

# ELECTROBOND

## High voltage Insulation Epoxy Floor Screed



### PRODUCT DESCRIPTION

ElectroBond is a seamless, self-leveling, high voltage insulation coating, based on epoxy resin reinforced with special type of fine aggregates and is available in assorted shades for application on concrete floors. It provides a hard-wearing floor finish where high level of Dielectric Voltage Breakdown is desired for high dielectric strength protection on concrete substrates.

### BENEFITS

- High dielectric strength and insulation resistant, High bond strength with concrete floors.
- Less than 0.1% porosity, Seamless and hygienic surface.
- Abrasion resistance, Easy to apply being composite pack. High Chemical Resistance.

### USES

- Concrete floors and Slabs, Metal plates in Electrical, Electronics and Communication industries.
- Concrete, Metal and Non-Metal Surfaces for Dielectric Insulation such as Control Panel rooms, AC rooms, Transformer Rooms, LT/HT laboratories
- Concrete Flooring at Warehouses, Chemical and Petrochemical plants, Workshops, Clean rooms, Food Processing areas which are subjected to electric hazards and chemical spillages.
- Pulp and paper mills, Metal-treatment plants.
- Battery storage areas, Production areas, Food-processing plants, Waste areas.

### SYSTEM REQUIREMENT

- **FLOORBOND PRIME:** Epoxy Based Primer for Concrete.
- **ELECTROBOND:** Dielectric Insulation Coating applied in 1mm and 2mm thickness.

## TECHNICAL DATA

PROPERTIES	RESULTS
Breakdown Voltage	> 43.2 KV (IS 2584:1963)
Dielectric Strength	>24.3 KV/mm (ASTM D 149-20) (For more details, please contact Highbond Coatings Pvt Ltd)
Color	Various Shades as per IS/RAL series
Finish	Glossy
Coverage	1.3 to 1.4 Kg/m <sup>2</sup> /mm
Thickness Required	1000 Micron
Touch Dry Time	2-5 Hours
Shore D Hardness	70-75 (DIN 53505)
Temperature Resistance	Tolerant up to 60 °C
Water Permeability	Nil-Karsten Test (impermeable)
Compressive Strength	>60 N/mm <sup>2</sup>
Pull-off bond strength	4.1 N/mm <sup>2</sup> (ISO 4624) (Concrete Failure)
Abrasion Resistance	Taber Abrader: 80 mg loss per 1000 cycles (1 kg load using CS10 wheels) (BS8204-2 Grade AR2)
Flexural Strength	>40 N/mm <sup>2</sup> (BS6319)
Tensile Strength	> 15 N/mm <sup>2</sup> (BS6319)
Pot Life	30 Minutes
Min. Working Temperature	25°C
Slip Resistance	TRRL Pendulum Slip Test Dry >40, Wet depends on specification
Speed of Cure	<b>10°C      20°C      30°C</b>
	Light traffic      48 hrs      24 hrs      18 hrs
	Full traffic      72 hrs      48 hrs      36 hrs
	Full chemical cure      12 days      7 days      6 days

## STORAGE

ElectroBond must be stored in accordance with national regulations. Storage conditions are to keep the containers in a dry, Cool, well-ventilated space and away from source of heat and ignition. Containers must be kept tightly Closed.

## SURFACE PREPARATION

Remove all dirt, Grease, Oil, Salt and Chemical Contaminants by washing the surface with Pure Strength Cleaner, Commercial detergent or other suitable cleaner. Mold and mildew areas must be cleaned with a chlorinated cleaner or bleach solution. Rinse thoroughly with fresh water and allow for fully dry. All surfaces must be dry at time of application. Moisture Content should be less than 3%.

## MIXING

- ElectroBond has a limited pot life; complete all preparations before starting the mixing sequence.
- It is very important to properly mix the components of this product together in the exact manner and sequence specified in the following instructions in order to form a stable slurry and ensure proper film formation before combining Parts.
- A and B, premix each separately. When mixing, wear Protective Gloves and Goggles to avoid injury from splashes. Part C should be added above mixed material.
- To mix ElectroBond Concrete Floor coating, pour the entire contents of Part B (Hardener) from the pail and insert into Part A in the bottom of the pail. Scrape out remaining material in the liner, being careful not to spill any. The Part A (Resin) container is oversized to allow for easy mixing. Part C should be added above mixed material.
- Do not mix by hand. Mix with a Jiffy mixer blade and an electric drill at very low speed for 3 – 4 minutes. Scrape sides of the container several times to ensure complete mixing. Keep the mixer blades immersed in the material to avoid introducing air bubbles.
- Use ElectroBond within its Pot life.

## PLACING

- Floor and atmospheric temperature must be between 16 – 27°C during the application of ElectroBond Concrete Floor coating. Apply suitable Primer.
- Apply the mixed material ElectroBond through Notch Trowel at desired thickness. Use spike roller to remove entrapped air.
- Install as evenly as possible, and avoid leaving excessive build-up in rougher areas. Complete coverage is required to ensure there are no pinholes or voids in the finish.

## PACKAGING

ElectroBond Available in 20 Kg Packing.

## PRECAUTIONS

Take care to avoid skin or eye contact and breathing Vapours. In the event of the skin contact immediately wash thoroughly. In the event of eye contact, wash continuously for 15 minutes in water and seek medical advice. Wear protective clothing, gloves, and safety glasses while using this product. If inhalation occurs, move to fresh air and seek medical advice in case of difficulty in breathing. Keep material away from heat, flames, and sources of ignition.

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