

ACRYLIC EMULSION BASED CONCRETE BONDING AGENT

Description

REPCON BOND AC is a modified acrylic-based emulsion which is specially designed for use as a bonding agent or cementitious system, REPCON BOND AC is acrylic emulsion based, used as a cement modifier when applied, provides good bond with masonry/cement and thus improves the tensile and flexural strength properties of the mortar..

Uses

- REPCON BOND AC is acrylic emulsion based, used as a cement modifier
- When applied, provides good bond with masonry /cement
- Improves the tensile and flexural strength properties of the mortar.

Advantages

- Single component - no site mixing
- Easy to use - ready to use straight from container
- Cost effective - economical in use
- Effective curing membrane for most FCSC repair mortars.

Characteristics

Basis	: Modified acrylic emulsion
Colour	: Milky white
Specific gravity	: 1.03 ± 0.02

Mechanical properties

Typical mechanical properties of 1:3 cement sand mortar at W/C - 0.45 for control and W/C - 0.35 for mortar containing REPCON BOND AC (10kgs /50 kg cement). Tested in accordance with BS 6319 & wet cured. After 28 days.

	Dry cured		Wet cured	
	Control	Typical result	Control	Typical result
Tensile Strength (Kg/cm ²)	40	45	30	35
Flexural strength (Kg/cm ²)	70	85	80	75

Direction for Use

Surface preparation

The object of the surface preparation is to achieve a clean sound surface with a good mechanical key. All substrates should be cleaned and free of dust, plaster, oil, paint, grease, corrosion deposits, and any other deleterious substances.

Laitance should be removed by mechanical means. Oil or greasy deposits should be removed by suitable means. All surfaces so treated should be thoroughly washed with clean water. Smooth substrates must be mechanically roughened e.g. by scrubbing, needle gun or grit/ sand blasting to provide a mechanical key. Damaged Concrete repairs: Any reinforcing steel in the repair area should be exposed around its full circumference and cleaned to remove all loose scale and corrosion deposits (Recommended to use (RUSTCURE) and then primed with REPCON BOND AC

43. Remove all surface dust and debris. Priming Immediately before priming, the concrete substrate should be thoroughly dampened with water and any excess being brushed off. Scrub REPCON BOND AC 43 into the substrate. Avoid puddling of the emulsion. The repair mortar/topping should be applied whilst the primer is still tacky. However, a satisfactory bond can be achieved up to 15mins. After application at 25°C.

Mixing

OPC cement: 50 kg

Zone 2 river/ quartz sand: 150 kg

REPCON BOND AC 43 - 10 Kgs

Water Add sufficient water to give required consistency

Note: Trials are recommended to optimize mix designs..

Application

Prepare surfaces thoroughly as previously recommended, cut back edges to avoid featheredging. Prime all surfaces including edges, using REPCON BOND AC.

All applications shall be wet on wet. For best results REPCON BOND AC should be allowed to become tacky. If the bonding agent is allowed to dry for more than 15minutes at 30°C initial 'grab' to the repair mortar will be reduced.

Therefore, the use of temporary shuttering is recommended. Water content of the mortar should be kept to the minimum necessary. For consistent results, the use of clean, Dry River / quartzs and is recommended. Where the use of wet sand is unavoidable, the quality of water to be added must be reduced. Cure mortars using REPCON BOND AC to prevent rapid drying out. Protect uncured mortar from frost and rain. Do not remember mortar after initial set. Minimum application temperature for REPCON BOND AC is 10°C, but the mortar should not be applied if the temperature is expected to fall. For permanently immersed conditions consult Local FCSC representative.

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As bonding agent: The bonding agent shall be REPCON BOND AC an acrylic based emulsified solution containing a minimum of 43% solids and compatible with cementitious materials. The bonding agent shall provide adequate bond strength when directly applied on concrete and also mixed with neat cement. As a mortar modifier the mortar modifier shall be REPCON BOND AC, an acrylic emulsified cement modifier which provides good bond with concrete /masonry and improves the flexural strength, tensile strength properties of the mortar when added in the Specified quantities. It shall be compatible with all common hydraulic Cements.

Limitations

As a bonding agent

REPCON BOND AC may exhibit less overlay time at higher temperature. In such cases as overlay mortar shall not be applied when REPCON BOND AC is totally dry REPCON BOND AC when used as bonding agent cannot act as a barrier coat against ingress of chloride ions from the substrate.

Coverage

As a bonding agent: approximate 4 - 5 m² / kg depending on substrate porosity.

Packaging

Available in 5 Kgs and 20 Kgs packing.

Storage and Shelf life

12 months if sealed pack and if stored in cool dry place under shaded area and should be protected from frost. Equipment cleaning immediately after use, wash all tools with clean water.

Safety Precautions

REPCON BOND AC is nontoxic. However, it should never be treatment. REPCON BOND AC is slightly alkaline. Skin contact should be avoided. Gloves and protective clothing should be worn. REPCON BOND AC is non flammable.

Note

All Technical Data Sheets are updated on regular basis; it is the user's responsibility, to obtain the most recent issue.

Field services where provided, does not constitute supervisory responsibility, for additional information contact our local FIRST CHOICE SPECIALITY CHEMICALS PRIVATE LIMITED representative.

Disclaimer

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