

MATERIAL PROPERTY DATA SHEET



EXCEL SR-1™

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

DESCRIPTION

Excel SR-1 temporary Erosion Control Blanket is composed of a 100% weed free agricultural straw matrix mechanically (stitch) bonded on two-inch centers to a single synthetic, photodegradable net. The net is secured to the top of the RECP to restrain the straw matrix once installed. Excel SR-1 blanket is intended for use in applications requiring erosion protection for a period up to twelve months. The material is fully degradable. The net and thread are photodegradable and the fiber matrix is biodegradable. Actual field longevity is dependent on soil and climatic conditions.



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

Material Content	
Matrix	Straw
Netting	Lightweight, Synthetic, Regular Degradable Top Net (Green)
Thread	Synthetic, Regular Degradable

Standard Roll Sizes			
Width	8 ft (2.4 m)	16 ft (4.9 m)	
Length	112.5 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, B
NTPEP Number	ECP-2019-03-010

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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	110 lbs/ft	(1.6 kN/m)
Tensile Strength – TD	ASTM D6818	60 lbs/ft	(0.9 kN/m)
Elongation - MD	ASTM D6818	30%	
Elongation – TD	ASTM D6818	30%	
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 insllations.

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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