



ARMOURCRETE

A Surfacing System for Protecting Concrete and Masonry

DESCRIPTION

'ARMOURCRETE' is an acrylic based, polymer modified cementitious composite coating system. 'ARMOURCRETE' Polymer, when mixed with cement, will provide a mortar, which will have much better adhesive properties, impact strength, flexural and thin section fragility, when compared to ordinary cement.

USES

'ARMOURCRETE' polymer modified mortar is ideal for use in new areas, as well as in renovation work for surfacing, protecting, shortcreting/ guniting, protecting, waterproofing, brick work, masonry, and also as filling material for joints, grooves etc.. All types of damaged, spalled and deteriorated concrete structures can be repaired with 'ARMOURCRETE' mortar, concrete or shotcrete. Structural integrity can be re-established. 'ARMOURCRETE' polymer is recommended for basements, toilets, roof gardens, terraces, swimming pools and water towers. In general concrete repairs. 'ARMOURCRETE' protects concrete against salt and chemical attacks and corrosion. It is fully compatible with all conventional construction material.

ADVANTAGES

- ❖ Resistant to UV (Ultra - Violet) rays
- ❖ Thixotropic - can be applied in uniform thickness on vertical and horizontal surfaces.
- ❖ Develops excellent bond with moist building materials.
- ❖ Arrests salt petre and prevent penetration of salts into concrete and mortar.
- ❖ Unaffected by chemical attacks, mild acids and strong alkalis.
- ❖ Highly durable in continuous wet service condition.
- ❖ Non- flammable and does not emit toxic gases, when exposed to fire.
- ❖ Resists corrosion and rotting.
- ❖ One time application, properties improve with age.
- ❖ Eco-friendly, harmless to works.

PROPERTIES

Form	Liquid
Colour	Milk White
Specific Gravity	1.01 - 1.05
pH Value	7-9
Chloride Content	Nil

SURFACE PREPARATION

Prior to application of 'ARMOURCRETE' all surface must be prepared properly to avoid failure. The surface shall be cleaned to remove all dust, foreign materials/loose particles or any deposits of contaminants, which could affect the bond between the surface and the 'ARMOURCRETE' coating. This can be done by scarifying, grinding, water blasting and sand blasting, acid washing or any other approved method.

New flat surfaces like sub base concrete shall be reasonably smooth, so as not to impede the application of 'ARMOURCRETE' coating and to avoid sharp projections.

All concrete surface shall be thoroughly pre-wetted for atleast one hour prior to the application of 'ARMOURCRETE' coating by ponding of water on flat surface and by vigorously spraying water on vertical/inclined surfaces.

When placing 'ARMOURCRETE' coating, all water shall be removed so that surface is only damp or surface dry. In no case there shall be standing water or a shiny wet surface.

Depressions are filled and leveled using 'ARMOURCRETE' fillers. For filler the mixing ratio is 1 kg. Cement 1.5 kg Silica Sand and 0.52 kgs. 'ARMOURCRETE'.

METHOD OF APPLICATION AND CURING

'ARMOURCRETE' polymer is mixed with neat cement in the ratio of 100 kgs cement : 52 kg of 'ARMOURCRETE'. The mix has to be stirred thoroughly until a homogeneous smooth consistency is obtained and any lump found in the mix, should be removed.

The mix has to be applied by brush on rendered and / or prepared surface. Two or more coats are recommended. First coat should be allowed to air dry for 5-6 hours before applying second coat. The surface should be made wet before application in case of porous structures.

After application of final coat of 'ARMOURCRETE' initial air-drying shall be done for 2 to 6 hours. During this period, no water should be used for curing. In case of high wind or in places with high ambient temperature, use a polythene sheet to avoid rapid drying of the coating. Maximum period of 6 hours after the final application, moist curing shall be done for the next 24 hours by way of spraying water on 'ARMOURCRETE' coating. During this period at no point of time should the 'ARMOURCRETE' Coating be left completely dry or submerged in water. Following moist curing the 'ARMOURCRETE' coating shall be allowed to air dry for 3 days before submersion in water.

PRECAUTIONS

- 'ARMOURCRETE' system must be applied when ambient temperature is above 10°C.
- During the first 12 hours of curing, it must be protected from abrasion, rain and other adverse conditions.
- No traffic shall be allowed on a standard 'ARMOURCRETE' surface within 48 hours after installation
- Curing the 'ARMOURCRETE' membrane should be done as per above recommendation.
- Reinforcement rods and other sharp materials should not be dragged over the 'ARMOURCRETE' membrane, as this can puncture the same.

DOSAGE / COVERAGE

Mix Proportion : 100 kg cement
52 kg 'ARMOURCRETE' polymer

Material	For single coat on concrete	For double coats on concrete
	Kg/sqr.mtr.	Kg/sqr.mtr.
Cement	0.488	0.730
'ARMOURCRETE' polymer	0.253	0.379

Incase white colour - use white cement

In case of other colour - white cement + colorant

'ARMOURCRETE' BRUSH TOPPING

Material	For one cubic metre	1.5mm Thick
Cement	858 Kg/m ³	1.289 Kg / m ²
'ARMOURCRETE' Polymer	446 kg/ m ³	0.670 Kg / m ²
Fine Silica Sand	858 Kg/ m ³	1.289 Kg / m ²
Yield / Coverage	2162 Kg/ m ³	3.248 Kg/ m ²

For shotcreting the dosage of 'ARMOURCRETE' shall be 15 - 20 % by weight of cement.

SHELF LIFE : Can be stored for 12 (Twelve) months in unopened condition.

PACKAGING : 1, 5, 25 KGS Containers.

TECHNICAL SERVICE :

SWC group maintains a technical division with highly qualified technical personnel to investigate and advise on subjects related to Concrete and the Construction Industry. The Division can advise on the correct use and selection of right products at the right place.

SWC undertakes Consultancy Service for diagnosis and rehabilitation of distressed structures. SWC undertakes Contracts on turnkey basis for total Waterproofing System with guarantee

NOTE : This Technical data sheet is to be used as guidance only. Although the basic formulation of the product remains unchanged, production refinements arising from continuing research and evaluation programmes may occasionally result in marginal change in properties. The recommendation and properties of the product based on continuous monitoring of the product are not intended to infringe on other patents.

THE STRUCTURAL WATERPROOFING CO.PVT.LTD.

Regd. Office : 21/1 Dover Road Calcutta- 700 019 **Dial :** 2475-2684/5378/9950, **Fax :** 2475- 8240
 Calcutta : Plot 38/1, Block-GN, Sector IV &V, Salt Lake City, Calcutta- 700 091
Dial : 2357- 3546/3547 , **Fax:** 2357 3881
 Delhi Office : 406, Deepali, 92, Nehru Place, New Delhi - 110 019, **Dial:** 26445680 &
 26435432 **Fax:** 26416861
 Mumbai Office : 56, Mahavir Centre, Sector -17, Vashi , Navi Mumbai - 400 703,
Dial: 27893601 **Fax:** 27893571 **E-mail:** swcbom@bom5.vsnl.net.in
 Chennai Office : 81, 3rd Floor, A, Sulochana Terrace, 1st Main Road, Gandhi Nagar, Adayar,
 Chennai-600 020 **Dial.** 24423731 **Fax.** 24422476
 Bangalore Office : 104, Victoria View, Borewel Road, White Field, Bangalore – 560 066.
Telefax : 080 – 3310112, Email – swcbangalore@yahoo.co.in

