



ROOFING
Sarnafil® AT
ADVANCED TECHNOLOGY

Sarnafil® AT

BUILDING TRUST



SUSTAINABILITY AT SIKA: MORE VALUE, LESS IMPACT



Green roof on Manchester Town Hall, UK.

HOW CAN SIKA ROOFING SYSTEMS CONTRIBUTE TO SUSTAINABLE CONSTRUCTION?

Long-lasting, high-performance roofing systems can make a major contribution to sustainable construction. Raw materials, production, application, the use phase and maintenance have significant influence on the overall sustainability performance of roofing applications.

SUSTAINABILITY AT SIKA:

As a signatory of the UN Global Compact, Sika commits itself to genuinely added sustainable value along the entire value chain. Our impacts are reported on an annual basis, according to the Global Reporting Initiative, (GRI) and have aligned to the United Nations Sustainable Development Goals (UN SDGs). Sika is also members of the World Business Council of Sustainable Development (WBCSD), Transparency International, Responsible Care, Together for Sustainability (TfS) and the UK Green Building Council (UKGBC).

DURABILITY:

The durability of building materials is a key to sustainable building construction. Internal and external studies document the outstanding service life of Sika roofing systems. A flat roof where the right waterproofing system has been specified and has been installed by trained professionals, can last for the design life of the roof.

USE AND MAINTENANCE:

Saving energy: Sika roofing systems can save energy by incorporating high-performance thermal insulation.

Generating energy: Sika SolaRoof® systems allow the production of energy.

Improving the microclimate: Sika green roofing systems help improve the microclimate and mitigate the development of urban heat islands as well as help manage water runoff from roofs.

Extending service life: Sika refurbishment solutions allow extending the service life of existing roofs by using the existing buildup as a base for the new system.

CRADLE TO CRADLE: Sarnafil® AT

First Cradle to Cradle Certified® Roofing Membrane in the Market

CRADLE TO CRADLE CERTIFIED® is a globally recognized measure of safer, more sustainable products, made for the circular economy. Product developers, manufacturers and brands around the world rely on the Cradle to Cradle Certified® Product Standard as a transformative pathway for designing and making products with a positive impact on people and the planet.

To receive certification, products are assessed on environmental and social performance across five critical sustainability categories:

Material Health

The material health category helps to ensure products are made using chemicals that are as safe as possible for humans and the environment, through a process of inventorying, assessing and optimizing material chemistries.

Material Reutilization

The material reutilization category aims to eliminate the concept of waste in a product cycle from production through to use and reuse.

Renewable Energy

The renewable energy category helps to ensure products are manufactured using renewable energy, so that the impact of climate changing greenhouse gases due to the manufacturing of the product is reduced or eliminated.

Water Stewardship

The water stewardship category helps ensure water is recognized as a valuable resource, watersheds are protected, and clean water is available to people and all other organisms.

Social Fairness

The social fairness category aims to design business operations, that honor all people and natural systems affected by the manufacturing of a product.

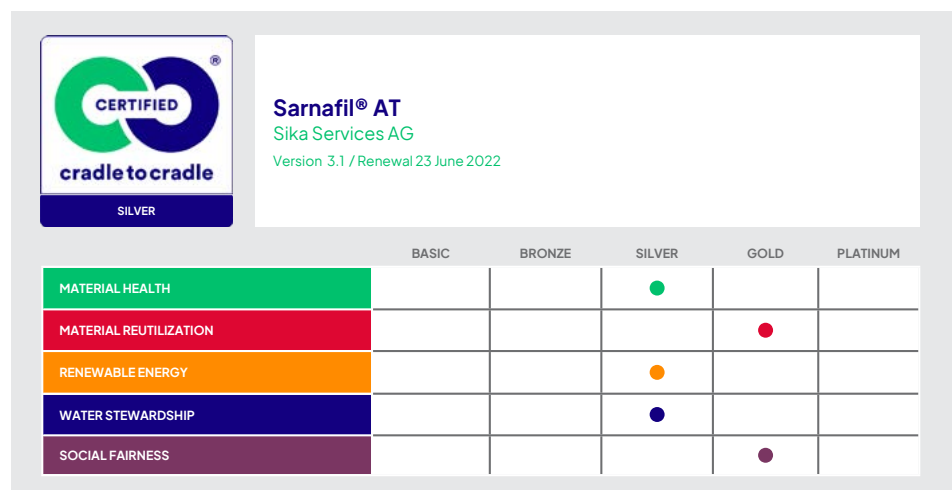
A product is assigned an achievement level (Basic, Bronze, Silver, Gold, Platinum) for each category. The product's lowest category achievement also represents its overall certification level. The standard encourages continuous improvement over time, by awarding certification based on ascending levels of achievement, and requiring certification renewal every two years.

Sika achieves its first Cradle to Cradle Certified® product

Sarnafil® AT is a new revolutionary roofing membrane technology.

Through its innovative products, Sika is committed to design, measure and communicate sustainable value creation. Certifications such as the rigorous **Cradle to Cradle Certified®** scheme demonstrate this commitment.

Sika embarked on its first **Cradle to Cradle Certified®** project in autumn 2019 for Sarnafil® AT, and was successful in achieving an overall Silver certification level. Sarnafil® AT is the



first roofing membrane in the market to be **Cradle to Cradle Certified®**. Becoming **Cradle to Cradle Certified®** is an important first step for Sarnafil® AT, helping Sika

to identify key actions for continuous improvement, which will be revisited every two years as part of the recertification process.

For more information about **Cradle to Cradle Certified®**, visit the Cradle to Cradle Products Innovation Institute's website: <https://www.c2ccertified.org/>

Sarnafil® AT

REACHING NEW HEIGHTS IN SUSTAINABLE ROOFING MEMBRANES

Proven performance for over 60 years, Sarnafil has established itself as the market leading single ply brand in the roofing industry.

The combination of expert Swiss polymer engineering, continual on-going research and development and market-leading contractor training, has provided a range of single ply roofing systems that offer high quality waterproofing solutions for both new build and roof refurbishment applications.

Through continuous innovation and development, Sarnafil® AT Advanced Technology, is the next generation of Sika single ply roofing membranes.





Sarnafil® AT

Unique hybrid technology for a smarter roofing experience

Sarnafil® AT FOR THE NEXT GENERATION.

With this patented hybrid technology, you will discover a versatile membrane that is easy-to-apply and long-lasting for sustainably designed roofs.

This new hybrid technology available as Sarnafil® AT is a great step forwards, and the evolution of a new generation of roof membrane solutions.

Smart, because it combines advantages from all existing membrane technologies, with good durability and the freedom of design, to flexibly adapt to different project demands.

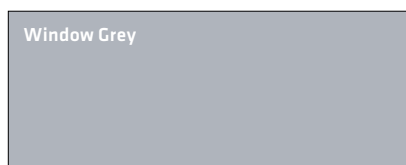
Easy to use and apply, allowing easy detailing and fast installation, with an overall time saving on site.

Sika has combined all the best attributes of single-ply roof membranes into one new 'Advanced Technology;' Sarnafil® AT.

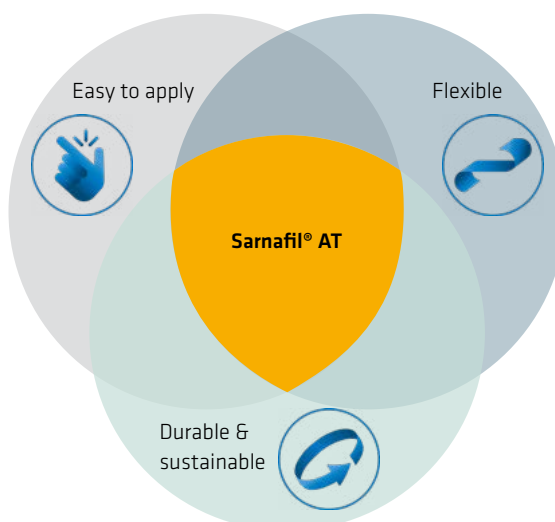


(R)EVOLUTIONARY!

Sarnafil® AT membrane is only available in the colour Window Grey.



As the global leader in single-ply roofing, Sika has created a highly flexible membrane with the ultimate combination of durability, sustainability and ease of installation.



ADVANTAGES

- Versatile
- Easy to apply
- Flexible
- Durable
- Sustainable

FEATURES AND BENEFITS OF SARNAFIL ADVANCED TECHNOLOGY

ADVANTAGES FOR OWNERS AND DESIGNERS

SUSTAINABLE



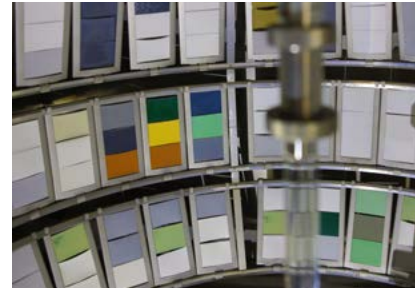
No oils, plasticizers or precarious heavy metals, ideal for sustainable buildings.

CRADLE TO CRADLE® CERTIFIED



Sarnafil® AT is Silver Cradle to Cradle® certified in sustainability performance.

LONG TERM PERFORMANCE



QUV tested for long-term service and durability for decades.

ADVANTAGES FOR CONTRACTORS

HIGHLY FLEXIBLE



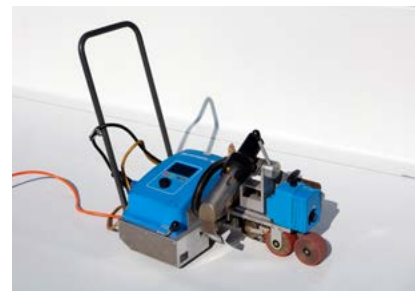
Highly flexible like EPDM, even at low temperatures, which allows faster roll-out of the membranes on site.

EASY TO APPLY / FASTER INSTALLATION



Easy, faster application and detailing work. Self adhesive tapes and membranes for detailing and upstands.

HOT AIR WELDABLE



Easy to weld and produce reliable welds like PVC, but also with an even wider welding temperatures window.

COMPATIBLE



A wide variety of accessories are available, as it is compatible with all existing Sarnafil® FPO-Systems.

IMPACT / PUNCTURE RESISTANCE



High resistance to impact damage, which helps to avoid punctures during installation and service.

MEMBRANE THICKNESS



At 2.5mm Sarnafil® AT membrane is the thickest single ply membrane available in the UK.

Sarnafil® AT

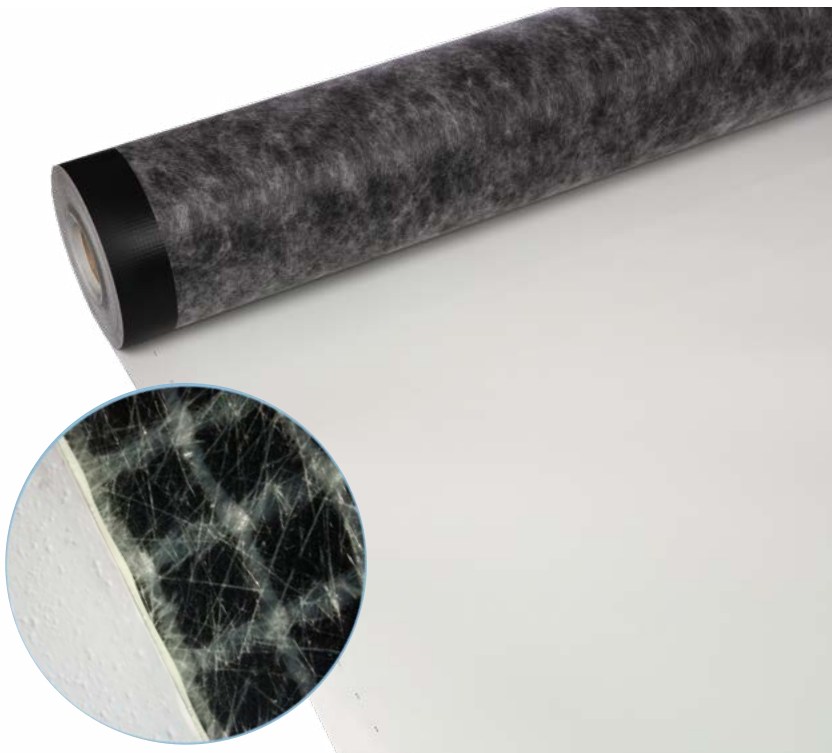
Advanced technology that pushes the boundaries again with a new generation of roofing membranes

DESCRIPTION

Sarnafil® AT is a membrane based on flexible polyolefins (FPO), with internal fabric reinforcement and backing in

accordance with EN 13956. The membrane is fully compatible with all existing Sarnafil® T accessories and ancillary components. Sarnafil® AT is a

hot air weldable roof membrane formulated for direct exposure and designed to use in all global climatic conditions.



USES

Roof waterproofing membrane for:

- Mechanically fastened systems
- Ballasted systems e.g with gravel, concrete slabs and for green roofs (intensive and extensive), plus on terraces with pedestrian traffic

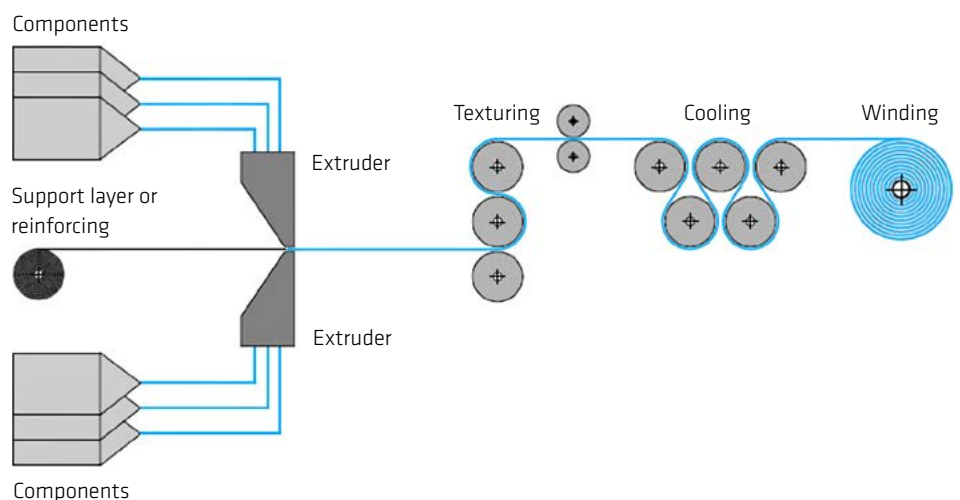
CHARACTERISTICS / ADVANTAGES

- Resistant to UV exposure
- Resistant to wind uplift
- Resistant to all other common environmental influences
- Hot air weldable
- No open flames required
- High dimensional stability with glass fleece inlay
- Resistant against impact loading and hailstones etc.
- Resistant to mechanical influences
- Resistant to root penetration
- Compatible with existing bitumen

THE PRODUCTION PROCESS

Sarnafil® AT roofing membrane is produced from a new combination of high-quality, flexible polyolefins (FPO). Using a well-proven extrusion production process, the carrier reinforcement is coated and the membrane is created.

The result is a tension-free roof waterproofing membrane that like all of the Sarnafil® membranes, is manufactured with great care in specially developed production facilities. In the extruders, the membrane components are melted, dispersed and applied in uniform layers over the carrier reinforcement. The fabric is thus homogeneously embedded centrally in the material and on what is to be the upper side, this is specially pigmented to be reflective and reduce the surface temperature.

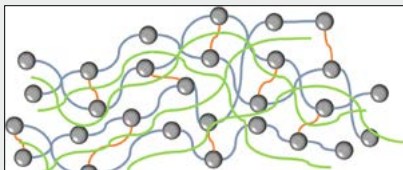


Sarnafil® AT-Technology = Thermoplastic + Elastomer

Sarnafil® AT-TECHNOLOGY

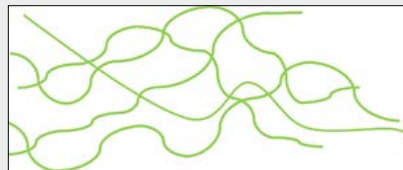
Sarnafil® AT is an elastomer modified FPO Membrane for roofing applications. The technology combines the advantages of FPO and elastomer membranes (as a hybrid). That means the Sarnafil® AT has excellent and easy weldability, safe and easy application (no solvents), high hail resistance and good application behaviour at low temperatures. Sarnafil® AT contains FPO thermoplastic and elastomer.

Thermoplastic
Elastomer



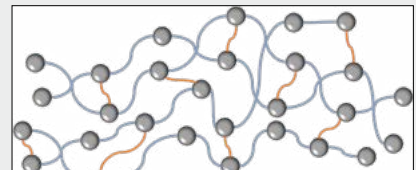
THERMOPLASTIC

Thermoplastics consist of long, threadlike, unlinked molecular chains. Thermoplastics can easily be deformed in a certain temperature range. This process is reversible, i.e. it can be repeated as often as desired by cooling and reheating to the molten state. With rising temperature, the molecular chains become increasingly mobile during the melting process. They may also disentangle themselves and slip apart. This molecular mobility makes it possible to weld the membrane.



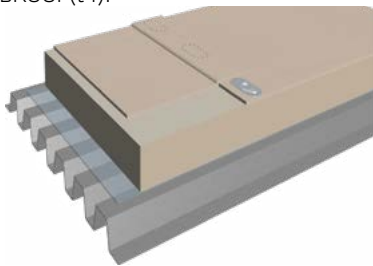
ELASTOMER

Elastomers are plastics whose special property is their high rubber-like elasticity, even at low temperatures. Elastomers are therefore dimensionally stable, but as they are elastic will return to their original shape after deformation. The molecular chains of elastomers are described as being wide meshed.



ONE MEMBRANE FOR ALL APPLICATIONS

Sarnafil® AT system build ups meet current Building Regulations for fire performance. Extensive 'external fire testing' of our systems has been conducted to the test standard for roofing - DD CEN/TS 1187:2012, and have been classified under BS EN 13501-5 to BROOF(t4).



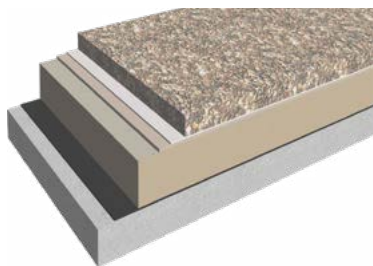
MECHANICALLY FASTENED

Mechanically fastened roofs are the most cost efficient for exposed roofing applications.

The fastest installation speeds are achieved with mechanical fastening.

The Sarnafil® AT membranes for mechanical fastening have special polyester reinforcement, enabling high wind load resistance.

Installation is almost not weather dependent.



BALLASTED - WITH GRAVEL

In gravel ballasted roofing systems, the waterproofing membrane is covered and ballasted against wind uplift and other exposure with a layer of gravel.

Conventional gravel ballasted roofs have been established in most markets for many years and are suitable on most flat roofs for suitably load-bearing structures.

Sarnafil® AT SYSTEM COMPONENTS

Compatible accessories as solutions for a complete roofing system build-up

Sarnafil® AT

Sarnafil® AT is a multi-layer synthetic membrane system based on flexible polyolefin (FPO) with internal fabric reinforcement and a fleece backing, in accordance with EN 13956. The Sarnafil® AT membranes are hot air weldable and formulated for direct exposure and use in all global climatic conditions. The embedded polyester scrim reinforcement increases resistance to wind uplift forces and the glass fleece backing optimises dimensional stability.

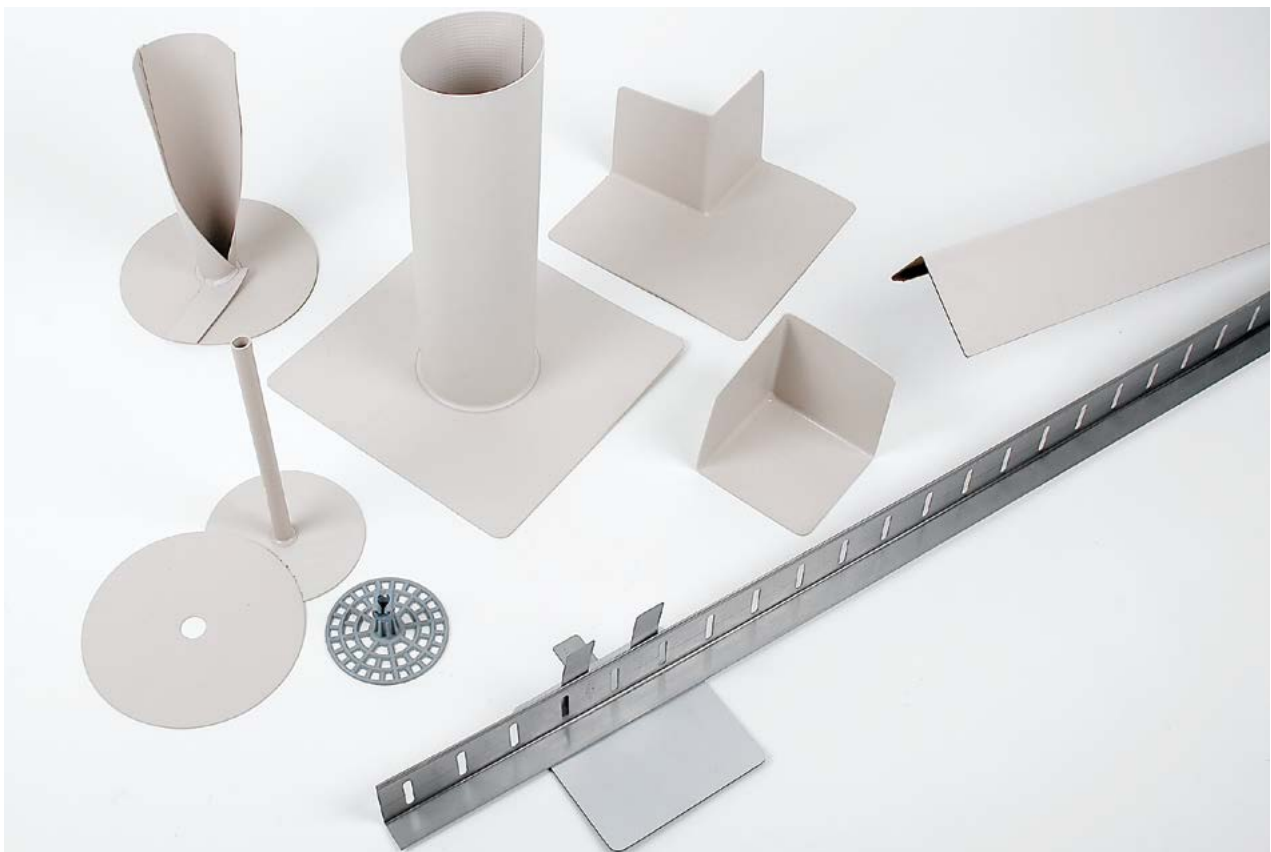
SYSTEM COMPONENTS

- Sarnafil® AT polymeric FPO roofing membrane
- Sarnafil® AT FSA P felt self-adhered FPO membrane for adjacent vertical surfaces such as parapets and upstands
- SikaRoof® Tape P for sealing and detailing around roof lights and smaller penetrations < 0.3 m



ANCILLIARY PRODUCTS

The complete range of existing Sarnafil® T ancillary products are compatible and hot air weldable with Sarnafil® AT membranes.



SIKA AT WORK

ROOF REFURBISHMENT OF LEISTER TECHNOLOGIES

Sarnafil® AT

PROJECT DESCRIPTION

Leister Technologies, situated in Switzerland close to our Sika Sarnafil manufacturing plant, required a sustainable roofing solution for the roof refurbishment of the buildings 2,000sm roof area. As the existing roof was more than 20 years in operation, it was essential for Leister to choose a roofing partner offering a long lasting and environmentally friendly roofing system.

Sika has a proven track record for more than 50 years in offering a reliable roofing solution. Sarnafil® AT, a new revolutionary hybrid thermoplastic roofing membrane, was specified as the right system as it's the first single ply roofing membrane in the world Cradle-to-Cradle Certified. Our innovative single ply membrane was the perfect choice for this project and the clients sustainable requirements.

Why did you choose Sarnafil® AT?

"We regard the durability and long-term performance of a roof as key criteria and the reason we selected Sarnafil® AT. This system is also highly resistant to mechanical damage, flexible and easy to weld, which are attributes that make an owner comfortable that they will have a watertight roof for many years. Sika has been in the roofing business for more than 60 years and is recognised as a leader in roofing technologies and as a solid partner world-wide, as are Leister, so we are convinced that Sarnafil® AT is the right choice for this important project."

*Bruno von Wyl, Chief Technology Officer,
Leister Technologies AG*

What was your experience with the Sarnafil® AT membrane system, especially in terms of its weldability, flexibility, application speed?

"The Sarnafil® AT membrane is extremely easy to weld and with the wide welding window the installer can easily achieve the right parameters. This creates confidence and a good weld can be achieved in a relatively short time, which increases the overall installation rates. Additionally, the Sarnafil® AT is highly dimensional stable, even at lower and higher temperatures. For example, on site we measured membrane surface temperatures changes of up to 80°C between day-time highs and night-time lows, and no wrinkling was visible on Sarnafil® AT."

Roofing System Installation Supervisor, Paul Röthlin

SIKA SOLUTION

Roofing area: Sarnafil® AT
Upstands: Sarnafil® AT FSA P (Self-adhered)
Insulation: Sikatherm EPS
Deck structure: Trapezoidal metal deck



SIKA FULL RANGE SOLUTIONS:



LIQUID APPLIED ROOFING



SINGLE PLY ROOFING



BITUMINOUS ROOFING



CONCRETE



CONCRETE REPAIR



STRUCTURAL STRENGTHENING



BUILDING FINISHING



WATERPROOFING



JOINT SEALING



FAÇADES



FLOORING



INDUSTRY



DISTRIBUTION



MODULAR/OFFSITE

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 101 countries around the world and manufactures in over 300 factories. With more than 27,000 employees Sika generates annual sales of CHF 9.3 billion (£7.54 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 1000 employees and a turnover of more than £360 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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BUILDING TRUST

