





# **NEW! Green Roof Installation Service**

- Unsure about working at height?
- No safety equipment of your own?
- Short of time?

## Let us help you to create your living green roof

Our trained green roof installers will discuss your requirements, assess the suitability of your roof and offer you a free, no obligation quotation. You may be surprised at how reasonable our prices are.

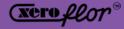
We supply all necessary safety equipment, roof components, fittings and fixtures.

Our customers include homeowners, hotels and schools who want to enjoy the benefits of a living green roof; supporting wildlife, improving the view, insulating their buildings and increasing the lifespan of their waterproofing.

Provided that the building is suitable, our fitters can install a living sedum roof on anything from a rabbit hutch to a kitchen extension or an outdoor classroom.

If you like to know more about our green roof installation service or need advice on installing your own green roof, please don't hesitate to contact us for ideas and information.

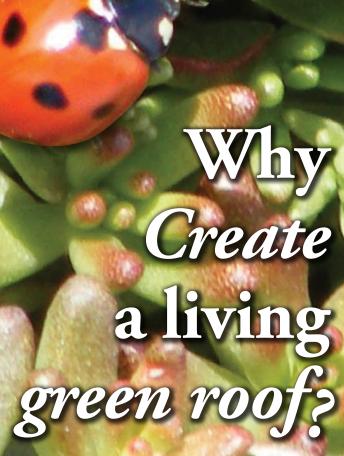




For more information about Environat, its installation and its care and maintenance, please visit www.environat.co.uk or phone us on 01842 828266











# Benefits of Green Roofing

**Insulates against heat and cold** saves on heating and air conditioning bills.

Improves the look of a building either helps it blend into the background or turns it into an outstanding feature.

A green roof is much nicer to look down on than plain waterproofing.

# Attracts and supports wildlife

## Extends the life of the waterproofing

in general, a green roof will at least double the life of the waterproofing, cutting maintenance costs and reducing the amount of building waste being sent to landfill.

#### Noise reduction

a sedum roof can halve the noise inside a building – ideal if you need peace and quiet.

# Introduction to Enviromat



Enviromat is a soft landscaping material that is grown in Norfolk by Q Lawns. Q Lawns are best known for growing the nation's favourite brand of lawn grass and are renowned for their high standards of quality and customer care. Those standards are applied just as rigorously to Enviromat as they are to our turfgrass.

By listening to gardeners, landscapes, architects and designers, Q Lawns have learned that there are many people who love the idea of a living green roof, or of a garden that is wildlife friendly, colourful and interesting all year round, but busy lifestyles mean that a high maintenance garden is simply not practical.

Q Lawns have for several years worked with Bauder to develop Environmat Sedum Matting, a low maintenance, easy to install, material with living plants that don't need dead-heading, mowing, pruning or weeding.

Enviromat is an extremely versatile, frost hardy and drought tolerant, random mix of flowering sedum plants. The plants are especially chosen for their wide range of colour, texture and seasonal differences in their flowers and foliage. The plants are grown on to a patented free-draining geotextile mat with a layer of growing medium that allows just the right amount of moisture retention for the plants – not too wet, not to dry. That's why Enviromat only needs watering during prolonged dry conditions.



# Where to Use Environat

Provided it has good drainage and plenty of sunshine Enviromat can be used for a wide range of projects, including:

- Window Boxes
- Rock Gardens
- Pond Surrounds ideal for hiding the pond liner
- Sunny banks
- On top of walls
- Green roofing for animal housing
- Living roofs on sheds, summerhouses, extensions, garages or garden offices\*
- Road verges, central reservations and roundabouts

\*Installing a living roof onto a domestic or commercial green roof over 50m2 in area requires specialist design knowledge and additional components. Q Lawns are not in the position to advise on this type of roof construction or supply specialist components.

For green roof construction we recommend that you take advice from green roof specialists Bauder Ltd.
Tel: 01473 257671 or visit www.Bauder.co.uk

# What to Expect from Environat



All year round interest! The plants in Environat keep their leaves all year round and flower from early spring right through to autumn. Through the seasons you will see yellow, pink, white and red flowers in different heights, shapes and patterns.

Environat foliage also changes colour and texture throughout the year as different species in the mixture all enjoy slightly different temperatures and light levels. Very often (but not always) Environat blushes a cheery shade of red during the winter months.

Enviromat is also attractive to wildlife. The sedum plants growing in Enviromat are native to Europe and are particularly attractive to garden-friendly insects such as bees, butterflies and ladybirds. Birds seem to like Enviromat, not least for the spent flower heads that provide nutrition and nesting material.



A green roof Gazebo by Penny Bennet Architects



## **Enviromat in Brief**

Available in 1m x 1m slabs or 1m x 2m rolls Saturated weight is 42Kg/m<sup>2</sup> Seed mix includes:

S. albumS. reflexumS. sexangulareS. spuriumS. kamtschaticumS. pulchellumS. acreSaxifraga granulata

We cannot guarantee that each of the species listed will appear in every piece of Environat but we do our best to make sure you get as much variety as possible.

Enviromat is grown onto special geotextile matting for strength and durability.

No need for extra soil – Enviromat contains its own growing medium made from recycled building materials and composted green waste.

Water efficient – sedums can go for up to one month without watering.

Low maintenance – no need for mowing or pruning but will need feeding twice a year.

Prefers full sun or part shade – will not survive in full shade.

Tolerates sea salt

May not be in flower when despatched.

Can be installed at any time of year.

Installation and maintenance available.

# How to install Enviromat on the ground or on a roof



How to install Environat on the ground or on a roof

Installing Environat is quick and easy. For best results, here are our recommended guidelines.

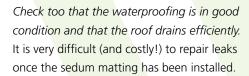
Be aware of Health and Safety Issues especially when working at height. Installing Environat is not a one-person job.

Avoid installing Environat directly on to soil. Weed seeds can be blown in on the wind or dropped by birds into the sedum matting. During a summer drought, weeds that are denied access to the soil will die out while the sedum plants will survive the dry conditions. Environat recommends putting a layer of waterproof membrane (such as butyl pond liner) on to soil before installing sedum matting.

When creating a green roof, check that the building is strong enough. If you are using the Environmat build up described in this booklet, the roof should be able to support at least 120Kg per square metre. This allows for the weight of the green roof build up plus live loading eg snow or a person walking on the roof to maintain it. If in doubt, seek advice from the building's manufacturer or from a structural surveyor.







Steer clear of slopes greater than 20 degrees they give rise to all sorts of challenges with irrigation and anchorage.

The surface of the roof or the ground should be smooth. Bear in mind that Environat must be in contact with the surface below at all times. Air pockets will lead to dead patches in the sedum matting. Environat will mould itself to gentle hills and hollows but it isn't flexible enough to cope with sudden changes of incline eg corrugated tin roofs.

A living green roof needs an edging to protect your Environat against wind uplift. Remember that the edging must allow water to drain away and mustn't damage the waterproofing. Environat can supply a metal edging that attaches to the waterproofing with super strength adhesive tape, alternatively, e-mail or phone us for more suggestions.



On a flat surface (slope is 3 degrees or less) it's important to use drainage matting beneath your Environat to ensure that the roots are never sitting in water. Sedum plants cannot survive in waterlogged conditions.

On any surface, sloping or flat, use a layer of water retention matting to store rainwater that will help the plants survive a period of drought. Sedum plants are drought tolerant but they are not drought proof. Water retention mat is a lightweight, relatively inexpensive fleece that holds up to 9 litres of water per square metre and helps make sure that the sedum plants have the right amount of water to stay healthy and vigorous. Use water retention matting on top of drainage mat (on a flat surface) and immediately below Enviromat. On an apex roof, it helps to have a double layer of water retention matting for approximately 30cm either side of the ridge.

On slopes of 10 degrees or more, irrigation should be available. This needn't be a complicated system, just make sure you can reach the plants with a hosepipe if you need to.

Try to avoid walking on the plants as you are installing Enviromat

Tucked underneath each piece of Environat is an extra flap of geotextile mat. Unfold this so that it covers the adjacent area and then put the next piece of Environat on top of the flap. *This helps to anchor the sedum matting*.

Enviromat offers an installation service on domestic green roofs of 50m<sup>2</sup> or less. Please contact us if you would like more details, or phone 0800 061 2653 for an estimate.



# Care and Maintenance of Enviromat

Compared with many garden occupants, Enviromat is remarkable easy to care for. The propagation has been done for you, there's no need for daily watering and it doesn't need mowing or trimming. However, it's important to remember that low maintenance is not the same thing as no maintenance. To get the best possible performance from your Enviromat – particularly if it's on a roof – it does need a simple, twice a year, maintenance regime with a little bit of extra TLC during periods of prolonged drought.

### Feeding

Sedum plants are very economical when it comes to fertiliser, however when they're growing in a shallow growing medium they do benefit from a twice-yearly application of slow-release fertiliser.

The Growers of Enviromat recommend applying Nutrifusion Spring/Summer lawn and sedum feed in early spring when temperatures begin to rise, and again in early summer to encourage flowering. Always follow the manufacturers instructions.



#### Watering

In general, Environat is more likely to be damaged by too much watering than by too little. Sedum plants hate to have perpetually soggy roots. Having said that, Environat will tolerate heavy rainfall as long as it has proper drainage. If Environat is installed on a roof, it's vital to ensure that drainage outlets are cleared out at least once a year.

Enviromat will survive for a month or so with no watering and so most of the time, the British weather will absolve you of all watering duties but there are situations in which a little extra help is needed. Don't worry if the leaves turn red and appear to shrink, this is the plants' natural response to drought. However, if the leaves start to look wrinkled and rubbery (like a deflated balloon) then the plants need a good watering.

## Weeding

Enviromat will be delivered to you with a dense covering of plants. This makes it impossible for the majority of weeds to find a space to germinate in. However, there are always a few opportunists. If you have installed Enviromat to our recommendations i.e. put a waterproof material such as butyl or polyethylene beneath the Enviromat build-up, you will find that in high summer, the sedum plants will revel in the hot dry conditions whilst any imposters will languish and die. Any really persistent weeds can be pulled out by hand.

## **Bare Patches**

When Environat leaves the production fields, approximately 95% of the matting will have a dense covering of plants. Occasionally though, small areas of the growing medium may become visible. Over time, the sedum plants will spread and fill in those patches. It is possible to speed up the process by breaking off little pieces of plant material from more dense areas and pressing them on to the bare patches. Within weeks, the "sprouts" will have grown roots and established themselves.

#### Pests and Diseases

There are very few pests and diseases that affect Environat. It doesn't taste nice, so won't be eaten; it can't be dug into, so cats aren't interested; insects like Environat but rarely damage it and the thick waxy coating on the leaves deters fungal diseases, so Environat is remarkable trouble-free.