

Boughton Intensive Green Roof Substrate 1



Product information

Boughton Intensive green roof substrate 1 has been designed to contain a greater proportion of organic matter and finer sand particles. This allows the substrate to retain more moisture for longer periods of time, as well providing extra nutrition for plants.

Application

Designed for intensive green roof installations, this substrate provides a stable growing medium for a wide variety of plants, including green roof lawns, shrubs and trees.

Standard

Boughton Intensive Green Roof Substrate 1 meets and exceeds all present G.R.O guidelines.



Properties

Bulk density oven dried (g cm-3)	1.07
Bulk density at 10% VMC (g cm-3)	1.33
Bulk density at field capacity (g cm-3)	1.45
Field Capacity (% v/v)	53.9
Particle Density (g cm-3)	2.18
Total Porosity (%)	48.9
Porosity at Field Capacity (%)	57.5
Effective Porosity (%)	0.0
Saturated Hydraulic Conductivity (mm min-1)	18

Installation details

Boughton Intensive Green Roof Substrate 1 can be laid to depths varying from 100 / 500 cm. The depth of substrate is determined by the planting scheme and the weight loading capability of the roof which must be assessed by a qualified structural engineer.

Delivery info

Boughton Intensive Green Roof Substrate 1 can be delivered in any required format. This includes 25ltr and IBC Bulk bags. Or loose tipped as required.



Boughton Intensive 1 Mix engineering characteristics compared to FLL standards for Extensive greening

Substrate Density

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Bulk Density at 10% VMC (g cm^{-3})	1.33
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Water & Air

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Total Porosity (%)	48.9
Porosity at Field Capacity (%)	57.5
Effective Porosity (%)	0.0
Saturated Hydraulic Conductivity (mm min^{-1})	18

Chemical

Organic Matter (%)	3.7
pH	8.0
EC (mS cm^{-1})	3.1

Plant Available Nutrients

Nitrogen (mg l^{-1})	7.8
Phosphate (mg l^{-1})	>165
Potassium (mg l^{-1})	>241

Particle Size Distribution

Stones (>8 mm)	10.4
Coarse gravel (8-4 mm)	5.0
Fine gravel (4-2 mm)	0.6
Very coarse sand (2-1 mm)	7.2
Coarse sand (1.0-0.5 mm)	20.1
Medium sand (0.5-0.25 mm)	39.5
Fine sand (0.250-0.125 mm)	15.5
Very fine sand (0.125-0.050 mm)	1.2
Silt (0.050-0.002 mm)	0.5
Clay (<0.002 mm)	0.1

Boughton Loam Ltd