— 2022

GrufeKit Green Roof System

Product Guide



Welcome



For more than 10 years we've supplied green roof systems. Having fine-tuned our offering and taken a specialist approach, we are able to advise on and offer the best green roof solution for your project.

Over the years we have accumulated a host of experience and knowledge. We've used this to put together a kit-form green roof that any roofer or contractor can install with minimal training.

We believe in providing products that last and with that in mind we pre-grow all of our green roofs for 12 - 18 months before they leave our nursery. This is unique in the industry and ensures that our green roofs continue to outlast and outperform other systems.

We hope to inspire you to enhance structures naturally.

Richard Silcock Managing Director





Why a green roof?





Insulation

The soil and plants provide a dense extra layer of insulation.

A green roof (with approx. 100mm) of soil equals a 15% reduction of heating required in winter, and a 25% reduction of cooling needs in summer. Rooms are at least $3-4^{\circ}\text{C}$ cooler than the air outside, when it's between $25-30^{\circ}\text{C}$.

Planning

Meet local planning requirements or development policies, without sacrificing development space and therefore ROI.

Biodiverse roofs (like our brown wildflower GrufeKit) are especially effective in meeting local regulations.

Aesthetics

Why wouldn't you want to make an overlooked grey area green? Bring the garden closer and cover a dull flat roof in one go.



Why a green roof?

Rainwater retention

A natural type of floodwater management, green roofs can absorb up to 75% of rainwater in the summer.

Building Ratings

When seeking to improve a building's ratings with BREEAM or the code for sustainable homes, choosing a green roof or brown wildflower (biodiverse) roof is a good option. To get further recognition, consider a bespoke plant mix roof with local wildflower varieties which we can choose based on your postcode area.

If you are trying to hit certain targets, please get in touch and we can advise.

Economic Value

The greater longevity, therefore lower replacement costs equals increased property values and marketability of a property. A home with a sustainable focus sells for more.





Why a green roof?



Roof longevity

Did you know that green roofs extend the lifespan of a flat roof by 20+ years? Why? Green roofs prevent:

- · UV rays breaking down the membrane
- · Freeze-thaw weathering
- Puddling

Plants use the suns rays to grow rather than letting them break down the waterproofing beneath.

Environment

Providing an alternative ecological habitat, green roofs can support local biodiversity and improve air quality. Plants naturally absorb CO₂ and release oxygen through photosynthesis.

But why the GrufeKit? Read on to find out...



What's the GrufeKit?

It's an all-in-one kit that provides a low-risk, long-term green roof solution.

Here's what you need to know:

Modular

No handling of the separate components. Everything is in one place.

Pre-grown

Established for 12-18 months, the modules are fully acclimatised which means the plants are more resilient.

Low maintenance

We use sedum to not only provide an evergreen cover, but because it's a hardy low-growing plant that survives all seasons. Wildflowers come and go as they please.

No irrigation

Sedum is self-sufficient and does not require intensive irrigation, and the soil used can retain water efficiently.

DIY install

The modules simply clip together on top of the fleece.



The Process







Protection fleece placed over your roof membrane.

GrufeTile's are clipped together on top of the protection fleece.

Give your green roof a nice finish with accessories such as white pebbles.



What's in the kit?

Your choice of GrufeTile:



Sedum

The most popular choice, sedum is an evergreen plant and the tile arrives fully established. No mowing, watering or maintenance required.



Sedum & Wildflower

The ultimate biodiverse roof, with wildflowers on a base of evergreen sedums, providing bursts of colour through the Spring and Summer.

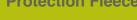


Brown Wildflower

Wildflowers bloom in the Spring and Summer and die back in colder months. Provides real biodiverse value and allows windblown local seeds to grow.







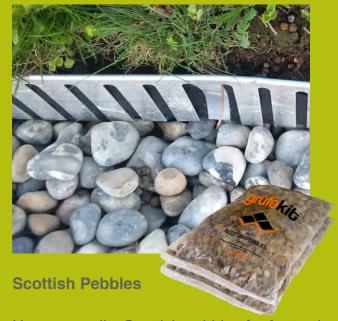


Your Green Roof Accessories

Give your green roof the perfect finish.



This edgeguard gives a sophisticated finish to the roof. We recommend this is used if there is no parapet or upstand. It will make the finished roof look neater and protect the edge of the modules. The GrufeGuard comes with in-built connectors.



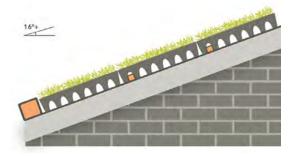
Use our quality Scottish pebbles for footpaths on the roof or to add a feature edging. Some local authorities require a stone border as a fire break. They can also stop windborne plant debris reaching the edge of the roof and gutters.



Sloped Roofs







Option 1

Sloped roofs with a gradient of 16 degrees or less can be treated as a standard flat roof. The GrufeKit can be installed with or without GrufeGuard and the weight of the modules will hold them in place.

Option 2

For roofs with a pitch of more than 16 degrees, GrufeGuard can be installed fixed to the waterproof membrane using IFP's across the roof in front of the modules to act as a restraint preventing slipping. This is dependent on the roofs pitch and the contractor's discretion.

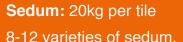
Option 3

For roofs with a pitch of more than 16 degrees, 4" x 2" restraining timber batons can be installed prior to waterproofing across the roof. These will need a break for water drainage every 1.5 meters. This is dependent on the roofs pitch and the contractor's discretion.



Key Facts

If you need additional information, please contact us at sales@grufe.co.uk.



Sedum & Wildflower: 22kg per tile 8-12 varieties of sedum with 20-30 varieties of wildflowers and meadow grasses.

Brown Wildflower: 22kg per tile 20-30 varieties of wildflowers and meadow grasses.



- Compressive strength 588 Kg/tile
- · Water holding capacity of 5.8 litres/tile
- UV resistant
- Temperature range -50°C 80°C
- Carrier material 100% Regenerated
- Polypropylene (PP)
- Carrier measures 540 x 540 x 90mm
- Drainage Surface 93.5 cm²/tile
- Outflow Volume 11.7 l/tile
- 1 year guarantee



Case Studies The Sedum GrufeKit





How is the GrufeKit so low-maintenance?



The GrufeKit is designed as a low-maintenance green roof solution, using the hardy evergreen sedum varities to ensure coverage all year round.

No immediate aftercare is required at the time of installation. Each GrufeTile comes to site fully established with pre-grown vegetation eliminating the need of any irrigation.



Tips for your GrufeKit Green Roof



Here's how to ensure your green roof stays in good condition:

- Hand weed and remove unwanted seedlings
- Clear gutters or drainage outlets of vegetation
- Feed the roof with organic phosphate and potassium
- Ensure stone perimeters are clear of dead and live plants
- Clear any leaves that have fallen from deciduous trees
- Maintenance should be carried out in early Autumn.
- Where breeding birds are expected, this should be undertaken once the nesting season has ended.
- Sedum will go red when stressed through dry or cold weather and sometimes when it is low on organic nutrients. This does not mean the roof is dead. You can either wait for rain or irrigate the roof once a week for approximately 1 hour.

Got a question?

Give us a call on +44 1243 545818 or email sales@grufe.co.uk and we'll do our best to help you!



Where to buy your GrufeKit



We like to keep things simple. You can purchase your GrufeKit at your local merchant or order it on-line, either way, it will be delivered direct to where you need it.

If you want to get started, give us a call on +44 1243 545818 or email sales@grufe.co.uk.





