



Thermoplastic Single Ply and Multi-Ply Roofing Systems

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FLEX G100W DRAINAGE COMPOSITE

PRODUCT DESCRIPTION

The Flex G100W provides the added benefit of a woven geotextile bonded to one side for higher clog resistance and long-term flow capacity.

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** 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.
- **Relief of hydrostatic pressure buildup** against subterranean surfaces.
- **Cost savings** thanks to the lightweight, easy to install 4'x50' (1.22m x 15.24m) panels. This saves the transportation cost of bringing aggregate to the construction site.

APPLICATIONS

Flex G100W is designed for use in high-flow, high compressive strength, horizontal or vertical applications where a single-sided subsoil drainage filter layer is needed. The panel is installed as a drainage and filter panel between the Flex waterproofing system and the soil fill. The panel has high compressive strength making it ideal for use as the drainage system for installation in Flex Garden Roof Systems.

INSTALLATION GUIDELINES

Detailed installation instructions are available from your Flex representative.

TECHNICAL SERVICES

Complete technical assistance is available from Flex and its sales representatives. Service includes assistance during design and specification stages as well as initial stages of installation.

WARRANTY

Flex warrants that the product that it sells will conform to the specifications published in this literature. For information on limitations to this warranty, contact Flex Membrane International at 800-969-0108.

FLEX G100W DRAINAGE COMPOSITE

TECHNICAL DATA

<u>PROPERTY</u>	<u>TEST METHOD</u>	<u>UNITS</u>	<u>FLEX G100W</u>
<u>CORE</u>			
Color			Black
Thickness	ASTM D 1777	in (mm)	0.40 (10.16)
Compressive Strength	ASTM D 1621	psf (kN/m ²)	18000 (862)
Maximum Flow Rate ¹	ASTM D 4716	gpm/ft (l/min/m)	21 (260)
Installed Vertically ²	ASTM D 4716	gpm/ft (l/min/m)	18 (222)
Installed Horizontally ³	ASTM D 4716	gpm/ft (l/min/m)	3.8 (47)

¹In plane flow tested at 3600psf (173kPa) with a gradient of 1.0.

²Installed flow rate with soil or concrete overburden at vertical gradient of 1.0.

³Installed flow rate with soil overburden at horizontal gradient of 0.05.

GEOTEXTILE FILTER

<u>MECHANICAL PROPERTIES</u>	<u>TEST METHOD</u>	<u>UNITS</u>	<u>FILTERWEAVE®</u>
<u>402</u>			
Grab Tensile Strength (MD)	ASTM D 4632	lbs (kN)	365 (1.62)
Grab Tensile Strength (CD)	ASTM D 4632	lbs (kN)	200 (0.89)
Mullen Burst Strength	ASTM D 3786	psi (kPa)	450 (3097)
Trapezoidal Tear Strength (MD)	ASTM D 4533	lbs (kN)	115 (0.51)
Trapezoidal Tear Strength (CD)	ASTM D 4533	lbs (kN)	75 (0.33)
Puncture Strength	ASTM D 4833	lbs (kN)	100 (0.44)
UV Resistance after 500 hrs	ASTM D 4355	% strength	90

HYDRAULIC PROPERTIES

AOS	ASTM D 4751	U.S. Seive (mm)	40 (0.415)
Permittivity	ASTM D 4491	sec ¹	2.14
Flow Rate	ASTM D 4491	gpm/ft ² (l/min/m ²)	145 (5907)
Percent Open Area	COE-02215-86	%	10

PACKAGING

Roll Width		ft (m)	4 (1.22)
Roll Length		ft (m)	50 (15.24)
Est. Gross Weight		lbs (kg)	50 (22.7)
Area		ft ² (m ²)	200 (18.6)

NOTE: All Geotextile Mechanical Properties and Hydraulic Properties shown are Minimum Average Roll Values (MARV). All Core Properties shown are Typical Values.