

MiaSolé

CUSTOMER CASE STUDY

General Membrane: Trevignano Residence

CUSTOMER SITUATION

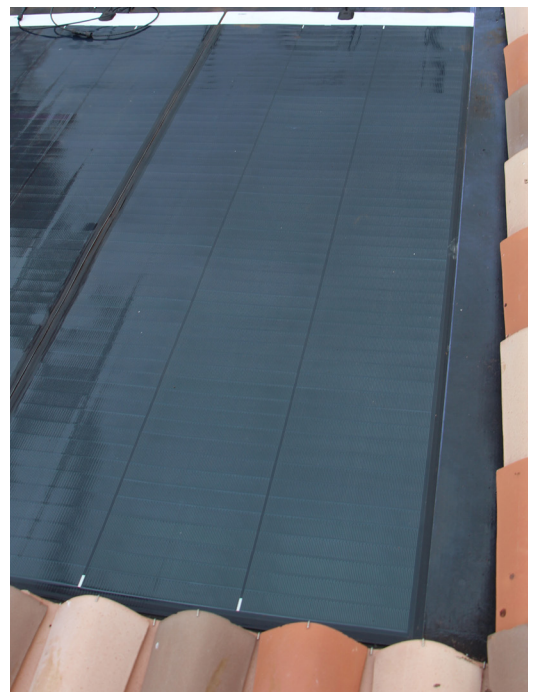
Trevignano is a residential village located in the province of Treviso, in the northern part of Italy. This peaceful location is the site of a local home, in which the home owner had hired the company Bettiol Luigino to install solar power. Bettiol Luigino decided, after much research, that General Solar PV—a product born from a partnership between General Membrane SpA and MiaSolé—would be the perfect solution for the customer.

MIASOLÉ SOLUTION

General Membrane SpA, the premiere Italian provider of bitumen and synthetic waterproofing membranes, integrates the MiaSolé flexible thin-film CIGS (Copper Indium Gallium Selenide) FLEX module into their new General Solar PV, an innovative solution for the waterproofing sector. General Solar PV is composed of MiaSolé flexible modules adhered to a Phoenix Solar Tech bituminous waterproofing membrane created for the adhesion of the modules. General Solar PV becomes an integral part of the roof and offers the double benefit of waterproofing and generation of electricity, and can be used on new and existing flat or sloping roofs as well as roofs with variable geometry, such as curves.

For the Trevignano project, Bettiol Luigino determined that the site could support 5.92kW of FLEX-02W modules, generating the electricity required to power the home's heat pumps and other amenities such as lighting. The company integrated the FLEX modules with the Fronius Primo 6.0-1 light inverter.

Bettiol Luigino, with no previous experience or training, was able to install the 16 modules that comprised the Trevignano installation in two and a half hours, including navigating around the roof chute door brackets, by simply following the instructions in the installation manual with an initial support of the technical office of General Membrane. Once installed, the modules lay flat against the roof surface, providing excellent resistance to wind and seismic events.



RESULTS

The MiaSolé FLEX modules, with their high efficiency rating, integrated smoothly into the General Membrane waterproof membrane roof. The modules do not protrude above the surface of the roof, providing an aesthetic solar solution in keeping with the tranquil setting of Trevignano. The solar solution generates all the electricity required for the energy needs of the building.

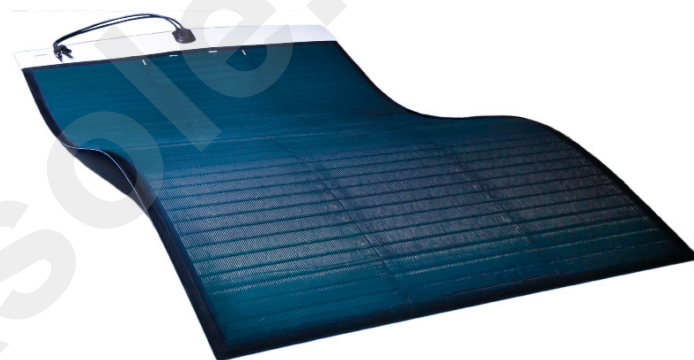
The MiaSolé FLEX Series module is IEC 61646 & IEC 61730 and UL 1703 certified.

THE GENERAL SOLAR PV SYSTEM

The General Solar PV System is an integrated, unique solution that covers the essential requirements of a roof: high-quality waterproofing, thermal insulation in compliance with current standards, and the efficient production of electricity. The system uses the MiaSolé FLEX module, the highest efficiency, flexible, thin-film product on the market today, with up to 17.8% efficiency for maximum power generation.

THE GENERAL SOLAR PV SYSTEM IS IDEAL FOR:

- ❖ EXISTING ROOFS
- ❖ NEW ROOFS
- ❖ RE-ROOFINGS



The thin, flexible and lightweight MiaSolé module installs directly onto the General Solar bituminous waterproofing layer and provides excellent resistance to high wind and seismic events.



The house in Trevignano integrates tile with flexible solar, without the need for racking. From the street, the solar system is barely visible on the two story house.

