

# **Boughton Biodiverse Substrate**



## **Product information**

The greater amount of sand particles in this substrate allows it to hold onto a greater volume of water compared to EX1, but still allows rapid drainage when required. Due to the greater sand content, this substrate is not suitable for very lightweight applications. As a result of its relatively free draining nature, temporary irrigation may be required to assist plant establishment.

## **Application**

Designed specifically for semi-intensive green roofs, this substrate should be installed at a depth of 120-180mm. It is perfectly suited for biodiverse roofs, which require substrate to be installed at varied depths across the structure in order to increase variability.

### **Standard**

Boughton Biodiverse Substrate meets and exceeds all present G.R.O guidelines.



# **Properties**

Bulk density oven dried (g cm-3)	0.99
Bulk density at 10% VMC (g cm-3)	1.08
Bulk density at field capacity (g cm-3)	1.40
Field Capacity (% v/v)	40.0
Particle Density (g cm-3)	1.38
Total Porosity (%)	71.9
Porosity at Field Capacity (%)	39.5
Effective Porosity (%)	32.3
Saturated Hydraulic Conductivity	151
(mm min-1)	

## **Delivery info**

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















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### Boughton Biodiverse Mix engineering characteristics compared to FLL standards for Extensive greening

#### **Substrate Density**

Bulk Density when oven dried (g cm <sup>-3</sup> )	0.99
20	
Bulk Density at 10% VMC (g cm <sup>-3</sup> )	1.08
Bulk Density at field capacity (g cm <sup>-3</sup> )	1.40
Particle Density (g cm <sup>-3</sup> )	1.38

#### Water & Air

Field Capacity (% v/v)	40.0
Total Porosity (%)	71.9
Porosity at Field Capacity (%)	39.5
Effective Porosity (%)	32.3
Saturated Hydraulic Conductivity (mm min-1)	151

#### Chemical

Organic Matter (%)	3.7
pH	8.2
EC (mS cm <sup>-1</sup> )	2.8

#### Plant Available Nutrients

Nitrogen (mg l <sup>-1</sup> )	12.3
Phosphate (mg l <sup>-1</sup> )	>165
Potassium (mg I <sup>-1</sup> )	>241

#### **Particle Size Distribution**

Stones (>8 mm)	1.7
Coarse gravel (8-4 mm)	16
Fine gravel (4-2 mm)	2.6
Very coarse sand (2-1 mm)	7.4
Coarse sand (1.0-0.5 mm)	21.0
Medium sand (0.5-0.25 mm)	33.9
Fine sand (0.250-0.125 mm)	13.2
Very fine sand (0.125-0.050 mm)	0.6
Silt (0.050-0.002 mm)	2.3
Clay (<0.002 mm)	1.4

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