extensive green roofs



Lightweight extensive green roofs comprise a shallow layer of specially formulated growing media above filtration, drainage and waterproofing protection layers. The vegetation is selected from a range of drought tolerant plants including hardy succulents, grasses, herbaceous perennials, native wildflowers, alpines and bulbs.

Suitable for both new build and retrofitting, they are designed to replicate the benefits derived from open green spaces. Living roofs are virtually self-sustaining; requiring minimal maintenance (typically once or twice a year) and, in the vast majority of projects, no irrigation.

We shall require a substantially new manner of thinking if mankind is to survive

Albert Einstein

Extensive roofs provide benefits that contribute towards buildings' aesthetics, rainwater management, thermal regulation, pollution control, acoustic performance and biodiversity enhancement. They reduce whole life costs by extending the life of the waterproofing, lowering energy costs and increasing the building's value. Blackdown extensive green roofs can be achieved in a number of ways.



Blackdown Extensive Green Roofs

We firmly believe that each green roof should be tailored to the environment in which it is to be installed in order to achieve the objectives sought from it. Below, we present 4 different types of extensive green roof, each affording a particular benefit or fulfilling a requirement.



Instant Greening: NatureMat®

Nature Mat® is a pre-grown vegetated mat consisting of a biodegradable base layer, a specially formulated substrate layer and a minimum 90% mature plant cover comprising 6-8 species (predominantly sedums) randomly grown to maturity in our fields in Somerset. Installed over a Blackdown substrate-based system, Nature Mat® is quick and simple to install, providing instant green coverage for flat, pitched or curved roofs.



Species Diversity: Plug Planted

A diverse selection of sedum plug plants is supported by 70 mm of Blackdown's extensive growing medium installed over a filter fleece, drainage and protection layer. An attractive plant cover can be custom-designed to achieve specific colour-related themes, maximum winter aesthetics and varied flowering periods; calling on up to 50 species – affording a diversity of colour, height and flowering times.



Low Structural Load: Featherweight System

For roofs that have limited structural capacity, a more limited range of sedum plug plants, capable of flourishing in 45 mm of Blackdown's extensive growing medium, has been established following extensive research trials. Affording the ecological benefits of plug planted green roofs, the thin soil layer minimises the loads imposed by the green roof on the building's structure. An irrigated system using less substrate is also available.



Cost Saving: Hydroplanted System

A mix of sedum cuttings, seeds, mulch and fertiliser are applied, through hydroplanting, on to the prepared Blackdown growing medium, filter fleece, drainage and protection layer. The plant cover will germinate and grow (typically over 1 to 2 growing seasons) to deliver the long-term benefits of a green roof. Particularly suited to large roof areas where a fast installation method and low initial supply cost are sought.