



Growing Media for Extensive Green Roofs

Description

Terra-LITE™ Extensive is an engineered growth media that has optimized performance characteristics for extensive green roofs, rooftop gardens, container gardens, and planters.

Terra-LITE™ Extensive is available in different saturated weight classes, each designed to guide you in choosing the best option for your project based on your weight requirements. Each weight class is identified by a number that corresponds to the typical weight for fully saturated media based on ASTM E2399.



Weight Classes

System	Saturated Weight
Extensive 500	50 - 60 lbs/ft ²
Extensive 600	60 - 70 lbs/ft ²
Extensive 700	70 - 80 lbs/ft ²
Extensive 800	80 - 90 lbs/ft ²
Extensive 900	90+ lbs/ft ²

Benefits

- An ideal growing media for extensive green roof assemblies in multi-course or multi-layer construction
- Can be combined with Terra-LITE™ Granular Drain as a multi-course system or with a synthetic drainage layer in a multi-layer system
- Normally used at depth of 3-6 inches
- Supports growth of hardy succulents and other drought-tolerant vegetation

Uses

- Extensive green roofs with hardy and drought-tolerant vegetation

Properties

Particle Size Distribution (ASTM D-422-63)

Description	Measurement
Proportion of Particles < 0.05 mm	≤ 15% (mass)
Proportion of Particles < 0.25 mm (#60 mesh)	5 - 30% (mass)
Proportion of Particles < 1.00 mm (#18 mesh)	10 - 50% (mass)
Proportion of Particles < 2.00 mm (#10 mesh)	30 - 70% (mass)
Proportion of Particles < 3.20 mm (1/8" mesh)	40 - 80% (mass)
Proportion of Particles < 6.30 mm (1/4" mesh)	65 - 95% (mass)
Proportion of Particles < 9.50 mm (3/8" mesh)	80 - 100% (mass)
Proportion of Particles < 12.50 mm (1/2" mesh)	100% (mass)

Bulk Density Measurements (ASTM E-2399)*

Description	Measurement
Bulk Density Dry Weight Basis	25 - 45 lbs/ft ³
Bulk Density at Max. Water Holding Capacity	60 - 70 lbs/ft ³

Water/Air Measurements (ASTM E-2399)

Description	Measurement
Total Pore Volume	≥ 50% (vol)
Max. Water Holding Capacity	40 - 60% (vol)
Air-Filled Porosity @ Max. Water Holding Capacity	≥ 7% (vol)
Water Permeability (Saturated Hydraulic Conductivity)	0.024 - 2.83 in/min

pH and Salt Content

Description	Measurement
pH (in CaCl ₂)	6.0 - 8.5
Soluble Salts (water, 1:10 m:v)	< 3.5 g (KCl)/L

Organic Measurements (LOI @ 500°C; SM 2540 G)

Description	Measurement
Organic Matter Content	25 - 65 g/L

Nutrient Retention Capacity

Description	Measurement
Cation Exchange Capacity (CEC)	≥ 6 meq/100 g



LEED Credits available for:

- Materials & Resources (MR)