



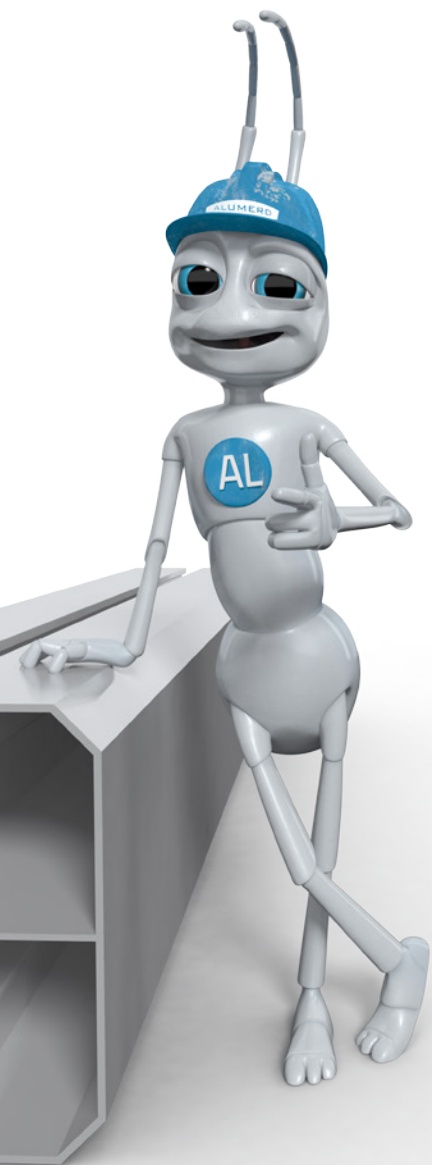
SOLAR



ALUMERO

SYSTEMS & TECHNOLOGY

EN



There is no segment that allows us to prove the sustainability of our innovative concepts better than this one. We invest all our energy into the ultimate developmental goal of harnessing the power of the sun. All our efforts are focussed on the development of new technologies in the field of renewable energy.

To use the infinite power of the sun.



ALUMERO is specialized in mounting systems for photovoltaic and solar installations on flat roofs, pitched roofs and for ground mounting. Individual clamping technologies for laminated and framed modules, as well as customized constructions are also part of our core competency.

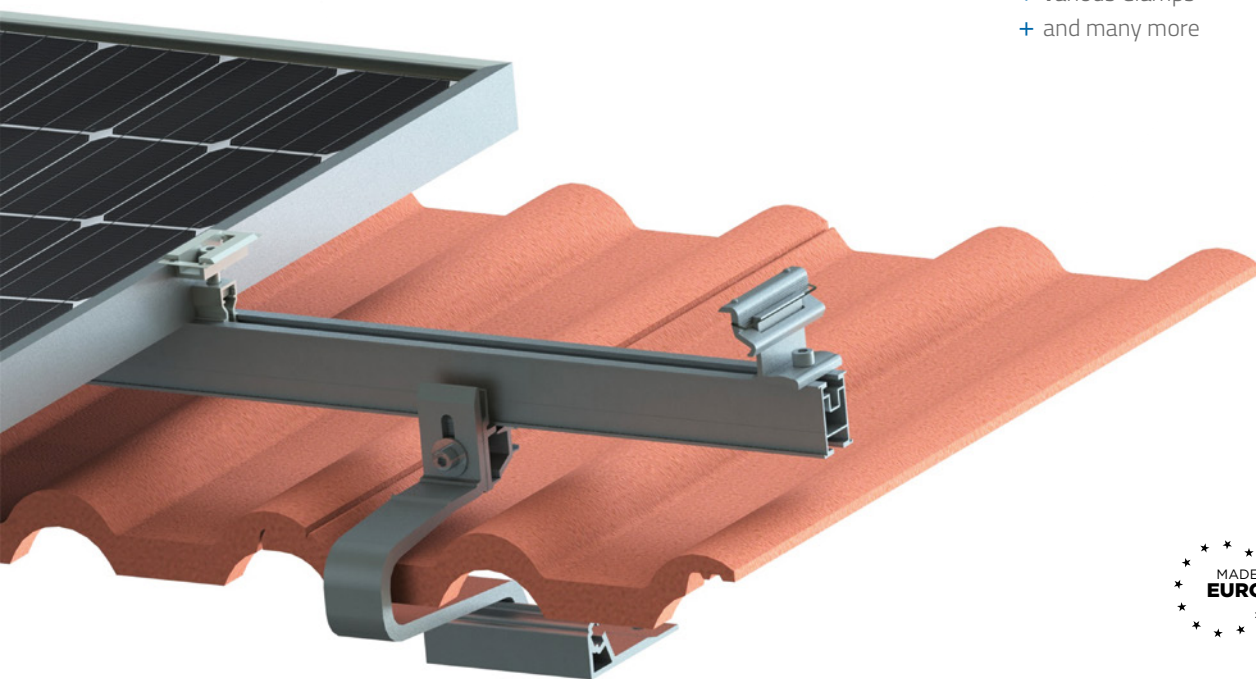
ALUMERO – your system- and OEM-producer.



PITCHED ROOF AS 2.1

THE INNOVATIVE PITCHED ROOF MOUNTING SYSTEM

ALUMERO's most economical pv mounting system for pitched roofs is quick and easy to install. The system **AS 2.1** scores with structurally optimized profiles and pre-mounted components. The ALUMERO **SOLAR.PRO.TOOL** supports you in the technical layout of the pv mounting system. It generates the project report, a material list and a verifiable structural calculation for your pv system.



All product ranges
from this catalog you
can find online at
www.alumero.com

COMPONENTS

- + Roof Hooks
- + Trapezoidal Bridge
- + Hanger Bolt
- + Standing Metal Seam Clamp
- + Mounting Profile
- + various Clamps
- + and many more



SCHRÄGDACH AS 2.1





NEW!
VERSION 2.1

AEROCOMPACT 2.1 S & AEROCOMPACT 2.1 +

AERODYNAMIC FLAT ROOF MOUNTING SYSTEM

After two very successful years, in which more than 300 MW AEROCOMPACT-Systems were built, now version 2.1 is here.

Beside the usual simplicity and reliability, the new 2.0 version has more distance to the roofing which makes it easier to compensate roof unevenness and to simplify the wire management. It comes with a new ballast tray that can be used for all system types. With this version more ballast can be installed for high wind loads and the point loads are evenly distributed in the case of soft roof insulation.

Another benefit is the new inter-row spacing which is calculated with a 18- or 25- degree sun angle for the optimal roof layout per location. Pre-assembled mounting clips provide additional hold to the attached fleece protection pads with aluminum coating.

YOUR BIG ADVANTAGE

- + quick and easy installation
1 kWp in 5 min. with 2 men
- + more distance to the roofing
- + new ballast tray for all systems
- + module clamps with integrated grounding
- + pre-assembled mounting clips
for fleece protection pads
- + less single components
- + corrosion-resistant
- + optimal water drain
- + wind tunnel tested and statically verified
- + examined acc. to „Fire-Test“ UL1703
and load test acc. to IEC 61215
(TÜV-Rheinland)

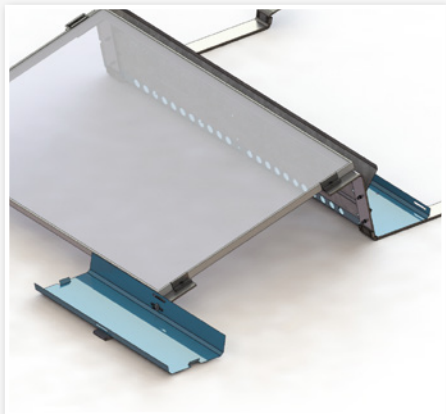


AEROCOMPACT 2.1 S



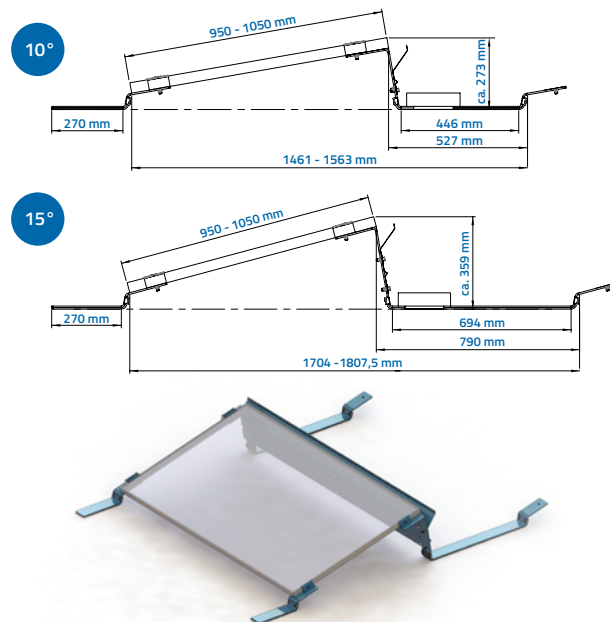
AEROCOMPACT 2.1 +





BALLAST TRAY
for all systems

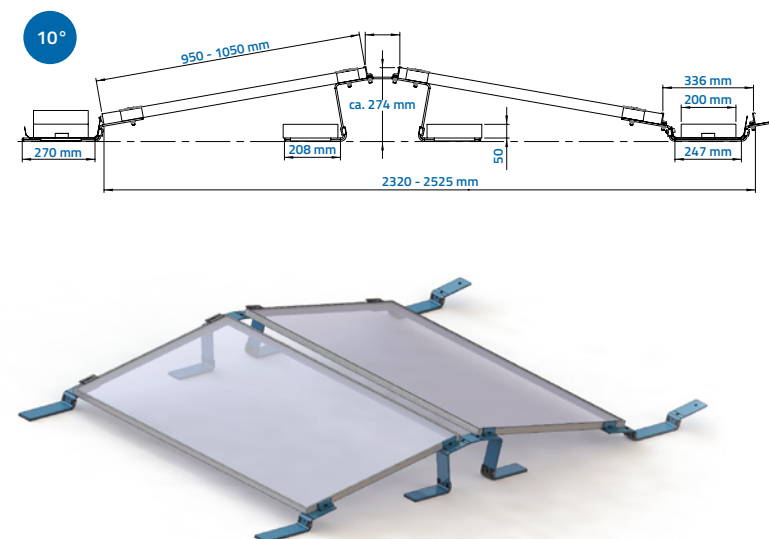
AEROCOMPACT 2.1 S



AEROCOMPACT 2.0 S with shorter row spacing for 25° sun angle available!

AEROCOMPACT 2.1 +

AEROCOMPACT 2.1



TECHNICAL SPECIFICATIONS

Min. load bearing reserve of the roof structure(*):

10 kg/m²

15 kg/m²

Min. system size:

2 rows at 3 moduls / 3 rows at 2 moduls

rows at 2 double-moduls

GENERAL SPECIFICATIONS

Material of flat roof structure:

Aluminium EN AW 6060 and wind-deflector galvanized steel; small parts: A2-70

Standard configuration:

Pressure load up to 2,4 kN/m² (**); suction load up tp 2,4 kN/m² (***)

Alpin configuartion:

Pressure load up to 4,4 kN/m² (**); suction load up tp 2,4 kN/m² (***)

For the following module dimensions:

950 – 1050 mm × 1559 – 1982 mm

Edge distance:

Roof area F and G can be used optionally (minimum edge distance: 600 mm)

Roof conditions:

We require the use of a roof insulation with a high load capacity of the type DAA-ds according to DIN 4108-10. Ensure at site that the roof substructure and other affected roof layers have adequate load bearing capacity.

Max. inclination of flat roof:

Up to 4° or up to 5° depending on roofing or with additional security measures

Max. building height:

25 m

Module fixation:

By clamps at the short side of the modules

Transport volumes:

Approx. 40 KW/range; 700 KW/truck

Accessory:

Earthing clamp for potential equalization, ballast tray, ridge connection for slope over 3°, earthquake protection

(*) The actual required load bearing reserve will be calculated project-related and is depending on the local wind and snow load assumptions (**) Design-value as a load combination from dead load, wind pressure and snow (***) Design-value as a load combination from dead load and wind pressure



THE FASTEST
GROUND MOUNT
INSTALLATION!

AEROCOMPACT G & AEROCOMPACT G+

THE NEW WAY OF GROUND MOUNT

AEROCOMPACT G is our brand new south oriented ground mount system. Designed with a 15° or 20° module tilt.

AEROCOMPACT G+ is the new east/west oriented ground mount system with up to 30% more modules on the same ground space. Designed with a 10° module tilt and elevated 40 cm off the ground from the lowest module point

With the fastest installation time in the industry and the ability to ship 1 MW per truckload, the innovative ground mount system provides both material and labor cost savings. The system can be installed with ground screws or ballast blocks.

YOUR BIG ADVANTAGE

- + wind tunnel tested
- + TUV certified, conforms to UL 2703
- + patent pending
- + 1 MW per truck or 40 ft container
- + very low transport costs
- + complimentary ballast calculation incl. roof layout
- + module clamps with grounding pins
- + the fastest groundmount installation in the industry



AEROCOMPACT G

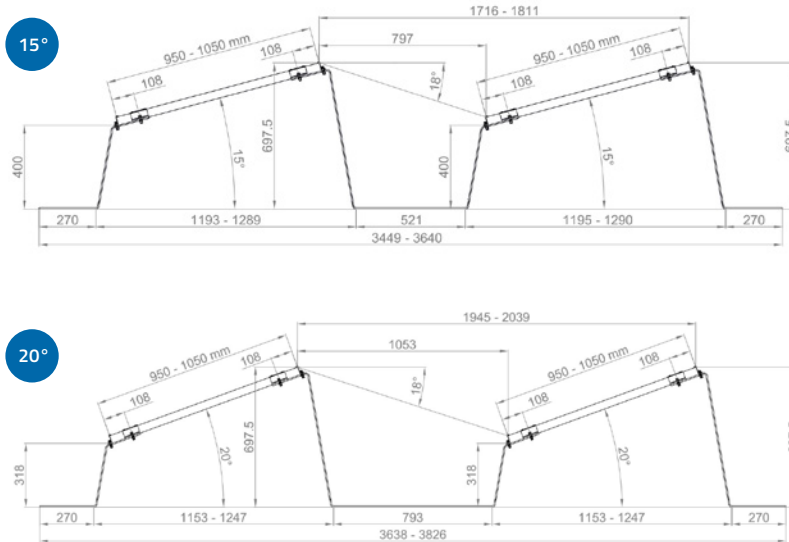


AEROCOMPACT G+

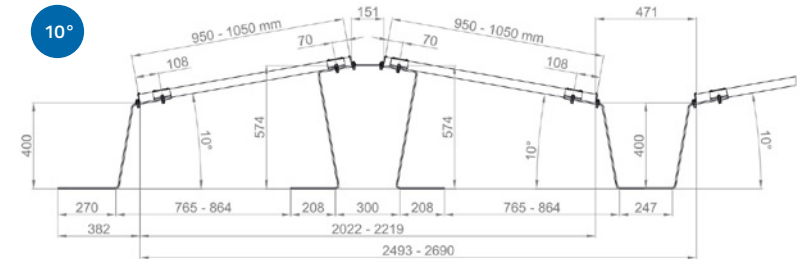




For mountings on green areas we recommend a mow-robot or fleece pieces to avoid vegetation.



AEROCOMPACT G+



TECHNICAL SPECIFICATIONS

Module tilt:	AEROCOMPACT G: 15°, 20°	AEROCOMPACT G+: 10°
Inter-row spacing:	AEROCOMPACT G 15 (18° sun-angle): 797 mm spacing AEROCOMPACT G 15 (25° sun-angle): 555 mm spacing AEROCOMPACT G 20 (18° sun-angle): 1053 mm spacing AEROCOMPACT G 20 (25° sun-angle): 747 mm spacing	AEROCOMPACT G+: 549 mm spacing
Space to the ground:	AEROCOMPACT G 15: 400 mm height AEROCOMPACT G 20: 318 mm height	AEROCOMPACT G+: 400 mm height

GENERAL SPECIFICATIONS

Module dimensions:	950 – 1050 mm x 1552 – 2080 mm (width - length)
Max. ground slope:	20 degree
Wind-/Snowload:	2.4 KN/m ² (Design load as a load combination of dead load and wind suction)
Max. array size:	12 x 20 rows, 240 modules
Material:	Supporting materials made of aluminum EN AW 6060 T64, module-clamps aluminum EN AW 6063 T66, stainless steel screws
Shipping:	Approx. 40 KW per pallet, 700 KW per truckload



SYSTEM
GX

GROUND MOUNT GX

POLE MOUNTING SYSTEM

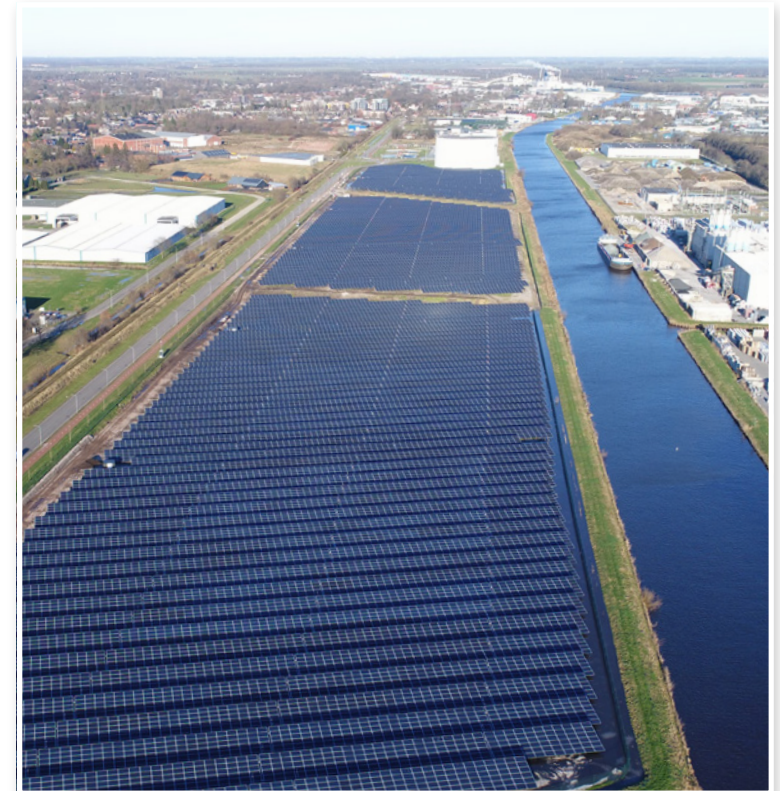
The demand for ground mounted photovoltaic systems have changed.

Due to falling prices of solar modules; land, assembly and installation costs currently make up a larger share of the overall system costs. This results in tighter and denser module layouts; the horizontal alignment of modules is preferred in order to reduce losses from the system's own shadow. Larger constructions with 4 to 6 module rows decrease the racking costs per module.

For those reasons, we have developed the **GX** ground mount system. The horizontal and vertical rail alignment fixed on two rows of poles provide more flexibility and the surface area is efficiently utilized. The system meets the highest industry standards, is wind tunnel tested, calculated project-specifically and statically optimized through our **SOLAR.PRO.TOOL** design software.

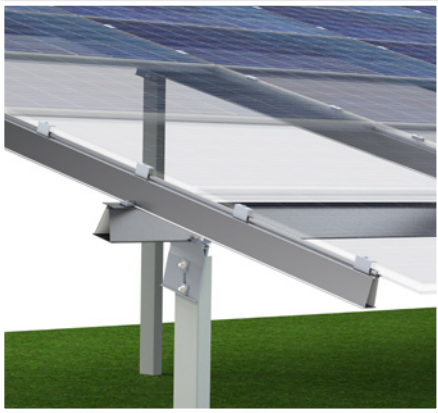
YOUR BIG ADVANTAGE

- + Wind-tunnel tested
- + Moduleclamps with grounding pins
- + Standardized components
- + Therefore fast delivery times
- + Approved for every ground surface
- + Including project specific static calculations
- + Long-term corrosion protection
- + Maximized use of land space

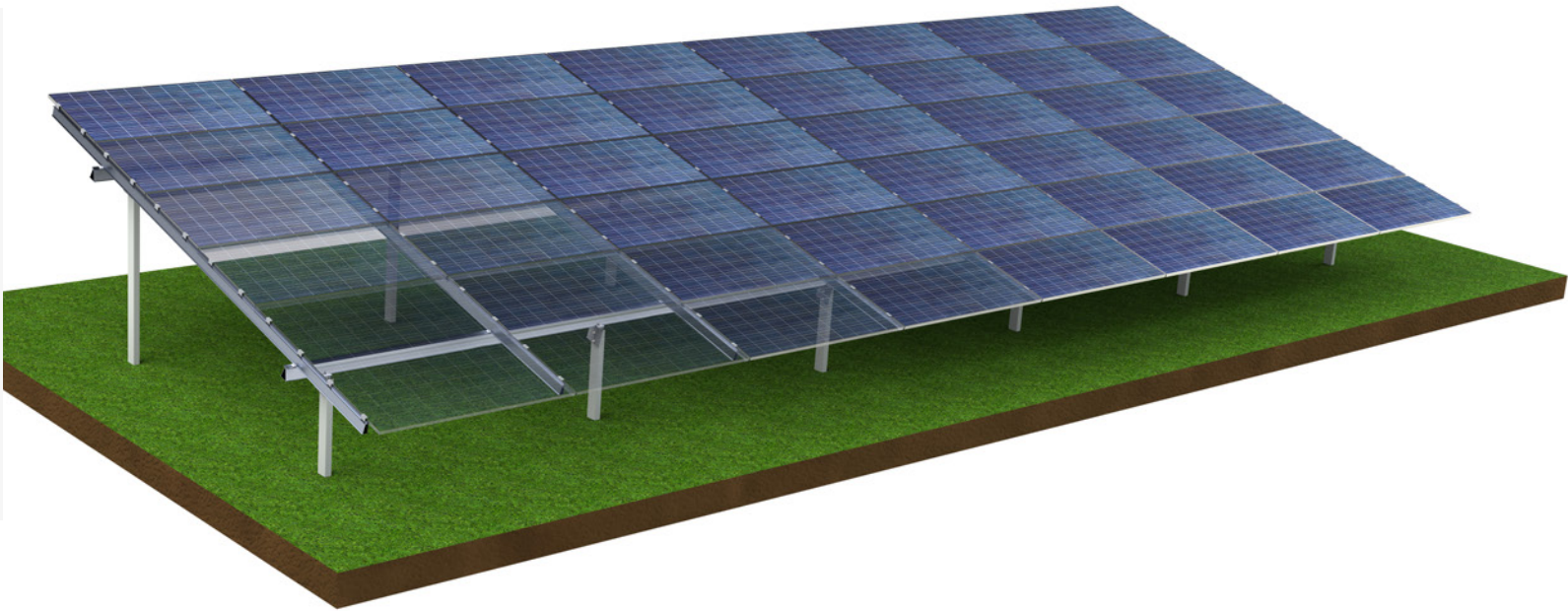


GROUND MOUNT GX





DETAILS



TECHNICAL SPECIFICATIONS

Foundation:	Rammed poles, concrete foundation, drilled holes
Terrain slope:	North- / south -inclination up to +/- 45° East- / west -inclination up to +/- 15°
Material:	Pole: Steel, hot galvanized (EN ISO 1461) Main rail, module rail: Aluminum 6063 T66 Fixtures: Stainless steel 1.4301
Clamping range:	30 – 50 mm
Module orientation:	Landscape
Module configuration:	4 – 6 modules on to of each other
Module type:	60 and 72 cell, framed and frameless
Inclination:	Flexible angle, 5° – 25°
Max. Wind-/Snowload:	Windload up to 250 Km/h Snowload up to 2,4 KN
Module clamps:	Available with and without grounding pins



LANDSCAPE 2.1

GROUND MOUNTING SYSTEM

With a clever mix of high-quality steel components and innovative aluminum components our ALUMERO ground mounting system **LANDSCAPE 2.1** can optimally respond to your requirements. Ease of installation is also of paramount importance for ground mounting system as in the entire portfolio of ALUMERO. With the pre-assembled components for quick mounting you can achieve maximum installation speed. Due to sophisticated standard components different table configurations can be realized immediately from stock. In addition, the simple adjustability makes it easy to adapt the table configuration at site to the different terrain. Thereby your solar park fits in every case, even in difficult terrain.

YOUR BIG ADVANTAGE

- + optimized adaptation to the relief by integrated adjustment
- + effective utilization of material
- + quick and easy installation
- + small quantity of individual components
- + project-related planning and structural calculation
- + no sealing of the soil
- + long life time by high quality components
- + corrosion-resistant
- + easy maintenance of terrain and pasturing possible
- + complete recyclable
- + high residual value

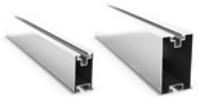


LANDSCAPE 2.1

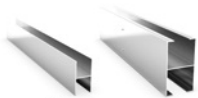




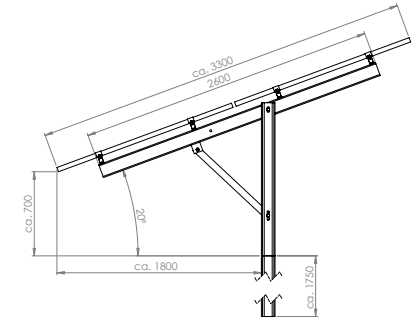
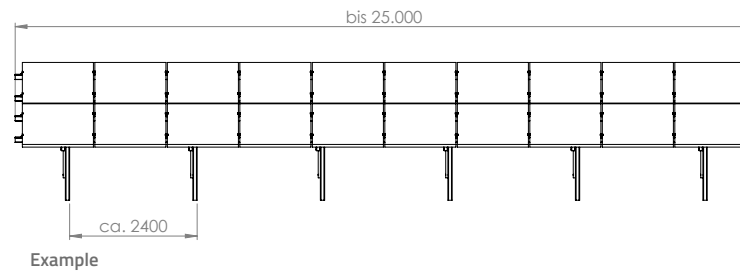
Clamps as pre-assembled components



Aluminium mounting profiles, varying to the wind- and snowloads



Profile connector with slipping protection



Example



TECHNICAL SPECIFICATIONS

Table design:	2 module in portrait in top of each other
Table inclination:	19 ° - 35 °
Table length:	up to 25 m
Depth of penetration:	Standard 1750mm or rather to custom specification
Height of bottom edge of table:	variable
Distance of piles and rafters:	will be calculated project-related and is depending on the local wind and snow load assumptions
Cross section profiles:	will be calculated project-related and is depending on the local wind and snow load assumptions
Material of piles and rafters:	galvanized steel
Material of mounting profiles and clamps:	aluminium EN AW 6063 T66
Material of fastening elements:	Stainless steel A2-70
Accessory:	earthing clamp for potential equalization, components for cable fixation, components for internal potential equalization, ground wire, clamps for all types of modules

LAMINATE CLAMPS

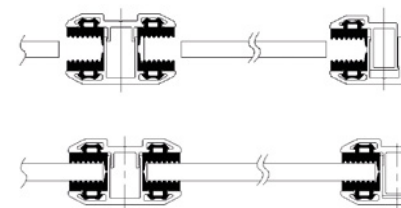
HIGH QUALITY CLAMPS MADE OF EXTRUDED ALUMINIUM

Our unique laminate clamps **CLICK** and **SECURITAS** are high-quality clamps made of an extruded forgeable aluminium alloy with integrated bearing area seal. The elastic sealing insert made of UV-resistant rubber delivers the best possible permitted force-fit clamping. Besides optimal function and quick and easy installation, our clamps also offer other advantages like flexible and customer-designed solutions in constant best quality and short time delivery.



ALUMERO LAMINATE CLAMPS CLICK

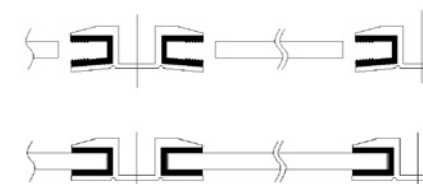
- + Convenient clip connection
- + Delivered fully assembled
- + Available in anodised E6/C35 on request
- + Short-term delivery possible



Scheme open and closed

ALUMERO LAMINATE CLAMPS SECURITAS

- + One-piece – simplifies installation
- + High degree of functionality guaranteed
- + Structural shape integrity guaranteed



Scheme open and closed

CERTIFIED FOR





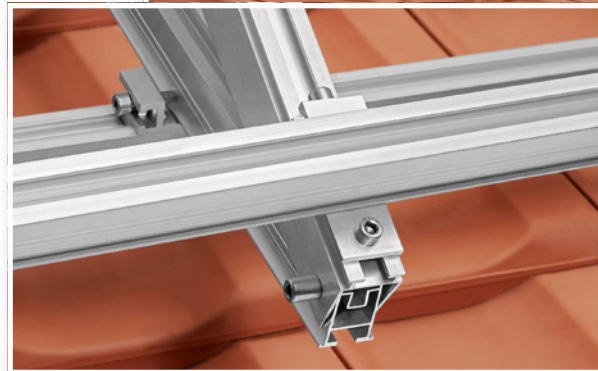
NEW
BY ALUMERO

SOLAR THERMAL ENERGY

LET US USE THE SUN FOR OUR ADVANTAGE

Beside our established and existing photovoltaic mounting-systems, we now present our new and already proved mounting-system for **SOLAR THERMAL ENERGY**. For the winning of sustainable solar energy, the components are designed to incline the thermal-collector from 21° up to 60° on flat and pitched roofs. Specific articles, like mounting-clamps and the slip guard, will be produced and processed to the respective thermal collector or as requested from the client. All ALUMERO solar products are calculated according to the European standards (e.g. EC1 / EC3), and certified and fabricated according to the CE-regulations.

As an industrial company with production plants all over Europe, our focus is the development and the production. That is why we are looking for established and dedicated partners for our mounting systems.



SOLAR.PRO.TOOL

TO PLAN SOLAR PROJECTS FAST AND PRECISE

The ALUMERO **SOLAR.PRO.TOOL** is a software for a simple registration and fast planning of **AEROCOMPACT-** and **AS 2.1-systems**. After collecting the project datas you will get a automatically module plan with simulation of the shadowing, a workable CAD engineering plan, a list of the required material and a project report.

The results are based on the ALUMERO mounting system wich you have choosen and on the therewith connected static calculations according the EN standards.

With our new planning software SOLAR.PRO.TOOL the planning and static calculation of the mounting construction become a breeze for you.



YOUR BIG ADVANTAGE

- + fast and easy data collection and project planning
- + proofable static according EN norms for each project
- + individual planning and material list as output
- + layout and mounting plan
- + shading calculation
- + solar radiation simulation with Polysun
- + 3D view
- + roof datas with Google Fast Draw
- + web application
- + central project management
- + save resources and minimize mistakes



PROJECT PLANNING IN 8 STEPS

- 1 Master data
- 2 Roof datas
- 3 Interfering areas
- 4 PV-modules
- 5 Engineering design
- 6 CAD plan
- 7 Structural calculation
- 8 Required material

+ FAST
+ PROFESSIONAL
+ EFFECTIVE





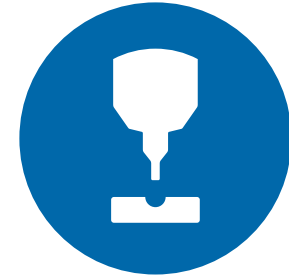
DEVELOPMENT AND ENGINEERING

Individual solutions in close cooperation with our customers are our task and obligation. From the idea to sketch and construction to the finished product we combine all our know-how for you.



EXTRUSION

ALUMERO have specialized in the manufacture of high quality aluminium design profiles made from drawings. For every specific task and requirement we develop the most economical solutions.



PROFILE AND SHEET METAL WORKING

Spezialised experts and state-of-the-art machines stand for quality. ALUMERO offers perfect possibilities for a flexible and powerful production.



SURFACE TECHNOLOGY

Professional surface refinement offers a perfect protection and an elegant design. Our extensive range of surface technologies opens a wide range of design possibilities.



WELDING TECHNOLOGY

Our team of qualified professionals, led by a qualified welding engineer, satisfies challenging demands by offering the highest quality.

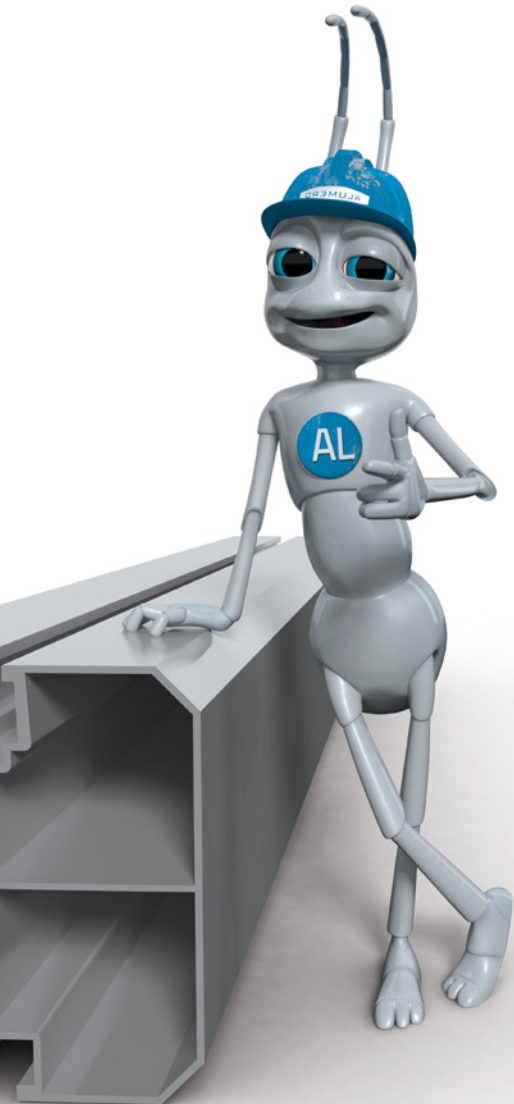


ASSEMBLY PRODUCTION

We supply complete solutions in the frame and assembly production. Many years of experience in connection with modern technology enable us also to assemble complex, individual constructions.



WE ARE THERE BEFORE
THE OTHERS EVEN START.



QUALITY YOU
CAN BUILD ON.

WHY ALUMINIUM?

- + Low weight
(1/3 of the weight of steel)
- + Excellent material strength
- + Corrosion resistant
- + High class appearance
- + Easily reshaped
- + Easily processed
- + Extremely long
life expectancy
- + reflects light
- + Good thermal conductor
- + Good electrical conductor
- + Environmentally friendly
and recyclable

EXTREMELY LIGHT
& ULTRA-STABLE



8%

of the earth's crust is made up of aluminium.



THE „GREEN“ METAL

About 8% of the earth's crust is made up of different types of aluminium compounds. That makes aluminium one of the few raw materials with an almost unlimited supply.

Because of its material properties aluminium has low environmental impact, and it can be used time and time again for the same purposes.

The recycling of aluminium only requires 5% of the original energy input. The percentage of remelting aluminium is meanwhile globally at 35% of the yearly wastage, the trend is increasing. Aluminium is therefore correctly also in the future a material with future!

Aluminium is therefore correctly also in the future a material with future!



ALUMERO GROUP

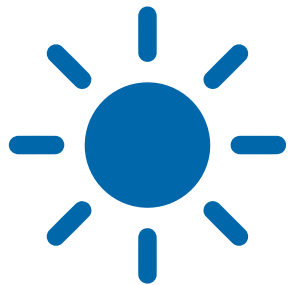
DESIGN, DEVELOPMENT, CONSTRUCTION UND PRODUCTION

ALUMERO is a specialist for tailor-made aluminium solutions. Thereby we can convince as a manufacturer of high-quality aluminium extrusion profiles and aluminium assemblies with mechanical processing, as well as system provider in the business areas solar and photovoltaic, furniture and kitchen industry, metal and façade structures, noise protection, fences, balconies, winter gardens, house doors and much more.

We create long-term solutions based on innovative ideas. We apply our comprehensive knowledge of products and production methods to all aspects of design and development.



ALIVE WITH ALUMINIUM



SOLAR



LIVING



INDUSTRY



BAUTEC / BMA

QUALITY

Quality is no coincidence. it a result of all the details that make a product so valuable, functional, technical, and make its shape pleasing to the eye.

- + modern quality management acc. to EN-ISO 9001:2008 standards
- + high-quality delivered products guarantee our success
- + customer-oriented quality agreements
- + TQM, from planning to purchasing to shipping

- + quality Management as an active and dynamic process
- + standard quality requirements for welding according to EN-ISO 3834-2
- + production of load-bearing structures according to EN 1090
- + time based business administration and agile process management



WWW.ALUMERO.COM

ALUMERO LOCATIONS

Our production facilities provide cost-effective product planning, consistently high product quality and reliable delivery schedules.



ALUMERO Finex Extrusions

Helmond, Netherlands



ALUMERO d.o.o.

Sl. Bistrica, Slovenia



ALUMERO Systematic Solutions

Headquarter, Seeham, Austria



ALUMERO Metal Components

Chorzów, Poland



ALUMERO AND AEROCOMPACT

A STRONG SYMBIOTIC RELATIONSHIP

Due to bundling and linking effects we could offer a best price and technical sophisticated mounting system. Based on continuous development, we ensure the competitiveness and success of our partners.

This modern, future-oriented and powerful alliance increase the entire performance spectrum. Therefore we ensure a professional and cost-effective production and the best service with beneficial consultation on site.



AEROCOMPACT®
smart mounting solutions

THIS IS
AEROCOMPACT

WWW.AEROCOMPACT.COM

AEROCOMPACT LOCATIONS

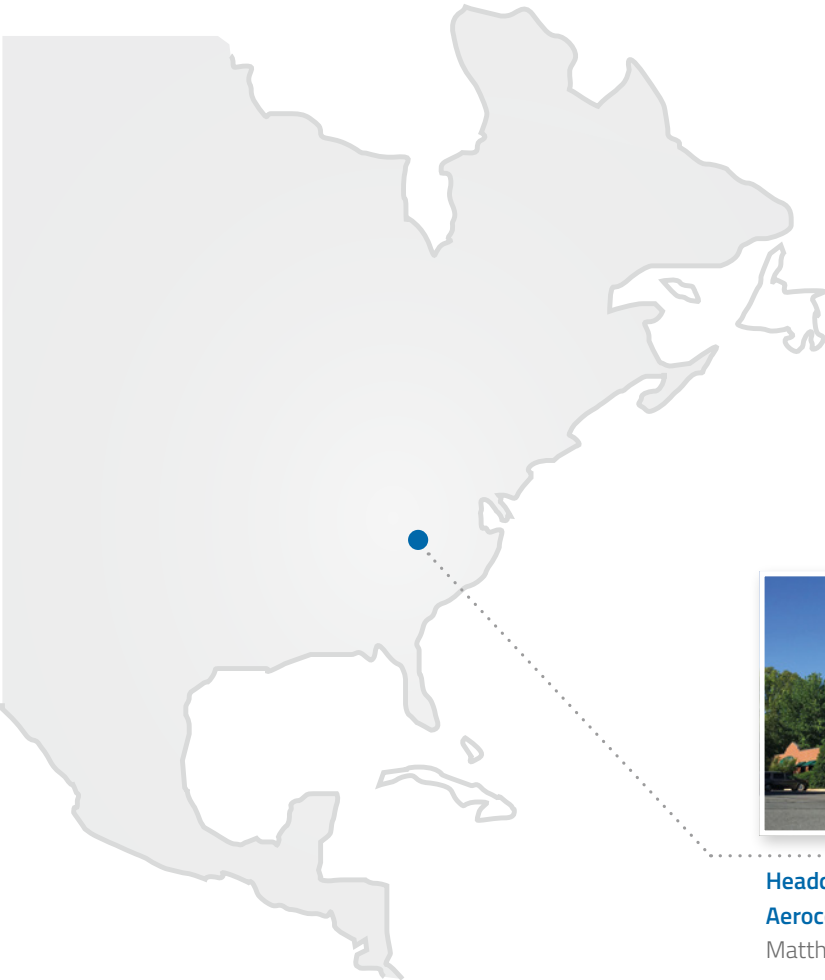
Worldwide locations in Europe, Asia and US.



Headquarter Europe
Aerocompact GmbH
Satteins, Austria



Headquarter USA
Aerocompact Inc.
Matthews, North Carolina



Engineering Office Germany
Freiburg i. B.

Sales Office Germany
Hamburg

Sales Office Benelux
Heerlen

Sales Office Hungary
Csömör

Sales Office Colorado
Greenwood Village

Distribution Center Arizona
Scottsdale

SEEHAM (AUT)

ALUMERO

Systematic Solutions GmbH
Sonnenweg 1-2
5164 Seeham, Austria

CHORZOW (PL)

ALUMERO

Metal Components Sp. z. o.o
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41-508 Chorzów, Poland

HELMOND (NL)

ALUMERO

Finex Extrusions B.V.
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5705 CA Helmond, Netherlands

SL. BISTRICA (SL)

ALUMERO

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2310 Sl. Bistrica, Slovenia

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YOUR DEALER

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