



HIND CARBO GUARD W

PRODUCT DATA SHEET

SINGLE COMPONENT ACRYLIC POLYMER BASED ANTI CARBONATION AND CRACK BRIDGING COATING FOR CONCRETE STRUCTURES

DESCRIPTION

Hind Carbo Guard W is a single component based on UV curing acrylic dispersion and possesses the unique properties of crack bridging and anti-carbonation, to protect RCC structures and all other masonry cementitious substrate that is directly exposed to the atmosphere and affected from UV rays, high degree of humidity, torrential rainfall, heavy industrial pollution carbonation. It gets penetrated into porous concrete substrate on its application forming an impervious exterior coating. It conforms to **IRC : SP : 80**.

USES

Hind Carbo Guard W is recommended for use as an anti-carbonation, protective and decorative coating for Bridge, RCC water Tanks, Flyovers, Subways, Stadium, Underpass, Concrete surface exposed to atmosphere, Retaining Walls, Bridge walls, Tunnels, Sewage tanks, Reservoir and all types of cementitious exterior masonry and plastered surfaces having a risk of cracking.

ADVANTAGES

- Acts as an excellent barrier to penetration of carbon dioxide, water, sulphates, chloride ions and other gases present in the atmosphere.
- Crack bridging even at low temperature.
- Water vapor permeable.
- Ready to use single component by brush, roller or spray.
- Excellent adhesion to concrete substrate with high film build up.
- Imparts chemical resistance to substrate.
- Resistant to formation of moss, fungus and algae.
- Reduces or prevents salt penetration into concrete.
- Non toxic and can be used in water tank.
- Protects structures against saline & marine environment.
- Flexible, Tough & durable coating.
- Environment friendly with no solvent added.
- Protect RCC structures which are exposed to very aggressive environment.
- Possess excellent waterproofing characteristics and reduces water penetration into the structures.

APPLICATION

Surface Preparation

Substrate must be sound, clean free from loose particles or laitance and preferably wire brushed. If any paint exists it is to be removed by suitable mechanical means. The surface to receive the coating is to be checked. First.. If any cracks exist, it has to be repaired with cement mortar admixed with **Hind Crete Plus WPM**. Undulation and depression to be filled and leveled to obtain even surface. The prepared surface must be thoroughly wetted with water and it has to be ensured that there is no standing water on the surface, before application of **Hind Carbo Guard W**.

Priming

To ensure complete bonding and surface finish a primer coat of **Hind Elasto Coat** mixed with clean water in the ratio **1 : 1 (1 part Hind Elasto Coat : 1 part clean water)** is to be applied on the prepared surface with a flat paint brush @ 0.500 Kg / Sq. Mtr. of the diluted mixture. It should be allowed to dry completely for **2-3** hours before application of **Hind Carbo Guard W** at a substrate temperature **8° C to 40° C** and Relative air humidity **<80%** with substrate & ambient temperature at least **+3° C above dew point**.

Finishing Coat

After the primer coat gets dried up application of **2 Coats** of **Hind Carbo Guard W** without any dilution is to be applied at an interval of **5-6 hours** when the first coat gets completely dry. **Hind Carbo Guard W** does not require and special curing but should be protect from rain for at least **4 hours** at **20° C** from the time the application is completed.

PROPERTIES

Aspect	Acrylic polymer dispersion acrylate base.		
Appearance & Colour	Thixotropic liquid and available in various RAL shades		
Density at 30°C	1.4 + 0.05 kg/L		
Solid Content (%)	70 ± 1		
Crack Bridging ability (ASTM C 1305)	No failure is observed at 3.2 mm		
Tensile Strength (ASTM D 638)	>1.5 N/mm ²		
Elongation at break (ASTM D 638)	>200%		
Tensile adhesion Strength (ASTM D 4541)	>1.5 N/mm ²		
Capillary absorption (EN 1062-3)	w < 0.1kg/m ² ·h ^{0.5}		
Permeability to Water Vapor (DIN 52615)	Dry film thickness	d=210µm	
	Equivalent air layer thickness	S _D ·H ₂ O = 1.69 m	
	Requirement of Breathability	<5 m	
Resistance to UV Exposure (ASTM G 53)	No colour change after 400 hours		
Permeability to carbon dioxide (EN 1062-6)	Dry film thickness	d=210µm	
	Equivalent air layer thickness	S _D ·CO ₂ = 141.6 m	
	Requirement of Protection	<50 m	
Chloride ion diffusion resistance (ASTM C 1202)	Negligible penetrability (chloride ion)		

COVERAGE

Hind Elasto Coat (As Primer) - 0.500 Kg / Sq. Mtr. of the diluted mixture depending on the porosity of the surface.

Hind Carbo Guard W- 2.0 Sq. Mtr per Kg for 2 coats depending on the porosity of the surface. (**Layer thickness to be maintained ranging 200-225 microns for CO₂ diffusion and Water vapor diffusion**)

SHELF LIFE

Best before 12 months from the date of manufacture. Should be stored in a cool and dry place away from direct sunlight at temperature ranging between 2° C (Min.) and 50 ° C (Max.).

PACKING

10 & 20 kg in HDPE container or as required.

HANDLING PRECAUTION

Hind Carbo Guard W is non-toxic and prolonged skin contact should to be avoided. In case of contact with eyes occurs wash with plenty of clean water and seek medical advice. Cleaning of tools is to be done with water.

Note:

- **Hindcon Chemicals** maintains a team of technically trained professionals to provide full support to your problems in construction, and recommend the correct product to suite your specific requirements. Our authorized applicators can attend your site for application of the products.
- The content of the Technical datasheet are for general information and guideline. The result shown here are generated from our laboratory or from our site experiences.
- Quality of our products are maintained as per ISO9001:2008 recommendations and continuous researches. The behavior can change as per the prevailing conditions at the time of applications.
- Since **HINDCON CHEMICALS LIMITED** has no control over the use to which the users may put the material, it does not claim or warrant that in the user's particular circumstances, the result that the user will obtain from the product will be the same as those described in this communication or that the user will find the information or recommendations complete, accurate or useful. The client must test and ascertain the safety and fitness for the product for use.
- The right to change the properties of the products is reserved with us. The proprietary rights of third parties must be observed. All orders are accepted subject to the terms of sale and delivery. Users must always refer to the most recent issue of the latest Data Sheet for the product concerned, copies of which will be supplied on request.

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