

Talrakpolybond® AR

Acrylic polymer based bonding agent cum cement mortar modifier



The Construction Alchemists

Description

Talrakpolybond® AR is a modified acrylic emulsion specially designed for use as a bonding aid and gauging polymer for cementitious systems. It is resistant to hydrolysis and can therefore be used for external applications.

Talrakpolybond® AR is the recommended primer for Talrak's Rendercem® range of products.

Features & Benefits

- **High bond** - Provides excellent bond to concrete, masonry mortars.
- **Strength** - Improves tensile and flexural properties of mortar.
- **Versatile** - Compatible with all common hydraulic cements
- **Economical** - Economical to use

Primary Application

Recommended primer for Talrak's Rendercem® range of cementitious repair system. For improving and bonding floor toppings, renders and mortars; repair of worn, damaged or spalled concrete.

Mechanical properties

Typical improvements in mechanical properties of a 3:1 sand / cement mortar using Talrakpolybond® AR

Mechanical Properties	Curing Condition	Control	Talrakpolybond™ AR
Compressive Strength (MPa)	Air cured	35	30
	Wet	30	30
Tensile Strength (MPa)	Air cured	4.0	4.5
	Wet	3.0	3.5
Flexural Strength (MPa)	Air cured	8	11
	Wet	7	9
Adhesion to concrete slant shear bond (Mpa)	Air cured	5	20

Specification Clauses

As a bonding agent

The bonding agent shall be Talrakpolybond® AR an acrylic based emulsified solution containing a minimum of 43% solids and compatible with cementitious materials. The bonding agents 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 Talrakpolybond® AR, 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 quantity. It shall be compatible with all common hydraulic cements.

Application instructions

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 scabbling, needle gun or grit/ sand blasting to provide a mechanical key.

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 and then primed with Talrakote® ZE. 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 Talrakpolybond® AR 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 15 mins. after application at 30°C

General Recommendations or Repair

Prepare surfaces thoroughly as previously recommended Cut back edges to avoid feather edging. Prime all surfaces including edges, using Talrakpolybond® AR.

All applications shall be wet on wet. For best results Talrakpolybond® AR should be allowed to become tacky. If the bonding agent is allowed to dry for more than 15min @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 sand is recommended. Where the use of wet sand is unavoidable, the quality of water to be added must be reduced.

Cure mortars using Talrakpolybond® AR. to prevent rapid drying out. Protect uncured mortar from frost and rain. Minimum application temp. for Talrakpolybond® AR. is 10°C but the mortar should not be applied if the temperature is expected to fall.

Limitations

As a bonding agent

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

Estimating Packaging

Talrakpolybond® AR is supplied in 1,5 and 20 ltrs plastic containers

Storage

Talrakpolybond® AR has a shelf life of 6 months @ 30°C if kept in dry store in original, unopened containers. If stored at high temperature and/or high humidity conditions the shelf life may be reduced.

Precautions Health & Safety Instructions

Talrakpolybond® AR 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. Talrakpolybond® AR is slightly alkaline. Skin contact should be avoided. Gloves and protective clothing should be worn.

Flash point : 48°C



Talrak Construction Chemicals Pvt. Ltd.
An ISO 9001:2015 Certified Company

Works:

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