

Duraklick

A brand of SOLTOP Energie GmbH



Mounting system

Green roof

GR 10° / 15° / 20°

Assembly instruction



approved by
German Institute
for Building
Technologies

Welcome!

We are delighted that you have chosen the Duraklick-ECO mounting system. This guide explains the professional installation of the mounting system. If you have questions or suggestions, we will be happy to hear from you.

Your team
SOLTOP

The GR 10°/ 15° / 20° mounting system consists of the following components:



Module end clamp



Module center clamp



Module rail



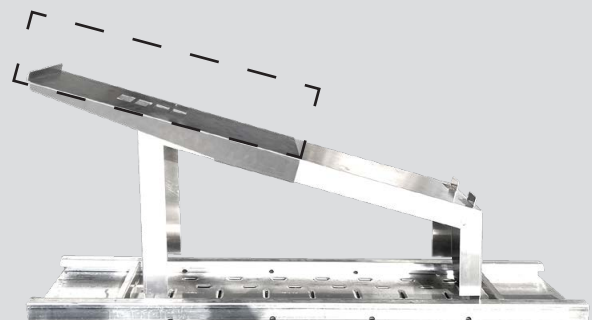
Connector profile



Self-tapping screws



GR support



Optional extension for increased snow load

For assembly you need:

- ▶ Cordless screwdriver
- ▶ Allen key 6 mm for the middle and end clamps
- ▶ 8 mm socket attachment for the self-tapping screws
- ▶ Measuring tape and tape measure
- ▶ Plastic hammer
- ▶ Gloves

Compliance with regulatory and safety standards

During installation of the assembly system, it is necessary to ensure compliance with safety regulations and precautions applicable in the respective country. In Germany these are:

Electrical installation::

- ▶ DIN VDE 0100-712 (IEC 60364-7-712) Low-voltage installations – Part 7-712: Requirements for premises, rooms and special installations – Solar photovoltaic (PV) power supply systems
- ▶ DIN VDE 0126 Solar systems for private use
- ▶ DIN EN 62305 Lightning protection
- ▶ VDEW guideline (2001)
- ▶ VDI 6012, Sheet 2, Decentralized energy systems in buildings – Photovoltaics
- ▶ TAB Technical connection conditions of the energy supply companies

Accident prevention regulations:

- ▶ BGV A1 Principles of prevention
- ▶ BGV A3 Electrical installations and operating equipment
- ▶ BGV C22 Construction work
- ▶ BetrSichV, supplementary “Instructions for handling ladders and steps” (BGI 694)

Other:

- ▶ VDS (Association of Property Insurers) guidelines
- ▶ DIN EN 1991-1-4 Wind loads
- ▶ DIN EN 1991-1-3 Snow loads
- ▶ DIN 1052 Design, calculation and dimensioning of timber structures – General design rules and design rules for building construction
- ▶ Current local provisions and regulations must be observed.

Photograph roof damage!

Before installation, check whether there is damage of any kind, in particular water beading or damage to the roof cladding.

These should be documented with a digital camera to avoid later claims for compensation.

Roof preparation

The roof surface to be covered must be free of impurities, e.g. sharp stones, moss, leaves, dirt, etc., to ensure that the floor rails can be laid flat. Clean the roof!



Caution!

Personal danger!

Module installation and laying of DC cables must be performed by expert personnel. (Danger of electric shock! Danger of arcing! etc.) If there are lightning protection systems already in place, have a specialist company check whether they may be integrated into the system. Also check for changes to lightning protection requirements as a result of the installation.

TIPP



Take photos of roof damage!



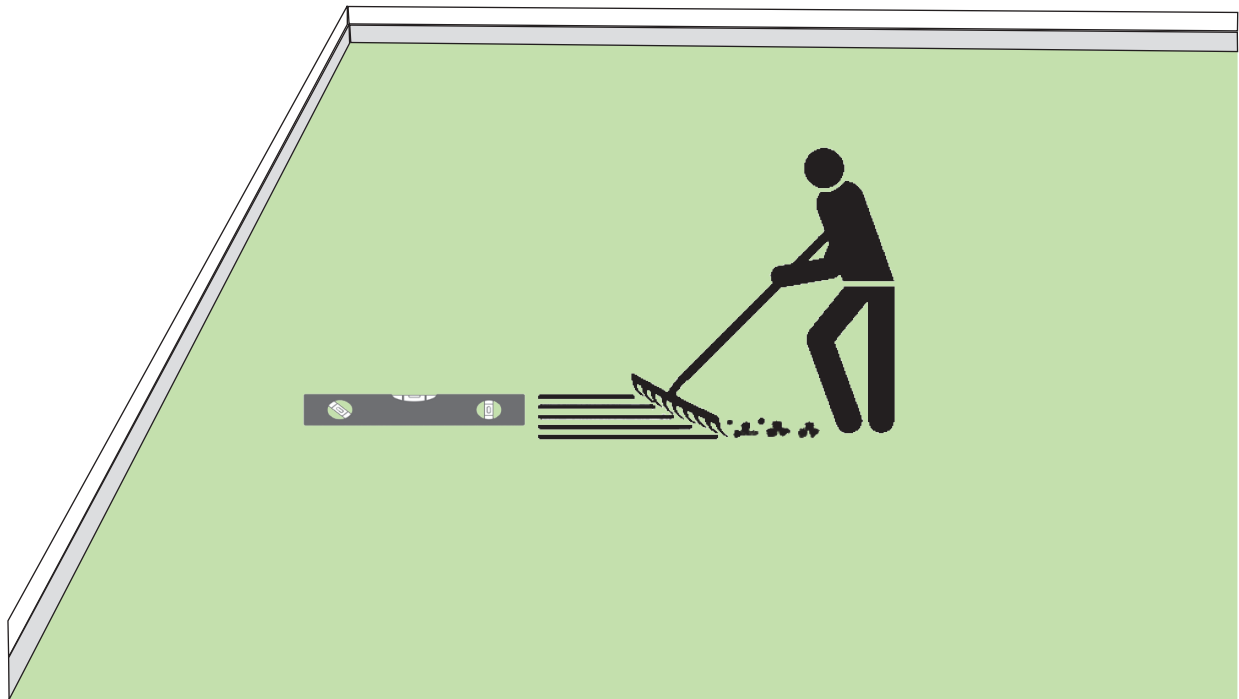
Clean the roof!



Wear gloves during assembly!
Risk of injury from sharp edges!

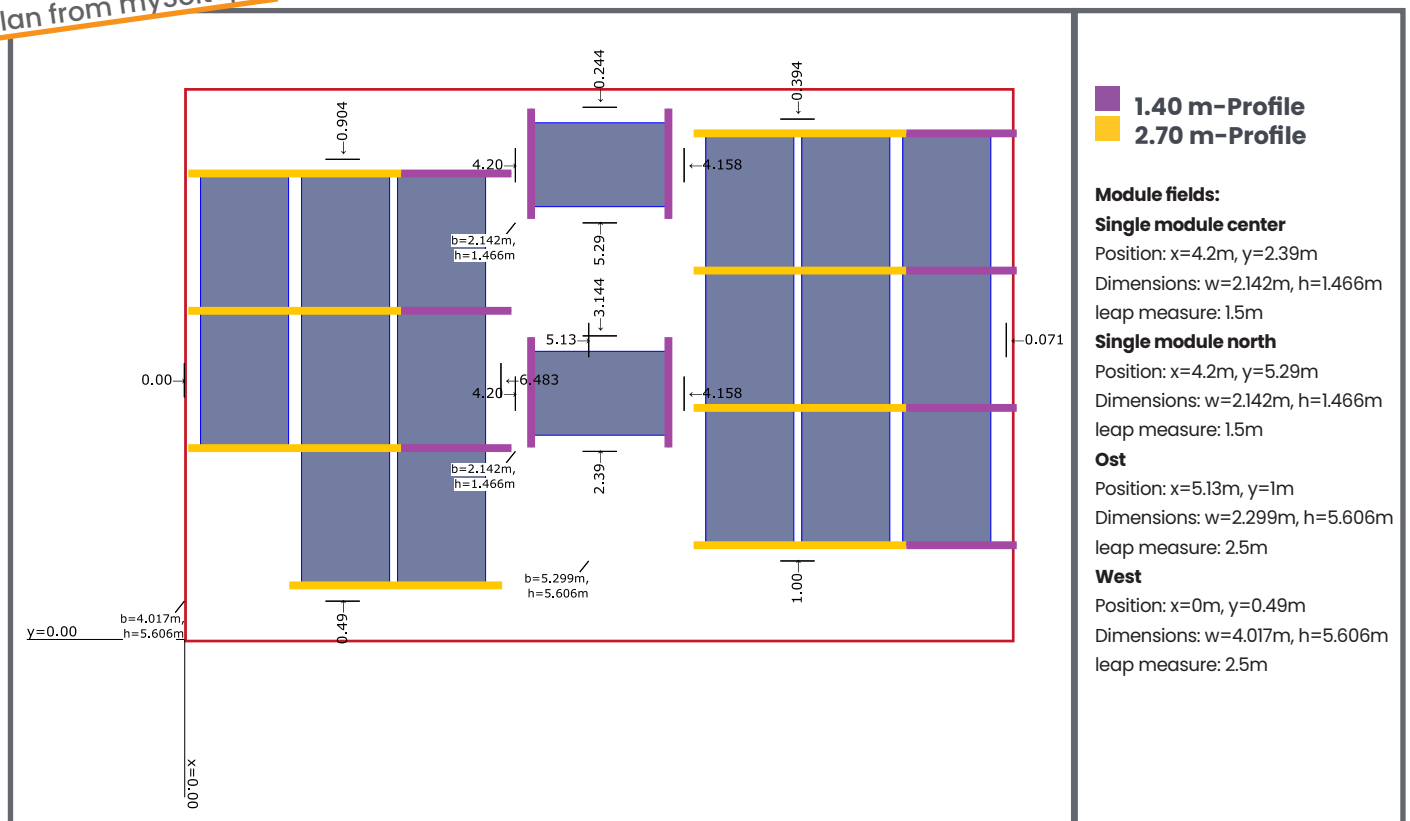
1. Preparation

1. Clean and level the roof



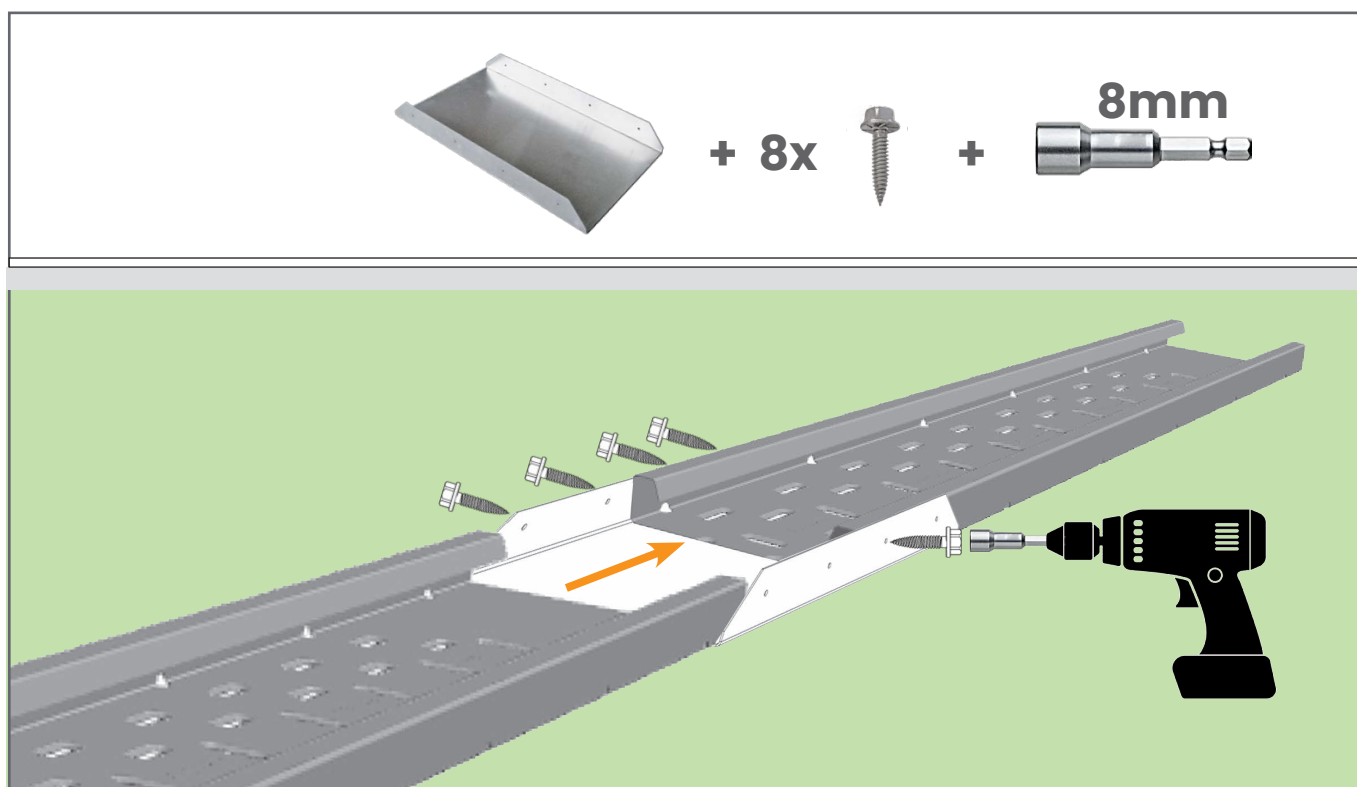
2. Measure the field according to the laying plan

Example installation plan from mySoltop



2. Mounting the module rail

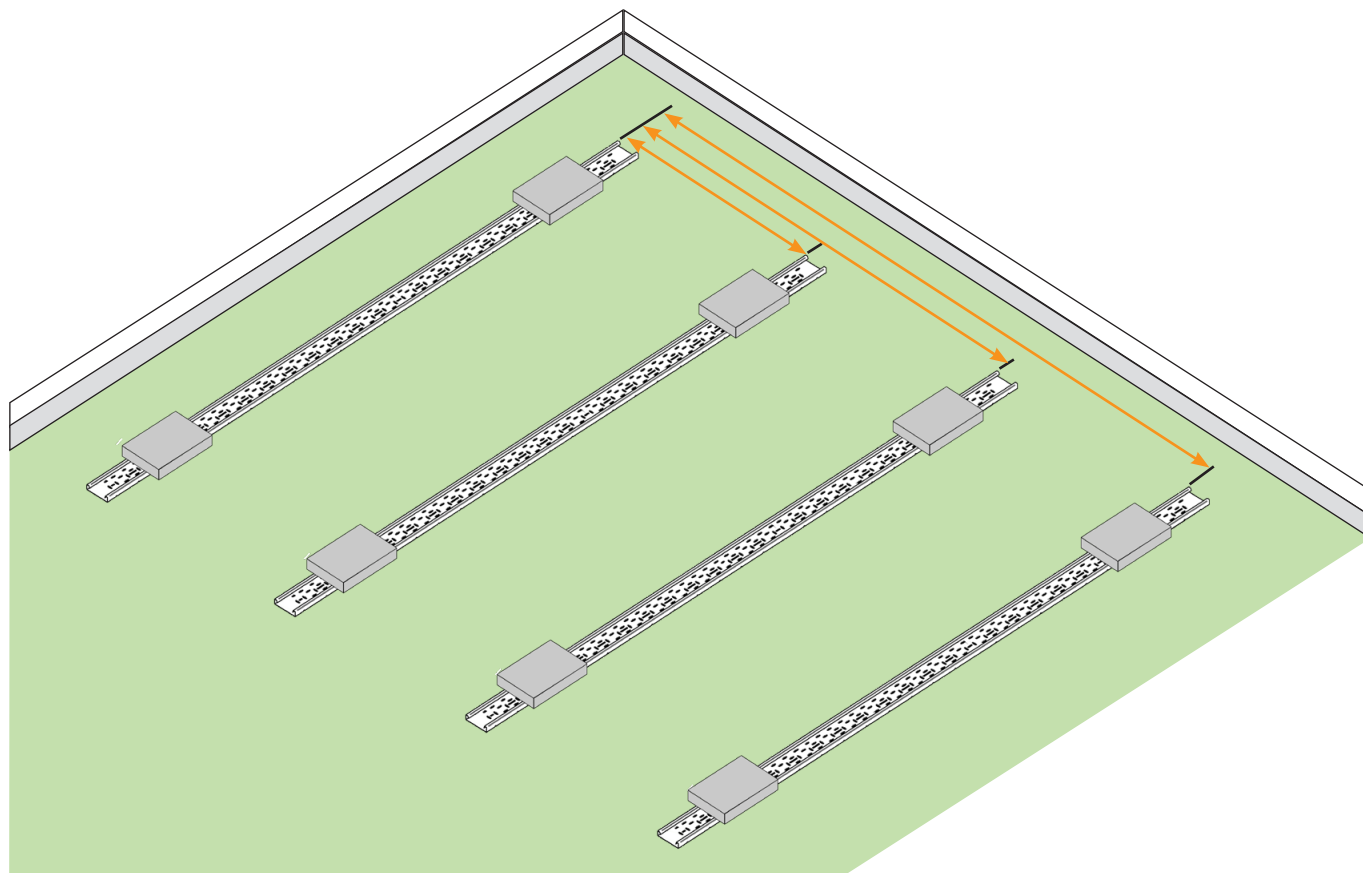
3. connect floor rails according to the installation plan



4. Laying the floor rails according to the installation plan

Rail spacing = 1x module length + 2 cm clamp

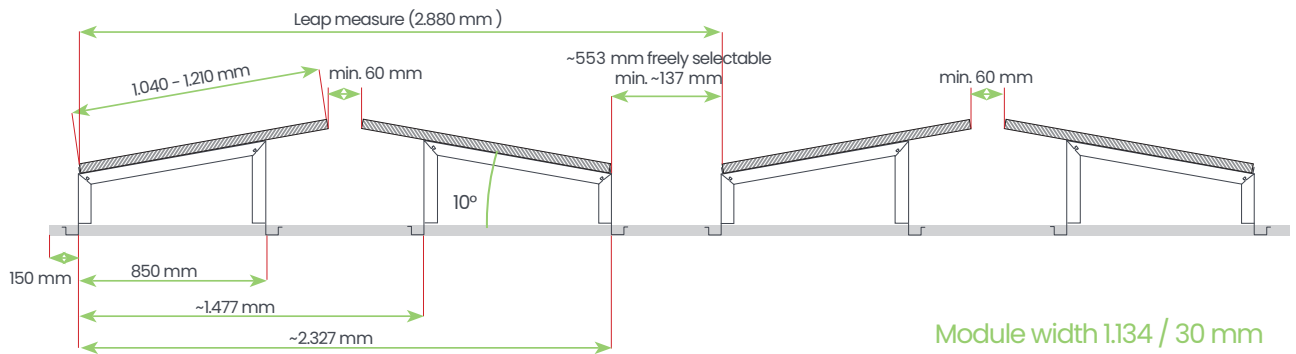
Apply ballast in advance to prevent the rails from slipping



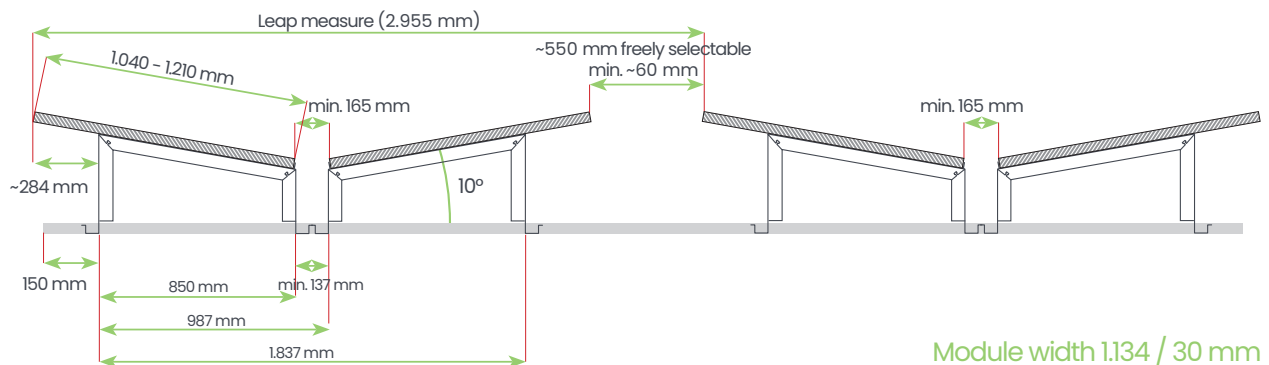
2. Mounting the supports

4. Click in GR supports, spacing as in the installation plan

GR 10° EW-A



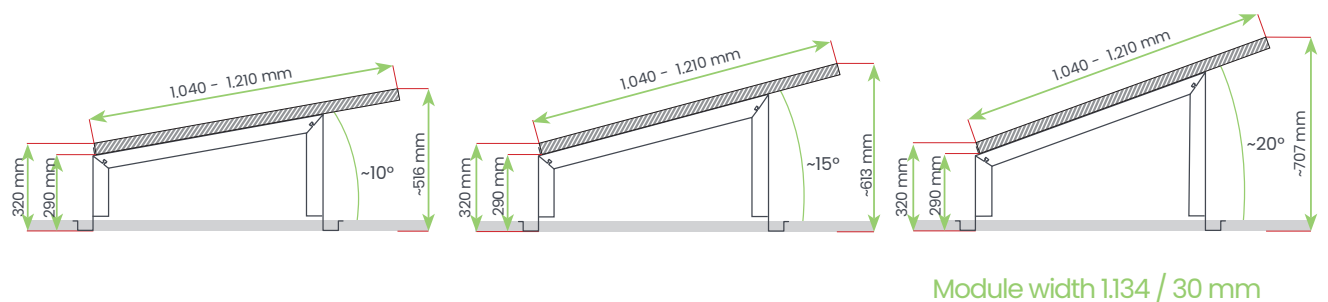
GR 10° EW-V



GR 10°

GR 15°

GR 20°



2. Mounting the supports

4. Click in GR supports, spacing as in the installation plan



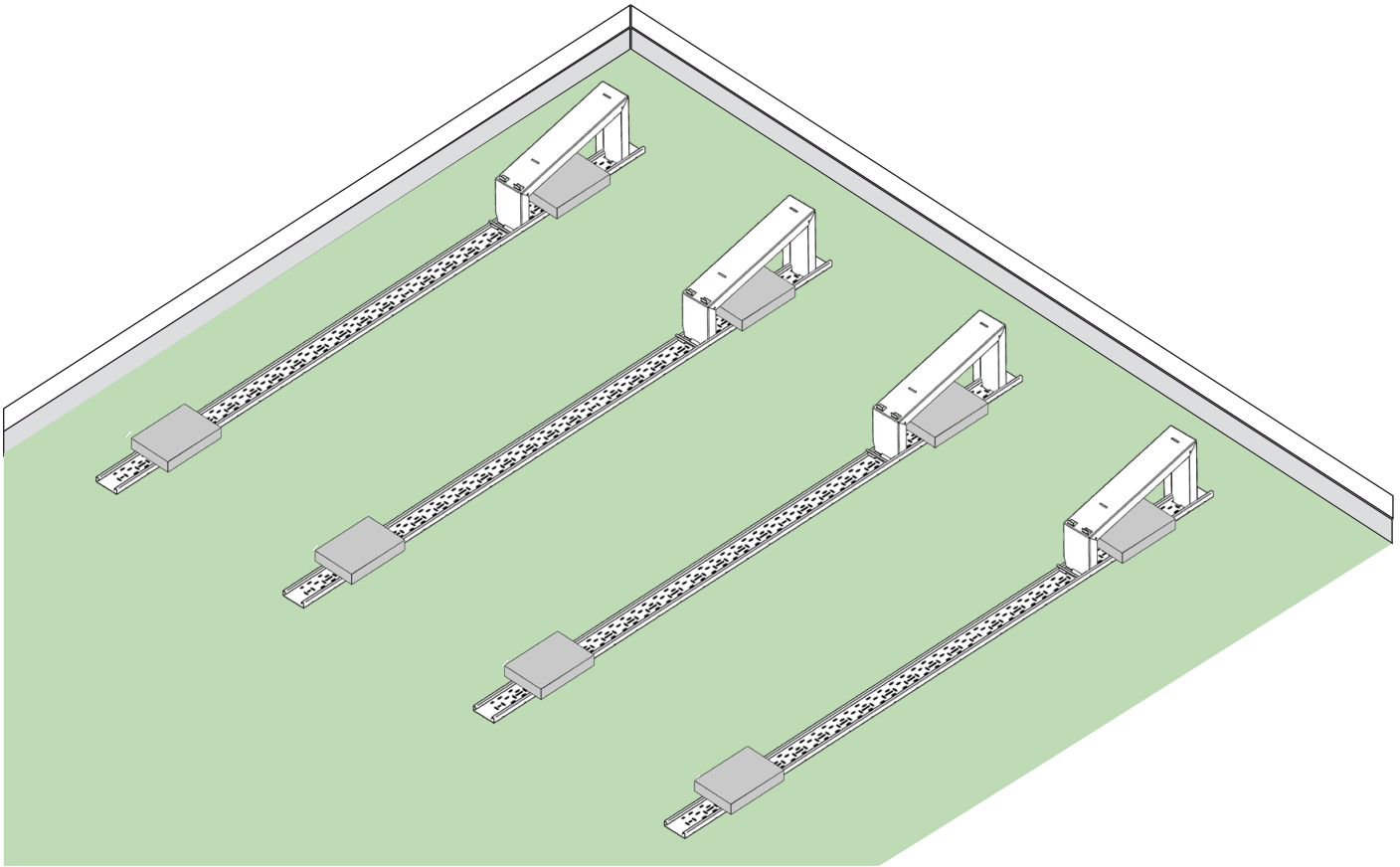
First hook the feet of the GR support into the floor rail on one side and then click in the other side.



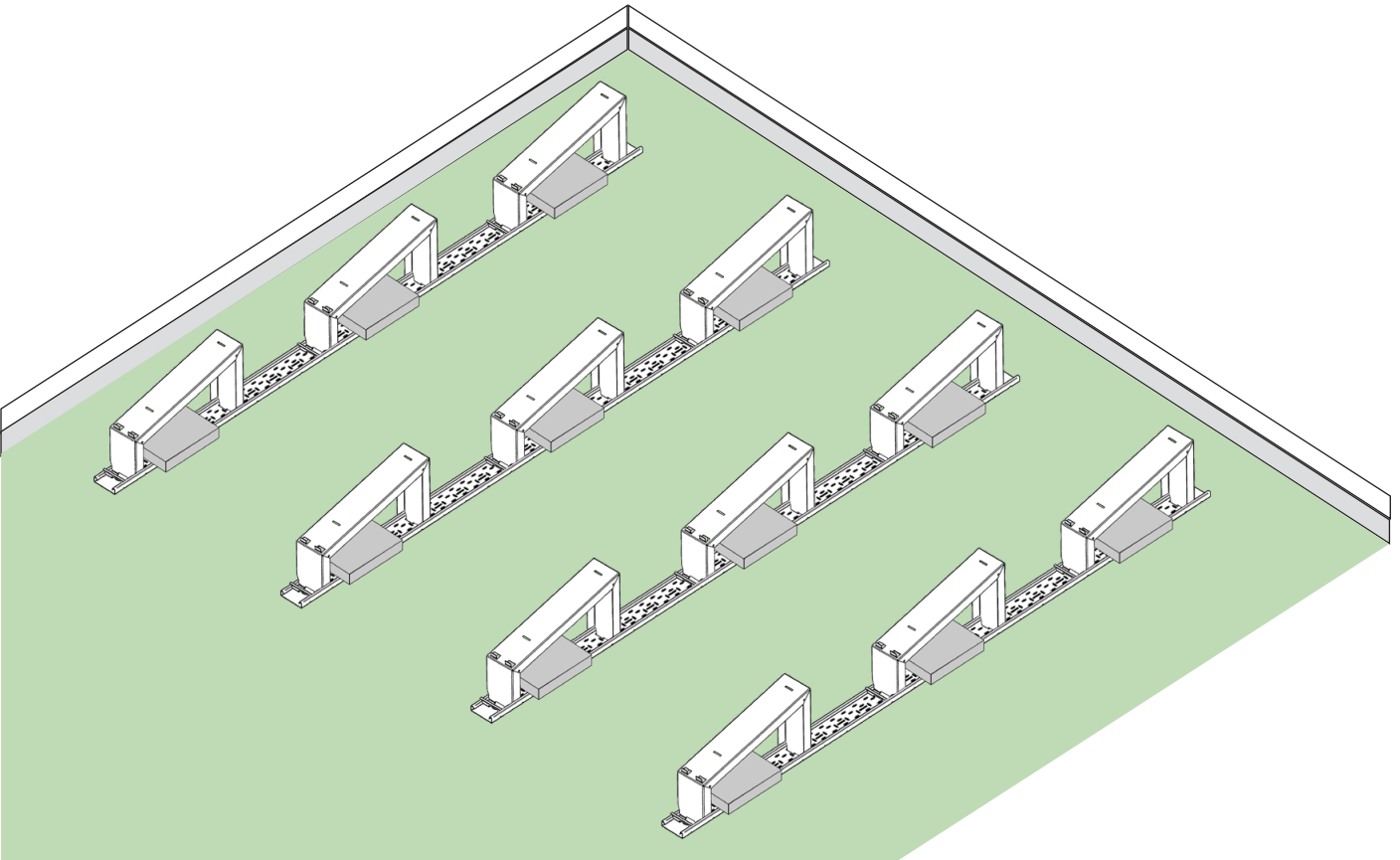
Ensure that the GR module support is clicked in on both sides!

2. Mounting the supports

4. Click in GR supports Example south elevation



5. Complete the ballasting according to the ballasting plan, fix the system in place

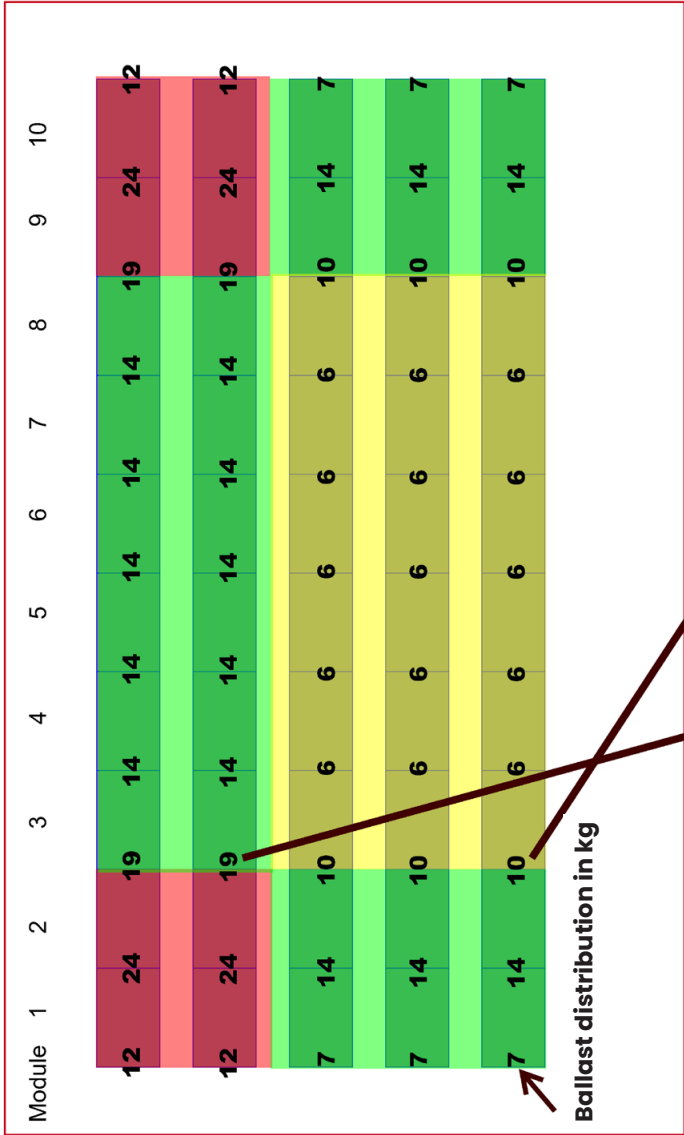


Example ballasting plan and distribution of ballast

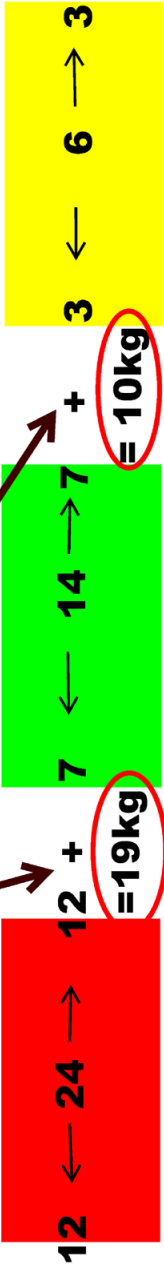
Duraklick ballasting plan

Default: red = 24.0 kg / module
green = 14.0 kg / module
yellow = 6.0 kg / module

Calculation: red = 1/2 = 12
green = 1/2 = 7
yellow = 1/2 = 3
red 1/2 + red = 12 + 12 = 24
green 1/2 + green 1/2 = 7 + 7 = 14
yellow 1/2 + yellow 1/2 = 3 + 3 = 6
red 1/2 + green 1/2 = 12 + 7 = 19
green 1/2 + yellow 1/2 = 7 + 3 = 10



Ballast distribution between the ballast zones



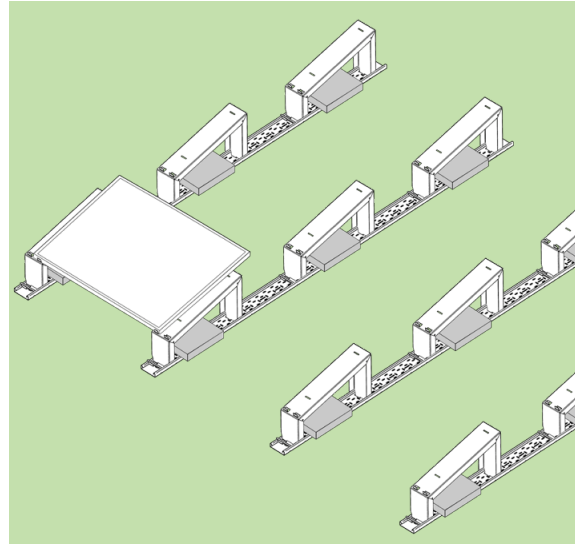
Projekt Ballastplan Dachfläche 1 Standort Musterstraße, 88165 Lindenberg/DE			Modulplan	
My.Soltop-ID P15081-DF33900	Dachtyp: Flachdach 0°	Anlagetyp: SOLTOP Duraklick	Leistung: 20.5 kWp	
Kundennummer: EU-K10001	Masse: 20.00 x 12.00 m	Montagesystem: Duraklick ECO 10°	Datum: 09.03.2023, ID K36018	
Int. Bez.: (reine)	Gebäudehöhe: 10.00 m	50 x AXITEC AXIpremium XXL HC BLK, 1724x1134mm	50 x AXITEC AXIpremium XXL HC BLK, 1724x1134mm	
			soltop energie	
			SOLTOP Energie AG Tel: 052 397 77 77	
			St. Gallerstr. 3 info@soltop-energie.ch	
			8535 Eßg www.soltop-energie.ch	

4. Inserting terminals / mounting modules

6. Inserting the module clamps



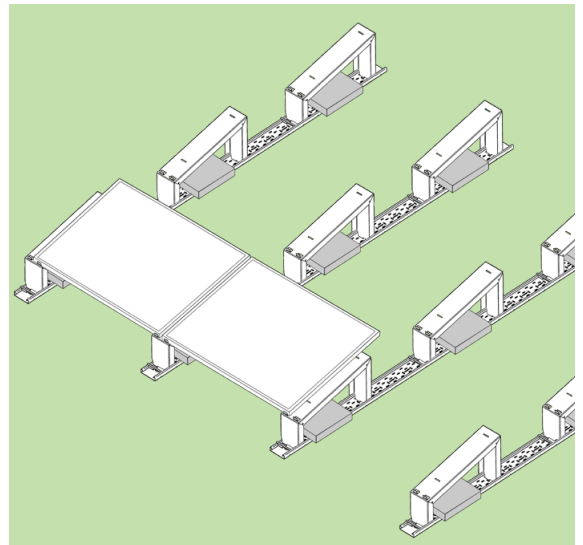
Insert the Duraklick end clamps,
the nose of the clamp foot points upwards.



Insert the first module on the left or right
side, tighten the end clamp.



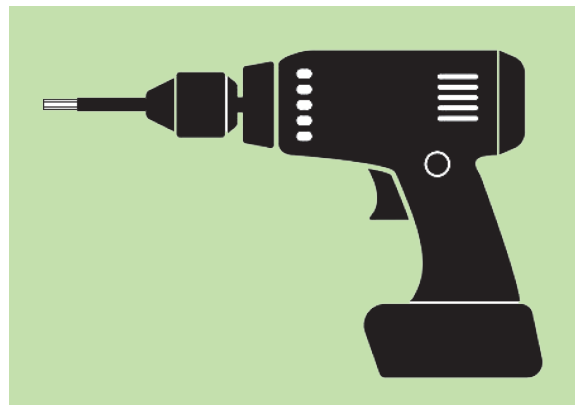
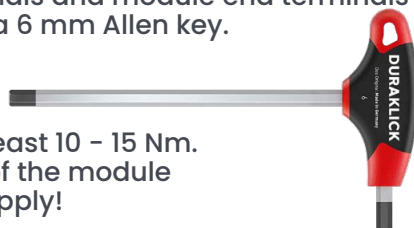
Insert Duraklick center clamps,
the nose of the clamp foot points upwards.



Insert the next module, tighten the center
clamp.

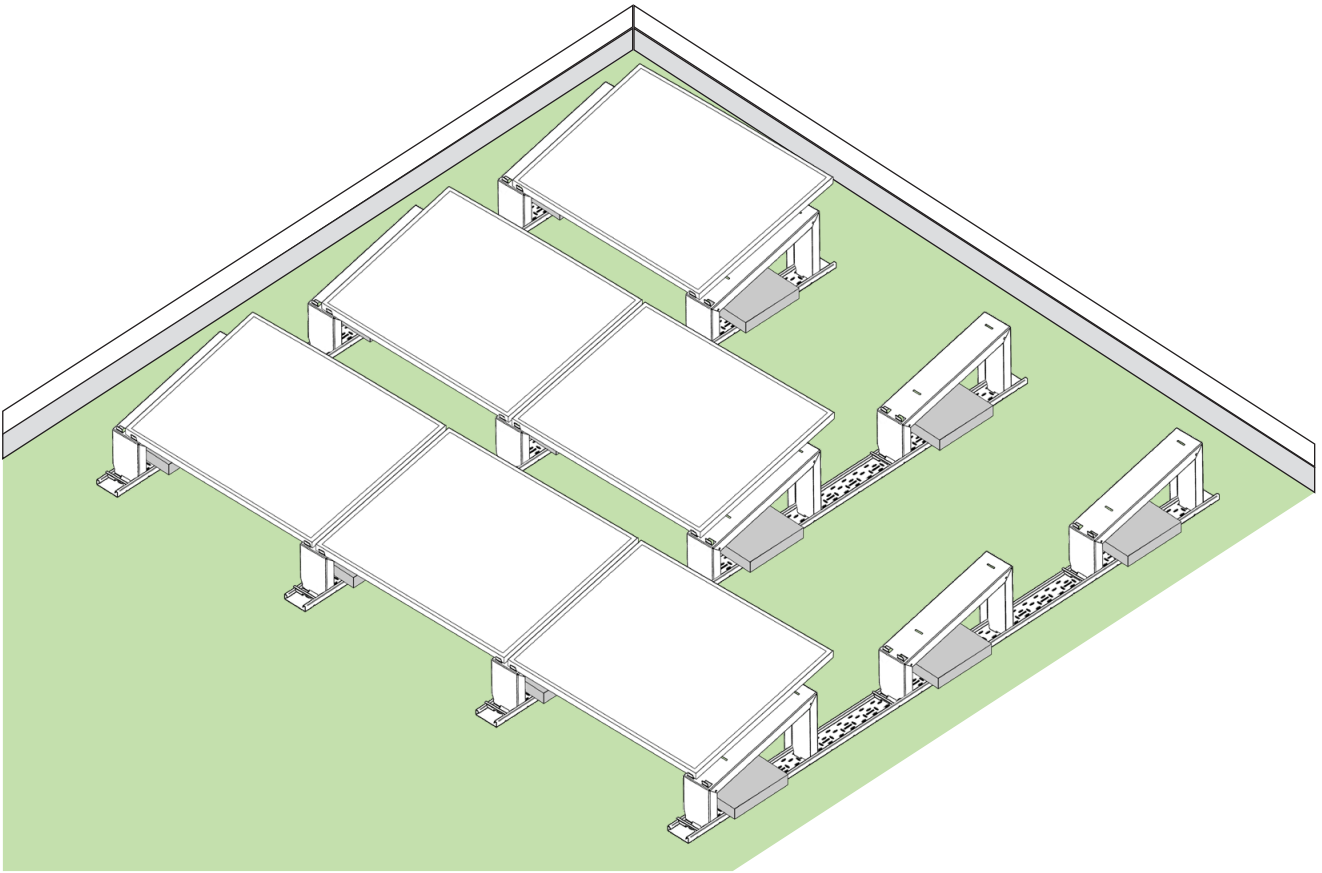
All module center terminals and module end terminals
must be tightened with a 6 mm Allen key.

Tightening torque is at least 10 – 15 Nm.
The tightening torques of the module
module manufacturer apply!

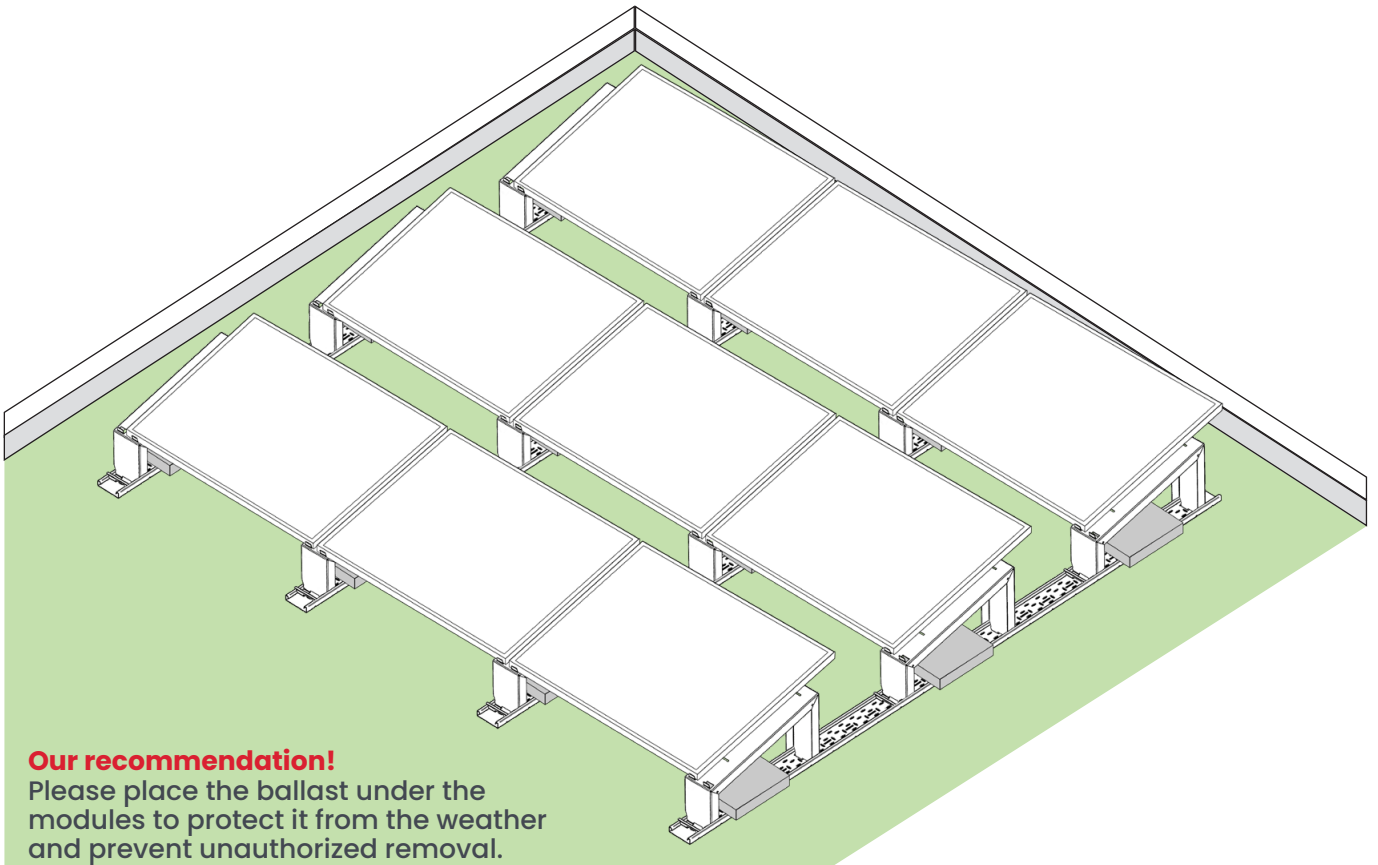


5. Installing the modules

7. Finish mounting the first row of modules to prevent the floor rails from slipping.



8. Repeat all work steps and assemble the rest modules in sequence.



Our recommendation!

Please place the ballast under the modules to protect it from the weather and prevent unauthorized removal.

Examples



GR 20° in East-West elevation



GR 15° in south elevation



GR 10° in East-West A-elevation



GR 10° in East-West A-elevation



GR 10° in East-West V-elevation

Exclusion of liability

The manufacturer will not be held liable for the use of the mounting system for purposes other than those intended.

Warranty conditions

The terms provided by law shall apply.

Manufacturer information

The Duraklick PV mounting system GR 10° / 15° / 20° is manufactured by:

SOLTOP Energie GmbH
Lindauer Straße 15
D-88145 Hergatz
www.soltop-energie.eu



Duraklick



Warranty certificate

On all Duraklick mounting systems supplied by us you will receive

10 years durability guarantee on all parts.

If damage occurs during normal use and despite proper installation and handling, we will immediately replace the affected component within the warranty period.

The obligation to provide warranty service does not apply if the damage occurred in connection with exceptional stress (e.g. storm damage, exposure to instability of the substrate, special chemical or biological effects), unless it can be proven that the damage was not caused by this, but was essentially caused by a material or design defect. The installation and handling shall be governed by the technical the technical product descriptions and installation instructions supplied by us for the respective products, the legally prescribed or or generally accepted standards and principles of construction principles of construction as well as, if applicable, the plans, structural analyses and instructions prepared by us individually for the customer shall have priority.

The warranty is limited to the subsequent delivery of defective parts upon notification of the damage within the warranty period. Any statutory warranty or liability claims shall remain unaffected.

Insofar as a possible shorter service life is expressly stated for certain components in general or for a certain type of use, or replacement within a shorter period is provided for within the framework of plans individually drawn up by us, the warranty period shall be limited to this service life or period.

If the damage is covered by an insurance policy against storms and similar events (elementary insurance) or can be usually be covered, there are no claims.

This warranty only substantiates claims by our contractual partner, through whom all warranty claims are to be processed. Claims may only be asserted by third parties if we agree to this. In all other respects, our General Terms and Conditions shall apply in their currently valid version.



For more information, please visit www.soltop-energie.ch & www.soltop-energie.eu

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Eine vom Bund und den Ländern gemeinsam getragene Anstalt des öffentlichen Rechts
Zulassungs- und Genehmigungsstelle für Bauprodukte und Bauarten

Datum: 24.09.2025
Geschäftszeichen: I 85-1.14.4-113/24

Allgemeine bauaufsichtliche Zulassung / Allgemeine Bauartgenehmigung

Nummer:
Z-14.4-691

Antragsteller:
SOLTOP Energie GmbH
Lindauer Straße 15
88145 Hergatz

Geltungsdauer
vom: **24. September 2025**
bis: **24. September 2030**

Gegenstand dieses Bescheides:
Flachdach-Montagesystem "Duraklick"

Der oben genannte Regelungsgegenstand wird hiermit allgemein bauaufsichtlich zugelassen/ genehmigt.
Dieser Bescheid umfasst neun Seiten und drei Anlagen mit 25 Seiten.
Der Gegenstand ist erstmals am 10. März 2014 allgemein bauaufsichtlich zugelassen worden.

DIBt

Mounting system Green roof GR 10° / 15° / 20° Assembly instruction

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For more information, please visit www.soltop-energie.ch & www.soltop-energie.eu

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