

Boughton Extra Lightweight Green Roof Substrate



Product information

Boughton Extra Lightweight Green Roof Substrate mixture makes it an ideal growing media for green roofs where weight loading is an issue. Its low bulk density, even at field capacity, allows it to be installed to a much deeper depth than conventional extensive substrates, improving the growing environment for plants. Its free draining nature prevents the substrate from becoming saturated, making it ideal for drought tolerant plants.

Application

Boughton Extra Lightweight would normally be applied at depths between 80 and 150mm. This would allow for a varied planting scheme where a heavier substrate would limit the depth and therefore the diversity. Boughton Extra Lightweight should be laid directly onto drainage board.

Standard

Boughton Extra Lightweight Green Roof Substrate meets and exceeds all present G.R.O guidelines.



Properties

Bulk density oven dried (g cm-3)	0.70
Bulk density at 10% VMC (g cm-3)	0.83
Bulk density at field capacity (g cm-3)	1.13
Field Capacity (% v/v)	41.0
Particle Density (g cm-3)	0.98
Total Porosity (%)	71.8
Porosity at Field Capacity (%)	28.9
Effective Porosity (%)	42.9
Saturated Hydraulic Conductivity (mm min-1)	213

Delivery info

Boughton Extra Lightweight Green Roof Substrate can be delivered in any required format. This includes 25ltr and IBC Bulk bags. Or loose tipped as required.



Boughton Loam Ltd

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Boughton Extra Lightweight Mix engineering characteristics compared to FLL standards for Extensive greening

Substrate Density

Bulk Density when oven dried (g cm ⁻³)	0.70
Bulk Density at 10% VMC (g cm ⁻³)	0.83
Bulk Density at field capacity (g cm ⁻³)	1.13
Particle Density (g cm ⁻³)	0.98

Water & Air

Field Capacity (% v/v)	41.0
Total Porosity (%)	71.8
Porosity at Field Capacity (%)	28.9
Effective Porosity (%)	42.9
Saturated Hydraulic Conductivity (mm min ⁻¹)	213

Chemical

Organic Matter (%)	4.4
pH	8.2
EC (mS cm ⁻¹)	3.0

Plant Available Nutrients

Nitrogen (mg l ⁻¹)	4.5
Phosphate (mg l ⁻¹)	>165
Potassium (mg l ⁻¹)	>241

Particle Size Distribution

Stones (>8 mm)	4.9
Coarse gravel (8-4 mm)	34.6
Fine gravel (4-2 mm)	4.7
Very coarse sand (2-1 mm)	3.4
Coarse sand (1.0-0.5 mm)	12.1
Medium sand (0.5-0.25 mm)	23.6
Fine sand (0.250-0.125 mm)	11.9
Very fine sand (0.125-0.050 mm)	1.1
Silt (0.050-0.002 mm)	2.4
Clay (<0.002 mm)	1.4

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