



DBR Root Bloc™ 50 and DBR Root Bloc™ 100

Root Barrier/Water Retention/Drainage Layer System

Physical Properties

	<u>DBR Root Bloc™50</u>		<u>DBR Root Bloc™ 100</u>		<u>Test Method</u>
<u>Root Barrier Fabric Properties</u>					
-Material	Polypropylene		Polypropylene		
-Fabric	Needle-punched, non-woven		Needle-punched, non-woven		
-Weight	5.6 oz/ft ² , 195 gpm/m ²		5.6 oz/ft ² 195 gpm/m ²		ASTM D3776
-Root Barrier Coating	Copper hydroxide		Copper hydroxide		US EPA 1812-347
--Flow Rate	120 gpm/ft ² 4888 lpm/m ²		120 gpm/ft ² 4800 lpm/m ²		ASTM D4491
<u>Core Properties</u>					
-Material	Polystyrene		Polystyrene		
-Thickness	7/16"		1" inch		
-Compressive Strength	15,000 lbs/ft ² 732 kN/m ²		9500 lbs/ft ² 460 kN/m ²		ASTM D1621 (Mod)
-Water Storage Capacity	0.06 gal/ft ² 2.4 l/m ²		0.11 gal/ft ² 4.5 l/m ²		
-Perforation Open Area	3.9 in ² /ft ² 27,080		8.7 in ² /ft ² 60,400		
-Horizontal Flow – gradient = 1.0	mm ² /m ²		mm ² /m ²		ASTM D4491
-Horizontal Flow – gradient = 0.1	16 gpm/ft ² 200 lpm/m ² 6 gpm/ft ² 75 lpm/m ²		100 gpm/ft ² 1240 lpm/m ² 21 gpm/ft ² 260 lpm/m ²		ASTM D 4491
<u>Geotextile – Separation Layer</u>					
-Material	Polypropylene		Polypropylene		
-Fabric	Needle-punched, nonwoven		Needle-punched, nonwoven		
-Weight	4 oz/ft ² 136 gm/m ²		4 oz/ft ² 136 gm/m ²		ASTM D3776
<u>Dimensions & Weights</u>					
-Roll Width	4 ft 1.22 m		36 in 0.91 m		
-Roll Length	50/100 ft 15.25/30.5 m		50/100 ft 15.25/30.5m		
-Roll Weight	40/80 lb 18/36kg		44/88 lb 20/40 kg		

Description

DBR Root Bloc™ 50 or 100 system consists of a high-strength, dimpled polymeric sheet. The perforated core has two specific fabrics attached to the top and bottom core layers. The top fabric contains a root barrier embodied into the non-woven fabric. Unlike physical barriers that re-direct the root or other chemical barriers that kill root tips, this fabric stops root penetration and promotes secondary root branching. The bottom fabric layer provides excellent cushioning properties, delivering extra protection to the roofing membrane. The back of the dimples in the core will be the primary water reservoir, while the perforations in the core provide the best drainage system in the industry.

Features

- High compressive strength
- Root barrier, strategically located at soil level, prevents root damage to insulation and drainage layer
- Reduces storm water runoff to drains
- Provides excellent water storage capacity and aeration for the growing medium

Uses

DBR Root Bloc™ 50 and 100 are used to provide a root barrier/ water retention/ drainage layer system in a complete Green Roof assembly. Typically, **DBR Root Bloc™ 50** is used for *extensive* applications where grasses / small plants with a non-aggressive root system. **DBR Root Bloc™ 100** is used for *intensive* applications where larger plants/ trees with more aggressive root systems.

Limitations

DBR Root Bloc™ is loose laid over the protection course or insulation and therefore may require temporary ballasting prior to the installation of subsequent permanent covering materials. < >