



# ROOFING

## SikaShield®

THE GLOBAL CHAMPION OF BITUMINOUS MEMBRANES  
FOR ROOFING AND WATERPROOFING APPLICATIONS

BUILDING TRUST





Jika

Jika

®

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# SikaShield®

## BITUMINOUS MEMBRANE

Why to choose Bitumen?



**Bitumen**, also known as asphalt, is a sticky, black and highly viscous liquid or semi-solid form of petroleum.

Thanks to its waterproofing qualities, it is widely used in construction, either for new buildings or renovation projects.

SikaShield® bituminous membranes are an excellent solution for waterproofing of:

- Retaining walls and basements
- Flat roofs under protective layers or ballast
- Balconies and terraces under tiles
- Wet areas
- Underground car parks
- Raft slabs
- Protection of various substrates in a wide range of applications

Once applied, Sika's bituminous membranes are a thin layer of watertight material fully-bonded to the surface. It is a flexible system, able to maintain its waterproof capacity without causing cracks.

### **VARIETY**

SikaShield® bituminous membranes are available within different application methods (torch, self-adhered, mechanically fixed, hot or cold applied). And with the correct combination of raw materials, different performances and durability can be achieved, allowing its use in a wide range of applications.

### **SECURITY**

SikaShield® bituminous membranes have high resistance to mechanical damage and punctures. It resists to hails, shocks that might happen during the application and other possible tearing. It's also trafficable during installation and has a high dimensional stability during all climate changes, guaranteeing its waterproofing properties.

### **ADDED VALUE**

SikaShield® can integrate different systems and build-ups, even together with other technologies. Always to achieve the required design.



## HISTORY

The first most known bituminous sheet was a felt paper impregnated with hot distilled bitumen, which was completely black, but still with a high water absorption.

Some improvements were developed to increase the quality of the product and, during the early 1960's, the paper was replaced for the glass fiber felt. Surface finishing has also been developed.

Gradually, the practice of laying 3-4 layers of bitumen paper weighting 300-1200 gr/m<sup>2</sup> gave place to an application of sheets weighting 3-4 kg/m<sup>2</sup> in 2 or 3 layers.

Traditional bitumen felts assembled in place with alternate layers of hot oxidized bitumen were replaced by polymer modified bituminous membranes torch applied and other reinforcements were incorporated.

In the nowadays, a bituminous sheet is made of a combination between different raw materials, which can lead to a variety of qualities, such as heat resistance, flexibility, viscosity, softness, mechanical resistances, but also different uses.

Mainly, it is made of a bituminous compound with or without a reinforcement, which is protected by an upper and a bottom finishing. And it's available in different thickness and weights.

## BITUMINOUS MEMBRANE BUILD-UP

### 1 BOTTOM FINISHING:

A protection for the bituminous compound, which can be a polyethylene foil, a removable foil, non-woven fabric, etc., depending mainly on the application method.

Some special membranes can have strips or bituminous embossments for different uses and purposes.

### 2 and 4 BITUMINOUS COMPOUND:

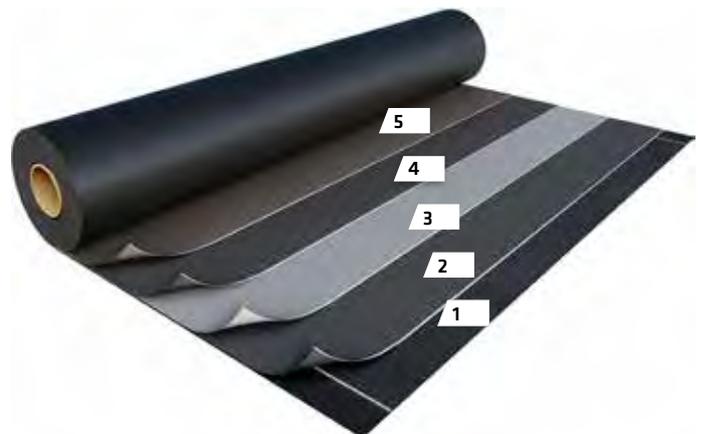
Defines the type of the membrane (APP or SBS) and its cold flexibility, heat resistance, viscosity and softness.

### 3 REINFORCEMENT:

Responsible for the mechanical properties of the membrane, such as strength, elongation, tear, shear, etc. Examples: polyester, glass fiber, glass fleece, aluminum, etc.

### 5 SURFACE FINISHING:

Protects the bituminous compound and defines where the membrane can be applied. Can be a smooth surface or self-protected. Examples: polyethylene foil, sand, talc, slates, HDPE, etc.



The result between these layers is a watertight material, which is fully bonded onto the surface with no space for water ingress in case the membrane is punctured.

It is a flexible system, able to follow the structure and the dilatation, maintaining its capacity to waterproof, without causing cracks.

# SikaShield® THE GLOBAL BRAND

Sika bitumen product portfolio

SikaShield® is available in a wide range of possibilities in order to fit to the most possible systems and designs. Our membranes are made of a very selective combination of polymers to achieve better properties, such as cold flexibility, heat resistance, viscosity and softness.

The correct choice of this bituminous compound is very important to keep the waterproofing function in different temperature exposures and/or weather conditions (wind, snow, hail). Therefore, three types of products are offered:

## SikaShield® P

Bituminous membranes made of, mainly, plastomeric polymers, such as polyethylene, polypropylene, virgin or recycled, APAO, etc.

- Ideal for hot climates
- Excellent heat resistance
- Wide hardness range

It's also called generically as **APP membrane**.

## SikaShield® E

Bituminous membranes made of, mainly, elastomeric polymers, such as SBS, SIS, resins, etc.

- Ideal for cold climates
- High flexibility at low temperature
- Excellent elastic recovery
- Excellent fatigue resistance

## SikaShield® HB

Hybrid membrane: The upper layer is made from APAO modified bitumen, which gives excellent heat resistance and durability. The under layer is SBS-modified bitumen, which provides increased elongation, improved flexibility in cold conditions, and excellent resistance to thermo-oxidative aging.



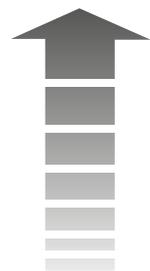
After choosing the compound, it's time to check for the other properties to build-up the appropriate and required bituminous membranes. These are the characteristics the SikaShield® can offers.

### COLD FLEXIBILITY

The “cold flexibility” or “flexibility at low temperature” it's a general indicator of quality, not only because is related to the weather conditions, but also because is related to the life expectancy.

To help the identification and selection of the products, SikaShield® is named numerically according to the different cold flexibilities. The concept is simple: higher the number, lower the cold flexibility and better the performance.

Cold flexibility	Numeric
-35 to -40 °C	8
-25 to -30 °C	7
-20 to -24 °C	6
-15 to -19 °C	5
-10 to -14 °C	4
-5 to -9 °C	3
0 to -4 °C	2
> 0 °C	1



### REINFORCEMENT

The reinforcement is the responsible for the mechanical properties of the bituminous membrane, such as strength (tensile force), elongation and tear and shear resistance. These values must be in accordance with the features of the building, guaranteeing the resistance of the membrane against its movements and its carried force. The most popular reinforcements are glass fiber, glass fleece, aluminum, non-woven polyester, polyethylene foil and some other combinations.

SikaShield® bituminous membranes are available with all these options and the same concept of the cold flexibility is adopted: a number is used to identify the different types. Higher this number, better the mechanical properties and more flexible is the membrane for different uses and applications.

### TOP SURFACE

SikaShield® bituminous membranes are also available with different surfaces, which are classified in two groups: smooth or self-protected.

SMOOTH SURFACES	SELF PROTECTED
<p>Ensures the bond of the overlying layer</p> 	<p>Protects the membrane against UV-rays</p> 
<p>Examples: Polyethylene foil, sand, talc, HDPE, etc.</p>	<p>Examples: Granules, aluminum, geotextile, etc.</p>
<p><b>Uses:</b></p> <ul style="list-style-type: none"> <li>■ Non exposed roofs (with exceptions)</li> <li>■ Below Ground applications</li> <li>■ Under layer or intermediate layer in multi-layer systems</li> <li>■ Upper layer in multi-layer systems with protection</li> </ul>	<p><b>Uses:</b></p> <ul style="list-style-type: none"> <li>■ Exposed roofs</li> <li>■ Upper layer in multi-layer systems without permanent heavy surface protection</li> </ul>
<p><b>Identification:</b></p> <ul style="list-style-type: none"> <li>■ “S”: refers to sand, which gives the extra advantage of bonding the thermal insulation with adhesives.</li> <li>■ “PE”: refers to polyethylene foil</li> <li>■ “T”: refers to talc</li> </ul>	<p><b>Identification:</b></p> <ul style="list-style-type: none"> <li>■ “MG”: refers to Mineral Granules.</li> <li>■ “ALU”: refers to Aluminum Foil</li> </ul>

# SikaShield® - PRODUCTS

How to choose the right bituminous membrane

## MEMBRANES REINFORCED WITH **GLASS FIBER/FLEECE AND ITS VARIATIONS**

- **Use:** Always as an underlayer combined with a polyester reinforced membrane as cap sheet
- **Advantage:** Increases the dimensional stability of the system

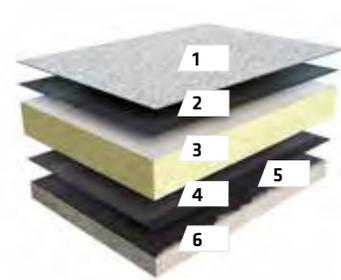
SikaShield®	P22	P32	E33	E43	E53	E63
Type	APP	APP	SBS	SBS	SBS	SBS
Bottom side	PE foil	PE foil	PE foil	PE foil	PE foil	PE foil
Top surface	<b>PE</b>	<b>PE</b>	<b>Sand</b>	<b>PE</b>	<b>Sand</b>	<b>Sand</b>
Reinforcement	<b>glass fiber</b>	<b>glass fiber</b>	<b>glass fleece</b>	<b>glass fleece</b>	<b>glass fleece</b>	<b>glass fleece</b>
<b>Cold flexibility</b>	≤ 0 °C	≤ -5 °C	≤ -5 °C	≤ -10 °C	≤ -15 °C	≤ -20 °C

## MEMBRANES REINFORCED WITH **LIGHT POLYESTER**

- **Use:** Always in multi-layers systems as underlayer or cap sheet
- **Advantage:** Cost efficient solution for double layer systems

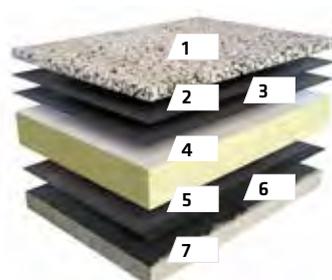
SikaShield®	P24	P34	P44	P54	E54	E64
Type	APP	APP	APP	APP	SBS	SBS
Bottom side	PE foil					
Top surface	<b>Sand, PE MG</b>	<b>Sand, PE MG</b>	<b>Sand, Talc MG</b>	<b>PE, Talc</b>	<b>PE, Sand</b>	<b>PE, Sand</b>
Reinforcement	Non-woven polyester fabric					
<b>Cold flexibility</b>	≤ 0 °C	≤ -5 °C	≤ -10 °C	≤ -15 °C	≤ -15 °C	≤ -20 °C

### EXPOSED ROOFING



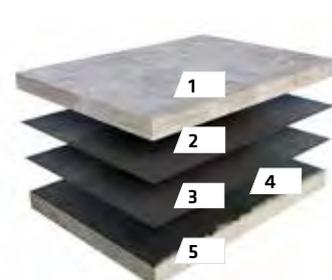
- 1 Cap Sheet: SikaShield® Px5, Ex5 - MG
- 2 1<sup>st</sup> layer: SikaShield® Px4 or Ex4 - PE, S or T
- 3 PIR/PUR thermal insulation
- 4 Vapor Control Layer
- 5 Primer
- 6 Substrate

### NON-EXPOSED ROOFING



- 1 Gravels
- 2 2<sup>nd</sup> layer: SikaShield® Px5 or Ex5 - PE, S or T
- 3 1<sup>st</sup> layer: SikaShield® Px4 or Ex4 - PE, S or T
- 4 PIR/PUR thermal insulation
- 5 Vapor Control Layer
- 6 Primer
- 7 Substrate

### BELOW GROUND



- 1 Floor
- 2 2<sup>nd</sup> layer: SikaShield® Px5 or Ex5 - PE, S or T
- 3 1<sup>st</sup> layer: SikaShield® Px2, Ex3 - PE or S
- 4 Primer
- 5 Substrate

## MEMBRANES REINFORCED WITH MEDIUM WEIGHT POLYESTER

■ **Use:** As single-layer or in double-layer systems

■ **Advantage:** Increases the mechanical properties of the system leading to a safer waterproofing system

SikaShield®	P25	P35	P45	P55	E55	E65
Type	APP	APP	APP	APP	SBS	SBS
Bottom side	PE foil					
Top surface	<b>Sand, PE MG</b>	<b>Sand, PE MG</b>	<b>PE, Sand MG</b>	<b>PE, Sand MG</b>	<b>PE, Sand MG, ALU</b>	<b>PE, Sand MG</b>
Reinforcement	Non-woven polyester fabric stabilized with glass fiber					
<b>Cold flexibility</b>	≤ 0 °C	≤ -5 °C	≤ -10 °C	≤ -15 °C	≤ -15 °C	≤ -20 °C

## MEMBRANES REINFORCED WITH HEAVY WEIGHT POLYESTER

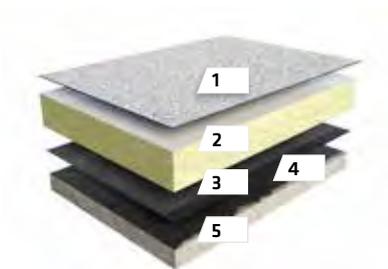
■ **Use:** As single-layer or in double-layer systems

■ **Advantage:** Increases fire resistance. Certified as Broof t1

SikaShield®	E57	E67
Type	SBS	SBS
Bottom side	PE foil	PE foil
Top surface	<b>Sand, MG</b>	<b>Sand, MG</b>
Reinforcement	230 gr/m <sup>2</sup> non-woven polyester fabric stabilized with glass fiber	230 gr/m <sup>2</sup> non-woven polyester fabric stabilized with glass fiber
<b>Cold flexibility</b>	≤ -15 °C	≤ -20 °C

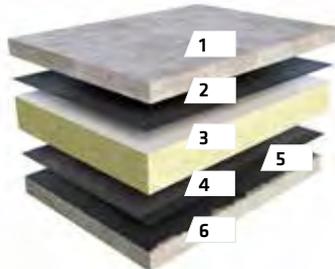


### EXPOSED ROOFING



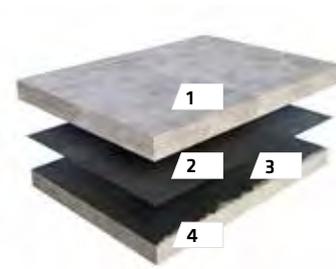
- 1 SikaShield® Px5, Ex5 - MG
- 2 PIR/PUR thermal insulation
- 3 Vapor Control Layer
- 4 Primer
- 5 Substrate

### NON-EXPOSED ROOFING



- 1 Floor
- 2 SikaShield® Px5 or Ex5 - PE, S or T
- 3 PIR/PUR thermal insulation
- 4 Vapor Control Layer
- 5 Primer
- 6 Substrate

### BELOW GROUND



- 1 Floor
- 2 SikaShield® Px5 or Ex5 - PE, S or T
- 3 Primer
- 4 Substrate

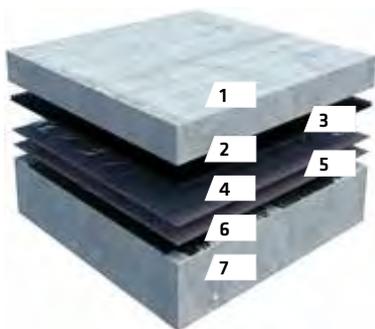
# SikaShield® - PRODUCTS

How to choose the right bituminous membrane

## MEMBRANES FOR UNDERGROUND CAR PARKS AND/OR BRIDGES

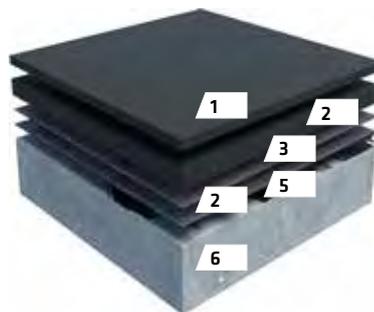
- **Use:** As single-layer or in double-layer systems and as sealing in concrete bridges and other concrete traffic surfaces
- **Advantage:** Resists to the hot asphalt or to the concrete paving. Has high crack bridging ability to compensate the stress caused for the building structure

SikaShield®	P56	P47	P67	P58
Type	APP	APP	APP	APP
Bottom side	PE foil	PE foil	PE foil	PE foil
Top surface	<b>Talc</b>	<b>Talc</b>	<b>Talc</b>	<b>Talc</b>
Reinforcement	200 gr/m <sup>2</sup> Non-woven polyester fabric stabilized with glass fiber	250 gr/m <sup>2</sup> Non-woven polyester fabric stabilized with glass fiber	250 gr/m <sup>2</sup> Non-woven polyester fabric stabilized with glass fiber	300 gr/m <sup>2</sup> Non-woven polyester fabric stabilized with glass fiber
<b>Cold flexibility</b>	≤ 0 °C	≤ -5 °C	≤ -10 °C	≤ -15 °C



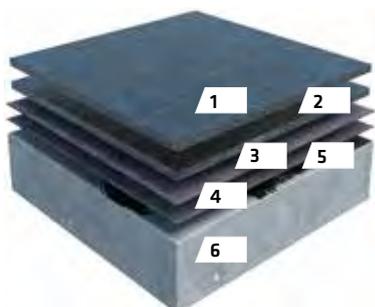
### CONCRETE PAVING

- 1 Concrete paving
- 2 Drainage Mat
- 3 Sheet of drift
- 4 2nd waterproofing layer
- 5 1st waterproofing layer
- 6 Sika® Primer\*
- 7 Concrete



### MASTIC ASPHALT

- 1 Mastic asphalt
- 2 Mastic asphalt (protective layer)
- 3 2nd waterproofing layer
- 4 1st waterproofing layer
- 5 Sika® Primer\*
- 6 Concrete



### ROLLED ASPHALT

- 1 Rolled asphalt
- 2 Rolled asphalt (protective layer)
- 3 2nd waterproofing layer
- 4 1st waterproofing layer
- 5 Sika® Primer\*
- 6 Concrete

\* An epoxy primer, such as Sikadur®-18 Normal, can also be use.  
Sika® Hot melt bitumen is also a good option to bond the membranes.



# SikaShield® - THE NEW PRODUCTS

SikaShield® W: the bituminous membrane wet applied

**SikaShield® W** is an innovative bituminous membrane which is bonded to the concrete substrate with a special modified cement-based adhesive.

SikaShield® W overcomes the most common challenges when waterproofing below ground structures. As the membrane is bonded to the concrete surface with the SikaShield® W-1, a cement-based adhesive, the only requirement is: **the substrate must be wet!**

Therefore, with SikaShield® W there are **NO CONCERNS REGARDING:**

- Residual moisture  
it **can be applied directly after removing the formwork and over green concrete** resulting in a faster application
- Intermittent rain  
**application can continue once the rain stops**, no waiting time
- Substrate preparation  
only sharp edges to be smoothed and dirt to be washed-off guaranteeing a **better control on the execution**

SikaShield® W is fully bonded to the surface. The self-priming cement based adhesive mortar acts as levelling compound and sealing adhesive resulting in **a strong and lasting bond between the concrete substrate and the membrane**, avoiding any lateral water migration and reducing the risks of leakages.

SikaShield® W is designed for non-exposed waterproofing application such as:

- Foundations
- Basement slabs and walls in contact with the ground
- Balconies
- Podium slabs
- Wet areas



# SikaShield® - THE NEW PRODUCTS

SikaShield® Pure-Air: the bituminous membrane that helps to keep the air clean

The ensured performance of a standard Sika bituminous membrane coupled with the cleaning function of Titanium Dioxide (TiO<sub>2</sub>) technology

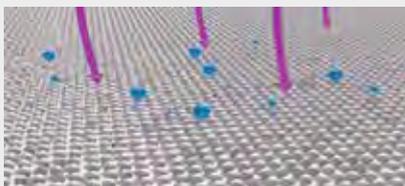
SikaShield® Pure-Air is the innovative bituminous membrane born from Sika's commitment towards sustainability. Its advanced TiO<sub>2</sub>-based technology allows to trap and remove harmful compounds of the pollution released by the exhaust gases of the vehicles or industries, reducing smog, thus helping to make the city or industrial area environment greener.

White granules of TiO<sub>2</sub> on top the membrane guarantee the cleaning function of the product.



## THE CLEANING FUNCTION OF SikaShield® Pure-Air

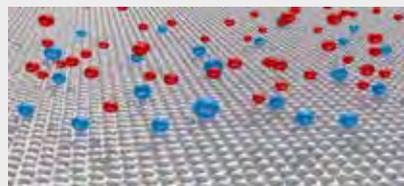
1



**THE UV RADIATION ACTIVATES THE TiO<sub>2</sub>**

The granules on the surface are coated with titanium dioxide (TiO<sub>2</sub>), which acts like a catalyst and is activated when UV radiation, releasing energy for breaking the NO<sub>x</sub> particles.

2



**NO<sub>x</sub> ARE CONVERTED INTO HNO<sub>2</sub> BY CHEMICAL REACTIONS**

The harmful NO<sub>x</sub> compounds are removed from the atmosphere by reacting with the TiO<sub>2</sub> surface and the water vapor in the air resulting in nitric acid HNO<sub>2</sub>.

3



**THE RAIN WASHES OUT THE HNO<sub>2</sub>, REGENERATING THE MEMBRANE**

The HNO<sub>2</sub> is removed from the surface of the membrane by rain, which regenerates the catalyst function of the TiO<sub>2</sub> for a new cycle and which lasts for the entire of the roof.

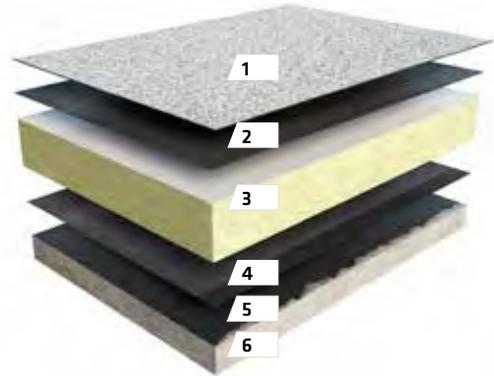
# SikaShield® SPECIAL PRODUCTS

## Safe2torch SYSTEM:

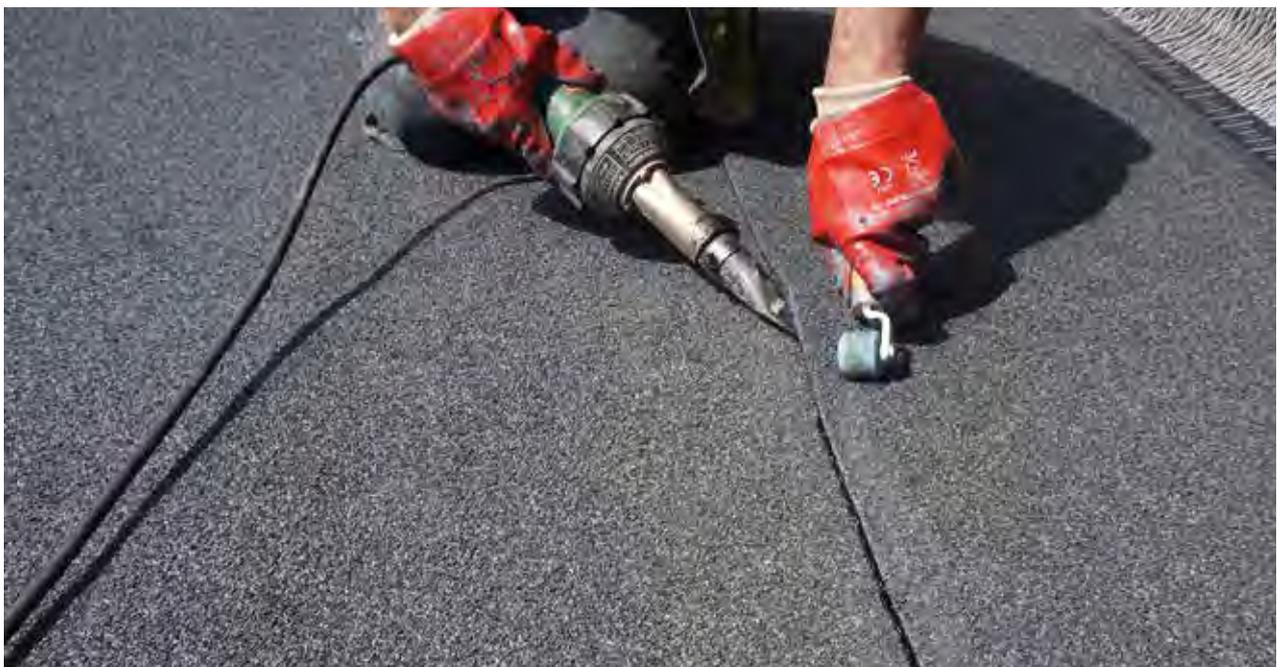
SikaShield® membranes were specially designed to provide a safer and secure roof waterproofing solution with flame free installation for compliance with the Safe2Torch guideline



- 1 SikaShield® E79 SA or SikaShield® HB79
- 2 SikaShield® E74 SA or SikaShield® P54
- 3 PIR/PUR thermal insulation
- 4 SikaShield® VB E71
- 5 Primer
- 6 Substrate



SikaShield®	HB79	E79 SA	E74 SA	E54	VB E71 SA
Type	Hybrid: APAO + SBS	SBS	SBS	SBS	SBS
Bottom side	PE foil	Removable foil	Removable foil	PE foil	Removable foil
Top surface	Granules	Granules	PE foil	PE foil	PE foil
Reinforcement	fiberglass mat compressed between two layers of non-woven polyester	fiberglass mat compressed between two layers of non-woven polyester	non-woven polyester stabilized with fiberglass	non-woven polyester stabilized with fiberglass	non-woven polyester stabilized with glass fiber combined with aluminum
Cold flexibility	≤ -25 °C	≤ -25 °C	≤ -25 °C	≤ -15 °C	≤ -25 °C



## MECHANICALLY FIXATION:

SikaShield® membranes can be used for covering pitched and flat roofs and terraces for new roofing or in rehabilitation projects. The system is designed specially for use mechanically fastened according to the SINTEF Technical Approval.

SikaShield®	E65	E75
Type	SBS	SBS
Bottom side	PE foil	PE foil
Top surface	Sand	Granules
Reinforcement	non-woven polyester stabilized with fiber-glass	non-woven polyester stabilized with fiber-glass
<b>Cold flexibility</b>	<b>≤ -25 °C</b>	<b>≤ -25 °C</b>
<b>Uses</b>	<b>Underlayer</b>	<b>Cap Sheet</b>



## ANTI-ROOT MEMBRANES:

SikaShield® anti-root membranes are ideal for waterproofing system in direct contact with the soil, because it resists to the chemical effects of humic acids and fertilizers preventing the penetration of the roots.

SikaShield®	P44 RT	P35 RT
Type	APP	APP
Bottom side	PE foil	PE foil
Top surface	PE foil	PE foil
Reinforcement	non-woven polyester	non-woven polyester stabilized with fiber-glass
<b>Cold flexibility</b>	<b>≤ -10 °C</b>	<b>≤ -15 °C</b>
<b>Uses</b>	<b>Multi-Layer systems</b>	<b>Single layer</b>



SikaShield® RT



# SikaShield®

## VAPOR CONTROL LAYERS



### SikaShield® VB - Standard Vapor Barriers

Moisture in today's buildings can be a source of continuous problems if not tackled professionally. This applies equally, to both new and existing buildings, particularly those that house high-tech-electronics, machinery and computer equipment, or which have moisture sensitive finishes or contents that need to be protected against condensation and its consequences.

A vapor control layer is particularly important in roof structures and especially on large flat roofs, where this needs to be continuous and have greater water vapor resistance than the rest of the roof structure elements above. A continuous sealed vapor control layer will also have the added benefit of reducing cold draughts and the amount of heated air escaping from a building. In this way the thermal and energy efficiency as well as the comfort of the building's interior is increased and significantly improved. Care must be taken to ensure an air and watertight seal, including around any penetrations, overlaps and terminations at perimeters, which must all be reliably sealed.

The function of a vapor control layer is firstly to avoid moisture build up in the fabric or structure of a building, where it could find its way into the insulation and reduce its thermal efficiency, or cause damage to other building elements. In addition to this, the vapor control layer also serves to help secure the air tightness of the building.

SikaShield®	P21	P42	E71
Type	APP	APP	SBS
Bottom side	PE foil	PE foil	Removable foil
Top surface	Talc	Sand	PE foil
Reinforcement	aluminum foil and a non-woven polyester fabric stabilized with glass fiber	Glass fiber	non-woven polyester stabilized with glass fiber combined with aluminum
<b>Water vapor permeability</b>	<b>Sd &gt; 6500 m</b>	<b>Sd &gt; 400 m</b>	<b>Sd &gt; 3700 m</b>
<b>Cold flexibility</b>	<b>≤ -25 °C</b>	<b>≤ -25 °C</b>	<b>≤ -25 °C</b>



# SikaShield® VMS

## VAPOR MANAGEMENT SYSTEM

### SikaShield® VMS FOR ROOF RENOVATION

SikaShield® VMS is a bituminous membrane with strips on the under side **to diffuse any water vapor and prevent blistering**. **The strips** - around 40% of the membrane surface - **guarantee better adhesion** and consequently higher resistance to wind. **The remaining 60% is not glued, creating free space for improved diffusion of water vapor and preventing the formation of bubbles from residual moisture.**

- USES
- Rehabilitation of an old roof, terrace or balconies
  - Vapor barrier over spaces with high humidity
  - Flat or pitched roofs up to 15% gradient

SikaShield® VMS	E51, P51 BS	P52	P55	E75
Type	SBS,APP	APP	APP	SBS
Bottom side	Strips	Strips	Strips	Strips
Top surface	Strips	PE, foil, Sand	Granules	Granules
Reinforcement	aluminum foil and a non-woven polyester fabric stabilized with glass fiber	Glass fiber	non-woven polyester fabric stabilized with glass fiber	non-woven polyester fabric stabilized with glass fiber
<b>Cold flexibility</b>	<b>≤ -15 °C</b>	<b>≤ -15 °C</b>	<b>≤ -15 °C</b>	<b>≤ -25 °C</b>



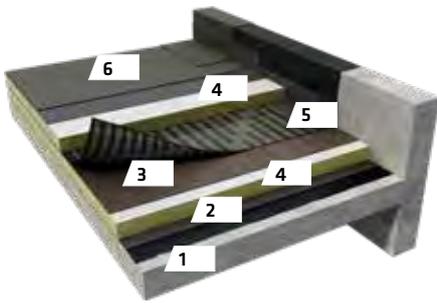
SikaShield® VMS RANGE IS AVAILABLE IN TWO VERSIONS:

- The SikaShield® VMS heat-adhesive membranes are made of a special adhesive compound that is activated by heat, which provides a strong, safe and long-lasting semi-adhesive bond to the base.
- The SikaShield® VMS SA self-adhesive membranes are made of bitumen, tackifying resins, thermoplastic elastomeric polymers and antifreezing additives with long-lasting adhesive properties. In both versions, 40% of the under side of the membrane is covered with strips for better adhesion and higher resistance to wind than the current solutions on the market, such as perforated screens.



“BS” or “smooth” type for new buildings or renovation when working on a damp base or above areas with a high production of water vapor

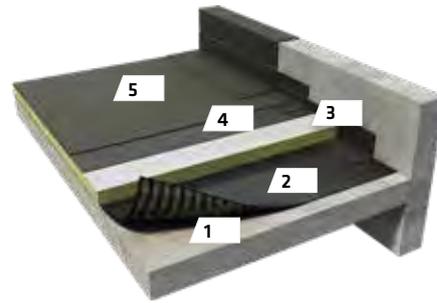
**“BS” type**



Option 1:

- 1 New or old base
- 2 Sika® Igolflex® P-10 EL
- 3 SikaShield® VMS E51 BS SA
- 4 Thermal insulation XPS or EPS
- 5 SikaShield® E74 PE SA 3 mm
- 6 SikaShield® HB79 MG 4 mm

**“Smooth” type**



Option 2:

- 1 New or old base
- 3 SikaShield® VMS P51 BS
- 4 Thermal insulation XPS or EPS
- 5 SikaShield® E74 PE SA 3 mm
- 6 SikaShield® HB79 MG 4 mm

- 1 New or old base
- 2 SikaShield® VMS P52
- 3 Thermal insulation PIR or PUR
- 4 SikaShield® E74 PE SA 3 mm
- 5 SikaShield® HB79 MG 4 mm

**“MG type” for renovation of terraces or balconies**

**With or without thermal insulation**



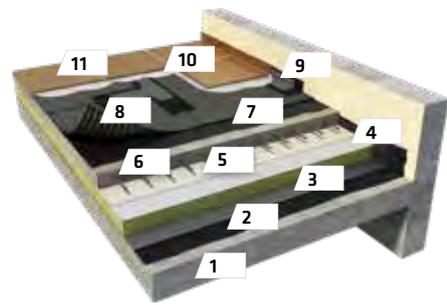
Option 1:

- 1 Old base
- 2 Sika® Igolflex® P-10 EL
- 3 SikaShield® VMS E75 MG SA
- 4 End and side joints with double coat of Sikalastic®-685 and Sika® Igolflex® F-05
- 5 Perimeter joint with double coat of Sikalastic®-685 and Sika® Igolflex® F-05
- 6 New floor bonded with adhesive class C251

Option 2:

- 1 Old base
- 3 SikaShield® VMS P55 MG
- 4 End and side joints with double coat of Sikalastic®-685 and Sika® Igolflex® F-05
- 5 Perimeter joint with double coat of Sikalastic®-685 and Sika® Igolflex® F-05
- 6 New floor bonded with adhesive class C251

**With thermal insulation where the thickness of the base is not sufficient for laying a screed**



- 1 Old base
- 2 Sika® Igolflex® P-10 EL
- 3 SikaShield® VB E71 PE SA 3 kg/m<sup>2</sup>
- 4 Thermal insulation EPS or XPS
- 5 Non-woven polyester
- 6 Reinforced concrete screed
- 7 Sika® Igolflex® P-10 EL
- 8 SikaShield® VMS E75 MG SA
- 9 End and side joints with double coat of Sikalastic®-685 and Sika® Igolflex® F-05
- 10 Perimeter joint with double coat of Sikalastic®-685 and Sika® Igolflex® F-05
- 11 New floor bonded with adhesive class C251

# ADDITIONAL PRODUCTS

## PRIMERS

Sika® primers are very important prior the installation of the SikaShield® membranes. It penetrates the substrate reducing porosity, improves the adhesion and consolidates friable surfaces.

Sika® Igoflex®	P-01	P-10	P-10 EL
Type	Water	Solvent	Elastomeric, solvent



## WATERPROOFING COATINGS

Sika® Igoflex®	101	201	301
Technology	Polystyrene filled	Fiber reinforced	Elastic synthetic resins
Ready to use	Yes	No (two components)	Yes
Cerification	EN15814	EN15814	EN15814; EN1504-2; EN14891
Advantages	Cost effective	Adhesive for insulation boards	High performance; Wet on wet application
Uses	Ground moisture with non-pressure water	Ground moisture with and without pressure water	Ground moisture with and without pressure water; Detailing

## ROOFING COATINGS

Sikalastic®	660	680 RT	685
Technology	acrylic	Fiber reinforced	Elastic synthetic resins
Cerification	-	FLL	ETAG-005
Advantages	4-in-1: coating, vapor barrier, adhesive and sealing and re-pairing	Anti-root	Resistant to UV; wet on wet application
Region	LATAM	APAC	EMEA

Sika® Igoflex®-301 and Sikalastic®-685, besides of acting like a waterproofing coating, are also widely used as a solution for detailing (gutters, troughs, tanks, parapet walls and flashing, etc.), joints or bitumen membrane overlaps sealing

# ACCESSORIES

**A FULL RANGE OF ACCESSORIES** is available to complete the waterproofing systems, such as vent collars and outlet vent collars for safe integration of roof openings such as ventilators, railing supports, guardrails, lightning protection, etc.

The different types of materials available (stainless, in connection with bitumen waterproofing (APP and SBS), EPDM, polypropylene, etc.) are also a key point in Sika's portfolio, all within various dimensions.



**EPDM rubber roof outlet**, applied by torch method and compatible with any type of bituminous membrane. With different heights and diameters.



**Vertical roof outlet:** Stainless steel, SBS or APP with or without flange.



**Horizontal roof outlet** for installation through parapet: Stainless steel, SBS or APP.

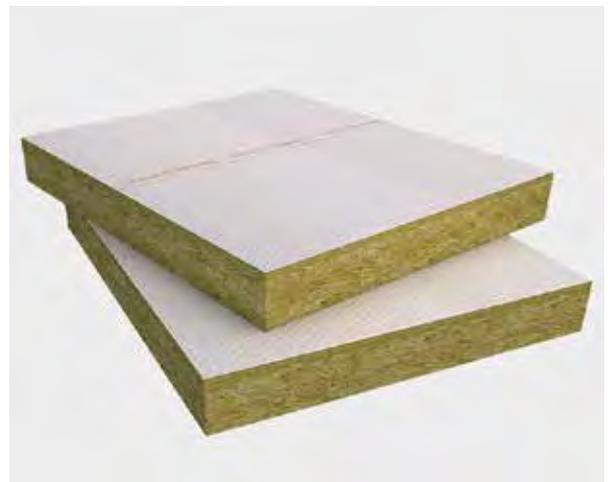


**Thermoplastic elastomer vent pipes** to allow moisture and vapour under waterproofing membranes to go out.

## THERMAL INSULATION BOARDS

Thermal insulation is one of the most important system components in a roof, creating a comfortable environment inside the building by protecting it from heat and cold while also helping to reduce heating and cooling energy costs. The importance of thermal insulation has increased recently mainly due to changing insulation standards worldwide, which put higher demands on the thermal resistance of building structures to reduce energy loss for heating or cooling.

Sika has a full range of insulation boards between PIR/PUR, Mineral Wool, EPS and XPS to compose any requirement of your system.

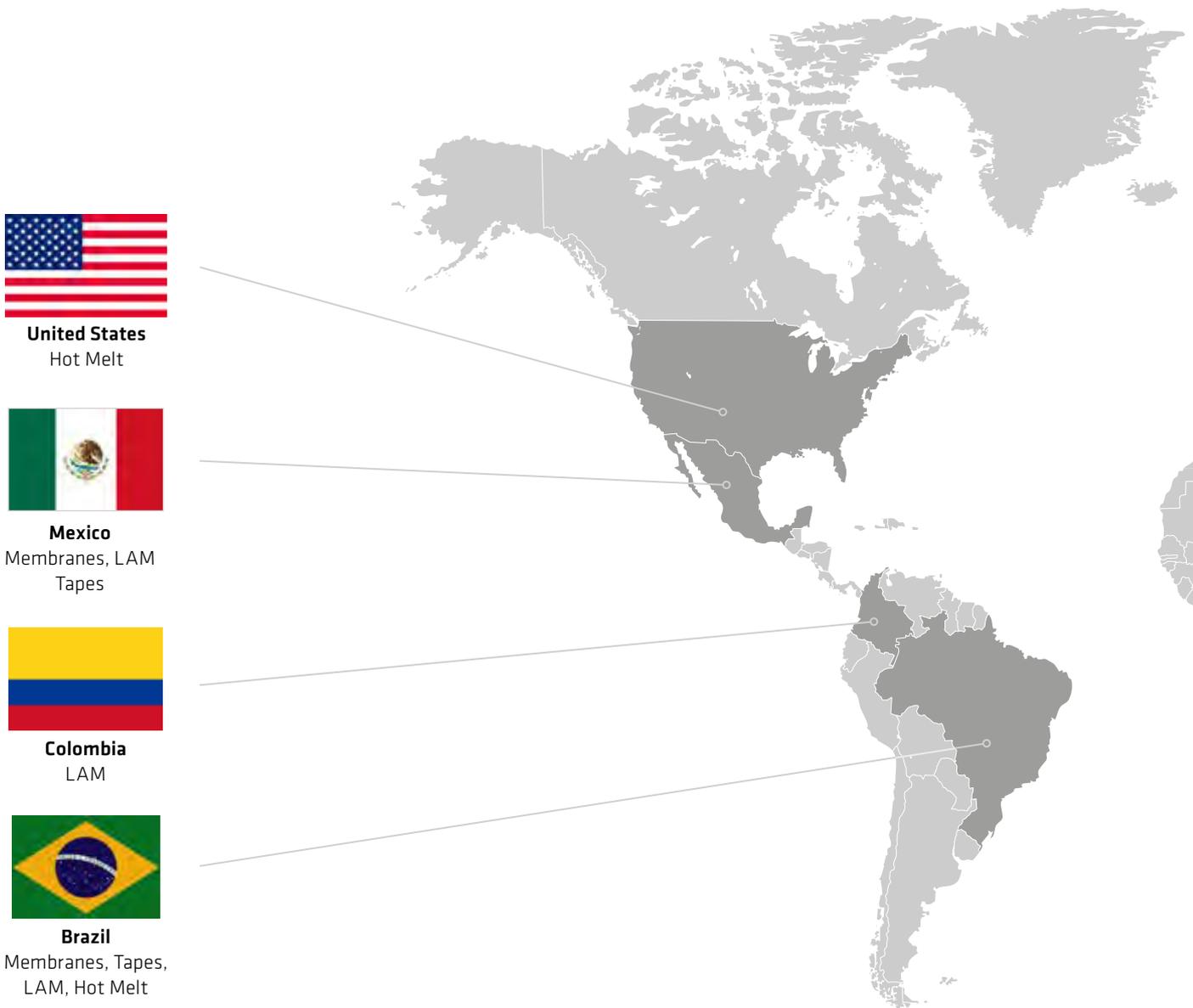


# SIKA FACTORIES

Where to find SikaShield®?

## BITUMINOUS FOOTPRINT

Over the years, Sika has been strategically acquired various bituminous companies around the world. Nowadays, we have more than 10 factories producing different technologies which are widely used for civil engineering products, roofing and waterproofing applications, such as bituminous membranes, liquid applied membranes, emulsion paints, hot melt, sound-proofing and other. However, the bitumen market is dominated by the membranes



**United States**  
Hot Melt



**Mexico**  
Membranes, LAM  
Tapes



**Colombia**  
LAM



**Brazil**  
Membranes, Tapes,  
LAM, Hot Melt

**Germany**  
Self-Adhesive  
membranes,  
Vapor Control Layers



**Czech Republic**  
Membranes



**Austria**  
Membranes, Hot Melt,  
Vapor Control Layers



**Italy**  
Membranes, LAM,  
Vapor Control Layers



**Romania**  
Membranes, Vapor  
Control Layers



**China**  
Membranes



**Japan**  
Carrier membranes  
for LAM



**India**  
Membranes



**Singapore**  
LAM



**Egypt**  
Membranes, LAM



# 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 Data Sheet prior to any use and processing.



since 1997



since 1986



MEMBER



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