

# GSE Nonwoven NW-S Geotextiles

GSE Nonwoven NW-S Geotextiles are a family of staple fiber needlepunched UV-stabilized polypropylene geotextiles. The geotextiles are manufactured using an advanced manufacturing and quality system to produce the most uniform and consistent nonwoven needlepunched geotextile currently available in the industry. GSE combines a fiber selection and approval system with an in-line quality control and a state-of-the-art laboratory to ensure that every roll shipped meets customer specifications.



**AT THE CORE:**  
A family of geotextiles used for separation, filtration, protection and drainage applications.

## Product Specifications

Property <sup>(1)</sup>	Test Method	Unit	Average Values					
			NW-S 8	NW-S 12	NW-S 16	NW-S 20	NW-S 25	NW-S 30
Tensile Strength (MD/CMD)	EN ISO 10319	kN/m	8 / 8	12 / 12	16 / 16	20 / 20	25 / 25	30 / 30
Tensile Elongation (MD/CMD)	EN ISO 10319	%	45 / 45	45 / 45	50 / 50	55 / 55	65 / 65	65 / 65
Static Puncture Strength	EN ISO 12236	N	1,500	2,000	2,600	3,350	4,300	4,800
Dynamic Perforation Resistance	EN ISO 13433	mm	36	26	22	17	13	10
Opening Size, (O <sub>90</sub> )	EN ISO 12956	µm	100	90	80	70	70	60
Water Permeability V <sub>I,H50</sub>	EN ISO 11058	m/sec x 10 <sup>-3</sup>	130	110	90	70	65	45
Water Flow Rate	EN ISO 11058	l/m <sup>2</sup> /sec	130	110	90	70	65	45
Thickness (2 kPa)	EN 9863-1	mm	0.8	1.1	1.3	1.6	2.0	2.5
Mass per Unit Area	EN 9864	g/m <sup>2</sup>	100	140	180	250	300	380
<b>ENDURANCE</b>								
Weathering Resistance	EN 12224	% retained strength	90	90	90	90	90	90
Oxidation Resistance	EN ISO 13438	% retained strength	90	90	90	90	90	90
<b>TYPICAL ROLL DIMENSIONS</b>								
Roll Width <sup>(1)</sup>	---	m	5.4	5.4	5.4	5.4	5.4	5.4
Roll Length	---	m	100	100	100	100	100	75
Roll Area	---	m <sup>2</sup>	540	540	540	540	540	405

NOTES:

- <sup>(1)</sup> Typical tolerance: ± 0.05 m.

GSE is a leading manufacturer and marketer of geosynthetic lining products and services. We've built a reputation of reliability through our dedication to providing consistency of product, price and protection to our global customers.

Our commitment to innovation, our focus on quality and our industry expertise allow us the flexibility to collaborate with our clients to develop a custom, purpose-fit solution.



**[ DURABILITY RUNS DEEP ]** For more information on this product and other, please visit us at [GSEworld.com](http://GSEworld.com), call 49.40.767420 or contact your local sales office.

