RHEINZINK-PV

THE VISUALLY INTEGRATED PHOTOVOLTAIC SYSTEM FOR DOUBLE STANDING SEAM ROOFS.







ESTHETIC

EASY TO INISTAL

FFFICIEN

RHEINZINK-PV combines
aesthetics, functionality, and sustainability
in one innovative system –
ideal for modern construction projects that value
both design and energy efficiency.



With RHEINZINK-PV, your roof becomes the most beautiful source of energy.

The future begins on your own rooftop:

With RHEINZINK-PV, you make a clear statement for sustainability, independence, and responsibility. As energy costs rise and environmental concerns grow, the call for renewable energy becomes ever louder. So why not harness the power of the sun – right where it shines every day? RHEINZINK offers you an aesthetic and efficient solution to transform buildings into sources of clean energy. An investment that pays off – ecologically and economically.

RHEINZINK-PV combines sophisticated architecture with forward-looking energy generation. The solution appears as part of the roof – not as an add-on system. The result is an elegant overall appearance that perfectly unites form and function.

EASY INSTALLATION, PERFECT INTEGRATION.

While other systems negatively affect longitudinal and transverse expansion, RHEINZINK remains completely flexible.

Thanks to the patented seam clamp, thermal expansion is unaffected The modules can be freely positioned and are attached directly to the double standing seams independent of the roof clips used for the seam covering.

A SYSTEM THAT THINKS AHEAD.







Release of electrons

An electric field forms, forcing the released electrons within the solar cell in a specific direction, generating direct current (DC).

Thus, light energy is converted into electrical energy.

Sunlight consists of photons—tiny packets of energy.

These photons strike the surface of the solar cell.

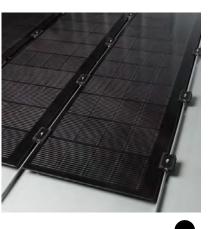




Power made usable

The generated direct current is typically converted into alternating current (AC) via an inverter, which is used in households and

The electricity can then be used directly, stored in batteries, or fed into the public grid.



Technical Details

Frameless glass/glass laminates with special edge sealing

Modern N-Type TOPCon solar cells Cell type

1900 x 506 x 5.5 mm

Adapted to 530 mm seam width, tolerance +4/-2 mm

Power output 180 Wp

Install. height Approx. 40 mm (incl. 30 mm rear ventilation)

Roof pitch 3° to 60°

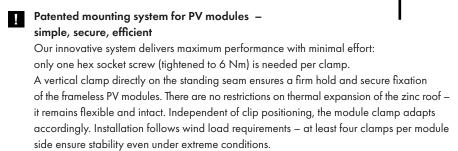
min. 4 PV clamps per module side **Uplift** load $2.4 \, kN/m^2$

Pressure load bis 3.6 kN/m²

Certifications IEC 61215, IEC 61730, Hail Resistance Class 3

Tested for RHEINZINK standing seam roofs

The Clamp -The Heart of the System





Cell Technology

1 N-Type TOPCon Cells

Thanks to advanced cell technology offering higher efficiency, improved temperature stability, and greater heat resistance, our modules deliver outstanding performance and a significantly longer lifespan.

2 Glass-Glass Technology

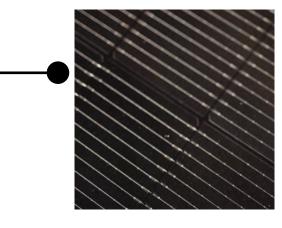
With greater resistance to environmental influences and aging, our modules provide superior protection against moisture and mechanical stress, lasting longer than glass-foil modules – and enabling full bifacial power gain.

3 Edge Sealing

The unframed edge area of our photovoltaic laminates is reliably protected from environmental influences and moisture by a high-quality thermal edge seal. This proven technology significantly extends the service life of the modules and ensures long-term performance.

4. Bifacial Cells

By using sunlight on both sides – directly on the front and indirectly on the back via reflected ambient light – our modules achieve higher energy yields.



INSTALLATION INSTRUCTIONS Perfect results in just a few steps.





 Observe wind load requirements, min. 4 clamps per module side Ensure precise fit to seam geometry









Attaching and fixing the clamp top parts Clamp hook must enclose the seam Hex socket screw secures the clamp hook

Tighten to 6 Nm



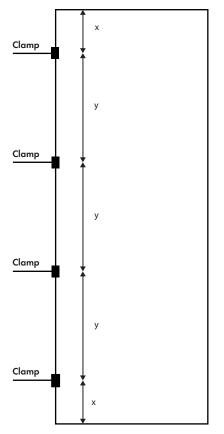


Lay, connect, and fasten additional

Wind Load Calculation Table

Number of PV clamps

per module side



The illustration shows clamp positioning for a maximum wind load of $\leq 2.1 \text{ kN/m}^2$.

Wind load calculation for direct installation of the RHEINZINK-PV system on RHEINZINK double standing seam roofs:

The required number of RHEINZINK-PV clamps is based on a clip design resistance of 600 N/clip. At least four PV clamps are required along the long side of the module (1.90 m). Clamp spacing (center-to-center) should be approximately half that at the edges (center-to-edge). Values are based on German standards with a safety factor of 1.5 on the clip side. Other countries may require additional safety factors.

Distance between PV

clamps and edge(x) in mm

190

150

Distance between

clamps (y) in mm

500

320



Max. rated wind load

≤ 2.1 KN/m²

≤ 2.8 KN/m²

≤ 3.4 KN/m²

≤ 4.0 KN/m² ≤ 4.5 KN/m²

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