



## DESCRIPTION:

Bestcoat-2C is a two component acrylic modified cementitious coating for protecting concrete structures against water, vapour, ingress of chloride ions, attacks of acidic gases and alkalis. It cures to form a tough flexible coating having excellent waterproofing properties. Bestcoat-2C is a blend of cement, selected fillers, polymers and graded silica sand which is in the powder form. The liquid contains acrylic co-polymers and wetting agents.

## CHARACTERISTICS:

- Good flexibility. Thermal co-efficient of expansion similar to that of concrete.
- Good adhesion to both, porous and non-porous surfaces.
- Good mechanical properties.
- Suitable for light pedestrian traffic.
- Nontoxic, therefore suitable for use in potable water applications.
- Resistant to carbon dioxide and chloride ion diffusion. (Forms a film that provides an anti-carbonation coating over concrete. A 1mm coating provides anti carbonation cover which is equivalent to over 75 cm of concrete).

## TECHNICAL DATA SHEET

Product	BESTCOAT 2C
Mixed Density	1825 kg/m <sup>3</sup>
Mixing Ratio, by weight	3:1 (powder: Liquid)
Pot life	100 Minutes at 25C 25 Minutes at 40C
Recoat able	6 - 10 Hours
% Elongation	>6% (un bonded)
Abrasion resistance (ASTM D4060, CS17 wheel)	50 mg/1000 cycles
Water penetration DIN 1048	7 bars - no leakage (at 2mm DFT)
Toxicity	Non-toxic
Water vapor co-efficient	>3.64 x 10 <sup>-4</sup> cm/s
Initial surface absorption	>95% reduction against control
Co <sub>2</sub> diffusion resistance (Tested by Taywood Engineering, UK)	R > 357m, Sc > 89cm (1mm DFT), Sc - equivalent Concrete thickness
Chloride ion diffusivity	Zero penetration at 90 days
Chloride ion diffusion coefficient	1.04 x 10 <sup>-7</sup> cm <sup>2</sup> /s
Oxygen diffusion coefficient (Co <sub>2</sub> )	7.6 x 10 <sup>-6</sup> cm <sup>2</sup> /s



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## FIELDS OF APPLICATION:

Used as a waterproofing and protective coating for the following structures:

- Pile heads.
- Internal lining for potable water reservoirs and other water retaining structures.
- Protection of exposed concrete structures like bridge decks against carbonation and chloride attack.
- Inverted roofs, lift and inspection pits, swimming pools, spillways.
- Backing on marbles and granites to prevent the ingress of moisture.
- General construction waterproofing
- Wet area (bathroom, kitchen, balcony, swimming pool and other features).
- Moisture vapor barrier on facade damp proofing

## APPLICATION:

It is recommended to apply Bestcoat-2C in two coats to provide a minimum thickness of 2mm. Each coat shall be applied @ 1.8 kg/m<sup>2</sup> which will give a dry film thickness of 1mm.

The coating can be applied with a stiff brush or by an airless spray of nozzle size of 3-4mm and a pressure of bar. After the application of the first coat and whilst the coating is still wet, embed a glass fiber mesh at all corners and other joints for added reinforcement. The second coat shall be applied after the first coat dries off completely (6-10 hours @ 25°C, 50% rh). For general protection against carbonation and alkali attacks, the coating can be applied in minimum 1mm thickness.

## APPLICATION INSTRUCTIONS:

The application temperature should be between 5°C to 45°C. Application procedures may vary slightly depending upon site conditions. The general recommended guidelines for the application of the coating system is as follows:

## SURFACE PREPARATION:

The surface must be structurally sound and free of oil, grease, dust and other contaminants which will affect the bonding. Any structural cracks and potholes shall be repaired with a suitable repair mortar from the Bestrepair of repair mortars. The surface to be treated should be pre-saturated with water prior to application. However, any standing water shall be removed prior to application.

## MIXING:

Bestcoat-2C is supplied in two pre-measured parts which just requires on site mixing. Do not mix more material than that can be used within the pot life. Part mixing can be carried out by mixing 3 parts of powder with 1 part of liquid (by weight). Pour the liquid into a suitable container and slowly add the powder to the liquid. Mix the contents using a slow speed drill (300~400rpm) fitted to a proprietary paddle mixer till a homogenous, lump free and creamy consistency is achieved.

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### **PROTECTION:**

Adequate protection needs to be provided for the coating in the following conditions:

- Areas subjected to mechanical abrasion.
- Flowing water areas.
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### **CURING:**

The coating shall be cured immediately after it dries by wet hessian cloth or mist spraying for a minimum period of 72 hours. The coating will achieve its full mechanical.

### **CLEANING:**

Clean all tools immediately with water after use. Hardened materials can be removed mechanically only.

### **COVERAGE:**

1.8kg per m<sup>2</sup> per coat for 1mm dry film thickness.

### **STORAGE & SHELF LIFE:**

Store under cover, out of direct sunlight and protect from extreme temperatures. It is recommended to keep the powder bags on pallets and not stacked on the floor. The shelf life is up to 12 months when stored as per recommendations and in unopened conditions. Failure to comply with the recommendations will result in premature deterioration of the product and reduce its shelf life.

### **HEALTH & SAFETY:**

As with all construction chemical products caution should always be exercised. Protective clothing such as gloves and goggles should be worn. Treat any splashes 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.

### **Disclaimer:**

The information in this data sheet is given to the best of our knowledge based on laboratory testing and practical experience. However, as the product is often used under conditions beyond our control, we cannot guarantee anything but the quality of the product itself. We reserve the right to change the given data without notice.



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