

**PRODUCT DESCRIPTION:** Fibseal Crystal cementitious capillary waterproofing systems provides a permanent solution to leakage, seepage or ingress of water and moisture in concrete by sealing capillaries and shrinkage cracks in both the positive and negative side of the structure. The waterproofing effects is provided by reaction of different chemical components in Fibseal Crystal within the matrix of the concrete structure forming crystallization products that seal the capillaries and shrinkage cracks present. The reaction is osmotic in nature in the presence of moisture and free lime and insoluble crystals formed penetrate deep into the capillary structure and shrinkage cracks and blocks the passage of water while still permitting the transmission of water vapor and allowing the concrete structure to breath and eliminating water pressure build up.

## AREAS OF APPLICATION

Fibseal Crystal is recommended for use in any concrete or block structure where it is required to keep water in or out of the structure. Because it can be applied on either the positive side (side in contact with water) or the negative side (side not in contact with water), it allows for all application requiring waterproofing.

- Water retaining structures
- Concrete roof decks
- Swimming pools
- Basements
- Septic tanks
- Balconies
- Elevator Shafts
- Planter boxes
- Bathroom and toilets
- Tunnels
- Concrete pipes
- Containment walls
- Water Tank

## ADVANTAGE

- Becomes an integral part of the concrete structures instead of merely being a surface coating or membrane that can damage or delaminate.
- Penetrates deep into the capillary tracks and shrinkage cracks and can seal both the positive and negative side of the concrete structure.
- Un-reacted chemicals remain active and will react in contact with water providing additional protection against leakage.
- Protects against water borne corrosive chemicals that can cause corrosion of reinforcement.
- Does not require special protection during back filling, placement of reinforcement or other procedures necessary to protect a surface type waterproofing systems.

## APPLICATION

### SURFACE PREPARATION

The concrete or concrete block surface to receive the Fibseal Crystal system must be structurally sound and be free from dirt, soil, oil release agents, laitance and any other foreign materials which may impair the bond, penetration and/or the overall performance of Fibseal Crystal materials.

- Extremely smooth concrete surface must be water blasted, acid etched to make sure the concrete surface has an open capillary system. The surface to be treated should never have shiny appearance.
- Rout out visible cracks exceeding 0.25 mm in size to a depth of 20 mm to 25 mm. Also rout out honeycombed pockets, holes and faulty construction joints to sound concrete.
- Construction joints should be routed out with a formed 20 mm x 20 mm.
- Wet dry surface lightly prior to the application of Fibseal Crystal system. Moisture must be present in the concrete strata to ensure maximum chemical penetration. Surface should be damp when Fibseal Crystal products are applied.

## MIXING

Brush application: Mix 8-10 ltrs of water with 25 kg of powder. Stir the slurry mixture frequently during the application and prepare only as much as can be applied within 20 minutes.

## APPLICATION

- Apply Fibseal Crystal coating by masonry type brush (artificial fibers, if available).
- Prior to application of Fibseal Crystal coating, fill form tile holes, routed out cracks, honeycombed pockets and seal strips at construction joints with Fibcrete WPC Putty.
- Fibseal (Crystal) slurry must be applied to damp concrete block surfaces only in a specified quantities. Each coat should have a thickness of just under 1.2 mm. The second coat should be applied when first coat is touch dry. Light spray of water may be required between coats in hot/dry climates.
- For horizontal concrete surfaces apply Fibseal Crystal slurry in one coat with stiff bristle brush/broom or squeegee.

## CURING

Except for extremely hot weather and very low humidity, curing of the Fibseal Crystal system is not required. In these extreme conditions curing must begin as soon as the Fibseal Crystal coating has hardened sufficiently.

## CLEAN UP

Clean all tools immediately after use with water. Do not allow material to harden. Any hardened material will need to be removed mechanically.

## TECHNICAL SPECIFICATIONS

Physical Appearance / Colour	Grey Cementitious granular powder
Density (Bulk Density)	1.3±0.02 kg/l
Permeability to Water Vapour (IS 2645 & ASTM C 1306-05a)	Impermeable at 3kg/cm <sup>2</sup>
Water Pressure Resistance EN1928	16±1 bar
Consistency	Brushable consistency
Setting time	Confirm to IS 2645-2003 for initial and final.
Coverage	
Vertical surface	1.1kg/m <sup>2</sup>
Horizontal surface	1.2kg/m <sup>2</sup>

All technical data stated in this Product Data Sheet are based on laboratory tests. Actual measured data may vary due to circumstances beyond our control.

## PACKAGING

FIBSEAL CRYSTAL is packed in 25kg bag.

## STORAGE

Store the material at temperatures between + 10° C and + 45° C in originally sealed packages, the material can be stored for 6 months. But before opening the bags and without expose to moisture.

## PRECAUTIONS

During mixing and application the following precautions should be observed: ensure adequate ventilation and avoid contact of the material with the eyes, nasal passages, mouth and unprotected skin. Avoid contact with the hands by wearing protective gloves, if necessary, a suitable barrier cream. In case of contact with the eyes, rinse immediately with plenty of water and seek medical advice and after contact with the skin wash immediately with plenty of soap and water (do not use solvents). Prolonged contact with the skin should be avoided, especially where the user has an allergic reaction. Always wear gloves and eye/face protection as necessary. Observe personal hygiene, particularly washing the hands after work has been completed or at any interruption whilst work is in progress. Care should be taken when removing gloves to avoid contaminating the insides. In case of accidents seek medical advice.

## DISPOSAL / SPILLAGE

Spillage of any of the component products should be absorbed onto sand or other inert material and transferred to a suitable disposable vessel. Disposal of such spillage or empty packaging should be in accordance with local waste disposal authority regulations.

## NOTE

The information supplied in this datasheet is based upon extensive experience and is given in good faith in order to help you. Our company policy is one of continuous Research and Development we therefore reserve the right to update this information at any time without prior notice. We also guarantee the consistent high quality of our products however as we have no control over site conditions or the execution of the work, we accept no liability for any loss or damage which may arise as a result thereof.

## HEALTH AND SAFETY

This material is intended to be used by trained professionals with proper equipment's. The following safety measures are recommended:

- Wear protective gloves, clothing, goggles, hearing protection for noise reduction and hard hats for falling debris.
- Do not eat, drink or smoke while in active contact with these materials.
- Avoid skin contact.
- Wash hands thoroughly with soap and cool water.
- Never wash the skin with a solvent.
- Anyone experiencing difficulty breathing when working with these materials or showing an allergic reaction should seek fresh air immediately and consult a physician if symptoms persist.

# FIBSEAL CRYSTAL

A Crystalline water Proofing Coating

Product # 114.48  
Version no: 16.11.23

# Tech Data

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