

RENOLIT ALKORGEO

Hydraulic structures



GEOCOMPOSITE RENOLIT ALKORPLAN 00518

For hydraulic works **UV Resistant**



PRODUCT

- Homogeneous flexible polyvinyl chloride PVC-P thermobonded to a Polypropylene geotextile.
- Designed for dams, canals, hydraulic tunnels, reservoirs, lagoons and other hydraulic structures with exposed or protected waterproofing system.
- Geocomposite is made of a PVC-P geomembrane RENOLIT ALKORPLAN 35254 2.5mm thick, UV resistant, dual layer, thermobonded to a 500 g/m² PP fleece.

CHARACTERISTICS

- Geocomposite in accordance with the requirements of ISO 9001 and ISO 14001 certificate.
- High UV stability.
- Resistant to swelling, rotting and ageing.
- Geocomposite produced with high quality resins, this guarantees high consistency of properties and optimum durability.
- CE Marking and mechanical properties in accordance with EN 13361 and 13362.
- Very high level of watertightness, even with permanent deformation.
- Large capacity for adaptation to irregularities or deformation of support owing to its high deformability and weld strength.
- High resistance to puncturing.
- Root resistance in accordance with EN14416.
- Not resistant to bitumen, oil and tar.

INSTALLATION

Hot air or hot wedge welding achieves assembly of the geocomposite or prefabricated panels. The weldability and the quality of the welding done on site can be influenced by atmospheric conditions (temperature, humidity of the air) and also by the state of the surface of the geocomposite (clean surface, more or less wetness of the surface) and must be adapted accordingly.

Generally when laying gravely sand, gravel, selected fill or concrete on a geocomposite, a geotextile or a protection membrane of non-reinforced PVC-P (protection against dynamic puncturing) should be placed in between. The geomembrane can be used on a bituminous support after the insertion of a suitable separation layer. To avoid hydrolysis of the PES geotextile due to high alkalinity, it can not be installed on fresh concrete without adequate separation.



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We reserve the right to amend or change specifications as and when required. We will be pleased to advise current specifications upon request. Other technical characteristics are available upon request.

CHARACTERISTICS	NORMS	UNITS	SPECIFICATIONS
Thickness Geomembrane	EN 1849	mm	2.5 -0+10%
Density Geomembrane	EN ISO 1183	g/cm³	≥ 1.25
Mass per unit area of geotextile	ISO 9864	g/m²	500+-10%
Tensile strength	EN ISO 527	kN/m	≥ 48
Elongation at failure Geomembrane	EN ISO 527	%	L: ≥ 280
			T: ≥ 280
Tear resistance	EN ISO 34-1	N/mm	≥ 130
Puncture resistance CBR	EN ISO 12236	kN/m	≥7
Cold folding resistance	EN 495-5		No cracks at -30°C
Resistant under water pressure	EN 1928		Waterproof at 10 bar/72 h
Dimensional stability after accelerated ageing (6h/80°C)	EN ISO 1107-2	%	≤2
Behaviour after long-term ageing 56d/50°C Methods			
A&B General appearance			No blister
- Dimensional stability, L&T	EN 14415	%	≤2
- Variation of tensile strength, L&T		%	< ±10
- Variation of elongation at failure, L&T		%	< ±10
Folding at a temperature of – 20°C			Cracks at -20°C
Resistant against UV radiation at 4500 MJ/m ² with	EN 12224		Fulfilled
artificial weathering			
Resistant to oxidation	EN 14575		Fulfilled
Lamination strength (PVC vs PP)	EN 12316-2	N/50mm	>50
Root resistance	EN 14416		Fulfilled
Fire resistance	EN ISO 13501-1	class	E
	ÖNORM B3800/1		B2

STORAGE

• Store in dry unheated space. Rolls to be parallel and in original packing. Do not stack in cross form or under pressure.

The storage area must be of such a nature as not to damage the geomembrane.

• Delivery in roll form, 2.15 or 2.10 meter width, on cardboard cores.



