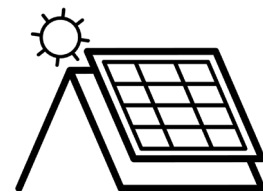




CASE STUDY — enerix Rostock Tonnendach Rostock, Germany



PVKIT® | S-5-E™ Mini

AT-A-GLANCE

Project Name

enerix Rostock Tonnendach

Location

Rostock, Germany

Solar Installer

enerix Rostock

S-5! Supplier

RoofTech GmbH

Roof Profile

Rheinzink double-fold zinc
standing seam, curved barrel
metal roof

Industry

Residential

PROJECT STATS

Project Size

7.5 kWp

S-5! Products Supplied

- PVKIT® solar mount
- S-5-E™ Mini clamp

The Situation

The project required a non-penetrating solar mounting solution that was lightweight, reliable and compatible with the curved geometry of the roof.

The Result

The PVKIT in combination with the S-5-E provided the rail-less solar mounting solution for this unique curved barrel metal roof. The project impressively demonstrates how modern solar technology can be integrated efficiently and with minimal material use into sophisticated roof architecture.



The Project

Located in the coastal city of Rostock on Germany's northeastern Baltic shore, this apartment building features the installation of a 7.5 kWp solar PV system on an elegantly curved, barrel-shaped metal roof with a double-folded standing seam profile.

The goal was to seamlessly integrate renewable energy into the building without compromising the integrity of the roof or aesthetic appeal.

To meet these requirements, a reliable, non-penetrating mounting solution was essential—one that could conform to the curved geometry of the metal roof.



The Challenge

The shape of the barrel roof presented a unique mounting challenge. Due to the structural load limitations, the mounting system needed to be lightweight, while also allowing for a quick and efficient installation.

A traditional rail-based system was not a viable option as it would have required significant custom adaptations, driving up the weight, cost, carbon footprint and complexity of the installation.

Additionally, preserving the watertight integrity of the roof was a top priority, ruling out any mounting system that required roof penetrations.

The Solution

The **S-5-E Mini** clamp in combination with the **PVKIT** rail-less solar mounting solution was selected to secure the PV modules directly to the standing seams – with absolutely no roof penetrations – a crucial factor in preserving the waterproofing of the roof and maintaining its warranty.

The rail-less design of the PVKIT proved to be the ideal solution for the curved geometry of the barrel roof. It allowed the system to adapt seamlessly, following the curve of the roof without requiring custom modifications and significantly simplifying the installation process.

The solution not only ensures secure fastening but also maintains the integrity of the roof—a key consideration when installing on standing seam metal roofs.

By eliminating the need to ship, store or install heavy rails, both material and labor costs were substantially reduced. The installation was quick and straightforward, requiring fewer tools and less labor, which helped minimize installation time and lower overall project cost. Additionally, the system's ultra-lightweight

design reduced the structural load on the roof while delivering a clean, low-profile aesthetic that complements the building's architectural appeal.

How Did S-5! Products Help?

- **Easy to Install, reduced installation time**
- **Reduced material costs, including freight costs**
- **Non-penetrating system, not invasive to the roof**
- **Maintained the roof's integrity, avoiding leaks**
- **Improved system aesthetics**
- **Minimized the amount of time workers must spend on a steep roof**
- **Eliminated the risk of a voided roof manufacturer warranty—no holes/no damage**
- **85% lighter than rails, providing 25% better load distribution**

“Due to the curvature of the roof, installing modules would have required unnecessary effort and additional materials for custom substructures. Instead, we mounted the system directly onto the standing seams without damage or impairing its function. The S-5-E Mini clamp, a trusted solution for standing seam roofs, provides versatility for various seam profiles. Compact, robust, and easy to install—especially when paired with the PVKIT—it saves time and money during planning, storage, and installation.

The modules now deliver clean energy—efficiently, roof-friendly, and without any damage. It's a great example of how sophisticated architecture and smart PV mounting technology can work perfectly together.”

— Björn Schumacher, CEO, enerix Rostock



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