



FVG3i System

the building integrated photovoltaic solution
with thermal insulation for all types of building

Adaptability & Flexibility

- Insulation from 40 to 100 mm thick (polyurethane foam, rock wool, ...)
- Adaptable to all FVG ENERGY PV module series
- Adaptable to all types of roof structures, direct fixation on purlins
- Adaptable to all types of sloping roofs from 5° to 50°
- All types of finishing sides can be used

Optimization & Profitability

- Support profiles equipped with thermal breaks to ensure complete insulation of the roof covering
- Insulation on the roof slope leading to savings in fitting out the building interior
- Can be cantilevered up to 0.5 m above the ridge purlin and 1.1 m below the gutter, equalling an extra module per vertical array

Warranty & Quality Standards

- 5-Year manufacturer's warranty on materials and components with a specific additional insurance covered by a leading European Insurance company
- Compliant with European building integrated photovoltaic criteria
- Eligible to higher feed in tariff for BIPV installations

Reliability & Long life

- Aluminium rails and stainless steel fastenings for a high resistance to environmental influences over time
- The system has no areas in which is vulnerable to dirt build-up or moss growth, ensuring that your roof stays clean all year round
- Control of expansion stresses between roof structure and photovoltaic modules

Easy to Set Up & Install

- Maximum weight of 8.5 kg/m² (without PV modules) to simplify the handling
- Conduits provided for cable runs
- Only a few tools required
- High installation productivity

Design

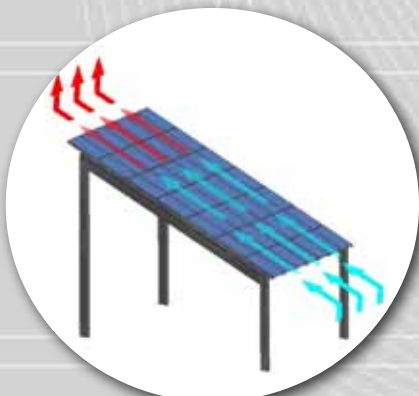
- The system has been developed by a leading European company in the roof-integrated mounting support's field with great experience and technical know-how
- The system blends aesthetically with the roof for a perfect appearance
- Possibility to colour the accessories (black, blue, red, ...)

Ventilation & Performance

- System without underlay with openings that creates an air flow for a better rear ventilation of the PV modules for an additional 10% efficiency minimum
- The integration system can be coupled to a heat pump to recover heat from the warm air between the modules and the insulation

Training

FVG ENERGY, in partnership with Mecosun, analyzes the Customer's request, defines the type of project, stands over the set up and installation process arranging trainings and assistance through trainings on system installation and gives a professional after-sales support



Technical Specifications

	Standard beams	Fastening method
For metal roof structures	IPN from 80 to 180 (standard)	Fixing clips
	IPE from 80 to 200 (standard)	Fixing clips
	HEA, HEB from 100 to 120	Fixing clips
	Thin sheeting profiles (e > 1.5 mm)	Fixing clips
For wooden roof structures	Traditional or laminated	Fixing clips
For concrete roof structures	Beams with metal inserts	Fixing clips
Structural load	Maximum 8.5 kg/m ²	
Acceptable roof slope	From 5° to 50° (from 8% to 120%)	
Distance between two support beams	Maximum 2 m	
Wind areas (NV 65)	Zone 4 - Zone 5 (on case study)	
Snow areas (NV 65)	Zone 4 - Altitude 900 m	
Module orientation	Portrait	
Length of roof slope	Maximum 27 m for standard installation, 40.5 m special installation (above these lengths consult us)	

Insulation (structural)

Thickness	40, 50, 60, 80, 90 and 100 mm
Dimensions	Breadth adapted to the system
Structural load	Maximum 5 kg/m ²
Materials	Polyurethane foam, rock wool...



The system FVG3i in section

- ① Profile for fastening to the roof structure on the host system
- ② Insulation panel
- ③ Profile panel mounting and insulating host drains latitude water
- ④ Longitudinal drain water
- ⑤ FVG ENERGY photovoltaic module with frame
- ⑥ Top line watertight



Example of an installation combined with a heat pump



Installation on industrial and collective roofs