



# CCW MiraDRAIN®

## 5000

### DRAINAGE COMPOSITE

#### DESCRIPTION

CCW MiraDRAIN 5000 is a high-performance, high-strength drainage composite consisting of a three-dimensional, high-impact polystyrene core — with pierced holes allowing double sided drainage — wrapped in a nonwoven polypropylene filter fabric. The filter fabric is bonded to the individual dimples of the molded polystyrene core to minimize fabric intrusion into the flow channels caused by backfill pressure. The fabric also prevents the passage of soil particles into the core, while allowing water to pass freely.

#### TYPICAL USES

CCW MiraDRAIN 5000 is designed for use where double-sided subsurface drainage is required, and is available in two and four foot panels. CCW MiraDRAIN 5000 is ideal for chimney drains on slopes or against wood lagging. CCW MiraDRAIN 5000 can also be used to drain the top layer of a landfill enclosure. CCW MiraDRAIN 5000 is capable of collecting large quantities of subgrade moisture and conducting it to a discharge pipe.

#### FEATURES AND BENEFITS

- Consistent and proven long term performance due to a multi-directional core configuration providing a uniform flow path for water to escape.
- High-flow drainage capacity up to three times the flow capacity of aggregate or sand assuring effective drainage for virtually any drainage need.
- No-clogging drainage performance.
- High compressive strength of core withstanding installation and in-situ earth stresses.
- Cost savings installation. Light weight, easy to install 2' or 4' by 50' panels save the transportation cost of bringing aggregate to the construction site. In addition, CCW MiraDRAIN allows you to backfill with the same excavated soil.

#### INSTALLATION

##### *Chimney Drains or wood lagging*

Attach CCW MiraDRAIN 5000 to vertical wall with CCW DRAIN GRIP™ adhesive soil stakes or concrete masonry nails. Proceed with placement of overburden.

##### *Trench Drains*

Dig a trench to the required depths and allow for at least six inches of space more than the width of the CCW

MiraDRAIN panels. Place the CCW MiraDRAIN 5000 panel in the trench and cover up with the excavated soil.

##### *Landfill enclosure*

Place CCW MiraDRAIN 5000 horizontally over the soil and cover up with backfill soil, typically several feet in height. For chimney drain configurations and product limitations, contact the Carlisle Coatings & Waterproofing technical department.

#### PACKAGING

*Packaging:* CCW MiraDRAIN 5000 are available in rolls of 4' by 50' (1.22m by 15.24m); 2' by 50' (.6m by 15.24m). *Availability:* CCW MiraDRAIN 5000 is made in the USA and is sold through a highly qualified sales representative network. CCW MiraDRAIN 5000 is readily available from a national system of Carlisle Coatings & Waterproofing warehouses. *Cost:* Consult your Carlisle Coatings & Waterproofing representative for price quotes.

#### CAUTION / LIMITATIONS

Do not store CCW MiraDRAIN 5000 in direct sunlight or at temperatures exceeding 95°F. Improper storage could lead to product deterioration making proper installation of CCW MiraDRAIN 5000 difficult.

#### MAINTENANCE

CCW MiraDRAIN 5000 requires no maintenance after installation.

## TECHNICAL DATA

Property	Test Method	Unit	Typical Value
<b>Core</b>			
Thickness	ASTM D 1777	in (mm)	0.40 (10.16)
Compressive Strength	ASTM D 1621	psf (kN/m <sup>2</sup> )	15,000 (719)
Maximum Flow Rate <sup>1</sup>	ASTM D 4716	gpm/ft <sup>2</sup> (l/min/m <sup>2</sup> )	15 (188)
Installed Horizontally <sup>2</sup>	ASTM D 4716	gpm/ft <sup>2</sup> (l/min/m <sup>2</sup> )	2.4 (30)
Installed Vertically <sup>2</sup>	ASTM D 4716	gpm/ft <sup>2</sup> (l/min/m <sup>2</sup> )	12.5 (155)
<b>Fabric (140NC)</b>			
Apparent Opening Size	ASTM D 4751	US Std Sieve (mm)	70 (.21)
Water Flow Rate	ASTM D 4491	gpm/ft <sup>2</sup> (l/min/m <sup>2</sup> )	140 (5,698)
Grab Tensile Strength	ASTM D 4632	lbs (kN)	100 (0.45)
Grab Elongation	ASTM D 4632	%	50
Puncture Resistance	ASTM D 4833	lbs (kN)	65 (0.30)
<b>System</b>			
Performance Index	*		18,250

All flow rates were tested at 3600 psf.

<sup>1</sup>In plane flow rate @ gradient of 1.0

\* Drainage Performance Index is a function of ASTM D 4833, D 4632 and D 1621

<sup>2</sup>Installed flow rate with soil overburden at vertical gradient of 1.0

## 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.