Eco Green Roofs takes pride in the design, supply and installation of sustainable green roofs. Our scientific knowledge of green roof systems sets us apart and allows us to provide technical expertise that is backed up by published academic research.

A green roof is a living system that cannot be treated as a typical building or roofing product, getting it right is a science!

Eco Green Roofs was formed by three close friends as a project based around a passion for the environment. This passion has developed into an industry leading business – promoting novel, sustainable and superior products. We have seen the company grow rapidly to become the UK’s leading green roof expert!
THE UK’S LEADING GREEN ROOF EXPERTS
Green Roof Benefits

**Water Quality**

Water is cleaned when passing through a green roof system. Found that 60% of cadmium, copper and lead, and approximately 16% of zinc, can be removed from rainwater on passing through a green roof.

**Storm Water Run Off**

Vegetated roofs are able to retain on average 82% of rainfall compared to 27% on pure gravel rooftops; and this is even better on roofs with a 2% slope (up to 87% retention).

**Air Conditioning Bills**

Publications have indicated that the need for air conditioning in summer months can actually be reduced by 6% and, combined with a 1-2% reduction of the urban heat island effect; greened cities could see electrical demand come down by 5%.

**Habitat For Rare Wildlife**

Green roofs provide a stepping stone for many rare birds endangered by the lack of suitable habitats. They also provide a home for many rare insects, beetles, spiders and plant species.

**Heating Bills**

Heating bills can also reduced by a green roof, with an average saving of around 4%.
Thermal Benefits

Investigations into the thermal properties of green roofs have revealed that plants themselves significantly reduce air temperatures both inside the building and in the immediate environment. Experiments in Toronto, Canada, comparing common flat roofs, painted white roofs and green roofs found that, on average, roof temperatures on dry summer days were 65°C, 42°C and 35°C respectively.

Roof Life Span

Studies have proven that a green roof can increase a roof’s lifespan by up to 3 times. There are a couple of examples where the green roof has not needed to be replaced for over 100 years! The green roof protects the waterproofing from UV rays, frost and ice.

Air Quality

Studies have suggested a 37% reduction of sulphur dioxide (that causes acid rain) and a 21% reduction in nitrous acid can be achieved in the air above a green roof, when compared to other air samples taken nearby.

Planning Permission

In some cases a green roof factored into a new building’s design can help you gain planning permission. If green roofs are for an existing building then planning permission for the green roof itself is very rarely needed.

Sound Insulation

University of Sheffield research shows that a 20 – 100mm dry growing medium could achieve an extra SPL (Sound Pressure Level) attenuation of 10 – 40dB, depending on frequency.
DESIGN, SUPPLY, INSTALL
Sedum Roofs

Our Sedum Systems have been designed with between 8-12 sedum species per meter square. We grow our sedum blankets for over 12 months to ensure the plant roots are well established and robust enough for roof level. We provide Sedum systems in blanket, plug plant, cuttings and seeded options. Eco green roofs have a number of sedum farms across the UK.
Wildflower systems provide more diverse plant communities than Sedum green roofs. They are particularly favoured when ecological, aesthetic and environmental function needs to be considered. Wildflower Blankets are pre-established for a minimum of 12 months and include up to 50 U.K. native wildflower, herb and grass species. Eco Green Roof wildflower mats and Plug planted systems are easily installed for immediate visual impact.
Bio Diverse / Brown Roofs

Bio-diverse or Brown roof systems are specifically designed for biodiversity by offering a broad range of annual and perennial wildflower and grass species, and providing a mosaic of habitat opportunities for important invertebrate and bird species. In particular these roofs are created for species important to the site or regional bio-diversity plan; and incorporate several different substrate types placed a different depths to produce undulations (or a contoured effect). Log, stone and sand piles are added for further interest and give areas of shading on a micro level.
Bespoke Roofs

Here at Eco Green Roofs we provide bespoke systems to meet every client’s needs.
Eco green roofs specialize in bespoke design, supply and installation. Our in-house ecologist Dr Chloe Molineux holds a PhD in green roof substrates and is one of the top specialists in Europe. With this unique knowledge we can provide a green roof system to suit any requirements.

Specialist installation teams

- All in-house full employed labour force
- All team members CSCS and SSSTS certified
- First aid trained
- NEBOSH certified contract manager
- Professional reporting system
Amazon Fulfilment Centre, Tilbury

Solar PV

Eco Green Roofs (EGR) have successfully completed this extensive warehouse roof top Solar PV project in Tilbury, Essex, for Amazon. It’s the biggest building in the UK and one of the biggest buildings in Europe.

The 350kWp Solar PV array has successfully been installed and the 1271 Trina 275w solar modules combined with 7 Huawei 36kW Inverters have now been commissioned and are generating the electricity required to help power this impressive 2.2 million sq. ft. distribution facility at the Port of Tilbury.

In partnership with SIG D&T, EGR offer a free design and quotation service on the supply and installation of Solar PV throughout the UK.
**EGR BLUE ROOF SYSTEM**

EGR have completed a number of blue roof projects throughout the UK, both on roofs and podiums. Our system has been developed by our own inhouse expert and designed by Carl Harrop who has been the leading specialist of this technology for over 15 years.

**What is a blue roof?**
A blue roof is designed to attenuate water, typically rainfall and release this water over a longer period of time. This eases the pressure on the drainage systems particularly in times of severe rainfall.

The momentum behind using the roofscape is to attenuate storm water as a SuDS mechanism continues to grow. The uptake of this method, referred to as a Blue Roof, will be further fueled by the new London Plan. The draft of this document specifically puts blue roofs at the top of the preference hierarchy in its requirement for Sustainable Drainage

Introducing rainwater attenuation onto the roof and podium of a building challenges many established approaches and brings with it the potential for increased risk if not properly considered.

EGR have recognised that the introduction of Blue Roofs draws us deeper into the overall building design process and increases the interfaces we have with the wider design team.

Acknowledging that, in effect, we are designing and installing an element of the Building Services Systems which requires co-ordination, maintenance and management we have employed a leading specialist in the field to support us.
WHY WATERSHED ENGINEERING?

Carl Harrop has 30 years experience in consulting engineering, designing rainwater and drainage systems and has more recently specialised in rooftop attenuation.

About Carl:
- Contributor / Steering Committee member for the PH industry design guide, CIBSE Guide G
- Author of the article Blue-roof thinking in the CIBSE journal that sparked the development of the first patented blue roof, roof outlet.
- After 14 years managing one of the UK’s largest specialist teams for WSP now owns Watershed Engineering supporting EGR
- Is on the Steering Committee for the potential new CIRIA Blue Roof Design Guide

“Watershed Engineering were excited by Eco Green Roof’s approach to embracing Sustainable Drainage techniques on their projects. By working in partnership, Watershed get to add their extensive knowledge and passion for Blue Roof Design to the wide range of exciting projects undertaken by EGR.”

— Carl Harrop FSoPHE MCIBSE FCIPHE

EGR & SIG D&T PARTNERSHIP

To ensure that this offering goes full circle we have partnered up with SIG D&T so we can offer the service to our joint client base with peace of mind.

What to do next:
If you have a blue roof enquiry, please feel free to contact our team of experts to get your project off the ground. We will need some information about the project to allow us to take the project to the next stage. Please contact us:
info@ecogreenroofs.co.uk
01277 355705