

ertexsolar

Energy Meets Architecture



Top-notch solar
architecture!

The right solution for individual needs.



Dieter Moor
Managing Director

TEAM WORK

ertex solar is a small flexible team of specialists that has set itself the goal of integrating solar technology as harmoniously as possible into the building architecture. That extends from the design planning together with the architects through to the implementation planning in cooperation with leading façade builders.

Location

The photovoltaic elements are produced at our location in Amstetten / Lower Austria. Unusual solar projects can be realised through the combination of glass know-how with photovoltaic expertise.

Our activities are focused on Austria and its neighbouring countries. Beyond European projects, however, we have also delivered to customers from Kazakhstan, Sudan, Mexico, Qatar and the USA.



History

We have realised between 100 and 150 projects per year since our founding in 2004 - from the glazing of small balconies through to complete railway station roofs. Valuable experience that we also incorporate into your project.

Things that particularly distinguish us

We are one of the few suppliers that can boast certificates both from the world of construction and from electrical engineering or photovoltaics respectively. Two essential building blocks for the realisation of systems that work stably in the long term.

These certificates apply to a wide range of services and products. For instance, we have the most diverse cells in our portfolio. These are polycrystalline, mono-

crystalline, high-efficiency and also semi-transparent cells.

In the glass sector we can also provide complete services in projects such as insulating glass elements, various edge finishes, drilling of holes, etc.

It's important to mention that we use only PVB film (polyvinyl butyral), because its long-term stability is well known from the automotive and construction industries and it contains no acetic acid or other aggressive components.

The realisation of coloured variants is achieved through the use of coloured cells, coloured films, coloured glass or printed glass.

We manufacture semi-transparent solutions using different cell spacings or with semi-transparent cells, which create a much more even shadow pattern.

We are unbeatable worldwide when it comes to maximum-size implementations. 2,440 x 5,100 mm is a world record in the solar module sector.

Small details, big effect

Our special connection boxes for slender façade profiles enable our premium façade customers such as Schüco, Hydro, Wicona or sapa to integrate our elements into their systems with a minimum of effort.

Dive into the fantastic world of solar energy and let yourself be inspired by a selection of projects that we have already realised. It would be our pleasure to implement your project too.



Pure beauty in its most sustainable form.

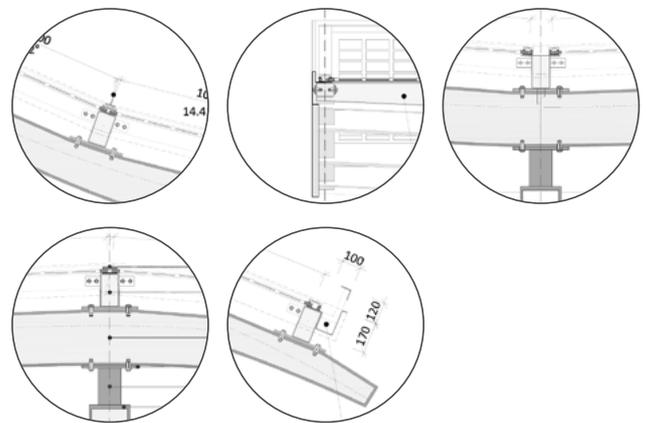
DESIGN & FUNCTION

Regenerative energy generation and architectural design possibilities are not opposites. On the contrary, it is possible to cater to the respective situation through close coordination between architects, building owners and ertex solar.

That was the case in the national park house „Könige der Lüfte“ (Kings of the Air) in Rauris, Salzburg. The solar roof was intended to allude to the subject of the exhibition by resembling an airily light eagle’s wing.

The installation of semi-transparent cells in overhead glazing makes it possible to combine high performance with protection against the weather and a unique design.

Dialer Architekten, who have offices in Innsbruck (Austria) and Munich (Germany) rightly impressed the building owners from the word go with the wave-shaped construction of the photovoltaic roof. Inspired by the wings of the eagles that one can observe from there, the building manages to stand out whilst not stealing the show from its surroundings.



module type used



max. module output



total project output



7.109
Wp

Give free rein to your phantasy.

XXL DESIGN FREEDOM

Thanks to ertex solar virtually no restrictions are placed on the ideas of creative minds.

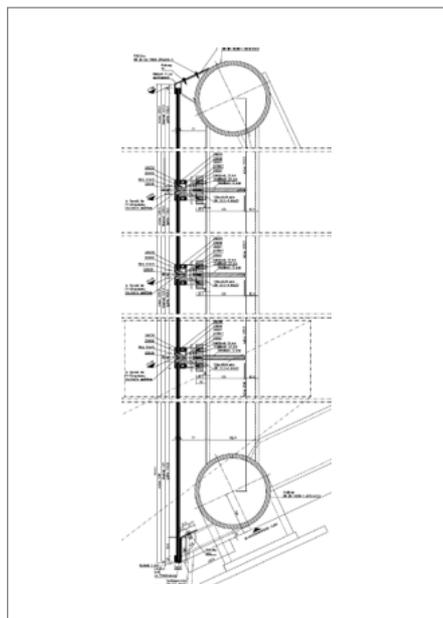
The size of the modules can be adapted individually, as can the shape, colour and the arrangement of the cells inside the modules. Since extremely large modules are also possible, such as those used, for example, in the case of the office building

of the Püspök Group in Parndorf (Austria), large areas can be designed as far as possible without joints and extremely efficiently.

Depending on the desired transparency, the cells were also placed in the modules with different spacings in the Püspök project, firstly to enable a clear view of the

outside and secondly to ensure privacy on the inside.

With their understanding of the requirements, the Austrian ad2 Architekten Andrea Dämon and Andreas Doser won through against five other architect's offices – not least due to the iconic solar façade.



module type used



max. module output

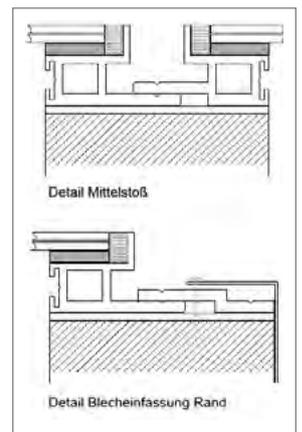


170 Wp/m²

total project output

38.983
Wp





Sustainable energy generation at second glance.

OPAQUE OPTICS

Photovoltaics that is not recognisable as such and a completely uniform surface that can supply an entire building with electricity.

It is so well known because the large surfaces of the entire front side and also the sawtooth roof have been clad with photovoltaic modules that are not recognisable as such at first glance.

The building of the Plusenergie Kindertagesstätte Marburg (plus-energy childcare centre Marburg, Germany) is very well known in the industry under the name of +e kita Marburg or the "energy caterpillar".

The opaque surfaces produce enough energy to supply the entire childcare centre with electricity.

The city's requirements, namely that the building must blend in with the charm of the surrounding park, be operated with the maximum possible energy-efficiency and offer children an ideal space to develop, were implemented with flying colours by Opus Architekten from Germany.

module type used



max. module output



150 Wp/m²

total project output



52.319
Wp

Source of shade or source of energy? Both.

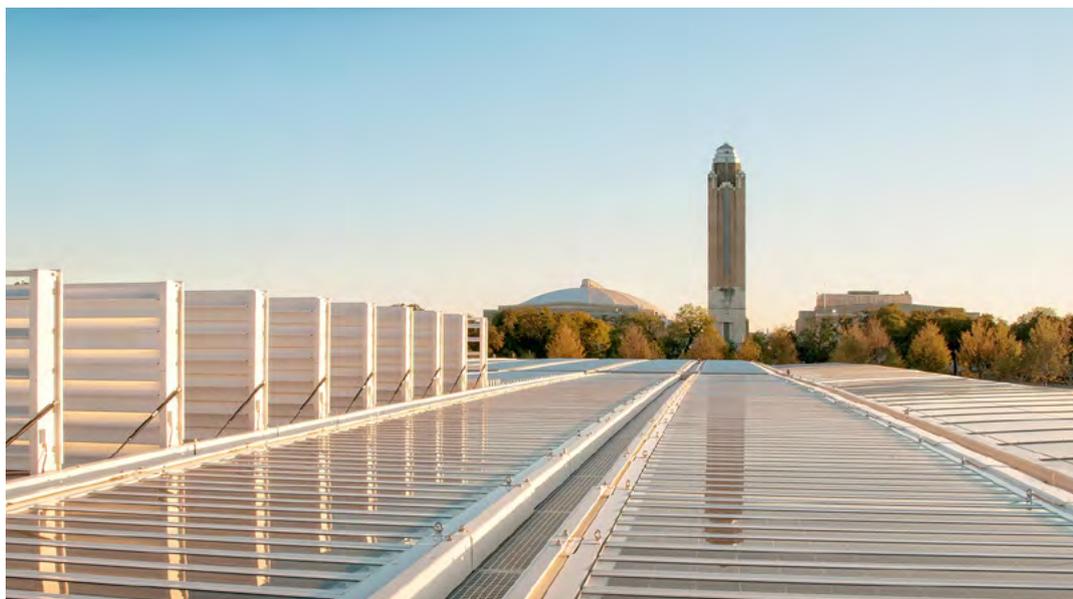
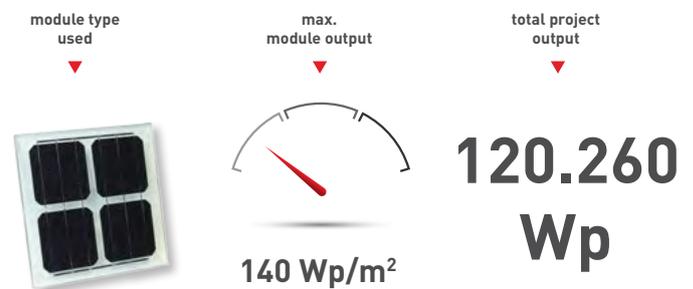
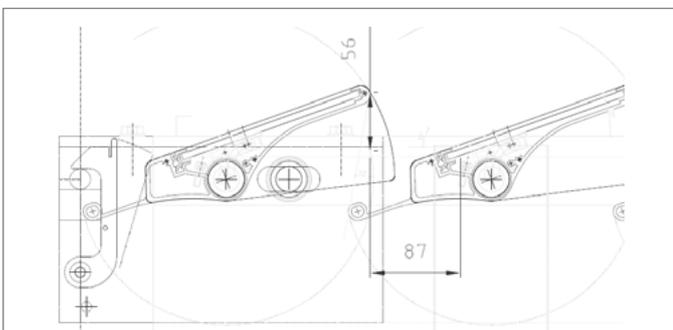
SHADING & ENERGY

ertex solar can score points with its unusual photovoltaic solutions outside of the German-speaking region, too. During its renovation, the Kimbell Art Museum in Fort Worth, Texas, USA was fitted with movable lamellae on the roof that can generate enormous amounts of energy.

The production of electricity can almost be described as a side effect, however, since the emphasis is actually put on controlling

the shading of the exhibits inside the building. The movable shading system allows both the adjustment of the lighting conditions and the saving of further energy.

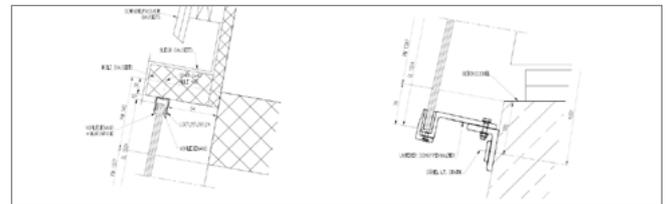
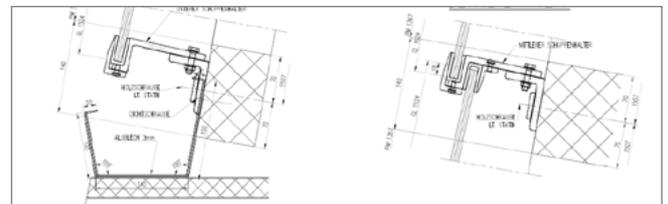
The concept for the multifunctional roof of the Texan museum designed by the Italian star architect Renzo Piano was inspiring from the very beginning with its futuristic and versatile characteristics.





Even under extreme conditions.

TOUGH



Making use of the powerful sunshine on the highest summits of Austria's mountains had previously been absolutely impossible due to the extreme weather coupled with strong gusts of wind. With ertex solar it is now possible to generate green solar electricity even under the most extreme conditions.

In collaboration with experienced structural engineers and solution providers from the façade construction industry, an appropriate concept was elaborated for the Glocknerbahn in Zell am See, Salzburg. Hasenauer Architekten from Saalfelden (Austria) planned the summit station with sustainability in mind and implemented it with technology from ertex solar.

module type used



max. module output



total project output



17.332
Wp



Very beautiful. Energy-efficient.

TECHNOLOGY & AESTHETICS

Perfection in the combination of energy-efficient construction and aesthetics is visible above all in the building of the Pierre Arnaud Foundation on Lake Louché in Lens, in the French-speaking region of Switzerland.

The building shell fulfils all the requirements asked of it. This applies on the one hand to the protection of the works of art against harmful UV radiation and on the other to the production

of electricity by solar cells, through to LED projections that are reflected in turn by the adjacent lake in nocturnal plays of light.

„Through its shine, its purist aesthetics and technological efficiency, the façade has established itself quite naturally as the foundation's trademark“, says Daniel Salzmann, President of the Pierre Arnaud Foundation, about the ertex solar façade.

module type
used



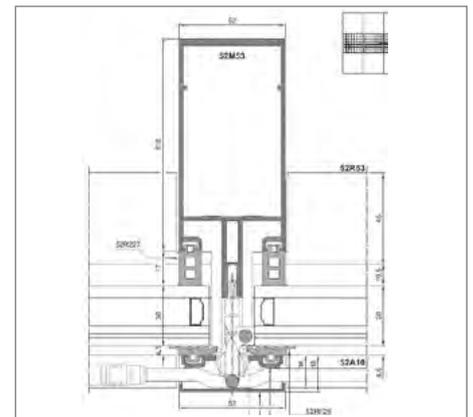
max.
module output



105 Wp/m²

total project
output

20.027
Wp





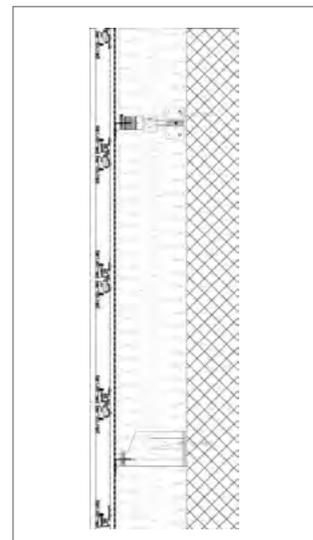
PV or not PV? That is the question.

HIDDEN TALENTS

„Nobody needs to know that it is a solar house.“ This is the quote from Erika Fries of the huggenbergerfries architects on the apartment building on Zurich´s Seestraße (CH) completed in 2017.

In the foreground of planning were many different aspects, such as e.g. the color of the new building, which should be similar to the Red Factory on the other side of the street. Also the local conditions had a significant influence on the total shape of the building´s floor plan, which resulted in resembling an hour glass. In addition, the fact that the residential building itself is supplied with 1,300 integrated photovoltaic elements made of profiled cast glass in the building skin is in this case only a breathtakingly inconspicuous positive side effect.

This building is one of the best proofs that photovoltaic can be integrated into almost any architectural concept. The multi-family house thus manages to supply its inhabitants without revealing that the reason for this fact is a photovoltaic system integrated in the entire building envelope.



module type used



max. module output



total project output

90.280
Wp

A breathtaking play of light and shadow.

TIMELESS DESIGNS

Limitless design possibilities and absolute freedom in the design. Only two of the aspects made possible by the use of building-integrated photovoltaics from errex solar.

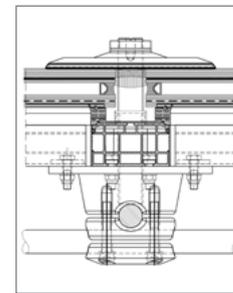
The dream of many architects to integrate renewable energy into the architectural concept is therefore within reach. An

impressive example of this is the so-called Kazakh pavilion, the main building of Expo2017 in Astana (KZ).

The spherical glass-steel construction also called Sphere has a diameter of about 80m in total. Within the photovoltaic system no module is similar to the other. Inside the insulating glass modules, the cell

net has been variably inserted, creating a unique play of light and shadow inside.

In this project, Adrian Smith + Gordon Gill Architecture succeeded in creating a big picture from 380 different pieces which fit together like a puzzle and brings the beauty of photovoltaic technology near to its visitors.



max.
module output



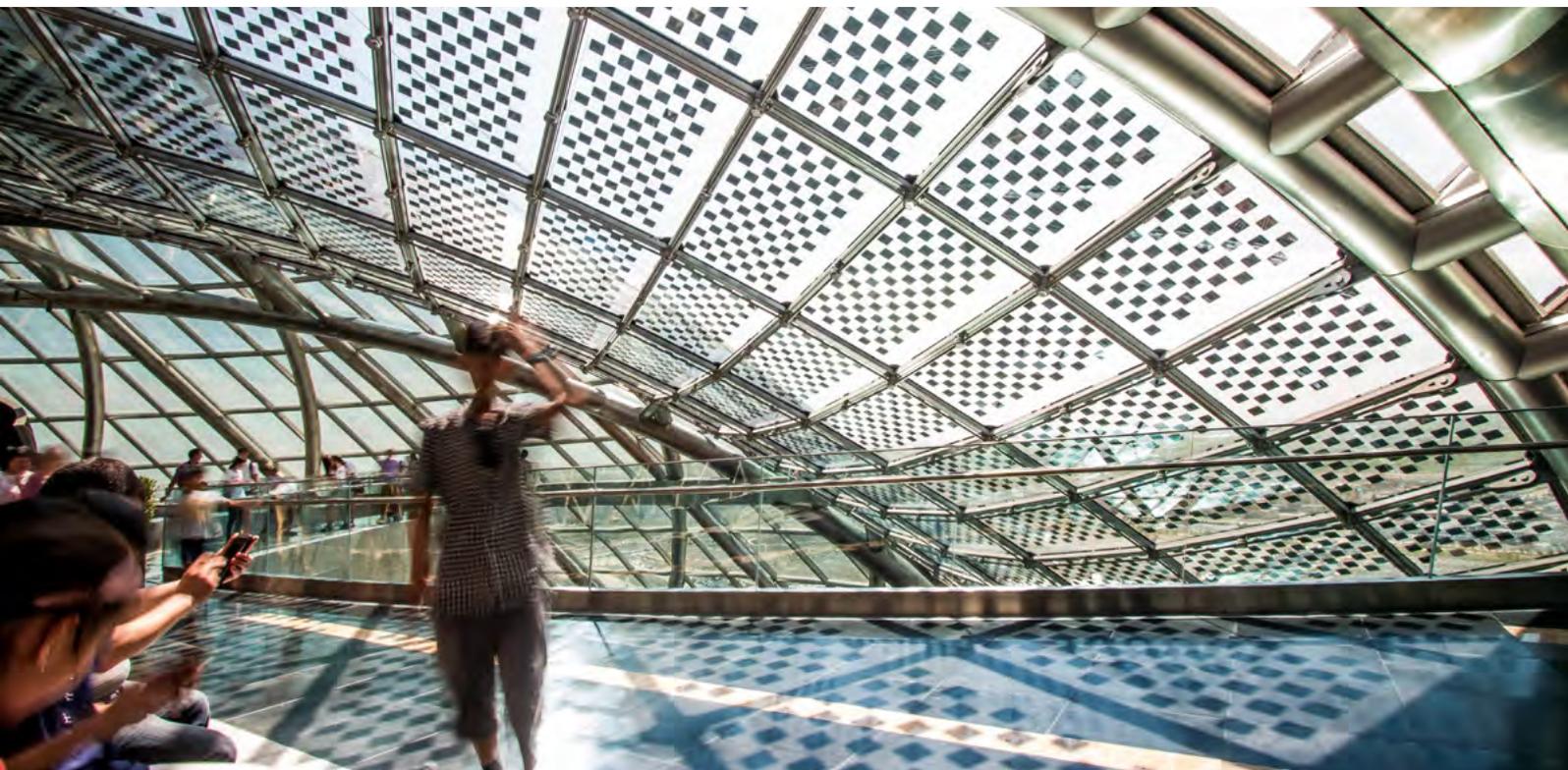
160 Wp/m²

module type
used



total project
output

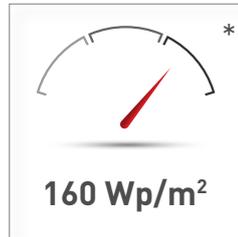
33.922
Wp



Variety is standard with us.

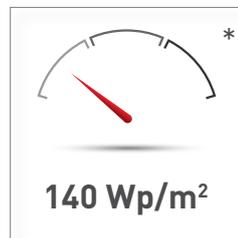
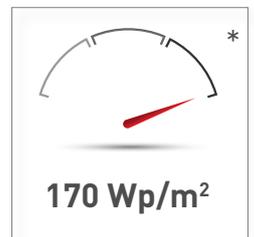
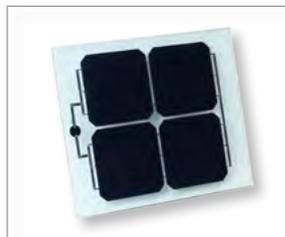
OUR „STANDARD“-MODULES

polycrystalline cells



monocrystalline cells

monocrystalline cells, high-efficiency



monocrystalline cells, semitransparent

monocrystalline cells
with black bands

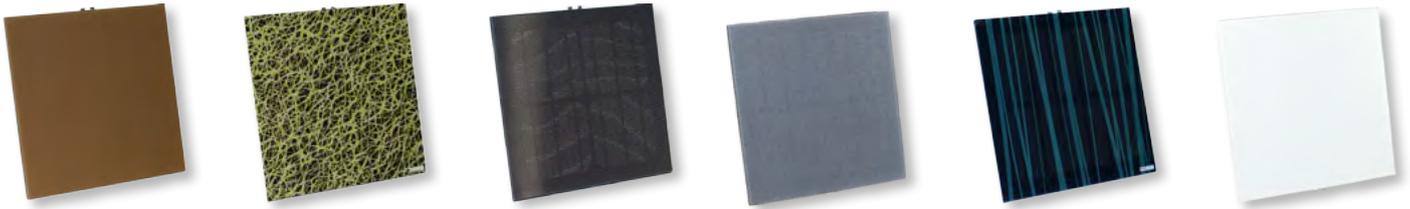


* all values with maximum cell coverage of the modules

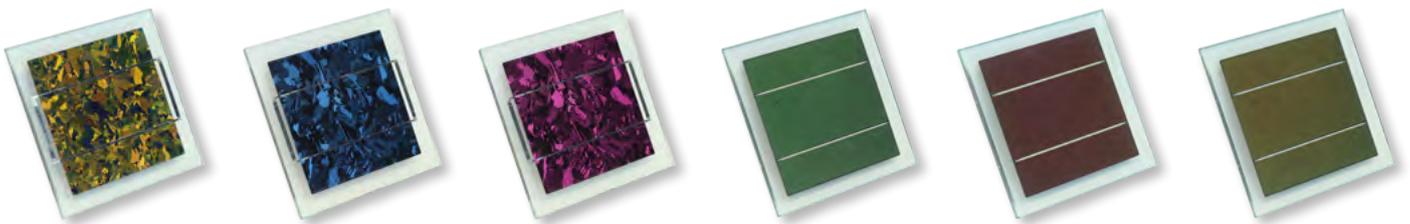
Limitless possibilities. According to your taste.

NEW POSSIBILITIES

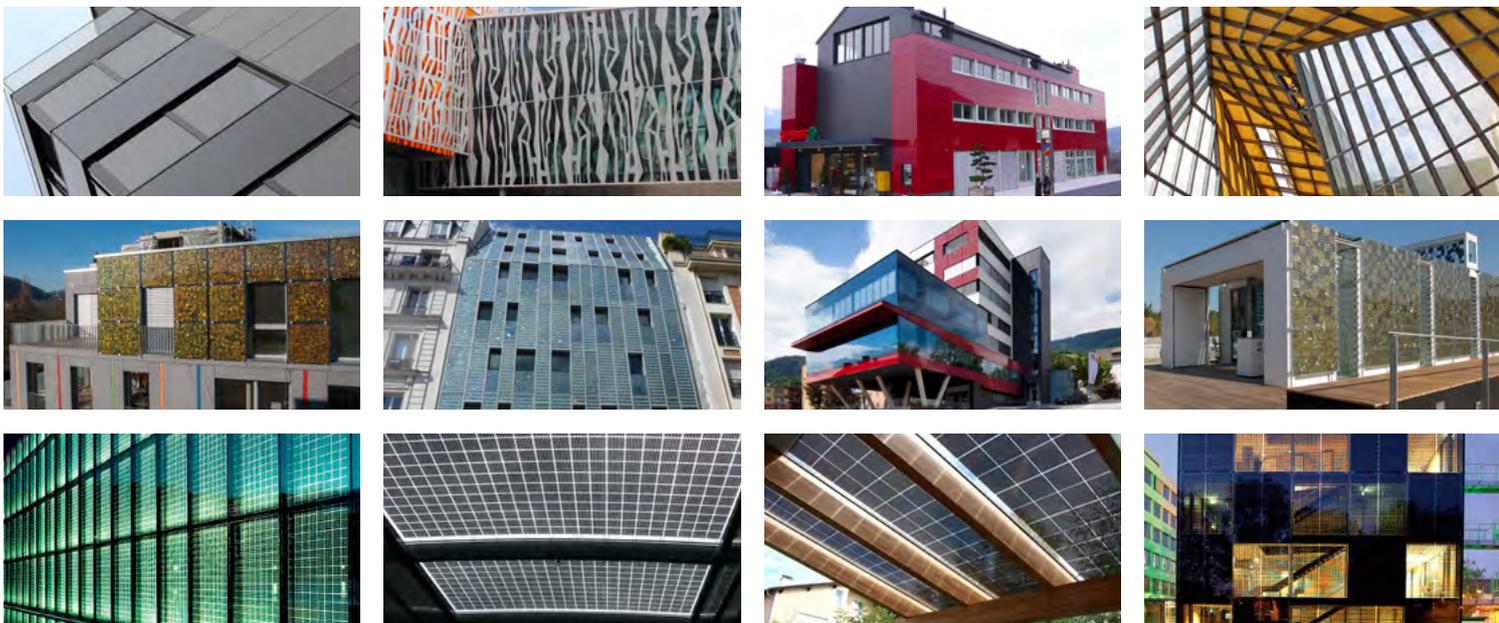
Digiprint: outputs of between 80 and 120 Wp/m² depending on the degree of printing and motif

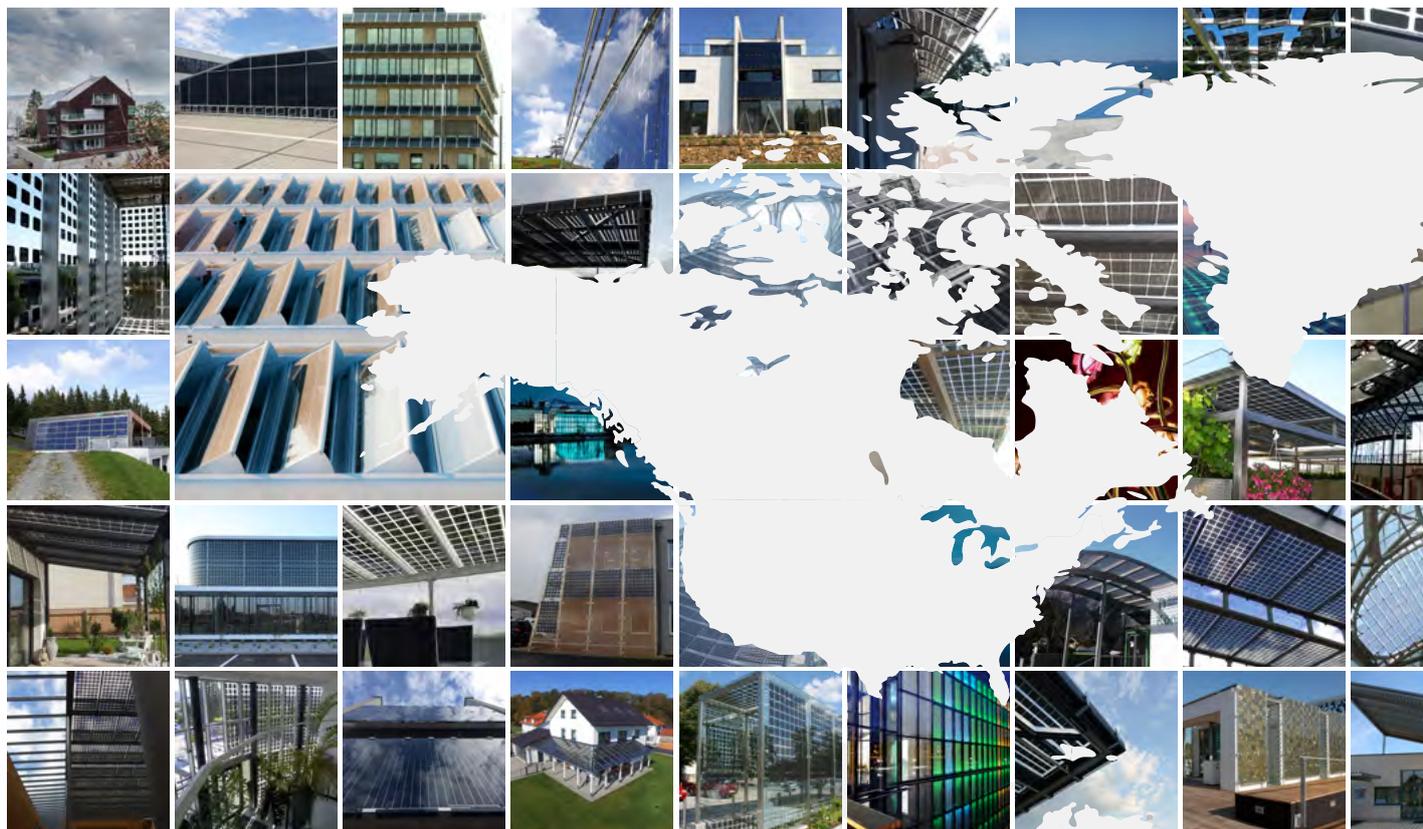


Colored cells: put variety into your system



Perforated cell types: design your logo and determine your degree of shading





Know-how from Austria.

REPRESENTED WORLDWIDE

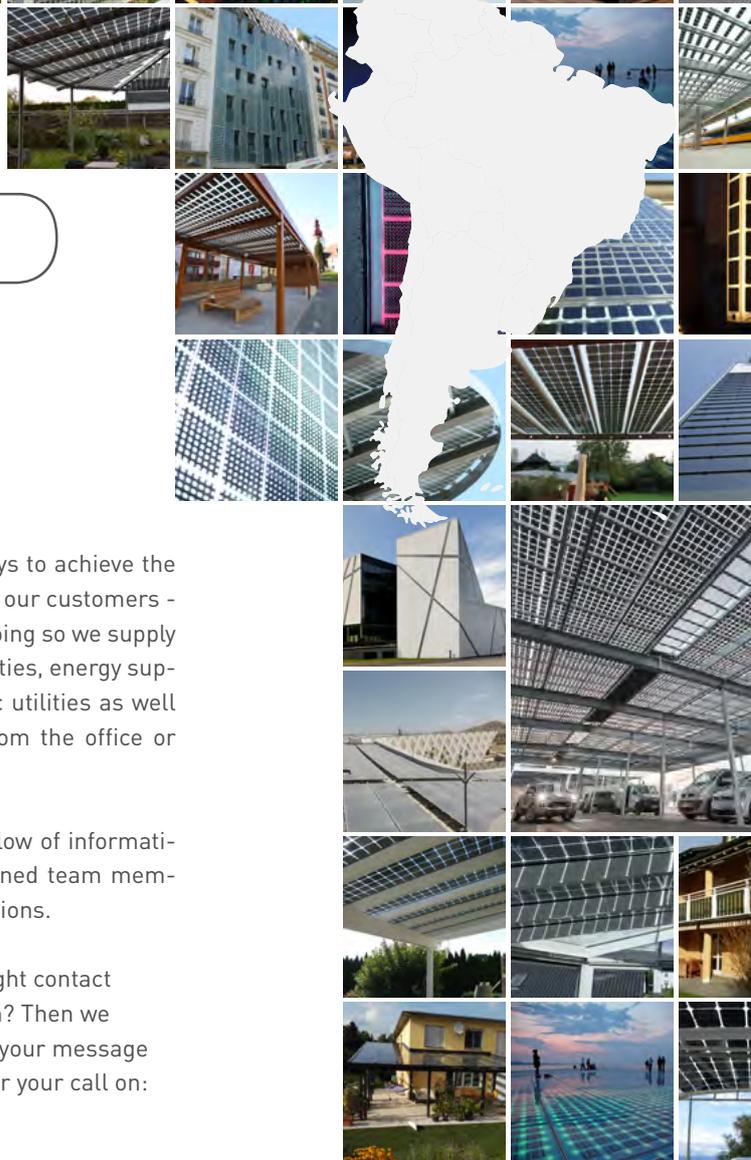
With our partners on every continent we enable you to implement your projects quickly and purposefully. Individual solutions are elaborated in close co-operation with architects and planners. The network has grown enormously over the past 10 years.

It is our task to co-operate with the respective experts from the construction industry so that the modules can be installed in the building shell according to the local standards. So it's only natural that we should collaborate not only with small metalworking companies, carpenters and glaziers, but also with large companies from the glass façade segment.

The primary goal is always to achieve the best possible solution for our customers - the building owners. In doing so we supply the projects of municipalities, energy supply companies and public utilities as well as property operators from the office or residential sectors.

To ensure the optimum flow of information we have specially trained team members in the respective regions.

Are you looking for the right contact person in a certain region? Then we look forward to receiving your message to: sales@ertex-solar.at or your call on: +43/7472/28260-612.





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Kontakt: +43 (0)7472 / 28260 - 612, info@ertex-solar.at, www.ertex-solar.at
Peter-Mitterhofer-Straße 4, 3300 Amstetten, Österreich



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