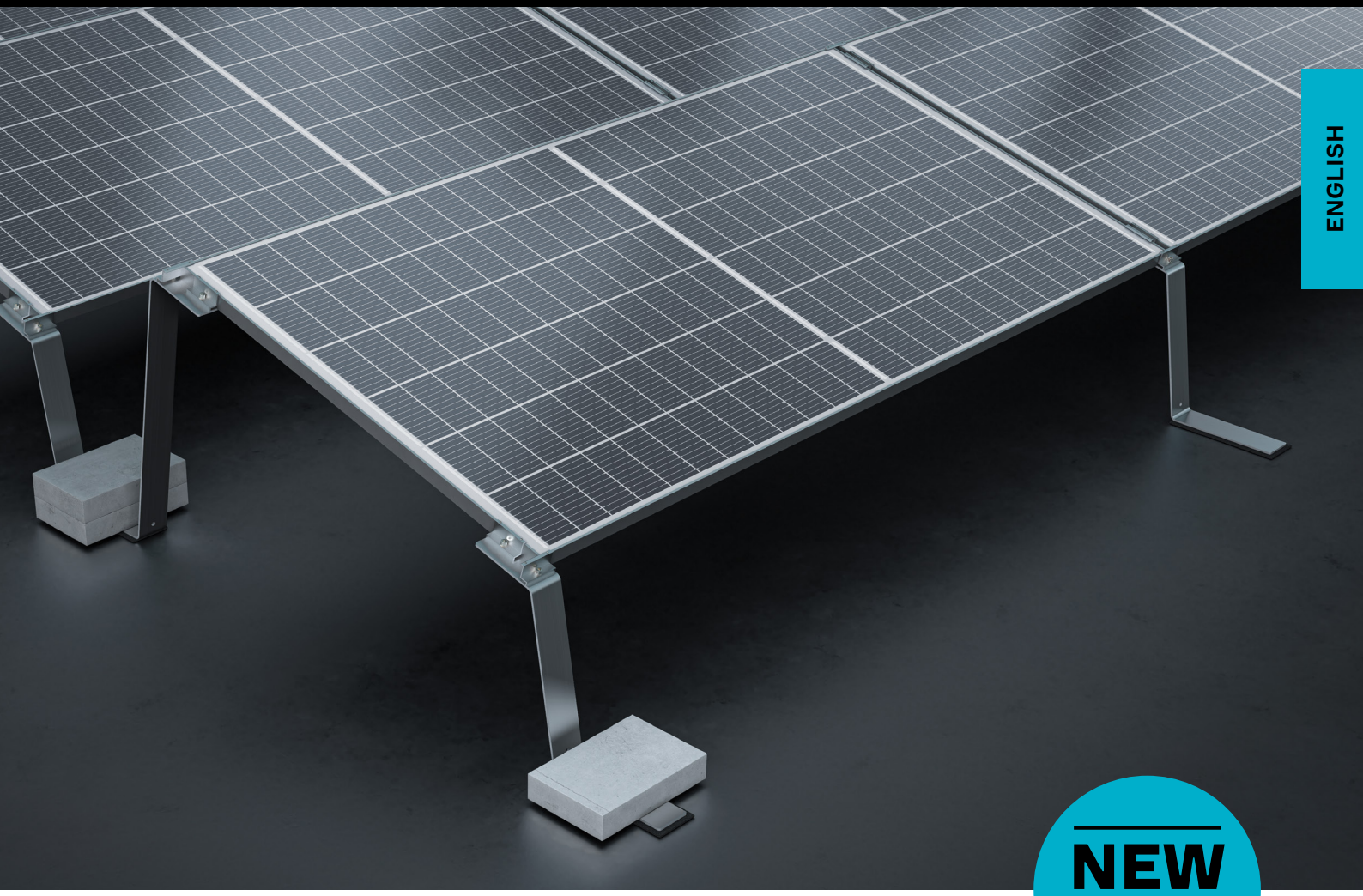
AEROCOMPACT®

ENGLISH



NEW

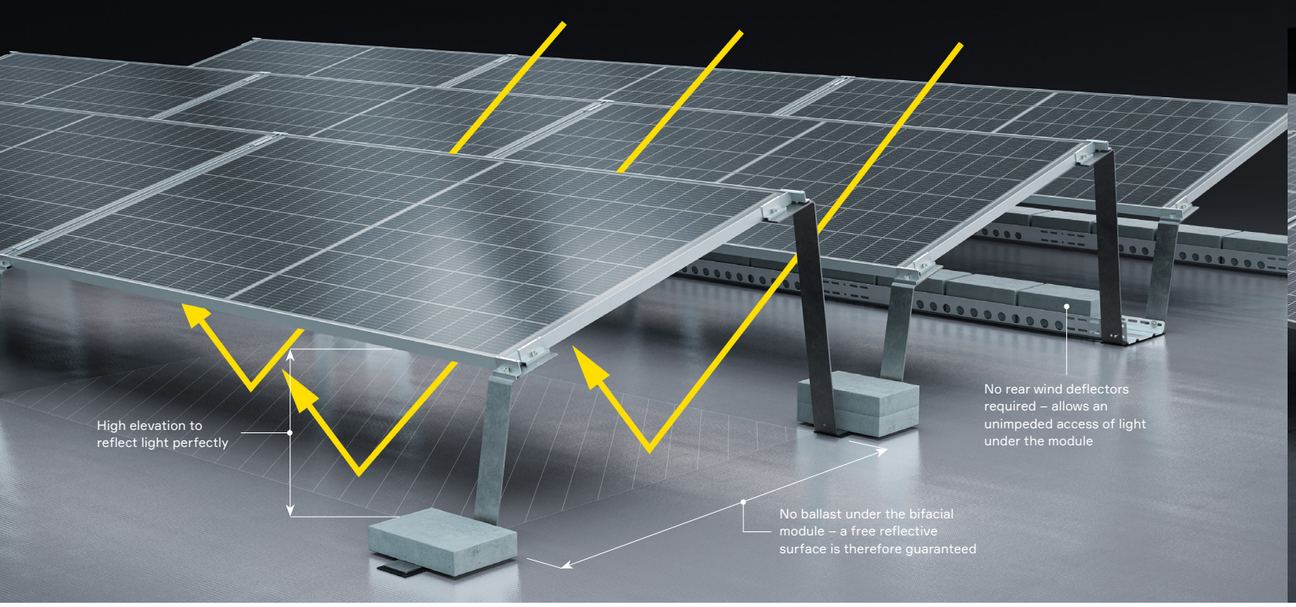
FOR GREEN ROOFS & BIFACIAL PV MODULES

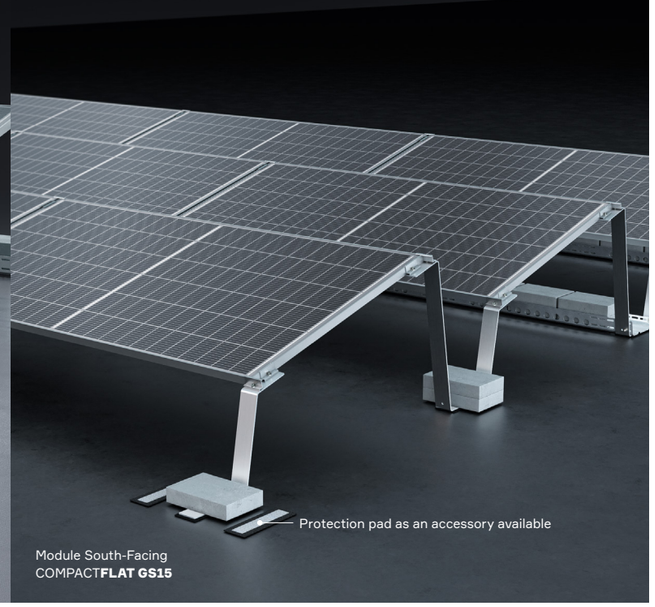
COMPACT**FLAT GS**

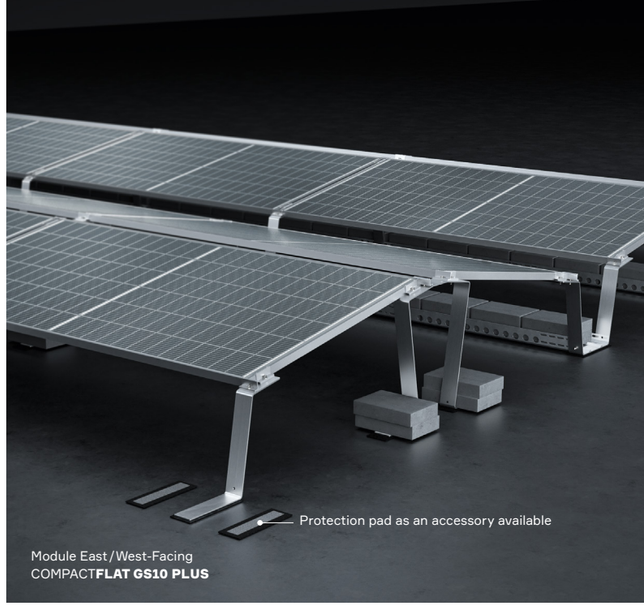
THE COMPACTFLAT GS SYSTEM IS A HIGHLY ELEVATED FLAT ROOF SYSTEM, WHICH HAS BEEN SPECIFICALLY DEVELOPED FOR INSTALLATION ON GREEN ROOFS AS WELL AS FOR APPLICATIONS WITH BIFACIAL MODULES. WITH THIS RACKING SOLUTION, PERFORMANCE-ENHANCING EFFECTS OF THE PV MODULES ARE ACHIEVED AND THE NECESSARY DISTANCE TO GREEN ROOF SURFACES CAN BE MAINTAINED.

INTELLIGENT SOLAR RACKING

+ Perfect for green roof applications
+ High stability at moderate costs
+ Fast assembly
+ Based on the proven bracket system
+ Up to 20% higher yield
+ Few components, no long rails







FOR BIFACIAL PV MODULES

Customary glass-foil modules are being increasingly replaced by bifacial modules and differ only slightly in terms of costs. Many module manufacturers are completely switching to bifacial modules. The COMPACTFLAT GS model has been specially developed for flat roof applications in combination with bifacial modules. Independent laboratory tests have shown that yield increases of up to 20 %* can be achieved by reflecting light with a bright roof surface.

WITH BIFACIAL PV-MODULES UP TO **20 %*** **MORE YIELD**

Comparison – Commercial system amortization based on a 12% additional perfomance yield according W. Mühleisen et al. (2020)*: 144 modules, 375 Wp, 19,5 kg, 1.755 x 1.038 mm; East-West-facing; roof with 28 m x 18 mincluded in CA.

System	Price racking	Amortization
COMPACT**FLAT S10 PLUS**	Base	Base
COMPACT**FLAT GS10 PLUS**	**+ approx. 25 %**	**Less than 2 years**

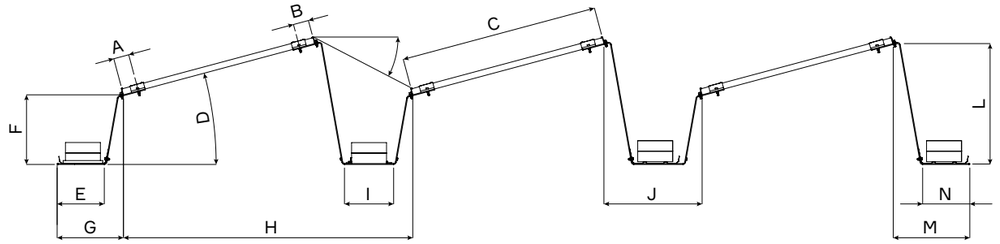
FOR GREEN ROOFS

Flat roofs are widely vegetated, but traditional flat roof systems have limited suitability for green roof applications. The plant cover requires light and care. This can only be ensured with a highly elevated system with good accessibility.

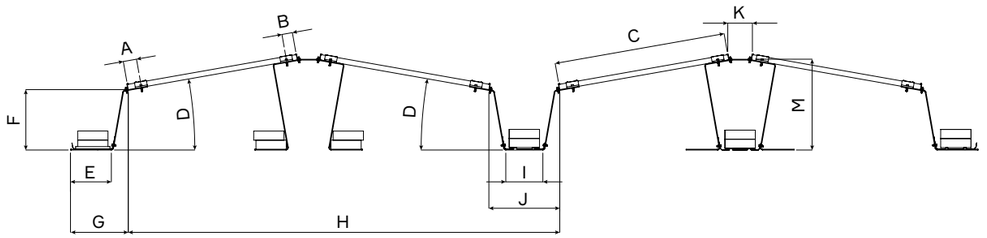
THE VERSIONS

The COMPACTFLAT GS as a system solution for flat roofs is available in two versions: the model for a south-facing solution with a module inclination of 15° (COMPACTFLAT GS15) and the model for an east/west-facing solution with a module inclination of 10° (COMPACTFLAT GS10 PLUS).

COMPACT**FLAT GS15**



COMPACT**FLAT GS10PLUS**



	A [mm]	B [mm]	C** [mm]	D [°]	E [mm]	F [mm]	G [mm]	H** [mm]	I [mm]	J [mm]	K [mm]	L [mm]	M [mm]	N [mm]
GS15	88,5	88,5	950–1150	15	270	399	380	1466–1674	282	562	–	692	438	270
GS10 PLUS	88,5	70	950–1150	10	270	399	382	2490–2897	245	468	163	–	–	–

* W. Mühleisen et al. (2020): Operation and Evaluation of a Bifacial PV Module Test Setup, ** Depending on the PV module size

AEROCOMPACT®

- + Can be assembled by one person
- + Minimal storage
- + Stable and corrosion-resistant
- + CE approval
- + Wind tunnel tested
- + Developed in Austria

TECHNICAL DATA

DESCRIPTION	Aerodynamic racking system for mounting framed PV modules on flat roofs. Cost-effective clamping on the short side of the module, ballasting options directly on the bracket or in ballast trays.
AREA OF APPLICATION	On foil and bitumen roofs with and without thermal insulation under the seal, as well as on concrete and gravel roofs. Perfect for green roofs or in combination with bifacial modules. Corrosion coating approved for coastal areas near the sea.
MODULE DIMENSIONS	950 – 1.150 mm x 1.500 – 2.280 mm (width x length)
INSTALLATION ANGLE	One-sided: 15°; two-sided: 10°
CLAMPING OPTIONS	Long-side clamping; short-side clamping
DISTANCE TO ROOF SURFACE	Approx. 400 mm
DISTANCE FROM THE ROOF EDGE	Without attic: 550 mm; with attic: depending on height
MAX. BUILDING HEIGHT	25 m (adaptation to higher buildings on request)
MAX. ROOF INCLINATION	Up to 5°
MAX. FIELD SIZE	GS15: 12 x 20 rows, 240 modules GS10PLUS: 12 x 16 double rows, 384 modules
MIN. FIELD SIZE	GS15: 3 rows of 2 modules each, or 2 rows of 3 modules each GS10PLUS: 2 double rows of 2 modules each
WIND LOAD	Up to 2,4 kN/m²
SNOW LOAD	Up to 2,4 kN/m²
DESIGN / PROOF OF STABILITY	Supported by software based on wind tunnel tests as well as code and construction standards.
ON-SITE REQUIREMENTS	It must be ensured on site that the roof structure and building structure have the sufficient structural 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. The module release must also be checked by the customer.
COMPONENTS	Module clamps with earthing pins, brackets, ballast stones, optional ballast trays and adhesive building protection pads.
MATERIALS	Load-bearing connecting parts and module clamps made from EN AW–6063 T66 aluminium, screws made from A2-70 stainless steel, brackets made from flat steel - 80 x 5 S355 JR plus 55 HDG, protection against corrosion, building protection pads made from polyester fleece

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