PU SMART FLEX

Single Component, Polyurethane / Polyurea Based, Liquid Applied Membrane Developed For Heavy Duty Applications

POLYURETHANE WATERPROOFING MEMBRANE

DESCRIPTION

PU SMART FLEX, is a single component, polyurethane / polyurea based, liquid applied membrane which is specially designed for waterproofing of heavy duty areas such as bridge decks platform. It has excellent elongation and crack bridging properties at low and high temperatures.

TYPICAL APPLICATIONS

- Bridge deck platforms (asphalt, bridges),
- Foundations,
- Underground structures as, parking platforms, and tunnels,
- Wet areas under the coating (bathroom, kitchen, etc.),
- Terraces, verandas and balconies,
- In high corrosive and high trafficable areas with top coat.

FEATURES AND ADVANTAGES

- High crack bridging ability.
- Easy to apply (brush, roller or airless spray).
- It is compatible with asphalt layers without any adhesion layer.
- It is hydrofobic.
- High thermal resistance.
- High chemical resistance.
- It is resistant to engine oils, fuel oils and gasoline.

APPLICATION PROCEDURE

• SURFACE PREPARATION

Before the application, to ensure a good adhesion oil, grease, paraffin waste, cement grout, loose particles, mold release agents, cured old membranes should be removed from the surface. After washing the surface with high pressure water, it should be free from damp. Surface defects and cracks should be repaired with suitable products.

• PRIMING

For absorbent surfaces such as concrete, cement or screed, PU PRIMER 200 or EPOXY PRIMER should be used. AQUA PU PRIMER 2K or EPOXY PRIMER WB should be preferred on damp surfaces. TILE PRIMER should be used on non-absorbent surfaces such as metal, ceramic or old coatings. Please examine primer table for detailed information.

• APPLICATION

Before using, the package should be opened and mixed with a low speed mixer (for 2-3 minutes). For spray application, add CLEVER 001 at a maximum rate of 5%-7% if needed. The previously primed surface should be applied with a roller or brush until the entire surface is covered.

APPLICATION REMARKS

- Not recommended for unstable surfaces.
- It is not used for waterproofing of swimming pools chemically treated with water.

CONSUMPTION

- Airless Spray (for each layer): 0,75 - 0,90 kg/m²
- Total Consumption (min.): 1,50 - 1,80 kg/m²
- Bridge Application (min.): 2,50 kg/m²

CLEANING

After the application, all tools should be cleaned with CLEVER 001. Roller brushes are disposable.

PACKAGING AND COLOR

Grey and in 25 kg metal buckets.

STORAGE AND SHELF LIFE

The product can be stored for a maximum of 12 months in its unopened original package at temperatures between +5°C and +25°C. Opened product should be used as soon as possible.

PRECAUTIONS

The product should be used in well ventilated environments. The product should not be in contact with open fires. Smoking should not be allowed during application. Protective gloves and masks should be used for hands and eyes during application. If the material comes into contact with eyes, it should be washed immediately with sufficient water. For more detailed information, ask for the Safety Data Sheet (MSDS) from CLEVER POLYMERS technical department.

TECHNICAL DATA		
QUALIFICATION	**METHOD**	**FEATURE**
Coating Type	Clever Lab.	Single Component Polyurethane / Polyurea
Density	ASTM D 1475 / EN ISO 2811-1 (+20°C)	1,45 (±0,05) gr/cm^3
Viscosity	ASTM D 2196-86 / EN ISO 3219 (+25°C)	2000 - 5000 cp
Water Vapor Permeability	ASTM E96	0,8 gr / m^2 hour
Gloss	Clever Lab.	Semi-Gloss
Application Temperature	Clever Lab.	+5°C to +35°C
Heat Resistance	EOTA TR011	100 days at +80°C
Shock Heat Resistance	Clever Lab.	220°C - Passed
Solid Content	Clever Lab.	85% (±5)
Hardness	ASTM D2240, DIN 53505, EN ISO R868	> 80 (Shore A)
Elongation at Break	ASTM D 412 (+23°C)	> 350%
Tensile Strength	ASTM D 412 (+23°C)	> 7 N / mm^2
Adhesion to Concrete	TSE EN 1542 (+23°C)	> 2 N / mm^2
QUV	ASTM G154	2000 Hours - Passed
Abrasion Resistance	ASTM D4060-14	30 mg loss (CS17/1000/1000)
Service Temperature	Clever Lab.	-40°C to +80°C
Tack Free Time	25°C / 55% RH	6 hours
Recoat Time	Clever Lab.	6 to 24 Hours

* Viscosity measured at + 25°C according to EN ISO 3219 standards. Viscosity increases inversely with temperature.

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