



# FACTORY MUTUAL APPROVALS FOR SIKA ROOFING SYSTEMS

## FM APPROVALS FOR EMEA PRODUCTS:

- SINGLE PLY ROOF SYSTEMS – Sarnafil® AT, Sarnafil® T, Sikaplan® PVC
- PHOTOVOLTAIC MOUNTING SYSTEM – SarnaRoof® Solar Mount-2 (SSM2)



BUILDING TRUST



# WORLDWIDE CONSTRUCTION AND INDUSTRY SOLUTIONS



Sika's history began in 1910 with the electrification of the Gotthard railway tunnels. The Swiss company founded by Kaspar Winkler played a decisive role in this momentous project. A revolutionary new waterproofing mortar was developed, marking the beginning of Sika's global reputation for high quality.

Today the Sika Group is a leading global manufacturer of construction chemical products and systems as well as industrial sealants and adhesives. The Group's core competencies – sealing, bonding, damping, reinforcing and protecting load-bearing structures – have been enabling a wide range of applications in the construction sector and in industrial production for over 100 years. The high-quality product range includes concrete admixtures, special mortars, sealants and adhesives, damping and reinforcing materials, floor coating systems, sealing membranes and corrosion protection products.

Sika annually produces a volume of roofing membrane that could cover the entire area of Manhattan. More than 10,000 roofing contractors in over 85 countries are Sika-trained and certified, which ensures qualified installation.

All our customers – developers, building owners, architects, engineers, consultants and contractors – receive expert advice from our highly competent team. Building on a foundation of trust, we offer our experience and knowledge to provide recommendations and long-lasting solutions for any project you may have.

Roofing can be selected and designed to meet the specific technical requirements and budget of almost any roofing project. Our tailored solutions allow freedom of design and form, with no limitations on geometry or color, to meet the specific requirements of any type of roof.

## STRATEGIC SUCCESS THROUGH GLOBAL PRESENCE

- With subsidiaries in 103 countries, Sika offers local presence worldwide
- Sika operates over 400 production sites and sales locations
- Sika employs approx. 33,000 people worldwide
- The Sika umbrella brand covers some 980 Sika product trademarks
- In fiscal year 2023 the Sika Group achieved sales of approximately CHF 11.24 billion

# SIKA ROOFING SYSTEMS WITH FM APPROVALS TESTING AND CERTIFICATION

## WHO ARE FM GLOBAL AND WHAT ARE FM APPROVALS?

FM Global (Factory Mutual) provides comprehensive global commercial and industrial property insurance, engineering-driven underwriting and risk management solutions, plus innovative property loss prevention research and risk management. ([www.fmglobal.com](http://www.fmglobal.com))

At its research and testing center - unique in the world - the causes of property damage and methods of damage prevention are examined under realistic site conditions, including the assessment of the effects of fire, wind, rain and other natural forces, plus explosions and the engineered protection systems for these.

Its subsidiary FM Approvals tests and certifies products and systems for property damage prevention to the highest performance, quality and safety standards.

Roofing products are covered by FM Approvals standard 4470, which is becoming increasingly important and recognized around the world, specifically now in Europe. Many more investors and building owners are requesting and obtaining FM Approvals Certificates on the systems used on their buildings for the preventive protection of their business against natural forces and fire.



## FM APPROVALS CERTIFIED SIKA ROOFING SYSTEMS

Many Sika roof waterproofing products and systems have passed testing and inspection by FM Approvals since 1995. The products listed here are those currently tested and certified in different roof build-ups and combinations, and including different types of thermal insulation manufacturers in Europe. In addition to the strict and demanding FM Approvals criteria, all of these Sika roofing systems fully comply with all other relevant national and international requirements and standards.

The general combinations of Sika roofing system build-ups tested are shown in the following tables.

**The referred FM assemblies are valid only for products supplied out of EMEA production plants.**



# SIKA ROOFING SYSTEMS WITH FM APPROVALS TESTING AND CERTIFICATION

## WHAT IS TESTED?



### 1. WIND UPLIFT TESTING MEMBRANES

Simulated wind uplift forces as well as testing of the pull-off strength and impact resistance for relevant fastening components to verify the wind uplift security of Sika roofing systems.



### 2. WIND UPLIFT TESTING PHOTOVOLTAIC

Simulated wind uplift test with east-west oriented photovoltaic mounting system SarnaRoof® Solar Mount-2 installed on Sika roofing systems.



### 3. INTERNAL FIRE TESTING

Cone calorimeter testing to assess the behaviour in fire of the Sika roofing systems in relation to ignitability, combustibility, and the production of smoke and toxic gases.



### 4. EXTERNAL FIRE TESTING

Physically testing the flammability and flame propagation of the materials to verify the fire resistance of Sika roofing systems.



### 5. HAILSTONE DAMAGE TESTING

Simulated hail storms are used to verify the hailstone impact resistance of the Sika roofing systems.



### 6. WATERTIGHTNESS - LEAK TESTING

Artificial weathering and liquid water resistance testing to verify the outstanding watertightness of Sika roofing systems.



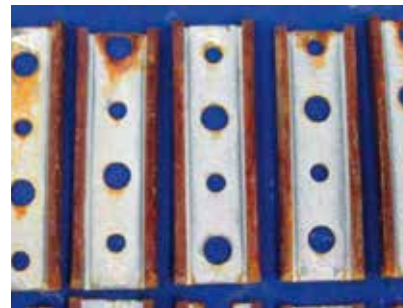
### 7. FOOT TRAFFIC TESTING

Physical and simulated walking and load testing to verify the pedestrian and traffic resistance of Sika roofing systems.



### 8. TEAR RESISTANCE TESTING

Testing the fixings and fasteners to verify the pull-out strength and tear resistance of Sika roofing systems.



### 9. CORROSION TESTING

Testing the fixings and fasteners to verify the corrosion resistance and durability of Sika roofing systems.

# FPO – MECHANICALLY FASTENED ROOF SYSTEMS ON STEEL DECK OR CONCRETE DECK

## Sarnafil® OR Sikaplan® MECHANICALLY FASTENED FPO ROOF WATERPROOFING MEMBRANE AND THERMAL INSULATION ON STEEL DECK OR CONCRETE DECK

Roofing Waterproofing Membrane (Cover – Single-ply)		
Sika Deutschland GmbH	Sarnafil® AT-15 / 18 / 20 Sarnafil® TS 77-15 / 18 / 20 Sarnafil® TS 77-15 E / 18 E / 20 E	E = enhanced fire rating
Spot Fastening or Induction Welding of Roof Waterproofing Membrane (Securement – Cover)		
Sika Deutschland GmbH	Different fastening solutions	
Thermal Insulation (Insulation – Board Stock)		
Kingspan Insulation GmbH & Co. KG	Therma TR 26 Therma TR 27	Polyisocyanurate / polyurethane (PIR / PUR)
Recticel NV	Eurothane® Powerdeck®	Polyisocyanurate / polyurethane (PIR / PUR)
ROCKWOOL Operations GmbH & Co Kg	Hardrock Durock	Mineral wool
Fastening of Thermal Insulation (Securement – Board Stock)		
Sika Deutschland GmbH	Different fastening solutions	
Vapour- Control Layers / Barriers (Vapor Retarder)		
Sika Deutschland GmbH	Sarnavap® 1000 E Sarnavap® 2000 E Sarnavap® 5000 E SA FR	
Roof Deck (Deck)		
Steel or Reinforced Concrete (Structural Concrete)		

() Description according to RoofNav



# FPO – MECHANICALLY FASTENED ROOF SYSTEMS ON STEEL DECK

## Sarnafil® MECHANICALLY FASTENED FPO ROOF WATERPROOFING MEMBRANE, COVERBOARD AND THERMAL INSULATION ON STEEL DECK

Roofing Waterproofing Membrane (Cover – Single-ply)		
Sika Deutschland GmbH	Sarnafil® AT-15 / 18 / 20 Sarnafil® 77-15 / 18 / 20 Sarnafil® 77-15 E / 18 E / 20 E	E = enhanced fire rating
Spot Fastening or Induction Welding of Roof Waterproofing Membrane (Securement – Cover)		
Sika Deutschland GmbH	Different fastening solutions	
Coverboard (Cover Board)		
Georgia-Pacific Gypsum LLC	DensDeck® Prime	
Fastening of Coverboard (Securement – Cover Board)		
Sika Deutschland GmbH	Sarnafast® SBF 6.0 and IF/IG-C-82 x 40	
Thermal Insulation (Insulation – Board Stock)		
Kingspan Insulation GmbH & Co. KG	Therma TR 26 Therma TR 27	Polyisocyanurate / polyurethane (PIR / PUR)
Recticel NV	Eurothane® Powerdeck®	Polyisocyanurate / polyurethane (PIR / PUR)
ROCKWOOL Operations GmbH & Co Kg		Mineral wool
Fastening of Thermal Insulation (Securement – Board Stock)		
Sika Deutschland GmbH	Different fastening solutions	
Vapour- Control Layers / Barriers (Vapor Retarder)		
Sika Deutschland GmbH	Sarnavap® 1000 E Sarnavap® 2000 E Sarnavap® 5000 E SA FR	
Roof Deck (Deck)		
Steel		

() Description according to RoofNav

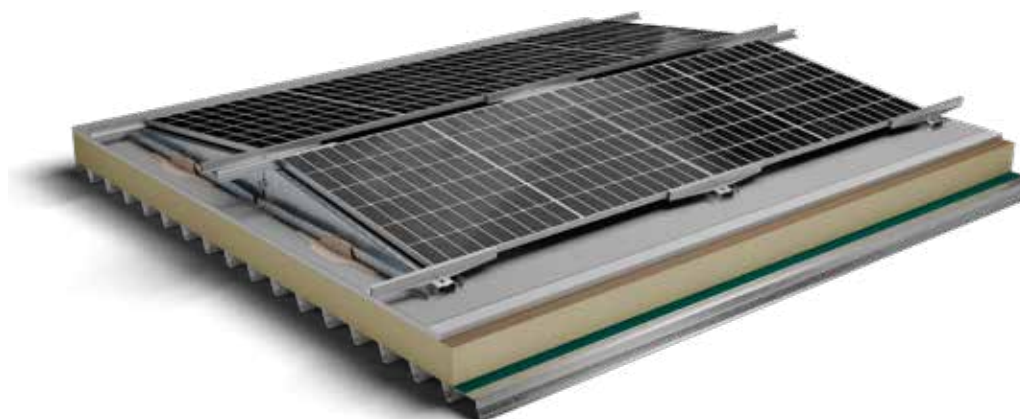


# FPO – MECHANICALLY FASTENED ROOF SYSTEMS WITH PHOTOVOLTAIC MOUNTING SYSTEM ON STEEL DECK

## PHOTOVOLTAIC MOUNTING SYSTEM ON TOP OF MECHANICALLY FASTENED FPO ROOF WATERPROOFING MEMBRANE, COVERBOARD AND THERMAL INSULATION ON STEEL DECK

Photovoltaic Mounting System (Coating / Surfacing)		
Sika Deutschland GmbH	SarnaRoof® Mount-2	
Roofing Waterproofing Membrane (Cover – Single-ply)		
Sika Deutschland GmbH	Sarnafil® 77-15 / 18 / 20 Sarnafil® 77-15 E / 18 E / 20 E	E = enhanced fire rating
Coverboard (Cover Board) – optional		
Georgia-Pacific Gypsum LLC	DensDeck® Prime	
Spot Fastening or Induction Welding of Roof Waterproofing Membrane (Securement – Cover)		
Sika Deutschland GmbH	Different fastening solutions	
Thermal Insulation (Insulation – Board Stock)		
Kingspan Insulation GmbH & Co. KG	Therma TR 26 Therma TR 27	Polyisocyanurate / polyurethane (PIR / PUR)
Recticel NV	Eurothane® Powerdeck®	Polyisocyanurate / polyurethane (PIR / PUR)
ROCKWOOL Operations GmbH & Co Kg	Mineral wool	
Fastening of Thermal Insulation (Securement – Board Stock)		
Sika Deutschland GmbH	Different fastening solutions	
Vapour- Control Layers / Barriers (Vapor Retarder)		
Sika Deutschland GmbH	Sarnavap® 1000 E Sarnavap® 2000 E Sarnavap® 5000 E SA FR	
Roof Deck (Deck)		
Steel		

() Description according to RoofNav

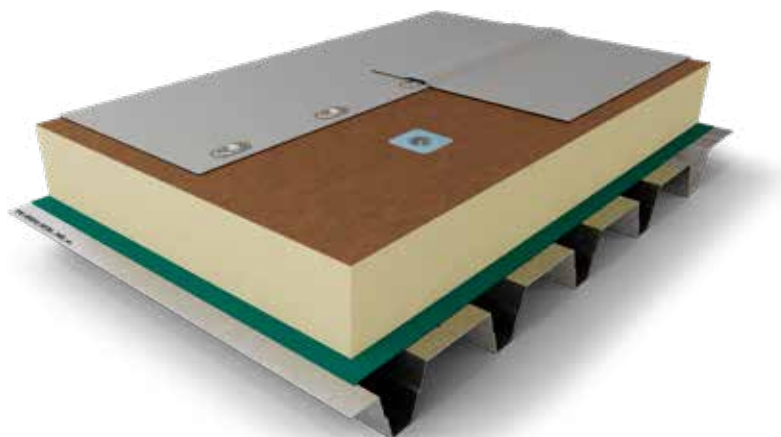


# PVC – MECHANICALLY FASTENED ROOF SYSTEMS ON STEEL DECK OR CONCRETE DECK

## Sikaplan® MECHANICALLY FASTENED PVC ROOF WATERPROOFING MEMBRANE AND THERMAL INSULATION ON STEEL DECK OR CONCRETE DECK

Roofing Waterproofing Membrane (Cover – Single-ply)		
Sika Deutschland GmbH	Sikaplan® G -15 / 18 / 20 Sikaplan® VG-15 / 18	VG = Enhanced fire rating
Spot Fastening or Induction Welding of Roof Waterproofing Membrane (Securement – Cover)		
Sika Deutschland GmbH	Different fastening solutions	
Thermal Insulation (Insulation – Board Stock)		
Kingspan Insulation GmbH & Co. KG	Therma TR 26 Therma TR 27	Polyisocyanurate / polyurethane (PIR / PUR)
Recticel NV	Eurothane® Powerdeck®	Polyisocyanurate / polyurethane (PIR / PUR)
ROCKWOOL Operations GmbH & Co Kg	Hardrock Durock	Mineral wool
Fastening of Thermal Insulation (Securement – Board Stock)		
Sika Deutschland GmbH	Different fastening solutions	
Vapour- Control Layers / Barriers (Vapor Retarder)		
Sika Deutschland GmbH	Sarnavap® 500 E Sarnavap® 1000 E Sarnavap® 2000 E Sarnavap® 5000 E SA FR	
Roof Deck (Deck)		
Steel or Reinforced Concrete (Structural Concrete)		

() Description according to RoofNav





# FPO – SELF ADHERED ROOF SYSTEMS ON STEEL DECK

## Sarnafil® SELF ADHERED FPO ROOF WATERPROOFING MEMBRANE WITH MECHANICALLY FASTENED COVERBOARD AND THERMAL INSULATION ON STEEL DECK

Roofing Waterproofing Membrane (Cover – Single-ply)		
Sika Deutschland GmbH	Sarnafil® TG 76-15 FSA / 18 FSA / 20 FSA	FSA = Felt Self Adhered
Coverboard (Cover Board)		
Georgia-Pacific Gypsum LLC	DensDeck® Prime	
Fastening of Coverboard (Securement – Cover Board)		
Sika Deutschland GmbH	Sarnafast® SBF 6.0 and IF/IG-C-82 x 40	
Thermal Insulation (Insulation – Board Stock)		
Kingspan Insulation GmbH & Co. KG	Therma TR 27	Polyisocyanurate / polyurethane (PIR / PUR)
Vapour- Control Layers / Barriers (Vapor Retarder)		
Sika Deutschland GmbH	Sarnavap® 1000 E Sarnavap® 2000 E Sarnavap® 5000 E SA FR	
Thermal Barrier – optional		
Georgia-Pacific Gypsum LLC	DensDeck® Prime DensDeck®	
Roof Deck (Deck)		
Steel		

() Description according to RoofNav

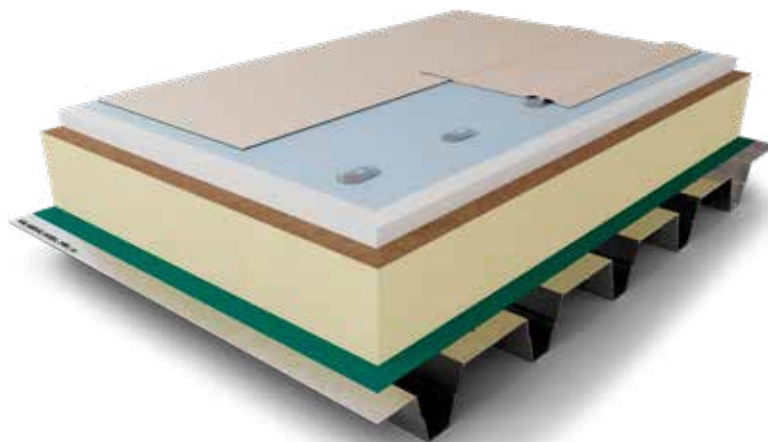


# FPO – ADHERED ROOF SYSTEMS ON STEEL DECK

## Sarnafil® ADHERED FPO ROOF WATERPROOFING MEMBRANE WITH MECHANICALLY FASTENED COVERBOARD AND THERMAL INSULATION ON STEEL DECK

Roofing Waterproofing Membrane (Cover – Single-ply)		
Sika Deutschland GmbH	Sarnafil® TG 76-15 Felt PS / 18 Felt PS / 20 Felt PS	
Adhesion of Roof Waterproofing Membrane (Securement – Cover)		
Sika Deutschland GmbH	Sarnacol®-2142 S	
Coverboard (Cover Board)		
Georgia-Pacific Gypsum LLC	DensDeck® Prime	
Fastening of Coverboard (Securement – Cover Board)		
Sika Deutschland GmbH	Sarnafast® SBF 6.0 and IF/IG-C-82 x 40	
Thermal Insulation (Insulation – Board Stock)		
Kingspan Insulation GmbH & Co. KG	Therma TR 27	Polyisocyanurate / polyurethane (PIR / PUR)
Vapour- Control Layers / Barriers (Vapor Retarder)		
Sika Deutschland GmbH	Sarnavap® 1000 E Sarnavap® 2000 E Sarnavap® 5000 E SA FR	
Thermal Barrier – optional		
Georgia-Pacific Gypsum LLC	DensDeck® Prime DensDeck®	
Roof Deck (Deck)		
Steel		

() Description according to RoofNav

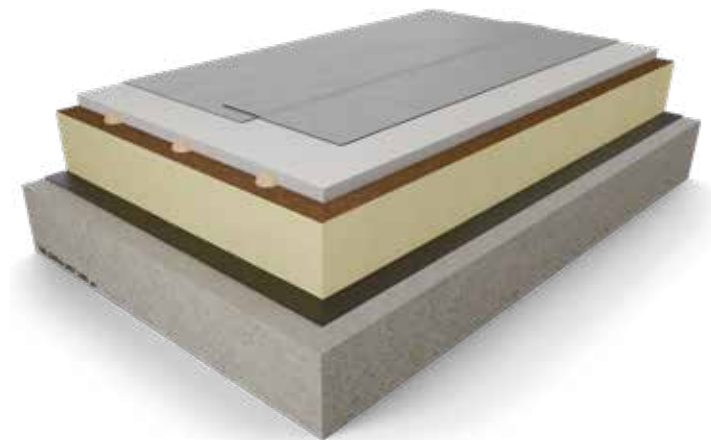


# FPO – SELF ADHERED ROOF SYSTEMS ON CONCRETE DECK

## Sarnafil® SELF ADHERED FPO ROOF WATERPROOFING MEMBRANE WITH COVERBOARD AND THERMAL INSULATION ON CONCRETE DECK

Roofing Waterproofing Membrane (Cover – Single-ply)		
Sika Deutschland GmbH	Sarnafil® TG 76-15 FSA / 18 FSA / 20 FSA	FSA = Felt Self Adhered
Coverboard (Cover Board)		
Georgia-Pacific Gypsum LLC	DensDeck® Prime	
Thermal Insulation (Insulation – Board Stock)		
Kingspan Insulation GmbH & Co. KG	Therma TR 27	Polyisocyanurate / polyurethane (PIR / PUR)
Adhesion of Thermal Insulation (Securement – Board Stock)		
Hot Asphalt		
Substrate Primer		
Concrete Primer, Asphaltic		
Roof Deck (Deck)		
Reinforced Concrete (Structural Concrete)		

() Description according to RoofNav

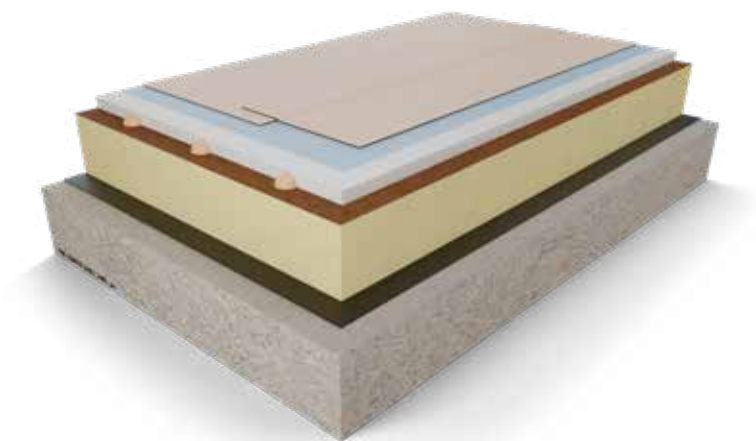


# FPO – ADHERED ROOF SYSTEMS ON CONCRETE DECK

## Sarnafil® SELF ADHERED FPO ROOF WATERPROOFING MEMBRANE WITH COVERBOARD AND THERMAL INSULATION ON CONCRETE DECK

Roofing Waterproofing Membrane (Cover – Single-ply)		
Sika Deutschland GmbH	Sarnafil® TG 76-15 Felt PS / 18 Felt PS / 20 Felt PS	
Adhesion of Roof Waterproofing Membrane (Securement – Cover)		
Sika Deutschland GmbH	Sarnacol®-2142 S	
Coverboard (Cover Board)		
Georgia-Pacific Gypsum LLC	DensDeck® Prime	
Thermal Insulation (Insulation – Board Stock)		
Kingspan Insulation GmbH & Co. KG	Therma TR 27	Polyisocyanurate / polyurethane (PIR / PUR)
Adhesion of Thermal Insulation (Securement – Board Stock)		
Hot Asphalt		
Substrate Primer		
Concrete Primer, Asphaltic		
Roof Deck (Deck)		
Reinforced Concrete (Structural Concrete)		

() Description according to RoofNav



# SIKA ROOFING SYSTEMS WITH FM APPROVED ROOF ASSEMBLIES AND PRODUCTS

## WHERE TO FIND ROOF ASSEMBLIES AND PRODUCTS?

Approved assemblies and products can be found on the following homepage: [FM RoofNav](https://www.fmglobal.com) (fmglobal.com)  
The registration in advance is mandatory.



**Since the FM approved roof assemblies cannot always fully meet the project specific roof build-up requested, technical solution is always subject of a FM Global Engineer acceptance.**





# SIKA ALL IN ONE

WORLDWIDE SYSTEM SOLUTIONS  
FOR CONSTRUCTION AND INDUSTRY

Sika offers the right solutions for all requirements.

Whether by phone, fax, e-mail or in person – we are always at your service.  
Thanks to our partnership with the specialized trade, you can also obtain  
competent advice there.

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