

# Landlok® 450

**Landlok 450** turf reinforcement mat (TRM) features **X3™ technology** that consists of a dense web of crimped, interlocking polypropylene fibres 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 resilience, and possess strength and elongation properties to limit stretching in a saturated condition. Every component of **Landlok 450** is stabilised against chemical and ultraviolet degradation which are normally found in a natural soil environment. Furthermore, the TRM contains no biodegradable components.

**Landlok 450** conforms to the property values listed below<sup>1</sup> and is manufactured at a facility having achieved ISO 9001:2000 certification. Internal Manufacturing Quality Control (MQC) tests are performed that have been accredited by the Geosynthetic Accreditation Institute - Laboratory Accreditation Program (GAI-LAP).

		MARV <sup>2</sup>
PROPERTY	TEST METHOD	METRIC
PHYSICAL		
Mass/Unit Area	ASTM D-6566	340 g/m <sup>2</sup>
Thickness	ASTM D-6525	10.1 mm
Light Penetration (% Passing)	ASTM D-6567	20%
Colour	Visual	Green
MECHANICAL		
Tensile Strength (Grab)	ASTM D-6818	5.8 x 4.3 kN/m
Elongation	ASTM D-6818	50% (max)
Resiliency	ASTM D-6524	90%
Flexibility	ASTM D-6575	30,000 mg-cm (avg)
ENDURANCE		
UV Resistance @ 1000 hours	AMST D-4355	80%
PERFORMANCE		
Velocity <sup>3</sup> (vegetated)	Large Scale	5.5 m/sec
Shear Stress <sup>3</sup> (vegetated)	Large Scale	479 Pa
Manning's "n" <sup>4</sup> (unvegetated)	Calculated	0.025
Seedling Emergence <sup>4</sup>	ECTC Draft Method #4	409%
ROLL SIZES		2.0 m x 42.2 m

## NOTES

- The property values listed are effective 08/2006 and are subject to change without notice.
- MARV indicated the minimum average roll value calculated as the typical minus two standards deviations. Statistically, it yields a 97.9% degree of confidence that any sample taken during quality assurance testing will exceed the value reported.
- 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. Please contact Geosynthetics for further information.
- Calculated as typical values from large-scale flexible channel lining test programs with a flow depth of 150 - 300mm.

This information corresponds to our current knowledge on the subject. It is offered solely to provide possible suggestions for your own experimentation. It is not intended, however, to substitute for any testing you may need to conduct to determine for yourself the suitability of our products for your particular purposes. This information may be subject to revision as new knowledge becomes available. Since we cannot anticipate all variations in actual end use conditions, Geosynthetics Limited makes no warranties and assumes no liabilities in connection with this information. Nothing in this publication is to be considered as a licence to operate under or a recommendation to infringe any patent right.

