

ANCHORFIX

Polyester Resin Fast Curing Anchoring Grout

Description:

ANCHORFIX is a high strength, corrosion resistant, fast curing polyester resin anchoring grout, pre-packed in two parts of a polyester resin and blended aggregates with a chemical catalyst. When mixed it is designed to give excellent workability during application with high tensile strength when cured.

ANCHORFIX is available in two different grades:

ANCHORFIX-H - a self-leveling flowable mix which allows the easy of application for holes drilled in horizontal surfaces. ANCHORFIX-V - a thixotropic mix which allows the product to be applied into holes drilled in overhead and vertical surfaces.

Applications:

ANCHORFIX is used as a fast setting anchoring grout for installation of reinforcing dowels, starter bars, handrails, safety fences, wall ties, railway tracks, foundation bolts, and ground anchors in concrete, concrete block, aerated autoclaved block and stone.

Advantages:

- Economical & easy to apply.
- Fast curing, early gain of high strength.
- Excellent dynamic vibration resistance.
- Corrosion resistant.
- Resistant to attack by many chemicals.
- Cure under damp conditions.
- Resistant to immersion underwater.

Instructions for Use:

The strength of the cured ANCHORTITE permits the assembly of anchors capable of high loadings. The ultimate load will be governed by:

- Strength of substrate.
- Length of resin bond to bar
- Type and dimension of bar
- Hole preparation

Surface Preparation:

Drill using heavy duty drill machine with the right pit diameter according to the required design. Follow the below table as a guidance for the recommended hole depth and diameter. The hole of anchoring then should be cleaned and free from dust and contaminants. Apply air blow by a manual air or electrical blower with a long hose to ensure that the hole is completely clean from dust. Always insert the pump hose to the far end of the drill hole and pumped with clean air to remove all dust.

Mixing:

ANCHORFIX consists of two components, resin and catalyst (with filler) which are supplied pre-weighed. Completely mix the two components well, using a mechanical stirrer until a uniform consistency is obtained.

Application:

The mixed grout should be poured or pumped steadily into the prepared holes within the gelling time. The mix should be injected to the bottom of the hole to avoid air entrapment. The bar or bolt should then be inserted into the hole to the required depth using a twisting motion. This will assist in ensuring a complete bond. The assembled bar should be left undisturbed till the grout hardens.

Standards:

ANCHORFIX conforms to:

- BS 6319

Storage:

Store in original packing in dry conditions away from direct sunlight in temperature control warehouse.

Cleaning:

Clean tools and equipment with solvent before material harden.

ANCHORFIX

TECHNICAL PROPERTIES	
Appearance	: Paste
Density	: 1.95 Kg. / m ³
Pot-life time at 25°C	: 30 minutes
Compressive Strength	: 75 N / mm ² @ 3 hours 80 N / mm ² @ 24 hours 89 N / mm ² @ 7 days
Flexural strength	: 7 days @ 23 N / mm ²
Bonding strength	: Greater than cohesive strength of concrete substrate
Dry Residual	: 100%
Hardening at 25°C	: 3 hours
Completely Hardened	: 7 days
Viscosity at 25°C	: 1500 – 2000 Mpa.S
Tensile Strength	: 12 N / mm ² @ 7 days

Shelf Life:

ANCHORFIX can be utilized within 4 months of production date if stored in proper conditions in unopened original packing with a temperature less than 25°C.

Packaging:

ANCHORFIX is available in 1 liter duel kit.

Remarks:

- Do not add other material to ANCHORFIX.
- Do not mix more grout than can be applied within the pot life of the product.
- Anchoring strength depends on: strength of substrate, resin embedded length, hole preparation, steel bar type and diameter.

Health and Safety:

ANCHORFIX when fully cured is harmless but avoid skin and eye contact with resin and hardener. In the event of any splashing in the eye, rinse the eye with plenty of water and seek medical advice. During mixing, gloves and goggles should be used. Adequate ventilation at working site should be provided.

Coverage:

Table 1: Showing the minimum hole depth of installation for type – 1 bar block.

Concrete strength (N/mm ²)		20	≥ 30	≥ 40	
Concrete shear stress (N/mm ²)		2.0	2.2	2.5	
Bar Diameter (mm)	Yield (Tons)	Hole Diameter (mm)	Minimum Hole Depth (mm)		
12	5.4	20	236	215	189
16	9.6	20	420	382	335
20	14.7	25	524	477	420
25	27.9	32	640	582	512
32	37.6	38	884	803	707

Bar reinforcement should be clean and free from rust.

Table 2: Showing the approximate Volume of ANCHORFIX required (ml) per 100 mm of bond length.

Hole Diameter	Bolt Diameter					
	12	16	20	25	32	38
mm						
20	20					
25	38	29	18			
32	70	60	49	31		
38		94	82	64	33	
45			128	110	79	63
50				155	123	91

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This technical data sheet is not considered as local building codes. It shall be used as general reference for the product, based on our current knowledge and experience. However the company do not accept any liability arising from the use of its products as it has no direct control on how and where the product is applied.

