

MYK Bond AR 43

Acrylic emulsion based Concrete Bonding Agent

Description:

MYK bond AR 43 is a modified acrylic based emulsion which is specially designed for use as a bonding agent or cementitious system, MYK bond AR 43 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.

Advantages:

- Adhesion strength to the base concrete surface is distinctly improved.
- The tensile and flexural strength increases in compared to the reference mix mortar
- Excellent bond to stone work plaster
- Compatible with all common hydraulic cements
- Economical to use.

Technical Data:

Properties

Basis: Modified acrylic emulsion

Colour: Milky white emulsion,

Sp. Gravity @ 25 OC : approx. 1.03 gm/cc

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 MYK bond AR 43 (10 kgs / 50 kg cement). Tested in accordance with BS 6319 & wet cured. After 28 days

.Mechanical properties Curing Control MYK Bond

Conditions AR 43

Tensile strength Dry 40 45

(Kg/cm²) Wet 30 35

Flexural strength Dry 70 85

(Kg/cm²) Wet 60 75

Adhesion to concrete Dry 50 150

Slant shear bond

(Kg/cm²)(BS 6319):

Application area:

As a bonding agent

The bonding agent shall be MYK bond AR 43 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 MYK bond AR 43, 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.

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 MYK Rust remover/ MYK Rust converter) and then primed with MYK Asocrete VK 2050. 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 MYK bond AR 43 into the substrate. Avoid puddling of the emulsion. The repair mortar/topping should be applied whilst the primer is

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still tacky. However a satisfactory bond can be achieved up to 15 mins. After application at 25 0C

Suggested design mix as a Mortar Modifier:

OPC cement : 50 kg

Zone 2 river/ quartz sand : 150 kg

MYK bond AR 43 - 10 Kgs

Water Add sufficient water to give required consistency

Note: Trials are recommended to optimize mix designs.

Guideline for application in repairs:

Prepare surfaces thoroughly as previously recommended, cut back edges to avoid feather edging.

Prime all surfaces including edges, using MYK bond AR 43.

All applications shall be wet on wet. For best results MYK bond AR 43 should be allowed to become tacky. If the bonding agent is allowed to dry for more than 15 minutes at 300 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 / quartz sand is recommended. Where the use of wet sand is unavoidable, the quality of water to be added must be reduced.

Cure mortars using MYK bond AR 43 to prevent rapid drying out. Protect uncured mortar from frost and rain. Do not retemper mortar after initial set.

Minimum application temperature for MYK bond AR 43 is 10 0C, but the mortar should not be applied if the temperature is expected to fall.

For permanently immersed conditions consult Local MYK Schomburg representative

Limitations

As a bonding agent:

MYK bond AR 43 may exhibit less overlay time at higher temperature. In such cases as overlay mortar shall not be applied when MYK bond AR 43 is totally dry.

MYK bond AR 43 when used as bonding agent cannot act as a barrier coat against ingress of chloride ions from the substrate.

Equipment cleaning

Immediately after use, wash all tools with clean water.

Coverage: as a bonding agent: approximate 4 - 5 m² / kg depending on substrate porosity

Supply: available in 5 Kgs and 20 Kgs packing.

Storage: 6 months if sealed pack and if stored in cool dry place under shaded area. And should be protected from frost.

Health & Safety instructions

MYK bond AR 43 is non toxic. However it should never be ingested and if it comes into contact with eyes, wash immediately with plenty of water and seek medical treatment.

MYK bond AR 43 is slightly alkaline. Skin contact should be

avoided. Gloves and protective clothing should be worn.

Fire MYK bond AR 43 is non flammable.

Quality Policy

The information given in the data sheet is based on the years of experience, and found correct to the best of our knowledge. However the success of the product & its application is dependent on many external factors. We are fully assured of our products quality at the time of dispatch. As we are constantly endeavoring to enhance the qualities of our products which may reflect changes in the data sheets. Hence in the event of any doubt on critical parameters it is advisable to consult our technical department

Technical Support:

Technical information regarding Schomburg range of products can be obtained from the technical cell of MYK Schomburg

Note:

Information in this technical data sheet is to the best of our knowledge true and accurate. However, such conditions under which our products may be used are beyond our control, recommendations