



SikaMembran<sup>®</sup> System  
WATERPROOFING AND VAPOR  
CONTROL FOR CURTAIN WALL  
FACADES

BUILDING TRUST



# RELIABLE APPLICATION THAT LASTS

## THE APPLICATION OF THE COMPONENTS OF SikaMembran® System IS EASY AND RELIABLE.

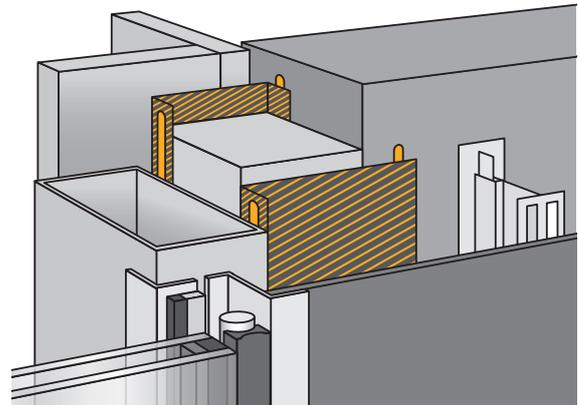
It opens various construction options. With SikaBond® TF Plus N, Sika has developed a special type adhesive for the durable fixation of the EPDM sheet membranes to many kinds of construction materials.

### SikaBond® TF Plus N

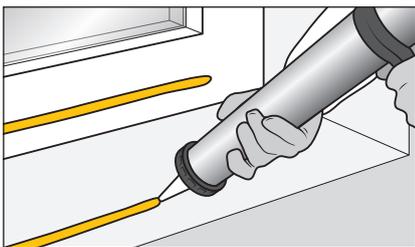
One component, humidity curing and elastic adhesive as part of the membrane system, with very good adhesion on typical substrates.

### BENEFITS

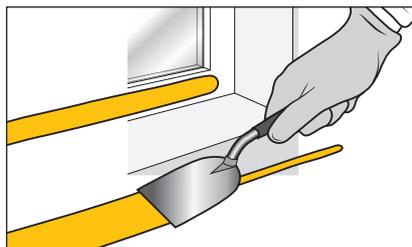
- Safe processing with non-sagging property
- Adhesion to concrete, anodized and powder coated aluminum, PVC, wood and other common materials
- Single-sided adhesive application
- Can be adjusted up to 30 minutes after application
- Gap Filling capabilities
- Fast curing, no contact pressure necessary



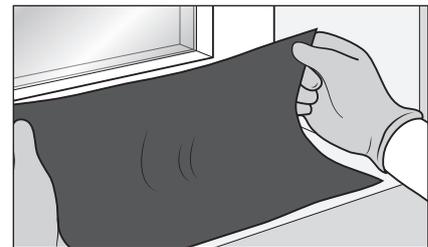
## APPLICATION



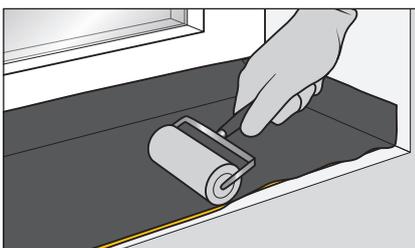
Application of adhesive.



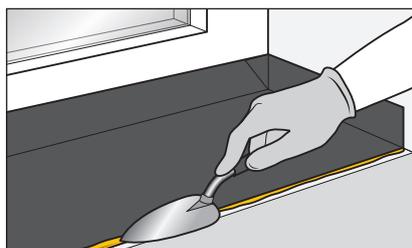
Spread adhesive with spatula 4-5 cm in width and 1-2 mm in thickness.



Apply SikaMembran loop-shaped and free from tension.



Press the membrane with plastic roller.



Embed edge of membrane in the excess adhesive.



Membrane can be adjusted within 30 minutes after adhesive application.

# WATERPROOFING AND VAPOR CONTROL FOR CURTAIN WALL FACADES

**DURABLE BUILDING CONSTRUCTIONS NEED PROFESSIONAL WATER PROOFING.** Especially the joints between different components are highly demanding on the building design. Accumulated condensation within the wall construction must be transferred outward, while the outer face must withstand rain and wind.

Air with high moisture content is pressured by physical forces through the wall construction. If the dew point temperature is reached on the way through the wall component, the moisture will condense. This moisture can damage the insulation material, favors fungal and bacterial growth, reduces the thermal insulation and leads to poor indoor air quality.

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

## **SikaMembran® Universal**

EPDM-Membrane for indoor and outdoor use. 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.

## **SikaMembran® Outdoor Plus**

EPDM-Membrane for outdoor use. 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.

## **SikaMembran® Strong**

EPDM-Membrane for indoor and outdoor use. Specially for curtain wall facades, wide joints and tall buildings with high demands on wind forces and other mechanical demands and UV radiation. Meets fire retardant requirements of EN 13501-1 Class E.

## **SikaMembran® ECO Uni / SikaMembran® ECO Out**

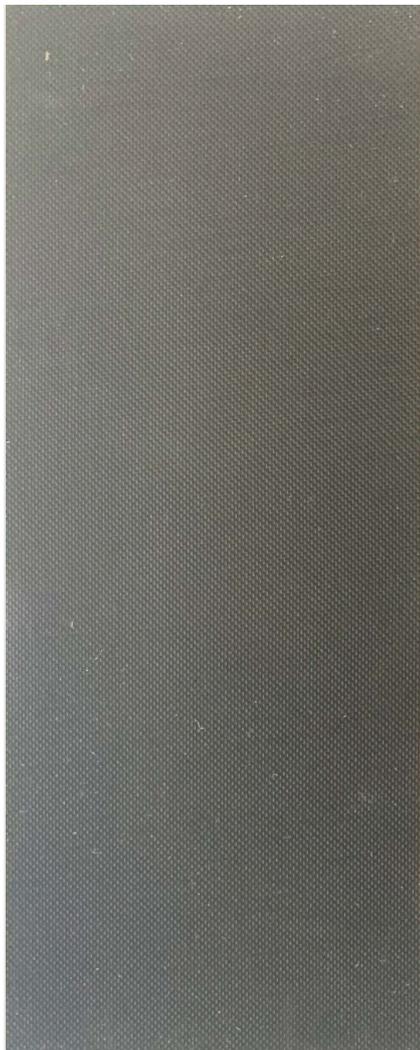
EPDM-Membrane for indoor and outdoor use. Specially for curtain wall facades, wide joints and tall buildings with high demands on wind forces and UV radiation. Meets fire retardant requirements of EN 13501-1 Class E.

The SikaMembran® system is a vapor control system comprising of various EPDM sheet membranes. They are suitable for all 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.

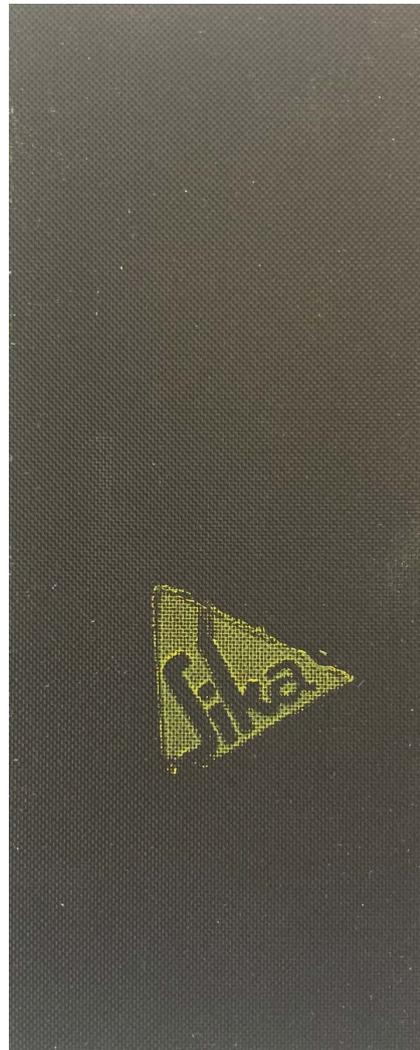
## **BENEFITS**

- Made of special EPDM suitable for all climatic conditions
- Proven quality for more than 50 years
- Ozone- and UV- and weather resistant
- Very resistant to high wind loads (> 4 kPa)
- Meet fire retardant requirements of EN 13501-1 Class E
- Certified according to ISO 9001 and ISO 14001
- CE marked
- Fast, easy and secure application even for corners due to high flexibility and thickness of only 0.6 (0.5) mm.
- No mechanical fixation necessary
- Easy to install even in the cold if surface is dry and clean
- Type of membrane easily recognizable by printing on one side
- Solutions for bonding on bitumen surfaces available

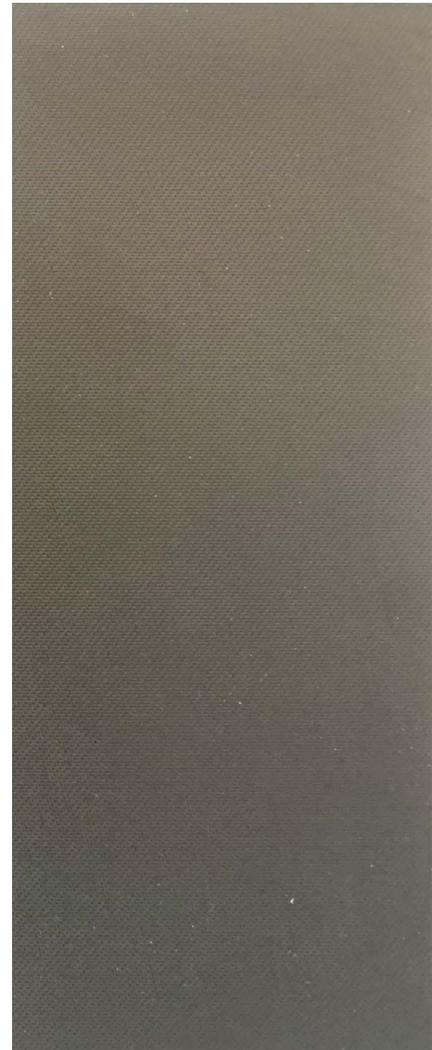
# SIKA MEMBRANES



**SikaMembran® Universal**



**SikaMembran® Strong**



**SikaMembran® ECO Out**

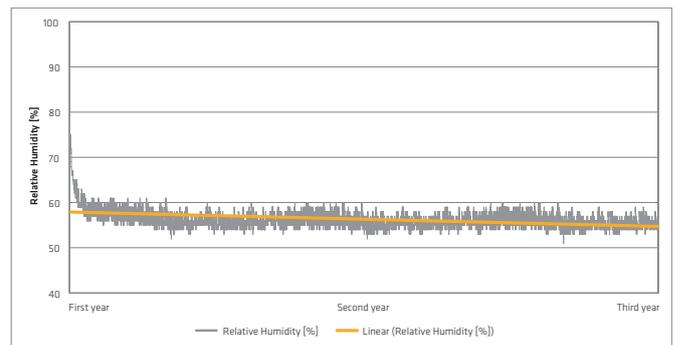
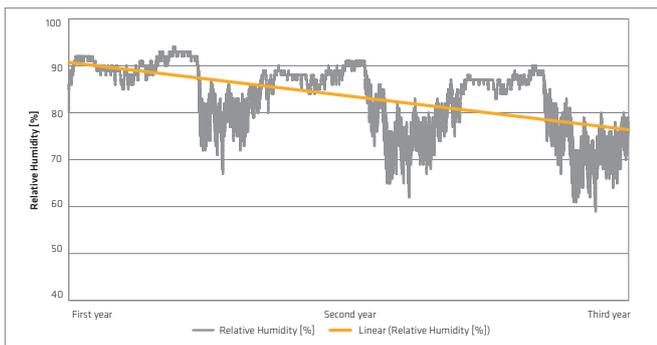
	<b>SikaMembran® Universal</b>	<b>SikaMembran® Outdoor plus</b>	<b>SikaMembran® Strong</b>	<b>SikaMembran® Eco Uni</b>	<b>SikaMembran® Eco Out</b>
Base	Elastic EPDM, Butyl modified	Elastic EPDM	Elastic EPDM	Elastic EPDM	Elastic EPDM
Thickness	0.6 mm	0.6 mm	1.2 mm	0.5 mm	0.5 mm
Diffusion Resis- tance Coefficient $\mu$	103 000	5 000	66 000	80 000	4 000
Equivalent Air Layer Thickness $s_{d1}$ -Value [m]	62	3	79	40	2
CE Marked	Yes	Yes	Yes	Yes	Yes
Packaging	Rolls in 25 m in various widths up to 140 cm				

# HYGROTHERMAL ANALYSIS

**THE DEPARTMENT OF HYGROTHERMICS AT FRAUNHOFER IBP** has developed the WUFI® software family for state-of-the-art hygrothermal analysis. WUFI® performs dynamic simulations of coupled heat and moisture transfer, known as “hygrothermics”. The methods have been validated by numerous field and lab tests worldwide and provide realistic simulation of hygrothermal conditions in building components and buildings under actual climate conditions.

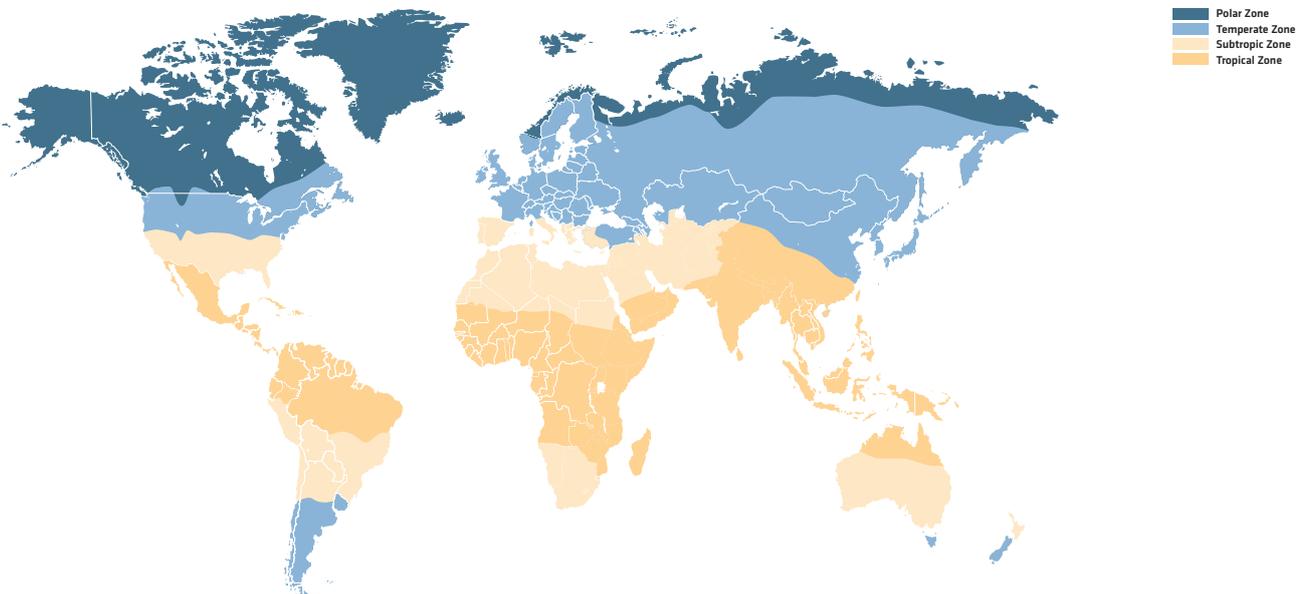
The Fraunhofer Institute has made some basic calculation for Sika to prove performance of the vapor control concept in four different climatic zones. Four basic facade window connections have been investigated and checked for humidity accumulation. With correct selection of the SikaMembran®, the calculations

showed a decline in overall humidity content within the wall structure in all climate zones. Even considering the worst case such as for example using concrete in the calculation instead of an aluminum profile. This shows that with the Sika Membrane® system, the wall keeps breathing.



- Munich Germany, Moderate Climate  
Outside: Temperature: max. 23°C min. -4°C, r.h. 78%  
Inside: 20°C/60% - sinusoidal climate

- Bangkok Thailand, Tropical Climate  
Outside Temperature max. 35°C min. 21°C, r.h. 80%  
Inside: 20°C/60% - constant climate - Air Conditioner



# GLOBAL BUT LOCAL PARTNERSHIP



## FOR MORE INFORMATION:



[www.sika.com/facade](http://www.sika.com/facade)

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.



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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