

Technical Data Sheet

HYDROSOIL[®] SUBSTRATES

Axter have a range of substrates available to suit a variety of living and green roof systems.

Hydrosoil Biodiverse Substrate

A free draining, low nutrient and moisture retentive growing medium made from 100% recycled material in line with the UK Green Roof Code of best practice. Testing conforms within the BS8616:2019 green roof substrate testing methods and was completed by STRI.

Key benefits

- A free draining substrate suitable for use on intensive and extensive roof systems.
- Recommended substrate depth: 80-150mm.
- Free draining when saturated.
- Allows root penetration.
- Recycled brick/material.
- Green waste meeting strict PAS100 standards.



Physical Properties	
Bulk Density when oven dried	0.876 g cm ⁻³ (876kg/m ³)
Bulk Density at field capacity	1.089 g cm ⁻³ (1089kg/m ³)
Field capacity (% v/v)	32.7% v/v
Total porosity (%)	44.8%
Porosity at field capacity (%)	12.1%

Technical Properties	
Organic matter (% weight)	2.9 %
pH	7.4
Electrical Conductivity (mS cm ⁻¹)	2.9 mS cm ⁻¹
Phosphate (mg l ⁻¹)	269 mg l ⁻¹
Potassium (mg l ⁻¹)	909 mg l ⁻¹
Total nitrogen (%)	0.44%

Specification description

All testing of Axter Ltd Substrate was completed by Sports Turf Research Institute under the BS8616:2019 Specification for Performance Parameters and Test Methods for Green Roof Substrates. A specially blended mix of free draining organic material with clean and screened aggregates. Recycled from certifiable waste products in the building industry to provide a low nutrient water retentive growing medium.

Hydrosoil Sedum Substrate

A free draining, low nutrient and moisture retentive growing medium made from 100% recycled material in line with the UK Green Roof Code of best practice. Testing conforms within the BS8616:2019 green roof substrate testing methods and was completed by STRI.



System considerations

- A free draining substrate suitable for use on extensive roof systems and all plant finishes.
- Minimum recommended depth: 60mm.
- Free draining when saturated.
- Allows root penetration.
- Recycled content.
- Organic material PAS100 certified.

Physical Properties	
Bulk Density when oven dried	0.834 g cm ⁻³ (834kg/m ³)
Bulk Density at field capacity	1.115 g cm ⁻³ (1115kg/m ³)
Field capacity (% v/v)	25.60% v/v
Total porosity (%)	41.40%
Porosity at field capacity (%)	15.60%

Technical Properties	
Organic matter (% weight)	4.5 %
pH	7.0
Electrical Conductivity (mS cm ⁻¹)	2.21 mS cm ⁻¹
Phosphate (mg l ⁻¹)	293 mg l ⁻¹
Potassium (mg l ⁻¹)	1072 mg l ⁻¹
Total nitrogen (%)	0.86%

Specification description

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Hydrosoil Lawn Substrate

A nutrient-balanced and moisture retentive growing medium made from a blend of soil, compost, lightweight aggregate and crushed brick, suitable for use on intensive roof and podium systems. Testing conforms within the BS8616:2019 green roof substrate testing methods and was completed by STRI.



System considerations

- A free drainage substrate suitable for use on intensive roof systems and podium decks.
- Suggested Depth: 200mm± to suit plant depth.
- Free drainage when saturated.
- Allows for root penetration.
- Recycled content.
- Organic material PAS100 certified.

Physical Properties	
Bulk Density when oven dried	0.79 g cm ⁻³ (791kg/m ³)
Bulk Density at field capacity	1.17 g cm ⁻³ (1172kg/m ³)
Calculated Bulk Density at Saturation	1.54 g cm ⁻³ (1542kg/m ³)
Field capacity (% v/v)	45.80% v/v
Total porosity (%)	51.70%
Porosity at field capacity (%)	5.90%

Technical Properties	
Organic matter (% weight)	6.5%
pH	7.2
Electrical Conductivity (mS cm ⁻¹)	2.39 mS cm ⁻¹
Phosphate (mg l ⁻¹)	264 mg l ⁻¹
Potassium (mg l ⁻¹)	978 mg l ⁻¹
Total nitrogen (%)	0.11%

Specification description

All testing of Axter Ltd Substrate was completed by Sports Turf Research Institute under the BS8616:2019 Specification for Performance Parameters and Test Methods for Green Roof Substrates. Specially blended mix of free draining organic material with clean, lightweight and screened aggregates, to provide a nutrient-balanced water retentive growing medium. Complies with Soil Association standards and certifications.

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