

Portland Lodge - 75 Belsize Lane NW3 5AU

Application ref: 2021/4037/P

Discharge of Planning Condition no.5, 2nd December 2021

London Borough of Camden, Development Management

Planning requirement: condition no.5

- Prior to above ground works relating to the single storey rear extension, full details in respect of the living roof in the area indicated on the approved roof plan shall be submitted to and approved by the local planning authority. The details shall include:
 - i. a detailed scheme of maintenance
 - ii. sections at a scale of 1:20 with manufacturers details demonstrating the construction and materials used and substrate depth
 - iii. full details of planting species and density
- The living roof shall be fully provided in accordance with the approved details prior to first occupation and thereafter retained and maintained in accordance with the approved scheme.
- Reason: In order to ensure the development undertakes reasonable measures to take account of biodiversity and the water environment in accordance with policies G1, CC1, CC2, CC3, D1, D2 and A3 of the London Borough of Camden Local Plan 2017.

Proposed Modular System

The green roof proposed for the extension involves a pre-planted modular system, as supplied by Sky Garden (sky-garden.co.uk), made up of pre-planted cells that 'click' together to create an 'instant' complete green roof system over a protective roof membrane

Features and benefits:

- Recyclable polypropylene trays
- Built-in water retention
- Includes a filtration layer, growing substrate and sedum blanket planting
- Tailored for use on smaller domestic roofs
- Easy, fast installation, maintenance and replacement
- Pre-grown instant aesthetic effect
- Sustainable with low irrigation requirement
- Excellent Biodiverse and ecological function



5i. “a detailed scheme of maintenance”

A multi-species sedum blanket modular system has been chosen to ease maintenance and irrigation requirements in comparison with other planting systems, while at the same time providing a year-long attractive cover. This green roof is known to be more durable and less prone to erosion, making it a more sustainable solution

- Sedum blanket systems are designed to be low maintenance - species selection ensures that the roof will evolve successfully and, unlike wild flower systems, there is no requirement for regular strimming and re-seeding
- Regular irrigation will be performed, as required by the producer, for the first 6 months and then only during elongated periods of drought (6-8 weeks), as the plants are succulents. The green roof will be directly below a conservatory and roof terrace with access to fresh water. This means that the green roof can be sprayed very easily from above and any signs of dryness can be observed at all times
- 90% cover at the outset means that there is little scope for invasive plant species to take hold. If this is the case, then some weeding may be necessary, as well as replacement of plants that have not survived well. The click-tray system means that it is easy to maintain the planting in situ or dismantle elements, as required. The supplier is able to send a team to perform these activities when necessary



5ii. “sections at a scale of 1:20 with manufacturer’s details demonstrating the construction and materials used and substrate depth”

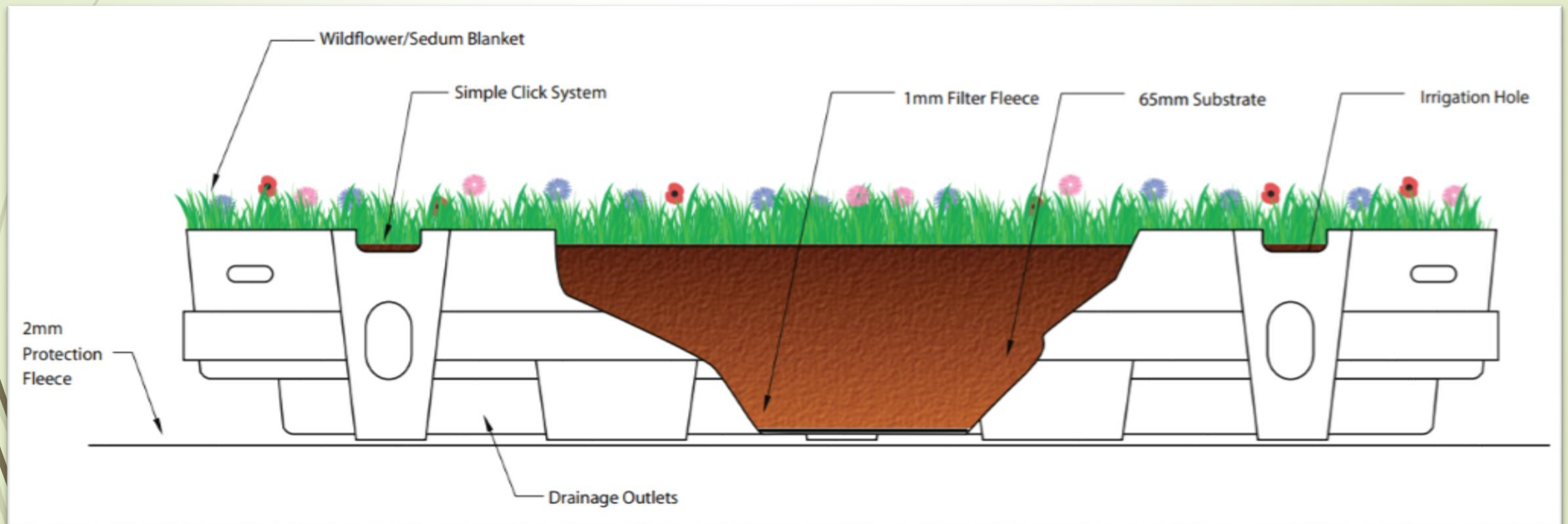
Each module contains a pre-cultivated UK-grown vegetation blanket, with between 8-12 species specifically chosen for extensive green roof applications. Grown on a 70 mm substrate base within a rigid recycled polypropylene modular 400x600mm container

Component Description

- Protection Layer 2mm tensile geo-synthetic fleece
- Tray System 80mm drainage and retention tray
- Filtration Layer 1.1mm non-woven geo textile fleece
- Substrate Layer 65mm blended 80:20 crushed red brick, free draining root zone
- Vegetation Layer 30mm
- Sedum Blanket Species Number 10-12
- 90% cover at installation

5ii. “sections at a scale of 1:20 with manufacturer’s details demonstrating the construction and materials used and substrate depth”

Cross-section of module at scale 1:2



5iii. “full details of planting species and density”

Due to seasonal variations, some 10-12 sedum species are included in each installation

A typical mix available currently:

- Sedum acre, Sedum album, Sedum ellacombianum, Sedum floriferum, Sedumforsterianum, Sedum hybridum, Sedum kamtschaticum, Sedum montanum, Sedum reflexum, Sedum selskianum, Sedum sexangulare, Sedum spirium. Full list of species offered is on the next slide

Planting density is 90%



5iii. “full details of planting species and density”

Sedum Species	Height	Colour	Flowering Spread	Exposure		System Stream		
	(cm)	  	(S)ummer (S)pring (A)utumn	Sun 	Shade 	Seed 	Plug 	Blanket 
<i>Sedum hispanicum</i>	10-12	  	S S A					
<i>Sedum acre Golden Carpet</i>	12-15	  	S S A					
<i>Sedum acre October Fest</i>	10-12	  	S S A					
<i>Sedum album</i>	10-12	  	S S A					
<i>Sedum ellacombianum</i>	10-12	  	S S A					
<i>Sedum selskianum</i>	15-20	  	S S A					
<i>Sedum floriferum</i>	10-12	  	S S A					
<i>Sedum forsterianum</i>	10-12	  	S S A					
<i>Sedum hybridum</i>	10-12	  	S S A					
<i>Sedum kamtschaticum</i>	15-20	  	S S A					
<i>Sedum kamtschaticum W. Gold</i>	10-12	  	S S A					
<i>Sedum lydium glaucum</i>	10-12	  	S S A					
<i>Sedum montanum Orientale</i>	10-12	  	S S A					
<i>Sedum oreganum</i>	10-12	  	S S A					
<i>Sedum rupestre</i>	10-12	  	S S A					
<i>Sedum reflexum</i>	10-12	  	S S A					
<i>Sedum sediforme</i>	10-12	  	S S A					
<i>Sedum sexangulare</i>	10-12	  	S S A					
<i>Sedum spurium</i>	10-12	  	S S A					
<i>Sedum album Coral Carpet</i>	10-12	  	S S A					