

## Specifications

### Module frame

- Framed modules
- From 30 to 50 mm height
- Other dimensions upon request

### Application options

- Profiled metal roofs
- Sandwich panel roofs
- Facades
- Others upon request

### Recommended roofing material

- Steel thickness: from 0.5 mm
- Aluminium thickness: from 1.0 mm
- Others upon request

### Orientation of PV laminates

- Parallel to roofline
- Portrait format (standard)
- Landscape format

### Materials

- High-quality aluminium
- Stainless steel
- EPDM gaskets

### Rivets and gaskets

- UV resistant
- Temperature stable
- Waterproof
- TÜV-tested and field-proven

### Special design features

- "Floating" fixation system without screws
- Integrated anti-theft protection device
- Each module can be exchanged individually

### Other information

- Anodized black upon request
- Ultra-efficient in packaging
- Very low embodied energy



\*The tensile strength of the montavent assembly system sheeting meets DIN 1055-4 requirements for wind resistance. As montavent does not have sufficient information about all building parameters reference is solely made to wind suction loads. The manufacturer/buyer must establish the necessary additional load tolerance (equipment, wind, snow, etc.) of the building/sh sheeting.

## References - an outstanding track record since 1999.

montavent's PV panel mounting system has been developed by Swiss engineers. With a proven track-record of more than ten years, montavent is proud to be on Europe's biggest soccer stadiums and honoured with the European Solar Award.



Industrial construction D  
Built in 2009  
Power 105 kWp



Hangar D  
Built in 2008  
Power 25 kWp



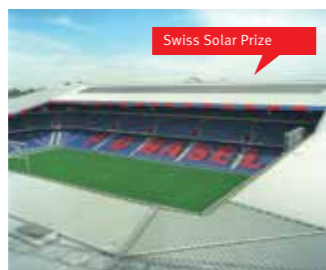
Industrial building CH  
Built in 2008  
Power 48 kWp



Agricultural building D  
Built in 2008  
Power 20 kWp



Main railway station Zurich  
Built in 1999  
Power 50 kWp



St. Jakob Stadium Basel  
Built in 2001/2004  
Power 150/200 kWp



Stade de Suisse Bern  
Built in 2005/2007  
Power 1'350 kWp



Equestrian hall D  
Built in 2008  
Power 55 kWp

For long-lasting fixation of unframed modules on trapezoidal roofs use montavent™ LAMINAT.

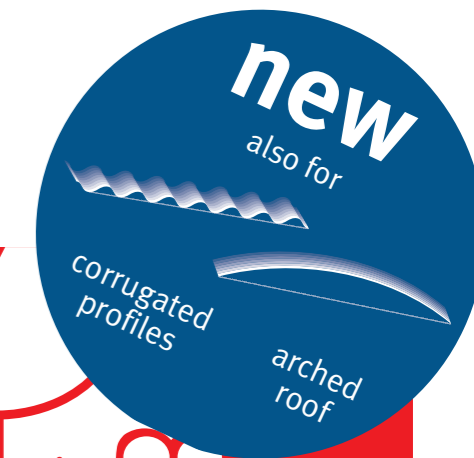


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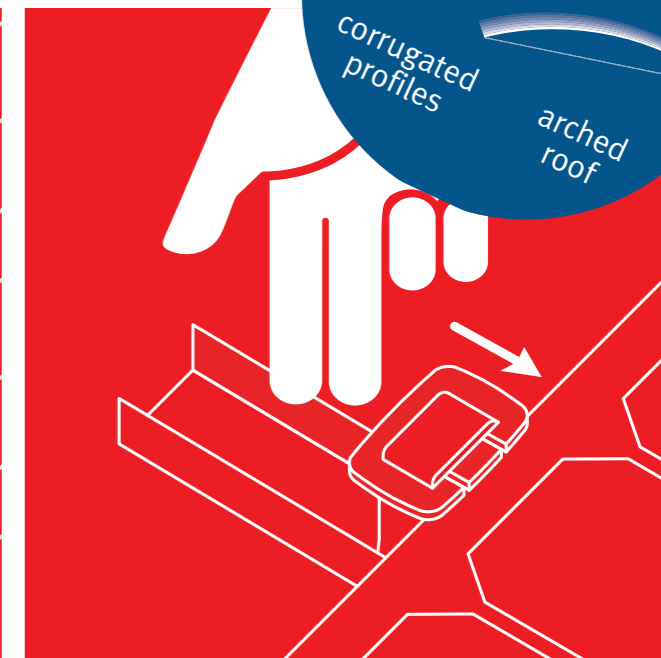
Your partner

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Version 1.03



Short profiles securely riveted and waterproof



Fix modules quickly and without screws

## montavent™ TRAPEZ

for framed solar modules

Secure and quick installation on profiled metal roofs



Installation Systems for Solar Power Plants

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Find all information and a short installation video on  
www.montavent.ch

**Take advantage of easy handling and low costs.**

All of the montavent system components are less than 45cm in length. They are delivered in handy cardboard boxes, facilitating ease of handling, storage, transport and installation saving you time and money.



**Long-lasting. Short profiles won't warp like long rails do, avoiding stress and damage.**

The comparably short mini-rails of the montavent mounting system have been specifically designed to avoid warping. Cracking of roofing sheet metal, bolt stressing with associated fatigue failure and resulting water leaks are eliminated. This is in contrast to long mounting rails where warping from temperature changes can result in damage to the roof or the module.



**Rapid Mounting. Mount your PV modules without the use of a screwdriver.**

All montavent components are delivered ready-made and pre-drilled allowing for quick and easy assembly of your roof mounted solar array. montavent saves time, money and materials compared to other PV module installation systems.



**The Swiss PV assembly system complies with DIN 1055-4 for wind suction**

An obligatory binding wind suction test is carried out for each installation, to ensure that the system in the sheeting withstands wind suction force. The sealing rivets are tested by TÜV Rheinland for their ability to withstand tensile forces in various types of sheeting.



**Precision & Speed**  
The montavent drilling jig guarantees precise and speedy installation. It is easily adjustable to roof profiles and module sizes. Errors are virtually eliminated.



**Easy & Secure**  
The retaining mini-rails are fixed to the pre-drilled roof points using industrial aluminium rivets. This results in an easy and secure mounting method.



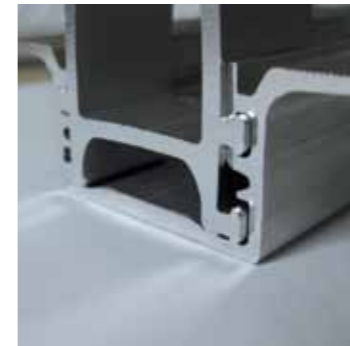
**Waterproof & Stable**  
The self-sealing rivets used by montavent in combination with an EPDM-gasket ensure a stable connection without leaks, hence being waterproof for the life of the roof.



**Strong & TÜV-tested**  
The expanding rivets form a three-legged footprint to cover a large contact area. As tested by TÜV, this fastening technique results in strong anchoring to the roof.



**Safety & Simplicity**  
montavent's mounting system was developed with safety and simplicity in mind. Module sliding forces are safeguarded with a simple but smart clip-in ring.



**Insert & Anchoring**  
Safe anchoring of a PV module is achieved by sliding lock-in plates firmly into the module spacers. Accurately set. Ready for use. No more forgotten or incorrectly tightened screws.



**Ready, set, go**  
Just set the form-ready module fastener in between two modules on the profile to anchor the modules. No more forgotten or incorrectly tightened screws. Accurately set and ready for use.



**Start & Finish**  
Starting and finishing spacers are secured by crimping the mini-rail with a simple bending tool. This results in fast, stable, safe and permanent mounting without screws.