

SikaMembran® System WATERPROOFING AND VAPOR CONTROL FOR CURTAIN WALL FACADES



# WATERPROOFING AND VAPOR CONTROL FOR CURTAIN WALL FACADES

#### SIKA INTRODUCES THE NEXT GENERATION OF WATERPROOFING AND VAPOR CONTROL

**FACADE MEMBRANES.** The new EPDM hybrid membranes have an exceptional thickness of 0.3 mm. Nevertheless, the mechanical properties, such as tensile strength and tear propagation resistance, are respectively four times and twice as high as those of the equivalent 0.6 mm thick EPDM SikaMembran®. But what is just as important is the fact that the next generation of SikaMembran® has about half the ecological footprint of the first generation.



#### **SUPER THIN**

- half the thickness and therefor smooth processing even in difficult details



#### **ULTRA-STRONG**

- double the tear propagation resistance



#### **MORE SUSTAINABLE**

- with half the carbon footprint

SikaMembran® Universal SikaMembran® Outdoor Plus

SikaMembran® Outdoor Plus

SikaMembran® -820 Allround

All in comparison with the SikaMembran® Universal / Outdoor plus

### Innovation in "Sustainable Solutions" is an integral part of Sika's innovationstrategy and drive.

Creating value added products based on both higher performance and sustainability benefits – combining product performance and sustainability into one integral concept. This is the key objective of Sika's strategic product innovation approach.

#### SUSTAINABLE SOLUTION = BETTER PERFORMANCE + SUSTAINABILITY BENEFITS

#### PERFORMANCE SOLUTION



ALWAYS COMBINE SIKA PROVEN "VALUE THROUGH PERFORMANCE" WITH ADDED SUSTAINABILITY BENEFITS

**FOCUS ON ADDED VALUE** 



PERFORMANCE AND SUSTAINABILITY SOLUTION

The SPM Concept was introduced at Sika with the aim to increase the company's portfolio of "Sustainable Solutions" and support the sustainability goals of our customers. It is aligned to the company's overarching Group Strategy 2023 and "More Value Less Impact" Sustainability strategy, serving as a backbone to the Group's "Sustainable Solutions" target area. It is fully integrated into Sika's Product Development Process.

# WATERPROOFING AND VAPOR CONTROL FOR CURTAIN WALL FACADES

**DURABLE BUILDING CONSTRUCTIONS NEED PROFESSIONAL WATER PROOFING.** Especially the joints between different components pose significant challenges for the building designer. Accumulated condensation within the wall construction must be transferred outward, while the outer face must withstand rain and wind

The moisture from the interior is driven by physical forces, along with warm air, through the wall construction and towards the exterior. If the dew point is reached on the way through the wall component, the vapor will condense. This moisture can damage the insulation material, favor fungal and bacterial growth, reduce the thermal insulation and lead to poor indoor air quality.

Since the wall components can bear only a very limited amount of moisture, it is more favorable to control the flow of humidity and avoid water condensation, thus ensuring the water can evaporate over time.

SikaMembran® -800 Permeable

EPDM Hybrid Membrane with low vapour diffusion resistance, mainly used for the outside of the structure. Specially for curtain wall facades, wide joints and tall buildings with high demands on wind forces and UV radiation. Meets fire retardant requirements of EN 13501-1 Class E.EN 13501-1 Class E.

#### SikaMembran®-820 Allround

EPDM Hybrid Membrane with high vapour diffusion resistance, used for the inside and outside of the structure. Specially for curtain wall facades, wide joints and tall buildings with high demands on wind forces and UV radiation. Meets fire retardant requirements of EN 13501-1 Class E.



The SikaMembran® system is a vapor control system comprising of various EPDM Hybrid sheet membranes. They are suitable for most climatic conditions and provide a secure and durable vapor barrier and waterproof seal at junctions between building elements. SikaMembran® system is used for curtain walls, ventilated facades and window installations.



#### **BENEFITS**

- Highly flexible waterproofing and vapor control system
- Fast, easy and secure application even in corners
- Provided with CE-mark according to EN 13984: 2013-05
- Meet fire retardant requirements of EN 13501-1 Class E
- No additional mechanical fixing necessary
- Pre-treatment free bonding on SikaMembran®-800
   Permeable and SikaMembran®-820 Allround with Sikaflex®-525
- Suitable for uneven substrates (blowholes in concrete), leveling of substrate by adhesive
- UV-resistant
- Passes EN 1928:2000-03 Determination of watertightness treatment A for SikaMembran-820 Allround applicable only
- The products meet the highest requirements of ecobau and Minergie-ECO and receives the eco1 rating.
- Conformity with LEED v4 MRc 4 (Option 2): Building Product
   Disclosure and Optimization Material Ingredients

## RELIABLE APPLICATION THAT LASTS

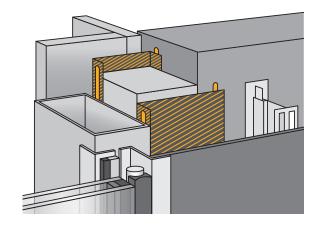
#### Sikaflex®-525 - THE SYSTEM ADHESIVE

Sikaflex®-525 is a low emission 1-component isocyanate free sealant based on the Sika Silane Terminated Polymer (STP) technology adhesive for the SikaMembran®-800 series. Sikaflex®-525 adheres excellent to a wide range of substrates.

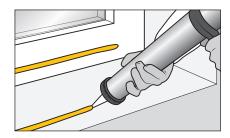
■ Isocyanate-, Phthalate- and PVC-free

#### **BENEFITS**

- Adhesion to concrete, anodized and powder coated aluminum, PVC, wood and other common materials
- Safe processing with non-sagging property
- No primer required on the SikaMembran®
- Ensures leveling on substrate
- Very high resistance to creep, no slipping of the sheets
- Membrane can be adjusted up to 30 minutes after adhesive application - peel off the adhesive bed and apply again
- Single-sided adhesive application
- Available in unipacks
- Contributes to LEED v4 and v4.1 with credit points EQc1 "low-emitting materials"
- Complies with common VOC requirements



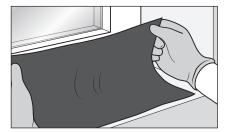
### **APPLICATION**



Application of adhesive.



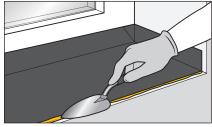
Spread adhesive with spatula 4-5 cm in width and 1-2 mm in thickness.



Apply SikaMembran® loop-shaped and free from tension.



Press the membrane with plastic roller.



Embed edge of membrane into the excess adhesive.



Membrane can be adjusted within 30 minutes after adhesive application.

## THE SYSTEM COMPONENTS



SikaMembran®-800 Permeable



SikaMembran®-820 Allround

	SikaMembran® -800 Permeable	SikaMembran® -820 Allround
Base	Elastic EPDM Hybrid	Elastic EPDM Hybrid
Thickness	0.3 mm	0.3 mm
Diffusion Resistance Coefficient µ	8 835	198 920
Equivalent Air Layer Thickness s <sub>d</sub> -Value [m]	3	59
CE Marked	Yes	Yes
Packaging	Rolls in 25 m in various widths	Rolls in 25 m in various widths

## GLOBAL BUT LOCAL PARTNERSHIP



## FOR MORE INFORMATION:



www.sika.com/facade

#### WHO WE ARE

Sika AG, Switzerland, is a globally active specialty chemicals company. Sika supplies the building and construction industry as well as manufacturing industries (automotive, bus, truck, rail, solar and wind power plants, facades). Sika is a leader in processing materials used in sealing, bonding, damping, reinforcing, and protecting loadbearing structures. Sika's product lines feature high-quality concrete admixtures, specialty mortars, sealants and adhesives, damping and reinforcing materials, structural strengthening systems, industrial flooring as well as roofing and waterproofing systems.

#### **Technical Service**

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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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