

Material and Performance Specification

## ECS-1D<sup>™</sup> Temporary Single Net Straw Rolled Erosion Control Product

## Description:

The ECS-1D<sup>™</sup> is made with uniformly distributed 100% agricultural straw and one polypropylene net securely sewn together with degradable thread. The tidy compressed blankets are wrapped and include a product label, code and installation guide. The blankets are palletized for easy transportation. The ECS-1D<sup>™</sup> has functional longevity of approximately 45 to 90 days, but will vary depending on soil and climatic conditions, andsisitable for slopes 3:1 or less. The ECS-1D<sup>™</sup> meets Type 1.C specification requirements established by the Erosion Control Technology Council (ECTC) and Federal Highway Administration's (FHWA) FP-03 Section 713.17.

Matrix:		1		2			
	100	% Straw					
Netting:		Туре			Net C	Net Color	
Top: Acce	lerated Lightweig	ht Photodegra	dable Polypropyler		Clear - 1	% UVD	
Middle: None							
Bottom: None	2						
Net Opening:	Opening: Top		N	Middle		Bottom	
	0.5	5" x 0.5"					
Thread:	ead: Type Degradable Threac		C	Color			
			١	White			
Roll Sizes:	St	andard	"A	″ Size	Me	ga	
Width:	8 ft	2.4 m	4 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*:	50 lbs	22.7 kg	50 lb:	s 22.7 kg	100 lbs	45.4 kg	
Area:	100 yd <sup>2</sup>	83.6 m <sup>2</sup>	100 yd	<sup>2</sup> 83.6 m <sup>2</sup>	200 yd <sup>2</sup>	167.2 m <sup>2</sup>	
#/Pallet:		25		9		25	

\*Weight at time of manufacturing

Index Value Properties*:					
Property	Test Method	Ту	pical		
Mass/Unit Area	ASTM D6475	8.00 oz/yd <sup>2</sup>	271.2 g/m2		
Thickness	ASTM D6525	0.30 in	7.62 mm		
Tensile Strength-MD	ASTM D6818	121 lb/ft	1.77 kN/m		
Elongation-MD	ASTM D6818	30 %			
Tensile Strength-TD	ASTM D6818	79 lb/ft	1.15 kN/m		
Elongation-TD	ASTM D6818	35.0 %			
Light Penetration	ASTM D6567	22 %			
Density / Specific Gravity	ASTM D792	N/A g/cm <sup>3</sup>			
Water Absorption	ASTM D1117	458 %			

\*May differ depending upon raw material variations

Slope Performance Design Values*:					
Property	Test Method		Value		
C-Factors	ASTM D	6459	0.02		
Slope Length (L)	≤ 3:1	3:1-2:1	≥ 2:1		
< 50 ft (15 m)	0.024	N/A	N/A		
50 ft – 100 ft	0.105	N/A	N/A		
>100 ft (30 m)	0.185	N/A	N/A		

\*Large-Scale Results obtained by 3rd Party GAI Accredited Independent Laboratory

Bench-Scale Testing* (NTPEP***):				
Test Method	Parameters	Results		
	50mm (2in) / hr-30 min	SLR**=6.29		
ECTC Method 2 Rainfall	100mm (4in) / hr-30 min	SLR**=5.80		
	150mm (6in) / hr-30 min	SLR**=5.37		
ECTC Method 3 Shear Resistance Shear at .50 in soil loss 1.10 lb/ft <sup>2</sup>				
ECTC Method 4 Germination	op soil; Fescue; 21 day incu	bation 517 %		
*Bench scale tests should not be	e used for design purposes.			

\*\*Soil Loss Ratio=Soil Loss Bare Soil/Soil Loss with RECP=1/C-Factor

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Channel Performance Design Values*:					
Property	Test Method	Value			
Unvegetated Shear Stress	ASTM D 6460	1.50	lbs/ft <sup>2</sup>	71.82	Ра
Unvegetated Velocity	ASTM D 6460	6.8	ft/s	2.07	m/s
Vegetated Shear Stress	NA	N/A	lbs/ft <sup>2</sup>	N/A	Ра
Vegetated Velocity	NA	N/A	ft/s	N/A	m/s
Manning's N (Value Represents a Range)			0.02	25	

\*Large-Scale Results obtained by  $\mathbb{P}^d$  Party GAI Accredited Independent Laboratory

The values presented are for guidance purposes and do not constitute the practice of engineering. East Coast Erosion Blankets LLC (ECEB) ascertains that at the time of manufacture, all information presented herein is accurate and reliable and falls within the ECEB manufacturing product specification variances. If the product does not meet the stated values and ECEB is notified in writing prior to installation, the product will be replaced at no cost to the purchaser. ECEB will not be held liable for any type of damage or losses. directly, or indirectly for failure of this product. Current revision supersedes all previous versions for this producc