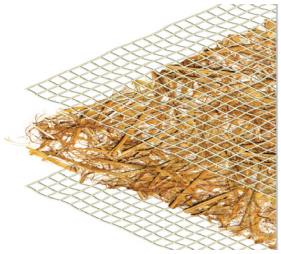
Carthage Mills **Product Data**

Geotextiles | Erosion Control | Geogrids | Geomembranes

CS-3AN Double Net Straw/Coconut Rolled Erosion Control Product

DESCRIPTION

Excel CS-3 All Natural (CS-3AN) Extended Term Erosion Control Blanket consists of 30% coconut fibers and 70% weed free agricultural straw manufactured into a continuous matrix. The coconut/straw matrix is confined by a biodegradable, jute/scrim net on top and bottom, mechanically (stitch) bound on two-inch centers with a biodegradable, cotton thread. Excel CS-3AN is intended for slope and channel erosion control applications requiring up to twenty-four months of functional longevity. 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 CS-3AN is made in the USA.

Material Content		
Matrix	Straw/Coconut Blend	
Netting	Top & Bottom Net: Jute Scrim, Biodegradable, Leno Weave	Double 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%	53 lb	(24.1 kg)	530 lb	(241.0 kg)
Area	100 sy	(83.6 m^2)	1000 SY	(836.0 m^2)

Material available in custom roll sizes

Approvals & Classification	
FHWA/ECTC Class	Type 3.B
TTI Approvals	Class 2 Type E
NTPEP Number	ECP-2020-01-010

Index Property	Test Method	Typical	
Thickness	ASTM D6525	0.30 in.	(8 mm)
Mass/Unit Area	ASTM D6566	8.5 oz/sy	(290 g/sm)
Tensile Strength – MD	ASTM D6818	210 lbs/ft	(3.1 kN/m)
Tensile Strength – TD	ASTM D6818	190 lbs/ft	(2.8 kN/m)
Elongation - MD	ASTM D6818	15%	
Elongation – TD	ASTM D6818	15%	
Density/Specific Gravity	D792	N/A	
Light Penetration	ASTM D6567	12%	
Biomass Improvement	ASTM D7322	500%	
Water Absorption	ASTM D1117	350%	

Design Parameters		
Property	**Unvegetated**	**Vegetated[3]**
RUSLE C Factor[2]	0.03	N/A
Slope Maximum Gradient[1]	2H:1V	N/A
Permissible Shear Stress[2]	2.1 psf (100 Pa)	N/A
Permissible Velocity[2]	8.0 fps (2.4 m/s)	N/A

Manning's n Roughness (HEC-15)		
τ_{lower}	τ_{mid}	τ_{upper}
0.045	0.036	0.031

1 Maximum Gradient a recomendation 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

Effective 12/2025

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