

Non Woven Geotextiles

Non-Woven Geotextile

Non-woven geotextiles are needle-punched continuous filament engineering fabrics capable of providing planar water flow in addition to their soil stabilization and separation functions. Typical applications include protective liner under-layment and overlayment, hydraulic conductivity in composite liner systems, access roads, aggregate drains, asphalt pavement overlays, and erosion/weed control.



Common Applications

- Liner Protection
- Soil Stabilization & Separation
- Erosion Control
- Weed Control
- Liquid Transmission
- Gas Transmission

Material Advantages

- Cost effective liner protection allows thinner geomembranes to be incorporated in projects
- Easily installed without the need of specialized machinery or technicians
- Available in a variety of fabric weights from 1.9 oz./Sq. Yd to 60 oz./ Sq. Yd.



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NON WOVEN GEOTEXTILE

| PROPERTY | UNIT | TEST METHOD | Non Woven | Non Woven | Non Woven |
|---------------------|---|-------------|-------------|-------------|-------------|
| | | | 8 oz | 12 oz | 16 oz |
| Weight (Typical) | oz/yd ² (g/m ²) | ASTM D5261 | 8.0 (271) | 12.0 (407) | 16.0 (542) |
| Thickness* | mils (mm) | ASTM D5199 | 100 (2.5) | 120 (3.05) | 175 (4.45) |
| Grab Tensile | lbs (kN) | ASTM D4632 | 225 (1.0) | 330 (1.47) | 425 (1.89) |
| Grab Elongation | % | ASTM D4632 | 50 | 50 | 50 |
| Trapezoid Tear | lbs (kN) | ASTM D4533 | 90 (0.40) | 125 (0.556) | 150 (0.667) |
| Puncture Resistance | lbs (kN) | ASTM D4833 | 130 (0.578) | 190 (0.844) | 240 (1.07) |
| Mullen Burst | psi (kPa) | ASTM D3786 | 425 (2928) | 625 (4306) | 800 (5512) |
| Permittivity* | sec ⁻¹ | ASTM D4491 | 1.26 | 0.9 | 0.57 |
| Permeability* | cm/sec | ASTM D4491 | 0.3 | 0.3 | 0.25 |
| Water Flow* | gpm/ft ² (l/min/m ²) | ASTM D4491 | 100 (4074) | 70 (2544) | 45 (1833) |
| A.O.S.* | U.S. Sieve (mm) | ASTM D4751 | 80 (0.180) | 100 (0.150) | 100 (0.150) |
| U.V. Resistance | %/hrs | ASTM D4355 | 70/500 | 70/500 | 70/500 |

Headwater Lining's nonwoven geotextile is needle-punched and made of 100% polypropylene staple fibers, which are formed into a random network for dimensional stability. All geotextile products resist ultraviolet deterioration, rotting, biological degradation, naturally encountered basics and acids. Polypropylene is stable within a pH range of 2 to 13.



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