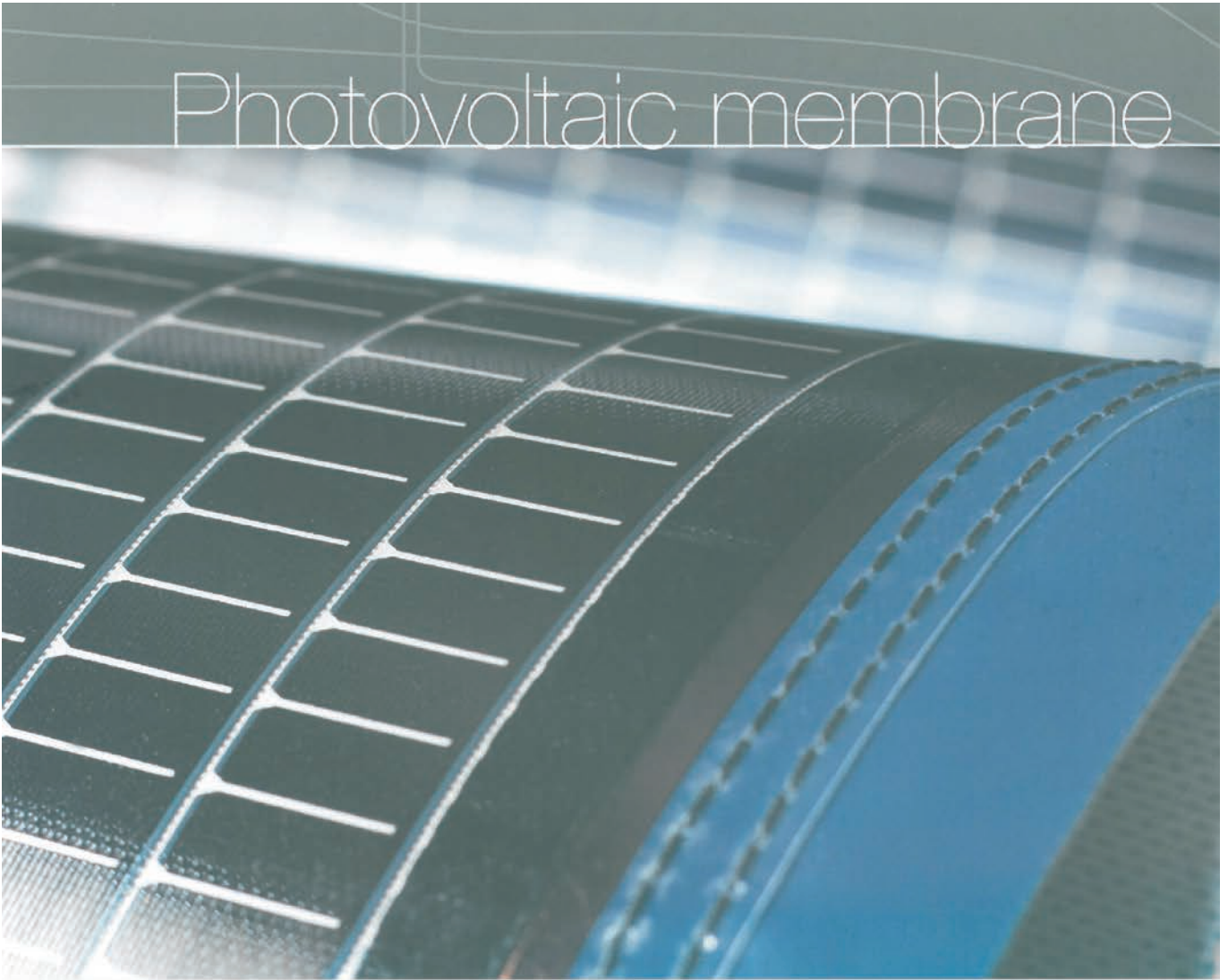


# Photovoltaic membrane



[www.sergeferrari.com](http://www.sergeferrari.com)

## TEXYSOLAR

  
**Serge Ferrari**

[www.arcite !\[\]\(e3f8612927870f2e0f9f5989e6dd3064\_img.jpg\).at](http://www.arcite.at)

## TEXYSOLAR

### Self-adhesive photovoltaic membrane

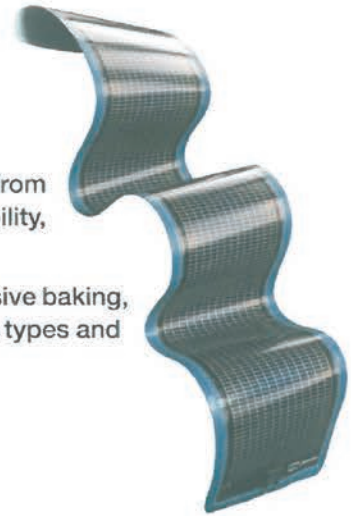
*Advantages:* Lightweight, flexible, ready-to-use, easy to install, durable, high-performance power generation

*Applications:* New or existing permanent textile structures

### Custom fit your textile structures and generate your own power

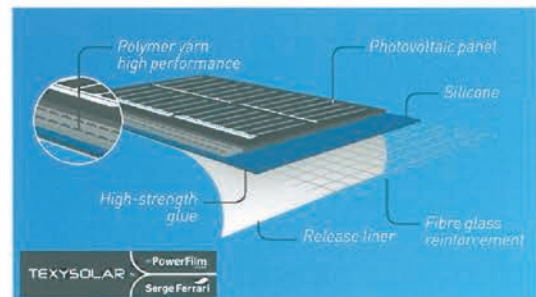
Texysolar is a high-performance photovoltaic membrane, which differs from conventional rigid modules due to its unmatched lightness and flexibility, whilst offering a proportionally higher efficiency in low light conditions.

**Texysolar exclusiveness:** the panel features a high-strength self-adhesive backing, which simplifies installation and enhance durability on diverse surface types and shapes in new or existing textile structures.



### An integrated complete system

- Texysolar is a self-adhesive photovoltaic membrane, which is assembled by sewing:
  - > a very high-performance, silicone and fibre glass based Serge Ferrari composite,
  - > Power Film photovoltaic panels made of double junction amorphous silicon.
- Associated with Précontraint Serge Ferrari membranes, this assembly ensures high strength in photovoltaic installations.



*Exclusive: a self-adhesive backing for easy installation*

### Lightness, flexibility and discretion: distinct advantages



*Texysolar meets the demand of lightness required by the textile structures.*

- Texysolar is 10 times lighter than a conventional rigid solution and 3 times lighter than other textile solutions. Texysolar displays a unit weight of only 1.4 kg/sqm. A major advantage for equipping textile structures to:
  - > minimise induced stresses to be resisted,
  - > achieve an unmatched ratio of 27 Wp/kg, compared with 12 Wp/kg for conventional solutions.
- Its thinness and flexibility enable it to adapt to single and double curvatures in textile structures and to hug the sheet metal undulating shapes and glass or metal angular shapes.

## ■ Ready-to-use for easy installation and suited to every situation

- Texysolar can be rolled to a small 10 cm diameter: it is lightweight and compact to transport.
- The Texysolar module is ready for use due to its high-strength self-adhesive. Just remove the protective release liner and apply Texysolar directly to the surface.
- Texysolar respects the integrity of the support since its installation requires neither perforation nor structural transformation or modification.
- Site installation on new or existing structures enables exposure to be checked and location to be optimised in relation with the sun orientation.



*Texysolar facilitates installation: it requires neither installation equipment nor preliminary making or welding.*

## ■ Texysolar: unflinching strength

### Wind tunnel test

- Texysolar resists 250 km/h winds and prevents any "flapping" effect. (*Wind tunnel test at CMEFE independent laboratory - Geneva*)
- Texysolar is an effective solution against theft or vandalism.



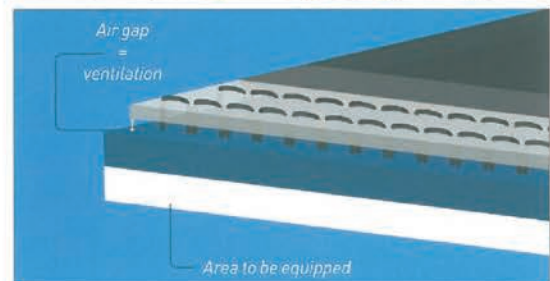
### Resistance to impacts

- The impact propagation area is limited and the durability is enabled by the printed interconnect of the photovoltaic panel: bullet impacts test shows that, even when perforated, Texysolar conserves its production capacity. (*Power Film impact test: video available on request*)



### Advantages of sewn assembly

- Greater reliability: the panels are sewn and not welded, they are disconnected from the loads transferred to the support structure.
- Durability: this assembly allows air to circulate, heat is naturally dissipated.



## ■ High-performance technology



- Amorphous silicon double junction technology and low level of laminate dirt accumulation support relatively higher efficiency:
  - > generally irrespective of panel inclination,
  - > even at low luminosity, shade effects, diffuse light or limited dirt.
- The energy produced can be used directly or resold to the grid.

# Photovoltaic membrane

## A complete range

Texysolar is available in 6 module sizes.

Power-related Texysolar module dimensions	Texysolar 25 Wp*	Texysolar 50 Wp*	Texysolar 100 Wp*
<b>Single</b>	395 x 2024 mm	395 x 3632 mm	395 x 7142 mm
<b>Twin</b>	713 x 1065 mm	713 x 1868 mm	713 x 3622 mm

\* Wp = Watts-peak

- > Texysolar is delivered with its two connectors and is ready for connection.
- > A full range of electrical accessories is available: extension leads, ducts, etc. Please consult us.

## Technical data

	Texysolar 25 Wp		Texysolar 50 Wp		Texysolar 100 Wp	
	Single	Twin	Single	Twin	Single	Twin
Area (sqm)	0.799	0.759	1.434	1.332	2.821	2.582
Weight (kg)	1.15	1.1	1.95	1.85	3.75	3.55
Nominal power (Wp)	25	25	50	50	100	100
Voltage at maximum power $U_{mpp}$ (V)	15.4	15.4	15.4	15.4	15.4	15.4
Current at maximum power $I_{mpp}$ (A)	1.8	1.8	3.3	3.3	6.6	6.6
Packaging dimensions L x l x h (cm)	50 x 25 x 25	84 x 25 x 25	50 x 25 x 25	84 x 25 x 25	50 x 25 x 25	84 x 25 x 25

Nominal characteristics under standard test conditions (STC: 1000 watt/m<sup>2</sup> - 25°C - Spectrum 1.5 AM). A detailed technical datasheet is available on request.

The technical data above are averaged values with a +/- 10% tolerance.

The buyer of our products is fully responsible for their application and their transformation concerning any possible third party. The buyer of our products is responsible for their implementation and installation according to the standards, use and customs and safety rules of the countries where they are used. Concerning the contractual warranty, please refer to the text of our warranty.

The values mentioned above are the results of tests performed in conformity with the use and customs in terms of studies; they are given as an indication in order to allow our customers to make the best use of our products. Our products are subject to evolutions due to technical progress; we remain entitled to modify the characteristics of our products at any time. The buyer of our products is responsible to check that the above data is still valid at time of fabrication.

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Downloading, technical data, references, photos, and much more.



Sustainable development

Serge Ferrari development is based on strict adherence to good safety and environmental practices. This includes an understanding of Life Cycle Analysis (LCA), selection of the best materials, and eco-design. The Company obtained its first ISO 14001 certification in 2003.

100% recyclable

Serge Ferrari developed the Texyloop technology specifically for the recycling of composite PVC membranes and textiles. Through the management of its end-of-life products Serge Ferrari is committed to sustainable development. [www.texyloop.com](http://www.texyloop.com)

  
**Serge Ferrari**