PLASTCONE AR

Acrylic emulsion cement modifier and water based concrete bonding agent

Uses:

Recommended primer for Redwop cementitious repair system. For improving and bonding floor toppings, renders and mortars; repair of worn, damaged or spalled concrete; polymer modified floor screeds.

Advantages

- Simply brush onto concrete as a primer. Single component, gauged as required.
- High adhesion -Provides excellent bond to concrete, masonry, stone work plaster and block board.
- Increased strength - Improves tensile and flexural
- Properties of mortar. Allows thin section applications.
- Versatile - Compatible with all common hydraulic cements
- Economical - Economical to use

Description:

POLYCOTE AR is a modified acrylic emulsion specially designed for use as a bonding aid and gauging liquid for cementitious systems. It is resistant to hydrolysis and can therefore be used for external applications. POLYCOTE AR is the recommended primer for the Redwop cementitious repair system.

Properties:

Mechanical properties:

Typical improvements in mechanical properties of a 3 : 1sand∕cement mortar using POLYCOTE AR.

Mechanical properties	Curing condition	Control	POLYCOTE AR
Compressive strength(N/mm^2)	Dry Wet	35 30	40 30
Tensile strength(N/mm^2)	Dry Wet	4.0 3.0	4.5 3.5
Flexural Strength (N/mm^2)	Dry Wet	8 7	11 9
Adhesion to concrete Slant shear bond (N/mm^2)	Dry	5	20

Specification clauses

1. **As a bonding agent:** The bonding agent shall be POLYCOTE AR 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.

2. **As a mortar modifier:** The mortar modifier shall be POLYCOTE 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 quantities. It shall be compatible with all common hydraulic cements.

Application instructions

1. **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 an mechanical key.

2. **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 Redwop Primer. Remove all surface dust and debris.

3. **Priming:** Immediately before priming, the concrete substrate should be thoroughly dampened with water and any excess being brushed off. Scrub POLYCOTE AR into the substrate. Avoid pudding 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 $30^{o}C$

4. **Typical Mix designs to modify mortars:**

OPC	50 kg
Zone 2 sand	150 kg

POLYCOTE AR

8 – 10 liters

Water   Add sufficient water to give required consistency

Note: Trials are recommended to optimize mix designs. General recommendations for repairs Prepare surfaces thoroughly as previously recommended Cut back edges to avoid feather edging, Prime all surfaces including edges, using POLYCOTE AR.

All applications shall be wet on wet. For best results POLYCOTE AR should be allowed to become tacky. If the bonding agent is allowed to dry for more than 15 minutes at $30^{\circ}C$ 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 POLYCOTE AR to prevent rapid drying out. Protect uncured mortar from frost and rain. Do not retemper mortar after initial set. Minimum application temperature for POLYCOTE AR is $10^{\circ}C$, but the mortar should not be applied if the temperature is expected to fall. For permanently immersed conditions consult Local Redwop office.

Limitations

1. **As a bonding agent:** POLYCOTE AR may exhibit less overlay time at higher temperature. In such cases as overlay mortar shall not be applied when POLYCOTE AR is totally dry. POLYCOTE 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: POLYCOTE AR is supplied in 1, 5, 20, 50 & 200 liter plastic containers.

Coverage: Approximately 6 – $8m^{2}/$ liter depending on substrate

Shelf life: 12 months at 30^oC. POLYCOTE AR should be protected from frost.

Precautions

Health & Safety instructions: POLYCOTE 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. POLYCOTE AR is slightly alkaline.   Skin contact should be avoided.   Gloves and protective clothing should be worn.

Fire:

POLYCOTE AR is non flammable.

- Flash point : 48^oC

REDWOP CHEMICALS PVT. LTD.

Office:

1st Floor, Suryachandra Complex,

Opp Punjab Honda Showroom,

Kalawad Road,

Rajkot-(Guj.)INDIA.

Pin.360005

Factory:

Village Shapara, Nr.Jay Internation

School,Opp Arya Bhagwati Society,

Kalawad Road,

Metoda,G.I.D.C

Rajkot.(Guj.)INDIA.

Customer Care: +91 97246 55551

Phone no.: +91 281 2576664

E: info@redwopchemical.com

W: www.redwopchemical.com

NOTE: Redwop products are guaranteed against defective materials and manufacture and are sold subject to its standard terms and conditions of sale,

ISO 9001:2008

Responsible Care