



IDEAL FOR THE CONTAINMENT OF WASTE AND WATER

TERANAP BITUMINOUS GEOMEMBRANES - TP 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	Nonwoven polyester + glass mat	SBS elastomer bitumen	Fusible film (root barrier)

DIMENSIONAL CHARACTERISTICS - TP RANGE

	331 TP		431 TP		531 TP		631 TP	
	TYPICAL	MINIMUM	TYPICAL	MINIMUM	TYPICAL	MINIMUM	TYPICAL	MINIMUM
Thickness (mm)	3.6	3.3	4.1	3.9	4.8	4.6	5.6	5.4
Length (m)	100	99	90	89.1	75	74.3	65	64.4
Width (m)	4.00	3.96	4	3.96	4	3.96	4	3.96
Area density (kg/m ²)	4.15	3.84	4.85	4.49	5.44	5.17	6.25	5.94
Mass of a roll (kg)	1775	1642	1861	1723	1744	1657	1728	1642

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 - TP RANGE

TEST	STANDARD	UNITS	331 TP		431 TP		531 TP		631 TP		
			TYPICAL	MINIMUM	TYPICAL	MINIMUM	TYPICAL	MINIMUM	TYPICAL	MINIMUM	
Tensile Strength	MD	ASTM D 7275	kN/m	19	17	29	24	30	25.5	36	33
	CMD			14	11.5	21	18	27	23.0	29	27
Elongation	MD	ASTM D 7275	%	55	40	55	47	65	55	83	77
	CMD			65	50	60	51	70	60	85	77
Tensile-tear strength	MD	ASTM D 4073	N	750	640	940	850	1090	1000	1240	1170
	CMD			550	470	750	650	880	750	1090	1020
Static puncture resistance	ASTM D 4833	N	410	315	550	467	620	560	700	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 TP 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 TP conforms to the shape of the soil profile below
- Its low thermal expansion coefficient ensures Teranap TP 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)

