

ROOFING Sarnafil® AT ADVANCED TECHNOLOGY





Sarnafil® T

In 1989 a new generation of roof waterproofing membranes was born

30 YEARS AGO this development set new benchmark standards for the Roofing Industry in Europe.

A revolutionary new technology was born - Sarnafil® T.

Sika was the pioneer that launched roof waterproofing membranes based on flexible polyolefin (FPO). A multi-disciplined expert team from Sika has made it possible to introduce a new benchmark membrane system on to the European roof waterproofing market.

EXTRACT FROM THE LAUNCH PRESS RELEASE:

"In the development of Sarnafil® T, a revolutionary new type of polymeric roofing membrane, Sika has invested intensive research and 30 years of our experience. The result is poetry in every aspect: this new Flexible PolyOlefin material is resistant to bitumen, dimensionally stable with high elasticity and weathering resistance; plus thanks to the environmental raw materials, it has a future oriented ecological profile.

It is known that we produce excellent waterproofing systems. Since the December $4^{\rm th},$ we have also been honoured again. On Wednesday we have received the 1991 Innovation Reward for Sarnafil® T from the 'The Chamber of Commerce and Industry, Central Switzerland' (IHZ). We would like to thank you for this honour and promise to continue developing successful waterproofing solutions."



STILL 'BEST IN CLASS' – EVEN MORE THAN 25 YEARS AFTER IT'S INTRODUCTION

EXTRACT FROM THE 2014 PRESS RELEASE:

To help customers in their decision making process, in 2014 Sika commissioned an expert report on the durability of the polymeric roofing membranes Sarnafil® TS and Sarnafil® TG. This was based on a detailed investigation of five 17 to 25 year old roofs, plus another 158 roofs that were investigated and assessed by Sika personnel in a field survey, together with Sika's production data and QA/QC test results.

The results of this long term study and 25 years of proven performance, plus equally positive experience with the durability of Sarnafil® TG and Sarnafil® TS, combine to confirm that given the same conditions and maintenance, these membranes will continue to perform and fulfil their function for many more years to come.

Specifically the report concluded: "We investigated a selection of Sarnafil® projects that are 25 years old. The performance and durability of Sarnafil® membrane are proven through time by hard facts and figures. We don't know of any other comparable manufacturer in the market with regard to the quality of their products and sense of responsibility towards society." Stephan Wehrle Dipl. -Ing. (FH), Institute for Construction Protection, Construction Materials and Construction Physics, Germany.



First Sarnafil® T roofing system installed in 1988 in Sarnen.

25 YEARS OF Sarnafil® T – A BIRTHDAY TO CELEBRATE PROVEN DURABILITY

...The Sarnafil® T roofing system has proven long term stability and durability for waterproofing flat roofs.

The first Sarnafil® T roofing system was installed in 1988 at Sarnen in Switzerland. 25 years later a sample of the membrane was cut out for laboratory testing as part of the Expert Report. Also in 2014 the roof was still in perfect condition — But what does 'perfect' condition mean?

The investigation showed that even after 26 years there was no moisture in the roof structure and that the quality of the membrane was still similar to newly produced material e.g. still flexible, elastic and easy to weld, as well as waterproof.

AND NOW WE PROUDLY PRESENT ...

Sarnafil® AT

REACHING NEW HEIGHTS IN ROOFING MEMBRANES

In 50 years, Sarnafil® established itself as the prime brand in the roofing industry. Protecting your building, protecting your investment, protecting your company. We reached the top, but we didn't stop. We challenged ourselves to produce the next generation of roofing membranes: Sarnafil® AT. Advanced technology that pushes the boundaries of 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!

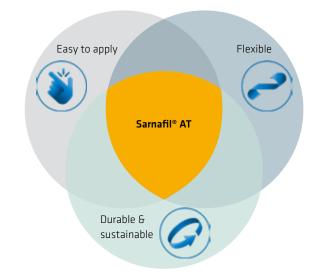
AVAILABLE COLORS:

Traffic White

Window Grey

Beige

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

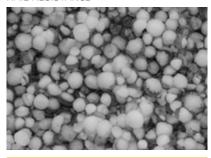
- Versatile
- Easy to apply
- Flexible
- Durable
- Sustainable

ADVANTAGES FOR OWNERS AND DESIGNERS

SUSTAINABLE



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



High resistance to impact and damage e.g. hail, to ensure a longer service life.



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

ADVANTAGES FOR CONTRACTORS

HIGHLY FLEXIBLE (even at low temperature) EASY TO APPLY / FASTER INSTALLATION



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



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.

WELDED SEAM PERFORMANCE



Seam collapse test value of more than 3 x that of EPDM, for long-lasting waterproof seams.

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 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.



Roof waterproofing membrane for:

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

CHARACTERISTICS / ADVANTAGES

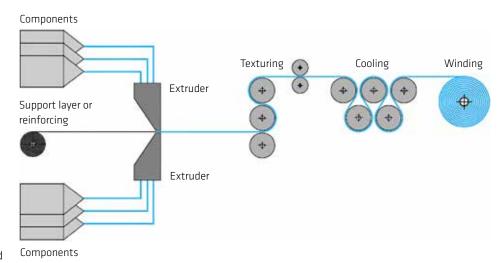
- Resistant to UV exposure
- Resistant to wind uplift
- Resistant to all other common environmental influences
- Hot air weldable
- No open flames required
- High dimensional stability with glass fleece inlay
- Resistant against impact loading and hailstones etc.
- Resistant to mechanical influences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

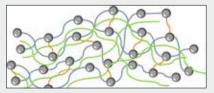


Sarnafil® AT-Technology = Thermoplastic + Elastomer

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 perature, the molecular chains become behaviour at low temperatures. Sarnafil® AT contains FPO thermoplastic and elastomer.

Elastomer



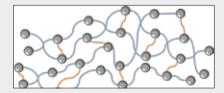
THERMOPLASTIC

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 temincreasingly 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

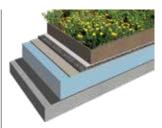


MECHANICALLY FASTENED

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 - GREEN ROOFS

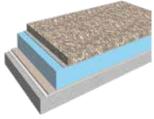
In so called 'Green Roofs' the ballast is soil, or a suitable plant growing medium, built up and planted with selected vegetation over the waterproofing membrane. Green roofs can make a significant contribution and present practical solutions in the quest for sustainability, increased biodiversity and quality of life.



BALLASTED - WITH GRAVEL

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



INVERTED ROOFS

In inverted roofs the membrane is applied below the insulation boards that are loose-laid on top and weighted down with concrete slabs.

The insulation protects the membrane from direct UV exposure, snow and hail, as well as extremes of thermal expansion and contraction in summer/winter.

Rainwater is drained by the scuppers/outlets.

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.

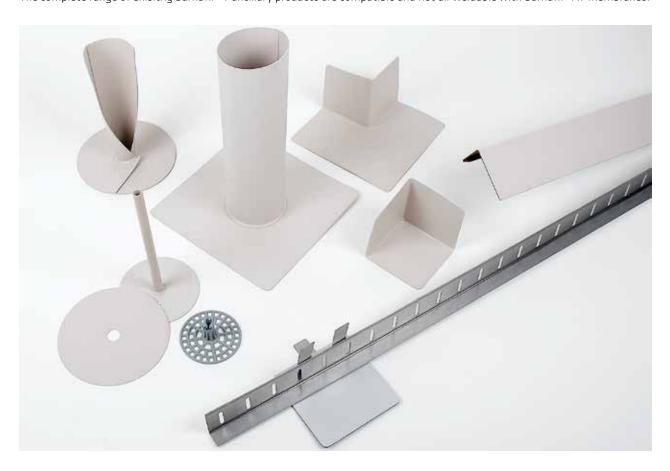
SYSTEM COMPONENTS

- 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 exisitng Sarnafil® T ancillary products are compatible and hot air weldable with Sarnafil® AT membranes.



Sarnafil® AT FSA P

Revolutionary self-adhered membrane solution for parapets and upstands



Sarnafil® AT FSA P is a highly flexible, self-adhered grade of the new FPO membrane for water-proofing parapets, upstands and other vertical details. It can also be used in conjunction with other Sarnafil® T membranes.



VERY EASY AND FAST APPLICATION



1. Remove Sarnafil® AT FSA P release liner



2. Mark position of upper parapet edge



3. Attach membrane



4. Press membrane in position with a suitable roller



5. Final hot air seam welding



No solvents or adhesives needed on the roof

GLOBAL BUT LOCAL PARTNERSHIP



FOR MORE SIKA ROOFING INFORMATION:



WE ARE SIKA

Sika is a specialty chemicals company with 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's product lines feature concrete admixtures, mortars, sealants and adhesives, structural strengthening systems, industrial flooring as well as roofing and waterproofing systems.

Our most current General Sales Conditions shall apply. Please consult the most current local Product Data Sheet prior to any use.







