

ISOLION TE 2K 105

TWO-COMPONENT CEMENT-BASED FULL ELASTIC WATER INSULATING MATERIAL

Product Definition	<ul style="list-style-type: none">› It is a dwell based waterproofing material that is bicomponent, cement and acrylic based, polymer modified, fully flexible, developed specially against water coming from positive direction.
Fields of Use	<ul style="list-style-type: none">› Houses, shopping centres, hospitals,› Vertical and horizontal applications in indoors and outdoors,› In foundation isolation and retaining walls,› Facilities such as hot springs and baths,› Used for water storage, swimming and ornament pool,› Terraces (with the condition of protecting its top)› Wet areas such as bathroom, WC, balconies,› Applied in the direction of water in engineering utilities such as metro, tunnels, dams, highways.
Characteristics and Advantages	<ul style="list-style-type: none">› Does not require water.› It is fully flexible.› It can be applied by hand or through spraying.› Its operating time is long.› Does not make shrinking and cracking.› Thanks to its crack-bridging feature, it can be applied on fresh screed and concrete surfaces.› It prevents carbonation in concrete blocks.› Since it does not contain corrosive and toxic substances, it can be used in drinking water depots.› It protects concrete against ice melting salts such as calcium and sodium chloride, sea water and carbon dioxide gas.› It has high resistance against chlorine ions.
Application Details	<ul style="list-style-type: none">› Surfaces should be clean, smooth and solid as purified from adhesion prohibiting materials and wastes such as dust, oil, dirt, rust, mold lubricant and detergents. If segregation exists in cement, loose and deteriorated parts should be thrown and weak parts must be removed. If any cracks and holes exist on the surface to be applied, they should be repaired with ISOLION REPAIR MORTAR.
Surface Preparation	<ul style="list-style-type: none">› If surface to be insulated is dry, it is watered and saturated to water and ready for application. Fillet should be applied on sharp corners and edges with thick repair mortar. In wet areas and balconies to be applied with ceramic, all corners should be applied with placket bands previously.
Application	<ul style="list-style-type: none">› ISOLIO TE 2K 105, B component (liquid) is poured into a clean container. On it, A Component (powder) is added slowly, mixed with a low-speed mixer or drilling machine, and it is mixed for 5 min until a homogenous mixture is obtained. This mixed product is rested for 5 min after mixing (to solve organic substances in it) and then mixed for another 30 seconds to make product ready for use. This mixture can be applied with a brush or trowel.› Without water-saturated surface losing its moisture, well mixed and rested ISOLION TE 2K 105 is applied with a hard brush and/or trowel on the surface. Following first setting of material, 2nd layer application is made in vertical direction of 1st layer application. If desired, carrier glass wool or 75 gr/m² net can be used as fittings between floors.

Warnings and Recommendations

- › During coating process, it should be paid attention not to harm insulation material mechanically.
- › Since it is cement based, do not breathe its powder; do not contact it with skin and eye.
- › Do not apply on wood, chipboard, MDF, plywood, PVC and metal surfaces.
- › For mixture, only its own liquid should be used. Never add water.
- › Do not add foreign substances.
- › To achieve long-term performance expected from the product, protection is required. To protect against all types of punctures, starching and impacts that may occur after application, tile, ceramics, plaster and alum should be applied 3 days later.
- › After application, it should be protected against negative weather conditions such as direct sunlight, high winds, high temperatures (+35°C), rain and frost. Hands should be cleaned with water and detergent before the product receives complete cure and hardens.
- › Immediately after application, before hardening, equipments should be cleaned with water. After the product hardens, it should be cleaned by mechanical means.

Technical Specifications

Mixture Colour	Gray
Liquid density (kg/l)	1.02 (± 0.03)
Liquid density + powder(kg/l)	1.70 (± 0.10)
Water Vapor Transfer Rate	Class I; Sd < 5 (TS EN ISO 7783)
Activation Duration	3 – 7 days
Mixture Density	1.8 (± 0.50) kg/l
Counter Life	6 hours
Waiting Duration between Floors	5 – 6 hours
Adherence Resistance	≥ 1.0 N/mm ² (TS EN 1542)
Capillary Water Absorption Value	< 0.1 kg/(m ² .h ^{0.5}) (TS EN 1062-3)
Crack Bridging	≥ 2.5 mm (A5) (EN 1062-7)
Adhesion Strength After Heat Aging	≥ 1.0 N/mm ² (EN 1062-11 EN 1542)
Pressurized Water Resistance	7 Bar Positive
Water Vapor Permeability	Class I; Sd < 5 (EN ISO 7783)
Chlorine Ion Diffusion	≤ 200 Coulomb (Class Very low permeability) (ASTM C1202)
Carbon Dioxide Permeability	Sd > 50 m (Sd Equivalent air layer thickness) (EN 1062-6)
Adhesion Strength without Defroster Salt Effect	≥ 1.0 N/mm ² (EN 13687-3/ EN 1542)
Heat Resistance of Hardened Product	(-40°C) – (+80°C)
Hazardous Materials	Complying with Article 5.3.
Fire Reaction	Cs1d0

*** Tests have been performed in a laboratory environment at 23 °C and 50% relative humidity.

Consumption

- › 1.5 – 2 kg/m² (for 1 mm, at single floor)

Packing

- › In the form of 30 kg set (A Component (powder component) 20 kg craft bag + B Component (liquid component) 10 kg can)

Shelf Life

- › 12 months in unopened packing in dry environment.

Standard

- › Conforms to TS 14891, EN EN1504-2 standards.

