



ARMSTRONG CHEMICALS PVT. LTD., Bengaluru
An ISO 9001 Certified Company



High strength, Structural Grade, Abrasion Resistant
Fiber Reinforced Epoxy Concrete.

DESCRIPTION OF THE PRODUCT :

ROOFCRETE FREP is a three parts system, it is based on high grade, solvent free, Fiber reinforced Epoxy resin amine based curing agents and silica filler materials is a unique formulation which needs to be added with graded clean aggregates at site to form into a high strength epoxy refinery concrete for reinstatement of distressed / defected concrete repairs. Specially designed for use in repairs and rehabilitation of structural elements to provide high compressive strength, impact strength, bond strength for repairs when mixed as per recommendation

RECOMMENDED FOR :

Industrial floors, hospital floors, sea wall, irrigation projects, joints arris repairs, Use as bedding mortar etc.

ADVANTAGES :

- ★ Deep section repairs in columns, walls and heavily loaded areas
- ★ Excellent load bearing properties of repaired concrete with high resistance to chemical abrasion.
- ★ Solvent free material provides best performance for reinforced concrete repairs with high impact resistance.
- ★ Fast cure product unaffected by humidity.
- ★ High ultimate strength suitable for structural use.
- ★ Per-weighed Components ensure consistency.
- ★ Excellent bonding strength even in thin sections, concrete to concrete ,steel plates, metal to concrete.
- ★ Ideal to use for repairs and rehabilitations of concrete elements for both and dry conditions.

TECHNICAL PROPERTIES :

1.	Bond strength to cement	4 N/mm ²
2.	Pot life at 27 C	90-120 minutes
3.	Water absorption	0.2% (concrete -2.0 to 2.5%)
4.	BRE impact Resistance (BS 8204 part 1:1987)	Category A
5.	Density of mix	2.5 kg /ltr
6.	Compressive Strength	86N/mm ² @7 days
7.	Flexural strength	20N/mm ² @7days
8.	Tensile strength	10N/mm ² @ 7days
9.	Full cure	20°C 35°C 7days 4 Days
10.	Initial hardness	24 hours 16 hours
11.	Fresh wet density	Approximately 2000kg/m3 Fully Compacted)

TYPICAL APPLICATION :

ROOFCRETE FREP three parts epoxy concrete designed to provide tough, high strengths, chemical and abrasion resistant for concrete repairs.

Ideal to use for reinstatement of distressed /defective concrete where high strengths of compression, impact, abrasion bond strengths are very much important.

Ideal to use as excellent alternative to that of conventional concrete repairs for foundations, dams, surge pool gates, spillway concrete, bridges, runways / highways of concrete, with high strengths of epoxies

Solvent free material, unaffected by environmentally exposed areas of concrete repairs and also un effected by humidity for its curing. Ideal product which suits even for damp and dry surfaces of concrete repairs

SURFACE PREPARATION :

It is highly important to see that the surface which is going to receive the ROOFCRETE FREP concrete must be in a sound clean and dry condition in order that maximum bond strength is achieved between the substrate and repair concrete.

Thorough mechanical cleaning is strongly recommended to clean the surface from oil, grease, corrosion deposits, algae if any, loose particles, debonded materials must be chipped of until to achieve the sound substrate of concrete and all the laitance shall be removed by scrubbling or grit blasting and oil, grease, fungus shall be removed by detergent scrubbing, if required acid etching should be used.

PRIMING :

After thorough cleaning of the surface, the substrate should be primed with ROOFBOND EP Primer a solvent based epoxy resin primer designed for maximum absorption and adhesion to substrates. Add the entire contents of the hardener tin to the base tin and mix thoroughly. Once mixed, immediately apply the primer in a thin continuous film to the clean prepared surfaces by using stiff brushes, for heavy porous and high absorption areas of repairs, the second coat of primer application is recommended immediately after the primer application – ROOFCRETE FREP can be placed before the ROOFBOND EP Primer could dry i.e., when the primer is still in tacky condition, within the 40-50 minutes time at 350 C.

MIXING :

1. Prior to mixing all parts, mix Part A (resin) briefly using a mixing spindle attached to a slow speed electric mixer.
2. Do not mix excessively. Mix until a uniform mix is achieved. The entire contents of hardener tin should be poured in to the base container and mixed for 3 minutes thoroughly until to get a homogeneous mix.
3. Add Part A to Part B (hardener) and mix Parts A+B continuously for at least 3 minutes until a uniformly coloured smooth consistency mix has been achieved, while mixing Parts A + B, gradually add Part C (aggregate/ powder)
4. The mixed material of ROOFCRETE FREP shall be poured on the prepared surfaces, when the primer is in sticky condition to a uniform thickness and level the surface, finishing the same by using steel trowel, ensure that applied surface should not be over worked.

PACKING : 19.5 Kgs.

SHELF LIFE : 2 Years from the date of Mfg.

STORAGE : Store in dry conditions in the original containers.

Whilst **ARMSTRONG CHEMICALS PVT. LTD.** strives to ensure that any advice, information or recommendation given are appropriate and correct. It cannot accept any liability directly or indirectly arising out of the use of products since the method and place of application of the products are beyond its control.

Authorised Distributor / Stockist

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TRUSTED AND ACCLAIMED FOR ITS
MULTIPLE ACTION PERFORMANCE



Manufacturers :

ARMSTRONG CHEMICALS PVT. LTD.

An ISO 9001 Certified Company

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