

## Crystalline -2K

 Description:	<p><b>Crystalline -2K:</b> is a slurry reacts with concrete by way of crystallization in order to generate a two-component, durable and flexible membrane which will be used for filling any cracks, ensuring resistance to hydrostatic pressure and being used at saturated areas. The unique and very efficient components of the product react with free water, moisture and lime in the pores and veined areas on the concrete in order to form insoluble crystal complexes preventing water penetration. These crystals remain in the veins and thus, they ensure water tightness. The binding agent of the product “second component” is used in substitution for water in order to enhance the efficiency of the mixture, ensure perfect adhesion to the surface, maximize flexibility and prevent shrinkages.</p>
 usage areas:	<ul style="list-style-type: none"><li>• Indoors and outdoors below the sea level for the prevention of corrosive salt generation in concrete due to water.</li><li>• Prevention of hydrostatic pressure between horizontal structural inclinations and toppings.</li><li>• Protection against algae and fungi on masonry walls, atmospheric pollutants and moisture.</li><li>• Easy application to form a waterproof, rigid and durable coating, which is resistant to damages and corrosions.</li><li>• Formation of a waterproof sublayer for vinyl and carpet.</li><li>• Waterproof external walls against water leakage.</li><li>• Prevention of efflorescence and water tightness for the surface prior to marble laying.</li><li>• Surface treatment material prior to wallpaper; plaster board and ceramic tile applications.</li></ul>
 Suitable Surfaces:	<p>Concrete, Brickwork , Precast Surface , Lightweight Blocks , Shotcrete</p>
 Shelf life/storage conditions:	<p><b>12 months from date of production.</b> The product must be stored as per local storage regulations and should be kept in dry and well-ventilated location far from heat and direct sunlight.</p>
 Availability:	<p>Available in 30 kg (20 kg paper bag + 10 kg plastic can) (Packing may vary from country to country depending on local requirements)</p>

**PHYSICAL CONSTANTS:**

<b>Shade /Colors:</b>	<b>Gray</b>
<b>Mixing rate:</b>	<b>20 kg of powder mixed with 10 kg of liquid.</b>
<b>Resting period:</b>	<b>3-5 minutes.</b>
<b>Compressive strength:</b>	<b>27,1N/mm<sup>2</sup> (2 days) 47,0N/mm<sup>2</sup> (28 days)</b>
<b>Bonding strength:</b>	<b>1,28N/mm<sup>2</sup></b>
<b>Tensile strength:</b>	<b>4,7N/mm<sup>2</sup></b>
<b>Water vapor permeability:</b>	<b>0,00261g/s.m<sup>2</sup></b>
<b>Pot life:</b>	<b>35 minutes.</b>
<b>Application Temperature:</b>	<b>Between +5 °C and +35 °C</b>
<b>Service Temperature:</b>	<b>-20 °C / +70 °C</b>
<b>Consumption:</b>	<b>3-5 kg/m<sup>2</sup> depending on the surface condition.</b>
<b>Application Tools:</b>	<b>Brush-Roller-Spraying.</b>
<b>Drying period of the first coat:</b>	<b>About 4 hours</b>
<b>Drying period of the last coat:</b>	<b>About 5 hours</b>

**Surface Preparation:** The application surface must be clear of materials which prevent bonding, such as dust, oil, paint, curing agents, detergents, mold release oils, silicone, and has to be moisturized. Weak parts of the concrete must be repaired, plasters that are not adhering well must be removed, the surface must be shaped flat and sound, static cracks on the building must be repaired with plaster with Hayperflex Latex or HYPER REPAIR MORTAR. The application surface must be saturated with water and must be kept moist during application.

**Mixing** Put the liquid component into the mixing bowl and slowly pour the powder component into the liquid and keep mixing by low speed mixer without adding water until there is no lump. Wait for 5 minutes until it becomes viscous and then mix for 20 - 30 seconds and apply in one direction and corners with a brush.

- Application:** Make sure that there is no accumulation (aggregate) in slurry powder prior to mixing. Mix the two component with a mechanical mixer for 2-3 minutes until you obtain a soft, creamy, smooth and consistent form. Dampen the concrete surface with clean water. Do not allow water accumulation or ponding. Apply the prepared material on the prepared surface with the help of a brush or roll. Apply at least two coats in vertical direction or apply a single coat with a spud. It is required to mark the area of application and calculate the amount to be used beforehand. Therefore, you can obtain the desired coating rate. It is required to apply the second coat while the first coat is green; however, the second coat must dry smoothly in order to prevent any deformation. The mixed material should not be applied on any surfaces, which are below 5 °C or frost. Total thickness must not exceed 5 mm in a single application.
- Cleaning:** Clean all equipment and tools with water immediately after use.
- Safety:** For information and advice on the safe handling, storage and disposal of chemical products, users should refer to the most recent Material Safety Data Sheet containing physical, ecological, toxicological and other safety-related data.