

# Polyfelt P

Polyfelt P geotextiles are mechanically bonded (needle punched) continuous filament nonwovens from 100% UV stabilized polypropylene. They have been developed for optimum protection efficiency for geomembranes.



Properties	Test method	Unit	P20	P30	P40	P50	P60	P70	P80	P100S	P120
Raw material / Type of fibre			100% polypropylene, UV stabilized, continuous filaments								
Strip tensile strength (MD*)	EN ISO 10319	kN/m	16	21	27	36	43	48	55	68	80
Strip tensile strength (CMD*)	EN ISO 10319	kN/m	16	21	27	36	43	48	55	68	80
Elongation at max. load (MD*)	EN ISO 10319	%	80	80	85	85	91	90	95	95	105
Elongation at max. load (CMD*)	EN ISO 10319	%	68	70	70	70	72	70	75	90	105
Strip tensile at 10% elongation	EN ISO 10319	kN/m	3.0	5.0	7.0	8.0	9.0	10.0	11.0	14.0	14.5
CBR puncture resistance	EN ISO 12236	kN	2.40	3.50	4.70	5.90	7.00	7.90	9.20	11.00	11.30
CBR displacement	EN ISO 12236	mm	59	59	59	59	59	59	59	62	63
Cone drop test (hole ø)	EN ISO 13433	mm	20	15	11	9	7.5	7	5.5	3.9	3
Protection efficiency (Deformation at 300 kPa)	EN 13719	%	1.7	1.6	1.5	1.3	1.1	0.8	0.7	0.6	0.6
Pyramidal puncture resistance	EN 14574	N	200	300	450	550	750	850	1100	1500	1900
Opening size (O90)	EN ISO 12956	µm	110	90	85	95	85	85	80	75	70
Permeability normal to the plane (Δh = 50 mm)	EN ISO 11058	mm/s	90	80	55	45	35	30	20	15	10
Water flow capacity in the plane (20 kPa)	EN ISO 12958	l/ms	1.5E-3	2.6E-3	3.9E-3	5.5E-3	7.1E-3	9.0E-3	1.1E-2	1.1E-2	1.1E-2
Water flow capacity in the plane (100 kPa)	EN ISO 12958	l/ms	4.0E-4	6.6E-4	1.1E-3	1.6E-3	2.3E-3	3.1E-3	4.1E-3	4.1E-3	4.1E-3
Weathering resistance (Residual strength)	EN 12224	%	>90	>90	>90	>90	>90	>90	>90	>90	>90
Exposure time	EN 13249 ff	days	30	30	30	30	30	30	30	30	30
Chemical resistance (Residual strength) (Method A)	EN 14030	%	>90	>90	>90	>90	>90	>90	>90	>90	>90
Microbiological resistance (Residual strength)	EN 12225	%	>95	>95	>95	>95	>95	>95	>95	>95	>95
Thickness at 2 kPa load	EN ISO 9863-1	mm	2.00	3.00	3.40	4.50	5.00	5.70	6.30	7.50	8.50
Mass per unit area	EN ISO 9864	g/m <sup>2</sup>	200	300	400	500	600	700	800	1000	1200
<b>Form of Supply</b>											
Width		m	6	6	6	6	6	6	6	5.4	5.2
Length		m	220	120	100	80	65	55	50	40	35

#### Notes

\* MD = Machine Direction, CMD = Cross Machine Direction

The values given are average values obtained in our laboratories and in testing institutes. The right is reserved to make changes without notice at any time.

#### Certification and Accreditation



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