



PACTOGrout AG

Epoxy Based Structural Adhesive & Anchor Grout

DESCRIPTION

PACTOGrout AG is a two component epoxy base, high strength, structural adhesive and anchor grout. It is available in paste and pourable grades.

TYPICAL USES

PACTOGrout AG is used as epoxy grout for base plate bolt pockets, bar anchor, starter bars, bridge bearing, boom fixing, etc. It is also used for speedy and permanent patching repairs to concrete structures, bonding of precast concrete components, bridge bearings to concrete and all structural repair works where strength, impermeability to water and resistance to aggressive chemicals is essential.

Suitable grade of PACTOGrout AG can be used for fixing of carbon plates range depending on the location.

ADVANTAGES

- High early strength
- 3 to 4 times stronger than typical concrete
- Good adhesion to most of the substrates
- Excellent resistance to abrasion and impact
- Corrosion resistant
- Unaffected by a wide range of acids, alkalis and industrial chemicals
- Suitable for dynamic loads
- Two grades in paste and pourable variants
- Tolerant to damp conditions

SURFACE PREPARATION

Surfaces should be dry, clean, free from standing water, grease, curing compounds, mould oils and all loosely adhering particles. Cement laitance should be removed by mechanical means. Rotary percussive drilling will help in providing a rough internal surface which will help in better bonding.

MIXING

Stir base & hardener individually before mixing. Add hardener to base component. Mix together thoroughly with a slow speed drill (max 400 R.P.M.) fitted with a paddle for one minute till a uniform colour and consistency is obtained.

APPLICATION INSTRUCTIONS

Preparation

For Anchor Bolts

Anchor bolt pockets, dowel & starter bar holes must be dry. Pour the mixed grout into the bolt hole and push the bolt/dowell bar into the hole with a slight agitation to remove entrapped air.

For Patching Work and as Adhesive

Apply the material by using notch trowel, scrapper or with a big spatula for a minimum thickness of 1 mm. Bonding of elements should be done while PACTOGrout AG is still tacky

TABLE 1 - TECHNICAL DATA (TYPICAL PROPERTIES at 25°C)

PROPERTY	TEST METHOD	VALUE	
Component		Two: Part A - Base Part B - Hardener	
Colour		Grey when mixed	
Mixed Form		PASTE	POURABLE
Mixed Density		1.12 kg/ltr +/-0.05	1.70 kg/ltr +/-0.05
Compressive Strength	BS 6319-2	45 N/mm ² at 1 day	55 N/mm ² at 1 day
		70 N/mm ² at 7 days	80 N/mm ² at 7 days
Flexural Strength	BS 6319-3	20 N/mm ² at 7 days	35 N/mm ² at 7 days
Tensile Strength	BS 6319-7	20 N/mm ² at 7 days	25 N/mm ² at 7 days
Pot Life		30-45 mins	30-45 mins
Bond Strength	ASTM D4541	>2.5 N/mm ² at 7 days (concrete failure)	>2.5 N/mm ² at 7 days (concrete failure)
Chemical Resistance	ASTM D 543	Resistance to alkalis, fuels, acids, oils, etc.	



TABLE 2 -Volume of PACTOGrout AG in ml/100 mm. bond length

(mm.)	Bolt Diameter					
	12	16	20	25	32	40
20	25					
25	50	40	25			
32	80	70	60	40		
38		130	100	75	45	
45			150	130	100	45
50				180	150	90
62					280	225

The following formula may be used to determine the minimum depth of installation for type 1 rebar bolts, to ensure the shear stress within the concrete is kept within the limits set out in BS 8110.

$$\text{Minimum hole depth (mm)} = \frac{0.6Y \cdot Pd_1}{SPd_2} = \frac{0.15Yd_1}{Sd_2}$$

Where Y is characteristic yield strength of steel (460 N/mm²)

S is permitted shear stress in concrete (N/mm²)

d₁ is bar diameter (mm)

d₂ is hole diameter (mm)

This formula is used typically as shown in Table 3

TABLE 3

Minimum hole depth					
Characteristic concrete					
Strength (N/mm ²)					
Permitted concrete shear					
Stress using Type One Bar					
(N/mm ²)					
Bar Diameter (mm)	Hole diameter (mm)	Minimum hole depth (mm)			
12	20	280	250	225	200
16	20	490	445	400	355
20	25	615	555	500	440
25	32	750	675	615	540
32	38	1035	930	845	745
40	45	1365	1225	1115	980

GENERAL INFORMATION

Shelf Life 12 months from date of manufacture when stored under warehouse conditions in original unopened packing. Extreme temperature/humidity may reduce shelf life.

EQUIPMENT CLEANING

Clean all equipments and tools with PAC Cleaner immediately after use.

PACKAGING

PACTOGrout AG 1 ltr, 3 ltr and 6 ltr set

HEALTH AND SAFETY

PPE's: Gloves, goggles & suitable mask must be worn.

Precautions: Contact with skin, eyes, etc. must be avoided. If swallowed seek medical attention immediately Hazard Regarded as non-hazardous for transportation.

Disposal: Do not reuse containers. To be disposed off as per local rules and regulations.

For additional information pls. refer to MSDS, available on request.



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