PC Crystal Coat



Crystalline Waterproofing Coat

Product Overview

PC Crystal Coat is a surface-applied, inherent crystalline waterproofing material, which waterproofs and protects concrete in-depth. It consists of portland cement, specially treated quartz sand and a compound of active chemicals. It needs only to be mixed with water prior to application.

Areas of applications

- 1. Basement retaining walls
- 2. Parking structures
- 3. Concrete slabs (floor/roof/balcony, etc.)
- 4. Tunnels, subway systems, cellars
- 5. Foundations
- 6. Water retaining structures
- 7. Substructures
- 8. Sewage and water treatment plants
- 9. Channels
- 10. Reservoirs
- 11. Bridges, dams and roads

Properties

When PC Crystal Coat is applied to a concrete surface, the active chemicals actively react with moisture and the by-products of cement hydrates that generates an insoluble, crystals. These crystals fill the capillary pores and minor shrinkage cracks in the concrete to prevent any further water seepage (even under pressure).

However, PC Crystal Coat will still allow the concrete to breathe. Even after the concrete has been cured, PC Crystal Coat remains dormant in the concrete and will reactivate in the presence of moisture to seal capillary tracts and hairline cracks. Hence it protects concrete against seawater, wastewater, aggressive groundwater and many other aggressive chemical solutions. PC Crystal Coat is found to be safe with potable water and is therefore suitable for use in water storage tanks, reservoirs, water treatment plants, etc.

Indications for Usage

1. The concrete substrate to be treated with PC Crystal Coat should be sound and even, open-pored, rough, freed from large cracks, ridges, oil, dirt, grease using sandpaper or sand blasting, wire brushes, etc. Faulty concrete must be chased and kept wet prior to application.

2. PC Crystal Coat is to be mechanically mixed with clean water till thick lump-free viscous mixture is formed. Mix only as much material as can be used within 20-25 minutes and stir mixture frequently. If the mixture starts to set, do not add more water; simply re-stir to restore workability.

For Brush method: 5 parts PC Crystal Coat with 2 parts of water (20 kgs with 6-7 lt). While

applying by brush, ensure that all cavities in the substrate are filled. Directions for application :crosswise application (vertically bottom-up, then horizontally).

For Spray method: 5 parts of PC Crystal Coat with 2.75-3.25 parts of water. While using spray method, the spraying mechanism should have pressure and volume adjusting system. The first layer of PC Crystal Coat is to be applied in circular motion with the spray nozzle held at a 90% angle to the substrate. The final layer can be left as a spray finish.

Apply subsequent coat while previous coat is still damp at the surface. The waiting time before applying the next coat depends on the local climate conditions such as humidity, temperature etc. The previous coat must not be damaged during application of the next coat. To maintain workability, do not add water and simply re-stir the mixture. Don't apply to substrate at temperature below 7°C. Protect the freshly treated substrate from harsh weather conditions (heavy rainfall, snow, sun, wind, etc.) and leave it for moisture cure for 3 - 5 days. The second fresh coat must be protected from rain for at least a period of 24h. This step is to be followed up by backfilling on 5th day.

Important remarks

- 1. Do not apply PC Crystal Coat to freezing surfaces.
- PC Crystal Coat can not be used as an additive to concrete or plasters. Instead PC Plus can be used for such applications.
- 3. PC Crystal Coat is a non decorative material.

Packages available

PC Crystal Coat is available in 20kg bags. Others on request.

Storage and shelf life

Should be stored in a dry, undamped, unopened, undamaged, with original packaging, at a minimum temperature of 7°C. Its shelf life is 12 months when stored under proper conditions.

Advantages

1. PC Crystal coat becomes an integral part of concrete. Can be applied to all types of concrete: new or old.

2. Can be applied from both positive and negative sides. Penetrates deeply and blocks all capillary tracts, hairline cracks shrinkage pores. Very effective against high hydrostatic pressure.

3. Waterproofing and chemical defiance properties remain , even if the surface is damaged.

4. It is both cost and labor efficient.

5. PC Plus has Zero VOC (volatile organic compounds) and are safe for use both outdoors and in confined indoor spaces. Hence non toxic.

Safety Measures

PC Crystal Coat will irritate eyes and skin and may cause skin sensitization. Wear appropriate eye, skin and breathing protection when using this product. Avoid contact with skin and eyes. In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

For further clarifications Please contact on below address

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