

SKY-GARDEN GREEN ROOF SYSTEMS
BIO-DIVERSE STANDARD
200mm 50:50 site sourced / supplied substrate
Non seeded natural finish

STANDARD SPECIFICATION
(Seeded and Verdant Turf option to finish)

System Depth	System saturated weight	System minimum dry weight	Water attenuation capacity	Standards	System Complexity
230mm	220-250kg/m ₂	175kg/m ₂	40% initially	GRO, FLL, BREEM	3/5
Component		Depth	Description / Function		
Rigid drainage layer		30mm	<i>Rigid load bearing perforated drainage board with 20mm stud. Reduced water retention capacity</i>		
Filter layer		2mm	<i>Fine grade geo-synthetic filter layer mechanically fixed to drainage with loose layer that incorporates the substrate layer above</i>		
Aggregate layer Site sourced		100mm	<i>Site sourced aggregate screened and blended with imported material. (if available) graded to 8-50mm, cleaned and screened with minimal concrete and no metal content</i>		
Substrate layer (allowing for settlement)		100mm	<i>Regionally supplied bio-diverse substrate comprising, recycled crushed brick, 10% maximum, lightweight organic compost, locally sourced sands, gravels, composted bark & stone from local sources</i>		
System		<i>The substrate is designed to be very low in organic content and suitable to the range of grasses and plants used in the Sky-Garden mix. The substrate mixing with site materials is crucial to the bio-diversity and maintenance of local fauna and flora.</i>			
Root activator		within substrate	<i>Root activation granules within substrate</i>		
Contouring		Surface finish	<i>Surface finish contoured to specification requirements</i>		
Surface finish		Surface finish	<i>Blended areas of substrate 75%, river stones 5%, sand 10% and bark 10% to maximise diversity</i>		
Surface habitats			<i>Ground based habitats comprising locally sourced stone piles and seasoned wood piles for bird, insect and small mammal encouragement.</i>		
System finish			<i>System left to self seed and evolve under observation.</i>		
Roof Inspection		<i>A 3 month roof inspection to monitor performance and establishment and to outline ongoing maintenance contract requirements is provided on all roofs that are installed by Sky-garden.</i>			

Plant Layer	Controlled natural seeding and migration of plant material from the local environment.
Plant Range	Although this specification is for natural migration of plant material, Sky-garden offer a range of regional seed mixes for bio-diverse roofs and the exclusive Verdant Bio-Diverse Turf, (a careful blend of species designed to cope with the stresses of a hot summer and a dry roof environment. It is low maintenance and able to set seed quickly.)
Edging Detail (not included as standard, see estimate)	<i>Aluminium edging will be required on all exposed edges where retention is needed. This is generally fixed using compatible adhesives or mechanically fixing by roofing contractor prior to installation.</i>
River-Stone (not included as standard, see estimate)	<i>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 prevention of sedum invasion to drainage outlets or roof edges.</i>

Sky-garden provide a range of green roof systems to fit the requirements of this developing industry sector. Bio-diverse roofing (brown) utilises several key components, locally sourced, site sourced or recycled products. They have a high environmental and ecological function and although not exclusively are generally installed in urban areas both to new builds and refurbished systems. The systems can be high aesthetic but are generally seeded and left to evolve under minimal maintenance guidelines.

Establishment :

The system will take up to 6-8 months to begin greening and during this period and following establishment, inspections to remove incompatible species are required. The green roof will not require an irrigation system unless there has been planting.

Maintenance :

It is recommended to carry out annual maintenance at least once a year to remove invasive plant and weed specimens, check outlets are working correctly and to apply grass granular fertiliser.

Irrigation :

Although not recommended as standard, in some areas of the country or in heavily exposed areas where wind drying is an issue we strongly recommend an irrigation system or supplementary watering system is in place.

Initial coverage	Estimated time to full coverage	Maintenance requirements	Irrigation requirements	Sustainability
0% allowing for self seeding	6-36 months depending on location	Low	Generally not required	Good

General Description:

A high ecological and environmentally functioning system built for sustainability using quality components both organic and recycled.