

ETRS-1-BN - BIONET STRAW

Rolled Erosion Control Blanket

A 100% Biodegradable blanket featuring 100% straw fill with a functional longevity of 12 months but will differ with soil and climate conditions. This product meets all FHWA FP-03 Type 2.C requirements.

Part Numbers	ETRS-2-BN-100	ETRS-2-BN-200
Blanket Size	8 ft x 112.5 ft	16 ft x 112.5 ft
Rolls per Pallet	25	25
Rolls per Truck Load	600	300
Netting	Biaxially Oriented Net - Natural/Biodegradable/Jute	
Opening Size	0.5 in x 0.5 in	
Stitching Thread	Natural/Biodegradable	
Stitching Frequency	2 in	
Fill	100% Straw	
Packaging	Each Roll is Individually Stretched Wrapped with a Label	

INDEX TESTING	TEST METHOD	UNIT	ENGLISH
Mass per Unit Area	ASTM D 6475	oz / sq yd	9.00
Thickness	ASTM D 6525	mils	292
Tensile Strength	ASTM D 6818	lb/in	21.0 / 13.3
Ground Cover / Light Penetration	ASTM D 6567	%	93.2 / 6.8
Water Absorption	ASTM D 1117	% wt Change	418
BENCH-SCALE TESTING	TEST METHOD	Parameter	ENGLISH
Determination of Unvegetated RECP Ability to Protect Soil from Rain Splash and Associated Runoff Under Bench-Scale Conditions	ASTM D 7101	50 mm (2 in.) / hr for 30 min.	Soil Loss Ratio = 15.14
		100 mm (4 in.) / hr for 30 min.	Soil Loss Ratio = 14.43
		150 mm (6 in.) / hr for 30 min.	Soil Loss Ratio = 13.76
Determination of Unvegetated RECP Ability to Protect Soil from Hydraulically Induced Shear Stresses Under Bench-Scale Conditions	ASTM D 7207	Shear: 1.35 psf for 30 min.	Soil Loss = 156.7 g
		Shear: 1.89 psf for 30 min.	Soil Loss = 581.7 g
		Shear: 2.43 psf for 30 min.	Soil Loss = 703.3 g
		Soil loss curve intercept =	1.98 psf @ ½-in soil loss
Determination of Temporary Degradable RECP Performance in Encouraging Seed Germination and Plant Growth	ASTM D 7322	Topsoil; Fescue (Kentucky 31); 21-day incubation; 27±2° & approximately 45±5% RH	% of Control
			= 556% (increased biomass)
LARGE-SCALE TESTING	TEST METHOD	UNIT	ENGLISH
Slope Erosion	ASTM D 6459	C Factor	0.027
Channel Erosion	ASTM D 6460	lb/ft ²	2.60

Notes:

1. Soil Loss Ratio = Soil Loss Bare Soil / Soil Loss with RECP = 1 / C-Factor (Note: soil loss is based on regression analysis).
2. Permissible Velocity and Shear Stress have been obtained through large scale test programs featuring specific soil types, vegetation classes, flow conditions, anchor methods, and failure criteria. These conditions may not be relevant to every project nor can they be replicated by other manufacturers. Please contact your Erosion Tech rep for more information.
3. Design Performance Criteria for Vegetated Velocity and Shear Stress are estimated values given the typical industry results for RECP's manufactured to FHWA Type 2.C standards and with similar physical properties. The Designing Engineer is responsible for determining the suitability of this product on projects.

