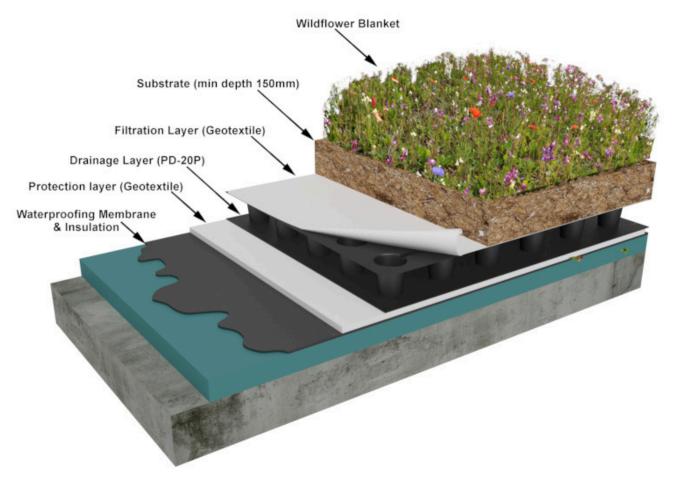


Rollout Wildflower Green Roof System



Total System Weight Variance per square metre				
Dry Weight Minimum (Based on Substrate at 150mm depth)	Approx. 165 kg per sqm ± 5%			
Saturated Weight (Based on Substrate at 150mm depth)	Approx. 225 kg per sqm ± 5%			

It is the customer's responsibility to ensure that the roof is structurally sound and capable of supporting the additional weight of the green roof, including allowances for snow load.

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Rollout Wildflower Green Roof System

System Overview

A wildflower roof is an extensive green roofing solution that combines aesthetics with environmental benefits. Rollout wildflower green roofs are pre-cultivated systems designed for efficient installation. These systems are made up of multiple layers, each contributing to the performance and longevity of the roof.

At the base, a waterproofing membrane safeguards the building from water ingress, followed by a protective layer (geotextile) laid directly on the subfloor. Then a drainage layer (e.g., Protecto-Drain 20P) ensures excess water is efficiently directed away, while keeping some water for plant growth in the egg shell cups.

A filtration layer (geotextile) is laid on top of this to prevent fine particles from clogging the drainage system. This is topped with a growing medium/substrate.. The substrate depth is typically deeper than that of sedum systems to accommodate the diverse root structures of wildflower species and promote greater biodiversity.

The final layer consists of pre-cultivated wildflower blankets with a mixture of mature plants that allows you to establish dense planting very quickly - more reliable than seeding and less time consuming than plug planting.



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40 Wildflower Species (100% Native Flowers)					
Bladder Campion	Grandmothers Garden	Cornflower	Fennel	Chicory	
Clustered Bellflower	Greater knapweed	Fox and cubs	Foxglove	Harebell	
Autumn hawkbit	Common daisy	Small scabious	Maiden pink	Agrimony	
Birdsfoot trefoil	Common mallow	Columbine	Red campion	Red clover	
Sheep's bit scabious	Common sorrel	Musk mallow	White campion	Tansy	
Meadow buttercup	Common toadflax	Purple loosestrife	White Clover	Teasel	
Meadow cranes-bill	Field poppy	Ragged robin	Wild Marjoram	Wild Basil	
Wild Carrot	Wild clary	Wild pansy	Wild thyme	Yarrow	

*As sown. The actual percentage of each species contained may vary due to environmental factors. Our supplier makes every effort to ensure wildflower products are free from weeds and pests, however, due to the natural way in which these products are grown we cannot guarantee they are 100% pest free on delivery. It is unlikely that you will see every species that is listed. The variation of species present has been developed to suit a wide variety of soils and environmental conditions. This will result in a product that will adapt to individual settings, which may mean some species are more successful than others. Contains annual, biannual, and perennial species. If installed after March, many species may not flower during the first year



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Rollout Wildflower Green Roof System

Birds & Bees Wildflower Blanket

Available	All year round
Standard Roll Size	1 sqm (500mm x 2,000mm)
Soil Thickness	18mm to 20mm
Soil Classification	Grown on bespoke FLL compliant substrate
Roll Weight	20kg (Saturated weight up to 25kg)
Typical Seed Mixture	100% Native Wildflowers
Vegetation Height on despatch	Approx. 100mm. The product is mown before despatch to minimise damage to plants. It will not be in flower when delivered.
Growth	The blanket is a blend of 40 native wildflowers, selected to be pollinator friendly. Many of the species are perennial which means they will flower every year if the conditions are suitable. Grown on a biodegradable coir blanket, this product does not include grass species, resulting in a more colourful blanket that is also suitable for green roof installations. The Wildflower blanket will contain mature plants, root fibre, and enough substrate to maintain the plant during establishment.



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Rollout Wildlfower Green Roof System

Substrate

Available	All year round		
Bag Sizes	25 Litre Bag & 750 Litre Bulk Bag		
25 Litre Bag Weight	Dry Weight : 24kg Saturated weight : 33kg		
750 Litre Bulk Bag Weight	Dry Weight : 698kg Saturated weight : 968kg		
25 Litre Bag Coverage	1m² to a depth of 25mm		
750 Litre Bulk Bag Coverage	30m² to a depth of 25mm		
Recommended depth for Substrate	150mm		
Details	An Extensive green roof substrate which is tested to FLL - Green-Roofing Guidelines (2018). This substrate provides the perfect base for establishing a green roof installation. The use of recycled crushed brick provides the most effective media for Extensive green roof systems, due to its ability to retain moisture whilst also remaining lightweight.		



10mm PAS green compostMineral Material

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Rollout Sedum Green Roof System Filtration and Protective Layer - Geotextile Fleece



GE-PP-PPT-400-Z

Wallbarn PPT Geotextile is a nonwoven, recycled polypropylene material. This is a stronger, more durable fabric then the recycled polyester. PPT Geotextile is ideal as a protection & filtration membrane for green roof applications. Made from multi-coloured fibres resulting from recycling processes, it promotes sustainable construction.

Key benefits:

- Made from recycled Polypropylene material.
- Ideal for green roofing Meets GRO Code
- High performance material with a cost saving.
- Can be exposed to sunlight (Must be covered within 15 days of installation).
- Durability forecast: minimum 5 years in natural ground with a pH between 4 and 9 and soil temperature above 25°C.
- Manufactured without glues or chemical binders.

Specifications:

- Polymer: Polypropylene
- Specific weight: 0.91 kg/dm³
- Raw material: Staple fibres
- Process: Needle-punched and calandered.
- Colour: Multi-coloured

Available as $1 \times 50 \& 2 \times 50$ metre rolls (stock item) - Widths of 3, 4, 5 & 6 metre available on special order (min. quantities apply)

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Rollout Wildflower Green Roof System

Filtration and Protective Layer - Geotextile Fleece cont'd

Physical Properties Standard		Value	Units	Tolerance %	Tolerance Units
Mass per unit area	EN ISO 9864	400	g/m²	+/- 10	+/- 40
Thickness at: 2 kPa 20 kPa 200 kPa	: EN ISO 9863-1 EN ISO 9863-1 EN ISO 9863-1	: 2.50 2.20 1.50	: mm mm mm	: +/- 20 +/- 20 +/- 20	: +/- 0.50 +/- 0.44 +/- 0.30

Mechanical Properties	Standard	Value	Units	Tolerance	Tolerance Units
Tensile Strength	EN ISO 10319 MD EN ISO 10319 CMD	7.0 8.0	kN/m kN/m	-15 -15	-1.1 -1.2
Elongation at maximum load	EN ISO 10319 MD EN ISO 10319 CMD	70 70	%	+/- 30 +/- 30	+/- 21 +/- 21
Energy absorption index	EN ISO 10318	2.60	kJ/m²	+/- 20	+/- 0.52
Static puncture resistance (CBR)	FN 180 12236		kN	-30	-0.42
Dynamic puncture EN ISO 13433 resistance		18	mm	+30	+5
Pyramidal puncture resistance	ouncture EN 14574		N	-30	-72

μm = Micrometre

kg/dm³ = Kilogram per cubic decimetre

g/m² = Gram per square metre

mm/s = Millimetre per second

kN = Kilonewton

kN/m = Kilonewton per metre

kJ/m²= Kilojoule per square metre

mm = Millimetre

⁻³l/ms = Cubic metre per millisecond

MD = Machine Direction/Longitudinal

CMD = Cross Machine Direction/Trasversal

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Wallbarn - Technical Datasheet Rollout Wildflower Green Roof System

Drainage Layer - Protecto-Drain 20mm Perforated

Wallbarn Protecto-Drain 20P is a water-storing, perforated dimpled membrane and is an ideal solution for extensive green roofs. The 20 mm dimples have a water storage capacity of approx. 6 l/m2. The pressure resistance of approx. 180 kN/m2 offers a high level of security, corresponding to a compressive strength of approx. 18 tonnes per m2.

Dimpled membrane	HDPE approx. 1,000 g/m²	
Dimple height	approx. 20 mm	
Total weight	арргох. 1,000 g/m²	
Number of dimples	400 dimples/m²	
Compressive strength	арргох. 180 kN/m²	
Water draining capacity	approx. 9 l/s·m	
Water storage	approx. 6.0 l/m²	
Roll length	20 m (or on request Roll width 0.5 / 1.0 / 1.5 / 2.0 m)	
Air volume between the dimples	approx. 14 l/m²	
Temperature resistance	-30 °C to +80 °C	
Chem. properties	chemical-resistant	
Physiolog. properties	safe for drinking water	
Water permeability EN ISO 11058	approx. 100 · 10-3 m/s	
Fire behaviour	Class E	

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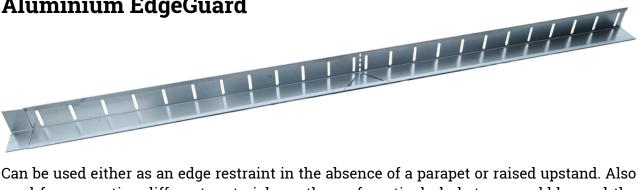
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Rollout Sedum Green Roof System

Accessories

Aluminium EdgeGuard



used for separating different materials on the roof, particularly between pebbles and the green roof buildup. Can be used on roofs that have up to 5 degree pitch. Available in a variety of heights (See below).

Code	Description	Height (mm)	Width of base (mm)	Material thickness (mm)	Length of section (mm)
GR-EDGE050-Z		50	100	1.2	
GR-EDGE075-Z	Aluminium, pre- punched and profiled	75	100	1.2	
GR-EDGE100-Z		100	100	1.2	
GR-EDGE120-Z		120	100	1.2	2400
GR-EDGE150-Z		150	150	1.2	2400
GR-EDGE200-Z		200	150	1.5	
GR-EDGE250-Z		250	200	1.5	
GR-EDGE300-Z		300	200	1.5	



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Wallbarn - Technical Datasheet Rollout Sedum Green Roof System

Pebbles



40 x 25Kg Bags GR-PEB-2040-PAL-Z



1 x 25Kg Bag GR-PEB-2040-Z



1 Tonne Bulk Bag GR-PEB-2040-LARGE-Z

Also familiarly known as Sea Washed Pebbles/Cobbles/Stones/Beach/Ballast etc (NB the material is sourced from vast shingle banks and repeatedly washed in clean water during screening). The material is supplied, according to buyers' needs, as roughly spherical stone (which may include some broken materials) graded in diameter normally. The colour of the stone varies from light to mid brown through to grey/black.

Wallbarn strongly recommends following the guidelines set out in the <u>GRO Code</u> for green roof best practices. Part of these recommendations include a pebble border around the entire perimeter of the green roof area and also around rooftop features such as rooflights, vents and any other equipment installed on the roof.

Gravel & Leaf Guards







Heavy duty leaf and gravel guards designed to stop leaves, gravel and pests enteringthe top of the circular drainage downpipe. This prevents blockages and assists in drainage of the roof.

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Wallbarn - Technical Datasheet Rollout Sedum Green Roof System

Inspection Chambers



Used to create an inspection chamber around outlets and irrigation points in green roof systems.

- Manufactured from high grade, powder coated aluminium for excellent corrosion resistance.
- Base of Inspection Chamber allows drainage via channels cut in the base
- Standard or parapet bases available
- Three different sizes of interlocking mid sections to cater for different levels of build up
- Lockable lid section

Code	Description	Height (mm)	Dimensions of Base (mm) w x l
GR-INSPECT-ALI-Z	Aluminium Inspection Box	50	300 x 300
GR-INSPECT-ALI-300-Z	Aluminium Inspection Box - Full Slots	300	300 x 300
GR-INSPECT-BASE-100-Z	Aluminium Inspection Box Parapet Base	100	300 x 300
GR-INSPECT-BASE-300-Z	Aluminium Inspection Box Parapet Base	300	300 x 300
GR-INSPECT-EXT-050-Z	Aluminium Inspection Box Extension Piece	50	300 x 300
GR-INSPECT-EXT-075-Z	Aluminium Inspection Box Extension Piece	75	300 x 300
GR-INSPECT-EXT-100-Z	Aluminium Inspection Box Extension Piece	100	300 x 300
GR-INSPECT-EXT-200-Z	Aluminium Inspection Box Extension Piece	200	300 x 300
GR-INSPECT-ALI-COVER-Z	Aluminium Inspection Box Locking Cover	55	300 x 300

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Rollout Wildflower Green Roof System

Important Information - Please Note

- Delivery Lead Times: Typical lead times for the Rollout System can be as short
 as one week. However, we strongly recommend coordinating a delivery
 schedule with your Account Manager well in advance to prevent delays caused
 by weather or courier availability. We can accommodate various delivery
 requests, including Bronze, Silver, and Gold FORS. Articulated lorries, HIAB, and
 Moffett deliveries are all available. For commercial projects, having a forklift on
 site and a designated area for temporary storage is advised.
- Site and Delivery Restrictions: It is crucial to inform Wallbarn of any site or
 delivery restrictions before your order is confirmed. Your Account Manager is
 available to assist in creating a delivery schedule that aligns with your project
 timeline. We recommend receiving all materials except the Wildflower blanket
 first and installing them prior to the blanket delivery. Unloading, unrolling, and
 laying the blanket on the same day it arrives is advised to ensure it adapts and
 flourishes as quickly as possible.
- Best Practice Guidelines: Wallbarn promotes the <u>GRO Code</u>, published by the non-profit Green Roof Organisation (<u>www.greenrooforganisation.org</u>), which outlines best practices for green roofs and walls in the UK. We advise reviewing this document to gain a deeper understanding of these practices.
- Warranty: As green roofs are living systems, proper installation is critical for their long-term success. Therefore, Wallbarn cannot offer a warranty on the system, with the exception of the protective and filtration fleece and the drainage layer.



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