

EverCrete® Pavishield®



TOTAL PROTECTION FOR INDUSTRIAL AND CONCRETE FLOORS

FOR PROFESSIONAL USE ONLY. LAST REVISION: 20/06/13



Evercrete Pavishield® is a special protecting agent for preventing industrial concrete floors from deterioration. Its proprietary formula, based on waterglass with a special catalyst, allows the product to penetrate the concrete from 10 mm up to 34 mm.

Evercrete Pavishield® seals the pores in the concrete and becomes a permanent barrier.

Evercrete Pavishield® can be applied to any type of floor, ramp, or concrete, both fresh and mature.

Properties

Evercrete Pavishield® protects fresh concrete floors and acts as a curing compound with an anti-evaporation effect. It eliminates the cracking caused by plastic and hygrometric shrinkage.

Evercrete Pavishield® has a dust-binding effect and is an excellent consolidating agent for dusty floors. It is a permanent and definitive treatment.

Evercrete Pavishield® provides an excellent base for further surface treatments and cementitious overlays. It is an excellent consolidating agent, blocks the rising damp and avoids saponification. It ensures R.H. < 85% over time.

Evercrete Pavishield® protects the paving from damage caused by freezing and by thawing salt. It increases resistance to wear and to atmospheric agents.

Evercrete Pavishield® creates a permanent barrier that inhibits the penetration of water, acids, oils and toxic agents.

Evercrete Pavishield® is a total protection for the concrete; it blocks carbonizing, chloride, sulphate, provides a better wear resistance and protects the reinforcing bars.

Evercrete Pavishield® is in compliance with prescriptions of 89/106 EEC Directive and meets the requirements of the standard EN 1504-2.

Uses

- New and existing industrial concrete floors
- Indoor and outdoor floors
- Ramps and chutes
- Pavements
- Airport runways
- Sports tracks
- Cellars
- Farm structures like stables, cowsheds, piggeries, and barns for cereals and hay
- Skateboard tracks
- Before applying cementitious overlays such as Ercole and Microbond

Technical features

Composition	Proprietary blend of waterglass in aqueous solution
Expiry	36 months if stored sealed
Flammability	Not flammable
Environmental risk	None
Organic properties	Odourless, colourless liquid
Storage	Store in a dry place and keep away from glass and Aluminium
Toxicity	None
Coverage rate per liter	6 - 8 m ²
Dilution	None - ready to use
Curing time	36 days - can be walked on after a few hours
Packaging	10, 20 liter tanks

Certification

Ecobeton Italy srl Via Galileo Galilei 47, 36030 - Costabissara (VI) 13 GB08/76012	
UNI EN 1504-2:2005 Evercrete® - Vetrofluid® Products for the concrete protection on buildings and works of civil engineering Impregnation	
EN 13813	Abrasion resistance: improvement > 30%
EN 1062-3	Capillary absorption and water permeability: w < 0,1 kg/mq x h ^{0.5}
EN 2812-1	Chemical resistance (absorbing mean): no visible defects
EN 13529	Chemical resistance (astrigent attack): no visible defects
EN 13687-1	Thermal compatibility: ≥ 1,5 N/mm ²
EN ISO 6272-1	Falling-weight test: Classe III: ≥ 20 Nm
EN 1542	Bond strength by pull-off: ≥ 1,5 N/mm ²
EN 13501-1	Reaction to fire tests: euroclass A1 Slip/skid resistance: NA Depth of penetration: > 10 mm Dangerous substances: absent

The above technical data have been obtained with a dosage of 400 g/m².



Evercrete Pavishield is an EPD certified product, an environmental declaration defined in ISO 14025 standards. It guarantees the environmental performance of the product. Certification number S-P-00412, www.environdec.com.

Performance

Properties	Result	Reference standard
Resistance to surface compression	100% mean increase	UNI 9944
Adhesion to binders, resins and paints	Improved	AMA-83 Sweden
Eflorescence susceptibility	None	
Absorption of oils and grease	67% reduction	
Anti-evaporation	Excellent results	ASTMC-C-309-74
Freezing and thawing resistance	300 cycles without damages	UNI 7087/72

Application

The product should be applied in two coats, on perfectly clean surfaces free from residues of oil and grease. It can be applied by spraying, roller or brush. Application by spraying is recommended using low-pressure pumps manual and electric (max 5 bar).

Start from step 3 in case of fresh casts.

On cured casts (aged over 3 months):

1. The floor should be clean and wet thoroughly before application.
Wash with a water pressure machine or washer-dryer.
2. Wait until the surface of the floor is dry (from 6 to 24 hours).
3. Stir the product thoroughly before use.
4. Evenly apply the first coat of the product, moistening the entire surface.
5. Wait till the first coat has been absorbed.
6. Apply the second coat going cross (in other words, if the first coat has been applied following the east-west direction, apply the second one in the north-south direction).
7. Rinse the floor within 12 hours from the first coat, to remove all products in excess using a floor washer or other systems.

Other applications

Ecobeton technical service is at your disposal for any technical information at europe@ecobeton.it

Warning

The use of quartz on floors partly saturates the porosity of the concrete and thus the coverage rate per sq. meter will be higher, even though the resulting performance of the floor will be slightly lower. Always apply **Evercrete Pavishield®** at the end of topping

Operations.

Bleeding: the bleeding phenomenon, i.e. the exudation of water from the cast, creates an accumulation of alkalis on the surface which makes **Evercrete Pavishield®** react immediately and makes the treatment useless. The problem can be avoided by applying the product before the appearance of the phenomenon, i.e. immediately after casting.

Temperature: **Evercrete Pavishield®** is a water-based product and therefore does not withstand harsh climates. Do not apply below 5 °C and above 40 °C. Do not apply when precipitations are forecasted within 24 hours.

Glass and Aluminium: protect glass and aluminium during application (watches, glasses, etc.) they can be damaged by the product.

Floor signals: signals on the floor must be removed by sanding the involved area.

Measures after cutting: before applying **Evercrete Pavishield®** remove the cement dust generated by the cutting and then apply the product. Do not allow the cutting dust to be mixed with **Evercrete Pavishield®**.

Product in excess: particularly on indoor hard trowelled floors, the product can form white glass marks. Therefore it is recommended to rinse the surface at the end of the application within 12-24 hours.

Curing time: **Evercrete Pavishield®** can normally be walked on after a few hours according to the impregnation of the material. The complete curing inside the concrete requires 36 days. Cement-based coatings can be applied immediately after rinsing **Evercrete Pavishield®**. The application of other types of overlays (resins, wood, etc.) has to be made after 36 days.

Coverage rate

The coverage rate per square metre varies depending on the absorption of the surface treated. In general, treat the concrete until saturated.

Type of floor	Coverage rate in two coats
Indoor dry-shake topping floor	8 m ² /liter
Outdoor dry-shake topping floor	5-6 m ² /liter
Hard trowelled floor	4-5 m ² /liter

Note:

The information contained in this sheet is accurate to the best of our current knowledge. The products are guaranteed and have the highest quality and standard with regard to product tolerances.

As it is impossible to carry out any controls on the application of the product, no express or implicit guarantee is provided as regards the result and no responsibility is accepted directly or indirectly by the use of the products. Users are encouraged to carry out tests before application.

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