

MATERIAL PROPERTY DATA SHEET

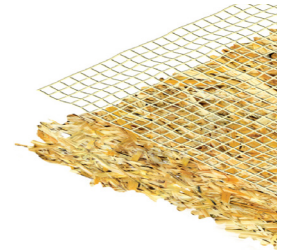


EXCEL SR-1 All Natural™

Short Term • Single Net • Straw Matrix •
Biodegradable • Erosion Control Blanket

DESCRIPTION

Excel SR-1 All Natural (SR-1AN) temporary Erosion Control Blanket is composed of a 100% weed free agricultural straw matrix mechanically (stitch) bonded on two-inch centers to a single biodegradable, jute/scrim net. Thread utilized in the construction of the blanket is biodegradable cotton. Excel SR-1AN blanket is recommended applications requiring erosion protection for a period up to twelve months. The material is fully degradable. The net, thread, and the fiber matrix is biodegradable. Actual field longevity is dependent on soil and climatic conditions.



Each roll of Excel SR-1AN is made in the USA and manufactured under Western Green's Quality Assurance Program to ensure a continuous distribution of fibers and consistent thickness.

SR-1AN has replaced ECS-1B, formerly provided by East Coast Erosion. SR-1AN meets or exceeds the ECS-1B and can be used as a replacement with no limitations.

Material Content	
Matrix	Straw
Netting	Jute Scrim, Biodegradable, Leno Weave Single Net
Thread	Biodegradable Cotton or Rayon

Standard Roll Sizes			
Width	8 ft (2.4 m)	16 ft (4.9 m)	
Length	112 ft (34.1 m)	563 ft (171.0 m)	
Weight ± 10%	50 lb (22.7 kg)	500 lb (227.0 kg)	
Area	100 sy (83.6 m ²)	1000 SY (836.0 m ²)	

Material available in custom roll sizes

Approvals & Classification	
Classification	FHWA: Type 2.C / ECTC: Type 2.C
TTI Approvals	Class 1 Type A, C
NTPEP Number	ECP-2019-03-011

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Index Property	Test Method	Typical	
Thickness	ASTM D6525	0.28 in.	(7 mm)
Mass/Unit Area	ASTM D6566	8.0 oz/sy	(275 g/sm)
Tensile Strength – MD	ASTM D6818	125 lbs/ft	(1.8 kN/m)
Tensile Strength – TD	ASTM D6818	90 lbs/ft	(1.3 kN/m)
Elongation - MD	ASTM D6818	15%	
Elongation – TD	ASTM D6818	15%	
Density/Specific Gravity	D792	N/A	
Light Penetration	ASTM D6567	15%	
Biomass Improvement	ASTM D7322	375%	
Water Absorption	ASTM D1117	400%	

Design Parameters		
Property	Unvegetated	Vegetated ³
RUSLE C Factor ²	0.02	N/A
Slope Maximum Gradient ¹	3H:1V	N/A
Permissible Shear Stress ²	1.6 psf (75 Pa)	N/A
Permissible Velocity ²	5.0 fps (1.5 m/s)	N/A

Manning's n Roughness (HEC-15)		
τ_{lower}	τ_{mid}	τ_{upper}
0.040	0.030	0.030

1 Maximum Gradient a recommendation for typical installations.

2 Hydraulic thresholds compliant with ASTM D6459/D6460 but generalized for typical applications.

3 Vegetated values dependent on established stand of vegetation

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Scan for additional and updated product information, or [click here](#).

