



solar roofs for professionals

# Solar-Energiedach GmbH PV plans and installs high-quality PV-systems for all kinds of roofs.

This includes not only the assembly, but also the complete planning and checking of all necessary details.

Appraisal of quality and durability of the existing roof sealing, if necessary. Assembly of new roof sealing that corresponds to the durability of the PV-installation. Maintenance and online monitoring of the PV-installation and roof sealing throughout the period.





We can recommend all necessary insurances to you, for example: electronic insurance, business standard insurance etc.

intelligent solutions, safety, dependability, quality













High-quality solar installations at professional standards with Solar-Energiedach GmbH PV. Only a high-performance photovoltaic installation is a safe investment. Solar-Energiedach GmbH plans and builds your PV-installations to ensure this.

Our PV-assembly system for flat roofs and light constructions consists of universally used high-quality components (aluminium/stainless steel) and enables the construction of PV-installations for every common roof and flat roof construction.

There is a complete static system for the total system, which determines the guidelines for all types of assembly. The most modern manufacturing techniques guarantee the production of standard parts as well as the flexible realisation of special customer requirements.

Quality control is according to the German/EN standard ISO 9001:2000.

S-ED GmbH PV is the first manufacturer of PV-roof installations to consider the durability of components and to supply them.







## applications

The assembly system SIS (Solar Installation System) for photovoltaic-installations fulfils the demands for key technology in solar power installations for industrial flat and light construction roofs. Thanks to a specially developed roof-integrated connection technology, standard statics are used which can also be extended to modules for light constructions.





The rack technique of the photovoltaic installation in the roof membrane is always water-tight integrated, and the load of the photovoltaic system is safely and linearly distributed over the total roof construction of the building.



The assembly system, for all kinds of sealing, guarantees low-stress form stability for the total roof sealing and provides a mechanical connection system with a strong and wind-resistant surface connection for all roof and PV-components.













intelligent system

designing the future of solar energy





### assembly system



#### Advantages of the assembly system

- rack technology offers optimum wind-resistance
- distribution of the extra weight on the roof as surface load is simultaneously re-distributed throughout the under-construction
- static proof of the complete system, even for high buildings
- very good module-cooling through rear ventilation
- UV-protected cables within closed rack technology
- easy access to roof membrane if repair or later assembly of modules is needed
- problem-free disassembly of the modules













#### Heretsried II, 2,5 MWp power, Ramstein, Germany

- 🔁 90.000 m² roof, Logistikcenter Gutperle, Ramstein, Rheinland-Pfalz, Germany
- 🔁 37.000 ,First Solar' modules
- 115 tons cables
  ■
- 🕣 output 2,4 Mio. kwh/year











#### solar system



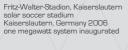
SIS is a rooftop mounted solar installation system configured to your unique needs for optimized performance, reliability, and cost effectiveness.

- designed for grid connected systems from 20 KWp to 25 MWp
- constructed from lightweight aluminum
- the system can be designed to support roof angles up to 45 degrees
- S-ED GmbH PV engineers use exclusive software to calculate:
- 1) precise dimensions for system components
- 2) optimal component layout
- 3) cabling patterns
- 4) ideal angle for maximum light exposure
- elegantly simple design minimizes the number of components to reduce installation time
- no compromises, racks are manufactured specifically for each project to assure



#### innovation 4 professionals









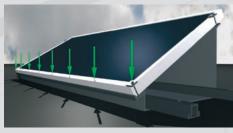






The uniform weight distribution of the module throughout the frame maximizes panel capacity while ensuring structural stability.





SIS allows for either fastening roof mounts with the patented flange and plate technologies or ballasted mounts.



The SIS design allows continuous airflow on the bottom side of all modules to reduce overall unit temperature and to increase module efficiency.



Energyplant, Volvo Trucks, Belgium





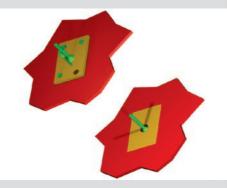




## technology

#### Leak Protection

The base plate and flange technology provide a roof seal that eliminates leakage.

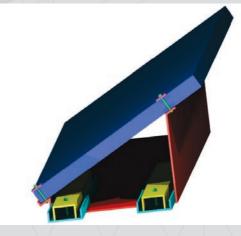




#### Wind Protection

The rear vertical support of the frame offers protection against wind sheer. The system can protect the module in winds from all directions up to 167 mph.



















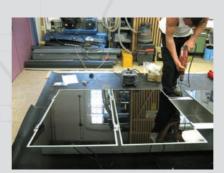
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#### Safety and Affordability

The SIS system has been statically tested for load, pull & wind forces according to stringent guidelines. The SIS system allows air flow over solar panels in all directions, maximizing the module efficiency.













Energyplant, Volvo Trucks, Belgium



#### MAIN OFFICE

SOLAR-ENERGIEDACH GMBH PV Messerschmittstr.2-3 67681 Sembach Germany Tel.: +49 (0) 6303 - 80 73 25 www.solar-energiedach.de info@solar-energiedach.de

#### BUREAU BELGIUM SOLAR-ENERGIEDACH GMBH PV Heikenstraat 19 9250 Waasmunster Belgium Tel.: +32 474 77 66 89 www.solar-energiedach.be kris@solar-energiedach.be

ayout www.mdiehl.com