

SIKA UK GREEN ROOFING SYSTEMS





# WHY CHOOSE A SIKA GREEN ROOF?

At Sika, our aim is to support building for a sustainable future. A Green roof has many environmental benefits and underpinned with one of our Sika roof waterproofing systems, provides a sustainable solution for a new build or refurbishment project.

### STORM-WATER RETENTION

During heavy rainfalls, runoff from surfaces such as pavements and rooftops can cause serious problems such as sewer overflow and water pollution. Green roofs slow down the water flow by retaining up to 75% of the rainwater, thus alleviating the pressure on storm-water infrastructures.

### **REDUCING ENERGY CONSUMPTION**

Green roofs are great insulators. They can reduce peak energy demand by lowering a building's cooling costs in the summer months and heating costs in the winter months.

### **REDUCING THE URBAN HEAT ISLAND EFFECT**

More green roofs and fewer dark colored roofs equal a cooler city. Dark roofs retain heat while plants naturally cool their surrounding environments through evapotranspiration cycles. In cities where the ambient temperature can be up to 10 degrees hotter than the surrounding areas, green roofs can help bring the overall temperature down.

### WATERPROOFING MEMBRANE PROTECTION

A green roof protects the waterproofing membrane from damaging UV rays, freeze-thaw cycling and repeated foot traffic, extending its lifespan. Some green roofs in Europe have lasted more than 40 years without being replaced.

### **SOUND INSULATION**

Soil and plants are an effective sound insulator.

### AESTHETICS

Green roofs are visually stimulating and can make great areas for recreation and pleasure.

### **INCREASED PROPERTY VALUE**

Installing a green roof can increase property value by providing a valuable building asset.

### **NATURAL AIR PURIFICATION**

The range of plant-life available for green roofs will be effective at filtering particulate matter from the air - converting CO<sub>2</sub> into oxygen, thus contributing to improved local air quality.

## SIKA UK GREEN ROOF TYPES

We offer three different green roof types, these are: Extensive, Intensive and Bio-diverse. Our Area Technical Managers can support at the initial consultation stage to ensure the correct green roof and Sika waterproofing system is specified.

### **EXTENSIVE GREEN ROOF**



#### Extensive

- Most common green roof plant species
- The hardiest plants; are not nutrient hungry
- Low maintenance plant species
- Requires reduced substrate depths in comparison to other green roof types, reducing the overall system weight
- Perennial plant
- Common pre-grown sedum blankets with 12 species sown

### **BIO-DIVERSE GREEN ROOF**



- Can closely replicate the local ecology of the building
- Supports a natural habitat for local species of plant, birds, animals and invertebrates
- Custom seed mixes available to grow specific species to match local ecology

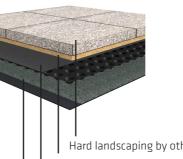
### **INTENSIVE GREEN ROOF**



### Intensive

- Greater variety of vegetation
- Hard and soft landscaping
- Requires regular maintenance and irrigation
- Suitable for recreational activities
- Heavier than other types of green roof almost always concrete roof or podium deck
- Soft landscape can retain up to 90% of rainfall

### HARD LANDSCAPING



Hard landscaping by others

Sand/Cement blinding (Or similar as specified by landscape designer)

SikaRoof Rigid Drainage Layer 40 UK

SikaRoof Protection Fleece P-225 UK

### Hard Landscaping

- Suitable for heavy traffic; both foot and vehicular
- Rainwater is directed down to the high performance drainage board
- Suitable for a variety of finishes; tarmac, pavers, etc.
- Can be combined with soft landscaping or planters for variety





# SIKA ROOFING WATERPROOFING SOLUTIONS

In addition to green roof systems, Sika is also able to provide the waterproofing solution, creating a complete, bespoke roof system for your project. With over 150 years of roofing heritage, we are able to offer a range of complimentary membrane technologies that are compatible with all our green roof systems, ensuring peace of mind.

For each project we ensure an initial consultation or roof survey is undertaken, so we can provide a bespoke specification for every roof which details the best waterproofing solution and green roof type for the project requirements.

### Sika® Sarnafil®AT and Sikaplan® Single Ply Membranes

Sika® is renowned throughout the world for providing high quality long lasting single ply roofing solutions. Our waterproof membranes are suitable for most types of roof design in new build and refurbishment applications, on steel, timber, and concrete structures, and for warm, cold and inverted roofs. Whether it's a flat, pitched, vertical, wave form, domed, concave or convex roof, we can provide a solution for almost any type of roof structure.

The BBA independently approves all of our PVC roofing membranes and has released durability statements in excess of 35 years. This, coupled with decades of experience in the roofing industry, means our customers can be reassured that their roofing project is in safe hands.

Sarnafil® Advanced Technology (AT) is the only UK roofing membrane to be certified in Cradle to Cradle. Sarnafil® AT has been independently assessed to a Silver certification by the organisation who globally assess products to ensure they are more sustainable and safer for the circular economy.











### SikaShield® Reinforced Bituminous Membranes

SikaShield® Bituminous Membranes offer the best of both worlds technologies, combining the flexibility and tensile strength of a Styrene-Butadiene-Styrene (SBS) modified bitumen membrane with the hardwearing properties and UV stability of Amorphous Poly-Alpha-Olefins (APAO). This ensures exceptional waterproofing protection, along with proven ease of application.

SikaShield® has been developed to comply with the NFRC's Safe2Torch Guidance. The NFRC (National Federation of Roofing Contractors) published its Safe2Torch guidance in July 2017 to help specifiers put safety first at the design stage of roofing projects.

Our SikaShield® Reinforced Bituminous Membranes are BBA Certified with a life expectancy in excess of 35 years.

Our root barrier for SikaShield® bituminous membranes is also approved by FLL.

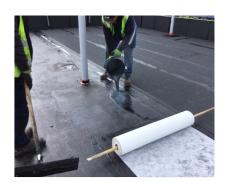


# SikaShield® Hot Melt Structural Waterproofing

SikaShield® Hot Melt Structural Waterproofing is commonly used in an inverted green roof build up as the waterproofing layer. Due to its monolithic state, the system boasts versatility and provides an outstanding performance with every installation.

Quick and easy to install, our SikaShield® Hot Melt Structural Waterproofing is ideal for busy construction sites as it can be trafficked soon after installation.

Our SikaShield® Hot Melt Structural Waterproofing system is BBA Certified with a life expectancy at least equivalent to the structure in which it is incorporated.





### **BREEAM**

BREEAM is an environmental assessment method and rating system for buildings, launched in 1990 by the UK organization BRE (Building Research Establishment). It is also used in other countries such as Netherlands and Spain. BREEAM assesses the overall performance of buildings using factors such as energy and water use, the internal environment (health and well-being), pollution, transport, materials etc., and awarding credits in each area according to defined performance criteria. The environmental impact is determined using LCA's.

### **BREEAM GREEN BUILDING PROGRAMS**

Below are some of the BREEAM categories where specifying a green roof can contribute towards a BREEAM rating.\*

\*BREEAM UK New Construction V6.

### **Biodiversity**

- Land Use & Ecology (LE 02) Ecological Risks and Opportunities
- Land Use & Ecology (LE 03) Managing Impacts on Ecology
- Land Use & Ecology (LE 05) Long Term Ecological Management

### **Reduced Noise Transfer**

- Health and Wellbeing (Hea O5) Acoustic Performance
- Pollution (Pol 05) Reduction of Noise Pollution

### **Access to Nature**

■ Health and Wellbeing (Hea 07) Safe and Healthy Surroundings

### **Storm Water Management**

- Pollution (Pol 03) Surface Water Runoff (rate & volume)
- Pollution (Pol 03) Minimising Watercourse Pollution
- Waste (Wst 05) Adaptation to Climate Change

### Health and Wellbeing

■ Health and Wellbeing (Hea 05) - Acoustic Performance

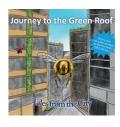
### **Sustainable Materials**

- Waste (Wst 01) Construction waste management (Diversion from Landfill)
- Waste (Wst 02) Use of Recycled and Sustainably Sourced Aggregates

Sika is committed to building trust, and creating value with its suppliers, customers, communities, and society as a whole. We see value in education, which is a primary focus of our social involvement through sponsorship of, or participation in, various initiatives across the UK.

As such Sika® are Gold Sponsors of "Journey to the Green Roof", a Tales from Mother Earth book, officially launched on World Green Roof Day (6 June 2023).

All profits will be invested back into the Green Roof Organisation (GRO) Education Fund.





BREEAM Information packs are available upon request from your local Area Technical Manager

"We have worked hard to ensure our green roofing solutions meet the requirements of the various types of buildings, and have produced BREEAM information packs to help the design team understand the contribution our roofing membranes and green roof systems can have towards a BREEAM rating.

> Dr. Sarah Peake. Sika UK Sustainability Manager

### SIKA FULL RANGE SOLUTIONS:





































#### **WHO WE ARE**

Sika Limited and Sika Ireland Limited are part of the global Sika Group, specialising in the manufacture and supply of chemical based products. Sika has a global leading position in the development and production of systems and products for bonding, sealing, damping, reinforcing, and protecting in the building sector and motor vehicle industry. Sika has subsidiaries in 103 countries, manufactures in over 400 factories, and develops innovative technologies for customers around the world that facilitate the sustainable transformation of the construction and transportation industries. With more than 33,000 employees, the company generated annual sales of CHF 10.5 billion (£9.4 bn) in 2022.

In the UK and Ireland, we provide market-leading solutions for building finishing, concrete, waterproofing, roofing, flooring, refurbishment, sealing & bonding, and industry, and have manufacturing sites in Welwyn Garden City, Preston, Leeds, Wishaw, Redditch, and Dublin with more than 900 employees and a turnover of more than £420 million.

The information, and, in particular, the recommendations relating to the application and end use of Sika® products, are given in good faith based on Sika's current knowledge and experience of the products when properly stored, handled and applied under normal conditions. In practice, the differences in materials, substrates and actual site conditions are such that no warranty in respect of merchantability or of fitness for a particular purpose, nor any liability arising out of any legal relationship whatsoever, can be inferred either from this information, or from any written recommendations, or from any other advice offered. The proprietary rights of third parties must be observed. Please refer to our homepage www.sika.co.uk for our current standard terms & conditions applicable to all orders. Users should always refer to the most recent issue of the Product Data Sheet for the product concerned, copies of which will be supplied on request.







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