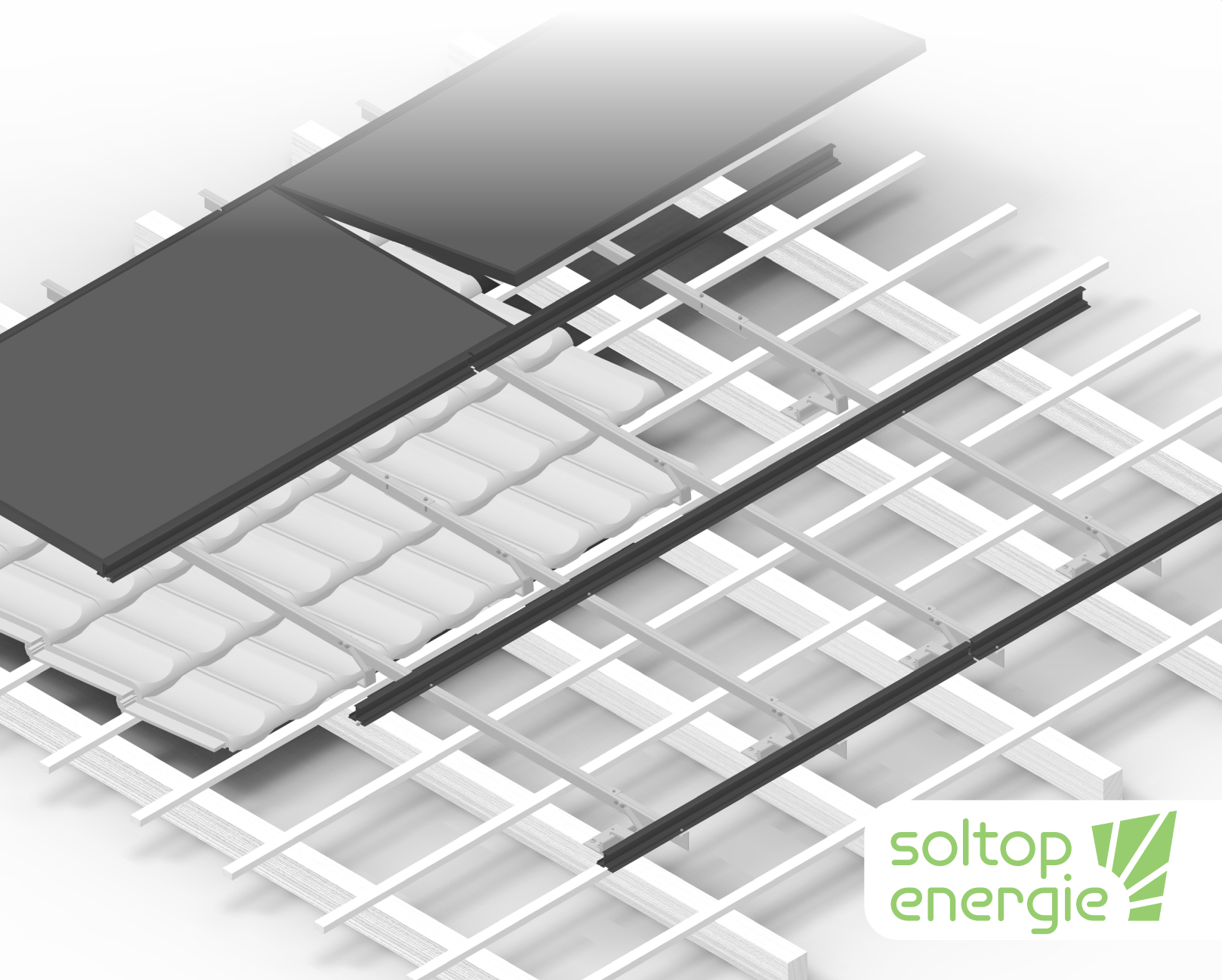


Assembly instruction

Duramont



Important information

Scope of validity of the instructions

These installation instructions only describe the installation of the Duramont mounting system for photovoltaic modules. For the installation of other components (inverters, monitoring systems, etc.), please use the documents supplied by the respective manufacturer.

Statics

The mounting system is calculated in accordance with the standards SIA 260 (load-bearing structure) and SIA 261 (wind and snow load). The installation must be carried out in accordance with the installation plans and structural analysis report supplied. The number of fixing points must not be reduced.

Target groups

The Duramont mounting system may only be installed and put into operation by persons who are able to ensure that the work is carried out in accordance with the regulations due to their professional suitability (e.g. training or activity) or experience.

Storage of the documents

The system operator must ensure that these installation instructions are available for maintenance when required.

Lightning protection

Lightning protection measures must be planned by the installer in consultation with the relevant specialists.

Guarantee conditions

The "Guarantee conditions for SOLTOP Energie products" valid at the time of purchase and the "General terms and conditions of sale" of SOLTOP Energie AG, CH-8353 Elgg apply.

Wartung

Photovoltaic systems are technical installations and require periodic inspection. SOLTOP Energie AG offers corresponding inspection and maintenance services.

Scope of delivery

The delivery must be checked for completeness immediately upon receipt. Complaints can only be made on the day of delivery.

Requirements for the roof

- The roof structure must be designed for the additional forces generated by the photovoltaic system.
- The roof covering must have sufficient holding force for the substructure.
- Roof pitch up to max. 80°
- Insertion system: For roof pitches below 12°, the use of module securing is mandatory.

Assembly requirements

- All information in these installation instructions must be observed when installing the system.
- Only the components supplied by SOLTOP Energie AG may be used for the installation of "Duramont". SOLTOP Energie AG cannot accept any liability for the use of third-party products.
- Thermal separations must be observed in accordance with these installation instructions and the plans from my.Soltop.
- Installation systems from SOLTOP Energie AG are subject to constant further development and can therefore change continuously, so the latest version of the installation instructions should always be used. Download via: <https://www.soltop-energie.ch/planungsunterlagen/>
- The module manufacturer's installation instructions must always be observed.
- Equipotential bonding within and between the module fields must be implemented in accordance with country-specific regulations.
- When penetrating the sub-roof, a nail sealing tape must be installed underneath the counter battens.

my.Soltop design software

Interpretation:

The photovoltaic system is planned in the my.Soltop design software. If the design is to be adopted by SOLTOP Energie AG, all planning-relevant information must be provided.

For an uncomplicated and quick design, we recommend that all customers use my.Soltop independently. You can plan your own system in just a few steps and receive your quotation in no time at all.

Statics:

My.Soltop calculates a structural analysis for each system and immediately produces a project-specific structural analysis report. The information in the structural analysis report must be adhered to during installation.

Output documents:

Once the system has been designed and calculated, the following output documents are created automatically by my.Soltop:










- Structural analysis report
- Roof hook plan / hanger bolt plan
- Module plan as PDF & DXF
- Assembly plan
- Cutting plans of vertical & horizontal profiles


The information on the output documents is based on the input values from my.Soltop. The dimensions must be checked on site.

Safety instructions


Occupational safety and accident prevention regulations and the relevant SUVA standards and regulations must be observed!


Explanation of the pictograms for the safety instructions

Safety pictograms (warning symbols)				Description
 Danger	 Electrical Voltage	 Hot surface	 Risk of falling	Warns of personal injury
 Attention	 Glass (fragile)	 Instructions read	  Transport and storage	Warns of damage to property and the environment

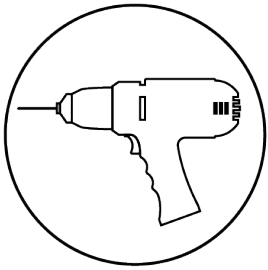
 The planning, installation and commissioning of the solar power system may only be carried out by qualified specialists. Improper execution can lead to damage to the system and the building and endanger persons.

 **Equipment**
Personal protective equipment (PPE) must be worn.

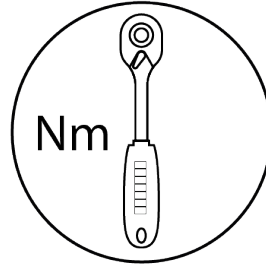
 **Risk of falling**
There is a risk of falling when working on the roof and when climbing up and down. It is essential to observe the SUVA accident prevention regulations and use suitable fall protection equipment.

 **Risk of injury**
People can be injured by falling objects. Before starting installation work, cordon off the danger zone and warn people in the vicinity.
Protective gloves must always be worn

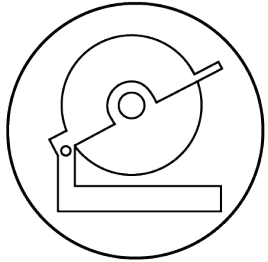
Tool overview



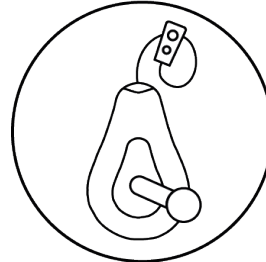
Cordless screwdriver



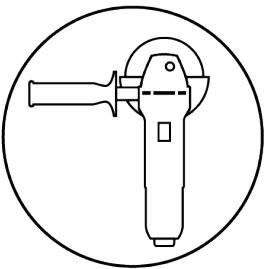
Torque wrench



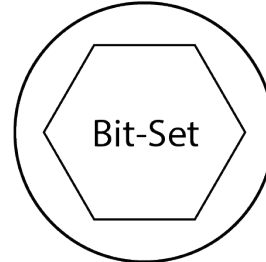
Crosscut saw



Impact cord

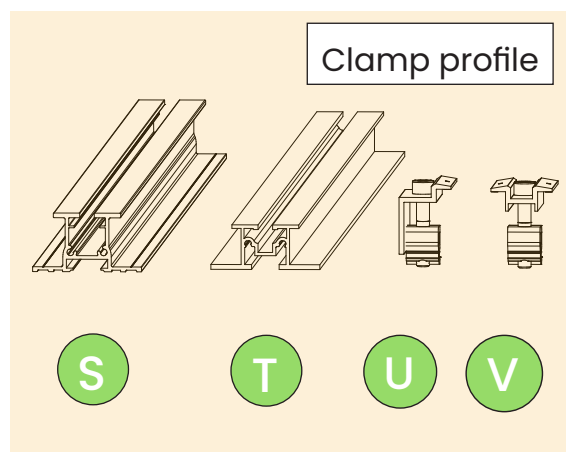
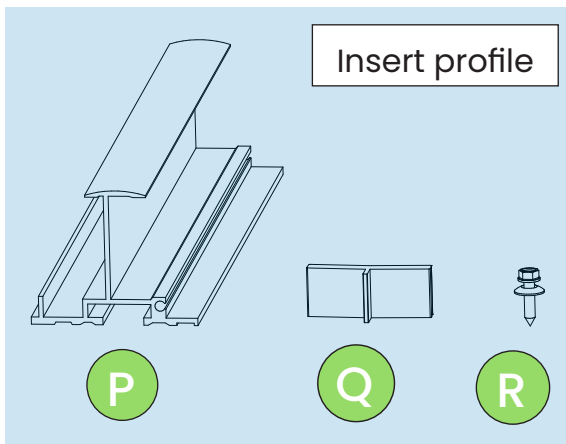
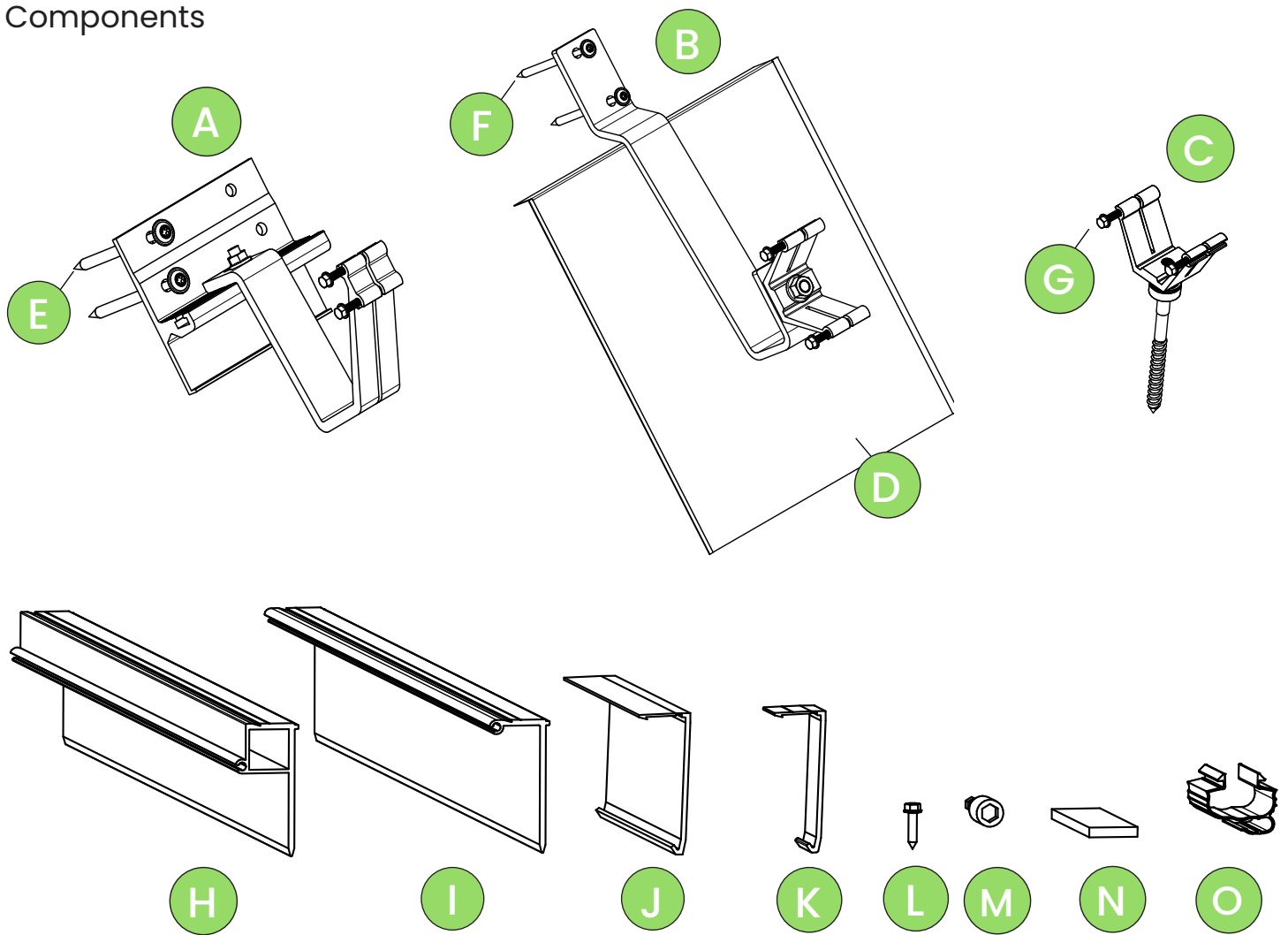


Angle grinder



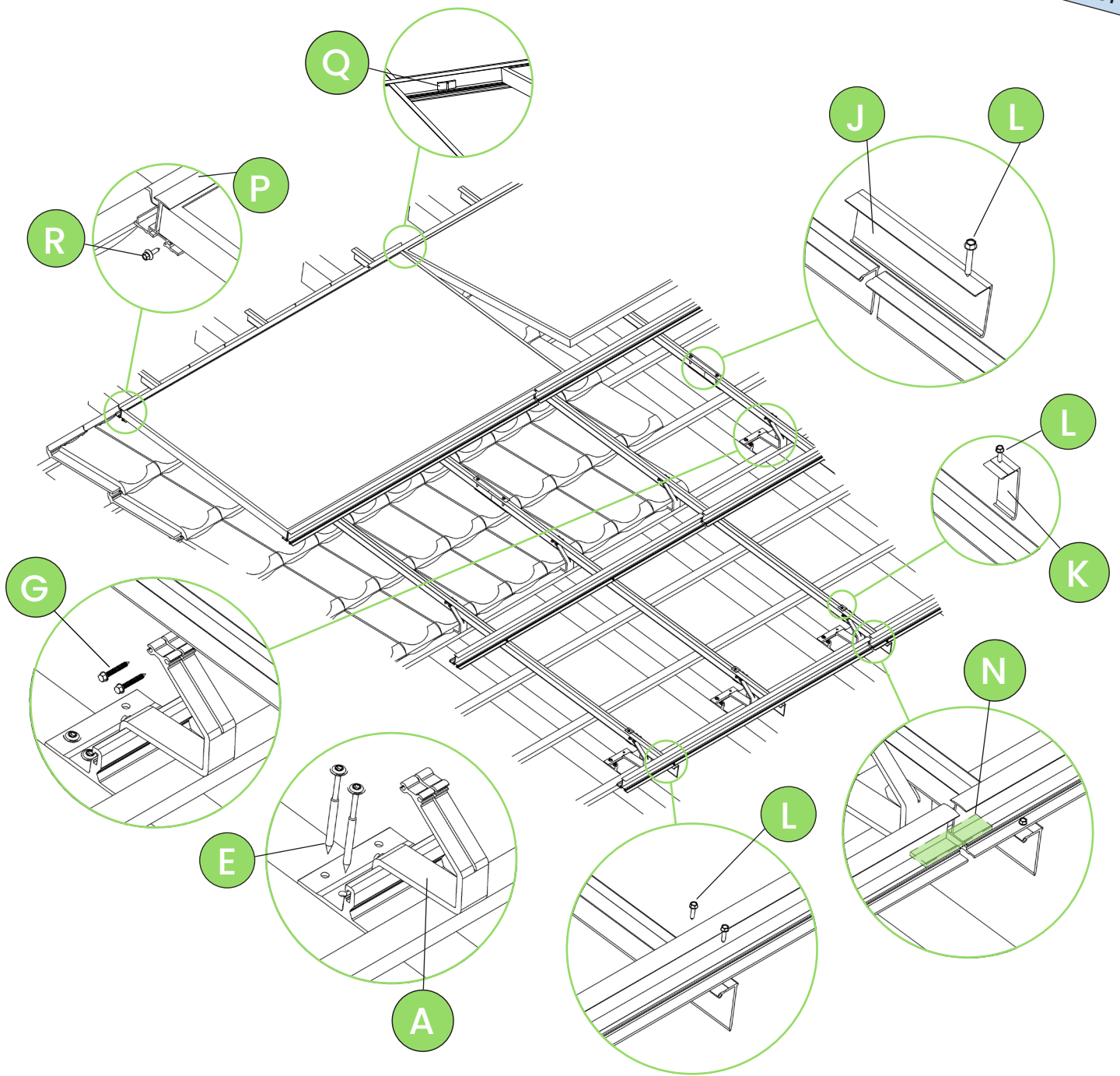
Bit Set

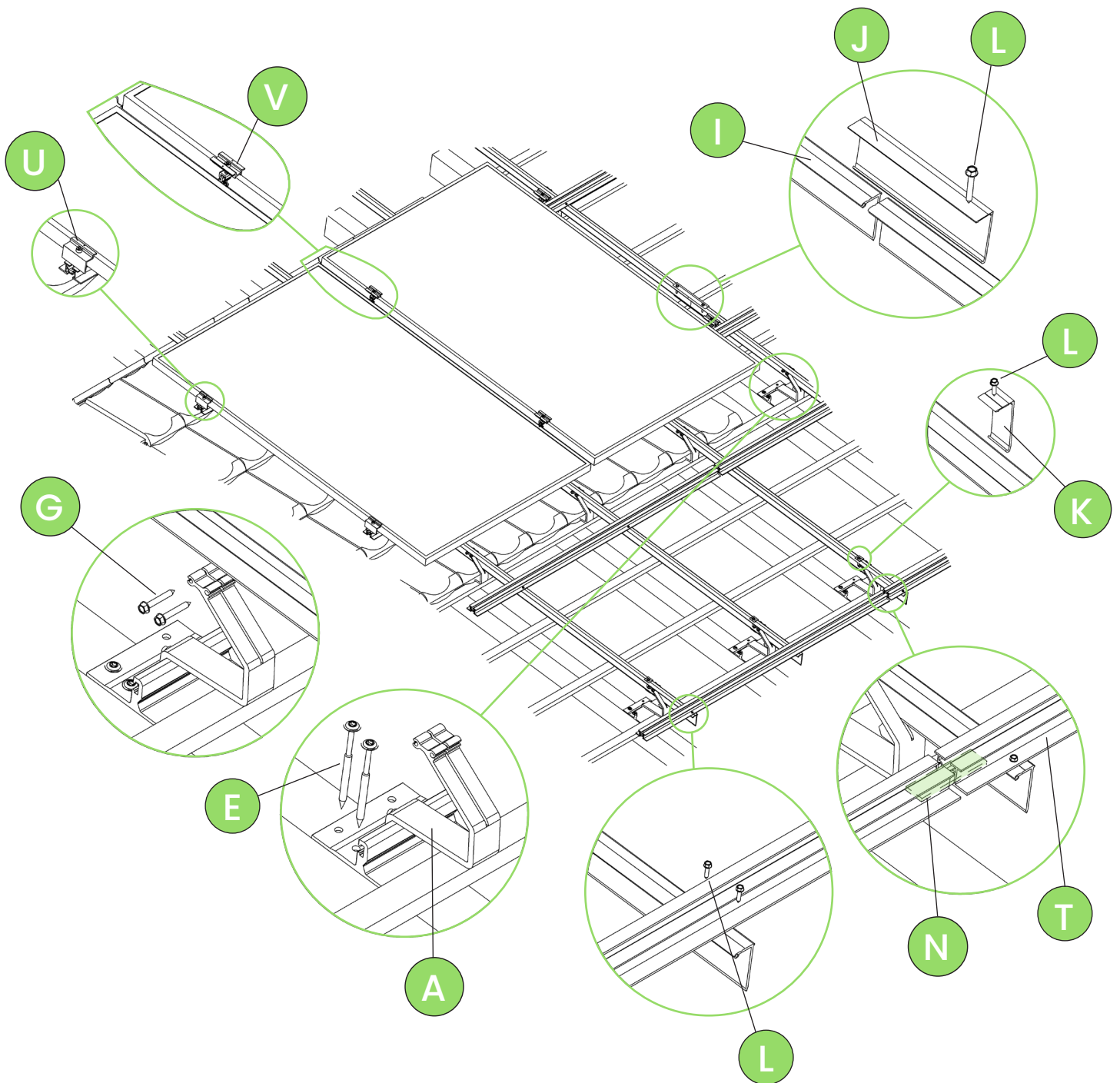
Components



- A: Roof hook interlocking, concrete tiles
- B: Roof hook for plain tiles
- C: Hanger bolt M10 x 155 / V-adaptor
Corrugated, slate tiles (SW8)
- D: Beavertail underlay plate
- E: Plate head screw 8 x 120mm (TX40)
- F: Plate head screw 6 x 100mm (TX25)
- G: Sheet metal screw hex. with collar 5.5 x 38mm (SW8)
- H: Vertical profile P-shape
- I: Vertical profile L-shape
- J: Vertical profile connector
- K: Mounting clip (anti-slip protection)
- L: Self-tapping screw hex. 5.5 x 22mm
- M: Bit screw socket SW08
- N: Horizontal profile connector
- O: Cable clip

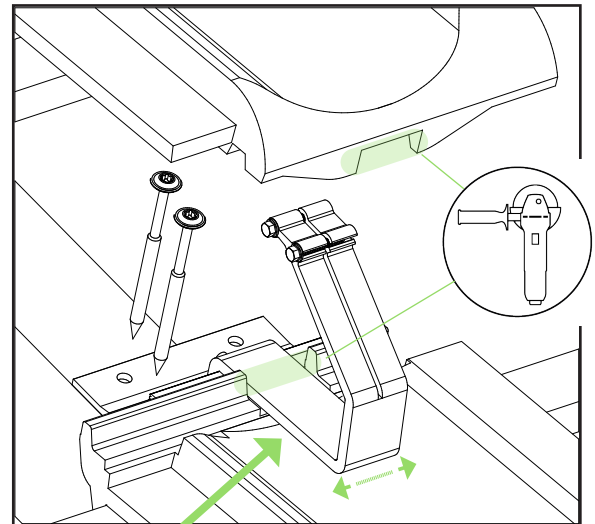
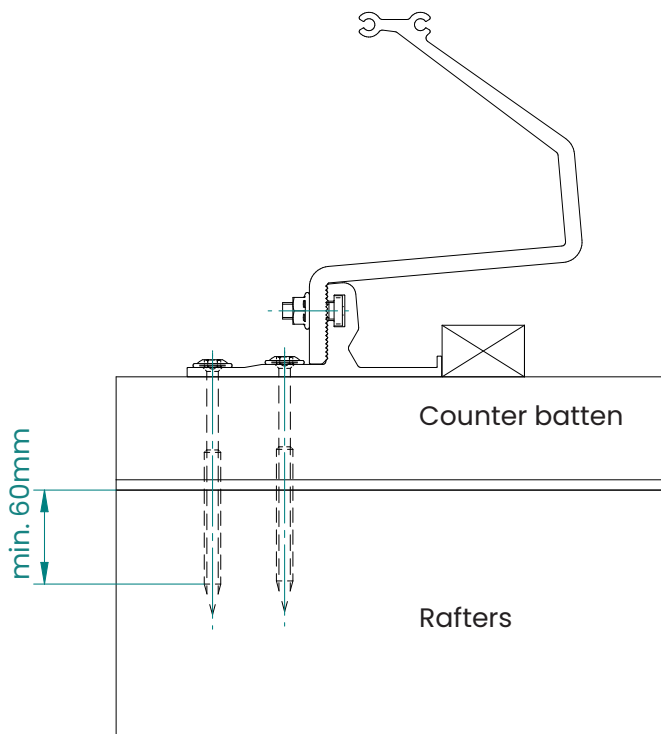
- P: Insertion profile
- Q: Module lock (under 12° inclination)
- R: Hexagon head drilling screw with sealing washer
4.8 x 20mm / d16mm (SW8)
- S: Clamping profile
- T: Clamping profile light
- U: End clamp
- V: Center clamp





Mounting roof hooks

Interlocking tiles

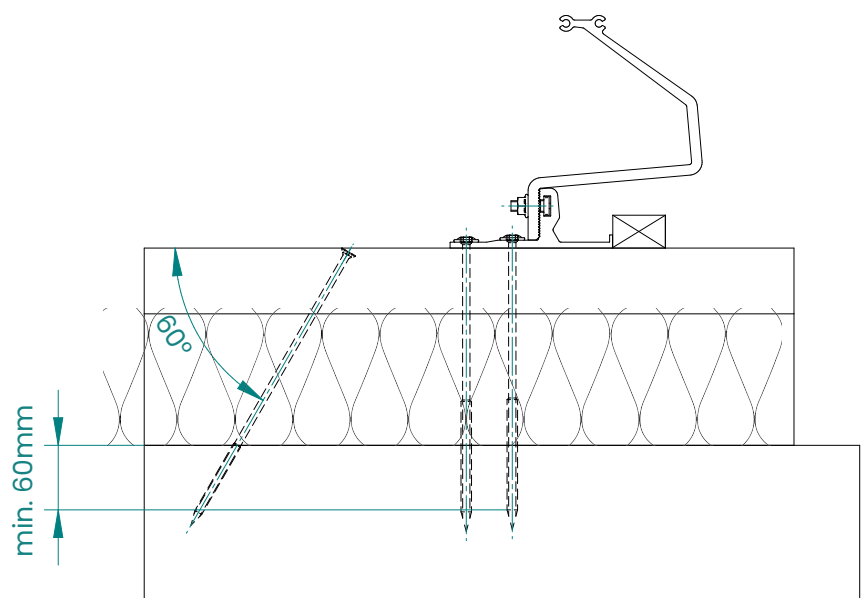


Leave a 1–3 mm gap between the roof hook and the tile!

Lateral adjustment: 100 mm 

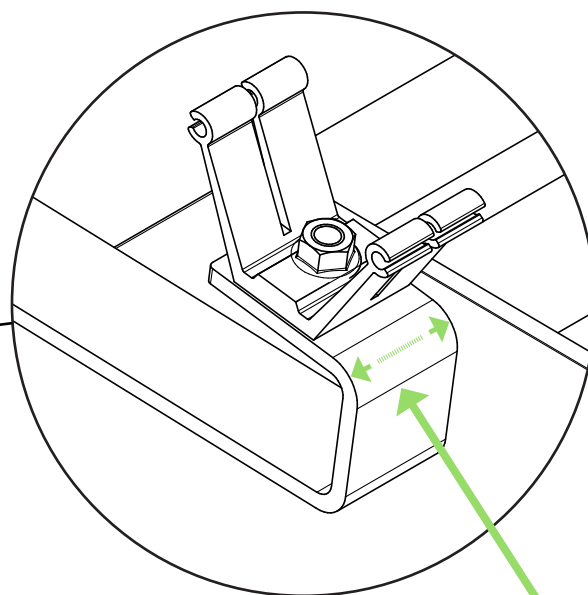
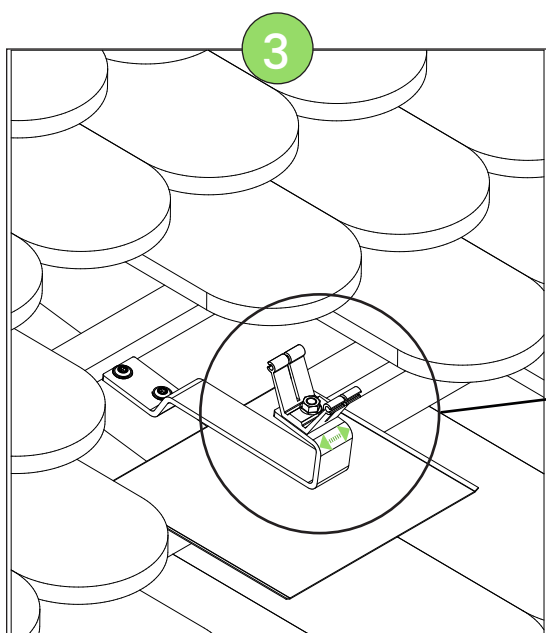
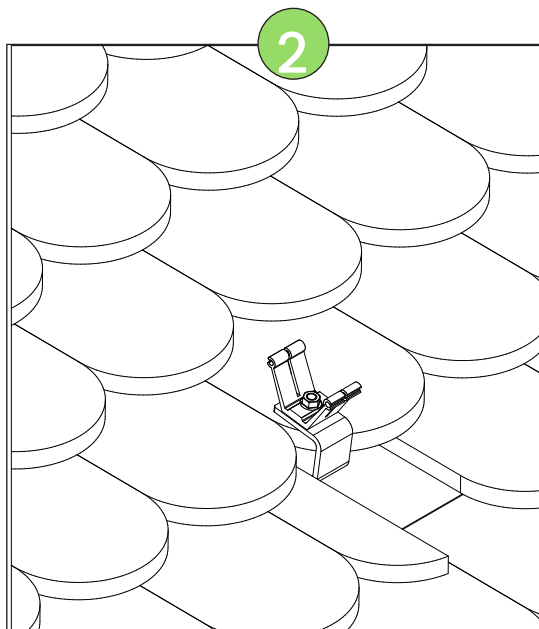
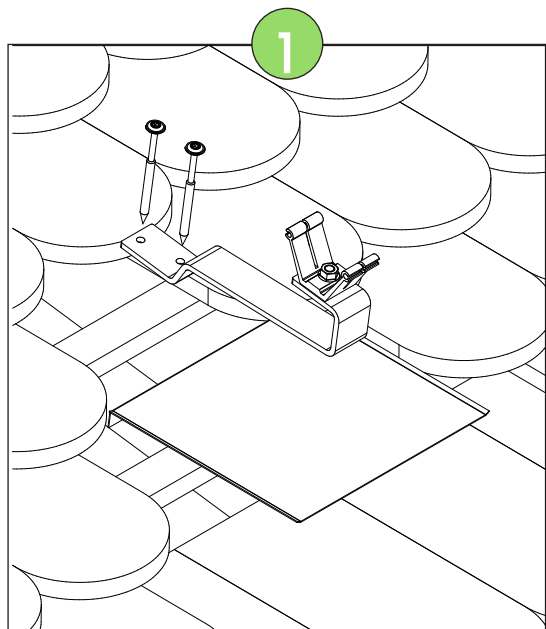
Rafter insulation

- Use screws ($\varnothing 8$, stainless steel A2) of the appropriate length on site!
- Additionally, 1 countersunk screw ($\varnothing 6$ mm, stainless steel A2) per rafter for lateral slope forces.



Mounting roof hooks

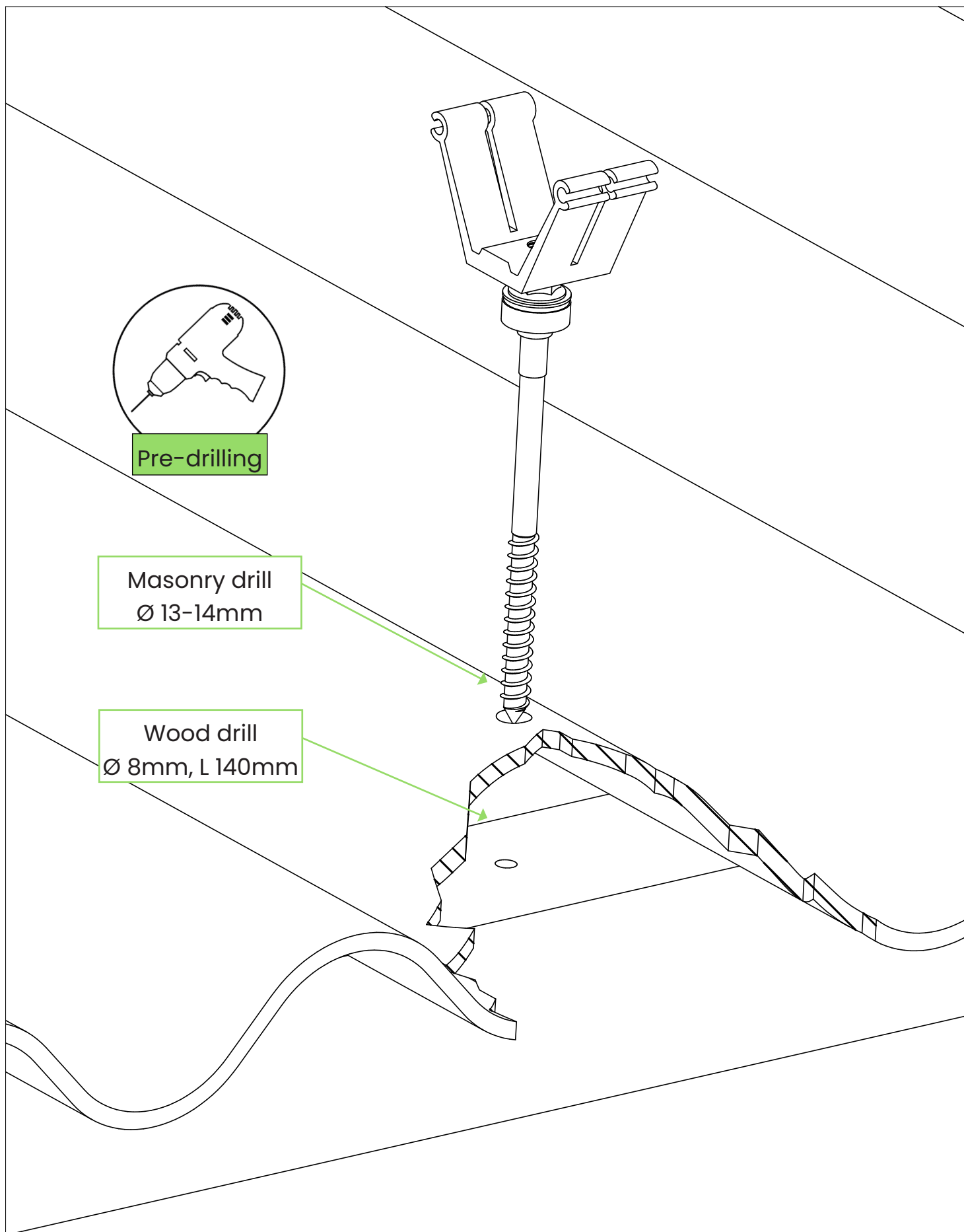
Plain tile double covering



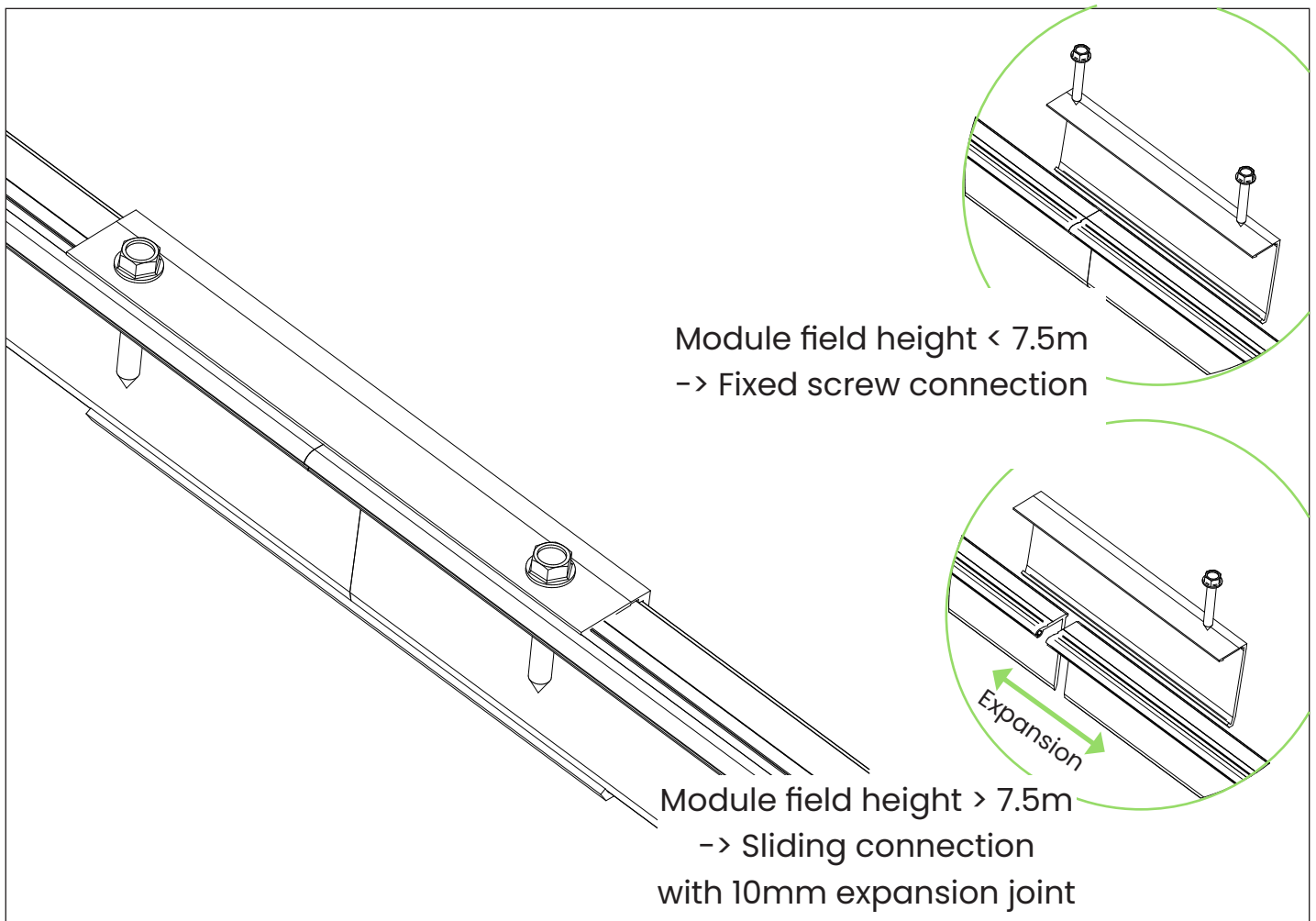
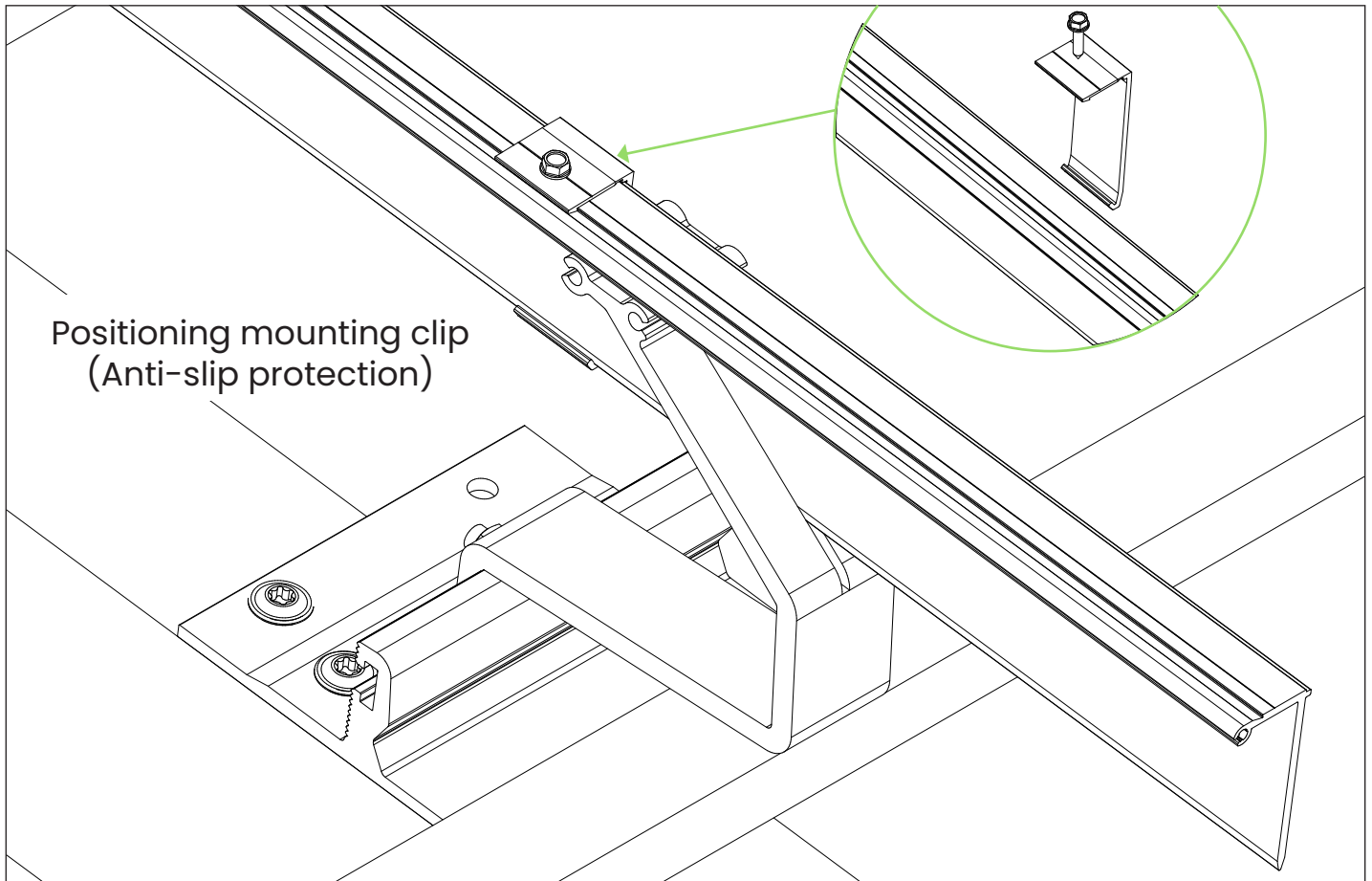
Lateral adjustment: 18 mm

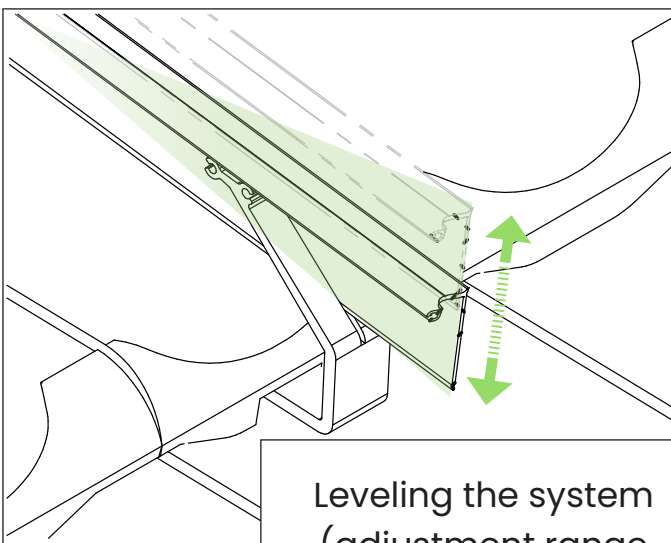
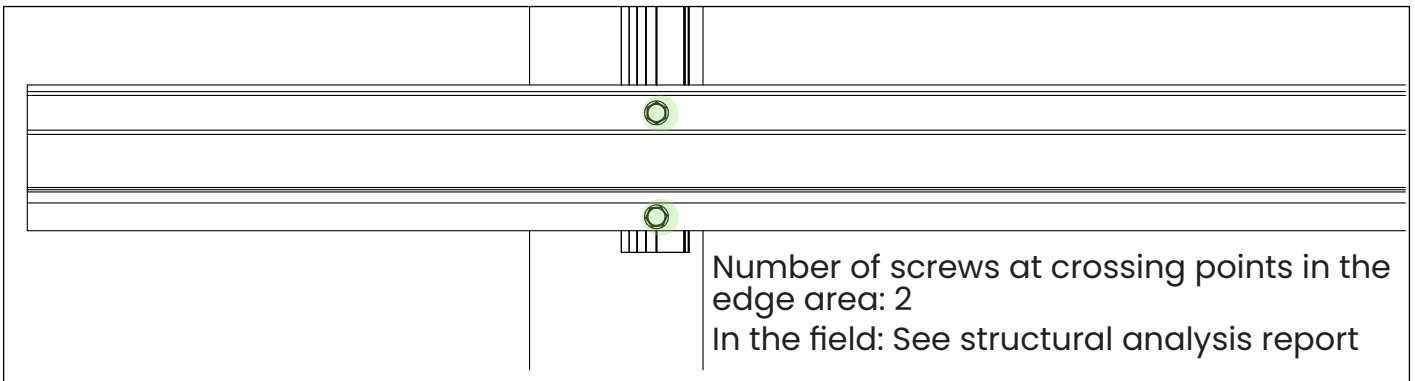
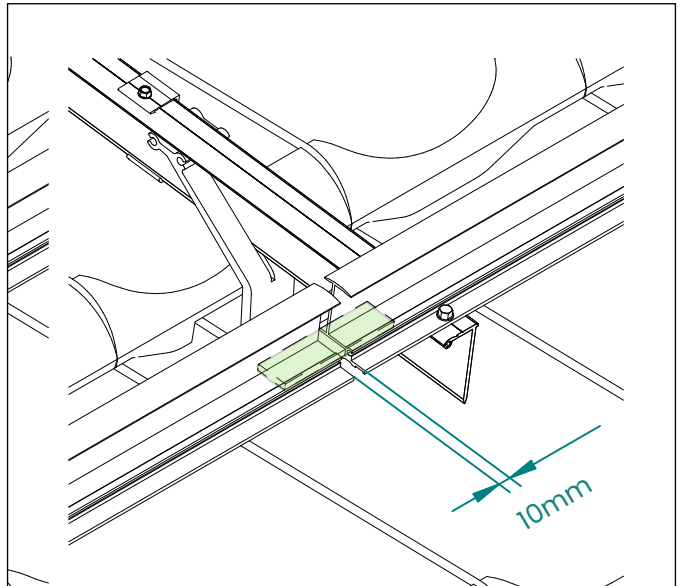
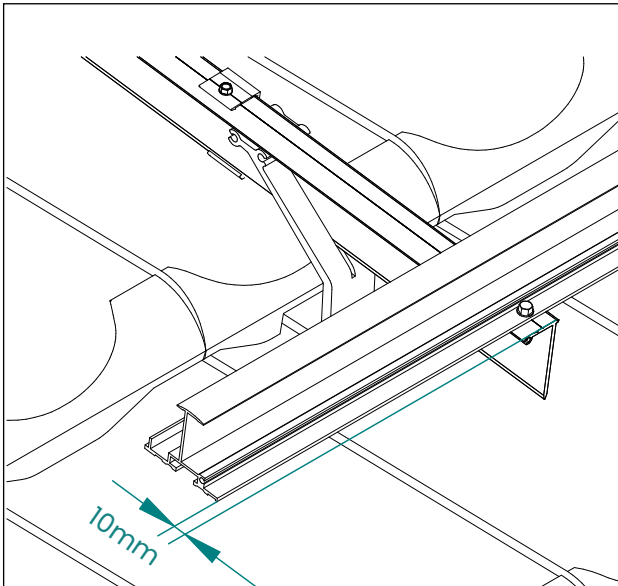
Mounting hanger bolt

Wave eternite

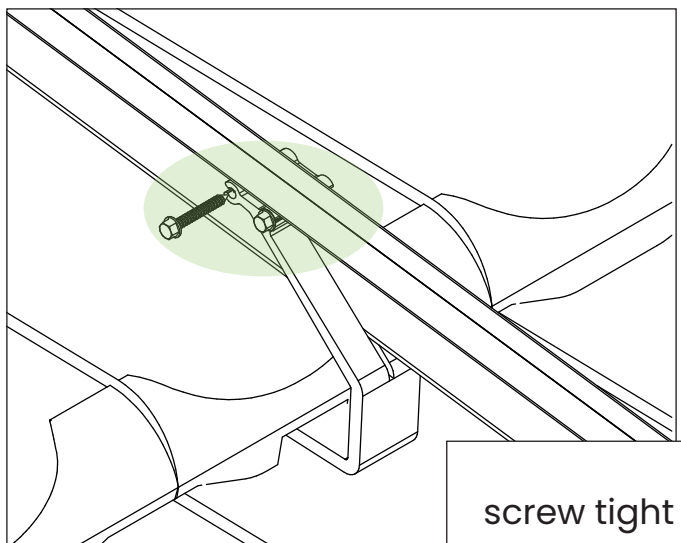


Mounting vertical profile

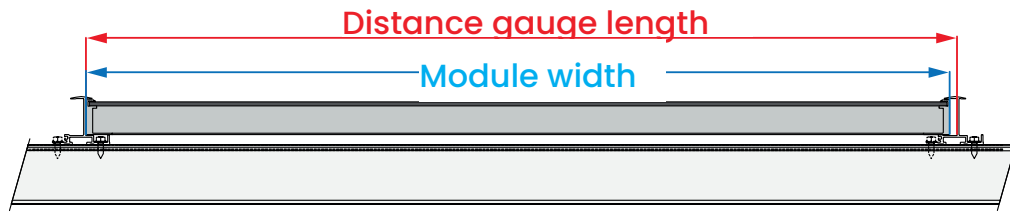




Leveling the system
(adjustment range
50mm)

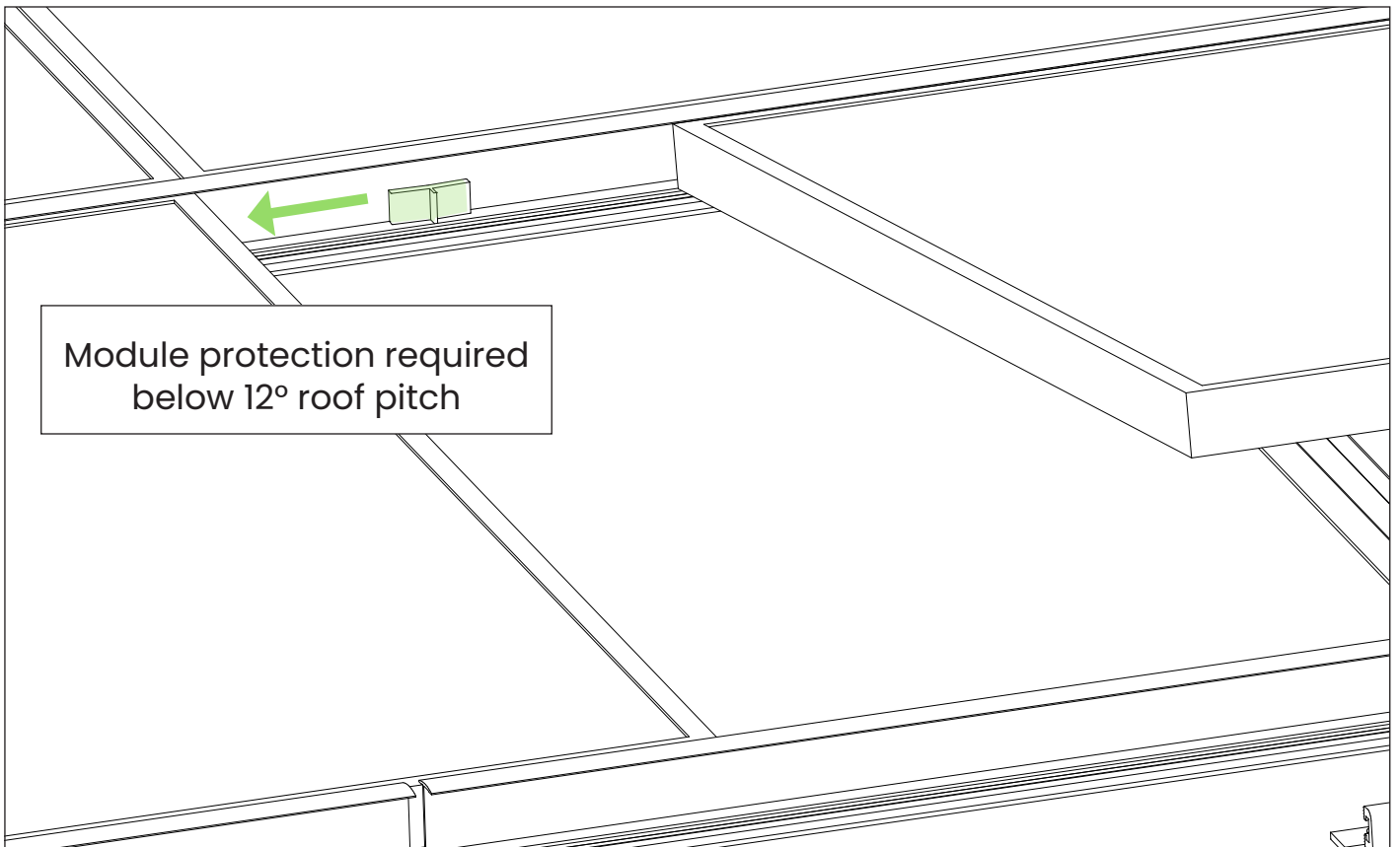
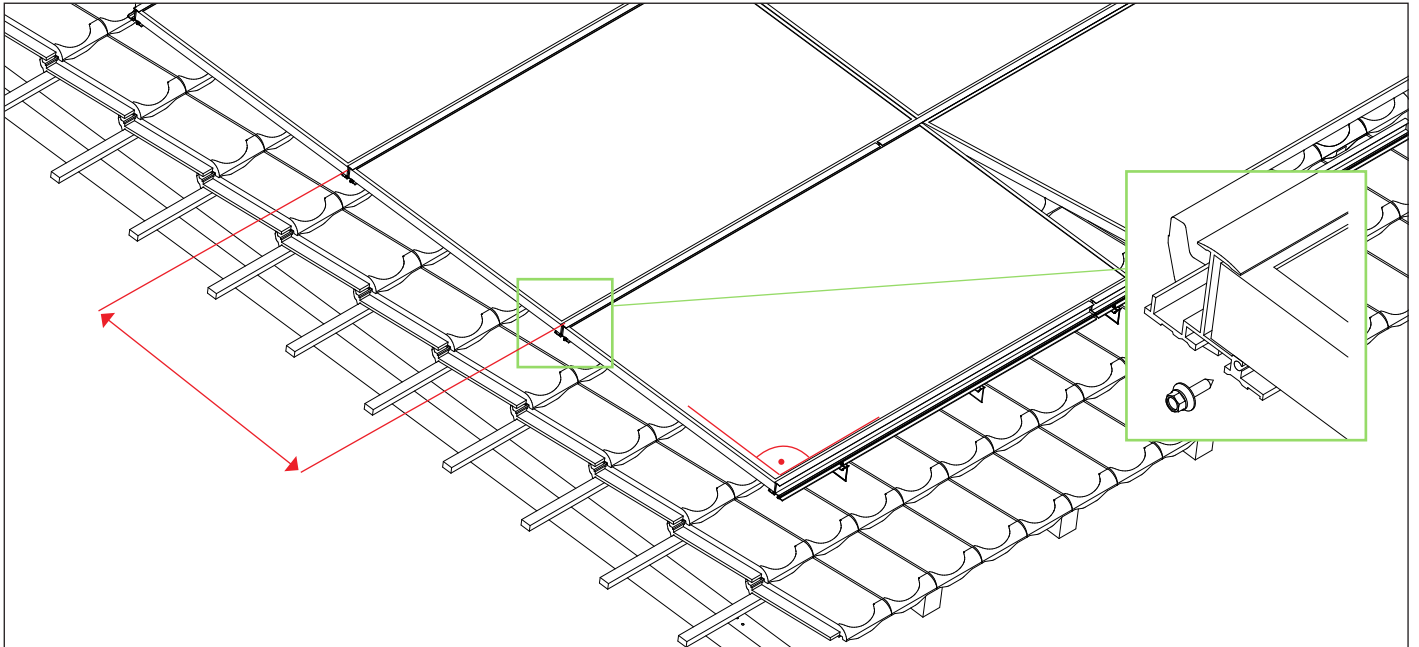


screw tight



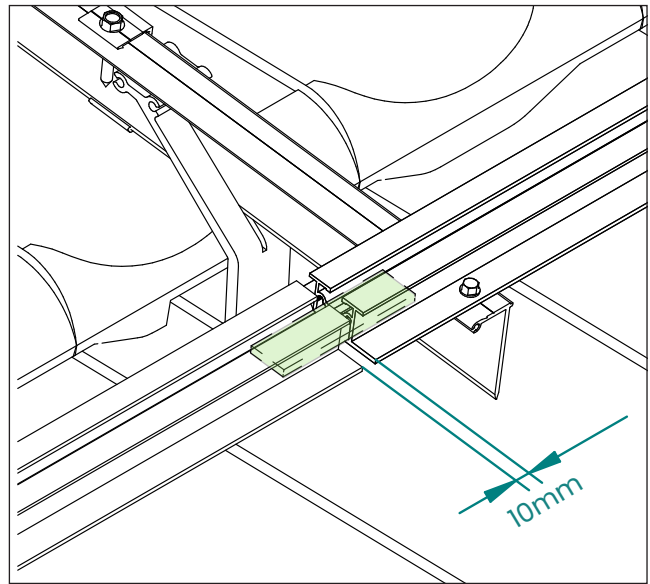
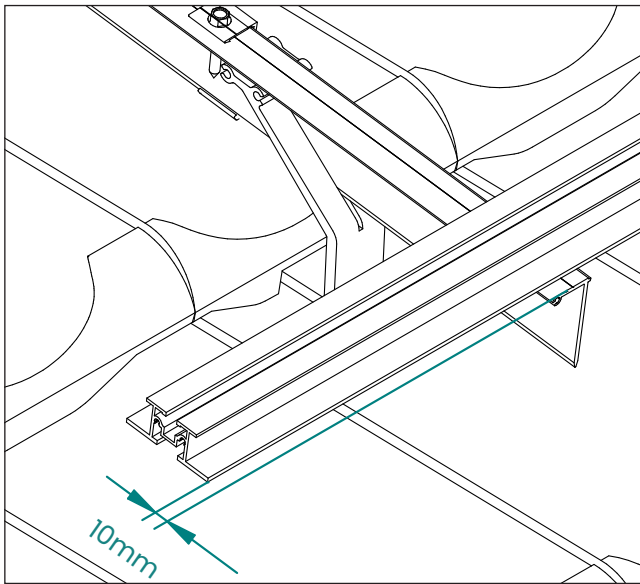
Formula:
Module width in mm
plus 10mm equals
Length of the distance gauge

Example: Module width measured
1000mm + 10mm = 1010mm

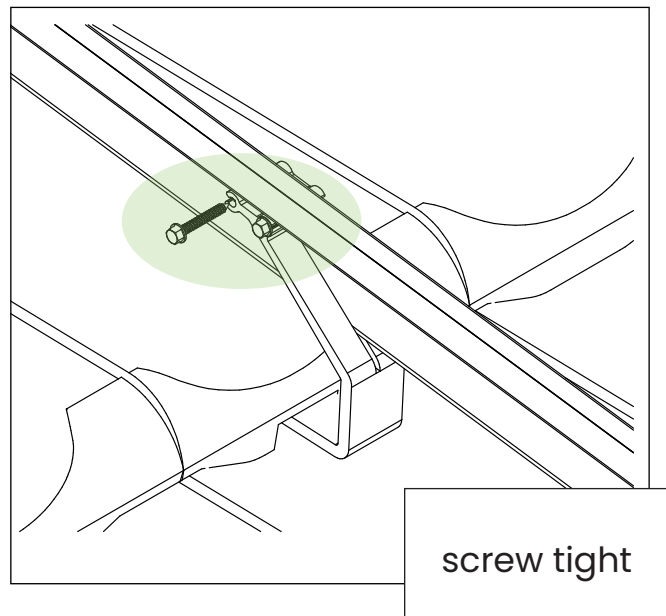
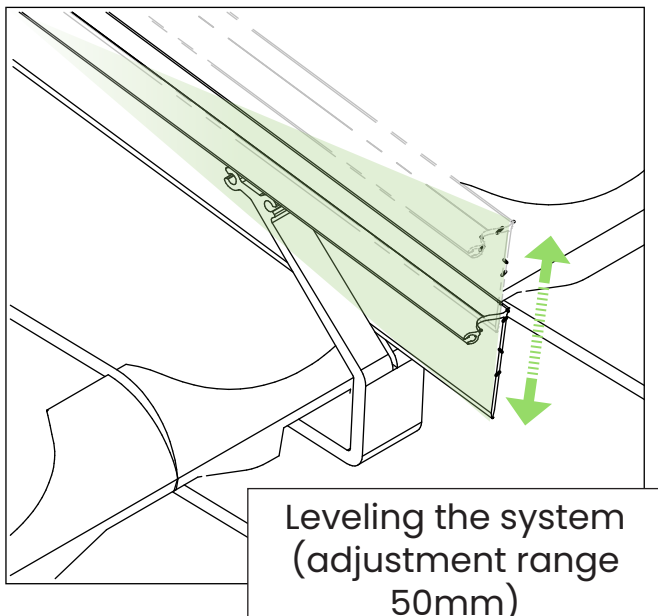


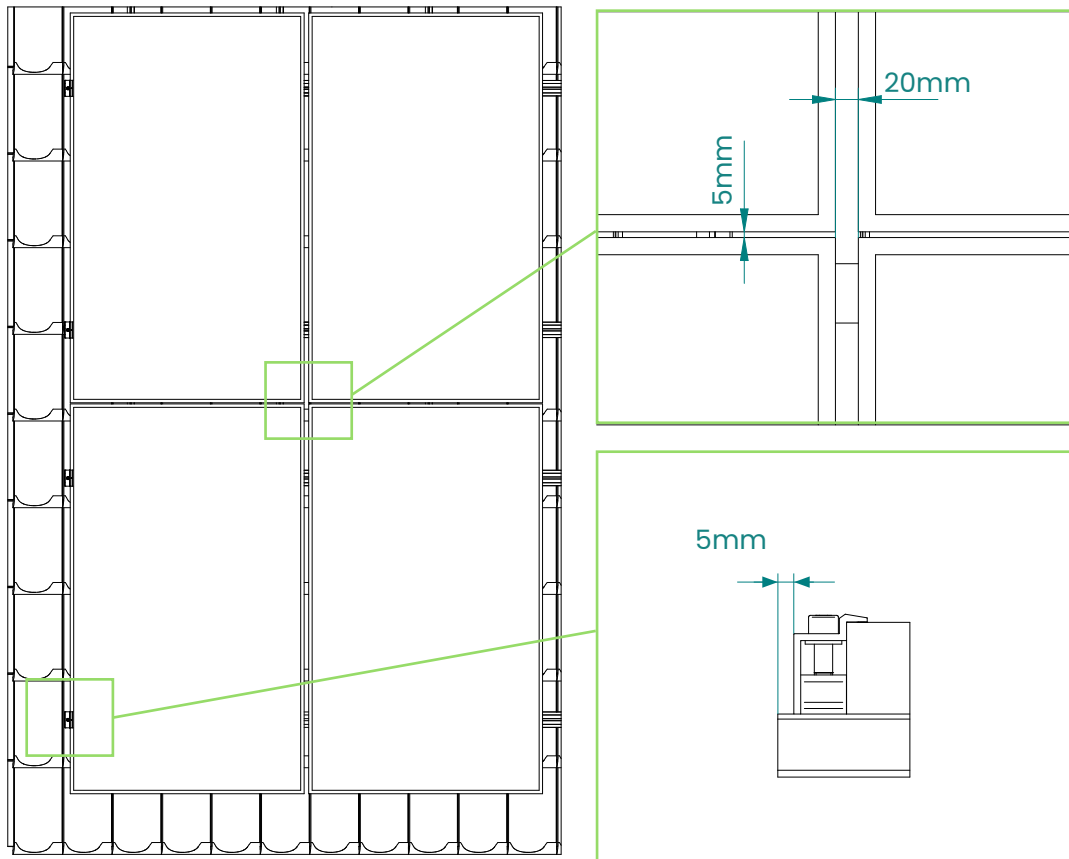
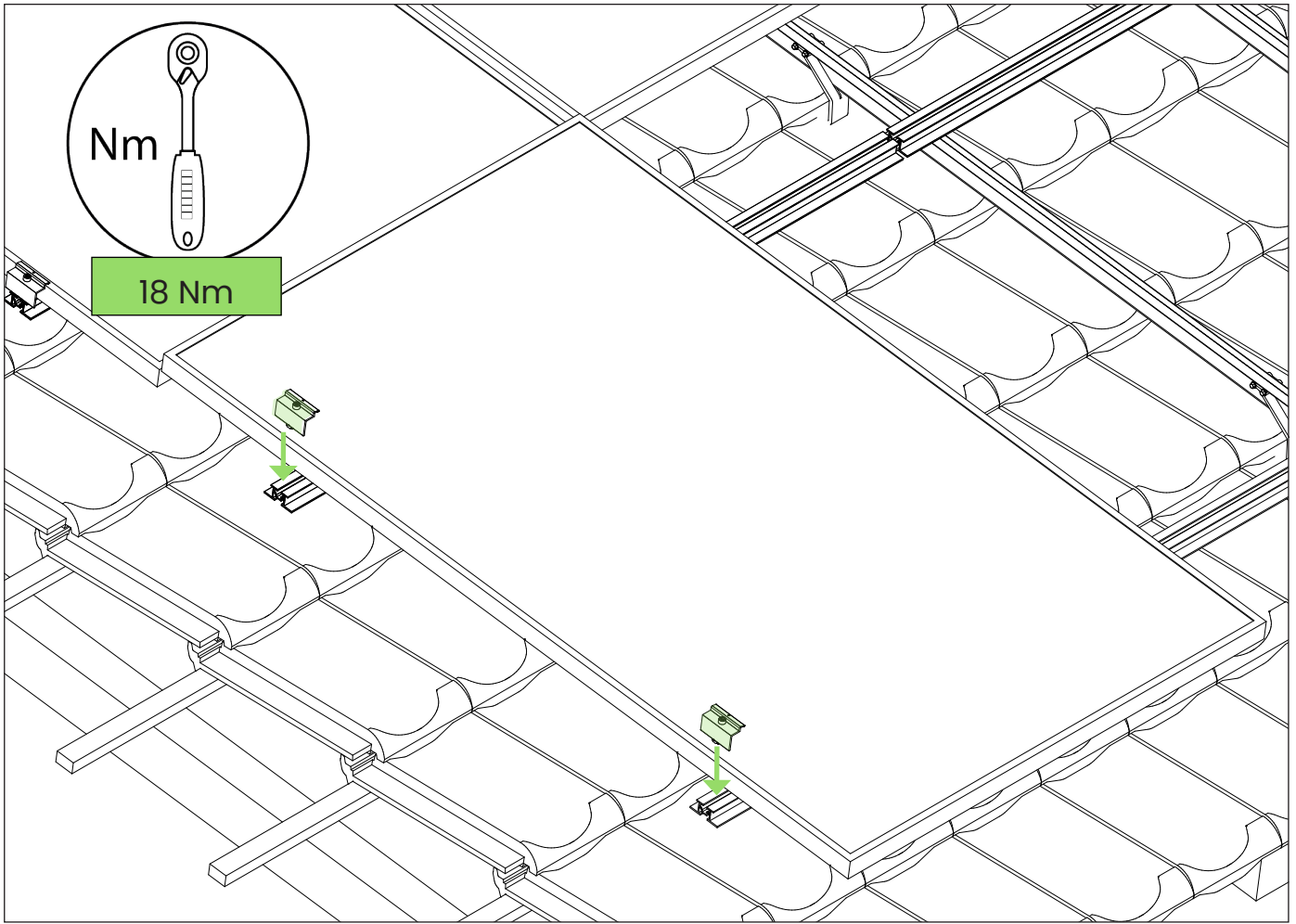
Mounting clamping profile

Clamping system

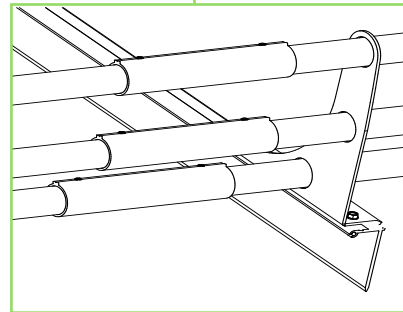
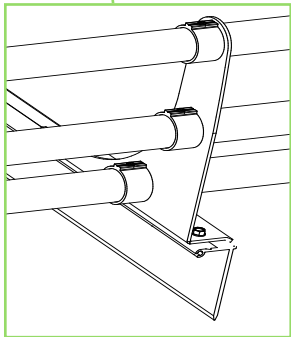
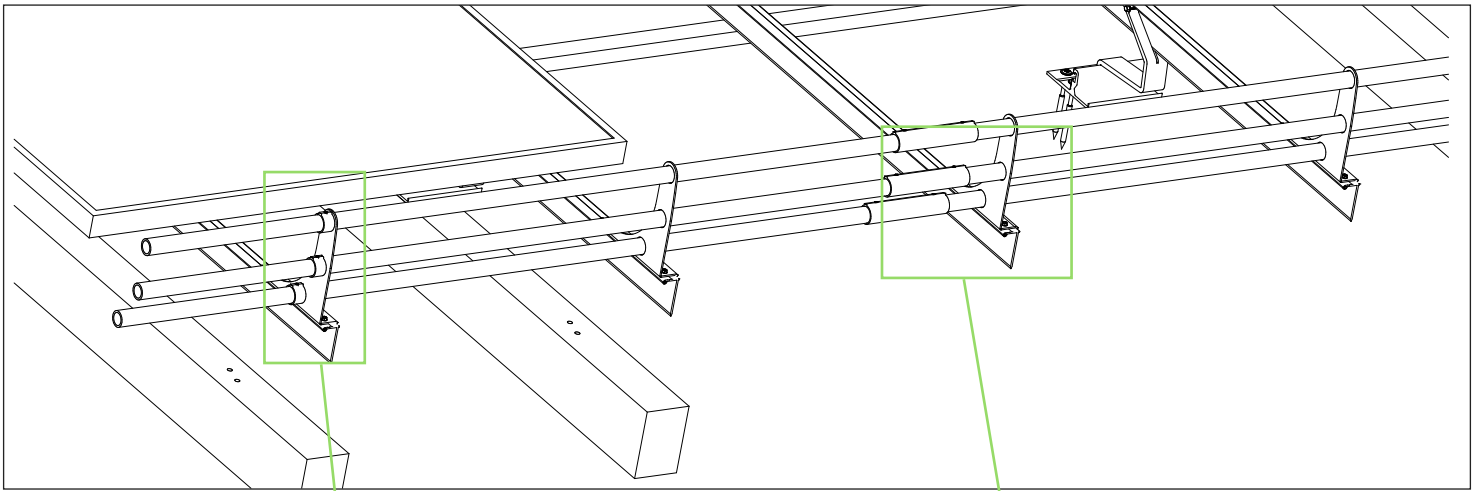
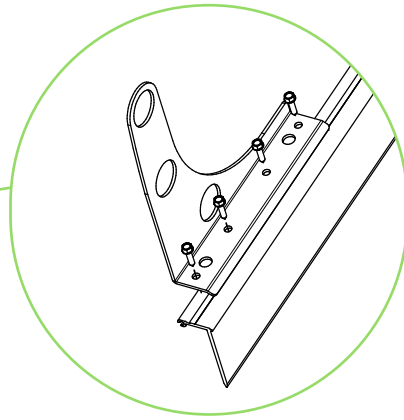
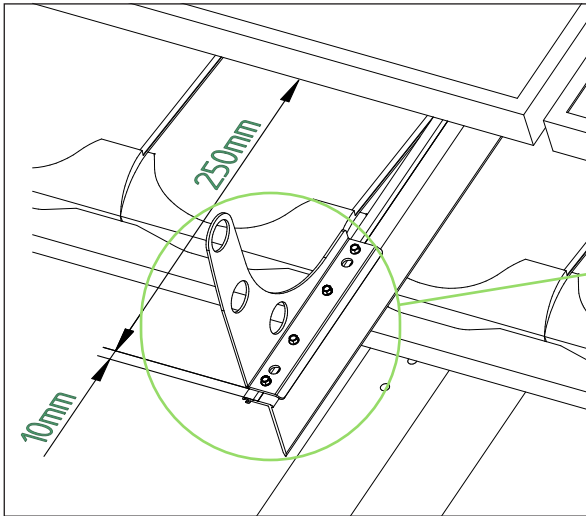


	<p>Number of screws at crossing points In the edge area: 2 In the field: see structural analysis report</p>





Mounting snow guard



The logo for SOLTOP energie is located in the top right corner. It consists of the words "soltop" and "energie" in a white, lowercase, sans-serif font, stacked vertically. To the right of the text is a stylized white icon of a sun with rays, set against a green square background.

soltop
energie

Smart technology
for the energy revolution

Thank you for choosing a SOLTOP system!

If you have any suggestions, questions or ideas for improvement, please do not hesitate to contact us:

You can find all contact details at: www.soltop-energie.ch/kontakt

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