

SIKA UK GREEN ROOFING SYSTEMS





# WHY CHOOSE A SIKA GREEN ROOF?

At Sika, our aim is to support in building for a sustainable future. A green roof has many environmental benefits and incapsulated with one of our Sika waterproofing solutions provides a sustainable roofing system for either 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.

#### **IMPROVED AIR QUALITY**

Green roofs filter air by absorbing and converting carbon dioxide to oxygen.

#### **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.









## 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 to ensure the correct green roof and Sika waterproofing system is specified.

#### **EXTENSIVE GREEN ROOF**



- 4. SikaRoof® Sedum Blanket UK
- 3. SikaRoof Substrate Extensive UK
- 2. SikaRoof Rigid Drainage Layer 20 UK
- 1. SikaRoof Protection Fleece P-225 UK



#### Extensive

- Most common green roof plant species
- The hardiest plants; are not nutrient hungry
- Low maintenance plant species
- Requires the least substrate, weighting factor for planning
- Perennial plant, no winter decline
- Common pre-grown sedum blankets with 13 species sown

#### **INTENSIVE GREEN ROOF**



- 5. Turf/Planting by others
- 4. SikaRoof Substrate Intensive UK
- 3. SikaRoof Filter Fleece F-120 UK
- 2. SikaRoof Rigid Drainage Layer 40 UK
- 1. SikaRoof Protection Fleece P-225 UK

#### 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





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

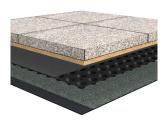


- 4. SikaRoof Wildflower Blanket UK
- 3. SikaRoof Substrate Bio-diverse UK
- 2. SikaRoof Rigid Drainage Layer 20 UK
- 1. SikaRoof Protection Fleece P-225 UK

This specific type of green, brown or 'living' roof typically either tries to replicate as closely as is practical the ecological environment of the site where construction has taken place or sets out to create a natural habitat to support a variety of plants, birds, animals and invertebrates.



#### HARD LANDSCAPING



- 4. Hard landscaping by others
- 3. Sand/Cement blinding (Or similar as specified by landscape designer)
- 2. SikaRoof Rigid Drainage Layer 20 UK
- 1. 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 to the waterproofing
- Suitable for a variety of finishes tarmac, paving etc.
- Can be combined with soft landscaping or planters for variety







# SIKA ROOFING WATERPROOFING SOLUTIONS

As well as the green roofing systems, Sika are able to provide the waterproofing solution for the roof. With over 150 years of roofing heritage, we have ensured all of our market leading technologies: single ply, reinforced bituminous membranes, hot melt and cold-applied liquid waterproofing systems are all compatible with our green roof types.

For each project we ensure an initial consultation or roof survey is under taken so our Area Technical Managers can use their roofing expertise to provide a detailed specification for every roof which specifies the best waterproofing solution and green roof type for the buildings requirements.





Sika® Sarnafil®, single ply membrane

Sika® Sarnafil® 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 40 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.

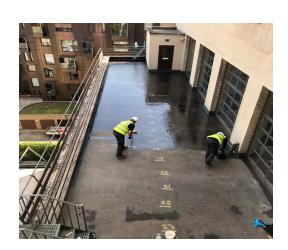






Sika® Liquid Plastics, cold liquid applied

Sika® Liquid Plastics liquid applied membranes are high performance polyurethane membranes which become rapidly resistant to rain damage, and can be used on both flat and pitched roofs. Our liquid applied membranes are cold applied, eliminating disruption through low odour technology for an occupied building during installation and cure to form a seamless waterproof membrane. As well as a solution for waterproofing the roof of a building, this cold liquid applied product range is ideal for balconies, terraces and walkways for both new build and refurbishment.





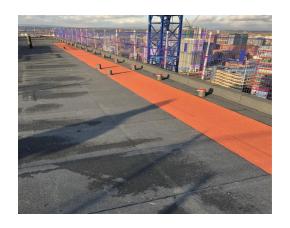




#### SikaBit® Pro, reinforced bituminous membranes

SikaBit® Pro 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.

SikaBit® has been developed to comply with the NFRC's Safe2Torch Guidance. The NFRC (National Federation of Roofing Contractors) published its Safe2Torchguidance in July 2017 to help specifiers put safety first at the design stage of roofing projects.



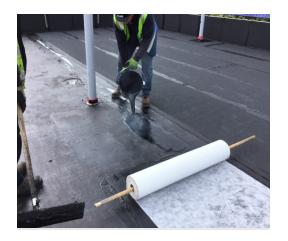




#### SikaBit® ProMelt, hot melt solution

SikaBit® ProMelt, is Sika's hot-applied liquid waterproofing solution. Due to its monolithic state, the system boasts versatility and provides an outstanding performance with every installation. Quick and easy to install, our ProMelt solutions are ideal for busy construction sites as it can be trafficked soon after installation.

Our SikaBit  $^{\rm o}$  ProMelt system is BBA certified for the life expectancy of the building.





### 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 PROGRAMMES**

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

#### **Biodiversity**

- Land Use & Ecology (Le 03) Mitigating Ecological Impact
- Land Use & Ecology (Le 04) Enhancing Site Ecology
- Land Use & Ecology (Le 05) Long Term Impact on Biodiversity

#### **Storm Water Management**

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

#### **Reduction Noise Transfer**

- Health and Wellbeing (Hea 05) Acoustic Performance
- Pollution (Pol 05) Noise Attenuation

#### **Health & Wellbeing**

- Health & Wellbeing (Hea 05) Acoustic Performance

#### **Access To Nature**

- Health & Wellbeing (Hea 07) - Safe & healthy surroundings

#### **Sustainable Materials**

- Waste (Wst 01) Diversion from Landfill
- Waste (Wst 02) Recycled Aggregates



#### Sarah Peake: Sika UK Sustainability Manager

"We have worked hard to ensure our green roofing solutions meets 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. As the UK Sustainability Manager in Sika, I am able to provide support in sustainability for any green roofing project alongside your dedicated Area Technical Manager."

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

# SIKA FULL RANGE SOLUTIONS FOR CONSTRUCTION:





























### FOR MORE INFORMATION:



#### **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 leading position in the development and production of systems and products for bonding, sealing, damping, reinforcing, and protecting in the building sector and the motor vehicle industry. Sika has subsidiaries in 100 countries around the world and manufactures in over 300 factories. With more than 25,000 employees Sika generates annual sales of CHF 7.9 billion (£6.14 bn). We are also committed to providing quality, service, safety and environmental care.

In the UK and Ireland, we provide market-leading solutions for concrete, waterproofing, roofing, flooring, refurbishment, sealing & bonding, and industry, and have manufacturing sites in Welwyn Garden City, Preston, Leeds, Wishaw and Dublin with more than 920 employees and a turnover of more than £290 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.







#### **SIKA LIMITED**

Head Office Watchmead Welwyn Garden City Hertfordshire, AL7 1BQ United Kingdom

#### **SIKA IRELAND LIMITED**

Sika House Ballymun Industrial Estate Dublin 11 D<sub>11</sub> DA<sub>2</sub>V Ireland

#### Contact

+441707394444 +441707329129 E-Mail enquiries@uk.sika.com www.sika.co.uk

@SikaLimited

#### Contact

Phone +353 1862 0709 Fax +353 1 862 0707 E-Mail info@ie.sika.com

www.sika.ie @Sikalreland



