



VEGETATIVE ROOFING COMPONENTS

PROTECTIVE FLEECES

Extensive Protective Fleece

Product #

3310

Our Extensive Protective Fleece is designed specifically for use within Extensive green roofing systems. Specific to this product, it:

- **protects the roof membrane** and/or root barrier against damage from light mechanical demands
- **separates materials** of incompatible substrates from one another
- **stores water** & nutrients, depending on its function
- has a mass/structure and water holding capacity designed with the dead load weight and plant palettes of the Extensive roof system in mind to give the perfect **balance of water holding capacity and protection**



LEED Credits available for:

- Materials & Resources
- MR 4.1 & MR 4.2



Tiered pricing based on product quantity



1,076 ft² per Roll
6 Rolls per Pallet (6,456 ft²)

TECHNICAL DATA

Materials:

- Polypropylene, Polyester & Recycled Acrylic Thread

Material Thickness:

- 0.14", 9 oz.

Roll Dimensions (W x L)

- 6' 6 3/4" x 164' 1/2"

Roll Diameter:

- 1' 3 3/4"

Roll Weight:

- 67 lbs.

Total Saturated Weight:

- 0.47 lbs. / ft²

Water Holding Capacity:

- 0.08 in³ / in² (0.049 gal / ft²)

Rot & Pathogen Resistant:

- Yes

Puncture Resistant:

- Yes

Vegetated Roofing Use:

- Extensive vegetative roofs

Installation Requirements:

- Overlap fabric by 6"



VEGETATIVE ROOFING COMPONENTS

FILTER FLEECES

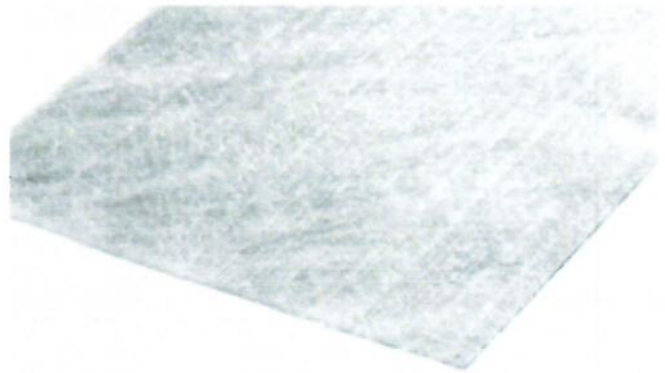
Extensive Filter Fleece

Product #

3710

Our Extensive Filter Fleece is used when the drainage system needs to be protected from fine particles entering from the substrate layer. Specific to this product, it:

- acts as a separation between vegetation areas and vegetation-free zones
- **separates drainage and substrate layers** in multi-layered structures
- is designed with the perfect elasticity to **allow the fibrous root structures of extensive plant species** to penetrate it
- **enables plants to uptake water** from the drainage / retention board without deteriorating the fleece's filtration capacity



Tiered pricing based on product quantity



2,153 ft² per Roll
11 Rolls per Pallet (23,683 ft²)

TECHNICAL DATA

Materials:

- Polypropylene Thread

Material Thickness:

- 0.04"

Roll Dimensions (W x L):

- 6' 6 3/4" x 328' 1"

Roll Diameter:

- 11"

Filtration Capability:

- Up to No. 140 Sieve

Total Saturated Weight:

- 0.02 lbs. / ft²

Tensile Strength (CBR Test):

- 1.08 lbs. / in²

Puncture Resistance:

- 269.7 lbs.

Rot & Pathogen Resistance:

- Yes

Vegetated Roofing Use:

- Extensive vegetative roofs with either a drainage/retention board or dual-media system

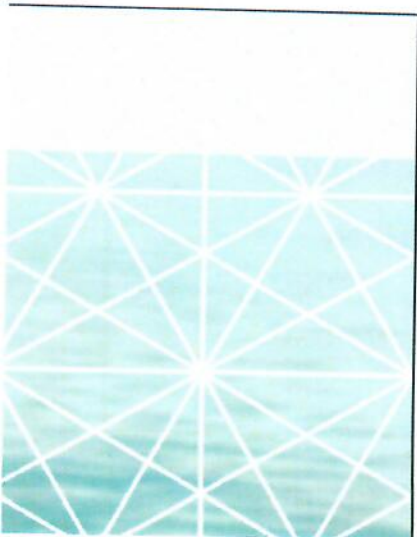
Installation Requirements:

- Overlap seams by 6"
- Cover with Extensive growth media



HANGING GARDENS

green roofs | stormwater | bioremediation





VEGETATIVE ROOFING COMPONENTS

WATERTIGHT LINER

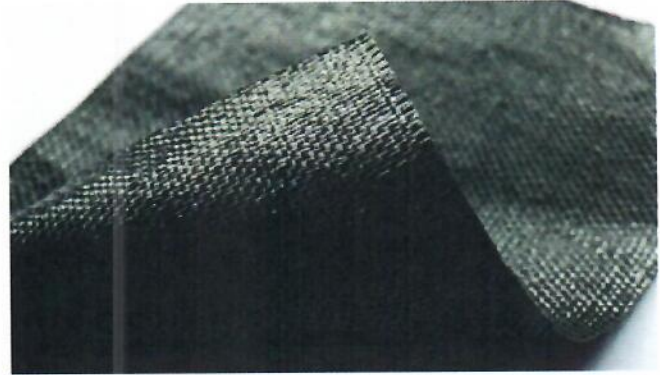
40 Mil Reinforced Polyethylene

Product #

3183

Our Watertight Liners are utilized to create a watertight system for stormwater runoff containment or retention. Our liners provide durability, flexibility, and ease of installation. Specific to this product, it:

- **can be prefabricated** to any length, width, corner and shape, eliminating the cost of heat welding on site
- is a **cost effective** alternative to other types of liners, such as HDPE, PVC, & EPDM
- is made from **environmentally friendly** materials that are both fish and plant safe, as well as approved for potable human drinking water
- has more than **7x the Tongue tear strength** & nearly **5x greater Mullen bursting strength** compared to a typical EPDM liner



Tiered pricing based on product quantity



Liners come folded on pallets, if not prefabricated

TECHNICAL DATA

Materials:

- heavyweight woven-coated reinforced polyethylene (RPE)

Thickness (ASTM D 1777):

- 40 Mils

Coating Thickness:

- 2.5 Mils

Weight (ASTM D 751):

- 0.128 lbs. / ft²

Tensile Strength - Grab Method (ASTM D 5034):

- 680 lbs. / in (Machine Direction)
- 650 lbs. / in (Transverse Direction)

Tear Strength - Tongue Method (ASTM D 5884):

- 150 lbs. / in (Machine Direction)
- 155 lbs. / in (Transverse Direction)

Bursting Strength - Mullen (ASTM D 3786):

- 1250 lbs. / in²

Hydrostatic Resistance (ASTM D 751):

- 685 lbs. / in²

Puncture Resistance (ASTM D 4833):

- 347 lbs.

Low Temperature Cold Crack (ASTM D 2136):

- -85°F

Water Vapor Transmission (ASTM E 96):

- 0.475 g / m² / day

UV Resistance (ASTM G 154):

- >90% Strength retained after 2000 hours



GROWTH MEDIA & SOIL ADDITIVES

INFILTRATION MEDIAS

Bio-Infiltration Mix

Product #

4530

Our Bio-Infiltration Mix is blended specifically for all bioinfiltration systems. Regardless if the system is a swale, berm, or sock, we blend our mixes specific to the plant palette, so please provide that list prior to ordering. Bio-Infiltration Mix infiltration media offers many advantages and guarantees:

- is **uniquely formulated** for specific swale, berm, or sock depths
- a **buffered pH** per planting palette
- particle distribution size designed per anticipated stormwater intake



LEED Credits available for:

- Materials & Resources
 - MR 5.1 & MR 5.2
- (in most locations)



Tiered pricing based on product quantity



Available in:

- Bulk
- 2 yd³ Super Sacks
- 1 ft³ Bags

TECHNICAL DATA

Coverage (1 yd³):

- @ 12" = 27 ft²
- @ 36" = 9 ft²
- @ 72" = 4.5 ft²

Dry Weight (approximate):

- 72 lbs. / ft³

Saturated Weight (approximate):

- 111 lbs. / ft³

Total Water Holding Capacity:

- @ 1" = 0.29 gal. / ft²

Cation Exchange Capacity:

- 20.1

pH:

- 7.2

% of Water Held:

- @ Maximum Water Holding Capacity = 54

Electrical Conductivity:

- 1.8 mS / m

Bulk Shipping Data:

- Bulk material weighs approximately 2,850 lbs. / yd³
- 28 - 30 yd³ in dump trailer, 15 yd³ in a tri-axle

2 yd³ Super Sacks:

- 2 yd³ Super Sacks weigh approximately 5,700 lbs.
- 12 - 13 2 yd³ Super Sacks / flatbed trailer

1 ft³ Bags:

- 1 ft³ Bag weighs approximately 102 lbs.
- 60 Bags / pallet
- 12 - 13 pallets / flatbed trailer

HARDSCAPING

POROUS PAVEMENT

Microporous Pavers

5530

Product #



Our Microporous Pavers are a ceramic-based porous paving unit with strength and durability characteristics that meet requirements for commercial traffic applications. Microporous Pavers offer many advantages and guarantees:

- unique product formula provides microscopic pores within each paver that **do not clog** with dirt and debris
- installed flush to one another, which **reduces the risk of cracking** and chipping from vehicular traffic
- allow **exponentially higher long-term infiltration rates** when compared to traditional cement-based pavers
- **minimal maintenance** requirements
- colors are sintered at high temperatures and **do not fade over time**
- product performance and integrity can be maintained with **periodic power washes** or simple street clean sweeps when needed



Tiered pricing based on paver size & quantity



133 sq ft of Pavers per Pallet
Full truckloads are available



LEED Credits available for:
 • Sustainable Sites
 • SS 6.1.5S 6.2, & SS 7.1

TECHNICAL DATA

Paver Dimensions (H x W x L):

- HG 5530.1 2.16" x 3.94" x 7.87"
- HG 5530.2 2.16" x 7.87" x 7.87"
- HG 5530.3 2.16" x 5.90" x 11.81"
- HG 5530.4 2.16" x 11.81" x 11.81"

Pavers also available in 1.57" & 1.95" thickness

Paver Weight:

- 10.2 lbs. / ft²
- 10,545 lbs. / ft³

Compressive Strength (ASTM C 67):

- 1,376 lbs. / in²

Modulus of Rupture (ASTM C 99):

- 1,376 lbs. / in²

Infiltration (ASTM C 1781):

- 120" / hour (joints not sealed)
- 30" / hour (joints sealed)

Static Coefficient of Friction (ASTM C 1028):

- Minimum of 0.95 (dry)
- Minimum of 0.89 (wet)

Freeze-Thaw Durability (ASTM C 666):

- Less than 0.05% paver degradation



SIENNA



SANDSTONE



VERMILLION



CHARCOAL



STEEL



AMERICAN WHITE



SALT WATER



STORMWATER HARVESTING

RAIN BARRELS

Desert Collection

Product #

7110

Hanging Gardens offers both freeze-proof & non-freeze proof options for rain barrels in various holding capacities and styles to meet your design criteria. Rain Barrels offer many advantages and guarantees:

- have a thick, heavy duty seamless wall designed to **resist freezing temperatures**
- as a freeze-proof system, the barrel **doesn't need to be drained**
- features a vertical wall around the top perimeter to **divert water into the barrel**
- incorporates welded fittings, **guaranteed leak free**. Custom fittings locations available at no additional charge
- available in 16 solid colors, 16 speckled colors, and 4 premium resins



Tiered pricing based on product quantity



Varies dependent on order
Please contact us for packaging & shipping details

TECHNICAL DATA

Volume Options & Dimensions (All Cylindrical):

HG 7110	50 Gal.	20" Diameter x 36" Height
HG 7120	55 Gal.	22" Diameter x 34" Height
HG 7130	65 Gal.	20" Diameter x 48" Height
HG 7140	100 Gal.	27" Diameter x 42" Height
HG 7150	200 Gal.	36" Diameter x 48" Height
HG 7160	360 Gal.	48" Diameter x 48" Height

Weight (Full):

HG 7110	435 lbs.
HG 7120	490 lbs.
HG 7130	565 lbs.
HG 7140	880 lbs.
HG 7150	1750 lbs.
HG 7160	3230 lbs.

Materials:

- UV-Protected Recyclable Polyethylene

Top Styles (Removable):

- 'Bowled' Top with 8" dia. Basket Strainer
- 'Canale' Top with 17" dia. Basket Strainer

Valve Options:

- Brass Bucket-High Valve
- Brass Butterfly Drain Valve

Colors / Finishes:

- Solid Colors
- Speckled Colors
- Premium Stone Effects