



Zero-carbon sunroom is based on the people-oriented active building concept, by improving the active perception and adjustment ability of the building.

Let buildings actively generate energy and use building photovoltaic integration technology to increase energy production

The modules are deeply integrated with the sun room roof to achieve a balance between health and comfort and energy saving and environmental protection.

Class A

10-18%

6+6mm

Class A fire protection

Atomized light transmission

Ultra-clear tempered glass



Patented process
Balanced lighting



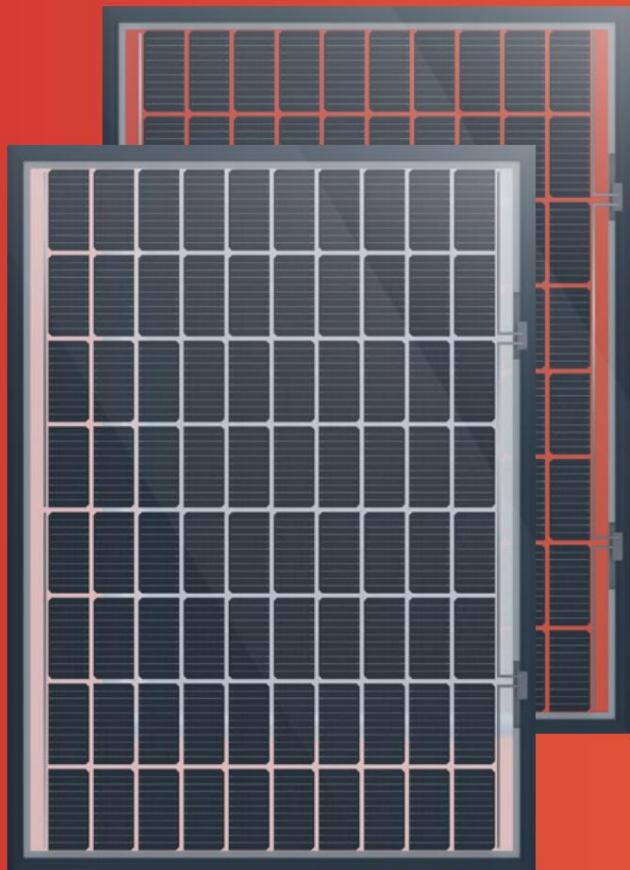
Modular installation
Convenient construction and recyclable



Structuring
Drainage design



Customizable
Diversified Space



Working Parameters

Mechanical load 5400Pa

Two-Sided Factor 70±5%

Combustion performance grade Level A

Protection level II

Transmittance ratio 10-18%

Electrical performance parameters

Maximum power (Pmax) 275W

Maximum power point voltage (Vmpp) 23.48V

Maximum power point current (Impp) 11.80A

Open circuit voltage (Voc) 27.52V

Short circuit current (Isc) 13.56A

Power generation per square meter 142W/ŷ

Temperature coefficient

Isc Temperature Coefficient 0.048%/ŷ

Voc Temperature Coefficient -0.28%/ŷ

Pmpp temperature coefficient -0.35%/ŷ

Carbon Neutrality Index

30 years of power generation 8120

30 years of electricity generation equivalent to standard coal 2477

30 years of electricity generation equivalent to carbon emissions reduction 4718



Ventilated and lighted sun room



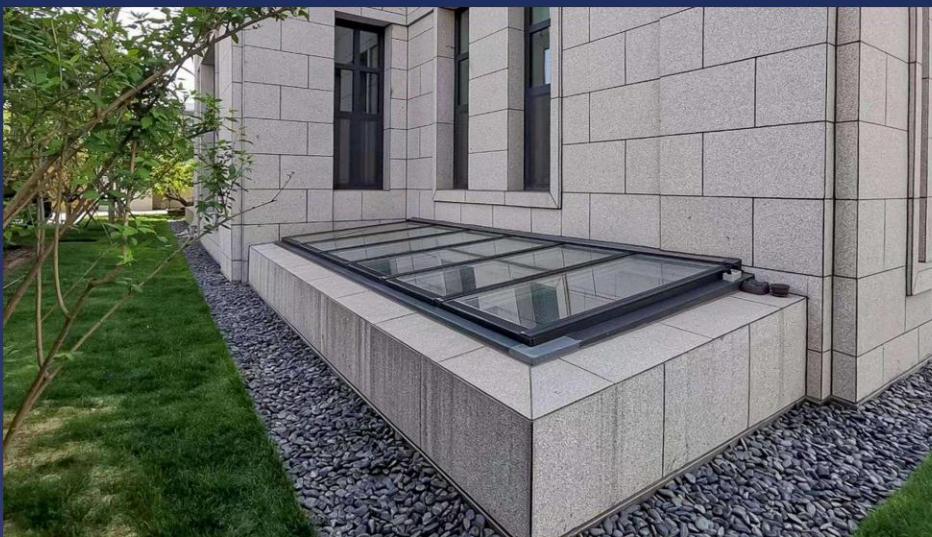
Open sun room



Corridor



BIPV market demand



Conventional photovoltaic product defects

With the sun shed and sun room put into use, the following problems will arise:

When using translucent roof products, the indoor comfort is greatly reduced in the summer when the sun is directly exposed

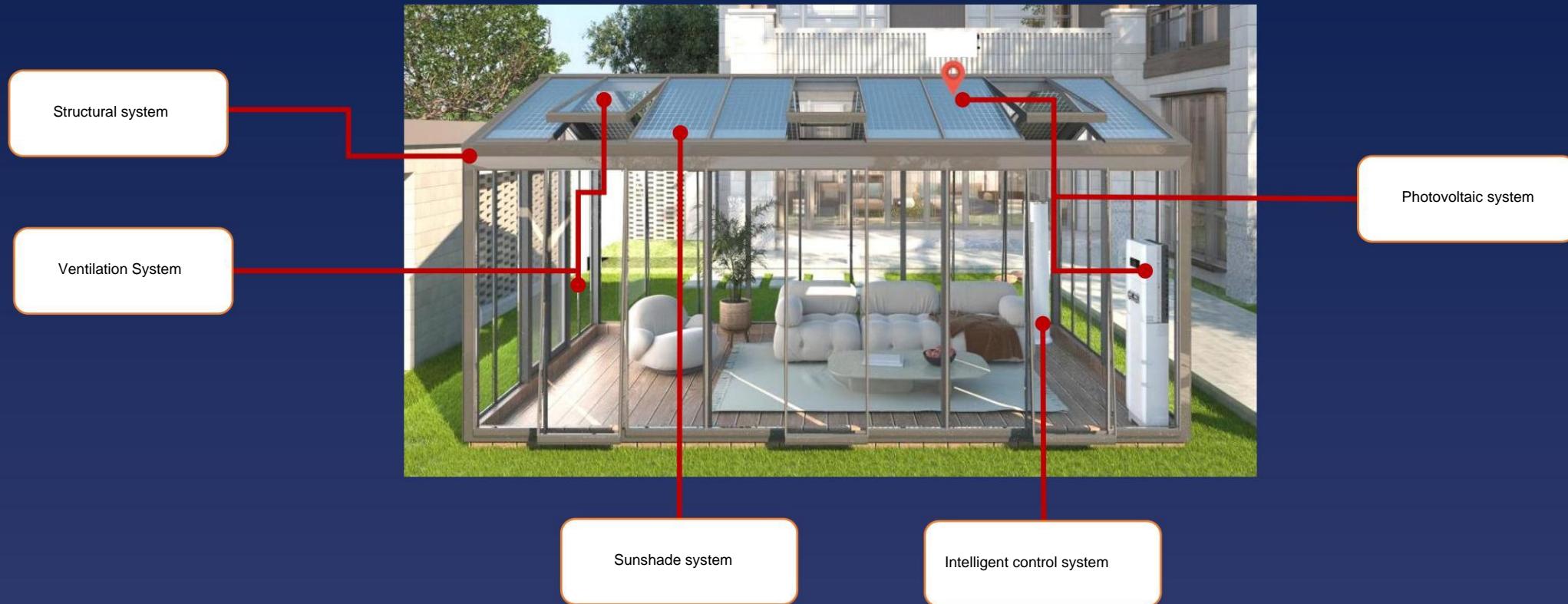
to strong light and the room temperature rises ; **when using opaque conventional photovoltaic modules, although it can avoid**

It blocks direct sunlight, but will cause insufficient light indoors.



Sun room overall system

Provide a complete system solution for the sun room



Soft and transparent

The product's battery cells are spaced 10mm apart to allow light to enter the room.

Leave space to achieve a light transmittance of 10% to 18%;



The POE film has its own haze, which can weaken the light spot.

Effect, creating a soft indoor lighting atmosphere.



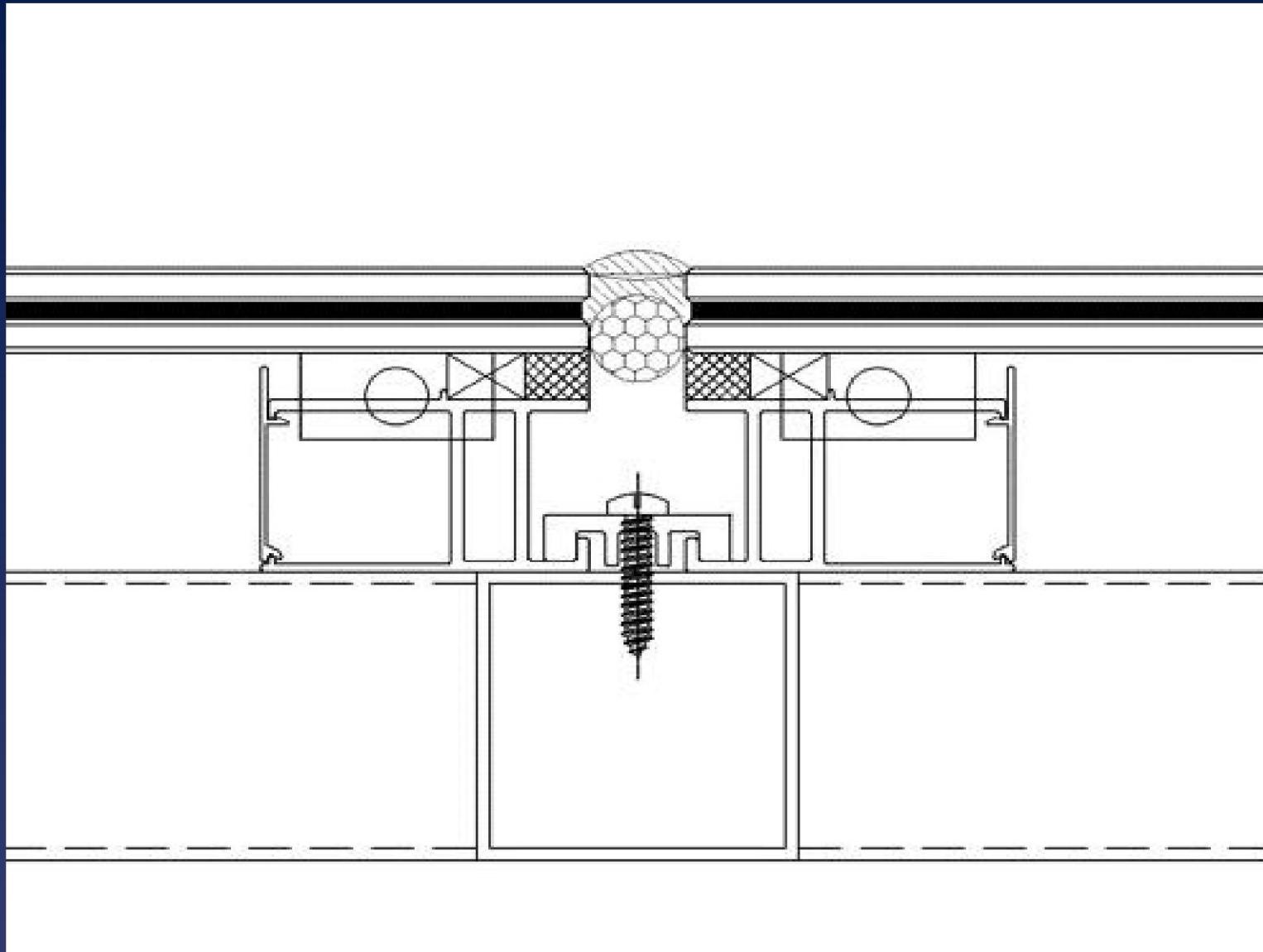
Double sun shading function



The crystalline silicon cell itself is not transparent to avoid
Direct sunlight in summer;

Built-in sunshade to achieve sunshade in the sun room
Ensure internal privacy.

Excellent waterproof performance



Adjust the slope according to the rainfall in each area, no less than 3%

The drainage slope is conducive to the discharge of rainwater;

Neutral silicone building sealant is used for joints, and its performance should **comply**

with the current national standard "Silicone Building Sealant"

GB/T14683-2003 requirements.

15mm wide glue seam avoids deflection due to temperature changes and weight

Large tensile strength is produced under the action of high and local concentrated loads.

and compression displacement.

Ventilation and heat dissipation



Configuring Low-E glass can effectively insulate,

It can block sunlight from entering the room, thus achieving energy saving

Environmental protection effect

There are two types of electric sunshades: automatic and manual.

Types should be selected according to the size of the sun room.

Choose the right sunshade;

Cooperate with Velux, the industry's leading manufacturer, to develop automatic ceiling

Window system. By identifying indoor air quality and indoor

Temperature, automatically open the skylight to achieve air circulation

Get rid of excess calories.

Internal air conditioning system, cools the room by cooling the air temperature.

Safe and reliable

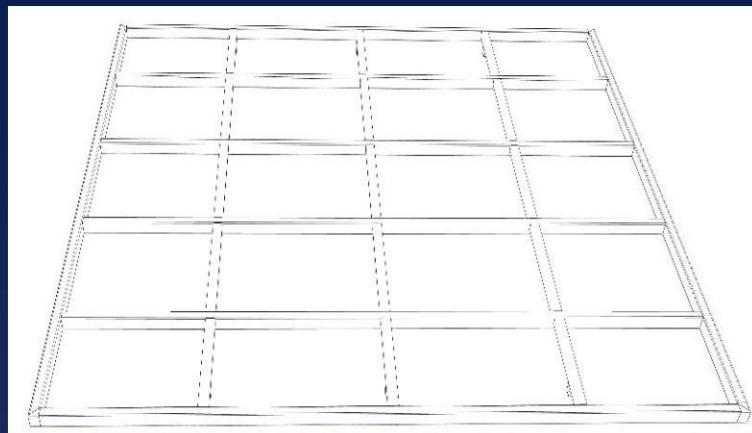


3C Product Certification

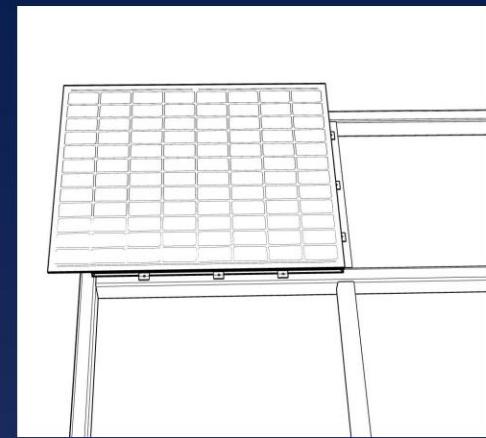
Steel structure skeleton: high material strength, light weight, uniform material; good elasticity and plasticity, strong earthquake resistance

Ultra-clear tempered glass: good thermal stability, prevents thermal cracking

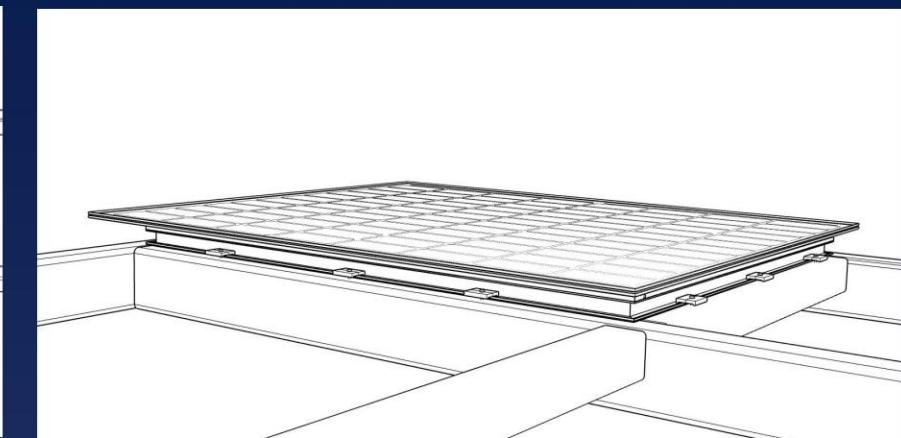
Installing the system



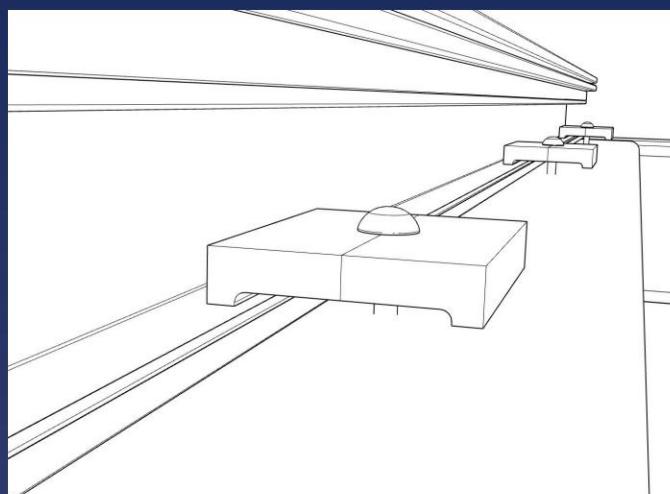
STEP1: Steel structure completed



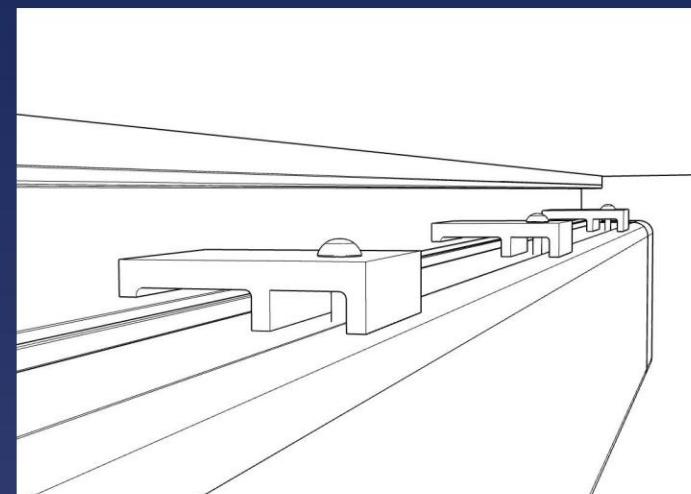
STEP 2: Install the product



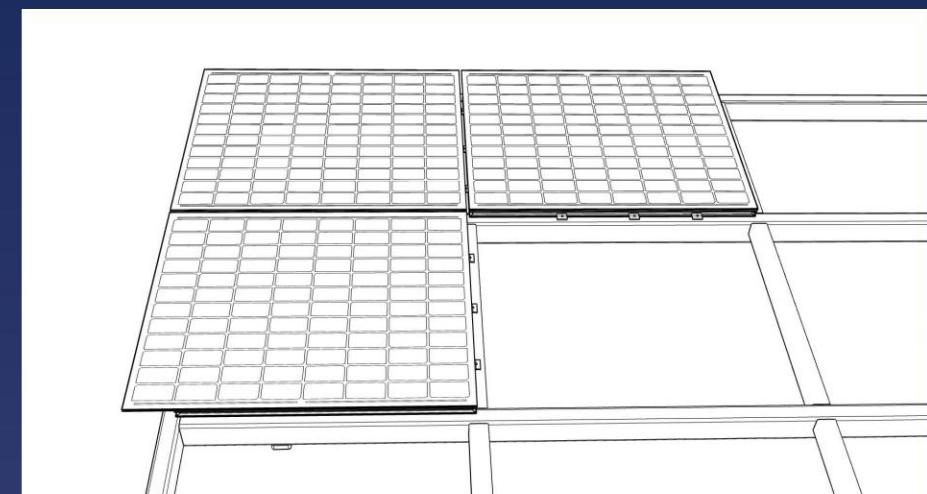
STEP3: Install 3 pressure blocks on each side



STEP3_1: Double-sided pressing details

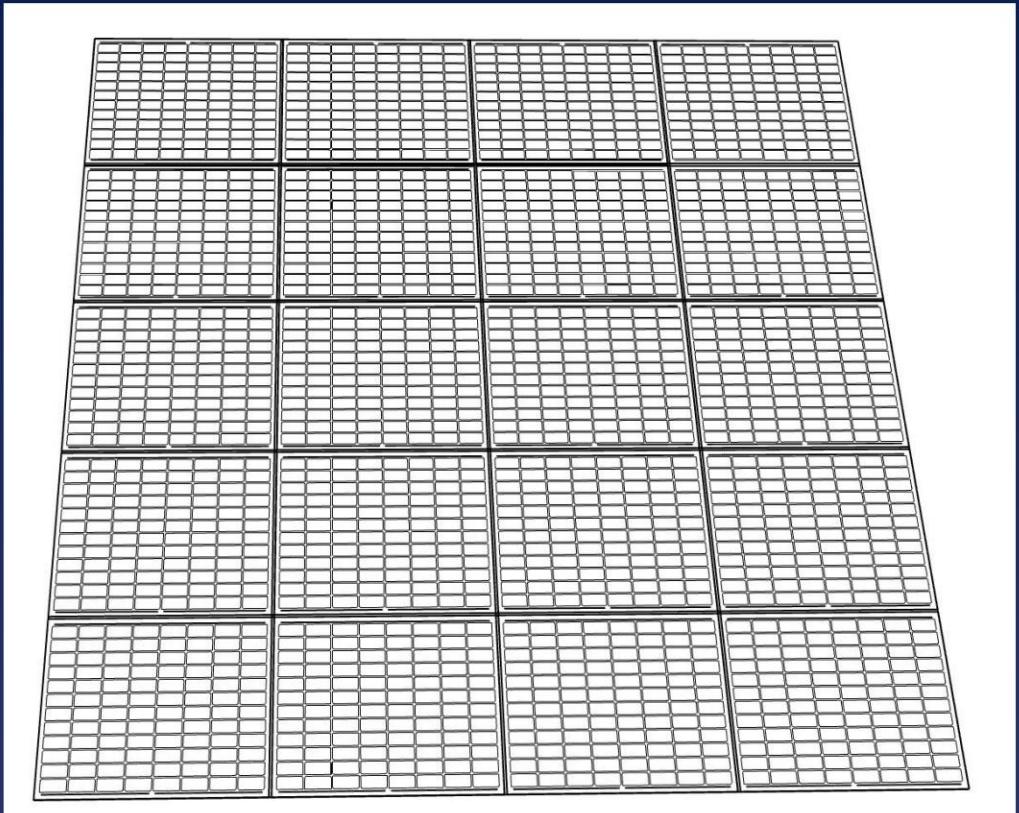


STEP3_2: Single-side pressing block details



STEP4: Install adjacent panels

Installing the system



STEP5: After all panels are installed, fill the space between the panels with foam sticks, and then apply silicone sealant. Refer to the picture on the right for the effect.

Sun Room



Zero carbon sun room overall solution

Skylight



The sun room is designed with curtains on the east and west sides. When the curtains are lowered, the sun room is a closed space that can be used as a living room or lounge. When the curtains are raised, the sun room becomes a transparent space that can be used as a pavilion or corridor.

Skylight



05 Project Examples

Suzhou University of Science and Technology Lighting Project



Project Name: BIPV Project of School of Electronic Information Engineering, Suzhou University of Science and Technology

Project location: About 120 meters southeast of the intersection of Houde Road and Kehui Road, Huqiu District, Suz

Design time: August 2022

Total installed capacity: 3.85kW

Annual power generation: 3806.12kWh

On-site construction scene



Standard plate

modular installation

Convenient construction