

SOLAXESS⁺

WHITE & COLOR SOLAR TECHNOLOGY

100% integrated
photovoltaics

www.solaxess.ch

Your partner
for the production of
BIPV elements
active roofs and facades

Our expertise

Solaxess is a Swiss company that specializes in the **high-tech solar sector** and works closely with the CSEM (Swiss Center for Electronics and Microtechnology).

Solaxess develops, manufactures and markets nanotechnology-based foils that can be integrated into photovoltaic (PV) panel manufacturing process. **Thanks to the use of Solaxess foil, photovoltaic panels can be perfectly integrated into the construction of all kinds of buildings.**

Our foils enable PV module manufacturers to provide architects, developers and ultimately owners with white or other colored active **full-building elements that are cost effective, durable and aesthetically pleasing.**

Solaxess brings the building envelope into a new era. Facades and roofs become **active and beautiful.**



Solaxess
high-end design
sustainable performance

Construction

⊕ Energy

⊞ = Active roofs
and/or facades

**Let's build tomorrow's buildings together and renovate today
in all shapes and colors.**

Our perfection makes solar invisible and efficient.



**Colors in constant
development**

Add colors to your projects thanks to our technology

A product adapted to your operation

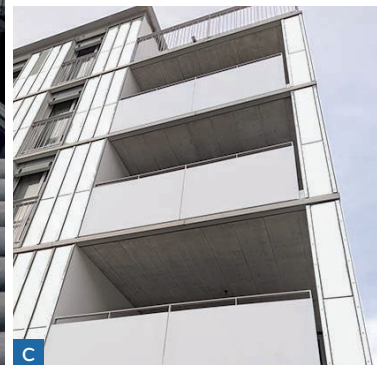
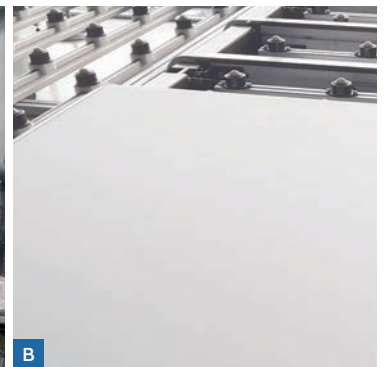
We support you with the integration of our foils into your standard fabrication process.

Our technology works with standard PV module production lines, as well as more sophisticated automated production lines.

With our shapes and colors, you allow architects and designers to better integrate your photovoltaic panels in their building concept. They can incorporate **renewable energy** into their design without compromising their aesthetic vision.

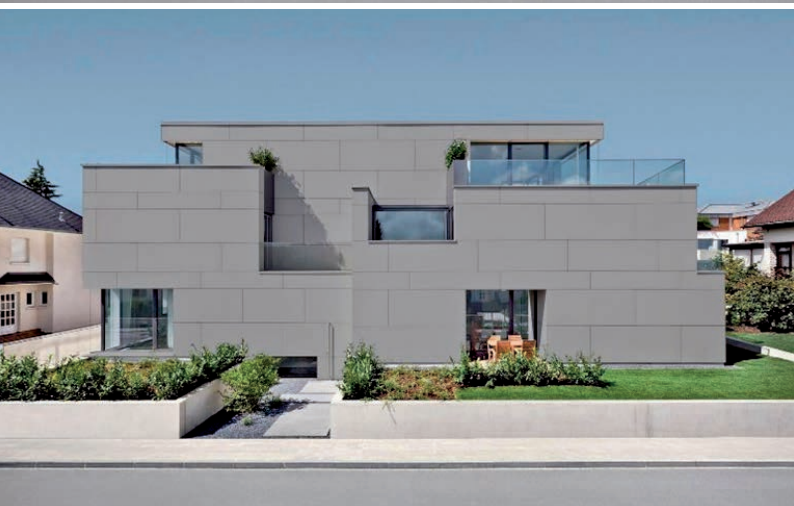
- A** 2016 - Flexible solar panel CIGS
- B** 2017 - Standard module with PERC cells and white foil Solaxess
- C** 2022 - Integrated white PV panels balconies

SOLAXESS ⁺
WHITE & COLOR SOLAR TECHNOLOGY
inside





A



Our patented technology makes facades active and enhances the architectural design. The anti-UV treatment guarantees an excellent stability.

A revolutionary technology

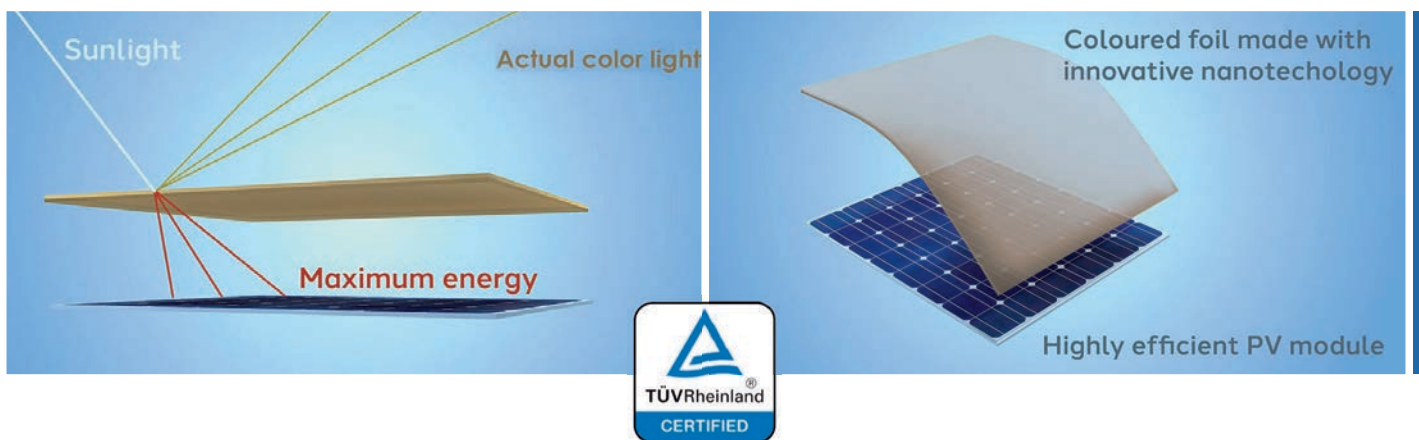
SOLAXESS[®] simplicity, sustainability

WHITE & COLOR SOLAR TECHNOLOGY

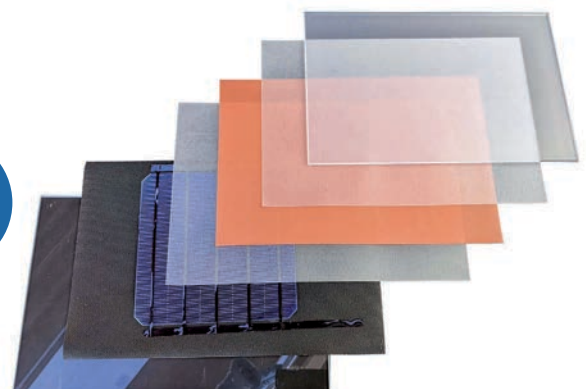
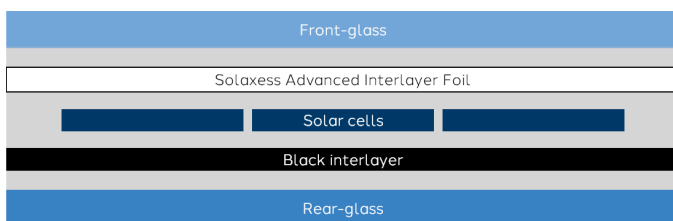
Our innovative technology allows for optimal reflection of visible light energy. **The desired color is thus obtained, while maximizing the energy transmitted to the PV cells.**

This unique feature allows the PV panel to appear perfectly white or colored to the naked eye, hiding the solar cells, while maintaining excellent conversion efficiency.

Our foil is **compatible with the main PV technologies on the market**, based on c-Si, CIGS-based thin foils or others. It makes any PV panel aesthetically pleasing and therefore easier to integrate into a facade or roof.



Simple integration into PV modules

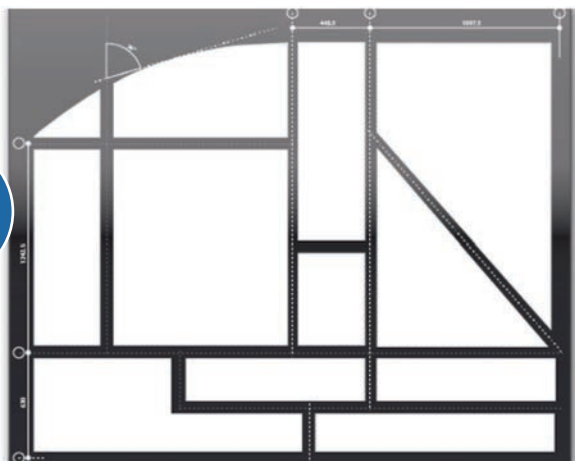


- A** Foil production machine
- B** Easy handling and logistics, reduced storage
- C** Panel with PERC cells and white foil Solaxess
- D** Standard roll: 200m², 1200 mm width, 167 linear meters



Solaxess supports PV module manufacturers to adapt their product to architectural needs

In BIPV, all PV panels shapes are feasible



Strengths

Aesthetic design

provides the best trade-off in terms of aesthetics and performance

Exclusive technology

patented and usable by any PV module manufacturer

Simple logistics

can be delivered worldwide - just a few rolls will cover 10'000 m²

Flexibility

can be adapted to any size and shape required

Customised color

on demand, any color can be manufactured

Long term guarantee

excellent color uniformity and stability

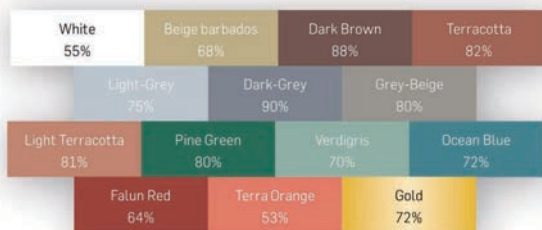
A few key facts

Large PV facade power output

Conventional passive facade elements made of plaster, aluminium, marble or other materials can finally be replaced by active PV building elements.

The typical **power output of a PV module with our technology is between 110 and 200 Wp/m², depending on the color.** Any color can be developed to match the project design.

Achievable power output of mono c-Si PV modules using our foils :



The efficiency is clearly dependent on the type of cells used.



Männedorf - René Schmid Architekten AG

Award for the best energy performance under the aegis of the Swiss Federal Office of Energy SFOE

Let's pool our knowledge together for a better world: ventilated facade, photovoltaic product and sustainable development

Panel performance improvement

A photovoltaic panel better works at low temperatures. Our foil reduces high temperatures impact on its performance. This temperature reduction, compared to standard black modules, allows

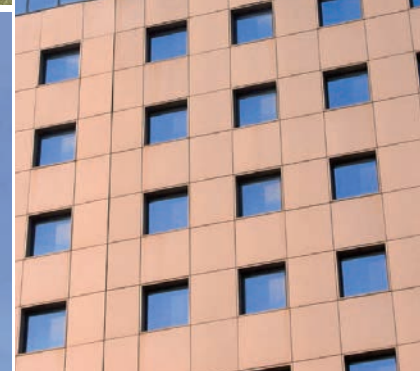
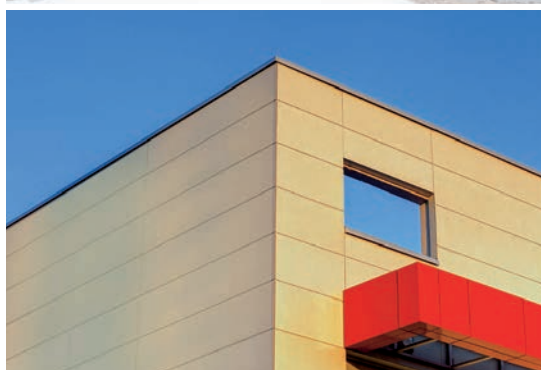
- A better performance in real-world conditions, especially at high temperatures;
- A reduction in air conditioning requirements;
- A solution against urban heat islands.



This 2.0 facade produces your energy
and offers you the energy independence.

The future of construction lies with BIPV, Building Integrated Photovoltaics

Photovoltaic system as an 100% integrated building material



A Architect: Richard Meier

Architects and designers trust Solaxess for their building and sustainable renovation projects

By covering a part of the buildings with photovoltaic panels, we largely reach our objectives of sustainable development.



renovated and active

Solaxess provides a nanotechnology foil in white or other color to photovoltaic panels manufacturers.

If you are an architect, promoter, installer or project owner, we can support you in your projects.

This facade produces energy



Solaxess production site in CH-2074 Marin-Epagnier



Samoo Architects & Engineers

BE SMART

We are part of BE-Smart. This project has received funding from the European Union's Horizon 2020 research and innovation program under grant agreement No 818009



In collaboration with Hangzhou Microquanta Co. Ltd.

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