

MATERIAL PROPERTY DATA SHEET



EXCEL CC-4™

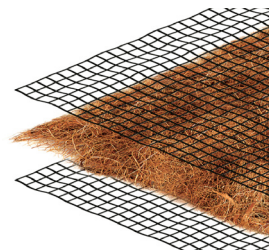
Long Term • Double Net • Coconut Matrix •
Erosion Control Blanket

DESCRIPTION

Excel CC-4 consists of a machine produced, clean coconut fiber matrix, manufactured for consistent coverage and thickness. The coconut matrix is confined by a UV stabilized photodegradable, synthetic net on top and bottom, mechanically (stitch) bound on two-inch centers. Excel CC-4 is intended for slope or channel erosion control applications requiring up to thirty-six months of functional longevity. 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.

CC-4 is made in the USA and manufactured under Western Green's Quality Assurance Program to ensure a continuous distribution of fibers and consistent thickness.

CC-4 has replaced ECC-2, formerly provided by East Coast Erosion. CC-4 meets or exceeds the ECC-2 and can be used as a replacement with no limitations.



Material Content

Matrix	Coconut		
Netting	Top and Bottom Net: Medium weight, Synthetic, Regular Degradable		Double Net (black)
Thread	Synthetic, Regular Degradable		

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%	56.3 lb	(25.6 kg)	563 lb	(256.0 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 4.B / ECTC: Type 4.B		
TTI Approvals	Class 1 Type B, D	Class 2 Type E,F	
NTPEP Number	ECP-2022-01-12		

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Index Property	Test Method	Typical	
Thickness	ASTM D6525	0.28 in.	(7 mm)
Mass/Unit Area	ASTM D6566	9.0 oz/sy	(305 g/sm)
Tensile Strength – MD	ASTM D6818	280 lbs/ft	(4.1 kN/m)
Tensile Strength – TD	ASTM D6818	180 lbs/ft	(2.6 kN/m)
Elongation - MD	ASTM D6818	25%	
Elongation – TD	ASTM D6818	25%	
Density/Specific Gravity	D792	N/A	
Light Penetration	ASTM D6567	15%	
Biomass Improvement	ASTM D7322	500%	
Water Absorption	ASTM D1117	300%	

Design Parameters

Property	Unvegetated	Vegetated ³
RUSLE C Factor ²	0.02	N/A
Slope Maximum Gradient ¹	1H:1V	N/A
Permissible Shear Stress ²	2.3 psf (110 Pa)	N/A
Permissible Velocity ²	9.0 fps (2.7 m/s)	N/A

Manning's n Roughness (HEC-15)

τ_{lower}	τ_{mid}	τ_{upper}
0.033	0.031	0.031

1 Maximum Gradient a recommendation for typical insillations.

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

3 Vegetated values dependent on established stand of vegetation

Rev. 4.2023

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



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EXCEL CC-4 All Natural™

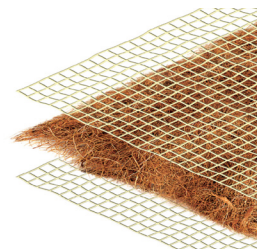
Long Term • Double Net • Coconut Matrix •
Biodegradable • Erosion Control Blanket

DESCRIPTION

Excel CC-4 All Natural (CC-4AN) Long Term Erosion Control Blanket consists entirely of coconut fibers manufactured into a matrix of uniform thickness and coverage. The coconut matrix is confined by a biodegradable, jute/scrim net on top and bottom, mechanically (stitch) bound on two-inch centers with a biodegradable thread. Excel CC-4AN is intended for slope and channel erosion control applications requiring up to thirty-six 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 CC-4AN is made in the USA and manufactured under Western Green's Quality Assurance Program to ensure a continuous distribution of fibers and consistent thickness.

CC-4AN has replaced ECC-2B, formerly provided by East Coast Erosion. CC-4AN meets or exceeds the ECC-2B and can be used as a replacement with no limitations.



Material Content	
Matrix	Coconut
Netting	Top Net: Jute Scrim, Biodegradable, Leno Weave Bottom Net: Jute Scrim, Biodegradable, Leno Weave
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%	56.3 lb (25.6 kg)	563 lb (256.0 kg)	
Area	100 sy (83.6 m²)	1000 SY (836.0 m²)	

Material available in custom roll sizes

Approvals & Classification	
Classification	FHWA: 4.B / ECTC: 4.B
TTI Approvals	Type B, D
NTPEP Number	ECP-2020-01-011

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Index Property	Test Method	Typical	
Thickness	ASTM D6525	0.28 in.	(7 mm)
Mass/Unit Area	ASTM D6566	9.0 oz/sy	(300 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	15%	
Biomass Improvement	ASTM D7322	500%	
Water Absorption	ASTM D1117	300%	

Design Parameters		
Property	Unvegetated	Vegetated ³
RUSLE C Factor ²	0.02	N/A
Slope Maximum Gradient ¹	1H:1V	N/A
Permissible Shear Stress ²	2.5 pfs (120 Pa)	N/A
Permissible Velocity ²	9.0 fps (2.7 m/s)	N/A

Manning's n Roughness (HEC-15)		
τ_{lower}	τ_{mid}	τ_{upper}
0.023	0.025	0.029

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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