

# Roofing

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**SWISS PAVILION**  
EXPO 2010 SHANGHAI



## **Sika Sarnafil** World Class Roofing and Waterproofing



**Sarnafil®**

Innovation & Consistency | since 1910

# The Company

## Sika Group

Located in Barr, Switzerland, Sika is a global company in specialty chemicals for Construction and industry. Sika is a leader in processing materials used in sealing, bonding, damping, reinforcing and protecting load-bearing structures. Today Sika has over 100 production and marketing companies in over 70 countries in the world.

### 100 Years Sika (1910-2010)

Sika was founded by Kaspar Winkler in 1910 and in 2010 Sika celebrates its 100-year anniversary. During the past one century since the foundation, Sika constantly strives for new levels of excellence with a strong innovative tradition, which opens up new opportunities for the development of the company, its employees, and its partners in trade and industry.

## Sika in China

With rapid business expansion, Sika set up its headquarter Sika (China) Ltd. and China Research & Development center in Suzhou industry park in 2006. Nowadays, Sika China has developed into a group company with 5 business units, concrete, contractors, distribution, roofing and industry, 9 production factories and marketing & sales network through out China, producing and selling a full range of construction materials, including advanced PC concrete admixture (Viscocrete®), PVC Waterproofing membrane system, PU sealant, all kinds of industrial flooring materials, grouting materials, strengthening and repairing & protection materials etc. Sika provides our customers total solutions from roof to basement with strong technical support as well.



## Sika Sarnafil

Sika Sarnafil was created by the global merger of Sika and Sarnafil in 2005. As an acknowledged high polymeric membrane system supplier from Switzerland around the globe, Sika Sarnafil has been developing and manufacturing high-quality polymeric waterproofing membranes since its establishment in 1958. So far over 400 million square meters of Sika Sarnafil membrane has been laid worldwide and Sika Sarnafil has become the globally recognized market leader in waterproofing industry. Internationally well-known brands include Sarnafil® and Sikaplan®.

Sika Sarnafil have over 50 years of proven experience in producing and applying PVC membrane waterproofing systems globally. To supply the market with high quality products and reliable integrated roofing and waterproofing solutions is our consistent tradition.

Sika Sarnafil entered China market in 1998. As the roofing business unit of Sika China, Sika Sarnafil owns two fully-owned subsidiaries, Sarnafil Waterproofing Systems (Shanghai) Ltd. and Jinan Sika Engineering Co., Ltd., specialized in manufacturing and selling quality homogenous and reinforced PVC waterproofing membranes and system accessories as well as providing installation direction and technical consulting service. The PVC membranes and accessories manufactured in China are now widely used in new roof and re-roofing projects.

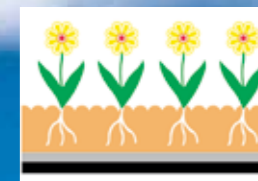
With over 10 years of development in China, Sika Sarnafil has established a wide network of sales offices and contractors through out China, which enables us to quickly respond to customers' needs. The PVC membrane roofing and waterproofing systems are now widely used at the projects of airport, metro, high speed railway station, stadium, exhibition center, supermarket, tobacco factory, food warehouse, industrial facility, residential building and villa.

**Where there is a roof, there is Sika Sarnafil.**



# The Product

50 years



Sika Sarnafil mainly sells PVC waterproofing membranes.

PVC, one of the most popular high polymeric materials in the world, is used in a wide range of products, such as wire insulation, optical fiber coatings, shoes, bags, decorations, signboards, AD boards, furniture, medical products, gloves, tools, etc. PVC ranks as the 3rd largest output plastic products and tops the building plastic materials. PVC roof waterproofing membrane is an important application.

PVC is produced through the reaction of ethylene and chlorine with petroleum and halite as its raw materials. Consisting of 57% chlorine, PVC consumes less petroleum than other plastics.



Sika Sarnafil waterproofing membranes have two brands: Sarnafil® and Sikaplan®. Under the Brand of Sarnafil®, there are S327L, G410L (F) and G476 membranes. Under the Brand of Sikaplan®, there are GC, F10 (F) and F30 (F).

## General Product Features

- ▲ About 50 years' application record under various climates
- ▲ Aging-resistance property proven by projects and artificial weathering test.
- ▲ Low temperature flexibility
- ▲ Root resistant, especially required for roof gardens
- ▲ High puncture resistance and high mechanical resistance
- ▲ Low shrinkage rate
- ▲ Zero-flame and Self-extinguishing
- ▲ 2.00m wide, minimum material waste during installation
- ▲ Seam integrated through hot air welding
- ▲ Good moldability, easily adaptable to complicated flashings and corners
- ▲ Easy maintenance with low cost

## Special Properties and Applications

### Sarnafil® S327L Membrane

- ▲ White as standard color and can be tailor-made for other colors
- ▲ Special lacquer (aging-resistant and easy cleaning)
- ▲ UV resistant polyester scrim reinforced membrane
- ▲ High tensile strength and excellent mechanical properties
- ▲ Mainly for mechanically fastened Exposed Roof System

### Sarnafil® G410L (F) Membrane:

- ▲ White as standard color and can be tailor-made for other colors
- ▲ Special lacquer (aging-resistant and easy cleaning)
- ▲ UV resistant fiber glass reinforced membrane
- ▲ Good dimension stability and elongation at break
- ▲ Mainly for fully adhered Exposed Roof System

### Sarnafil® G476 Membrane

- ▲ With signal color
- ▲ Non UV resistant fiber glass reinforced membrane with signal layer
- ▲ Root resistant and good elongation at break
- ▲ Mainly for loosely laid Protected Roof System, particularly Roof Gardens

### Sikaplan® GC Membrane

- ▲ Standard color: light grey
- ▲ UV resistant polyester scrim reinforced membrane
- ▲ High tensile strength and good mechanical properties
- ▲ Mainly for mechanically fastened Exposed Roof System

### Sikaplan® F10 (F) Membrane

- ▲ Standard color: light grey
- ▲ UV resistant homogenous membrane
- ▲ Mainly for fully adhered or mechanically fastened Exposed Roof System

### Sikaplan® F30 (F) Membrane

- ▲ Standard color: light grey
- ▲ Non UV resistant homogenous membrane
- ▲ Mainly for loosely laid Protected Roof System or tunnel projects

## Technical Datasheet

PVC waterproofing membrane produced by Sika Sarnafil refers to international and domestic standards for various technical properties. Advanced product recipe, modern production equipment and strict production management result in excellent product properties.

### Physical Properties of Selected Membranes

Item	Sarnafil®		Sikaplan®	
	S327-12L	G410-12LF	GC-12	F10-12F
Max Tensile Force	≥ 250N/cm	≥ 120N/cm	≥ 250N/cm	≥ 100N/cm
Elongation at Max. Tensile Force	≥ 15%	--	≥ 15%	--
Elongation at Break	--	≥ 100%	--	≥ 150%
Heat Dimension Stability	≤ 0.5%	≤ 0.1%	≤ 0.5%	≤ 1.5%
Low temperature Flexibility	-25℃	-25℃	-25℃	-25℃
Joint Peel-off Strength	≥ 3.0N/mm	≥ 3.0N/mm	≥ 3.0N/mm	--
Adhesion Under Shear Condition	--	--	--	≥ 3.0N/mm or membrane fails
Trapezoid Tear Strength	≥ 250N	≥ 220N	≥ 250N	--
Water Tightness	meet req.			
Puncture Resistance	meet req.			
Static Load Resistance	meet req.			
Heat Aging Treatment	meet req.			
Chemical Corrosion Resistance	meet req.			
Artificial Weathering	meet req.			

Testing Standard: Sarnafil® S327-12L, G410-12LF, Sikaplan® GC-12, F10-12F are based on Q/TBYJ3-2010 (\*GB12952-2011); Sikaplan® F10-12F is based on GB12952-2003

Roof waterproofing relies on a complete waterproofing system, supported by various components, including PVC waterproofing membrane, joints of membranes, accessories like fasteners, adhesives, insulation materials, vapor controlling layer, etc.



Sarnafil® G410 (F), G476

Sarnafil® S327, Sikaplan® GC

Sikaplan® F10 (F), F30 (F)



**Sarnafil®**

# The Advantage

- ▲ Sika China provides the one-stop service from roof to floor (R2F)
- ▲ Sika Sarnafil PVC membrane is produced by imported world advanced membrane production lines.
- ▲ The light color, having a higher solar reflectance than traditional dark colors, is more energy saving. Sika Sarnafil has been awarded with the Eco/Health-Building Materials Logo by National Research Center of Testing Techniques for Building Materials.
- ▲ Sika Sarnafil waterproofing membranes can be tailor-made to the needs of architects and clients, realizing creative designs and presenting an aesthetic roof appearance.
- ▲ Hot air welding with no flame.
- ▲ With nearly 50 years of experience in the production and use of thermoplastic waterproofing membranes and systems, Sika Sarnafil has over 400 million square meters installed worldwide, s a recognized leader in protecting the roof from weathering effects and other problems associated with water ingress and moisture penetration. Today, these world class roofing systems have been installed in thousands of projects in China, including 10 more giant projects that have a roof area more than 100,000 square meters.
- ▲ Sika Sarnafil offers timely and professional service through our nationwide sales and technical network.
- ▲ Sika Sarnafil AP Testing Center in Shanghai, a nationally recognized lab by CNAS, is able to test PVC membrane in accordance with Chinese national standards or international standards like EN, ASTM, JIS, etc.
- ▲ Sika Sarnafil China established the Wind Uplift Test Facilities in 2008, the first and only one in China which was set up strictly in accordance with ETAG 006 to test a dynamic wind load. The facility is designed to correctly test the wind uplift resistance of the whole roof system by simulating dynamic influence of the natural wind load on the roof, to provide data basis for a safe and correct system design.

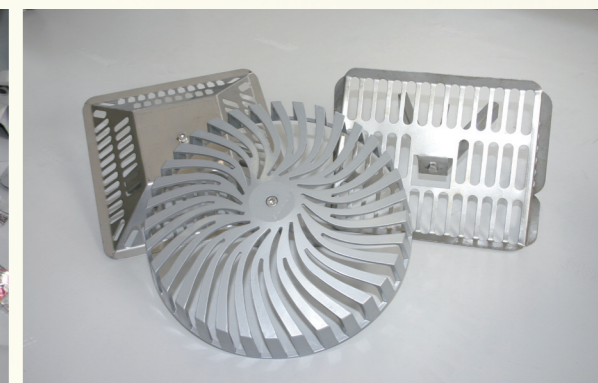
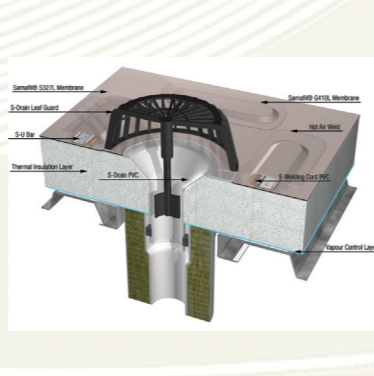
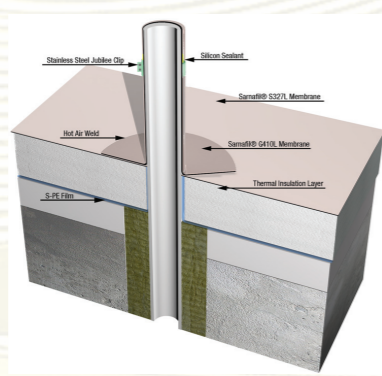
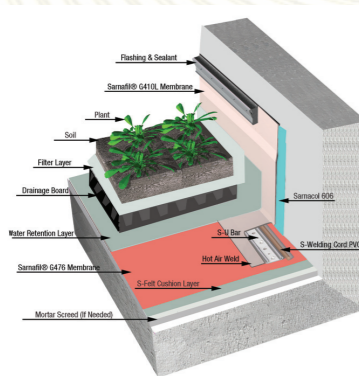
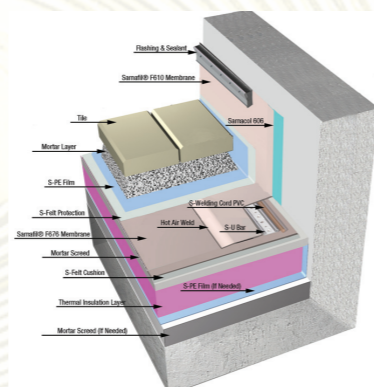
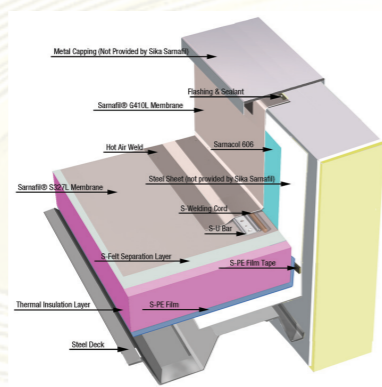
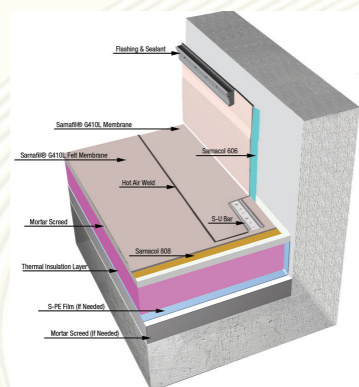


**Sarnafil®**

# Systems and Accessories

Sika Sarnafil entered China in 1998 and has been introducing in many world advanced single-ply roof waterproofing systems. The roof garden and light weight roofing systems offer a complete new design option for the China construction market at European standard. Increasing architects and owners in China are getting to accept the concept of single ply waterproofing systems.

- ▲ Is the first to propose the concept of waterproofing systems
- ▲ Offers tailor-made design of waterproofing system for each project
- ▲ Provides system accessories with high quality
- ▲ Selects proper and practical material type for different projects
- ▲ Uses advanced installation tools to guarantee the reliability of various waterproofing systems
- ▲ Offers site support to guarantee a complete implementation of waterproofing systems



Sika Sarnafil offers a wide range of accessories to meet various system requirements:

- ▲ **Sika Sarnafil Fasteners, Washers and Sleeves** mainly for Sika Sarnafil Mechanically Fastened System
- ▲ **Sarnacol 606 & 808** adhesives mainly for Sika Sarnafil Fully Adhered System
- ▲ **S-Termination Bar** mainly for termination of perimeters
- ▲ **S-U Bar & S-Welding Cord** for fixation of field area at the bottom of parapet
- ▲ **S-Corner** prefabricated to ensure a safer and more reliable inside corner and outside corner treatment
- ▲ **S-Drain** prefabricated outlet to ensure convenient installation and long-term performance
- ▲ **Sika Sarnafil Leaf Guard** used with outlets
- ▲ **Sikaflex®** sealant used with termination bars for termination sealing
- ▲ **S-PE Film or S-PE Film Tape** Vapor controlling layer to prevent condensation
- ▲ **S-Lightening Conductor Clip** to support lightening conductors





# Installation and Trainings

To benefit from all advantages of Sika Sarnafil waterproofing systems, the use of Sika Sarnafil PVC membrane and system accessories is not enough. Installation should also meet Sika Sarnafil installation requirements as installed by a Sika Sarnafil certified applicator.

## Installation features of Sika Sarnafil Mechanically Fastened System:

- ▲ Little climate influence, quick and reliable installation
- ▲ Bearing high strength wind load to guarantee the security of the system
- ▲ High quality fasteners applicable to different substrates
- ▲ Automatic welding machine available
- ▲ Low installation and system cost

## Installation features of Sika Sarnafil Loosely Laid System:

- ▲ Cost effective
- ▲ Little climate influence, quick and reliable installation
- ▲ Proper felt protection measures
- ▲ Widely used in protection system such as roof garden, utility deck and basements
- ▲ Automatic welding machine available

## Installation features of Sika Sarnafil Fully Adhered System:

- ▲ Special Sika Sarnafil adhesives and low consumption rate
- ▲ Tight adhesion fully reflecting the original shape of a building
- ▲ Automatic welding machine available

Sika Sarnafil has set up a professional and complete contractor training program.

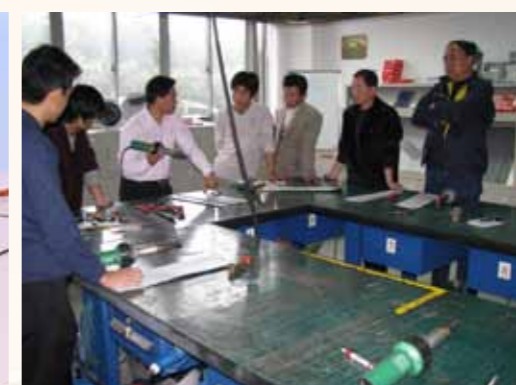
Contractors and applicators are trained in Sika Sarnafil's indoor and outdoor training rooms to learn hot-air welding, details treatments, system installation, etc.

## Training contents:

- ▲ Product introduction
- ▲ Roofing systems
- ▲ Installation management
- ▲ Trainings to applicators
- ▲ Other related trainings



Qualification Certificates are issued to those trained and qualified contractors. Only Sika Sarnafil certified contractors are allowed to install roofs using Sika Sarnafil products.





# Re-roofing

## When is re-roofing necessary?

- ▲ Leakage or damage on the roof
- ▲ Improve roof performance by adding heat or noise insulation ,etc.
- ▲ Change roof functions (transfer a normal roof to roof garden or traffic roof)



### Advantages of Sika Sarnafil Re-roofing

- ▲ Short installation time
- ▲ Long life expectancy
- ▲ Little influence on building use
- ▲ Little additional load
- ▲ Easy and reliable detail treatment
- ▲ Easy maintenance with low cost
- ▲ Improve roof performance
- ▲ Energy efficient

## Ridge



## Gutter



## Skylight



## Chimney



## Outlet



# The Clients and Projects



## Tobacco Industry

Etsong Tobacco (Group) Qingdao Cigarette Factory  
Shanghai Tobacco Company  
Hangzhou Tobacco Logistics Jiande Branch  
Nanjing Cigarette Factory  
Lan Zhou Tobacco Factory  
Kunming Cigarette Factory  
Nanchang Cigarette Factory  
Wuhu Cigarette Factory  
International Tobacco Co.  
Philip Morris Tobacco Factory  
Japan Tobacco  
Camel Cigarette Factory  
...

## Grain Storage

National Grain Storage, Huzhou  
Rushan Grain Storage, Shandong  
Yanzhou Grain Storage, Shandong  
Yu Yao Grain Storage, Zhejiang  
Jiaxing Grain Storage, Zhejiang  
Nan Guan Ling Grain Storage, Dalian  
Guangyuan Hexi Grain Storage, Sichuan  
Zhejiang Grain Bureau Grain & Oil Reserve Warehouse  
Shandong National Grain Storage  
...

## Automobile Industry

2nd phase plant of Guangzhou Honda  
Guangzhou Honda Technical Service Center  
Guangzhou Fengshen Motor  
Dong Feng Passenger Vehicle New Engine Factory  
Dong Feng Honda R&D Center  
Shanghai GM  
Shanghai GM (Shenyang) Beisheng Auto  
Shanghai Volkswagen  
Bosch Automotive Products (Suzhou)  
Nanjing Valeo  
Beijing Hyundai Mobis Automotive Parts  
Tianjin Toyota  
...

## Stadiums

Wukesong Stadium, Beijing  
Central Stadium of Guangzhou University City  
Stadium of South China University of Technology  
Sports Center of South China Normal University  
Qingdao Stadium  
Shenzhen Stadium  
Suzhou Stadium  
Xiamen Sports Center  
Hejian Science and Technology Stadium  
Yangzhou Sports Park Stadium  
Huzhou Stadium  
...

## Exhibition & Convention Center

International Convention & Exhibition Center, Hong Kong  
New International Exhibition Center, Beijing  
International Convention & Exhibition Center, Nanjing  
Shandong International Conversion & Exhibition Center  
Nanning Exhibition Center  
Ganhaizi Convention & Exhibition Center, Jiuzhaigou  
Great Hall of the NPC, Nanning  
Great Hall of The People, Beijing  
...

## Airport

Beijing International Airport  
Guangzhou Baiyun Airport  
Jiangbei International Airport, Chongqing  
Shanghai Hongqiao Airport, New Terminal  
...

## FM Approved Projects

Husky Injection Molding Systems (Shanghai) Ltd.  
McCain Foods (Harbin) Co., Ltd  
ANDREAS STIHL Power Tools (Qingdao) Co. Ltd.  
Dongfeng Behr Thermal Systems Co., Ltd.  
Coloplast (China) Ltd  
Fedex (Guangzhou)  
Kimball Electronics (Nanjing) Co., Ltd.  
Valeo (Wuhan)  
Valeo (Nanjing)  
Sidel Machinery (Beijing) Co., Ltd  
...



## Organizations in China

### Sika Sarnafil Waterproofing Systems (Shanghai) Ltd.

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info\_roofing@cn.sika.com www.sika.com

### Beijing Sales Office

Room 1401, Yi He Sunshine Mansion, No. 12 East Tu Cheng Road,  
Chaoyang District, Beijing 100013  
Tel: +86 10 6448 9463 Fax: +86 10 6448 9581

### Shenyang Sales Office

Rm.1207, Building of Jin ke, No.19, Wen hua Street, He ping District,  
Shenyang 110004  
Tel: +86 24 2389 2668 Fax: +86 24 2389 2668-111

### Jinan Sales Office

Room 1102, 1109, Runheng Building, No. 83 Jingqi Road, Jinan 250001  
Tel: +86 531 8191 1728 Fax: +86 531 8191 1700

### Suzhou Sales Office

No.28 Jingdong Road, Suzhou Industrial Park, Suzhou 215121  
Tel: +86 512 6273 2888 Fax: +86 512 6287 7070

### Guangzhou Sales Office

Room 902, North Tower Suntec Plaza, No.197 North Guangzhou Avenue,  
Guangzhou 510075  
Tel: +86 20 3759 7200 Fax: +86 20 3759 8030

### Chongqing Sales Office

Room 19-2, Future International Mansion, No.6 1<sup>st</sup> Branch of North Jianxin Road,  
Chongqing 400020  
Tel: +86 23 6772 5338 Fax: +86 23 6772 1055



# Sika Sarnafil

## Your Safe Choice for Your Roofing

### Sika – A Dynamic Group in China:

- ▲ 1958 Sika has entered into China market through Hongkong with the establishment of Sika Hongkong Ltd.  
In the past 50 years, Sika has recorded a dynamic development in China.
- ▲ 1991 Sika Taiwan Ltd.
- ▲ 1992 Sika Guangzhou Ltd.
- ▲ 1997 Sika Beijing Representative Office
- ▲ 1998 Sika Shanghai Representative Office
- ▲ 1998 Sarnafil Waterproofing Systems Ltd., Jinan
- ▲ 2001 Sika Ltd., Dalian
- ▲ 2001 Sika Tianjin Plant
- ▲ 2004 Sarnafil Waterproofing Systems (Shanghai) Co., Ltd.
- ▲ 2005 Sika (Guangzhou) Trading Company
- ▲ 2005 Sika Macau Representative Office
- ▲ 2005 Sarnafil Roofing System became a member of Sika Group.
- ▲ 2006 Headquarter Sika (China) Ltd. established in Suzhou  
Produce, proceed construction admixtures, waterproofing mortars, sealants and waterproofing, anti corrosion coatings and other construction chemical products.
- ▲ 2008 Sichuan Keshuai Admixture Co., Ltd. (Acquisition)
- ▲ 2009 Jiangsu TMS Admixture Concrete Ltd. (Acquisition)
- ▲ 2010 Sichuan Keshuai Admixture Kunming Plant
- ▲ 2011 Hebei Jiuqiang Building Materials Co., Ltd. (Acquisition)

### Sika Sarnafil Waterproofing Systems (Shanghai) Ltd.

4555 Huaning Road, Xinzhuang Industrial Park  
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Our most current General Sales Conditions shall apply.  
Please consult the most current local Product Data  
Sheet prior to any use.



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