



Atlantic Industries Limited

# Technical Data Sheet



**AIL100** geotextile is composed of high-tenacity polypropylene yarns, which are woven into a network such that the yarns retain their relative position. **AIL100** geotextile is inert to biological degradation and resistant to naturally encountered chemicals, alkalis, and acids.

| MECHANICAL PROPERTIES                        | TEST METHOD | UNIT  | MINIMUM AVERAGE ROLL VALUE |             |
|--|-------------|---|----------------------------|-------------|
|  |             |   | MD                         | CD          |
| Tensile Strength (at ultimate)               | ASTM D4595  | lbs/ft (kN/m)                                   | 3600 (52.5)                | 3240 (47.3) |
| Tensile Strength (at 5% strain)              | ASTM D4595  | lbs/ft (kN/m)                                   | 1500 (21.9)                | 1560 (22.8) |
|  |             |   | MINIMUM ROLL VALUE         |             |
| Flow Rate                                    | ASTM D4491  | gal/min/ft <sup>2</sup> (l/min/m <sup>2</sup> ) | 40 (1630)                  |             |
| Permittivity                                 | ASTM D4491  | sec <sup>-1</sup>                               | 0.9                        |             |
|  |             |   | MAXIMUM OPENING SIZE       |             |
| Apparent Opening Size (AOS)                  | ASTM D4751  | US Sieve (mm)                                   | 40 (0.425)                 |             |
|  |             |   | TYPICAL TEST VALUE         |             |
| Pore Size $O_{95}^1$                         | ASTM D6767  | microns   | 292                        |             |
| Pore Size $O_{50}^1$                         | ASTM D6767  | microns   | 158                        |             |
|  |             |   | MINIMUM TEST VALUE         |             |
| Coefficient of Interation (C) <sup>1,2</sup> | ASTM D6706  | -   | 0.90                       |             |
| Factory Sewn Seam                            | ASTM D4884  | lbs/ft (kN/m)                                   | 2400 (35.0)                |             |
| UV Resistance (at 500 hours)                 | ASTM D4355  | % strength retained                             | 80                         |             |

<sup>1</sup> Based on Third Party Testing

<sup>2</sup> Interaction Coefficient value is for sand or gravel based

| PHYSICAL PROPERTIES              | UNIT                              | ROLL SIZE              |
|----------------------------------|-----------------------------------|------------------------|
| Roll Dimensions (width x length) | ft (m)                            | 15 x 300 (4.57 x 91.4) |
| Roll Area                        | yd <sup>2</sup> (m <sup>2</sup> ) | 500 (418)              |

**Disclaimer:** Atlantic Industries Limited assumes no liability for the accuracy or completeness of this information or for the ultimate use by the purchaser. Atlantic Industries disclaims any and all express, implied, or statutory standards, warranties or guarantees, including without limitation any implied warranty as to merchantability or fitness for a particular purpose or arising from a course of dealing or usage of trade as to any equipment, materials, or information furnished herewith. This document should not be construed as engineering advice.