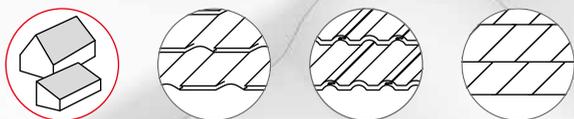
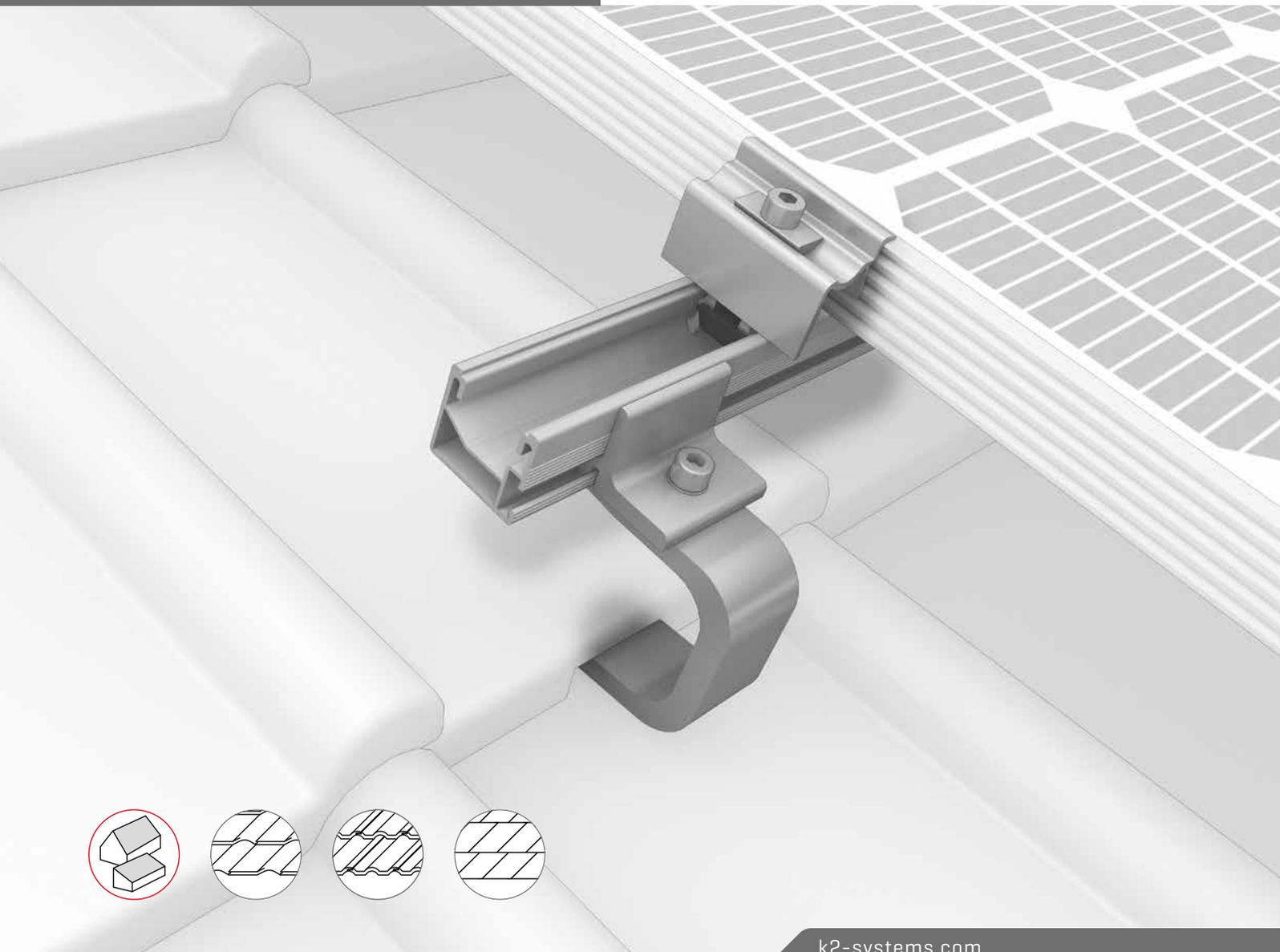


We support PV systems



SingleRail System with roof hooks

ASSEMBLY MANUAL



Content

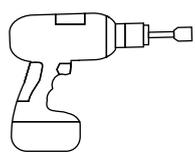
/ Tools overview	3
/ General safety information	4
/ The following guidelines apply	5
· Roof requirements	5
· Important mounting instructions	5
/ Components	6
· Base components	6
· CrossBoard and SingleBoard	8
/ Compatible roof hooks	9
· CrossHook 3S	9
· CrossHook 4S	9
· SingleHook 1.1	10
· SingleHook Alpin	10
· CrossHook 2	11
· SingleHook Vario	11
· L-Adapter for further roof hooks	12
/ Assembly	13
· Portrait	13
· Thermal separations	16
· Landscape with 2 rail layers	17
· Assembly between rafters	19
· Obstructions / roof edge: Use of CrossBoard / SingleBoard	21
/ Notes	23

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/en/technical-information

Tools overview



TX25/40



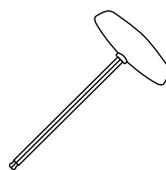
13 mm



6 mm



8.5 mm



6 mm



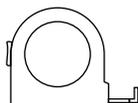
6 - 30 Nm
[4.5 - 22.2 lb-ft]



6 mm



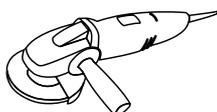
13 mm



≥ 3.0 m



≥ 6.0 m



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/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 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.
- German law shall apply excluding the UN Convention on CISG. Place of venue is Stuttgart. Our General Terms of Business apply.
- 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 SingleRail system with roof hooks can be used without further testing by K2 Systems in the following standard conditions. To calculate maximum distances between supports we recommend using our calculation tool K2 Base. The system is also suitable for higher requirements. However, if a value exceeds the standard conditions, please contact K2 Systems.



Roof requirements

- The sufficient holding force of the roof covering at the support or substructure must be ensured on site.
- Roof pitch of 5 - 75°
- Sufficient load reserves to support the PV system.

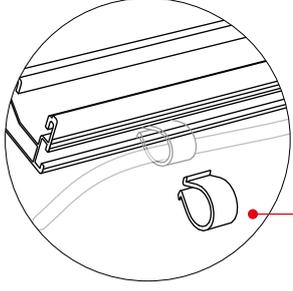
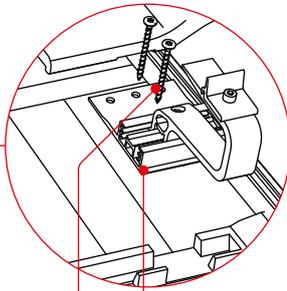
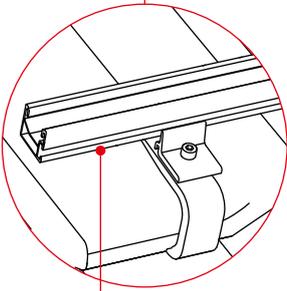
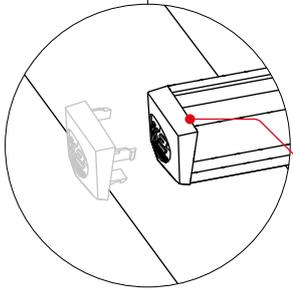
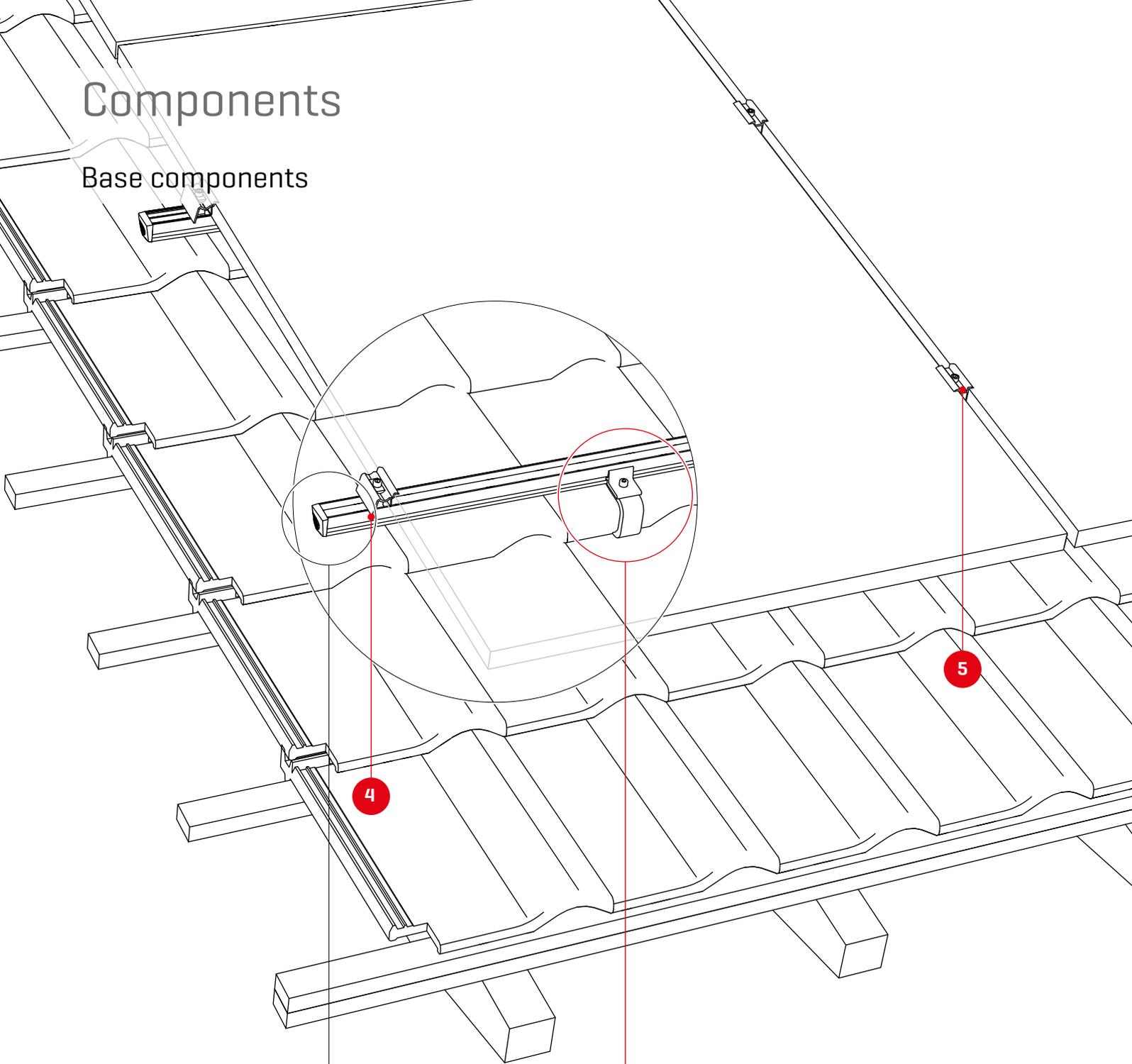


Important mounting instructions

- 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).
- Please refer to our Handbook "Wood Screw Fixation of K2 Roof Hooks" for the installation of all roof hooks k2-systems.com/en/handbook-roof-hooks
- **Roof hooks between rafters:**
Before assembly, the existing roof structures and superstructures must be qualitatively checked for their load-bearing capacity. It must be ensured that the existing roof boarding and the timber used are in good condition to bear the weight and forces of additional roof hooks.
- We recommend a thermal separation after maximum of 17.6 m.
- A minimum mounting distance of 50 mm from the end of the rail / rail joint to the module frame.
- Tightening torque for all module clamps 14 Nm
- For manufacturer information regarding clamps see the manufacturing module data sheet.
- In order to avoid damage under high snow loads, replace the clay/concrete roof tile with metal roof plate or sheet metal replacement tile under the bracket of the roof hook.
- Do not step on roof hooks or rails, as these are not climbing assists.
- Sizing and positioning of the wood screws are subject to the relevant regulations.
- Dimensioning and positioning of the woodscrews subject to the European Technical approvals (ETA) of the screw manufacturers.
- Special requirements apply with on-rafter insulation or counter battening: Special fit-for-purpose spacer screws have to be used.

Components

Base components



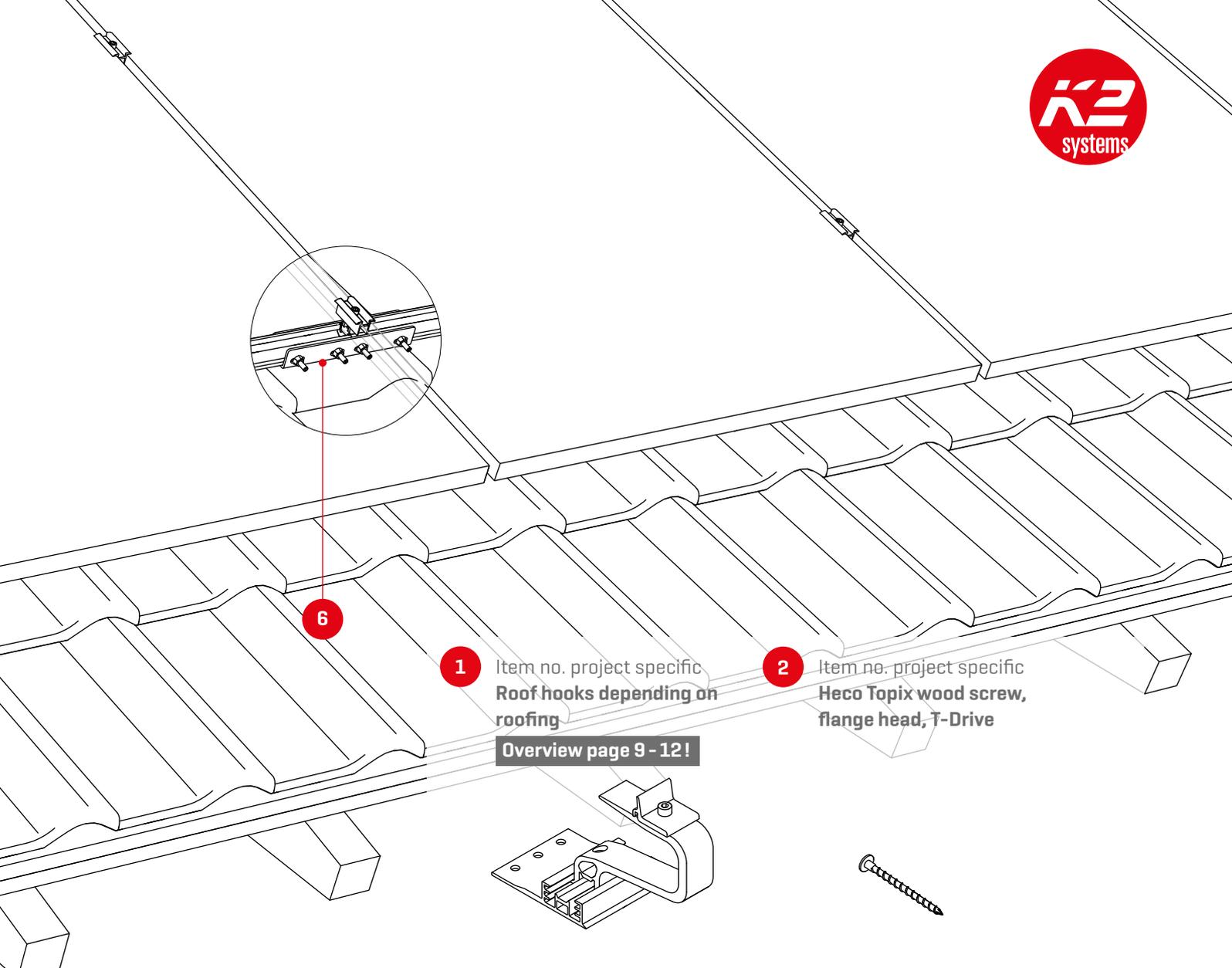
7

8

3

2

1



6

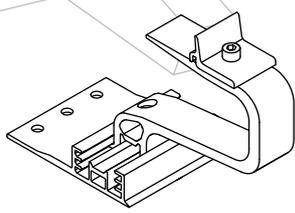
1

Item no. project specific
Roof hooks depending on
roofing

2

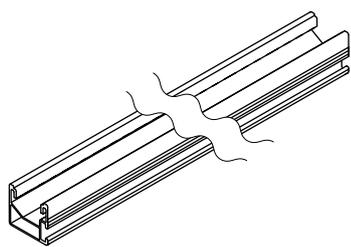
Item no. project specific
Heco Topix wood screw,
flange head, T-Drive

Overview page 9 - 12!



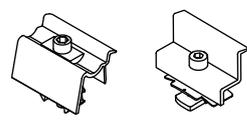
3

Item no. project specific
SingleRail 36, 50 or Light



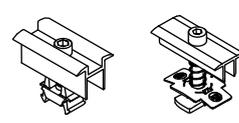
4

Item no. project specific
OneEnd / module end clamp
standard



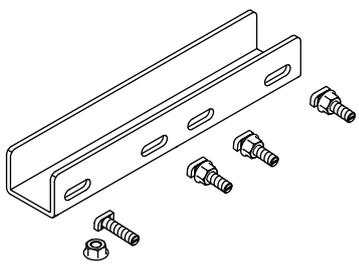
5

Item no. project specific
OneMid / module middle clamp XS



6

2001976 / 2002404
SingleRail 36/50 Connector Set

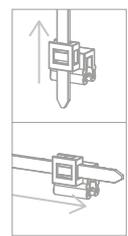
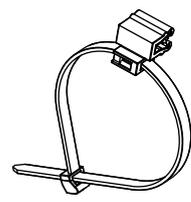


7

1004767
EndCap SingleRail 36

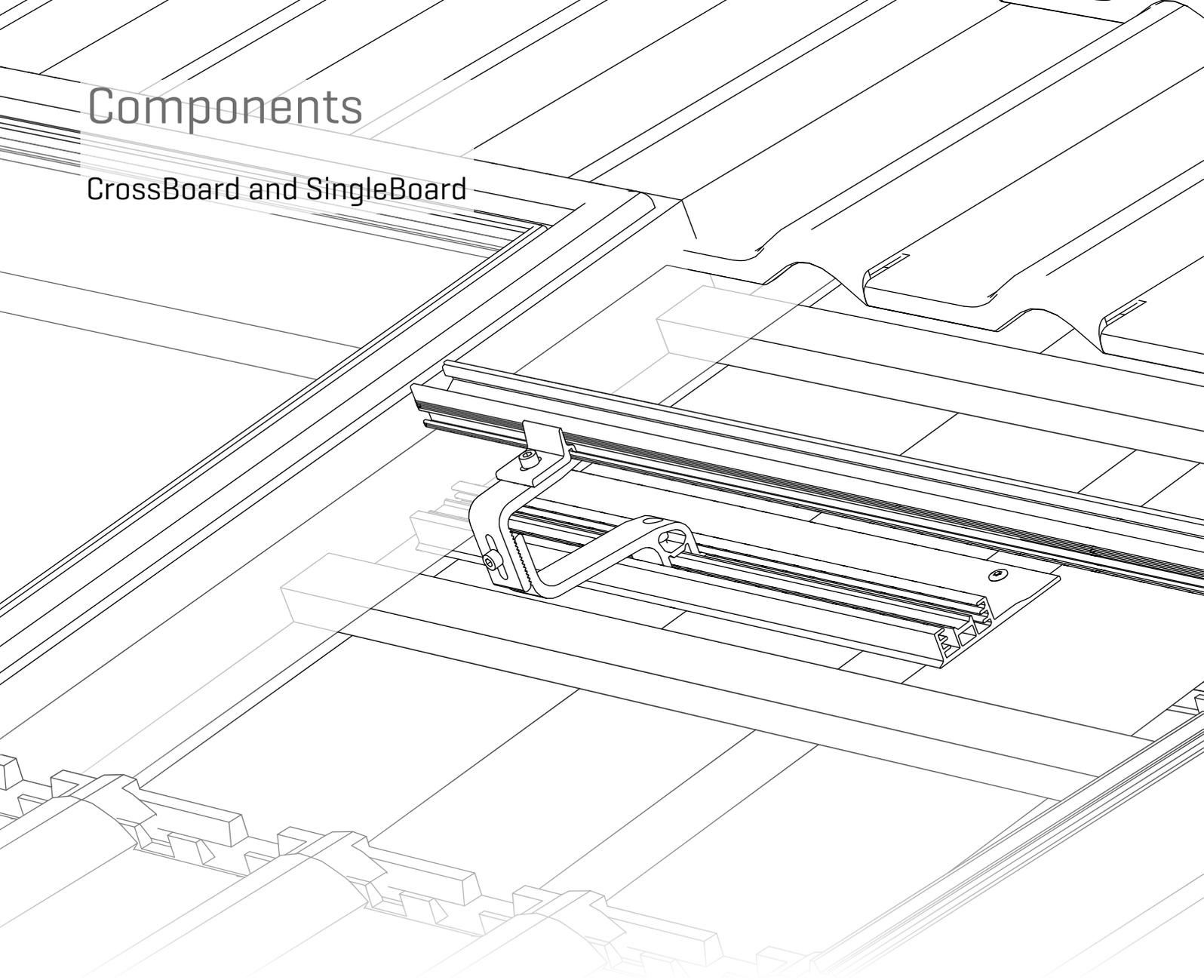


Optional: 2002870
Cable Manager

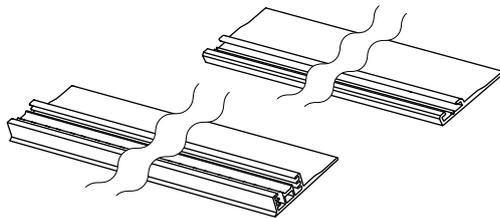


Components

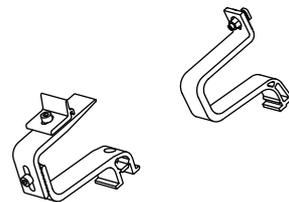
CrossBoard and SingleBoard



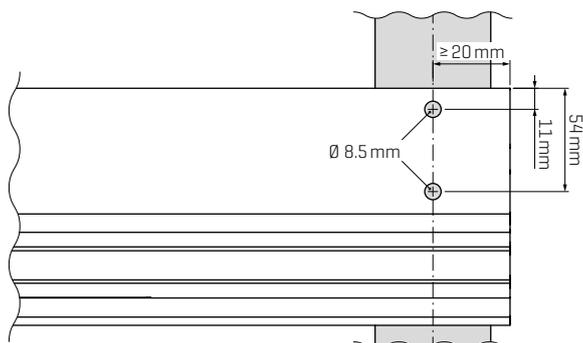
1 2001972 / 2002935
CrossBoard / SingleBoard



2 2002927 / 2003152
CrossBracket 4S / SingleBracket 1.1



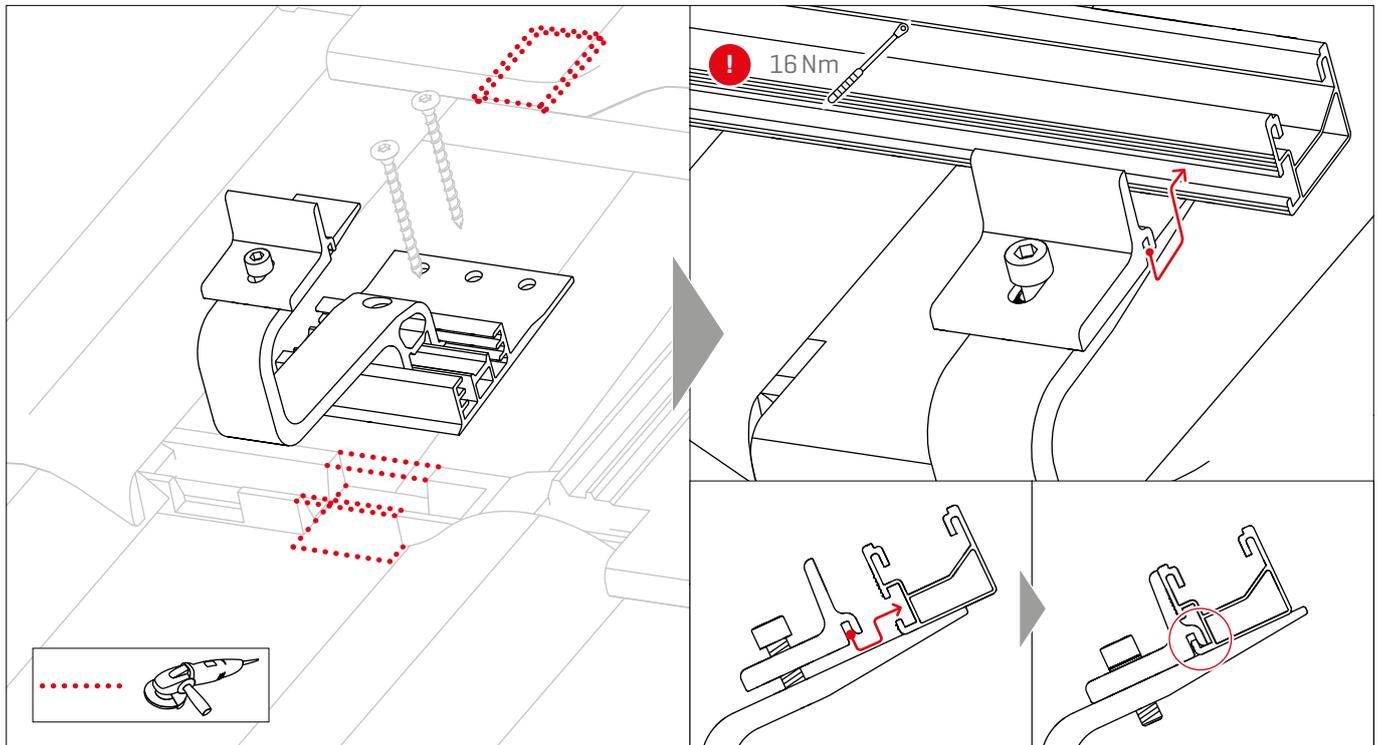
Drilling specifications for CrossBoard / SingleBoard



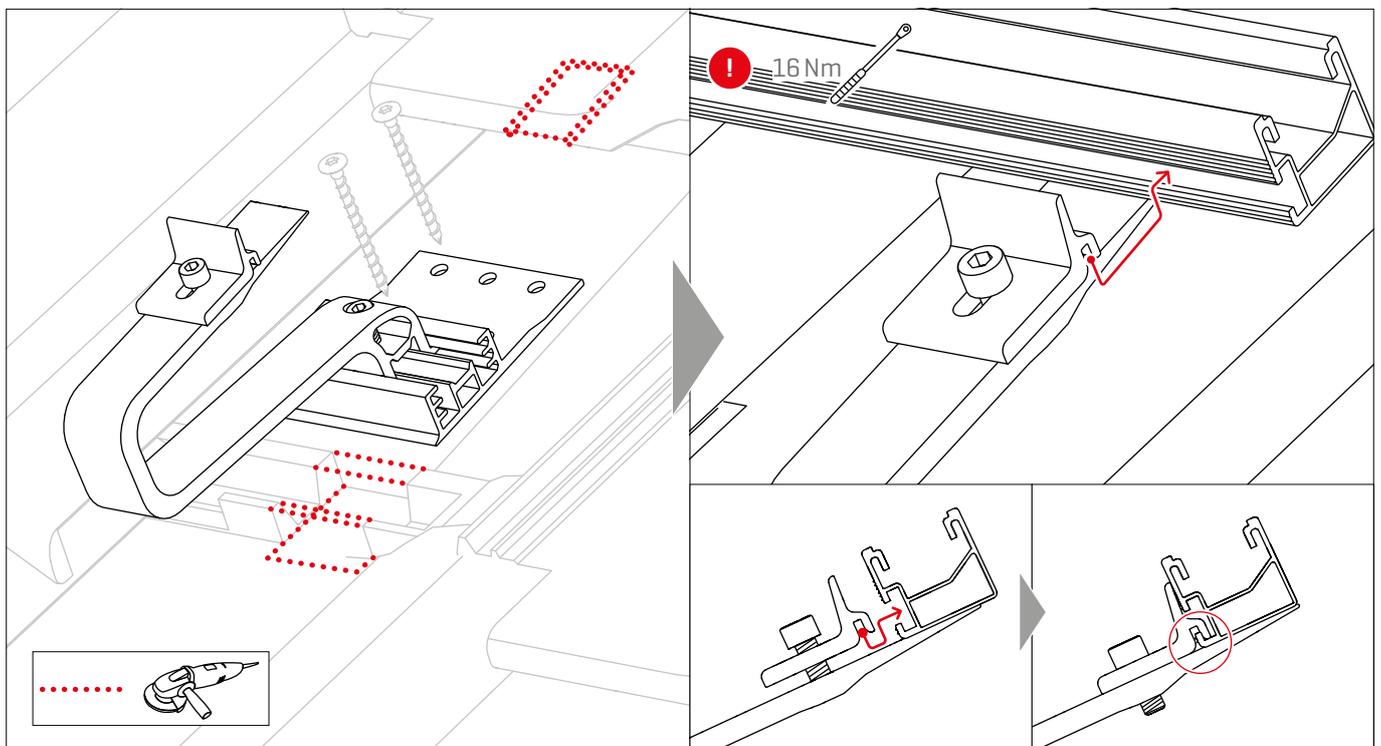
Compatible roof hooks



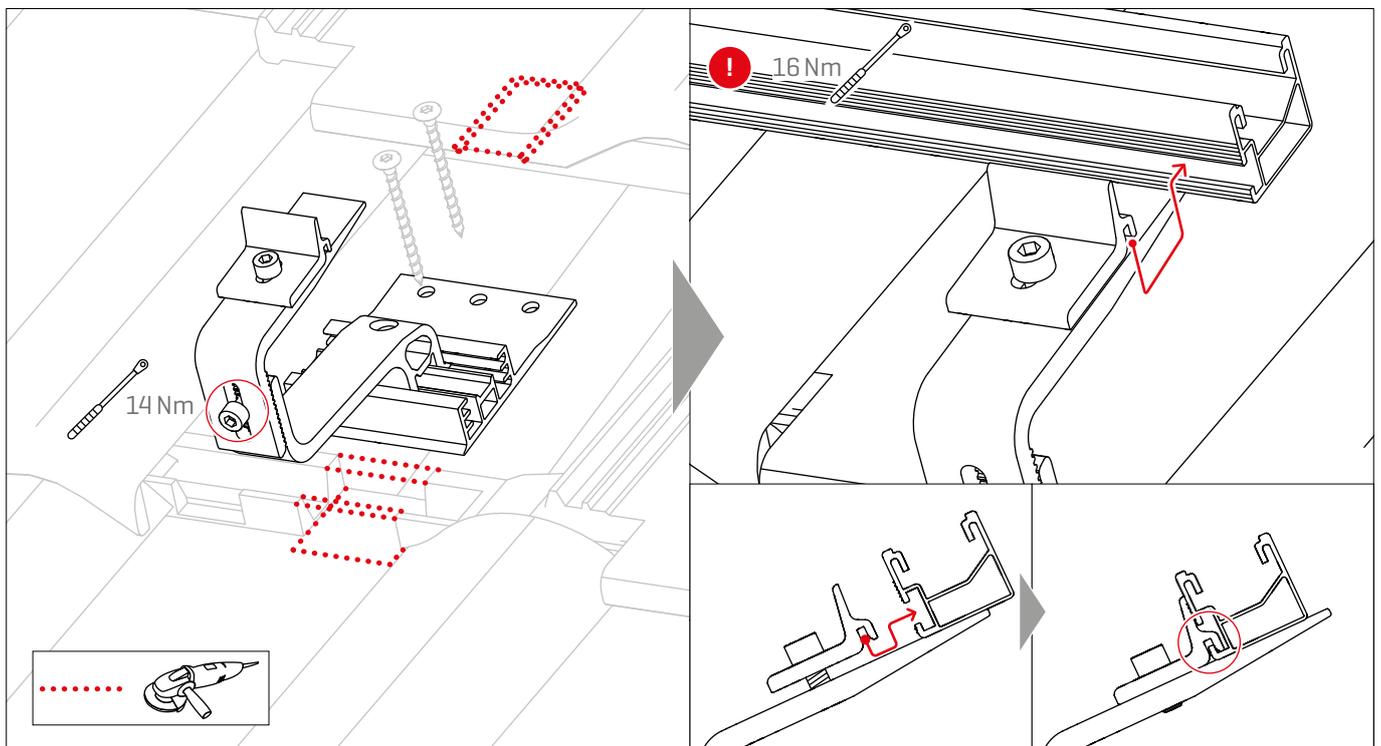
CrossHook 3S · 2003215



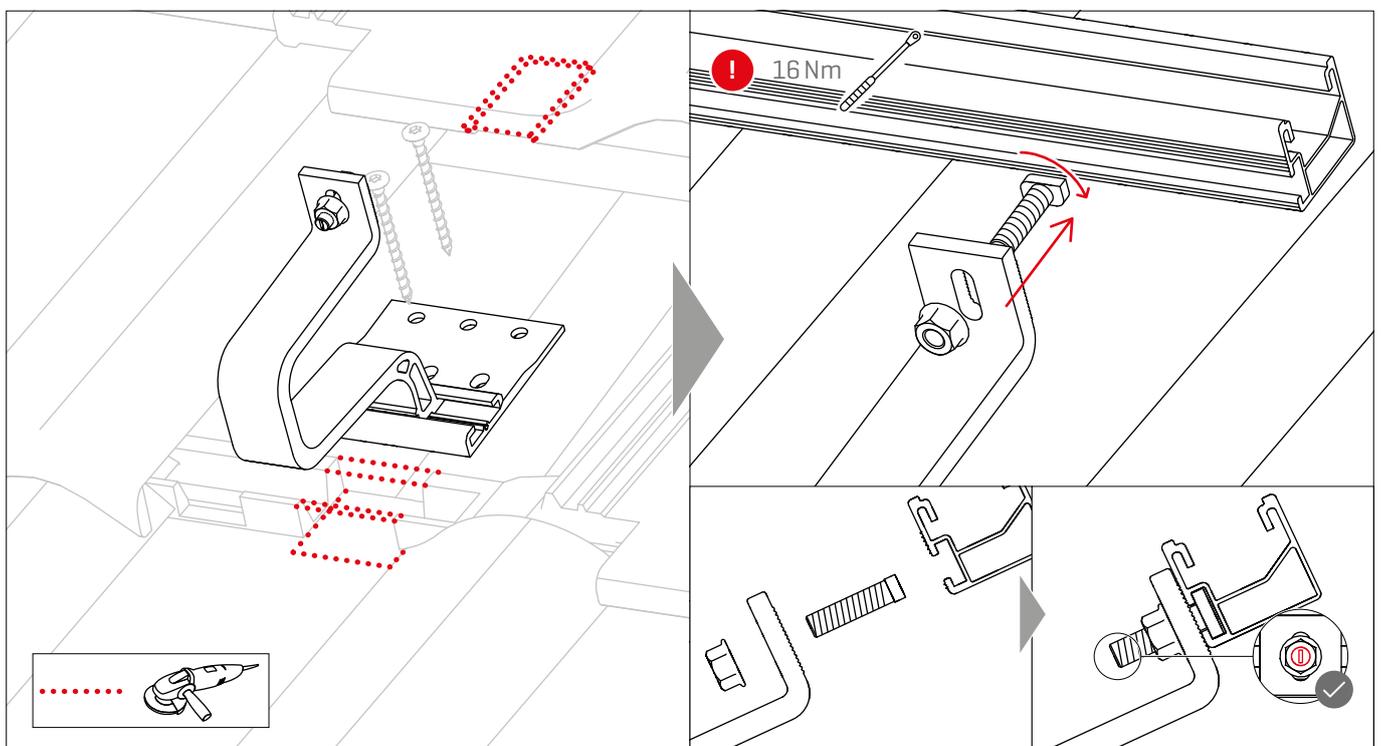
CrossHook 3S Long · 2004222



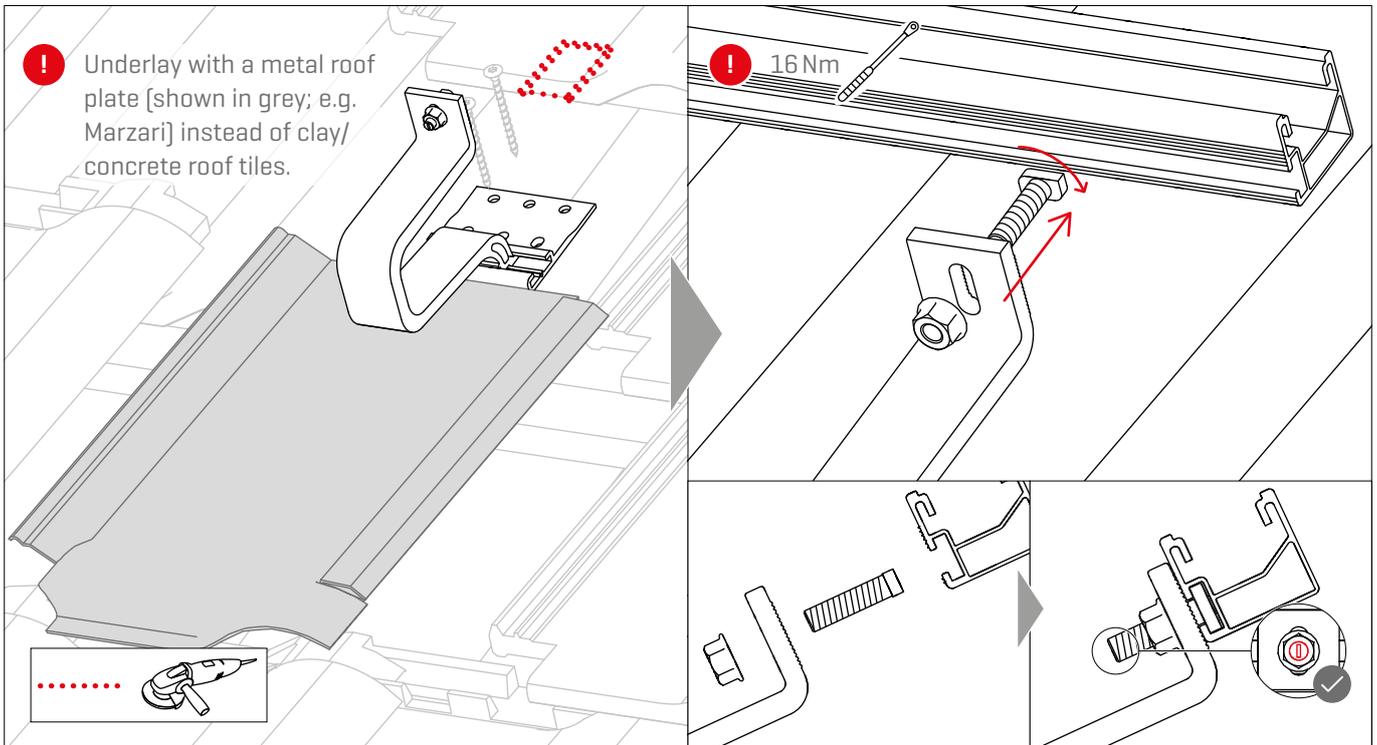
CrossHook 4S · 2003144



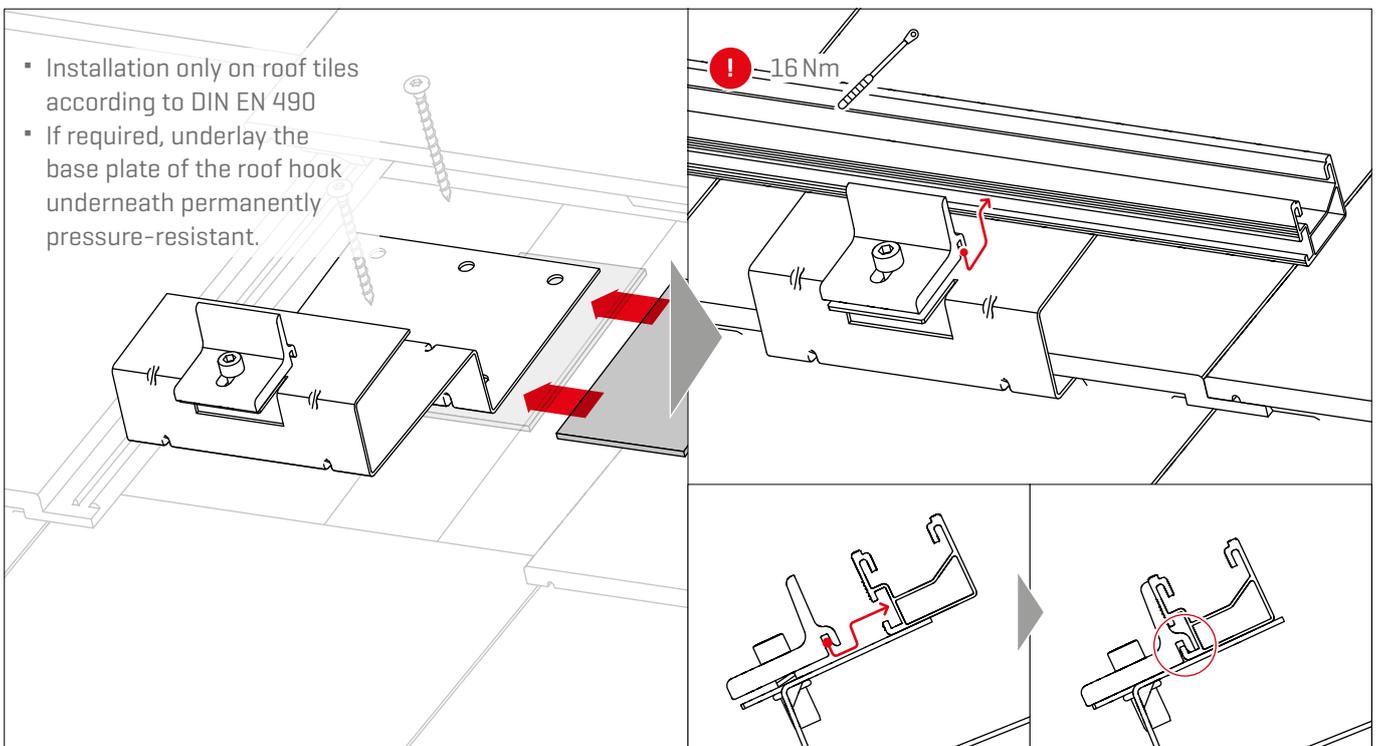
SingleHook 1.1 · 2001928



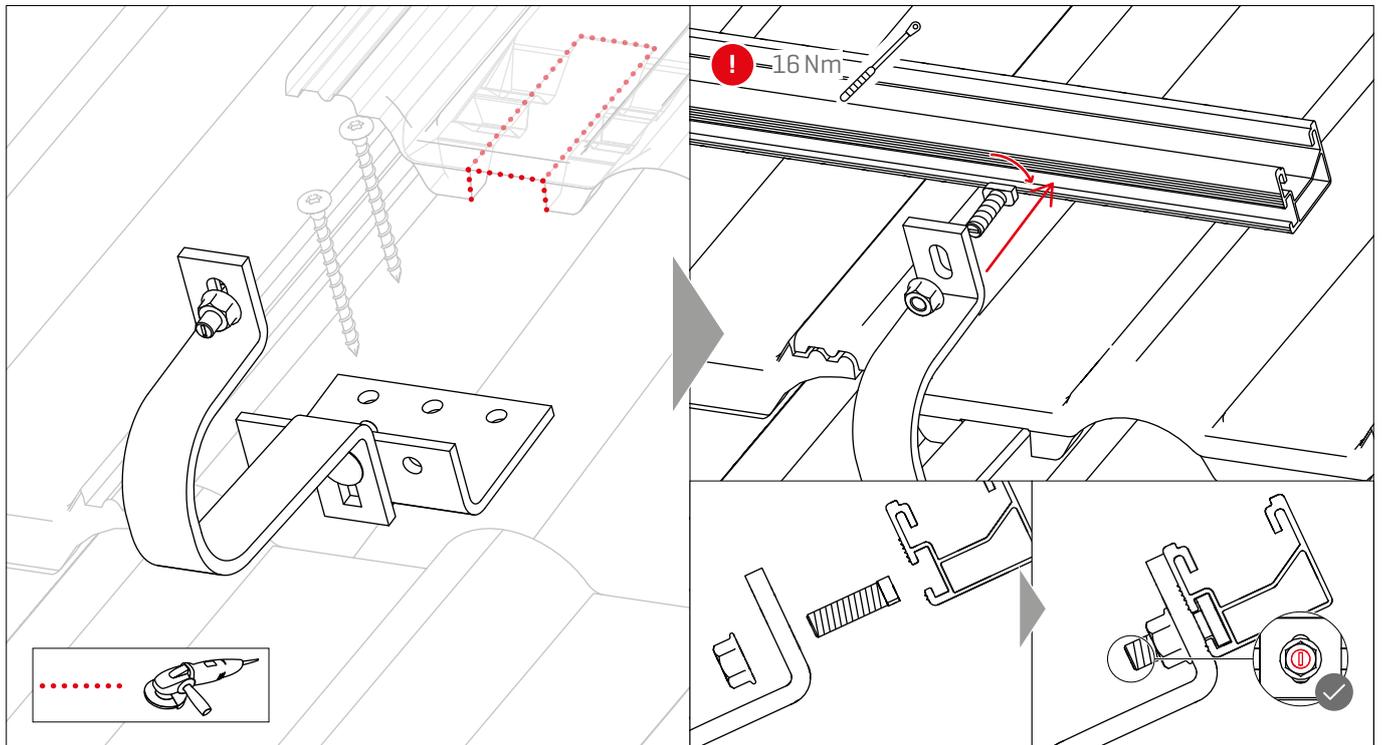
SingleHook Alpin · 2003155



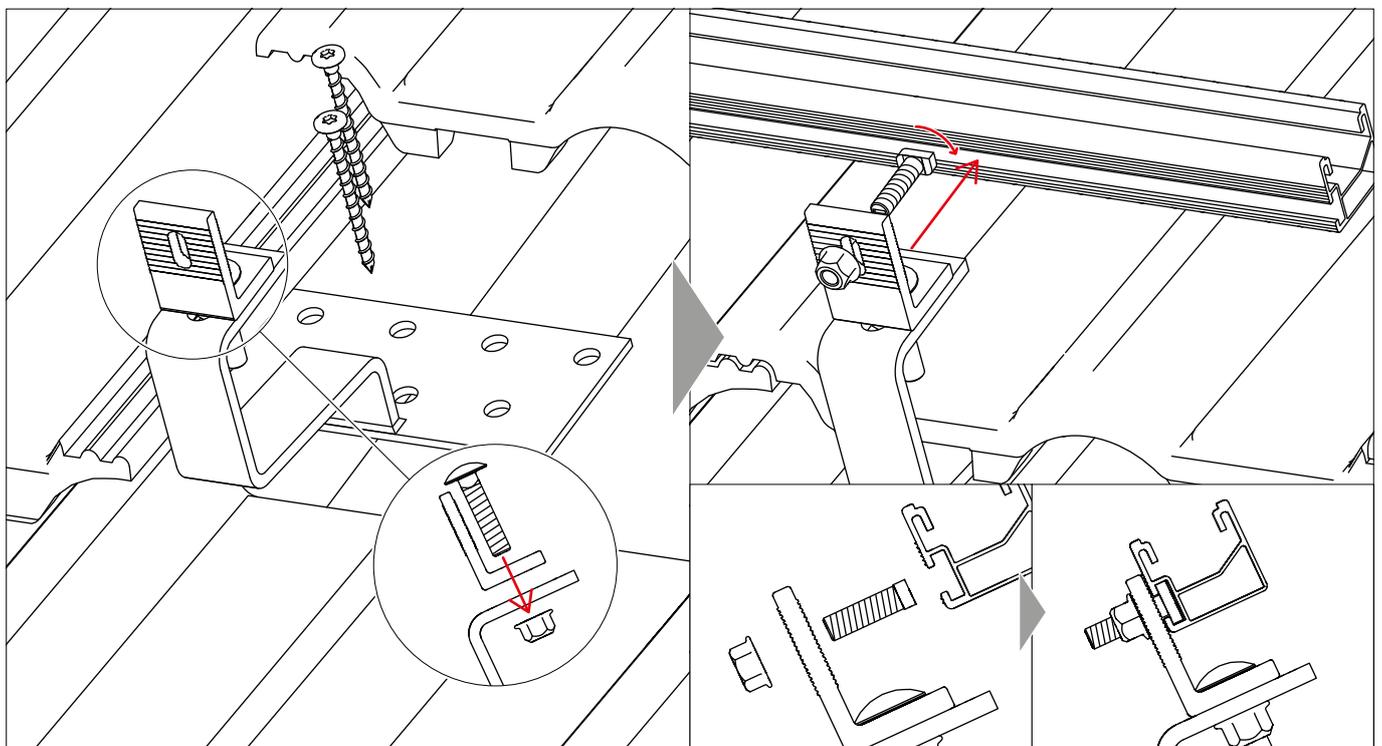
CrossHook 2 · 2003175



SingleHook Vario · 2002651



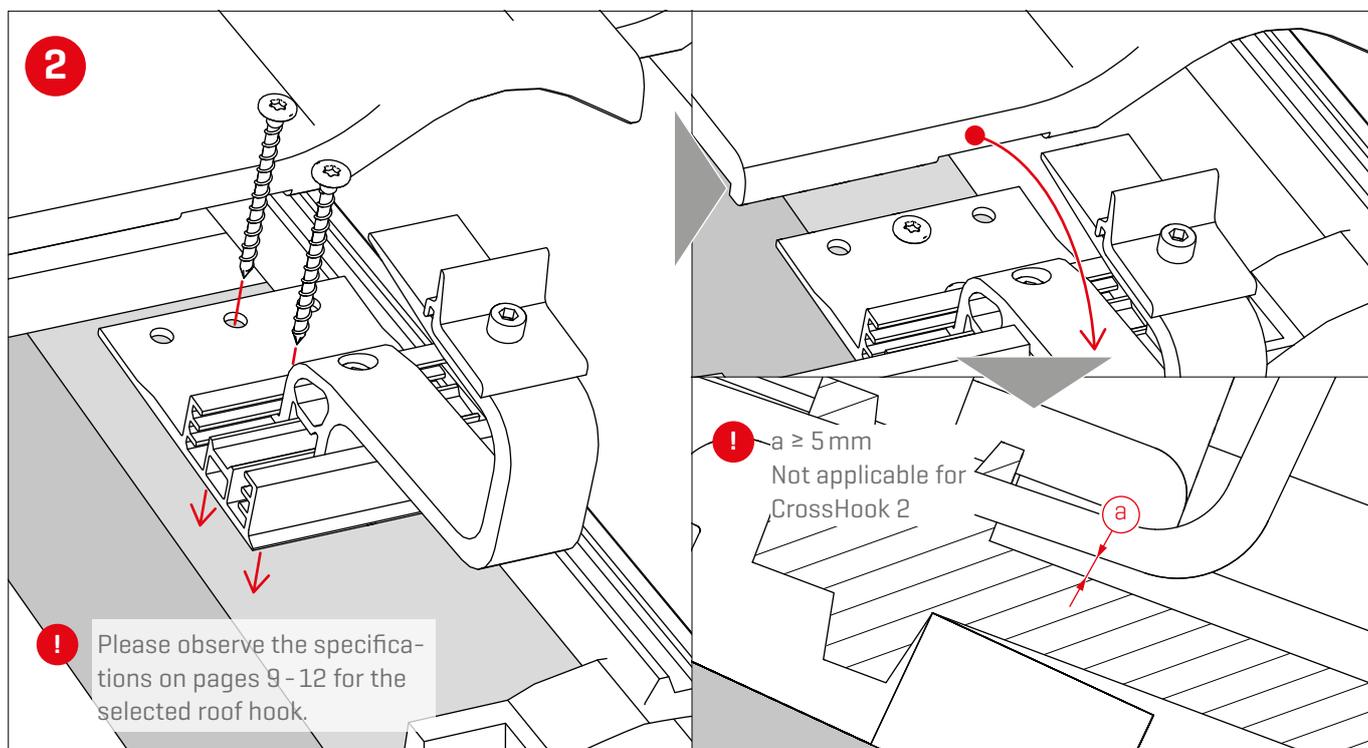
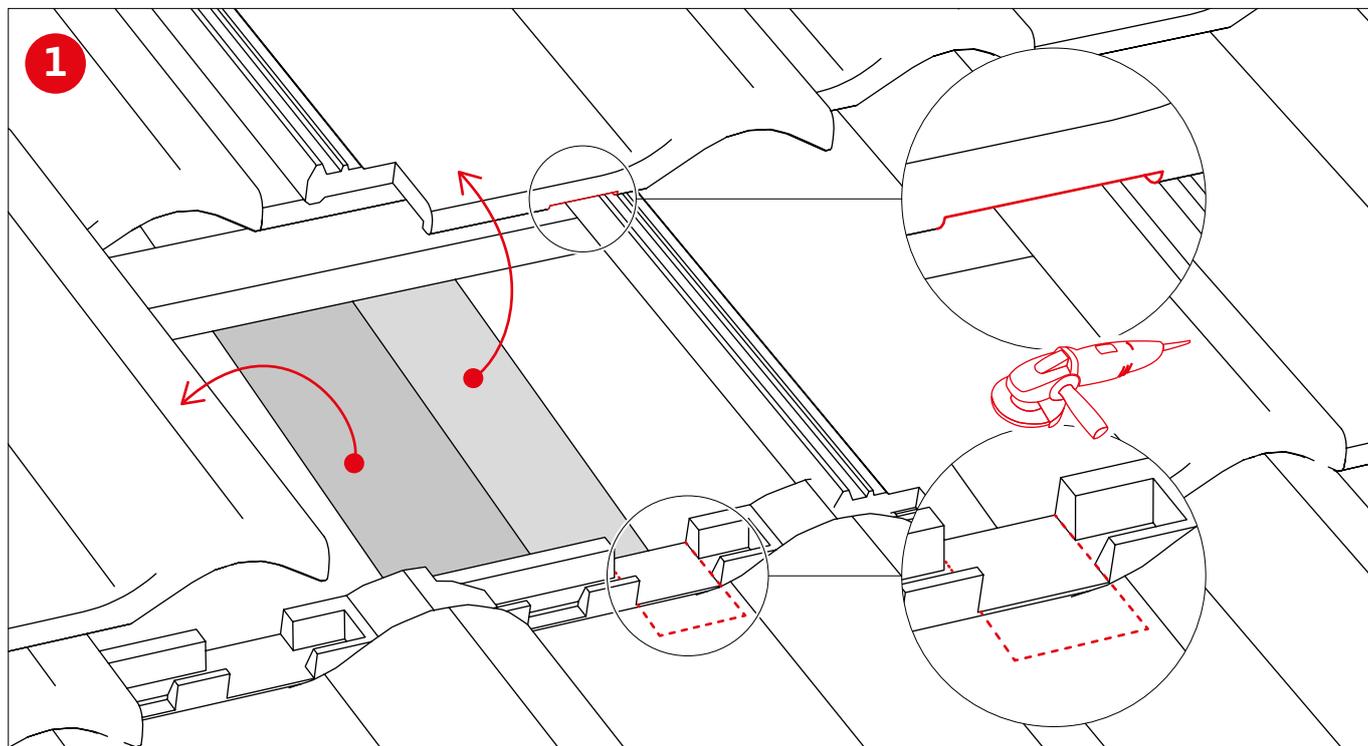
L-Adapter for further roof hooks · 2002683

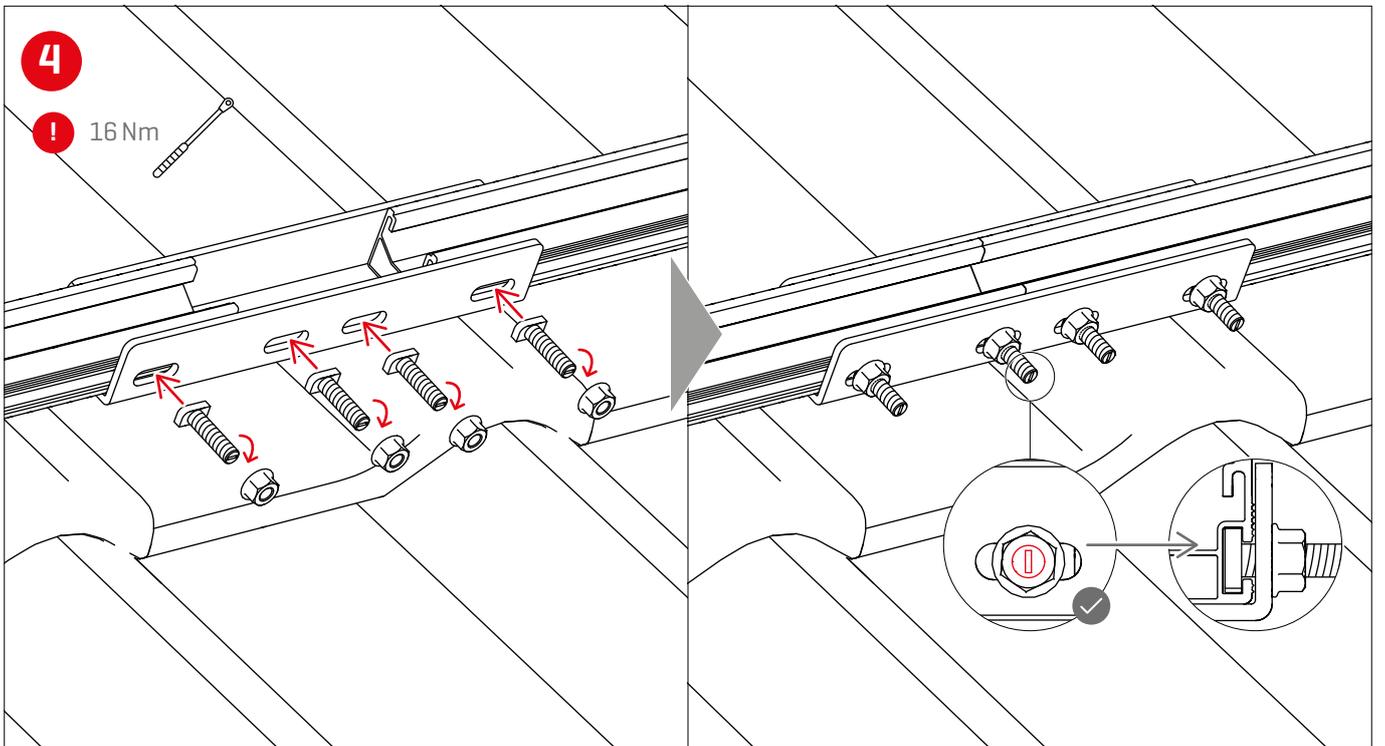
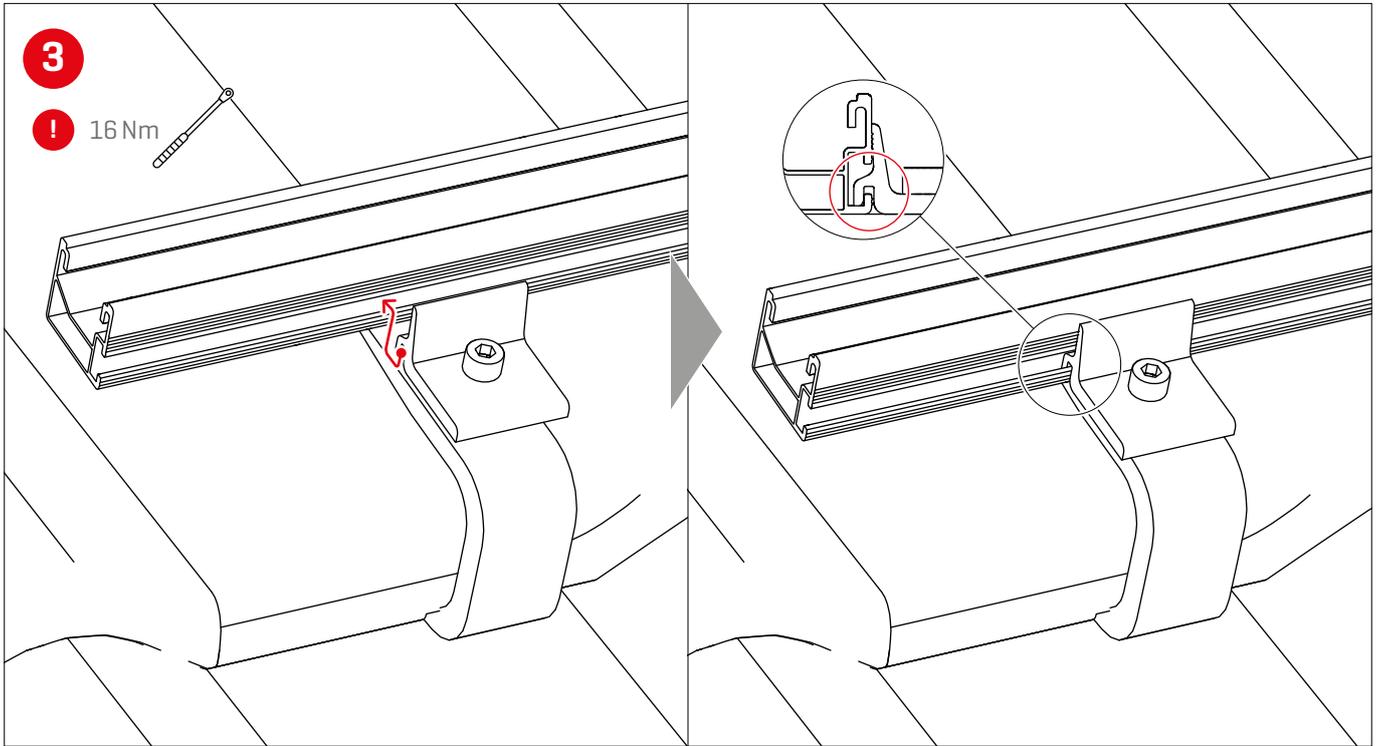


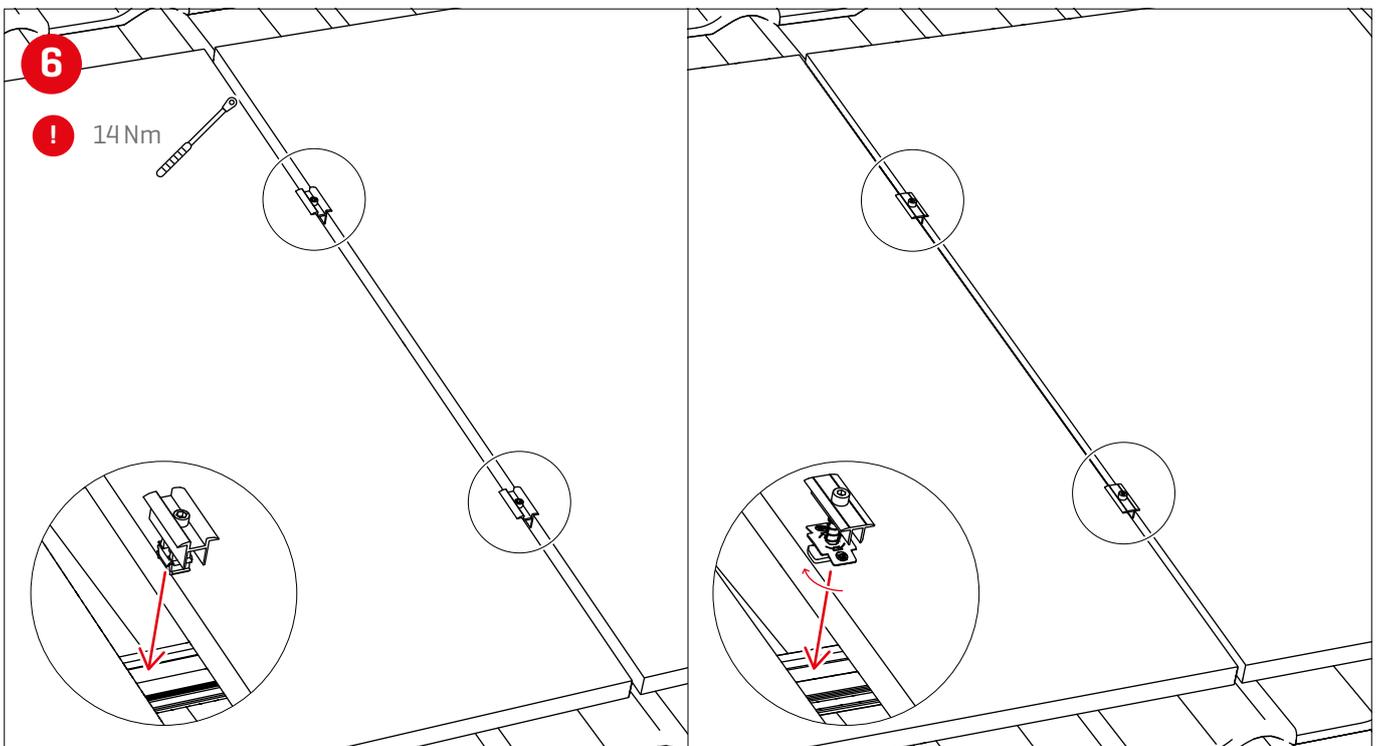
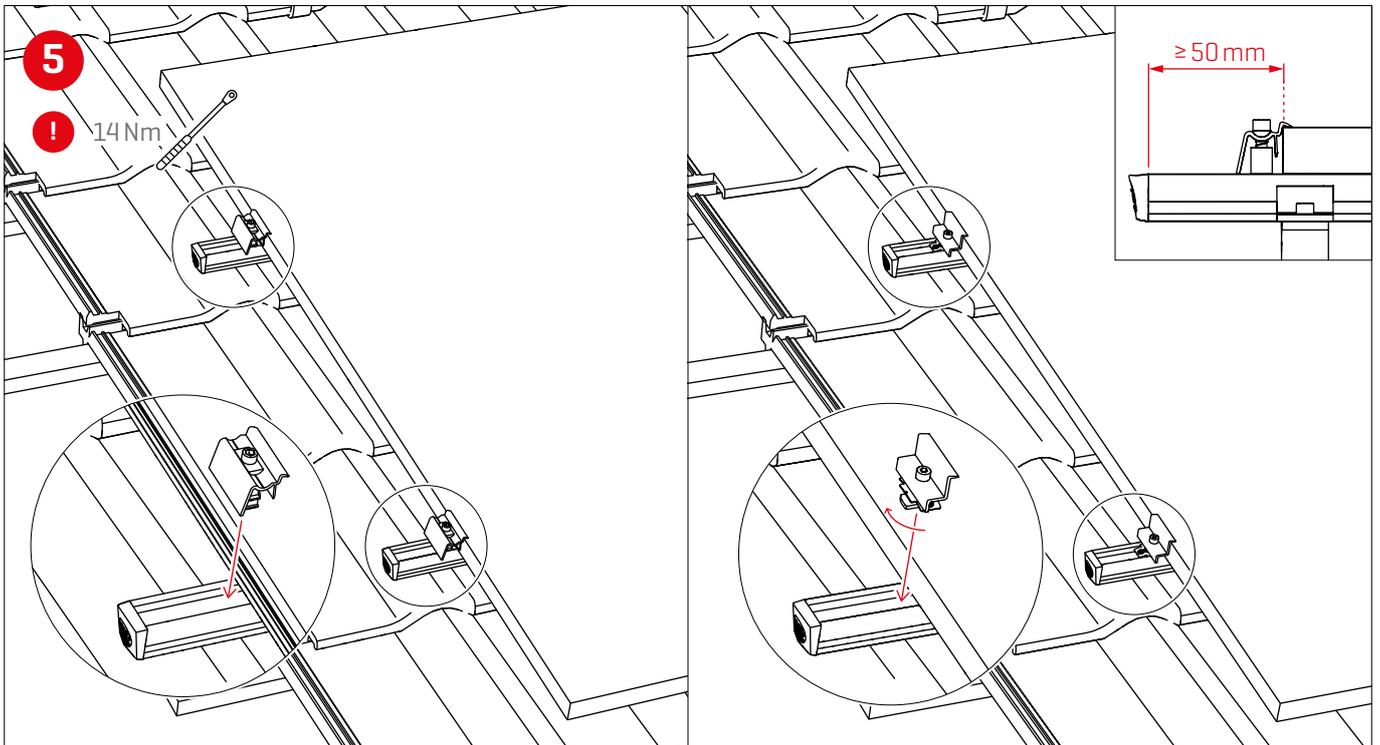
Assembly



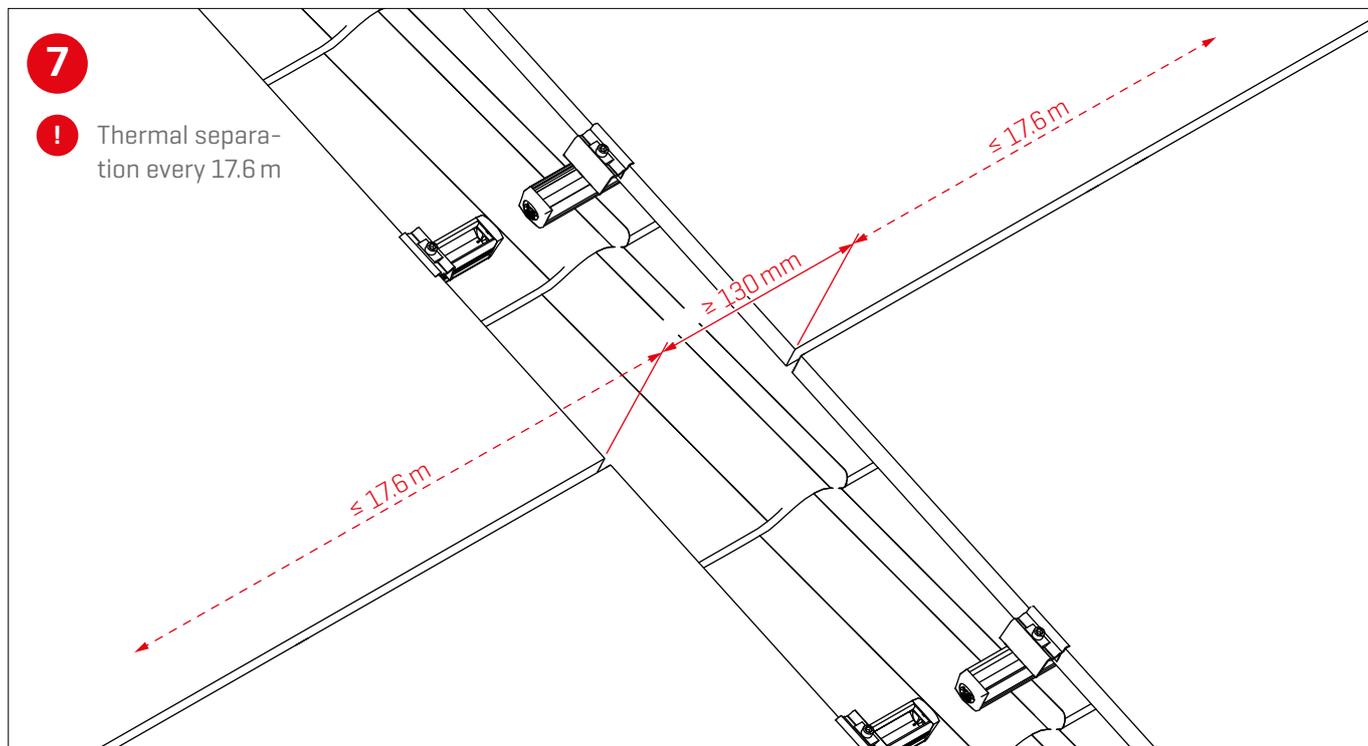
Portrait



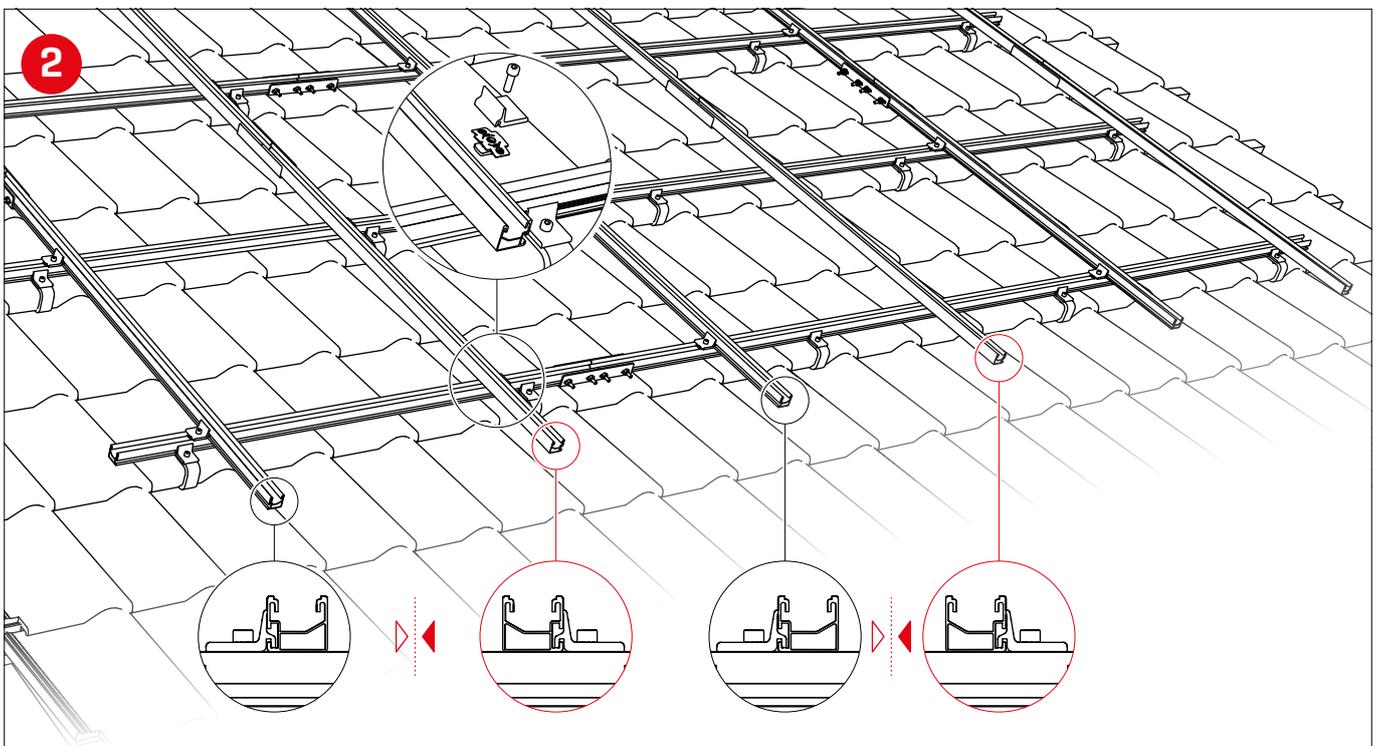
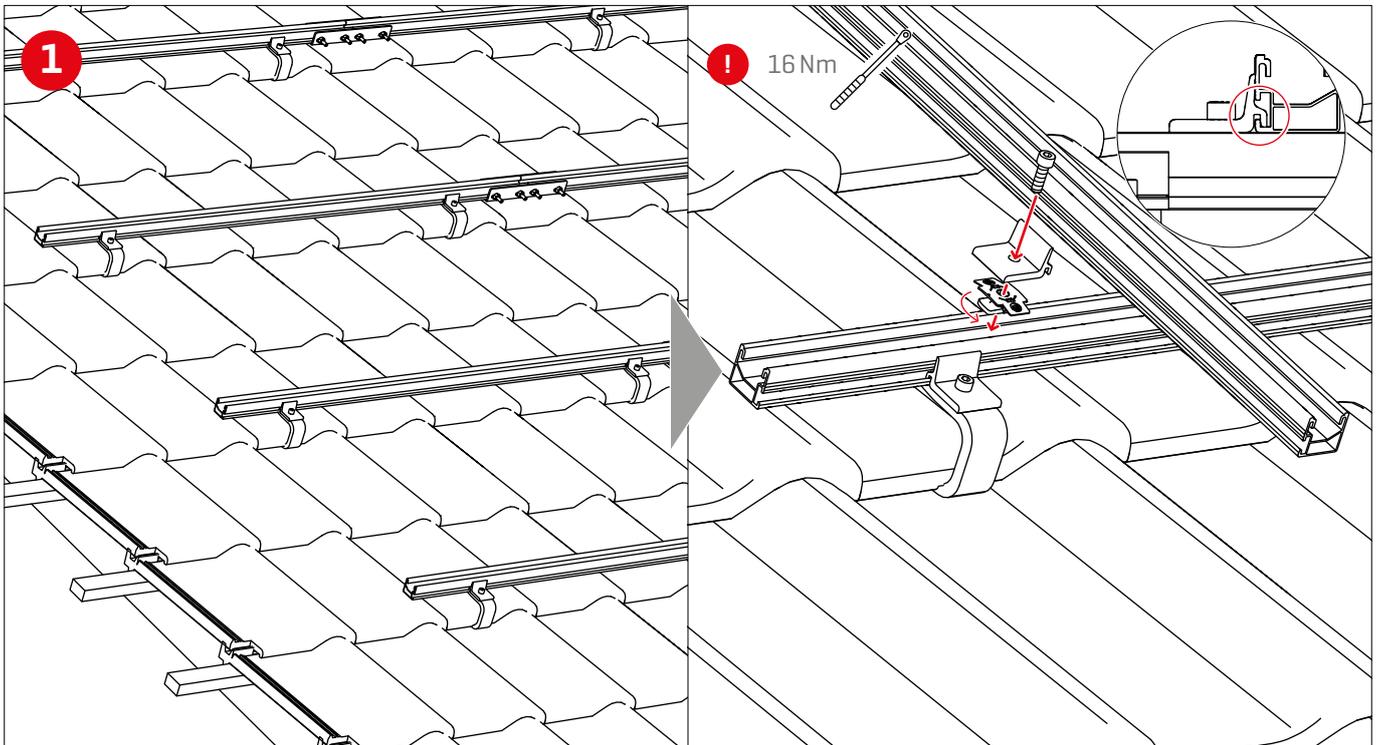


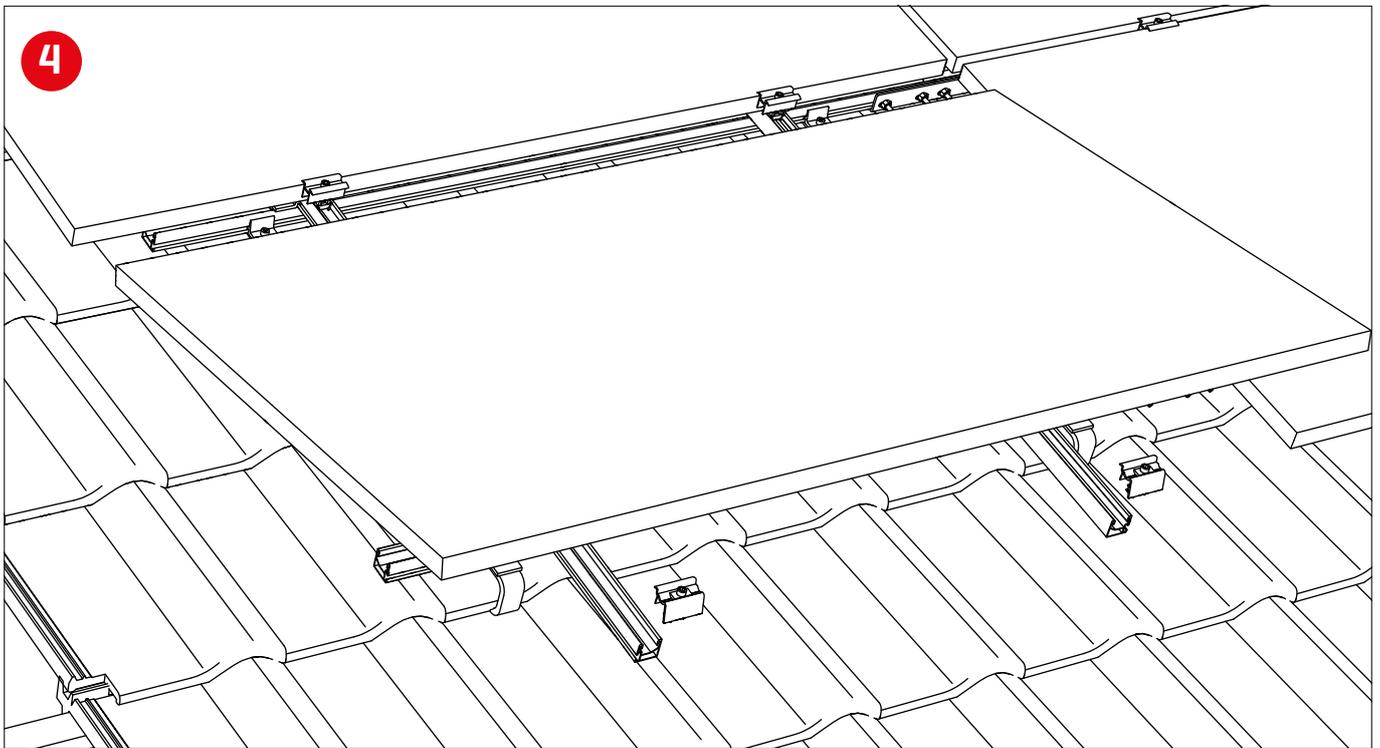
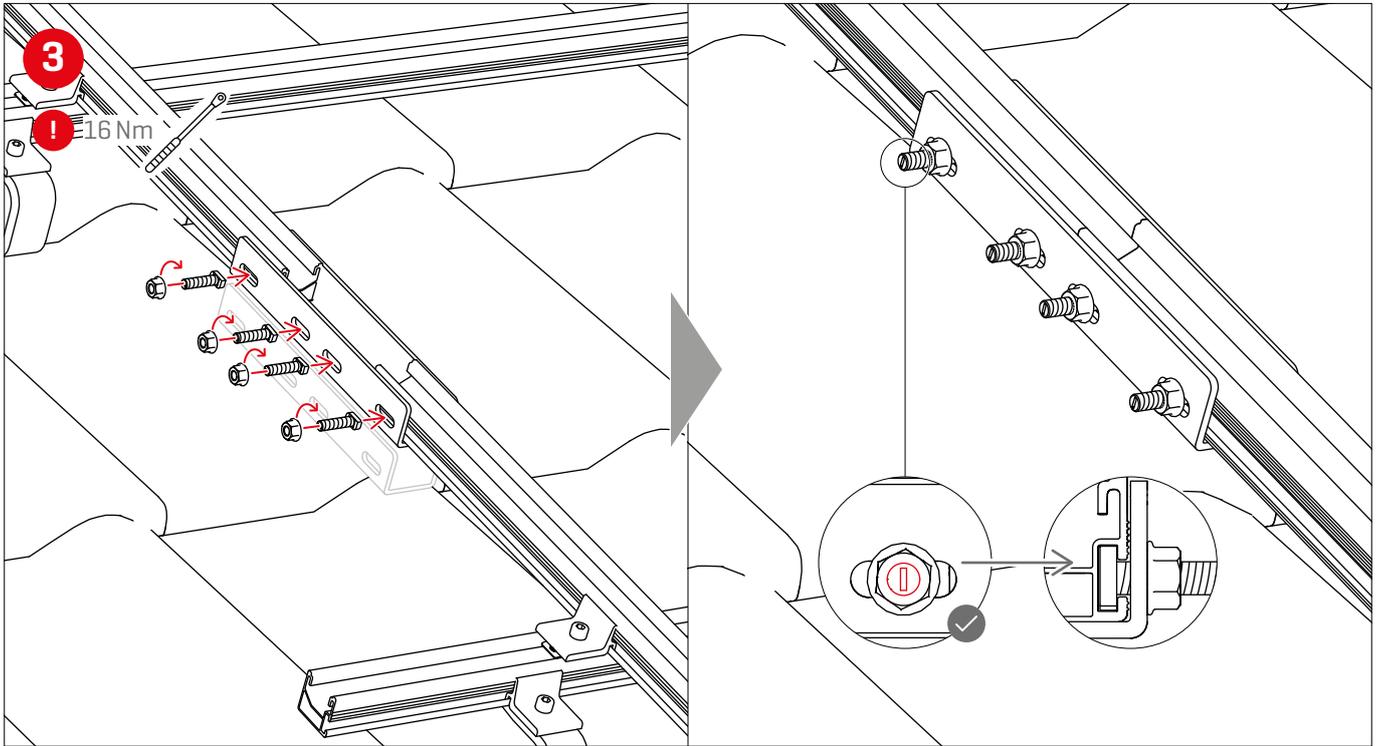


Thermal separations



Landscape with 2 rail layers



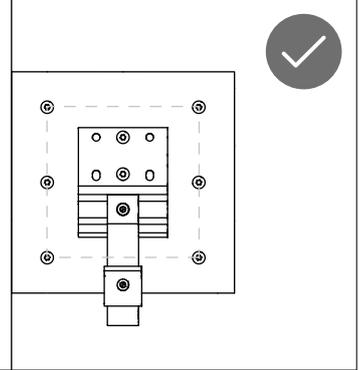
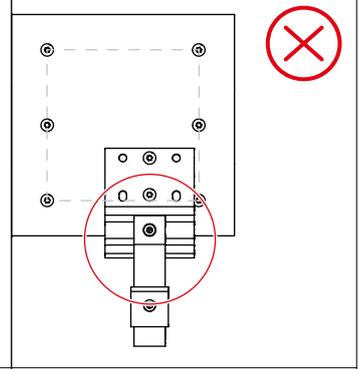
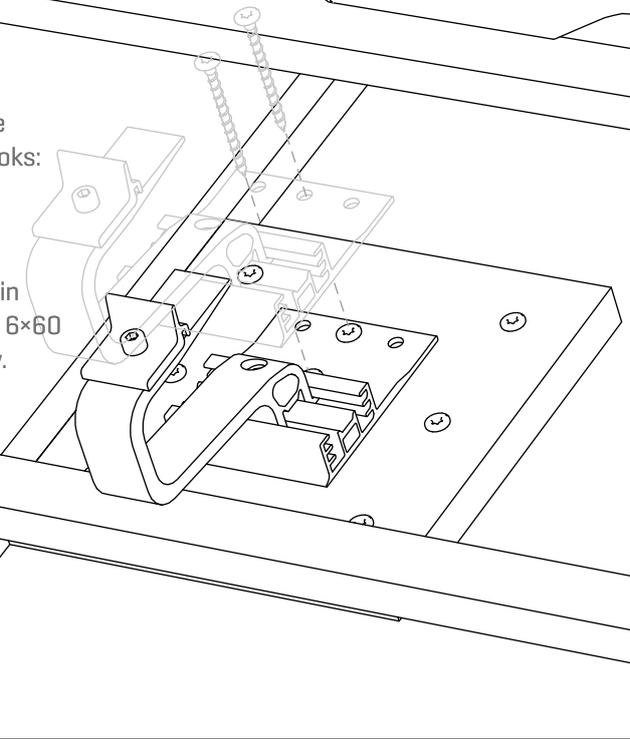


2

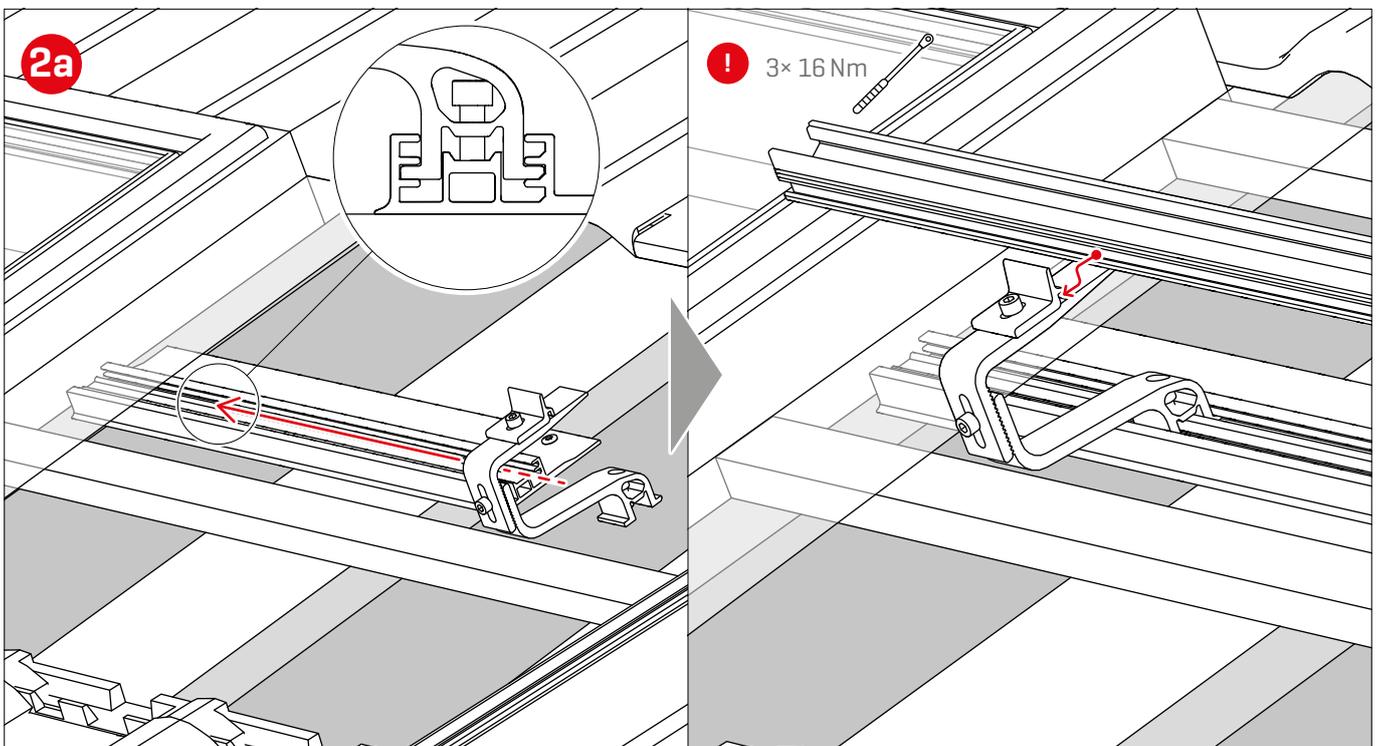
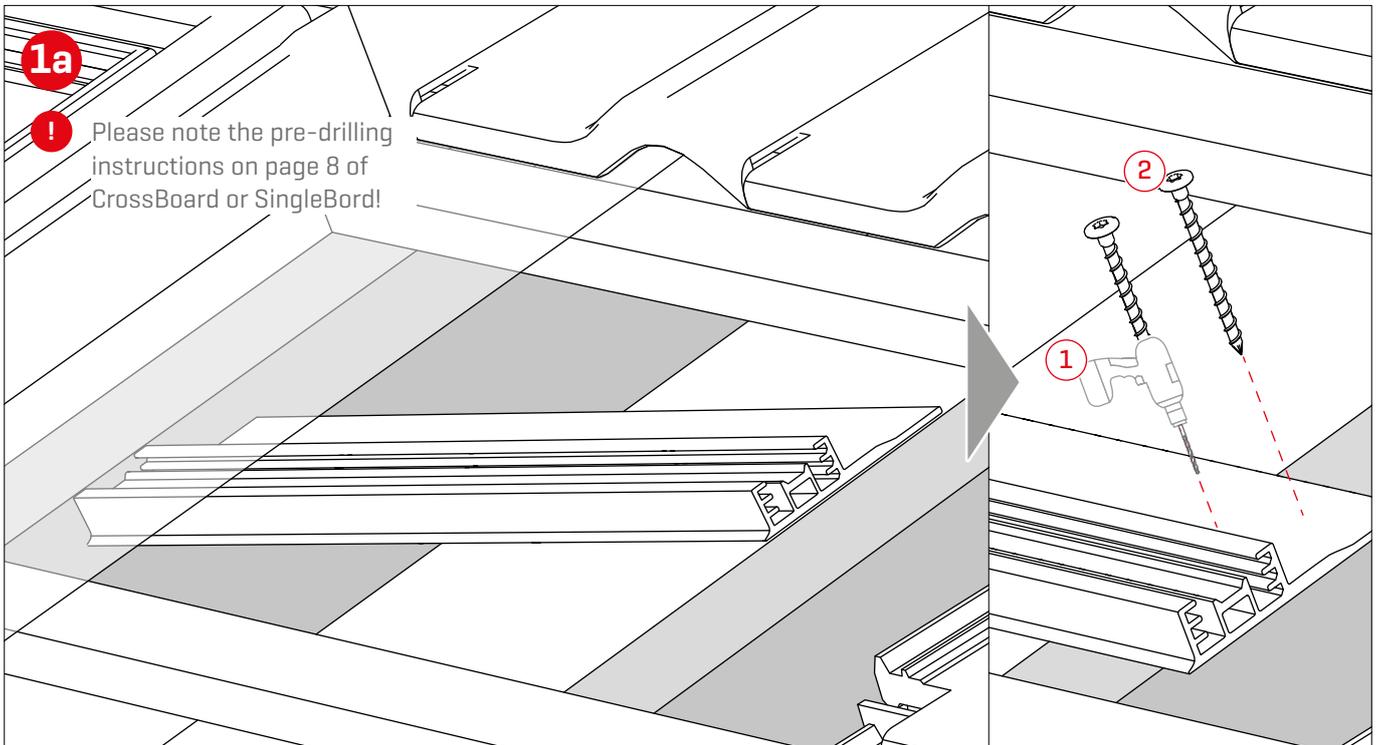


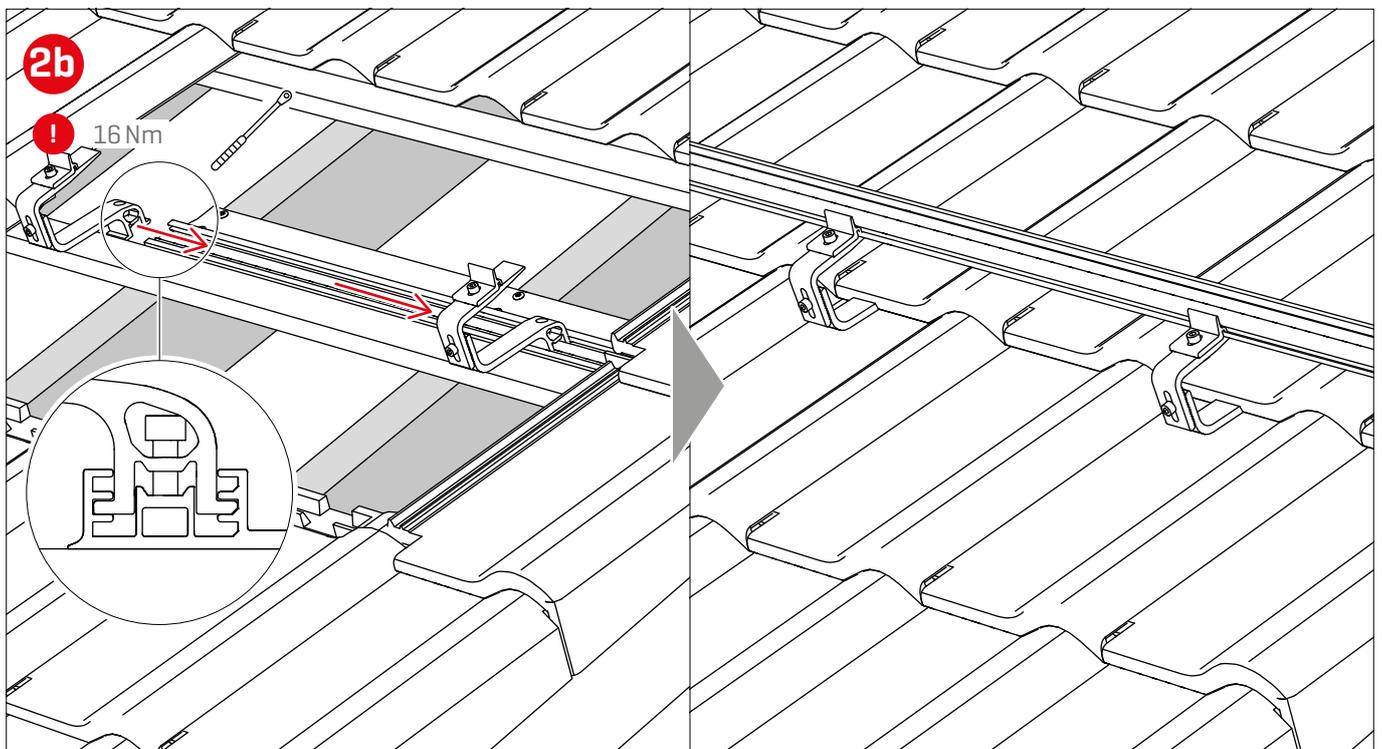
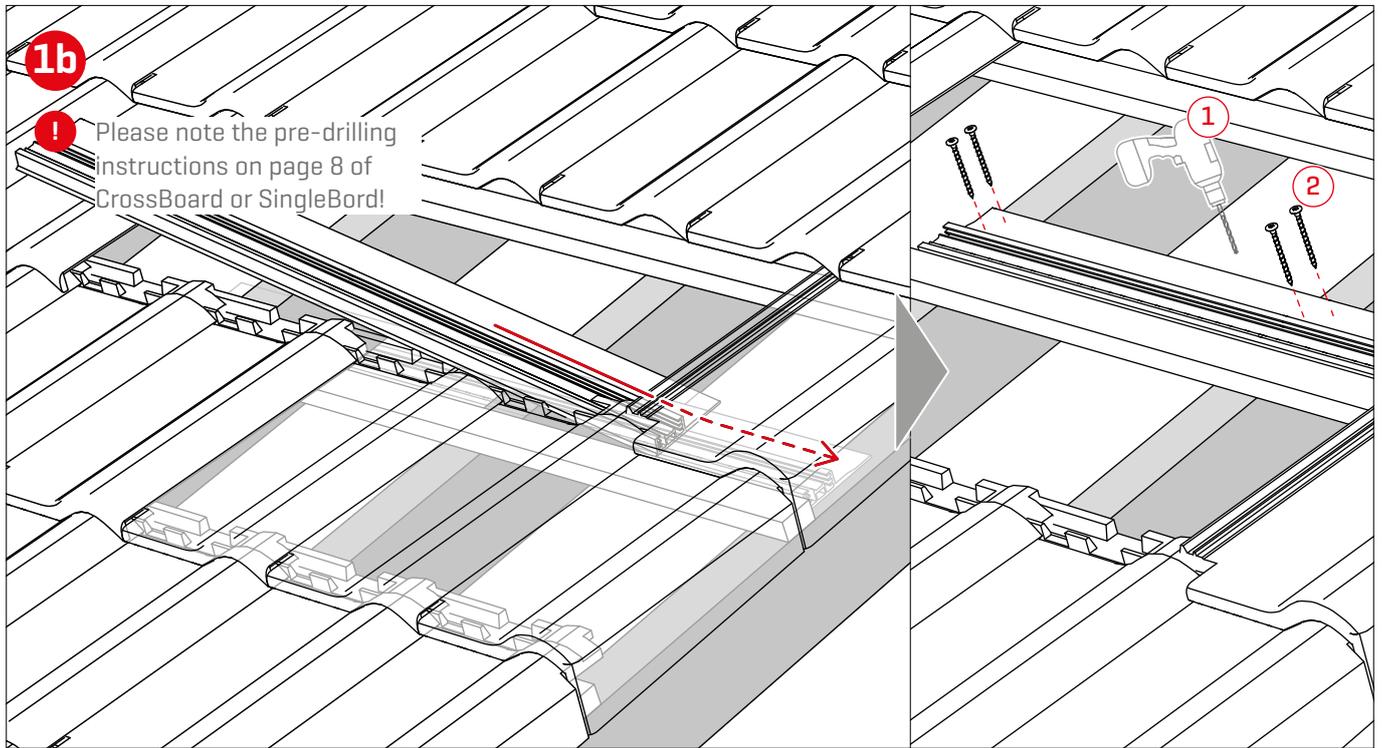
Applicable for the following roof hooks:

- CrossHook 3S
 - CrossHook 4S
 - SingleHook 1.1
 - SingleHook Alpin
- using Heco Topix 6×60 [2001882] screw.
See page 9 - 12!



Obstructions / roof edge: Use of CrossBoard / SingleBoard





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:

▶ k2-systems.com/en/contact

▶ **Service Hotline: +49 [0]7159 42059-0**

German law shall apply excluding the UN Convention on CISG. Place of venue is Stuttgart.

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

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