

ProLiner® SuperFlex™

High Flex Geomembrane

Exhibits high flexibility and ductility



Product Information

ProLiner® SuperFlex™ geomembranes have a generalised use in lining of containment structures such as dams, channels, leachate ponds, waste cells and a broad spectrum of waterproofing. The customised SuperFlex™ resin formulation exhibits high flexibility & ductility, also making it suitable for detailed & irregular surfaces such as tank lining and stormwater culvert wrapping. Thus SuperFlex™ is also suitable enough to be factory 'prefabricated' & folded/rolled offsite in large panels, enabling cost effective transport and rapid deployment without the need to mobilise excess equipment and crew to site. SuperFlex™ is easily welded or joined using a double sided butyl tape, & does not suffer from the high temperature 'adhesion' phenomenon which is common with poorly formulated flexible liners.

Applications

- Tank lining
- Float covers
- Reserve pits
- Under rig liners
- Retention ponds
- Fresh water pits
- Flowback pits
- Secondary containment
- Above ground storage tanks

ProLiner® SuperFlex™

Product Data Sheet

Product Grade

Properties	Unit (Metric)	Test Method	Standard 0.50mm	Standard 0.75mm	Standard 1.00mm
Thickness (average)	mm	ASTM D 5199	0.50	0.75	1.00
Thickness (minimum -10%)	mm	ASTM D 5199	0.45	0.68	0.90
Density (maximum)	g/cc	ASTM D 792	0.939	0.939	0.939
Tensile Properties (average MD/CD ¹)					
Break Strength	kN/m	ASTM 6693 (Type IV)	13	20	27
Break Elongation	%		800	800	800
Tear Resistance (average MD/CD ¹)	N	ASTM D 1004	50	70	100
Puncture Resistance (average)	N	ASTM D 4833	140	210	270
Flex Modulus (average MD/CD ¹)	MPa	ASTM D 790	330	310	280
Carbon Black Content (range)	%	ASTM D 4218 / D 1603	2.0 - 3.0	2.0 - 3.0	2.0 - 3.0
Carbon Black Dispersion	Cat	ASTM D 5596	1 - 2	1 - 2	1 - 2
Oxidative Induction Time (Standard OIT)	min	ASTM D 3895	100	100	100
Standard Roll Dimensions					
Roll Width (m)			8.0	8.0	8.0
Roll Length (m)			100	70	50
All rolls are folded and rolled during manufacture onto a 4 metre wide core for ease of handling and transport.					
Permeability of ProLiner® Superflex™ LLDPE geomembranes is less than 1×10^{-9} m/s.					

SuperFlex™ is produced using the highest quality blown film co-extrusion process with virgin polyethylene base resin, giving it all the typical physical, mechanical, UV, oxidative and chemical resistant properties which are indicative of pure polyethylene. All ProLiner® geomembranes are produced to exceed the stringent standards of GRI (Geosynthetic Research Institute.) SuperFlex™ exceeds the requirements of GRI GM17 and is accredited under the ILAC mutual quality assurance recognition program of which NATA is a member. SuperFlex™ is certified under AS/NZ 4020:2005 for potability & hence is drink-water safe. SuperFlex™ is available in 8m widths but folded ('gusseted') on a 4m core for ease of transport & handling.

Other roll dimensions available on demand.

ProLiner® is manufactured to ISO9001, quality assurance procedure. Properties of ProLiner® are minimum typical roll values unless otherwise noted. (GM) refers to the Geosynthetic Research Institute GRI-USA.

Notes:

1 MD refers to Machine Direction and CD refers to Cross Machine Direction

About Us

Leaders in Geosynthetics

Global Synthetics is a 100% Australian-owned company, proud to offer a complete range of high-quality geosynthetic products backed by over 200 years of combined staff experience in the industry.

We have supplied products to some of the largest recent infrastructure works in Australia. Global Synthetics provides major benefits to any geotechnical engineering project with the right products and our technical expertise.

Global Synthetics products are used in the following applications:

- Pavement Stabilisation
- Ground Improvement
- Soil Reinforcement and Retaining Structures
- Water Management
- Drainage Systems & Hydraulic Works
- Landfills
- Coastal Erosion Structures

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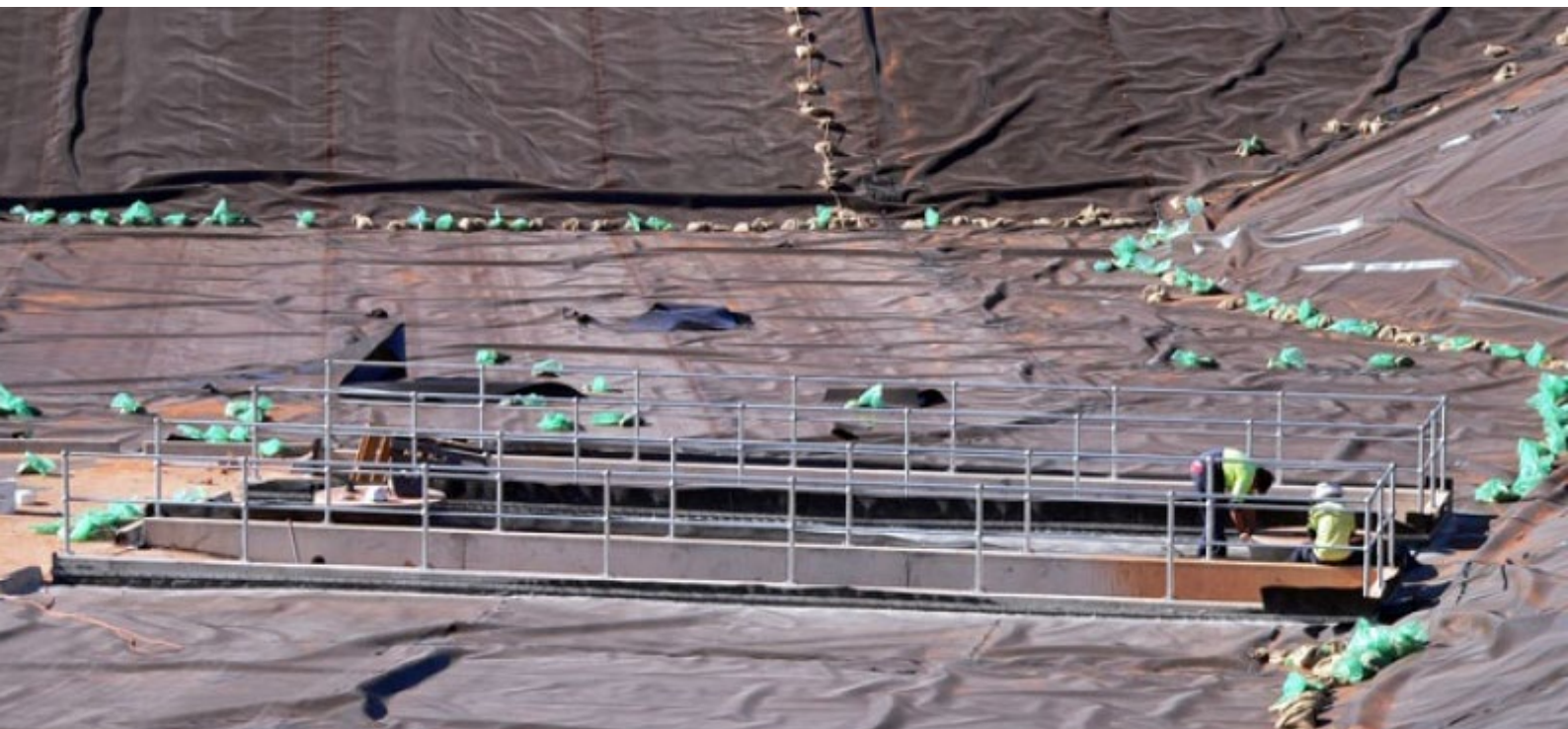
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