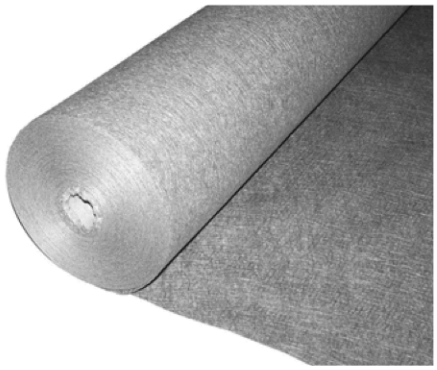
Product Data Sheet
Filter Sheet SF



Geotextile of thermally strengthened polypropylene, applicable as filter sheet above drainage elements for normal mechanical stress.

CE 0799-CPD-74

Technical Data

Filter Sheet SF
Thermally strengthened filter sheet of Polypropylene.

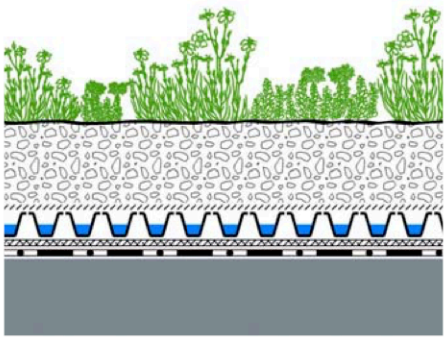
Thickness:		ca. 0.60 mm	
Weight:		ca. 100 g/m²	
Colour:		grey	
Penetration force according to EN ISO 12236:		ca. 1100 N	
Strength class:		2	
Tensile strength (200 mm) according to EN ISO 10319:		ca. 7.0 kN/m	
Tensile extension lengthwise/crosswise:		ca. 40% / 55%	
Flow rate (H_{50}) according to EN ISO 11058:		ca. 70 l/(m²·s)	(≙ 0.07 m/s)
Effective opening width (O_{90}) according to EN ISO 12956:		ca. 95 µm	
Dimensions:			
length:	ca. 100.00 m	width: ca. 2.00 m	Order No. 2100
		width: ca. 1.00 m	Order No. 2102
length:	ca. 10.00 m	width: ca. 2.00 m	Order No. 2101

Features

- resistant to mechanical stress
- various application possibilities
- resistant to all naturally occurring acids and alkali
- chemically and biologically neutral
- especially high passage of water
- quick and easy installation
- non-rotting

Application Example

"Extensive Green Roof Type Rockery Type Plants according to ETA-13/0668"



Plant layer
"Rockery Type Plants"

System Substrate
"Rockery Type Plants", ca. 80 l/m²

Filter Sheet SF

Roof construction with root resistant waterproofing

DIBt
European Technical Approval for "Kits for Green Roofs"
CE ETA-13/0668

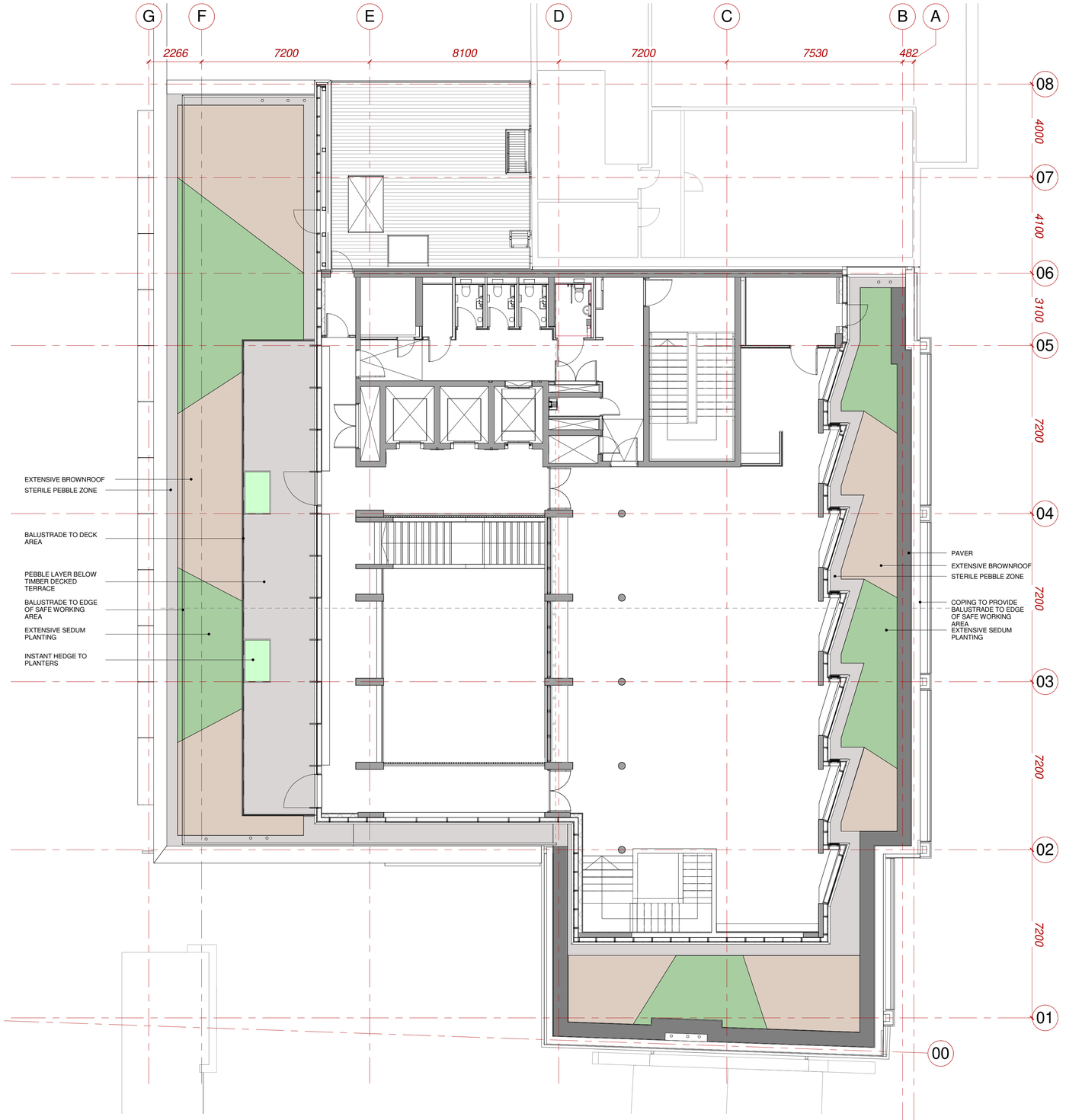
Specification Suggestion

Thermally strengthened sheet of polypropylene; weight ca. 100 g/m², penetration force according to EN ISO 12236: ca. 1100 N, strength class 2, flow rate (H_{50}) according to EN ISO 11058: ca. 70 l/(m²·s), effective opening width (O_{90}) according to EN ISO 12956: ca. 95 µm, delivery and installation according to manufacturer´s instructions.

eco. greenroofs

KEY

	EXTENSIVE 'BROWNROOF' SUBSTRATES OF VARYING 100-300mm DEPTH AS PER Q37/130. AREA 50% PLUG PLANTED AS PER BIO-DIVERSE ROOF MIX.	- EGR
	EXTENSIVE SEDUM PLUG PLANTING (AS PER BAUDER XF300 SEDUM MIX) TO BROWNROOF SUBSTRATES OF 100mm DEPTH AS PER Q37/130	- See EGR Plug List attached in this document
	INSTANT HEDGING TO RAISED PLANTERS AS PER Q31 SPECIFICATION	- Not covered by this document
	STERILE ZONE / DRAINAGE BRAKE - AREA TO BE FILLED USING 40mm GRADED AND WASHED ORNAMENTAL PEBBLE BALLAST	- EGR Alteranative 20-40mm Graded Washed Pebble
	600x600mm PAVER TO PROVIDE MAINTENANCE ACCESS	- By others



Level 4 Roof Garden

Biodiverse 'Brown Roof' - (UK Provenance Native species plugs planted @ 20/m2) (111m/2)

Mix %	Qty	Name	Form	Grth (cm)	Hght (cm)	Clear Stem (cm)	Root Type	Size	Comments
10.00	260	Armeria maritima	Plug				PL	50cc min.	Established root; Sept to April planting; British native-origin
10.00	260	Daucus carota	Plug				PL	50cc min.	Established root; Sept to April planting; British native-origin
10.00	260	Festuca ovina	Plug				PL	50cc min.	Established root; Sept to April planting; British native-origin
10.00	260	Festuca rubra	Plug				PL	50cc min.	Established root; Sept to April planting; British native-origin
10.00	260	Leucanthemum vulgare	Plug				PL	50cc min.	Established root; Sept to April planting; British native-origin
10.00	260	Plantago lanceolata	Plug				PL	50cc min.	Established root; Sept to April planting; British native-origin
10.00	260	Primula veris	Plug				PL	50cc min.	Established root; Sept to April planting; British native-origin
10.00	260	Prunella vulgaris	Plug				PL	50cc min.	Established root; Sept to April planting; British native-origin
10.00	260	Silene dioica	Plug				PL	50cc min.	Established root; Sept to April planting; British native-origin
10.00	260	Verbascum chaixii					C	0.5L	Seed propagation; full pot

Green Roof' - (UK Provenance plugs planted @ 20/m2) (85m/2)

Mix %	Qty	Name	Form	Grth (cm)	Hght (cm)	Clear Stem (cm)	Root Type	Size	Comments
20	408	Sedum acre	Plug				PL	50cc min.	Established root; Sept to April planting; UK Provenance
20	408	Sedum album 'Bella d'Inverno'	Plug				PL	50cc min.	Established root; Sept to April planting; UK Provenance
20	408	Sedum ewersie	Plug				PL	50cc min.	Established root; Sept to April planting; UK Provenance
20	408	Sedum pulchellum	Plug				PL	50cc min.	Established root; Sept to April planting; UK Provenance
20	408	Sedum sexangulare	Plug				PL	50cc min.	Established root; Sept to April planting; UK Provenance

Raised Planter - 'Ready Grown' Hedge

Abbrev.	Qty	Name	Form	Grth (cm)	Hght (cm)	Clear Stem (cm)	Root Type	Size	Comments
B sem	12	Buxus sempervirens	Hedge	7 plants per trough, 30-35cm hght			C		1m long trough; neatly clipped ready grown hedge, UK Provenance

Rev.	Date	Description
C01	09/05/18	First Issue

0 5m

Nicholas Hare Architects
3 Barnsbury Square London N1 1JL
telephone +44 (0)20 7619 1670
fax +44 (0)20 7619 1671
e-mail 689.ucl@nicholashare.co.uk
(689)

status: Construction
To be read in conjunction with all relevant information - do not scale

project: UCL New Student Centre
for: University College London
title: Roof finishes - Level 04 - Species Layout

scale: 1:100 | size: A1 | drawing number: 031-51-0100-DR-A-47012-04 | rev.: C01

The following procedures should be carried out to ensure the roof is well maintained and to protect any guarantees.

Preliminary Maintenance:

- Ensure Safe access can be gained on the roof and that all of the relevant health and safety procedures are followed.
- Eco Green Roofs recommends removal of leaf litter that has fallen from any surrounding trees both spring and autumn. This is to stop the leaves smothering the vegetation.
- To remove excess bio mass, trim down any dead vegetation then remove and dispose of at ground level.
- Ensure all outlets are unblocked and the roof is able to drain freely
- Check all trims are fixed safely
- Ensure any new items of plant or machinery have a necessary fire break between them and the vegetation
- Any damage made to the vegetation or green roof system Eco green roofs should be contacted immediately.

Maintenance on the vegetation

- Remove any unwanted vegetation that may have encroached the drainage outlets, walkways or Firebreaks.
- If any movement or settlement to the fire/ vegetation breaks has occurred simply top up these areas with more pebbles.
- Remove any tree saplings
- If plants are looking distressed we will add fertiliser

We would suggest the removal of evasive plant types; these include tree saplings, nettles, wild grasses, thistles and buddleia

If the vegetation grows in excess of 250-300mm we recommend this to be trimmed back to 75-100mm. The high growth suggests a high nutrient level in the substrate, which although is blended to be nutrient poor to stop such growth, this must be monitored to keep the bio diversity high. (Cuttings should be bagged up and removed from the roof to prevent the release of nutrients back into the substrates).

Schedule

Temporary irrigation is required through establishment. Watering 3 times per week (sometimes more in long dry periods).
Plants are established after 6-8 weeks, then, water as required.

Maintenance - as details above. Three times per annum. min. for 5 years

NB// Irrigation water pressure should be at least 3 bar and flow at 60L/min

ECO GREEN ROOFS LTD

DESIGN SUPPLY INSTALL **MAINTAIN**

Introduction

Eco Green Roofs are the UK's leading living roof experts and we recognised that there is a massive grey area for the maintenance and aftercare of living systems. As a result we have a dedicated team looking after the maintenance division at EGR. This allows us to really focus on an area that needs much needed attention.

The Current Problem In The Market

A living roof is usually installed and handed over to the main contractor. During this period and the defect period no one is 100% clear on who takes responsibility for the living roof. EGR want to produce clarity and a sustainable maintenance regime, which results in the living roof flourishing for years.

Important Factors to Consider

EGR can assist with design considerations for the ongoing maintenance of a green roof. The factors to consider with living roof maintenance:

- Roof Access
- Budget
- Clients Expectations
- Location
- Irrigation
- Mansafe Systems
- Firebreaks
- Solar Panels and Green Roofs
- Roof exposure and drainage (outlets)