

# TECHNICAL DATASHEET

## TNW1100 NON WOVEN GEOTEXTILE

### PRODUCT DESCRIPTION

A UV stabilized, needle punched, nonwoven geotextile produced from 100% polypropylene staple fibers.

### USES & FUNCTIONS

Used in many civil engineering and building applications. Designed to offer filtration and separation functions.

### Typical applications for TNW non woven geotextiles include:

- As a general purpose separator for use under site access roads and areas of hardstanding.
- As a separation and strengthening layer under new roadways, car parks, industrial units etc.
- As a filter surround in the construction of a French drain or granular drainage blanket.
- For separation: to prevent the intermixing of dissimilar soil layers.
- For filtration: to allow the passage of fluids whilst preventing the uncontrolled passage of soil.



TNW1100 meets the requirements of BS8661:2019 for mechanical characteristics of high-extension geotextiles TYPE 1 and the hydraulic requirements for use in Separation with Filtration.

PROPERTY		STANDARD	UNITS	VALUE	TNW1100
<b>MECHANICAL</b>					
UNIT TENSILE STRENGTH (MD/CD)		EN 10319	kN/m	AVERAGE	8/8
TENSILE ELONGATION (MD/CD)		EN 10319	%	AVERAGE	45/45
RESISTANCE TO STATIC PUNCTURE		EN ISO 12236	N	AVERAGE	1500
DYNAMIC PERFORATION RESISTANCE		EN ISO 13433	mm	AVERAGE	36
<b>HYDRAULIC</b>					
CHARACTERISTICS OPENING SIZE (0 <sub>90</sub> )		EN ISO 12956	µm	AVERAGE	100
WATER PERMEABILITY V <sub>H50</sub>		EN ISO 11058	mm/sec	AVERAGE	130
WATER FLOW RATE		EN ISO 11058	l/(m <sup>2</sup> -sec)	AVERAGE	130
WATER FLOW CAPACITY IN THE PLANE (MD/CD)	HG 1.0 AT 20kPa	EN ISO 12958	10 <sup>-4</sup> l/(m-sec)	AVERAGE	37/25
	HG 1.0 AT 100kPa				2.2/3.8
	HG 1.0 AT 200kPa				1.7/1.3
<b>ENDURANCE</b>					
WEATHERING RESISTANCE		EN 12224	%RETAIN STRENGTH	AVERAGE	90
RESISTANCE TO LIQUIDS - ACID		EN 14030	%RETAIN STRENGTH	AVERAGE	90
RESISTANCE TO LIQUIDS - ALKALINE		EN 14030	%RETAIN STRENGTH	AVERAGE	90
OXIDATION RESISTANCE		EN 13438	%RETAIN STRENGTH	AVERAGE	90
RESISTANCE TO SOIL BURIAL		EN 12225	%RETAIN STRENGTH	AVERAGE	90
<b>PHYSICAL</b>					
MASS/UNIT AREA		EN 9864	gr/m <sup>2</sup>	AVERAGE	100
THICKNESS (2kPa)		EN 9863-1	mm	AVERAGE	0.8
<b>STANDARD PACKING</b>					
ROLL WIDTH		MEASURED	m	TYPICAL	4.5
ROLL LENGTH		MEASURED	m	TYPICAL	100

1. TCS Geotechnics is a trading name of Technical Civils Solutions Ltd
2. TCS Geotechnics Ltd reserves the right to alter product specifications without prior notice.
3. It is the responsibility of all users to satisfy themselves that the above data is current.
4. The above figures are average values obtained from testing to current EN ISO standards
5. TCS Ltd 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.
7. MD...Machine direction    CD...Cross direction