Erosion Supply Company
8817 Midway West Rd., Raleigh, NC 27617

ECP-2 10 oz.™ Polypropylene Turf Reinforcement Mat

Description:

The ECP-2 10 oz™ is made with uniformly distributed 100% polypropylene fiber and two medium weight polypropylene nets securely sewn together with UV stabilized thread. The tightly compressed blankets are wrapped and include a product label, code and installation guide. The blankets are palletized for easy transportation. The ECP-2 10 oz™ is a permanent turf reinforcement mat and is suitable for 1:1 slopes and high-flow channels. The ECP-2 10 oz™ meets Type 5.A, 5.B specification requirements established by the Erosion Control Technology Council (ECTC) and Federal Highway Administration's (FHWA) FP-03 Section 713.18.

Matrix:	1	2
	Green or Tan Polypropylene Fiber	

Netting:	Type	Net Color
Top:	Medium weight 5# PMSF UV Stabilized Polypropylene	Black
Middle:	None	
Bottom:	Medium weight 5# PMSF UV Stabilized Polypropylene	

Net Opening:	Top	Middle	Bottom
	0.5" x 0.5"		0.5" x 0.5"

Thread:	Type	Color
	UV Stabilized Thread	Black

Roll Sizes:	Standard	"A" Size	Mega
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:*	62 lbs 28.1 kg	62 lbs 28.1 kg	124 lbs 56.2 kg
Area:	100 yd^2 83.6 m^2	100 yd^2 83.6 m^2	200 yd^2 167.2 m^2
#/Pallet:	16	9	16

*Weight at time of manufacturing within specified tolerances.

Index Value Properties*:

Property	Test Method	Typical	
Mass/Unit Area	ASTM D6566	10.00 oz/yd^2	339.1 g/m2
Thickness	ASTM D6525	0.40 in	10.16 mm
Tensile Strength-MD	ASTM D6818	370 lb/ft	5.40 kN/m
Elongation-MD	ASTM D6818	24 %	
Tensile Strength-TD	ASTM D6818	315 lb/ft	4.60 kN/m
Elongation-TD	ASTM D6818	20.0 %	
Light Penetration	ASTM D6567	25 %	
Density / Specific Gravity	ASTM D792	0.917 g/cm^3	
Water Absorption	ASTM D1117	0 %	
Resiliency	ASTM D6524	80 %	
UV Resistance	ASTM D4355	82 %	1000 hours

*May differ depending upon raw material variations

Bench-Scale Testing* (NTPEP***):

Test Method	Parameters	Results
ECTC Method 2 Rainfall	50mm (2in) / hr-30 min	SLR**=4.58
	100mm (4in) / hr-30 min	SLR**=8.80
	150mm (6in) / hr-30 min	SLR**=16.92
ECTC Method 3 Shear Resistance	Shear at .50 in soil loss	2.42 lb/ft^2
ECTC Method 4 Germination	Top soil; Fescue; 21 day incubation	482 %

*Bench scale tests should not be used for design purposes.

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

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Slope Performance Design Values*:

Property	Test Method		Value
C-Factors	ASTM D6459		0.01
Slope Length (L)	≤ 3:1	3:1-2:1	≥ 2:1
< 50 ft (15 m)	0.009	0.019	0.062
50 ft – 100 ft	0.025	0.044	0.077
>100 ft (30 m)	0.053	0.072	0.096

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

Channel Performance Design Values*:

Property	Test Method				
Unvegetated Shear Stress	ASTM D 6460	2.30	lbs/ft^2	110.12	Pa
Unvegetated Velocity	ASTM D 6460	9.0	ft/s	2.74	m/s
Vegetated Shear Stress	ASTM D 6460	10.0	lbs/ft^2	478.80	Pa
Vegetated Velocity	ASTM D 6460	18.0	ft/s	5.49	m/s
Manning's N (Value Represents a Range)			0.024		

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

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