

Assembly Manual

D-Dome 6 System

Lifted LS



Connecting Strength

k2-systems.com

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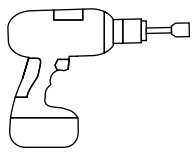
Quality tested - several certifications

K2 Systems stands for secure connections, highest quality and precision. Our customers and business partners have known that for a long time. Independent institutes have tested, confirmed and certified our capabilities and components.

Please find our quality and product certificates under:

[k2-systems.com](https://www.k2-systems.com)

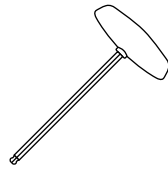
Tools overview



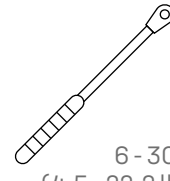
6 mm



13 mm



6 mm



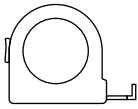
6 - 30 Nm
(4,5 - 22,2 lb-ft)



6 mm



13 mm



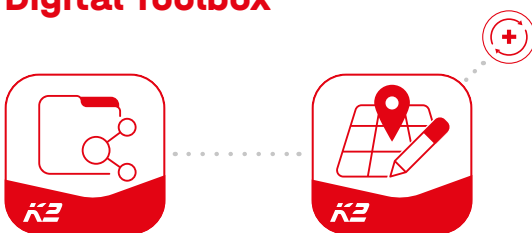
≥ 3.0 m



≥ 6.0 m



Digital Toolbox



Do you already know our digital services? Use our K2 DocuApp now and record the first important data directly at the customer or project site.

Simply transfer the data to our online planning software K2 Base. Here you can plan your project easily, safely and quickly. You receive a detailed project report with assembly plan and static report.

The K2+ interface enables seamless project data transfer to the planning tools of well-known inverter manufacturers or yield planning tools.

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General safety information

Please note that our general mounting instructions must be followed at all times and can be viewed online at [k2-systems.com](https://www.k2-systems.com)

- The equipment may only be installed and operated by qualified and adequately trained installers.
- Prior to installation, ensure that the product complies with on-site static loading requirements. For roof-mounted systems, the roof load-bearing capacity must always be checked.
- National and local building regulations and environmental requirements must be adhered to.
- Compliance with health and safety regulations, accident prevention guidelines and applicable standards is required.
 - Protective equipment such as safety helmet, boots and gloves must be worn.
 - Roofing works must be in accordance with roofing regulations utilising fall protection safeguards when eaves height exceeds 3 m.
 - At least two people must be present for the duration of the installation work in order to provide rapid assistance in the event of an emergency.
- K2 mounting systems are continuously developed and improved and the installation process may thereby change at any time. Prior to installation consult our website at www.k2-systems.com/en/technical-information for up-to-date instructions. We can send you the latest version on request.
- The assembly instructions of the module manufacturer must be adhered to.
- Equipotential bonding/grounding/earthing between individual parts is to be performed according to country specific standards, as well as national laws and regulations.
- At least one copy of the assembly instructions should be available on site throughout the duration of the installation.
- Failure to adhere to our general safety and assembly instructions and not using all system components, K2 is not liable for any resulting defects or damages. We do not accept liability for any damage resulting in the use of competitor's parts. Warranty is excluded in such cases.
- K2 Systems GmbH reserves the right to exclude liability in case of disregard of our General Safety Instructions as well as in case of installation or mounting of components of a competitor.
- If all safety instructions are adhered to and the system is correctly installed, there is a product warranty entitlement of 12 years! We strongly recommend reviewing our terms of guarantee, which can be viewed at [k2-systems.com/en/warranty-terms-and-conditions](https://www.k2-systems.com/en/warranty-terms-and-conditions) We will also send this information on request.
- Dismantling of the system is performed in reverse order to the assembly.
- K2 stainless steel components are available in different corrosion resistance classes. Each structure or component must be carefully checked for possible corrosion exposure.

The following guidelines apply

This system can be used without further testing by K2 systems under the following standard conditions. It is also suitable for higher requirements, however if a value exceeds the standard conditions, please contact K2 Systems.



Roof requirements

- The roof surface must be clean and dry. Roof irregularities must be corrected or removed where appropriate.
- Roof pitch up to 10°



Static requirements

- It is essential to check that the roof structure has sufficient residual load capacity and that the pressure capacity of the roof insulation (where present) is not exceeded.
- Suitable for framed modules with a frame height 30 - 50 mm
- Permissible module dimensions:
length 1562 - 2390 mm, width 50 - 1170 mm



Important mounting instructions

Mounting system

- The exact mounting angle deviates slightly from 10° depending on the module width. This angle decreases with higher module widths.
- A minimum distance to the roof edge of 600 mm must be maintained. For building heights below 5 m, the minimum distance can be reduced.
- At least two elevations must be mounted together in order to use this system.
- Ensure a thermal separation (distance between module blocks) in the direction of the base rail and module rows must be maintained:
 - Base rail: 12.3 m
 - Module row: 16.0 m

- In the event of exceptional circumstances (such as storms, heavy rain, earthquakes, etc.), the system should be checked by a specialist. Should an inspection find damage or plastic deformation (such as in the module clamp area) the components must be replaced.

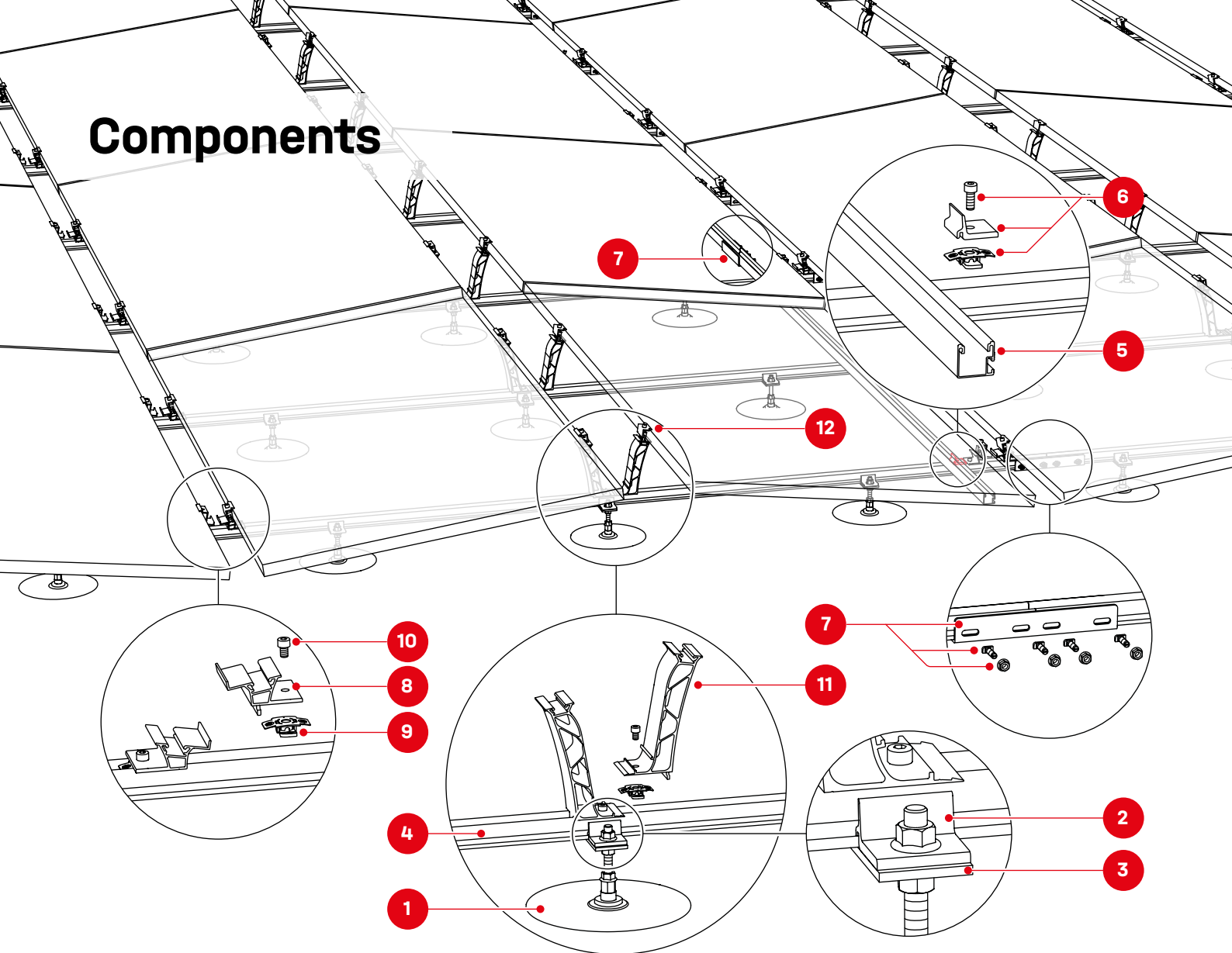
Modules and clamping

- Tightening torque of 14 Nm for all module clamps.
- Adhere to module manufacturer recommendations for clamping area and module installation (see module manufacturer instructions). Check whether manufacturer approval is available for clamping on the short module side. See k2-systems.com/en/approved-modules-dome-6

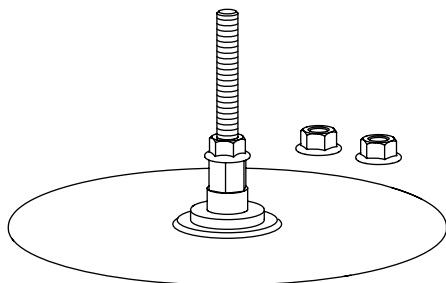
General information

- It is important to ensure that the rain water flow is not hindered.
- Because of the different orientation of the solar modules, the string and inverter connection must be appropriately observed. It is recommended that the inverters and strings are connected separately.
- On-site general standards and regulations for lightning protection must be observed and consultation with a specialist to create a lightning protection concept is recommended (use lightning protection clamp if necessary).

Components



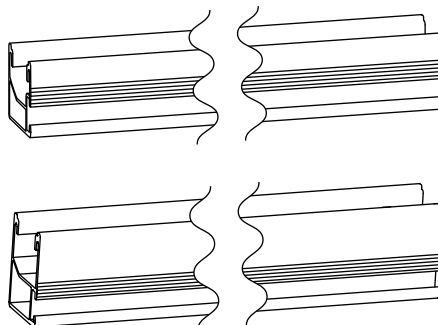
1 **Roof anchor plate with adapter**
 Not included in the K2 product portfolio
 Manufacturer: Sika, CW Lundberg, Solmont etc.



3 2002546/2002547
**Adapter plate M10/
 Adapter plate M12**



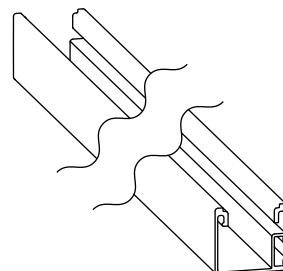
4 Item number system-specific
SingleRail 36/SingleRail 50



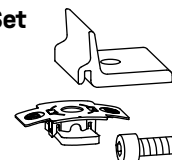
2 2003146/2003147
**Climber 36/50 M10/
 Climber 36/50 M12**

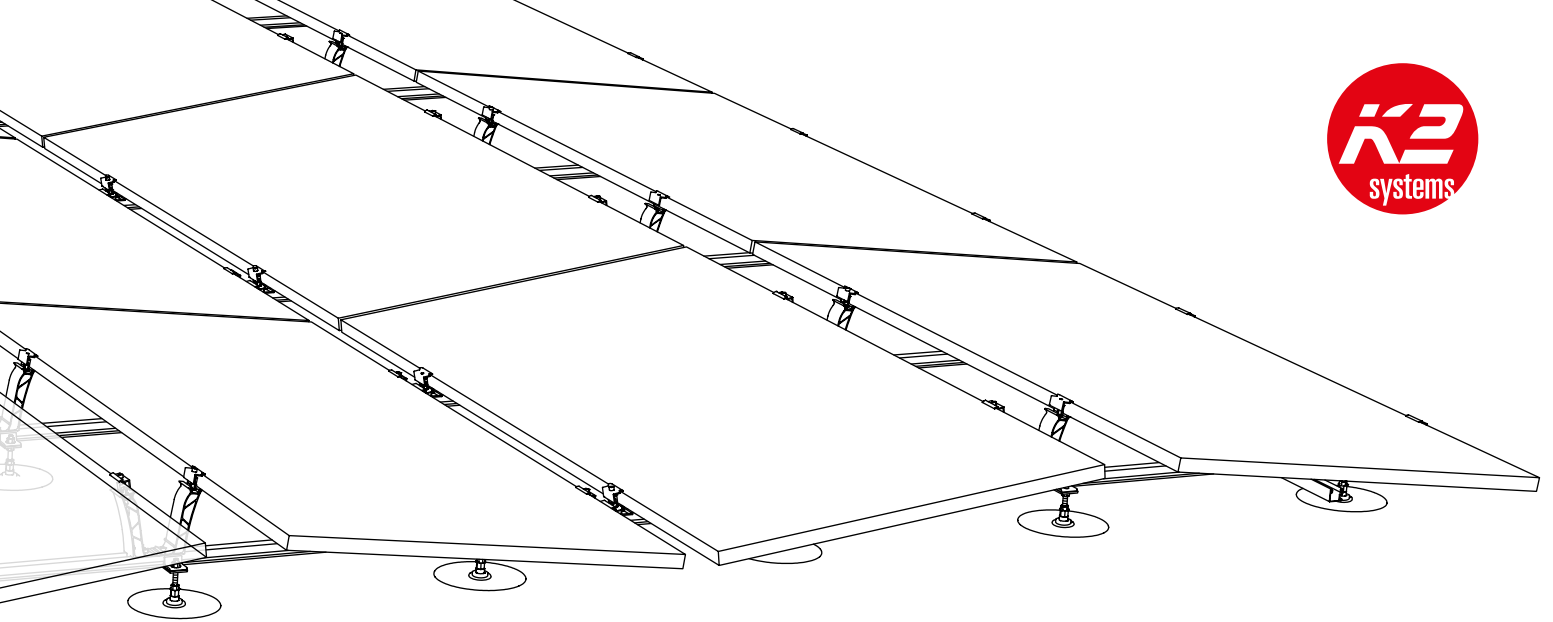


5 Item number system-specific
SingleRail 36 Light



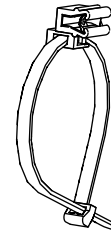
6 2003145
Climber 36/50 Set





Optional

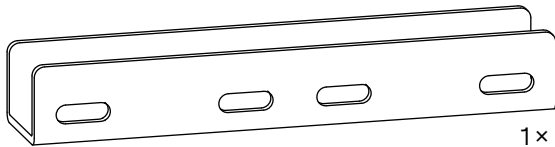
2002870
Cable Manager



2003542
TerraGrif K2MI
Duo 18



7 2001976
Rail connector Set
SingleRail 36



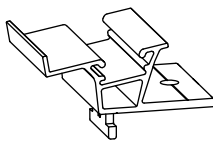
1x



4x

4x

8 2003243
Dome 6.10 SD



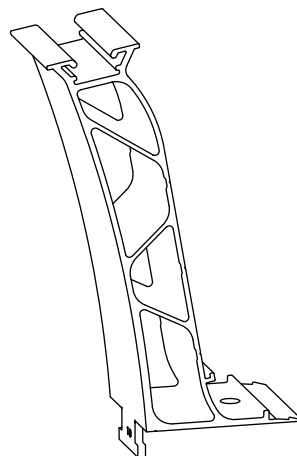
9 1001643
MK2 insertion nut



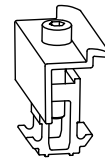
10 2001729
Hexagonal socket head
cap screw M8



11 2004125
Dome 6.10 Peak

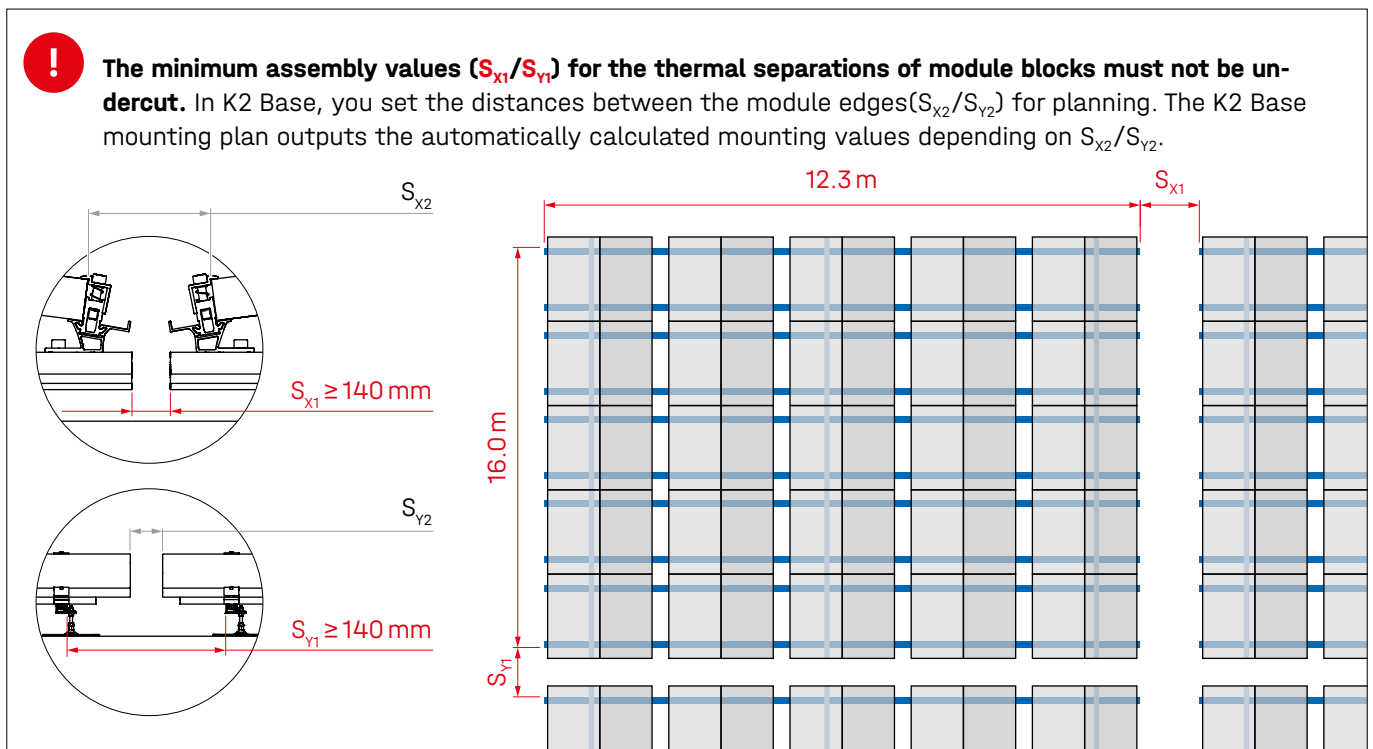


12 2002559/2002610
DomeClamp EC 30-50 mm,
silver/black

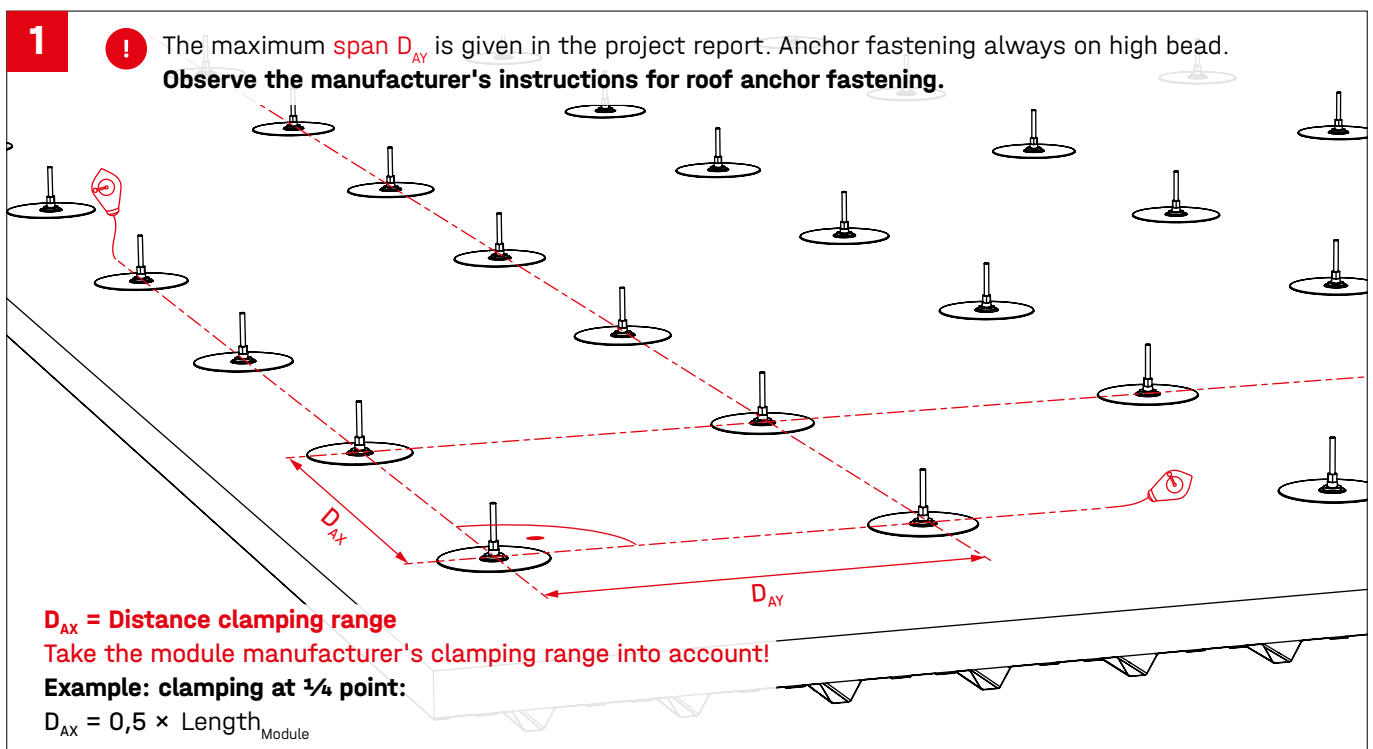


Assembly

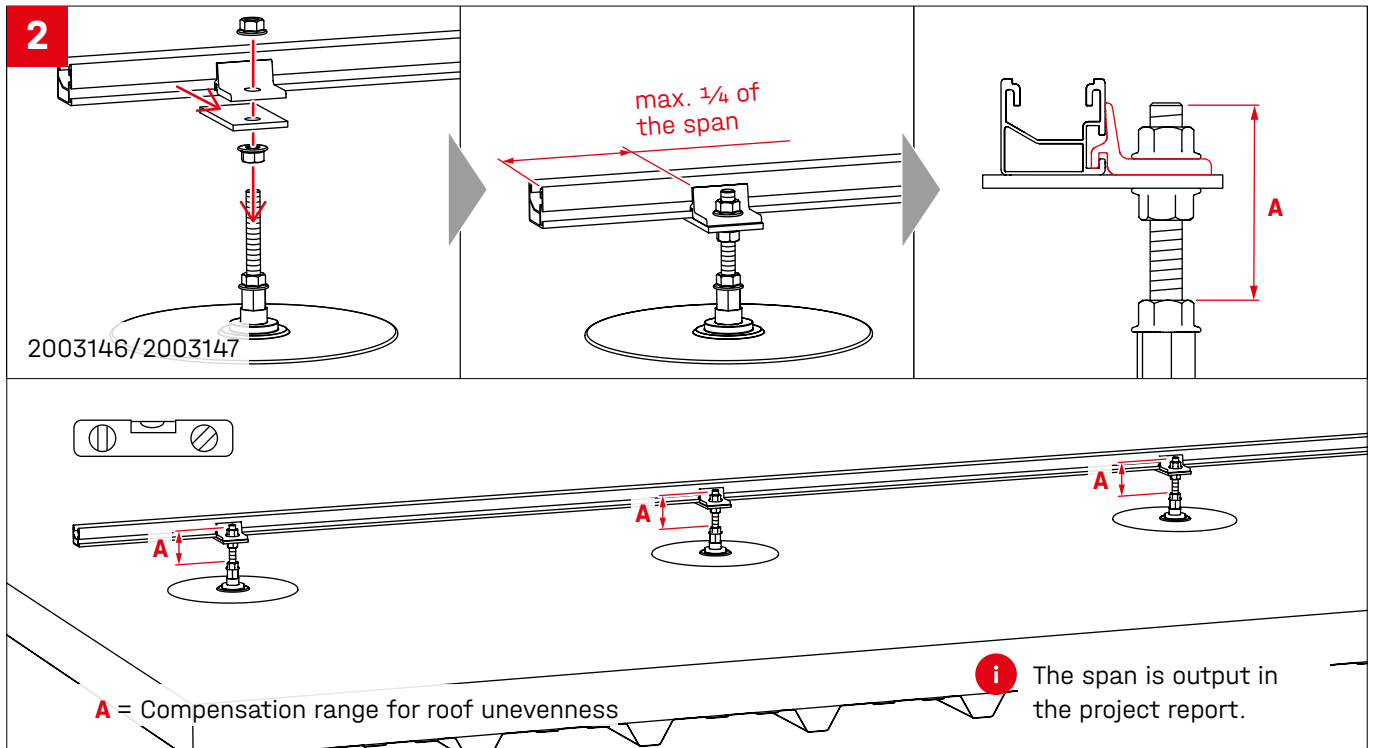
Installation of module field and thermal separations



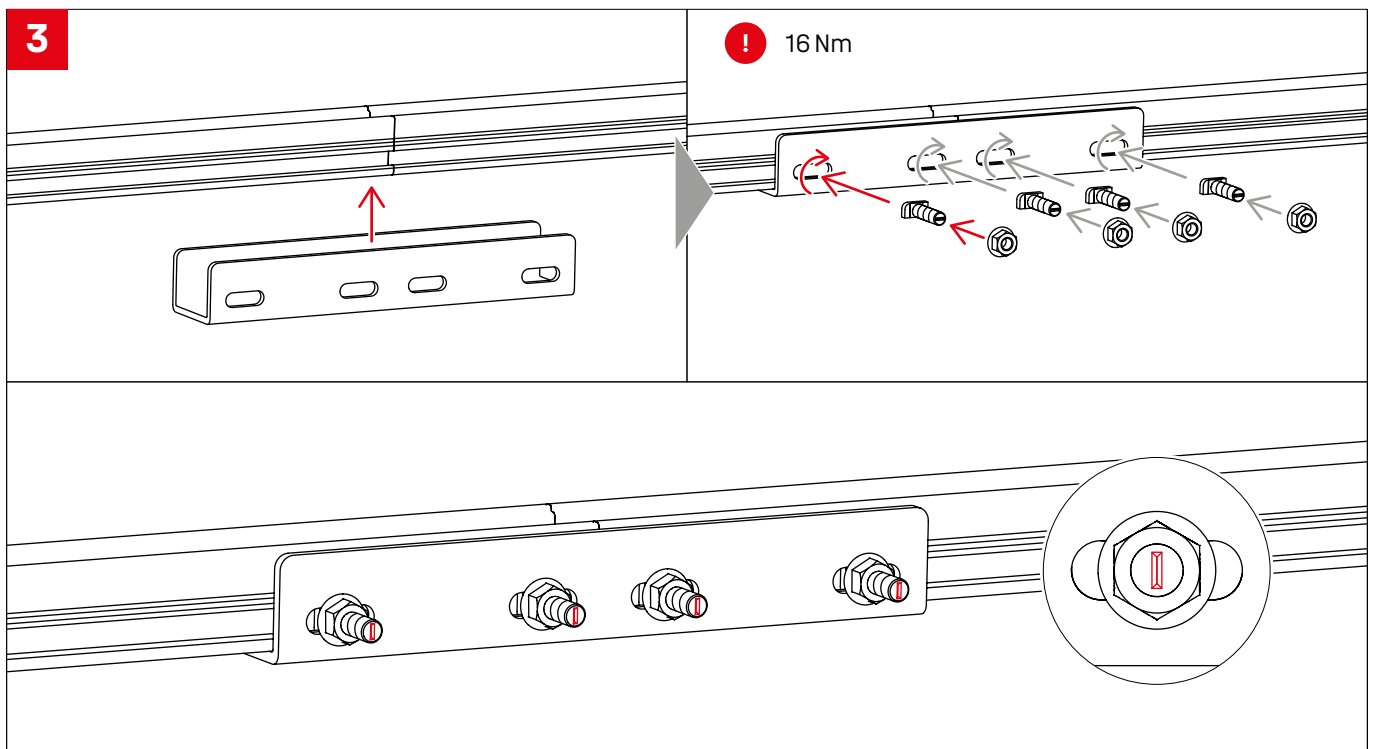
Set anchors



Rail attachment



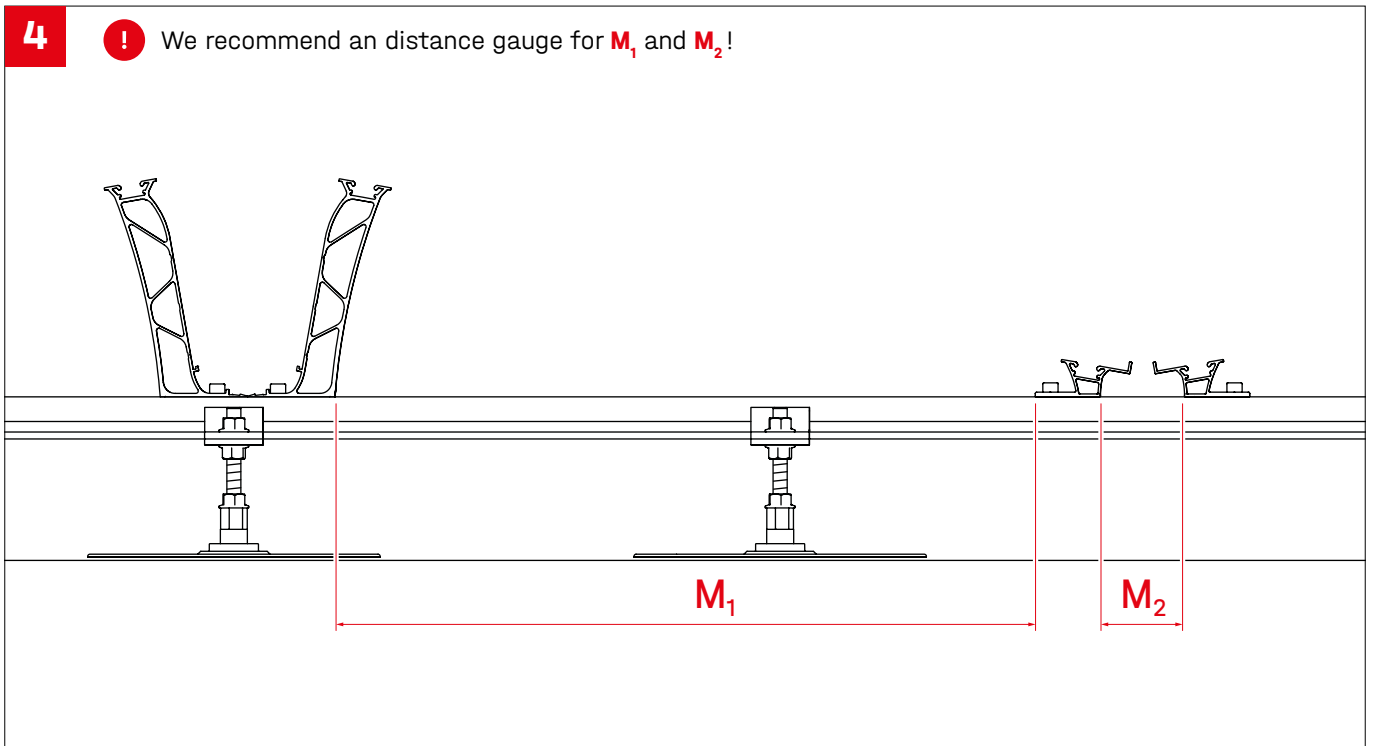
Connecting rails



Pre-assembly dimension SD/Peak

4

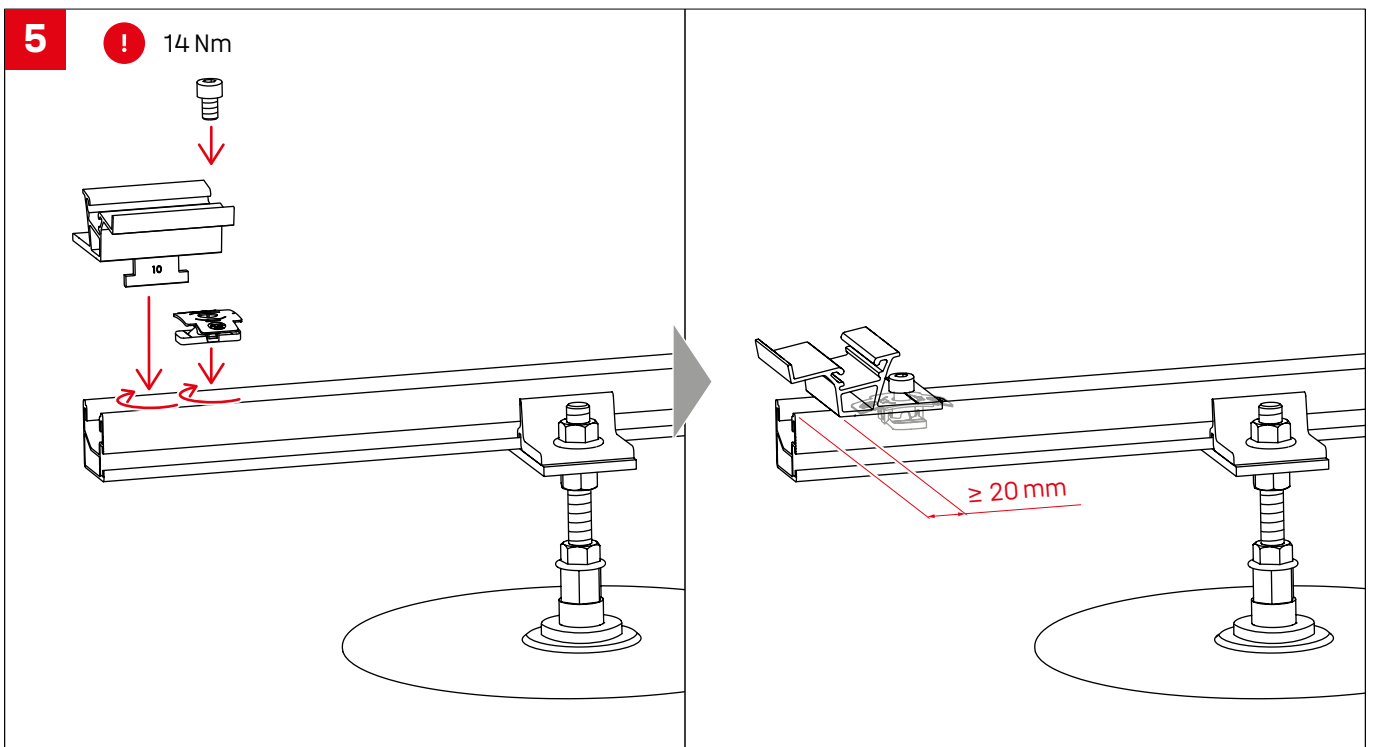
! We recommend an distance gauge for M_1 and M_2 !



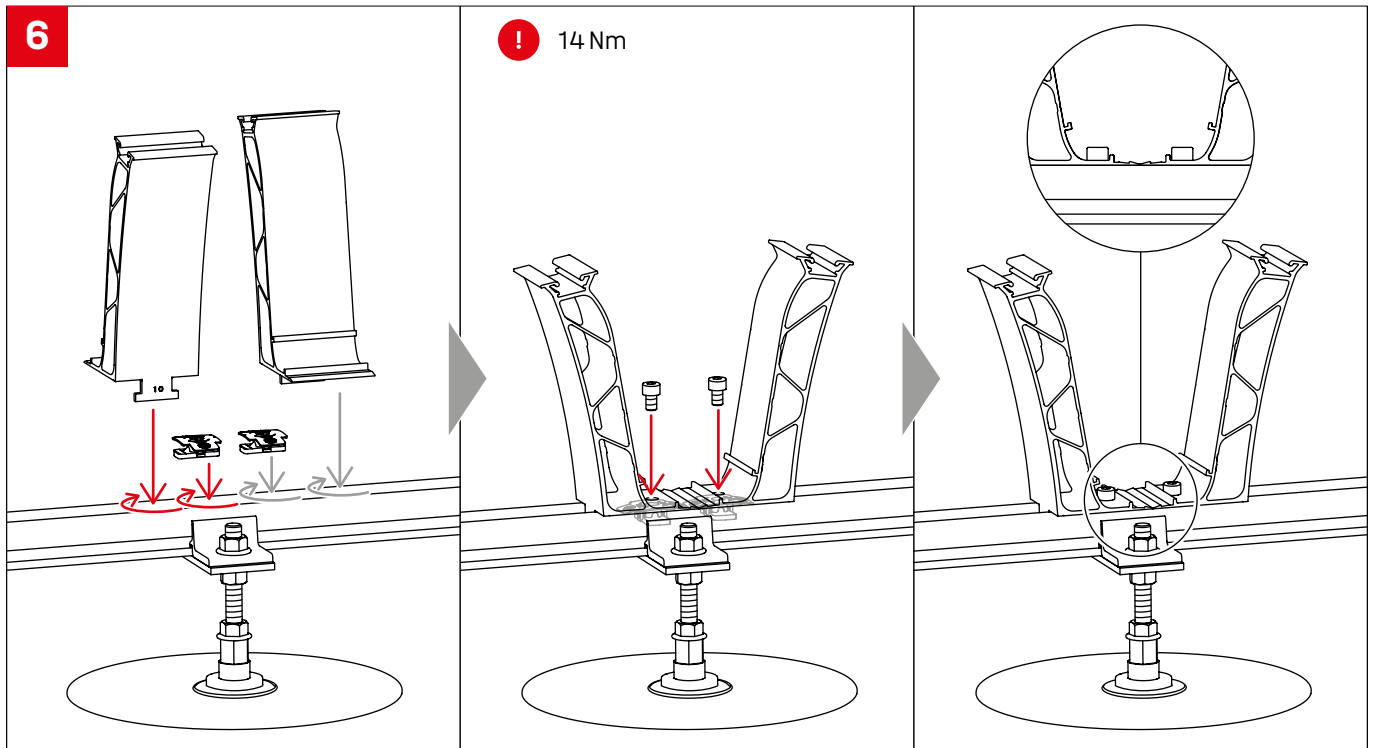
Assembly Dome 6.10 SD

5

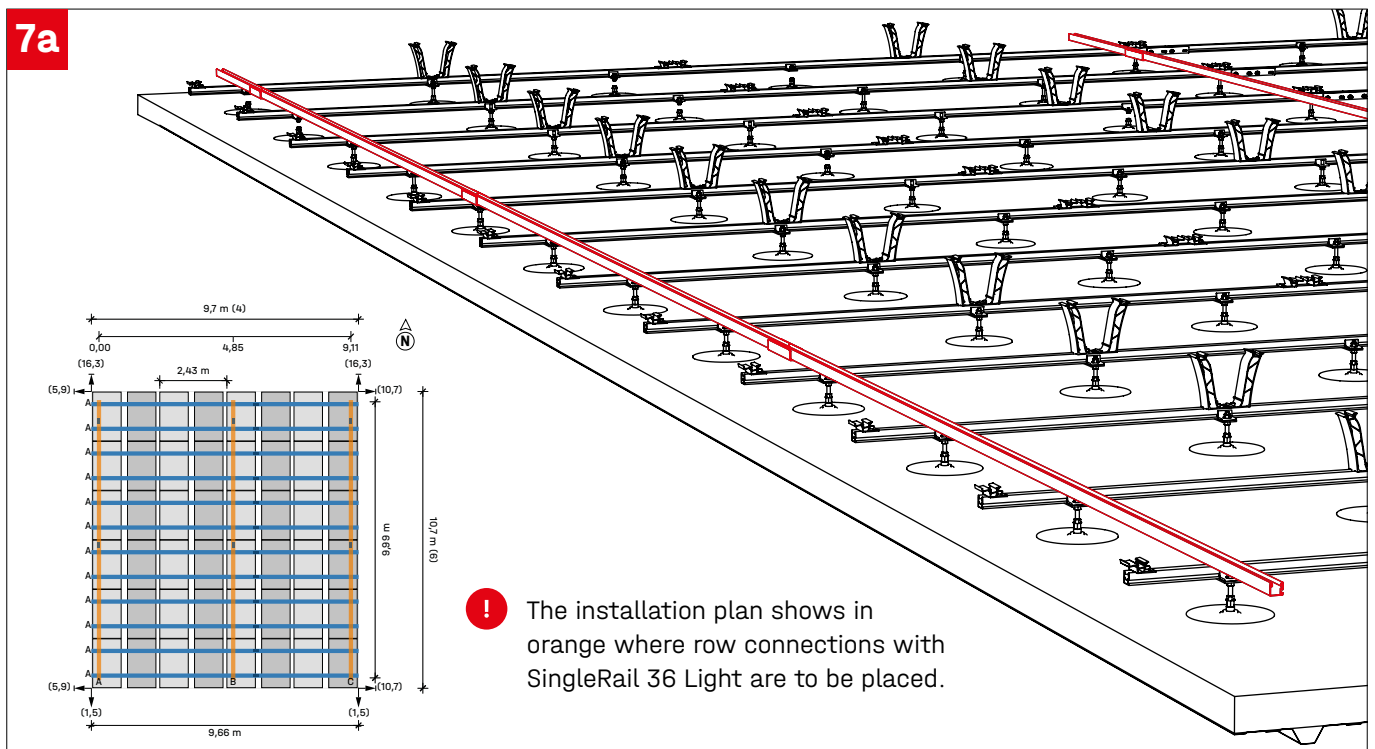
! 14 Nm



Assembly Dome 6.10 Peak

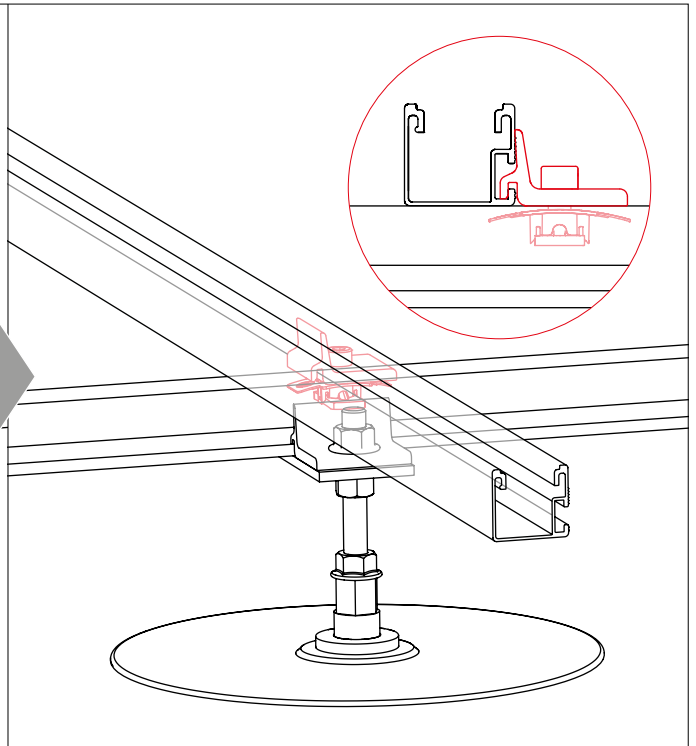
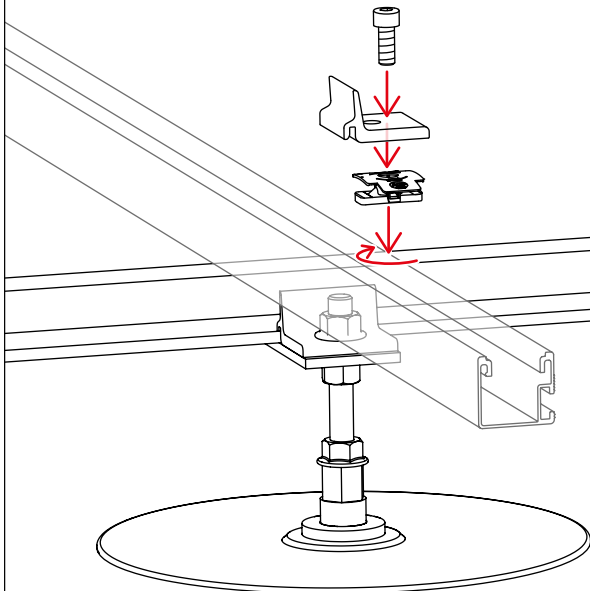


Bracing with SingleRail 36 light



7b

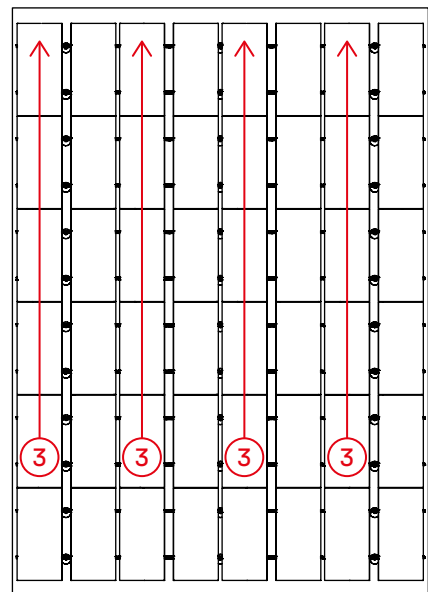
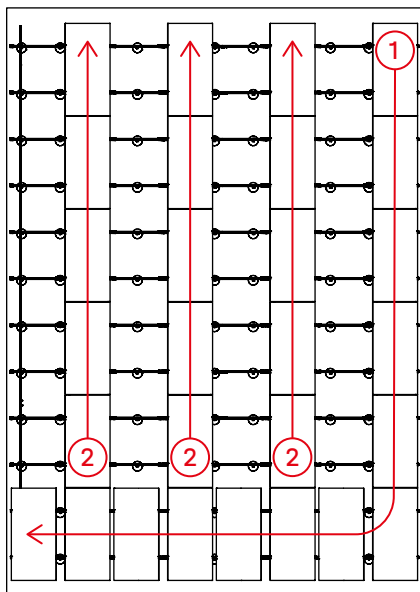
! 16 Nm



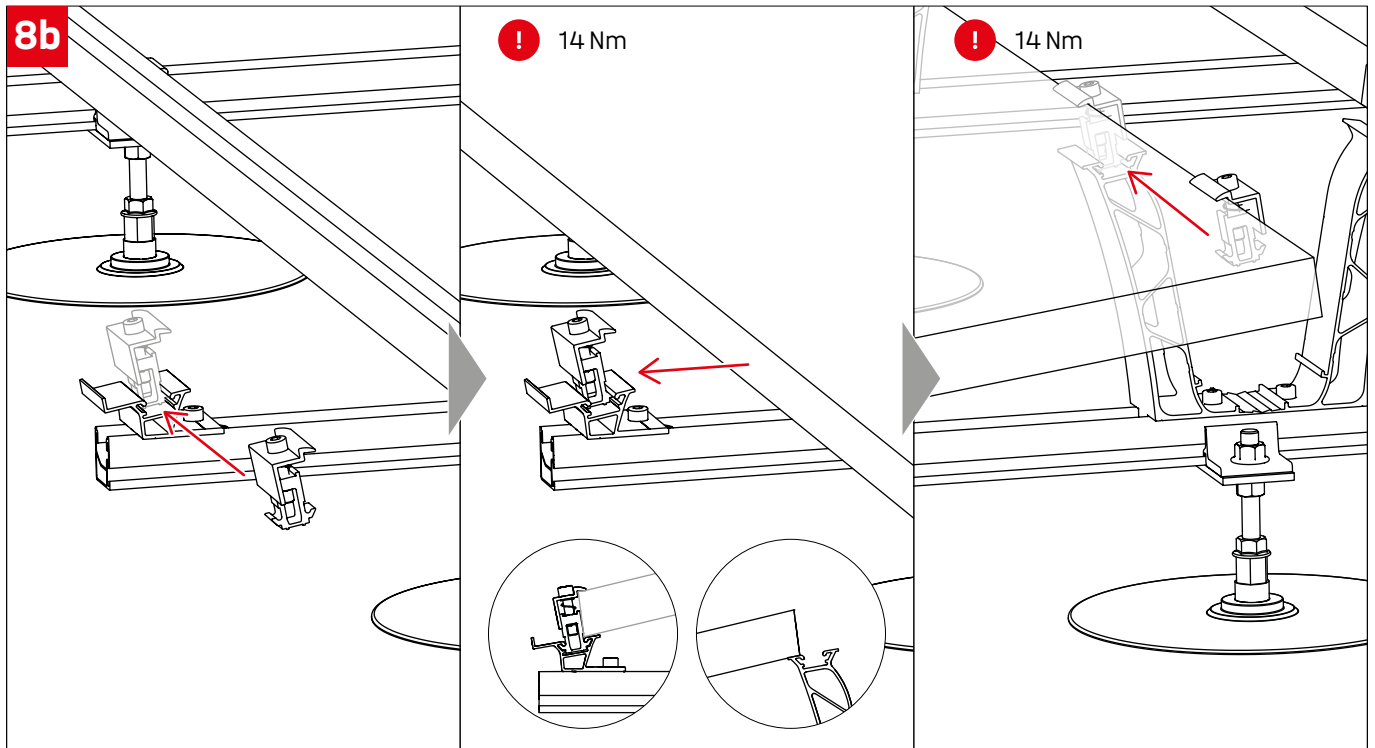
2003145

Module assembly sequence

8a

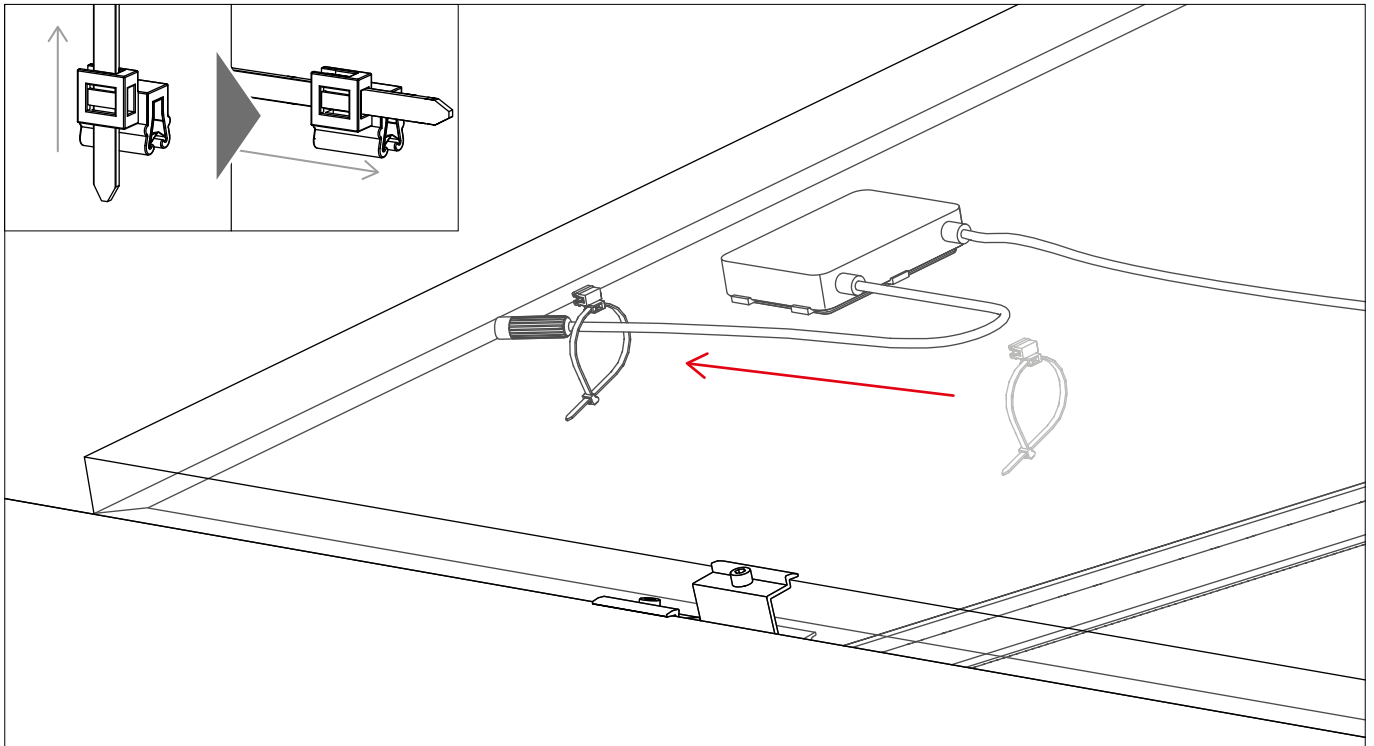


Module assembly

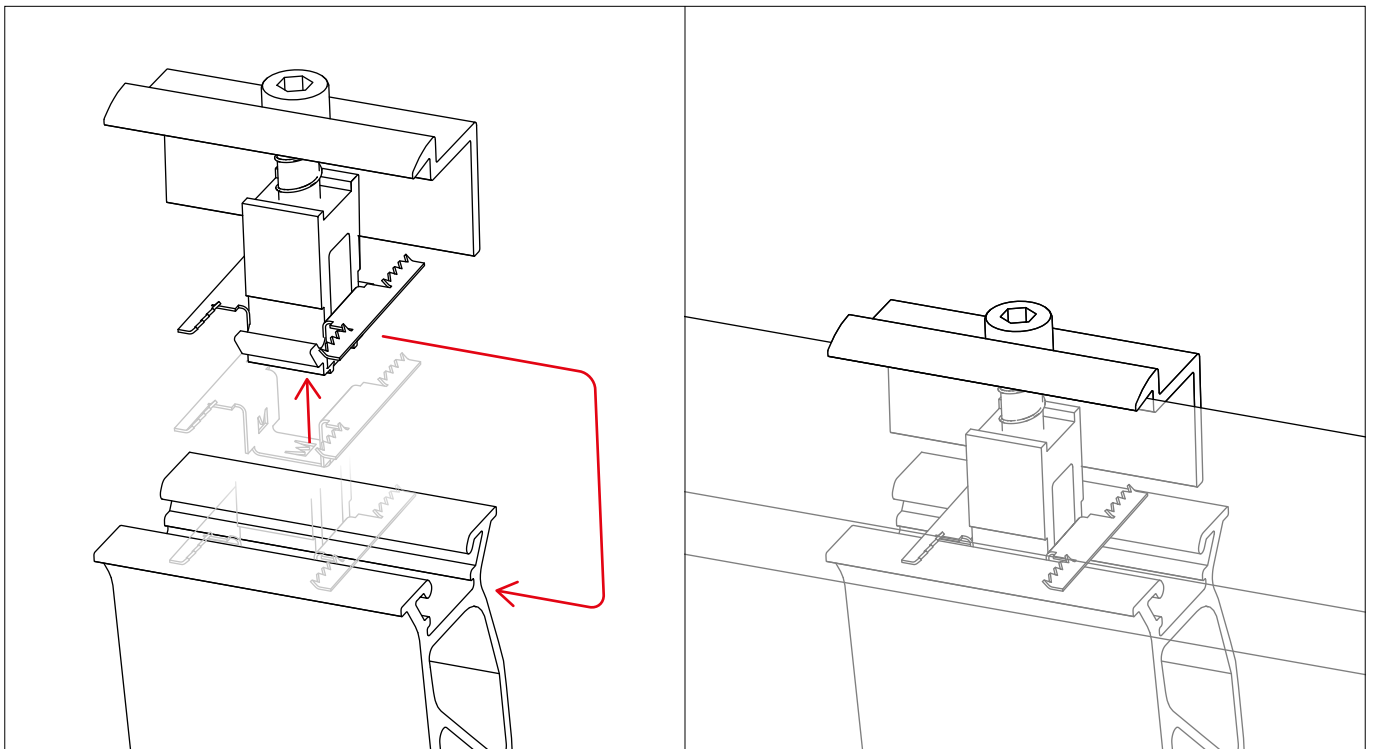


Optional

Cable management with Cable Manager



Module frame earthing with TerraGrif K2MI



Thank you for choosing a K2 mounting system.

Mounting systems from K2 Systems are quick and easy to install. We hope these instructions have helped. Please contact us with any questions or suggestions for improvement. Our contact data:

- k2-systems.com/en/contact
- **Service Hotline: +49 7159 42059-0**

Our General Terms of Business apply. Please refer: k2-systems.com

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D-Dome 6 Lifted LS Assembly EN V1 | 0426 · Subject to change
Product illustrations are exemplary and may differ from the original.



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