



PRODUCT DETAILS

Product name **Pro-Living® Substrate - Extensive**

Product type Green roof component

PRODUCT DESCRIPTION

Pro-Living® Substrate - Extensive is composed of recycled crushed brick and PAS100 compost. The substrate is free draining, porous, lightweight and is especially suited for drought-tolerant planting schemes such as sedum mixes between **80–150mm** and wildflower mixes between **120–150mm**.

Pro-Living® Substrate - Extensive meets all present GRO guidelines.

APPLICATION

Pro-Living® Substrate - Extensive is designed for extensive green roofs, it is installed at regular depth across the roof during installation to support a range of sedum and wildflower mixes.

INSTALLATION

Pro-Living® Substrate - Extensive should be installed at a depth of **80-150mm** and directly onto a **25mm** deep drainage board.

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.

TECHNICAL INFORMATION

Characteristic	Value	Unit
Bulk density oven dried	0.83	g/cm ³
Bulk density at 10% VMC	0.97	g/cm ³
Bulk density at field capacity	1.26	g/cm ³
Field Capacity	37.6	% v/v
Particle Density	1.79	g/cm ³
Total Porosity	46.4	%
Porosity at Field Capacity	31.3	%
Effective Porosity	15.1	%
Saturated Hydraulic Conductivity	48	mm/min
Nitrogen	13.1	mg/l
Phosphate	> 165	mg/l
Potassium	> 241	mg/l
Organic matter	2.8	%
pH	7.7	-
EC	-	mS/cm

Particle Size Distribution		
Particle	Size mm	Quantity %
Stones	> 8	61.2
Coarse gravel	8 - 4	28.5
Fine gravel	4 – 2	1.2
Very coarse sand	2 – 1	0.5
Coarse sand	1.0 – 0.5	0.6
Medium sand	0.5 – 0.25	1.3
Fine sand	0.250 – 0.125	1.2
Very fine sand	0.125 – 0.050	0.7
Silt	0.050 – 0.002	2.7
Clay	< 0.002	2.0

SIZE, FINISH AND COLOUR

Product Code	Weight kg	Max Water capacity Volume - %
GRSUEx25	25	55
GRSUEx100	1000	55

HANDLING

Always use relevant safe manual handling techniques relevant to a products size and weight.

PACKAGING

Supplied in bags or shrink wrapped on pallets. The product is bagged specifically for projects to ensure material is kept dry and free from growth or detritus.

LIMITATIONS OF USE

For professional use only.

GUARANTEES

Defects arising from lack of maintenance or abnormal use may fall outside of the cover of the Proteus Waterproofing guarantee.

DISPOSAL

Disposal of **Pro-Living® Substrate - Extensive** should be done in a manner that is compliant with UK regulations and best practices. This includes ensuring that the material is properly classified and described, that it is not mixed with hazardous waste, and that it is disposed of in a manner that is environmentally responsible.

MAINTENANCE

For information on maintaining our roofing systems please refer to our [Maintenance Guide](#).

GUIDELINES AND STANDARDS

It is the responsibility of the Contractor to thoroughly familiarise themselves with all relevant Codes of Practice and Building Regulations to the works or referred in the specification.

Proteus Waterproofing take no responsibility for misinterpretation or lack of knowledge for third parties.

The works shall be carried out in accordance with the requirements of:

- **BS 6229** Flat roofs with continuously supported flexible waterproof coverings - Code of practice
- **BS 8217** Reinforced bitumen membranes for roofing - Code of practice
- **BS 8000-0** Workmanship on construction sites - Introduction and general principles
- **BS 8000-4** Workmanship on building sites - Code of practice for waterproofing
- **LRWA** [Design Guide for Specifiers](#)
- **S2T** [Safe to Torch](#)
- **GRO** [Code of Best Practice](#)