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Teknomer 100

Crystallized Waterproofing Material

CE TS EN 1504-3

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Product Description

Cement based, single component, applied to concrete mixture or concrete surfaces, crystallized structure waterproofing material that reacts with water coming from the concrete.

Areas of Usage

- Elevator pits,
- Water storage, swimming and ornamental pools,
- Reinforced concrete pipes,
- As a concrete additive that provides crystallized insulation during concrete casting,
- In the ruin and infrastructure materials,
- Basically, on the basement walls,
- In engineering constructions such as metro, tunnel, dam, highway,
- It is used for negative and positive water insulation of buildings like basement walls.

Features and Benefits

- The crystallization feature effectively prevents the passage of water from the surface.
- Resistant to positive and negative water pressure.
- It is easy to use, mixed with plain water and used.

Application Instructions

Surface Quality: The surfaces must be clean, smooth, solid, free from any antiadhesive substance such as dust, oil, dirt, rust, mold oil, detergent and waste. In case of segregation in concrete, it should be discarded and loose parts should be removed, weak parts should be removed. If there is crack, hollow on the floor or wall to be applied, it should be repaired with appropriate TEKNOREP repair mortars. TEKNOMER 100 application should be started 3-4 days later.

Make sure that the slab or concrete is thrown in the direction of the water stream. The correct control of the curve is made in the following way. Beginning from the beginning to the gauge, put a scale on it. If it is determined that there is no inclination or reverse slope in the control result, the application should not be started and the direction of the water flow should be adjusted by performing concrete and slab treatment. If necessary, additional screed or concrete must be poured.

Surface Preparation: If the surface to be insulated is dry, it should be wetted and ready to be applied to the water.

6,0-7,0 lt clean, clear water received from normal ambient temperature into a clean container which is free from all kinds of materials which prevent adhesion. The powder is in the vessel filled with water and the Teknomer 100, which is in the 20 kg bag, is emptied. The product is mixed with a low speed mixer until a homogeneous mixture without lumps is obtained. Mixing time should be at least 5 minutes, the mortar obtained at the end of the process should be rested for 3 min. and mixed again until it becomes homogenous for 2 min.

The application of TEKNOMER100 is done in three ways;

- By brush: On dry floors, the concrete surface is moistened and saturated with water. There may be moisture on the surface, not condensation or ponding. If there is continuous water, leakage should be stopped with TEKNOPLUG. Then the prepared mixture is applied to the surface 2-3 times with brush. Application can be made by hard bristle brush or mechanical spraying method. The application is completed from first left to right, second to top down. The waiting time between floors is as follows. When the concrete floor is checked manually, if the TEKNOMER 100 does not leave a mark, the other layer can be applied.
- Hand Sprinkle Method: TEKNOMER 100 is sprinkled on the grobeton before the concrete is poured. Depending on the demand TEKNOMER 100 Then concrete is poured.
- The admixtures may be batched in either a central or truck mixer . For most applications, the recommended dosage of Teknomer 100 admixture is as %2-3 by mass of cement. It is mixed for 3-5 minutes. Preliminary testing is recommended for different kinds of applications.

The TEKNOMER 100 admixture, which is determined according to the cement dosage of the concrete in the transmixer, is mixed with a low speed drill in a suitable container with about 6,0 - 7,0 kg water by weight and turned into an aqueous slurry. The prepared mixture is added to the rotating transmixer. Each mixture should be prepared with at most one cup of TEKNOMER 100 and added to the concrete. In order to obtain a homogeneous mixture, the mixing time in the transmixer should be about 4-5 minutes.

Application Notes / Restrictions

- Follow work safety precautions. Use gloves, mask, glasses when using the product.
- Since it's cement based, do not breathe it dust, prevent contact it with skin and hands.
- Do not apply to wood, chipboard, mdf, plywood, PVC and metal surfaces.
- Only the specified amount of water can be used in the mixture. No more water should be added.
- Foreign materials should not be added.
- It must be protected after application against adverse weather conditions such as direct sunlight, high air temperature (above +35°C), rain and frost. The product should be cleaned thoroughly with water and detergent before it is fully cured and hardened.
- Immediately after application, before hardened, the equipment should be cleaned with water. After the product is hardened, it should be cleaned by mechanical methods

Technical Data

General Information	
Appearance	Grey Colored Powder
Shelf Life	12 months in unopened package in dry environment
Package	20 kg kraft bag
Application Information	
Application Temperature	(+5°C) - (+35°C)
Mixture Ratio	6,0 - 7,0 lt of water/ 20 kg powder
Pot Life	20 min.
Time To Put Into Service	5 Days
Performance Information	
Concrete Adhesion Strength (EN 1542)	≥ 1.0 N / mm²
Water impermeability	7 bar (Negative and Positive direction)
Capillary Water Intake Valve (EN 1062-3)	≤ 0.1 kg / m².h$^{0'5}$
Water Vapor Transfer (EN ISO 7783)	Class; Sd < 5 (Sd: Equivalent air layer thickness)
Temperature Resistance	(-25°C) - (+80°C)
Hazardous Substances (EN 12004)	See the safety data sheet
Fire Response	A1

Consumption Table

Teknomer 100	Mixture Density (kg / liter)	1 m² for 2 floors Powder Consumption (kg)	Mixture Water Amount (liters)
20 kg kraft bag	~1,98	~2	6,0 - 7,0

Technical data are approximate values obtained from the laboratory study of Tekno Construction Chemicals for finished products obtained at +20°C air temperature and 50% relative air humidity and valid for its performance after 28 days.