

Kemroof PU

Liquid Applied Solvent Free Polyurethane Elastomeric High Build Coating

Description	Solvent free elastomeric high build liquid applied membrane coating is an above-grade exterior UV resistance polyurethane coating, produces a high wearing and abrasion resistance membrane, it forms an incredibly thick yet flexible impermeable coating that helps waterproof the exterior of a structure	
Where to use	• Concrete floors • Concrete roofs • Metal surfaces • Wood surfaces • Tiles & old roofing membranes • Balconies & Patios • Plaza decks • Roof top (Re-Creation areas)	
Advantages	• Fast Cure, Solvent free • UV-Stable • Waterproof & water vapor permeable • Excellent adhesion • Crack bridging & Flexible at temperature from -40 °C /+90 °C • Excellent weather and UV –Resistance • Chemically resistance • Resistant to fire & smoke spread (Special version)	
Properties		
Density	1.2 ±0.05 gm/cm ³	
% Volume Solids	100%	
Pot life @ 25 °C	40 minutes	
Recoating time @ 25 °C	Minimum - 6 hours Maximum - 48 hours	
Curing time @ 25 °C	7 Days	
Tensile strength	6 - 7 N/mm ²	ASTM D412
Elongation	360% - 387%	ASTM D412
Shore A Hardness	80	
Adhesion strength	1.2 N/mm ²	
Water absorption	0.97 %	
Water tightness & Flood test	1 m column water pressure show no leak	BS EN 1928 - ASTM D5957
Accelerated weathering 50 hours @ 60°C	Passed – no any cracks	ASTM G154
Abrasion Resistance	67.3 mg loss – Used wheel C17 with 1000 g load and 1000 cycles	ASTM D4060
Fire resistance – Direct flame exposure	15 cycles of 2 minutes each Exposure of 10 minutes – maximum spreading distance = 1.8 m	Passed Class A - ASTM E108

Surface Preparation	• Surfaces must be clean, sound and dry, free from any contaminations • (max. moisture content 5 %) • Old loose roofing must be removed by grinding machines • Any surface irregularities must be smoothened
Mixing	• Premix (A&B) separately in its containers • Mix thoroughly (A&B) with low-speed mixer for 2 minutes • Material can be thinned if needed using 3% of Prosolve PU up to a maximum of 5%
Application	• Prime the substrate with Sealer E43 in case of dry surfaces or Wetseal for wet surfaces Kemprim M or Kemprim AL for metal surfaces Allow to dry overnight • Repair cracks or joints with Kemrepair EP or Kemputty PU or the Kemroof PU mixed with a dry filler to a butter consistency • Use Proflex LM sealant for expansion joints • Apply the coating with roller or airless spray until the surface is covered and leave it to cure (6 - 48 hours) between coatings • Apply another one or two coats & leave to dry for 24 hours • For traffic decks, apply Kemroof PU reinforced with Fibermesh • Reinforce joints with Kemfelt 28 – 60 g
Theoretical coverage	• 0.3 Kg/m²/250 microns (D.F.T) • 2 coats are recommended • For reinforced coating 1.5 – 2.0 Kg/m² being applied over 3 layers
Packaging	5 Kg pails 20 Kg pails
Shelf life & Storage	6 months in its unopened packs stored in cool, dry conditions
Health and Safety	• Use goggles, gloves and breathing mask when applying • Apply forced ventilation in confined spaces • Skin splashes to be removed with hand cleaner, soap and water • Eye splashes to be washed with plenty of water • If ingested seek medical advice
Additional Information	PROKEM provides the construction industry with a comprehensive range of construction chemicals and specialty products answering the queries of modern engineers for trouble free durable structure PROKEM designs tailor made products should there be critical application that requires specific properties rather than our main range. For our customer's satisfaction PROKEM reserves the right to change the properties of its products All orders are accepted subject to our current term of sale & delivery Users must always refer to the most recent issue of the local product data sheet for the product concerned, copies of which will be supplied on request PROKEM extends technical services to include after-sales support to assist users in the proper handling of our products