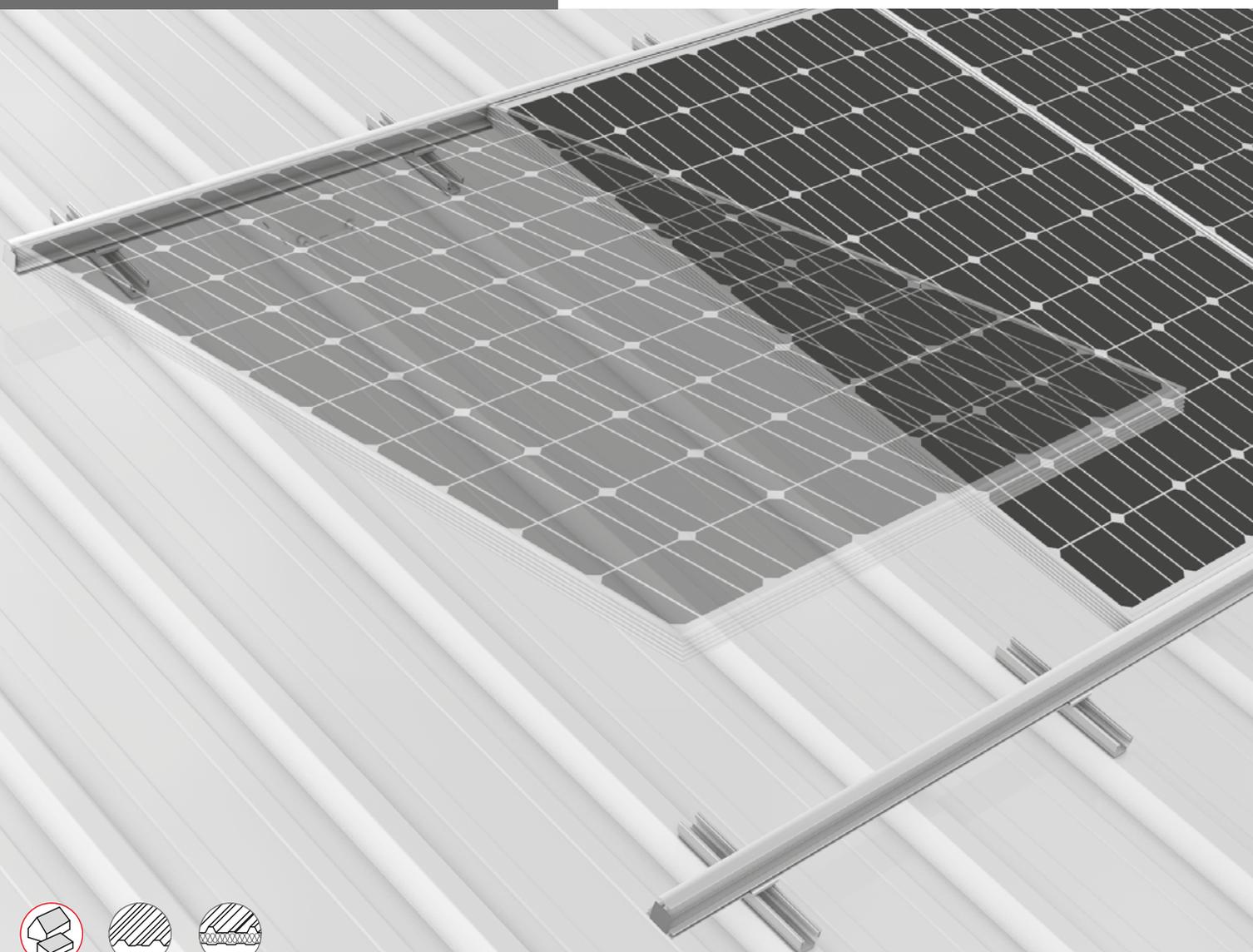


We support PV systems



Insertion System on trapezoidal sheet metal

ASSEMBLY MANUAL



Content

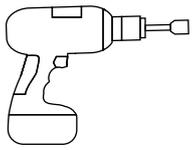
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Quality tested – several certifications

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:
www.k2-systems.com/en/technical-information

Tools overview



3/4/5 mm



TX25/40



7/8/9/13 mm



6 - 35 Nm
[4,5 - 22,2 lb-ft]



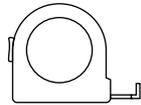
3/5/6 mm



7/9/13 mm



15/19 mm

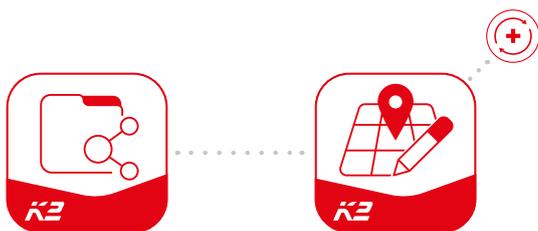


≥ 3,0 m



≥ 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.

Get started and register now:

docuapp.k2-systems.com →

base.k2-systems.com →

General safety information

Please note that our general mounting instructions must be followed at all times and can be viewed online at www.k2-systems.com/en/technical-information

- ▶ 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 web-site 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 www.k2-systems.com/en/technical-information 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

The InsertionRail with MultiRail can be used on trapezoidal sheet metal roofs without further testing by K2 Systems in the following standard conditions. The system is also suitable for higher requirements. However, if a value exceeds the standard conditions, please contact K2 Systems.



Planning with K2 Base

We recommend our free online software K2 Base for the planning. In five steps, you can plan the right assembly system and get a construction recommendation, parts list and the structural analysis report. Simply register and start planning: base.k2-systems.com



Important mounting instructions

- ▶ On site, the general standards and regulations for lightning protection must be observed and, if necessary, a specialist must be called in to draw up a lightning protection concept (use lightning protection terminal if necessary). Country-specific regulations must be observed.
- ▶ If the trapezoidal sheet metal is fastened with calottes, the MultiRails must not be screwed onto them. It is absolutely necessary to measure the distances in advance.
- ▶ Fastening of the MultiRails on trapezoidal sheet metal with building authority approved thin sheet metal screws.
- ▶ At gaps the minimum distance between two horizontal rails is 7 mm.
- ▶ Thermal separation of module blocks:
 - MultiRail:
max. 13.6 m
 - Insertion rails / module level:
max. 21.0 m



Roof requirements

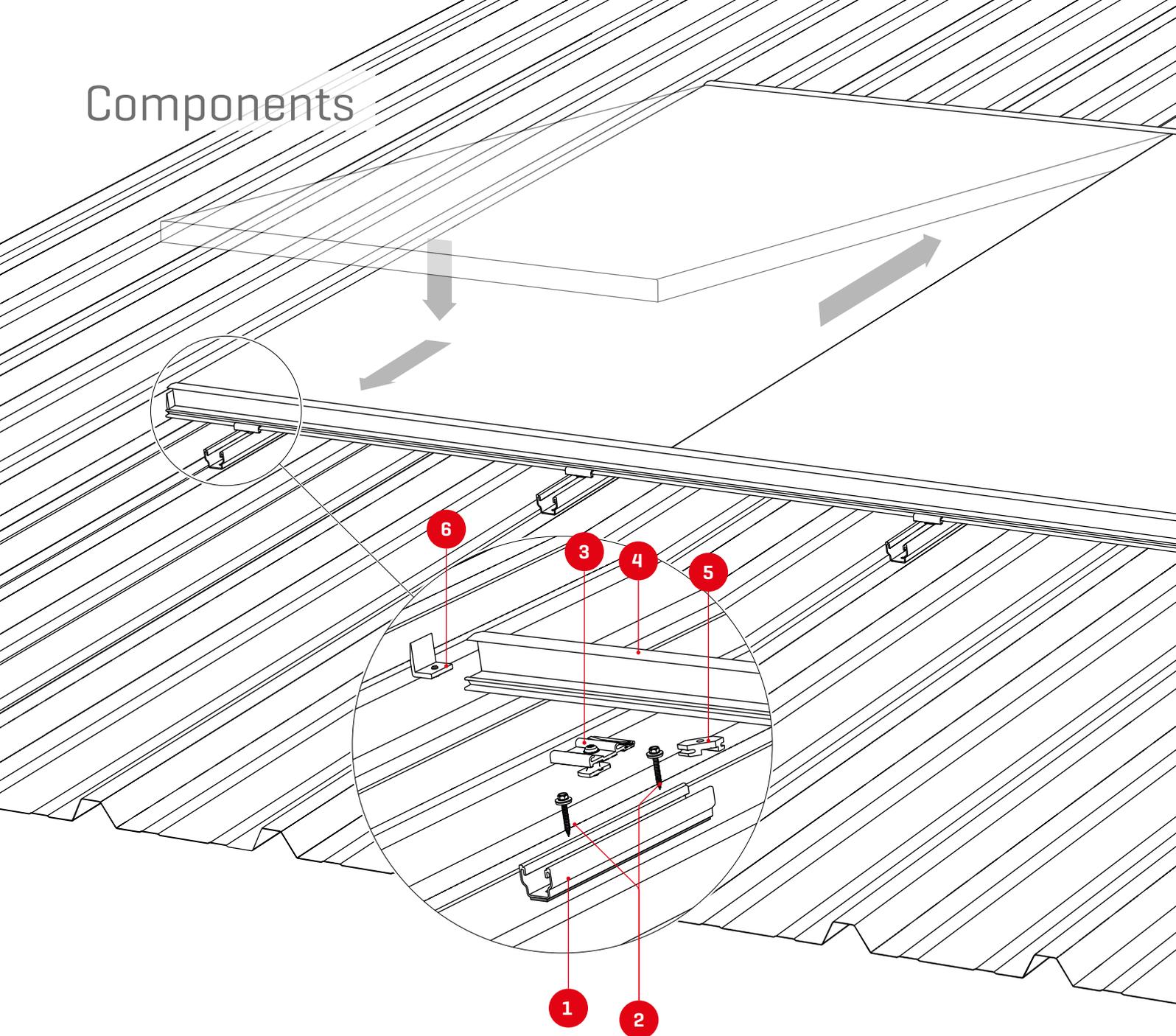
- ▶ Sufficient holding force of the roof covering on the supporting or substructure
- ▶ Roof pitch: 5 - 75°
- ▶ Trapezoidal sheet thickness ≥ 0.4 mm steel and ≥ 0.5 mm aluminium
- ▶ Steel grade min. S235 according to DIN EN 10025-1
- ▶ Minimum tensile strength aluminium 165 N/mm²
- ▶ Minimum crest width 22 mm, plane support around the borehole: $\varnothing \geq 20$ mm
- ▶ If the roof pitch is less than 12°, the module must be secured against upward migration by means of a module earthing clip or by pulling a wire rope in the insertion profile.



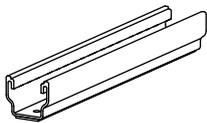
Structural requirements

The static verification of the components is automatically calculated for the respective location by the K2 Base planning software. The design is provided by means of a project report and must be adhered to.

Components



1 2002793



MultiRail 25/4

2 1005207



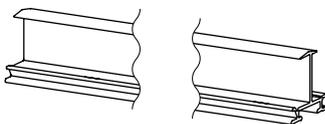
**Self-tapping screw with
sealing washer**

3 2002762 / 2002763



CrossConnector
aluminium mill finish / black anodised

4 Item number
system-specific!



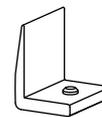
InsertionRail
30 / 35 / 40 mm module frame height

5 2002766

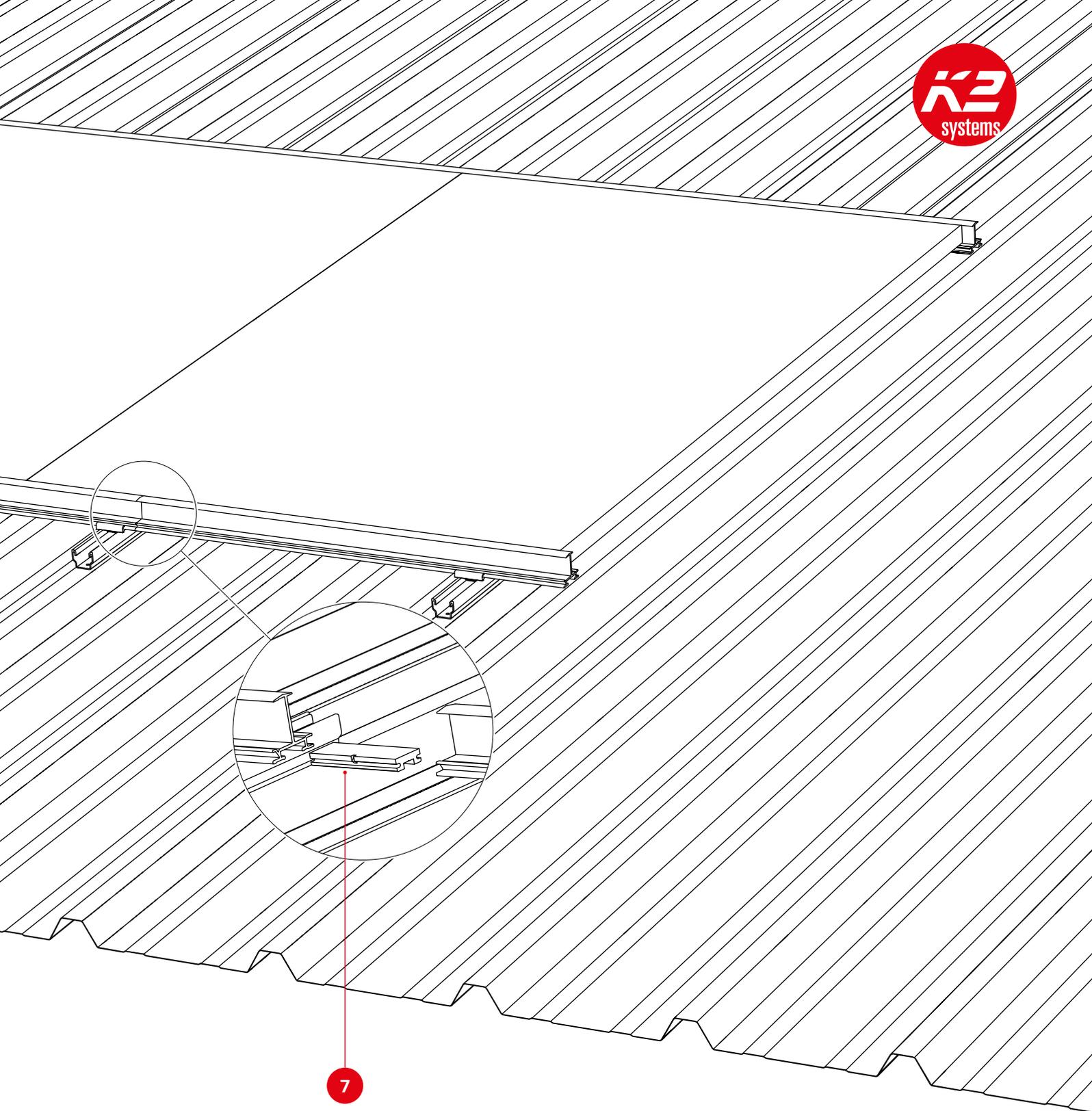


InsertionRail Fix Stop

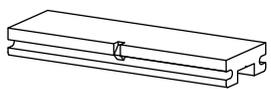
6 2002760 / 2002761



InsertionRail End Stop
aluminium mill finish / black anodised



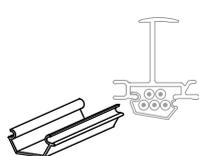
7 2002764



InsertionRail Connector

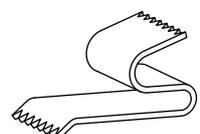
Optional Components

2002767



InsertionRail Cable Clip

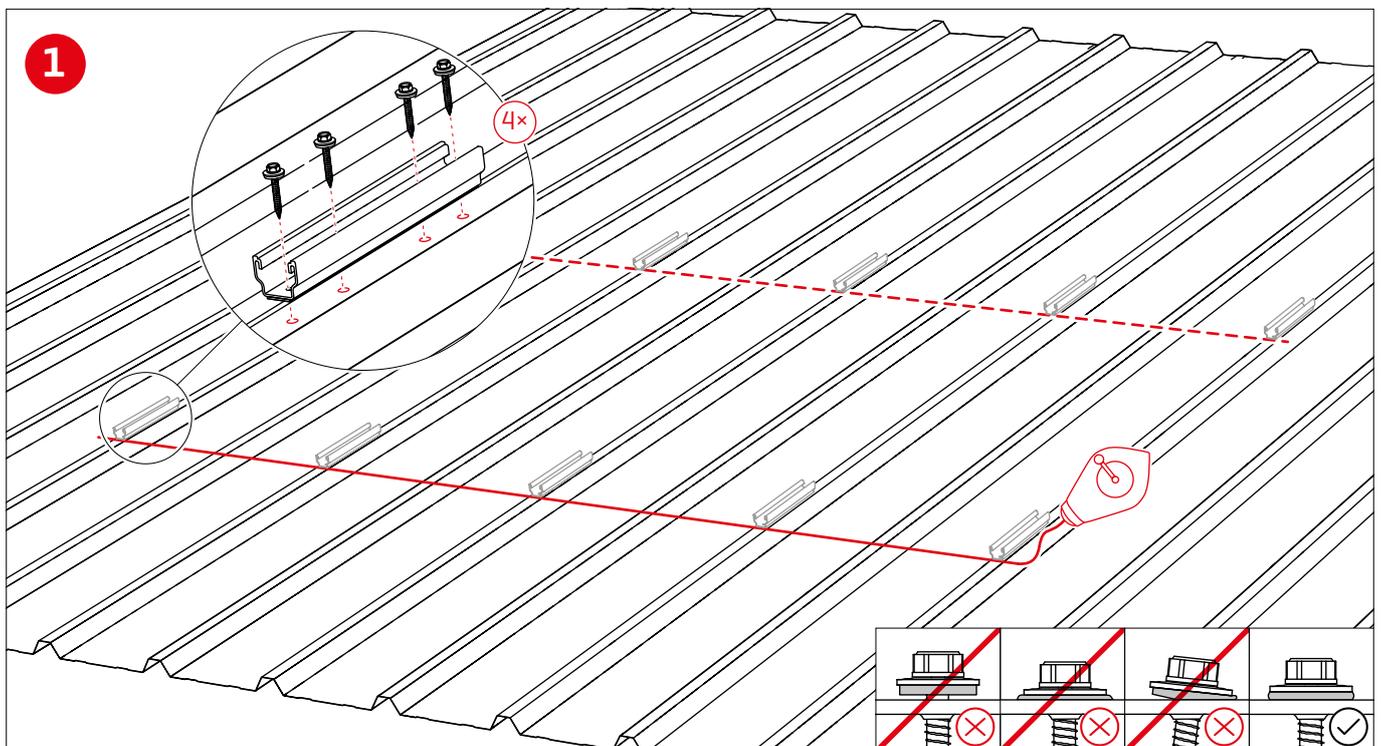
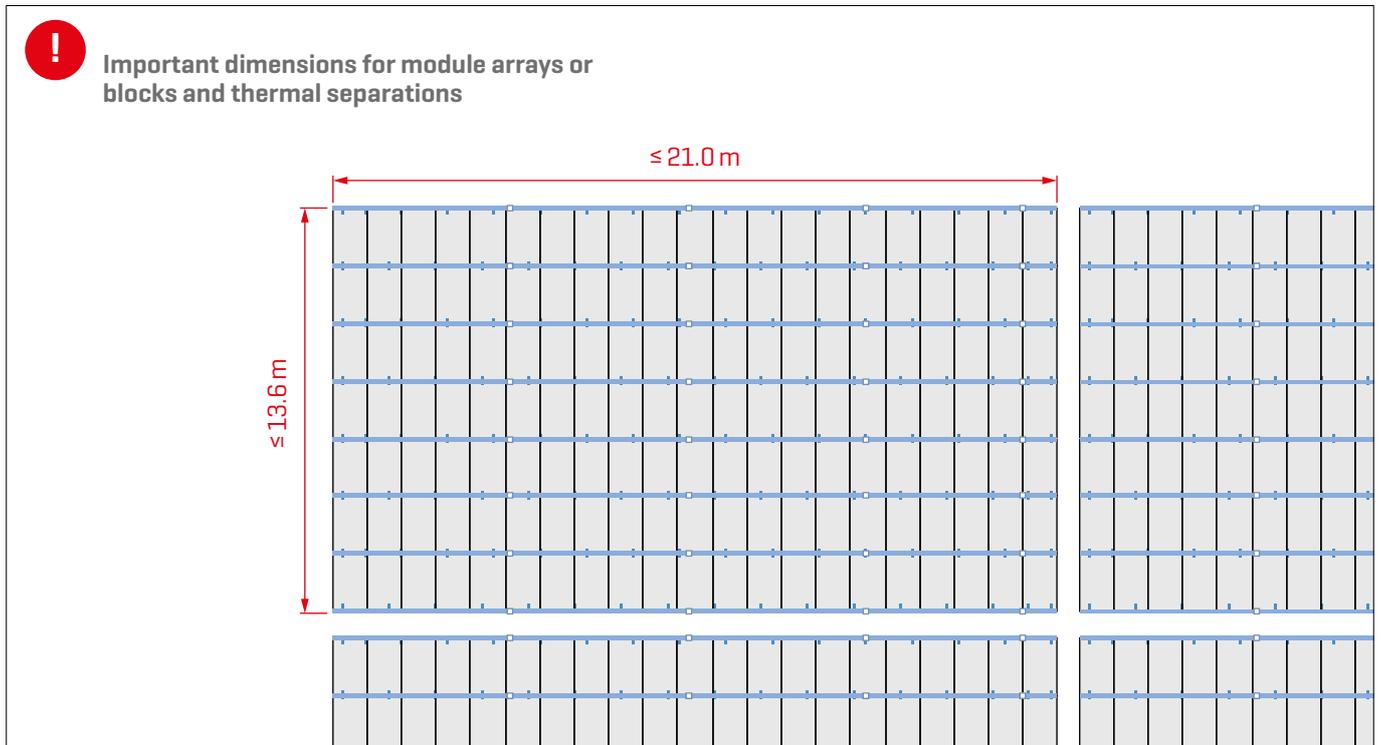
2002397

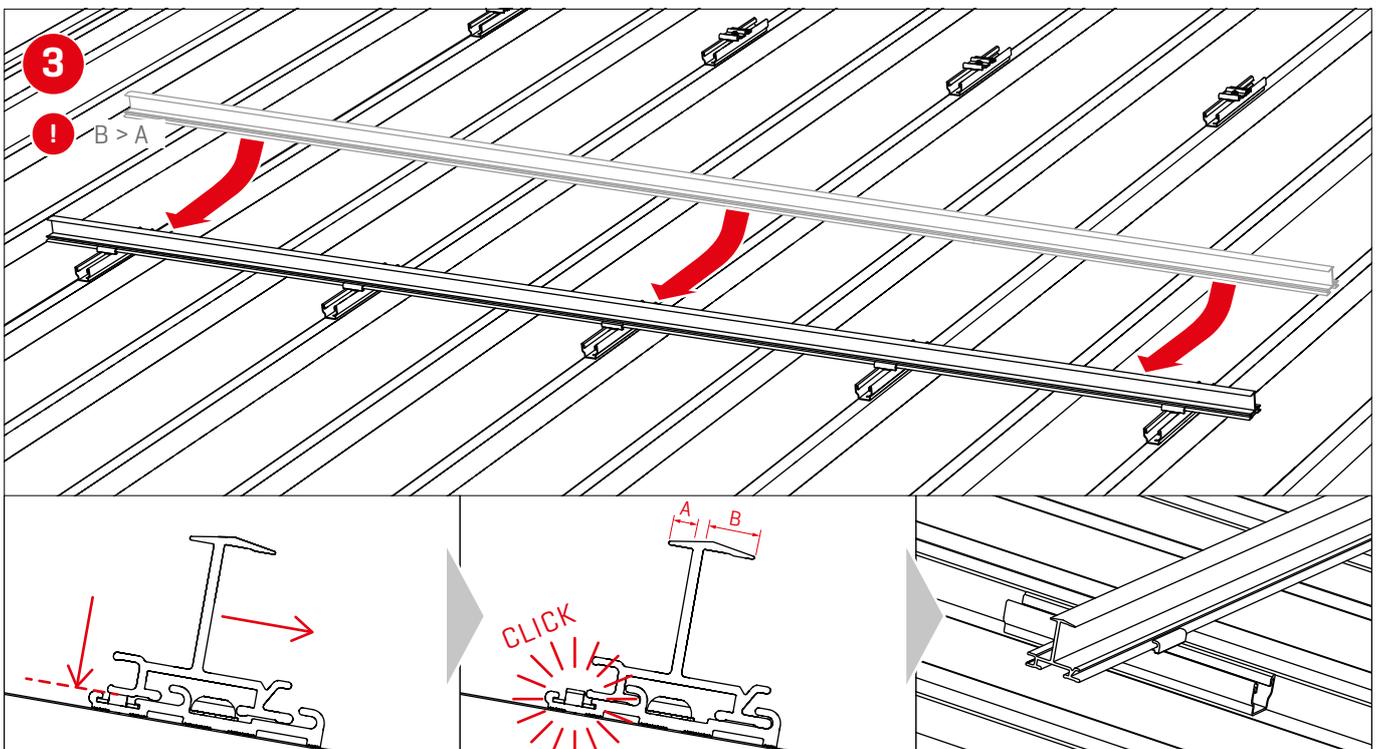
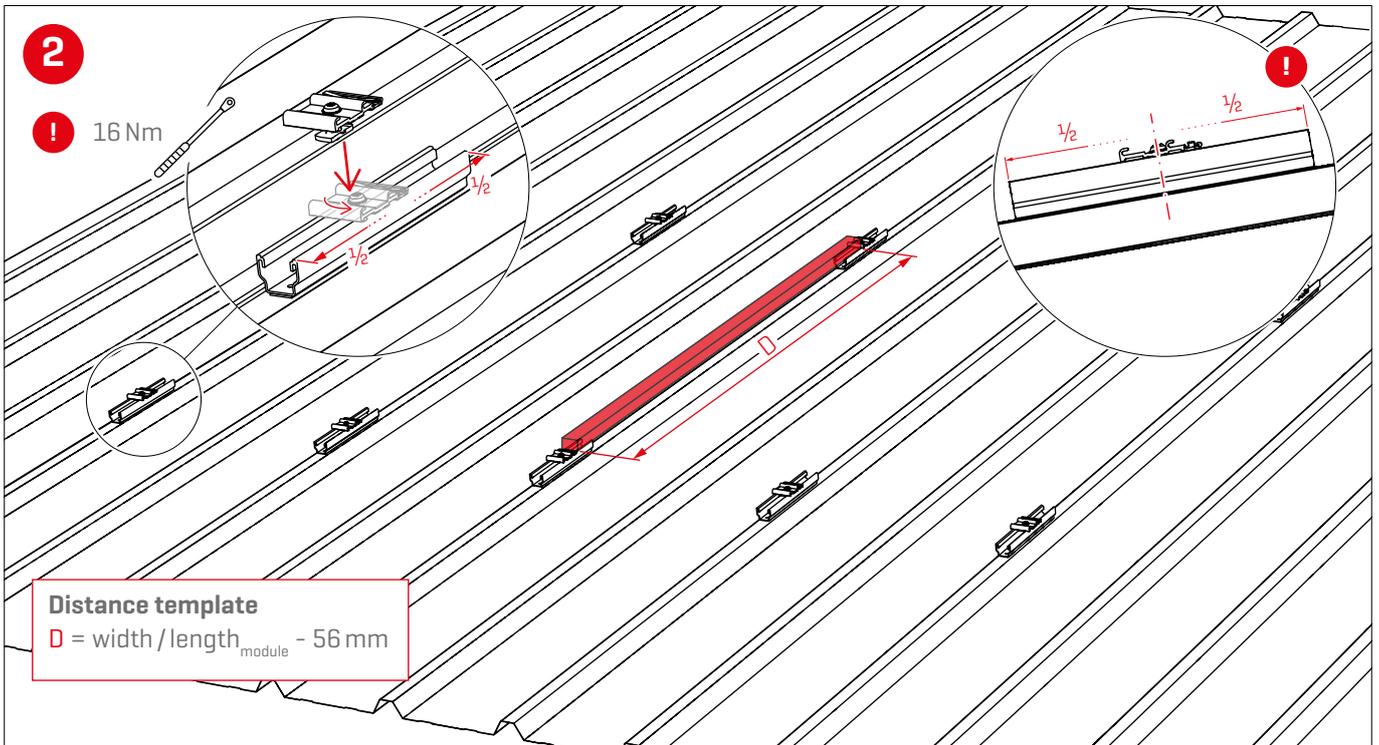


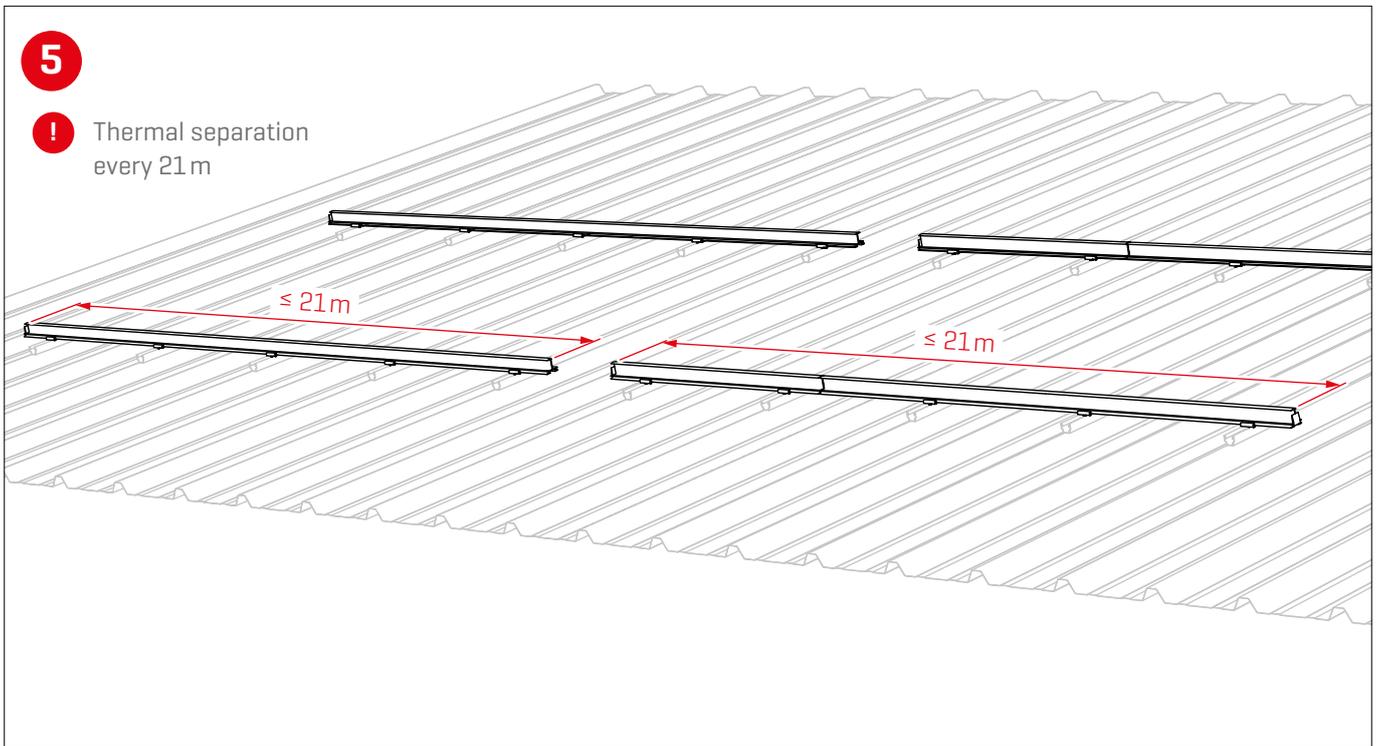
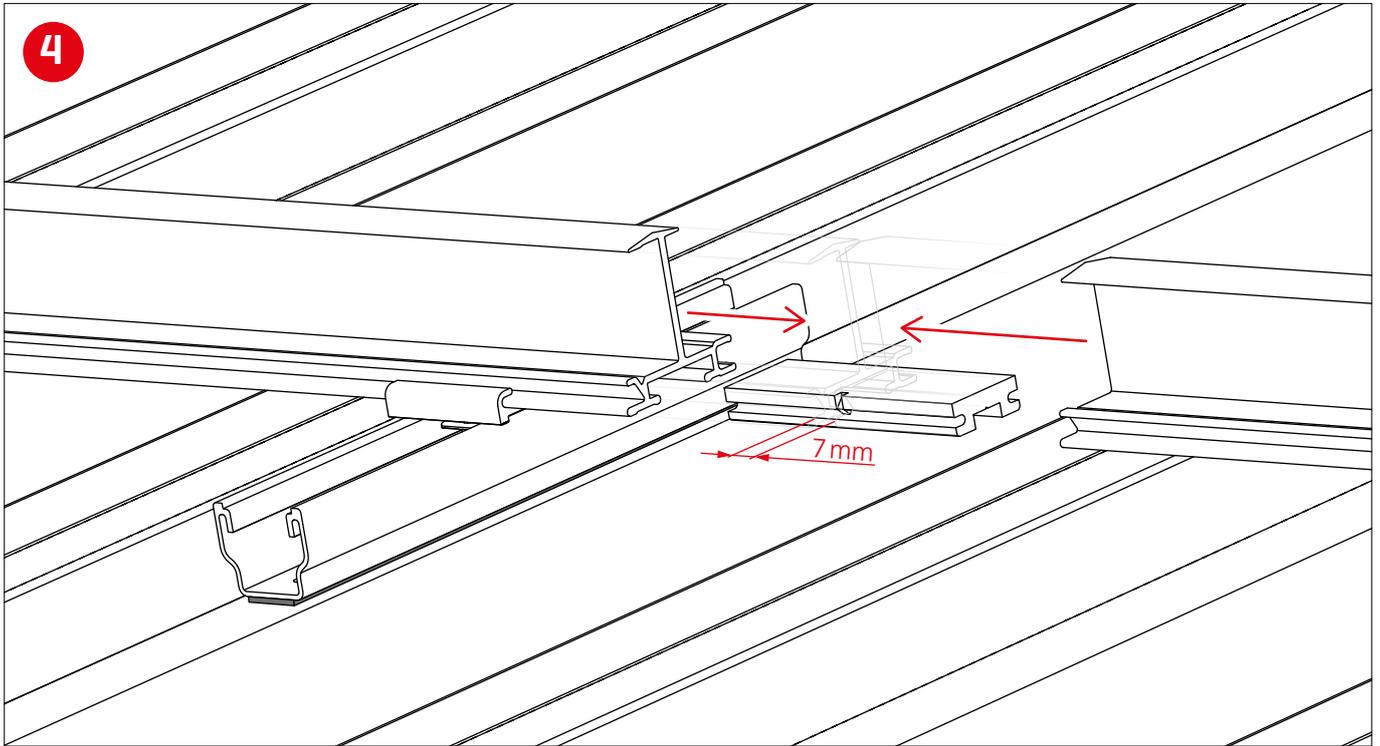
TerraGrif S

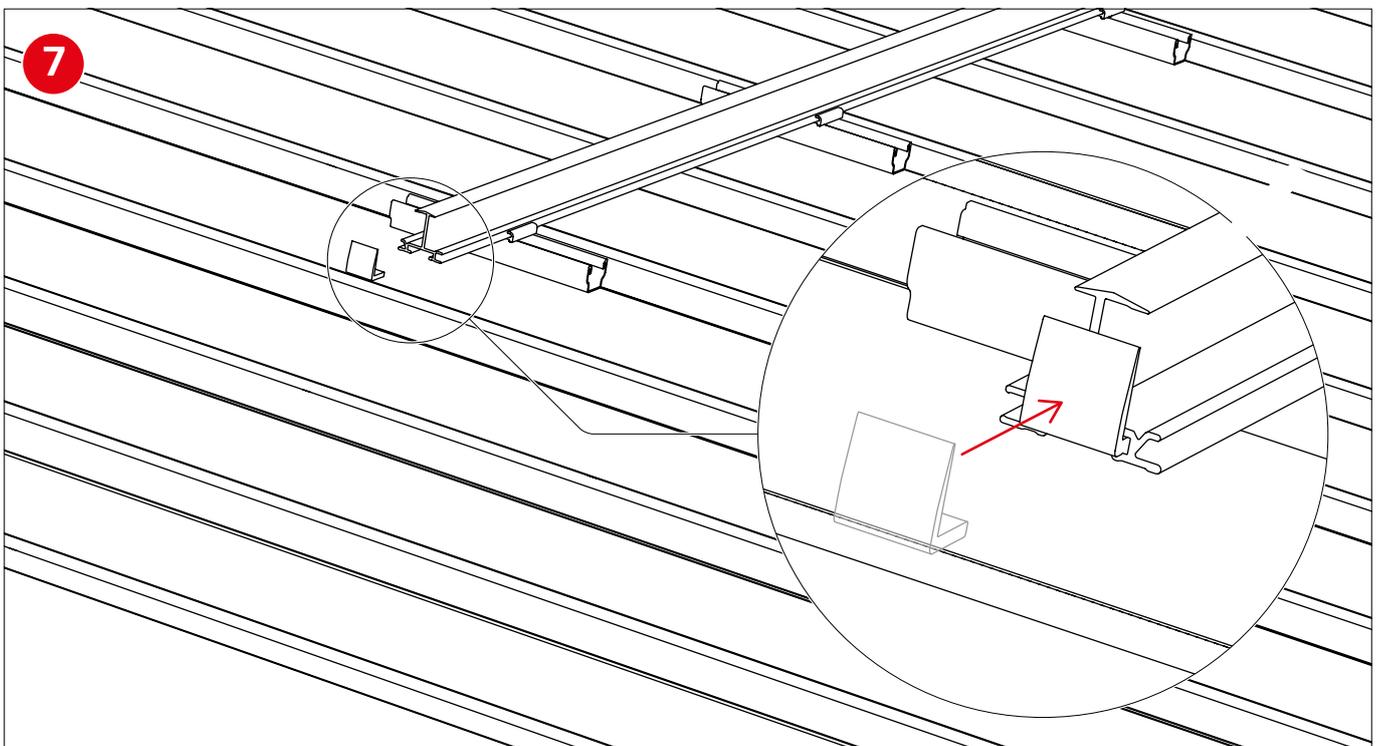
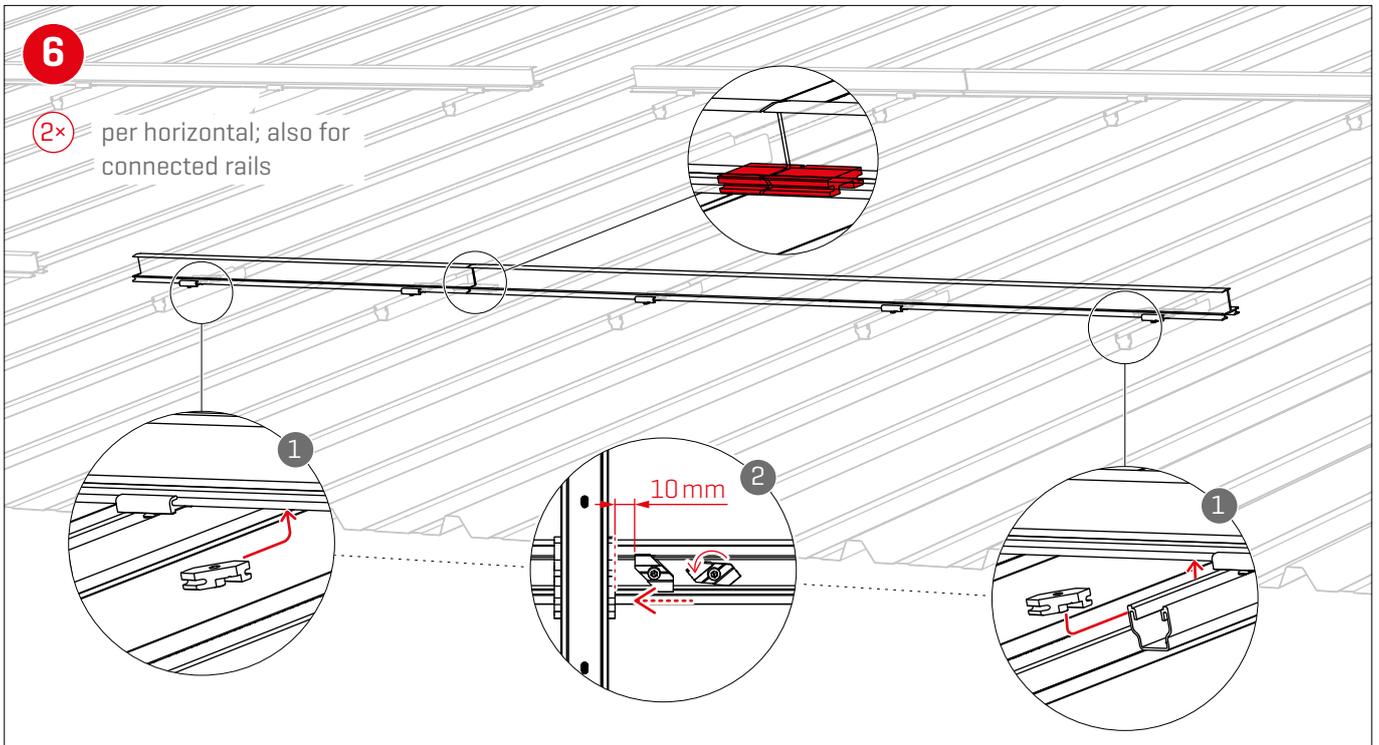
Assembly

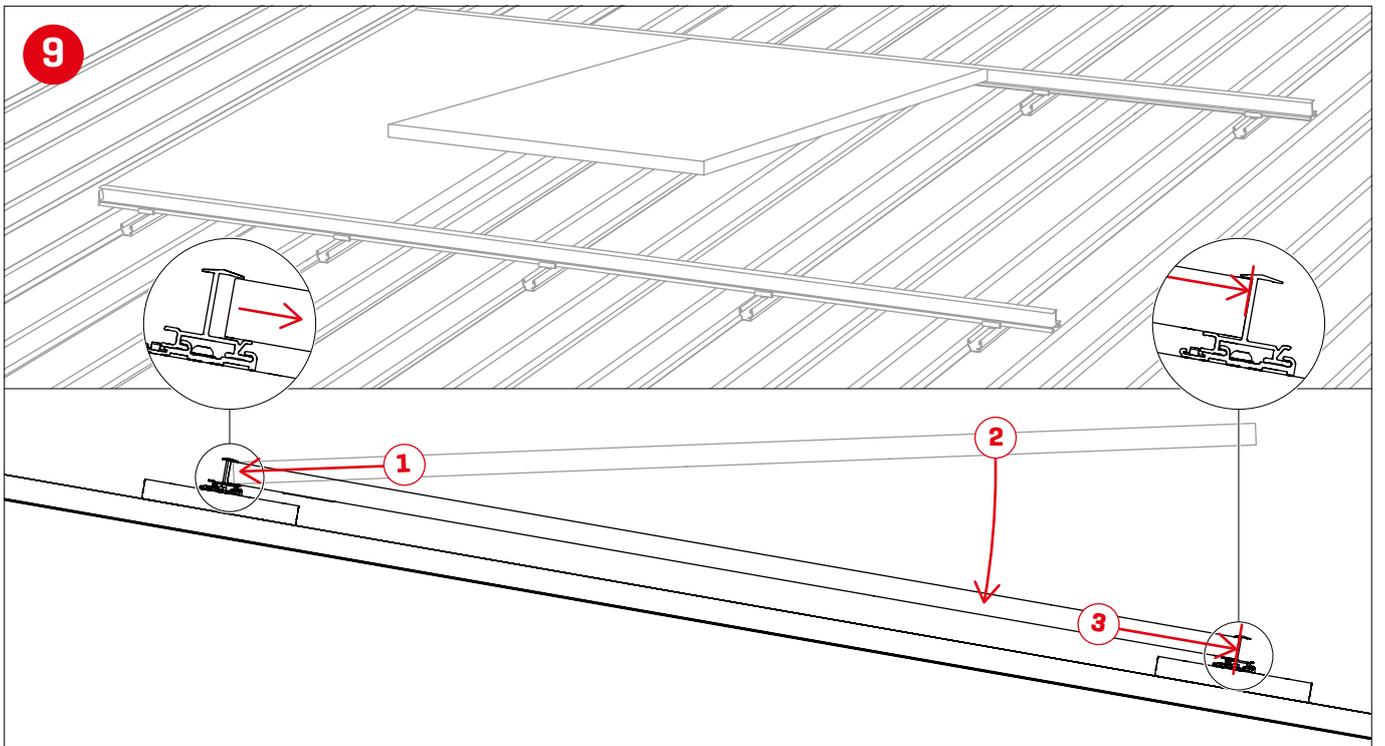
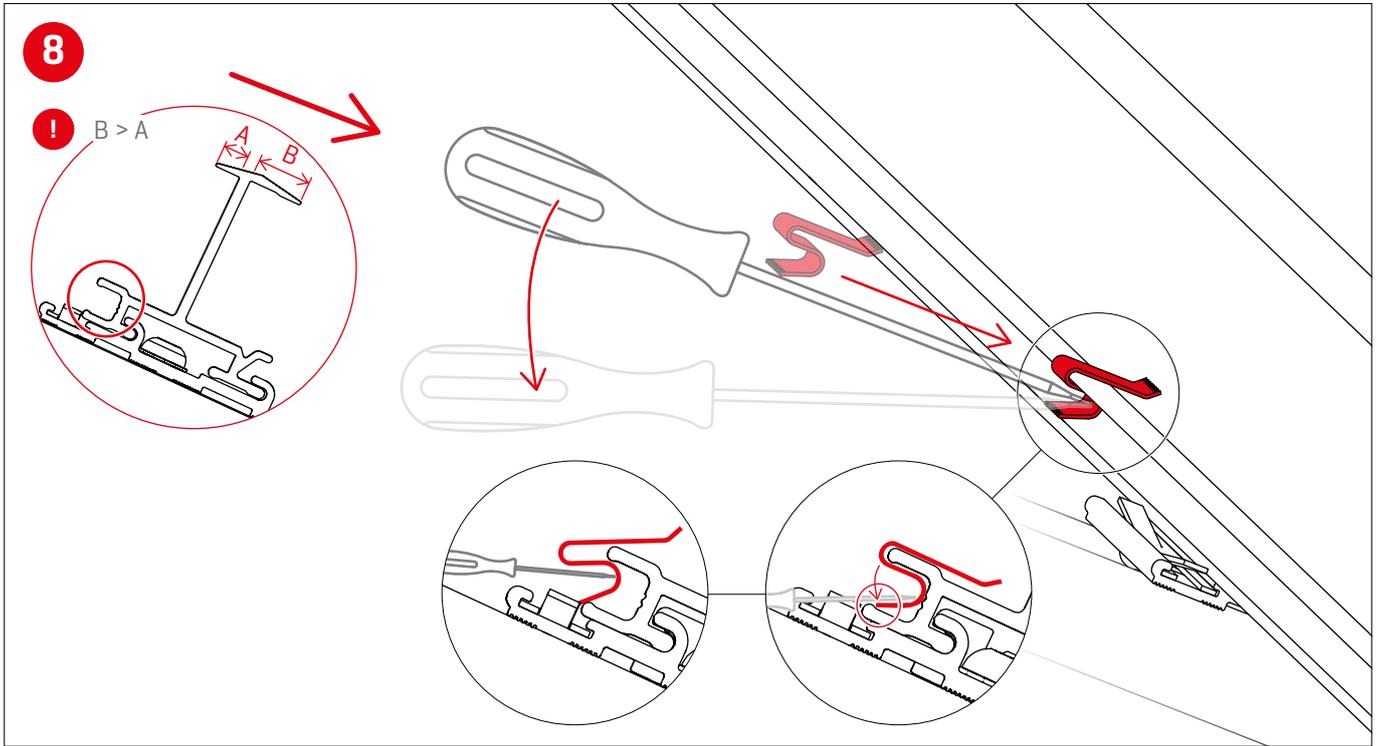
Portrait and Landscape



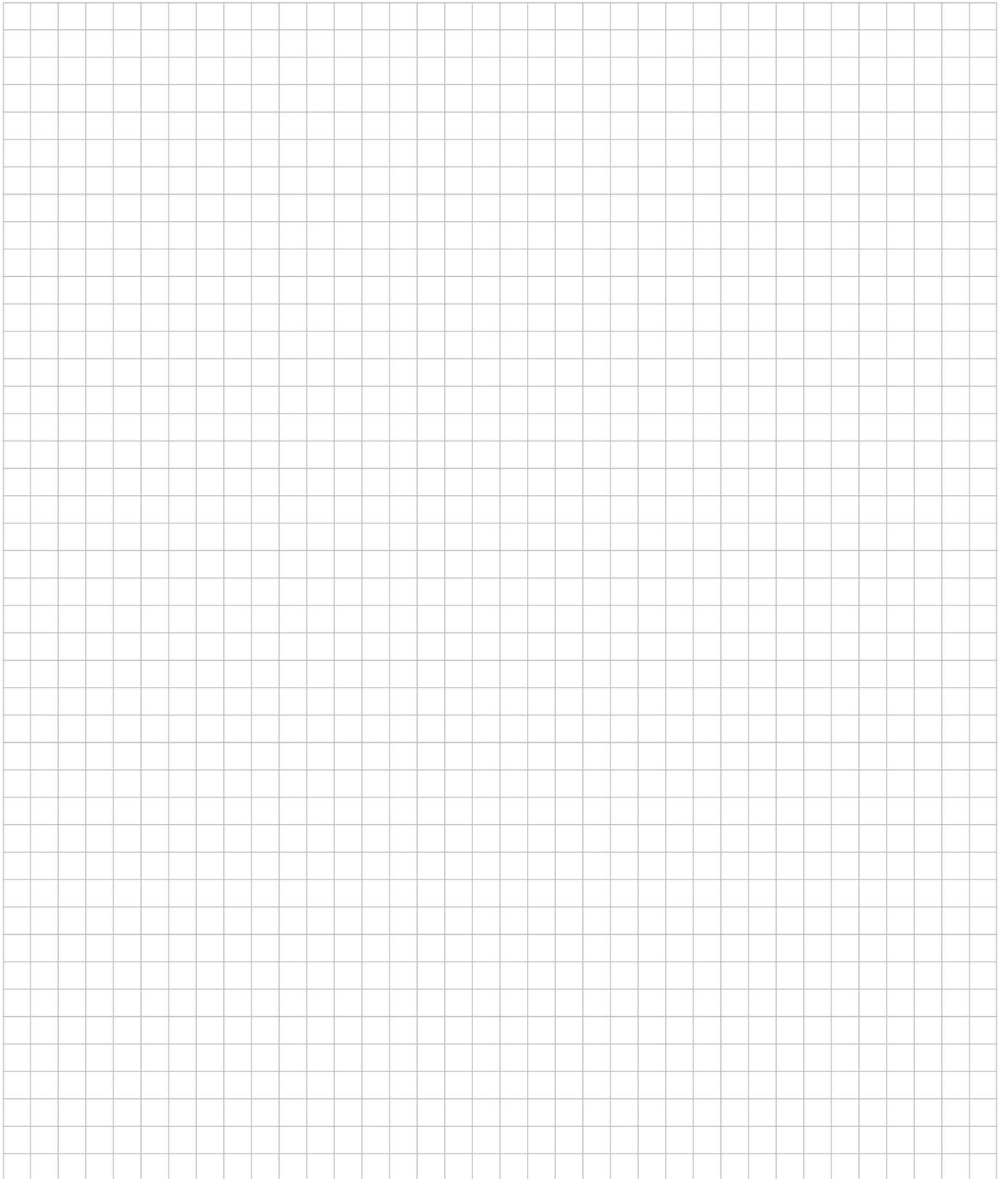


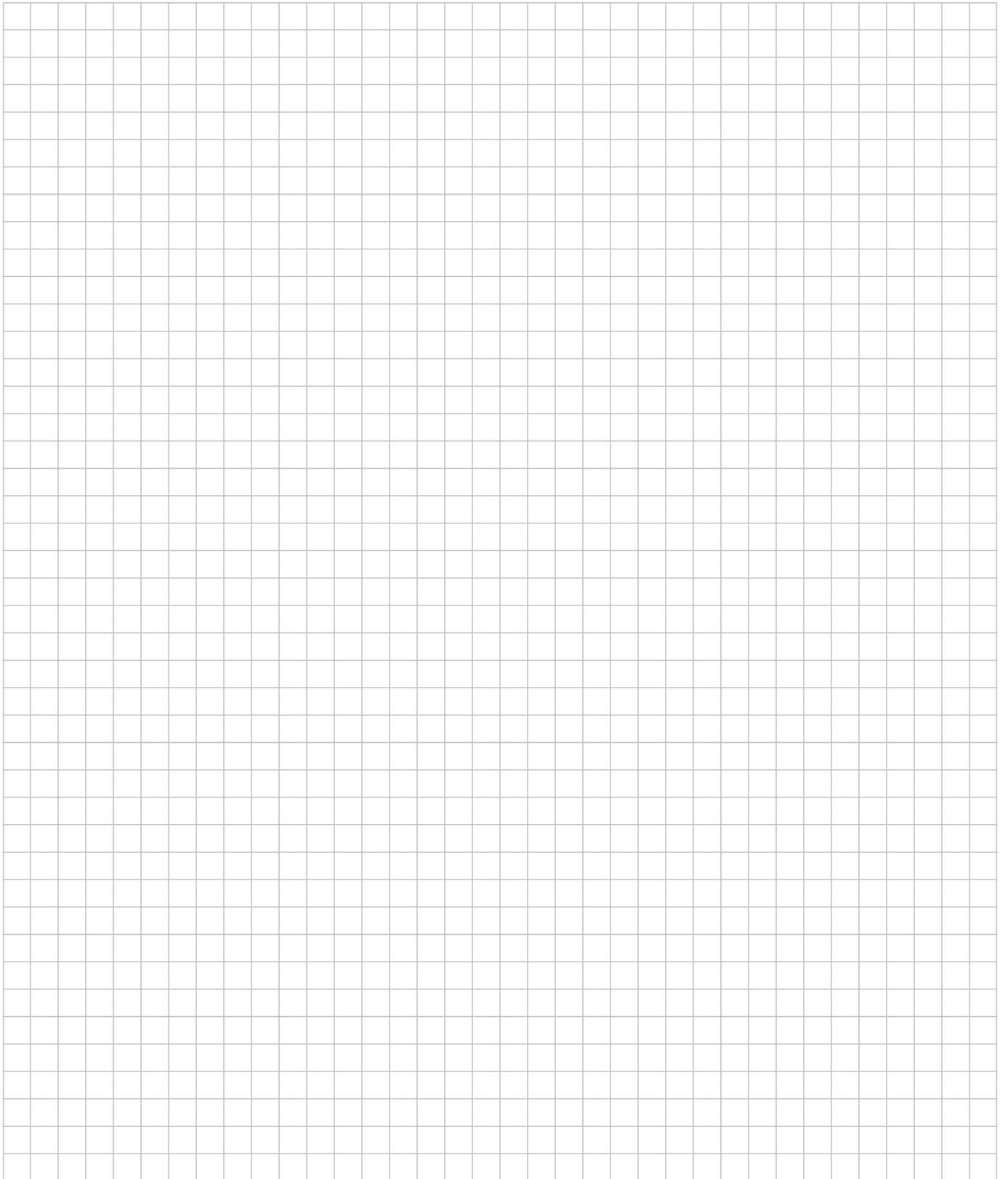






Notes





We support PV systems



Thank you for choosing a K2 mounting system.

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:

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

Our General Terms of Business apply. Please refer:
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