

Mounting System for
Roof-top Application

IntegPV® Solar System





A step towards a better world

The use of energy in residential and industrial buildings has become a concern of the utmost importance.

It is up to all of us to save energy.

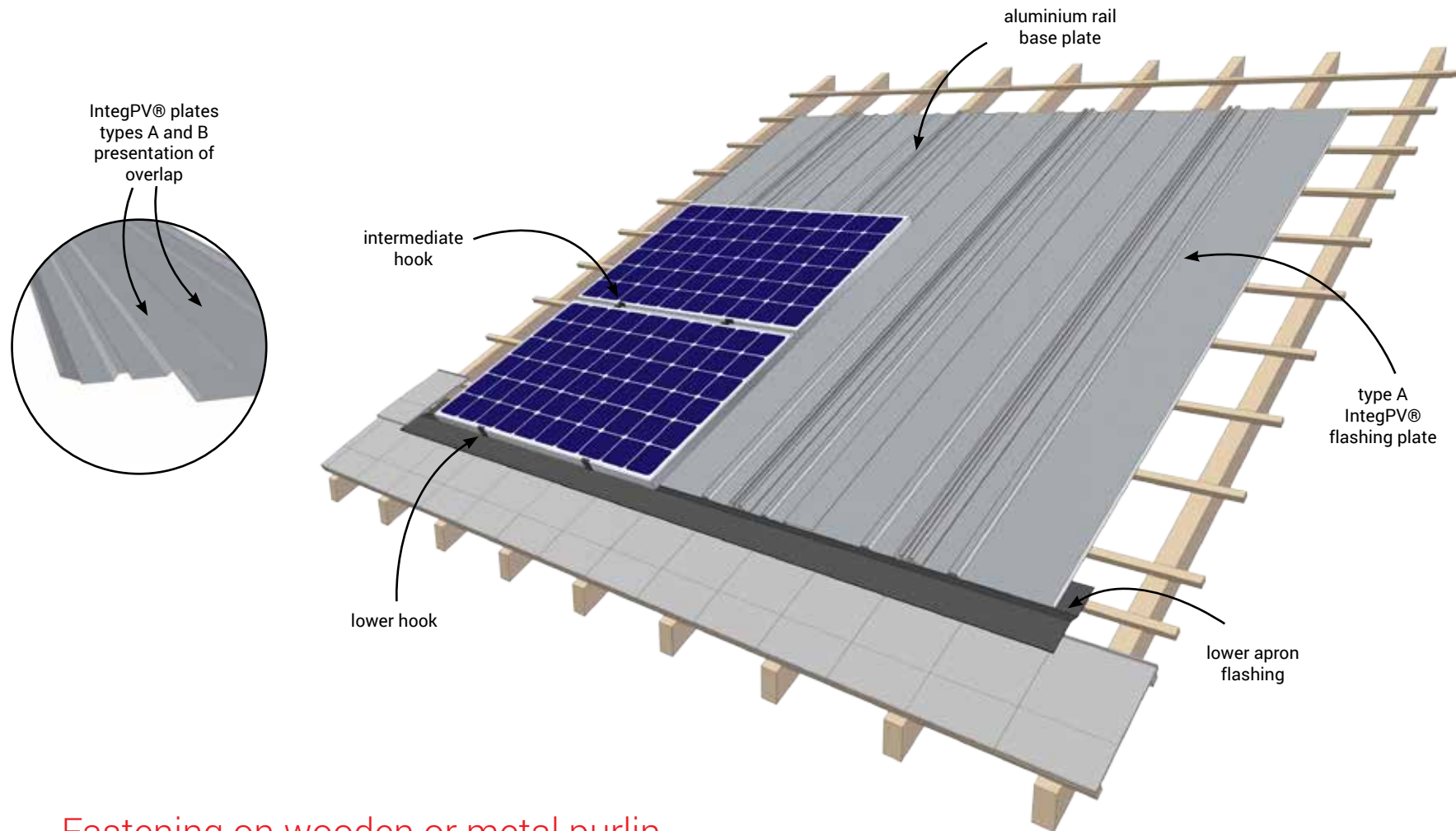
That is why we continually endeavour to help customers reduce their impact on climate change by offering them an approach that protects the environment and conserves the natural resources we will need for development to continue.





Description and components

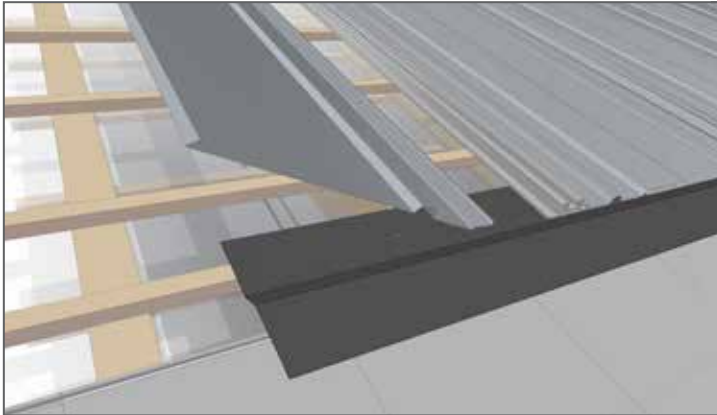




Fastening on wooden or metal purlin

The roofing plates are integrated into the side parts of aluminium profiles to provide sealing on the structure. The assembly is fastened to the structure (wooden or metal). After that, the PV modules are fitted on the aluminium profiles and fastened with hooks. By making the two types of plate– A and B– overlap, the system can be adapted to any roof and any module.





1.

The IntegPV® flashing plate is the first piece to be placed after all the rails. Lift the end of the plate so as to tilt its nose and insert the nose into the lateral groove of the rail.

Also fasten a strip of flexible foam on the height of the flashing plate so that the tiles are supported on it and thus form a barrier against water and snow.

2.

Proceed similarly to finalise the whole surface of the roof. Fasten with a self-drilling screw with an EPDM seal on the top of the wave.

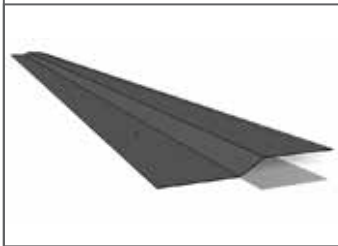


Possibilities offered by the system

Depending on the size of the photovoltaic generator, your installation could be connected to the grid or for your own consumption. The storage battery and the equipment required could be rated in a more detailed study. Our team is at your disposal for any queries or need for additional information.

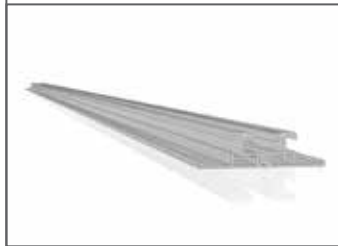
1.

The lower apron flashing is fixed to the slats at the bottom of the photovoltaic field to force water to flow down on the lower tiles. It is fixed with self-drilling screws with flat EPDM seals.



2.

A flat rail developed especially for IntegPV®, fixed at the top with no clamp or hook in the flat part of the rail on both sides, using self-drilling screws with hexagon heads and EPDM seals.



3.

The integration deck is made up of two overlapping plates. The nose of the type A IntegPV® metal piece that is placed in the lateral side of the aluminium rail makes the deck integral with the rail and seals the system. That same profile is used to make flashing.



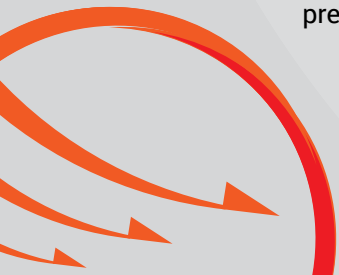
4.

The fastening principle is the same for a type B IntegPV® metal piece, which then overlaps the type A IntegPV® piece to form the roofing cover. The assembly is fixed at the top of the waves using self-drilling screws with hexagon heads and EPDM seals.



Why choose IntegPV ?

IntegPV Solar System has been designed to simplify the installation of a photovoltaic system and thus save time. It is the most suitable system for roof renovation. The width of the steel covering is easily adjustable, doing away with the need to use a predefined module.



5.

Self-drilling screw with hexagon head for fastening the system to the structure. Screw length between 50 and 70 mm to drill all the way through the slats and thus maintain the system.



6.

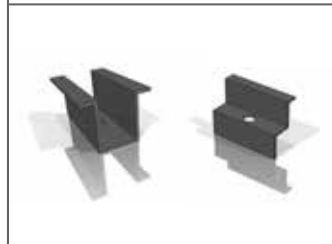
Hook for fastening modules at the lower part of the system. It connects the modules with a 50 mm overhang in relation to the aluminium rail, to hide the covering system underneath and improve the appearance of the roof.



7. / 8.

Pre-mounted intermediate fastening hook with hammer head screw and flange nut for fastening between modules along the PV field.

Hooks for fastening modules at the upper part of the system. Pre-mounted with hammer head screw and flange nut.



9.

Flexible foam used in most cases of roofing applications. It makes it possible to seal off any gaps and keep out water during heavy rainfall or melting snow on the modules. It is fixed along the flashing. At the top part, under the tiles and at the bottom, between the apron flashing and the covering to stop water from climbing up along the system.



Strengths of the system

The system offers very high stability by covering large distances between rafters. It is suitable for all types of module available on the market, whether photovoltaic or thermal. The rails are fixed to the structure, making the roof non-bearing; the modules are not fixed to the roof, which makes it easier to replace a module with no loss of waterproofing. The system also offers shielding from electromagnetic fields and is not flammable.



Achievements



1.

Voss
Switzerland
Power : 10 kWp



2.



Lendhaeuser
Germany
Power : 18 kWp



3.

School in Lembach
France
Power : 36 kWp

MEETING THE REQUIREMENTS FOR SUSTAINABLE DEVELOPMENT

- 
Research and innovation
 Close to 20 years' experience in the area of photovoltaic systems, with committed and globally reputed partners.
- 
Development
 Designing systems of the future up to the manufacturing process. Development of processes and production.



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