NOW FOR
EVEN
LARGER
PV MODULES

AEROCOMPACT®

COMPACTFLAT SN 2

The CompactFLAT SN 2 is based on the previous system and now allows even larger PV modules to be used. The flexible, rail-based modular system offers a solution for every conceivable flat roof application and enables short-side and long-side clamping. The same components are used in the south-facing system as in the east/west system.

- MODULE SIZES UP TO 2,384 x 1,303 mm
- LOW POINT LOADS
- SHORT-SIDE AND LONG-SIDE CLAMPING
- SUITABLE FOR HIGH WIND AND SNOW LOADS
- FLEXIBLE SYSTEM WITH FEW COMPONENTS
- PREASSEMBLED COMPONENTS, PLUG & PLAY

East / west-facing modules (SN 2 PLUS) with long-side clamping and long rail structure

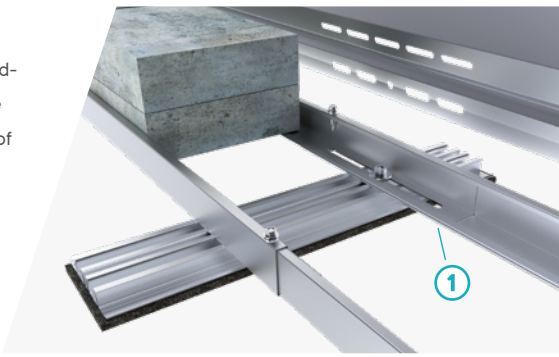
South-facing modules (SN 2) with short-side clamping and multi-component rail structure

THE **CHALLENGE**

The steadily growing size of modules poses particular challenges for manufacturers of racking systems. Reliable and flexible racking systems which don't just withstand heavy snowfall and severe wind, but also offer a quick and uncomplicated mounting and thus save costs during assembly, are seeing more demand than ever.

THE **SOLUTION**

The trimmed-down product concept for the CompactFLAT SN 2 is impressive thanks to its high load-bearing capacity and resistance to extreme weather conditions. This cost-optimised system can be quickly and easily attached to flat roofs in just a few simple steps and now allows PV module sizes of up to 2,384 x 1,303 mm. Having been further developed, the individual, preassembled components of the racking system mean that only a single technician is required for installation. This effectively saves both time and costs during assembly.



1. The rail connectors simultaneously function as ballast carriers. As the module's length is continuously adjustable, preassembly of the system without modules is a breeze.

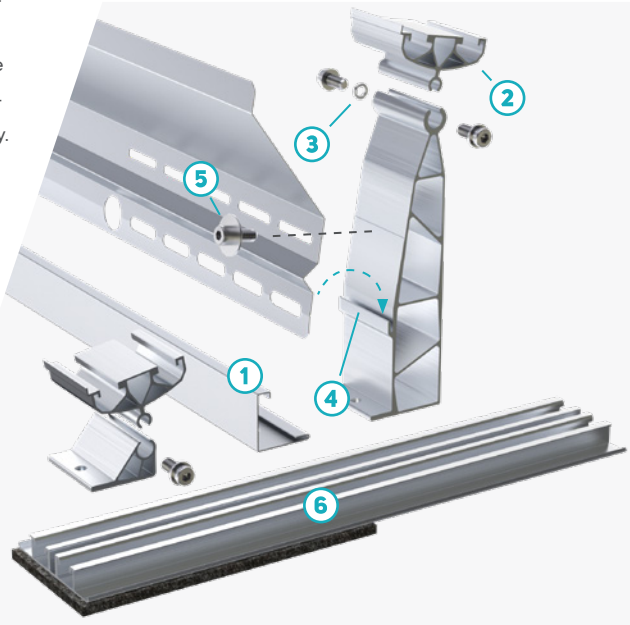
2. The preassembled foot rocker continuously adjusts so that it is at the correct angle depending on the module's width. Two grooves allow two types of clamping, short-side and long-side clamping, and provide tolerance compensation during assembly.

3. Spring elements hold the rocker in position and allow the PV module to be positioned.

4. Statically optimised brackets allow the system to withstand even the highest snow and wind loads.

5. The wind deflector can be placed in the guide and is then fastened with just a single screw.

6. Rails with preinstalled pads guarantee the fastest possible assembly; underlay pads serve to ensure the height remains level in the event of uneven roof surfaces or as extended drainage.



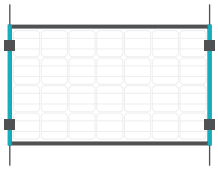
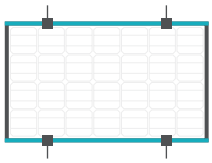
THE **VARIANTS**

IT'S YOUR CHOICE

This system's wealth of configuration options allows perfect adjustments for every single project. Two **clamping variants** can be combined with the three **rail structure variants** as desired. This means all **advantages** are used in the optimal manner. Despite all these possibilities, only a few components are required.

1. Clamping variants

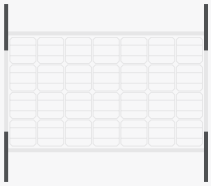
In the event of moderate snow loads, the PV modules can be clamped on the short side, which saves material. If the pressure load increases or large modules are used, long-side clamping is recommended.

			2. Rail structure (see below)		
			Multi-component	Connected	Long
Short-side clamping • Quick assembly • Reduced material costs		South-facing modules (SN 2)	●	●	●
		East/west-facing modules (SN 2 PLUS)	●	●	●
Long-side clamping • High loads • Large modules		South-facing modules (SN 2)	○	●	●
		East/west-facing modules (SN 2 PLUS)	○	●	●

2. Rail structure

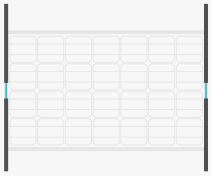
As there are different possibilities for the rail structure, the system can be individually configured to suit the respective application, regardless of the project's scale.

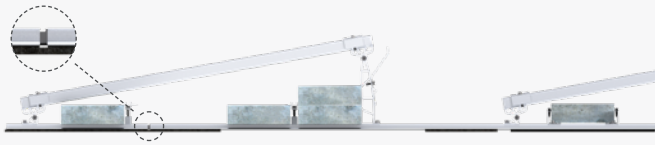
Multi-component rail structure
- Reduced material costs
- Easy shipping
- No caterpillar effect



Max. 900 mm rail length

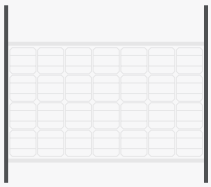
Connected rail structure
- High loads
- Preassembly
- No caterpillar effect

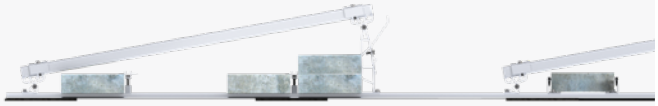




Max. 1,980 mm rail length

Long rail structure
- Fastest assembly time
- High loads
- Preassembly





5,800 mm rail length

AEROCOMPACT®

- **ONE-MAN INSTALLATION POSSIBLE**
- **MINIMAL STORAGE**
- **OPTIMISED FOR PRE-ASSEMBLY**
- **PV MODULE POSITIONING AIDS**
- **WIND TUNNEL TESTED**
- **DEVELOPED IN AUSTRIA**

Description	Rail-based racking system for mounting framed PV modules on flat roofs. Optimal load distribution for any insulation material. Positioned on continuous rails. Preassembly even without PV modules. The clamping on the long module side allows the system to withstand high wind or snow loads as well as the use of large scaled PV modules.
Area of application	On foil and bitumen roofs with and without thermal insulation under the seal, as well as on concrete and gravel roofs
Module dimensions	950 – 1,303 mm x 1,550 – 2,384 mm (width x length)
Installation angle	10°
Distance to roof surface	Approx. 70 mm, less on gravel roofs if necessary
Distance from the roof edge	Without attic, 550 mm; with attic, dependent on height
Max. building height	100 m (adaptation to higher buildings on request)
Max. roof inclination	Up to 3° in the case of long rail structure, 5° in the case of connected or multi-component rail structure; With anchoring, up to 10°
Max. field size	Up to 14 rows of 10 modules each
Min. field Size	2 modules side by side or behind one other
Wind load	Up to 2.4 kN/m^2 *
Snow load	Up to 5.4 kN/m^2 *
Design / proof of stability	Supported by software based on wind tunnel tests and construction standards
On-site requirements	It must be ensured on site that the roof structure and building structure have sufficient static load-bearing capacity and that the roof structure has sufficient compressive load-bearing capacity. The general terms and conditions, warranty conditions and the user agreement apply.
Components	Module clamps with earthing pins, base rails, front foot, back foot, cross struts, building protection pads, wind deflectors, ballast stones; optional ballast angle, roof anchor, earthing and lightning protection clamp, optimiser mount
Materials	Load-bearing connecting parts and module clamps made from EN AW–6063 T66 aluminium, screws made from A2–70 stainless steel, cross struts, wind deflectors and ballast trays made from steel with protective coating against corrosion, building protection mat made from polyester fleece

* depending on the system variant and PV modules used

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