

CASE STUDY

SICILY, ITALY

Hotel Costa Verde



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HOTEL COSTA VERDE



Location:	Sicily, Italy
Hot Water Requirement:	65,000 litres/day at 60°C.
System Installed:	40 x Solahart 302Kf, 37 x Solahart 303Kf
Total Collector Area:	191 x 2m (382m ²)
Total Storage:	77 x 300 L (23,100 L)
Estimated Energy Saving:	257,000* kWh per year (336 tonnes CO ₂ per year from a coal fired power station).

Cefalù is a small fishing village of Arab-Norman origin, located in the province of Palermo, on the northern coast of Sicily, Italy. A popular tourist resort on the Tyrrhenian Sea, Cefalù is known for its sandy beaches, appealing old town, historic buildings (most notably its two-towered, 12th century, Norman cathedral), and the massive outcrop which towers above the town – called La Rocca (the Rock).

Hotel Costa Verde, a luxury 4 star hotel situated on a hillside overlooking Cefalù, is one of the largest hotels in Palermo. With 380 rooms, several bars, restaurants, and conference facilities, they have high hot water demand. The hotel owner contracted the Solahart distributor for Italy, Accomandita Tecnologie Speciali Energia Spa, to provide a solution to reduce the high energy bill from the pre-existing electric and gas hot water systems.

Accomandita designed a solution using 77 of Solahart's proven 302Kf and 303Kf solar hot water systems, as pre-heaters for the existing water heating plant. The high efficiency Kf absorber maximises the solar energy transferred into the unique 35 riser 'multiflow' collector. As the fluid within heats, it rises to the top of the collector and into the tank where it displaces cooler fluid. This cooler fluid flows to the bottom of the collector where the process is repeated over and over - with no moving parts.

The installation at Hotel Costa Verde has a collector area of 382m², and provides 23,100L of stored hot water. It was completed in three stages and spans several of the hotel's buildings. The system provides approximately 65,000 litres per day and is estimated to save the hotel 257,000* kWh of energy and 336 tonnes of CO₂ per year (from a coal fired power station).

*Hotel is open from April to October only.

