



IDEAL FOR THE CONTAINMENT OF WASTE AND WATER

TERANAP BITUMINOUS GEOMEMBRANES - EXPERT RANGE

TECHNICAL DATA SHEET

Teranap Bituminous Geomembranes (BGM) are ideal for the containment of waste and water. They are commonly used as liners and caps in Australian waste and mining applications.

- A large width geomembrane made of SBS modified bitumen for environmental protection such as tailing and industrial waste containment ponds
- Also suitable for hydraulic applications such as dams, canals and irrigation works
- Manufactured with special reinforcement that provides waterproofing, chemical resistance, ageing behaviour and resistance to high mechanical stresses
- Available with or without Teranap Control Technology which is a propriety air channel technology for CQA seam testing
- Applicable for Water, Waste and Mining sectors



COMPOSITION

SURFACE 1	REINFORCEMENT	COMPOUND	SURFACE 2
Sand	Spunlaid polyester nonwoven reinforced with a glass-scrim	SBS elastomer bitumen	Polyester film

DIMENSIONAL CHARACTERISTICS - EXPERT RANGE

	300		400		500		600	
	TYPICAL	MINIMUM	TYPICAL	MINIMUM	TYPICAL	MINIMUM	TYPICAL	MINIMUM
Thickness (mm)	3.2	3.0	3.8	3.5	4.3	4.0	4.9	4.5
Length (m)	110	108.9	95	94.1	85	84.2	75	74.3
Width (m)	4.00	3.96	4.00	3.96	4.00	3.96	4.00	3.96
Area density (kg/m ²)	3.89	3.60	4.69	4.335	5.325	4.925	6.02	5.567
Mass of a roll (kg)	1830	1694	1897	1755	1926	1782	1920	1776

Some rolls may be segmented and come with 2 panels per roll. Approximately 15% to 20% of rolls made to order will come in this format unless specifically requested. This is done to avoid waste.

TECHNICAL PERFORMANCE - EXPERT RANGE

TEST		STANDARD	UNITS	300		400		500		600	
				TYPICAL	MINIMUM	TYPICAL	MINIMUM	TYPICAL	MINIMUM	TYPICAL	MINIMUM
Tensile Strength	MD	ASTM D 7275	kN/m	18.5	14.8	24	19.2	28.5	22.8	32.5	26
	CMD			16.5	13.2	20	16	23	18.4	26	20.8
Elongation	MD	ASTM D 7275	%	42	35	46	38	50	40	55	44
	CMD			42	35	46	38	50	40	55	44
Tensile-tear strength	MD	ASTM D 4073	N	700	560	890	710	900	720	1230	980
	CMD			635	510	770	620	840	670	1000	800
Static puncture resistance		ASTM D 4833	N	385	350	500	450	590	540	680	620
Cold temperature flexibility		ASTM D 5147	°C	-25	-20	-25	-20	-25	-20	-25	-20
Water tightness		ASTM E 96	m/s	6E-14							
Gas tightness		ASTM D 1434	m ³ /(m ² .j)	38.6E-6							

CMD : Cross Machine Direction ; MD : Machine Direction

PACKAGING

- Products are rolled up with a plastic intercalated film
- Each roll wears a data sheet indicating the trademark, the product name and the serial number
- Rolls are piled up (prismatic volume) during transport
- Rolls are equipped with metallic mandrels of 4.8 m long and internal diameter of 159 ± 0.5 mm
- Teranap Expert is not classified as dangerous according to the international regulation of transport

TECHNICAL INFORMATION

- Due to the flexibility (viscoelastic behaviour) of SBS modified bitumen, Teranap Expert conforms to the shape of the soil profile below
- Its low thermal expansion coefficient ensures Teranap Expert remains in contact with subgrade
- Welds are typically 200mm wide and achieved with a propane torch. For gas sensitive projects, use flameless weld techniques. The Bitumat B2 Leister (flameless) has been approved and tested and produces a 120mm wide weld. It is slower than propane torching but weld strengths are consistent and allows less risk of human error. Contact your Geofabrics representative for more information
- Easy to anchor and connect

ADDITIONAL INFORMATION

VALUES	TOLERANCES	MODIFICATION(S)	HAZARDOUS CLASSIFICATION	ADDITIONAL INFORMATION	STORAGE
Where 2 values for given characteristics are shown, the first is for longitudinal direction and the second is for the cross direction.	The average values derived from standard tests and are subject to the usual production variations. Some slight variations can be noticed as the values are based on the average values obtained from several plants.	Our company reserves the right to modify its composition as a result of technologic and experiments improvements. This product data sheet supersedes the previous edition, to obtain the up-date technical data sheet, please contact our technical department.	It is not classified as dangerous according to the international regulation (ADR, RID, IATA, and RTMDR).	This product is only a product technical data sheet, regarding each waterproofing design, please, consult the concerned technical agreement and in case of doubt contact our technical department.	This product is packaged in rolls set up vertically on pallet or wooden box. It must be stored vertically under shelter, away from heat sources.

Visit **geofabrics.co** or call 1300 60 60 20
or **geofabrics.co.nz** or call 0800 60 60 20 (NZ)



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