



Eco Green Roofs Ltd

Unit 3 Rays Barn Farm Ingatestone, Essex

CM4 9EH

Project Name: Pears Building

O&M Manual

Systems Installed:

IKO Wildflower Seed System

Installers and Manufacturers: Eco Green Roofs Ltd

Operations Manager: Josh Bonner

Prepared by	:	Kim Wilkinson
Date	:	22/07/20
Rev	:	00



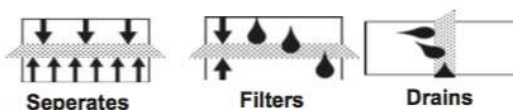
Sustainable Roof Gardens



DATA SHEET: PLASFEED 20

Certificate number	1213-CPD-3988
year tested	2010
Reference Standard	EN 13252, CE
Application	Drainage Boards

Drainage geocomposite made with an inner core consisting of a laminate in recycled high density polyethylene bonded to a geotextile filter



FILTER ELEMENTS

Prime Material (+ st.UV)		Polypropilene		
Mass	EN ISO 9864	g/m ²	150	±10
Average Tensile Strength MD/CMD	EN ISO 10319	kN/m	6/6	-1
Elongation at Max Load MD/CMD	EN ISO 10319	%	55/60	±30
Resistance to static loading CBR	EN ISO 12236	N	1000	-115
Dynamic Puncture resistance	EN ISO 13433	mm	38	+6
Flow perpendicular to the plane	EN ISO 11058	mm/s	100	-40
Porous metric	EN ISO 12956	micron	95	±35

LAMINATE

Material (+ st.UV)		Hdpe		
Mass	EN ISO 9864	g/m ²	1000	
Width		m	2	

GEOCOMPOSITE

Mass	EN ISO 9864	g/m ²	1150	±50
Thickness a 2 kPa	EN ISO 9863-1	mm	20	±2
Tensile Strength MD/CMD	EN ISO 10319	kN/m	14/14	-2
Stretch MD/CMD	EN ISO 10319	%	50/55	±15
Compressive Strength	ISO 25619-2	kN/m ²	150	±30
Hydrolyic Resistance				
In-plane flow capacity MD (20kPa, M/R, i=1)	EN ISO 12958	l/(m·s)	10	±2
In-plane flow capacity MD	EN ISO 12958	l/(m·s)		±20%
	Gradient	Contatto	i = 0,04	i = 0,10
	20 kPa	M/R	2.00	4.05
				i = 1
				10.00

M / M contact Soft / Soft M / R contact Soft / Rigid

DIMENSIONS STANDARD

Width	m	2	±3%
Length	m	10	±2%
pallet	n°	5	

The information contained herein is based on our level of knowledge and production. New research and practical experience can make revisions necessary. For this reason, we reserve the right to update the data sheets without notice.

The characteristics expressed relate to the production standard. Any deviations or requests for special products, are to be agreed upon.



IKO Extensive BioDiverse Growing Substrate

DESCRIPTION

A blend of water retaining aggregates, crushed brick and organic material mixed to provide an extensive substrate to meet customer specifications.

COMPOSITION

All substrates are composed of composted material from sustainable sources, the crushed brick element is a by-product or a second from the brick manufacturing industry and therefore contains no demolition waste.

Loose Bulk Density:	800 – 950 Kg/m ³
Saturated Density:	Approx. 1200 kg/m ³
pH Value:	6.5 – 7.5
Available in:	Plastic sacks on pallets Bulk bags Loose bulk Silo tanker

Extensive substrates are a versatile lightweight general purpose green roof growing media ideal for sedum matting systems and substrate based systems supporting hardier lower maintenance plants such as sedum, wild flowers and grasses. These mixes are used in a wide range of projects from large industrial or commercial buildings to smaller domestic properties.

SAFETY DATA

In the condition sold, the product does not present a hazard to health. The products are not required to carry a hazard label under the chemicals (Hazard information and packaging for supply) Regulations 1994 (CHIP 2).

When chipped, brick particles can cause damage to the eyes. Eye protection to B.S. EN 166 should be worn. When products are mechanically crushed, respirable dust will be produced which can contain silica (quartz). Engineering control measures should be employed to keep airborne dust to a minimum. If adequate local exhaust ventilation equipment is not provided, dust masks, or their equivalent, to type FFP2 should be worn.

FIRE

There are no direct risks of fire or explosion from this product.

OFF-LOADING

Ensure that the lifting equipment is suitable and will carry the weight.

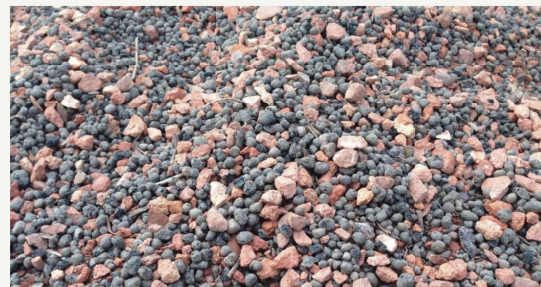
FIRST AID

Where particles enter the eye, irrigate well with copious amounts of clean water. Seek medical attention, if necessary.

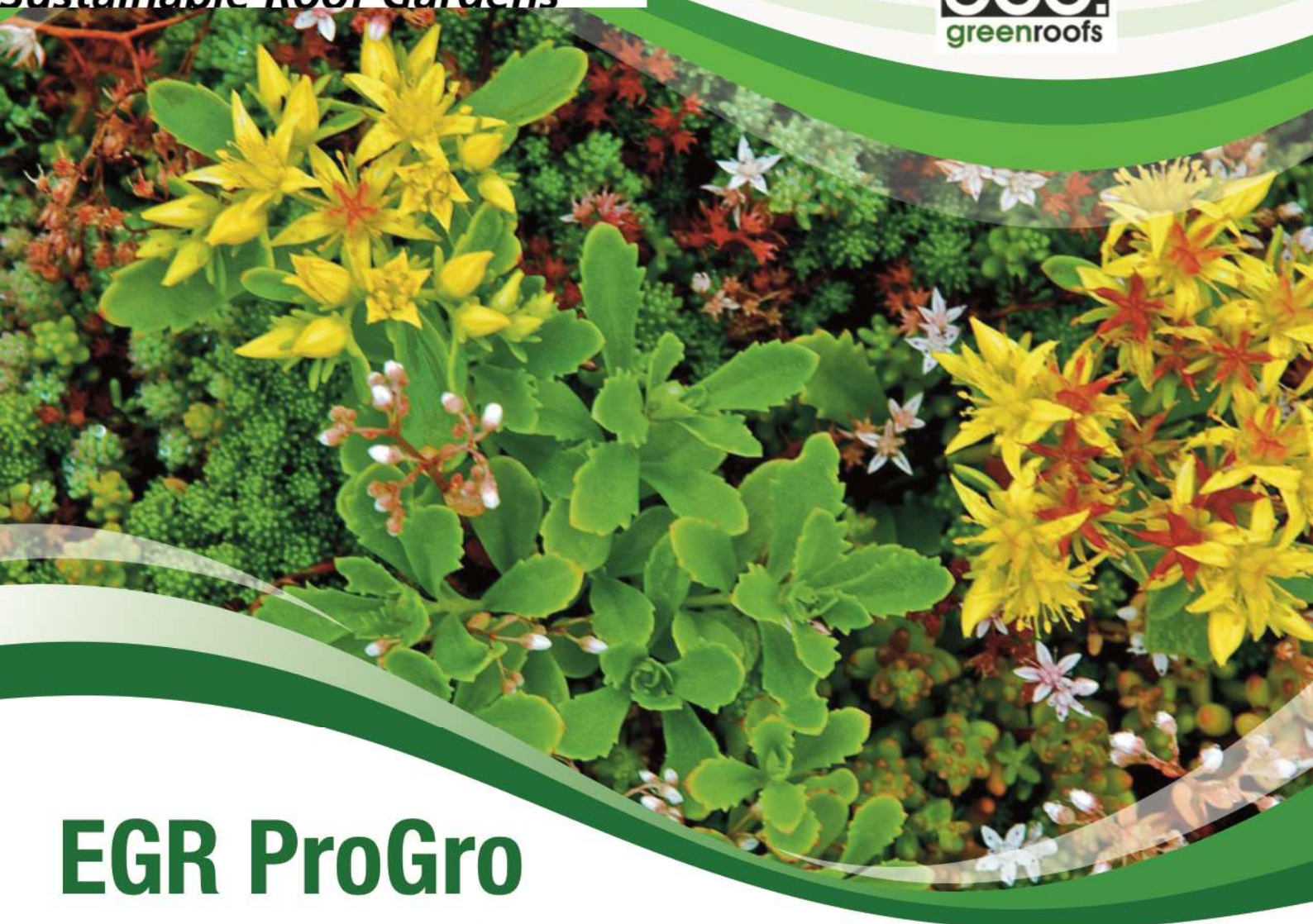
Inhalation of dust, remove to fresh air and seek medical attention, if necessary.

DISPOSAL

Waste from stone is easy to handle, non-toxic and inert. However, its storage and disposal should be carried out in accordance with section 34 of the Environmental Protection Act: Waste Management – The Duty of Care.



This information is offered for guidance purposes only.
No warranty is implied or given.



EGR ProGro Wildflower Seeds

When sowing wildflower seeds at roof level you have many potential issues which can seriously effect the germination rate.

To maximise the success rate we sow our roofs with our EGR ProGro Wildflower Seed Mix. We include the following in our mixes:

- Specially Selected UK Wildflower Species for Biodiverse Green Roofs
- Horticultural Binding Agent
- Organic Slow Release Granular Fertiliser

The following benefits of choosing our specialist seed mix:

- Development of beneficial micro-organisms
- Improves the substrate structure with nutrients and trace elements
- Help plants to grow stronger root systems leading to healthier and more vigorous plant growth
- Less chance of seeds being wind swept
- Creates a more even coverage

Specialist UK Wildflower Seeds



Over-sow rate 3g/m²

Botanical / Latin Name:	Common name:	%
Achillea Millefolium	Yarrow	1.5
Agrostemma githago	Corn Cockle	14
Anthemis arvensis	Corn Chamomile	5
Centaurea cyanus	Cornflower	6
Centaurea nigra	Common Knapweed	4.5
Centaurea scabiosa	Greater Knapweed	2.5
Chrysanthemum segetum	Corn Marigold	5
Daucus carota	Wild carrot	2.5
Digitalis purpurea	Common Foxglove	2.5
Galium verum	Lady's Bedstraw	4.5
Leucanthemum vulgare	Oxeye Daisy	2
Lotus corniculatus	Bird's-foot-trefoil	1.5
Malva moschata	Musk-mallow	2
Medicago lupulina	Black Medicks	5
Myosotis arvensis	Forget-Me-Not	2
Papaver rhoeas	Flanders Poppy / Field Poppy	1.5
Plantago lanceolata	Ribwort Plantain	2
Plantago media	Hoary Plantain	1.5
Poterium sanguisorba / Sanguisorba minor	Salad Burnet	5.5
Primula veris	Cowslip	0.5
Prunella vulgaris	Selfheal	3.5
Ranunculus acris	Meadow Buttercup	4
Rumex acetosella	(Sheep's) Sorrel	3.5
Salvia verbenaca	Wild Sage / Wild Clary	3.5
Silene dioica	Red Campion	4.5
Silene latifolia / Silene alba	White Campion	3.5
Silene noctiflora	Night-flowering Catchfly	3.5
Tragopogon pratensis	Goats beard	2.5



Caledonian Pebbles 20-40mm - Data Sheet

DESCRIPTION

20-40mm rounded washed river stones sourced from the Moray Firth. Naturally rounded pebbles.

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IMMEDIATE CARE



Maintenance and/or irrigation available on request
maintenance@egr.co.uk - 01277 355705

1. Your green roof is now installed
2. It needs watering (soaking) once a day during the first 8-12 weeks of establishment during summer (once per week for 6-8 weeks winter) or until established.
3. Watering should be done before 8am or after 4pm. Watering never to be done between these times (summer months) as this will result in the vegetation failing

4. Any break from this can cause failure
5. Do not stand on the vegetation until established
6. Do not water in strong sunlight

Note: Rain is often not enough of a substitute for watering during dry periods.

Wildflowers and Grasses require water during dry spells.



Unit 3 Rays Barn Farm
Ingatstone, Essex, CM4 9EH




www.egr.co.uk
maintenance@egr.co.uk



01277 355705



YOUR PARTNER FOR LIVING ROOF SYSTEMS

 Unit 3 Rays Farm Barn, Ingatestone
Essex CM4 9EH

 01277 355705

maintenance@egr.co.uk



CONGRATULATIONS

Whether you have just purchased or inherited your new living roof, you can be proud of the contribution you are making to the local environment:

- ✓ Improving stormwater management by reducing runoff;
- ✓ Improving water quality;
- ✓ Helping to conserve energy;
- ✓ Increasing the longevity of your roofing membrane;
- ✓ Reducing noise and air pollution;
- ✓ Encouraging biodiversity by creating a habitat for wildlife;
- ✓ Providing a more aesthetically pleasing and healthy environment to work and live
- ✓ Improving return on investment compared to traditional roofs.



PROTECTING YOUR INVESTMENT

With regular maintenance this roof will continue to provide these benefits for years to come.

Regular visits will ensure that:

- ✓ Unwanted invasive vegetation are removed to maintain balance
- ✓ Trimming, feeding and watering systems are maintained to ensure health of roof
- ✓ Gravel margins are cleared of weeds and walkways cleared of unwanted moss
- ✓ Compliance with current fire break regulations is maintained
- ✓ Vegetation is not encroaching into and impeding outlets

In summary that the beauty, health and integrity of the living roof is kept in optimum condition.



MAINTAINING QUALITY

EGR are uniquely qualified and experienced in the creation, installation and maintenance of green and blue roofing systems



“ A green roof is a living system that cannot be treated as a typical building or roofing product: getting it right is a science ”



HEALTH AND SAFETY – MANAGING RISKS

- ✓ All operatives fully trained in Working at Height, use of MEWPs, Harnesses and Man-Safe systems;
- ✓ BALI backed ROLO training - Specific and unique to the roof landscape industry;
- ✓ Experienced in regulatory compliance with regard to fire risk;
- ✓ ISO 9001 company, Constructionline, CHAS andSSIP compliant





WHAT NEXT?

All you have to do is contact us at:

Maintenance@egr.co.uk
Or call **01277 355705**

And we will arrange a free assessment survey, whether we installed your roof or not. We will produce a report with recommendations and suggest a bespoke maintenance program to suit your budget.

It's that easy to secure the peace of mind that EGR will be protecting your living roof system for years to come.



Maintenance Visit Handover Sheet

Site Name/Project No: _____

Site Address: _____

Site Contact Name and Number: _____

Current Visit Date: _____

Next visit due: _____

Please sign to confirm that maintenance has been carried out today, that the area has been left in a clean and tidy condition and waste has been removed from site.

Signed: _____

Name and Date: _____

Comments:

