

BLUSKY™POWERFLEX PVC

Geomembrane With Twin Signal Color (Twin Color) For Tunnel and Basement Waterproofing

Description

BLUSKY™POWERFLEX PVC Non-reinforced geomembrane, opaque, made of flexible polyvinyl chloride (PVC-P), with thin yellow signal layer (PVC-P), designed for tunnels and basement works. This geomembrane is not suitable for permanent exposure to UV radiation.

The use of a geomembrane with a thin <<signal>> layer of clear color allows:

- Better in lighting in the tunnel under construction by the reverberation of the artificial lights.
- An easy visual detection of the damages caused to the geomembrane as well as during the installation and during the successive works. Indeed, if the geomembrane, locally, sustains loss of thickness by mechanical, thermal or other aggression, the thin

<<signal>> layer will be damaged, and will let appear the dark layer of the geomembrane.

Domains of Application

BLUSKY™POWERFLEX PVC membranes are ideal for high performance use in waterproofing systems. They are used on low slope concrete roofs, balconies, multi-storied car parks, tunnels, for lining sewerage canals, sub grade structures and any concrete or cementitious flat surface that needs waterproofing.

Method of Application

Hot air or hot welding achieves correct assembly of the geomembrane. The weldability and the quality of the welding done on site can be influenced by atmospheric conditions and also by the state of surface of the geomembrane (clean and dry) and must be adapted in consequence.

An anti-puncturing geotextile or a composite (protective membrane with laminated fleece) should be placed onto the support of the waterproofing.

In case the geomembrane will be covered with sand, gravel or concrete a geotextile or a protection membrane of non-reinforced **BLUSKY™POWERFLEX PVC** should be placed in between. The geomembrane can be used on a bituminous support after the insertion of a suitable separate.

Advantages

- Manufactured in ISO 9001 & ISO 14001 certified plant
- Mechanical properties in accordance with EN 13491
- Geomembrane with thin yellow signal layer (twin colors)
- Hardly combustible (B2-ON B 3800/1, B2-DIN 4102,IV.2-SIA 280,CLASS E-EN 150 11925)
- Resistant to swelling, rotting and ageing
- Very high level of water tightness, even with permanent deformation
- High capacity for adaptation to irregularities or deformation of support due to its high deformability and weld strength
- High resistance to puncturing
- Root resistance in accordance with EN14416

The information contained in this technical data sheet is given to the best of our knowledge and the results from extensive testing in order to remain as objective as possible. However, it cannot, in any case be considered as a warranty involving our liability in case of misuse or any different use of our products from the "Application" paragraph of this technical data sheet. Some application tests should be carried out before using the product to ensure that the methods of use and conditions of application of the product are satisfactory. Our technical assistance is at the disposal of the users Consult the latest update of the technical data sheet on our website www.bluskyscpl.com

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Characteristics	Norms	Units	Specifications
Thickness	EN 1849-2	mm	2.0 ± 5 %
Tensile Strength	EN ISO 527	N/m m ²	≥ 15
Elongation at failure	EN ISO 527	%	≥ 300
Tear Strength	EN ISO 34	KN/m	≥ 42
Dimensional stability after accelerated ageing (6h/80 °C)	EN ISO 1107-2	%	< 2%
Puncture Resistance (CBR)	EN ISO 12236	N	> 2400
Height of fall without perforation	DIN 16726	mm	> 1100
Cold folding resistance	EN 495-5		No cracks at - 20° C
Resistant under water pressure	DIN 16726		waterproof at 10 bar/10 hr. waterproof at 6 bar/72 hr.
Behavior after storage in hot water (8 months/50 °C)	SIA V 280		
Mass variation			< 4 %
variation at Elongation at failure			< 20 %
variation of tensile strength			< 20 %
Folding at a temperature of - 20 °C			No cracks at - 20° C
Behavior after long-term ageing 80° C/70 days	DIN 16726		
General appearance			No blister
dimensional Stability		%	< 2%
variation of tensile strength		%	≤ 10 %
variation at Elongation at failure		%	≤ 10 %
Folding at a temperature of - 20 °C			No cracks at - 20° C
Behavior after storage in acid and / or alkaline solutions (56 d / 50 °C)	EN 14416		
Variation of tensile strength,			≤ 10 %
Variation at Elongation at failure			≤ 10 %
Folding at a temperature of - 20 °C			No cracks at - 20° C
Root Resistance	EN 14416		Resistant
Oxidation resistance	EN 14575		Conform
Behavior in fire	B2 ON B 3800/1		B2
	SIA 280		5.2
	DIN 4102		B2
	EN ISO 11925		Class E

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