

# CICO CRYSTALSEAL

## WATERPROOFING OF CONCRETE & MASONRY BY CRYSTALLIZATION

**CICO CRYSTALSEAL** cementitious Composite coating system based on cement and special additive. These additives penetrate into the concrete and seal the pores and micro fine cracks. This crystalline growth is highly resistant to extreme water pressure from either side of the concrete and also to most aggressive chemicals. Since the process is catalytic, the crystalline structure can reactivate many years after the original application, to seal or re-seal many defects which might occur in the concrete at a later time.

### USES

**CICO CRYSTALSEAL** is used for surface treatment, protecting, waterproofing and repairing concrete and masonry. Waterproofing of basements, toilets, terraces, roofs, swimming pools, water towers etc. General concrete repairs. Protection of concrete against corrosion, salt attack etc.

### FEATURES

- Combines a tough, hard-wearing surface with waterproofing.
- Allows trapped vapour to escape thus preventing peeling and blistering.
- Can be applied in uniform thickness to horizontal and vertical surfaces.
- Develops excellent bond.
- Reduces or prevents salt penetration into concrete.
- Is not affected by ultraviolet light or by chemicals ranging from mild acids to strong alkalies.
- Is highly durable in continuous wet condition.
- Penetrates into the concrete about 2 mm
- Protects concrete against alkali aggregate reactions
- Self-sealing
- Can be used from negative side
- Perfect for blind wall application
- Inhibits the effects of CO, CO<sub>2</sub>, SO<sub>2</sub> and NO<sub>2</sub>
- Is non-flammable and does not give off toxic gases, when exposed to fire.
- Will not rot or corrode.
- Most properties improve with age.
- Is not harmful to the health of workman.

## TECHNICAL DATA

<b>Appearance</b>	Grey powder
<b>Mixing Ratio</b>	40 to 50 % by wt. of powder
<b>Water permeability</b>	Nil at 20 meter height of water head.
<b>Coverage</b>	2 m <sup>2</sup> /Kg in single coat 1-1.5kg/m <sup>2</sup> for 2 coats
<b>Shelf Life</b>	6 months in sealed condition

## METHOD OF USE

### Surface Preparations

Prior to application of **CICO CRYSTALSEAL**, surface must be prepared as mentioned below to avoid failure and to achieve maximum beneficial properties.

- The surface shall be cleaned to remove all dust, foreign matters, loose materials or any deposits of contamination which could affect the
- Bond between the surface and the **CICO CRYSTALSEAL** Coating. This can be done by scarifying, grinding, water blasting, sand blasting, acid washing or by any other approved method.
- New flat surface like sub-base concrete shall be made reasonably smooth so as not to impede the application of **CICO CRYSTALSEAL** Coating and to avoid sharp projections.
- All concrete surfaces shall be thoroughly pre-wetted prior to the application of **CICO CRYSTALSEAL** Coating by pouring water on flat surface or by spraying water on vertical/inclined surfaces.
- When placing **CICO CRYSTALSEAL** Coating, water should be removed so that surface is only damp. In no case there should be standing water.
- Depressions are to be filled and leveled using 1:3 cement sand mortar.
- On smooth concrete surfaces, sandblasting or roughening of the surface may be required prior to application of the product.

## APPLICATION

Mix **CICO CRYSTALSEAL** with cleaned potable water as per recommended ratio to make smooth slurry. Any lump found in the mix should be removed or mixed thoroughly. 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 prior to apply subsequent coat.

## CURING

After application of final coat of **CICO CRYSTALSEAL**, initial air drying shall be done for 8-12 hours. During this period no water is to be used for curing. In case of high temperature and low humidity combined with high wind condition, the coating shall be covered with polythene sheet to avoid rapid drying of the coating. After maximum period of 24hours after the final application, moist curing shall be done for the next 3-4 days by spraying/sprinkling of potable water on **CICO CRYSTALSEAL COATING**

## PRECAUTIONS

**CICO CRYSTALSEAL** System must be applied with temperature above 5° C and below 40° C.

## STORAGE

Store in dry cool place and away from direct sunlight.

## PACKAGING

5 kg & 25kg HDPE bag

### Important Note:

All CICO products are sold in the market after strict Quality Control in line of ISO 9001 and guaranteed against any manufacturing defect. Although the basic formulation of Company's products generally remains unchanged, production refinements arising from continuing research and evaluation program may occasionally result in marginal changes in properties. CICO aspires to ensure that any recommendation, advice, test data, specification, method statement and other information given in this product datasheet is accurate and best of company's knowledge. Since, the company (CICO TECHNOLOGIES LTD) has no control over the selection of its product, applicators, application methodology, how and where it is applied, therefore, the company cannot accept any liability directly or indirectly arising from the use of its product. It is important to any customer, user or specifier satisfies him / herself that the product is suitable for the intended purpose including health, safety and environmental aspect. Unless or otherwise agreed in writing, all products of the company are sold strictly pursuant to the terms of our standard conditions of sale which are available upon request. All information and technical assistance is given without warranty or guarantee and is subject to change without notice. All customers, users, specifiers should ensure that they examine the suitability of the product with company's latest product datasheet.

## CICO TECHNOLOGIES LIMITED

Corp. Office: C-120, 2<sup>nd</sup> Floor, Okhla Industrial Area,  
Phase -I, New Delhi-110 020  
Tel. No: 91-11-4050 9400, Fax: 91-11-4050 9413  
E-Mail: [cicotech@cicogroup.com](mailto:cicotech@cicogroup.com)  
Web Site: [www.cicogroup.com](http://www.cicogroup.com)

