

Sarnafil® AT

ONGOING
WATERPROOFING
PERFORMANCE

ROOFING

Sarnafil® AT FSH

SELF-HEALING ROOFING MEMBRANE

BUILDING TRUST



Sarnafil® AT FSH SELF-HEALING MEMBRANE

For secured roof waterproofing over the entire life cycle

Sarnafil® AT FSH Self-healing roof waterproofing membrane is the next generation of roofing technology. The Sarnafil® AT patented hybrid technology provides a versatile membrane which is easy to apply and ensures the longevity of your sustainably designed roof.

Roofs are becoming more complex than they were in the past. Equipment such as solar panels or Heating, Ventilation and Air Conditioning (HVAC) are often installed after the successful application of the roof waterproofing membrane. Subsequently, installers of such equipments often damage the roof waterproofing layer - not on purpose, but simply by inexperience or lack of knowledge.

Such damages may not be detected quickly, which results in water ingress. As the world looks to reduce their impact on the environment and conserve natural resources, installing a long-lasting, waterproof roof is an excellent way to build in sustainability and reduce future costs. The new Sarnafil® AT FSH Self-healing roofing membrane offers all the advantages that Sarnafil® AT is known for, combined with self-healing properties for a reliable, sustainable, and long-lasting roof.

A NEW GENERATION OF DURABLE ROOF PRODUCTS

Sika has long been a pioneer in combining elastomeric and flexible polyolefins technology, with the Sarnafil® AT range of sustainable roof products. These patented hybrid roof

membranes bring together all the best attributes of single-ply roofing membranes, providing long-lasting, versatile, and sustainable roof solutions. Now, with the introduction of the Sarnafil® AT FSH Self-healing, Sika is once again pushing the boundaries of roofing technology and delivering benefits for owners, installers, and designers.

This new self-healing feature preserves the waterproofing functionality over the life cycle of the membrane by repairing mechanical damage of limited sizes sustained after successful installation.

To ensure watertightness, membrane damage must be avoided – that's a fact. Yet as more installations take place after handover by adding solar panels, HVAC, or other equipment, there is a higher risk of physically damaging the membrane – not on purpose, but simply through carelessness or a lack of knowledge.

The self-healing process helps extend the lifespan of the roof, while improving safety and energy efficiency.



Installing a photovoltaic mounting rig or additional HVAC equipment may damage your roof waterproofing layer – but not with Sarnafil® AT FSH Self-healing.

Sarnafil® AT FSH SELF-HEALING MEMBRANE

Waterproofing technology

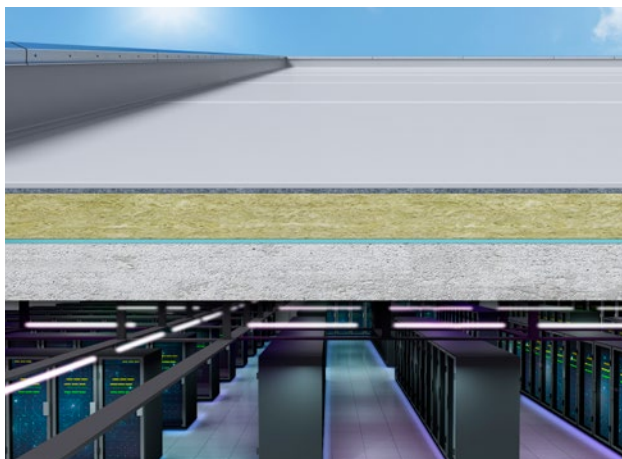
HOW IT WORKS

Sarnafil® AT FSH Self-healing is very different as it repairs mechanical damage of limited size sustained after installation, which ensures watertightness and membrane damage. This is achieved through its unique combination of a synthetic, elastomer-modified membrane with a water-reactive polymer integrated into the felt backing.

This type of polymer is designed to react to water in order to repair mechanical damage; ie punctures or cuts in the roofing membrane, which typical roofing applications generally produce. When the water comes into contact with the polymer, it swells within a localized area and closes the puncture, with the moisture retained within the polymer. This preserves the integrity of the roof and protects the contents within the building. This is what gives Sarnafil® AT FSH its self-healing functionality.

LET'S GET TECHNICAL

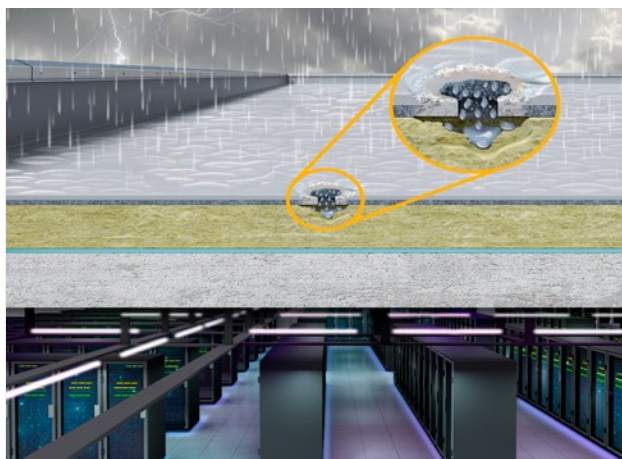
Sarnafil® AT FSH is a self-healing, elastomer-modified, synthetic roof waterproofing membrane based on flexible polyolefins (FPO) with an internal fabric and polyester fleece backing according to EN 13956. The technology combines the advantages of FPO- and elastomer-membranes (hybrid membrane) which results in excellent weldability, safe and easy application (no solvents needed), high hail resistance, and superior application behavior even at low temperatures. The membrane is hot air weldable, formulated for direct exposure or ballasted systems, and designed for use in all global climatic conditions. It is also available with a self-healing and self-adhesive felt backing for even easier application.



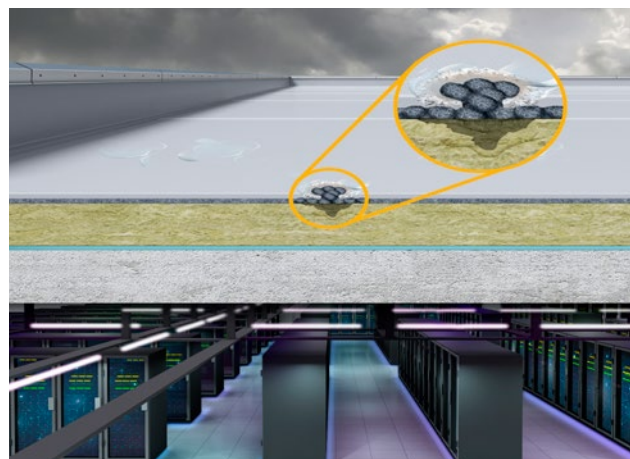
Watertight roof waterproofing functionality.



Damaging the roof waterproofing membrane after hand-over.



Mechanically damaged roof waterproofing membrane makes contact with water.



Self-healing functionality ensures continuous roof waterproofing functionality.

Sarnafil® AT FSH SELF-HEALING MEMBRANE

Features and benefits

USES

Waterproofing membrane for:

- Mechanically fastened roof systems
- Self-adhered roof systems
- Ballasted roof systems; e.g. gravel, concrete slabs, green roofs (intensive and extensive), inverted roofs, terraces with pedestrian traffic, etc.

CHARACTERISTICS

- Resistant to UV exposure
- Resistant to permanent wind exposure and uplift
- Resistant to all common environmental influences
- Hot air weldable; no open flame equipment required
- High dimensional stability from glass fleece inlay
- Resistant against impact loading and hail
- Resistant to mechanical influences
- Resistant to root penetration
- Compatible with existing bitumen

ADVANTAGES

- Easy to apply for faster installation
- Highly flexible even at low temperatures
- Long lasting and sustainable
- Ensured waterproofing functionality

Incorporating a water-reactive polymer into a roofing membrane offers building owners and installers a cutting-edge solution for improving the durability, safety, and sustainability of their roofing systems.

DURABILITY

For example, the life expectancy of a roof membrane is a key aspect for measuring roof sustainability. Extending the durability and lifespan of the roof means lower investment costs for owners by reducing the need for early refurbishment. It also reduces the amount of natural resources used to maintain a building over the course of its serviceable life, improving a building's sustainability credentials.

RISK

Risk mitigation is another benefit of a long-lasting, self-healing roof. For designers and installers, there is less risk of damage being incurred to the building as a result of flooding or leaks, reducing the chance of claims. For installers, this is even more important as it provides more freedom and safety during the building life cycle.

PROTECTION

Similarly, owners have the peace of mind of knowing that their asset is protected during its life cycle against leaks and other damage, improving the safety of both the building and its occupants. A self-healing roof membrane can also help reduce energy costs by improving the roof's ability to retain heat and reducing the risk of drafts and can help lower the overall cost of building ownership. Furthermore, should any renovation or refurbishment works take place on the roof – such as the installation of solar panels or HVAC equipment – the roof integrity will remain intact.

Feature	Advantage	Benefits
Self-healing	No change in waterproofing functionality	Ongoing waterproofing for more freedom and less hassle
Flexible	Faster and easier application	Lower installation costs
Durable	Robust and long-lasting	Longer service life before replacement
Easy to weld	Wide welding window and strong, reliable welds	Safer and faster welding joints



Drilling holes into roof waterproofing membrane by installing various equipment after completed application.

Sarnafil® AT FSH SELF-HEALING MEMBRANE

Products

AN INNOVATIVE AND SUSTAINABLE ROOF SOLUTION

As a pioneer in combining elastomeric and flexible polyolefins technology, Sarnafil® AT is an evolution that is paving the way for the next generation of roofing.

A smart product, it combines the benefits of all existing technologies: excellent durability and design freedom, with the flexibility to adapt to different designs and requirements. Uncomplicated, it also offers fast installation and easy detailing, saving valuable time on construction projects.

With more than 60 years of roofing experience, Sika is pleased to provide a new, versatile, and innovative solution that leverages all the advantages of the Sarnafil® brand.

An additional benefit of this experience is that Sarnafil® AT FSH Self-healing is compatible and hot air weldable with the existing Sarnafil® T product range, so there is no need to change any equipment.

SUITABLE APPLICATIONS

Sarnafil® AT FSH Self-healing is specifically designed for buildings where any water ingress is a critical issue, such as data centers, art galleries, or pharmaceutical manufacturing, among others. In these situations, the self-healing aspect provides added peace of mind. It ensures that water is prevented from damaging high-value assets until the issue is detected during the next inspection and maintenance cycle and can be resolved.

Suitable for both new construction and refurbishment projects, Sarnafil® AT FSH Self-healing is prepared with an uncoated welding edge to ensure that a strong hot air welding seam is achieved in the overlap between membranes.

Sarnafil® AT FSH Self-healing



Sarnafil® AT FSH SA Self-healing (self-adhesive)



Ancillary Products

The complete Sarnafil® T product range is compatible with and hot air weldable to Sarnafil® AT, providing complete flexibility for existing installations.

ROOF AREA

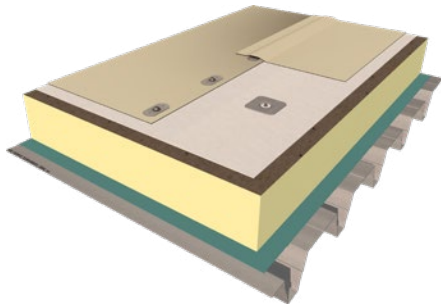
Product name	Thickness	Colour	Width x Length	Applications
Sarnafil® AT-18 FSH (FSH = Felt Self-healing)	1.80 mm	Window grey (~RAL 7040)	2.00 m x 10.00 m	Mechanically fastened or ballasted roof systems
Sarnafil® AT-18 FSH SA (FSH SA = Felt Self-healing/Self-adhesive)	1.80 mm	Window grey (~RAL 7040)	2.00 m x 10.00 m	Self-adhered or ballasted roof systems

ROOF UPSTANDS

Product name	Thickness	Colour	Width x Length	Applications
Sarnafil® AT-18 FSA-P (FSA P = Felt Self-adhesive for Parapets)	1.80 mm	Window grey (~RAL 7040)	0.33 m x 15.00 m 0.50 m x 15.00 m 0.66 m x 15.00 m 1.00 m x 15.00 m 2.00 m x 15.00 m	Mechanically fastened, ballasted and self-adhered roof systems

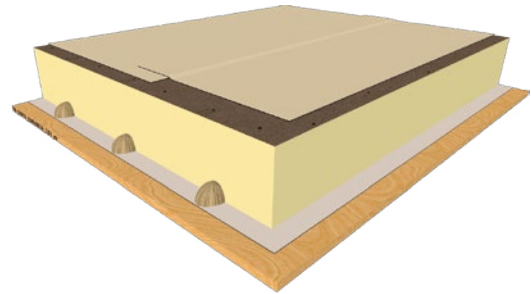
Sarnafil® AT FSH SELF-HEALING MEMBRANE

Two membranes for all applications



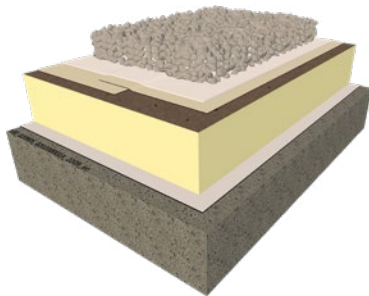
MECHANICALLY FASTENED ROOFS

- The most cost-efficient solution for exposed roofing applications
- Mechanical fastening offers the fastest installation speed
- Membrane includes special polyester reinforcement, enabling high wind load resistance
- Installation can take place in most weather conditions



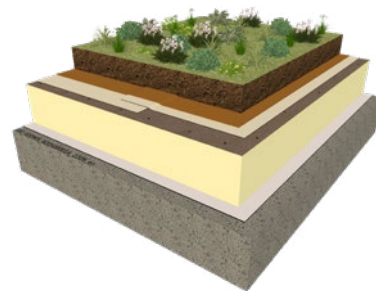
SELF-ADHERED ROOFS

- Highly aesthetic appearance
- Offers complete design freedom; suitable even for complex roof shapes
- No penetration of the roof deck required
- Very low noise emissions during installation
- Easy refurbishment of existing bitumen roofs



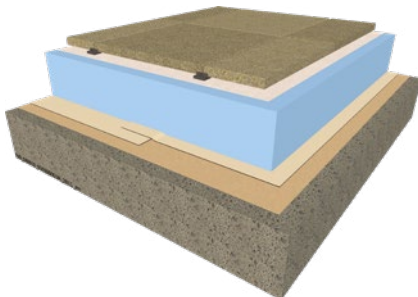
BALLASTED - GRAVEL ROOFS

- Roof waterproofing membrane is covered and ballasted against wind uplift and other exposures with a layer of gravel
- Established roofing solution in most markets
- Suitable on most flat roofs and bearing structures



BALLASTED - GREEN ROOFS

- Includes soil, or a suitable plant-growing medium, built up and planted with selected vegetation over the roof waterproofing membrane
- Vegetation makes a significant contribution to environmental goals
- A practical solution for increased biodiversity, sustainability, and quality of life



BALLASTED - INVERTED ROOFS

- Membrane is applied below the insulation boards, which are laid on top and weighed down with concrete slabs
- Protects the membrane from direct UV exposure, snow and hail, as well as extreme thermal expansion and contraction

Sarnafil® AT FSH SELF-HEALING MEMBRANE

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

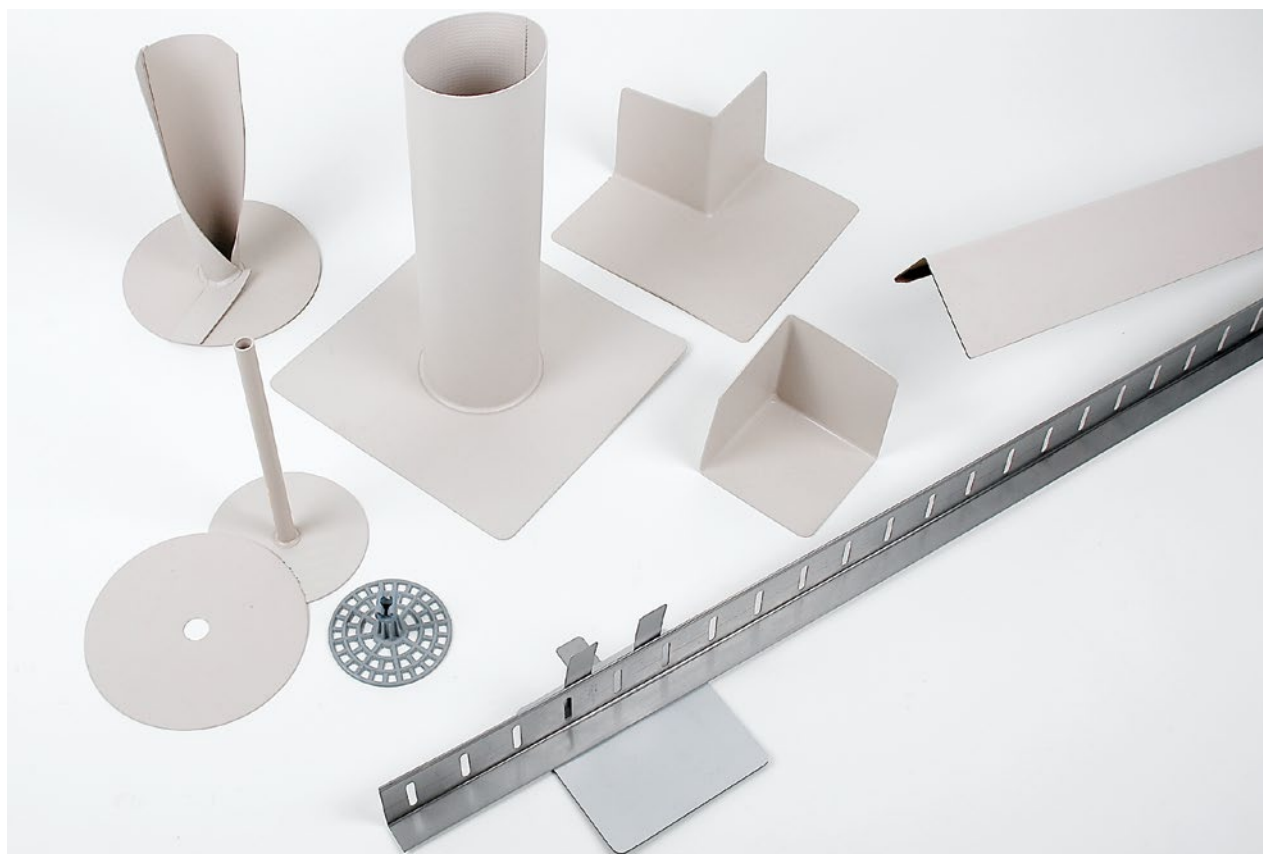
SYSTEM COMPONENTS

- All Sarnafil® AT polymeric FPO roofing membranes and accessories can be combined with Sarnafil® AT FSH Self-healing membranes.
- 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.

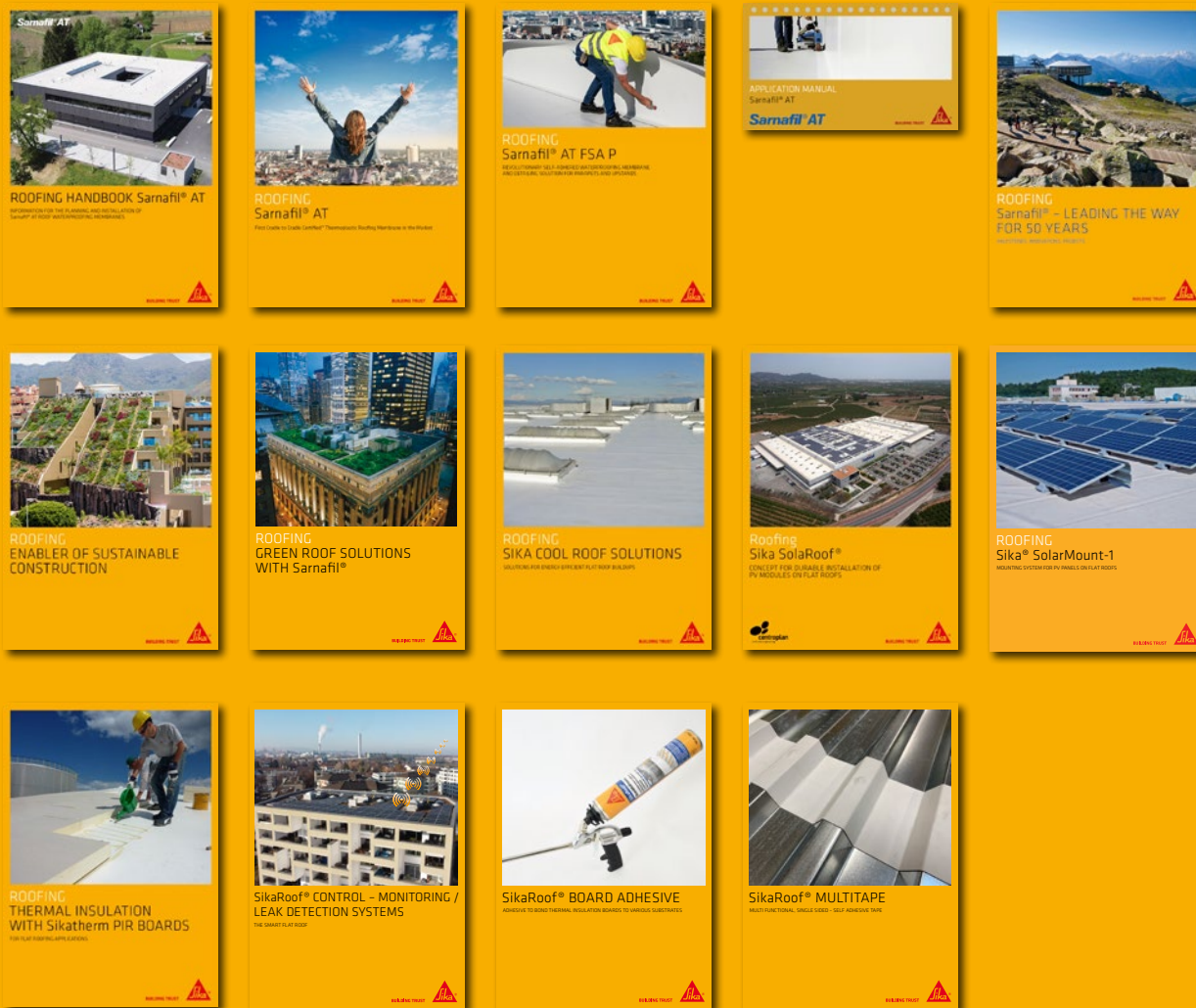


ANCILLIARY PRODUCTS

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



ALSO AVAILABLE FROM SIKA



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.



Contact

Phone +41 58 436 40 40
www.sika.com

SIKA SERVICES AG
Tueffenwies 16
CH-8048 Zurich
Switzerland

BUILDING TRUST

