Appendix E

Specification of the Proposed Geotextile

SG WOVEN GEOTEXTILES

we under^{cover} the world

A TOTAL RANGE OF GEOTEXTILES

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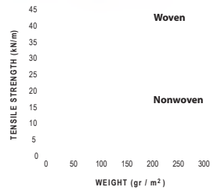
bontec
woven and nonwoven geotextiles



SEPARATION

REINFORCEMENT

Other geotextiles available within the Bontec range include Highflow, High strength Wovens and Thermally Bonded & Needlepunched Nonwovens

Visit us at our website:
www.bonartf.com

SG Woven Geotextiles

PRODUCT PROFILE

"An exciting range of Standard Grade geotextiles that offer the perfect solution to your Separation requirements. With tensile strengths ranging from 10 to 300 kN/m you can be certain that an SG fabric will be available with the performance that you are looking for."

DAILY SEPARATION, SOIL STRENGTHENING
OR GROUND REINFORCEMENT?

Bontec SG woven geotextiles are manufactured from polypropylene tapes & yarns, and exhibit an excellent chemical resistance to commonly encountered acids and alkalis at ambient temperatures. Available in a lightweight range with products from 80 to 200g/m2, and a heavyweight range from 200 to 800g/m2.

Bontec SG facts include:

Tensile strengths up to 300 kN per metre (kN/m) width
CBR Puncture Strengths ranging from 1.800 N to 12.500 N
SG Mechanical Properties that offer maximum strength at minimal cost and ensure the products survivability both against installation damage and in the longer term.

Lightweight woven geotextiles typically offer greater mechanical strengths per unit weight than comparable nonwoven grades. This makes lightweight woven geotextiles the ideal choice for separation

Waterflows normal to the plane that are generally several times more than that required by design

A range of consistent opening sizes suited for use in soils ranging from clay to coarse granular fill.

SG hydraulic properties that are suited to the demands of everyday separators.

Available ex-stock in 4.5m and 5.25m wide rolls or other widths to order

Typical applications for SG woven geotextiles include:

As a general purpose separator for use under site access roads and areas of hardstanding.
As a separation and strengthening layer under new roadways, car parks, industrial units etc.
As an erosion control layer under heavy rock armour in coastal defence projects.
For any separation application where there exists a need to prevent the intermixing of soft foundation soils with good clean granular fill.

SG Woven Geotextiles have been manufactured as a cost effective solution to your soil separation and stabilisation applications. They are manufactured from highly durable polypropylene polymer and have a long life expectancy when used in permanent structures.

For further product information, be it a technical data sheet or to discuss your project with one of our in-house geotextile experts please do not hesitate to contact one of our offices listed below.

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bontec
woven and nonwoven geotextiles

Bontec® SG 110/110

Standard Grade Woven Geotextiles

Technical data sheet

Product description

Polymer	Density	Melting Point	Construction
100% Polypropylene	0,91 kg/dm³	165 °C	Tapes

Properties

Mechanical Properties	Standard	Performance	Tolerance
Tensile strength - MD	EN ISO 10319	110 kN/m	-9,9 kN/m
Tensile strength - XD	EN ISO 10319	110 kN/m	-9,9 kN/m
Elongation at break - MD	EN ISO 10319	10 %	+/-2,3 %
Elongation at break - XD	EN ISO 10319	7 %	+/-1,6 %
Static puncture resistance (CBR)	EN ISO 12236	12,5 kN	-2,5 kN
Dynamic perforation resistance (cone drop)	EN ISO 13433	10 mm	+2,0 mm

Hydraulic Properties	Standard	Performance	Tolerance
Water permeability normal to the plane (VIh50)	EN ISO 11058	25x10-3 m/s	-8x10-3 m/s
Waterflow in the plane @20 kPa	EN ISO 12958	-	-
Characteristic Opening Size (O90)	EN ISO 12956	230 µm	+/-69,0 µm

Physical Properties	Standard	Performance	Tolerance
Thickness under 2 kPa	EN ISO 9863-1	1,53 mm	+/-0,31 mm
Weight	EN ISO 9864	464 g/m²	+/-46,4 g/m²
Length x width		100 x 525 m	
Roll Diameter		-	

Durability	Standard	Performance	
Predicted minimal durability in years in natural soils with 4 < pH < 9 and soil temperatures < 25°C	Annex B	25,0	

Version date : 1/07/2013

Version n° 1

The Quality Management System of Bonar has been approved to the ISO 9001 Quality Management System Standard. Certificates are available on request.

CE

Bonar
partners in performance

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SILT PROTECTOR (오탁방지막)

SILT PROTECTOR의 용도

- 매립 공사시 해수중에 발생하는 토사, 세립토(SILT)의 확산방지
- 해상 공사의 주변 양식장, 청정수역, 해수욕장 피해 방지
- 항로 준설, 해상 정비 지역 주위의 오탁 확산 방지
- 항만, 호안 공사시 인근지역의 오탁 방지

SILT PROTECTOR의 특징 및 효과

- 조립, 설치, 철거가 용이하고 취급이 간편하다.
- 고강도의 다양한 막체를 생산하여 해상 조건에 따른 막체 선정이 자유롭다.
- 파랑에 대한 순응성이 양호하며 FLOAT 파손시 부분 교체, 보수가 용이하다.
- 오탁수의 침강 촉진과 확산 방지가 탁월하다.
- 현장의 해상 및 기상 조건 등에 따라 CANVAS부의 강도와 FLOAT부의 부력에 맞춰 다양한 제품의 공급이 가능하다.

SILT PROTECTOR의 물성 및 상세도

SILT PROTECTOR

구 분	단 위	JYS 10	JYS 15	JYS 20	JYS 25	JYS 30	JYS 32	시험방법
재 질	–	폴리에스터						KS K 0210-1
중 량	g/m²	300	400	600	700	900	1000	KS K ISO 9864
인장 강도	kN/m이상	100	150	200	250	300	320	KS K ISO 10319 광폭스트립법
인장 신도	%	10~30					10~40	KS K ISO 10319 광폭스트립법
인열 강도	N, 이상/ (Kgf 이상)	1000 (100)	1500 (150)	2000 (200)	2500 (250)	3000 (300)	3200 (320)	KS K 0796
투수 계수	cm/sec	α × 10-2~10-4 (α : 1.0~9.9)						KS K ISO 11058
치수변화율	%	±0.2% 이하						KS K ISO 7771

SILT PROTECTOR 상세도