# ParaGREEN<sup>™</sup> Drainage and Water Retention Mat

**Dual-Component Prefabricated Sheet Drain and Water Retention Mat** 



#### **Description:**

ParaGREEN<sup>™</sup> Drainage and Water Retention Mat is a dual-component, prefabricated sheet drain and water retention mat. It consists of a formed polypropylene core covered with a white nonwoven spun bound polypropylene fabric on the top side and a black nonwoven needle punched fabric on the bottom side. Contact Siplast for information on approved product uses.

#### **Features and Benefits:**

- Provides durability, moisture resistance, and longevity
- Enhances drainage capabilities to help allow for efficient water flow
- Easy installation helps save on time and labor
- Retains water, making it available for long term use by plant material, reducing irrigation demand
- Core incorporates perforations to provide aeration to the bottom of the media profile

## **Typical Physical Property Data:**

Typical Properties	Values/Unit	Test Method			
Fabric Properties					
Material	Polypropylene				
Grab Tensile Strength	150 lb. ASTM D4632				
CBR Puncture	295 lb.	ASTM D6241			
Water Flow Rate	70 gpm/ft. <sup>2</sup>	ASTM D4491			
Apparent Opening Size	80 sieve	ASTM D4751			
Core Properties					
Material	High Impact Polystyrene				
Thickness	1 in.	ASTM D5199			
Compressive Strength	9,500 psf	ASTM D6364			
Water Retention	0.08 gal/ft. <sup>2</sup>	ASTM E2398			
In-Plane Flow Rate*	18 gpm/ft.	ASTM D4716			
Product Properties					
Roll Size	4 ft. x 50 ft. (0.92 m x 15.24 m)				
Coverage	150 ft. <sup>2</sup> (14 m <sup>2</sup> )				

\*In-plane flow rate measured at 3,600 psf (172 kPa) compressive load and a hydraulic gradient of 1.0.

## **Application:**

- Install with the white filter fabric side up
- ParaGREEN<sup>™</sup> Filler Fabric may also be required at horizontal to vertical transitions
- Refer to installation manual for detailed application instructions

#### Storage and Handling:

- All Siplast ParaGREEN<sup>™</sup> products should be stored on a clean, flat surface.
- All roofing products should be stored in a dry place out of direct exposure to the elements and should not be double stacked.
- Material should be handled in such a manner as to ensure that it remains dry prior to and during installation.
- See product packaging and the Safety Data Sheet for specific information on the safe handling of this product.

### Packaging:

- Pallet: 68 in. x 68 in. (2073 cm x 2073 cm)
- Weight Per Roll: 40 lb. (18 kg)
- Rolls Per Pallet: 18

### **Ordering Information:**

ParaGREEN<sup>™</sup> Drainage and Water Retention Mat is available in rolls. For pricing and availability, contact Siplast customer service at the regional emails listed below:

**Siplast**<sup>®</sup> With you every step of the way

- Southeast: southeast@siplast.com
- Northeast: northeast@siplast.com
- West: mountainpacific@siplast.com

### **LEED Information:**

Recycled Cont (% by weight	tent .)	Manufacture Location
Core	77%	Monroe, NC
Filter Fabric	10%	Monroe, NC

PRODUCT	PARAGREEN™ DRAINAGE AND WATER RETENTION MAT				
Physical Properties <sup>1</sup>	Test Method	Units of Measure	Typical Values		
GEOTEXTILE - TOP SIDE					
Material <sup>2</sup>			PP, SBNW		
Grab Tensile Strength	ASTM D4632	lb.	150		
		N	667		
Grab Elongation	ASTM D4632	%	50		
	ASTM D6241	lb.	295		
CBK Puncture		Ν	1,312		
Transacidal Taar	ASTM D4533	lb.	60		
Trapezoidal Tear		Ν	290		
UV Resistance	ASTM D4355	% / 500 Hrs	70		
	ASTM D4751	sieve	80		
Apparent Opening Size (AOS) <sup>3</sup>		mm	0.180		
Permittivity	ASTM D4491	sec <sup>-1</sup>	1.0		
Wedge Floor Dada	ASTM D4491	gpm/ft. <sup>2</sup>	70		
water flow kate		Lpm/m <sup>2</sup>	2,853		
CORE					
In Compressive Strength	ASTM D6364 / ASTM D1621	psf	9,500		
in-compressive strength		kPa	455		
Thickness	ASTM D5199	in.	1		
		mm	25.4		
In-Plane Flow Rate <sup>4</sup>	ASTM D4716	gpm/ft.	80		
Hydraulic Gradient = 1.0		Lpm/m	933		
In-Plane Flow Rate⁴	ASTM D4716	gpm/ft.	21		
Hydraulic Gradient = 0.1		Lpm/m	260		
Water Storage Capacity	ASTM E2398	gal/ft. <sup>2</sup>	0.08		
		L/m <sup>2</sup>	3.3		
Perforation Open Area		in²/ft.²	8.7		
renoration Open Area	CALCOLATED	mm²/m²	60,400		
GEOTEXTILE - BOTTOM SIDE					
Material <sup>2</sup>			PP, NPNW		
Grab Tensile Strength	ASTM D4632	lb.	100		
		Ν	445		
COMPOSITE					
Recycled Content <sup>5</sup>	CALCULATED	%	>50		
Roll Size	MEASURED	ft.	3 x 50		
Roll Weight <sup>6</sup>	MEASURED	lb.	40		

<sup>1</sup>Unless otherwise noted, all physical and performance properties listed are Typical Values as defined in ASTM D4439.

<sup>2</sup>PP = Polypropylene; NPNW = Needle-Punched Nonwoven; SBNW = Spunbonded Nonwoven <sup>3</sup>AOS value listed is Maximum Average Roll Value

<sup>4</sup>In-plane flow rate measured under 3,600 psf (172 kPa) compressive load at referenced hydraulic gradient.

<sup>5</sup>Pre-Consumer recycled content by weight

<sup>6</sup>Approximate packaged roll weight.