Extra strong polypropylene geotextile fabric
with new needle punch technique

Properties	test method	unit	values
			110
Thickness - 2 kPa	EN ISO 9863-1	mm	0.7
Thickness - 20 kPa	EN ISO 9863-1	mm	0.6
Thickness - 200 kPa	EN ISO 9863-1	mm	0.45
Strength resistance MD	EN ISO 10319	kN/m	8
Strength resistance CMD	EN ISO 10319	kN/m	8
Elongation at max load MD	EN ISO 10319	%	50
Elongation at max load CMD	EN ISO 10319	%	50
Static puncture test	EN ISO 12236	kN	1.2
Dynamic puncture test (cone drop test)	EN 918	mm	37
Velocity index VI	EN ISO 11058	mm/s	76
Permeability coefficient normal to the plane	EN ISO 11058	10^{-3} m/s	1.04
In-plane flow capacity (MD) at 20 kPa	EN ISO 12958	$10^{-6}m^2/s$	0.1
Opening size	EN ISO 12956	µm	89
Weathering resistance	EN ISO 12224		To be covered within 30 days from the day of installation
Oxydation resistance	EN ISO 13438		Forecast minimum durability of 25 years for every application in natural grounds with 4<pH<9 and soil temperature <25°C

Polypropylene geotextile fabrics
Double calendered and heat treated

Non-furring, ideal for drilling and fixing

Properties	test method	unit	values					
			100	120	150	180	200	300
Thickness	EN ISO 9863-1	mm	0.7	0.9	1.1	1.2	1.3	1.8
Strength resistance MD	EN ISO 10319	kN/m	4.5	6	7	8	8	11
Strength resistance CMD	EN ISO 10319	kN/m	4.5	6	7	8	8	11
Elongation at max load MD	EN ISO 10319	%	50	50	50	50	50	60
Elongation at max load CMD	EN ISO 10319	%	50	50	50	50	50	60
Static puncture test	EN ISO 12236	kN	0.8	1	1.2	1.3	1.3	1.8
Dynamic puncture test (cone drop test)	EN 918	mm	>50	45	30	15	15	8
Weathering resistance	EN ISO 12224		To be covered within 15 days from the day of installation					
Oxydation resistance	EN ISO 13438		25 years for every application in natural grounds with 4<pH					
Length (m)			150	125	100	100	100	75
Width (m)			200/250	200/250	200/250	200/250	200/250	600
Surface (m^2)			300	250	200	200	200	100
Diameter (cm)			34	36	37	39	39	40
Roll weight (kg)			30	30	30	36	36	30

Polypropylene geotextile fabrics - top quality

Properties	test method	unit	values													
			100	125	140	150	170	200	230	280	300	340	400	500	800	1000	1200
Thickness	EN ISO 9863-1	mm	0.65	0.75	0.85	0.9	1.1	1.2	1.4	1.7	1.8	1.9	2.5	3.5	4.5	5.5	6.5
Strength resistance MD	EN ISO 10319	kN/m	6	8	10	11	12	14	16	20	22	25	27	34	48	65	75
Strength resistance CMD	EN ISO 10319	kN/m	6	8	10	11	12	14	16	20	22	25	28	35	54	70	80
Elongation at max load MD	EN ISO 10319	%	52	52	50	55	60	60	90	70	70	85	70	70	70	80	80
Elongation at max load CMD	EN ISO 10319	%	55	55	50	55	60	60	90	80	80	90	70	70	70	80	80
Static puncture test	EN ISO 12236	kN	1.1	1.4	1.6	1.7	2	2.4	2.9	3.3	4	4.5	5.2	6	8	10	11
Dynamic puncture test (cone drop test)	EN 918	mm	38	36	32	30	26	20	14	10	8	6	5	3	1	0	0
Velocity index VI	EN ISO 11058	mm/s	80	75	71	69	65	68	63	40	47	45	32	25	18	16	14
Permittivity	EN ISO 11058	S^{-1}	1.6	1.5	1.42	1.38	1.3	1.36	1.26	0.8	0.94	0.9	0.64	0.5	0.36	0.32	0.28
Permeability coefficient normal to the plane	EN ISO 11058	10^{-3} m/s	1.04	1.13	1.21	1.24	1.43	1.63	1.76	1.36	1.69	1.71	1.6	1.75	1.62	1.76	1.82
In-plane flow capacity (MD) at 20kPa	EN ISO 12958	$10^{-6}m^2/s$	0.1	0.1	0.1	0.1	0.1	2.7	4.7	4	1.8	4	1.8	3.5	4.4	4.9	5
Opening size	EN ISO 12956	µm	89	85	80	70	64	60	<55	<50	<49	<48	<44	<32	<28	<25	<23
Weathering resistance	EN ISO 12224		To be covered within 15 days from the day of installation														
Oxydation resistance	EN ISO 13438		Forecast minimum durability of 25 years for every application in natural grounds with 4<pH<9 and soil temperature <25°C														
Length (m)			170	150	130	120	120	100	90	90	80	70	65	50	40	30	25
Width (m)			600	600	600	600	600	600	600	600	600	600	600	600	600	450	450
Surface (m^2)			1020	900	780	720	720	600	540	540	480	420	390	300	240	135	112.5
Diameter (cm)			40	40	40	40	40	40	40	40	40	40	40	40	48	40	40
Roll weight (kg)			102	112.5	109.2	108	122.4	120	124.2	151.2	144	142.8	156	150	192	135	135

Geotextile fabrics - recycled polyester

Properties	test method	unit	values										
			120	150	200	300	400	500	600	700	800	1000	1200
Thickness	EN ISO 9863-1	mm	0.9	0.9	1.2	1.7	2.1	2.4	2.8	3.2	3.9	4.5	5
Strength resistance MD	EN ISO 10319	kN/m	0.6	1.5	1.8	2.8	3.5	5	6	7	8	12	16
Strength resistance CMD	EN ISO 10319	kN/m	0.7	2	2.3	3.5	4.3	5.5	7	8	9	14	20
Elongation at max load MD	EN ISO 10319	%	60	80	80	80	80	80	80	80	80	80	80
Elongation at max load CMD	EN ISO 10319	%	70	80	80	80	85	85	80	80	80	80	80
Static puncture test	EN ISO 12236	kN	0.1	0.1	0.2	0.6	0.7	1.1	1.3	1.6	1.9	2.2	3.8
Dynamic puncture test (cone drop test)	EN 918	mm	>50	>50	45	30	15	10	8	6	4	2	1
Velocity index VI	EN ISO 11058	mm/s	95	120	100	60	35	28	20	18	15	13	10
Opening size	EN ISO 12956	µm	65	120	100	80	60	50	40	38	35	32	25
Weathering resistance	EN ISO 12224		To be covered within 1 day from the day of installation										
Hydrolisis resistance	EN ISO 12447		Forecast minimum durability of 5 years for every application in natural grounds with 4<pH<9 and soil temperature <25°C										
Length (m)			120	120	100	80	65	50	40	50	40	30	25
Width (m)			6	6	6	6	6	6	6	6	6	4.5	4.5
Surface (m^2)			720	720	600	480	390	300	240	300	240	135	112.5
Diameter (cm)			40	40	40	40	40	40	40	48	48	40	40
Roll weight (kg)			108	108	120	144	156	150	144	210	192	135	135