



Roofing Solutions for Health Care Facilities





Champion of Design Freedom

When it was time for the Hancock Medical Center in Bay St. Louis, Mississippi to reroof its building, aesthetics was an important factor. The sloped roofs are an architectural element of the building, and the Medical Center wanted the look of standing seam metal. Décor Roof Systems was the ideal choice, providing them with the look they desired along with the long-term, water-tight performance of a Sarnafil thermoplastic membrane.

In addition, Sarnafil membrane was used on the low slope roof sections, enabling the Medical Center to receive a single source warranty for the entire roofing project.

Décor is available in seven standard colors, including four EnergySmart Roof colors that meet the latest EPA Energy Star® standards, and an unlimited number of custom colors.



A prescription for health care that saves money.



▲ John Muir Medical Center, Walnut Creek, CA

◀ On The Cover: St John's Regional Medical Center

No roofing manufacturer understands the needs of health care facility building owners and managers better than Sika Sarnafil. No roofing membrane manufacturer is better prepared to address those needs.

Sika Sarnafil delivers a series of high performance thermoplastic roofing systems proven to be energy-efficient, highly reliable, and sustainable — factors that result in one of the lowest roofing life cycle costs in the industry.

The company's products can be installed free of odor and VOC's and with minimal disruption to facility occupants. They provide long-term, reliable protection for buildings and building contents, require little in the

way of costly maintenance, and save dollars by minimizing energy consumption when compared to competitive roofing products.

These characteristics are extremely important to health care facilities housing vulnerable patients, with high value systems and equipment in place for the treatment of these patients. Hospitals, medical clinics, and health care facilities already face a host of ever-increasing costs that have a major impact on patient health care and treatment — as well as the financial health of the facility, itself.

Sika Sarnafil acts as a partner with health care facility management, tailoring a roofing system to their specific needs and delivering a proven, high performance system that, over time, will help to keep expenses in line.





▲ Hancock Medical Center, Bay St. Louis, MS

“I went to a Sika Sarnafil roof system, because it historically lasts twice as long as rubber in this climate. The welded seams are bomb proof, and it’s easy to repair if a puncture occurs — which is rare. The white surface also helps keep the building cool during our summers and reduces cooling costs — even in Maine we can get extended days in the 80s and 90s.”

— Paul Smith, Executive Director of Support Services, Penobscot Valley Hospital, Lincoln, ME

Reducing Facility Costs, From the Top Down

To remain viable in a very competitive marketplace, hospitals and clinics must invest in expensive medical systems and equipment. Older health care facilities must stay ahead of building repairs and refurbishments. Newly-planned facilities must contend with the rising costs of construction. Compliance with a host of safety regulations can be costly, as well. In the very near-term, a wave of baby boomers will be accessing health care facilities in far greater numbers.

Sika Sarnafil roofing systems help to alleviate cost issues. The company’s single-ply thermoplastic membranes are durable, lightweight and flexible, and available in a variety of systems. Included are the reflective, energy-efficient EnergySmart Roof®; solar-ready roofing

systems that accommodate a wide variety of solar configurations; vegetated Green Roofs; and stylish Décor Roof Systems in a range of standard and custom colors. Sika Sarnafil roofing products feature long service life, low maintenance requirements, and consume fewer raw materials.

Reflective surfaces help conserve energy and are available with several Sika Sarnafil roofing systems. Cool roofs like the Sika Sarnafil EnergySmart Roof have been shown in independent testing to significantly lower energy consumption.

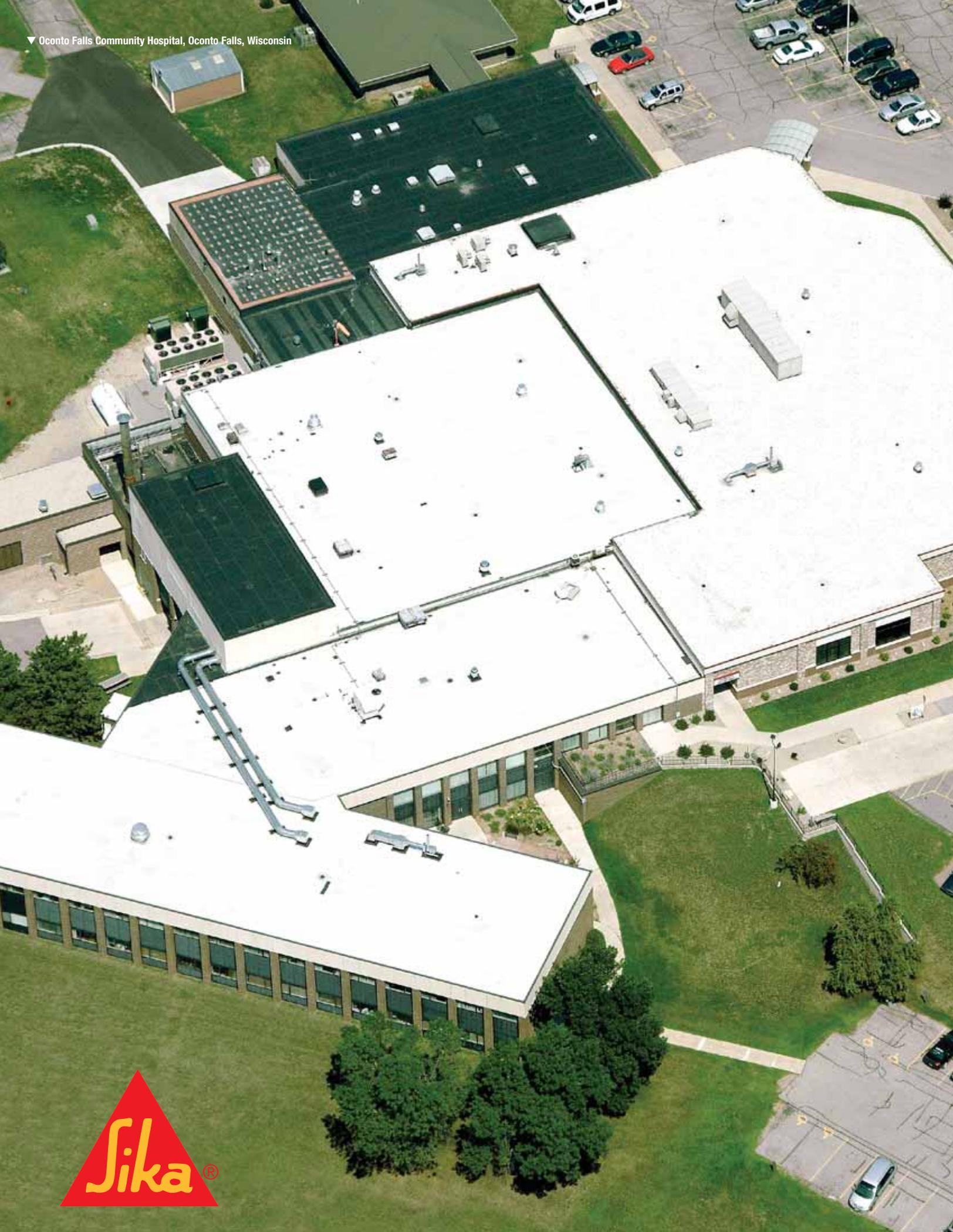
In a Lawrence Berkeley National Laboratory study commissioned by the U.S. Department of Energy and the EPA¹, researchers compared energy consumption in a 100,000 sq. ft. Texas facility over a two-year period — with a black rubber EPDM roof in use for the first 12 months, and a Sika Sarnafil vinyl

EnergySmart Roof in place for the following 12 months. As recorded in the Lawrence Berkeley report, the EnergySmart Roof reduced peak summertime air conditioning demand by 14 percent and resulted in an estimated savings of \$7,200 (7.2 cents per sq. ft. per year).

Cool roofs save in other ways, too. These systems do not experience the high rooftop temperatures that accompany dark-colored roofing systems and negatively affect the thermal performance of insulation. In addition, rooftop-mounted air conditioning equipment gets less use with cool roofs, thereby potentially extending the equipment’s service life.

Sarnafil®

1 Lawrence Berkeley National Laboratories (LBNL-47149). Copies available upon request.



A history of proven performance.

“Our Sika Sarnafil roof has been virtually maintenance-free for 22 years, with no coating, seam work, or re-securing required.”

– Bill Doney Facilities Manager, Oconto Falls Community Memorial Hospital, Oconto Falls, WI

Performance over time is the only true test of the quality of roofing or waterproofing systems². Independent studies have shown that Sika Sarnafil roofs last for decades — this legacy of proven performance can be found on buildings around the globe, in every imaginable climate. With more than 15 billion square feet of roofing and waterproofing membrane installed worldwide over a 40-year period, health care facility managers know they can depend on Sika Sarnafil for proven products and system performance.

Sika Sarnafil and the National Research Council of Canada (NRCC) collaborated on a durability survey of Sarnafil vinyl roof membranes². Roofing membrane samples from 44 roofs in North America and Europe were used to test the durability of the Sika Sarnafil thermoplastic roofing membranes in exposed applications. Laboratory evaluations tested physical properties considered essential in estimating long-term behavior of thermoplastic roofing membranes according to ASTM (USA), DIN (Germany), and SIA (Switzerland) standards. The average age of the roofs tested was more than 20 years, with the oldest 34 years of age.

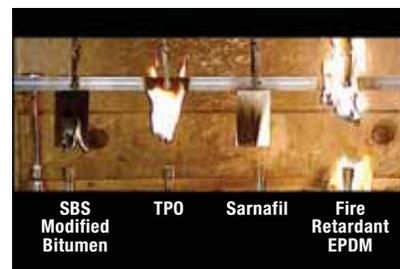
The laboratory testing confirmed that the membranes being examined held up extremely well when compared to the standard minimum values for new vinyl roofing membranes, as per North American and European standards. After considering the age and condition of the roofs analyzed, the data indicated that a properly formulated, properly maintained, Sarnafil-reinforced vinyl roof membrane system could perform in excess of 20 to 30 years in various climates throughout Europe and North America.

The British Board of Agrément (BBA) conducted their own independent analysis of Sarnafil membranes, resulting in the issuance of a certificate for Sarnafil vinyl membranes. The certificate indicated “All available evidence suggests that the durability of Sarnafil membranes when used in accordance with the relevant BBA Certificates should have a life in excess of 35 years³.”

Saving Money over the Life of Your Building

The total cost of your roofing system is determined over its life cycle by system longevity, maintenance expenses, and disposal cost. The initial installation expense, while a component of life cycle costing, is outweighed by these other factors. In particular, the life of the roofing system and its annual maintenance expenditures are the two biggest factors determining total life cycle cost. The long-term differences between roofing systems can be dramatic when considering life cycles — these differences should be carefully weighed before making a roofing decision. This is especially true for healthcare facilities, which are typically designed and built for a long service life.

Sika Sarnafil roofing systems satisfy the most demanding service life requirements. System seams are hot-air welded and Sarnafil membranes require virtually no maintenance, helping to keep annual operational costs to a minimum. Sika Sarnafil systems have a proven history of durability and are amongst the lowest cost roofing systems available when considering the life cycle of a building.



Fire Resistance Means a Safer Environment

Vinyl materials, such as Sarnafil membranes, are naturally fire retardant and do not support combustion when the flame source is removed. In a laboratory test conducted in accordance with a European fire testing standard, a flame source was applied for 10 seconds to SBS modified bitumen, polyolefin (TPO), Sarnafil (PVC), and fire-retardant rubber (EPDM). When the flame source was removed, the flame extinguished on the Sarnafil membrane, while the alternative membranes continued to burn.

View a video of a laboratory test for fire resistance at: usa.sarnafil.sika.com

2 S.P. Graveline, H.R. Beer, R.M. Paroli, A.H. Delgado, “Field Investigation and Laboratory Testing of Exposed Poly (Vinyl Chloride) Roof Systems,” Proceedings of the RCI 20th Annual International Convention and Trade Show, Miami, Florida, 2005.

3 British Board of Agrément Assessment Report Numbers 08/4531 and 08/4532, 2008.



Helping to sustain the environment.



▲ Sarnafil membranes integrate with a variety of solar configurations to form complete solar roof systems that generate electrical power.

According to independent industry groups, a sustainable roofing system must minimize the burden on the environment, conserve energy, and extend roof system life spans.⁴ Based on these criteria, Sika Sarnafil roofing and waterproofing systems score exceptionally well.

The EnergySmart Roof conserves energy and supports the environment by minimizing rooftop temperatures as compared to less-reflective, dark-colored roofs. The result is less energy consumption for building cooling and a reduction in carbon emissions from energy production.

The company's Green Roof tops off buildings with a durable thermoplastic membrane under a vegetated cover. Green roofs lower

rooftop temperatures and reduce storm water run-off to minimize erosion.

The Solar Integrated Roofing System does more than conserve energy — this system protects the building interior from the elements and generates power for its energy needs.

Sika Sarnafil also helps to reduce the landfill burden by recycling vinyl roofing at the end of its life. The company has diverted more than 35 million pounds of pre- and post-consumer roofing material from landfills into new roofing membrane products. Today, Sika Sarnafil's Roof Recycling Program allows building owners to recycle their old vinyl roofs at the end of their service life into



⁴ Council for Research and Innovation in Building Construction (CIB) and International Union of Testing and Research Laboratories (RILEM) (CIBW.83/RILEM166 RMS)



▲ In addition to being environmentally responsible, vegetated green roofs like the Sika Sarnafil system pictured are believed to have therapeutic value in a healthcare setting.

“I believe that Sika Sarnafil is an industry leader - four decades of unquestionable success, time-tested membrane formulation, highly regarded within the roofing industry, very reliable assistance and support...they are the standard I use to evaluate other roofing systems.”

– Walter Scarborough

Vice President, Director of Specifications, HKS Architects, Inc., Dallas, TX

new roofing membrane products.

Specifying a Reliable Roofing System

A high quality membrane is a crucial component in a reliable, long lasting roofing system. It is not, however, the only criterion to consider when developing a roof specification. System design and installation are critical factors to consider.

Even the best roofing system can have problems if these two elements are ignored. Sika Sarnafil is uniquely qualified to deliver a total system solution through our Milestone Management™ process. This rigorous approach is a key reason for the company's reputation for delivering high quality roofing and waterproofing systems that stand the

test of time.

When considering a roofing system, building owners, architects, and contractors should seek out a list of reference projects in the area that have exhibited longevity. Performance up on the roof is the only real true indicator of a roofing manufacturer's ability to deliver a high quality roofing system.

Call 1-800-576-2358 to receive a copy of Sika Sarnafil's Sustainability Kit, a guide to developing a long-lasting, reliable roofing system.



Sarnafil Milestone Management

The Sarnafil Milestone Management™ process integrates proven materials, skilled workmanship, and expert assistance into every phase of every project for comprehensive quality control. The result: peace of mind for architects, engineers, owners, and occupants alike.

Sarnafil®

Sika – Your Local Partner with a Global Presence

Sika is a globally active specialty chemicals company supplying the building and construction industry, as well as manufacturing industries. It is a leader in processing materials used in sealing, bonding, damping, reinforcing and protecting load-bearing structures.

Sika's product lines feature high-quality concrete admixtures, specialty mortars, sealants and adhesives, damping and reinforcing materials, structural strengthening systems, industrial flooring, and roofing and waterproofing systems. The company has a local presence in 80 countries and more than 15,000 employees to guarantee the success of all partners.



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Serving Your Needs Worldwide from Roof to Floor



Roofing Flooring Sealing and Bonding Refurbishment Waterproofing

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

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

ISO 14001: 2004-Compliant



*ENERGY STAR® for roofing products is only valid in the United States.
ENERGY STAR® is a trademark of the U.S. EPA.
LEED® is a trademark of the U.S. Green Building Council.
Green Globes® is a trademark of the Green Building Initiative.*

