

# Photönroof

PHOTOVOLTAIC CERAMIC ROOF TILES



CATALOG 2026



# PhotonRoof, the roof that generates energy

## Photovoltaic Roof Tiles for demanding architecture

PhotonRoof is an energy-active roof tile that simultaneously functions as both roofing and a photovoltaic installation. It replaces a traditional roof while preserving its form and proportions, discreetly generating clean energy for the building. The solution has been designed for architecture in which aesthetics, technology, and environmental responsibility must go hand in hand. With PhotonRoof, the roof remains a roof – a coherent, harmonious element of the building's form – while becoming a stable source of energy.

Behind the PhotonRoof system stands ML System S.A. – a manufacturer specializing in building-integrated photovoltaic (BIPV) solutions. The project was developed in response to the growing tension between the need for on-site energy generation and the requirements of contemporary and historic architecture. The goal was to create a roof tile that preserves the visual consistency of traditional roofing while incorporating the latest PV technologies and meeting rigorous quality and safety standards.

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“PhotonRoof brings together what for years remained separate – the roof and the energy source. We wanted investors not to have to choose between aesthetics, durability, and modern technology.”

President of the Management Board of PhotonRoof P.S.A.

Dawid Cycoń







# Design that becomes Architecture

**PhotonRoof combines the  
function of a roof and  
a photovoltaic installation into  
one coherent system.**

PV roof tiles replace traditional roofing, preserving the proportions, divisions, and character of classic roof tiles while simultaneously generating electricity – transforming photovoltaics from an add-on into an integral part of the building's architecture.

## **Roof and photovoltaics in one**

PhotonRoof eliminates the need to install separate panels on mounting structures. The roof itself becomes the PV installation, avoiding the visual "add-on" effect on the roof surface and preserving the building's clean, legible form.

## **Architecture without compromise**

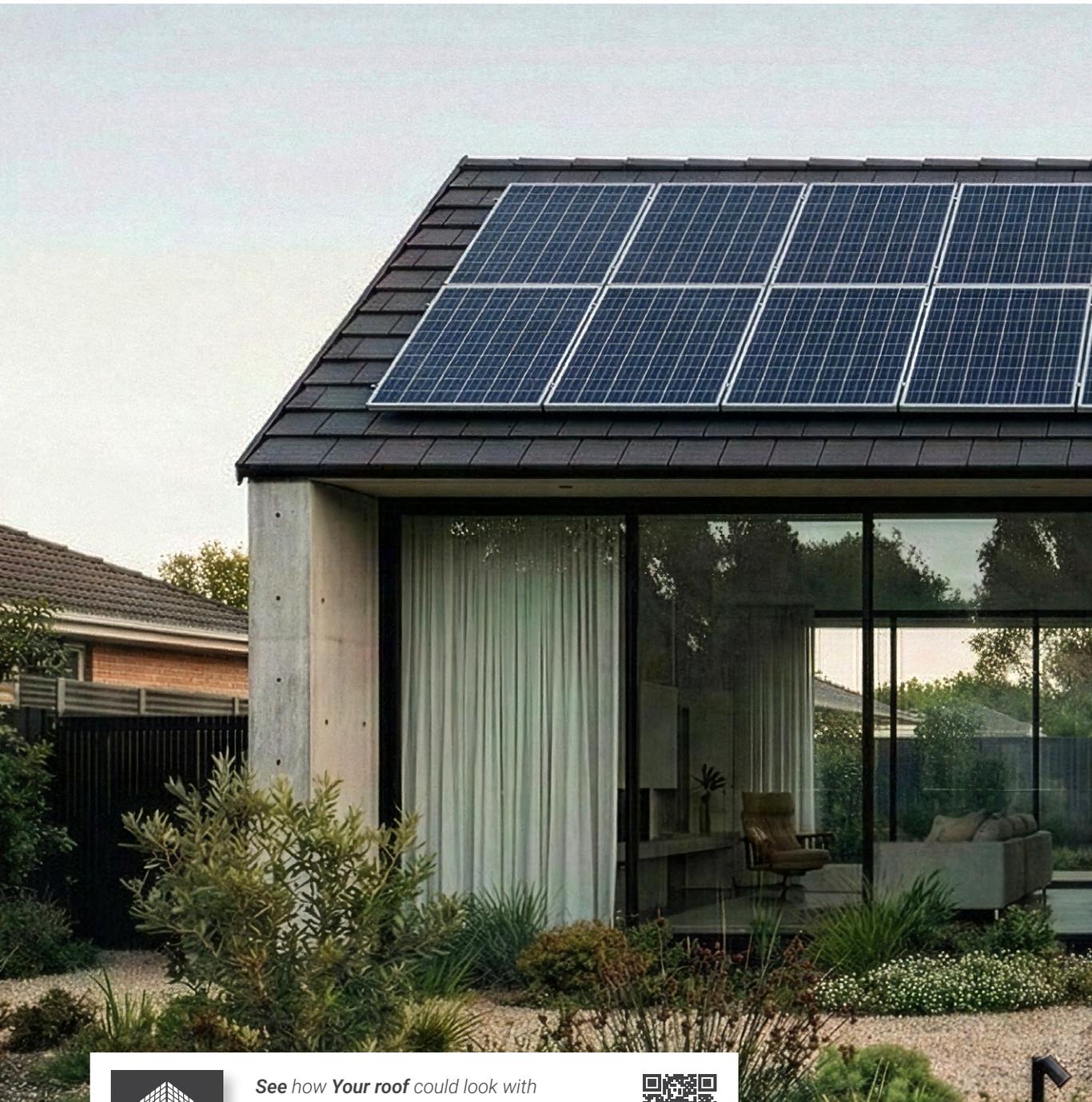
Photovoltaic roof tiles preserve the line and rhythm of traditional roofing. A uniform roof surface without frames or visible profiles does not compete with the building's form, but rather enhances and organizes it. The solution works equally well in both contemporary and more classical architectural designs.

## **Concealed PV technology**

Energy is embedded in the roof structure rather than added onto it. From the observer's perspective, PhotonRoof appears as a refined roofing solution; only the technical specifications reveal that it simultaneously functions as an energy source. This is particularly important for buildings with elevated aesthetic requirements.

# Traditional photovoltaics

Conventional rooftop photovoltaic installation\*



See how **Your roof** could look with  
**PhotonRoof** photovoltaic roof tiles.

[visual.photonroof.eu](https://visual.photonroof.eu)



# PhotonRoof

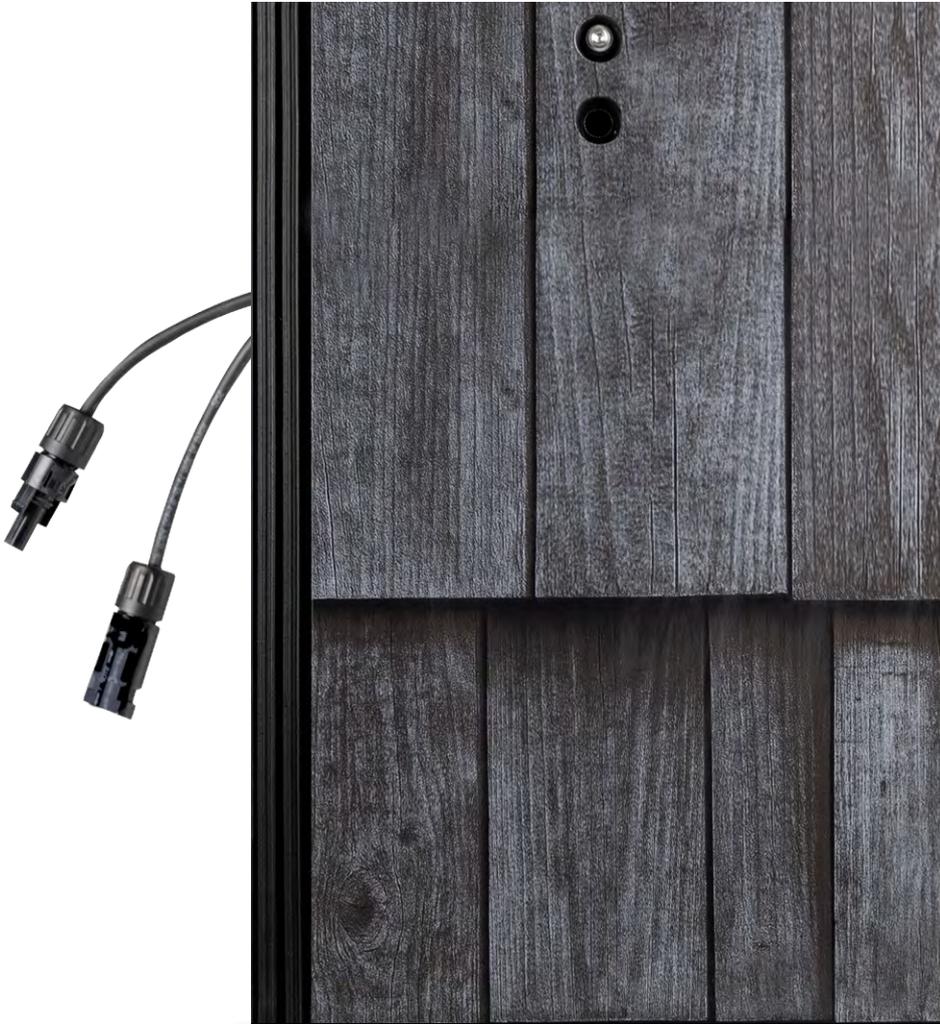
Conventional rooftop photovoltaic installation.



Modern Noble Slate

# PhotonRoof – Perfection in Every Detail

Roof tiles that combine cutting-edge technology with refined design.



Hail resistance:  
75 mm at a velocity of  
140 km/h



Temperature resistance:  
from  $-50^{\circ}\text{C}$  to  $+90^{\circ}\text{C}$



30-year  
warranty



Scratch resistance: hard-  
ness 8/10 on the Mohs  
scale



BROOF(t1)  
Highest external fire  
performance classification



Wind resistance:  
up to 250 km/h



## Exceptional surface

\*\*Replicates the roughness, texture, and structure of ceramic and natural materials.\*\*



## Active layer

High-efficiency cells generating electrical energy.



## Mounting bracket

The use of the mounting bracket enables faster installation, reducing overall costs.



## Mounting hole

A feature designed to ensure smooth and trouble-free roof installation.



## Gasket

Ensures roof watertightness even in the most demanding weather conditions.

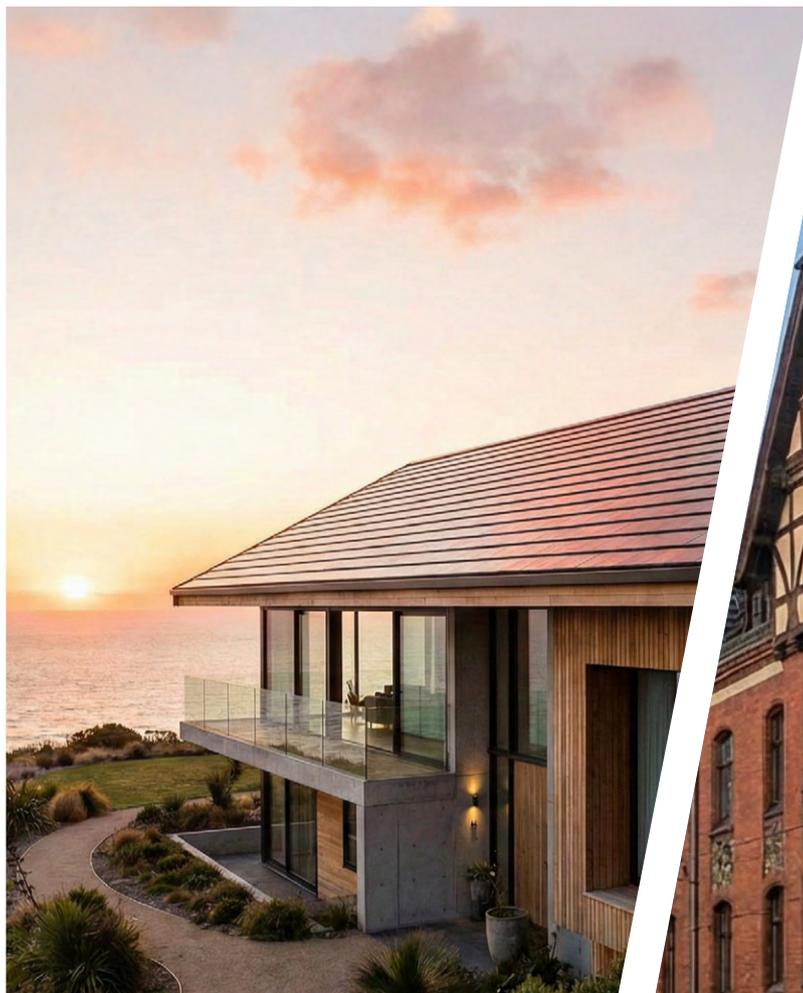


## Connectors

Enable precise and fast connection of individual components.

# PhotonRoof Roof Tile Lines

Choose the PhotonRoof roof tile line that matches the character and aesthetics of your roof.



## Modern Line

The flat roof tile is the essence of contemporary architecture. Its clean, geometric form creates a uniform, smooth roof surface, perfectly suited to minimalist designs. Forget traditional waves — choose subtle elegance that enhances the character of your home.

## Vintage Line

A line inspired by the classic beavertail tile shape, characterized by rounded, scale-like roof tiles. It is an excellent solution for buildings with a traditional form, manor houses, or renovated properties, where preserving the historic character of the roof is a priority while simultaneously implementing modern energy technology.



## Nature Line

A unique solution that visually replicates roofing made from natural materials. It is the ideal choice for design connoisseurs and for properties located in areas subject to landscape regulations. This series preserves harmony with characterful architecture, combining tradition with cutting-edge technology.

# PhotonRoof

## Designed with diverse needs in mind



## Noble Series

### Maximum style

\*\*The Noble Series was created for buildings where the roof highlights the architectural character.\*\* Varied glass textures and carefully selected colors make the roof surface an important compositional element rather than merely a neutral background. Noble is an excellent choice for homes with a distinctive form, representative buildings, and projects in locations with elevated aesthetic requirements. It is designed for investors who want to combine energy generation with a more expressive roof design – without compromising photovoltaic performance.

#### Noble – when to choose?

- ✓ when the roof is a key element of the architectural composition,
- ✓ in projects with elevated aesthetic standards,
- ✓ where form and detail are just as important as performance.

Power	■ ■ ■ □ □
Aesthetics	★ ★ ★ ★ ★
Surface structure	Rough



# Pure Series

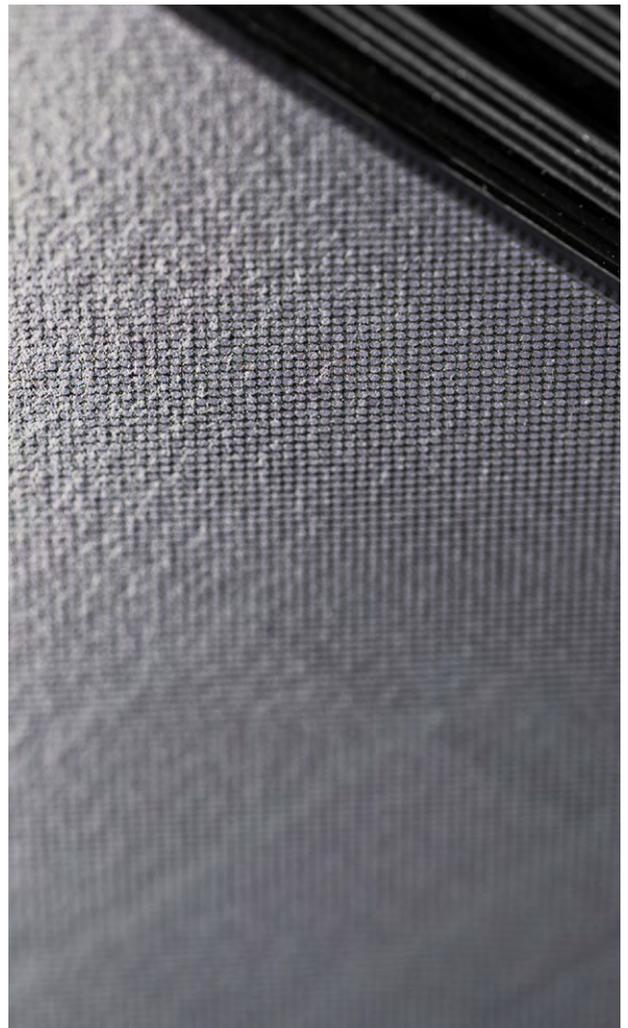
## Maximum power

The Pure Series was designed with maximum roof energy efficiency in mind. The textured surface structure and optimized tile geometry support high energy output, particularly in projects with large roof areas.

Pure is the choice for investors and designers who see the roof as an active energy component of the building and prioritize system performance above all.

### Pure – when to choose?

- ✓ when maximum energy production is the project's priority,
- ✓ in buildings designed for high on-site energy consumption,



Power	■ ■ ■ ■ ■
Aesthetics	★ ★ ★ ☆ ☆
Surface structure	Rough



# Modern Line

## Noble Series



\* podane moce dotyczą wytworzenia energii elektrycznej z 1 m<sup>2</sup> krycia modułu X6 przy minimalnym rozstawie łat

	Grey Noble:					Black Noble:					Red Noble:				
Module:	X1L	X1	X3	X4	X6	X1L	X1	X3	X4	X6	X1L	X1	X3	X4	X6
Power [Wp/unit]:	4,2	4,2	17,0	25,5	42,6	3,5	3,5	14,3	21,4	35,7	5,6	5,6	22,8	34,3	57,3
Power [Wp/m <sup>2</sup> ]*:	39	39	53	59	66	32	32	44	49	55	52	52	70	79	88
Width [mm]:	300	328	928	1228	1828	300	328	928	1228	1828	300	328	928	1228	1828
Height [mm]:	465	465	465	465	465	465	465	465	465	465	465	465	465	465	465
Thickness [mm]:	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12
Weight [kg]:	4	4	12	15	23	4	4	12	15	23	4	4	12	15	23
Coverage [units/m <sup>2</sup> ]:	9,26	9,26	3,09	2,31	1,54	9,26	9,26	3,09	2,31	1,54	9,26	9,26	3,09	2,31	1,54
Batten spacing [mm]:	360-385					360-385					360-385				



# Modern Line

## Pure Series



\* podane moce dotyczą wytworzenia energii elektrycznej z 1 m<sup>2</sup> krycia modułu X6 przy minimalnym rozstawie łąt

	Grey Pure:					Black Pure:					Red Pure:				
Module:	X1L	X1	X3	X4	X6	X1L	X1	X3	X4	X6	X1L	X1	X3	X4	X6
Power [Wp/unit]:	6,7	6,7	27,4	41,2	68,8	8,5	8,5	35	52,7	88	6,7	6,7	27,4	41,1	68,7
Power [Wp/m <sup>2</sup> ]*:	62	62	85	95	106	79	79	108	122	136	62	62	85	95	106
Width [mm]:	300	328	928	1228	1828	300	328	928	1228	1828	300	328	928	1228	1828
Height [mm]:	465	465	465	465	465	465	465	465	465	465	465	465	465	465	465
Thickness [mm]:	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12
Weight [kg]:	4	4	12	15	23	4	4	12	15	23	4	4	12	15	23
Coverage [units/m <sup>2</sup> ]:	9,26	9,26	3,09	2,31	1,54	9,26	9,26	3,09	2,31	1,54	9,26	9,26	3,09	2,31	1,54
Batten spacing [mm]:	360-385					360-385					360-385				



The company reserves the right to use cell types other than those shown in the catalog images and notes that color variations may occur depending on the production batch. Additionally, the placement of mounting holes may be subject to change.

# Linia Nature

## Seria Noble



**Slate Noble**

moc do 51 wp/m<sup>2</sup>\*

**Wood Noble**

moc do 51 wp/m<sup>2</sup>\*

**Copper Noble**

moc do 65 wp/m<sup>2</sup>\*

\* podane moce dotyczą wytworzenia energii elektrycznej z 1 m<sup>2</sup> krycia modułu X6 przy minimalnym rozstawie lat

Slate Noble:

Wood Noble:

Copper Noble:

Module:	X1L	X1	X3	X4	X6	X1L	X1	X3	X4	X6	X1L	X1	X3	X4	X6
Power [Wp/unit]:	3,3	3,3	13,2	19,9	33,1	3,3	3,3	13,3	19,9	33,2	4,1	4,1	16,7	25,1	41,9
Power [Wp/m <sup>2</sup> ]*:	31	31	41	46	51	31	31	41	46	51	38	38	52	58	65
Width [mm]:	300	328	928	1228	1828	300	328	928	1228	1828	300	328	928	1228	1828
Height [mm]:	465	465	465	465	465	465	465	465	465	465	465	465	465	465	465
Thickness [mm]:	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12
Weight [kg]:	4	4	12	15	23	4	4	12	15	23	4	4	12	15	23
Coverage [units/m <sup>2</sup> ]:	9,26	9,26	3,09	2,31	1,54	9,26	9,26	3,09	2,31	1,54	9,26	9,26	3,09	2,31	1,54
Batten spacing [mm]:	360-385					360-385					360-385				



# Linia Nature

## Seria Pure



**Slate Pure**

moc do 96 wp/m<sup>2</sup>\*

**Wood Pure**

moc do 94 wp/m<sup>2</sup>\*

**Copper Pure**

moc do 106 wp/m<sup>2</sup>\*

\* podane moce dotyczą wytworzenia energii elektrycznej z 1 m<sup>2</sup> krycia modułu X6 przy minimalnym rozstawie łąt

	Slate Pure:					Wood Pure:					Copper Pure:				
Module:	X1L	X1	X3	X4	X6	X1L	X1	X3	X4	X6	X1L	X1	X3	X4	X6
Power [Wp/unit]:	6,1	6,1	24,8	37,3	62,3	6	6	24,2	36,4	60,8	6,7	6,7	27,5	41,3	68,9
Power [Wp/m <sup>2</sup> *]:	56	56	77	86	96	56	56	75	84	94	62	62	85	95	106
Width [mm]:	300	328	928	1228	1828	300	328	928	1228	1828	300	328	928	1228	1828
Height [mm]:	465	465	465	465	465	465	465	465	465	465	465	465	465	465	465
Thickness [mm]:	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12
Weight [kg]:	4	4	12	15	23	4	4	12	15	23	4	4	12	15	23
Coverage [units/m <sup>2</sup> ]:	9,26	9,26	3,09	2,31	1,54	9,26	9,26	3,09	2,31	1,54	9,26	9,26	3,09	2,31	1,54
Batten spacing [mm]:	360-385					360-385					360-385				



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# Linia Vintage

## Seria Noble



\* podane moce dotyczą wytworzenia energii elektrycznej z 1 m<sup>2</sup> krycia modułu X6 przy minimalnym rozstawie lat

	Grey Noble:				Black Noble:				Red Noble:			
Module:	X1	X3	X4	X6	X1	X3	X4	X6	X1	X3	X4	X6
Power [Wp/unit]:	1,4	4,4	5,8	8,7	1,2	3,7	4,9	7,4	1,6	5	6,7	10,1
Power [Wp/m <sup>2</sup> ]*:	52	52	52	52	44	44	44	44	60	60	60	60
Width [mm]:	180	540	720	1080	180	540	720	1080	180	540	720	1080
Height [mm]:	380	380	380	380	380	380	380	380	380	380	380	380
Thickness [mm]:	12	12	12	12	12	12	12	12	12	12	12	12
Weight [kg]:	2	6	7	11	2	6	7	11	2	6	7	11
Coverage [units/m <sup>2</sup> ]:	36	12	9	6	36	12	9	6	36	12	9	6
Batten spacing [mm]:	155-165				155-165				155-165			



# Linia Vintage

## Seria Pure



\* podane moce dotyczą wytworzenia energii elektrycznej z 1 m<sup>2</sup> krycia modułu X6 przy minimalnym rozstawie łąt

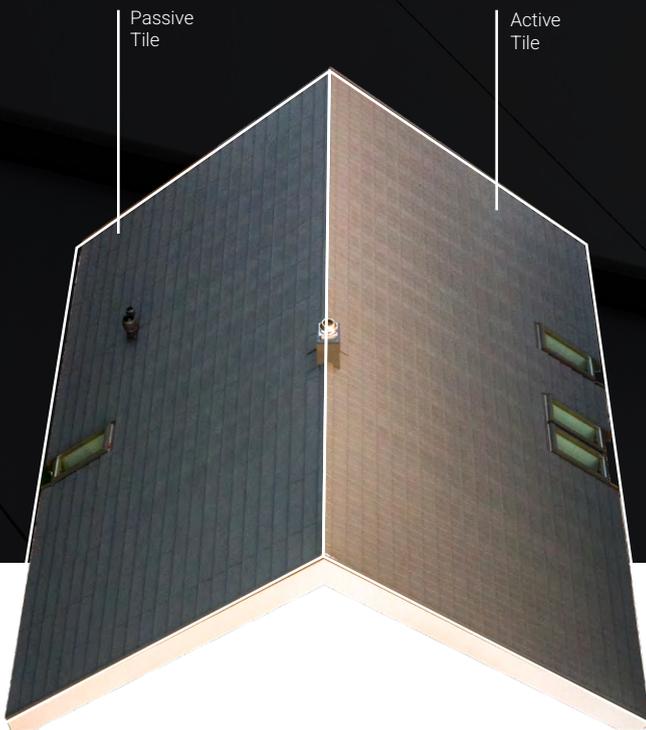
	Grey Pure:				Black Pure:				Red Pure:			
Module:	X1	X3	X4	X6	X1	X3	X4	X6	X1	X3	X4	X6
Power [Wp/unit]:	2,3	7,1	9,5	14,2	3,1	9,6	12,8	19,3	2,1	6,4	8,6	12,9
Power [Wp/m <sup>2</sup> ]*:	85	85	85	85	115	115	115	115	78	78	78	78
Width [mm]:	180	540	720	1080	180	540	720	1080	180	540	720	1080
Height [mm]:	380	380	380	380	380	380	380	380	380	380	380	380
Thickness [mm]:	12	12	12	12	12	12	12	12	12	12	12	12
Weight [kg]:	2	6	7	11	2	6	7	11	2	6	7	11
Coverage [units/m <sup>2</sup> ]:	36	12	9	6	36	12	9	6	36	12	9	6
Batten spacing [mm]:	155-165				155-165				155-165			



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# Uniform roof. Integrated energy.

The PhotonRoof system combines active and passive tiles within one visually cohesive roofing solution. As a result, the roof maintains a uniform appearance, without the mosaic effect typical of competing photovoltaic systems.



## How does it work?

### Active and passive tiles – one system

Passive tiles do not generate energy, but are visually identical to the active version. This allows for flexible roof design in shaded areas, on northern slopes, or in locations where energy production is not technically justified.

A uniform roof appearance regardless of the arrangement of active and passive elements.



## Complete roof finishing

In multi-slope roofs, such as hip roofs, there are areas that require special tile fitting – including hips and ridges, valleys, the main ridge line, chimneys, roof windows, and dormers.

In such cases, it is possible to order custom-made passive tiles manufactured to specific dimensions. This solution allows precise adaptation to roof slopes and ensures a uniform, aesthetically consistent appearance of the entire roofing system.

Custom-made tiles guarantee color consistency and a high-quality finish.



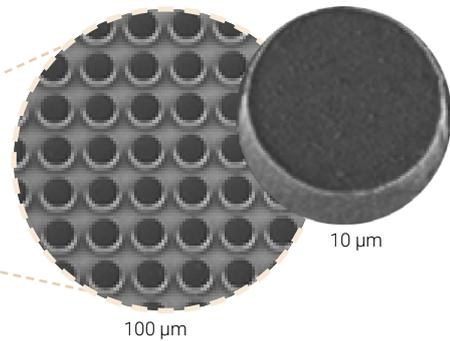
# More energy from the sun thanks to quantum technology

True luxury is not only about beauty, but above all about a sense of security and reliability. PhotonRoof embodies this idea – the quiet power of technology working seamlessly to provide protection, above-average energy performance, and peace of mind for decades.



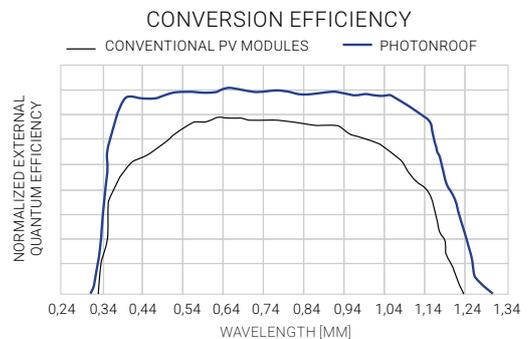
## Quantum technologies that generate more energy

PhotonRoof tiles demonstrate a significant advantage over traditional photovoltaic solutions. Thanks to the application of innovative quantum well technology, our system can generate up to 30% more green energy than a conventional PV installation with the same nominal capacity. This means more efficient use of every sunlit roof surface and a faster return on investment.



## Efficiency across a broader light spectrum

The photovoltaic roof tile has been designed to deliver high performance not only under intense sunlight, but also in diffused light, on cloudy days, and during morning and afternoon hours. Advanced cell technology enables efficient use of solar energy in varying lighting conditions, resulting in stable energy production throughout the day and maximum utilization of the roof's potential – regardless of the weather.



# Traditional installation of a modern roof tile

PhotonRoof tiles are equipped with integrated mounting holes. Depending on the module type, installation is carried out using one, two, or three screws.

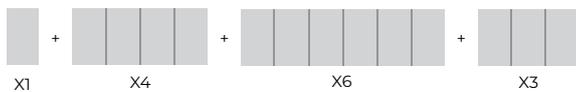
A dedicated mounting bracket ensures secure and stable positioning of the tile on the battens. The system is compatible with standard batten spacing used for traditional roof tiles, eliminating the need to redesign the roof structure.

The modular construction of PhotonRoof tiles significantly speeds up installation. In the case of the X6 module, six tiles are installed simultaneously using just three screws.

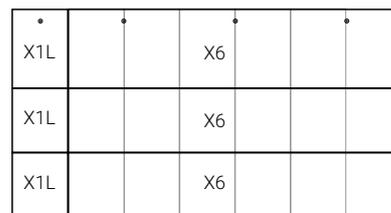


## Connection types

PhotonRoof tile modules can be interconnected in any configuration to maximize the efficient use of the roof surface.



Straight layout

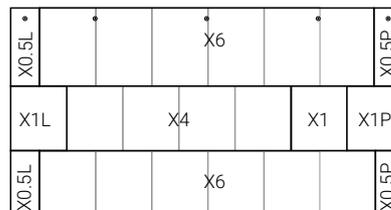


## Modern Tile

Batten spacing [mm]: 360–385

The Modern line allows for both straight and staggered layouts using active and passive tiles. Active tiles are responsible for energy production, while passive tiles are used in complementary areas — along edges, at corners, and in zones with limited sunlight exposure.

Staggered layout





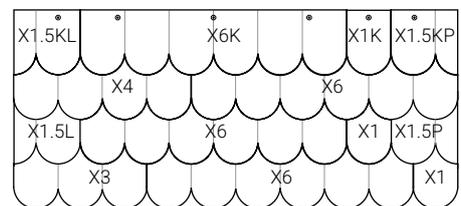
## Vintage Tile

Batten spacing [mm]: 155–165

The Vintage line was designed with a traditional roof form in mind and uses both active and passive tiles in edge and ridge configurations. Passive tiles are applied in areas where energy production is not required, ensuring an aesthetic finish along edges and the ridge line.

Active tiles are positioned in zones with the best sunlight exposure, without affecting the visual consistency of the roofing system.

Ridge tiles are available in the following versions:  
X1.5KL - X1.5KP - X1K - X3K - X4K - X6K



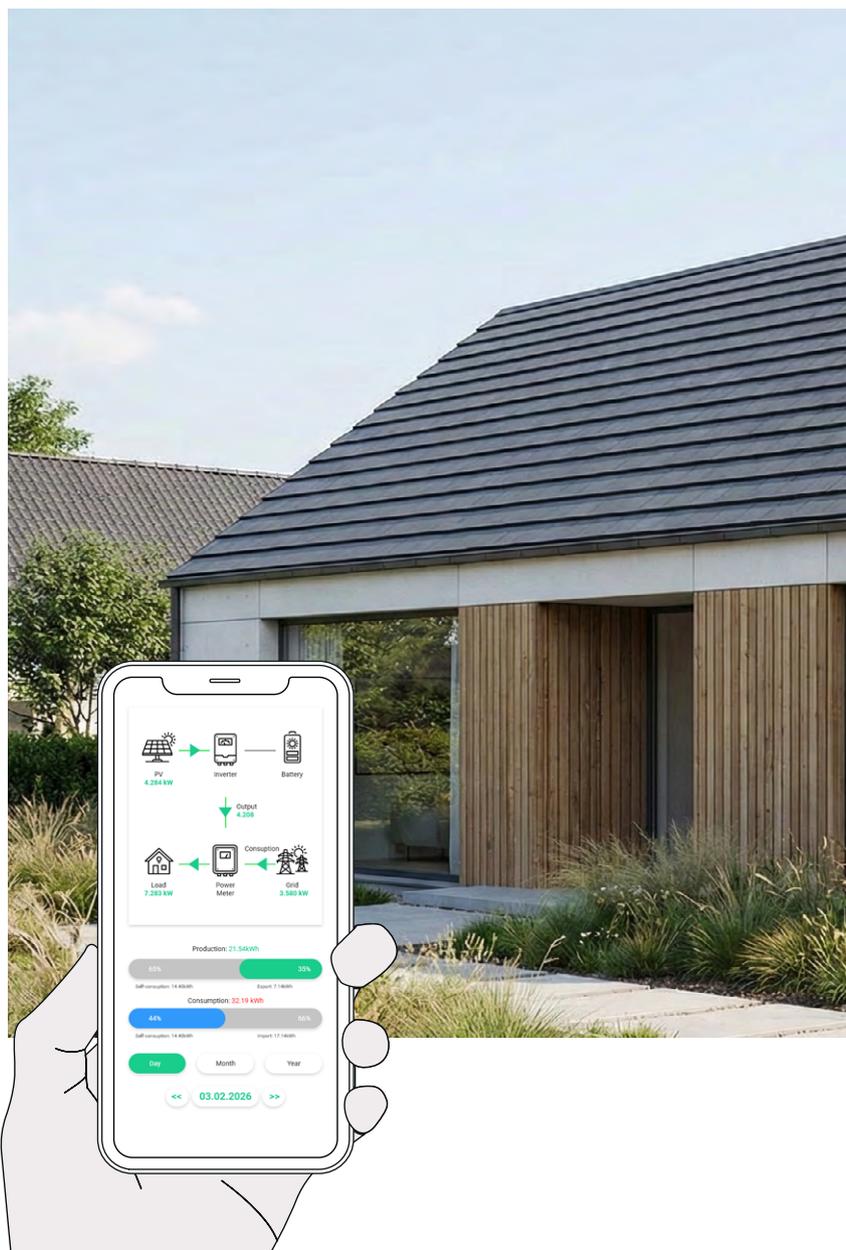
# Nexuview SCADA Intelligent management of your home

## Your Personal Energy Manager

### More than monitoring and automation (Global Scripts)

Your home thinks for you. With the Global Scripts feature, the system operates like an advanced PLC controller. There is no need to manually switch devices on – Nexuview SCADA automatically integrates the operation of your photovoltaic system with air conditioning or a heat pump, activating them when there is demand

- **Automatic control:** The system independently decides when to charge the energy storage system and when to feed electricity back into the grid, based on schedules and tariff structures.
  - **Power regulation:** Smooth control of both consumed and exported power.
- Profit maximization:** Priority use of self-generated energy (self-consumption) instead of exporting it to the grid, resulting in tangible reductions in electricity bills.



## True ecosystem integration

**One system, all devices** Nexuview SCADA is a central command hub that brings everything together into one integrated system

- **PhotonRoof tiles** and conventional PV modules
- **Energy storage** systems and meters
- **HVAC systems** (heating, ventilation, air conditioning)
- **Lighting** and blinds/shutters
- **Electric** vehicle chargers

The system supports universal communication standards (including BACnet, Modbus, and MQTT), ensuring that in the future you will be able to connect virtually any modern device that enters the market.

**Failure prevention:** The system does not wait for a malfunction to occur. Through continuous analysis of historical data and performance trends, it detects anomalies and enables intervention before a more serious failure develops.



## Security and remote diagnostics

You don't need to be an expert in electricity. Nexuview SCADA monitors your installation 24 hours a day.

- **Automatic alerts:** The system instantly detects faults, performance drops, or module soiling and notifies you – and optionally ML System S.A. service support.
- **Failure prevention:** Through the analysis of historical data and performance trends, we can respond before a serious malfunction occurs.

## Control in your pocket

Regardless of whether you use a computer, tablet, or smartphone, you have full visibility into your home.

- **Clear charts:** Check how much energy you generated today, yesterday, or last year.
- **Financial monitoring:** View your actual savings and reduced CO<sub>2</sub> emissions.
- **Remote control:** Turn off the lights or adjust the temperature in the living room while you're on vacation.

# Accessories and devices

**A roof is a complex system in which every detail affects the durability and overall aesthetics.** We leave nothing to chance. We supply only dedicated components designed to form an integral whole with the roof tile. As a result, your roof achieves full technical compatibility and a harmonious appearance, without unnecessary add-ons. By choosing a complete system from a single source, you gain certainty and peace of mind for years to come.

## Installation accessories

We offer a dedicated set of installation accessories designed as an integral part of the PhotonRoof ecosystem. These components ensure absolute watertightness, structural stability, and safety, while remaining invisible in the final aesthetic appearance. Each element has been selected to guarantee full material compatibility and resistance to the most demanding weather conditions.

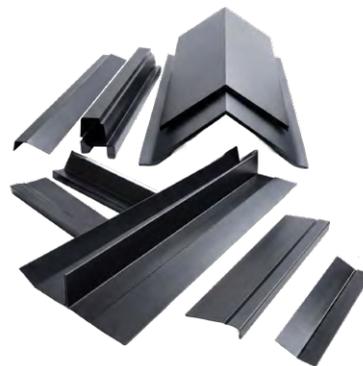


## Photovoltaic system

We provide a complete photovoltaic system, including all key components required for the safe and high-performance operation of the installation. The offering includes inverters, hybrid solutions, protection systems, and an energy management system. Each device has been carefully selected to perfectly match the performance characteristics of PhotonRoof tiles, ensuring operational stability and energy security.

## Roof finishing elements

Our sheet metal flashings are the aesthetic finishing element that completes the roof design. We deliver a comprehensive system of components made from high-quality aluminum, created with modern architecture in mind. We guarantee precision workmanship, durability, and a perfect fit with the building's form.







# In harmony with nature confirmed by an EPD declaration

By choosing PhotonRoof, you invest not only in your home,  
but also in the future of the planet.

Our commitment to sustainable development has been confirmed by the award of a Type III Environmental Product Declaration (EPD) for PhotonRoof. This transparent document, based on a full life-cycle assessment of the product, provides measurable data on its environmental impact:

## Rapid energy payback

A 100 m<sup>2</sup> roof offsets the energy used for its production in just 1.6 years.

## Annual CO<sub>2</sub> reduction

The same roof reduces CO<sub>2</sub> emissions by 10.331 tonnes per year, representing a significant environmental benefit.



# Economic value and long-term investment

Building a home is one of life's most important decisions, and choosing the roofing system is a key, one-time investment in the building's lifecycle. The value of the PhotonRoof system should therefore be assessed not only in terms of initial cost, but above all through its long-term economic and functional benefits, as well as the increase in the property's value. This investment delivers measurable advantages that make it a more thoughtful and cost-effective choice than traditional solutions.



## Intelligent capital efficiency

The PhotonRoof system is more cost-effective than the combined expense of purchasing traditional roofing and a separate PV installation. Additionally, installation on standard batten spacing simplifies and accelerates the process, generating further savings.

## Subsidies

As an integrated renewable energy source, the system may qualify for subsidies, significantly shortening the return on investment period.

PhotonRoof is not merely an expense for roofing — it is, above all, a smart investment in the building's energy future, its independence, and its long-term market value. Such an advanced product must be backed by a credible and experienced innovation leader who guarantees the fulfillment of every promise.

## A value-generating asset

The production of your own clean energy significantly reduces electricity bills, while surplus energy can generate additional income — ensuring a steady return on investment and increasing the property's market value.

## Guaranteed reliability

The investment is secured by a 30-year manufacturer's warranty, serving as a seal of its durability and reliability.

# Durability and safety

Standards comparison	Roof covering	Conventional photovoltaics	PhotonRoof
Photovoltaic standards:	-	✓	✓
Construction standards:	✓	-	✓
Fire classification standards:	✓	-	✓
Electrical standards:	-	✓	✓
Environmental standards:	-	-	✓



PN-EN 13501 – Fire classification of construction products and building elements

PN-EN 1990 – Basis of structural design

PN-EN 1991 – Actions on structures

PN-EN 16612 – Glass in building

PN-EN 12150 – Glass in building – Thermally toughened safety glass

PN-EN 14449 – Laminated glass and laminated safety glass

PN-EN IEC 61730 – Photovoltaic (PV) module safety qualification

IEC 61215 – Terrestrial photovoltaic (PV) modules – Design qualification and type approval

IEC 62716 – Ammonia corrosion testing

IEC 61701 – Salt mist corrosion testing of photovoltaic (PV) modules

IEC 62804 – Resistance to PID (Potential Induced Degradation)

EN 15804 – Sustainability of construction works

ISO 14001 – Environmental management systems

ISO 14064-1:2019 – GHG Protocol – Specification with guidance at the organizational level for quantification and reporting of greenhouse gas emissions and removals

ISO 14025 – EPD – Environmental Product Declaration

LVD 2014/35/EU – Low Voltage Directive (new) – Electrical equipment designed for use within certain voltage limits

2006/95/EC – Low Voltage Directive (old) – Electrical equipment designed for use within certain voltage limits

## ML System R&D Department

The R&D Department of ML System S.A. operates a state-of-the-art laboratory where new technologies and products are continuously developed. Many of these innovations are protected by patents and utility models. The laboratory's advanced equipment also enables comprehensive testing and further product development.

PhotonRoof is protected by international intellectual property rights.

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## Classifications and approvals

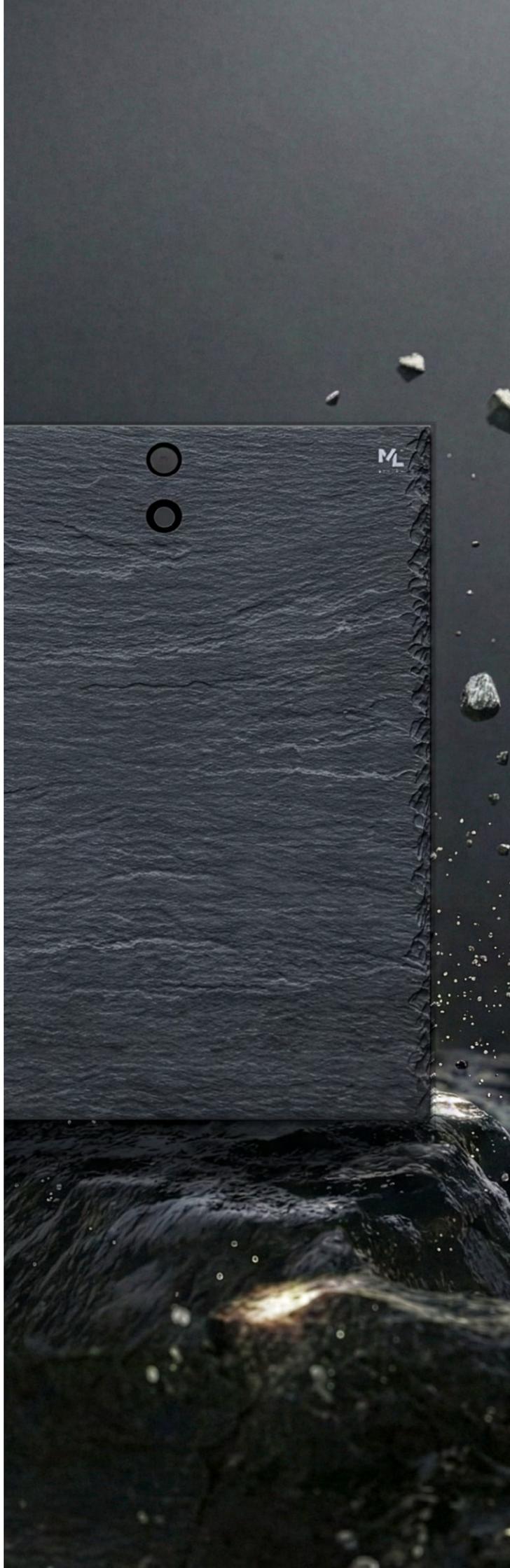
The PhotonRoof photovoltaic roof tile is **approved for use as a construction material**.

The PhotonRoof photovoltaic roof tile is **approved for use as a photovoltaic module**.

The product has been **tested in aggressive environments** (ammonia and salt mist).

The PhotonRoof photovoltaic roof tile is **classified as NRO – a non-fire-spreading material**, qualifying it for use on large roof areas exceeding 1,000 m<sup>2</sup>.

PhotonRoof holds the **European BROOF (t1) classification** for roofing systems.



# Quality assurance from an innovation leader

Behind the PhotonRoof technology stands ML System S.A. – a European leader in building-integrated photovoltaics (BIPV). It is a company whose technological strength and experience guarantee the highest quality standards.

## Global experience

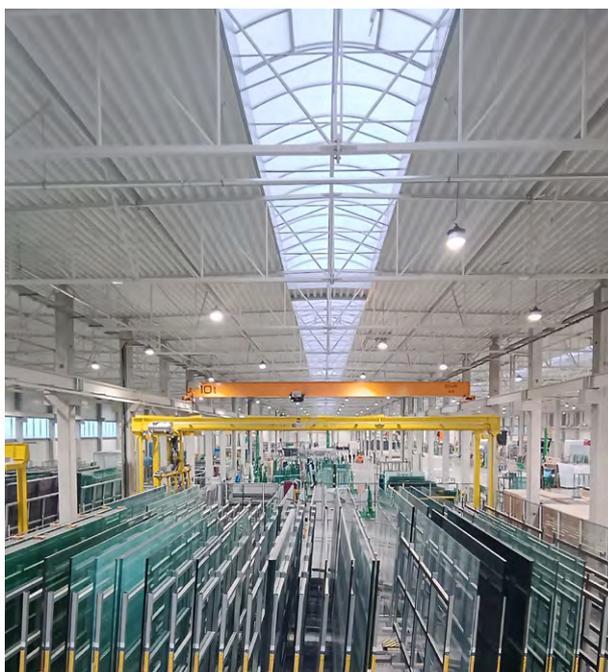
Our products have been successfully implemented in thousands of buildings worldwide, confirming their reliability across diverse climatic and architectural conditions.

## Infrastructure and facilities

A modern production facility with an area of 40,000 m<sup>2</sup> stands as proof of the company's scale and operational stability.

## Innovation

The company holds 21 granted patents. Its in-house laboratory is equipped with research devices unique on a global scale, reflecting a relentless pursuit of excellence.



The ISO 9001 certificate confirms the organization's ongoing process of continuous improvement. The ISO 14001 certificate demonstrates the development and implementation of an environmental management policy.



Product certification for photovoltaics according to IEC standards.



**Lukasiewicz**  
Instytut Ceramiki  
i Materiałów  
Budowlanych

Classification report for reaction to fire according to EN 13501: no flaming droplets (category d0), low smoke emission (category s1).



Manufacturer of complete BIPV systems offering: modules, façades, cladding panels, shutters, roof tiles, components, mounting systems, automation, and the ML SCADA management system.

**21**  
Granted  
patents

**40 000** m<sup>2</sup>  
of production facility  
space

**19**  
Years  
of experience

**100**  
research  
devices

**20 000**  
Completed  
projects



PhotonRoof comes with a 30-year warranty.\*



Classification report for roofing BROOF approving the use of PhotonRoof photovoltaic tiles.



Technical opinion on fire safety according to §225 of the Technical Conditions.

\*Detailed warranty terms are provided in the warranty card.

# Sample projects

## Modern Line Pure Series

Private project  
Location: Rzeszów  
PhotonRoof area: 420 m<sup>2</sup>  
Capacity: 42 kWp



A private single-family home in Rzeszów exemplifies a conscious choice of technology, where architectural aesthetics are just as important as functionality. The project involved three hip roofs, requiring precise adaptation of the system to the complex geometry of the building.

The use of photovoltaic roof tiles preserved the roof's cohesive form while introducing a discreet and fully integrated energy source, without altering the building's character.



## Nature Line Pure Series

Private project  
Location: Chamonix  
PhotonRoof area: 190 m<sup>2</sup>  
Capacity: 15 kWp



The project in Chamonix, located in one of Europe's most protected landscapes, required compliance with exceptionally strict formal and aesthetic regulations. The use of photovoltaic roof tiles was only possible after obtaining official approval from local heritage authorities, a distinction rarely granted in the French Alps.



Thanks to the precise imitation of wooden shingles, the tiles blend seamlessly into the Alpine architecture dominated by shingle and slate roofs, combining landscape preservation with modern technology.

## Vintage Line Pure Series

Wiśnicz Castle

Location: Nowy Wiśnicz

PhotonRoof area: 50 m<sup>2</sup>

Capacity: 3.9 kWp



Wiśnicz Castle, one of Poland's most valuable defensive residences, is a site of exceptional historical and conservation significance. Any intervention in its structure requires solutions that meet the highest heritage protection standards.

The application of ML System S.A. technology at this location demonstrates that modern photovoltaics can coexist harmoniously with historic architecture. PhotonRoof tiles preserved the building's original character while introducing a fully energy-active solution.



## Vintage Line Pure Series

Alte Münze Mint

Location: Munich

PhotonRoof area: 400 m<sup>2</sup>

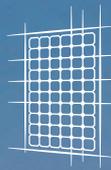
Capacity: 30 kWp



The Renaissance building Alte Münze (Old Mint), constructed between 1563 and 1567, is not only an architectural gem — it serves as the official seat of the Bavarian State Office for Monument Protection.

In this project, there was no room for compromise. The client was an institution setting the highest conservation standards in Europe. Their decision to renovate the roof using the PhotonRoof system from ML System S.A. is definitive proof that our technology meets the most rigorous aesthetic requirements.





# Photonroof

PHOTOVOLTAIC CERAMIC ROOF TILES

producer:



ML SYSTEM S.A.  
Zaczernie 190G  
36-062 Zaczernie, Poland



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[www.youtube.com/user/mlsystempl](https://www.youtube.com/user/mlsystempl)



[www.linkedin.com/company/ml-system-sa](https://www.linkedin.com/company/ml-system-sa)



See how **Your roof** could look with  
**PhotonRoof** photovoltaic roof tiles.

[visual.photonroof.eu](https://visual.photonroof.eu)



[photonroof.eu](https://www.photonroof.eu)

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