Landlok®

Turf Reinforcement Mat (TRM)

KEYMAY

LANDLOK® 1051 TURF REINFORCEMENT MAT (TRM)

LANDLOK® 1051 turf reinforcement mat (TRM) features X3® technology that consists of a dense web of crimped, interlocking, multi-lobed polypropylene fibers positioned between a biaxially oriented net and a non-woven geotextile, mechanically bound together by parallel stitching with polypropylene thread. The non-woven portion of this product has a mass per unit area (ASTM D-5261) of 3 oz/yd^2 and a grab tensile strength (ASTM D-4632) of 80 lbs. 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® 1051 is stabilized against chemical and ultraviolet degradation which are normally found in a natural soil environment.

LANDLOK® 1051			
PROPERTY	**TEST METHOD**	**ENGLISH**	**METRIC**
ORIGIN OF MATERIALS			
% U.S. Manufactured		100%	
PHYSICAL			
Mass/Unit Area [2]	ASTM D-6566	14.0 oz/yd^2	475 g/m^2
Thickness[2]	ASTM D-6525	0.40 in	10.2 mm
Light Penetration (% Passing) [3]	ASTM D-6567	5%	5%
Colour	Visual	Tan	
MECHANICAL			
Tensile Strength [2]	ASTM D-6818	300 x 225 lbs/ft	4.4 x 3.3 kN/m
Elongation [2]	ASTM D-6818	85%	85%
Resiliency [2]	ASTM D-6524	80%	80%
Flexibility [2]	ASTM D-6575	0.022 in-lb	25,385 mg-cm
ENDURANCE			
UV Resistance % Retained at 1,000 hrs [2]	ASTM D-4355	80%	80%
PERFORMANCE			
Velocity (Vegetated) [2, 3]	Large Scale	18 ft/sec	5.5 m/sec
Shear Stress (Vegetated) [2, 3]	Large Scale	10 lb/ft^2	479 Pa
Manning's n (Vegetated) [2, 4]	Calculated	0.026	0.026
Seedling Emergence [2]	ASTM D-7322	220%	220%
ROLL SIZES		6.5 ft x 138.5 ft	2.0 m x 42.2 m

NOTES

1. The property values listed above are effective 02/08/2017 and are subject to change without notice.
2. Typical value.
3. Maximum permissible velocity and shear stress has been obtained through vegetated testing programs featuring specific soil types, vegetations classes, flow conditions, and failure criteria. These conditions may not be relevant to every project nor are they replicated by other manufacturers. Please contact KEYMAY for further information.
4. Calculated as typical values from large-scale flexible channel lining test programs with a flow depth of 6 to 12 inches.

LANDLOK® 435 TURF REINFORCEMENT MAT (TRM)

LANDLOK® 435 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® 435 is stabilized against chemical and ultraviolet degradation which are normally found in a natural soil environment. Furthermore, the TRM contains no biodegradable components.

LANDLOK® 435			
PROPERTY	**TEST METHOD**	**ENGLISH**	**METRIC**
ORIGIN OF MATERIALS			
% U.S. Manufactured		100%	
PHYSICAL			
Mass/Unit Area [2]	ASTM D-6566	8.0 oz/yd^2	271 g/m^2
Thickness[2]	ASTM D-6525	0.35 in	8.9 mm
Light Penetration (% Passing) [3]	ASTM D-6567	40%	40%
Colour	Visual	Green	
MECHANICAL			
Tensile Strength [2]	ASTM D-6818	225 x 175 lbs/ft	3.3 x 2.6 kN/m
Elongation [2]	ASTM D-6818	50%	50%
Resiliency [2]	ASTM D-6524	80%	80%
Flexibility [2]	ASTM D-6575	0.015 in-lb	17,308 mg-cm
ENDURANCE			
UV Resistance % Retained at 1,000 hrs [2]	ASTM D-4355	80%	80%
PERFORMANCE			
Velocity (Vegetated) [2, 3]	Large Scale	12 ft/sec	3.7 m/sec
Shear Stress (Vegetated) [2, 3]	Large Scale	8 lb/ft^2	383 Pa
Manning's n (Vegetated) [2, 4]	Calculated	0.025	0.025
Seedling Emergence [2]	ASTM D-7322	273%	273%
ROLL SIZES		6.5 ft x 138.5 ft	2.0 m x 42.2 m

NOTES

1. The property values listed above are effective 02/08/2017 and are subject to change without notice.
2. Typical value.
3. Maximum permissible velocity and shear stress has been obtained through vegetated testing programs featuring specific soil types, vegetations classes, flow conditions, and failure criteria. These conditions may not be relevant to every project nor are they replicated by other manufacturers. Please contact KEYMAY for further information.
4. Calculated as typical values from large-scale flexible channel lining test programs with a flow depth of 6 to 12 inches.

LANDLOK® 450 TURF REINFORCEMENT MAT (TRM)

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.

LANDLOK® 450			
PROPERTY	**TEST METHOD**	**ENGLISH**	**METRIC**
ORIGIN OF MATERIALS			
% U.S. Manufactured		100%	
PHYSICAL			
Mass/Unit Area [2]	ASTM D-6566	10.0 oz/yd^2	339 g/m^2
Thickness[2]	ASTM D-6525	0.40 in	10.2 mm
Light Penetration (% Passing) [3]	ASTM D-6567	20%	20%
Colour	Visual	Green or Tan	
MECHANICAL			
Tensile Strength [2]	ASTM D-6818	400 x 300 lbs/ft	5.8 x 4.4 kN/m
Elongation [2]	ASTM D-6818	50%	50%
Resiliency [2]	ASTM D-6524	90%	90%
Flexibility [2]	ASTM D-6575	0.026 in-lb	30,000 mg-cm
ENDURANCE			
UV Resistance % Retained at 1,000 hrs [2]	ASTM D-4355	80%	80%
PERFORMANCE			
Velocity (Vegetated) [2, 3]	Large Scale	18 ft/sec	5.5 m/sec
Shear Stress (Vegetated) [2, 3]	Large Scale	10 lb/ft^2	479 Pa
Manning's n (Vegetated) [2, 4]	Calculated	0.025	0.025
Seedling Emergence [2]	ASTM D-7322	409%	409%
ROLL SIZES		6.5 ft x 138.5 ft	2.0 m x 42.2 m

NOTES

1. The property values listed above are effective 02/08/2017 and are subject to change without notice.
2. Typical value.
3. Maximum permissible velocity and shear stress has been obtained through vegetated testing programs featuring specific soil types, vegetations classes, flow conditions, and failure criteria. These conditions may not be relevant to every project nor are they replicated by other manufacturers. Please contact KEYMAY for further information.
4. Calculated as typical values from large-scale flexible channel lining test programs with a flow depth of 6 to 12 inches.