



Shaping the Future of Solar Energy with Cutting- Edge Solutions



www.advancedsolar.mk

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About Advanced Solar

Headquartered in North Macedonia, Advanced Solar is a specialized company that develops, manufactures, and delivers highly engineered solutions for photovoltaic systems.

Backed by a modern in-house production line and a team of experienced engineers, we design and manufacture:

- Structures and components for solar power plants
- Structures and solutions for agrivoltaic systems
- C, U, and Z-type profiles made from Magnelis® coated steel
- Mounting systems and fencing poles for photovoltaic facilities
- Lighting poles and monitoring system supports
- We exclusively use certified materials of European origin, such as Magnelis®, ensuring superior corrosion resistance, high precision, and long-lasting durability across all our products.

With a fully controlled process of production, storage, and logistics, Advanced Solar provides complete solutions for the solar industry — from the initial concept to final on-site delivery.

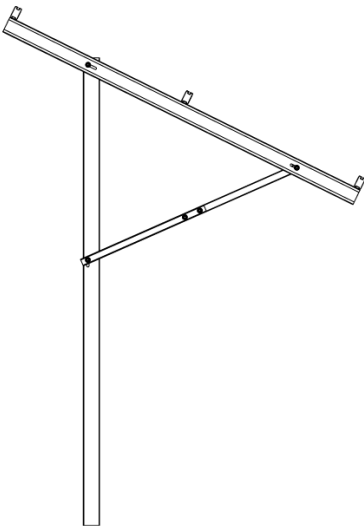


Single Pile Structure

SA12L & SA12P

SA12L: Designed for photovoltaic panels installed in a landscape orientation, this structure combines steel and aluminum for superior strength and durability. It increases energy output, enhances cooling efficiency, and reduces the risk of micro-cracks under extreme weather conditions.

SA12P: A cost-effective solution optimized for portrait-oriented panels, featuring a structure made of high-quality steel and aluminum. Ideal for mild climates and stable terrain, it ensures secure and economical installation.



Durability

Engineered to withstand diverse weather conditions with high static resistance.



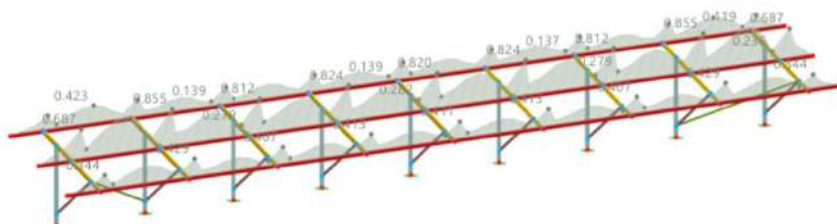
Mounting

A universal and efficient design for quick installation across various projects and terrains.



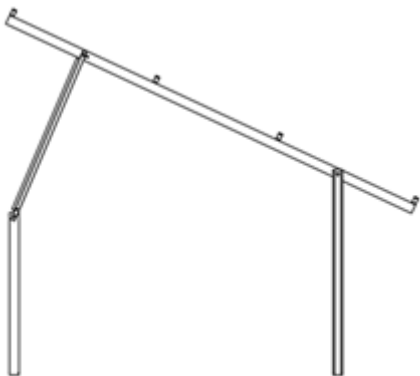
Financial Efficiency

Reduced investment costs, an ideal solution for moderate climate conditions.



Double Pile Structure

SA24L & SA24P

**1**

Best Price

This type of structure offers a highly reliable solution at a competitive price, combining durability, ease of installation.

2

Static Stability

The structure's design provides stability, reducing panel vibrations and cracks.

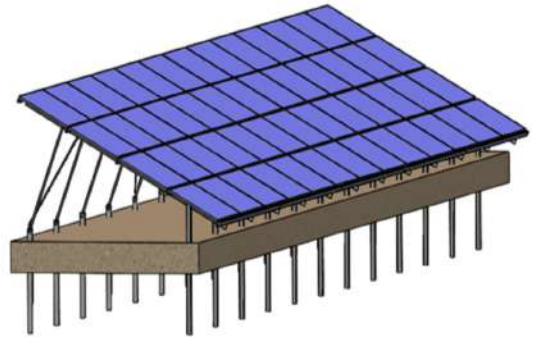
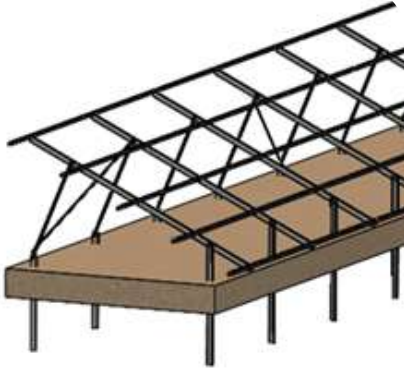
3

Mounting

Its design allows for easy and fast mounting, which significantly reduces installation time and labor costs — ultimately lowering the total price of the entire structure.

SA24L: Structure for landscape bifacial panels that allows maximum light exposure, better cooling, and higher energy production. The panels are secured with aluminum brackets and stainless-steel screws on five horizontal profiles for increased stability. Ideal for large plants with high yield and long lifespan.

SA24P: Cost-effective construction for standard panels, tailored for moderate conditions. It offers a good investment-to-energy performance ratio, with quick and easy installation that reduces costs.



Light Poles for PV Plants

1

Single arm

Single-arm light poles: Often used for long surfaces where a double-arm pole is not required. Our 6-meter lighting poles provide optimal illumination and fully meet all basic requirements.

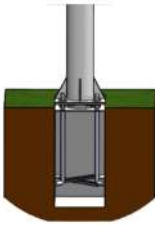
2

Double arm

Double-arm light poles: Often used at corners, our model with an adjustable angle offers flexibility with two angle options between the arms: 45 and 90 degrees, customized according to the client's requirements.

	Single-arm	Double-arm
Total Length	6 meters	6 meters
Angle	100 degrees	45 or 90 degrees
Components	3 parts + anchor	3 parts + anchor
Materials	S235/S355J2	S235/S355J2
Surface protection	HDG, ECG, ESP	HDG, ECG, ESP





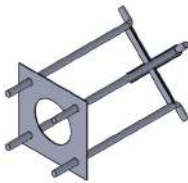
Adjustable anchor designed for easy installation in concrete foundations, providing stability and precise alignment of lighting poles.



The top of the lighting pole features an arm that passes through the tube, laser-cut to allow smooth cable passage. A cover is mounted at the very top, secured with two screws, preventing the entry of dirt and rain, ensuring durability and protection.



The opening for the electrical components is precisely laser-cut, ensuring accurate dimensions. The cover is also laser-cut for a precise fit and is secured with two Allen screws, providing enhanced safety and protection.



The preassembled anchors serve as a sturdy support for the lighting pole, designed and welded for embedding in concrete foundations. They feature a threaded rod that allows easy and adjustable installation of the pole, ensuring precise leveling.



Fence poles for Photovoltaic Plants

Our portfolio also includes the production of durable fence posts, with or without holes for barbed wire installation, using high-quality hot-rolled steel tubes.



The processes of machine-driven piling and hot-dip galvanizing are standard practices that ensure easy installation and excellent corrosion resistance, meeting the industry's strict durability standards.

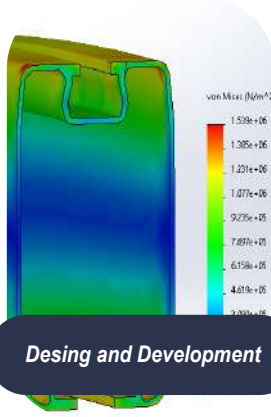
While we offer the three most commonly requested fence post types (3000, 3600, and 2400 mm), our R&D team is fully equipped to customize solutions according to each client's specific requirements.



Services



Advanced Solar offers an all-in-one solution for solar structures – from design and manufacturing to delivery and installation.



Desing and Development

Our design and development team works directly with you to create solutions tailored to your specific requirements.



We use top-quality materials such as EU-certified alloy steels with Magnelis, or HDG surface protection for long-lasting durability and performance.



Our team is an expert in ground-mounted solar power plants, offering efficient and reliable solutions. With years of experience, we cover everything – from site assessment to design and installation. We use high-quality materials and advanced technology for long-term optimal performance.



Our team specializes in fast and efficient installation of rooftop solar plants. We use modern technology and high-quality materials for reliable, long-lasting solutions that transform your roof into a stable source of energy.

Aluminum profiles

The Advanced Solar portfolio also includes specially designed aluminum alloy profiles for the installation of photovoltaic panels.

1

Enhanced statics

Additional research and development have led us to improve and enhance load durability.

2

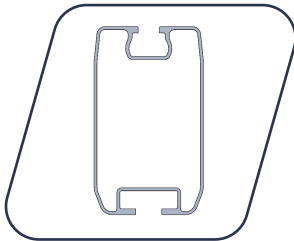
Simplified installation

Based on the guidelines from our field teams, we have been able to create solutions that assist in daily operations and accelerate the construction process of the power plants.

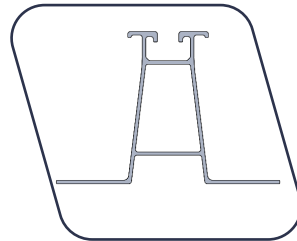
3

Competitive price

Our innovative solutions have led to a higher quality and more competitive European product.



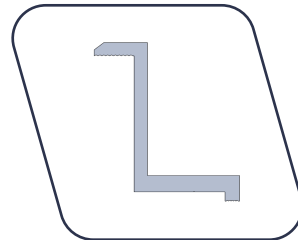
Profiles for PV plants on ground



Profiles for PV plants on roofs



Middle clamps



End clamps

Your Ideas, Our Expertise

At Advanced Solar, we don't just deliver components — we deliver fully integrated solutions, precisely engineered to meet your specific requirements.

Our experienced engineering team transforms your ideas, technical drawings, and concepts into functional, high-performance products for the solar energy sector, fencing systems, and street lighting infrastructure.



OEM and Custom Design to Your Specifications

We adapt our production process to your exact needs — whether it's a one-off prototype or a full-scale production run. Working directly from your drawings and specifications, we provide complete flexibility in material selection, dimensions, and finishing options.



Engineering Support and Technical Consulting

Our team of engineers, technicians, and manufacturing specialists offers comprehensive support at every stage of the project:

- Technical drawing review and optimization
- Test production and quality assurance
- Packaging, logistics, and final delivery
- Every project is executed with precision, care, and professionalism



Flexible Manufacturing and Rapid Prototyping

Equipped with a modern machine park — including CNC laser, CNC milling, CNC lathe, automated profile line (C, U, Z), CNC bending presses, and specialized engineering software — we offer fast prototyping, product testing, and scalable manufacturing with short lead times.

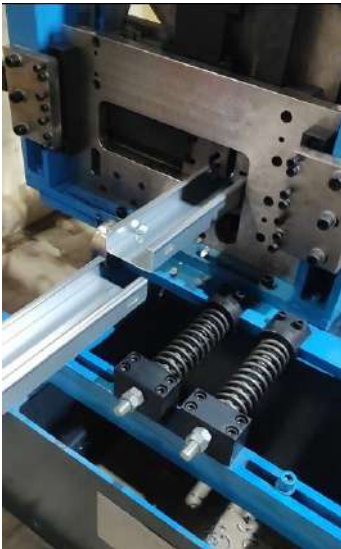


Long-Lasting Durability You Can Rely On

We work exclusively with proven materials such as Magnelis®, aluminum, and stainless steel, ensuring excellent corrosion resistance and exceptional longevity — even in the harshest environments.

Production - R&D

Advanced Solar operates a fully automated production facility in Skopje, Macedonia, specializing in the fabrication of C/U/Z steel profiles for photovoltaic mounting systems.



Our engineering division utilizes a modern machinery park for R&D, prototyping, and custom product development. We continuously integrate advanced manufacturing techniques and AI-driven process optimization to improve precision, product quality, and lead times across all production stages.

Clients and collaborators





Shaping the Future of Solar
with Cutting-Edge Engineering!

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