

# Roofit.Solar

# Velario<sup>®</sup>

## 175/3x12/001

### Extremely Weatherproof

Our solar roof is equipped to withstand any weather condition, including snow, ice, hail, and wind.

### 2-in-1 solution

Combining roof and solar panel into one product (2-in-1) reduces material and labor costs for both manufacturing and installation.

### Built to last

Premium quality materials and a strong metal backsheet.

### Warranty

25-year power warranty and 10-year product warranty.

### Ideal for Sloped Roofs

Ideal photovoltaic solution for sloped roofs with minimum pitch of 10°.

### Dreamed in Europe. Made in Europe.

We commit to the highest quality and European standards in the production and installation of our solar roofs.

### Tried-and- tested

Installed using traditional well-known double-lock standing seam roofing technology.

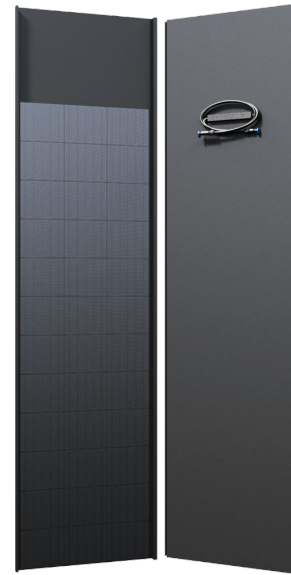
### Timeless design

Accepted by authorities for protected and heritage buildings.



# Roofit.Solar

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## Working Conditions

Maximum System Voltage	1000 V DC
Operating Temperature	-40 °C ... +85 °C
Maximum Series Fuse Rating	16A
Safety Class	Class II
Tested Positive Load	6000 Pa = 610 kg/m <sup>2</sup>
Tested Negative Load	2400 Pa
Impact Resistance	HW4 - hailstone up to 40 mm in size
Minimum Ventilation Below	50 mm
Minimum Roof Slope	10 degrees

## Mechanical Specifications

Cells	158,75 mm monocrystalline PERC 3x12 configuration
Front glass	3.2 mm tempered low-iron glass
Back sheet	0.5 mm galvanized steel with RR33 GreenCoat Pural BT coating
Encapsulant	POE
Junction boxes	3 bypass diodes, IP68, potted
Connectors	QC4.10
Cables	4 mm <sup>2</sup> H1Z2Z2-K solar cable length 700 mm
Effective roof coverage	2020 mm x 550 mm
Mounting method	Double Seam technology
Weight	16.5 kg (pc) = 15.5 kg/m <sup>2</sup> (installed)

## Packing

Packing Configuration	32 modules per pallet
Pallet (LxWxH)	2370 x 1130 x 750 mm

## Certification

**IEC 61215-1:2021** (PV Module Reliability)

**IEC 61730-1:2016** (PV Module Safety)

**EN 13501-5:2016** (Fire safety)

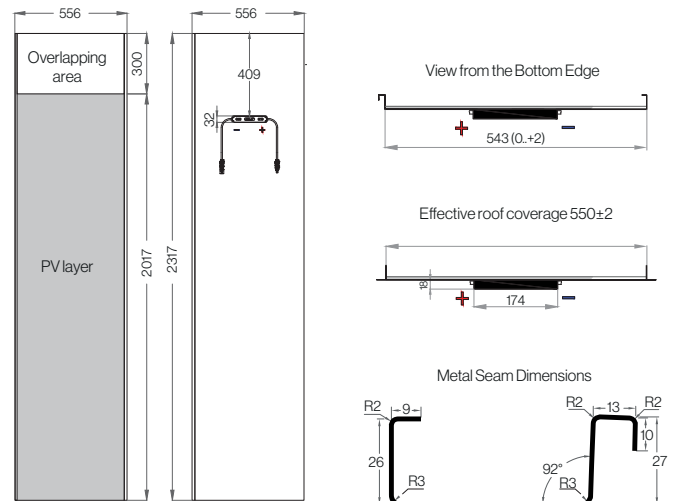
Roof (t1) by GTC

Roof (t2) by Eurofins Expert Services Oy



CAUTION: READ SAFETY AND INSTALLATION INSTRUCTIONS BEFORE USING THE PRODUCT.

## Engineering Drawings (units mm)



## Electrical Characteristics

		STC *	NMOT °
Nominal Power	$P_{mpp}$ (W)	<b>175</b>	116.8
MPP Voltage	$V_{mpp}$ (V)	<b>19.8</b>	17.4
MPP Current	$I_{mpp}$ (A)	<b>8.8</b>	6.71
Open Circuit Voltage	$V_{OC}$ (V)	<b>24.2</b>	21.9
Short Circuit Current	$I_{SC}$ (A)	<b>9.3</b>	7.2

Power Tolerances  $\pm 3\%$   
Current and Voltage Tolerances  $\pm 3\%$

\* Standard Test Conditions (irradiance 1000 W/m<sup>2</sup>, cell temperature 25 °C, spectrum AM1.5)  
° Nominal Module Operating Temperature (irradiance 800 W/m<sup>2</sup>, air temperature 20 °C, wind 1 m/s, spectrum AM1.5)

## Thermal Characteristics

Temperature Coefficient of $P_{mpp}$	-0.363 %/K
Temperature Coefficient of $V_{OC}$	-0.276 %/K
Temperature Coefficient of $I_{SC}$	0.043 %/K