

Estop Sealproof

Crystallization Penetrating Aids and Waterproofing of Old or New Concrete System

Description

Estop Sealproof crystalline capillary waterproofing system is a product which contains a blend of selected inorganic crystals, penetrating aids and defoamers formulated for application by spray, roller or brush.

Estop Sealproof when applied to aged or green concrete penetrates deeply into the capillary pores of the concrete, reacts with free lime within the concrete to make a calcium silicate gel (CSH) that is insoluble.

Estop Sealproof stops water from either the positive or negative side of the concrete slab when the seepage is not caused by cracking or other structural flaws. In addition, **Estop Sealproof** also aids in abatement of dampness odors caused by bacteria in ground water or flood water.

Uses

Estop Sealproof is used for waterproofing new or aged concrete against either positive or negative hydrostatic water pressure.

Estop Sealproof penetrates deeply (2–10 mm) into capillary voids and pores of the concrete and “crystallize” as part of the concrete. It is a concrete treatment and not a surfaces coating. It does not change the appearance of the concrete and it will not discolour or separate. **Estop Sealproof** works equally well on old or new concrete, above or below grade, and is intended for use on poured in place walls, preformed tilt-ups, bridges, road surfaces, pipes, basement walls, foundations, sidewalks and slab.

Advantages

- Easily apply by spray, brush or roller to new or aged concrete.
- Effective waterproofing system in sealing, hardening, and dust-proofing of concrete surfaces.
- Can be applied to damp concrete with no standing water.
- Penetrate deeply into capillary voids and pores and crystallize as part of concrete.
- **Estop Sealproof** treatment is permanent and will raise surface pH.
- Protect concrete surfaces from abrasion, freeze-thaw damage and chloride ion intrusion.
- Cost effective way of waterproofing system.
- Prevents efflorescence, which will improve the bonding of cementitious toppings, coating and paints.

Physical Properties

The values given below are average figures achieved in laboratory test. Actual values obtained on site may show minor variations from those quoted.

Density, kg/L	1.10 ± 0.05
Solubility in Water	100% soluble
Appearance and Odor	Clear and colourless No odour. Non toxic
Solid Content	30 – 35%
Permeability-Pressure Applied on Positive Side ASTM D5084-90	@ 5 bar (51.02m head of water) = 0 permeability (water tight)
Permeability-Pressure Applied on Negative Side ASTM D5084-90Per	@ 5 bar (51.02m head of water) = 0 permeability (water tight)
Hydrostatic Pressure Resistance USACE CRD C48 – 73)	@ 3 bar (30m head of water) = 0 leakage (water tight)
Absorption ASTM C642	7 Days = less than 2%
Compressive Strength at 7 Days ASTM C42	Control : 25 N/mm ² Treated : 36 N/mm ²
Efflorescence Reduction Fresh Concrete ASTM C67 – 75	No change to treated concrete.

Application Instruction

Surface Preparation

Surface must be able to absorb water, to be able to absorb **Estop Sealproof**. Surface may be wet, moist or dry, but not having puddles or running water.

Concrete surfaces must be clean, sound and free of oil, dirt, laitance and any other such contaminations which may interfere with the application process.

High pressure water jetting is the preferred method of surface preparation because mechanical cleaning, surfaces saturation and substrate roughing are simultaneously achieved.

Application

Wet the surface before applying **Estop Sealproof** to allow its penetration. Thoroughly mix **Estop Sealproof** before applying by airless sprayer, hand-pump-type garden sprayer, roller, brush or squeegee.

Agitate while applying to keep ingredients in suspension and from setting out. If **Estop Sealproof** puddles or beading is present, blow off with air, squeegee, and wipe up with cloth.

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Do not allow any **Estop Sealproof** to dry on surfaces, as it will cure into a hard white crystal powder that requires power grinding to remove.

After application, flush the treated surface with plenty of water for curing and also to remove excess **Estop Sealproof**.

Curing and Additional Waterproofing System

Estop Sealproof will penetrate and form crystal gradually in pores and voids in concrete.

In some circumstances, where additional waterproofing membrane system, such as **Estokote Flexi**, **Estoflex GP**, **Estoflex SM** etc, were to apply on top of **Estop Sealproof**, allow the later to cure for at least seven (7) days, before proceed with the additional waterproofing system.

Limitation

Apply at temperatures between 27 - 35°C. Do not apply to glass, aluminium, porcelain, enamel, clay brick or other clay based products. Do not apply on painted surfaces.

Packing & Size

Estop Sealproof	20 kg pail and 200 kg drum
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Coverage

Estop Sealproof	5m ² /litre for rough surface 10m ² /litre for smooth surface
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Technical Support

Denka offers a comprehensive range of high performance, high quality of product for both new and existing concrete surfaces. In addition, the company offers a technical support package to specifiers, end-users and contractors, as well as on-site technical assistance.

Storage

Estop Sealproof should be stored in original unopened packaging in dry conditions.

Estop Sealproof has a shelf life of 24 months.

Precautions

Wear suitable protective clothing, gloves, eye protection and respiratory protective equipment.

In case of contact with eyes, rinse immediately with plenty of clean water and seek medical advice. If swallowed. Seek medical attention immediately do not induce vomiting.

Additional Information

Denka Construction Solutions Malaysia Sdn Bhd offers a wide range of complementary products which includes waterstops, waterproofing products, grouts, anchors, specialized flooring products. In addition, a wide range of products formulated for repair and refurbishment of spalled concrete are available.



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