

# Dr. Fixit Concrete Guard WB



## WATER BASED ACRYLIC ANTI CARBONATION COATING

### Description

**Dr. Fixit Concrete Guard WB** is a water based composition of acrylic polymer, properly selected & graded inert fillers, light fast pigments & additives.

It is specially formulated to protect reinforced concrete and other masonry cementitious substrate that is directly exposed to atmospheric conditions like UV radiation, high humidity, heavy rain, industrial pollution, & carbonation.

### Standard Compliance / Specification

Confirms in accordance with IRC SP:80-2008

### Areas of Application

- As anti carbonation, protective coating for bridges, flyovers, subways, underpass, stadiums, exterior surface of RCC water tanks, parking areas etc.
- Concrete structures that are exposed to atmospheric conditions.
- All types of cementitious exterior masonry and plastered surfaces.

### Features & Benefits

- **Anti-Carbonation** - Excellent barrier to penetration & attack of carbon dioxide, water, sulphates and chloride ions.
- **Protection** - Protects the structures from adverse marine and coastal environments.
- **Adhesion** - Excellent adhesion to concrete substrate, with a high film build-up.
- **Micro organism resistance** - Excellent algae / fungal resistance.
- **Durability** - tough, flexible & durable coating.
- **Ease of application** - Single component, apply straight from the container, by brush, roller or spray.

### Method of Application

#### 1. SURFACE PREPARATION

##### New concrete/ cementitious surfaces

- New concrete / plastered surfaces must be allowed to cure for at least 6- 8 weeks before coating. All surfaces must be clean, dry and free of loose material, oil grease, etc.
- Light grit blasting of concrete surface ensures better cleaning & bonding.
- Wash the concrete surface thoroughly with water to clean dirt & dust which may hamper the bonding of the coating.
- Remove entirely, any previous growth of fungus & algae, by vigorous wire brushing and cleaning with water-jet.
- On non-decorated concrete surface containing blow holes, pin holes and/or minor irregularities should be patched with white cement putty mixed with Dr. Fixit Pidicrete URP 10 % by weight of cement in saturated surface dry (SSD) substrate.

##### Previously painted surfaces

- Alkyd Paint if any, should be sanded thoroughly to remove completely all loose particles. Mechanical methods are strongly suggested.
- Exterior surface previously coated with cement paint should be wire brushed and washed with water jet thoroughly and allowed to dry.

#### 2 PRIMING

- To produce better bonding & surface finish, apply priming coat of Dr. Fixit Concrete Guard WB by brush or spray, diluting in 1:1 proportion with water. Allow it to dry for 2-3 hrs before application of finishing coat.



### 3 FINISHING COAT

- Apply two neat coats of Dr. Fixit Concrete Guard WB without any dilution.
- Time interval between two coats is 6-8 hrs. depending upon the ambient temperature.
- Allow the coated surface to air cure fully for 7 days.

### Precautions & Limitations

- Although a gap of 6-8 hours may be given between the two coats, in cold / humid climates, dry up time may be extended.
- Stir the contents well before use.
- Do not apply below 10°C.
- Do not dilute the finishing coats.

### Technical Information

PROPERTIES	SPECIFICATION	RESULTS
Specific Gravity (g/ml)	IS 101 Part 8 Sec.6	1.45
Solid Content w/s %	IS 101 Part 8 Sec.2	71% ± 3
UV Resistant - 500 Hrs.	ASTM G 154 : 2016	NO Change
IR - Spectrum	IR - Spectrum	Acrylic Polymer
Adhesion to Concrete, (N/mm <sup>2</sup> )	ASTM D 4541: 2017	≥ 2
Dry Film Thickness, (Microns)	1 coat priming & 2 coats finishing	230 Microns
Diffusion resistance against CO <sub>2</sub> - Equivalent Air Layer Thickness, Sd CO <sub>2</sub> , (m)	DIN 1062 - 6: 2002	669
Diffusion resistance against water vapour - Equivalent Air Layer Thickness, Sd CO <sub>2</sub> , m	DIN 52615 : 1987	3.2
Chloride Ion penetration - Control (Coulombs)	ASTM C 1202 : 2019	3488
Chloride Ion penetration - Concrete Guard (Coulombs)	ASTM C 1202 : 2019	575
Water Permeability of coating (kg/ m <sup>2</sup> .h0.5)	EN 1062-3: 2008	0.01
Tensile Strength, (N/mm <sup>2</sup> )	ASTM D 638 : 2014	≥ 2
Elongation %	ASTM D 638 : 2014	≥ 200
Waterproofing % of reduction in Flux	Flux	70
Tear Strength, (N/mm <sup>2</sup> )	ASTM D 624 : 2020	15.32
Salt Spary - 400 Hrs	ASTM B 117 : 2019	Passes (No Rusting)
Crack Bridging Ability (mm)	EN 1062-7 : 2004	2
Water Absorption %	ASTM C 642 : 2013	0.4
Algae Resistance	ASTM G 29 : 2016	Zero (No growth)
Solar Reflectance Index (SRI)	ASTM E 1980 : 19	104
Re coat ability (Hour)		6
Dry Film Thickness, (Microns)	1 coat priming & 2 coats finishing	230 Microns

The values in the above table are obtained in controlled lab conditions when tested properly by competent laboratory. Note: Tolerance up to 5% on the lower side from the above values are allowable.



## Coverage

Primercoat (1:1 dil) : 10.00 sqm per litre per coat

Finishing coat (undiluted) : 4.00 sqm per litre per 2 coats

\*Coverage may vary as per the nature & texture of substrate.

## Packaging

20 litre

## Shelf Life & Storage

- Shelf life is 24 months from the date of manufacturing in unopened conditions. To be stored in original and unopened packaging in a cool and dry place away from direct sunlight.
- Recommend temperatures of (10°- 30°Celsius) for storage of Dr. Fixit Concrete Guard WB and anything below 10 °Celsius and above 30°Celsius is certainly not recommended.

## Health & Safety Precautions

- As with all chemical products, caution should always be exercised. Protective clothing's, such as gloves and goggles, should be worn.
- Treat any contact to the skin or eyes with fresh water immediately. Should any of the products be accidentally swallowed, do not induce vomiting but call for medical assistance immediately.
- Ensure the pack is available for the medical attendant to examine any relevant instructions and contents details.
- Reseal all containers after use and ensure product is stored as instructed.
- Do not inhale.
- Store away from sunlight.

## Other Products Categories available

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