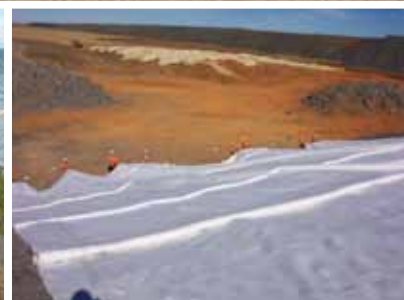


# ELCOMAX<sup>®</sup>

## Coastal & Landfill Geotextile



ELCOMAX<sup>®</sup> NON WOVEN, STAPLE FIBRE GEOTEXTILES REPRESENT THE MOST ADVANCED SELECTION OF SOIL STABILISATION & COASTAL ENGINEERING SOLUTIONS AVAILABLE TO A DESIGN ENGINEER. ELCOMAX<sup>®</sup> IS MANUFACTURED TO ISO 9001:2008 QUALITY MANAGEMENT SYSTEMS STANDARDS, OFFERING CUSTOMERS A HIGH QUALITY GEOTEXTILE.

ELCOMAX<sup>®</sup> PRESENTS UNIQUE GEOTEXTILE SOLUTIONS TO A RANGE OF ENGINEERING & COASTAL APPLICATIONS. TESTED UNDER THE HARSHTEST OF CONDITIONS AND MONITORED OVER EXTENDED PERIODS, ELCOMAX<sup>®</sup> HAS PROVEN ITS PERFORMANCE, DURABILITY AND RELIABILITY IN A LARGE NUMBER OF PROJECTS.

## GEOTEXTILE DEVELOPMENT

Developed over the last 40 years as a solution to suit the extremes of the Australian climate and provide solutions to increasing performance demands, ELCOMAX<sup>®</sup> non woven, staple fibre geotextiles are available in a range of engineered grades to meet specific application needs.



To restrict the migration of fine soil particles from a soil mass while remaining permeable to water movement at a rate at least equivalent to the permeability of the retained soil.



To allow water to flow through or within the plane of the geotextile, allowing the dissipation of pore water pressure which can have a detrimental effect on engineering structures.



To separate and prevent two distinct soils or different materials from intermixing, thereby reducing the performance of the individual materials.



To prevent damage to impermeable liners used to contain harmful liquours. The geotextile offers enhanced protection to prevent leakage resulting from such damage.

## APPLICATIONS

### REVTMENTS (COASTAL & ESTUARINE)

Rock revetments are a key component of many coastal/marine protection systems. ELCOMAX® provides tough, durable geotextiles with superior drainage capacity.

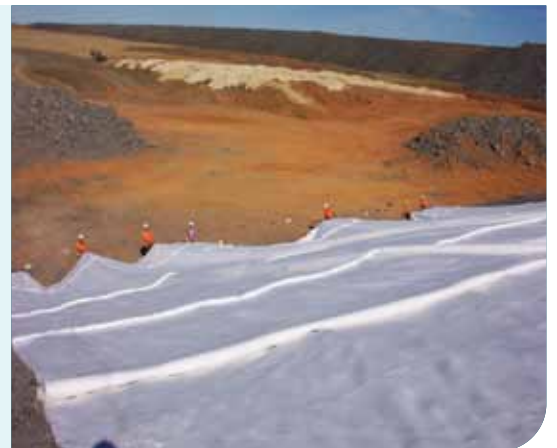
ELCOMAX® geotextiles have been used extensively in major coastal and port upgrades in the past 3 decades.



### LINER PROTECTION (LANDFILL & MINING)

Disposal of waste or mining by products, potentially harmful to the environment, in dedicated engineered containment facilities is required by law.

The long-term performance of the lining system used in the base of the containment facility is crucial and ELCOMAX® geotextiles provide protection to the relatively thin plastic liners used in these facilities.



### TAILINGS CONTAINMENT

Tailings containment is a major concern for many mine sites where the site footprint is limited. As a result, new developments in tailings impoundment design has allowed these structures to be built with steeper sides.

The inclusion of an ELCOMAX® geotextile as a filtration and drainage layer in these structures, where the geotextile may be exposed to the elements for up to 2 years, is key aspect to the success of the design.



### GEOTEXTILE CONTAINERS

Geotextile sand containers are a relatively new application for geosynthetics. ELCOMAX® geotextiles lead the world in terms of proven durability and performance in the harsh coastal environment through the development of composite geotextiles designed to reduce vandalism and extend the life of the structure.



## SPECIFICATION - ELCOMAX<sup>®</sup> Geotextiles - Typical & MARV Specifications

Mechanical Properties	Test		Standard	Units	360R	600R	900R	1200R	809RP	1209RP
	Thickness		AS3706.1-00	mm	4.4	5.1	5.6	5.9	11.0	12.5
Wide Strip Tensile Strength	MD	AS3706.2-00	kN/m	10.7	17.7	26.0	36.8	39.0	50.7	
	XMD			21.4	39.0	54.6	82.7	80.9	102	
Trapezoidal Tear Strength	MD	AS3706.3-00	N	320	477	656	842	1,175	1,432	
	XMD			542	917	1,264	1,774	2,216	2,730	
CBR Burst Strength		AS3706.4-01	N	2,719	4,522	6,526	8,824	10,791	14,191	
Grab Tensile Strength	MD	AS2001.2.3 Method B - 88	N	686	1,161	1,753	2,469	2,882	3,890	
	XMD			1,097	1,948	2,948	4,539	5,020	6,886	

Hydraulic Properties	Pore Size	AS3706.7-90	$\mu\text{m}$	<75	<75	<75	<75	<75	<75
	Permittivity	AS3706.9-01	$\text{s}^{-1}$	1.69	1.26	0.73	0.39	0.53	0.38
	Coefficient of Permeability	AS3706.9-01	m/s	$90.4 \times 10^{-4}$	$65.5 \times 10^{-4}$	$44.0 \times 10^{-4}$	$25.1 \times 10^{-4}$	$50.7 \times 10^{-4}$	$45.4 \times 10^{-4}$
	Flow Rate @ 100mm Head	AS3706.9-01	$\text{l/m}^2 \cdot \text{s}$	169	126	73	39	53	38

The data and specifications contained in this table are obtained from the manufacturer's laboratory testing. To ensure this information is current, please contact your local branch of Geofabrics Australasia.

**Typical Value** A Typical Value is the arithmetic mean of a set of results. This implies that 50% of the tested specimens will typically exceed this value and 50% will typically not meet this value.

**Machine Direction (MD)** The direction in a machine-made fabric, parallel to the direction of motion of the material through the processing machine (i.e. along the length of the roll).

**Cross Machine Direction (XMD)** The direction in a machine made fabric, perpendicular to the direction of motion of the material through the processing machine (i.e. across the width of the roll).

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