

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.

Uses:

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.
- 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:

- EN1504-6
- BS 6319 pt. 2,3,7

Packaging:

ANCHORFIX is available in 1 liter dual kit

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TECHNICAL PROPERTIES	
Appearance	Paste
Density	1.95 kg/m ³
Dry Residual	100%
Viscosity @25°C	1500 – 2000 Mpa.S
Potlife @25°C	30 minutes
Hardening @25°C	3 hours
Completely Hardened	7 days
Compressive Strength (ASTMC579) @24 hours @7 days	60 N / mm ² 80 N / mm ²
Flexural Strength @7 days (ASTM C580)	>25 N/mm ²
Tensile Strength @7 days (ASTM D638)	12 N/mm ²
Bonding Strength (ASTM C1881, 207)	Greater than cohesive strength of concrete substrate

*Values indicated may vary depending on the environment and conditions of the material. Figures given are tested according to standard laboratory conditions.

Coverage:

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

Concrete strength (N/mm ²)		20	25	30	>40	
Concrete shear stress (N/mm ²)		1.8	2.0	2.2	2.5	
Bar Dia.(mm)	Yield (Tons)	Hole Dia. (mm)	Minimum Hole Depth (mm)			
12	5.2	20	280	250	225	200
16	9.3	20	490	445	400	355
20	14.5	25	615	555	500	440
25	22.6	32	750	675	615	540
32	37.0	38	1035	930	845	745
40	57.8	45	1365	1225	1115	980

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

These figures allow for a 25% wastage factor

Note: 200 mm bond length is the minimum recommended.

*Coverage rate is an approximate value, and subject to actual site conditions.

Storage:

Store in original packing in dry conditions away from direct sunlight in temperature-controlled warehouse. Store between 10°C and 25°C. Damaged packing, high humidity and extreme temperature may reduce shelf life.

Shelf Life:

ANCHORFIX can be utilized within 6 months of production date if stored in proper conditions in an unopened original packing with a temperature less than 25°C.

Cleaning:

Clean tools and equipment with ARMOSOLVENT before material hardens. Hardened material can only be removed mechanically.

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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:

- Avoid contact with eyes and skin. Wear suitable protective clothing such as coveralls, goggles, dust mask and gloves. Use barrier cream. Ensure that there is adequate ventilation. Do not breathe vapour or spray mist.

FIRST AID:

- Eyes: In the event of accidental splashes, flush with warm water and seek medical advice.
- Skin: Wash skin thoroughly with soap and water
- Inhalation: Remove to fresh air, keep patient rested
- Ingestion: Do not induce vomiting. Seek immediate medical attention.

For further safety information, please refer to ANCHORFIX Material Safety Data Sheet.

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