B&B Specialities (INDIA) Private Limited.

"The Specialty Chemical Company"

HI-FIX

(Polymer Bonding Aid And Mortar Additive.)

DESCRIPTION

HI-FIX is Non-Remulsifiable acrylic latex, binding agent and admixture which is supplied as a ready to use white liquid. This high performance polymer is formulated as a bonding agent for cementitious mortars and toppings moreover as an admixture to site mixed or prepackaged cement based mortars. It also serves as a Bond Coat to repair sections. This binder can be used as a re-surface or patching compound for the repairs of floors, roofs and ceilings.

USES

Interior or exterior, above or below grade bonding agent. Performance, enhancing admixture for stucco, cement, plaster, cementitious topping and overlays, prepackaged and site mixed mortars. Cyclically damp environments, food processing plants, water storage facilities, swimming pools. Polymer modified concrete (PMC) for bridge decks and white toppings.

ADVANTAGES

Forms permanent, positive chemical and mechanical bond to sound surfaces. Single component liquid can be easily gauged as required.

Improved cohesion and workability.

As an admixture, increases abrasion and impact resistance, early and ultimate flexural tensile and compressive strengths.

Improves Chemical resistance to fertilizers acids, alkalis.

Aids in controlling shrinkage cracking.

Reduces permeability for excellent freeze-thaw resistance.

Deepens and enhances colored mortars, resists fading and is non-yellowing under UV exposure.

Higher quality polymer has no strong ammonia odor.

Significantly prohibits chloride ion penetration increasing corrosion resistance of reinforcing steel.

Priming

A slurry coating of a 1:1 cement: Hi-Fix by volume should mixed and be applied to the pre-dampened surface by medium-stiff brush.

Systems to be bonded must be placed whilst the primer remains tacky. The priming coat must be worked into the surface by stiff brush/broom ensuring uniform wetting out of the substrate. If the primer is allowed to dry, apply a second coat of primer.

TECHNICAL DATA

Meets the requirements of ASTM C-1059, type II, standards specifications for Latex Agents for bonding Fresh to Hardened Concrete when tested in accordance with ASTM C-1042.

PHYSICAL PROPERTIES OF MODIFIED PORTLAND CEMENT MORTAR

TEST	TESTMENTHOD	% IMPROVEMENT Curing Method
Shear Bond Strength	ASTM C-1042	389% 1600%
Flexual Strength	ASTM C-348	127% 222%
Tensile Strength	ASTM C-190	121% 215%
Compressive Strength	ASTM C-109	94% 228%

PACKING

Hi-Fix is a single component material packed in 5 liters, 20 liters plastic containers.

DIRECTIONS

Surface preparation

Substrate to the repaired or topped must be clean and free of all dust, dirt, oil grease curing or sealing compounds or other contaminants that may interfere with proper adhesion.

Reinforcing Steel Priming

Apply once full coat of Hi-Prime to any exposed steel reinforcement and allow to dry before continuing. If any doubt exists about having achieved an unbroken coating, a second application should be made and, again, allowed to dry before continuing.

MIXING

Pour the aggregate, sand and cement into a stationary creteangle-type mixer. Start the mixer ad mix for approximately 1 minute. Slowly add the pre-mixed Hi- Fix(8-10 liters for 50kg cement) and water and continue mixing for a further 3 minutes. Check the consistency of the mix, and if required adjust with a little water but keep this to a minimum.

Typical designs are detailed below:

Application	Priming Coat	Patch repair mortar 6mm-50mm	Render 6mm-9mm	Floor Screed 10mm-50mm	Bonding mortar for bedding tiles, slip bricks etc., 6mm-50mm
Cement	2 kg	50 kg	50 kg	50 kg	50 kg
Grade medium	-	150 kg	150 kg	75 kg	125 kg
Sharp sand aggregate	-	-	-	75 kg	-
Hi-Fix	0.4 kg	10 kg	10 kg	10 kg	10 kg
Water (approx)	0.41 ltrs	81 ltrs	61 ltrs	61 ltrs	71 ltrs
Yield (approx)	4 m2	0.1 m3	0.1 m3	0.1 m3	0.08m3

The above water contents are based on dry sand and aggregates, if using wet or damp sands. And aggregates the mix should be adjusted accordingly.

APPLICATION

Once mixing is complete, apply the mix onto the primed area and work well into the substrates. For leveling and consolidating, tamp with the screed bar and then rub with a plastic float. A smooth finish is achieved by light traveling with a straight edged steel trowel. If greater depths are required on both vertical and overhead applications, this may be carried out by building up in layers with the surface of the intermediate layer being scratch-keyed and cured prior to the further application of the slurry primer and mortar when the material has set up.

CURING

Hi-Fix mortars, toppings and renders are cement based. In common with all cementitious materials, they must be cured immediately after finishing in accordance with good concrete practice.

LIMITATIONS

Do not apply Hi-Fix when the temperature is expected to below 50c(40oF) within 12 hours or when rain is imminent.

CAUTIONS

Hi-Fix is non-toxic, non-flammable and non-hazardous.
However any splashes on any part of the human body, must be washed with plenty of water.

This Product is Formulated and Labeled and Commercial use only

For Best Results and Safest Usage, User is Specialty Directed to Consult.

Product Warranty: All recommendations, statements and technical data contained herein are based on tests we believe to be reliable and correct, HIBOND warrants its products to be free of mfg. Defects and that, at the time and place of shipment, our material will meet current published physical properties when applied within HIBOND'S directions and tested in HIBOND'S standards. HIBOND'S facility is limited to replacement of material found to be defective. As HIBOND has no control over the use to which others may put its products. It is recommended that the product be tested to determine if suitable for a specific application and / or our information is valid in particular circumstance. Responsibility remains with the architect or engineer, contractor and owner for the design, applications and proper installation of each product. Nothing contained herein shall be construed to be a recommendation to use or as a license to operate under or to infringe any existing patents.