



## **INDOFLEX COMBO PLUS**

### **Acrylic Modified Micro Fibre Reinforced White Cement based UV Resistant Cementitious Spray Waterproofing.**

---

#### **DESCRIPTION**

INDOFLEX COMBO PLUS is a two-part acrylic modified micro fibre reinforced, white cement based spray waterproofing membrane for protecting concrete structures against Water, vapor, ingress of chloride ions, attacks of acidic gases and alkalis. It cures to form a tough flexible coating having excellent waterproofing properties. INDOFLEX COMBO PLUS PLUS is a blend of cement, selected fillers, polymers and graded silica sand, which is in the powder form. The liquid part contains acrylic co-polymers and Wetting agents.

provides an anti-carbonation coating over concrete. A 1mm coating provides anti carbonation cover which is equivalent to over 75 cm of concrete).

- Can be applied to 24 hours old concrete, thereby giving immediate protection to the concrete.
- Allows the substrate to breathe.
- Can withstand negative and positive water pressure.
- Spray grade. Hence faster and foolproof application.

#### **CHARACTERISTICS**

- Good flexibility. Thermal co-efficient of expansion to accommodate concrete movements.
- Good adhesion to both porous and non-porous surfaces.
- Good mechanical properties.
- Good abrasion resistance. Suitable for pedestrian traffic.
- High durability to long term weathering effect and UV.
- Nontoxic, therefore suitable for potable water applications.
- Resistant to carbon dioxide and chloride ion diffusion. (Forms a film that

#### **FIELDS OF APPLICATION**

- Waterproofing for large roofs both exposed and in-concrete.
- For hardscapes and drive ways of large podiums/basement roofs.
- For wet area waterproofing.
- For waterproofing retaining walls in wet and dry conditions.
- Internal and external water proofing of potable water reservoirs.
- Good anti carbonation protective coating to exposed concrete structures.
- Protective coating on structures exposed to sea water.
- Sealing light aerated blocks, pre-cast joints.

- Waterproof coating on roofs, domes, tunnels, swimming pools, lift Wells, spillways, Surge shafts, pre-cast slabs and other wet areas.
- Specially designed for permanent ponding.

## TECHNICAL SPECIFICATION

*(The properties shown below were obtained under laboratory conditions)*

Color	Off White
Mixed Density [g/cc] ASTM D 1475	1.4 ± 0.02
Pot life @ 30°C (min)	45
Tensile strength [N/mm <sup>2</sup> ] ASTM D 412	≥3.5
Elongation, (%) ASTM D 412	>250
Abrasion resistance ASTM D 4060	<50gms
CO <sub>2</sub> diffusion resistance NT BUILD 372	≥50m
Toxicity BS 6920	Non-toxic
Water permeability Positive @7 bar Negative @ 3 bar BS 12390	Nil Nil
Crack bridging ability [mm] ASTM C 836	>3
Adhesion to concrete [N/mm <sup>2</sup> ] ASTM D 4541	>1
Chemical resistance ASTM D 543	pH 2.5-11.5
Initial cure@ 25°C & 50% RH, [hours]	6-8
Full cure@ 25°C & 50% RH, [days]	7

Application temperature	5°C to 45°C
Service temperature	0°C to 70°C

All values given are subject to 5-10% tolerance

## APPLICATION

### Surface Preparation

The surface must be structurally sound and free of oil and grease, dust and other contaminants which will affect the bonding. Any structural cracks or potholes shall be repaired with a suitable repair mortar from the **SPADREP** range of repair mortars. Light mechanical grinding or high pressure water jet cleaning of the concrete surface can be done to remove any contaminants from the surface. The surface to be treated should be pre-saturated with water prior to application. However, remove any standing Water from the concrete surface just before applying the coating.

### Mixing

INDOFLEX COMBO PLUS 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 1 volume of powder to 1 volume of liquid. Pour the liquid into a suitable container and slowly add the powder to the liquid. Mix the contents using a slow speed drill (300-400 rpm) fitted to a proprietary paddle mixer until a lump free creamy consistency is obtained. **DO NOT ADD WATER TO DILUTE THE MATERIAL AT ANY STAGE.**

### Application

It is recommended to apply INDOFLEX COMBO PLUS PLUS in two coats to provide a minimum thickness of 2mm for heavily trafficked areas, exposed locations and water retaining structures, 1.4mm for podiums, large roofs and retaining walls and 1-1.2mm for in-concrete

medium/small roofs and podiums. Each coat shall be applied @ 750g/m<sup>2</sup> which will give a DFT of average 1mm for 1.50kg. The product is best applied with a stiff brush or an airless spray of nozzle size of 3- 4mm and a pressure of 6-7 bars. After the application of the first coat and whilst it is still wet, embed a glass fibre mat in all the corners and other joints for added reinforcement. The second coat shall be applied after the first coat dries.

### **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 properties within 7 days at 25°C & 50% RH.

### **Cleaning**

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

### **PACKAGING**

INDOFLEX COMBO PLUS is a two-part kit.

1. Part A 10 kg bag
2. Part B 10 lt. pail

### **COVERAGE**

750g/m<sup>2</sup>/coat will give 0.5mm Dry Film thickness. Please apply two coats to get 1mm thickness.

### **STORAGE & SHELF LIFE**

Store the material in a covered and shaded area. Protect from sunlight, UV and extreme temperatures. In tropical conditions the product shall be stored in air-conditioned environments. The shelf life is 12 months when stored as per recommendation and in un-opened conditions. Prolonged exposure to heat and humidity will result deterioration of the quality of the product and reduce its shelf life.

### **HEALTH AND SAFETY**

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

---

Note: Whilst any information contained herein is true, accurate and represents our best knowledge and experience, no warranty is given or implied with any recommendations made by us, as the conditions of any labor involved in the application is beyond our control. Index shall not be liable for any injury, loss or damage, direct or consequential, arising out of the use of this product. It is the responsibility of the user to ensure that the product meets his particular requirements and to use it in a suitable way. Field service, where provided, does not constitute supervisory responsibility. For additional information contact your local Index representative.

