

Surface applied integral crystalline waterproofing system that penetrates into the concrete for an in-depth waterproofing solution.

DESCRIPTION

CRISTALPROOF L1 is a unique chemical treatment designed to waterproof and protect concrete from water penetration of pores and capillaries. It is designed to be a surface applied treatment that penetrates into concrete for an in-depth waterproofing solution. CRISTALPROOF L1 actually works within the concrete's substrate to force a reaction between un-hydrated cement particles and water to cause further hydration within the concrete's mass. This results in further hydration within the already established pores and capillaries effectively reducing the permeability of the concrete until water penetration is stopped. In doing so it will make the concrete permanently waterproof. Due to the catalytic nature of this technology, any water penetration that occurs at a later date is again utilized to produce more crystals within the pores and capillaries. This process of increasing concrete's own natural abilities by using CRISTALPROOF L1 means the self-healing process of the concrete is in excess of the concrete's normal and natural abilities. It allows concrete to increase the natural autogenously healing process allowing for self-healing capabilities of cracks up to 0.2mm in diameter when moisture is present.

AREAS OF APPLICATION

Concrete structures below and above grade: swimming pools, tunnels and subway systems, parking garages, all below grade concrete foundations, rooftops, dry vaults, sewage and water treatment plants, water towers and water reservoirs, marine structures, pipes, bridge decks, concrete walls and floors, shotcrete linings.

FEATURES, BENEFITS AND ADVANTAGES

- **Features**
 - Virtually eliminates water penetration through concrete.
 - Will work to prevent high hydrostatic pressure.
 - User Friendly – simply mix with the appropriate amount of water and brush on.
 - Will self-heal new hairline cracks to effectively stop water penetration into the concrete.
- **Benefits**
 - Low application cost.
 - Lowers overall costs through increased life span.
 - Completely eliminates the need for alternative waterproofing systems.
 - Lower maintenance costs and increased effective life.
- **Advantages**
 - Less volume to accomplish even greater productivity.
 - Stops corrosion of reinforcing steel, stops penetration of waterborne contaminants resulting in increased durability and reduction of opportunity costs.
 - Less chance of error, and no impediment to productivity.
 - Can be used to stop water penetration through concrete under dramatic conditions.
 - Eliminates expensive repairs while providing increased durability.

COVERAGE (see operational data)

All single coat applications: 1 kg powder per 1 m².
Two coats: 0.8 kg powder per 1 m² per coat.

OPERATIONAL DATA

CRISTALPROOF L1 is a dry powder that when mixed with water to a creamy consistency can be applied as a brush on slurry to concrete as a penetrating surface treatment under the following mix proportions:

- Single Coat Brush Applied Slurry Applications: Use 1 kg powder per m², mixed 8 litres of water to 25 kg of powder.
- Two coats: Use 0.8 kg powder per m² per layer mixed 8 litres of water to 25kg of powder.

CRISTALPROOF L1 may also be spray applied. When utilizing the spray application method follow the mix proportions as outlined and follow up immediately with a brush to insure that Cristalproof L1 penetrates effectively into the pores and capillaries.

- As Single Coat spray applications: use 1 kg of powder per m² (mixed 25 kg of powder to 8 litres of water).
- As a First Coat spray applications: use 0.8 kg of powder per m²(mixed 25 kg of powder to 8 litres of water).

CRISTALPROOF L1 may also be dry shake applied. To do so simply apply the powder spreading it evenly throughout the surface at a rate of 1 kg per m² before power trowelling the application. This system may only be done successfully when a power trowel is used for finishing. Do not add water to the mix should signs of setting occur.

TECHNICAL DATA

Colour	Grey
Appearance	Powder
Solids	100%
Bulk density	1.45
pH	13
Rate of penetration	± 2.1mm/week (depends on quality concrete)
Particle size	50 - 150 microns
Water pressure	170 m (when used as 2 coats)
Shelf life	2 years (when kept dry)

CURING

CRISTALPROOF L1 requires wet curing.

PACKAGING

25kg bags or plastic pails.
Alternative packing/private label available upon request.

STORAGE

Store in dry location, opened bags or pails will deteriorate if subjected to moisture.

SAFETY AND HEALTH PRECAUTIONS

Do not breathe dust/fume/gas/mist/vapours/spray.

If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

If on skin or hair: Take off immediately all contaminated clothing. Rinse skin with water/shower.

For more information, consult the safety data sheet.