2*} 38 mm	
mm	(in)	Pack Size	2.5	8.0	2.5	8.0	2.5	8.0	2.5	8.0	2.5	8.0	2.5	8.0
16	(5/8")		114	364				100						
20	(3/4")		50	160	88	282								
25	(1")		30	96	40	128	72	231						
32	(1***)		15	48	17	53	21	68	28	91				
38	(112*)		10	32	11	34	12	39	16	48	31	97		
44	134")		7	23	8	24	9	27	11	31	14	45	26	83
50	(2")		5	16	6	19	6	20	8	23	9	28	13	39
62	(21/2*)		3	10	4	12	4	12	5	14	5	15	6	17

The figures in table for a 25% wastage factor. If the anchor is in very old concrete, masonry or brick work the wastage factor should be increased. If the bonded depth is not 200 mm, the figures in the above table need to be extrapolated using the following factors:

Depth	Factor
800	0.25 (=200/800)
400	0.5
350	0.57
300	0.67
250	0.8
200	1.0
150	1.33
100*	2.00

^{*}Minimum bond length

Cleaning

All tools and equipment should be cleaned immediately after use with Fosroc Solvent 102.

Spillages should be absorbed with sand or saw dust and disposed in accordance with local regulations.

Packing

5 kg packs containing hardener and based.

Storage

At least 12 month if stored below 35 °C in unopened containers.

Precautions

Fire

Fosroc Solvent 102 is flammable. In the event of fire extinguish CO₂ or foam.

Health and Safety

Adhesive Compound: Contains resins which may cause sensitisation by skin contact. Avoid contact with skin and eyes and inhalation of vapour.

Wear suitable protective clothing, gloves, and eye/fase protection. Barrier creams provide additional skin protection. Should accidental skin contact occur, remove immediately with a resin removing cream, followed by soap and water. Do not use solvent. In case of contact with eyes, rinse immediately with plenty of clean water and seek medical advise. If swallowed seek medical attention immediately, do not induce vomiting.

Fosroc Solvent 102: Flammable Liquid Flash Point 33°C Keep away from sources of ignition - no smooking, wear suitable protective clothing, gloves and eye, face protection. Use only in well ventilated areas.

Additional Information

Adhesive compound is part of a wide range of repair mortars, sealing components and protective coating products specially designed and manufactured by Fosroc for the construction industry.



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Important note

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