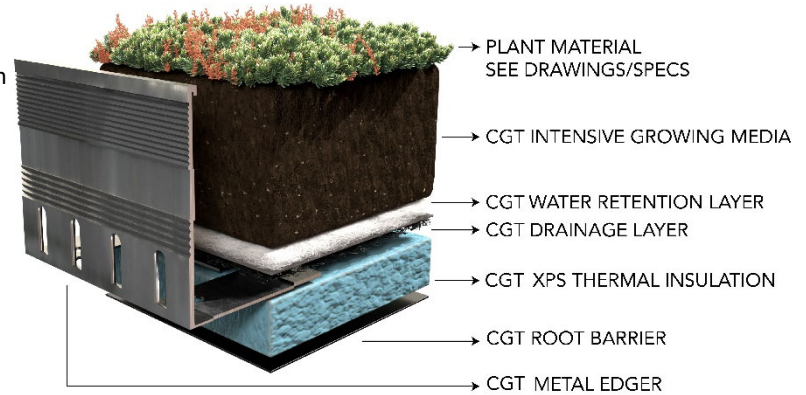


Extensive Layered Vegetated Roof System

Description:

The Columbia Green (CGT) Extensive Layered System is a lightweight, cost effective built-up vegetative roof system consisting of a root barrier, drainage layer, water retention layer and growing media. This product can fit any design or layout. Layers can be easily cut on-site to fit curves and angles.

The Extensive Layered System is designed to maximize stormwater management. It retains rain and irrigation water, to reduce or eliminate roof runoff. The system supports healthy root systems by allowing airflow under and up through the system. This high level of air permittivity throughout the individual layers also aids in de-energizing air flow under the system thus reducing the chance of system uplift.



Because of its shallow media depth, Extensive Layered Assemblies are typically planted with low growing sedum adapted to the rooftop environment. Growing media depths range from 3-inches to 6-inches, based on structural requirements and stormwater retention goals.

System Components:

1. CGT Metal Edger

An "L" Shaped perimeter restraint used to define and separate vegetative roof areas from paving, vegetation-free zones, or walls/parapets.

- Description: .125" Thickness Extruded Aluminum with perforations for drainage
- Connect adjacent sections by sliding connector (provided) into the channel at the end of each section. Can bend to curves.

2. CGT Root Barrier

A physical barrier preventing root intrusion into underlying roof membrane.

- Description: 20 mils thick

3. CGT 0.375" Drainage Layer

Designed to mitigate excess moisture while preventing erosion of the growing media. Promotes efficient drainage of the assembly.

- Description: .375" thick highly permeable three-dimensional entangled polypropylene matrix with adhered 3 oz. Filter Fabric
- Installation: Do not overlap drainage Layer. Overlap Filter Fabric at provided 3" seams.

4. CGT 1.0" Water Retention Layer:

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

- Description: High loft recycled nonwoven polyester blanket providing anchorage for solid root structures
- Installation: Do not overlap material.

5. CGT Growing Media: Columbia Green Extensive Growing Media, Regionally Sourced

See Columbia Green Growing Media Technical Information Sheet

6. Plants: Low profile, typically Columbia Green Pregrown Sedum mats, tiles or sedum plugs and cuttings. 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 Information: Post-Consumer Recycled Content and Manufacturing Locations:

- Drainage Layer 40% ; Euclid, Ohio
- Water Retention Layer 85% ; Cleveland, Ohio
- Metal Edger 6% Post Consumer, 49% Post Industrial. Holland, MI

System Weight*:

Root Barrier, .375" Drainage Layer, 1" Water Retention Layer, includes 2 lbs/s.f. plant material weight (plugs or cuttings)

System Depth	Dry Weight	Saturated Weight
3" Media Depth	11-14 lbs./ft ²	20-24 lbs./ft ²
4" Media Depth	14-18 lbs./ft ²	26-30 lbs./ft ²
6" Media Depth	20-26 lbs./ft ²	37-43 lbs./ft ²

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

Packaging/Component Size:

1.0" Water Retention Layer, ML2101	
Thickness:	1.0" +/- 0.1"
Dimension:	92"W x 90 ft L
Color:	Grey
Coverage:	690 ft ²
Weight:	5.1 oz./yd ²
Packaging:	30"± dia. roll
Storage Volume % ASTM E2397	23 % (unit weight retained water)

Filter Layer: Pre-attached to Drainage Layer	
Weight:	3 oz./yd ² (0.33 oz./ft ²)

0.375" Drainage Layer, ML2107	
Thickness:	0.40"
Dimension:	48"W. x 100'L.
Coverage:	400 ft ²
Weight:	17 oz./yd ² (1.88 oz./ft ²)
Packaging:	24"± dia. roll

