

Ressi EPO Anchor Pro 21

High Performance, two component Epoxy
Anchoring adhesive



Ressi EPO Anchor Pro 21 is a high-performance, two-component epoxy anchoring adhesive. Formulated for superior bonding of steel rods, bolts, and rebar into concrete, it is ideal for structural reinforcement, fixing of curtain walls, and heavy machinery anchoring. It provides outstanding adhesion, chemical resistance, and long-term durability, even under harsh environmental conditions.

ADVANTAGES

- ✓ Modified epoxy resin – non-styrene formula
- ✓ High bond strength and modulus
- ✓ Excellent toughness and seismic resistance
- ✓ Moisture-tolerant and stable in humid environments
- ✓ Acid and alkali resistance
- ✓ High thermal resistance
- ✓ Suitable for side and overhead anchoring (excellent thixotropy)
- ✓ Easy application with special dual cartridge system

WHERE TO USE

- ✓ Structural reinforcement of buildings, bridges and tunnels
- ✓ Anchoring of steel rebars and threaded rods
- ✓ Curtain wall and stone façade fixing
- ✓ Installation of railing, barriers, and signboards
- ✓ Reinforcement in water conservancy and road projects
- ✓ Equipment base and foundation fixing

APPLICATION

- ✓ Drill to required depth and diameter.
- ✓ Brush and blow the hole 3 times to remove dust.
- ✓ Inject using twin cartridge and static mixer (discard first 20 cm).
- ✓ Insert the anchor rod slowly with a single push.
- ✓ Let Cure as per temperature chart above before applying load.

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TECHNICAL INFORMATION

Property	Method	Typical Values
Appearance (Part A / Part B)	-	White paste / Red paste
Mixture Ratio (by weight)	-	2:1
Mix Viscosity	-	Thixotropic Paste
Density	-	1.25 ± 0.05 g/cm ³
Tensile Strength	ASTM D638	≥52 MPa
Flexural Strength	ASTM D790	≥55 MPa
Compressive Strength	ASTM D695	≥72 MPa
Elongation at Break	ASTM D638	≥1.6%
Thixotropy Index	-	≥3.0
Non-volatile Matter Content	-	≥99%
Steel-to-Steel Tensile Shear	-	≥15 MPa
Bonding Strength with Concrete	-	≥10 MPa (C60)
Heat Deflection Temperature	-	≥65°C
Sag Resistance (25°C)	-	≤2.0 mm
Creep Deformation	-	≤0.4 mm

*Typical results under laboratory conditions

CURING TIME & WORKING TIME

Ambient Temperature (°C)	Working Time (min)	Full Cure Time (hrs)
10	90	36
25	40	24
≥35	20	20

*Figures are theoretical values only. Allowance for wastage should be considered.

THE TABLE OF EPOXY USE AMOUNT – RESSI EPO ANCHOR PRO 21

Estimated epoxy adhesive consumption based on anchor size and embedment depth:

Steel Bar diameter	Hole diameter	Embedment Depth	Epoxy Volume (ml)	No. of Holes per 500 g	Embedment Ratio
8 mm	12 mm	80	6.03	64.68	10d
8 mm	12 mm	120	9.04	43.14	15d
8 mm	12 mm	160	12.06	32.34	20d
10 mm	14 mm	100	10.26	38.01	10d
10 mm	14 mm	150	15.08	25.86	15d
10 mm	14 mm	200	20.52	19.01	20d
12 mm	16 mm	120	16.09	24.24	10d
12 mm	16 mm	180	24.12	16.17	15d
12 mm	16 mm	240	32.18	12.12	20d
14 mm	18 mm	140	23.73	16.43	10d
14 mm	18 mm	210	35.61	10.95	15d
14 mm	18 mm	280	47.46	8.22	20d
16 mm	22 mm	160	40.52	9.62	10d
16 mm	22 mm	240	60.79	6.42	15d
16 mm	22 mm	320	81.04	4.81	20d
18 mm	25 mm	180	58.87	6.62	10d
18 mm	25 mm	270	88.31	4.42	15d
18 mm	25 mm	360	117.74	3.31	20d
20 mm	28 mm	200	82.06	4.75	10d
20 mm	28 mm	300	123.09	3.17	15d
20 mm	28 mm	400	164.12	2.38	20d
22 mm	30 mm	220	103.62	3.76	10d
22 mm	30 mm	330	155.43	2.51	15d
22 mm	30 mm	440	207.24	1.88	20d
25 mm	32 mm	250	133.97	2.91	10d
25 mm	32 mm	375	200.96	1.94	15d
25 mm	32 mm	500	267.95	1.46	20d

Note: Values are theoretical and based on two-thirds hole filling. Actual consumption may vary based on substrate conditions and installation technique.

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NOTE:

Ressi EPO Anchor Pro 21 is suitable for use in both cracked and uncracked concrete, and delivers long-term performance even in seismic or corrosive environments.

PACKAGING

20 KG

Part A 13.33 Kg

Part B 6.66 Kg

SHELF LIFE

Shelf Life: 12 months in original sealed packaging

Storage: Store upright, in cool & dry conditions (10–25°C), away from sunlight

HEALTH AND SAFETY

Ressi EPO Anchor Pro 21 is regarded as non-hazardous for transportation. Do not reuse cartridges or containers; dispose of them according to local regulations. Wear gloves, goggles, and suitable masks during application. Avoid eye contact and keep out of reach of children. Replace the static mixer nozzle if left idle for more than 15 minutes. Properly reseal any unused material. Refer to the product MSDS for complete safety instructions.