



Product Data Sheet

■ Landlok® TRM-450

LANDLOK® 450 turf reinforcement mat (TRM) features X3™ technology that consists of a dense web of crimped, interlocking, multi-lobed polypropylene fibers positioned between two biaxially oriented nets and mechanically bound together by parallel stitching with polypropylene thread. The TRM is designed to accelerate seedling emergence, exhibit high resiliency, and possess strength and elongation properties to limit stretching in a saturated condition. Every component of LANDLOK 450 is stabilized against chemical and ultraviolet degradation which are normally found in a natural soil environment. Furthermore, the TRM contains no biodegradable components.

| PROPERTY | TEST METHOD | DATA | |
|---|-----------------------|--|---|
| | | METRIC | ENGLISH |
| <input type="checkbox"/> Physical | | | |
| Mass Per Unit Area | ASTM D 6566 | 340 g/m ² | 10.0 oz/yd ² |
| Thickness | ASTM D 6525 | 10.1 mm | 0.40 in |
| Light Penetration (% passing) | ASTM D 6567 | 20% | |
| <input type="checkbox"/> Performance / Design Values | | | |
| Shear Stress - Vegetated | Large Scale | 479 Pa | 10 lb/ft ² |
| Velocity – Vegetated | Large Scale | 5.5 m/sec | 18 ft/sec |
| Mannings "n" – Unvegetated | Calculated | .025 | .025 |
| Seedling Emergence | ECTC Draft Method #4 | 409% | 409% |
| <input type="checkbox"/> Endurance | | | |
| UV Resistance | ASTM D 4355 | 80% @ 1000 hrs | |
| <input type="checkbox"/> Mechanical | | | |
| Tensile Strength | ASTM D 6818 | 5.8 x 4.3 kN/m | 400 x 300 lb/ft |
| Tensile Elongation | | 50% (max) | |
| Flexibility | ASTM D 6575 | 30,000 mg-cm (avg) | 0.026 in-lb (avg) |
| Resiliency | ASTM D 6524 | 90% | 90% |
| <input type="checkbox"/> Dimensional | | | |
| Standard Roll Size / Packaging (Special sizes, packaging and fabrication are available.) | Measured (Typical) | 2.0 m x 42.2 m 83.6 m ² 28.6 kg 58.4 cm diameter | 6.5 ft x 138.5 ft 100 yd ² 63 lbs 23 in. diameter |

- Maximum permissible velocity and shear stress has been obtained through vegetated testing programs featuring specific soil types, vegetation classes, flow conditions, and failure criteria. These conditions may not be relevant to every project nor are they replicated by other manufacturers.
- Mannings "n" is calculated as typical values from large-scale flexible channel lining test programs with a flow depth of 6 to 12 inches.
- Unless otherwise noted, all properties reported are Minimum Average Roll Values (MARV), and are calculated as the typical minus two standard deviations. Statistically, it yields a 97.7% degree of confidence that any sample taken during quality assurance testing will exceed the value reported.
- The properties reported above are effective 08/2006 and are subject to change without notice.

Seller makes no warranty, expressed or implied, concerning the product furnished hereunder other than at the time of delivery it shall be of the quality and specification stated herein. Any implied warranty of fitness for a particular purpose is expressly excluded, and, to the extent that it is contrary to the foregoing sentence, any implied warranty of merchantability is expressly excluded. Any recommendations made by seller concerning the uses or applications of said product are believed reliable and seller makes no warranty of results to be obtained. If the product does not meet Carthage Mills current published specifications, and the customer gives notice to Carthage Mills before installing the product, then Carthage Mills will replace the product without charge or refund the purchase price.