

# Product Data Sheet

# 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, 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.

#### **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.

# PHYSICAL PROPERTIES

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

<sup>4</sup>In plane flow tested at 3600psf (173kPa) with a gradient of 1.0. <sup>2</sup>Installed flow rate with soil or concrete overburden at vertical gradient of 1.0. <sup>3</sup>Installed flow rate with soil overburden at horizontal gradient of 0.05.

# **GEOTEXTILE FILTER**

MECHANICAL PROPERTIES	TEST METHOD	<u>UNITS</u> <u>FIL</u>	TERWEAVE® 402
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 <sup>1</sup>	2.14
Flow Rate	ASTM D 4491	gpm/ft² (l/min/m²)	) 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 <sup>2</sup> (m <sup>2</sup> )	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.