



Protec

Technical Data Sheet

Needle Punched Nonwoven Geotextiles

Version 09 dd.15/06/11

Mechanical Properties						
Test	Units	300	500SP	700	X 1200	
Tensile Strength - MD	EN ISO 10319	kN/m	21	36	40	81
Tensile Strength - XD	EN ISO 10319	kN/m	21	36	60	81
Elongation at break - MD	EN ISO 10319	%	60	80	75	80
Elongation at break - XD	EN ISO 10319	%	65	85	75	80
CBR Puncture Resistance	EN ISO 12236	N	3 600	5 500	8 400	13 500
Puncture Resistance	NFG 38019	N	1 850	2 500	3 000	4 500
Dynamic Cone Drop	EN ISO 13433	mm	8	5	3	0
Pyramid Puncture	EN ISO 14574	N	300	550	850	2000
Protection Efficiency	EN ISO 13719	%	1.58	2.4	3.36	3.84
Hydraulic Properties						
Test	Units	300	500SP	700	X 1200	
Characteristic Opening Size	EN ISO 12956	µm	70	63	63	63
Permeability	EN ISO 11058	m/s	70x10 ⁻³	55x10 ⁻³	40x10 ⁻³	25x10 ⁻³
Waterflow normal to the plane	EN ISO 11058	l/m ² .s	70	55	40	25
Waterflow in the plane	EN ISO 12958	m ² /s	8x10 ⁻⁶	8,5x10 ⁻⁶	9x10 ⁻⁶	8x10 ⁻⁶
Physical Properties						
Test	Units	300	500SP	700	X 1200	
Thickness under 2 kPa	EN ISO 9863-1	mm	3.3	5	7	8
Weight	EN ISO 9864	g/m ²	300	500	700	1200
Roll width		cm	420	525	525	525
Roll length		m	100	60	45	30
Full load volume (+/- 10%)		m ²	13440	10080	7560	5040
Roll diameter (+/- 10%)		cm	58	58	58	58

Notes relating to the use of Bontec geotextile products

1. Bonar Technical Fabrics reserves the right to alter product specifications without prior notice.
2. It is the responsibility of all users to satisfy themselves that the above data is current.
3. The above figures are average values obtained from testing to current EN geotextile test standards. Although not guaranteed, these results do to the best of our knowledge, offer a true and accurate record of the products performance.
4. Polypropylene is the constituent polymer used in the production of the Protec geotextile range.
5. Bonar Technical Fabrics cannot accept responsibility for the performance of these products as the conditions of use are beyond our control.
6. Installation details are available on request



Other grades of geotextile within the Bontec range include:

- Standard Grade, Highflow & Highstrength Woven fabrics and Thermally Bonded Nonwovens