



# WATERPROOFING

## MiraDRAIN® GR9400

### Description

CCW MiraDRAIN GR9400 is a high-capacity retention/drainage composite consisting of a three-dimensional, high-impact polypropylene core with holes allowing water retention and drainage. A moisture retention mat fabric is bonded to the retention side of the molded core. The moisture retention mat fabric also 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.

MiraDRAIN GR9400 is designed for use in horizontal green roof or large planter applications.

### Features and Benefits

- Greatly simplifies green roof installation
- Provides retention as well as drainage for green roofs
- Moisture retention mat is 100% post-industrial recycled material
- No-clogging drainage performance
- High compression strength withstands overburden stresses
- Cost-saving, lightweight, easy to install panels

### Installation

The panels should be placed so the water runs with the overlap, not against it. Place the MiraDRAIN GR9400 with the flat/green fabric side facing up. Butt adjacent rolls overlap the green fabric from panel to panel and secure with CAV-GRIP™.

### Limitations

Limit ultra-violet exposure by backfilling within 7 days of installation. Any panels damaged during installation should be replaced.

MiraDRAIN is resistant to chemicals in normal soil environments. However, some reagents may affect its performance. CCW representatives should be consulted concerning the suitability of MiraDRAIN in unusual soil environments.

### Packaging

4' x 50' (1.22 m x 15.24 m) rolls

### Typical Properties

Property	Method	Unit	Typical Value
<b>CORE</b>			
Composition			HIPS
Thickness	ASTM D1777	in (mm)	1" (25.4)
Compressive Strength	ASTM D1621 (mod)	psf (kN/m <sup>2</sup> )	9,500 (455)
Maximum Flow Rate	ASTM D4716	gpm/ft <sup>2</sup> (l/min/m)	21 gpm/ft
<b>FABRIC</b>			
Apparent Opening Size	ASTM D4751	US Std Sieve (mm)	100 (0.149)
Flow Rate	ASTM D4491	gpm/ft <sup>2</sup> (l/min/m)	75 (3055)
Grab Tensile Strength	ASTM D4632	lbs (kN)	300 (1.33)
Grab Elongation	ASTM D4632	%	50
Puncture Resistance	ASTM D4833	lbs (kN)	175 (0.78)

### 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 affect 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.