



KANPROOF PU 520

LIQUID APPLIED POLYURETHANE WATERPROOFING MEMBRANE COATING



KANGARU
POLYMERS



Product Description

KANPROOF PU 520 is a premium, liquid-applied, highly permanent elastic polyurethane membrane used for long-lasting waterproofing. Based on pure elastomeric hydrophobic polyurethane resins, which result in excellent mechanical, chemical, thermal, UV and natural element resistance properties. One-component, ground & air moisture-cured, cold-applied and cold curing, solvent-based, aromatic polyurethane.



Advantages

- Simple application (roller or airless spray)
- Seamless membrane without joints when applied
- Resistant to stagnating water
- Resistant to frost and high temperatures (maintains its mechanical properties over a temperature span of -30°C to + 90°C)
- Resistance to root penetration; hence, can be used in green roofs
- Crack-bridging up to 3mm, even at -20°C
- Provides water vapor permeability
- Provides excellent weather and UV resistance
- Waterproofs old bitumen, asphalt felts by covering them, without the need to remove them prior to application
- Resistant to detergents, oils, seawater and domestic chemicals
- Even if the membrane gets mechanically damaged, it can be easily repaired locally within minutes



Areas of Application

- Roofs and Terraces
- Green Roofs
- Old Bitumen felts, Asphalt felts, TPO, PP, EPDM, PVC membranes and old acrylic coatings
- Protection of Polyurethane Foam Insulation



Technical Data

Method of Application	
Nature	Single Component
Puncture Resistance	350 N
Tensile strength	>4 N/mm ²
Crack Bridging Ability (23°C)	4.4 mm
Crack Bridging Ability (-5°C)	3.7 mm
Crack Bridging Ability (-20°C)	3.6 mm
Hardness (Shore A Scale)	>65
Elongation at break	>680%
Water Vapour Permeability	12 g/m ² /day
Adhesion to concrete	>1.9 N / mm ² (concrete surface failure)
Resistant to Root Penetration	Resistant
Solar Reflectance (SR)	0.87 (Kanproof PU 520 White)
Solar Emittance (ε)	0.89 (Kanproof PU 520 White)
Hydrolysis (5% KOH, 7days cycle)	No significant elastomeric change
Service Temperature	-30°C to + 90°C
Shock Temperature (20 min)	200°C
Rain Stability Time	3-4 hours
Light Pedestrian Traffic Time	18-24 hours
Final Curing time	7 days
Chemical Properties	Good resistance against acidic and alkali solutions (5%), detergents, seawater and oils



Restrictions

- Avoid application in foggy conditions

Colour: Light Grey, White



Application Instructions.

Surface Preparation : Careful surface preparation is essential for optimum finish and durability. Concrete surface needs to be clean, dry and sound, free of any contamination, which may harmfully affect the adhesion of the membrane. Maximum moisture content should not exceed 5%. Substrate compressive strength should be at least 25MPa, cohesive bond strength at least 1.5MPa. New concrete structures need to dry for at least 28 days. Old, loose coatings, dirt, fats, oils, organic substances and dust need to be removed by a grinding machine. Possible surface irregularities need to be smoothened. Any loose surface pieces and grinding dust need to be thoroughly removed. For any other type of substrate contact technical support department.

***WARNING:** Do not wash surface with water.

Repair of cracks and joints : The careful sealing of existing cracks and joints before the application is extremely important for long lasting waterproofing results. Clean concrete cracks and hairline cracks, of dust, residue or other contamination. Prime locally with a suitable primer and allow 2-3 hours to dry. Fill all prepared cracks with Kankol PU sealant. Then apply a layer of Kanproof PU 520, 200 mm wide centred over all cracks and while wet, cover with a correct cut stripe of Kanfabric. Press it to soak. Then saturate Kanfabric with enough Kanproof PU 520, until it is fully covered. Allow 12 hours to cure. Clean concrete expansion joints and control joints of dust, residue or other contamination. Widen and deepen joints (cut open) if necessary. The prepared movement joint should have a depth of 10-15 mm. The width: depth ratio of the movement joint should be at a rate of approx. 2:1. Apply Kankol PU Sealant on the bottom of the joint only. Then with a brush, apply a stripe layer of Kanproof PU 520, 200mm wide centred over and inside the joint. Place the Kanfabric over the wet coating and with a suitable tool, press it deep inside the joint, until it is soaked and the joint is fully covered from the inside. Then fully saturate the fabric with enough Kanproof PU 520. Then place a polyethylene cord of the correct dimensions inside the joint and press it deep inside onto the saturated fabric. Fill the remaining free space of the joint with Kankol PU sealant. Do not cover. Allow 12-18 hours to cure.

Priming : Prime very absorbent surfaces like concrete, cement screed or wood with Kanfloor Primer 25/ Kanfloor Primer EP WB/ Kanfloor Primer HMT. For surfaces like PVC, activate with Kansolve 9000. Allow the primer to cure according to technical instruction.

Waterproofing : Stir slightly before using. Avoid excessive stirring to prevent air entrapment. Pour Kanproof PU 520 onto the prepared/primed surface and lay it out by roller, brush or squeegee, until all surface is covered. You can use airless spray allowing a considerable saving of manpower. We recommend reinforcement of the entire surface, with Kanfabric. Use 5-10 cm stripe overlapping. After 12-18 hours (not later than 48 hours) apply another layer of Kanproof PU 520.

***NOTE:** Do not apply KANPROOF PU 520 over 0.5 mm thickness (dry film) per layer. For best results, the temperature during application and cure should be between 5°C and 35°C. Low temperatures retard curing while high temperature speeds up curing. High humidity may affect the final finish.



Packaging

KANPROOF PU 520 25 kgs



Storage Life

KANFLOOR SL has a shelf life of 12 months if kept in warehouse conditions at 30°C in the original, unopened pack. sunlight.

Consumption

1.5 – 2.5 kg/m² applied in 2-3 layers. This cover is based on application by roller onto a smooth surface in optimum conditions. Factors like surface porosity, temperature & application method can alter consumption.

Health and Safety

No hazard with this product but please consult the Material Safety Data Sheets



Technical Support

Kangaru Polymers Pvt. Ltd. provides technical advisory services by experienced specialists. Advisory services at the time of execution are also available.



Disclaimer

Our technical advice for use is given in good faith and reflects the current level of knowledge and experience with our products. When using our products, a detailed object-related and qualified inspection is required in each individual case in order to determine whether the product and /or application technology in question meets the specific requirements and purposes. We are liable only for our products being free from faults; correct application of our products therefore falls entirely within your scope of liability and responsibility. We will, of course, provide products of consistent quality. Users are responsible for complying with local legislation and for obtaining any required approvals or authorizations. We are not liable for any losses to the existing structures that may occur during the application process due to the structure's inherent weakness. Values in this technical data sheet represent typical values of the products under ideal test conditions and may not be regarded as specifications. The new edition of the technical data sheet supersedes the previous technical information and renders it invalid.

Our technical advice for use, whether verbal or written, is given in good faith and reflect the current level of knowledge and experience with our products. When using our products, a detailed object-related and qualified inspection is required in each individual case in order to determine whether the product and /or application technology in question meets the specific requirements and purposes. We may guarantee only that our products are compliant with their technical specification; correct application of our products therefore falls entirely within your scope of liability and Users are responsible, in any case, for complying with local legislation and for obtaining any required approvals or authorizations, when necessary, either for their purchase and/or for their use. Values in this technical data sheet are given as examples and may not be regarded as specifications. For product specifications contact our technical department. The new edition of the technical data sheet supersedes the previous technical information and renders it invalid. It is therefore necessary that you always have to hand the current code of practice.

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