



## Bontec NW9

Non-Woven Geotextile

201909

### DESCRIPTION

Bontec NW9 is a thermally bonded non-woven geotextile made using modern technology. The main production polymer is 100% polypropylene (PP). It is used to construct retaining structures, linear constructions, waste deposits, drainage systems etc. The hydraulic properties of it stimulate the build up of a natural soil filter in the adjoining soil to ensure long term filtration stability. It functions as separation or filtration.

### USES

- Site access roads
- Hard standings
- New roadways
- Car parks
- Industrial units
- Railways
- French drains
- Granular drainage blankets



### ADVANTAGES

- Combines filtration properties and high-water permeability
- High resistance to puncture and abrasion
- Top level protection at high strain
- Designed to offer optimum performance per unit weight
- Thermal and mechanical bonding process ensures superior performance at lower weight
- Enables water flow normal to the plane which is usually several times greater than that required by the design
- A range of consistent aperture sizes to accommodate different soils
- Excellent mechanical robustness and hydraulic properties
- Significant reduction of carbon footprint and costs compared to traditional methods

**PHYSICAL & MECHANICAL PROPERTIES**

<u>Property</u>	<u>Test Method</u>	<u>Typical Results</u>
<b>Weight</b>	EN ISO 9864	110 g/m <sup>2</sup> 58 kg/roll
<b>Tensile Strength</b> Longitudinal Transverse	EN ISO 10319	9 kN/m 9 kN/m
<b>Elongation</b> Longitudinal Transverse	EN ISO 10319	45% 50%
<b>Static Puncture (CBR)</b>	EN ISO 12236	1.5 kN
<b>Dynamic Perforation (Cone drop test)</b>	EN ISO 13433	30 mm
<b>Water Permeability Normal to The Plane</b>	EN ISO 11058	108 l/m <sup>2</sup> /s
<b>Opening Size</b>	EN ISO 12956	0.115 mm
<b>Waterflow In The Plane –20 kPa</b>	EN ISO 12958	2 x 10 <sup>-7</sup> m <sup>2</sup> /s
<b>Thickness at 2 kPa</b>	EN ISO 9863	1.1 mm
<b>Natural UV light</b>	ASTM 4533	100%
<b>Chemical Resistance</b>	EN 14030	100%
<b>Oxidation Resistance</b>	EN ISO 13438	> 90%
<b>Microbiological Resistance</b>	EN 12225	100%
<b>Hydrolases</b>	EN 12447	100%
<b>Polymer</b>		100% Polypropylene
<b>Density</b>		0.91 kg/m <sup>3</sup>
<b>Melting Point</b>		165 °C
<b>Fiber Bonding</b>		Mechanical/ Thermal



## APPLICATION INSTRUCTIONS

**Subgrade Preparation:** It is possible to lay the geotextile directly on undisturbed vegetation e.g. grasses and reeds should levels so permit. Any plant vegetation such as bushes or shrubs, as well as large rocks or other similar obstacles must first be removed. All voids, wheel ruts or other deep depressions must be either filled or leveled to provide a smooth surface.

**Product Installation:** The geotextile should be rolled out and allowed to follow the contours of the land. It should be kept as taut as possible in an effort to minimize folds but not stretched so that it spans over any hollows. Small deposits of fill material may be required across the geotextile surface to hold it in place until fill placement commences. NO vehicle should drive directly on the geotextile surface at any time.

**Product Continuity:** The simplest and quickest method of ensuring product continuity is to overlap adjacent layers. Rolls placed side by side should have a minimum overlap of 300mm whilst length on length should have a minimum overlap of 600mm. Over soft or uneven soils these overlaps may require to be increased. Please contact our office for further advice. Should special circumstances identify a need for a mechanical joint then further details may be obtained from our office.

**Cutting to Length:** Product may be cut to length using either a sharp blade or

scissors.

**Cutting to Width:** Should the geotextile width have to be reduced then the product may be cut whilst still in a roll form Non-woven product may be cut with a hand or power saw whilst woven products may be cut using a circular stone cutting saw. This latter method may melt the roll end a little, making the product slightly more difficult to unwind.

**Placement of Cover Fill:** Fill material should be end tipped at either the edge of the geotextile or on top of already placed fill before being spread to the required depth using a tracked machine. A minimum fill layer thickness over the geotextile of 150mm is recommended prior to trafficking or compaction.

## PACKAGING

Thickness	1.1 mm
Size	2m x 100m roll

## HEALTH & SAFETY

There are no health hazards associated with Bontec NW 9 in normal use.

## STORAGE

It should be stored in the dry and not left exposed to the elements for extended periods, especially in hot climates.