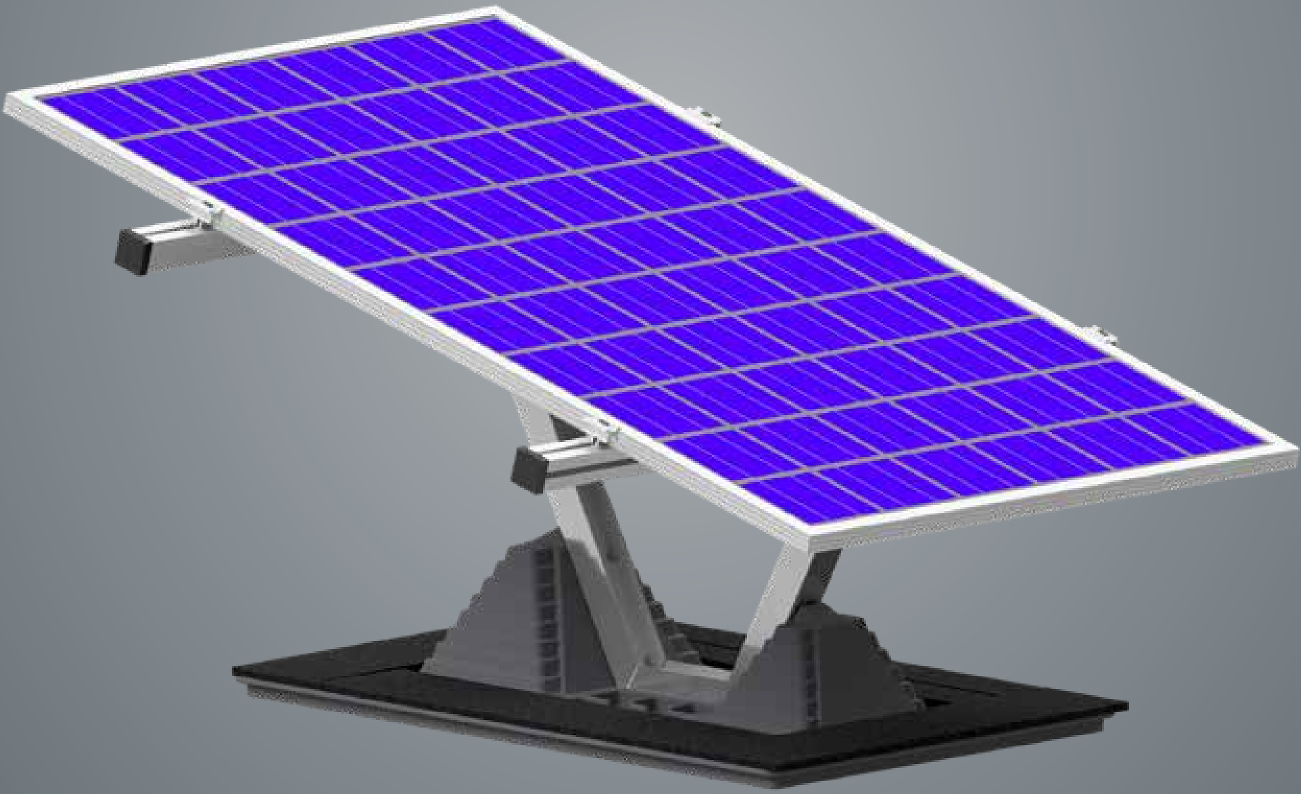
SOLAR GREEN SYSTEM 2.0

Substructure for PV panels



PRODUCT DESCRIPTION

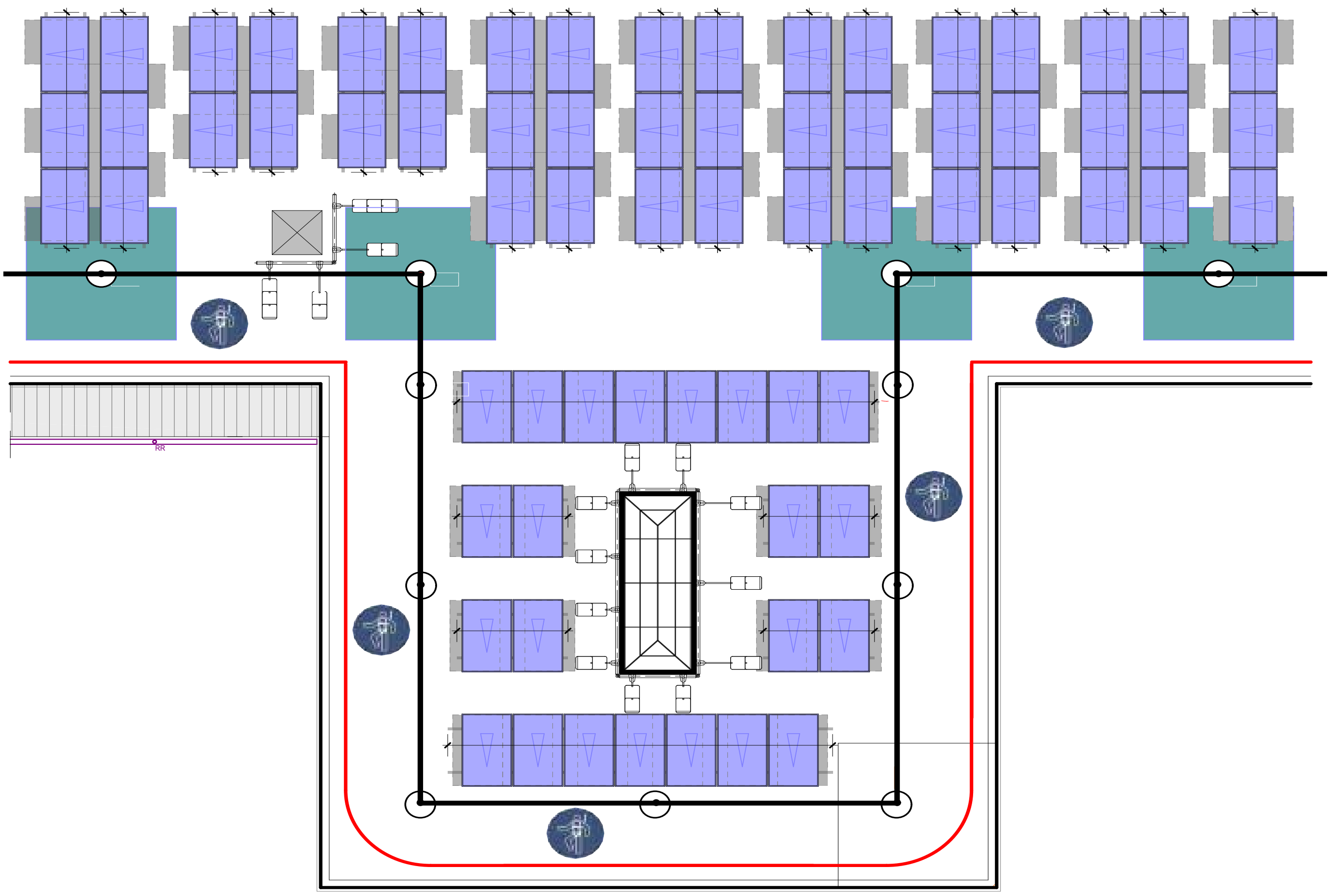
Solar Green System 2.0 is a supporting frame structure designed specifically for solar panels. It enables solar panels to be installed in a secure and stable position without damaging the waterproof roof membrane. The ballasting is provided by the green roof layers or gravel.

PLANNING PRINCIPLES

The planning team will provide the installation plan with the required items for the Solar Green System 2.0 systems. The plan needs to take into account the intended usage, characteristics of the building, local conditions and the applicable standards and industry guidelines. If the installation varies from the plan, any changes must always be agreed in advance and documented.

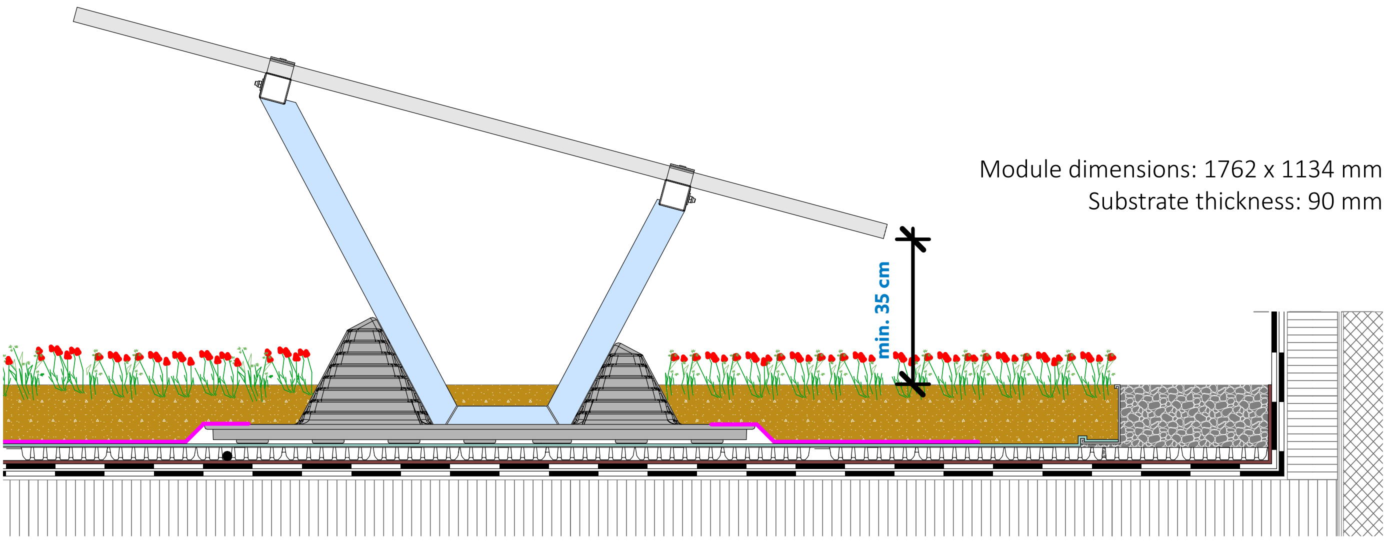
OCCUPATIONAL SAFETY

The planning process needs to follow local occupational safety regulations on construction works at height. In this way, subsequent maintenance and service work on the roof and the solar panels can be carried out in accordance with these regulations. Plans for a Solar Green System 2.0 and a SafetyPro™ fall protection system or TopRail railing system can be created at the same time.



ADVANTAGES

- Simple and very quick installation thanks to few system components
- Economical, due to optimised support spacing and integrated filter fleece
- The lower edge of the panel is at least 35 cm away from the top of the substrate, there is no plant loss due to the shading of panels (FLL specification: min. 20 cm)
- Elevated position of the photovoltaic panels allows snow to slide off completely, simplifies maintenance, inspection and cleaning of the system
- Ecological added value of the flat roof by combining solar energy panels with a biodiverse green roof
- Integrated water reservoir in the Solar Green System 2.0 Base plate
- Easy integration of fall protection



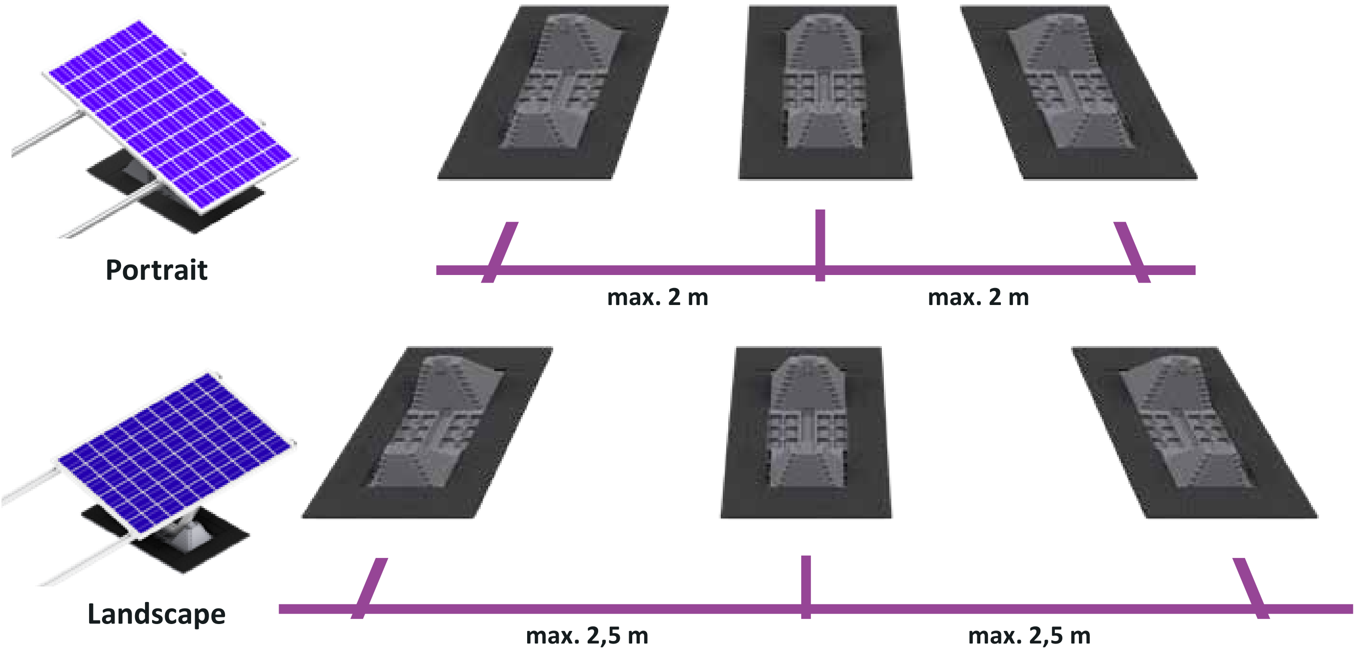
Module dimensions: 1762 x 1134 mm
Substrate thickness: 90 mm

TECHNICAL DATA

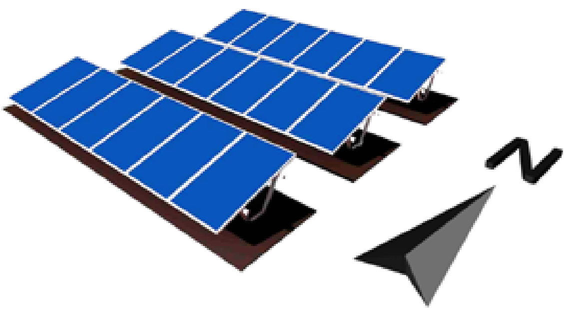
Base plate size	mm	716 x 1116
Weight	kg	approx. 25.5 kg (base plate, profile rails, profile holder, screws)
Water storage capacity	l/m²	14,41
Material	-	Recycled PE base plate + PP geotextile, aluminium, steel
Module inclinations	°	10, 15, 20
Ballasting	-	according to static calculation (EN 1991 Eurocode)
Maximum roof pitch	°/%	5 / 8,75
Reaction to Fire	-	Class E (EN 13501-1)

* other module inclinations on request

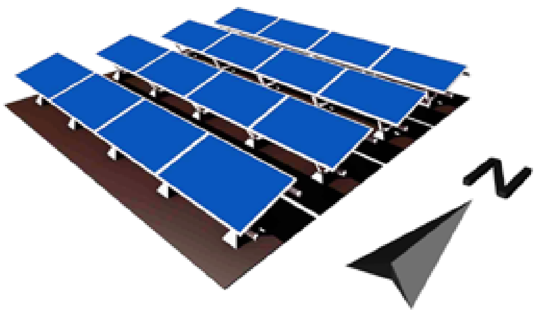
ALIGNMENT AND ARRANGEMENT OF THE SYSTEM



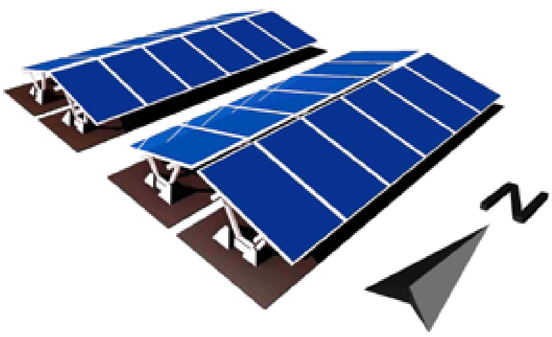
South orientation / Portrait layout



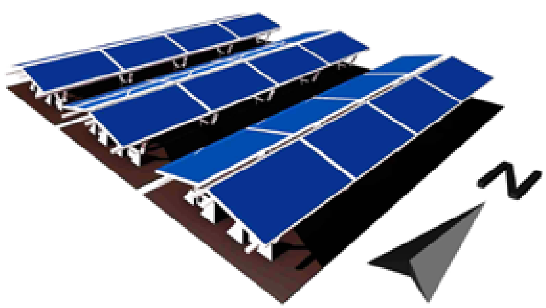
South orientation / Landscape layout



East-West orientation / Portrait layout



East-West orientation / Landscape layout



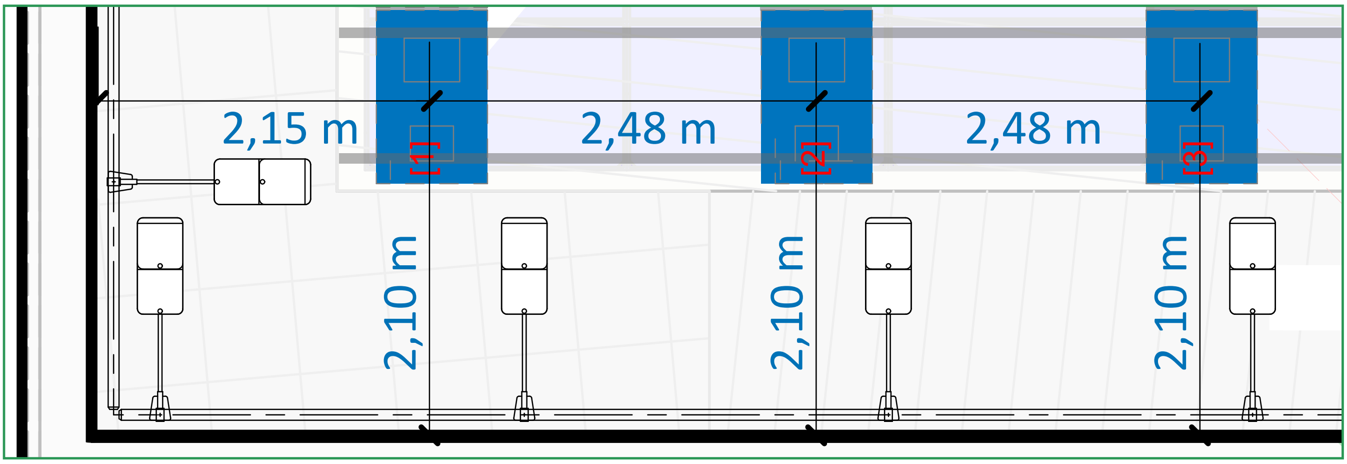
ASSEMBLY

PREPARATIONS ON THE ROOF BEFORE INSTALLATION

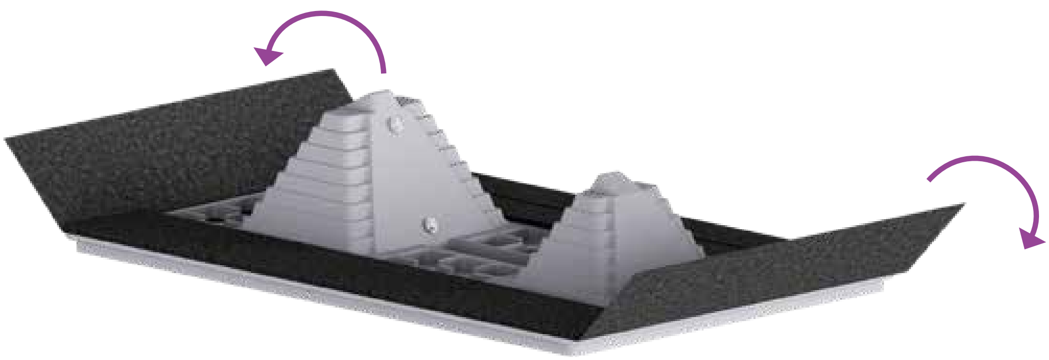
Before installation, the roof surface must be cleared of obstacles, dirt, moss, etc. The load-bearing capacity of the roof must be checked before installation. If in doubt, contact a civil engineer or your planner. We strongly recommend a preliminary leak test of the flat roof as a precaution for determining liability.

For quick and effective installation of the system, at least two specialists should be used.

MIN.

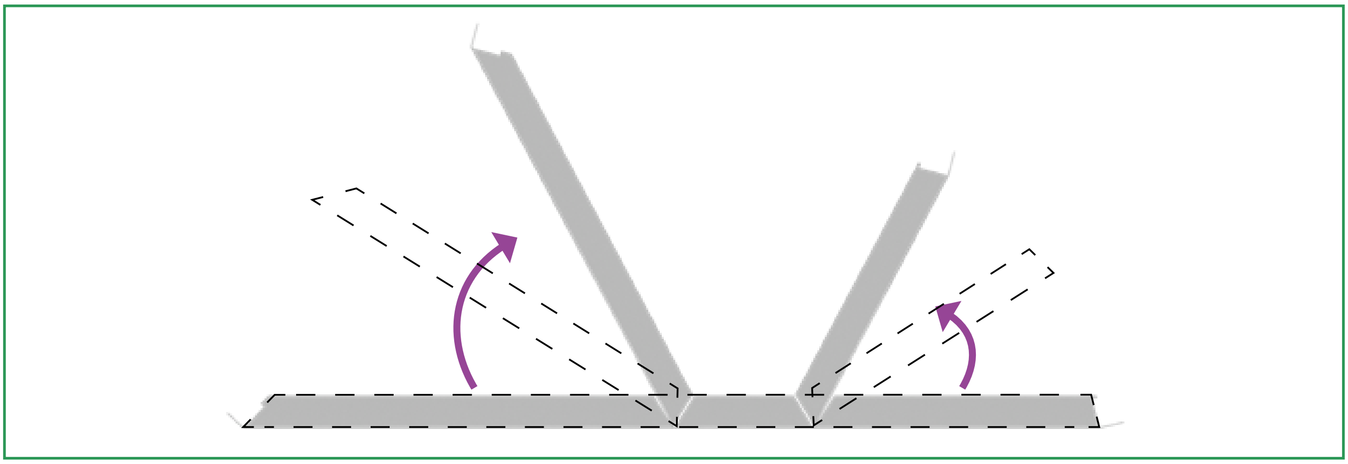


Position the Solar Green System 2.0 Base plate according to the installation plan.

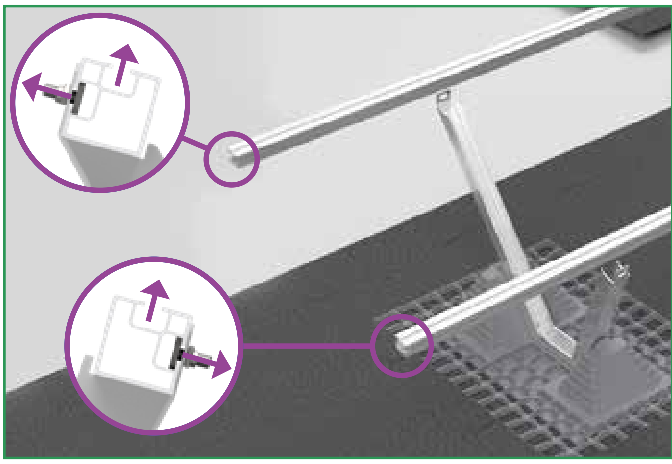


Fold completely the integrated geotextile of the Solar Green System 2.0 Base plate.

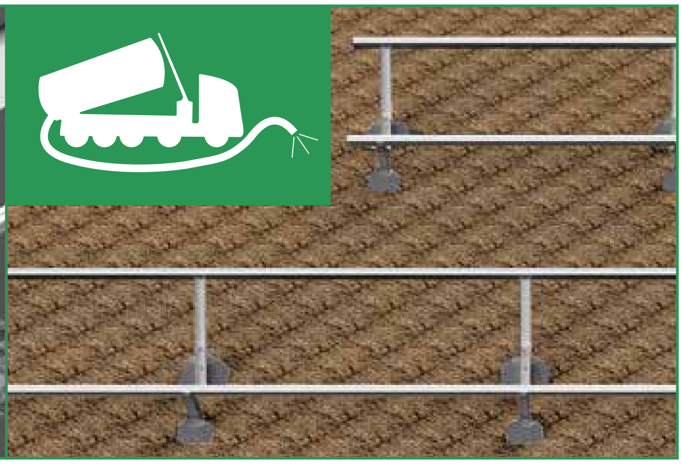
ASSEMBLY



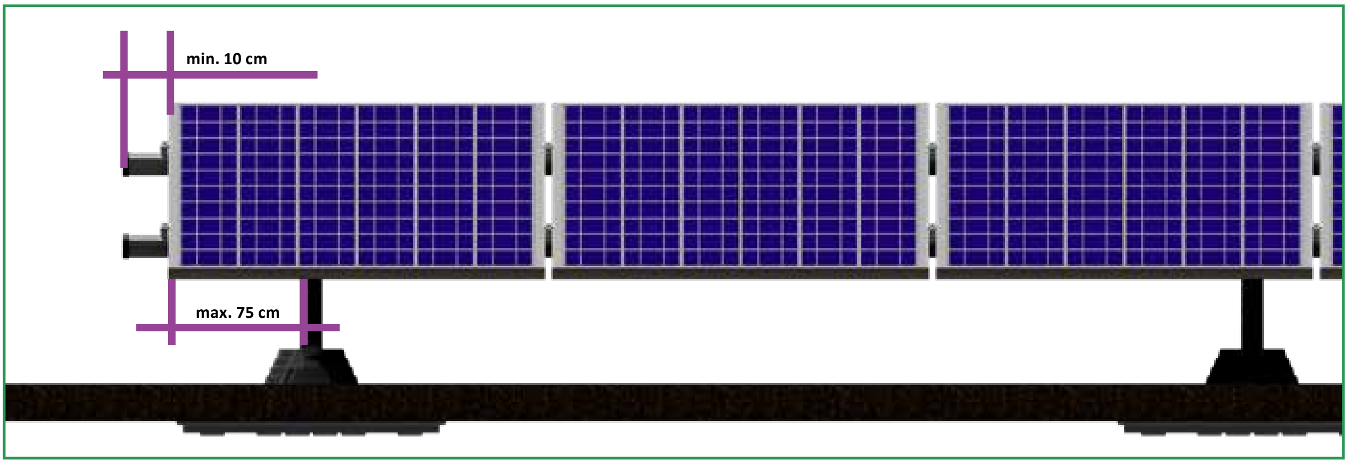
Position and fix the Solar Green System 2.0 V-Holder in the Solar Green System 2.0 Base plate.



Mount the Solar Green System 2.0 Rail 600
on the Solar Green System 2.0 V-Holder and then
apply the green roof substrate to the roof surface.



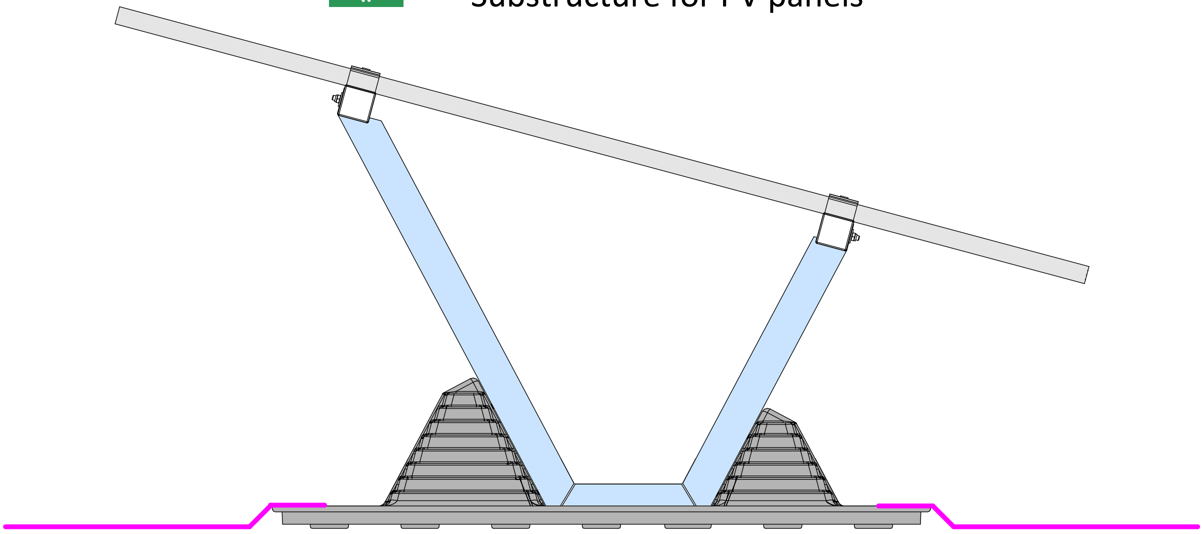
Now complete the green roof.

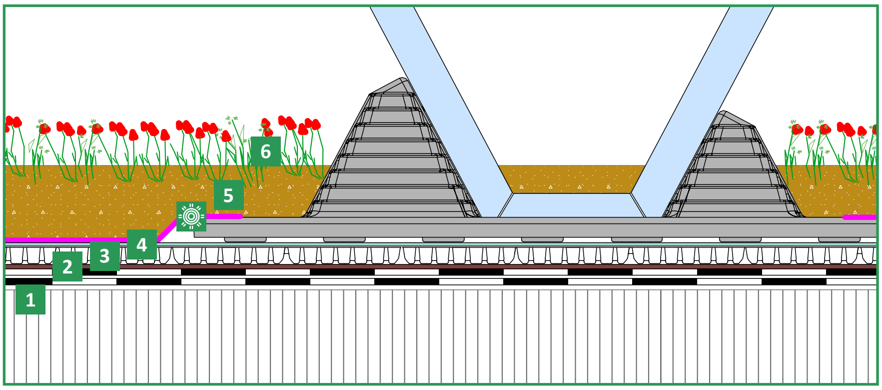


Mount the PV panels on the fully constructed Solar Green System 2.0 substructure.

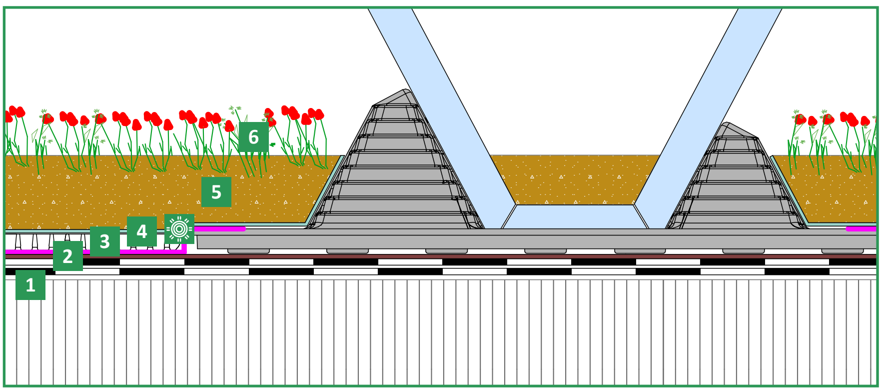
INSTALLATION VARIATIONS

Solar Green System 2.0
Substructure for PV panels





- 6 Extensive vegetation
- 5 Green roof substrate
- **Solar Green System 2.0**
- 4 Filter layer
- 3 Drainage layer
- 2 Protection layer
- 1 Roof system, root-resistant



- 6 Extensive vegetation
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- **Solar Green System 2.0**
- 2 Protection layer
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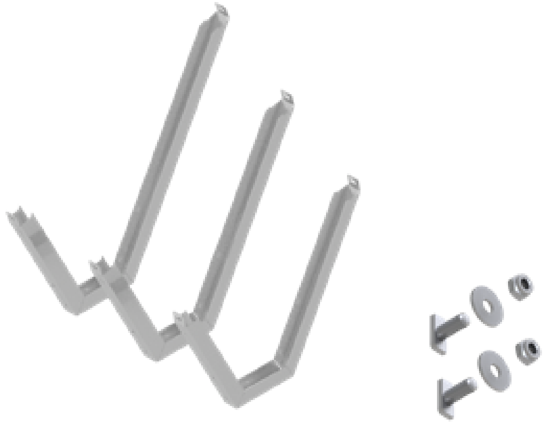
KOMPONENTEN

Art. No.: 109941329
SGS 2.0 Base plate
Plastic base plate with integrated geotextile to hold the elevation profiles incl. fasteners

Art. No.: 109941335
SGS 2.0 V-Holder 10° / 15° / 20°
Aluminium elevation profile for a module inclination of 10 / 15 / 20 degrees, incl. fasteners



Art. No.: 109941333
SGS 2.0 Rail 600
Profile rail for mounting the photovoltaic panels

Art. No.: 109941330
SGS 2.0 End cap
End cap for the profile rails

Art. No.: 109941334
SGS 2.0 Connector
Connecting and expansion element for the profile rails, incl. fasteners

Art. No.: 109941331
SGS 2.0 End clamp
End clamp for fixing the photovoltaic panels

Art. No.: 109941332
SGS 2.0 Middle clamp
Centre clamp for fixing the photovoltaic panels

DATE

CUSTOMER DATA

Company: | Telephone:
Contact person: | E-Mail:

BUILDING DATA[1]

Address:
Building height (m): | Roof load-bearing capacity (kg/m²): | Roof pitch (°):
Attic: yes ☐ no ☐ | if yes, height (cm):

INFORMATION PV-MODULE[2]

Number of panels (planned): | Maximum utilization: yes ☐ no ☐
Module manufacturer and type: | Module weight:
Module power (W): | Module dimensions (L x W x H; mm):

INFORMATION PV SYSTEM[3]

Orientation: South ☐ East-West ☐ | Modul inclination: 10° ☐ 15° ☐ 20° ☐ Other:
Module arrangement: Portrait (portrait format) ☐ Landscape (landscape format) ☐

FALL PROTECTION

Fall protection available: yes* ☐ no ☐
if yes, type: Collective protection ☐ Rope system ☐ Individual anchorage points ☐ Other:
Distance to the fall edge (cm):

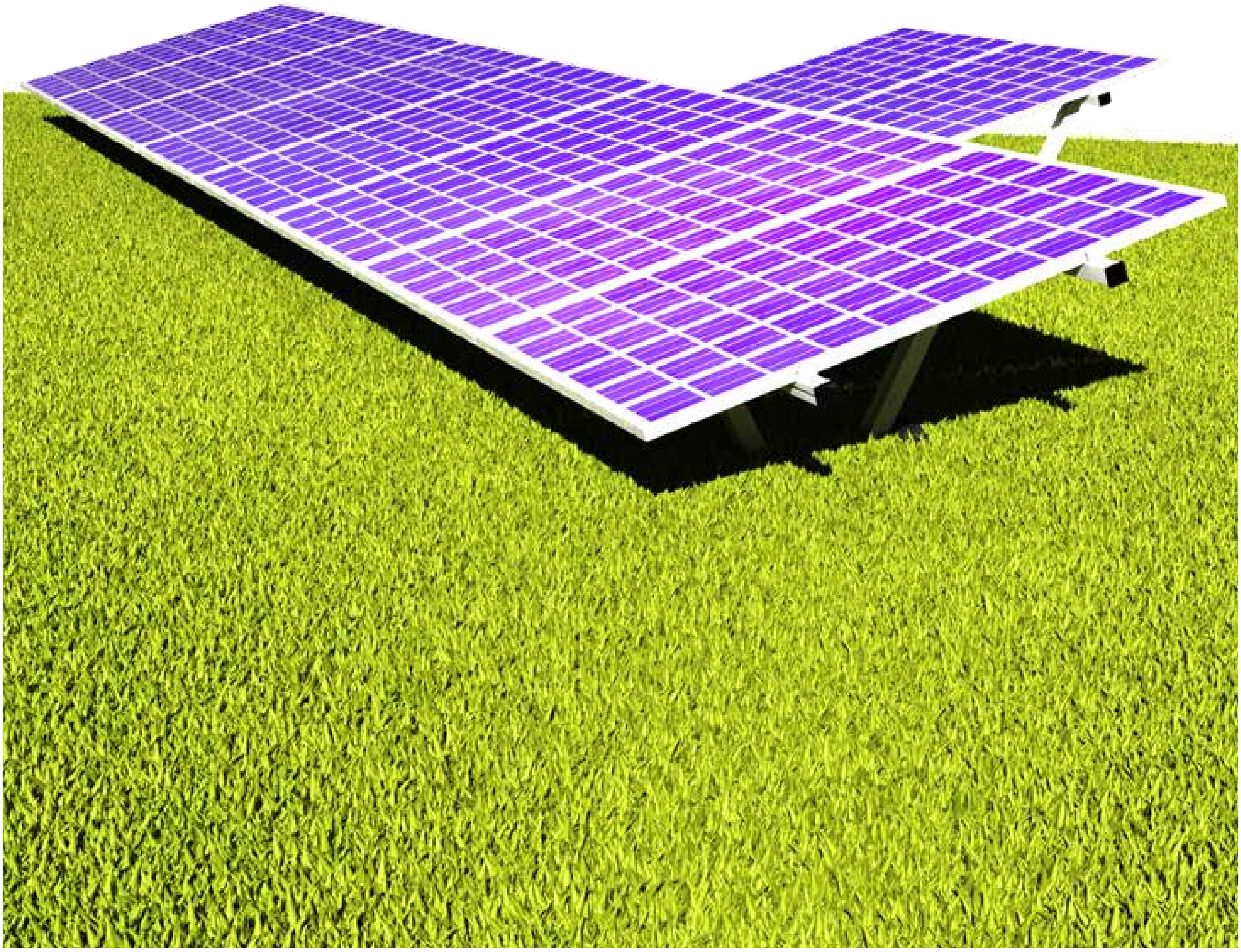
* If planning documents for fall protection are available, please include them.

Fall protection desired: yes ☐ no ☐
if yes, type: Collective protection ☐ Rope system[4] ☐

Additional Information[5]:

Please send the checklist and roof inspection plans (DWG, PDF) to the following address: info@6-f-g.de

[1] Provide plans in DWG or PDF format, otherwise Google Earth data will be used for planning
[2] If no information available: Maximum occupancy; 1700 x 1000 x 40 mm; 20 kg; ~400 watts
[3] Standard planning: East-West; Landscape; 15°
[4] Standard planning: 2.5 m from the fall edge
[5] Specific, local weather conditions (wind, snow, etc.)



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