ParaGREEN[™] Root Barrier

Commercial Product Data Sheet

Siplast

With you every step of the way

Description:

ParaGREEN[™] Root Barrier is designed for use in conjunction with Siplast ParaGREEN[™] Vegetated Roof Systems and helps provide protection against root penetration. It is composed of high-density polyethylene, with thicknesses and textures to meet design requirements for particular vegetated roof installations. Siplast advises against the specification of plants with aggressive roots on a structure over Siplast membranes.

Contact Siplast for information on approved product uses.

Uses: Vegetated Systems

Fully Vegetated Modules				
Color	Black			
Ambient Range at Time of Application	32°F - 104°F (0°C – 40°C)			

LEED Information				
Recycled Content (% by weight)	Manufacture Location			
0%	Houston, TX			



Application:

ParaGREEN[™] Root Barrier seams may be heat welded or overlapped 18 in. and held together using ParaGREEN[™] Root Barrier Tape. Refer to the ParaGREEN[™] Installation Guidelines for detailed application information.



Storage and Handling:

All Siplast ParaGREEN[™] products should be stored on a clean, flat surface. All roofing products should be stored in a dry place, in a manner that provides protection from puncture, dirt, grease, moisture, and excessive heat.

See product packaging and the Safety Data Sheet for specific information on the safe handling of this product.

ParaGREEN™ Root Barrier

Physical and Mechanical Properties

Physical Properties						
PROPERTY	Typical Values					
	20 mil	40 mil	60 mil	60 mil (Textured)	Test Method	
Thickness (minimum)	20 mil. (0.5 mm)	40 mil. (1.0 mm)	60 mil. (1.52 mm)	57 mil. (1.44 mm)	ASTM D5199	
Asperity Height	N/A	N/A	N/A	10 mil. (0.25 mm)	ASTM D7466	
Sheet Density	0.940 g/cc	0.940 g/cc	0.940 g/cc	0.940 g/cc	ASTM D1505 / ASTM D792	
Roll Width	7.5 ft. (2.3 m)	7.5 ft. (2.3 m)	7.5 ft. (2.3 m)	7.5 ft. (2.3 m)	N/A	
Roll Length	200 ft. (61 m)	95 ft. (29 m)	65 ft. (20 m)	65 ft. (20 m)	N/A	
Coverage	1,200 ft ² (111.5 m ²)	570 ft ² (52.95 m ²)	465 ft ² (43.2 m ²)	465 ft ² (43.2 m ²)	N/A	
Gross Weight (approx.)	150 lb. (68 kg)	150 lb. (68 kg)	151 lb. (68.5 kg)	151 lb. (68.5 kg)	N/A	
Lap Treatment (width)	18 in. (457 mm)	18 in. (457 mm)	4 in. (101 m)	4 in. (101 m)	N/A	
Lap Treatment (seam method)	Simple Overlap	Simple Overlap	Heat Weld	Heat Weld	N/A	
Surface	Smooth	Smooth	Smooth	Textured one or both sides	N/A	

Mechanical Properties							
PROPERTY		Typical Values					
	20 mil	40 mil	60 mil	60 mil (Textured)	Test Method		
*Yield Strength	42 lb./in.	84 lb./in.	126 lb./in.	126 lb./in.	ASTM D6693		
*Break Strength	76 lb./in.	152 lb./in.	228 lb./in.	90 lb./in.	ASTM D6693		
*Yield Elongation	13%	12%	12%	12%	ASTM D6693		
*Break Elongation	700%	700%	700%	100%	ASTM D6693		
Tear Resistance	14 lb.	28 lb.	42 lb.	42 lb.	ASTM D1004		
Puncture Resistance	36 lb.	72 lb.	108 lb.	90 lb.	ASTM D4833		
Shear Strength	N/A	80 lb./in.	120 lb./in.	120 lb./in.	ASTM D6392 (@ 2 in./min.)		
Peel Strength – Heat Welded	N/A	60 lb./in.	91 lb./in.	90 lb./in.	ASTM D6392 (@ 2 in./min.)		

*Machine direction (MD) and cross machine direction (XMD) average values should be on the basis of 5 test specimens each direction. Yield elongation is calculated using a gauge length of 1.3 inches; Break elongation is calculated using a gauge length of 2.0 inches.