

SKY GARDEN SYSTEM DATA SPECIFICATION

SGS02 Sedum Blanket (lightweight)

Description / Function	Dry weight (51kg/sqm)	Saturated weight (67kg/sqm)	Depth (80mm) when established																																								
A lightweight Sedum system incorporating locally sourced / produced materials. . The roof system comprises protection, drainage, filtration and substrate layers, substrate is virgin crushed brick and green waste with a sedum blanket, 8-12 species regionally produced UK provenance blanket. Field hardened for 12-18 months. The roof is generally maintained under agreed roof management plans and local BAP compliance																																											
Protection Layer	1mm Geo-synthetic fleece to protect the membrane, interface with the base of the system.																																										
Drainage layer	20mm rigid compression drainage and retention cell, 10L/sqm water retention capacity.																																										
Filter layer	1mm fine grade geo-synthetic filter loose laid to incorporate the substrate layer above and interfacing with river stone edge retention. (mechanically fitted to drainage system with 100mm overlaps)																																										
Substrate Layer	<p>Composition 30mm (average depth) of blended aggregate, soil and organic material, Imported substrate locally sourced. Material comprising 10% green waste, 15% LECA, 75% graded aggregate (85% crushed brick)</p> <p>Aggregate Aggregate grade 0-25mm 60%, 25-40mm 40%.</p> <p>Surface layers (substrate) The crushed brick element of the mix should be graded; large particles will form the base of the substrate bed.</p> <p>Design The soil and compost will wash down from the surface to form a rooting layer mid way up the substrate bed. The substrate will initially appear earthy but the soil and compost leach down to leave the crushed brick finish. (Surface mulching can be considered where plant material needs establishment aid.)</p> <p>Habitat Creation Provision Stone and wood piles on riverstone and sand bed for insect, invertebrate, ground dwelling bird species. Habitat piles seasoned / screened product, 1 pile (1sqm) every 150-200 sqm</p> <p>Habitats not used as standard on sedum systems</p>																																										
System & Function	<table border="0"> <tr> <td style="padding-right: 10px;">Pre Established</td> <td style="text-align: center;">●</td> </tr> <tr> <td>Immature</td> <td style="text-align: center;">●</td> </tr> <tr> <td>Coverage %</td> <td style="text-align: center;">90</td> </tr> <tr> <td>Aesthetics</td> <td style="text-align: center;">●</td> </tr> <tr> <td>Sustainability</td> <td style="text-align: center;">●</td> </tr> <tr> <td>Habitat provision</td> <td style="text-align: center;">●</td> </tr> <tr> <td>BAP compliance</td> <td style="text-align: center;">●</td> </tr> <tr> <td>BREEAM applicable</td> <td style="text-align: center;">●</td> </tr> <tr> <td>Attenuation aid</td> <td style="text-align: center;">●</td> </tr> <tr> <td>Carbon absorption</td> <td style="text-align: center;">●</td> </tr> <tr> <td>Thermal performance</td> <td style="text-align: center;">●</td> </tr> <tr> <td>Acoustic performance</td> <td style="text-align: center;">●</td> </tr> <tr> <td>Low traffic system</td> <td style="text-align: center;">●</td> </tr> <tr> <td>High traffic system</td> <td style="text-align: center;">●</td> </tr> <tr> <td>Bio-Diversity</td> <td style="text-align: center;">●</td> </tr> <tr> <td>Storage compatible</td> <td style="text-align: center;">●</td> </tr> <tr> <td>Harvesting compatible</td> <td style="text-align: center;">●</td> </tr> <tr> <td>Nectar provision</td> <td style="text-align: center;">●</td> </tr> <tr> <td>Pollen provision</td> <td style="text-align: center;">●</td> </tr> <tr> <td>Species provided (no)</td> <td style="text-align: center;">10</td> </tr> </table> <p>● (suitable) ● (may be suitable) ● (not suitable)</p>			Pre Established	●	Immature	●	Coverage %	90	Aesthetics	●	Sustainability	●	Habitat provision	●	BAP compliance	●	BREEAM applicable	●	Attenuation aid	●	Carbon absorption	●	Thermal performance	●	Acoustic performance	●	Low traffic system	●	High traffic system	●	Bio-Diversity	●	Storage compatible	●	Harvesting compatible	●	Nectar provision	●	Pollen provision	●	Species provided (no)	10
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Contouring	System laid flat																																										
Surface Finish	30mm 8-10 species sedum blanket, field hardened for 12-18 months, regionally produced UK provenance material.																																										
Plant Range	<i>Sedum acre, album, ellacombianum, floriferum, forsterianum, hybridum, kamtcschaticum, montanum Orientale, oreganum, rupestre, reflexum, sexangulare, spurium, selskianum</i>																																										
Flowering spread	Spring – Autumn.																																										
Seasonal coloration	Foliage – mixed and site specific, the system will leave winter flower heads																																										
Sun : Shade tolerant species	Sun 70% of species can tolerate full sun, 30% of species can tolerate light to moderate shade																																										

River Stone	All roof penetrations and system edges are finished with 300mm borders of washed river stones, these offer additional ballasted weight and drainage for the system plus prevent plant invasion to drainage outlets or roof edges. (Not included within standard system)	
Metal Edge Detail	100mm up stand and 75mm foot plate ballasted by system for exposed edge retention. 2mm detail that will need spot bonding on any roof with a pitch in excess of 5 degrees. (Not included within standard system)	
Separation Detail	100mm separation up stand, 1.2mm detail for interface between system and slab or stone detail. (Not included within standard system)	
Roof Assessment Visit	A single assessment visit with emergency remedial inclusion providing a report highlighting actions required within or additional to current aftercare packages.	
Pollen and nectar foraging provision	Species diversity and habitat creation suitable to encourage a variety of bee species and mixed pollen bearing flowers for insect development. Short season availability providing suitable foraging potential.	
Pollen richness	3-5	A restricted species spread for foraging and insect species development. Suitable for bees and butterflies, beneficial insects and some bat and ground dwelling bird species, flowering spread is short so foraging is seasonal
Nectar richness	3-5	
Habitat creation	1-5	The system does not accommodate the use of habitats; they can be added but not included as standards.
Sustainability	3-5	A pre established system which is moderately sustainable, reduced substrate bed may need intervention quicker than standard systems. Relatively self sufficient unless placed under significant moisture stress during establishment.
Bio-diversity	2-5	Species diversity is minimal as the range of plant species is selected for drought tolerance and sustainability
Flower attraction	<i>Low-moderate mixed pollen source, applicable to Bees – Mason, Honey Bombus spp, Insects – Chrysoperla (Lacewing), hoverfly (Episyrphus), Ladybird(Harmonia), Aphidius, Aphelinus, Aphidoletes (beneficial parasitic wasps)</i>	
Establishment period	<i>Blanket systems 6-8 months, plug systems 18 months, rhizome systems 18-24 months, seeded systems 24-36 months depending on the time of year installed. Irrigation recommendations – blankets (first 12 months), plug systems (18-24 months), seeded systems (24-36 months)</i>	
RPR (regional provenance requirement)	<i>Substrate and plant materials where possible are supplied and produced locally.</i>	
Irrigation	<i>The system will require supplementary irrigation during periods of potential drought. It is essential to irrigate post installation and then frequently during establishment otherwise areas will dry and die. A roof top source with a pressure of 2.5-3 BAR and a flow rate of 60L/min is recommended to connect a temporary system if required.</i>	
Aftercare	<i>The system is low maintenance and we recommend is weeded once a year to prevent development of invasive species affecting system integrity and diversity.</i>	
Retention Systems	<i>Roof (standard)</i>	<i>All roofs in excess of 10 degrees will require system retention detailing, this usually takes the form of thrust batons or retained drainage boards. All sloping systems will require mechanically fitted metal edge detail if edges of system are exposed.</i>
	<i>Roof (metal)</i>	<i>Metal seam roofs will require seam clip system specific retention systems on tray filled projects with pitches above 15 degrees and on above seam projects with pitches in excess of 8 degrees.</i>
Eaves Retention	<i>All pitched systems will require a mechanically fitted eaves detail to exposed edges above 5 degrees, flat systems below 5 degrees can be system ballasted but are better spot bonded.</i>	
Loading	<i>Unless requested, all estimates allow for no site movement or loading of materials, this is the responsibility of the contractor to supply unless discussed with Sky-garden directly.</i>	
Delivery	<i>All delivery will be using bulk materials unless previously agreed otherwise and articulated lorries, it is the responsibility of the contractor to inform Sky-garden over timing and access limitations.</i>	