Technical Data Sheet

Elasto Bitumen PU 4000

Product Description

A single component, bitumen modified polyurethane-based liquid waterproofing material. It is cured with moisture in the air and forms a quite elastic and durable film which perfectly adhering to different surfaces. It has excellent mechanical and chemical characteristics providing high tension, tearing and wearing resistance. It is effective in water vapor transmission. The film is capable of breathing and prevents the accumulation of humidity on the lower layer. It is capable of bridging shrinkage cracks thanks to its elasticity. Product only contains pure elastomeric, hydrophobic polyurethane resin and special inorganic admixture materials. It is easy to use.

Product uses:

- Foundations of the buildings.
- Roofs, verandas and balconies (providing that it is closed or covered).
- Wet floors.
- Used horizontally and vertically for structural units requiring insulation material in high crack bridging characteristics.
- Very humid closed areas.
- Under bathroom tiles.
- Asphalt, bitumen seals etc.

Properties

- Roller applies as it is a liquid material.
- It is not necessary to use open flame (blowtorch) during the application.
- It provides an excellent waterproofing membrane without joint when applied.
- It is freeze-resistant.
- Fast curing.
- It is highly adhesive to almost all types of surfaces, coated or uncoated.
- It has excellent thermal resistance; therefore, the product never becomes soft.
- The product is resistant to cold and keeps its elasticity up to -40 °C.
- It has excellent mechanical characteristics providing high elongation, tension, tearing and wearing resistance.
- It has excellent chemical resistance.

TECHNICAL PROPERTIES

Appearance/Color	Glossy / Black
Density:	1.35 kg/liter
Consumption:	1.5-2 ltr/ m² (2-2.5 kg/m²)
Tensile strength:	5-8 MPa (ASTM D412 / EN-ISO527-3)
Elongation:	> 700 % (ASTM D412 / EN-ISO527-3)
Tension Strength at Break (N/mm2):	2 N/mm² (ASTM D2240 / DIN 52455)
Adhesion to Concrete (N/mm²):	Uncoated: ≥ 0.5 Coated: ≥1
Crack Bridging Capacity:	≥2mm
Hardness, Shore A:	35 (ASTM D2240 / DIN 53505 / ISO R868)
Adhesion to Concrete:	≥2MPa (ASTM D4541)
Service Temperature:	-40°C to 90°C

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Dry to touch:	12 hour(s) 20°C/68°F
Hard Dry:	24 hour(s) 20°C/68°F
Recoat interval, min.:	12-24 hour(s) 20°C/68°F (Do not wait for more than 24 hours between coats.)
Application Temperature:	Between 5°C to 35°C

Application Details

Application method:	Brush / Roll / Airless Spray
Thinner:	Xylene
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:

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