

## APPLICATION DOMAIN

The product has application in the domain of civil and industrial engineering, construction of roads and other trafficked areas, earthworks, foundations and retaining structures, erosion control works (coastal protections, bank revetments), constructions of canals, solid waste disposal, construction of railways, drainage systems, construction of reservoirs and dams, construction of tunnels and underground structures, liquid waste containment projects.

## SHIPPING AND STORAGE REQUIREMENTS

The material shall be transported by clean, covered means of transportation, protected from moisture and dirt. The material shall be stored in closed spaces, protected from UV, away from water, steam and other types of pipes.

## TECHNICAL QUALITY CONDITIONS

Terasin NS geotextiles must accomplish the quality conditions from the table below:

### Physical-mechanical properties

Properties	Unit	Standard	Scheduled values and accepted tolerances													
			F	D	S	R	P	F+S	F+D	R+P	F+S+D	F+R+S	F+S	R+S	F+R	
Mass	gr/m <sup>2</sup>	EN 965:1995	110 <sup>+10%</sup>	120 <sup>+10%</sup>	150 <sup>+10%</sup>	200 <sup>+10%</sup>	250 <sup>+10%</sup>	300 <sup>+10%</sup>	400 <sup>+10%</sup>	500 <sup>+10%</sup>	600 <sup>+10%</sup>	800 <sup>+10%</sup>	1000 <sup>+10%</sup>	1200 <sup>+10%</sup>		
Thickness under the load of 2 kN/m <sup>2</sup>	mm	EN 964-1:1995	2.2 <sup>+0.2</sup>	2.0 <sup>+0.2</sup>	2.1 <sup>+0.2</sup>	2.6 <sup>+0.3</sup>	3.0 <sup>+0.3</sup>	3.8 <sup>+0.4</sup>	4.0 <sup>+0.4</sup>	5.0 <sup>+0.5</sup>	5.5 <sup>+0.5</sup>	6.0 <sup>+0.6</sup>	6.8 <sup>+0.7</sup>	7.6 <sup>+0.8</sup>		
Thickness under the load of 20 kN/m <sup>2</sup>	mm	EN 964-1:1995	1.0 <sup>+0.2</sup>	1.0 <sup>+0.2</sup>	1.2 <sup>+0.2</sup>	1.4 <sup>+0.3</sup>	1.8 <sup>+0.3</sup>	2.2 <sup>+0.4</sup>	2.3 <sup>+0.4</sup>	4.0 <sup>+0.5</sup>	4.5 <sup>+0.5</sup>	5.0 <sup>+0.6</sup>	5.8 <sup>+0.7</sup>	6.6 <sup>+0.8</sup>		
Tensile strength, longitudinal min.	kN/m	SR ISO 10319:1997	1.5 <sup>-0.4</sup>	2.5 <sup>-0.3</sup>	3 <sup>-0.3</sup>	5 <sup>-0.5</sup>	7 <sup>-0.7</sup>	9 <sup>-1</sup>	11 <sup>-1</sup>	13 <sup>-2</sup>	16 <sup>-2</sup>	24 <sup>-3</sup>	31 <sup>-3</sup>	40 <sup>-4</sup>		
Tensile strength, transversal min.	kN/m	SR ISO 10319:1997	2.6 <sup>-0.4</sup>	4 <sup>-0.4</sup>	6 <sup>-0.7</sup>	10 <sup>-1</sup>	13 <sup>-2</sup>	16 <sup>-2</sup>	20 <sup>-2</sup>	26 <sup>-2</sup>	31 <sup>-3</sup>	41 <sup>-4</sup>	55 <sup>-5</sup>	63 <sup>-5</sup>		
Elongation at break, longitudinal	%	SR ISO 10319:1997	140 <sup>+20</sup>	120 <sup>+20</sup>	120 <sup>+20</sup>	120 <sup>+20</sup>	120 <sup>+20</sup>	120 <sup>+20</sup>	120 <sup>+20</sup>	120 <sup>+20</sup>	100 <sup>+20</sup>	100 <sup>+20</sup>	100 <sup>+20</sup>	100 <sup>+20</sup>		
Elongation at break, transversal	%	SR ISO 10319:1997	120 <sup>+20</sup>	90 <sup>+20</sup>	90 <sup>+20</sup>	90 <sup>+20</sup>	90 <sup>+20</sup>	90 <sup>+20</sup>	90 <sup>+20</sup>	90 <sup>+20</sup>	90 <sup>+20</sup>	90 <sup>+20</sup>	90 <sup>+20</sup>	90 <sup>+20</sup>		
CBR puncture resistance	N	SR EN ISO 12236:07	300 <sup>-50</sup>	550 <sup>-55</sup>	600 <sup>-60</sup>	1000 <sup>-100</sup>	1200 <sup>-120</sup>	1500 <sup>-150</sup>	2200 <sup>-220</sup>	2900 <sup>-300</sup>	3500 <sup>-350</sup>	4900 <sup>-300</sup>	6300 <sup>-500</sup>	7400 <sup>-500</sup>		

### Hydric properties

Properties	Unit	Standard	Scheduled values and accepted tolerances													
			F	D	S	R	P	F+S	F+D	R+P	F+S+D	F+R+S	F+S	R+S	F+R	
V-Index 20°C (permeabilitatea)	mm/s	SR EN ISO 11058: 02	135 <sup>+10</sup>	125 <sup>+10</sup>	120 <sup>+10</sup>	115 <sup>+10</sup>	105 <sup>+10</sup>	95 <sup>+10</sup>	75 <sup>+10</sup>	65 <sup>+10</sup>	50 <sup>+10</sup>	35 <sup>+10</sup>	25 <sup>+5</sup>	19 <sup>+10</sup>		
Debitul de curgere	l/m <sup>2</sup> s	SR EN ISO 11058: 02	135 <sup>+10</sup>	125 <sup>+10</sup>	120 <sup>+10</sup>	115 <sup>+10</sup>	105 <sup>+10</sup>	95 <sup>+10</sup>	75 <sup>+10</sup>	65 <sup>+10</sup>	50 <sup>+10</sup>	35 <sup>+10</sup>	25 <sup>+5</sup>	19 <sup>+10</sup>		
Marimea porilor Ø90	microni	EN ISO 12956:1999	300 <sup>+20</sup>	300 <sup>+20</sup>	250 <sup>+20</sup>	200 <sup>+20</sup>	150 <sup>+10</sup>	100 <sup>+10</sup>	80 <sup>+20</sup>	75 <sup>+20</sup>	75 <sup>+20</sup>	70 <sup>+20</sup>	50 <sup>+10</sup>	50 <sup>+10</sup>		
k-Index la 20°C	m x10 <sup>-3</sup> /s	SR EN ISO 11058: 02	7.0 <sup>-0.7</sup>	6.8 <sup>-0.7</sup>	6.5 <sup>-0.7</sup>	7.5 <sup>-0.7</sup>	7.3 <sup>-0.7</sup>	7.0 <sup>-0.7</sup>	6.5 <sup>-0.7</sup>	6.0 <sup>-0.6</sup>	5.5 <sup>-0.6</sup>	4.5 <sup>-0.5</sup>	3.0 <sup>-0.3</sup>	2.5 <sup>-0.3</sup>		
k-Index la 10°C	m x10 <sup>-3</sup> /s	SR EN ISO 11058: 02	5.4 <sup>-0.7</sup>	5.2 <sup>-0.7</sup>	5.0 <sup>-0.7</sup>	5.7 <sup>-0.7</sup>	5.6 <sup>-0.7</sup>	5.4 <sup>-0.7</sup>	5.0 <sup>-0.7</sup>	4.6 <sup>-0.6</sup>	4.2 <sup>-0.6</sup>	3.5 <sup>-0.5</sup>	2.3 <sup>-0.3</sup>	1.9 <sup>-0.3</sup>		

### Functions (Role in the work)

F      D      S      R      P      F+S      F+D      R+P      F+S+D      F+R+S      F+S      R+S      F+R

## SAMPLING, PACKAGING, STORAGE AND DELIVERY PACKAGE

Each lot shall contain a declaration of conformity and other documents, according to the laws in force. Each roll shall be sampled in a visible place with a label containing: the name of the provider, article name, product width (m), roll length (m), operator number, shift, technical control quality visa (QC visa), production date, weight (kg). **Given the way in which it was obtained and in which it is used, this article does not affect life protection, work protection, and security. Therefore, a certificate issued by a neuter institution authorized in the domain is not necessary.**

## ENVIRONMENTAL AND INSTALLING REQUIREMENTS

To be covered within 24 hours from installation. The supposed durability is of minimum 20 years, for other applications except reinforcement, in natural soils with 4<pH<9 and a temperature of <25°C.

## PRODUCT RECEIPT

The term of acceptance and of formulating eventual complaints is within 5 days after receipt of the wares.

We are not liable for eventual damages caused by the incorrect putting into work of the geotextile or if the beneficiary uses a geotextile inadequate for the purpose of the work. We reserve the right to modify the technical data without prior notice.

Legend: F - Filtration / D - Drainage / S - Separation / R - Reinforcement / P - Protection