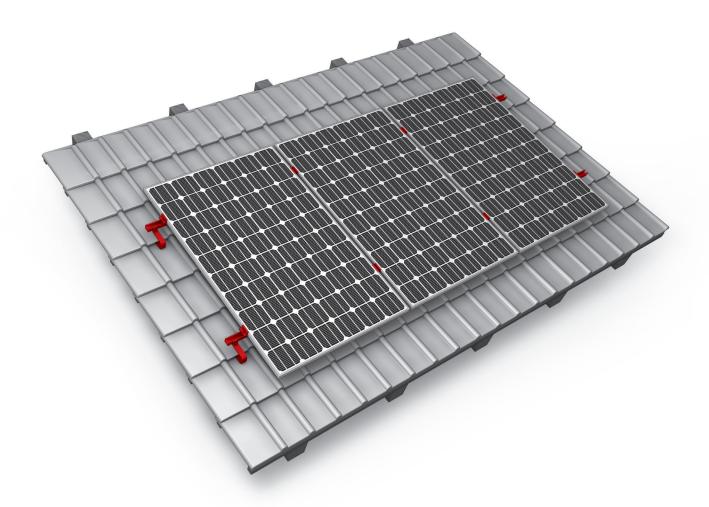
Mounting systems for solar technology





ASSEMBLY INSTRUCTIONS SINGLE HOOK 1.1/2.2/2.3

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/downloads/product-information.html.

The following guidelines apply:

- ¬ 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/downloads/produktinformationen.html 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.
- ¬ 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/downloads/product-information.html. We will also send this information
- 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:

Our general assembly instructions must be adhered to and can be viewed online at http://www.k2-systems.com/en/downloads/product-information.html Call +49 7159 42059-0 for customer log in details.

The SingleHook system 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 K2Base. 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 5−65°



Important mounting instructions!

- The grounding must be prepared on site (if necessary use lightning protection clamp). Country-specific regulations may apply.
- ¬ We recommend a thermal separation after maximum of 24.4 m.
- ¬ Don't use Middle and End Clamp sets at rail joints.
- ¬ Minimum spacing of 20 mm between rail end and Module End Clamp
- ¬ Tightening torque for all module clamps 14 Nm
- For manufacturer information regarding clamps see manufacturer module data sheet.
- ¬ To avoid tiles breaking under high snow loads, arrange for supporting the bracket with a suitable metal support plate.
- ¬ Don't step on roof hooks or rails; they aren't climbing assists.
- ¬ 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.

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AT A GLANCE: RECOMMENDED TOOLS

K2 Mounting Systems are optimized for an effortless assembly. The recommended tools are not included in the scope of supply.



Cordless Screwdriver

wrench size 6 mm and 8 mm



Torque Wrench

wrench size 6 mm



Chalk Line



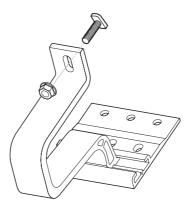
Tape Measure



Angle Grinder

THE SINGLE HOOKS



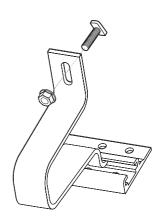






SINGLE HOOK 1.1

(Aluminium/Aluminium, height under bracket: 47.2 mm)



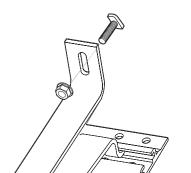
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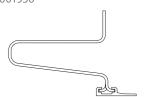
SINGLE HOOK 2.2

(Aluminium/Stainless Steel, height under bracket: 38.4 mm)





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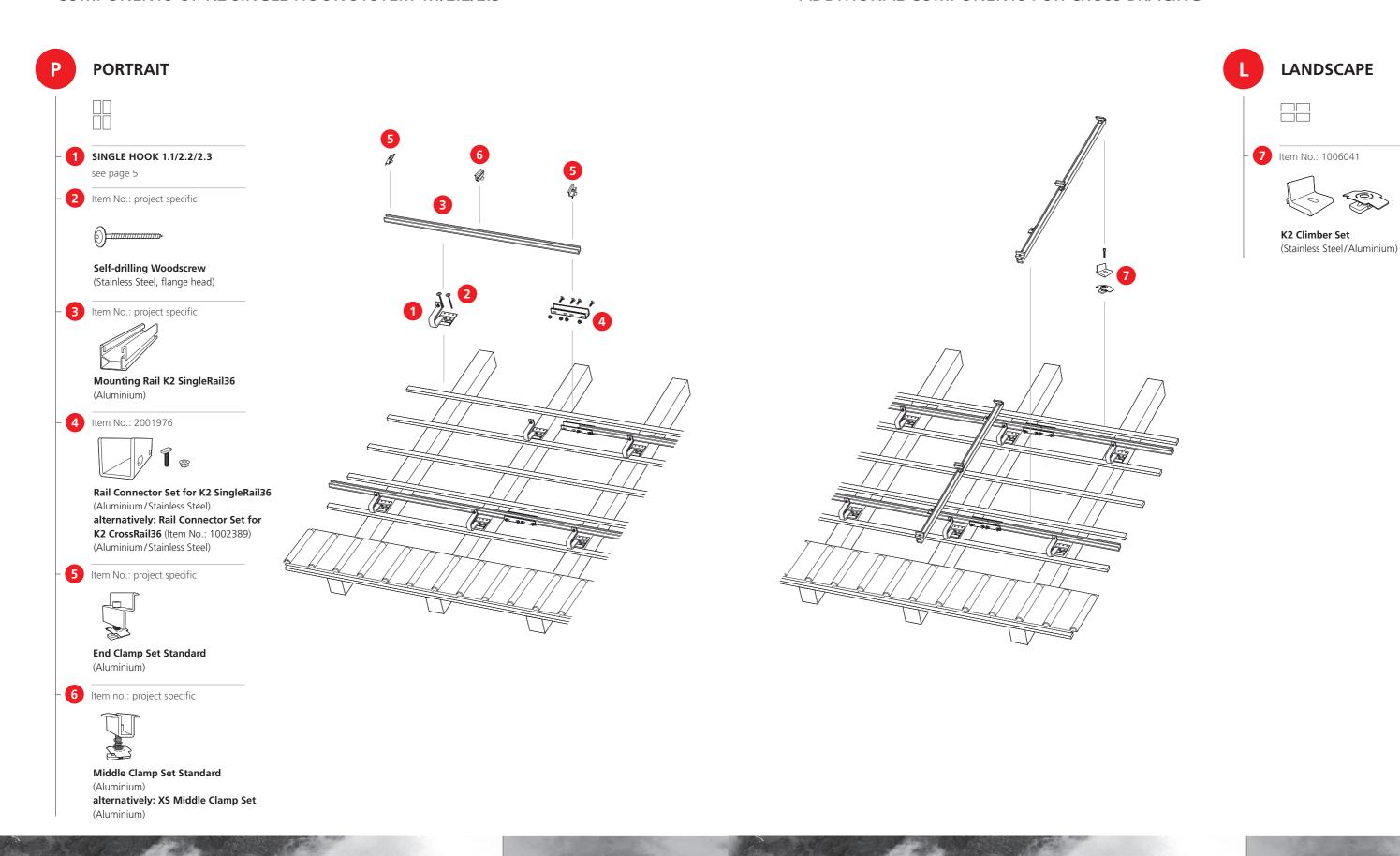


SINGLE HOOK 2.3

(Aluminium/Stainless Steel, height under bracket: 38.4 mm)







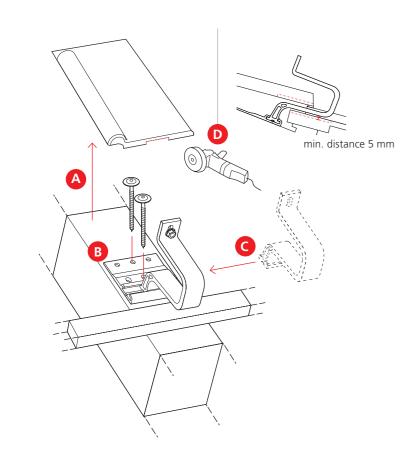
Assembly

Assembly

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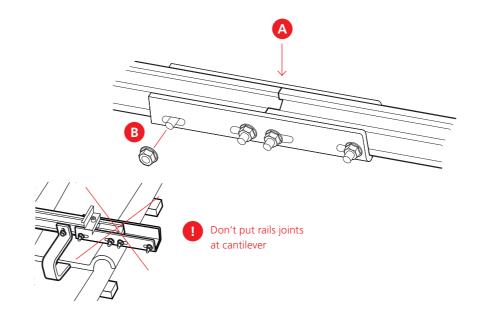
GENERAL INSTRUCTIONS FOR MOUNTING THE SINGLE HOOK SYSTEM WITH MODULES EITHER IN PORTRAIT OR LANDSCAPE

SINGLE HOOK SYSTEM 1.1/2.2/2.3 ASSEMBLY



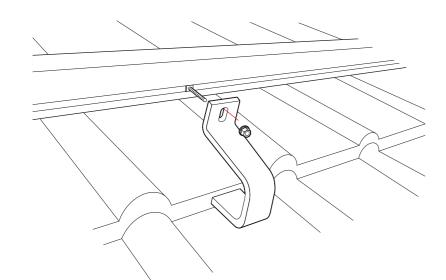
MOUNTING THE ROOF HOOKS

- A remove tiles and expose rafters
- **B** fix base plate to rafters with minimum 2 woodscrews per hook (one screw per row of holes)
- adjust bracket horizontally
- for SingleHook 2.2 and 2.3 fix the base plate first, then insert the bracket into the base plate
- ensure a minimum 5 mm distance between bracket and tile
- notch out tile as necessary



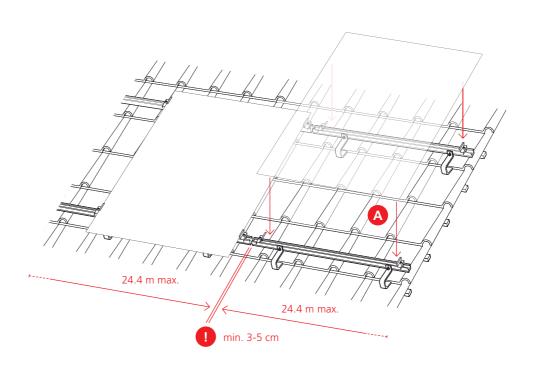
MOUNTING THE RAIL CONNECTOR SET

- A lay the K2 SingleRails flush
- avoid rail joints at roof hooks
- B connect the rails with the connector sleeve and T-Bolts/ serrated nuts. To achieve a structurally load-bearing connection use 4 pcs. T-Bolts/Nuts per sleeve, for non load-bearing connections 2 pcs. T/Bolts/nuts suffice (tightening torque: 16 Nm)
- after 24.4 m of continuous rail leaving a thermal gap is mandatory, which means starting a new module array with another rail and end clamp set



MOUNTING OF THE RAIL

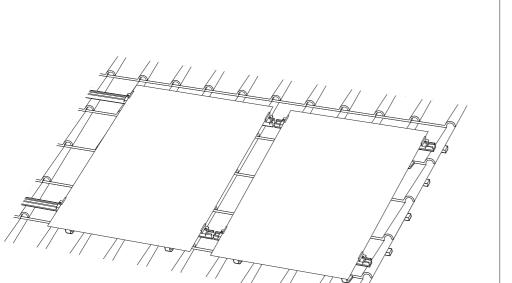
- A use the T-Bolt and serrated nut to fix the K2 SingleRail to the K2 SingleHook (tightening torque: 16 Nm)
- Ensure the toothing on the hook and SingeRail interlock accurately



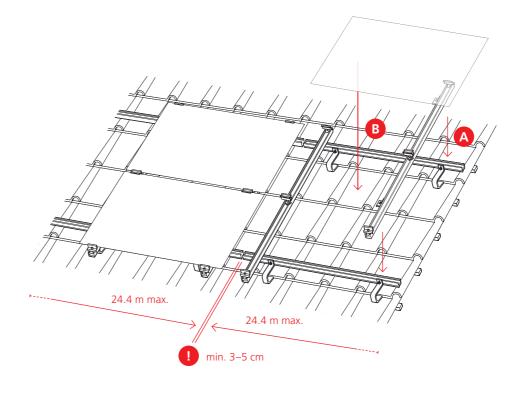
FASTENING THE MODULES

- A fix the modules to the rails using pre-assembled Middle and End Clamp Sets (tightening torque 14 Nm)
- adhere to the module manufacturers given clamping range
- 1 after 24.4 m of continuous rail, leaving a thermal gap is mandatory, which means starting a new module array with another rail and end clamp set

ALTERNATIVELY: INSTALLATION WITH MODULES IN LANDSCAPE USING CROSS BRACING

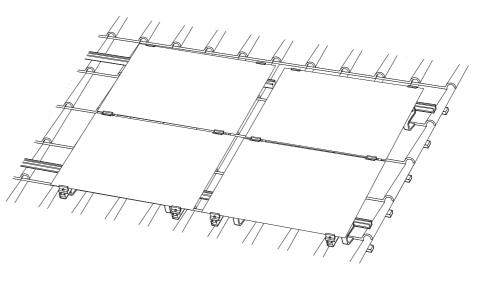


FINISHED INSTALLA-**TION WITH MODULES IN PORTRAIT**





- A fix an upper layer of rails perpendicular to the bottom layer of rails using the K2 Climber 36/48 Set (tightening torque 16 Nm)
- adjust distances between upper rails according the clamping range of the modules
- B fix the modules to the rails using pre-assembled Middle and End Clamp Sets (tightening torque 14 Nm)
- adhere to the module manufacturers given clamping range
- 1 after 24.4 m of continuous rail, leaving a thermal gap is mandatory, which means starting a new module array with another rail and end clamp set





FINISHED INSTALLA-TION WITH MODULES IN LANDSCAPE

Assembly

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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.

http://www.info@k2-systems.uk.com

Service Hotline: +44 (0) 1139 701280

Our General Terms of Business apply. Please refer to http://www.k2-systems.com/en/gsc.html.

TESTED QUALITY - 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.uk.com/downloads/certificates.html

