



ROOFING

Sarnafil® ROOF SYSTEM

BUILDING TRUST



FOR HIGH QUALITY, LONG LASTING ROOFING SYSTEMS WITH A HISTORY OF PROVEN PERFORMANCE, THE CHOICE IS CLEAR—SARNAFIL.

Sarnafil®



From world-renowned museums to warehouses, Sarnafil-brand roofing systems from Sika have been providing reliable protection to facilities around the world for over sixty years, in every climate imaginable.

The roofing system plays an essential role in the protection of a building. Ultraviolet rays, ponding water and high winds all conspire to compromise the roof prematurely, leading to leaking, damage to the building, costly repairs and possibly an early tear-off and re-roof. Sarnafil roofing systems respond to these challenges with a variety of system configurations designed to meet the specific needs of almost any application, regardless of slope.



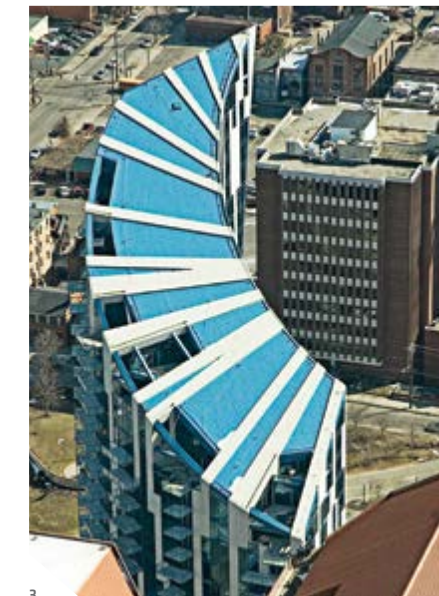
Sarnafil has solutions specifically developed for low and steep slope roofs, solar roofing and systems that mimic standing seam metal roofs.

Along with protection from the elements, Sarnafil's versatile single-ply membrane systems also boast sustainability features like unparalleled longevity, outstanding energy efficiency, recyclability and minimal maintenance. All which help building owners save money over the life of the roof and meet their sustainability goals.

Actual performance proven in the field over time is the only true test of a roofing system's quality. Billions of square feet of Sarnafil membrane have performed with distinction over the past 60 years in climates of every description. Many installations are still performing after 30 years of service.

Selecting a roofing system should be a decision based on choosing the best long-term value. Sarnafil roofing systems are widely recognized for exemplifying the highest standards of quality, reliability and watertight protection – a claim that has been proven through the test of time.

¹Carbotech AG, *Life Cycle Analysis of Low Slope Roof Systems*, November 2004



- C Lumen Field – Seattle, Washington
- 1 JFK Library & Museum – Boston, Massachusetts
- 2 Music City Center – Nashville, Tennessee
- 3 The Ascent Condominiums – Covington, Kentucky

SARNAFIL IS BORN

1962

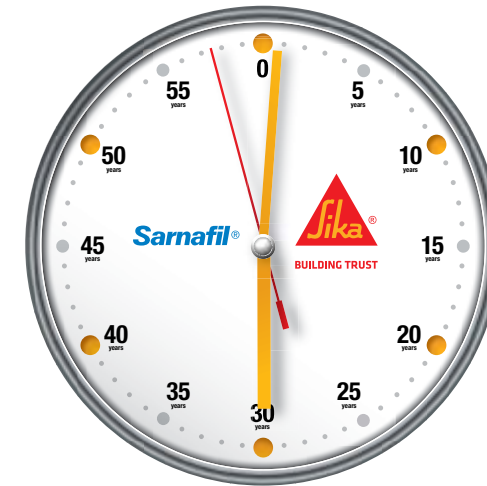
SARNAFIL IS WORLD'S FIRST FABRIC REINFORCED THERMOPLASTIC ROOF MEMBRANE

1964

FIRST LARGE-SCALE SARNAFIL INSTALLATION, EXPO 64 IN SWITZERLAND

SARNAFIL ROOFING SYSTEMS DEFY THE ELEMENTS YEAR AFTER YEAR.

TD Garden – Boston, Massachusetts



ENDURING SARNAFIL ROOFING SYSTEMS LASTING 30+ YEARS.

Sika documented the performance of four commercial roofing installations located in different climate regions. Each system delivered more than 30 years of reliable, watertight service.



1



COPPS COLISEUM
Hamilton, Ontario
30 Years of Service

This facility is home to the American Hockey League's Hamilton Bulldogs and the venue for many other sporting events and concerts.

2



PITMAN COMPANY
Woburn, Massachusetts
32 Years of Service

A Sarnafil roof was installed on this facility in 1978. The company and building changed hands in 2006 but the roof was still going strong. Finally in 2010, after 32 years, the company replaced the roof—with another Sarnafil roof, of course.

3



ROBBINS HALL, UC-DAVIS
Davis, California
33 Years of Service

A Sarnafil roof was installed on Robbins Hall in 1981. Sean Snyder, UC-Davis project manager, says that "This roof has completely exceeded my expectations." After more than three decades of service, Snyder had said the roof "was performing as well as some of the new roofs on campus."

4



BROOKSHIRE GROCERY
Tyler, Texas
32 Years of Service

Regarding the Sarnafil roof that was installed on his facility in 1980, Ken Reeves of Brookshire Grocery said, "There is no equal to this roofing system. If it were up to me, this is the only roofing system I would ever use." Brookshire Grocery replaced the warehouse roof in 2013 after 32 years of service with yet another Sarnafil system.

1965

SARNAFIL UNVEILS G410 FIBERGLASS REINFORCED MEMBRANE FOR ADHERED APPLICATIONS

1979

INTRODUCTION OF SARNAFIL 2121 WATER-BASED ADHESIVE

1987

INTRODUCTION OF THE SARNAFIL FELTBACK MEMBRANE

SARNAFIL MEANS EFFICIENCY.

Sarnafil roofing systems generate a positive Return On Investment for building owners while minimizing impact on the environment and protecting natural resources.



Certifiable

- Sarnafil S327 and G410 roofing membranes were the first products to achieve platinum certification to the NSF/ANSI 347 Sustainability Assessment for Single Ply Roofing Membranes.
- Sarnafil roofing systems help building owners achieve LEED and Green Globes certification.
- Sika roofing has been certified as compliant with strict management standards established by Responsible Care® and ISO 14001: 2004, two leading independent organizations developing standards relating to environment, health and safety, and security.
- Sika roofing has completed the Supplier Ethical Data Exchange Members Ethical Trade Audit that focuses on labor standards, health and safety, environment and business practice.



83%
SOLAR REFLECTANCE
WITH OUR WHITE
ENERGYSMART ROOF®
Available in four distinct colors

Sika reduces waste at every step in the Sarnafil product life cycle. It gathers both excess vinyl raw materials produced during manufacturing operations and trimmings contractors generate when installing new roofs. And when a roof must be replaced, Sika can recycle the used vinyl membrane.

To date, Sika's industry-leading Roof Recycling Program has diverted more than 45 million pounds of vinyl membrane from the landfill, recycling it back into roofing and waterproofing membrane products.

SAY NO TO LANDFILLS
And hello to the first of its kind roof recycling program



The feedstock of vinyl resin used to produce Sarnafil membranes is **53 percent salt** and represents the least amount of petroleum-based raw materials found in any common low-slope roofing product.

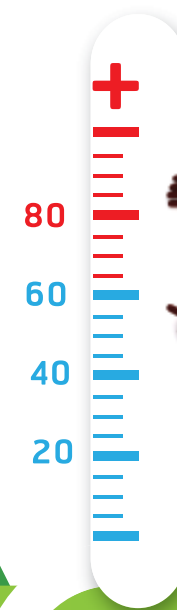
Reduce Consumption

Preventing solar radiation from elevating a building's internal temperature is an important strategy in reducing building cooling energy consumption. In research conducted by Lawrence Berkeley National Laboratory (LBNL)¹ for the U.S. Department of Energy and the Environmental Protection Agency, the Sarnafil EnergySmart Roof® reflected more than 80% of the sun's rays and scored an impressive Solar Reflective Index (SRI) of 104.

For the study a large retail store replaced a 100,000 sq. ft. black EPDM roof with a white Sarnafil roof. The study confirmed that the white roof membrane reduced average summertime air-conditioning peak demand by 14 percent and the total daily air-conditioning energy usage by 11 percent. Researchers estimated the total *annual* air-conditioning savings to be \$7,200 or 7.2 cents per square foot.

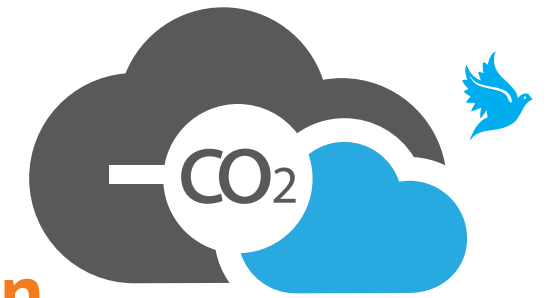
A comparative Life-Cycle Analysis (LCA) of commonly used low-slope roofing products conducted by the consulting firm Carbotech² ranked Sarnafil vinyl roofing membranes highest in eco-efficiency.

On top of all that, the EnergySmart Roof® requires minimal annual maintenance.



Solar is one of today's most recognizable symbols of sustainable building practices. The rooftop is an ideal setting for solar power generation. Because of its longevity, a Sarnafil roof system is an outstanding platform for all types of solar configurations.

¹ Lawrence Berkeley National Laboratory, *Measured Energy Savings and Demand Reduction from a Reflective Roof Membrane on a Large Retail Store in Austin*, June 2001
² Carbotech AG, *Life Cycle Analysis of Low Slope Roof Systems*, November 2004
³ Lawrence Berkeley National Laboratory, *Potential Benefits of Cool Roofs on Commercial Buildings*, March 2009

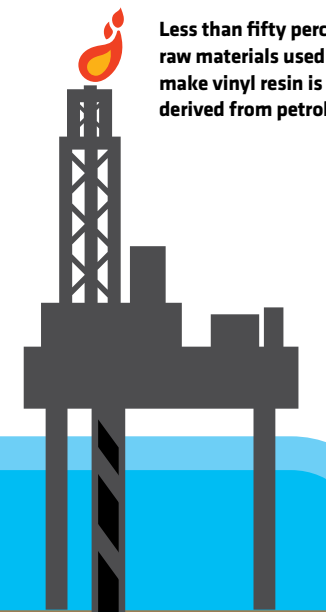


Buildings account for 48 percent of all U.S. greenhouse gas emissions. Replacing dark-colored roofs with reflective, light-colored roofs like the EnergySmart Roof® on eighty percent of air-conditioned commercial building roof areas could reduce emissions enough to offset the CO2 emissions of 1.2 million automobiles.

On average, a Sarnafil vinyl membrane in North America is carbon neutral after 1.7 years³.

<50%

Less than fifty percent of raw materials used to make vinyl resin is derived from petroleum.



UNPARALLELED LEADERSHIP IN SINGLE-PLY ROOFING.

Sika pioneered the use of PVC for roofing applications in 1962, developing the world's first thermoplastic membrane reinforced with fabric. This development revolutionized the single-ply roofing industry, and since that time the company has manufactured more than 15 billion square feet of membrane from production facilities located in six different countries.

EXPO 64 Pavilions – Lausanne, Switzerland



A ROOFING MEMBRANE'S INGREDIENTS SERVE AS THE FOUNDATION FOR ITS LONG-TERM PERFORMANCE AND DURABILITY. SIKA USES ONLY THE BEST INGREDIENTS TO PRODUCE CONSISTENTLY HIGH QUALITY SARNAFIL ROOFING.

POLYMER THICKNESS

While the reinforcement's role is to provide dimensional stability and mechanical properties, the polymer provides the waterproofing. Increased polymer thickness improves the life expectancy of the membrane, improves consistency of heat-welded seams and enhances durability and puncture resistance. Sarnafil membranes are available in a variety of thicknesses to match your need with your budget.



SARNAFIL THICKNESS GUARANTEE

The roofing industry standard allows membranes to be manufactured up to 10% below the advertised thickness.

Recent testing showed that only the Sarnafil-branded adhered and mechanically-attached membranes and one additional membrane met the labeled thickness, with all the other membranes failing to measure up.

To ensure that architects and roofing consultants can specify with confidence and that building owners will get what they pay for, Sika has instituted a Sarnafil Thickness Guarantee program. The program guarantees that the measured thickness will meet the labeled thickness per ASTM D-751 at the time of installation.

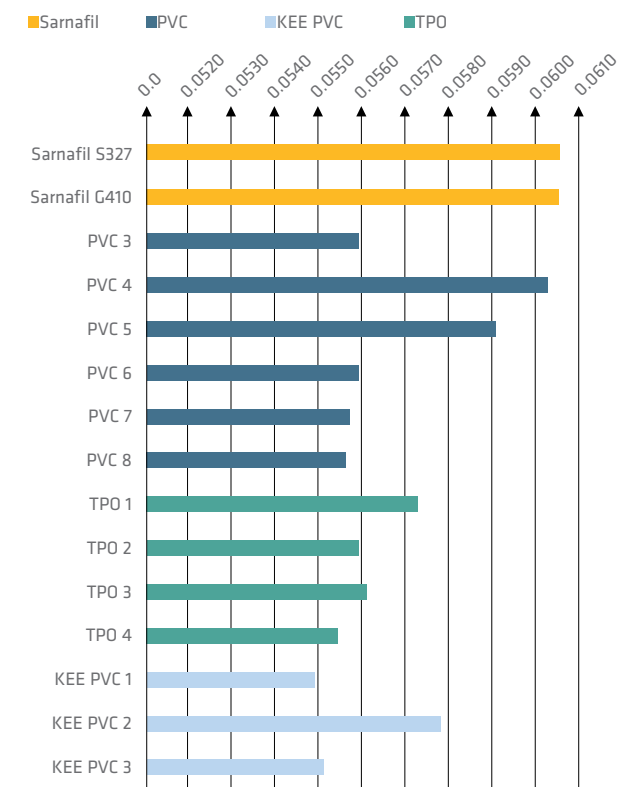
POLYMER ABOVE THE SCRIM

Waterproofing polymer protects a building from the intrusion of inclement weather; the reinforcement does not. Polymer above the scrim is exposed to the environment and is what keeps the elements from entering the building. In Sarnafil membranes, this polymer exceeds the thickness mandated by the ASTM. It is a premium blend formulated to withstand the elements for decades.

FACTORY-APPLIED LACQUER SURFACE COATING

Sarnafil membranes are manufactured with a unique coating. This coating helps repel dirt and airborne contaminants from the membrane's surface.

LABELED VS. MEASURED MEMBRANE THICKNESS – ALL MEMBRANES LABELED 60 MIL



Sika Corporation – Roofing, 2013

1994

NEW RECYCLING PROGRAM TURNS SARNAFIL MEMBRANE INTO WALKWAY PADS

ENERGYSMART ROOF MEMBRANE INTRODUCED WITH HIGH REFLECTANCE AND EMISSIVITY FOR ENERGY SAVINGS

1999

DÉCOR ROOF SYSTEM PROVIDES THE LOOK OF A STANDING SEAM METAL ROOF

PERFECTION IS IN THE DETAILS

When choosing the optimum roofing solution, quality products and proven performance are essential but it doesn't stop there. Attention to every detail from the right automatic welding equipment to expert installation support to a superior warranty makes a big difference – and helps make Sarnafil the biggest name in the industry.

TECHNICAL SUPPORT

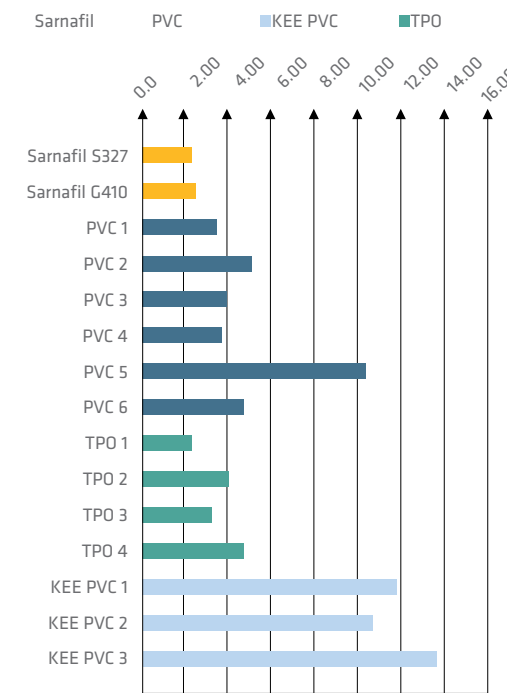
Sika allows only authorized applicators to install Sarnafil roofing systems. These applicators are trained by Sika to ensure a high level of quality. Technical support services are also available, and the company's support team provides the most coverage in the industry with field technicians located in every region of the country. They work closely with roofing applicators to ensure that the installation process goes smoothly, and they're available before, during and after each roof installation.

SEAM WELDING AND DETAILING

Faulty seams and details are a common source of leaks with many roofing systems. Some roofing membranes use sealants, adhesives or tapes that can deteriorate over time. The Sarnafil membrane is thermoplastic - its seams and flashings are welded together using Sika's automatic hot air welder, the Sarnamatic. When welded together, the sheets of membrane become one monolithic layer of material impervious to water and moisture infiltration.

WATER ABSORPTION

CHANGE IN WEIGHT AFTER IMMERSION IN WATER, MAX%, D570 MODIFIED 3.0%



Sika Corporation – Roofing, 2013

Water absorption can cause membrane delamination, affect the quality of seam welds and reduce the long-term performance of the membrane. Sarnafil membranes absorb less water than many competitive thermoplastic roofing systems. The occurrence of standing water also does not affect the coverage of a Sarnafil system warranty, which is not the case for all roofing systems.

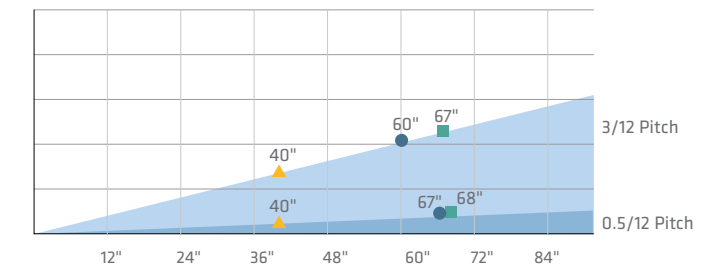
FIRE PERFORMANCE

While fire safety codes have greatly improved over the years, losses from fire are still an ongoing issue. One of the most vulnerable components of a building when exposed to fire is the roof. PVC roof membranes are naturally fire resistant.

ASTM E108 evaluates the fire characteristics of roof coverings when exposed to external fire sources. The coverings with a Class A rating can withstand severe test exposure and afford a high degree of protection to the roof deck.

The results on the graph below show the Sarnafil membrane has a much greater resistance to spread of flame than the EPDM and TPO membranes. Also while the other membranes will burn until fully consumed, the PVC membrane will self-extinguish if the source of the flame is removed.

MAXIMUM SPREAD OF FLAME (ASTM E108 RESULTS)



▲ Sarnafil ● EPDM ■ TPO

DESIGN AND COLOR OPTIONS

A roof can be an important design element for a building – sometimes transforming a facility into an architectural statement. Sarnafil roofing systems lead the way in innovative designs with colored membranes that can effectively accent these distinctive features. And because of the manufacturing process that builds color into the membrane, no recoating is ever needed.

2000

SARNAFIL RATED #1 BY SG&H IN THERMOPLASTIC ROOF MEMBRANE STUDY

2001

SARNAFIL FIRST PVC MEMBRANE PRODUCED IN 10 FOOT WIDTH

2005

OLD ROOF "TAKE-BACK" RECYCLING PROGRAM INITIATED

VERSATILE SARNAFIL ROOFING SOLUTIONS FOR EVERY APPLICATION.

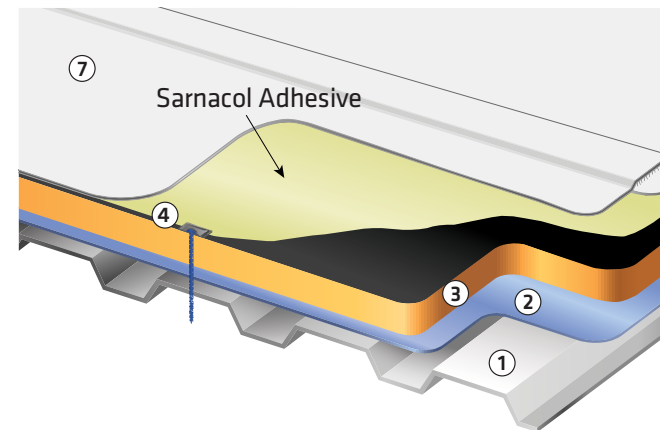
Sarnafil creates innovative roofing systems specially designed to suit the application. Each configuration uses the same Sarnafil membrane formulation that has established the company's world-class reputation for reliability and performance.

ILLUSTRATION KEY

- 1 Structural Deck
- 2 Vapor Retarder (if required)
- 3 Insulation
- 4 Insulation Fastener
- 5 Gypsum Roof Board
- 6 Sarnafil S Membrane
- 7 Sarnafil G Membrane
- 8 Sarnafil G Feltback Membrane
- 9 Asphalt
- 10 Mod. Bit Base Ply
- 11 Feltback Membrane Adhesive

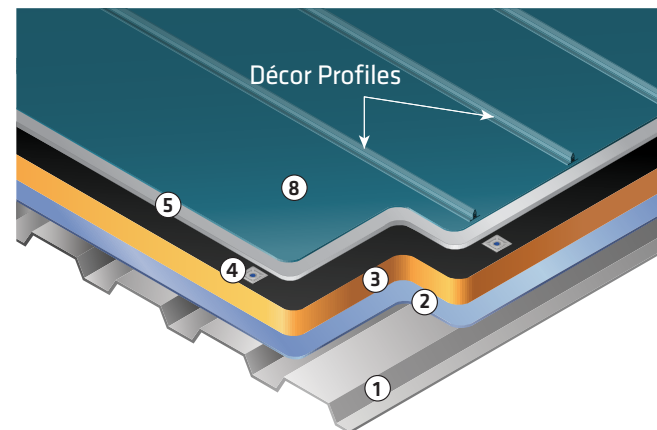
Sarnafil "G" series membranes have a unique fiberglass-reinforced, single-ply membrane. Specifically designed for adhered and loose laid systems, they deliver exceptional dimensional stability and a low coefficient of thermal expansion and contraction to extend the service life of the roof. The Sarnafil "S" series membranes are polyester-reinforced and used in mechanically-attached roof systems to resist the high point loads imposed on the membrane.

ADHERED



ADHERED SYSTEMS

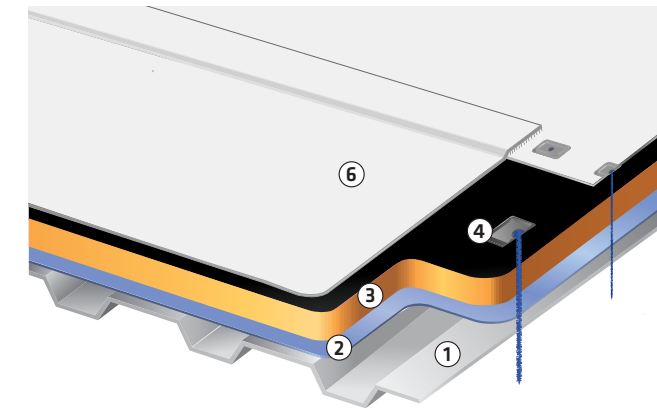
Sarnafil adhered roof systems are best for low sloped, uniquely shaped or pitched roof applications composed of nonnailable substrates such as precast or prestressed concrete, cementitious wood fiber or gypsum. They're also effective over nailable substrates such as steel and wood decks. For rough surfaces such as cellular concrete, the Sarnafil adhered feltback system minimizes the appearance of the substrate irregularities and offers high wind uplift resistance as well as increased puncture resistance.



DÉCOR ROOF SYSTEMS

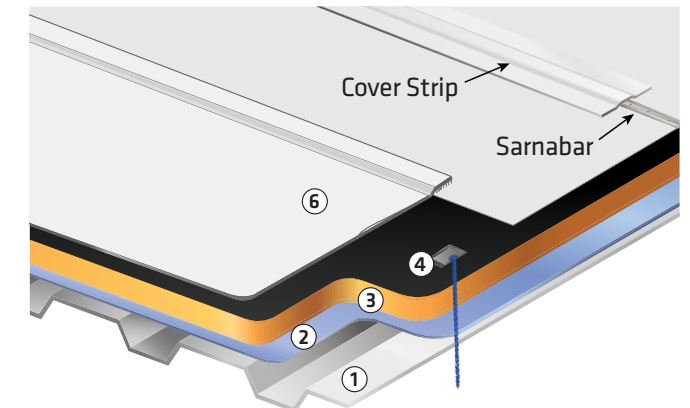
The Sarnafil Décor Roof System is the ideal choice for new or existing buildings that call for the look of a metal roof but require the watertight integrity and design flexibility of a thermoplastic roofing membrane. Décor systems achieve the appearance of metal with a thermoplastic rib that is hot air welded to the membrane surface. These systems come in seven standard color options and a nearly unlimited number of custom colors.

MECHANICALLY-ATTACHED



SARNAFAST

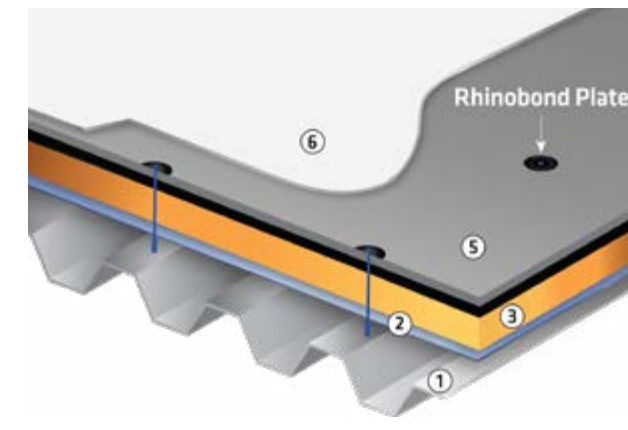
This mechanically-attached system is your best choice when speed and ease of installation are important. Sarnafast features metal plates fastened in the membrane overlap and spaced according to the roof's wind uplift requirements. It is designed to meet wind conditions on most building types.



ENGINEERED

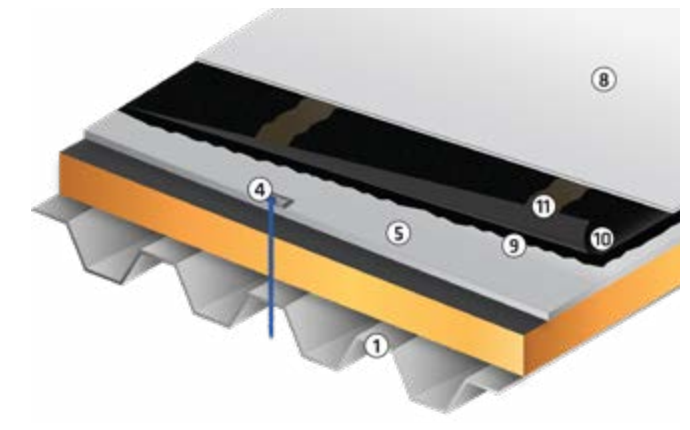
The Sarnafil Engineered System is designed for roofs that are subject to severe or extreme wind uplift forces. The advantage of this system is the fastening pattern – both row spacing and fastener spacing can be customized or "engineered" for any specified wind load. The Engineered System utilizes a specially designed bar which is secured to the structural roof deck with corrosion-resistant fasteners. The bar clamps the membrane fully along its length, uniformly distributing the dynamic load produced by wind uplift. Sika offers wind warranty protection of up to 120 mph with this system.

SPECIALTY SYSTEMS



RHINOBOND ROOF SYSTEMS

This innovative attachment system is used with Sarnafil membranes to increase contractor productivity and enhance roof wind uplift resistance. It uses electromagnetic induction welding to eliminate fastener penetrations through the membrane. Specially coated membrane plates are fastened to the roof deck and later fused to the underside of the membrane using the RhinoBond tool, which is lightweight, portable, and simple to use. The system achieves an FM I-90 and higher rating in the field while requiring 30 percent fewer fasteners per square than traditional systems.



HYBRID ROOFING SYSTEM

The "hybrid" roofing system uses Sarnafil® G410 Feltback roof membrane with an approved SBS modified bitumen product. It is ideal when a durable, multi-layered roofing system is desired, without sacrificing the energy savings of a highly reflective roof membrane. The integration of these two roofing systems provides the customer with a multi-layered, high performance roofing system using highly reflective, time proven materials.

2008

RHINOBOND ATTACHMENT SYSTEM
STREAMLINES INSTALLATIONS, ENHANCES WIND
UPLIFT RESISTANCE

2008

ECOSMART ROOF WITH INSULATION
REUSE WARRANTY INTRODUCED

2012

SIKA SOLAROF IS THE FIRST HOT-AIR
WELDED, NON PENETRATING ATTACHMENT
SYSTEM FOR COMMERCIAL ROOFTOP SOLAR

SARNAFIL ROOFING SYSTEM IN BUILDING RENOVATION

The Sie Welcome Center in downtown Denver underwent a renovation project that required a roofing system that could withstand Colorado's seasonal elements and protect the priceless art inside. The Sarnafil Roof System was used on all 20 of the new and renovated roof sections, covering 37,000 square feet of roof area. Despite the challenging installation conditions during the cold winter months, the Sarnafil system provided a watertight solution and has a proven track record of protecting some of the world's most important buildings and occupants for decades. The use of the Sarnafil system played a significant role in the project's success.

Denver Art Museum – Denver, Colorado



SARNAFIL MILESTONE MANAGEMENT



The Sarnafil Milestone Management™ process is the key to a successful installation. From technical assistance to installation, our “hands on approach” is designed to make any project an easier task for you. Here’s how we help make the process go smoothly:

Proven Materials – A high quality membrane is the key to any successful roofing project that demands absolute system integrity. With that in mind, Sika’s manufacturing process uses only the highest quality materials to produce a membrane that offers excellent weatherability and dimensional stability.

Expert Assistance – Our skilled technical experts make Sika stand apart from other manufacturers. We’re involved at each major milestone—offering assistance to architects and specifiers if needed, reviewing Notice of Award documentation, and training authorized applicators in the classroom and at the job site.

Skillful Workmanship – Skilled, trained applicators are critical to a quality roof installation. Sika sells only to a select group of authorized roofing contractors. Only the best are invited to join our team.

SARNAFIL WARRANTY OPTIONS

SARNAFIL ROOFING SYSTEMS

A variety of warranty options are available, including 5, 10, 15, 20, 25 and 30 year durations for:

- Membrane Only
- Full System

BUILDING TRUST, EVERY DAY

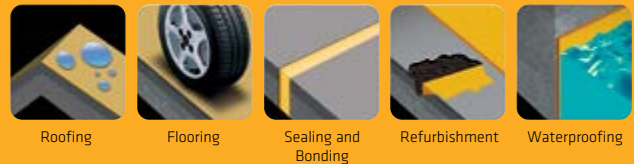
With over 100 years of experience, Sika is a worldwide innovation and sustainability leader in the development and production of systems and products for construction, as well as the marine, automotive, and renewable energy manufacturing industries. Sika has offices in over 100 countries with over 300 manufacturing facilities and more than 27,000 employees worldwide. With annual sales of 9.5+ billion dollars in 2021, our commitment to quality, innovation, and the environment as well as putting our customer’s needs first, encompasses why Sika is a global leader in our industries. Sika, Building Trust.

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



LEED® is a trademark of the U.S. Green Building Council.
Green Globes® is a trademark of the Green Building Initiative.

SERVING YOUR NEEDS WORLDWIDE FROM ROOF TO FLOOR



Sika Corporation can assist you with your construction needs from roof to floor. Call 1-800-576-2358 to learn about our complete building system solutions.

SIKA CORPORATION • ROOFING

100 Dan Road • Canton, MA 02021 • USA
East Tel: 888-552-9769 West Tel: 888-509-3350
Fax: 781-828-5365
usa.sika.com/sarnafil
webmaster.sarnafil@us.sika.com

© Sika Corporation / 12.100.5 / 04/2023

BUILDING TRUST

