



ROOFING & WATERPROOFING

SikaShield®

THE GLOBAL CHAMPION OF MODIFIED BITUMINOUS MEMBRANES

BUILDING TRUST





SikaShield® MODIFIED BITUMINOUS MEMBRANE

Why choose Modified Bitumen?



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

SikaShield® membranes are an excellent solution for roofing or waterproofing of:

- Low Slope Exposed or Ballast Roofs
- Balconies and Terraces Under Tiles

Once applied, SikaShield® membranes are a 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® membranes are available within different application methods (torch, self-adhered, mechanically attached, 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

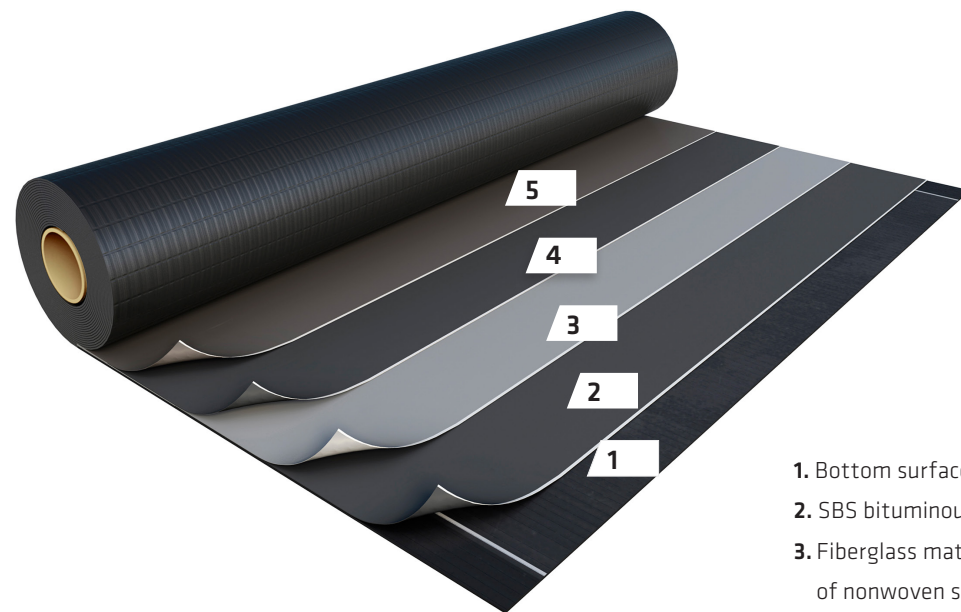
SikaShield® membranes have high resistance to mechanical damage and punctures. It is highly resistant to hail and shock that might happen during the application and other possible tearing. It's also trafficable during installation and has a high dimensional stability during all climate changes, guaranteeing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

SikaShield® HB79 HYBRID BITUMINOUS MEMBRANE

THE ONLY BITUMINOUS MEMBRANE COMBINING APP AND SBS FOR OPTIMAL PERFORMANCE.

SikaShield® HB79 is a 2-in-1 “hybrid” modified bitumen membrane that combines APAO (a premium type of APP polymer) and SBS asphaltic membrane technologies to produce a more resilient and longer-lasting modified bitumen membrane solution.

APAO polymer is compatible with SBS making the innovative combination possible. The APAO top layer exhibits excellent heat resistance and durability while the SBS bottom layer exhibits increased elongation, cold weather flexibility, and a secure bond to the substrate.



1. Bottom surface (burn-off foil or fabric)
2. SBS bituminous compound
3. Fiberglass mat compressed between two layers of nonwoven spunbond polyester fabric
4. APAO bituminous compound
5. Granules

SikaShield® HB79 is made of APAO (Amorphous Poly-Alpha-Olefins), which is compatible with SBS and has a higher heat stability and enhanced binding properties.

When subjected to a series of aging cycles, APAO modified bitumen shows no signs of visible deterioration. The joints of the membranes are also strong and long-lasting, even after torching.

All of this combined makes SikaShield® even more durable, backed by third-party certification confirming a service life of at least 35 years.

QUV Test			Thermal Shock		
Test of resistance to the combined action of water and UV rays			Test of resistance to rapid temperature charges		
One cycle: 4 hours UV rays at 60 °C 4 hours condensated water at 40 °C			One cycle: 55 minutes IR rays at 80 °C 5 minutes water at 15 °C		
SBS after 800 cycles	APP after 800 cycles	SikaShield® after 800 cycles	SBS after 500 cycles	APP after 1500 cycles	SikaShield® after 1500 cycles

SikaShield® HB79

FEATURES AND ADVANTAGES

INCREASED LONGEVITY

Thanks to premium APAO polymers, SikaShield® HB79 delivers superior heat stability and durable joints, even after torching. Third-Party Certified by the British Board of Agreement (BBA), SikaShield HB79 is noted as to have a “service life of at least 35 years.”*

THICKER MEMBRANE

SikaShield® HB79 measures 160 mils at the overlap, adding 30–40 mils more bitumen than typical sheets. This provides extra durability and protects your building from hail and other punctures.

EXCELLENT MECHANICAL RESISTANCE

Triple reinforced with a composite inlay of fiberglass and non-woven polyester, SikaShield® HB79 offers exceptional dimensional stability and eliminates the need for a cant strip—handling 90° angles with ease.

VERSATILE

Install with torch, mop, cold/hot adhered, self-adhered, or mechanically attached. Burn-off foil simplifies torching, while fabric layers ensure full bonding and immediate adhesion in cold and hot applications.

IMPACT RESISTANT

The APAO compound and added thickness provide high resistance to mechanical damage, punctures, and foot traffic—leaving no footprints.

MINIMAL GRANULE LOSS

With enhanced adhesion, SikaShield® HB79 in white limits granule loss to just 0.1 grams—far below ASTM allowances—improving durability, reducing maintenance, and extending cool roof performance.

SUSTAINABLE

SikaShield® membranes are made with recycled content, reducing waste in landfills. White granules also offer high reflectivity, reduce smog, and help to reduce the Urban Heat Island Effect.

* British Board of Agreement, Certificate #19/5716, 2023, Page 11



Different types of white granules can be applied to any of the existing membranes to achieve different cool roof ratings:



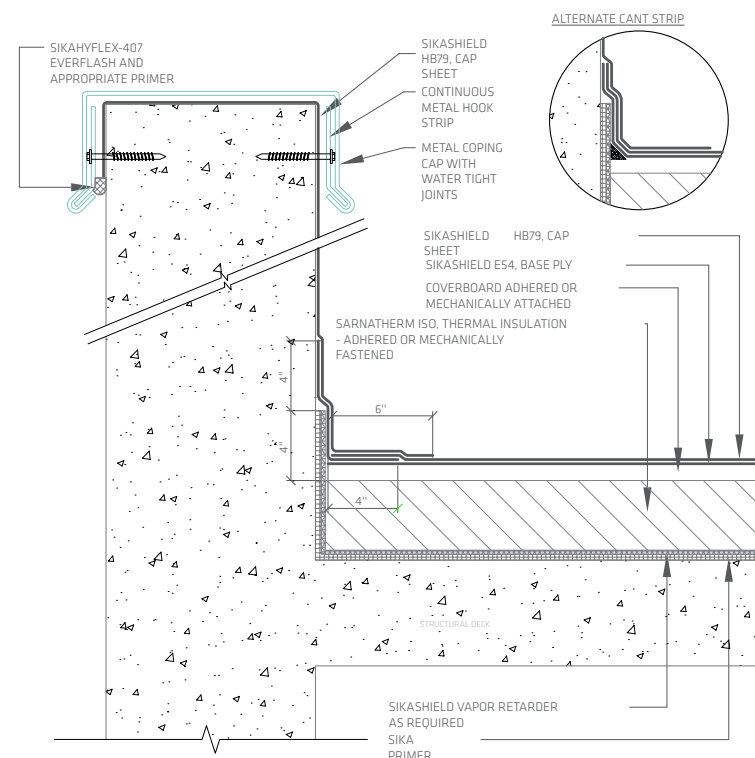
SikaShield® REINFORCEMENT

The reinforcement in a bituminous membrane improves overall performance, ensuring resistance to movement, stress, and environmental factors.

Fiberglass offers excellent dimensional stability and fire resistance, while **polyester** adds superior elasticity and flexibility, allowing the membrane to withstand thermal movement and mechanical stresses, enhancing durability.

ALL SIKASHIELD® MEMBRANES ARE REINFORCED WITH POLYESTER STABILIZED WITH GLASS FIBER.

This combination enables the membrane to perform effectively at perimeters and joints, acting as a cant strip, while the system as a whole absorbs and withstands the building's structural forces!



SikaShield® APPLICATION VERSATILITY

SikaShield® MEMBRANES ARE DESIGNED FOR EASE OF INSTALLATION AND RELIABLE PERFORMANCE

A thin burn-off foil simplifies torch application and facilitates roof inspections. For cold and hot applications, SikaShield® features a specialized fabric finish that ensures optimal adhesion to the substrate when used with Sika® Adhesive HF, delivering the same high-performance results as a torch-applied system. Additionally, the top surface is coated with sand, allowing perfect adhesion to insulation boards and enhancing system compatibility.



Cold or hot applied membranes
Bottom surface: polypropylene fleece/fabric
Top Surface: sand



Torch applied membranes
Bottom surface: burn-off polyethylene foil
Top Surface: burn-off polyethylene foil

SikaShield® HB79 ROOFING & WATERPROOFING SYSTEMS

SikaShield® BITUMINOUS MEMBRANES ARE NOT ONLY DURABLE AGAINST WIND, RAIN, SNOW, HAIL AND OTHER ENVIRONMENTAL CONDITIONS, BUT THEY ALSO COME WITH DECADES OF EXPERTISE AND SUPPORT.

SikaShield® modified bitumen membranes are engineered for versatility and performance in both new construction and roof renovation projects.

SikaShield® offers flexible installation options and proven compatibility with a wide range of roofing systems, making it ideal for both new construction and roof re-cover projects.

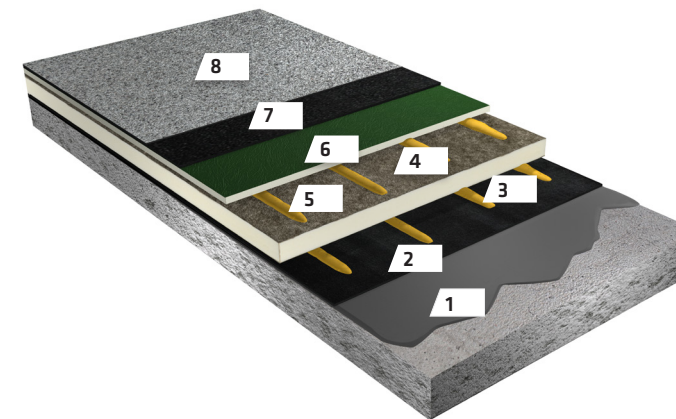
With application methods including **torch, mop, cold/hot adhered, self-adhered, or mechanically attached**, it easily adapts to project requirements and applicator preferences.

Suitable for low-slope roofs as well as balconies and terraces, SikaShield® delivers long-lasting protection, mechanical strength, and reliable performance across diverse applications—meeting the most demanding project requirements while providing a cost-effective solution to extend the life of existing roof systems.



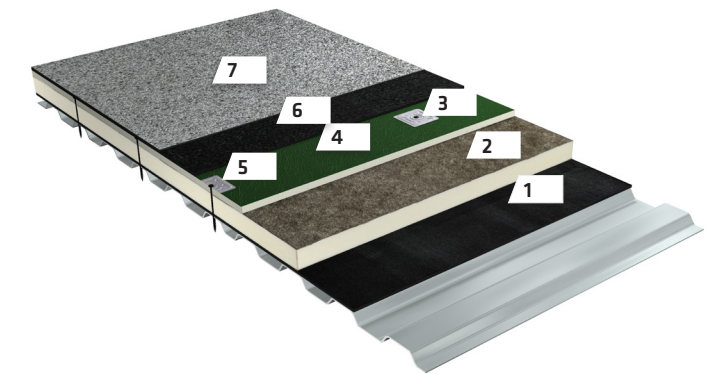
SikaShield® SYSTEM COMPONENTS

CONCRETE SUBSTRATE



1. Vapor Retarder Primer TA
2. SikaShield® VB P42 (Vapor Barrier)*
3. Sarnacol® OM Board Adhesive
4. Sarnatherm® ISO Insulation Board
5. Sarnacol® OM Board Adhesive
6. DensDeck® Prime (Hardboard)
7. SikaShield® Base Ply*
8. SikaShield® Cap Sheet*

METAL SUBSTRATE



1. Vapor Retarder SA 31
2. Sarnatherm® ISO Insulation Board
3. Sarnaplate®
4. DensDeck® Prime (Hardboard)
5. Sarnafastener® #12
6. SikaShield® Base Ply*
7. SikaShield® Cap Sheet*

* A primer and/or an adhesive is required to adhere the membrane, depending on the application type.

SikaShield® MEMBRANES

Each component is carefully developed to ensure seamless integration and consistent performance providing a roofing solution that meets the demands of diverse environments.

Unlike many systems on the market that require multiple membranes, SikaShield® is built around just three core membranes, simplifying installation while ensuring reliable, long-lasting performance.

SikaShield® HB79, CAP SHEET

- **Type:** Hybrid (APAO/SBS) Modified Bitumen Cap Sheet
- **Reinforcement:** Fiberglass mat compressed between two layers of nonwoven spunbond polyester fabric
- **Thickness:** 160 mil on the selvage edge
- **Application Method:** torch (MG) or cold/hot applied (MGF)
- Life expectancy of at least 35 years.

SikaShield® E54, BASE PLY

- **Type:** SBS-Modified Bitumen Base Sheet
- **Reinforcement:** non-woven spunbond polyester fabric stabilized with glass fiber
- **Thickness:** 118 mil (3 mm) or 87 mil (2.2 mm)
- **Application Method:** torch (PE) or cold/hot applied (SF)
- It can be left exposed up to 6 months

SikaShield® E74 S SA, BASE PLY

- **Type:** SBS-Modified Bitumen Base Sheet
- **Reinforcement:** non-woven spunbond polyester fabric stabilized with glass fiber
- **Thickness:** 118 mil (3 mm)
- **Application Method:** self-adhered
- It can be left exposed up to 6 months

SikaShield® VB P42, VAPOR BARRIER

- **Type:** APP-Modified Bitumen Base Sheet
- **Reinforcement:** glass fiber
- **Thickness:** 118 mil (3 mm)
- **Application Method:** torch (S) or cold/hot applied (SF)
- It can be left exposed up to 12 months



SikaShield® ACCESSORIES

Sika® Adhesive HF

A one-part, solvent-free, ready-to-apply asphalt-modified urethane adhesive designed for bonding SikaShield® base sheets, cap sheets, and vapor retarders.

Sarnatherm® ISO

A rigid, closed-cell polyisocyanurate insulation board with fiber-reinforced felt facers. Suitable for both new construction and re-roofing applications, offering high thermal performance.

Roof Boards

Designed to enhance building performance and provide a stable, smooth substrate for the installation of SikaShield® membranes using various application methods.

Flashings

Sikalastic® liquid-applied membranes serve as an effective alternative to modified bitumen membranes for flashing all roof details, ensuring seamless waterproofing.

Primers

Available in solvent-based, water-based, and VOC-compliant formulations to promote superior adhesion of membranes to a variety of substrates.

Adhesives, Fasteners, Discs & Plates

A comprehensive range of securement products engineered to meet wind uplift resistance and deck pull-out requirements, ensuring long-term system integrity.



A GLOBAL COMPANY BUT LOCAL PARTNER



FOR MORE ROOFING INFORMATION:



BUILDING TRUST, EVERY DAY

With more than 100 years of experience, Sika is a worldwide innovation and sustainability leader in the development and production of systems and products for commercial and residential construction, as well as the transportation, marine, automotive, and renewable energy manufacturing industries.

Sika has subsidiaries in 102 countries around the world and, in over 400 factories, produces innovative technologies for customers worldwide. In doing so, it plays a crucial role in the transformation of the construction and transportation sector toward greater environmental compatibility. With more than 34,000 employees, the company generated sales of CHF 11.76 billion in 2024.

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.

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