# GREENSCAPES™ GS-310

## STORMWATER MANAGEMENT

### **DESCRIPTION**

GREENSCAPES GS-310 is a stormwater retention and drainage composite product used within GreenScapes greenroof systems. GS-310 consists of a 3-dimensional polystyrene formed dimple core providing compressive strength to support subsequent layers. The formed dimple core retains stormwater but allows excessive stormwater to drain through drainage holes in the top of the drain board. GREENSCAPES GS-310 is preassembled with a spunbonded, filter fabric made from 100% post-consumered recycled polyester geotextile adhered to the top of the core and a black nonwoven polypropylene filter fabric adhered to the bottom of the core. The spunbonded filter fabric may vary in color from tan to black depending on the color of the recycled fibers from which it is made.

### **APPLICATIONS**

GREENSCAPES GS-310 provides storm water retention and drainage for CETCO GREENSCAPES Greenroof Systems. GREENSCAPES GS-310 allows for storage of up to 0.11 gallons of stormwater per square foot promoting irrigation through the plant roots and evapotranspiration into the GS-500 Series Growing Media.

#### **INSTALLATION**

Install GREENSCAPES GS-310 loose laid with the woven, spunbonded filter fabric facing up to maximize storm water retention. Do not mechanically fasten. Install adjacent rows butted together with filter fabric flap overlapping adjacent drainage panel ensuring the Growing Media does not pass through

gaps between adjacent drainage panels. Cut the GS-310 composite as required to fit around all penetration and drainage details.

Minimize direct traffic on the drainage material until placement of the Growing Media to avoid shifting of the installed drainage composite. Do not drive vehicles directly on drainage composite prior to installation of the Growing Media. Repair damaged or disrupted drainage composite prior to installing of the Growing Media. Do not leave exposed for prolonged time period.

#### **PACKAGING**

GREENSCAPES GS-310 is available in rolls 4' (1.2 M) by 50' (15.2 M) 200 sq-ft (18.5 sq m); per roll.

PHYSICAL PROPERTIES		
PROPERTY	TEST STANDARD	TYPICAL VALUE
DRAINAGE CORE PROPERTIES		
Panel Height	ASTM D1777	1" (25 mm)
Compressive Strength	ASTM D1621	9,500 psf (454 kPa)
Flow	ASTM D4716	30 gal/min/foot width (376 l/ min/m)
TOP SPUNBONDED FILTER FABRIC PROPERTIES		
Weight	ASTM D3776	2.95 oz/yd² (100 g/m²)
Grab Tensile Strength	ASTM D4632	75 lbs. (33 kN)
Grab Elongation	ASTM D4632	40%
Trapezoidal Tear	ASTM D4533	20 lbs. (0.09kN)
BOTTOM NON-WOVEN FILTER FABRIC PROPERTIES		
Weight		4 oz/yd² (94.8 g/m²)
Grab Tensile Strength	ASTM D4632	100 lbs. (0.4 kN)
Puncture	ASTM D4833	65 lbs. (0.28 kN)
TOTAL COMPOSITE PROPERTIES		
Weight (Dry)		0.325 lbs/sq ft (1.59 kg/m²)
Weight (Saturated - filled cups)		1.24 lbs/sq ft (6.05 kg/m²)
Water Retention		0.11 gals/sq ft (0.54 l/m²)

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