



CCW MiraDRAIN® GR9200 GREEN ROOF DRAINAGE

DESCRIPTION

CCW MiraDRAIN GR9200 is a high-performance retention/drainage composite consisting of a three-dimensional, high-impact polystyrene core with pierced holes allowing water retention and drainage. The filter fabric is bonded to the retention side of the molded core. The fabric serves as a filter medium to prevent the passage of particles into the water reservoirs while allowing excess water to pass freely into the drainage system.

TYPICAL USE

CCW MiraDRAIN GR9200 is designed for use in horizontal garden roof or large planter applications. CCW MiraDRAIN GR9200 is used in conjunction with CCW 500R, CCW MiraDRAIN 9000/9900 and accessories to provide a complete garden roof system.

FEATURES AND BENEFITS

- Provides retention as well as drainage for roof gardens.
- No-clogging drainage performance
- High compression strength that withstands overburden stresses.
- Cost-saving, lightweight, easy to install panels.

INSTALLATION

CCW MiraDRAIN GR9200 can be easily installed using the following procedure:

The panels should be placed so the water runs with the overlap, not against it. Place CCW MiraDRAIN GR9200 over the insulation with the flat side of board facing up. The first panels should be placed with the flanged edge uphill.

Cut the fabric along the flanged edge and strip off this fabric exposing the edge of the core and the flange. Place the dimpled edge over the preceding flanged edge to join the next panel. The fabric on the CCW MiraDRAIN GR9200 panel extends beyond the edges of the polystyrene core to provide overlap to the adjacent panels. When placing panels adjacent to each other, overlap fabric in the direction of water flow. Secure the remaining fabric flap with CCW DRAIN GRIP™.

PACKAGING INFORMATION

Packaging: 4'x50' (1.22m x 15.24m) rolls

CAUTION / LIMITATIONS

Limit ultra-violet exposure by backfilling within 7 days of installation. Any panels damaged during installation should be replaced by the installer. Limitations: MiraDRAIN is resistant to chemicals in normal soil environments. However, some reagents may affect its performance. Carlisle Coatings & Waterproofing representatives should be consulted concerning the suitability of MiraDRAIN in unusual soil environments.

TECHNICAL DATA

Property	Test Method	Unit	Typical Value	
Core				
Thickness	ASTM D 1777	in (mm)	0.40 (10.16)	
Compressive Strength	ASTM D 1621	psf (kPa)	15,000 (718)	
Reservoir Capacity	TCM-0207	in ³ /ft ³ (cm ³ /m ³)	10 (1,775)	
Percolation Flow Rate (1 punched hole/ft ²)	TCM-G0163	gpm/ft ² (l/min/m ²)	0.141 (0.503)	
Retention Performance	TCM-G0163	%	31	
Percolation Flow Rate (2 punched hole/ft ²)	TCM-G0163	gpm/ft ² (l/min/m ²)	0.197 (0.704)	
Retention Performance	TCM-G0163	%	18.3	
Percolation Flow Rate (3 punched hole/ft ²)	TCM-G0163	gpm/ft ² (l/min/m ²)	0.237 (0.847)	
Retention Performance	TCM-G0163	%	17	
Fabric (FW402/140NC)				
Apparent Opening Size	ASTM D 4751	US Std Sieve (mm)	Woven 40 (0.42)	Nonwoven 70 (0.21)
Water Flow Rate	ASTM D 4491	gpm/ft ² (l/min/m ²)	145 (5,907)	140 (5,698)
Grab Tensile Strength	ASTM D 4632	lbs (kN)	365 (1.62)	100 (0.45)

LIMITED WARRANTY

CARLISLE COATINGS & WATERPROOFING INCORPORATED (CARLISLE) warrants this product to be free of defects in workmanship and materials only at the time of shipment from our factory. If any CARLISLE materials prove to contain manufacturing defects that substantially effect their performance, CARLISLE will, at its option, replace the materials or refund its purchase price.

This limited warranty is the only warranty extended by CARLISLE with respect to its materials. There are no other warranties, including the implied warranties of merchantability and fitness for a particular purpose. CARLISLE specifically disclaims liability for any incidental, consequential, or other damages, including but not limited to, loss of profits or damages to a structure or its contents, arising under any theory of law whatsoever.

The dollar value of CARLISLE'S liability and buyer's remedy under this limited warranty shall not exceed the purchase price of the CARLISLE material in question.