



Enhancing
Sustainable
Development


*Advanced geosynthetic materials
Local experience and expertise
Alpha Pinnacle's localized solutions*

ALPHATex™

NONWOVEN GEOTEXTILES

VALUE | PERFORMANCE | RELIABILITY

SPECIALIST IN GEOSYNTHETIC SOLUTIONS



Quality assured by accredited labs

Available up to 1200gsm

Materials fit for purpose

Cost effective

WIDELY USED

ALPHATex™ NONWOVEN GEOTEXTILES

A selected choice engineers and designers trust. Widely used in all fields of civil engineering.

With a complete range up to 1200gsm, materials selected are fit for purpose. There is suitable grade for every application. We provide support in selection or specification for your project.

Quality is assured for materials well-tested by accredited independent laboratories.



Road engineering,
railway engineering



Slope protection,
retaining walls



Erosion control



Environment protection
(landfill and containment)



Hydraulic Engineering
(river, coastal protection)



Site containment

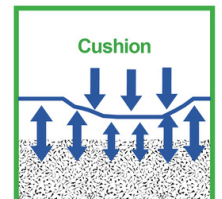
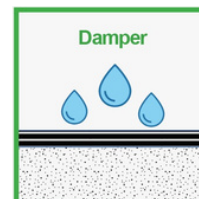
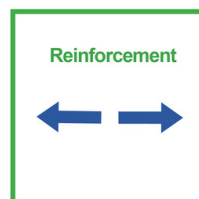
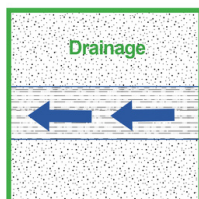
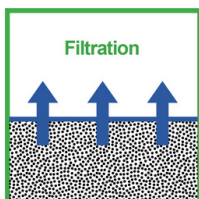
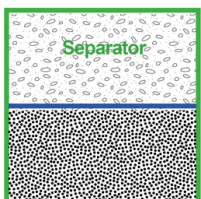
"Extends life span
of structures and
increases safety in
short and long
term"

ALPHATex™ nonwoven in highway
and road engineering projects

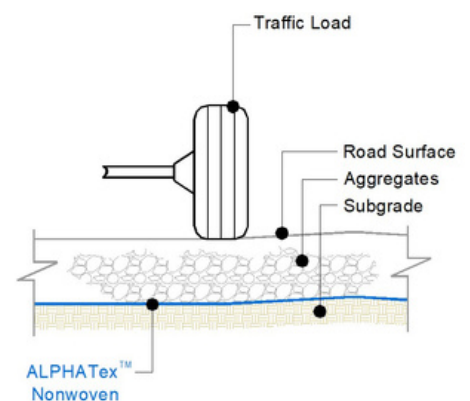
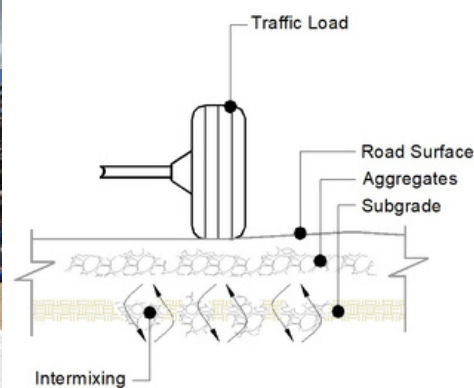
MULTI-FUNCTIONAL

Made from 100% virgin polymer filaments, our range of nonwoven geotextiles has the ability to separate, filter, drain, reinforce and protect. It is durable and has high resistance to installation damage, resistant to all naturally occurring soil acids and alkalis, and biological deterioration.

Alpha Pinnacle Sdn Bhd has partnership with established manufacturers who commits to quality - from highest quality raw materials to the finished products which are rigorously tested to international standards, independently certified and site proven for various applications.



SEPARATION



ALPHATex™ nonwoven geotextiles has excellent mechanical properties catering to the load from cover material and irregular subgrades or stones.

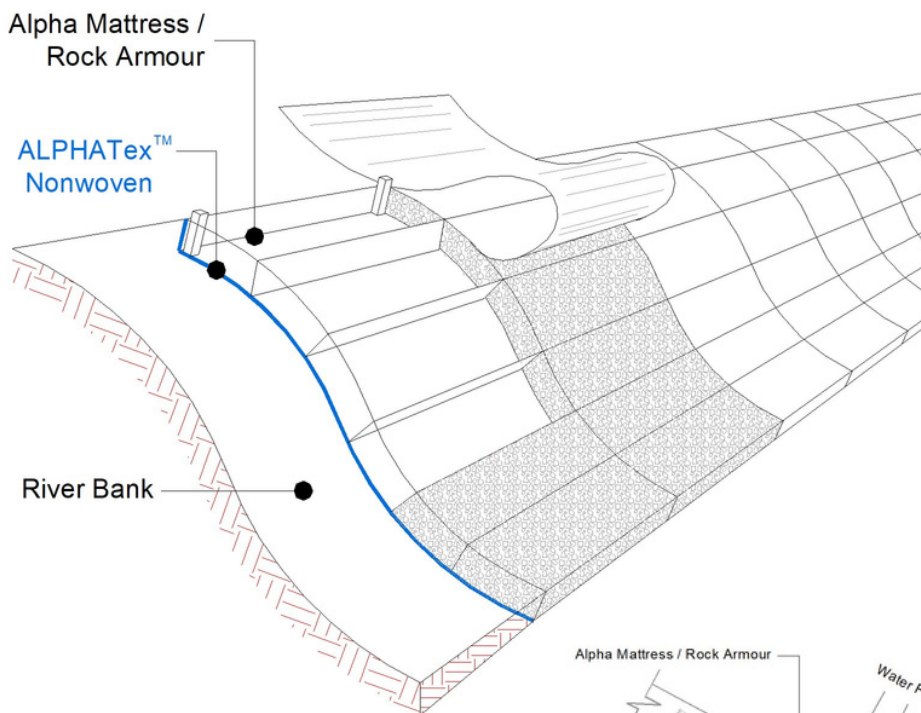
Some of the key benefits from the proper design and usage are :

- Prevents intermixing between dissimilar soil layers and maintain functions of separated materials*
- Avoids sacrificial aggregates occurrence (aggregate intrusion into fine soil) which reduce use of minerals and provide savings.*

FILTRATION



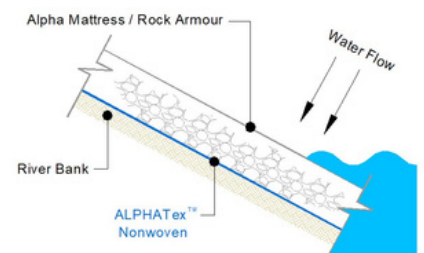
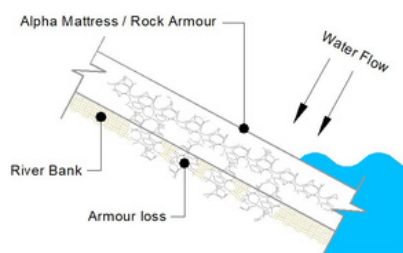
ALPHATex™ NONWOVEN GEOTEXTILES



Good soil-geotextile liquid flow to avoid hydraulic build-up and minimize clogging effect.

Governed by hydraulic properties such as opening size and water permeability.

An effective separator and filter to retain backfill material while allowing liquid pass through and prevents soil loss.

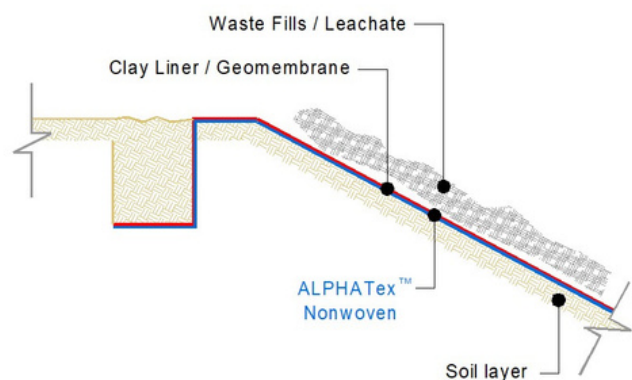
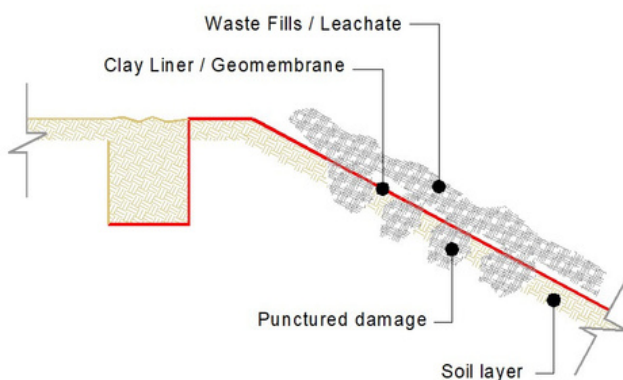


DRAINAGE, PROTECT

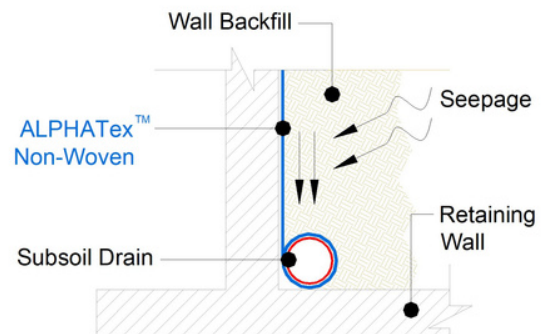
Key characteristics also serve many other functions common to projects

CUSHION AND PROTECT

In containment designs, cushioning geotextiles provide protection to the membrane or clay liner layers. Excellent puncture resistance minimizes impacts from aggregates and sharp objects during construction and also post-completion phase.

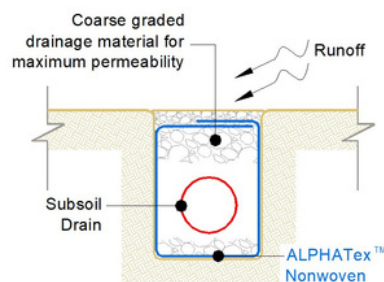
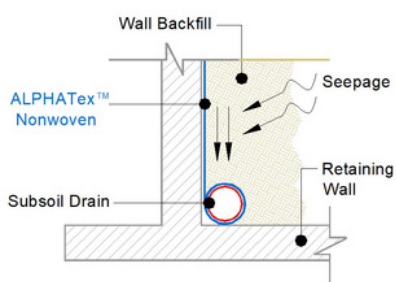


SLOPE DRAINAGE



Transmission of liquid in the plane of geotextile, prevents pore water pressure build-up at the backfill area.

SUBSOIL DRAINAGE



Please contact us to receive support to include this material in your project



TECHNICAL DATA

ALPHATex™ needle-punched nonwoven geotextiles are manufactured under ISO9001 quality assurance and made from 100% virgin polymer filaments

ALPHATex™ NW	Test standard Unit	NW9	NW13	NW15	NW19	NW21	NW24
Tensile strength	ISO 10319 kN/m	9	13	15	19	21	24
Elongation	ISO 10319 %	40	40	40	40	50	50
CBR puncture resistance	ISO 12236 N	1600	2200	2500	3500	3600	4000
Dynamic perforation resistance	ISO 13433 mm	30	25	22	20	20	15
Grab strength	ASTM D4632 N	560	825	900	1285	1300	1500
Grab elongation	ASTM D4632 %	50	50	50	50	50	50
Water permeability Water Flow at 50mm head	ASTM D4491 $\ell / (m^2 s)$	90	75	75	60	60	50
Apparent opening size	ASTM D4751 μm	260	230	210	190	180	180
Nominal mass	ISO 9864 gsm	130	180	200	260	285	325
UV resistance	ASTM D4355 %	70	70	70	70	70	70

Properties are typical values and correspond to average values derived from in-house and accredited lab testing. Tolerance for mechanical properties is +/- 10% and hydraulic properties is +/- 30%.

Information provided is intended as general guide and for selected grades only. Please contact us for more information. In line with a policy of continuous improvements or optimization, the information provided may change without notice.

ALPHATex™ AGS	Test standard Unit	AG13S	AG15S	AG18S	AG20S	AG25S	AG30S
Tensile strength	ISO 10319 kN/m	10	11.5	14	16	20	25
Elongation	ISO 10319 %	50	50	50	50	50	50
CBR puncture resistance	ISO 12236 N	1600	2000	2200	2700	3600	4500
Dynamic perforation resistance	ISO 13433 mm	28	24	21	18	14	10
Water permeability Velocity Index H50	ISO 11058 m/s	1.1×10^{-1}	1.0×10^{-1}	8.0×10^{-2}	7.5×10^{-2}	6.0×10^{-2}	6.5×10^{-2}
Water permeability Flow rate H50	ISO 11058 $\ell / (m^2 s)$	110	100	80	75	60	65
Characteristic opening size	ISO 12956 μm	100	100	90	90	80	85
Nominal mass	ISO 9864 gsm	130	150	180	200	250	300
Detector tested		Yes	Yes	Yes	Yes	Yes	Yes
UV resistance	ASTM D4355 %	70	70	70	70	70	70

Contact us, together we find better solutions

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PENINSULAR MALAYSIA

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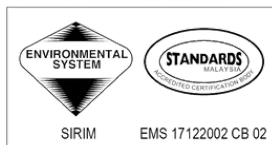
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Alpha Pinnacle Sdn Bhd is an ISO-certified company

A member of IGS



CERTIFIED TO ISO 14001:2015
CERT.NO.:EMS 00876



CERTIFIED TO ISO 9001:2015
CERT.NO.:QMS 03447



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