

Technical Data Sheet
Approved on **date**

LOGICROOF® V-RP (T)

Synthetic, single ply, mechanically fastened, waterproofing material

Product description

LOGICROOF® V-RP (T) is a polyester reinforced multi-layer membrane (PM) with anti-slippery top surface, obtained by co-extrusion, synthetic roof waterproofing sheet based on premium-quality plasticized polyvinyl chloride (PVC-P). The upper light layer is featured by a very high resistance to weather and UV rays, while the underlying black layer is punching resistant. Contains flame-retardants. Has enhanced flexibility, which makes installation process easier at low temperatures.



Application areas

Roof waterproofing membrane for single ply mechanically fastened exposed flat roofs meets high fire-resistance requirements and optimized for use in cold climate.

Properties / Advantages

- High resistance to environmental influences, including permanent UV radiation;
- High resistance to impact and puncture;
- High tensile strength;
- Excellent flexibility at low temperatures;
- Outstanding weldability;
- High water vapor permeability;
- Recyclable.

Norms / Standards

- Plastic and rubber sheets for roof waterproofing according to EN 13956;
- Russian standards: GOST 30547-97, №.123-FZ from 22 July 2008 "Technical Regulations of Fire Safety Requirements", STO 72746455-3.4.1;
- Factory production control provided by certified laboratories.

Appearance / Color

Surface: matt surface with TechnoNICOL logos

Upper layer colors

Color	RAL*	Reflectance, %
light grey	7047	42
white	9001	74
green	6002	24
blue	5002	7
red	3016	9

* Particular batch color may vary slightly

Bottom layer color: dark grey

Package

Each PM roll packed with polyethylene film by the whole roll length to protect membrane from contamination and UV radiation.

Thickness, mm	Width x Length, m	Rolls on pallet, pcs
1,2	2,05x25	18
1,5	2,05x20	18
1,8	2,05x15	18
2,0	2,05x15	18

Storage	<p>PM rolls shall be stored horizontally on pallets in original package without direct exposure of sun, rain and snow. Storage in dry premises, horizontally, no more than 3 rows by the height in no less than 1 m away from the heating appliances. PM rolls shall be stored in closed premises or under shelter. Short-term storage of the pallets outdoors is allowed.</p> <p>Pallets with PM rolls shall be transported in covered vehicles, horizontally, no more than 3 rolls by the height. Pallets can be transported in 3 rows by the height, whereby the weight of the upper pallets shall be equally distributed among all the rolls of the bottom rows, using wooden panels or pallets.</p> <p>Warranty storage period – 18 months from the date of production. After expiry of the warranty period PM shall be verified to compliance with requirements of STO 72746455-3.4.1. In case of compliance PM can be used by direct purpose.</p>
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Technical data

Reference document	EN 13956 and STO 72746455-3.4.1		
Visible defects	pass		GOST R EN 1850-2-2008
Length	(-0 % / +5 %) m		EN 1848-2
Width	(-0.5% / +1%) m		EN 1848-2
Straightness	≤ 30 mm / 10 m		EN 1848-2
Flatness	≤ 10 mm		EN 1848-2
Effective thickness	1,2 (-0% /+10 %) mm		GOST EN 1849-2
Weight per m²	1,2 mm – 1,5 (0% /+10 %) kg 1,5 mm – 1,8 (0% /+10 %) kg 1,8 mm – 2,3 (0% /+10 %) kg 2,0 mm – 2,5 (0 % /+10 %) kg		GOST EN 1849-2
Tensile strength			EN 12311-2
longitudal	≥ 1100 N/50 mm		
transversal	≥ 900 N/50 mm		
Elongation			
longitudal	≥ 18 %		
transversal	≥ 18 %		
Tear resistance	≥ 150 N		EN 12310-2
Foldability at low temperature	- 35°C		EN 495-5
Joint peel resistance	≥ 300 N/50 mm		EN 12316-2
Joint shear resistance	≥ 600 N/50 mm		EN 12317-2
Watertightness (24h/10 kPa)	pass		EN 1928 B
Resistance to impact rigid sub. / soft sub.	1,2 mm	≥ 600 / ≥ 700 (mm)	
	1,5 mm	≥ 800 / ≥ 1000 (mm)	EN 12691
	1,8 mm	≥ 1100 / ≥ 1500 (mm)	
	2,0 mm	≥ 1400 / ≥ 1800 (mm)	
Hail resistance rigid sub. / soft sub.	≥ 17 / ≥25 (m/s)		EN 13583
Resistance to static load	≥ 20 kg		EN 12730 B
Reaction to fire	Class E		EN 13501-1
External fire performance	B _{ROOF} (t1)*		EN 13501-5
	B _{ROOF} (t2)*		TS EN 1187
	B _{ROOF} (t3)*		
	* According test reports for roofing systems issued by independent labs		
UV exposure (>5000 h)	Pass		EN 1297

Roofing system information

System structure

TechnoNICOL accessories recommended for use:

- Non-reinforced PVC membrane – LOGICROOF® V-SR
 - Prefabricated shaped elements
 - Telescopic fasteners
 - Roof drains
 - Separation layer
 - Laminated metal sheet
 - Polyurethane sealant
 - Cleaner for PVC membranes
 - Contact adhesion
 - Liquid PVC
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Application data

Basement preparation

Basement surface shall be solid, smooth, without sharp edges

Application restrictions

Temperature

LOGICROOF® V-RP (T) membrane can be applied in all climatic zones.

Compatibility

Contact with any materials containing bitumen or solvents should be avoided. Direct contact with polymeric materials made of polystyrene foam (EPS, XPS) is not allowed.

Application instructions

Application method/ Equipment

Application method:

According to «Instruction for installation of single-ply roofs with LOGICROOF PVC membranes».

Fixation:

PM is installed by mechanical fastening in seam overlaps. Additional mechanical fastening on roof perimeter is mandatory.

Welding:

Overlap seams are welded by electric hot welding equipment, such as manual hot air welding machines and pressure rollers or automatic hot air welding machines with controlled hot air temperature.

Equipment:

Leister Triac or analogue for manual welding

Leister Varimat or analogue for automatic welding

Welding parameters depends from weather and should be defined immediately prior to welding. Welding seam width should be not less than 30 mm.

Laying restrictions

Installation shall be provided by trained personnel.

Laying temperature restrictions:

Air temperature: -20 °C min. / +50 °C max.

Application of chemical accessories, e.g. contact adhesion or cleaner for PVC membranes, possible at temperature not less than +5 °C. Read the manual before applying of these products please.

Safety measures

In case of indoor welding blowing ventilation shall be implemented

Transportation restrictions

Product does not contain substances dangerous in transportation

Recycling

Recyclable
