

# sky-garden GREEN ROOFS

Specialists in Greenroofs • Bio-Diverse Roofs



# Sky-Garden



Barnsley House, Cirencester

We have seen changes in building technology as a result of Climate change, solar panels, water harvesting, green building materials etc. however, no other green building technology offers as many benefits and opportunities as Greenroofing.

From improving energy efficiency and removing CO<sub>2</sub> from the atmosphere to providing much needed green spaces that aid urban drainage and improve human wellbeing, Greenroofs can deliver enormous benefits.

With over **60** years experience using vegetation as an engineering tool, our expertise ensures that whatever



Bio-diverse roof

The last 10 years have seen a revolution in the ideas that uphold building design, driven in part by our increasingly unpredictable climate.

Numerous serious floods and record UK temperatures are two of the clearest signs we could ask of nature.

Now more than ever, sustainable development is a responsibility that needs to be addressed, not simply on the fringe of the industry, but in mainstream domestic and commercial development.



Guildford Lodge

drives your Greenroof project, be it sustainability, ecology, aesthetics or amenity space, we can provide a scheme tailored to your needs.

From the wildlife habitat of a Bio-Diverse roof, to the breathing space of an Intensive Roof Garden, Sky-Garden will encompass all your possibilities.

**Sky-Garden is the UK's leading independent green roof company. Our first Green Roof was built in 1992. In 2008 we installed over 200 green-roofs.**

The preferred choice of waterproofers, contractors and many leading architects.

# Why Greenroofs?

**Greenroofs are an age old solution to arid urban environments, nowadays they are increasing in popularity due to the many benefits never being more relevant:**

- ❑ Slow run off to assist local SUDS planning and flood defences.
- ❑ Remove CO<sub>2</sub> and harmful pollutants from the atmosphere.
- ❑ Mitigate the Urban Heat Island effect.
- ❑ Regulate internal building temperatures.



- ❑ Release water naturally through transpiration, improving water quality.
- ❑ Create new wildlife habitats for marginalised species.
- ❑ Improve building energy efficiency.
- ❑ Protect the roof from the elements and prolong it's life.
- ❑ Improve thermal insulation lowering fuel bills significantly.
- ❑ Add value to a property.

- ❑ Insulate acoustically, reducing noise levels by up to 8dB.
- ❑ Create new leisure space.
- ❑ Improve the quality of our urban centres and our lifestyle.
- ❑ Improve productivity in the workplace.



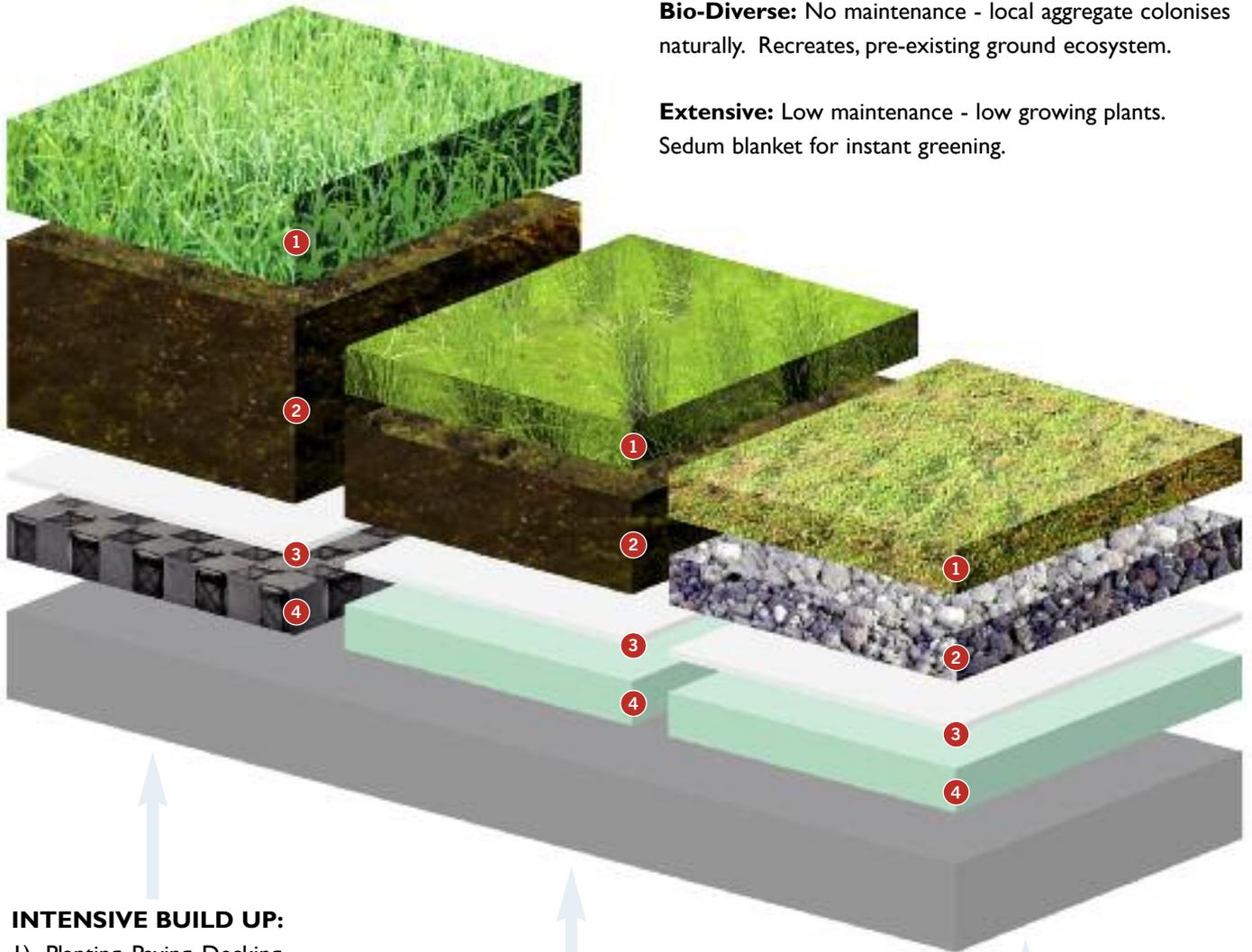
# Sky-Garden Systems

Depending on your criteria and the limitations of the roof space there are 3 varieties of Sky-Garden:

**Intensive:** High maintenance - Replicates a ground level garden. Provides new amenity space.

**Bio-Diverse:** No maintenance - local aggregate colonises naturally. Recreates, pre-existing ground ecosystem.

**Extensive:** Low maintenance - low growing plants. Sedum blanket for instant greening.



## INTENSIVE BUILD UP:

- 1) Planting, Paving, Decking
- 2) Intensive Soil
- 3) Filter Fleece
- 4) Geodrain

**Depth and Wet Weight vary**

## BIO-DIVERSE BUILD UP:

- 1) Wildflower, aggregate
- 2) Bio-Diverse soil mix
- 3) Filter Fleece
- 4) Biodrain

**Depth and Wet Weight vary**

## EXTENSIVE BUILD UP:

- 1) Sedum Blanket
- 2) Sedum Substrate
- 3) Filter Fleece
- 4) Biodrain

**Depth 120mm**

**Wet Weight 110kg/m<sup>2</sup>**

## PITCHED ROOFS OVER 20°

Build up as above + Sedum Roof Cell: Cells prevent slippage of growing medium.

**Depth 120mm**

**Wet Weight 120kg/m<sup>2</sup>**

These are the essential components of our Sky-Garden systems that meet the basic requirements of vegetation establishment. Our knowledge in developing Bio-Diversity within the urban landscape ensures your project is unique and is created to fulfill all client specifications.

# Technical Details

Sky-Garden has a wide range of products designed to provide a project specific solution for every type of roof greening application. Extensive, intensive, biodiverse, crop production and play amenity roofs all have individual requirements and our portfolio of materials allows us the unique ability to match a composite of products to the end use requirement.

**Sedum Blanket:** Pre-grown and delivered in standard rolls or squares where a shade tolerant mix is required. Sedum coverage minimum 75%.

**Sedum mix (Sun):** Sedum acre, album, spurium (white and red) kamchaticum, sexangulare, lydium and reflexum.

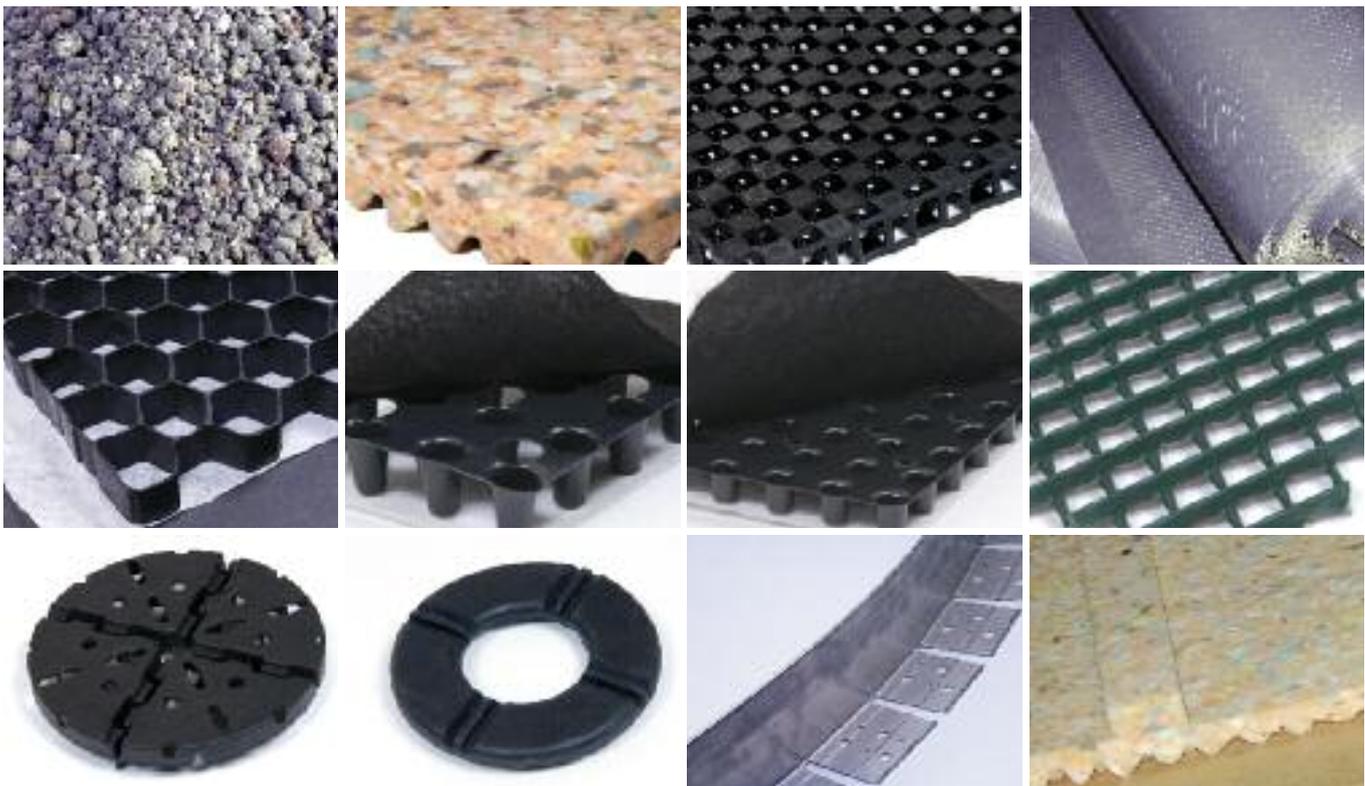
**Sedum mix (shade):** As above but also with Sedum hybridum, spurium (white) and a range of wild flowers if required.

- ❑ Sedums and wildflowers in seed format as well as plug plants
- ❑ Pre-grown wildflower/grass turfs
- ❑ Amenity lawn turf
- ❑ Sedum substrate in 25kg, 1 tonne and loose delivered loads
- ❑ Screened and specialist soils



## Drainage composites:

- ❑ Biodrain: recycled soft foam drain and reservoir
- ❑ Cusped drain: rigid reservoir and drain layer
- ❑ Geo-drain: rigid tile system for heavy load bearing
- ❑ Cusped Geodrain: for heavy load bearing and water retention
- ❑ Slip sheets 0.2mm thick
- ❑ Protection geotextiles
- ❑ Root barriers 0.5mm and 0.8mm thick
- ❑ Inspection boxes
- ❑ Roof edge profiles
- ❑ Drain channels
- ❑ Irrigation systems
- ❑ Substrate reinforcement grids



# Case Studies & Testimonials



Adnams Brewery, Suffolk

## BERKELEY FIRST

### Intensive Sky-Garden

An eco friendly housing development in Isleworth. Featuring perennial planting, paving and decking.

## WOOD STREET OFFICE

### Extensive Sky-Garden

Environmental planning requirements created demands for the ecological benefits of an extensive Greenroof on this office block in Wood Street, Central London.

## DOMESTIC BUILD ESSEX

A Sky-Garden was installed to complement the many sustainable features incorporated in this project.

## ADNAMS BREWERY

### 6000m<sup>2</sup> extensive Greenroof

New sustainable storage facility required a Greenroof to reduce the visual impact of the building on the landscape and to regulate the internal temperature. A drip irrigation system ensured the large roof area established and thrives.

## NATIONAL ARBORETUM AT WESTONBIRT

### 380m<sup>2</sup> pitched extensive

A Greenroof was required to visually enhance the building in line with the natural beauty of the Arboretum. Due to the exposed nature of the site a dual layer of our soil filled vegetation mat ensured excellent water and nutrient retention. 3 years on, the roof is thriving.



Berkeley First



Wood Street



Domestic project



Birches



National Arboretum at Westonbirt

## TESTIMONIALS

*The Greenroof on our Maples restaurant, continues to delight our customers at the National Arboretum here at Westonbirt. It is not only beautiful, but extremely hardy, requiring the minimum of maintenance despite having seen periods of extreme heat and dryness and the wet cold spring we have just been through.*

**(John Weir - Director - Westonbirt Arboretum)**

*... hopefully you will be able to understand why we were so ecstatic when we phoned after we'd finished laying the sedum roof. We just want you to know that we are absolutely delighted with it. It looks stunning even now, what's it going to be like when its established and flowering?!*

**(Philip and Bobbie Williams)**

# Technical Services

At Sky-Garden our sales team are trained to offer practical advice and guidance to assist you in understanding and designing your Greenroof project.

We work in co-operation with many of the UK's market leaders in waterproofing and construction, ensuring a flexible and tailored approach to your project.

We understand that innovative design and ideas are crucial factors in client satisfaction and pride ourselves on our ability to proactively create your Sky-Garden from the initial concept through to the completed project.



Moons Cottage



Guildford Lodge

An extensive Greenroof is by its very nature a very simple addition to a building, however there are many variables that can affect the success of your Greenroof, Sky-Garden offers technical and practical advice regarding:

- ❑ Supply only
- ❑ Installation
- ❑ Project management
- ❑ Issues of drainage
- ❑ Irrigation supply and installation
- ❑ Plant selection
- ❑ Roof exposure
- ❑ Hard landscaping
- ❑ Planning
- ❑ Environmental Consultation

If you require a more in depth service regarding potential Greenroof projects, **Sky-Garden Consultancy** offers a wide range of experience and knowledge in developing Bio-Diversity and environmental stability within the urban landscape.

Please contact us to discuss using this resource, and your requirement:

t: 01242 620905

f: 01242 620739

e: [enquiries@sky-garden.co.uk](mailto:enquiries@sky-garden.co.uk)



Trefoil Croft

Greenroofs offer a rare opportunity to improve building efficiency and aesthetics, both commercially and domestically. We view these benefits to be for anyone who chooses them and so we support our DIY customers in their Greenroof projects and are actively involved in the CIRIA Greenroof training scheme.

At Sky-Garden we are in a unique and unrivalled position, our history lies in erosion control and vegetation establishment, we have utilised plants as an engineering tool for longer than some here care to remember.

Our wealth of experience in environmental practice and horticultural engineering is second to none and will prove invaluable, when combined with our Sky-Garden system, to provide a living addition to your building that will thrive and keep giving back to the environment for many years to come.

Printed on material which is produced using Virgin wood fibre mainly from Europe. Pulp bleached using a Totally Chlorine Free (TCF) process. This material can be disposed of by recycling, incineration for energy and composting. Produced at a mill that is certified to the ISO14001 environmental management standard. PEFC Certified.



**European Trade Association  
of Greenroof Specialists**

**g10 Green Roof  
Organisations**



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GREEN ROOFS

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