Technical Data Sheet

Proof Guard PU 500 LV

Product Description

It is one component, ready to use, highly elastic, cold applied polyurethane waterproofing which cures into a membrane with excellent abrasion, mechanical, chemical, thermal, and UV resistance.

Product uses:

- Waterproofing of Roofs.
- Waterproofing of Balconies, Terraces and Verandas.
- Waterproofing of Wet Areas (under-tile) in Bathrooms, Kitchens, Balconies, Auxiliary Rooms, etc.
- Waterproofing and protection of Concrete constructions like Bridge-Decks, Tunnels, Stadium Stands, Car Parks, etc.
- Waterproofing of Green Roofs, Flowerbeds, Planter Boxes.
- Protection of Polyurethane Foam Insulation.

Properties

- Simple application (roller or airless spray).
- When applied forms seamless membrane without joints.
- Crack-bridging up to 2 mm, even at -10˚C.
- Maintains its mechanical properties over a temperature span of - 40 ˚C to + 90˚C.
- Resistant to detergents, oils, seawater and domestic chemicals.
- Resistant to frost.
- The waterproofed surface can be used for domestic and public pedestrian and vehicular traffic.
- Provides excellent adhesion to almost any type of surface.
- Even if the membrane gets mechanically damaged, it can be easily repaired locally within minutes.
- Provides excellent adhesion to almost any type of surface.
- Provides excellent thermal resistance, it never turns soft.
- Provides water vapor permeability, so the surface can breathe.
- Resistant to root penetration, so it can be used in green roofs.
- When applied forms seamless membrane without joints.

TECHNICAL PROPERTIES

Appearance/Color	Glossy / Gray , Red Oxide and beige
Density:	1.38 kg/liter
Consumption:	1.5-2 ltr/ m² (2-2.5 kg/m²)
Tensile strength:	5-8 MPa (ASTM D412 / EN-ISO527-3)
Elongation:	>600% (ASTM D412 / EN-ISO527-3)
Water Vapor Transmission:	0.8 gr/m²-hr (ASTM E96)
Crack Bridging Capacity:	≥2mm
Hardness, Shore A:	60 (ASTM D 2240/ DIN 53505)
Adhesion to Concrete:	≥2MPa (ASTM D4541)
Service Temperature:	-40°C to 90°C
Application Temperature:	Between 5°C to 35°C

Application Details

Application method:	Brush / Roll / Airless Spray
Thinner:	Polyurethane Thinner
Thinner Amount:	Brush : Do not thin Roll: 10 % Airless Spray 5-7 %

Surface Preparation:

The concrete substrate must be sound and of sufficient compressive strength (minimum 25 N/mm²) with a minimum pull strength of 1.5N/mm². Substrate moisture should not exceed 5%. New concrete structures need to dry for at least 28 days. The substrate must be clean and free from all traces of loose materials, old coatings, curing compounds, release agents, laitance, oil grease etc. Structurally unsound layers or surface contaminants must be mechanically removed by abrasive blast tracking, shot blasting, scarifying, or grinding. Substrates heavily impregnated with oil must be cleaned by torching, using suitable solvent or degreaser substance. Weak concrete must be removed and surface defects such as blowholes and voids must be fully exposed. All ducts, loose and friable material must be completely removed from all surfaces before application of product; preferably by brush and/or vacuum

PRECEDING COAT:

➢Top Floor TS 500-SB
➢Poly Clear PU 080

Important Remarks:

- Surfaces must have enough structural strength.
- Concrete should have minimum of 25 N/mm² compression resistance and minimum 1, 5 N/mm² tensile strength.
- Applications below 10°C should be avoided.
- The surface should be protected from moisture and rain for 8-10 hours after application.
- All application tools and equipment should be cleaned with thinner immediately after the use. Cured material can only be removed mechanically.
- Use only where application and drying can proceed at temperatures above: 10°C/50°F. The temperature of paint itself should be 15°C/59°F or above. Apply only on a dry and clean surface with a Temperature above the dew point to avoid condensation. In confined spaces provide adequate ventilation during application and drying.

Shelf life & Storage:

12 months from date of production if stored properly in original, unopened and undamaged sealed packaging in dry conditions at temperatures between +5°C and +30°C.

Safety:

For information and precautions on the safe handling, transportation storage and disposal of chemical products, users shall refer to the most recent Material Safety Data Sheet containing physical, ecological, toxicological and other safety-related data.

Legal Notice:

The information presented herein is given in good faith but without warranty. It's based on our experience, indicates our laboratory work results and does not necessarily indicate final product performance. We cannot be held liable for the results obtained with our products and for any loss or accident that may result from its use. Our suggestions don't release you from the obligation to check their validity and to test our products for both your process and end use application. All our products are sold in accordance with our General Conditions of Sale. We don't make any warranty, express or implied, including but not limited to the merchant ability and fitness for a particular purpose.