



ENKADRAIN[®] RETAIN&DRAIN3111

GREEN ROOF WATER RETENTION & DRAINAGE

PRODUCT DESCRIPTION

Enka[®]Retain&Drain 3111 is a geo-composite composed of a drainage core of fused three-dimensional entangled polypropylene filaments thermally bonded to a non-woven water retention fleece made of 100% mixed recycled synthetic fibers that are durable and do not rot.

The propylene filaments are molded into a square waffle pattern to form a drainage core with excellent compressive strength. Polypropylene has a low moisture absorption thus maintaining its strength even in wet service environment. It is chemically inert and has excellent resistance against organic solvents, degreasing agents, acids, and alkalines.

The water retention fleece is a lightweight non-woven that can capture and store more than 7.5 times its own weight in water. Unlike reservoir drains where water is stored in segregated small “cups”, Enka[®]Retain&Drain 3111 provides a uniform supply of water in direct contact with the growing medium that is readily accessible by the plants.

Enka[®]Retain&Drain 3111 comes in convenient roll format. It is water vapor permeable and therefore suitable for installation on conventional and protected membrane roofs. It is an environmental conscious green roof drain that contains 71% by weight of post-industrial recycled materials.

APPLICATIONS

- ▶ Extensive, semi-intensive and intensive green roofs
- ▶ Exterior and interior planters
- ▶ Enhance water retention and stormwater management capacities of green roofs
- ▶ Suitable for conventional and protected membrane roofs (PMR)

FEATURES & BENEFITS

- ▶ Protects waterproofing during and after green roof installation
- ▶ High compressive strength to maintain good drainage under loads
- ▶ Superior water holding capacity reduces runoff and contributes to stormwater management
- ▶ 3D open core provides a high drainage rate with minimal resistance
- ▶ Drainage core is resilient to transient loads and maintains flow
- ▶ Lightweight, flexible, easy and quick to install
- ▶ Conforms to irregular or curved roof surface
- ▶ Easy to cut and meet complicated landscape design requirements
- ▶ Durable, excellent chemical and biological resistances
- ▶ Recycled contents contributes towards LEED credits

INSTALLATION

Install Enka[®]Retain&Drain 3111 with the water retention fleece facing up and entangled filaments down. Butt rolls and cover joint with adjacent roll using the built-in 4in. (100mm) side lap to achieve a continuous fleece coverage. Butt ends of rolls together. Stagger adjacent rolls by at least 40 in. (1m) so end joints are not aligned. Cover Enka[®]Retain&Drain 3111 immediately after installation to prevent wind uplift and degradation by ultra-violet radiation.

PHYSICAL PROPERTIES

Property	Imperial	Metric
Core Material	Recycled Polypropylene	
Total Thickness	0.60 in	15.2 mm
Total Weight	33.0 oz/yd ²	1118 g/m ²
Core Thickness	0.4 in	10.2 mm
Core Weight	16 oz/yd ²	542 g/m ²
Water Holding Capacity	0.11 gal/ft ²	4.48 l/m ²

FABRIC PROPERTIES

PROPERTIES	TEST METHOD	IMPERIAL	METRIC
Polymer		Recycled Synthetic Fibers	
Fabric Color		Varies	
Weight	ASTM D-6525	17.0 oz/yd ²	576 g/m ²
Thickness	ASTM D-5261	0.20 in	5.1 mm
Fabric Width	ASTM D-3775	44.1 in	1.12 m
Water Retention	ASTM E-2397	0.11 g/ft ²	4.48 l/m ²

PACKAGING

Property	Imperial	Metric
Core Width	39.0 in	99.1 cm
Length	61.5 ft	18.8 m
Area	22.2 yd ²	18.6 m ²
Area	200.0 ft ²	18.6 m ²
Roll Diameter	28.0 in	71 cm
Gross Roll Weight	45.8 lb	20.8 kg

NOTE: To the best of our knowledge, unless otherwise stated, these are typical property values and are intended as guides only, not as specification limits. Chemical resistance, odor transmission, longevity as well as other performance criteria is not implied or given and actual testing must be performed for applicability in specific applications and/or conditions. AMERICOVER, INC. MAKES NO WARRANTIES AS TO THE FITNESS FOR A SPECIFIC USE OR MERCHANTABILITY OF PRODUCTS REFERRED TO, no guarantee of satisfactory results from reliance upon contained information or recommendations and disclaims all liability for resulting loss or damage. Limited Warranty available at www.Americover.com

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