

# Enkamat 7018 R<sup>2</sup>M

## Root Reinforcement Mat

### Description

Enkamat<sup>®</sup> 7018 is a three-dimensional turf reinforcement mat (TRM) made of continuous monofilaments fused at their intersections. Ninety-five (95%) percent of the Enkamat is open and available for soil, mulch and root interaction with filaments, creating the most effective Root Reinforcement Mat (R<sup>2</sup>M) available. Enkamat is manufactured from nylon to eliminate the buoyancy factor associated with submerged conditions and provide permanent TRM protection in vegetated channels as well as on slopes

### Recommended Applications

- Permanent erosion control for Green (vegetated) channels with expected shear stresses  $\leq 9$  psf.
- Permanent erosion control for slight to moderate slopes ( $\leq 2H:1V$ ).
- Support and enhance performance of Ecosystem plants.
- Substrate for hydraulically applied Bonded Fiber Matrix (BFM) and other mulches for erosion control applications where low water flow and low to moderate shear stresses are expected.

### Technical Data

Mechanical Properties	Test Method	Units	Typical Roll Value	
			MD	CD
Tensile Strength	ASTM D 5035 (modified)	kN/m (lbs/ft)	2.2 (150)	1.3 (90)
Thickness	ASTM D 5199	mm (in)	16.5 (0.65)	
Mass/Unit Area	ASTM D 5261	g/m <sup>2</sup> (oz/yd <sup>2</sup> )	290 (8.6)	
UV Stability	ASTM D G53 / ASTM D 5035 (modified)	% strength retained	80	

Performance Properties	Test Method	Units	Typical Roll Value
<b>Permissible Velocity</b>			
Product Only	Flume test <sup>1</sup>	m/s (ft/s)	6.1 (20)
30 minute, vegetated	Flume test <sup>1</sup>	m/s (ft/s)	5.8 (19)
50 hour, vegetated	Flume test <sup>1</sup>	m/s (ft/s)	4.2 (14)
<b>Permissible Shear Stress</b>			
Product Only	Flume test <sup>1</sup>	kN/m <sup>2</sup> (lbs/ft <sup>2</sup> )	0.53 (11.2)
30 minute, vegetated	Flume test <sup>1</sup>	kN/m <sup>2</sup> (lbs/ft <sup>2</sup> )	0.43 (9.0)
50 hour, vegetated	Flume test <sup>1</sup>	kN/m <sup>2</sup> (lbs/ft <sup>2</sup> )	0.34 (7.0)

1. Flume test performed at independent laboratory—data and details available upon request.

### Packaging Data

Physical Properties	Units	Nominal Value	
Roll Dimensions [width x length]	m (ft)	0.99 x 84.4 (3.25 x 277)	1.93 x 27.5 (6.33 x 90)
Roll Area	m <sup>2</sup> (yd <sup>2</sup> )	83.6 (100)	53 (63.3)
Estimated Roll Diameter	cm (in)	109 (43)	61 (24)
Estimated Roll Weight	kg (lb)	25 (54)	15 (34)

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