

# ProFab® Ultra Heavy Weight Nonwoven Geotextile

## Polyester Needle Punched Staple Fibre Geotextile

Heavy weight geotextile resistant to high puncture forces and abrasion



### Product Information

Protection layers, typically heavy mass nonwoven geotextiles, such as ProFab® Ultra are used in geosynthetic engineering to reduce the occurrence of local stresses and thus to control potential puncture of the liner by the material installed directly above, typically an aggregate drainage layer.

ProFab® Ultra Geotextile, when used as a protection layer acts as a cushioning barrier between a geosynthetic lining system such as in a dam or landfill cell. Defending the geomembrane from any damage from external forces coming into contact with the liner and reducing local stresses is imperative. This ability to act as a protection layer enables structural fill and base courses to maintain their reliability for longer periods of time. It is therefore paramount that the correct nonwoven needle punched geotextile cushion is specified, selected and then installed.

### Applications

- Railways
- Landfills
- Road constructions
- Environmental protection
- Pipelines
- Infrastructure engineering
- Tunnels
- Hydraulic engineering
- Access roads
- Wind parks

# ProFab® Ultra Heavy Weight Nonwoven Geotextile

## Benefits

- Acts as a cushioning barrier between a geosynthetic lining system
- Defending the geomembrane from any damage from external forces coming into contact with the liner
- Reducing local stresses
- Enables structural fill and base courses to maintain their reliability for longer periods of time

## Features

- Drainage
- Filtration
- Protection
- Reinforcement
- Separation
- Heavy duty nonwoven geotextile



# ProFab® Ultra Heavy Weight Nonwoven Geotextile

## Product Data Sheet

## Product Grade

Mechanical Properties	Test Method	Units	AS600X	AS800X	AS900X	AS1000X	AS1200X
Wide Width Tensile Strength	AS 3706.2	kN/m	34	42	46	50	62
Elongation		%	60	60	60	60	60
Trapezoidal Tear Strength	AS 3706.3	N	750	900	1050	1200	1450
CBR Burst Strength	AS 3706.4	kN	5.6	7.2	8.2	9.2	10.6
Puncture Resistance ( $h_{50}$ )	AS 3706.5	mm	6000	8450	9225	10000	12900
G Rating	Austrroads	-	5800	7800	8700	9600	11700
Grab Tensile Strength	AS 3706.2 Method B	N	1600	2150	2395	2640	3200

## Hydraulic Properties

Pore Size (EOS)	AS 3706.7	micron	≤75	≤75	≤75	≤75	≤75
Nominal Flow Rate	AS 3706.9	l / m <sup>2</sup> / s	70	60	50	40	35

## Physical Properties

Standard Roll Size	-	m	6 x 50	6 x 40	6 x 35	6 x 30	6 x 25
--------------------	---	---	--------	--------	--------	--------	--------

ProFab® Ultra Geotextiles are manufactured under ISO 2001 quality assurance procedures. ProFab® Ultra Geotextiles are made from 100% virgin polyester polymer filaments that are highly durable and resistant to all naturally occurring soil acids and alkalis. Polyester Geotextiles are unaffected by bacteria and fungi. Properties of ProFab® Ultra Geotextiles are typical values in the dominant strength direction and are derived from in house and independent laboratory testing.



# 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

## Get in Touch

### AUSTRALIA

#### Website

[globalsynthetics.com.au](http://globalsynthetics.com.au)

#### Email

[info@globalsynthetics.com.au](mailto:info@globalsynthetics.com.au)

#### New South Wales

(02) 9725 4321

#### North Qld

(04) 5921 1692

#### Victoria/Tasmania

(03) 9791 1772

#### Queensland

(07) 3865 7000

#### South Australia

(08) 8384 8894

#### Western Australia

(08) 9459 4300

### NEW ZEALAND

#### Website

[globalsynthetics.co.nz](http://globalsynthetics.co.nz)

#### Email

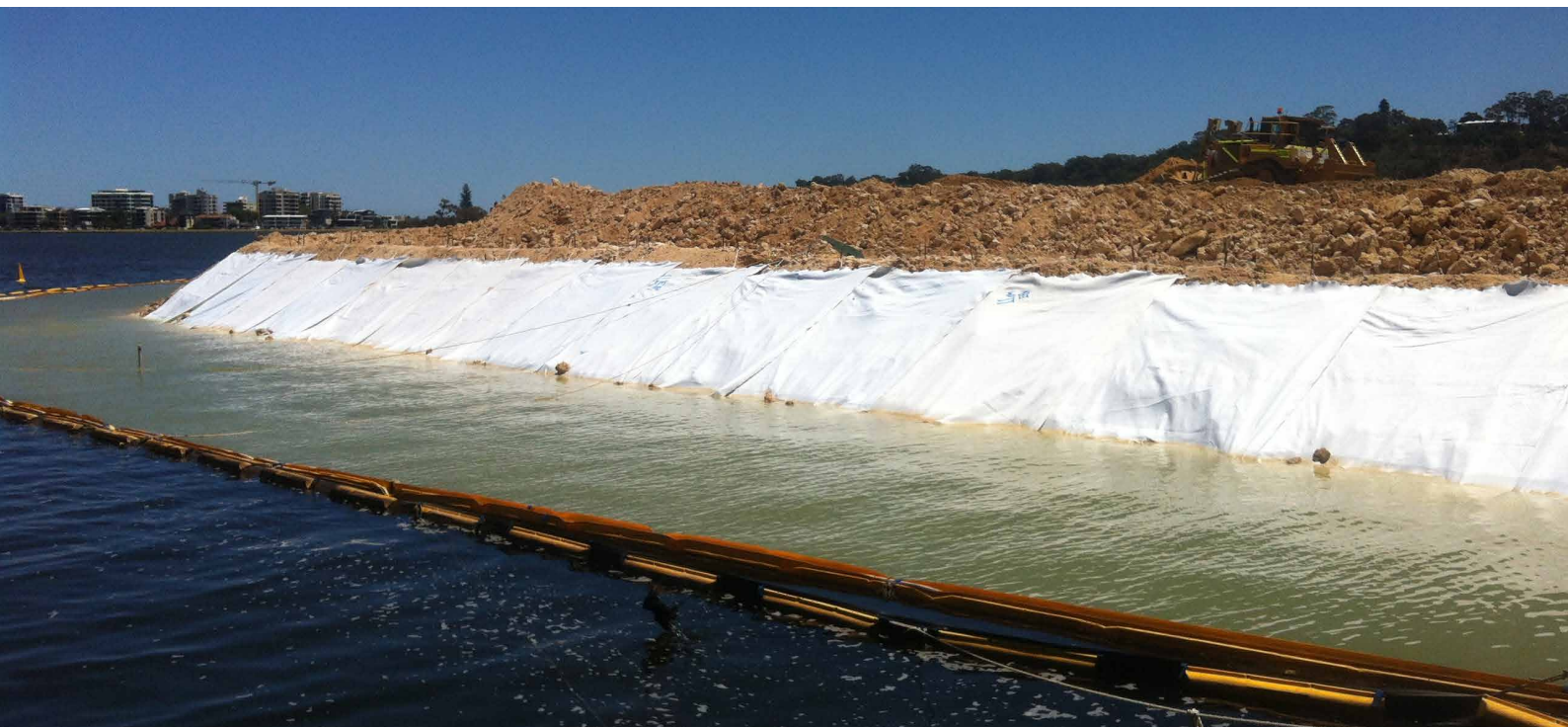
[info@globalsynthetics.co.nz](mailto:info@globalsynthetics.co.nz)

#### Auckland

0800 510 120

#### Christchurch

0800 510 120



All information provided in this publication is correct to the best knowledge of the company and is given out in good faith. The information presented herein is intended only as a general guide to the use of such products and no liability is accepted by Global Synthetics Pty Ltd for any loss or damage however arising, which results either directly or indirectly from the use of such information. Global Synthetics Pty Ltd have a policy of continuous development so information and product specifications may change without notice.



**Global Synthetics**  
LEADERS IN GEOSYNTHETICS