Built to seal. Made to last.

PRODUCT DATA SHEET

Fullproof® CRYSTRALIZE CWP

CRYSTALLINE WATERPROOFING POWDER FOR CONCRETE SUBSTRATES

DESCRIPTION

Crystalize CWP is a cementitious, brush applied, waterproofing treatment for concrete. When it is mixed with water & applied to concrete, it penetrates into the concrete mass protecting against the passage of water. Crystalize CWP Powder reacts chemically to form billions of needles like crystals which block the pores, voids & micro cracks in concrete. Pre saturation & subsequent re-wetting of the surface will cause deeper diffusion of the organic chemicals & formation of crystals at greater depth. It may take from seven days to one month to reach its maximum waterproofing capability, depending on the thickness of concrete. Environmental factors such as ambient temperature, density of concrete, moisture present & weather conditions all can affect the timing of sealing process. Under dry conditions, Crystalize CWP Powder lies dormant. However it becomes reactive whenever it is re-exposed to moisture. Crystalize CWP Powder contains active waterproofing chemicals which react with moisture and hydrates cement in the concrete, creating insoluble crystalline complexes which seal the capillaries and minor shrinkage cracks. They penetrate even against strong hydrostatic pressure, becoming an integral part of the concrete. The waterproofing chemicals remain active for the life of the structure, permanently sealing it from water penetration.

ADVANTAGES

- Stops water movement through concrete.
- Easy in application, only mix water at site.
- Protects reinforcing steel against corrosion.
- Waterproofs minor cracking & seals shrinkage cracks up to 0.4 mm width.
- easy to use powdered material
- Its waterproofing capability increases with time.
- Does not get affected by surface wear or abrasion.
- Can be applied to positive or negative side of concrete.
- Treated concrete withstands hydrostatic pressure up to 150 meter head.
- Protects concrete against contaminated water & corrosion.
- Applicable on moist substrates.
- It allows concrete to breathe, but is not a vapors barrier.
- Waterproofs by deep crystallization, where slabs of concrete rafts / PCC are to be landscaped.
- very economical compared to other methods
- underground vaults

APPLICATION

- Water retaining Structures.
- Water Excluding Structures.
- parking structures
- Basements, Foundations.
- Lift shafts, Inspection Pits.
- Swimming pool.
- Construction Joints.
- Bridge Decks.
- Harbors, Jetties.
- Dams.
- Sea defense walls, Retaining walls.
- Concrete Pipes, Canals, Tunnels

CRYSTALIZE ADMIXTURE

TECHNICAL DETAILS

Base	Crystalline Cementitious Admixture
Appearance	Grey Powder
Bulk Density	1.53 ± 0.3
Coverage	Brush Application 1.3kg/m^2 Dry Shacked Application 1kg / m^2
Depth of penetration of water BS EN 12390-8:2009	32.61%
Workability Retention	To be adjusted using water reducing & retarding admixture as required
Compatible with cement	Can be used with all cements including pozzolonic cements
Permeability to water	Has very low permeability compared to control concrete
Packing	25kg HDPE Bags
Storage & Shelf Life	12 months when stored in cool & dry place Keep away from direct sunlinght

DIRECTIONS FOR USE

Method of Application

- On fresh concrete floors, slabs, and horizontal surfaces, after the concrete is placed, consolidated, and leveled, wait until the concrete is hard enough to walk on, leaving only a 6-10 mm footprint.
- The concrete should be free from bleeding water.
- Broadcast 1 kg. of Powder by hand or rotary spreader before final trowelling work.
- Recommend to broadcast as two application, first 50% in one direction, last 50% at the right angle.
- After powder has absorbed moisture from slab, then start power floated.
- Only sprinkle water for initial curing. 48 hours later, ponding for regular curing can be done.

1. Surface preparation for existing concrete substrates

- Surface should be clean and free from dirt, laitance, loose particles, paints, etc., Remove by mechanical grinding, sandblasting, or high pressure washer cleaning, or suitable mechanical means.
- Remove all protrusions, chisel out honeycombed/damaged areas, repair the cracks and work back to sound concrete.
- All crack and holes should be filled with Crystalize CWP Powder 7 parts mix with 1 part of water.
- Substrate should be reach a "saturated surface dry" (SSD) condition (damp, without standing water)

2. Product preparation

- Mix powder to water in ratio 100g per Water 40g for waterproofing purpose.
- Always mix powder to water and stir it well to obtain a lump free mixture. Mix only quantities to be used within 30 minutes. Mix mechanically with clean water to a thick consistency.

CRYSTALIZE ADMIXTURE

3. Application

- Apply mixed Powder with a trowel or brush, in rate of 0.6 - 0.7 kg./m2/coat
- Apply a second coat after 3 to 6 hours. at the right angles of the first coat.

CURING

- shall be moisture cure for minimum 2-3 days & protected from rain & direct sunlight or light traffic for minimum 2 days after application
- Heavy traffic should be avoided until the surface has hardened, at least 5 days after application.
- Water retaining structures, can be carefully filled with water 7 days after application.
- Potable water tanks should be thoroughly rinsed with potable water prior to being placed in service.

PRECAUTIONS & LIMITATION

- Application can be done under normal temperature conditions.
- Heavy traffic should be avoided until the surface is hardened for at least 5 days.
- Finishes containing portland cement may be applied after 3 to 4 days.
- Any paint or coating should be applied after 28 days only, over application, after thorough wire brushing, washing & removing any Crystaline Powder residual on surface.
- Crystalline powder has a high pH, when mixed with water. Use protective gloves and clothing & goggles for eye protection.

QUALITY ASSURANCE

All products are manufactured under a Quality Management System for Design, Manufacturing and Selling of Construction Chemicals as per the standards of IS O9001: 2015.

LIMITATION OF LIABILITY

The data provided is based on tests and intended for guidance only. It is the user's responsibility to ensure suitability for application. Fullproof Coatings is not liable for substrate conditions or application practices. Ensure this sheet is current before use.

COMPANY STANDARD COMPLIANCE

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