

Semi-Intensive Growing Media

Product NUMBER: GM3000-SINT

Description:

The following technical information sheet covers the production and materials for use in lightweight growing media blends on semi-intensive vegetative roof assemblies. This is an ideal media for deeper green roofs and rooftop turf applications. It can support perennials, ornamental grasses and even small shrubs.

Our growing media is regionally blended and formulated to meet the standards of the FLL Guidelines for particle size gradation, fines content, dry and saturated bulk density, total porosity, air filled porosity, water retention, hydraulic conductivity, pH balance, soluble salt content and organic matter content.

Our growing media is created using only high quality and local sourced product to the greatest extent possible. FLL Guidelines do not distinguish between semi-intensive and extensive media. Our semi-intensive media falls within the ranges similar to extensive growing media and is derived from industry proven materials consisting inorganic and organic materials.



Physical Characteristics:

1. Expanded Media Component:
 - a. Description: Inorganic expanded Media that is consistent with Pumice, Perlite, Volcanic Cinder Rock, or lightweight expanded clay aggregate.
2. Compost Component:
 - a. Description: Nutrient grade compost that is manufactured from recycled material and is mixed with the other three components by a composter that is enrolled in the United States Compost Council's (USCC) Seal of Testing Assurance (STA) Program.
 - b. Only compost products that meet all applicable state and federal regulations, Section 07 33 63 www.federalgreenspec.wbdg.org pertaining to its production and distribution are used in this application.
 - c. All approved compost products meet applicable state and federal regulations for chemical contaminants (e.g. heavy metals, pesticides, etc.) and pathogen limits from the source materials in which it was derived.
3. Organic Component:
 - a. Description: Fiber or organic material that is a clean cellulose product that adds friability to media, filtration, and agronomic horticultural attributes.

Storage:

- Store in a dry area free of potential contaminants which may adversely affect the engineered blend including potential weed seeds.
- Store away from sources of ignition and extremely high temperatures, when media is shipped in bags or totes.

Precautions:

- When media is placed in bags or totes, avoid prolonged exposure to sunlight, heat, sparks and open flames.
- When media is delivered in bulk, cover media piles as needed to reduce effects of potential weather conditions including heavy rains and winds.
- Wash exposed skin prior to eating, drinking or smoking and at the end of each shift.

LEED Information:

Manufacturing Location and Post-Consumer Recycled Content: Varies; contact Columbia Green for project-specific information.

Physical Properties*:

Particle Size Distribution		
Proportion of silting components < 0.063 mm	Mass %	≤ 15
Proportion of particles < 0.25 mm 60 mesh	Mass %	5 - 30
Proportion of particles < 1.00 mm 18 mesh	Mass %	10 - 50
Proportion of particles < 2.00 mm 10 mesh	Mass %	30 - 70
Proportion of particles < 3.20 mm 1/8 inch	Mass %	40 - 80
Proportion of particles < 6.30 mm 1/4 inch	Mass %	65 - 95
Proportion of particles < 9.50 mm 3/8 inch	Mass %	80- 100
Density Measurements		
Bulk Density (dry weight basis)	lb/ft ³	44 - 53
Bulk Density (at max. water-holding capacity)	lb/ft ³	72 – 85
Water/Air Measurements		
Total Pore Volume	Vol. %	≥ 50
Maximum water-holding capacity	Vol. %	45 – 65
Air-filled porosity at max water-holding capacity	Vol. %	≥ 10
Water permeability (saturated hydraulic conductivity)	in/min	0.024 – 2.83
pH and Salt Content		
pH (in CaCl ₂)		6.0 - 8.0
Soluble salts (water, 1:10, m:v)	g (KCl)/L	< 3.5
Organic Measurements		
Organic matter content	g/L	40 - 65
Nutrients		
Phosphorus, P205 (CAL)	mg/L	≤ 200
Potassium, K2O (CAL)	mg/L	≤ 700
Magnesium, Mg (CaCl ₂)	mg/L	≤ 200
Nitrate + Ammonium (CaCl ₂)	mg/L	≤ 80

* Volume measures are guaranteed at the time of production and packing. Settling of materials may occur during transportation and handling. Minor deviations from test data may occur due to the natural variability of the bulk materials used to produce the media blend

Packaging/Component Size:

Type	Volume	Approx. Delivery Weight
1.5 cf. Bags	1.5 cf bags. (palletized in 1 cy increments)	1,250 lbs.
1.5 cy Tote	1.5 cy	1,850 lbs.
2.0 cy Tote	2.0 cy	2,500 lbs.
Bulk	40-60 cy. / truck (weight dependent)	48,000 lbs. (more with tandem)

* Recommended 10%-15% additional growing media (by volume) be ordered to account for long term settling of product.