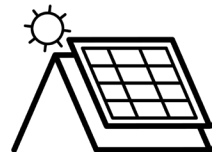




Case Study — Taspac Energy

PVKIT® | R465™ Mini | PVKONCEAL™



At-A-Glance

Project Name

Taspac Energy Residential Home

Location

Auckland, New Zealand

Solar Install

Avid Solar

S-5! Distributor

Taspac Energy Ltd.

Module Manufacturer

32 405-watt REC Alpha Pure Modules

Inverter Manufacturer

Fronius Gen 24Plus Hybrid Inverter

Battery Storage

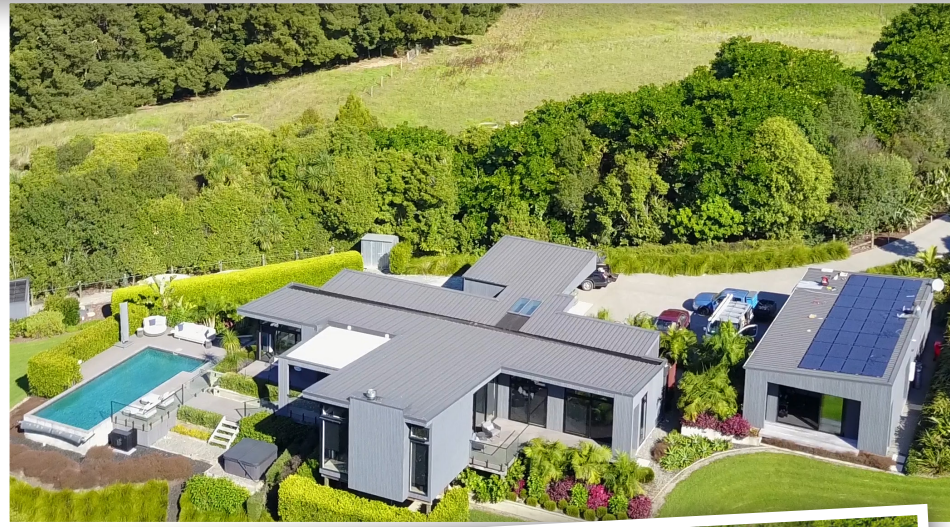
BYD Battery-Box Premium HVM
Battery Storage System

Roof Profile

Standing Seam Metal Roof

Industry

Residential



The Situation

The homeowner wished to supplement his energy intensive residence with solar power and required a mounting solution that is warranted for the life of the solar system, has an aesthetic appeal and would not damage his roof.

The Result

He chose the low-profile S-5! PVKIT solar PV mounting solution, providing a simple, economical and penetration-free method for direct-attachment of modules to the roof. The new system has reduced his dependence on electricity by about half.

Project Stats

- Roof measures: 14m x 7m
- Roof Pitch: 4 degrees
- Project Size: 12.6 kW
- S-5! Products Supplied:
 - PVKIT® (80)
 - R465™ Mini (80)
 - PVKONCEAL™ (12x 2.4m lengths)

The Project

Just north of Auckland, on the outskirts of town, is a natural forested area and a local working farm. Located on the farm is a newly developed gated community with approximately 20 architecturally designed modern homes.

Taspac Energy, a wholesaler and distributor of solar energy solutions across all market segments in the New Zealand solar industry, provided the solar mounting system for one of the residences, which features two buildings on site—the primary residence (150m² or 1,615 sq ft) and a garage/home office studio (100m² or 1,025 sq ft).

The secondary building features a standing seam metal roof with a 12.6 kW solar array secured in place utilising the S-5! PVKIT direct-attach, rail-less, solar solution. The rooftop solar system consists of 32 405-watt black PV modules connected to a 10 kW solar inverter coupled with a 19.2 kW hour battery storage system.



How Did S-5! Products Help?

- Cut material costs in half, including freight costs
- Cut installation costs in half by eliminating the assembly and installation required by traditional racking
- Reduced added dead load of mounting components
- Minimised the amount of time workers must spend on the roof
- Improved aesthetics with a low-profile system
- Eliminated the risk of a voided roof manufacturer warranty—no holes/ no damage
- All S-5! components are warranted for the life of the system

The Challenge

The homeowner chose a standing seam metal roof because of the design appeal and the flat uniform shape of the roof. It was important to him to have a low-profile, sleek, all black solar solution that would not penetrate the roof or void any roof warranty.

Additionally, the property features an outdoor swimming pool, a spa bathroom and an EV charging station on site, which is integrated into the whole solar PV system. The goal was for the solar system to supplement as much power as possible since the property consumes 35,000 KWH per year.

The Solution

The homeowner chose the PVKIT rail-less solar mounting solution (in black) combined with the **S-5-R-465 Mini** non-penetrating, standing seam clamp to complement the aesthetic look of the roof so the whole system would look slick and black.

The S-5! system provides a simple, secure method to “lay & play” PV modules with tested, engineered, cost-saving, direct-attachment onto the seams of the metal roof. Also, using the S-5! clamps meant the homeowner could maintain warranties due to the non-invasive, penetration-free attachment.

The homeowner also selected the S-5! **PVKONCEAL** module skirt to conceal the lower edge of the modules and all mechanical and electrical components underneath. PVKONCEAL creates an attractive, clean finished look while keeping out critters, debris and other unwanted objects from under the solar array.



Long-Term Outlook

The homeowner was able to reduce his dependency on electricity and supplement the property’s power generation by 45%. The PVKIT system eliminated the need for a traditional rail system and provided an aesthetically-pleasing, cost-effective PV mounting solution—saving the customer time and money on installation and materials.

“We were naturally drawn to the quality of S-5! products and the fact that there are no known warranty claims or failures on any of the products they have ever produced. We would absolutely recommend S-5! Their rail-less solution is super compact and easy to transport, great quality, super-fast and user-friendly. Once you try it, you will never go back. You’ll find that you will get your modules up on the roof way faster than you’re used to. And we love the story of a family-owned company who built the business together. S-5! has always been fantastic at looking after us Kiwis down at the bottom of the world.”

—James Hanff, Grid Connected Project Manager, Taspac Energy Ltd.

S-5!
The Right Way

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