



SYNAGE 

Suncol Tile M3

The roof integrated photovoltaic system





Suncol Tile

Suncol Tile is a **customisable and appealing** solar roof that fully blends in with the aesthetic of any structure.

It **substitutes** traditional roofing material by **seamlessly integrating** into any roof.

Its **high energy efficiency** changes the way homes work and **reduces CO₂ emissions** making the building sustainable.



Roof with PV panels



+



+



=



2x roof products
2x installations

2x cost
2x maintenance

No aesthetics

Roof with Suncol Tile



+



=



1x roof product
1x installation

1x cost
1x maintenance

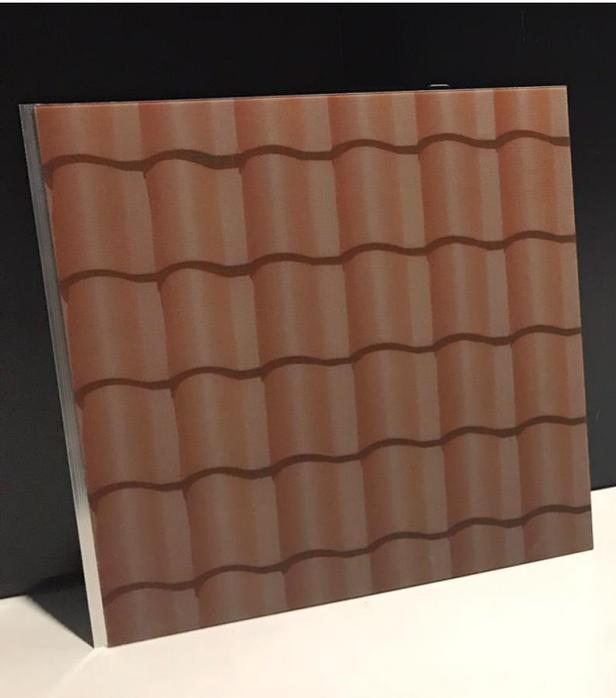
Appealing aesthetics

SYNAGE 





Why Suncol Tile?



Fast Fix: Its exclusive fixing concept makes it incredibly easy to install.



Cost Benefit: The roof pays for itself thanks to the energy it generates.



Energy Efficiency: It is almost as efficient as traditional PV panels.



Customisation: Design your solar roof from a wide range of choices.





Key Product Features



Colours



Texturing



Modularity



Fixing System





Colours



Terracotta simil ral 8015



Brown simil ral 8016



Front glass trasp / back black

Texturing



coppo red



coppo aged



marsigliese



perlina aged



coppo grey



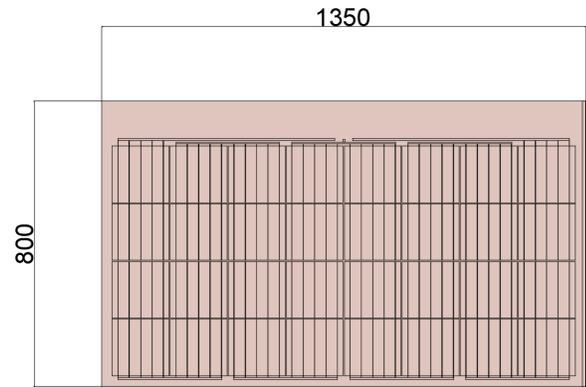
perlina grey



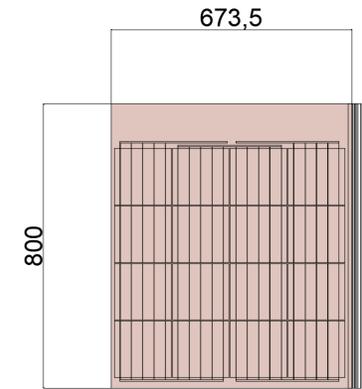


Modularity

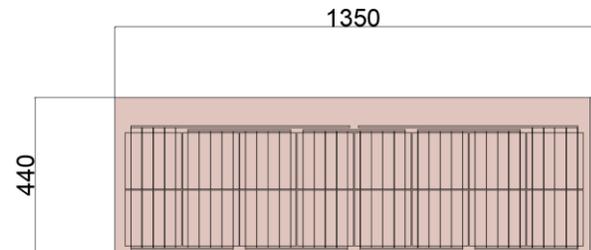
SUNCOL-TILE 32



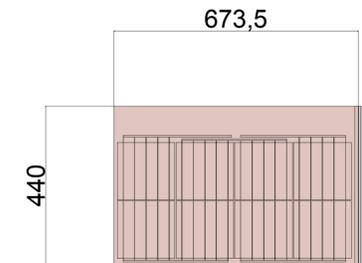
SUNCOL-TILE 16-V



SUNCOL-TILE 16-H



SUNCOL-TILE 8

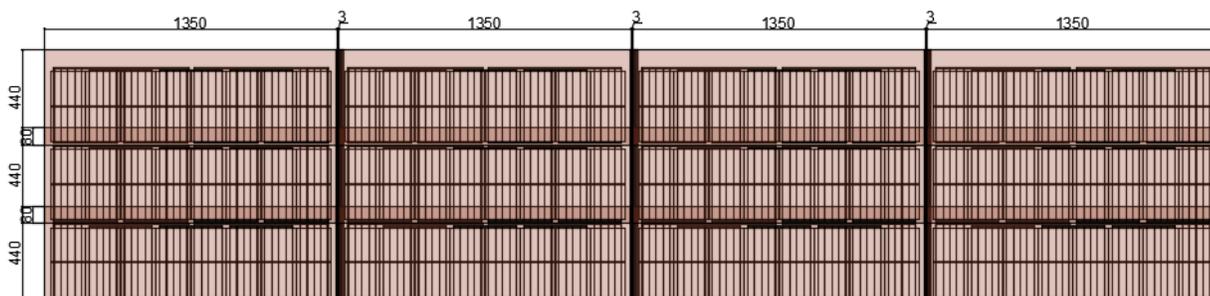
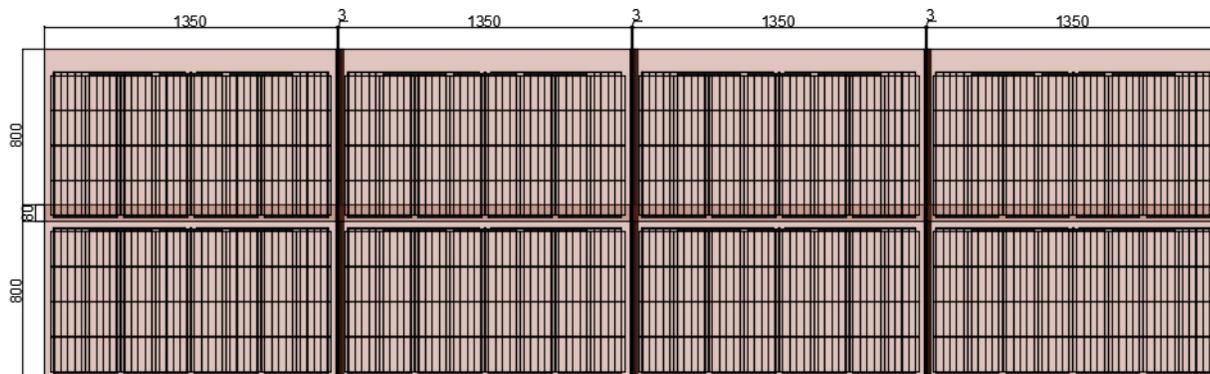




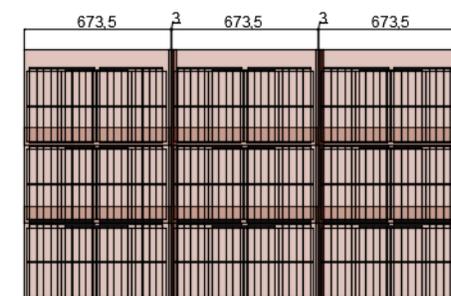
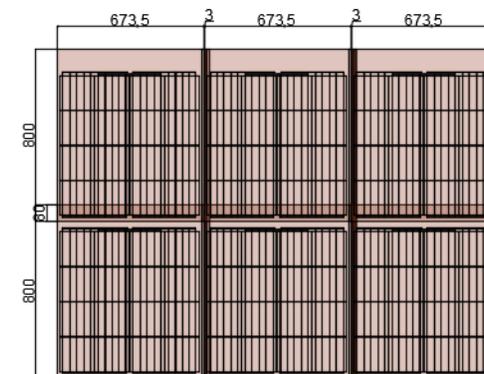
Modularity

Create your roof

SUNCOL-TILE 32



SUNCOL-TILE 16-V



SUNCOL-TILE 16-H

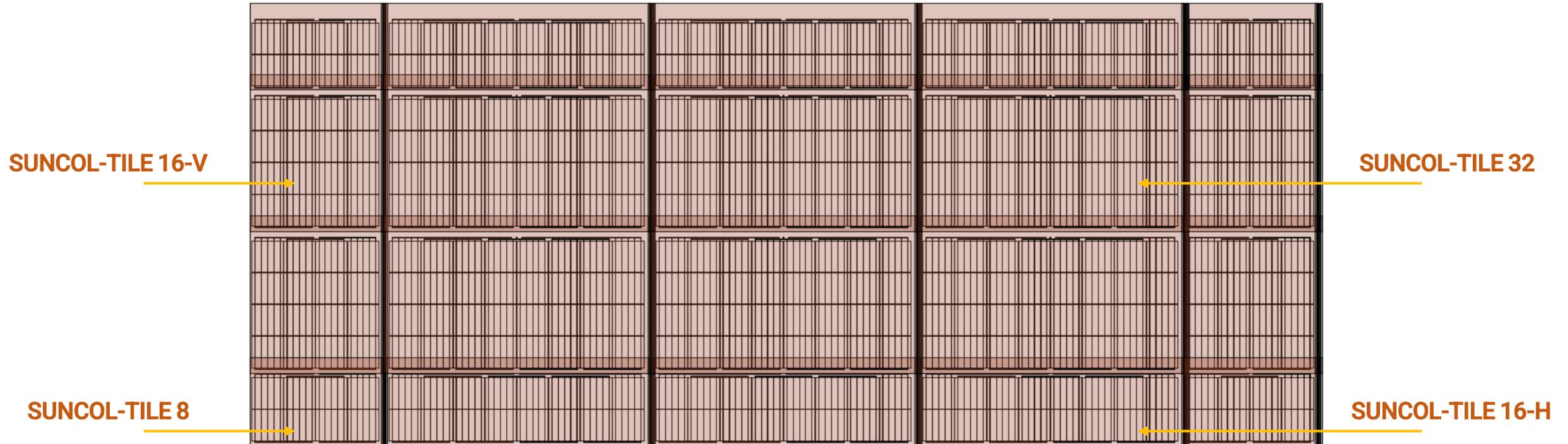
SUNCOL-TILE 8





Modularity

Create your roof

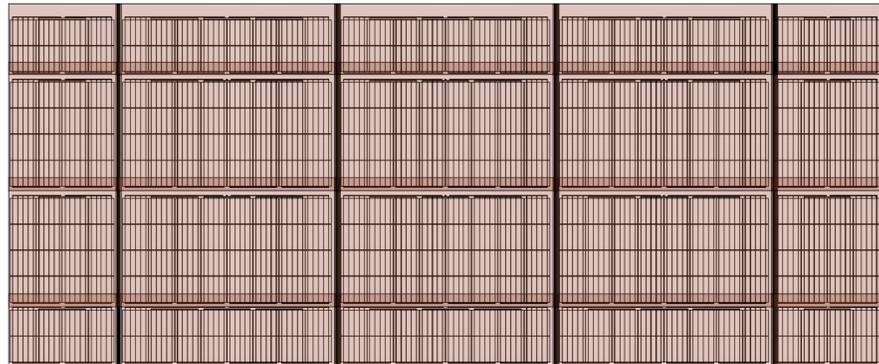




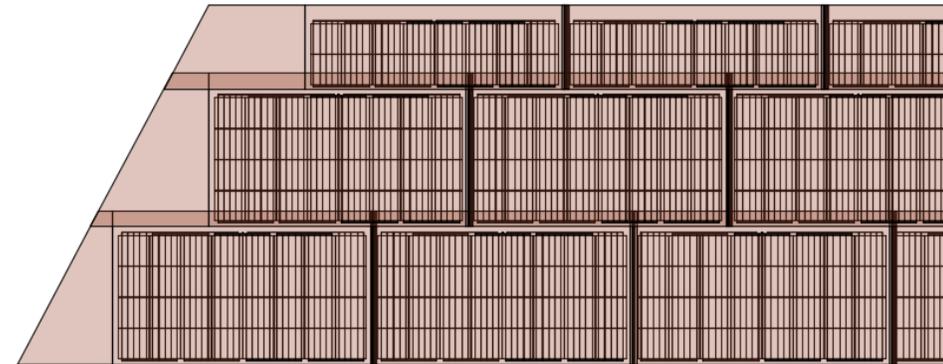
Modularity

Create your roof – Laying variants

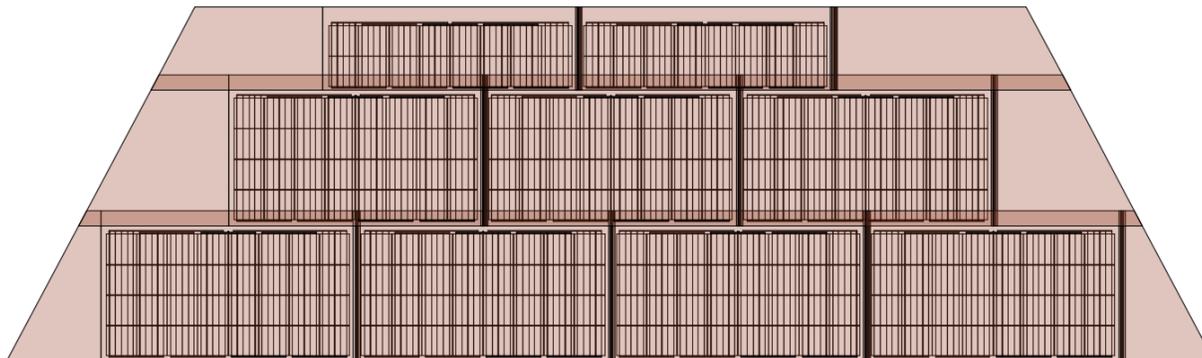
Linear joints



Irregular joints



Middle joints 1/2



Dummy modules

- Aesthetically identical to active modules but non-active
- Used to complete all the roof surface



Warranty & Certificate

Warranty

Factory defects

12 years

Performance

Linear decay
≤ 80% in 25 years

Certificate

IEC 61215 | IEC 61730



Physical Characteristics

Front Glass	thickness 3.2 mm, texturing Suncol / transparent
Cells	monocrystalline cells 158.75x158.75 mm high efficiency
Encapsulant	EVA Solar
Back Glass	thickness 3.2 mm, black color
Thickness	8 mm (-0.5mm / +1.5mm)
Junction Box	JB IP 67
Connector Features	MC4 original
Cable Characteristics	Ø 4 mm² – length 800 mm



Physical Characteristics

MODUL 32 CELLS

Weight	21 Kg
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MODUL 16-V CELLS

Weight	10.5 Kg
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MODUL 16-H CELLS

Weight	11.5 Kg
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MODUL 8 CELLS

Weight	6 Kg
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Maximum snow load (Pa)	5400
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Maximum load tested (Pa)	8000
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Maximum wind speed	130 Km/h
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Hail	G3 Class; Ø 25 mm; 82 Km/h
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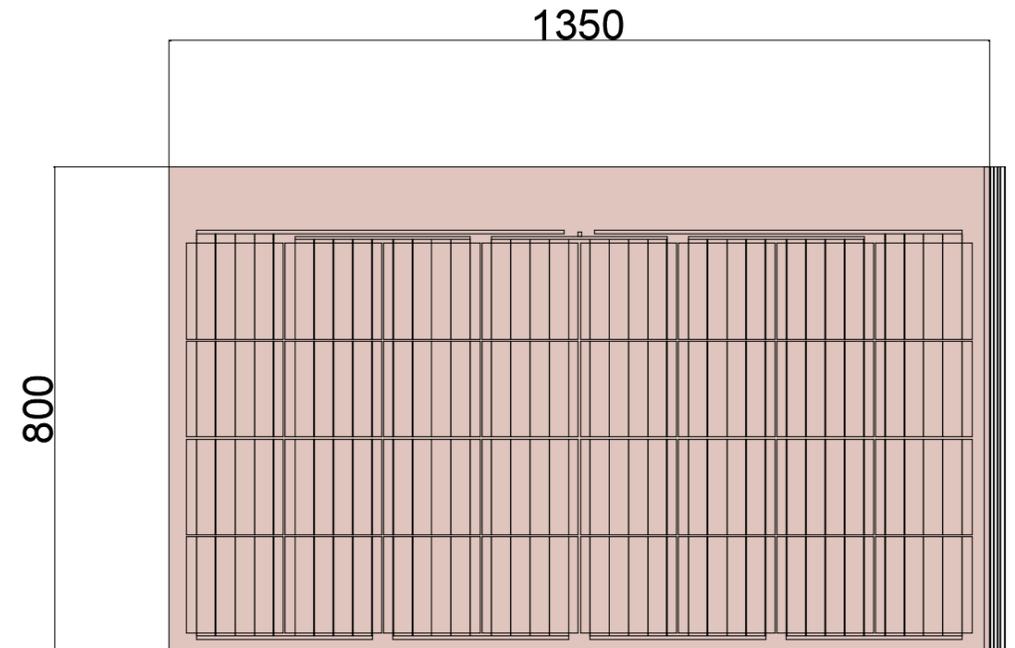
Reaction to fire	Class 1
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Electrical Characteristics

MODUL 32 CELLS

	SUNCOL TILE Terracotta RAL 8015 / Brown RAL 8016	SUNCOL TILE BLK FRONT GLASS TRANSPARENT	
Vmp	16.99	17.36	V
Imp	8.87	9.22	A
P	150	160	Wp
Voc	21.19	21.31	V
Isc	9.25	9.54	A
Temp. Coeff. Current α	0.025	0.048	(%/°C)
Temp. Coeff. Voltage β	- 0.28	- 0.29	(%/°C)
Temp. Coeff. Power γ	- 0.42	- 0.42	(%/°C)
NOCT	52	45	°C
2 Diodes	Max. Capacity fuse 15 V	Max. Voltage systems 1000 V	



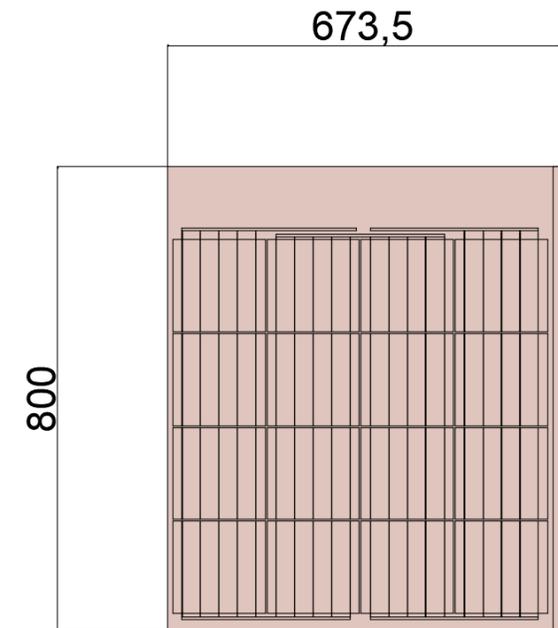
* The electrical data of coloured modules with texture will be confirmed by post-production tests.



Electrical Characteristics

MODUL 16 CELLS

	SUNCOL TILE Terracotta RAL 8015 / Brown RAL 8016	SUNCOL TILE BLK FRONT GLASS TRANSPARENT	
Vmp	8.49	8.67	V
Imp	8.87	9.22	A
P	75	80	Wp
Voc	10.59	10.66	V
Isc	9.25	9.54	A
Temp. Coeff. Current α	0.025	0.048	(%/°C)
Temp. Coeff. Voltage β	- 0.28	- 0.29	(%/°C)
Temp. Coeff. Power γ	- 0.42	- 0.42	(%/°C)
NOCT	52	45	°C
1 Diode	Max. Capacity fuse 15 V	Max. Voltage systems 1000 V	



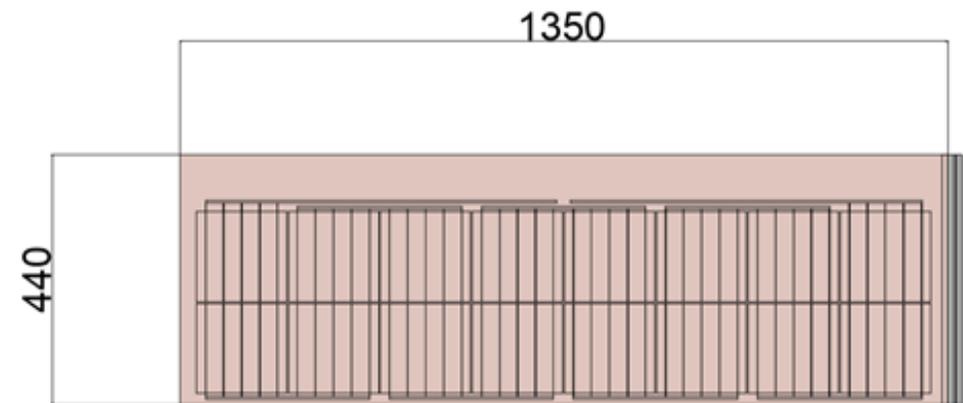
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Electrical Characteristics

MODUL 16 CELLS

	SUNCOL TILE Terracotta RAL 8015 / Brown RAL 8016	SUNCOL TILE BLK FRONT GLASS TRANSPARENT	
Vmp	8.49	8.67	V
Imp	8.87	9.22	A
P	75	80	Wp
Voc	10.59	10.66	V
Isc	9.25	9.54	A
Temp. Coeff. Current α	0.025	0.048	(%/°C)
Temp. Coeff. Voltage β	- 0.28	- 0.29	(%/°C)
Temp. Coeff. Power γ	- 0.42	- 0.42	(%/°C)
NOCT	52	45	°C
1 Diode	Max. Capacity fuse 15 V	Max. Voltage systems 1000 V	



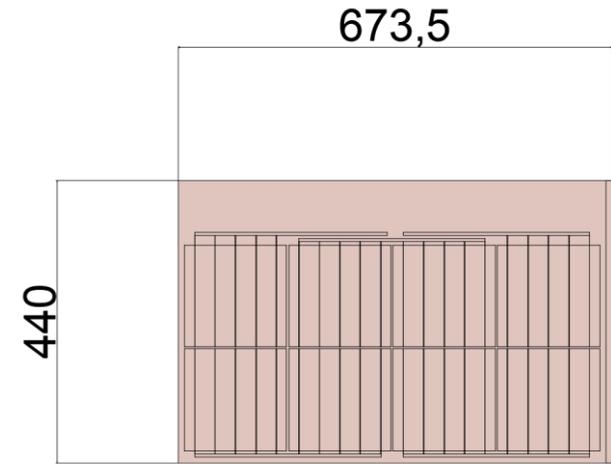
* The electrical data of coloured modules with texture will be confirmed by post-production tests.



Electrical Characteristics

MODUL 8 CELLS

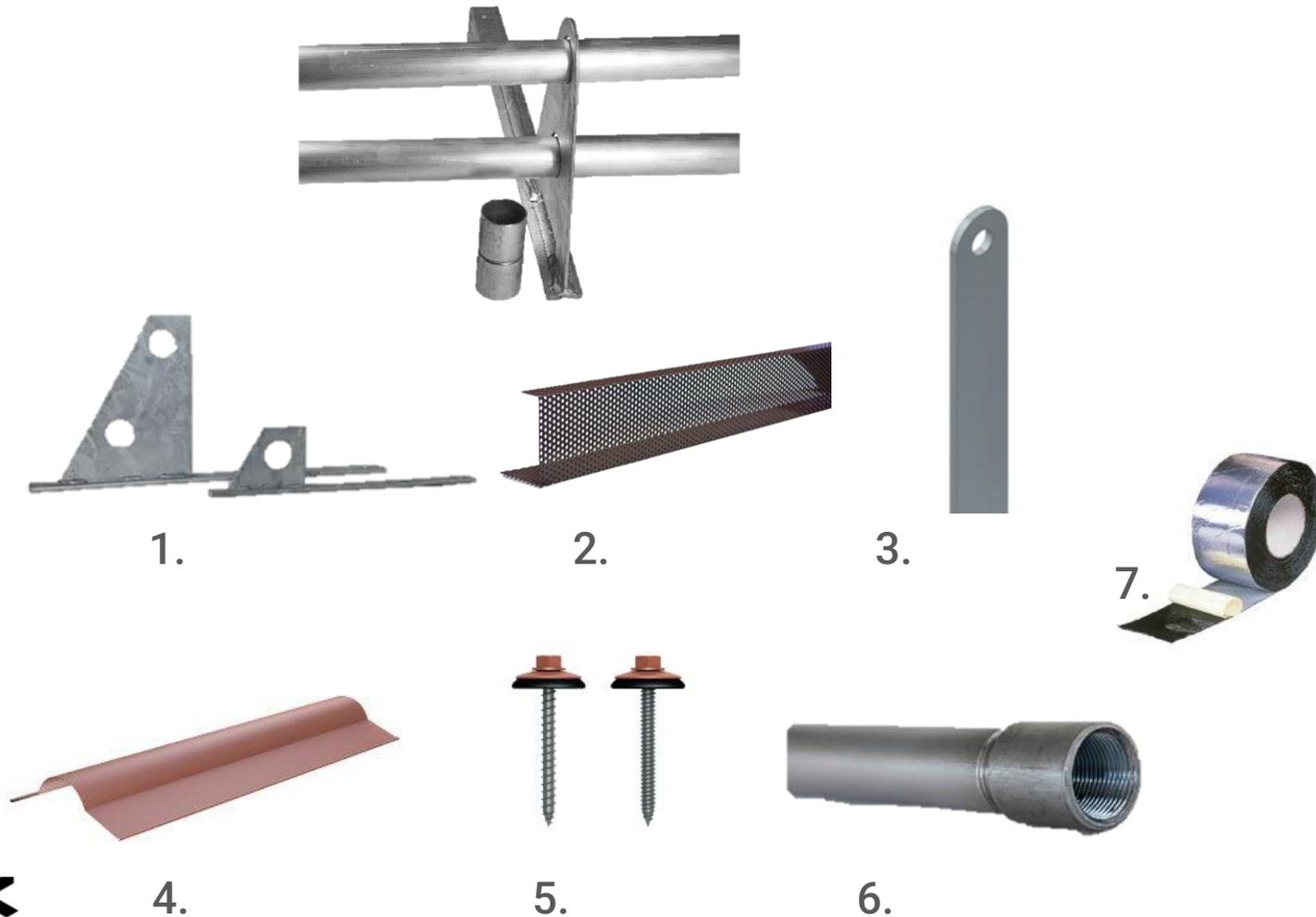
	SUNCOL TILE Terracotta RAL 8015 / Brown RAL 8016	SUNCOL TILE BLK FRONT GLASS TRANSPARENT	
Vmp	4.25	4.35	V
Imp	8.87	9.22	A
P	37.5	40	Wp
Voc	5.30	5.33	V
Isc	9.25	9.54	A
Temp. Coeff. Current α	0.025	0.048	(%/°C)
Temp. Coeff. Voltage β	- 0.28	- 0.29	(%/°C)
Temp. Coeff. Power γ	- 0.42	- 0.42	(%/°C)
NOCT	52	45	°C
1 Diode	Max. Capacity fuse 15 V	Max. Voltage systems 1000 V	



* The electrical data of coloured modules with texture will be confirmed by post-production tests.



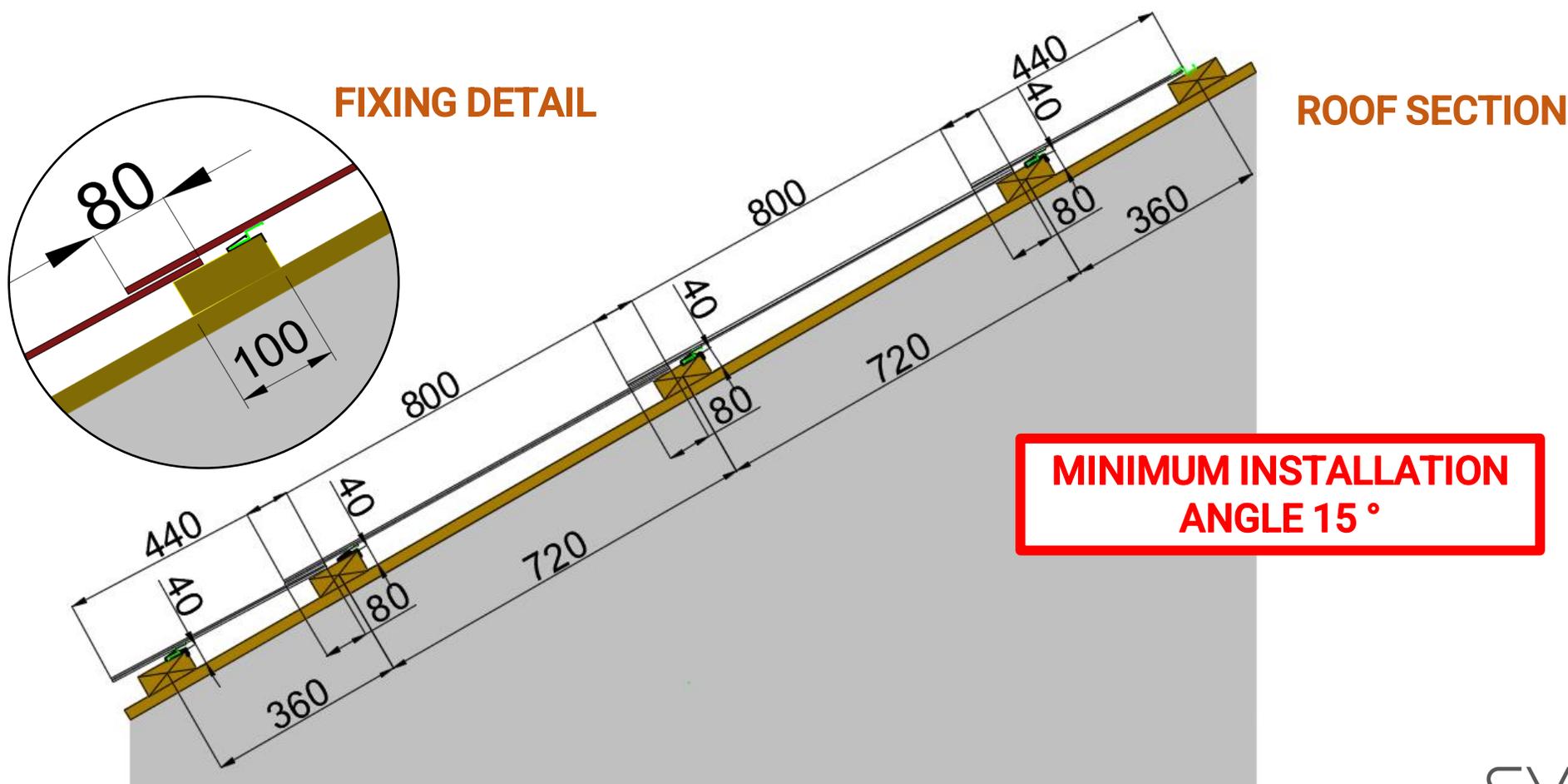
System Components



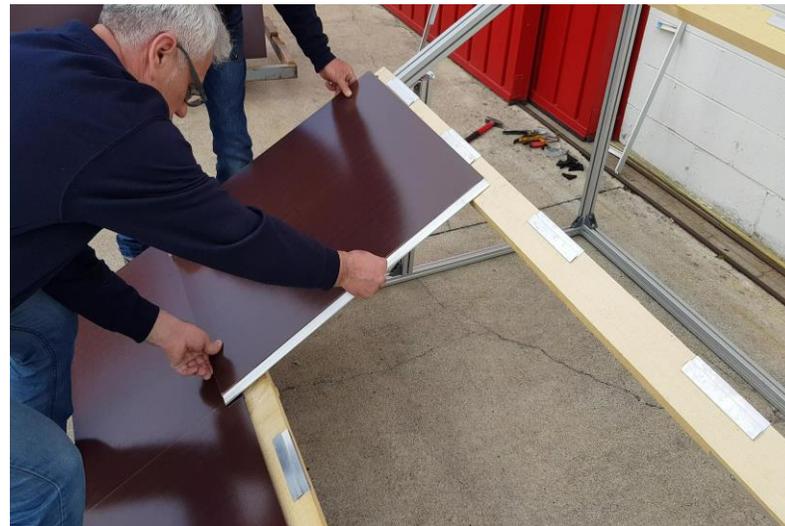
1. Snow stop system for 2 tubes, different types
2. Snow protection tube with thread/sleeve, powder-coated colour of the PV module
3. Safety hook
4. Edge or ridge finish with customised sheet powder coated in the same colour as the PV module, different types
5. Biting and self-tapping screws
6. Sealing tape
7. Connection plate with perforated edge, different types



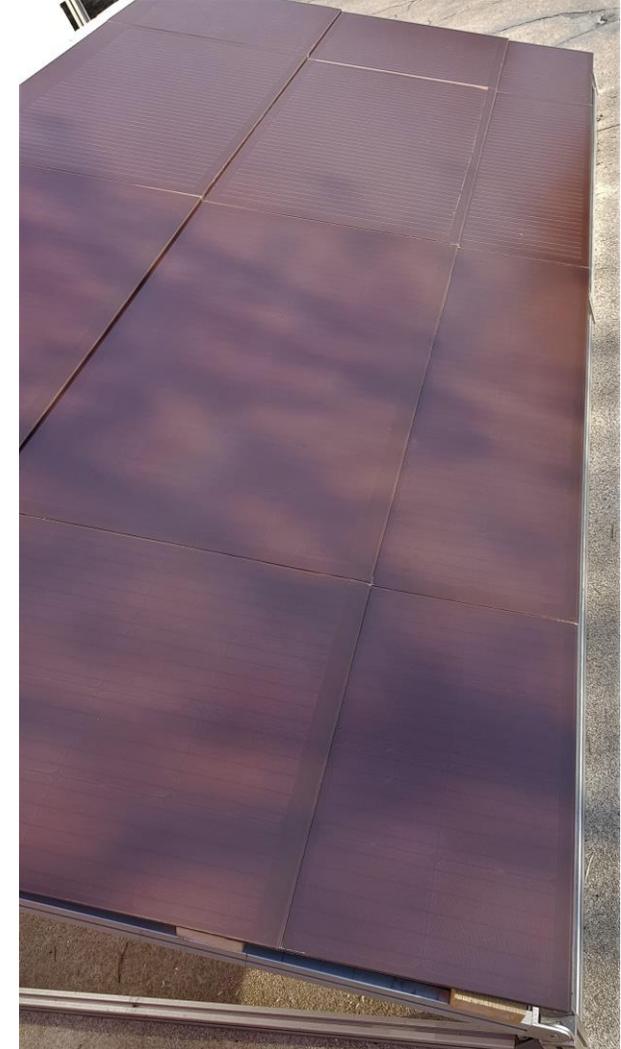
Fixing System



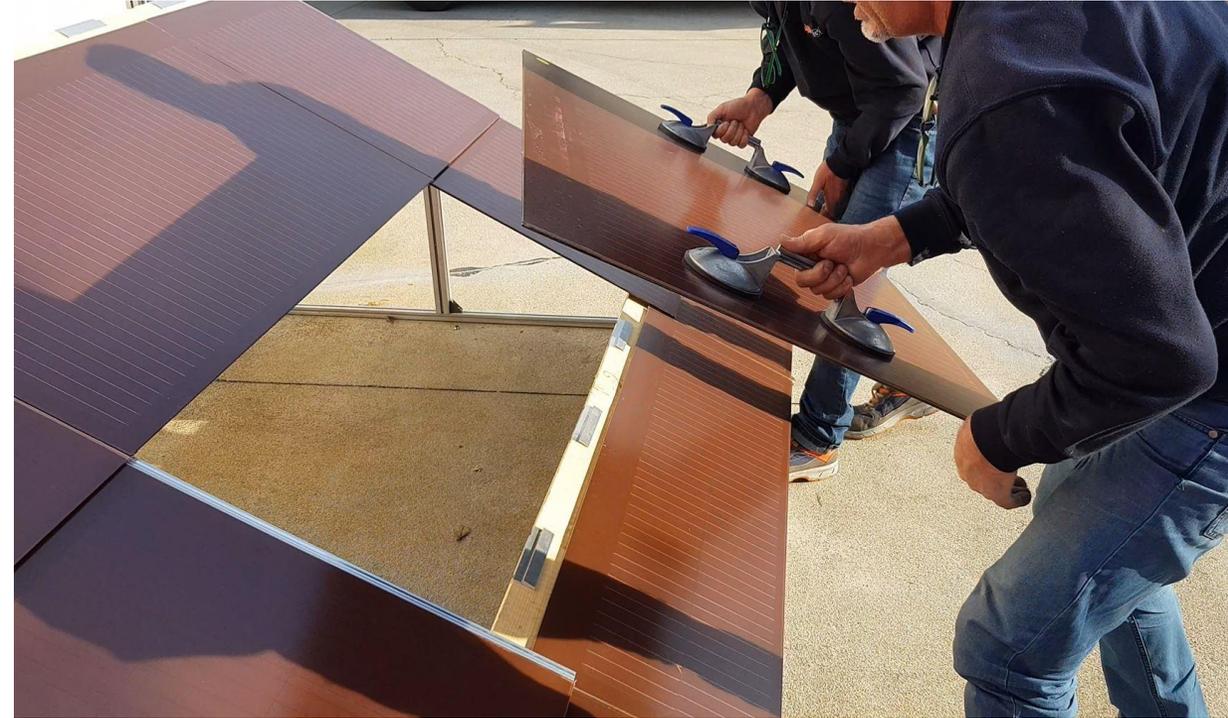
Application Example



Application Example



Application Example



Projects Overview

Roof Project Seergräben, Switzerland (2020)



Type of building: **Multi-functional**

Power installed: **7.5 kWp**

Efficiency: **15.75%**

Surface: **68 sqm**

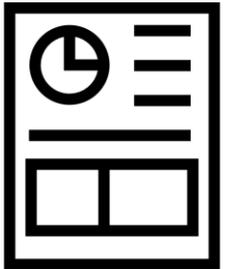
Number of installed modules: **63**

Type of modules: **Glass / Glass 3.2+3.2 mm**

Colour: **Terracotta**

Finishing: **Front solar glass**

Structure: **Hidden brackets mounting structure**



Projects Overview



Projects Overview

Roof Project *Varen, Switzerland (2020)*



Type of building: Residential

Power installed: 19 kWp

Efficiency: 18%

Surface: 119 sqm

Number of installed modules: 120

Type of modules: Glass / Glass 3.2+3.2 mm

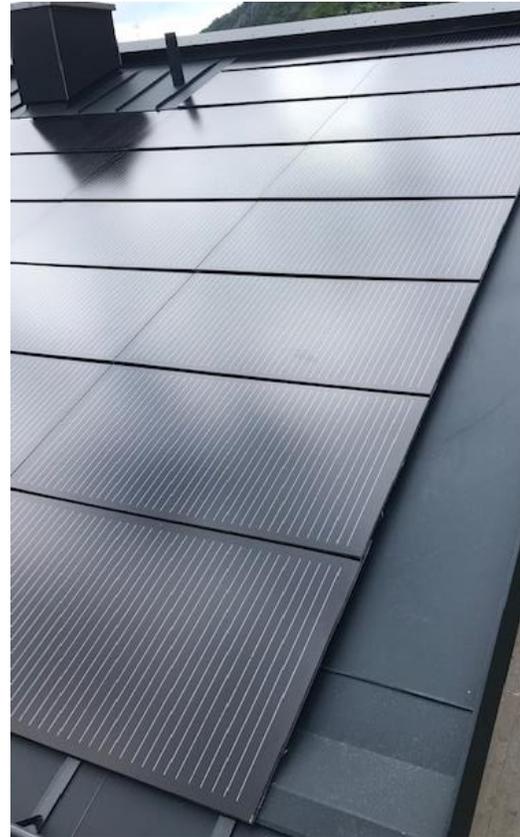
Colour: Black

Finishing: Front solar glass

Structure: Hidden brackets mounting structure



Projects Overview



Projects Overview



Projects Overview



Projects Overview



Projects Overview





Thank You
Envision. Design. Go Solar.

