

NURAPLY 3PC
IKO Polyroad 5 RA
TECHNICAL DATA SHEET

DESCRIPTION AND AREAS OF USE

Nuraply 3PC consists of an impregnated carrier with combination of polyester and glassfleece (280 g/m² for 5 mm thick), covered at the bottom side with flexible polymer bitumen.

The finish of the top surface of this membrane, talcum, admits direct application of road asphalt at a temperature of max. 160°C-200°C or mastic asphalt with a temperature of approx 250 °C.

The positioning of the carrier close to the upper surface of the membrane ensures a thorough adhesion between membrane and substrate.

INSTALLATION METHOD

- Type of protection layer: both mastic asphalt and road asphalt are possible.
- Type of overlay for the application: road asphalt is also possible over protection layer of mastic asphalt
- Intended use and method of application: for waterproofing of concrete bridge decks and other concrete surfaces trafficable by vehicles.

TECHNICAL SPECIFICATIONS (average values)

Characteristic	Test Method	Unit	Expression of result	Value or statement
Watertightness pretreatment	EN 14694	—	Pass	1000 cycles of 500 kPa on membrane without
Initial amount of mineral surface protection	EN 12039: 1999 Annex B	g/m ²	MDV	150g/m ² ± 100 g/m ²
Tensile properties: max	EN 12311-1	N/50mm	MDV± 20 %	Thickness 5 mm: L 1000 N / T 900 N
Tensile properties:	EN 12311-1	%	MDV ± 15 %	Thickness 5 mm: 35 %
Water absorption	EN 14223	%	MLV	≤ 0,5 %
Flexibility at low temp	EN 1109	°C	MLV	initial ≤ - 15 °C
Flow resistance at elevated temperature	EN 1110	°C	MLV I	initial ≥ 130°C
Dimensional stability / 24 h at 80°C	EN 1107-1	%	MLV	EN 1107-1: ≤ 0,2%
Dimensional stability at elevated temp/ 1 h at 160°C	EN 1107-1 + Annex B of EN	%	MLV	≥ -0,5%
Thermal ageing by long term exposure to elevated temperature; 12 weeks @ 70°C	EN1296	EN 1109 EN 1110	MDV	Flexibility at low T° ≤ 5 °C Flow resistance at elevated T° ≥ +110°C
Bond strength on concrete	EN 13596	N/mm ²	MLV	at 10°C: ≥ 1N/mm ²

Characteristic	Test Method	Unit	Expression of result	Value or statement
Bond strength on system concrete + membrane + protection layer	EN 13596	N/mm ²	MLV	With mastic asphalt at 23°C: ≥ 0.3 N/mm ² at 23°C: ≥ 0.8N/mm ² at 30°C: ≥ 0.6N/mm ²
Bond strength on concrete + bitumen leveling layer + membrane	EN 13596	N/mm ²	MLV	at 23°C: ≥ 1N/mm ²
Shear strength before ageing Concrete+primer+ Polybridge+asphalt	EN 13653	N/mm ²	MLV	with mastic asphalt ≥0.2N/mm ² with road asphalt ≥0.3N/mm ²
Bond strength after ageing 12 w @ 70°C on system concrete + bitumen leveling layer + membrane + protection layer	EN 1296 + EN 13596	N/mm ²	MLV	with mastic asphalt ≥ 1.00 N/mm ²
Crack bridging ability	EN 14224 or Annex E of this European Standard	°C	Pass test temp	- 10°C
Compatibility by heat conditioning 91 days @ 50°C on system concrete + membrane + protection layer	EN 14691 + EN 13653	% of initial value	MLV	With mastic asphalt: +170 % With road asphalt: + 140 %
Compatibility after 20 freeze-taw cycles according EN 13687-1 on system concrete + membrane + protection layer	EN 13687-1 + EN 13653	% of initial value	MLV	With mastic asphalt +143%
Resistance to compaction of an asphalt layer	EN 14692 + EN 1928	-	Pass	pass result

DIMENSIONS

- Thickness: 5 mm
- Length: 10 m
- Width: 1 m
- Surface: 10 m²
- Average weight: 57 kg

FIXING

Torching method

The information in this product data sheet is based on our experience and testing. It represents the latest information available at the time of printing, but no guarantee of its accuracy is made or implied, nor responsibility taken for use to which this information may be put. We reserve the right to alter or up-date information parameters and formulations at any time without notice.