Cormix ® Latex

POLYMER BONDING AID & WATERPROOFING ADMIXTURE

DESCRIPTION

Cormix Latex is an aqueous emulsion especially formulated for use with cementitious mixes. It is used in mortar and concrete to improve the waterproofing, wear resistance, durability and bonding properties. Mortars containing **Cormix Latex** may be used for vertical, horizontal and overhead repair work.

USES & ADVANTAGES

Cormix Latex is used to substantially improve the qualities of cement mixes, for example: thin layer patch mortars, renders, floor screeds, concrete repair mortar, abrasion resistant linings, fixing mortars, bonding slurry etc.

Advantages include:-

- Excellent water resistance.
- Increased durability.
- Plasticising effect and reduces shrinkage.
- Improved corrosion protection.
- Economical.
- Higher flexibility.
- Good resistance to many salts and chemicals.
- Excellent adhesion to concrete, mortar, stonework, plaster & blockboard.
- Thermal expansion and elastic modulus similar to concrete.
- Non toxic.
- Improves cohesion & workability.
- Single component easily gauged.
- Improved flexural & tensile properties allow for thin application.

PROPERTIES

The below results are approximated and achieved by considering the properties of a sand : cement mortar at 3:1 combined with **Cormix Latex** at 10 litres per 50 kg of cement.

Appearance: Milky White Liquid
Specific Gravity: Approx. 1.02 ± 0.02 kg/litre
Compressive Strength: 10-15% increase over control
BS 6319, Part 2
Tensile Strength: 5-10% increase over control
BS 6319, Part 7
Flexural Strength: 5-10% increase over control
BS 6319, Part 3
Shear Bond Strength: > 8.6 N/mm^2
by Slant Shear Method, ASTM C1042
Complies to ASTM C1059, Type II and ASTM C932
Chemical resistance:
Adding **Cormix Latex** to cement mortars reduces permeability and therefore helps reduce the rate of attack by aggressive chemicals, acid gases and water.
Toxicity: Non-toxic

SUBSTRATE PREPARATION

Saw cut or cut back the extremities of the repair locations to a depth of at least 10 mm. to avoid feather-edging and to provide a square edge. Break out the complete repair area to minimum depth of 6 mm. up to the sawn edge.

REBAR PRIMING

Prime rebar with **Congard Zinc** or **Congard ST**.

MATERIALS

Aggregates and sand should be clean and well graded. Sand particle size should relate to applied thickness of mortars and required surface finish.

SUBSTRATE PRIMING

The substrate should be thoroughly soaked with clean water and any excess removed prior to commencement.
A slurry primer should be prepared consisting of 1 volume **Cormix Latex** to 1 volume clean water to 1-3 volumes fresh cement. The slurry should be stirred frequently during use to offset settlement & worked well into the surface.
Avoid ponding. The repair mortar, topping or render must be applied on the wet slurry primer. If the slurry primer dries before application of the mortar, it must be removed and the area reprimed before continuing.

MIXING

Hand mixing is not recommended. Preferably a forced action mixer or low speed drill with appropriate paddle should be used. Hand mixing should only be undertaken with small quantities. Weigh the cement, sand and, where required, aggregate into the mixer and dry blend together for one minute. With the machine in operation, add the pre-mixed **Cormix Latex** and clean water. Continue mixing for 3 minutes to ensure complete dispersal into the sand and cement. Make any small adjustment to the quantity of clean water but do not significantly exceed the dosage shown below. Mix until lump free with creamy consistency.

METHOD OF USE

In all situations the surface must be in a clean, laitance free and roughened state. Absorbent surfaces should be saturated thoroughly with water, but avoid ponding. Oil or grease deposits should be cleaned away. Pull off tests should be conducted to assess decontamination. Expose rebar & clean to bright condition. Grit or sand blast.
Remove any corrosive agents such as chloride by high pressure water blasting.

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APPLICATION

Cormix Latex mortars, toppings and renders must be well-compacted on to the primed substrate by trowel. Exposed steel reinforcement should be completely encapsulated by the mortar. **Cormix Latex** mortars can be applied at a minimum thickness of 6 mm. and up to 40 mm. thickness, dependent on the location and configuration of the repair zone. Where thick sections up to a total thickness of 40 mm. are to be built up by hand or trowel application, the surface of the inter-mediate layers should be scratch-keyed. Application of the slurry primer and a further application **Cormix Latex** mortar may proceed as soon as this layer has set.

MIX DESIGN

Repair Mortar - Mix Design
Thickness : 6 mm. - 40 mm.

10 litres	of	**Cormix Latex**
8 litres	of	Clean water.
50 kgs.	of	Ordinary Portland Cement.
150 kgs.	of	Sand - fine to coarse depending on layer thickness.

Floor Screeds - Mix Design
Thickness : 10 mm. - 40 mm.

10 litres	of	Cormix Latex
6 litres	of	Clean water.
50 kgs.	of	Ordinary Portland Cement.
150 kgs.	of	sand - coarse sand up to 6 mm. depending on coat thickness.

The screed should be semi dry.

Renders - Mix Design
Thickness : 6 mm. - 9 mm.

10 litres	of	**Cormix Latex**
6 litres	of	clean water.
50 kgs.	of	Ordinary Portland Cement.
150 kgs.	of	Fine sand.

The render should be semi dry & cohesive.

Bonding Coat for Rendering / Bonding between old & new concrete

Cormix Latex : Water - 1 : 1
Dry mix : Cement : Fine sand - 1 : 1 or cement only.

Mix as mixing instruction above.
Apply slurry to prewetted substrate in 1 - 2 mm. thickness & place new concrete or water immediately before the slurry dries. **Place Wet on Wet.**
The above mixes are based on dry sand & aggregate. Site conditions & varying moisture contents will effect final performance.
Dry mix cement, sand and aggregate (if needed) for at least 1 minute before adding the premixed **Cormix Latex** & water. Mix for at least another 5 minutes. Do not use excessive amounts of water. Allowance must be made for the water content in the sand.

CURING

Cure with **Corcure 180** or **Corcure 90**.

SUBSEQUENT FINISHES

Cormix Latex can be finished with a steel, plastic or wood float, or by a damp sponge technique, to achieve the desired surface texture. The completed surface should not be overworked.

PACKAGING

25 litre pails; 200 litre drums.

STORAGE & SHELF LIFE

Cormix Latex should be stored protected from sunlight and frost. The shelf life is at least 9 months in original unopened containers.

HEALTH & SAFETY

Wear suitable protective clothing, gloves and eye protection. The use of barrier creams provide additional skin protection. In case of contact with skin, rinse with plenty of clean water, then cleanse with soap and water. If poisoning occurs, contact a doctor or Poisons Information Centre. If swallowed, **DO NOT** induce vomiting - give a glass of water. If in eyes, hold eyes open, flush with water for at least 15 minutes and see a doctor. If skin contact occurs, remove contaminated clothing and wash skin thoroughly with soap and water.

TECHNICAL SERVICE

The Cormix International Technical Service Department is available to assist you in the correct use of our products and its resources are at your disposal entirely without obligation.

QUALITY ASSURANCE

ISO 9001 : 2015 verified by TUV Nord.
ISO 14001 : 2015 verified by Lloyd's Register International.

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