GRUPPOSTG

ENERGYGLASS®

SOLAR & GLASS ARCHITECTURE

BIPV Solutions
Custom-made Photovoltaic elements

COMPANY PROFILE ENERGYGLASS ENG

GRUPPOSTG

ENERGYGLASS®

SOLAR & GLASS ARCHITECTURE

BIPV Solutions

Photovoltaic in safety and security glass or ceramic

The concept of *BiPV* requires the co-existence of the production of renewable energy and architectural functions of the elements. EnergyGlass™ is energy conscious design.

Creativity and Design must be expressed in harmony with functionality, ecology, and aesthetics, guaranteeing at the same time, security for people and respect to safety regulation.

The PV components EnergyGlass™ are designed and produced to ideally response the needs of architectural integration where the glass is an element of design. EnergyGlass™ photovoltaic elements allow flexibility and freedom of customization in terms of size, power supply, transparency and colors, always guaranteeing the highest security standards.

EnergyGlass™ components integrates and combines the competence of the photovoltaic industry with the expertise of structural glass for architecture.

To achieve and ensure these excellent results in BiPV, for the production of EnergyGlass™ Photovoltaic elements are used innovative layering materials, such as PVB Solar (poly vinyl butyral) typically used to stratify the safety glass commonly used in construction, and redesigned specifically for solar applications.

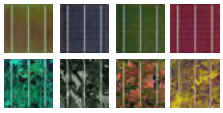
Technical Features

Encapsulated material: PVB Solar – EVA (architectural) - Ionomer

Glass type: Extra Clear and/or Clear . Thickness: 4-5-6-8-10-12-15 mm
Possibility of using special glass and assembling in insulate glass

Glass Processing: Heat strength or Toughen and HST

EnergyGlass™ photovoltaic elements can be produced using different typologies of cells in mono and poly crystalline silicon with variable power supply and transparence.

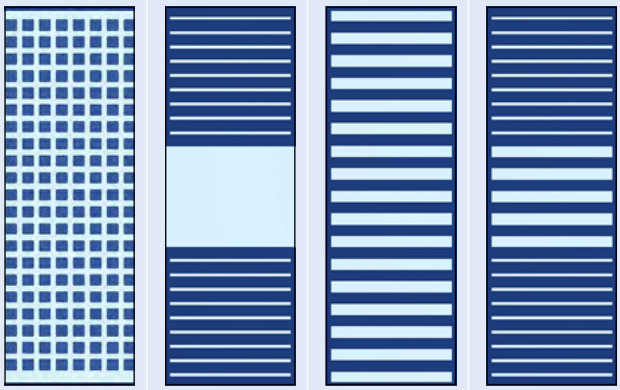


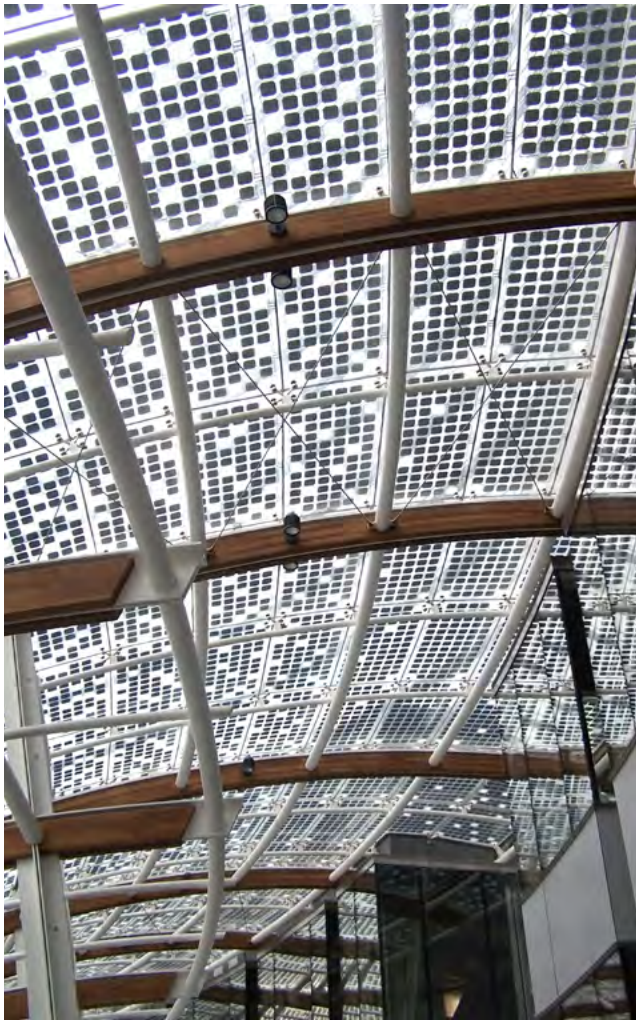
Type of PV cells	Mono or Poly Crystalline Silicon	Mono Crystalline Silicon	Mono Crystalline Silicon BACK CONTACT	Mono Crystalline Silicon BIFACIAL	Poly Crystalline Silicon COLOR
Dimension (mm)	6 inch (156,75 mm)	5 inch (125 mm)	5 inch (125 mm)	6 inch (156,75 mm)	6 inch (156 mm)
Power (wp)	4,6 - 5,4	2,9 - 3,1	3,4 - 3,6	Front 5,3 - Rear 4,5	3,5 - 4,2
Wp (max) per sq mt	180	150	180	200	135
Trasparency	0% - 50%	0% - 50%	0% - 50%	0% - 50%	0% - 50%

The BIPV products EnergyGlass™ replaces building elements (roofs, facades, balustrades, canopies, etc.) performing a multifunction role: they generate power and are architectural elements of the building envelop.

Photovoltaic elements EnergyGlass™ can be customized to match energy production, architectural and design requirements.

Combining photovoltaic and serigraphy is it possible to obtain innovative solutions for an harmonious and unique building design.

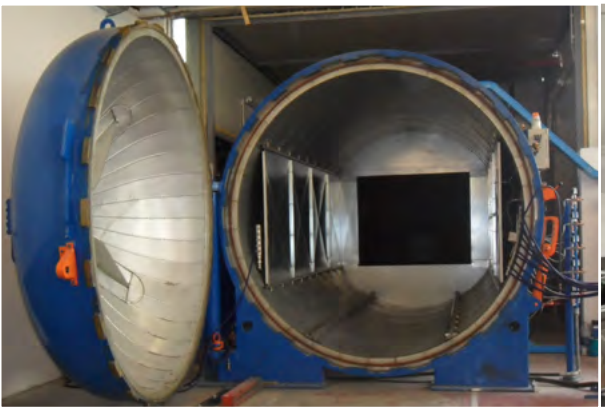
Nome	EG SCC®	EG SOP®	EG SOE®	EG SOV®
	Board	Horizontal stripes partial	Horizontal stripes equidistant	Horizontal stripes variables
Front and back view				

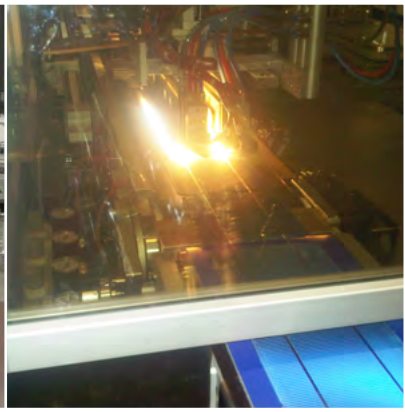


To obtain the best personalization, is it possible to realize a serigraphy, either in the same colour of the cell or any other desired colour, both on the front glass and on the rear in order to hide links between strings of cells or to obtain a special design.

The rear of the glass can be further customized with:

- Glass color: Blue, Bronze, Green or Grey.
- Opaque enameled glass in various colors, applicable uniformly throughout the glass or in correspondence of the cells or strips.
- Semi-transparent enameled glass applied over the glass in order to obtain the passage of light but without the projection of the shade of the cells in the building.
- Silk screen glass according to the design specifications





Certification

- EnergyGlass™ Photovoltaic elements are certified CEI EN 61215 and CEI EN 61730
- EnergyGlass™ Photovoltaic Glass laminated with PVB solar are in compliance with UNI 7697 for the application of laminated and toughened glass in architecture:
  - UNI EN ISO 12543 1-6: Laminated Glass
  - UNI EN 12600: Laminated Safety Glass for Buildings – Impact resistance tests
  - UNI EN 356: Laminated Safety Glass against Vandalism and Burglary
- The company is also in possession of the following business certifications: ISO 9001:2008, ISO 14001:2004 e OHSAS 18001:2007

About Us

Established in 2009, GruppoSTG is an Italian company that is specialized in the design and manufacture of photovoltaic and structural solutions.
Inspired by the principles of sustainable development and involved in the research and application of new pioneering technologies with the ultimate goal of saving energy, GruppoSTG has positioned itself as a reliable and competent partner, able to guarantee an integrated approach of energy solutions for the construction sector.

Valdengo (Biella)
Commercial offices, design offices and production plant.

GRUPPOSTG ENERGYGLASS® SOLAR & GLASS ARCHITECTURE

GRUPPOSTG VGS® ITALIAN PV SOLUTIONS

Bergamo
GruppoSTG' headquarters

GRUPPOSTG® LA FABBRICA ITALIANA DEL FOTOVOLTAICO

GRUPPOSTG® DIVISIONE IMPIANTI FOTOVOLTAICI

2 LOCATIONS

2 PRODUCTION UNITS

40 EMPLOYEES

"Solar architecture is not about fashion, it is about survival"
Norman Foster

GRUPPOSTG ENERGYGLASS® SOLAR & GLASS ARCHITECTURE

M info@gruppostg.com
W www.gruppostg.com
T +39 035 0510171

Visit Us