

Constrocare Bond Crete

Description

Is a Multipurpose Styrene butadiene Rubber (SBR) based emulsion, specifically designed for use with cement formulations

Typical Applications

Bonding agent, waterproofing and RCC repairs

Features & Benefits

Adds flexibility, thereby reducing cracking
Improves bonding between old and new concrete
Makes the mortar & coating waterproof
Enhances abrasion resistance
Reduces susceptibility to acids, gases & salt petre action

Technical Information

Type : Styrene Butadiene Polymer Liquid
Color : White
pH : 9 – 10
Specific Gravity : 1.02 + 0.01
Solid Content : 47.0 + 0.5
Shelf life : 18 months in unopened condition

Coverage

Application Area	Coverage *
Waterproofing Coat	25-30 sq. ft. per Kg for double coat
Bond Coat	45-50 sq. ft. per Kg per coat
Repair Mortar	Approx. 10 – 15% of the cement weight

*Note: Actual coverage may be varying depending upon substrate condition

Packing

1 Kg, 5 Kg & 20 Kg

Areas of Application

- As bond coating: Plaster to plaster, concrete to concrete, For plaster over brick masonry & hollow blocks
- As waterproof repair plaster
- As crack repair: Plaster cracks more than 5 mm, in gaps developed between masonry and RCC members.
- As waterproof coating: Water tanks, Swimming pools, Chajjas, Terraces, DPC, Over sunken slabs in bathrooms
- As coating for prevention of corrosion in rebars
- Efflorescence (salt petre/damp surfaces)

Method of Application

Surface Preparation -

- Surface for treatments must be thoroughly cleaned of all laitance, loose material, oils, grease, etc.
- Mechanical means such as wire brushing, sand blasting can be used and finally vacuum cleaned of all loose solids and liquids.
- Before application ensure that the surface is damp but in a touch dry condition.

No	AREAS OF APPLICATION	MIX (BOND CRETE: WATER: CEMENT) – by Wt	METHOD OF APPLICATION
1	As bond coat	<ul style="list-style-type: none">• Concrete to concrete - 1:0:1• Plaster to plaster - 1:1:2• Plaster over brick masonry - 1:1:2	<ul style="list-style-type: none">• Apply a single coat of the mixed quantity of Constrocare Bond Crete• When coat is tacky, apply the plaster or concrete according to the situation• Always add cement to the liquid (Constrocare Bond Crete : Water = 1 : 4)
2	As waterproof coating: Residential Water tanks,	1:0:1	<ul style="list-style-type: none">• Brush apply the 1st coat• Apply 2nd coat after 1st coat is dry approximately 4 - 6 hrs. between two coats• Overlay the 2nd coat with screed/plaster for protection and finish

	Chajjas, Terraces, DPC, Over sunken slabs in bathrooms		
3	As waterproof repair plaster	10-15% of cement wt.	<ul style="list-style-type: none"> • Mix 5 kg of Constrocare Bond Crete with pre-measured water for 50 kg of cement. • Use this mix to add to the recommended dry plaster mixes • Plaster mixes may be as rich as 1:3 (cement:sand) • Keep water-cement ratio in Plaster as low as 0.4 but not more than 0.45 • For better application apply a bond coat with Constrocare Bond Crete as earlier • Take care to scratch-key the 1st coat surface for effective bond with the 2nd coat • Bond coat over the 1st coat for effective bond with 2nd layer of plaster is must to be removed
4	Gaps developed between masonry and RCC members (Above 5mm)	10-15% of cement wt.	<ul style="list-style-type: none"> • Mix 5 kg of Constrocare Bond Crete with pre-measured water for 50 kg of cement • Use this mix to add to the recommended dry mortar mixes • Mortar mixes may be as rich as 1:3 (cement:sand) • Keep water-cement ratio in mortar as low as 0.4 but not more than 0.45 • Clean the cracked area properly of all loose materials • Wet the crack completely using a bottle spray. • Apply a single coat as a bond coat prior to the crack filling of the Constrocare Bond Crete as per the mixing proportions mentioned earlier. • Fill the crack with above prepared mortar • Compact it into the crack fully and trowel finish to level
5	RCC Repairs	1:0:1	<ul style="list-style-type: none"> • Check soundness of the substrate with help of hammer and remove the hollow portion • Rusted rebars must be thoroughly scraped, by mechanical means if required • Apply suitable rust convertor on the entire periphery of the bar • Wait for 30 minutes and then wash off the bar with the help of water jet • Mix Constrocare Bond Crete with neat cement in the ration of 1:1 by volume. Apply this coat on rebars and allow it to dry for 3-6 hours • Again, Brush-apply a single neat coat with Constrocare Bond Crete mixed with cement in the ration 1:1 by volume on the rebars and its adjoining concrete • Allow this coat to become tacky and then immediately hand press polymer modified mortar. If the bond coat is dried, apply another to ensure effective bonding • Prepare repair polymer modified mortar (PMM) in the proportions – Bond Crete:Cement:Sand in the ratio, 1:5:15 by wt. Add water just sufficient to attain desired consistency • Use fine, clean, washed and dried sand for repair mortar & a mechanical mixer for better consistency • Apply this mortar when the bond coat is tacky at a thickness up to 15-20 mm. (PMM with 50 Kg cement yield will be appx 10 m² area @ 10 mm thickness). Build up the required thickness in subsequent layers of 15-20 mm each over the final coat. Final layer can be finished with trowel
6	For 'salt petre' free plaster (efflorescence) Brick masonry	1:3:5	<ul style="list-style-type: none"> • Brush apply the 1st coat on brick (Sealer Coat) • Apply 2nd coat after 1st coat is dry (Bond Coat) • When 2nd coat is tacky, place plaster as per instruction in no. 3

Polymer Modified Mortar (PMM)

Cement	50 Kgs
Sand	150 Kgs
Constrocare Bond Crete	8-10 Kgs
Water	Just sufficient to attain desired consistency

Precautions & Limitations

- Strictly do not dilute beyond recommendation
- To be applied over damp substrate but in a dry to touch state
- Not suggested for use in very critical concrete repairs
- Waterproof coats with Constrocare Bond Crete must be protected with screeds/plasters
- When applying as a bond coat, if it becomes dry, re-apply to reach a tacky state for overlay of concrete or mortar

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