

Delta Pavex-F

The Curing & Waterproofing of Fresh concrete used in Airport Runways, Highways, Bridges and Concrete Structures

Description

DELTAPAVEX-F is a unique water based chemical solution for the ultimate curing and waterproofing of fresh concrete for large scale concrete substrates against temperature and moisture associated problems such as thermal cracking, damage caused by repeated freeze and thaw cycles, chloride ion penetration and alkali silica reaction. DELTAPAVEX-F treated concrete is reasonably dry and thus eliminate all moisture associated problems. It creates a three dimensional mechanism for concrete protection in all weather conditions. It provides moisture repellency and formation of two types of crystals in concrete, one type of crystals in presence of water swells and block pores, whereas the second type of crystals absorb the extra moisture on the surface of the first crystal preventing surface moisture on that crystal from diffusion to the concrete. These hygroscopic and hydrophilic properties provide double and durable action against moisture penetration in concrete. DELTAPAVEX-F treated concrete forms a moisture impermeable film that retains over 92% of the hydration water in the curing concrete assembly. It creates a hard, dense concrete capable of preventing premature cracking and checking on the surface.

Advantages

- Permanent internal waterproofing and moisture blocking from positive and negative sides.
- Prevents water, jet fuel and oil penetration from the surface of concrete.
- Excellent curing capability
- Resists aggressive chemicals such as acids caustic, jet fuel and oil.
- Protects reinforcing steel bars against corrosion without any negative effect on existing steel cathodic protection.
- Enhances the adhesion property of joint sealants and concrete road markers.
- Reduces Alkali silica Reactions (ASR), thus eliminates silicate dusting.
- Prevents penetration of chloride ions from de-icing salts.
- Eliminates damage caused by repeated freezing and thawing cycles.
- Prevents concrete scaling.
- Increases concrete hardness.

Fields of Application

DELTAPAVIX-F can be used as a treatment and protection against water and moisture associated problems for all kinds of concrete and cement structures. However, it is considered highly cast

effective for the treatment of :-

| | |
|------------------|-------------------------|
| Airport Runways | Airport Taxiways |
| Aircraft parking | Bridges |
| Tunnels | Concrete Roads-Highways |
| Parking Lots | Buildings |
| Sea Ports | Walkways |

Packaging

16 lit., 200 lit.

Test Results

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|------------------------|-----------------|
| Specific Gravity. | 1.1 |
| Viscosity. | 2.4 centipoises |
| Freezing point. | -4 °c |
| Boiling point. | 104 °c |
| Environmental hazards. | None |
| Color. | Clear |
| Odor. | None |
| Toxicity | None |
| Fumes. | None |
| Flammability. | None |

Product Performance

DELTAPAVEX-F complies with the following standards:-

- ASTM C 666, Resistance of Concrete to rapid freezing & thawing.
- ASTM C 672, Scaling resistance of concrete surface exposed to de-icing chemicals.
- ASTM C 1218, Water-soluble chloride in mortar and concrete.
- ASTM C 944, Abrasion resistance of concrete surface.
- ASTM C 1262, Evaluation of freeze and thaw durability of manufactured concrete units
- ASTM C 1202, Electrical indication of concrete's ability to resist chloride ion
- ASTM D 6489, Water absorption of concrete treated with water repellents
- ASTM C 642, Density, absorption and voids in hardened concrete

Crystalline Water Proofing

- ASTM F 609, Static slip resistance.
- ASTM E 303, British pendulum test.
- ASTM D 4541, Coating pull off strength.
- ASTM C 457, Microscopical determination of void system in hardened concrete

Application

Thoroughly agitate the material immediately prior to use. Decant material into a hand pump spray can and as soon as concrete substrate has reached the final set, spray in a consistent pattern onto concrete.

Coverage

It is recommended to apply DELTAPAVIX-F at an average rate of 3.7 to 4.9 m²/ lit. in one coat.

Limitations

Do not apply DELTAPAVIX-F if the temperature falls below 5°C.

Storage

DELTAPAVIX-F must be stored under room temperature. Cold temperature may cause the product to crystallize. Shelf life is one year in its original unopened packaging.

Safety Precautions

Keep out of reach of children and animals.



**Delta Coatings
& Sealants**