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## **Material and Performance Specification**

## ECSC-2B™ Double Net Straw/Coconut Biodegradable Rolled Erosion Control Product

## **Description:**

The ECSC-2B™ is made with uniformly distributed 70% agricultural straw, 30% coconut fiber and two organic jute nets securely sewn together with biodegradable thread. The tightly compressed blankets are wrapped and include a product label, code and installation guide. The blankets are palletized for easy transportation. The ECSC-2B™ has functional longevity of approximately 18 months, but will vary depending on soil and climatic conditions, and is suitable for slopes 2:1 to 1:1 and low to medium flow channels. The ECSC-2B™ meets Type 3.B specification requirements established by the Erosion Control Technology Council (ECTC) and Federal Highway Administration's (FHWA) FP-03 Section 713.17.

Matrix:	1	2		
	70% Straw	30% Coconut		
Netting:	Type		Net Color	
Top: Orga	nic Leno Weave Jute		Natural	
Middle: None				
Bottom: Orga	nic Leno Weave Jute			
Net Opening:	Тор	Middle	Bottom	
	0.5" x 1.0"	N/A	0.5" x 1.0"	
Thread:	Туре	Color		
	Biodegradable Thread	Natural		
Roll Sizes:	Standard	"A" Size	Mega	
Width:	8 ft 2.4 m	4.00 ft 1.2 m	16 ft 4.9 m	
Length:	112.5 ft 34.3 m	225 ft 68.6 m	112.5 ft 34.3 m	
Weight*:	60 lbs 27.2 kg	60 lbs 27.2 kg	120 lbs 54.4 kg	
Area:	100 yd <sup>2</sup> 83.6 m <sup>2</sup>	100 yd² 83.6 m²	200 yd² 167.2 m²	
#/Pallet:	20	9	20	

<sup>\*</sup>Weight at time of manufacturing.

Index Value Properties*:					
Property	Test Method		Typical		
Mass/Unit Area	ASTM D6475	9.00	oz/yd²	305.1	g/m2
Thickness	ASTM D6525	0.28	in	7.11	mm
Tensile Strength-MD	ASTM D6818	204.00	lb/ft	2.98	kN/m
Elongation-MD	ASTM D6818	14	%		
Tensile Strength-TD	ASTM D6818	134.00	lb/ft	1.96	kN/m
Elongation-TD	ASTM D6818	16.3	%		
Light Penetration	ASTM D6567	12	%		
Density / Specific Gravity	ASTM D792	N/A	g/cm <sup>3</sup>		
Water Absorption	ASTM D1117	361	%		

<sup>\*</sup>May differ depending upon raw material variations

Slope Performance Design Values*:					
Test Method ASTM D6459		<b>Value</b> 0.05			
				≤ 3:1	3:1-2:1
0.050	0.060	0.110			
0.059	0.075	0.130			
0.062	0.090	0.150			
	Test Me  ASTM D  ≤ 3:1  0.050  0.059	Test Method  ASTM D6459  ≤ 3:1 3:1-2:1  0.050 0.060  0.059 0.075			

<sup>\*</sup>Large-Scale Results obtained by 3<sup>rd</sup> Party GAI Accredited Independent Laboratory

Test Method	Parameters	Results	
	50mm (2in) / hr-30 min	SLR**=11.89 SLR**=13.60	
ECTC Method 2 Rainfall	100mm (4in) / hr-30 min		
	150mm (6in) / hr-30 min	SLR**=15.50	
ECTC Method 3 Shear Resistance	Shear at .50 in soil loss	2.46 lb/ft <sup>2</sup>	
ECTC Method 4 Germination To	p soil; Fescue; 21 day incub	ation 671 %	
*Bench scale tests should not be	used for design purposes.		
**Soil Loss Ratio=Soil Loss Bare So	oil/Soil Loss with RECP=1/C	-Factor	

<sup>\*\*\*</sup>The preceding test data excerpts were reproduced with the permission of AASHTO, however, this does not constitute endorsement or approval of the product, material or device by AASHTO

STM D 6460	2.00			
311VI D 0-100	2.00	lbs/ft <sup>2</sup>	95.76	Pa
STM D 6460	8.0	ft/s	2.44	m/s
NA	N/A	lbs/ft <sup>2</sup>	N/A	Pa
NA	N/A	ft/s	N/A	m/s
	NA	NA N/A NA N/A	NA N/A lbs/ft² NA N/A ft/s	NA N/A lbs/ft² N/A NA N/A ft/s N/A

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