

From Grid to Greatness: D'Agnolo Properties Solar Journey

At SunRanch Solar, we take pride in designing tailored solar solutions that deliver maximum efficiency, long-term value, and sustainability for our clients. Recently, we successfully completed a 142.38kWp (DC) rooftop solar installation for D'Agnolo Properties, achieving their energy goals with a system that combines performance, cost-effectiveness, and aesthetic appeal.



252 x JA SOLAR (JAM72S30-565W/LR) Panels

D'Agnolo Properties (Graniti Tecnica, an associated Company) – A history set in natural stone

In 1990 a man with a vision birthed a successful tiling company. This grew continually over the years and in 2007 Graniti Tecnica was introduced to the market (amidst an array of other successful, already established sub divisions: Marble Classic and Techno Granite SA)

To this day, tiling is still a speciality at the Graniti Technica Tile Plant. Graniti Tecnica's Tile Processing Plant fabricates several standard sized tiles as well as the procession of custom dimensions on request. In addition, they offer a variety of finishes such as polished, flamed, brushed, honed and antiqued.

PV Plant & Equipment:

Key components of the PV plant consist of high-performance JA Solar panels (565W/LR) and a Huawei inverter to ensure maximum efficiency and reliability.

Grid-Tied Inverters:

- 1x Huawei Technologies SUN2000-100KTL-M2

Solar Panels:

- 252 x JA Solar JAM72S30 565W/LR Panels



The project utilized JA 565W solar panels paired with a 100 kVA Huawei inverter, creating a system with a DC-to-AC ratio of 1.3. This optimized design was carefully calculated to deliver reliable power generation throughout the day, accommodating the east-west orientation of the roof. The plant was symmetrically designed, ensuring not only technical efficiency but also a visually appealing and neat installation—a reflection of SunRanch Solar's attention to detail and commitment to quality.

To further enhance the system's cost-effectiveness and efficiency, the design included short DC and AC cable runs. This approach minimized material usage, reduced energy losses, and significantly lowered overall costs for the client.

A key highlight of the project was the seamless integration of the solar PV system with the client's existing generator infrastructure, achieved through an Encombi unit. This advanced technology ensures the generator operates at only 30% capacity, significantly reducing fuel consumption and wear. The system intelligently communicates with the generator controller and only increase its generation when additional power is required, providing uninterrupted power while maximizing energy efficiency.

Exceeding Expectations and Achieving Results

The results have exceeded expectations. During sun hours, D'Agnolo Properties relies almost entirely on solar energy, drawing close to 0kW from the grid. This transition has not only resulted in substantial operational cost savings but also enhanced the sustainability of their energy usage.

The client expressed great satisfaction with the installation process and the exceptional performance of the system. This project for D'Agnolo Properties is a testament to our dedication to quality, precision, and customer satisfaction.