

Mirafi® G Series Drainage Composite

for Retaining Walls, Cut-Off Drains and Landfill Closures

TenCate™ develops and produces materials that function to increase performance, reduce costs and deliver measurable results by working with our customers to provide advanced solutions.

The Difference Mirafi® G Series Drainage Composite Makes:

- Consistent and proven long-term performance due to a multi-directional core configuration providing a uniform flow path for water to escape.
- Relief of hydrostatic pressure buildup against subterranean surfaces.
- High-flow drainage capacity of up to three times the flow capacity of aggregate or sand, assuring effective drainage for virtually any drainage need.
- High compressive strength core that withstands installation and in-situ earth stresses.
- Cost savings due to the lightweight, easy to install 1.22m x 15.24m (4' x 50') panels. This saves the transportation cost of bringing aggregate to the construction site.

Mirafi® G Series drainage composite G100N is produced from a high compressive strength core with a nonwoven polypropylene geotextile bonded to one side. The Mirafi® G Series drainage composite G100W provides the added benefit of a woven monofilament polypropylene geotextile bonded to one side for higher clog resistance and long-term flow capacity. Mirafi® G Series drainage composite G200N, ideal for two-sided drainage applications, is produced with Mirafi® N-Series nonwoven polypropylene geotextile bonded to both sides of a high compressive strength pierced dimple core.

APPLICATIONS

Mirafi® G Series drainage composite G100N products are designed for use in high-flow, high compressive strength, vertical applications where single-sided subsoil drainage filter layer is needed. The flat side of the core fits directly against wall surfaces making it ideal for retaining walls, bridge abutments and other similar retaining structures. Mirafi® G Series drainage composite G200N is designed for use where single or double-sided subsoil drainage filter layer is required.



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Mirafi® G Series drainage composite G200N products are capable of collecting large quantities of subgrade water and conducting it to a discharge pipe or collection system. Ideal applications are placed against the excavation cut of a retaining wall or slope, landfill closure interceptor drainage and in trench drains.

INSTALLATION GUIDELINES*

Detailed installation instructions are available from your TenCate™ representative.

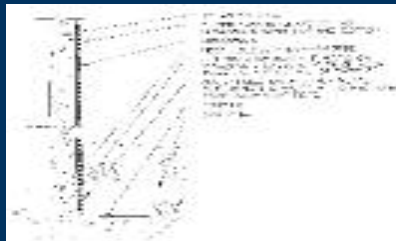
* These guidelines serve as a general basis for installation. Detailed instructions are available from your TenCate™ representative.



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Property	Test Method	Units	G100N	G100W	G200N
CORE					
Color	--	--	black	black	black
Thickness	ASTM D1777	in (mm)	0.4 (10.2)	0.4 (10.2)	0.4 (10.2)
Compressive Strength	ASTM D1621	psf (kN/m ²)	18000 (861.3)	18000 (861.3)	18000 (861.3)
Maximum Flow Rate ¹	ASTM D4716	gpm/ft (l/min/m)	21 (260)	21 (260)	21 (260)
Installed Vertically ²	ASTM D4716	gpm/ft (l/min/m)	12.5 (155)	18 (224)	155 (12.5)
Installed Horizontally ³	ASTM D4716	gpm/ft (l/min/m)	2.4 (30)	3.8 (47)	3.8 (47)
<i>¹In plane flow tested at 173kPa (3600psf) with a gradient of 1.0.</i>					
<i>²Installed flow rate with soil or concrete overburden at vertical gradient of 1.0.</i>					
<i>³Installed flow rate with soil overburden at horizontal gradient of 0.05.</i>					
GEOTEXTILE FILTER					
Mirafi® Geotextile	--	--	140NC	FW402	140NC
MECHANICAL PROPERTIES					
Grab Tensile Strength (MD)	ASTM D4632	lbs (N)	111 (494)	365 (1624)	111 (494)
Grab Tensile Strength (CD)	ASTM D4632	lbs (N)	111 (494)	200 (890)	111 (494)
Trapezoidal Tear Strength (MD)	ASTM D4533	lbs (N)	45 (200)	115 (512)	45 (200)
Trapezoidal Tear Strength (CD)	ASTM D4533	lbs (N)	45 (200)	75 (334)	45 (200)
CBR Puncture Strength	ASTM D6241	lbs (N)	337 (1500)	675 (3004)	337 (1500)
UV Resistance after 500 hrs	ASTM D4355	% strength	70	90	70
HYDRAULIC PROPERTIES					
AOS	ASTM D4751	U.S. Sieve (mm)	70 (0.21)	40 (0.43)	70 (0.21)
Permittivity	ASTM D4491	sec ⁻¹	1.9	2.1	1.9
Flow Rate	ASTM D4491	gpm/ft ² (l/min/m) ²	140 (5704)	145 (5907)	140 (5704)
Percent Open Area	COE-02215-86	%	na	6	na
PACKAGING					
Roll Width	--	ft (m)	4 (1.2)	4 (1.2)	4 (1.2)
Roll Length	--	ft (m)	50 (15.2)	50 (15.2)	50 (15.2)
Est. Gross Weight	--	lbs (kg)	50 (23)	50 (23)	55 (25)
Area	--	ft ² (m ²)	200 (18.6)	200 (18.6)	200 (18.6)

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Retaining Wall



Slope



Retaining Wall Interceptor Drain

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