

HI-SHIELD

(High-Performance polymer modified cementitious protective waterproof coating for concrete and masonry surfaces.)

DESCRIPTION

HI-SHIELD is the latest polymeric compounds made from selected synthetic co polymers to meet various applications which provide a water proof barrier for protecting and repairing RCC and steel Structures Hi-Shield is the main polymer component based on latex modified acrylic co polymer when blended with cement. The polymer cement mixture makes it suitable to provide the barrier coatings. Hi-Shield has excellent bonding property to mortars, concrete, brick work, wood, glass, aluminium and steel. The flexible and elastomeric nature of the system has properties which are able to combat the inadequacies of cement like low flexural strength and tensile strength, low impact strength, and thin section fragility. The resultant system offers a tough, hard wearing surface with abrasion, chemical and weather carbonation resistance coupled with excellent waterproofing effect for marine environments as well HI-SHIELD is resistant to salts, mild acids and strong alkalis between pH range 4 to 14. It is non-toxic and thus usable for coating structures storing portable water.

USES

HI-SHIELD is a flexible cementitious coating, used for waterproofing, it provides a flexible waterproof coating suitable for use in RCC roofs, portable water tanks, reservoirs, parking structures, bridges, canals, culverts and other concrete structures, HI-SHIELD is suitable for use on both horizontal and vertical surfaces.

PACKING

HI-SHIELD is supplied in set (Liquid and Powder).

Packing: 5 Ltr+8.75 kg, & 20 Ltr+35 kg.

TECHNICAL DATA

Pot Life	:	30 Min Approx
Color	:	Grey
Appln Temp	:	>5°C
Service Temp	:	25°C to 60°C
Salt Scaling Resistance	:	Excellent
Chloride Content	:	0.01% or less
Toxicity	:	Non Toxic

ADVANTAGES

- Excellent adhesion to most building substrates.
- Minimum surface preparation needed low labour costs.
- Improves flexural tensile, and thin fragility of cementitious
- Allows breathing thus preventing and scaling
- Gives a tough, hard wearing surface with effective waterproofing.
- Reduces chloride/salt penetration in marine environment.
- Resists carbonation effect
- Improves bond strength with steel
- Self-curing
- Increases overall structural durability

DIRECTIONS

SURFACE PREPARATION

Abrade existing substrate to remove all unsound concrete, but do not use excessive force, which may cause micro fracturing, consider wire brushing or sand blasting. Substrate must be structurally sound and free of laitance and loose dust particles, oil, grease, dirt or any other contaminants that can adversely affect the bond. Prepared surface must be free and dry condition. New concrete should be a minimum of three days old.

Mixing

1 Ltr of HI-SHIELD should be poured into a plastic or metal drum having a volume of at section least 5 litres. Kg of HI-SHIELD powder is system gradually added to the liquid whilst mixing with a mixing paddle or approved spiral peeling pad le attachment on a variable speed drill.

Mixing is continued, constantly moving the pad le around the drum, until lump-free slurry is obtained. This should take a minimum of 3 minutes and maximum of 5 minutes.

Note: The preferred drill speed is between 280 & 640 RPM

APPLICATION

Apply HI-Shield on the properly prepared substrate, by soft 4-inch wide paintbrush. The application should be similar to painting-in one direction. Take care while applying the slurry at construction joints and honey-combed the voids, holes or pours should be well covered by the slurry. Allow this first coat to dry for about 4 hours. Do not spray any water on it.

Apply a second coat of the slurry in the direction of right angles to the first coat. Allow this coat to air dry overnight and do not spray and water or walk over the surface.

LIMITATIONS

Do not apply Hi-Shield when is expected to below 5° C (40° F) within 12 hours or when rain is imminent.

CLEANING

Hi-Shield should be removed from tools and equipment with clean water immediately after use. Hardened material can only be removed mechanically.

STORAGE

Store tightly sealed containers at room temperature. Self life of properly stored surface. Material is one year from the date of manufacture.

CAUTIONS

Hi-Shield 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 Labelled 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, HI BOND warrants its products to be free of m fg. Defects and that, at the time and place of shipment, our material will meet current published physical properties when applied within HI BOND'S directions and tested in HI BOND'S standards. HI BOND'S facility is limited to replacement of material found to be defective. As HI BOND has no control over the u e to which others m ay put its products. It is recommended that the product be tested to determine if suitable for a specific application and / or our inform at ion 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 recommend at on to use or as a license to operate under or to infringe any existing patents.