Connecting Strength

Mounting systems

Content

Everything at a glance – find the right system:

Pitched roof	Page	Pantile	Plain Tile	Slate	Trapezoidal sheet metal	Trapezoidal sandwich panel	Corrugated sheet metal	Corrugated fibre cement	Standing seam	Bitumen
K2 SingleRail System	6	●	●	○	○	○	●	●	●	●
K2 SolidRail System	7	●	●	●	●	●	●	●	●	○
K2 Insertion System	8	●	●	●	●	●	●	●	○	○
K2 MultiRail/MultiRail CSM System	9	○	○	○	●	○	●	○	○	○
K2 MiniRail System	10	○	○	○	●	○	○	○	○	○
K2 BasicRail System	11	○	○	○	●	●	○	○	○	○

Flat roof	Page	Green roof	Gravel	Concrete	Membrane	Trapezoidal sheet metal	One-sided	Two-sided
K2 Dome 6 System	14	●	●	●	●	●	●	●
K2 Dome Zero System	15	●	●	●	●	○	○	○
K2 TiltUp Vento System	16	●	●	●	○	○	●	○
K2 GreenRoof Vento System	17	●	●	○	○	○	●	●

Warranty

We offer a 12-year warranty on all K2 components in the system:
k2-systems.com/en/warranty

Facade

	Page	Concrete/masonry*	Trapezoidal sandwich panel	Trapezoidal sheet metal	Corrugated sheet metal
K2 WallPV FacadeRail System	20	●	○	○	○
K2 WallPV CarrierRail System	21	○	●	○	○
K2 WallPV MultiRail System MultiRail CSM System	22	○	○	●	●
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Ground-mounted

	Page
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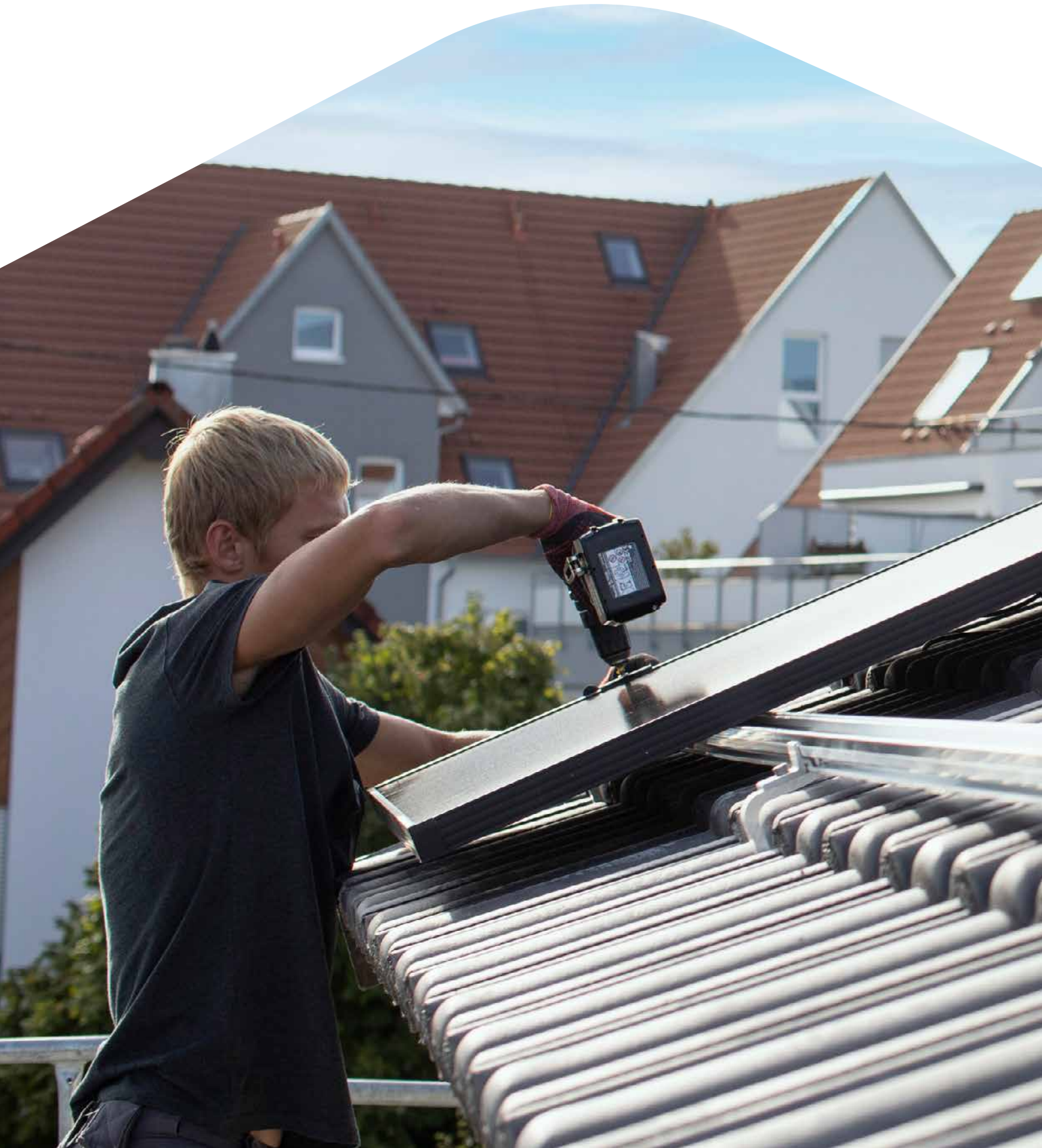
Carport

	Page
K2 Carport System	30

* Load tests on masonry necessary

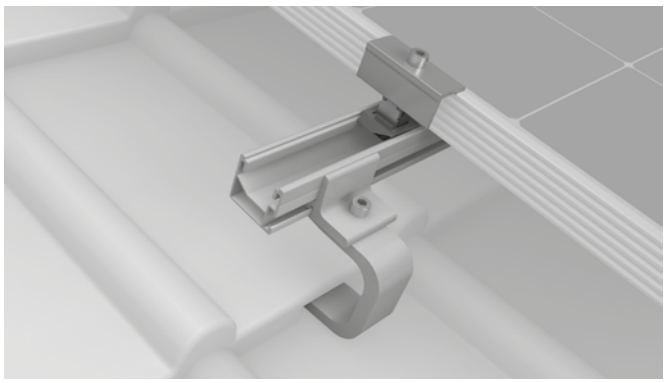
● Suitable ○ Unsuitable



Pitched Roof

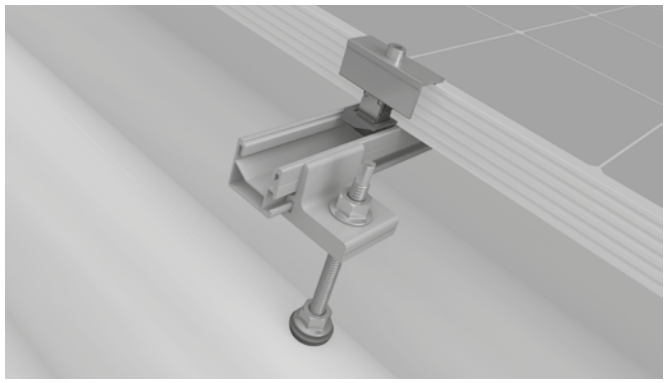
K2 SingleRail System

Extensive range of rails suitable for various load cases and many spans. Direct lateral connection to the rail enables fast and cost-effective installation. Individual height adjustment provides additional flexibility during installation.



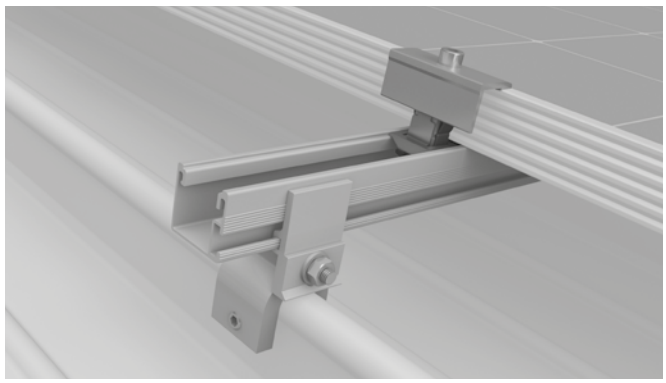
Roof tiles and slate

- Roof hooks for the majority of clay tiles, pantiles and concrete roof tiles
- Simple height adjustment on base plate, cantilever or on slotted hole connection
- 80% of all applications can be solved with SingleHook 3S or 4S



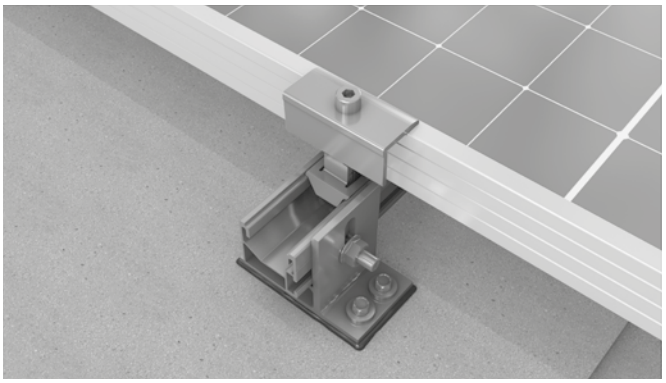
Corrugated fibre cement and corrugated sheet metal

- For all corrugated fibre cement and corrugated sheet metal roofing with wooden substructure
- Secure sealing on the roofing
- Climber connection
- abZ (general technical approval) in Germany



Standing seam

- Multitude of application possibilities: Double standing seam, angled seam, snap seam and round seam
- Direct lateral rail connection
- Penetration-free assembly



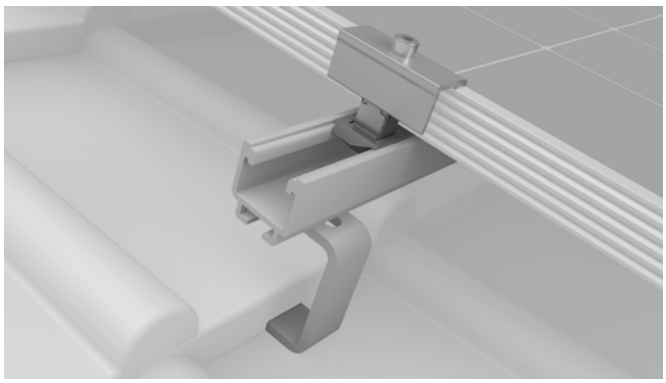
Bitumen

- Mounting with the SpliceFoot
- Fastening in the rafter or in the wooden boarding
- Watertight sealing due to butyl layer pre-mounted on the component

Further information, **all technical data and components**

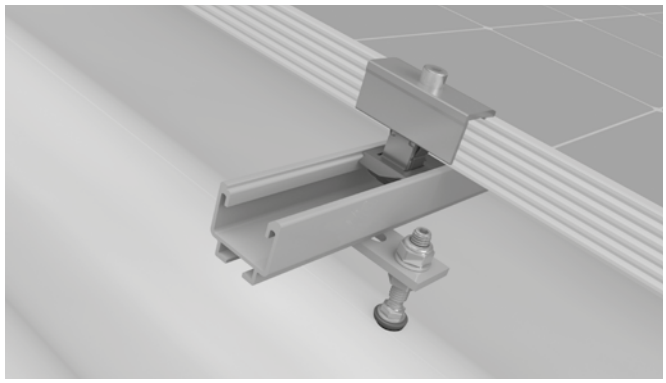
K2 SolidRail System

Extensive range of rails suitable for various load cases and many spans. Can be easily and quickly installed on brick, corrugated sheet metal and sheet metal folds.



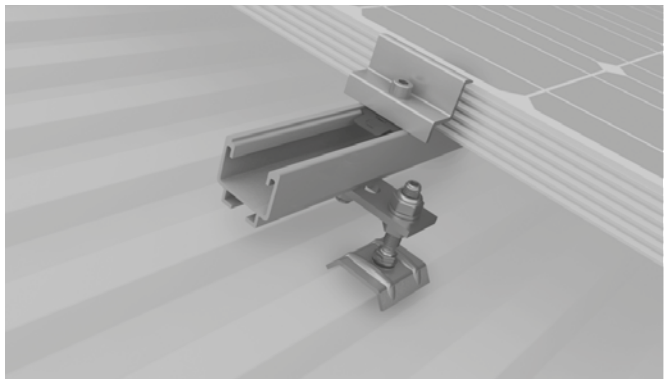
Roof tiles and slate

- Roof hooks for the majority of clay tiles, pantiles and concrete roof tiles
- Stainless steel roof hooks for tiles with low machining possibilities
- Flexibility is ensured by the adjustable connection in order to be able to install even with narrow rafters or different heights



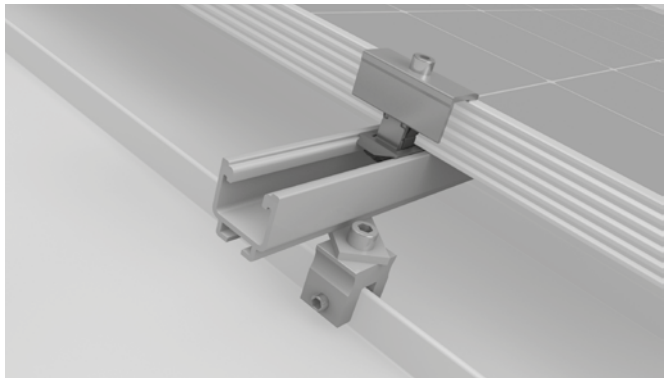
Corrugated fibre cement and corrugated sheet metal

- For all corrugated fibre cement and corrugated sheet metal roofing with timber or steel substructure
- Secure sealing at the roofing
- abZ (general technical approval) in Germany



Trapezoidal sheet metal

- Mounting with solar fasteners on trapezoidal sheet metal and sandwich element roofing.
- Fastening in the steel or wooden substructure
- abZ (general building approval) in Germany.



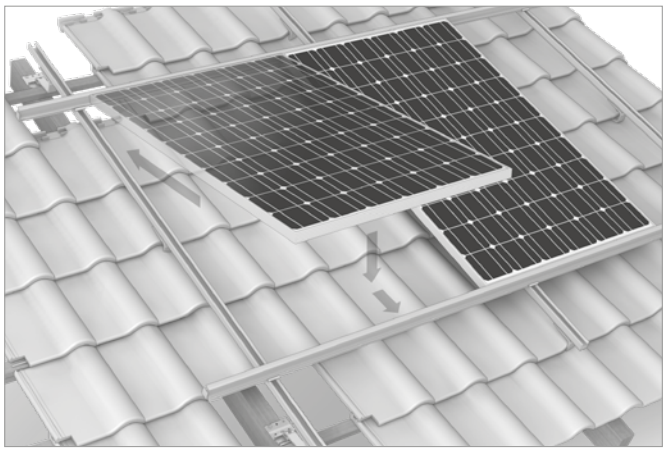
Standing seam

- Many application possibilities: Double standing seam, angled seam, snap seam and round seam
- Penetration-free assembly

Further information, **all technical data and components**

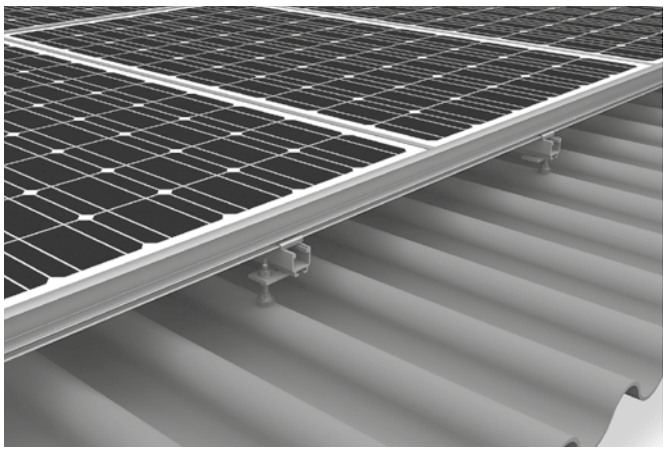
K2 Insertion System

For a shapely overall appearance without the need for module clamps. The closed surface forms an attractive roof construction with no gaps or additional edges. Lightning-fast installation of modules due to unique rail profile without screws, module clamps or assistance.



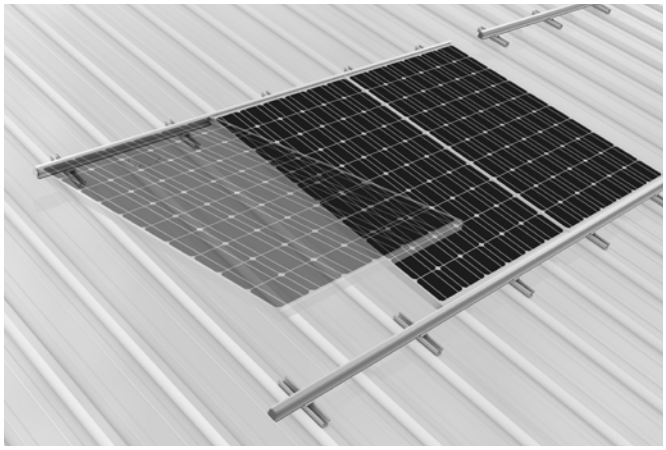
Roof tiles and slate

- Roof hooks for majority of clay tiles, pantiles and concrete tiles as well as roofing tiles
- Simple height adjustment on base plate or bracket
- 80% of all applications can be solved with SolidHook 3S+ or 4S+ solvable



Corrugated fibre cement and corrugated sheet metal

- For all corrugated fibre cement and corrugated sheet metal roofing with wooden substructure
- Climber connection possible
- abZ (general technical approval) in Germany
- Further connection with MultiRail CSM on corrugated sheet metal possible



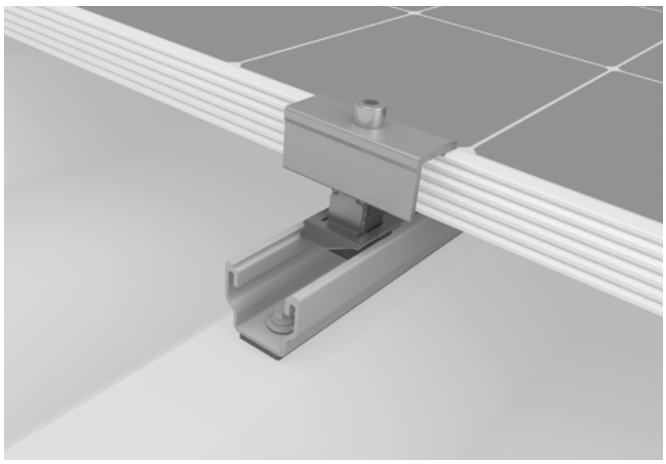
Trapezoidal sheet metal

- Connection with MultiRail mounting rail
- Simple assembly and quick planning with few components

Further information,
all technical data and components

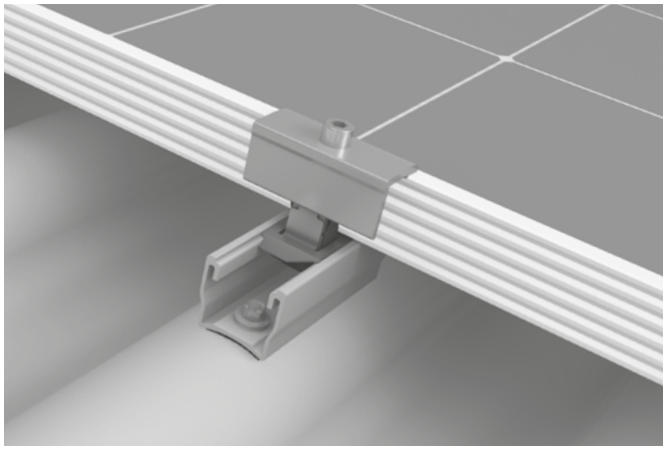
K2 MultiRail System

Roof connection and mounting rail in one component. Quick planning with little use of materials is possible.
The system can be easily installed on pitched roofs from 5 – 75° with trapezoidal sheet metal and corrugated sheet metal. No pre-drilling or time-consuming fixing in the roof substructure is necessary during installation.



K2 MultiRail

- Mounting with only one component on trapezoidal sheet metal and sandwich elements
- Short rail available in different lengths for different applications such as high load requirements



K2 MultiRail CSM

- Quick and easy installation on corrugated sheet metal
- Various lengths available

System-Highlights

With elevation for more yield

- Combination of the MulitRail and components from our flat-roof system Dome 6
- Better irradiation angle and thus higher yield

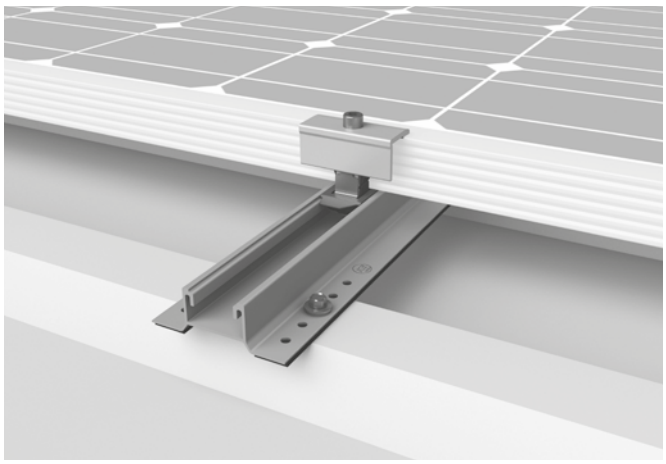
RailUp for more profit

- Elevation results in improved ventilation of the modules and thus the possibility for higher yields
- Easy installation of micro-inverters and power optimisers

Further information,
all technical data and components

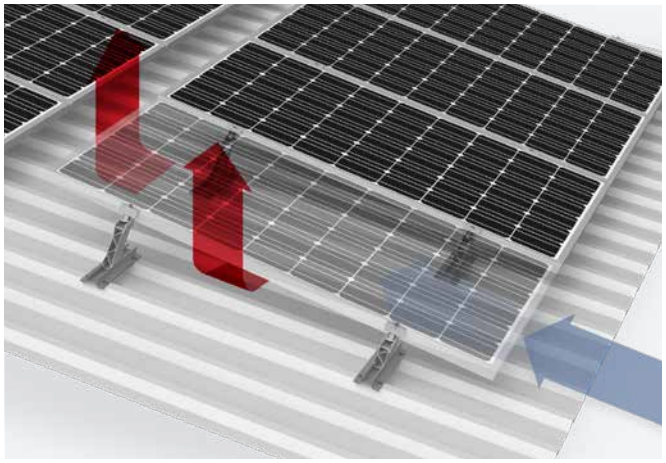
K2 MiniRail System

The system's compact dimensions allow for small packing dimensions and low weight. This results in optimised storage and easy transport. No pre-drilling or time-consuming fixing in the roof substructure is necessary during installation.



K2 MiniRail MK2

- Simple and fast installation due to a small range of components required
- MK2 rail channel enables mounting with the same module clamp on all pitched roof systems



K2 MiniFive MK2

- Additional 5° inclination possible with easy to install MiniFive MK2
- Improved rear ventilation and more yield
- Optimisation of module inclination and angle of incidence

System-Highlights

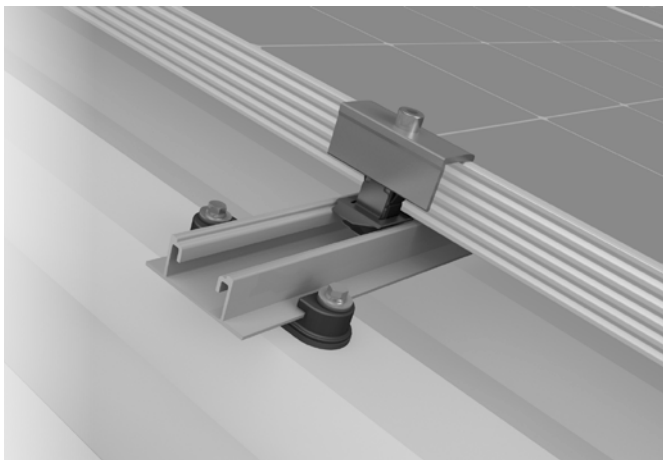
MiniRail 60

- Greater distance between module and trapezoidal sheet (60 mm)
- Optimiser and micro inverter can be installed underneath
- Improved rear ventilation and higher module output

Further information,
all technical data and components

K2 BasicRail System

Only four installations steps required and suitable for high loads. Controlled thermal expansion in rail direction through the floating rail fixation of the BasicClip. The system has general building authority approval (abZ) in Germany. No pre-drilling or time-consuming fixing in the roof substructure is necessary during installation.



Controlled linear expansion

- The floating rail fixation of the BasicClip results in a controlled thermal expansion of the rail.
- No transfer of forces to the roof cladding

System-Highlights

Landscape mounting option

- Landscape mounting is possible with the K2 AddOn
- Seamless module blocks without additional rail layer

Mounting on sandwich panels

- BasicRail System suitable for sandwich roofs
- abZ (general building authority approval) for panels from different manufacturers
- High installation speed of the BasicRail system and direct fastening in the sandwich elements

RailUp for more yield

- Elevation results in improved ventilation of the modules and thus the possibility for higher yields
- Easy installation of micro-inverters and power optimisers

With inclination for more yield

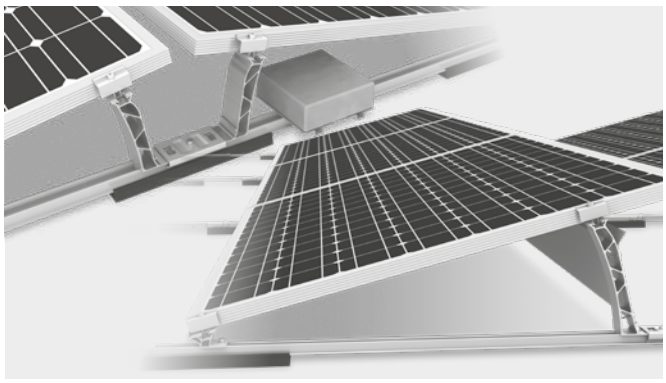
- Combination of the BasicRail system with the Peak from our Dome 6 flat roof systems
- Increased yield with better angle of incidence

Further information,
all technical data and components

Flat Roof

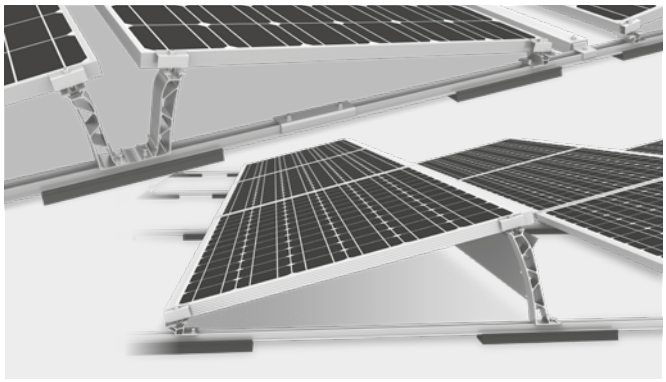
K2 Dome 6 System

Suitable for the majority of flat roof coverings. Ballast optimisation through good aerodynamics and wind tunnel tests. A secure anchoring with fixed connection can be carried out on roofs with more than 3° or low load reserves. With an elevation of 15°, a better angle of incidence can be created.



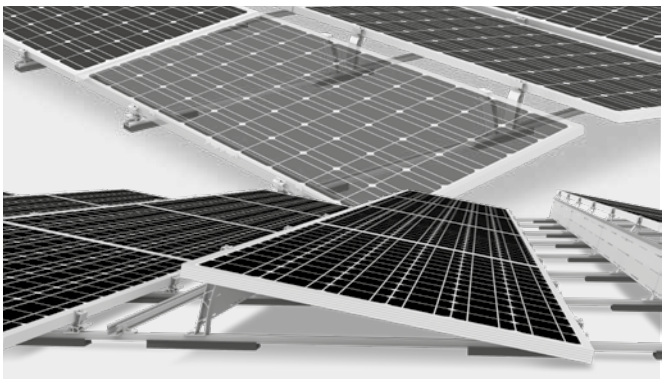
K2 Dome 6 Xpress

- Super-fast assembly in just a few steps
- Time-saving alignment of the rails with Dome Speed Spacer
- Snap-in function for peaks and tool-free rail connectors
- Optimisation of the angle of incidence through the option of elevation to 15°



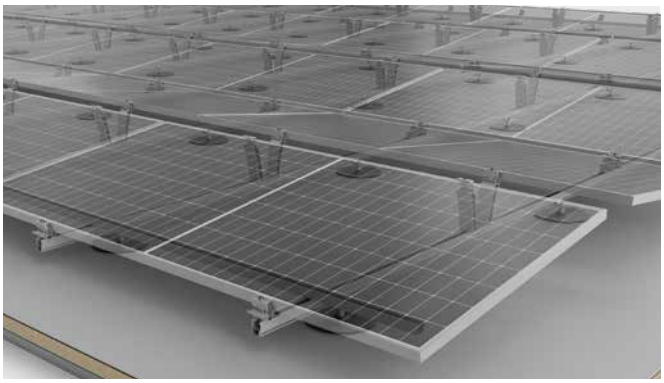
K2 Dome 6 Classic

- For mounting standard size PV modules and flexible row spacing
- Easy mounting with many obstacles for full utilisation of the roof area



K2 Dome 6 Classic LS

- Suitable for higher wind/snow loads and for larger modules up to 2390 × 1170 mm.
- Mounting on the long side of the module



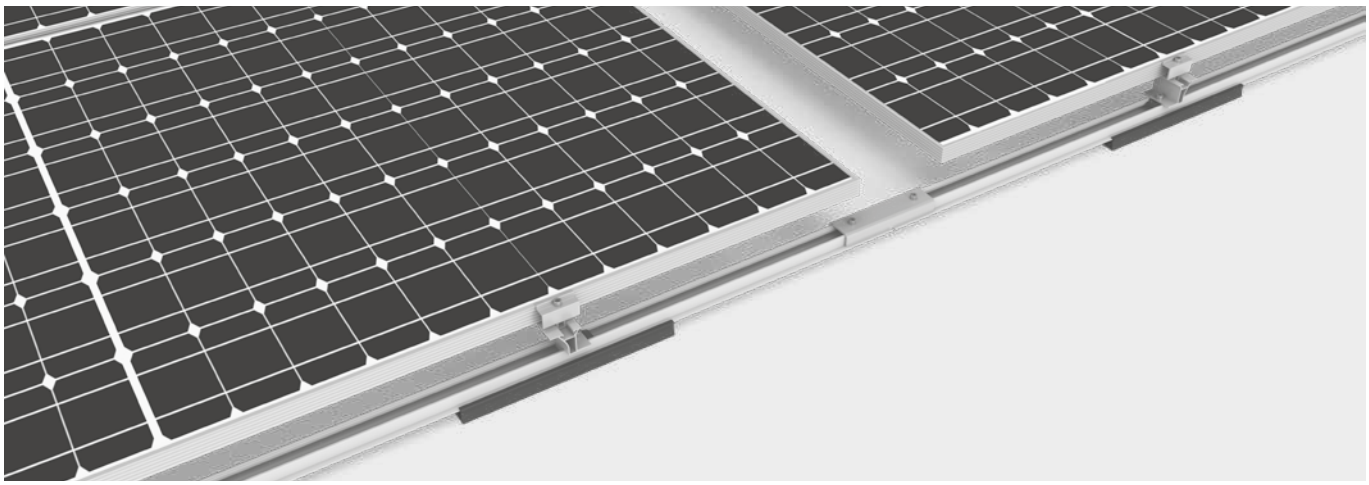
K2 Dome 6 Lifted LS

- Fastening with roof anchors for raised installation above the roof membrane
- Particularly suitable for roofs with low load reserves
- Compatible with multiple roof anchors types
- Existing components for easy installation

Further information,
all technical data and components

K2 Dome Zero System

For roof-parallel mounting using many of the Dome 6 components. A secure anchorage with fixed connection can be made for roofs with more than 3° and low load reserves.



System-Highlights

Roof pitch up to 10°

- Dome FixPro S fixed connection enables use on roofs with a pitch of up to 10°.

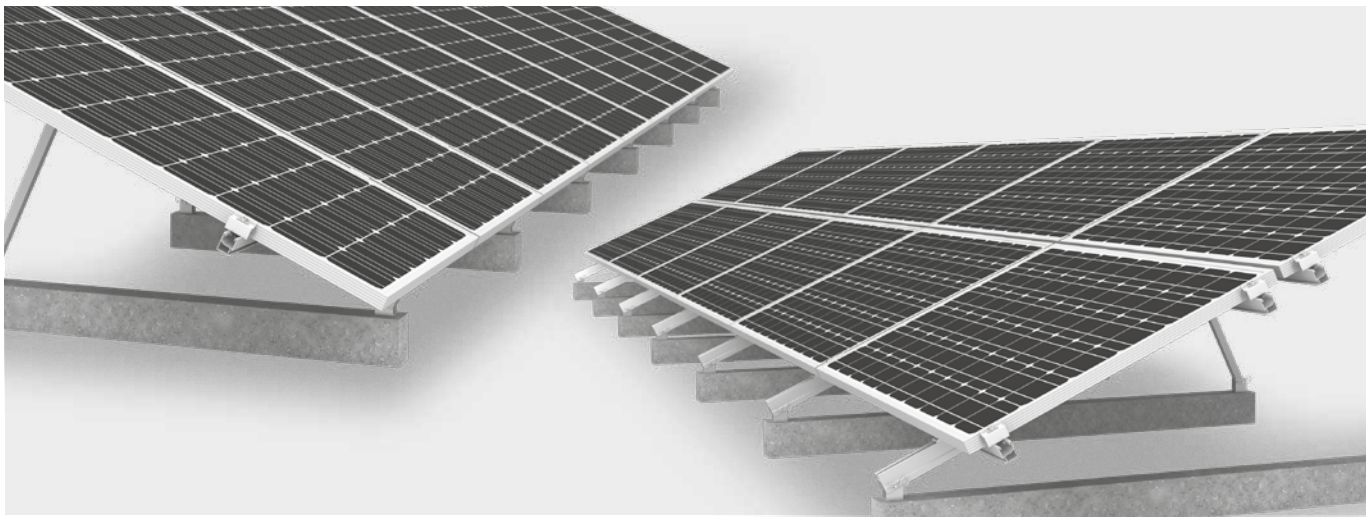
Few components

- Majority of components compatible with Dome 6 System
- For the elevation a 0° peak is used

Further information,
all technical data and components

K2 TiltUp Vento System

Many different module arrangements as well as 3 different inclination angles (20°, 25°, 30°) are possible. Due to the flexible connection via ballasting with concrete foundation or as direct connection with concrete anchors, it can be mounted on many roofs.



System-Highlights

Different roof connections

- Ballasted with concrete foundation
- Direct connection with concrete anchors possible

3 different inclination angles

- All module arrangements available in 3 inclination angles: 20°, 25° and 30°
- Component connections are the same throughout

Different module designs

- Portrait/landscape mounting possible with the same components
- Clamping on the short or long module side

Few components

- Sophisticated system with well thought-out connections with few components
- Enabling systemic storage

Further information,
all technical data and components

K2 GreenRoof Vento System

Clever flat roof solution for green roofs. Flexibility in terms of module orientation, inclination angle and system geometry. Good integration into green roofs.

System-Highlights

Flexible installation

- Module orientation in portrait or landscape
- Inclinations at 10° and 15°
- System geometry in S-shape, A-shape or V-shape
- Spacing between module rows can also be variably positioned for east-west installations, enabling flexible maintenance walks

Good integration into green roofs

- Distance of the module to the roof surface and system geometry enable accessibility below the modules and thus easy maintenance of the green roof

K2 modular concept

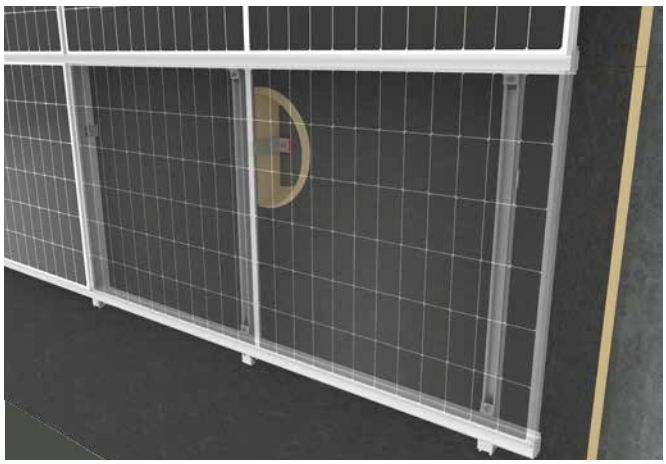
- Existing components of the K2 TiltUp Vento system

Further information,
all technical data and components

Facade

K2 WallPV FacadeRail System

The flexible solution for concrete facades.



Wall brackets for flexible connection to concrete facades

- Wall brackets are anchored in the concrete
- Connection to K2 FacadeRail and K2 InsertionRail

System-Highlights

Combination of RVF and ETICS

- Fastening to a rear-ventilated facade (RVF) or rainscreen cladding, terminations must be provided by the customer
- Installation on external thermal insulation composite systems (ETICS) is possible when the facade is newly insulated

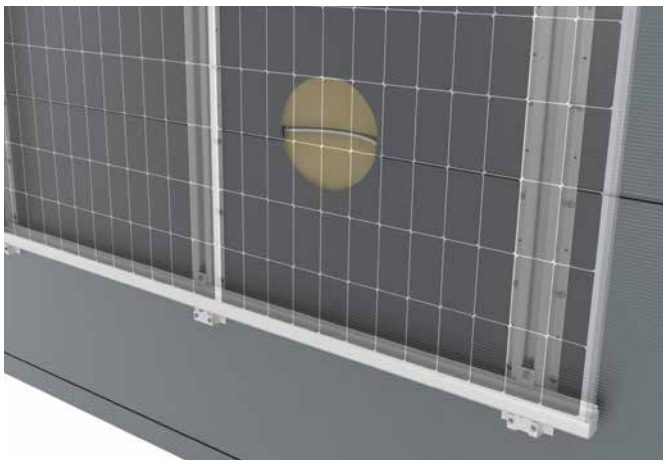
Closed surface with insert rails

- Elegant overall appearance thanks to silver or black insert rails
- Lightning-fast and secure installation with guaranteed rear ventilation

Further information,
all technical data and components

K2 WallPV CarrierRail System

Facades with sandwich panels are a major field of application for vertical photovoltaic systems, and our solution is the CarrierRail system for FischerTHERM Carrier® panels from Fischer Profil GmbH.



Facades with FischerTHERM Carrier®

- The solution for facades with FischerTHERM Carrier® sandwich panels on large commercial buildings
- Can be combined with facade cladding

System-Highlights

Fast, secure fixing

- Installation with building authority-approved sheet metal screws that are tried and tested in the rooftop sector
- Simple installation thanks to the MK2 rail channel and familiar K2 installation principles

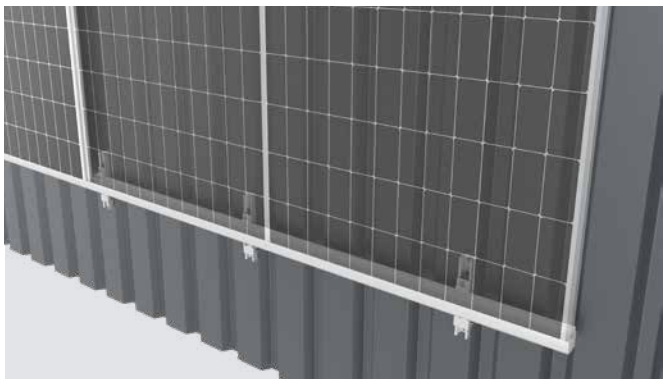
Closed surface with InsertionRail

- Elegant overall appearance thanks to silver or black InsertionRail
- Lightning-fast and safe installation with guaranteed rear ventilation

Further information,
all technical data and components

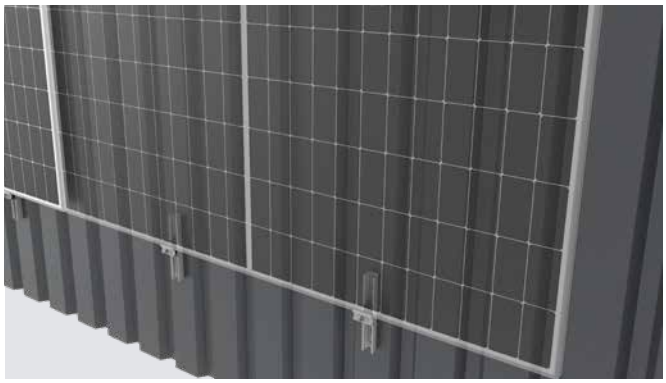
K2 WallPV MultiRail System

One of the most common facade claddings in the Industrial and agricultural industries is trapezoidal or corrugated sheet metal. For these materials, we rely on our tried and tested MultiRail. We offer an efficient and easy to install wall fastener.



For large scaling in commercial construction

- Closed surface with InsertionRails creates an attractive overall appearance
- For lightning-fast and secure installation of the modules on the facade



For smaller systems

- Efficient and flexible installation of smaller systems (workshops or sheds) with the K2 FacadeClamp

System-Highlights

Established system

- Many advantages and high safety thanks to proven system from the rooftop sector
- Simple installation thanks to wall connection and mounting rail in one component

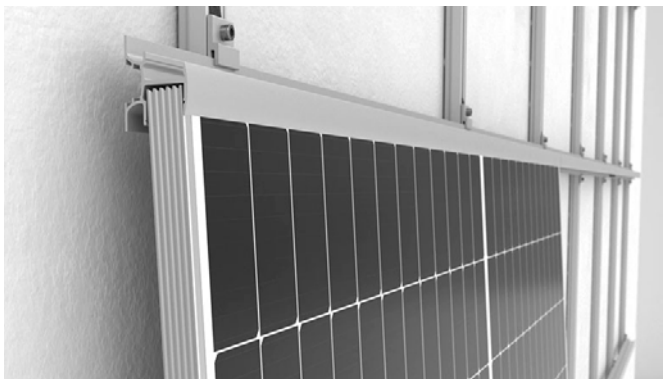
Universally compatible

- InsertionRail and FacadeClamp systems can be used for the majority of trapezoidal and corrugated sheet metal profiles
- Suitable for warehouses, halls, commercial projects and agricultural buildings – large or small

Further information,
all technical data and components

K2 WallPV PerfoRail System

The ideal solution for photovoltaic systems on concrete facades with existing thermal insulation: the system enables quick and easy installation without cutting open the insulation. The InsertionRail also creates an aesthetically pleasing and harmonious overall appearance.



For large scaling in professional commercial construction

- Closed surface with InsertionRails creates an attractive overall appearance
- For lightning-fast and secure installation of the modules on the facade

System-Highlights

Reisser-Screw RDS-CA

- The RDS-CA Reisser screw can be fixed directly through the facade insulation in the concrete without cutting open the insulation
- Suitable for various insulation thicknesses and individually adjustable
- Compensates for unevenness, regardless of the existing building fabric

Simple installation with K2 PerfoRail M

- Direct connection to the Reisser screw thanks to Pre-drilled holes
- Fast and intuitive installation

Advantages of the K2 InsertionRail

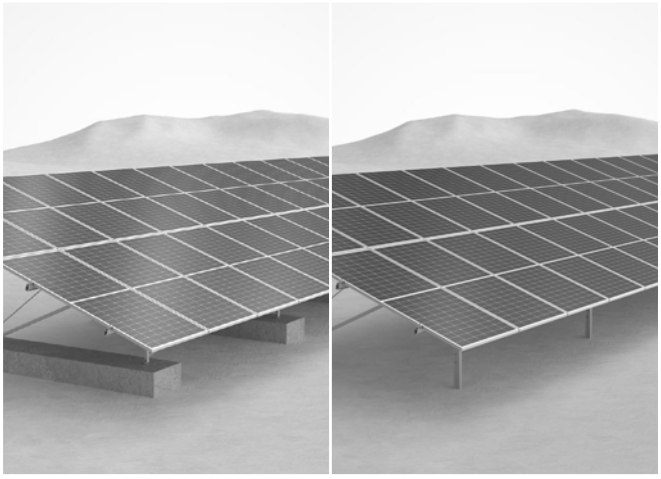
- Quick and uncomplicated installation of the modules
- Gives the PV system a coherent and aesthetic overall appearance

Further information, **all technical data and components**

Ground mounted

K2 N-Rack System

Fundamentally clever: Systematic ground mounted solutions.



Simple, flexible and quick installation

- Fixing with concrete or driven pile foundation
- Multiple inclination options: 15° and 20°
- Flexible and customised solution for a wide range of requirements

System-Highlights

Multiple foundation options

- Installation directly in the ground or on driven piles foundations
- Quick and cost effective solution using driven pile foundations

Fast and flexible installation

- Uncomplicated and quick installation
- Best results in a short time

Multiple inclination options

- Inclination of 20°: Installation of two rows of modules
- Inclination of 15°: possibility of installing three rows of modules

Future-oriented sustainability

- Sustainable thanks to outstanding recyclability and CO2-optimised production
- Time saving due to very easy handling

MyK2

Your entire K2 world in one account

Register once and benefit from many advantages:

- Manage projects and assign individual rights
- Communicate completely paperless and from any location
- Calculate prices quickly and easily
- Exchange project data between K2 Base and K2 DocuApp
- Track your training progress
- Assign individual rights Use your company logo on documentation documents

my.k2-systems.com

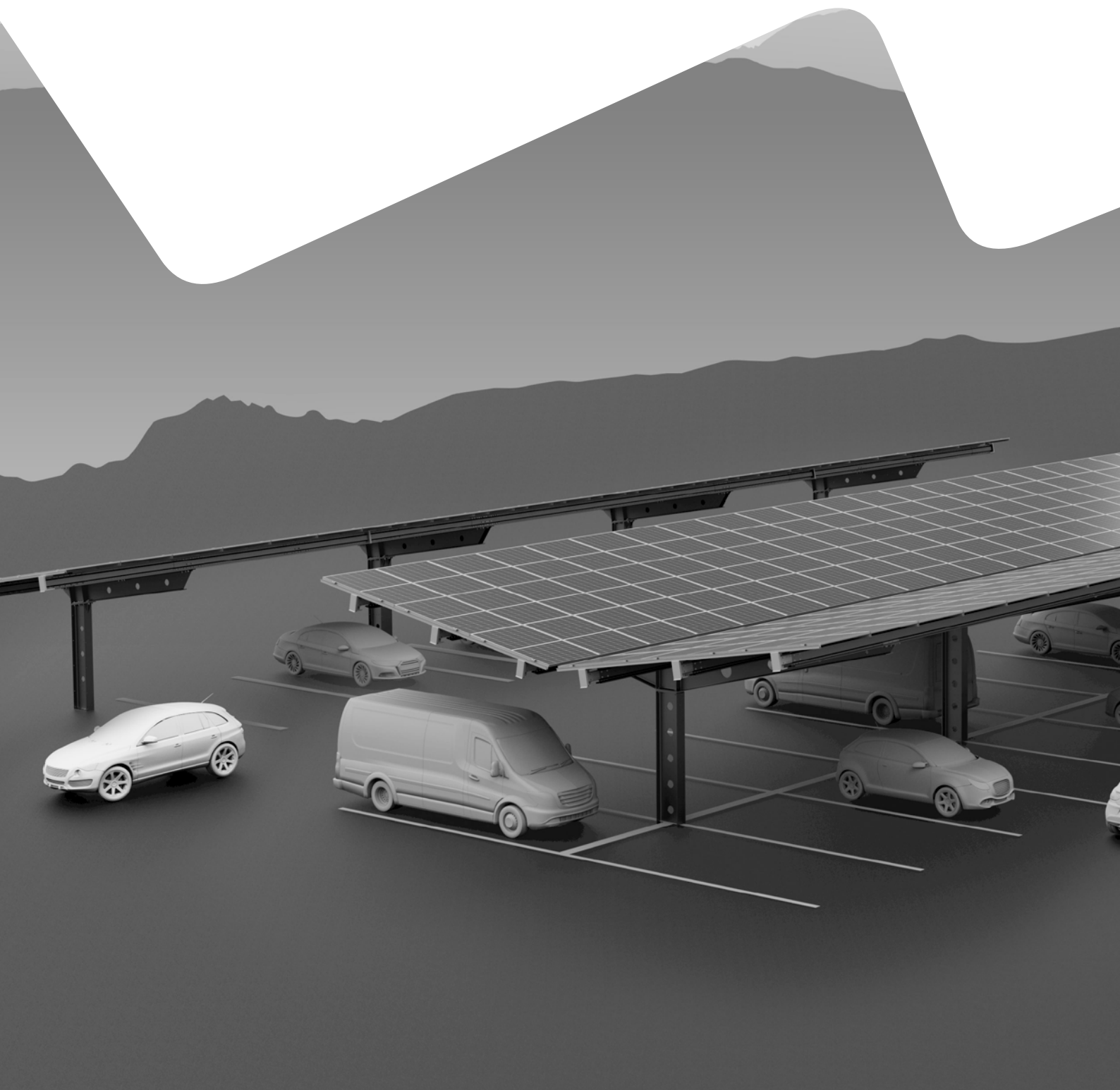
Calculation at the speed of light: MyPriceEstimator

- Calculate PV projects incredibly quickly and easily via smartphone or tablet
- Get an excellent basis for your offers with just a few key figures, even when you're on the move

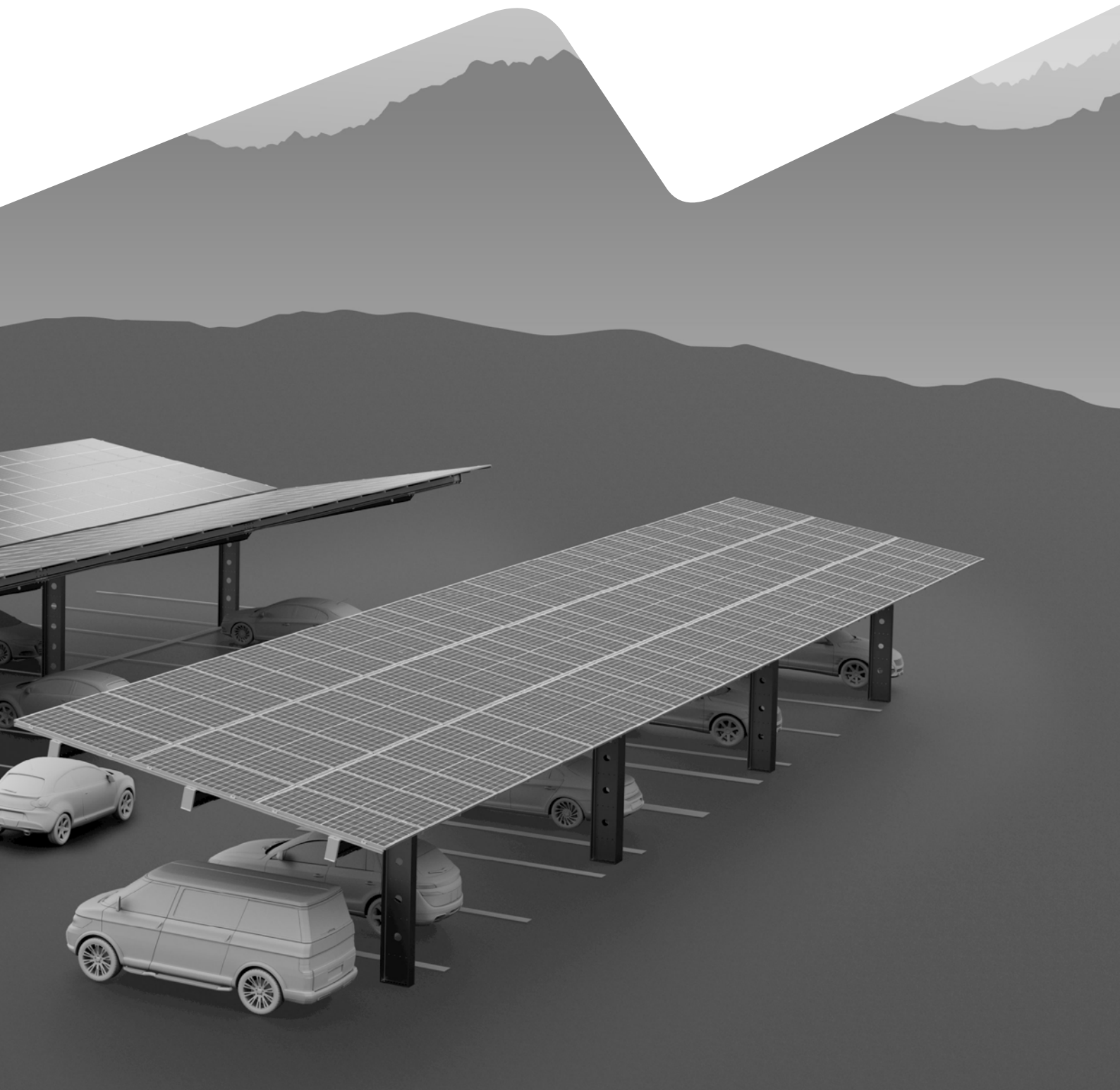
Aquire knowledge and certification MyTraining

- Complete a free K2 training course
- Track your training progress and download your certificates

my.k2-systems.com

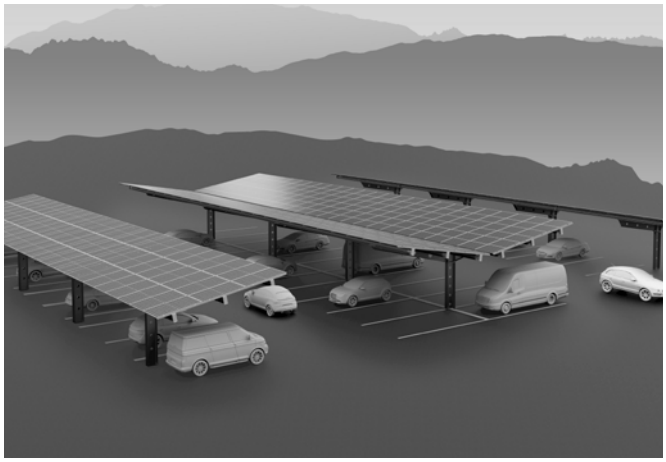


Carport



K2 Carport System

Great flexibility meets minimal effort: convenient parking experience with simultaneous energy generation.



Comfortable and flexible

- One-support system ensures a comfortable parking experience
- Installations with or without trapezoidal sheet metal roofing
- Module layout: 3x portrait 10°, single or double

System-Highlights

Parking space for all standard cars and commercial vehicles

- Carport height: front edge 3.15 m; rear edge 2 m
- Sufficient space and protection for compact cars as well as higher commercial vehicles

Layout

- In single or double version with 10° inclination
- Module layout 3 x portrait

Optional trapezoidal sheet metal roofing

Available in two versions:

- With trapezoidal sheet metal covering for robust protection and classic aesthetics
- Without trapezoidal sheet metal cladding for the use of bifacial modules and a more modern look

Optional roof-integrated drainage

- Efficient and controlled solution for draining rainwater with optional roof drainage

Digital tools

K2 digital tools in all project phases.

1.

Project start

K2 DocuApp

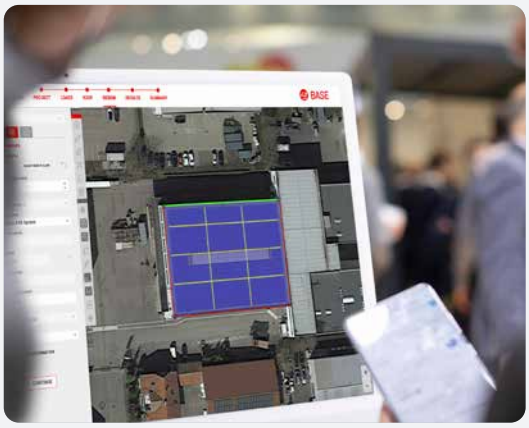
Capture data directly on your smartphone or tablet and share information directly with your colleagues

2.

Planning

K2 Base

Automatic upload of on-site data from the DocuApp. **Fast, reliable and precise planning with results report in K2 Base.**



3.

Installation

K2 DocuApp

Capture images via smartphone directly on site or **share information about the system in real time** with your colleagues in the office or on the roof.

4.

Project completion

K2 DocuApp / Buddy

DocuApp: Finalise the project directly on your smartphone.
Buddy: Monitoring system to warn against high snow loads.

k2-systems.com

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Product Brochure EN V2 | 0824 · Subject to change
Product illustrations are exemplary and may differ from the original.