



SikaRoof® ANCHOR SYSTEM IN COMBINATION WITH SOLAR ROOF SYSTEM

THE UNIQUE CONNECTION POINT TO K2 SOLAR ROOF SYSTEMS

BUILDING TRUST



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SikaRoof® ANCHOR SYSTEM IN COMBINATION WITH SOLAR ROOF SYSTEM

CONSIDERATIONS

SOLAR PANELS ON FLAT ROOFS ARE NOWADAYS VERY OFTEN A MUST. When evaluating the installation of a solar roof system on a new or existing single ply roof waterproofing system from Sika, several key guidelines should be followed to ensure the system performance, safety, and longevity.

Weight

Ensure the roof can support the weight of the solar roof system, including modules, mounting racks, wiring. Check with the manufacturer for load-bearing capacity specifications.

Thermal Insulation

Minimum compressive strength for thermal insulation based on 10% deformation. According to standard EN 826.

- ≥ 70 kPa Mineral wool
- ≥ 120 kPa EPS / XPS
- ≥ 120 kPa PIR / PUR

Existing Sika Single Ply Roof Waterproofing Systems – Roof Condition Assessment

A solar roof system typically has a lifespan of + 20 years. This time should be added to the age of the current roof system.



SikaRoof® ANCHOR SYSTEM IN COMBINATION WITH SOLAR ROOF SYSTEM

BENEFITS

LIGHT WEIGHT SOLAR ROOF SYSTEM (< 15KG/M²)

- No additional ballast required
- Suitable for roofs with limited load capacity

SUITABLE FOR ALL KIND OF ROOFS

- Systems for all roof slopes from flat till 35°
- For existing and new roof installations
- Full system compatibility with all Sika single ply roof waterproofing systems

HIGH PERFORMING FASTENING SYSTEM

- Fully secured against movement and wind-uplift forces in all climate conditions

FAST AND EFFICIENT SOLAR ROOF SYSTEM INSTALLATION

- Approximately one SikaRoof® Anchor needed per 2.5 kWp (around six solar panels à 2 m²) – Solar Hybrid System
- Fully modular solar roof system

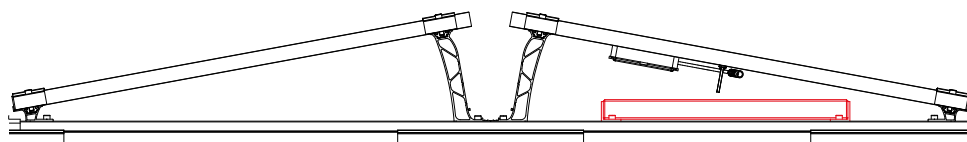


SikaRoof® ANCHOR SYSTEM IN COMBINATION WITH SOLAR ROOF SYSTEM

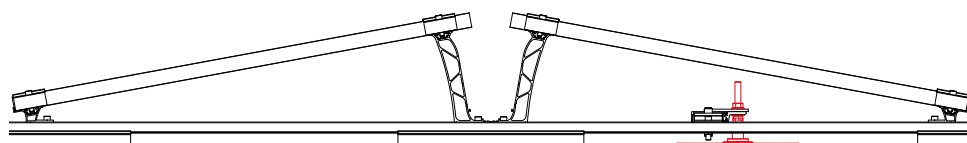
SOLAR ROOF SYSTEM SOLUTIONS

Solar Roof System	Common Ballasted Solution	Solar Hybrid K2 Dome 6 Xpress / Classic SikaRoof® Anchor	Solar Lifted Peak K2 Dome 6 Lifted LS SikaRoof® Anchor	Solar Lifted Parallel K2 Single Rail IFP SikaRoof® Anchor
Roof slope	max. 3°	max. 5°	max. 10°	max. 35°
Roofing membrane compatibility	Not in our responsibility - up to solar roof system supplier	PVC / FPO	PVC / FPO	PVC / FPO
Weight solar mounting system including photovoltaic panels	50-100 kg/m ²	12-15 kg/m ²	15-18 kg/m ²	12-15 kg/m ²
Ballast required	Yes	No	No	No
Secured against movement (horizontal)	No	Yes	Yes	Yes

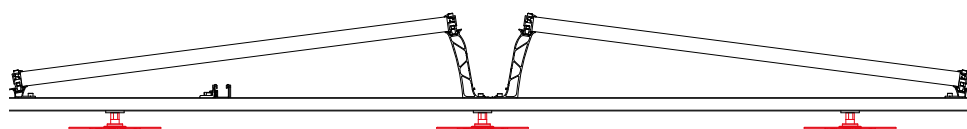
Common Ballasted Solution



Solar Hybrid
K2 Dome 6 Xpress / Classic
SikaRoof® Anchor



Solar Lifted Peak
K2 Dome 6 Lifted LS
SikaRoof® Anchor



Solar Lifted Parallel
K2 Single Rail IFP
SikaRoof® Anchor



SikaRoof® ANCHOR SYSTEM IN COMBINATION WITH SOLAR ROOF SYSTEM

SOLAR HYBRID

K2 DOME 6 XPRESS / CLASSIC AND SikaRoof® ANCHOR

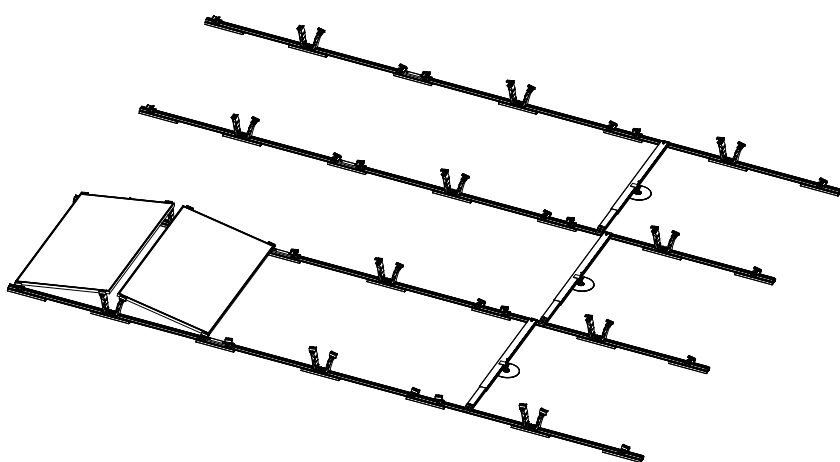
All-Rounder Solution: Versatile system suitable for various applications, from residential to industrial rooftops.

No Ballast Required: Lightweight system eliminates the need for additional weight, reducing structural load and installation complexity.

Optimized for Low Slopes: Works efficiently on surfaces with up to 5° inclination, ensuring stability and performance.

Easy & Fast Installation: Lightweight design and simplified mounting process for quicker deployment. Around one SikaRoof® Anchor per six panels.

Durability & Longevity: Built with robust materials to withstand environmental conditions with minimal maintenance.



SikaRoof® Anchor with SikaRoof® M12 Levelling Set



SikaRoof® ANCHOR SYSTEM IN COMBINATION WITH SOLAR ROOF SYSTEM

SOLAR LIFTED PEAK

K2 DOME 6 LIFTED LS AND SikaRoof® ANCHOR

All-Rounder Solution: Versatile system suitable for various applications, from residential to large-scale commercial rooftops.

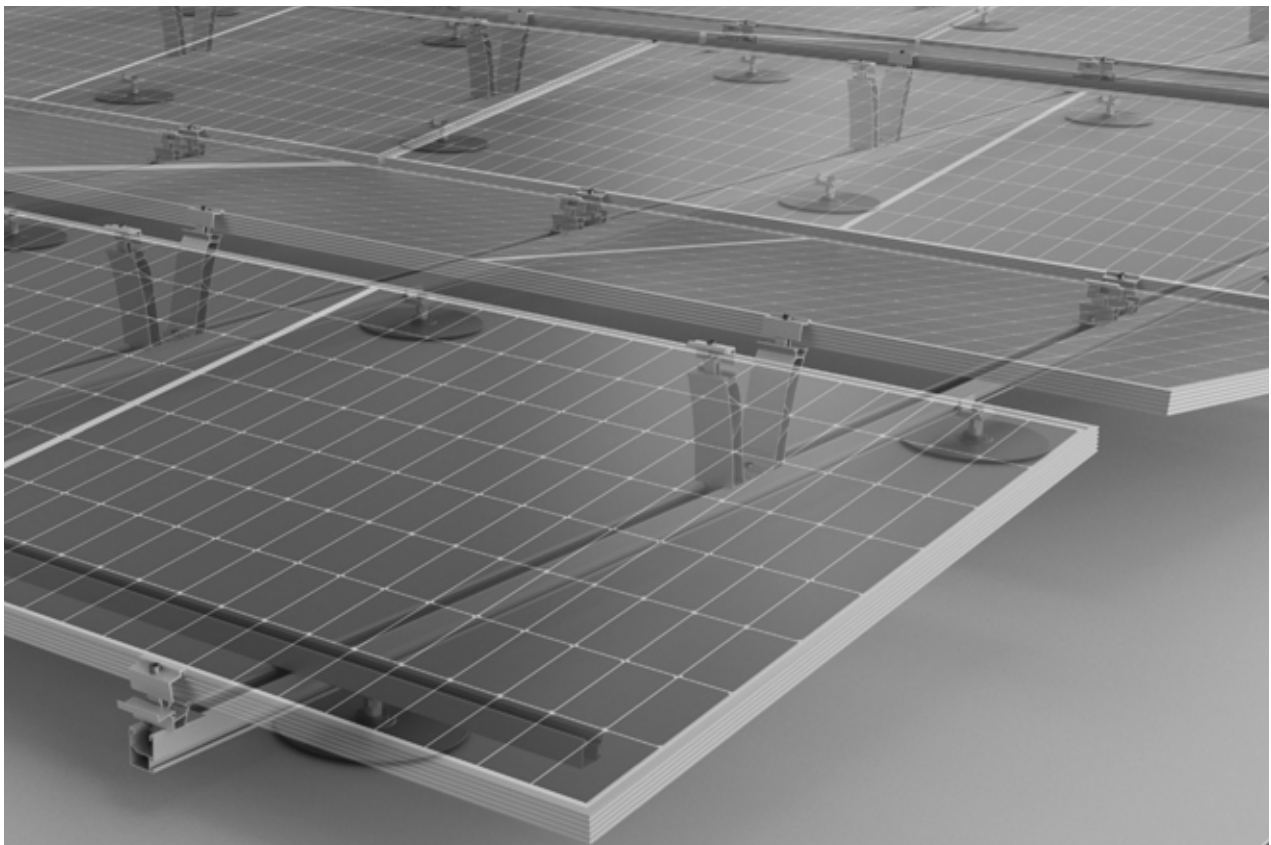
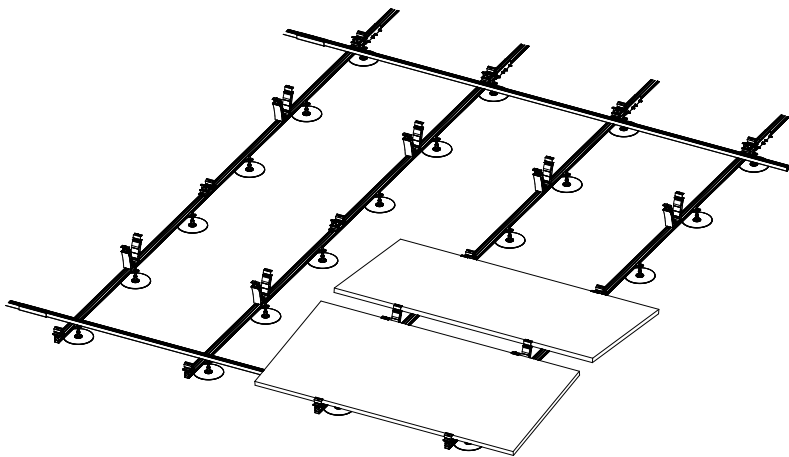
No Ballast Required: Lightweight system eliminates the need for additional weight, reducing structural load and installation complexity.

Optimized for Low Slopes: Designed for roofs with up to 10° inclination, ensuring stability and efficiency.

Free Water Management: Allows unobstructed water drainage, preventing ponding and ensuring long-term roof integrity.

Accessibility to Roof Waterproofing Membrane: Enables easy inspection and maintenance of the roof waterproofing membrane without system removal.

Durable & Low Maintenance: Built with robust materials for long-term reliability and minimal upkeep.



SikaRoof® ANCHOR SYSTEM IN COMBINATION WITH SOLAR ROOF SYSTEM

SOLAR LIFTED PARALLEL

K2 SINGLE RAIL IFP AND SikaRoof® ANCHOR

All-Rounder Solution: Versatile system suitable for various roof types and applications.

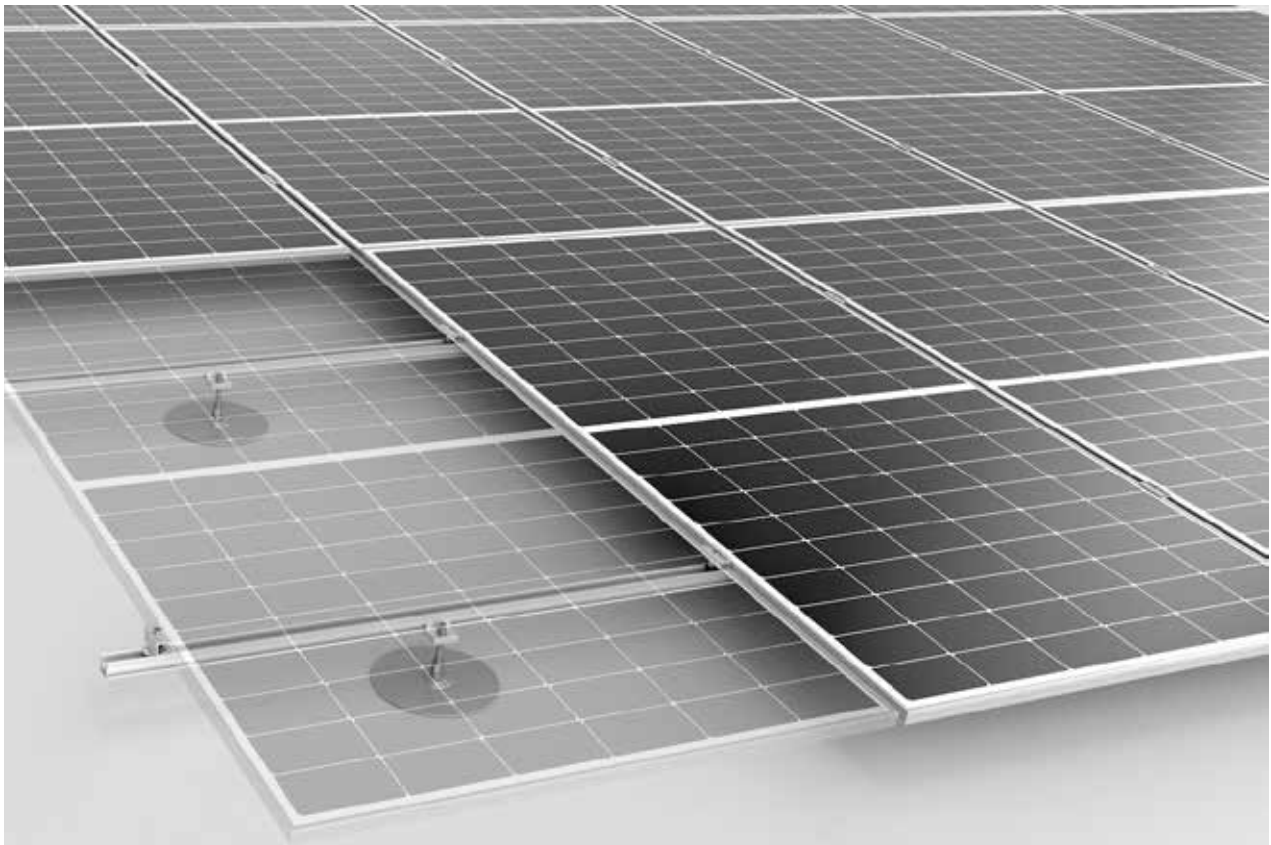
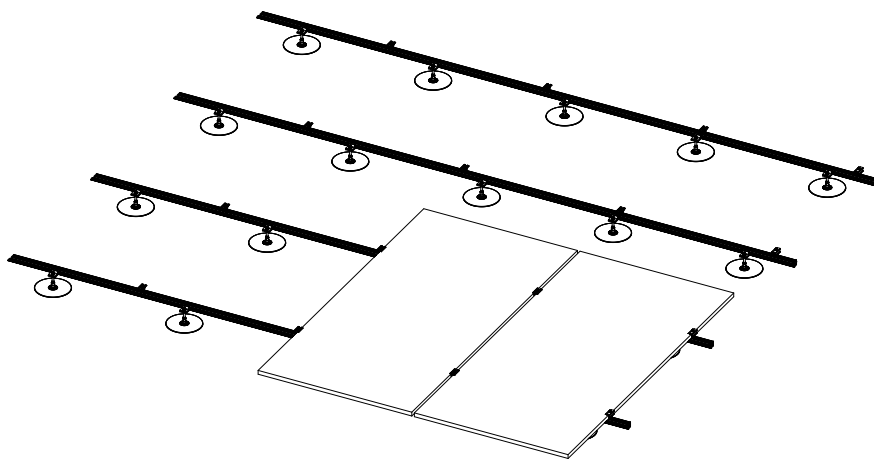
No Ballast Required: Lightweight system eliminates the need for additional weight and reducing structural load.

Optimized for High Slopes: Secure and efficient installation on roofs with inclination up to 35°.

Free Water Management: Unobstructed drainage prevents water accumulation and protecting roof integrity.

Roof Parallel System: Panels are mounted flush with the roof, ensuring aerodynamic stability and aesthetic integration.

Durable & Low Maintenance: Built with high-quality materials for long-term reliability.

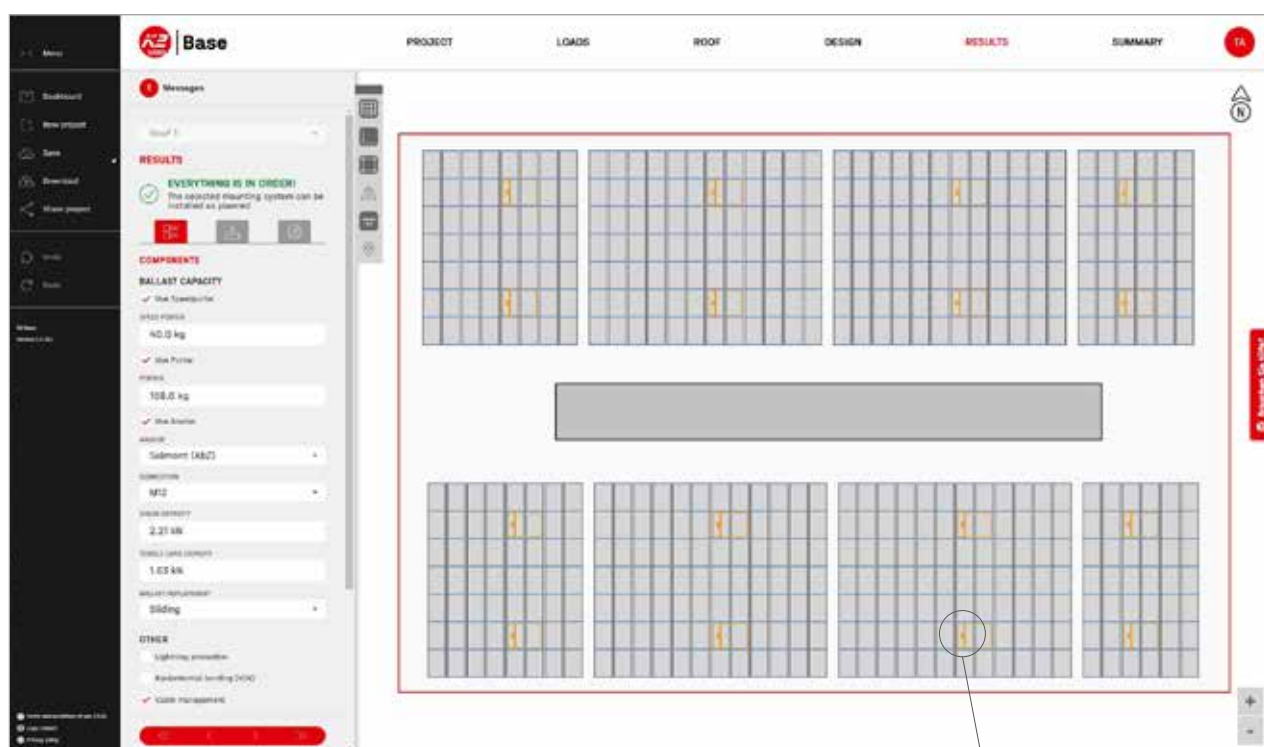


SikaRoof® ANCHOR SYSTEM IN COMBINATION WITH SOLAR ROOF SYSTEM

K2 BASE – PLANNING AND CALCULATION TOOL

K2 Base has a dashboard for efficient project management. Google Maps integration and graphic drawing tools support you with planning and calculation for your specific solar roof system in combination with SikaRoof® Anchors.

In just five steps, you can determine the optimal design of your K2 mounting system and the configuration of your solar roof system.



SikaRoof® Anchor

SikaRoof® ANCHOR SYSTEM IN COMBINATION WITH SOLAR ROOF SYSTEM

PRODUCT INFORMATION SikaRoof® ANCHOR AND M12 LEVELLING SET

The SikaRoof® Anchor system for FPO or PVC roof waterproofing systems opens a broad field of solar application on roofs. It creates a secure and watertight connection point from the roof waterproofing system to the solar roof system. Sika recommends the solar mounting systems from K2.



SikaRoof® Anchor 250 CR FPO or PVC

Due to the M12 inside thread, it is easy to assemble a broad range of solar roof constructions onto the SikaRoof® Anchor 250 CR.



SikaRoof® Anchor Washer 140

It is completely made of stainless steel with 2.00 mm thickness. This ensures strong and durable connection.



Sarnafast® Fastener SBF-6.0

Hardened carbon steel fastener with or without Sarnabar® Tube SBT-20 into corrugated steel, concrete and plywood / OSB decks.

Diameter: 6.00 mm
Head diameter: 9.80 mm
Available lengths: 35-300 mm
Drive: Drive Torx T25
Corrosion resistance:
15 cycles according to Kesternich



Sarnabar® Tube SBT-20

Polyamide tube (PA 6) in combination with Sarnafast® Fastener SBF-6.0.

Diameter: 20 mm (at collar)
Hole diameter: 12.40 mm
Available lengths: 40-400 mm
Corrosion resistance:
30 h conditioned in conditioning cell



SikaRoof® M12 Levelling Set

Stainless steel SikaRoof® M12 Levelling Set is used to overcome different heights in combination with the SikaRoof® Anchor and the FixPro Set from K2 (Solar Hybrid).

Set consists of: M12 thread rod with 100 mm length M12 nut and washer

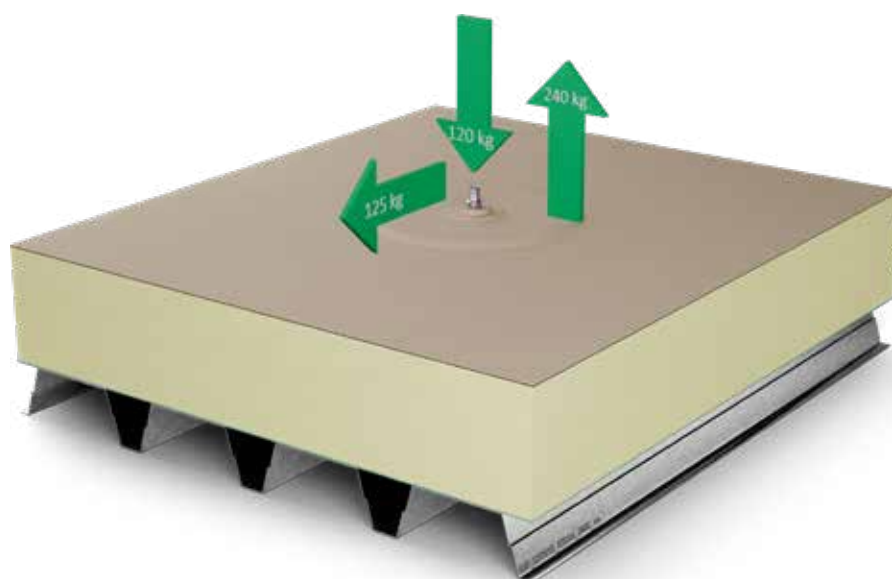
Features	Advantages	Benefits
Anchor welding flange Ø 250 mm	Easy to hot-air weld	Secure watertight connection to the roof waterproofing membrane
Anchor welding flange made of Sika compound	Correspond with the Sika Roof Application Manual	Resistant to weathering and UV exposure
Various colors of anchor welding flange available	Fits with the color of the roofing membrane	No visible color deviation on the roof surface
All metal parts are made of stainless steel	No corrosion expected	Long lifespan
Washer with fastener holes 7.20 and 15.35 mm	Also suitable for Sarnabar® Tube fastening system	Wider range of thermal insulation can be used
Anchor arranged as point fastening	Free waterflow to the rainwater outlets is ensured	No additional weight on the roof due to ponding water

SikaRoof® ANCHOR SYSTEM IN COMBINATION WITH SOLAR ROOF SYSTEM

BASIC DESIGN SPECIFICATION



The specification for the quantities and positioning of the SikaRoof® Anchor points are calculated by the solar designer / installer. This is based on the size of the solar panels, possible snow load and the project-specific substructure with the defined distances.

Technical Specification	Data	Description
Washer plate	Ø 140 mm	Octagonal, stainless steel 2 mm In combination with mineral wool thermal insulation, fastener / tube combination shall be used
Anchor welding flange	Ø 250 mm	FPO or PVC
Compressive stress / load	≤ 140 kg ≤ 120 kg	EPS / XPS / PIR / PUR thermal insulation ≥ 120 kPa with 10% compressive strength Mineral wool thermal insulation ≥ 70 kPa with 10% compressive strength
Wind-uplift	2400 N / 240 kg	4 fastener (OSB, metal or concrete substrate)
Horizontal shear force	≤ 125 kg	OSB, metal or concrete substrate
Internal thread	M12	Stainless steel
Height above membrane	42 mm	



SikaRoof® ANCHOR SYSTEM IN COMBINATION WITH SOLAR ROOF SYSTEM


PRODUCT PORTFOLIO SikaRoof® ANCHOR AND M12 LEVELLING SET

Article	Description	Roof System	Color / Material	Product
760750	SikaRoof® Anchor 250 CR	FPO	RAL 7040	
761533	SikaRoof® Anchor 250 CR	FPO	Beige	
764528	SikaRoof® Anchor 250 CR	FPO	RAL 9016	
795332	SikaRoof® Anchor 250 CR	FPO	RAL 7012	
764642	SikaRoof® Anchor 250 CR	PVC	Light grey	
765146	SikaRoof® Anchor 250 CR	PVC	RAL 9016	
795333	SikaRoof® Anchor 250 CR	PVC	Lead grey	
759756	SikaRoof® Anchor Washer 140	All	Stainless steel	

All products packed in cardboard box with 10 pieces.

Different (depending on length)	Sarnafast® Fastener SBF-6.0	All	Hardened carbon steel	
Different (depending on length)	Sarnabar® Tube SBT-20	All	Polyamide (PA 6)	

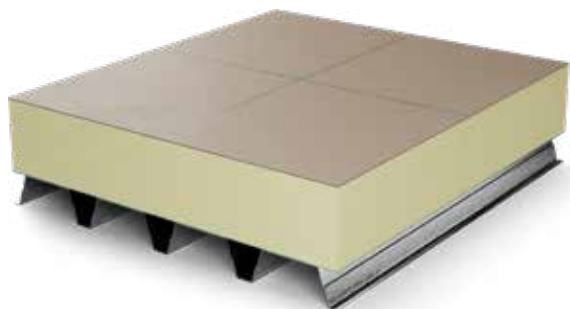
Packaging according to length.

821475	SikaRoof® M12 Levelling Set	All	Stainless steel	
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One box contains 20 pieces M12 thread rod, 60 pieces M12 nut and 20 pieces washer.

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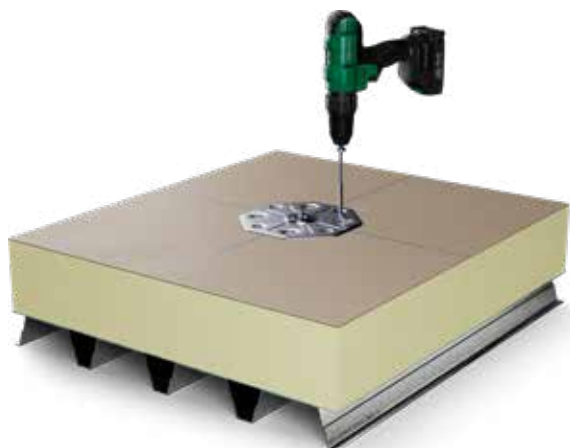
ANCHOR INSTALLATION



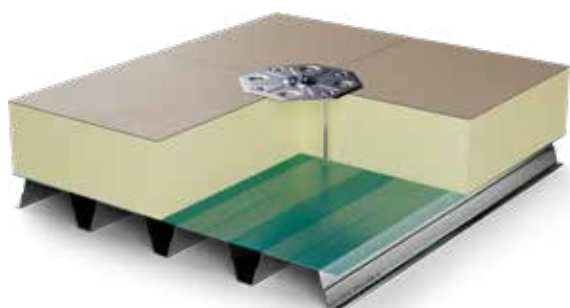
Mark the correct position for the SikaRoof® Anchor Washer 140 (fastener plate) on the roofing membrane according to the layout plan.



Place the SikaRoof® Anchor Washer 140 on the marking lines.



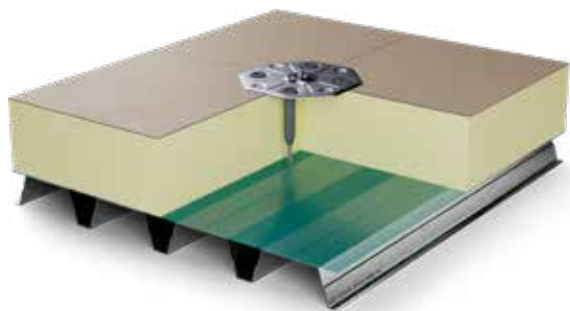
Fasten the SikaRoof® Anchor Washer 140 with the appropriate fasteners.



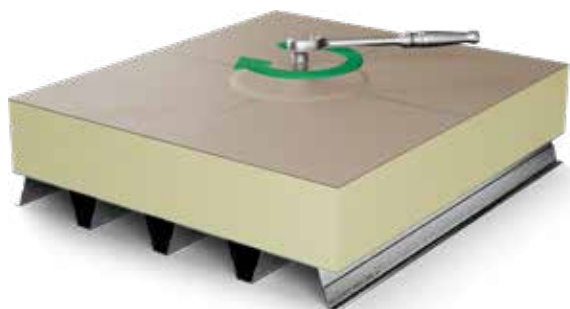
Sarnafast® Fastener SBF-6.0 x length
Metal: Roof build-up + 20 mm
OSB / Plywood: Roof build-up + 40 mm
Concrete: Roof build-up + 40 mm

SikaRoof® ANCHOR SYSTEM IN COMBINATION WITH SOLAR ROOF SYSTEM

ANCHOR INSTALLATION



Combination with tubes and fastener
Sarnabar® Tube SBT-20 x length
Sarnafast® Fastener SBF-6.0 x length



Screw-on the SikaRoof® Anchor 250 CR on the SikaRoof® Anchor Washer 140 and tighten with a spanner no. 19.



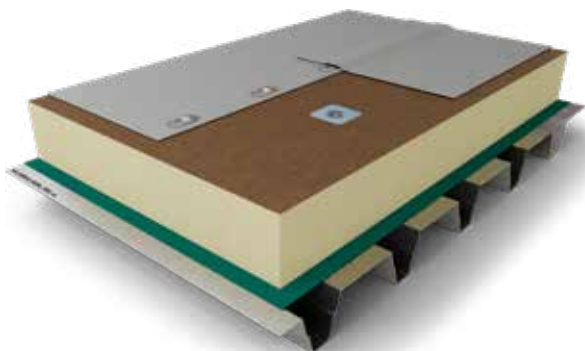
Clean the roof waterproofing membrane (marking lines) in the area of the hot-air welding seam.



Hot-air weld the SikaRoof® Anchor 250 CR onto the roof waterproofing membrane according to the Sika Roof Application Manual.

SikaRoof® ANCHOR SYSTEM IN COMBINATION WITH SOLAR ROOF SYSTEM

SECURITY THROUGH SYSTEM APPROACH



ROOF WATERPROOFING SYSTEMS

The life expectancy of more than 20 years requires a robust and durable roof waterproofing system. Minimum roof waterproofing membrane thickness should be 1.80 mm.



COVERBOARD

Use of DensDeck® coverboard since solar roof system increase foot traffic, point loadings and fire hazard on the roof substantially.



MONITORING

The smooth operation of the solar roof system requires close roof waterproof monitoring of the key function to avoid potential downtime production.



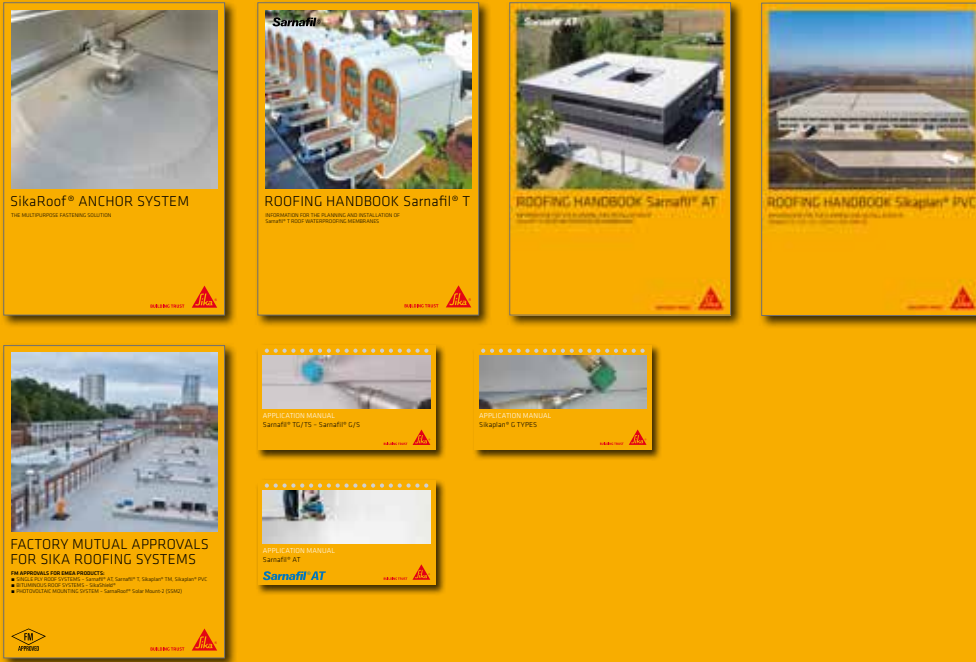
Roof Monitoring



SYSTEM ACCESSORIES

Comprehensive range of coordinated system accessories for the total roof waterproofing along build-up and detailing.

FURTHER ROOFING PUBLICATIONS AVAILABLE FROM SIKA



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 most current local Product Data Sheet prior to any use.



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