Connecting Strength

Mounting systems



Content

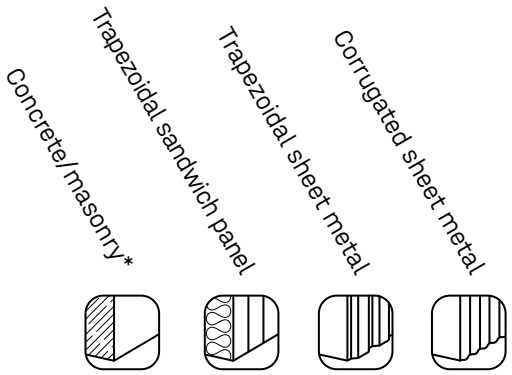
Everything at a glance – find the right system:

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

All components in the system network are covered by a 12-year product warranty. If the project is planned in K2 Base with static verification and documented in K2 DocuApp, the warranty for the mounting system is extended to 20 years: *k2-systems.com/en/warranty*



Facade	Page				
K2 WallPV FacadeRail System	20	●	○	○	○
K2 WallPV CarrierRail System	21	○	●	○	○
K2 WallPV MultiRail System MultiRail CSM System	22	○	○	●	●
K2 WallPV PerfoRail M System	23	●	○	○	○

Ground-mounted	Page
K2 N-Rack System	26

Carport	Page
K2 Carport System	30

* Load tests on masonry necessary

● Suitable ○ Unsuitable

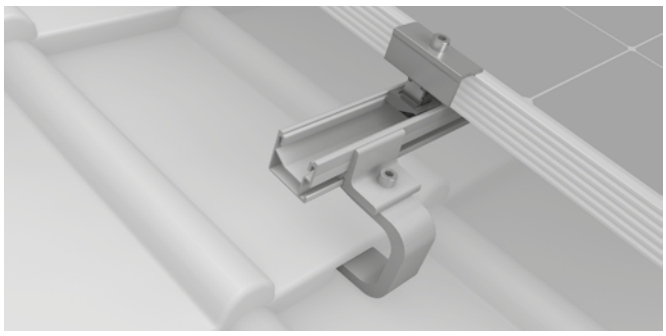


Pitched Roof



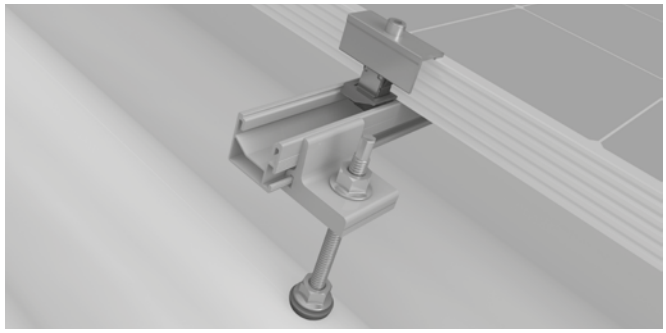
K2 SingleRail System

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



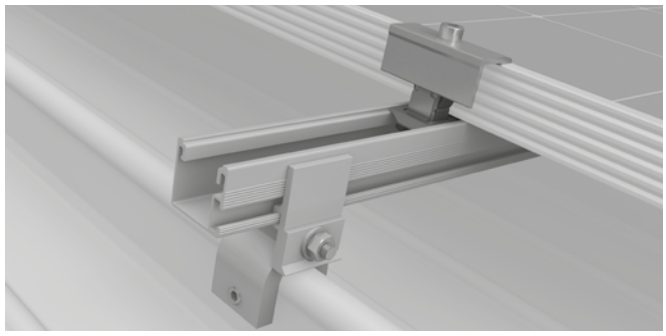
Roof tiles and slate

- 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 covered with SingleHook 3S, 3S light or 4S



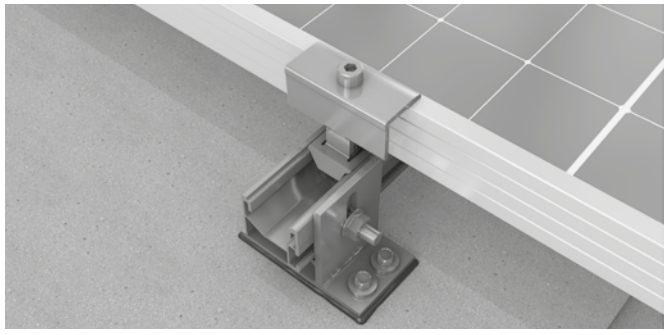
Corrugated fibre cement and corrugated sheet metal

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



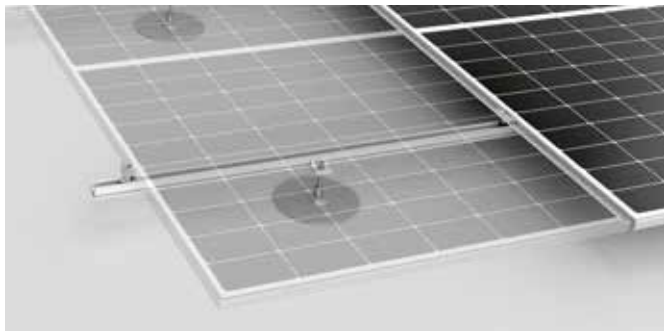
Standing seam

- 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 SpliceFoot



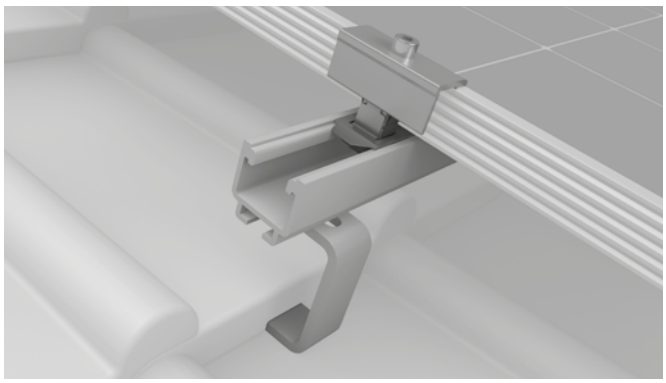
Membranes and Bitumen

- Secure and stable fastening on membrane and Bitumen pitched roofs using anchor plates or mounting feet
- Easy installation with the proven SingleRail Components

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

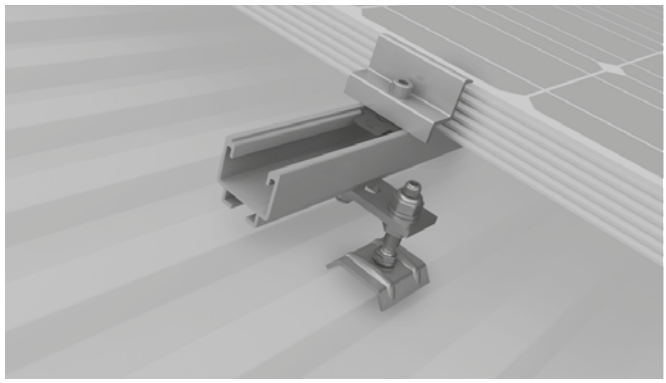
K2 SolidRail System

Extensive range of rails suitable for various load cases and many spans. Can be installed quickly and easily on tile, trapezoidal sheet metal, corrugated fibre cement and sheet metal seam roofing.



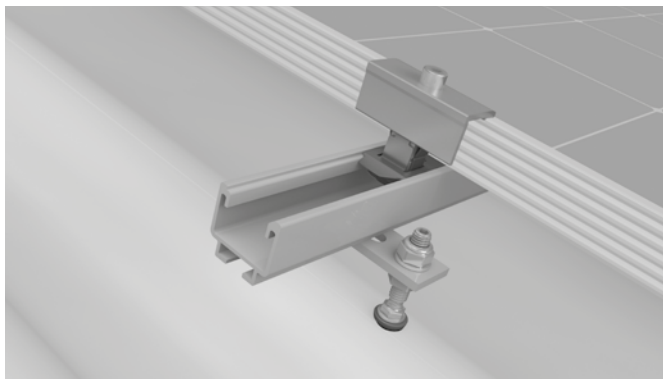
Roof tiles and slate

- Roof hooks for the majority of clay tiles, pantiles and concrete roof tiles
- Stainless steel roof hooks for tiles with low machining possibilities
- Maximum flexibility thanks to the adjustable connection – ideal for installation on narrow rafters or at different heights



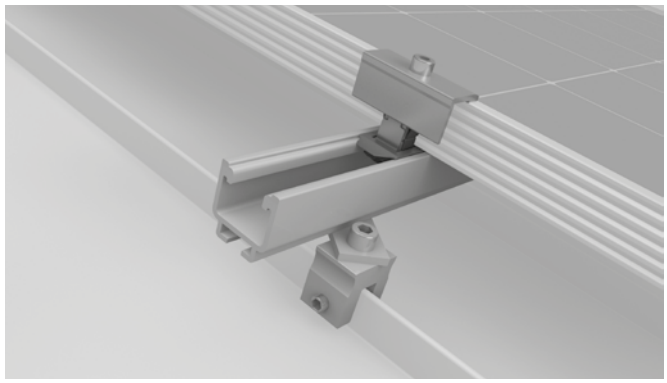
Trapezoidal sheet metal

- 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



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 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 the modules by just one person – without any screws or module clamps.



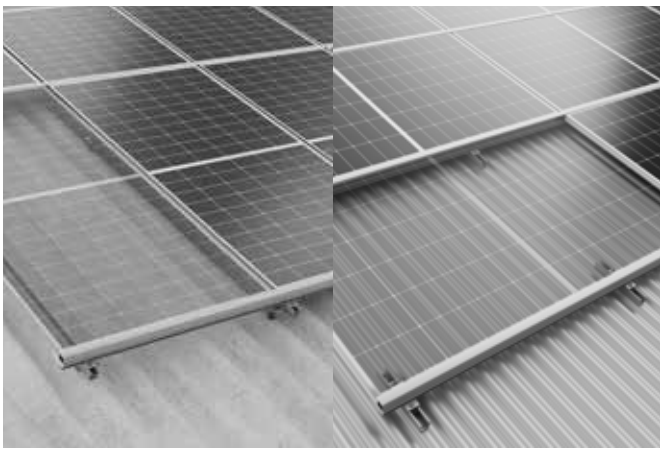
Roof tiles and slate

- 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+



Trapezoidal sheet metal

- Connection with MultiRail mounting rail
- Simple installation and fast Planning with few Parts
- Elegant and direct Connection with BasicClips



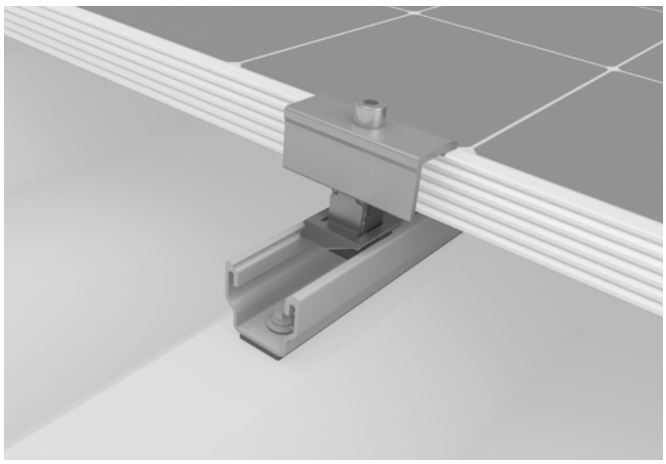
Corrugated fibre cement and Corrugated sheet metal

- For all corrugated fibre cement and corrugated sheet coverings with timber substructure
- With hanger bolt or solar fastener Connection, or K2 MultiRail (corrugated sheet metal)
- abZ (general building approval) in Germany for hanger bolts in Germany
- Additional connection with MultiRail CSM on corrugated sheet possible (Further information on p. 22)

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

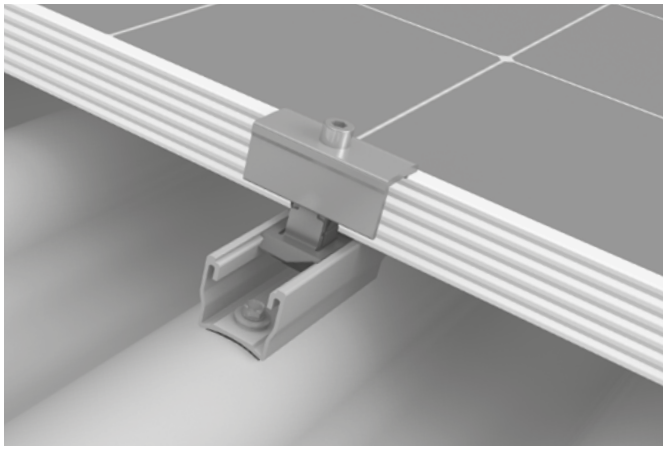
K2 MultiRail System

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



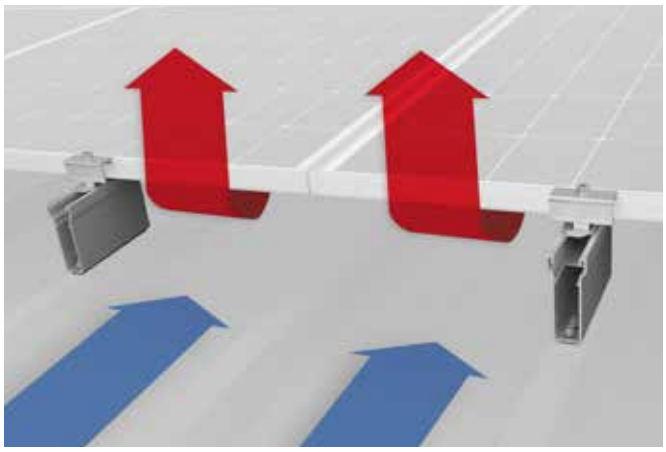
K2 MultiRail

- 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



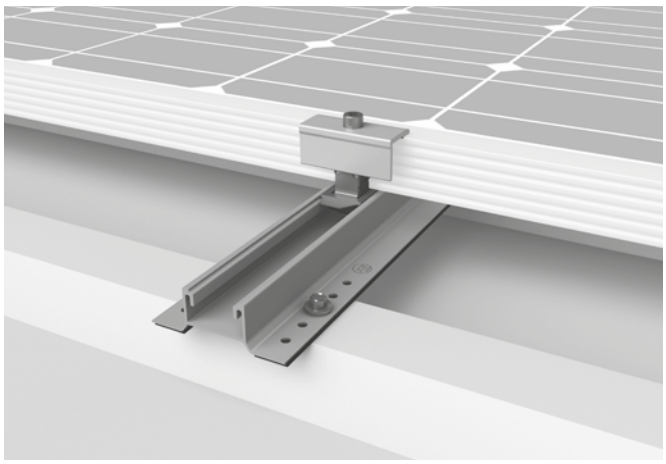
K2 MultiRail High

- Elevation provides improved rear ventilation of the modules, enabling higher yield
- Easier installation of micro-inverters and power optimisation devices

Further information,
all technical data and components

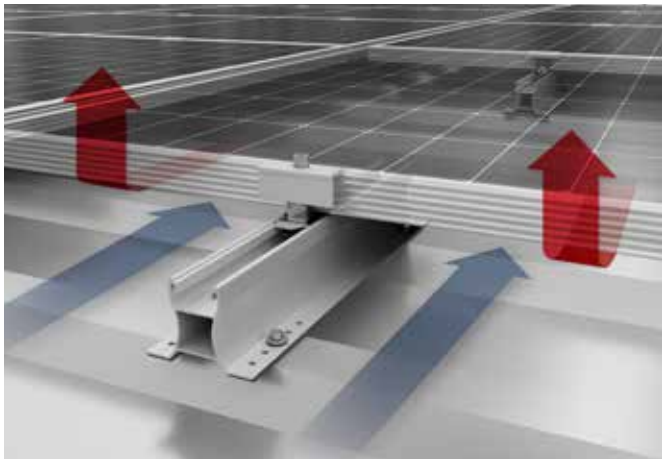
K2 MiniRail System

The system's compact dimensions allow for small packaging 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.



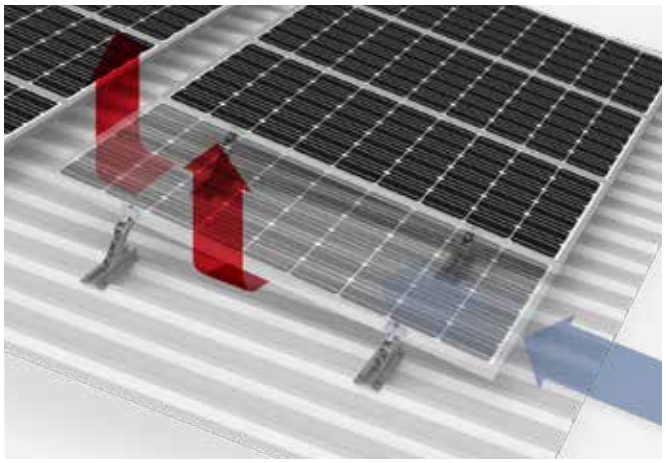
K2 MiniRail MK2

- Simple and fast installation due the single rail component
- MK2 rail channel enables mounting with the same module clamp on all pitched roof systems



K2 MiniRail 60 MK2

- Greater clearance between the module and the trapezoidal sheet metal thanks to a height of 60 mm
- Optimizer and micro-inverters can thus be installed beneath the module
- Improved rear ventilation for increased module performance



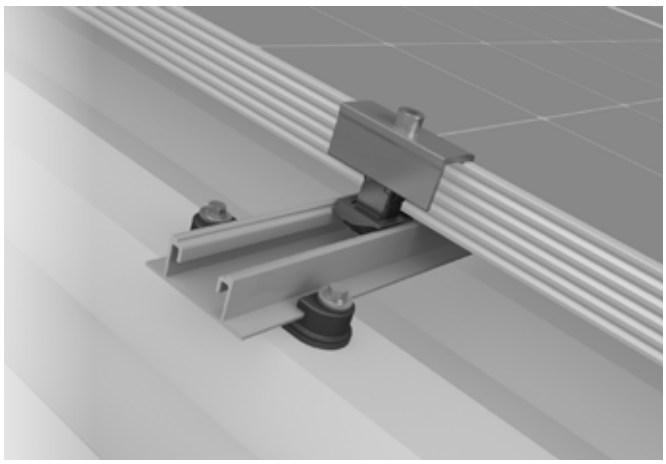
K2 MiniFive MK2

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

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 abZ (general building approval) 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 into the roof cladding



For tile-imitation sheet metal with K2 FlexAdapter

- Simple installation on curved roof tile sheets
- Adapter with height and tilt compensation
- K2 BasicClip with sealing underlay for additional safety

System-Highlights

Landscape mounting option

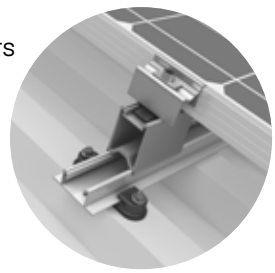
- Landscape mounting is possible with the K2 Add0 without additional rail layer and with interruption-free module blocks

Mounting on sandwich panels

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

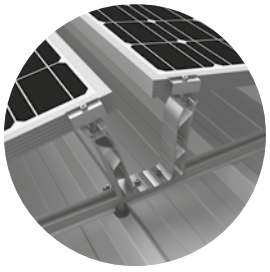
RailUp for more yield

- 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 the Dome 6 flat roof systems
- Increased yield with better angle of incidence



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

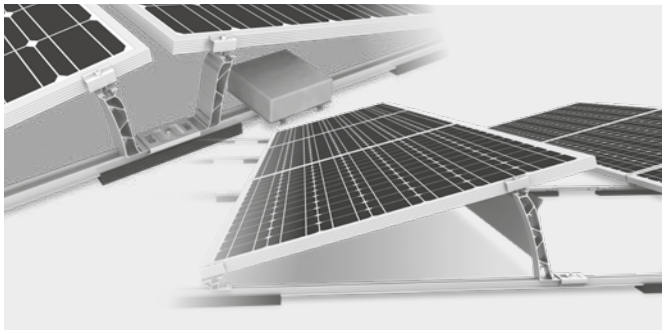


Flat Roof



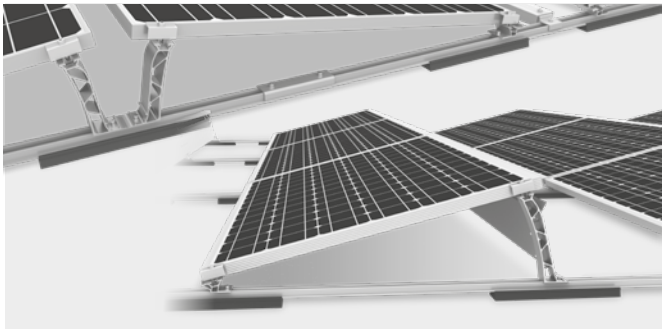
K2 Dome 6 System

For the majority flat roof coverings. Ballast is optimised by system aerodynamics and wind tunnel tests. Secure anchoring by fixed connection to roofs with more than 3° pitch or low load reserves. With elevation of 10° or 15° and South or East-West orientation, the optimum angle of incidence can be created. Certified with abZ (general building approval) in Germany.



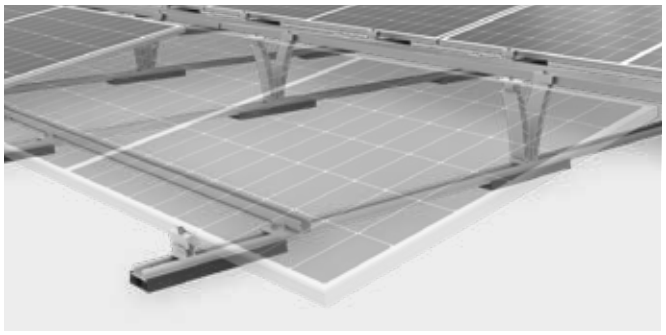
K2 Dome 6 Xpress

- Super-fast assembly in just a few steps
- Snap-in function for peaks and tool-free rail connectors
- Improved angle of incidence through optional elevation to 15°



K2 Dome 6 Classic

- Flexible row spacing enables customisable maintenance accesses
- installation with many obstacles to optimally utilise the roof area



K2 Dome 6 Xpress LS

- Pre-assembled system for higher load cases
- Time-saving installation: pre-assembled components and and easy click mechanism
- Clamping on the long module side for higher load cases and for the current module generation



K2 Dome 6 Classic LS

- Fastening on the long side of the module makes it suitable for higher loads



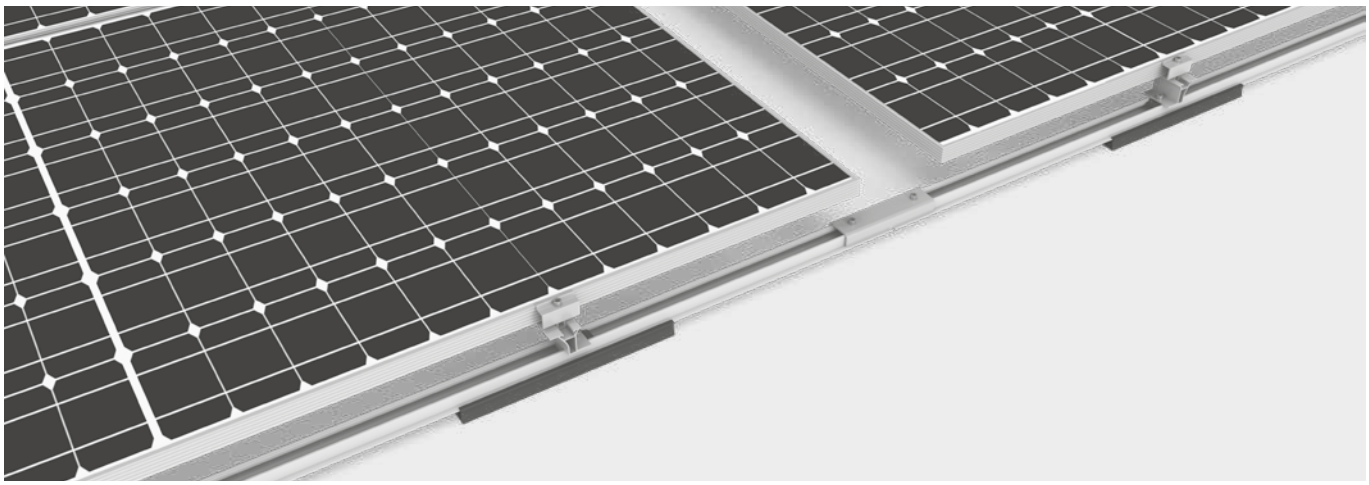
K2 Dome 6 Lifted LS

- Fastening with mounting anchor 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 anchoring with fixed connection can be made for roofs with more than 3° or 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°.

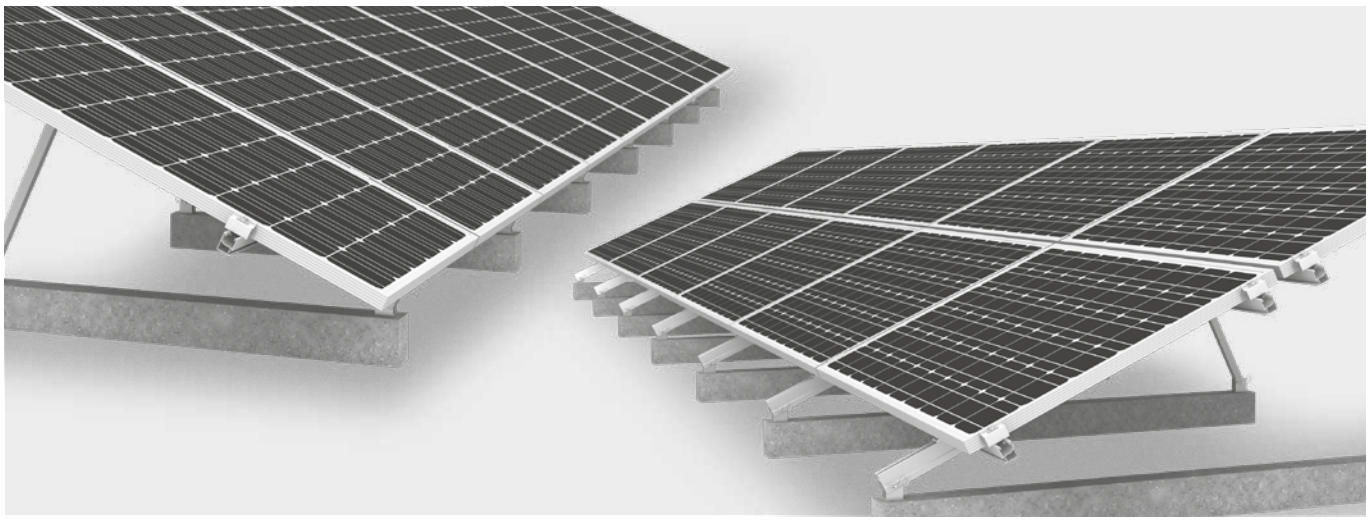
Few components

- Majority of components compatible with Dome 6 System
- Dome Zero Peak is used for roof-parallel modules (0°)

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

K2 TiltUp Vento System

Various module arrangements and three different angles of inclination (20°, 25°, 30°). Flexible mounting on many roof types, either ballasted with concrete foundations or by direct roof connection with concrete anchors.



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°
- Components for different elevations are the same throughout

Different module designs

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

Few components

- Sophisticated with well thought-out connection of components
- Enabling systemic storage

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

K2 GreenRoof Vento System

Clever flat roof solution for green & gravel roofs. Flexibility in terms of module orientation, inclination and system geometry. Can be integrated into existing green roofs.



System-Highlights

Flexible installation

- Module orientation in portrait or landscape
- Inclinations of 10° and 15°
- System geometry in S-shape, A-shape or V-shape
- Variable spacing between module rows for east-west installations, enabling optimal widths of maintenance walkways

Integration with roofing vegitation

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

Kit solution

- Pre-assembled beam kits for faster installation
- Beam kits in two lengths with 10° elevation

K2 modular concept

- Existing components of the K2 TiltUp Vento system

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

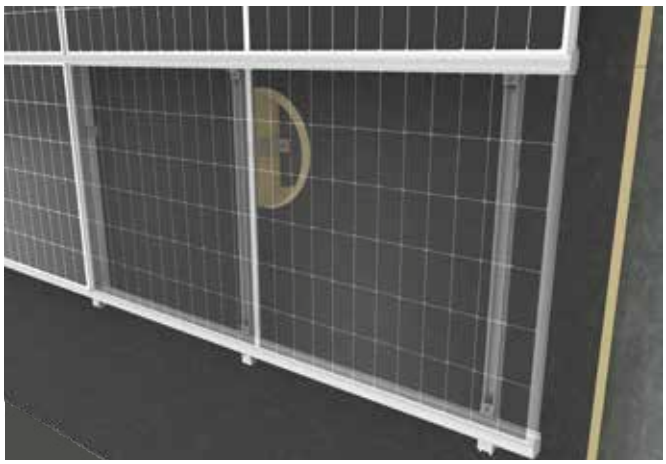


Facade



K2 WallPV FacadeRail System

The flexible solution for concrete and masonry facades*.



Wall brackets for flexible connection to concrete and masonry facades

- Wall brackets are anchored in the concrete/masonry
- Connection to K2 FacadeRail with K2 InsertionRail

System-Highlights

Combination of RVF and ETICS

- Fastening to a rear-ventilated facade (RVF) or rainscreen cladding, capping 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 InsertionRail

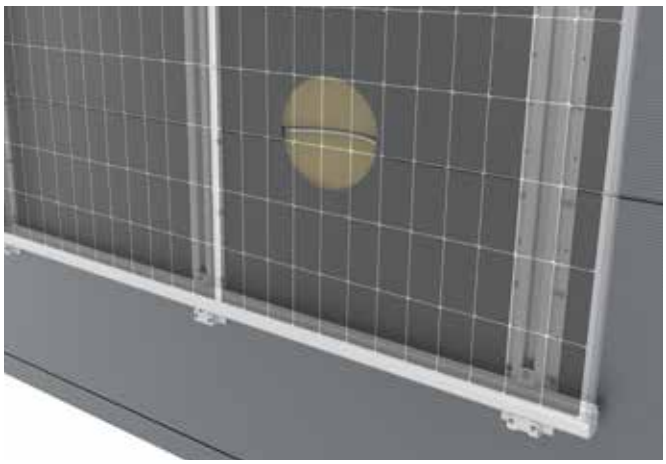
- Elegant overall appearance thanks to silver or black InsertionRail
- Lightning-fast and secure installation with guaranteed rear ventilation

** Load tests on the masonry are necessary*

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
- Installation solution with building authority-approved CarrierRail and high installation speed
- 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

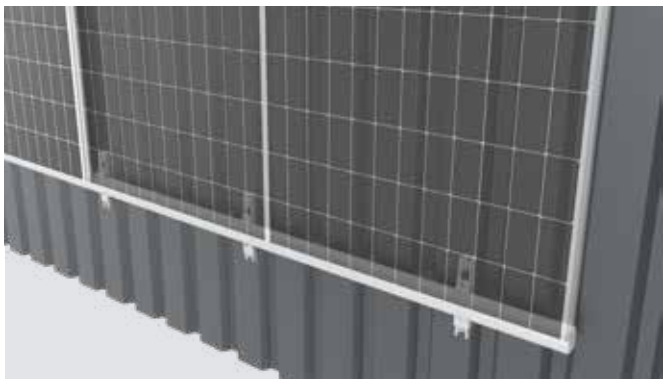
Closed surface with InsertionRail

- 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**

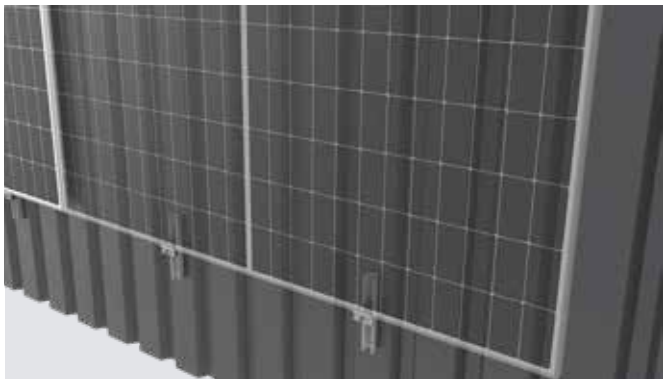
K2 WallPV MultiRail System

One of the most common facade claddings in the industrial and agricultural industries is trapezoidal or corrugated sheet metal. Efficient and easy to install wall fastener.



For large scaling in commercial construction

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



For smaller systems

- Efficient and flexible installation of smaller systems 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

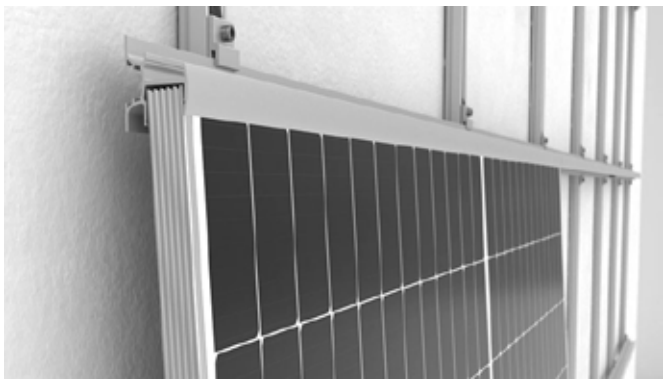
Universally compatible

- 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 creates an aesthetically pleasing and harmonious overall appearance.



For residential and industrial buildings with existing insulation

- Closed surface with InsertionRails creates an attractive overall appearance
- 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 into the concrete without cutting open the insulation
- Suitable for various insulation thicknesses and individually adjustable
- Compensates for unevenness, regardless of the existing building form

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
- Coherent and aesthetic overall appreaance of the PV system

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

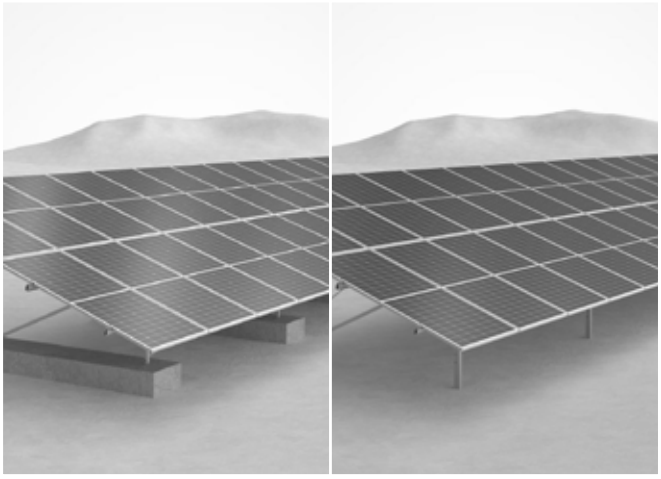


Ground Mounted



K2 N-Rack System

Fundamentally clever: Systematic ground mounted solutions.



Simple, flexible and quick installation

- Fastening in the ground, on the ground, or in concrete
- Multiple inclination options: 15° and 20°
- Flexible and customised solution for a wide range of requirements

System-Highlights

Multiple foundation options

- Installation directly on conrete or on driven pile foundation
- Quick and cost effective solutions for larger projects 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

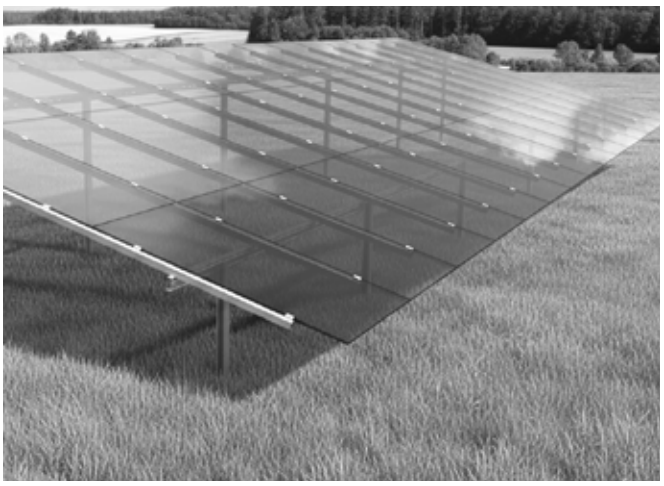
Kit solution with 20° elevation

- Practical kit solution for smaller ground-mounted systems
- Preconfigured: simple logistics and fast installation
- No structural calculation required
- 2×7 or 2×12 modules in portrait orientation possible
- Foundation options: concrete, driven piles, ground screws, and gabions

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

K2 Pi-Rack System

Combines proven K2 quality with project-specific solutions for large-area ground-mounted systems.



Flexibility and stability for every project requirement

- Foundations with driven posts (anchoring in the ground)
- Standard inclination 15° or 20° (other inclinations possible depending on project size)
- Module layout: standard 3 × portrait (other configurations possible depending on the project)

System-Highlights

Easy installation

- simple module mounting on a double-sided insertion profile
- screw-free module fixation
- Module layout 3 × portrait

Optimized steel supporting structure

- all steel parts, including driven posts, with zinc-magnesium-aluminum coating
- Layer thickness of the driven profiles according to soil analysis

Integrated cable management

- clean cable management directly in the purlins or along the rafter profiles

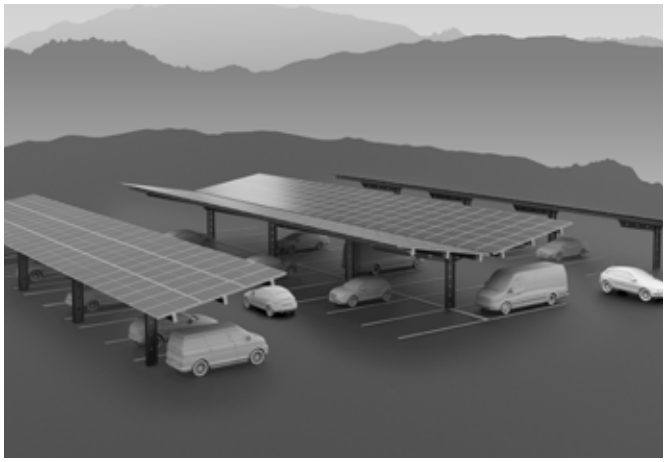


Carport



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°, mounted on single or double sided structure

System-Highlights

Parking space for all standard cars and commercial vehicles

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

Layout

- In single or double version with 10° inclination
- Module layout 3x 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 guttering solution for rainwater 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 with your colleagues

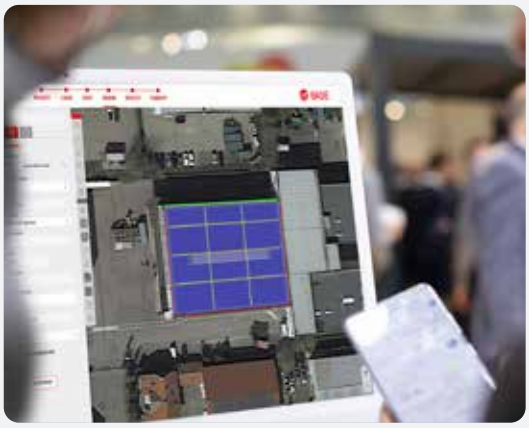


2.

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.

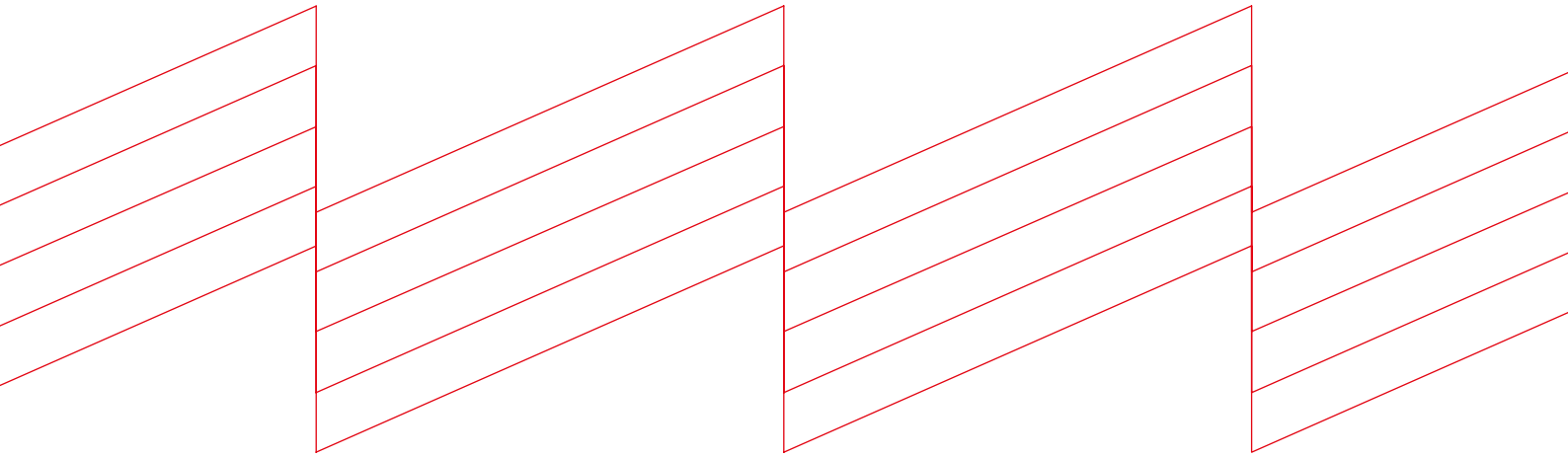
Project completion

K2 DocuApp

Finalise the project directly on your smartphone



k2-systems.com



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Product Brochure EN V4 | 0326 · Subject to change
Product illustrations are exemplary and may differ from the original.