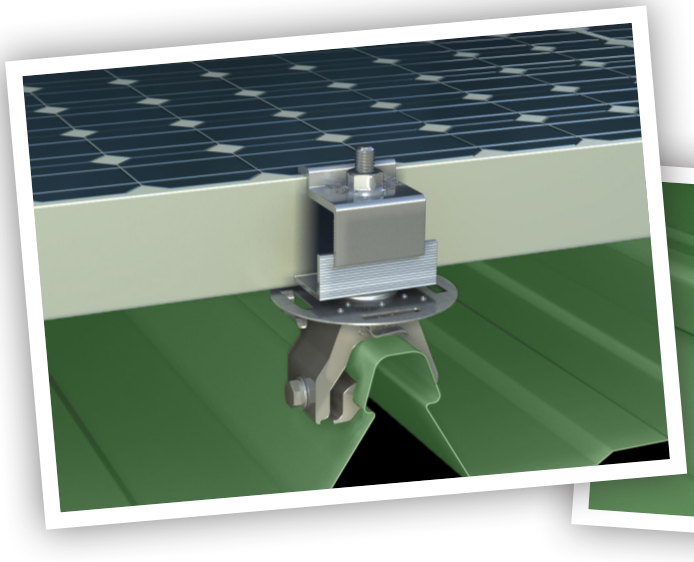
Success Story

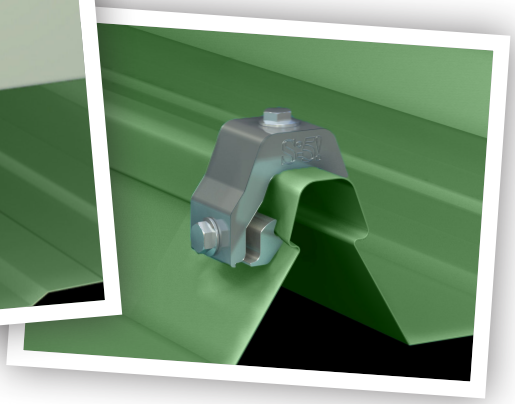
S-5!®

The Right Way!

Solar Array Installation
Wild Coast, South Africa

> We are very impressed by the product and even more so by the level of service we received. Well done—truly commendable.
>
> Neil Goss
> Director, FreePhase





Middle of Nowhere

Diesel generators and batteries are high-cost energy sources. Increasingly, off-grid locations are looking to alternate energy sources such as solar energy harvesting. Mkweni, a farm located well off the electrical grid on the remote Wild Coast region of South Africa, determined a roof-mounted solar array was the best solution for their needs. While the existing Safintra Saflok 700 standing seam metal roof provided a perfect mounting platform, they wanted to avoid penetrating the roof, thereby voiding the roof manufacturer's warranties.

Safintra worked with Mkweni to contract South African solar energy integrator, FreePhase, to commission the PV system. Director Neil Goss turned to S-5!® to provide a strong, non-penetrating solar mounting solution.

What Worked?

S-5!'s patented solar attachment technology was perfect for this project. The S-5-PV Kit is a cost-effective DirectAttached™ solar mounting solution that provides module-to-module conductivity. It saves time and money by eliminating the need for rack or rail mounting methods, and by drastically reducing the need for costly copper wire and lugs. The S-5-PV Kit utilizes the extensive line of profile-specific S-5! mini attachment clamps for maximum holding strength without damaging the roof membrane.

The S-5-K Grip Mini clamp was designed by S-5! for this particularly challenging metal roof profile. Previously, installers had to choose between poor holding strength or drilling holes into the roof. But the innovative new clamp design by S-5! utilizes a selection of clamp inserts to ensure a tight hold without drilling holes in the roof.

Partnering with Safintra, S-5! product engineer, Dustin Haddock, flew from Colorado to the Wild Coast to ensure proper installation, and pitched in to help finish the project. By the end of the day, the team had completed the array. As the sun rose the next morning, the system fired up. The 10 kWp system satisfies the entire electrical requirement of the farm.

Satisfied Customer

Goss, impressed with S-5!'s extraordinary service and the product's performance, later wrote Haddock to thank S-5! for engineering a truly problem-solving solar mounting solution for metal roofs: "We will certainly be recommending this product to everyone and anyone, and we hope to use it on as many roof installs as we can. It's such a win! One of the biggest concerns we hear from prospective industrial clients is that they don't want us drilling through their roof. This finally offers us something that will protect their warranties. Well done."

At A Glance:

Customer:
FreePhase (Pty) Ltd
Durban, South Africa

Location:
Wild Coast, South Africa

Industry:
Farming

Situation:
Mkweni, a farm in South Africa, located well off the electrical grid, was in need of a roof-mounted solar energy harvesting system that could withstand high wind loads. It was imperative that an attachment solution be found that would avoid piercing the roof (voiding the roof manufacturer's warranties).

Results:
FreePhase, the project developer employed to commission the PV system, turned to S-5! to provide a strong, non-penetrating mounting solution. When the unique metal roof profile posed some attachment challenges, the roofing manufacturer, PV integrator and attachment component manufacturer came together to get the job done correctly and quickly.

Stats:

- 10 kWp off-grid/hybrid system
- Safintra Saflok 700 roof panels
- 44 x 260w Trina Honey Modules
- 165 UL/ETL Listed S-5-PV Kits
- 165 S-5-K Grip Mini w/ GXM 50 Inserts