

Layered System for Intensive Green Roofs

AMENITY DECKS AND ROOFTOP GARDENS

Description:

The Intensive Layered system is a deeper media system designed for plant material, including perennials, shrubs and trees. Columbia Green Intensive growing media is used in this system. The Intensive system provides maximum design flexibility. It consists of a root barrier, drainage layer, filtration layer, and optional water retention layer. This system can be used in any landscape design, installed on the roof or in large planters. It is easy to install- layers can be cut in the field to fit curves and irregular shapes.

The Intensive Layered System is designed to retain water and decrease stormwater runoff. Once saturated, any excess water moves efficiently through the system and to the nearest roof drain. The system promotes plant health, allowing airflow in the drainage layer and through the media. The underlying membrane is protected with a Columbia Green root barrier. Growing media depths are based on root space requirements for plant material selected, structural requirements, and stormwater retention goals. Depths typically range from 8" to 48"+.

System Components:

1. Columbia Green Root Barrier

A physical barrier preventing root intrusion into underlying waterproofing membrane

- Description: 15-16 mils thick

2. 0.75" Drainage Layer

Designed to mitigate excess moisture through ventilation and promote efficient drainage of the growing media

- Description: .75" Thick highly permeable three-dimensional entangled polypropylene matrix
- Installation: Do not overlap material. Install parallel to slope.

3. Filtration layer

Adhered to the Drainage Layer, prevents erosion of the growing media

- Description: Durable spun-bonded polyester with non-directional weave
- Installation: Overlap using provided 3" seams

4. 0.5" Water Retention Layer [Optional]:

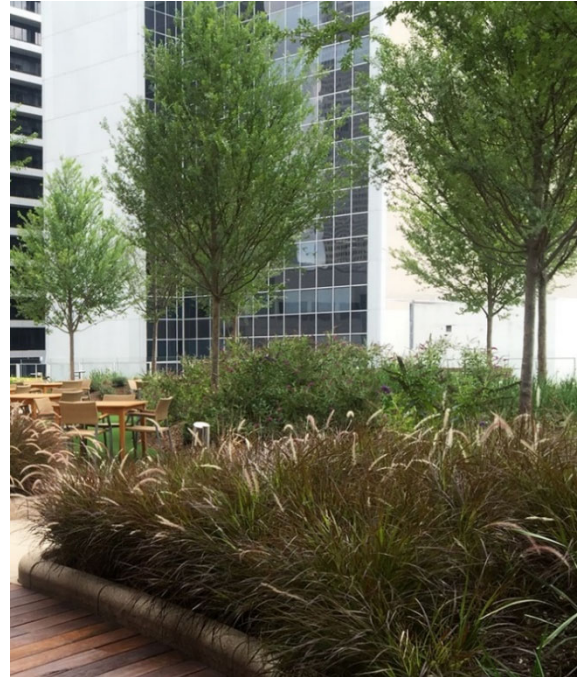
Provides supplemental moisture retention for green roof plants, and anchorage for plant roots

- Description: High loft nonwoven polyester blanket with anchorage points for promoting solid root structures
- Installation: Do not overlap material. Install perpendicular to slope.

5. Growing Media: Columbia Green Intensive Growing Media, Regionally Sourced

See Columbia Green Growing Media Technical Information Sheet

6. Plants: Selected by Designer



Storage:

- Store components in a dry area.
- Store away from sources of ignition and extremely high temperatures.

Precautions:

- Avoid prolonged exposure to sunlight, heat, sparks and open flames.
- Wash exposed skin prior to eating, drinking or smoking and at the end of each shift.

LEED Materials Transparency Information:

Post-Consumer Recycled Content and Manufacturing Locations:

- Drainage 40% ; Euclid, Ohio 44117
- Filtration 0% ; Euclid, Ohio 44117
- Water Retention Please Inquire; Michigan City, IN 4636

Packaging/Component Size:

0.5" Water Retention Layer (Optional), ML2102	
Thickness:	.65" +/- .10"
Dimension:	90"W. x 107'L.
Coverage:	800 ft ²
Weight:	3.6 oz./yd ²
Packaging:	30"± dia. roll
Storage Volume % ASTM E2397	24 % (unit weight retained water)

Filtration Layer (Attached to Drainage Layer)	
Weight:	3 oz./yd ² (0.33 oz./ft ²)
0.75" Drainage Layer, ML2105	
Thickness:	0.75"
Dimension:	48"W. x 50'L.
Coverage:	200 ft ²
Weight:	16oz./yd ² (1.78 oz./ft ²)
Packaging:	24"± dia. roll



System Weight*: Includes .75" Drainage Layer, .5" Water Retention Layer (optional), and 5 lbs/s.f. for container plants

System Depth	Dry Weight	Saturated Weight
8" Media Depth	34 - 41 lbs./ft ²	54 - 63 lbs./ft ²
10" Media Depth	41 - 49 lbs./ft ²	66 - 77 lbs./ft ²
12" Media Depth	49 - 58 lbs./ft ²	78 - 91 lbs./ft ²

* System weights vary by region due to variances in growing media weight contact your local representative for more information.

