

# COSTAR 1K

One Component Cementitious Waterproofing Membrane



## PRODUCT DESCRIPTION

Costar 1K is a blend of Portland cement, well graded quartz sand and polymer enhanced chemical ingredients which when mixed with water, forms a waterproof coating for concrete surfaces. It can be used above grade. A product of in-depth research; tested and trusted by experts, with wide range of applicability and features next to none

## FEATURES

- Easy application
- Polymer modified
- Excellent resistance to strong Non-hydrostatic pressure.
- Excellent freeze/thaw resistance
- Wide range application and flexibility
- Only requires mixing with water
- Variable Consistency
- Excellent sag resistance
- Applicable to damp substrates
- Unique adhesion properties

## APPLICATION AREA

- Costar 1k can be applied on Concrete, brick and block foundations and retaining walls, wastewater tanks etc.
- Applied interior/exterior, above or below grade, positive or negative water pressure side
- It can also be used as a base coat for Costar 2k
- It is useful for waterproofing and protection of basins and pipes.
- Excellent for waterproofing of showers, terraces, balconies, swimming pool etc.
- It can be applied as protection against effects of freeze- thaw and carbon dioxide attack

## APPLICATION INSTRUCTION

### Surface Preparation

Concrete substrates must be sound and of sufficient compressive strength (minimum 25N/mm<sup>2</sup>) with a minimum pull off strength of 1.5N/mm<sup>2</sup>.

The substrate must be clean, dry and free of all contaminants such as dirt, oil, grease, coatings and surface treatments, etc. if in doubt, apply a test area first.

Concrete substrates could be prepared mechanically using abrasive blast cleaning or scarifying equipment to remove laitance and achieve an open textured surface. Weak concrete must be removed and surface defects such as voids must be fully exposed. Repairs to the substrate, filling of voids and surface leveling must be carried out by using Costar Repair Mortar. The concrete or screed substrate has to be primed or leveled in order to achieve an even surface.

### Mixing and Application

Mix Costar 1K powder to 7-8 litres of water and mix for at least 3 minutes with a mechanical mixer to a creamy slurry consistency for brush or trowel and to a pump-able consistency for spray applications. Costar 1K can be left as a brushed finish, or it can be troweled up by a skilled plasterer to a relatively smooth cementitious finish. Apply the second coat as soon as the first coat has set.

## ATTENTION

- Protect application from direct sun and wind to prevent premature surface drying and shrinkage cracks.
- Apply Costar 1k in minimum of two coats
- All surfaces must be saturated surface dry (SSD) but with no standing water, immediately prior to application.
- Apply product with brush or appropriate compressed air spray equipment. Do not use roller.
- After application, protect from rain for at least 48 hours.
- Product should be applied in well ventilated areas so as to ensure quicker and proper setting; as setting time could be influenced or delayed by higher relative humidity
- If solvent based paint or any other finishing is to be applied on the product, it should be ensured that preliminary testing is carried out to ensure the solvents do not attack the waterproofing membrane layer.
- Please consult Costar Building Product Officer for other information you may need as regards applications under unusual conditions.

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- Skilled and trained personnel should be on site to ensure appropriate dosage is used and also, to give insight at their discretion to effectively or properly address status quo

## COVERAGE

Approximate coverage is 8-10 square meters for 20kg bag on two coats. Coverage is changeable depending on the application type, surface porosity, surface profile, variations in level or wastage etc. It is recommended that at least 2 coats are applied.

## TECHNICAL PROPERTIES

|                                     |                       |
|-------------------------------------|-----------------------|
| Bulk Density                        | 1.4 g/cm <sup>3</sup> |
| VOC                                 | 0%                    |
| Compressive Strength<br>(ASTM C109) | 20.7Mpa               |
| Flexural Strength                   | 20.7Mpa               |
| Drying Time                         | 2-4 hours at 20 °C    |

## STORAGE AND SHELF LIFE

Store under warehouse conditions below 35°C in the original, unopened packs. If stored at high temperature and/or high humidity conditions, the shelf life will be reduced. Product should not be exposed to adverse or

extreme conditions.

It has a shelf life of 12 months when stored in a dry place below 35°C in their original, unopened packs.

## PACKAGING

Costar 1K is packaged in 20 Kg bags

## STANDARD COMPLIANCE

Conforms to EN 1489-2007, ASTM D-968

## HEALTH & SAFETY

- Please ensure that hand gloves and goggles are worn during installation
- Apply in ventilated areas, away from flames
- It is only important that during application and after application, standard safety procedures are done.
- Please consult current MSDS for product. For Professional Use only.

## ADDITIONAL INFORMATION

Costarchem manufactures a complete range of construction chemical products which include:

- Concrete admixtures
- Waterproofing system
- Flooring system
- Cementitious and epoxy precision grouts
- Damp-proofing products
- Sealants and adhesives
- Repair and refurbishment systems

For more information on any of our products, please contact Costarchem global or regional office.

## LEGAL NOTE

The information and recommendations relating to the application of Costarchem products, are given in good faith based on current knowledge and experience of the products when properly stored, handled and applied under normal conditions in accordance with the stated recommendations in the product datasheets. Whilst Costarchem endeavors to ensure that any advice, recommendation, specification of information it may give is accurate and correct, it cannot, because it has no direct or continuous control over where or how its products are applied, accept any liability either directly or indirectly arising from the use of its products, whether or not in accordance with any advice, specification, recommendation of information given by it. The user of the product must test the product's suitability for the intended application and purpose. Costarchem reserves the right to change the properties of its products. The proprietary rights of third parties must be observed. All orders are accepted subject to our current terms of sale and delivery. Users must always refer to the most recent issue of the local Product Data Sheet for the product concerned, copies of which will be supplied on request.