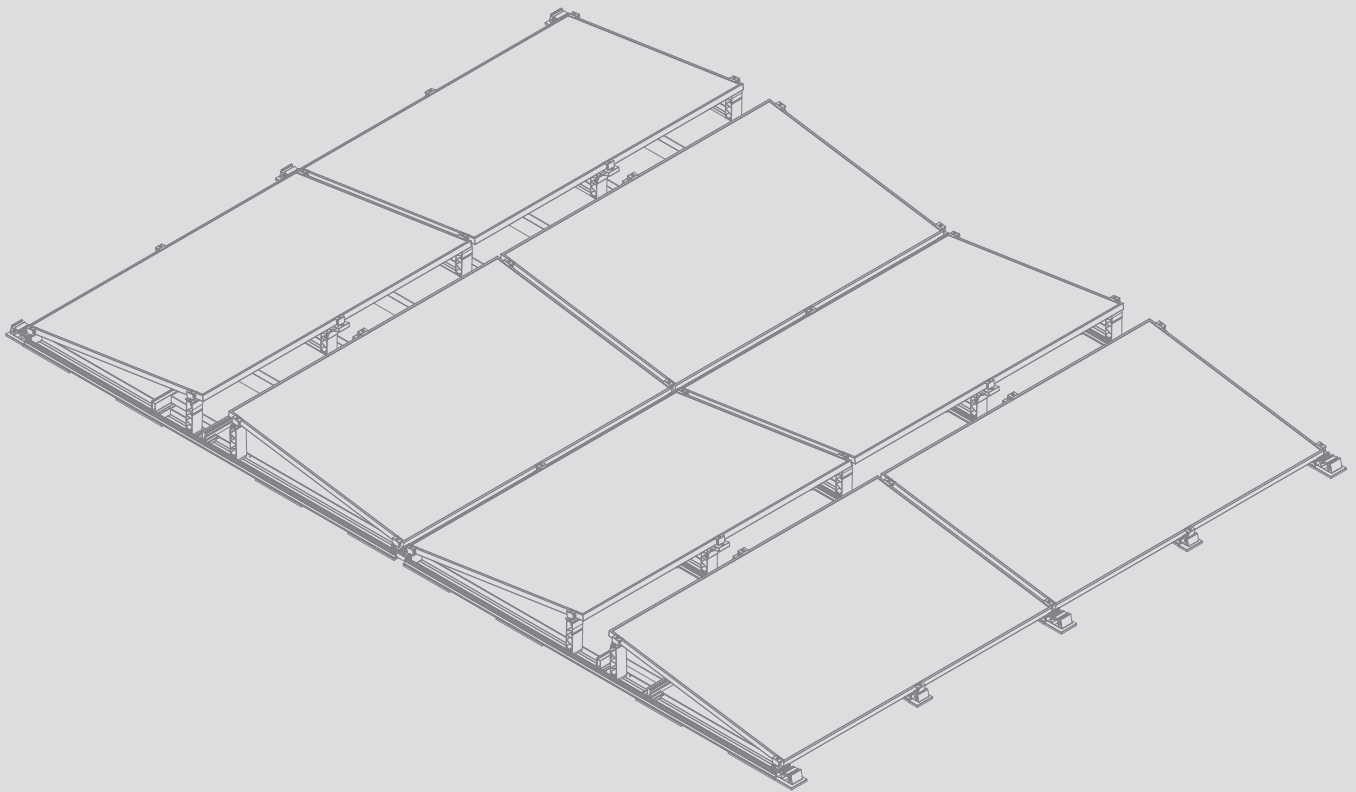
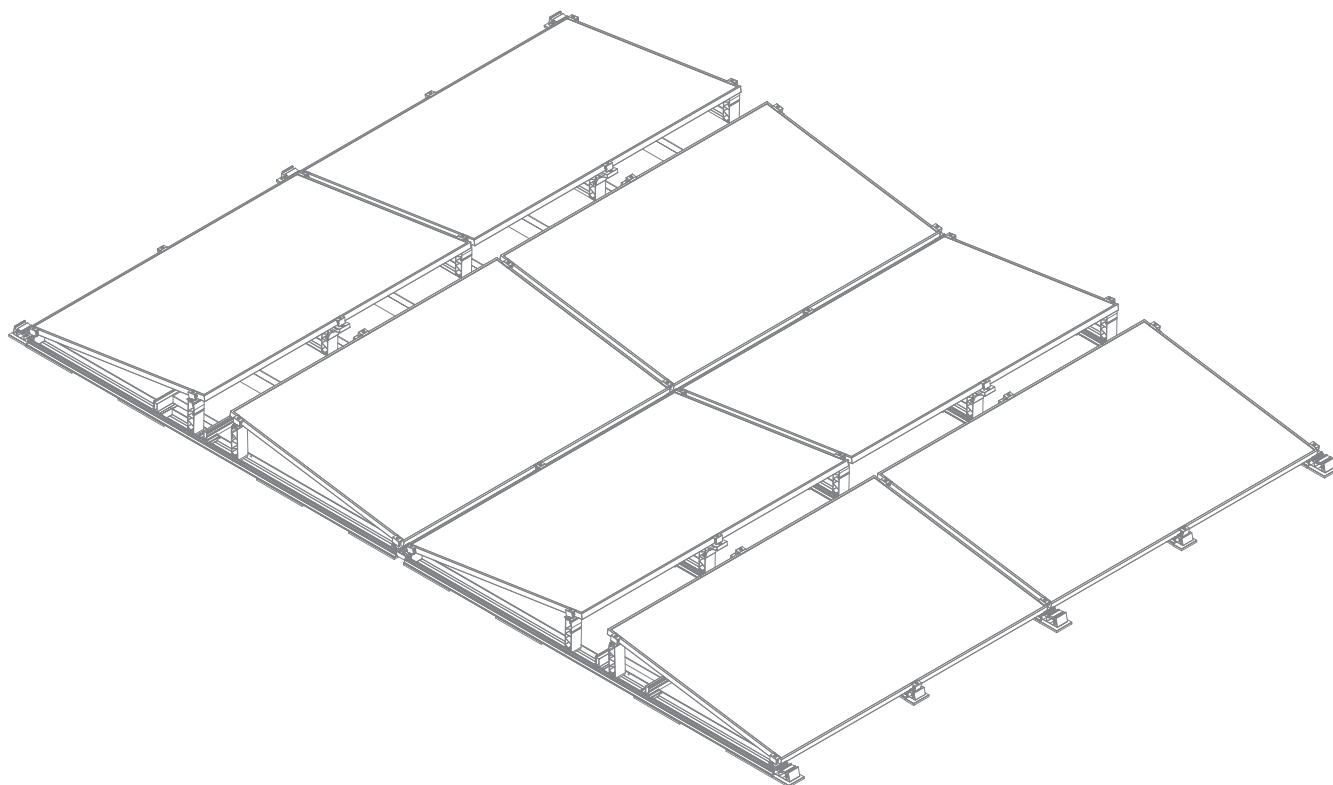


*Renusol **FS Pro** 10-EW-HL*

EN | Installation Instructions



Renusol FS Pro 10-EW-HL



EN | Usage

Mounting system for the installation of framed PV modules on flat roofs with a roof inclination of up to 5° without roof penetration.

Pre-installation considerations

The Renusol FS Pro is weighted with additional ballast (pavement slabs, etc.) to withstand wind loads. The required weight of the ballast depends on the building's height, location, the nature of the roof cover and wind loads.

The specified **coefficient of friction** in the calculation must be adhered to. This must be determined and documented on-site by a professional before installation at the customer's location. The coefficient of friction is a component for determining ballast and depends on local conditions.

Guidelines for the required ballast can be calculated according to Eurocode 1 (EN 1991).

For the Renusol FS Pro 10-EW-HL mounting system, the modules are fastened at the corner of the short module side and in the centre of the long module side. It is necessary to check whether the clamping area specified by the module manufacturer is adhered to and that the permissible module loads are not exceeded.

Drainage holes in PV module frames must be kept clear and must not be covered by the mounting system. The roof surface must be free of snow, ice, and dirt for installation. Consider the applicable regulations, state of the art and current occupational safety guidelines during installation.

A prerequisite for intended use is always a suitable substrate that can withstand the forces (weight, wind and snow loads) applied. The water drainage of the flat roof and its direction must be considered.

The roof surface must be suitable for placing building protection mats. The compatibility between building protection mats and roof foil must be checked in advance.

Wind Assessments

Suction and pressure coefficients have been determined through wind tunnel tests.

Relevant Documents

"General Installation, Maintenance, and Mounting Instructions, "Warranty Conditions, and Disclaimer."

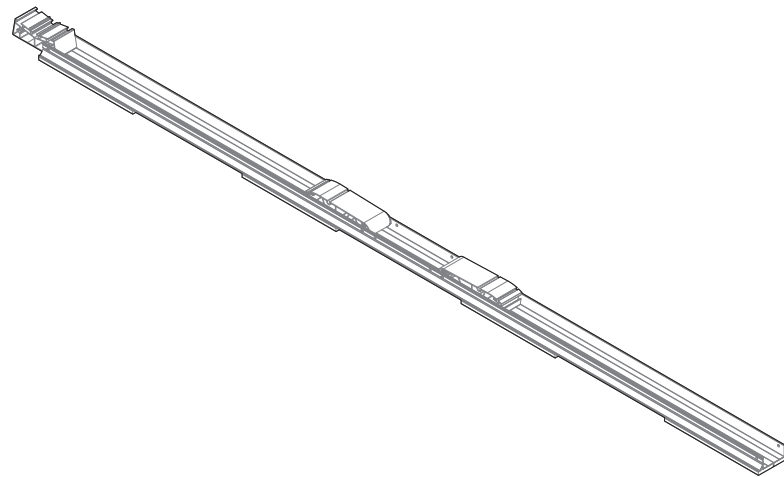
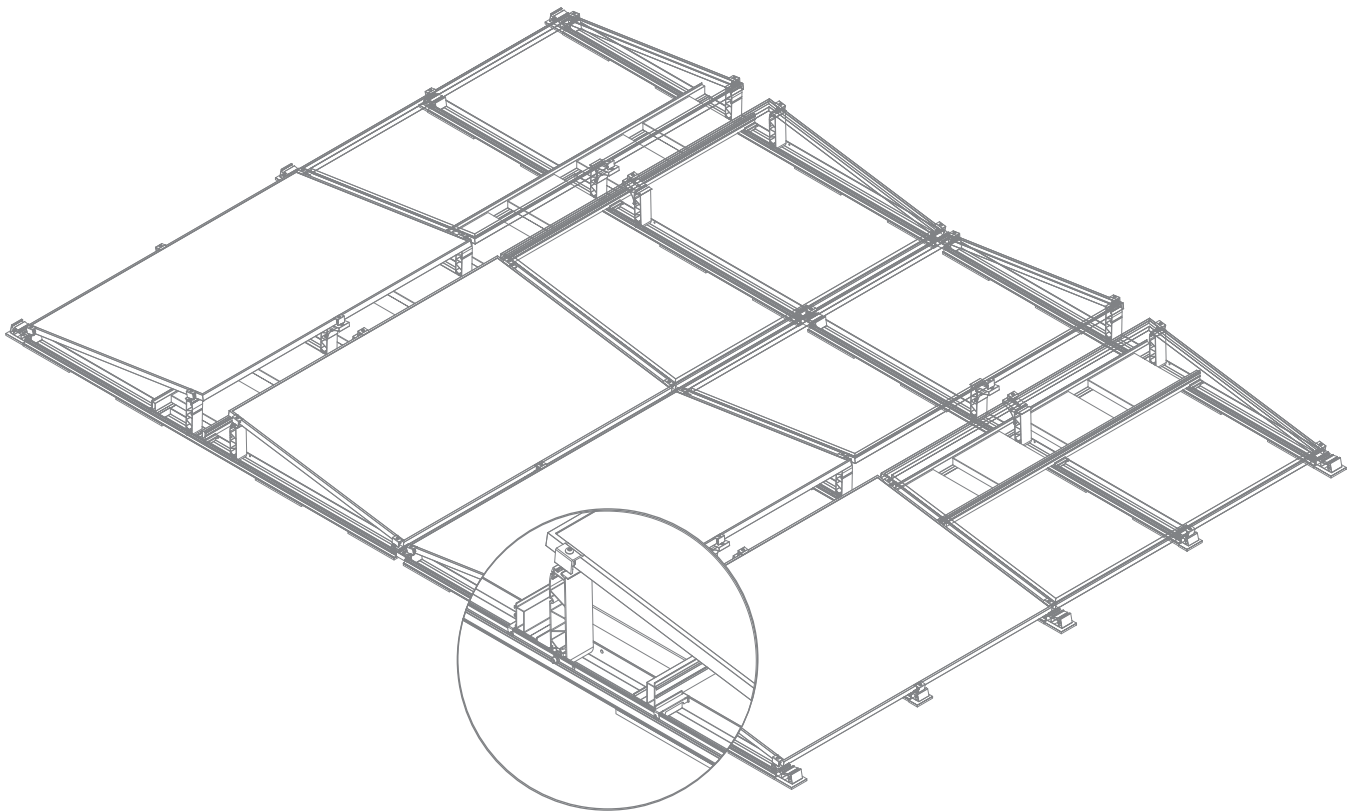
These documents are available at www.renusol.com

Warranty

Renusol's warranty is valid only when using the original Renusol FS Pro complete system in accordance with the warranty conditions. For statutory warranty/liability, please refer to Renusol's general terms and conditions.

www.renusol.com

Renusol FS Pro 10-EW-HL Component Overview



R520222
FS Pro 10-EW Base rail 2100 (Set)

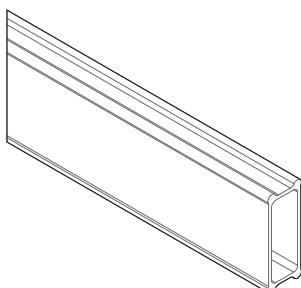
R520223
FS Pro 10-EW Base rail 2300 (Set)

R520229
FS Pro 10-EW Base rail 2700 (Set)

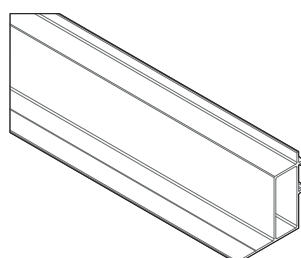
R520244
FS Pro 10-EW Base rail 2380 (Set)

Ballast rail

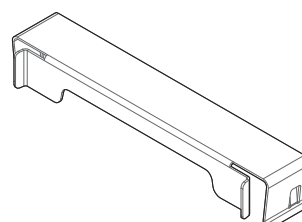
R500251
FS Pro Ballast profile connector



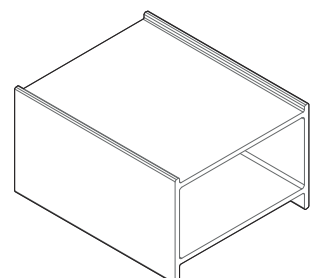
R500250
FS Pro Ballast profile 1900



R500253
FS Pro Securing clip ballast support

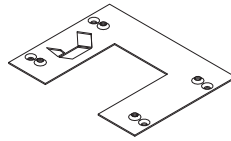


R500252
FS Pro Ballast profile support

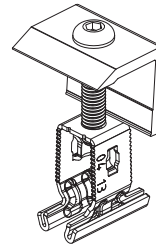


Renusol FS Pro 10-EW-HL Component Overview

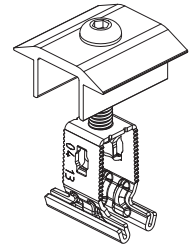
R900268 (optional)
P-Clip



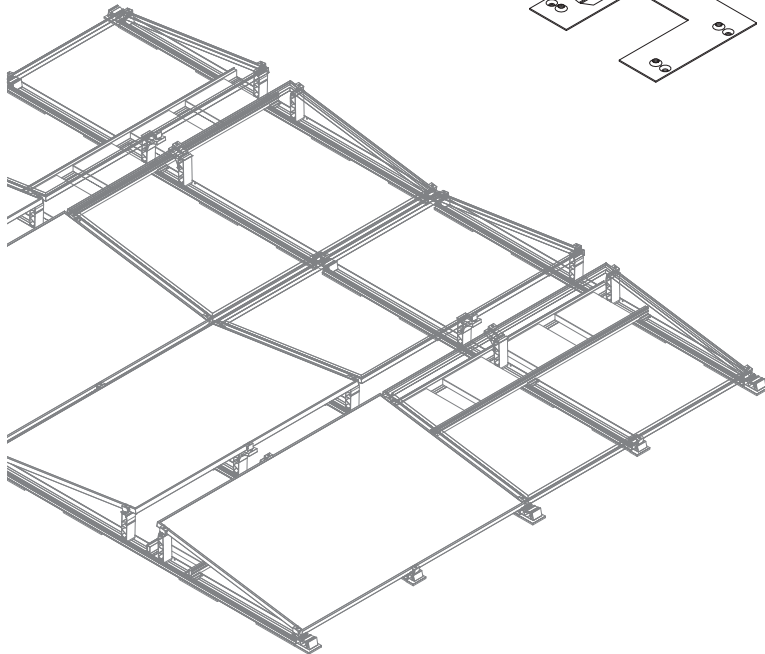
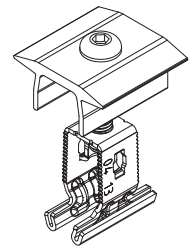
R420081 / R420081-BE
End clamp+
End clamp+ black



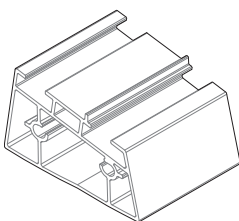
R420082 / R420082-BE
Middle clamp+
Middle clamp+ black



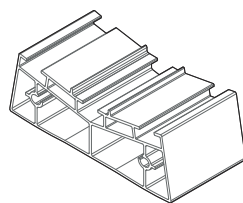
R520282
FS Pro Mid clamp EW



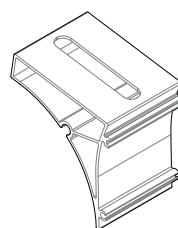
R500231
FS Pro 10-S Eave support



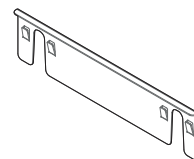
R500232
FS Pro 10-EW Eave support



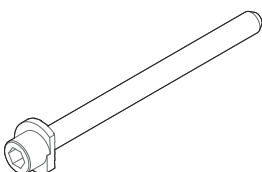
R500235
FS Pro adapter LS



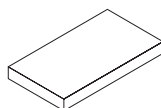
R500261
FS Pro Potential equalisation
clip EW



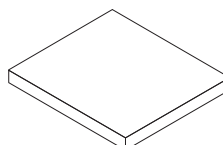
R500227
FS Pro Securing bolt



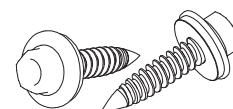
R500272
FS Pro Roof protection pad
55



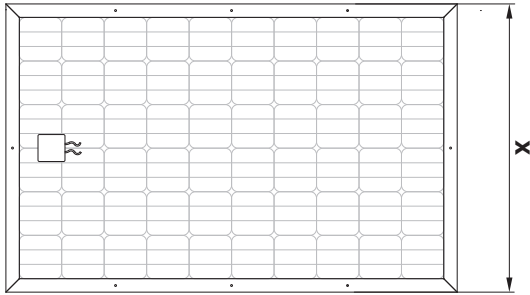
R500271
FS Pro Roof protection pad
110



R900229
Self Drilling Screw 4,8x19 A2



Preparation / Preface



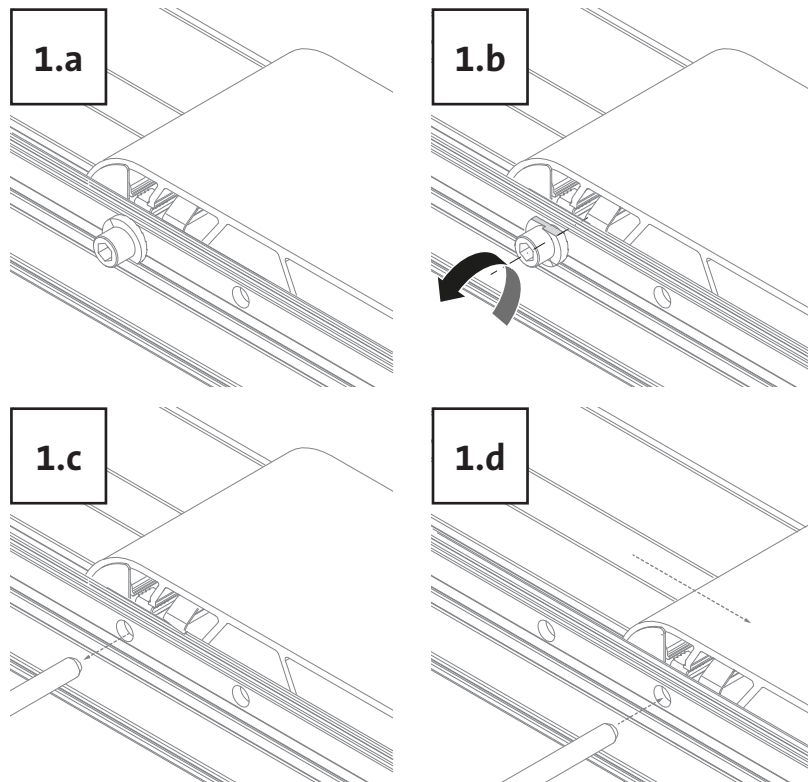
EN | Usage

The floor rails cover the following module dimensions:

- R520222: 990-1040 mm
- R520223: 1050-1134 mm
- R520229: 1134-1220 mm
- R520244: 1050-1134 mm

If you want to optimise the clamping on the short side according to the clamping range of the module, you can move the ridge support as shown in step 1 a-d.

The support must be moved horizontally.

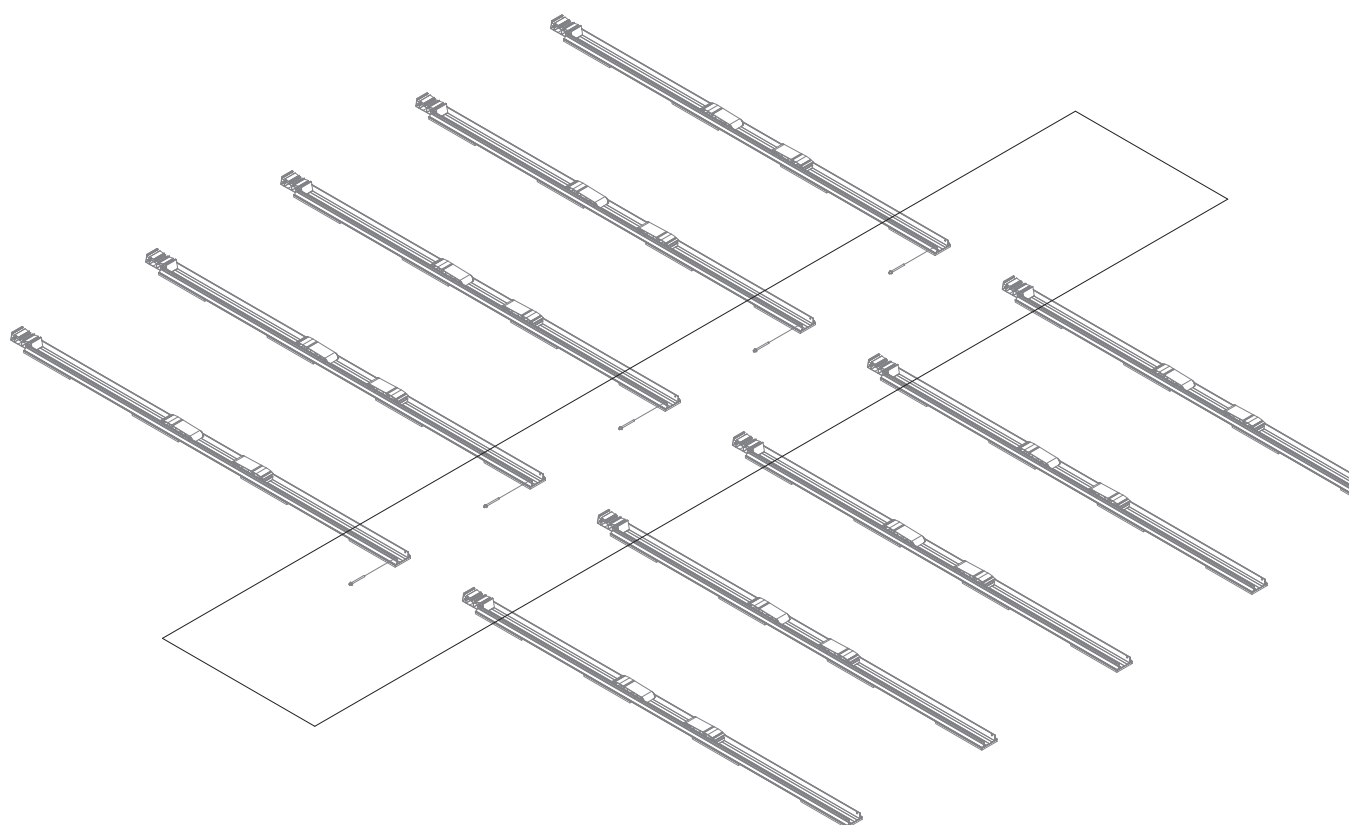
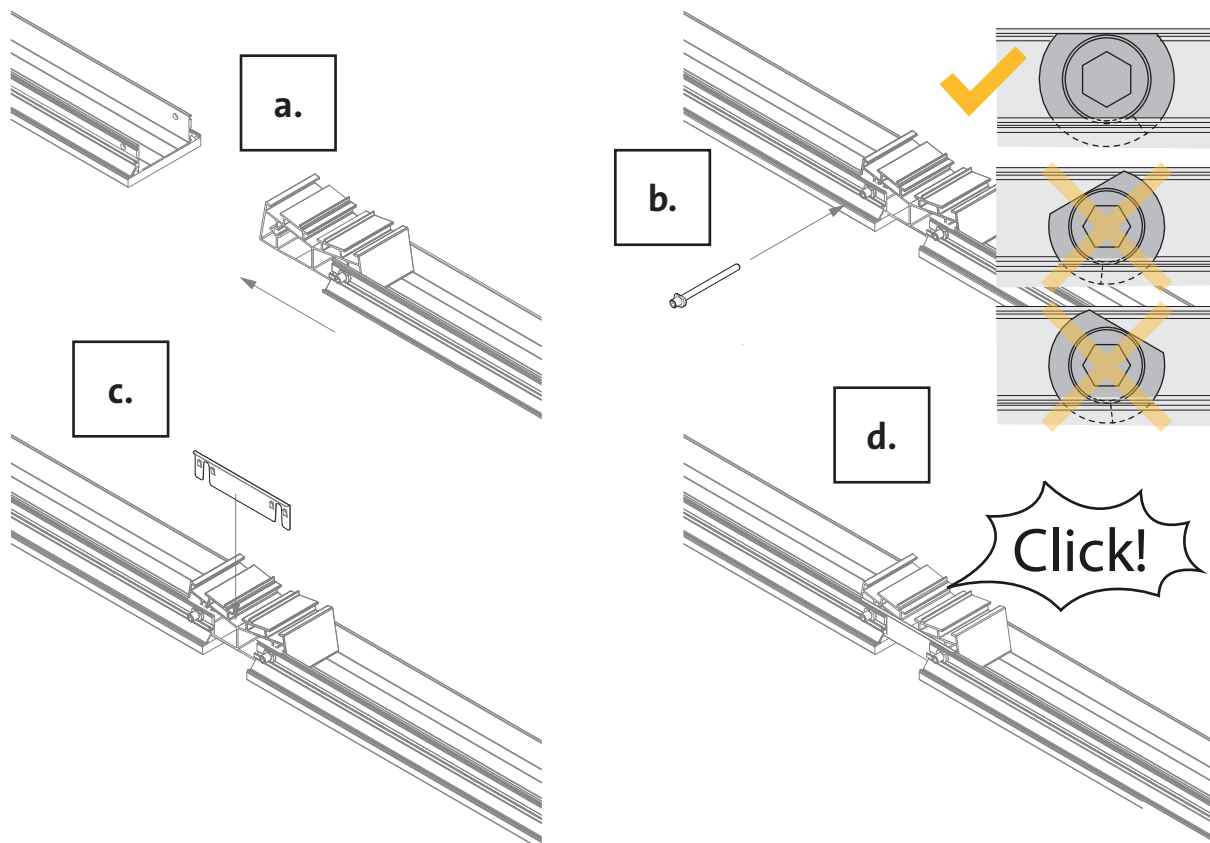


With a standard module width of 1134 mm, the following dimensions for the maintenance aisle result for the floor rails:

- R520222: /
- R520223: /
- R520229: 45 cm
- R520244: 16 cm

2.

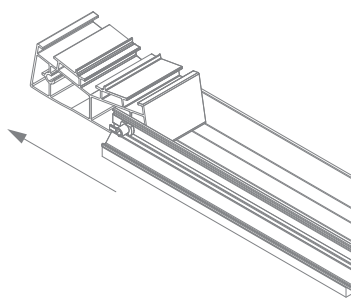
Rail Connection



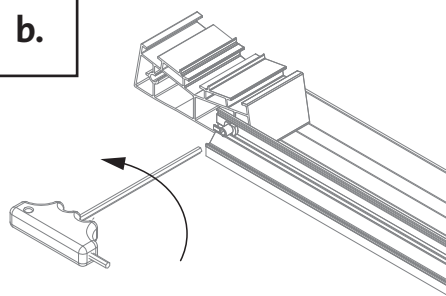
3.

Rail End (3rd rail)

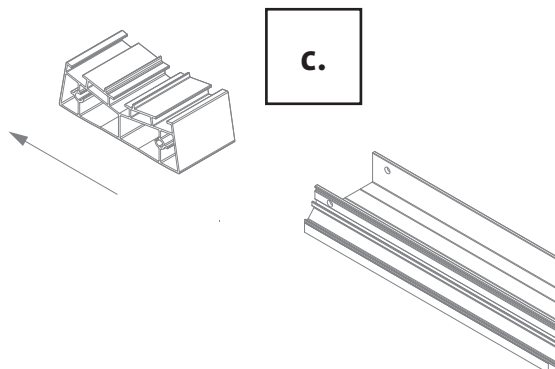
a.



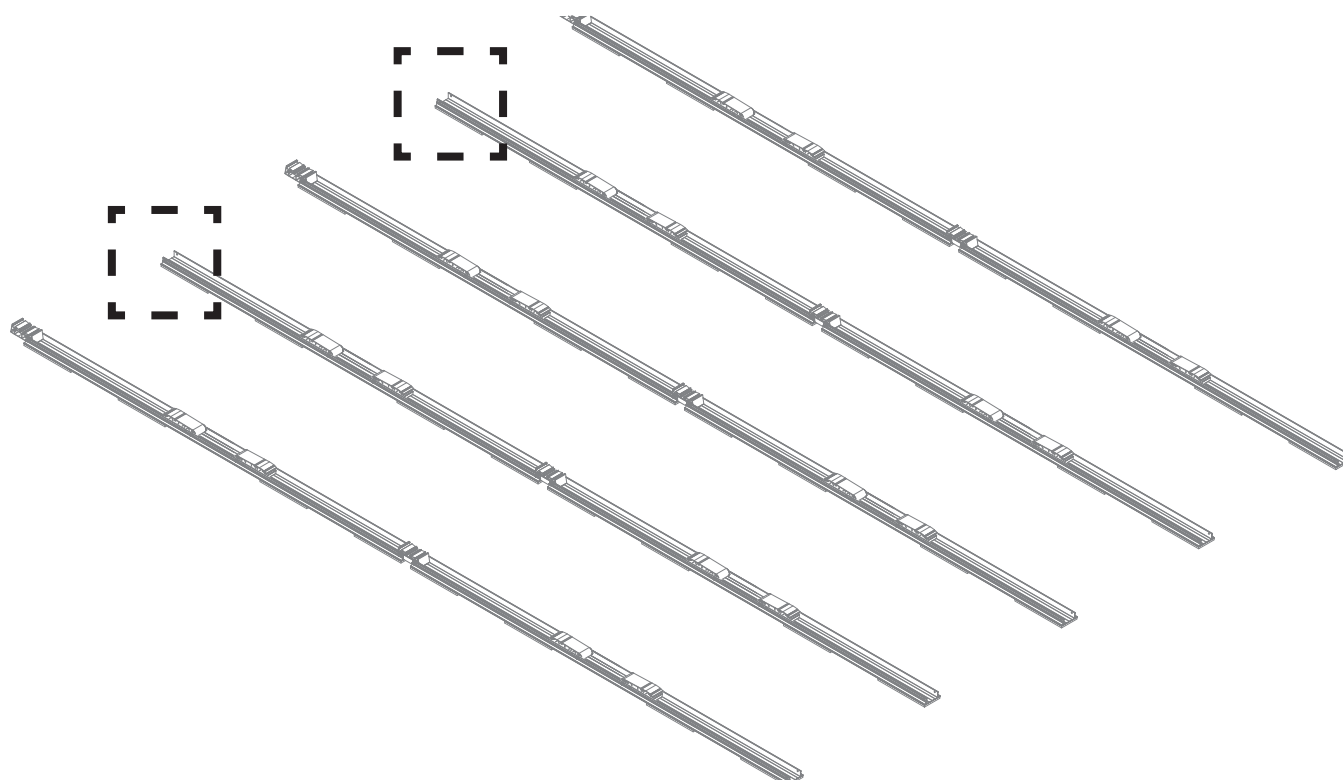
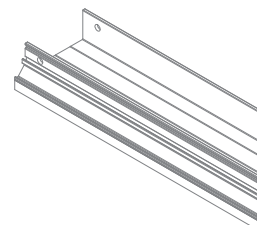
b.



c.



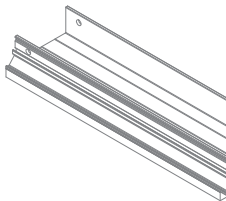
d.



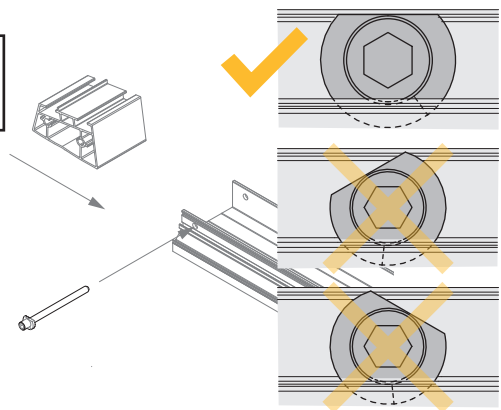
4.

Rail End (3rd rail)

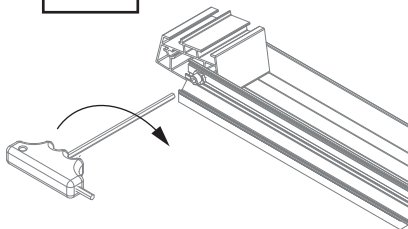
a.



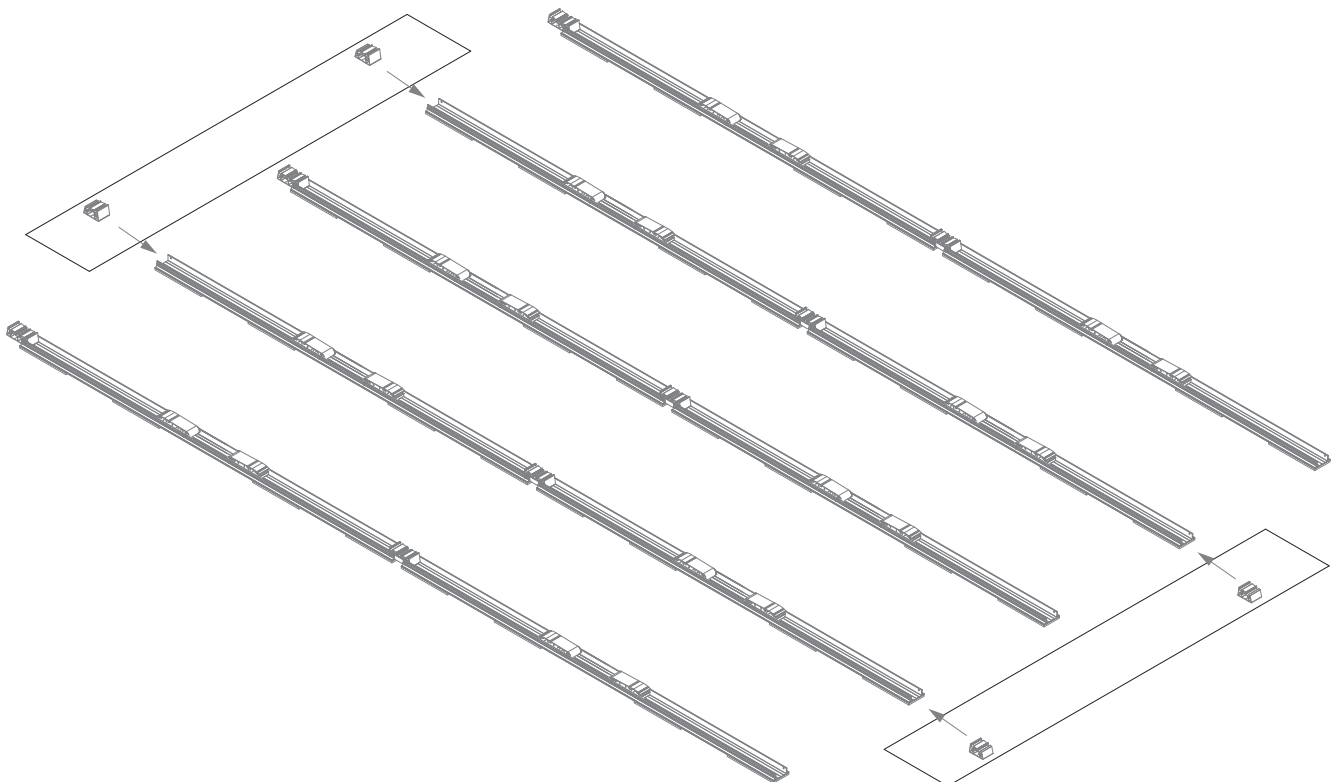
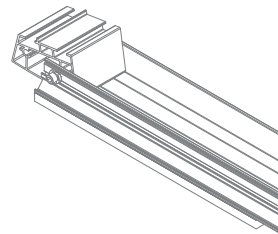
b.



c.

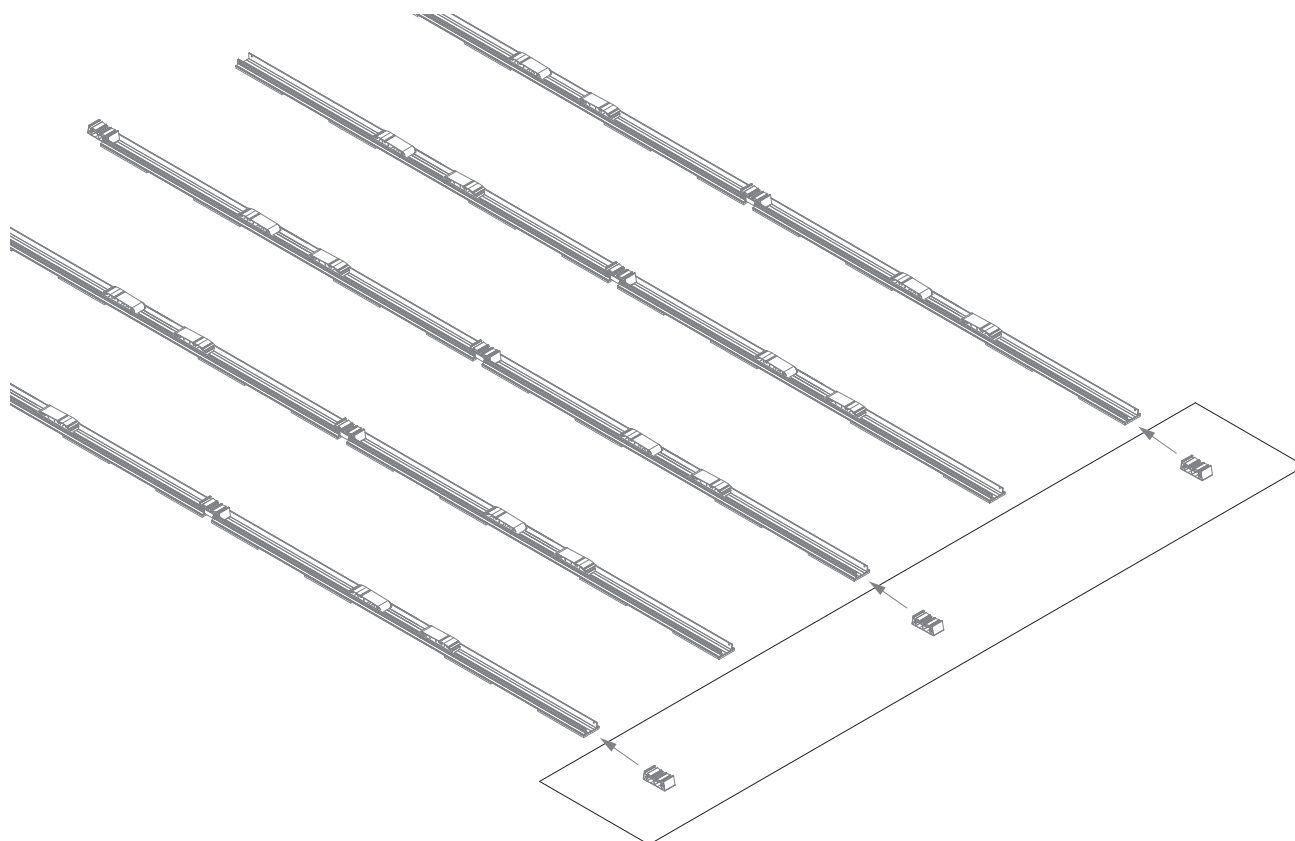
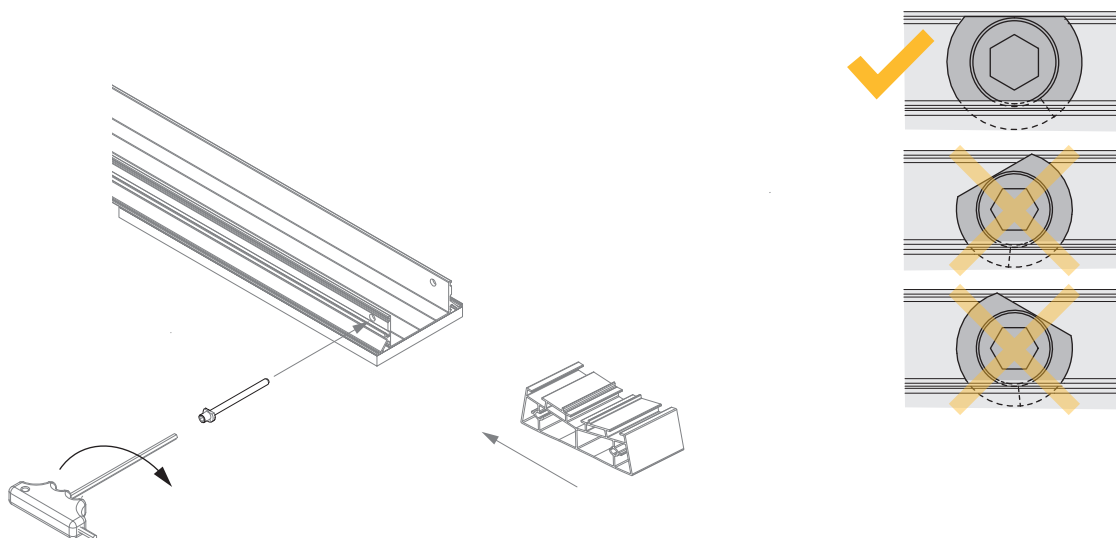


d.

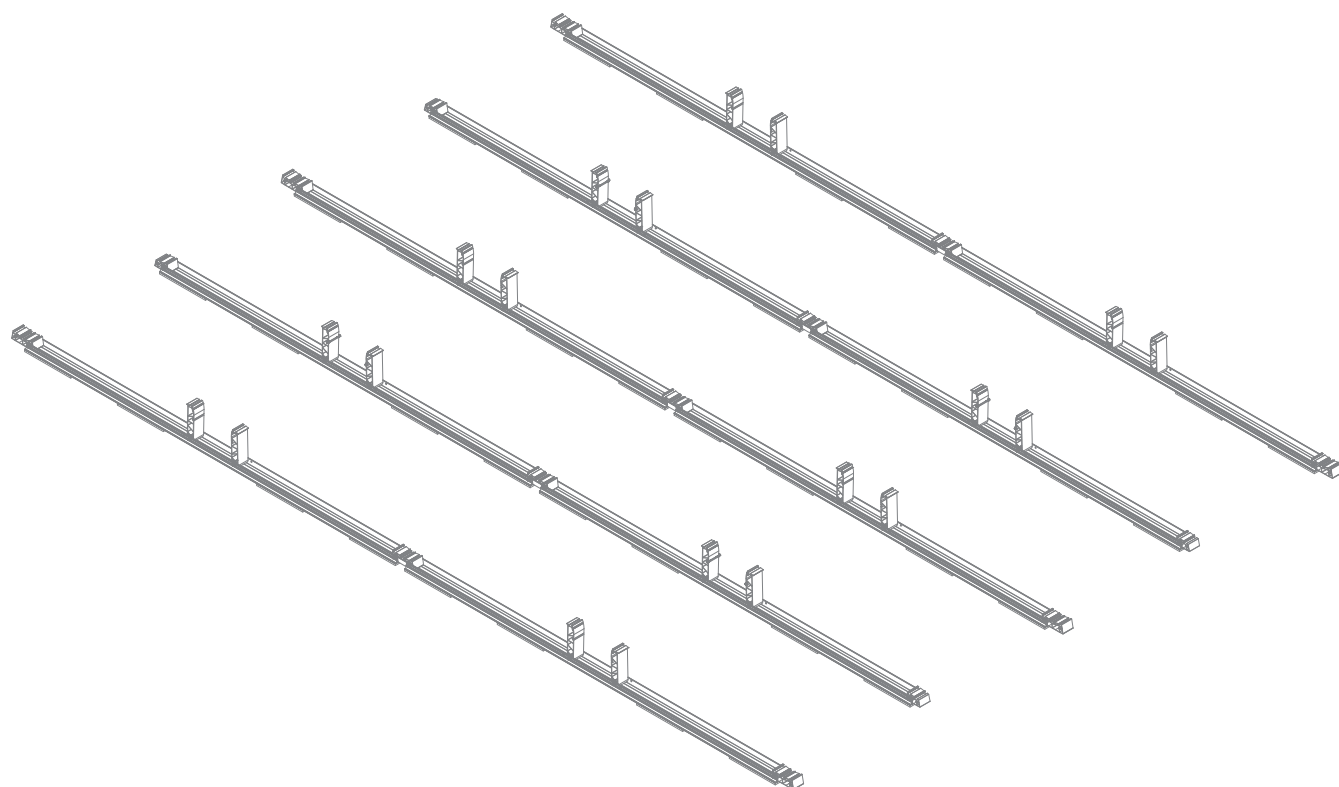
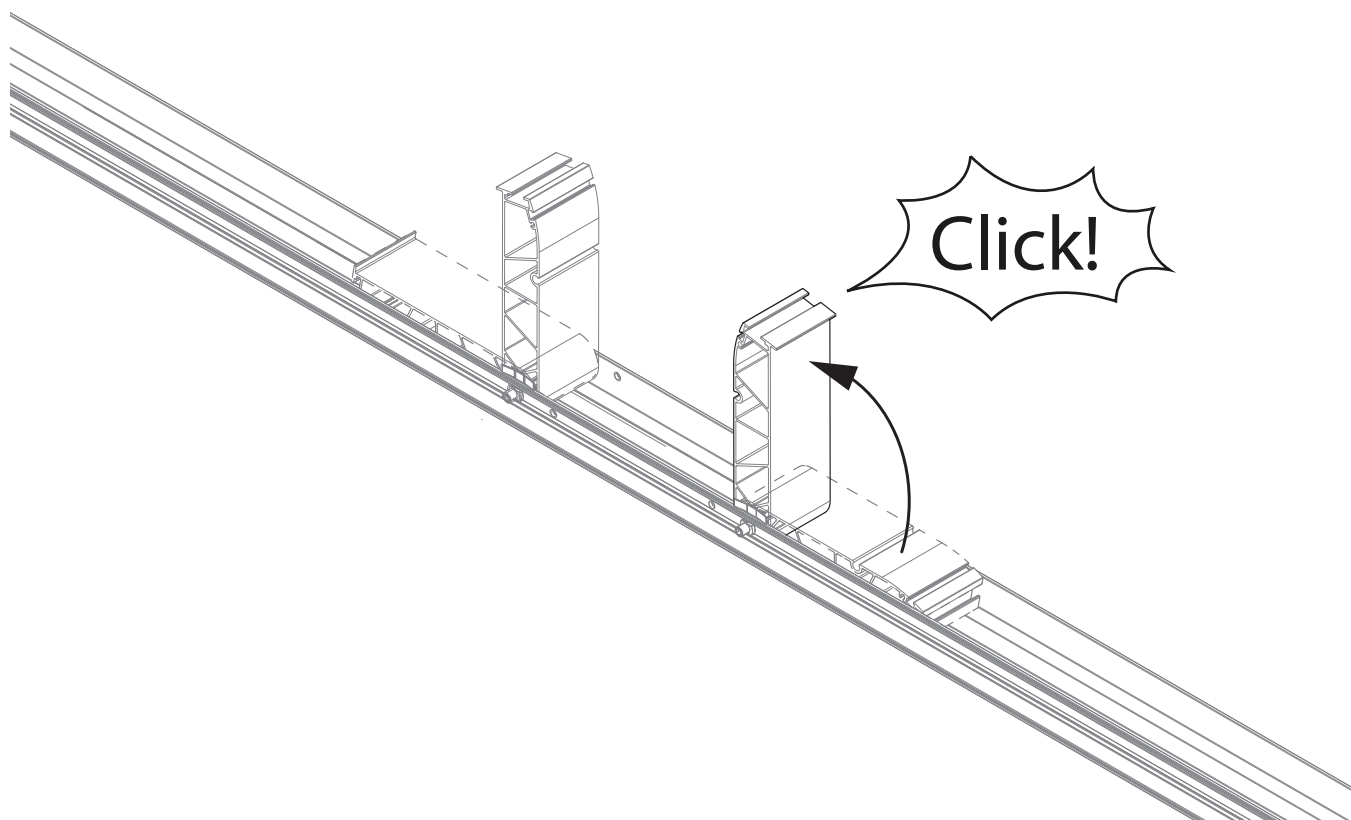


5.

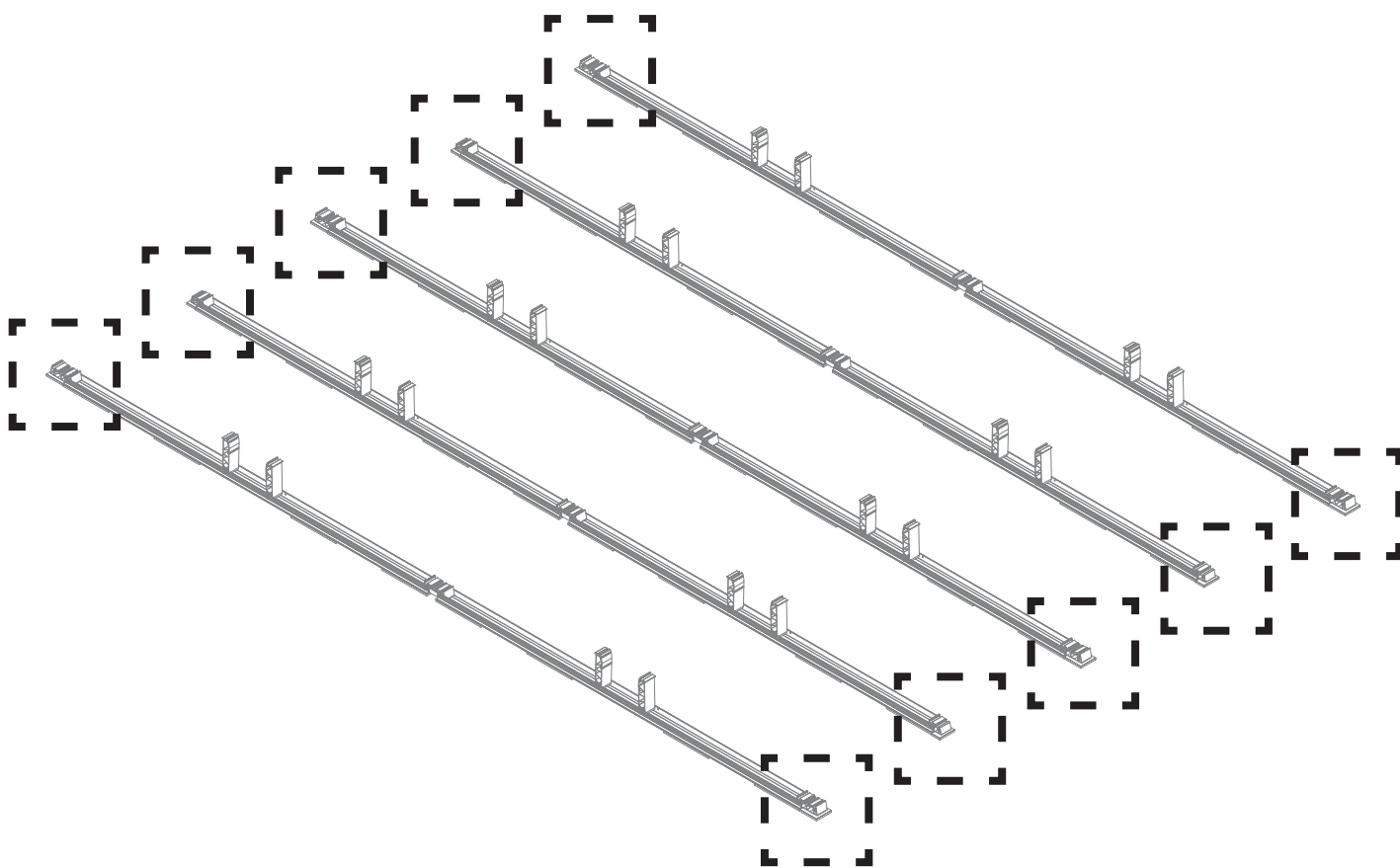
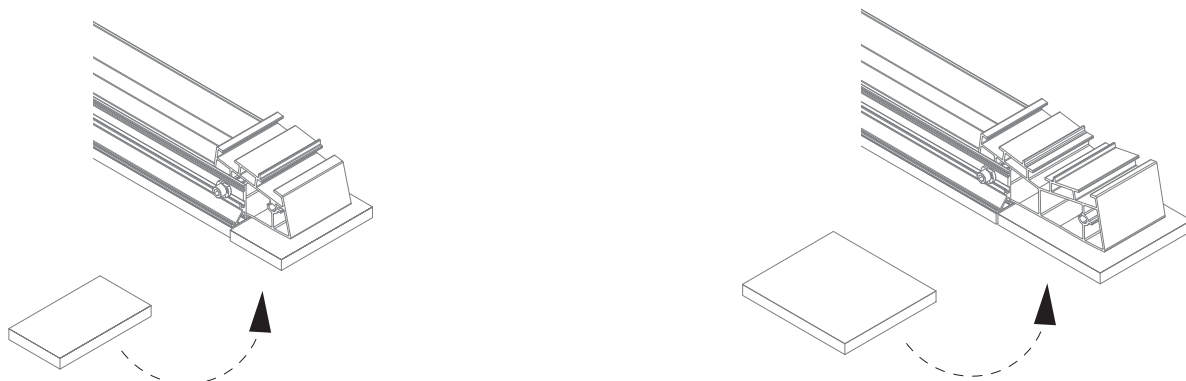
Rail End



6.



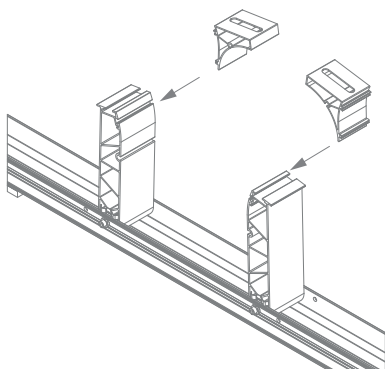
7.



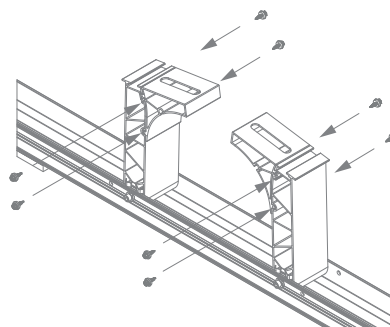
8.

FS Pro Adapter LS - Article number R500235

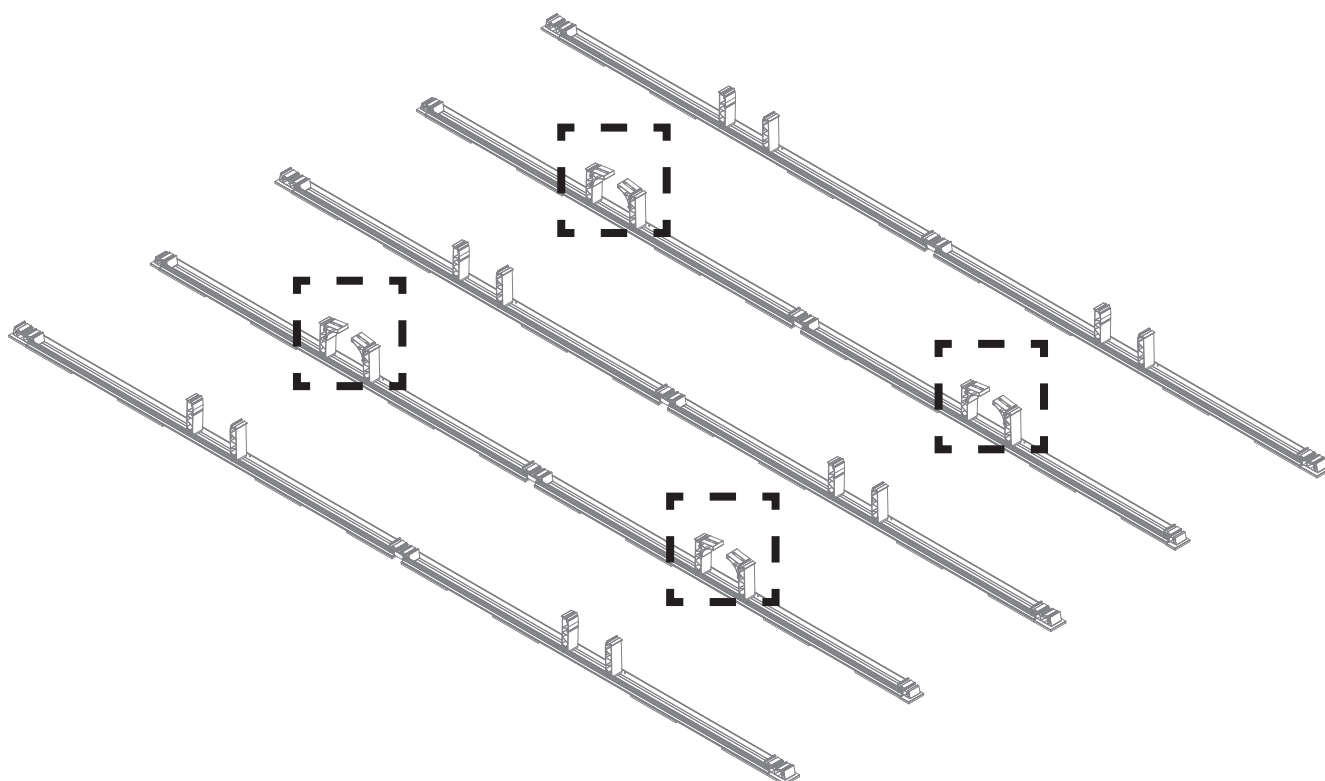
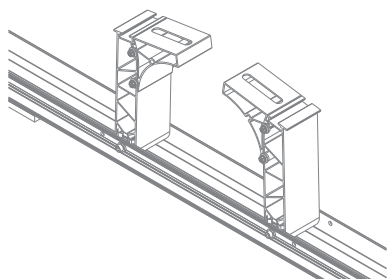
a.



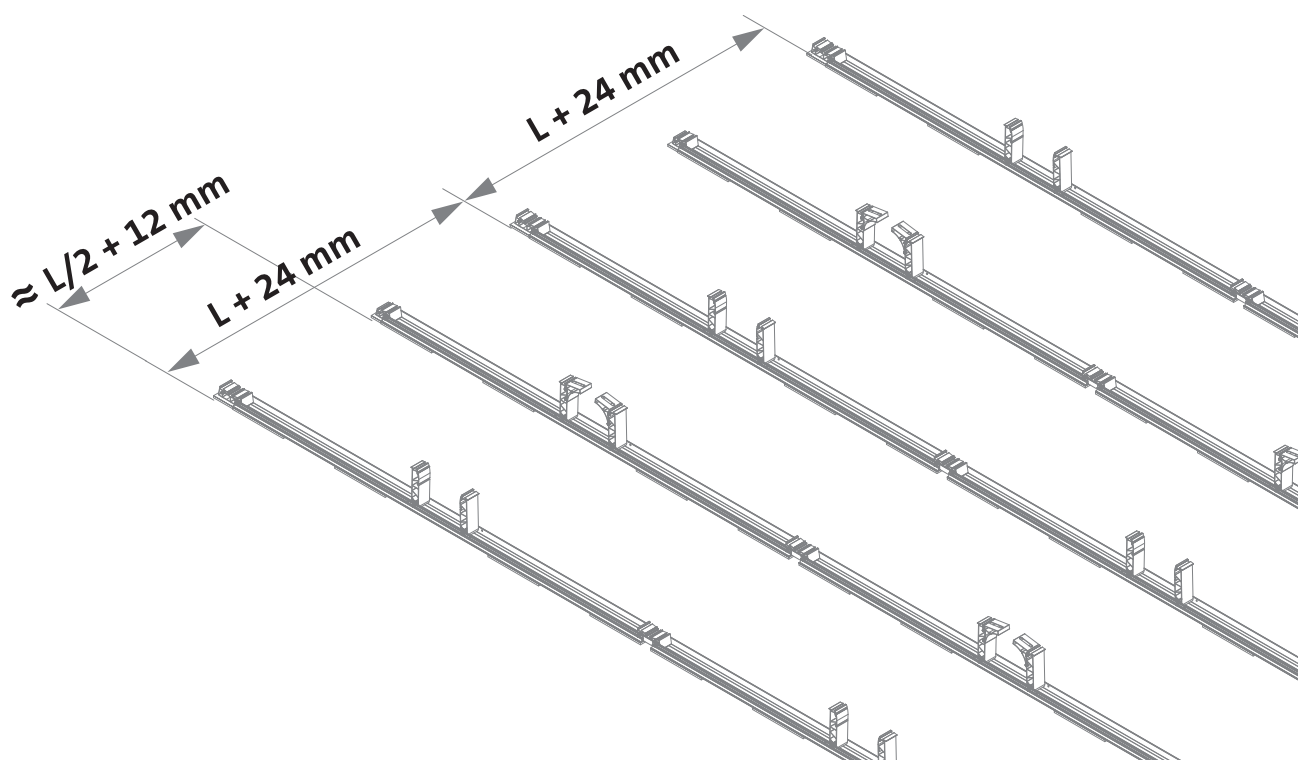
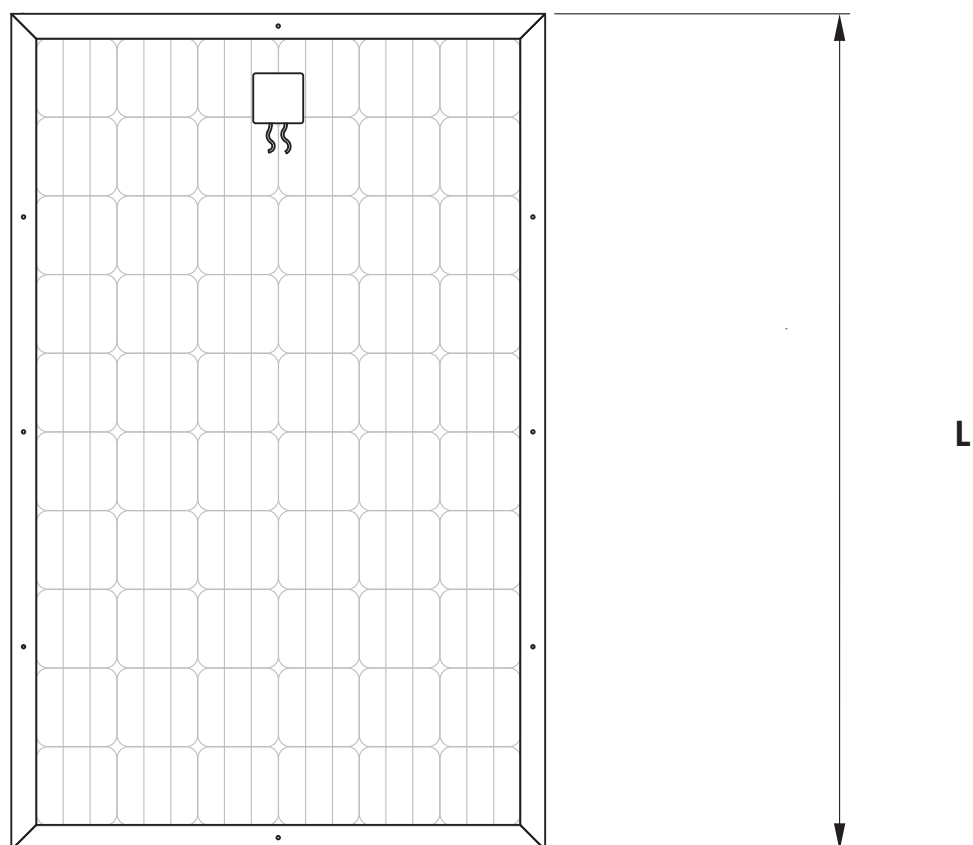
b.



c.



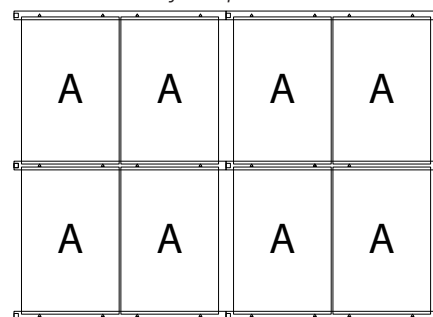
9.



10.

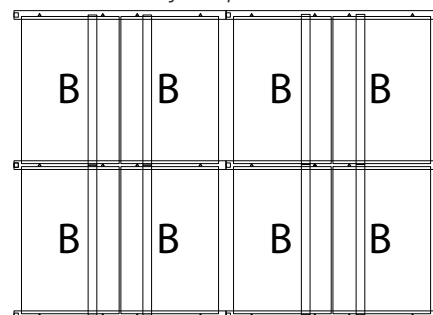
Various ballasting options are possible (see project report)

Project report view



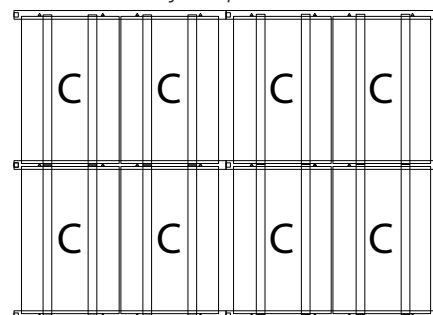
A.

Project report view

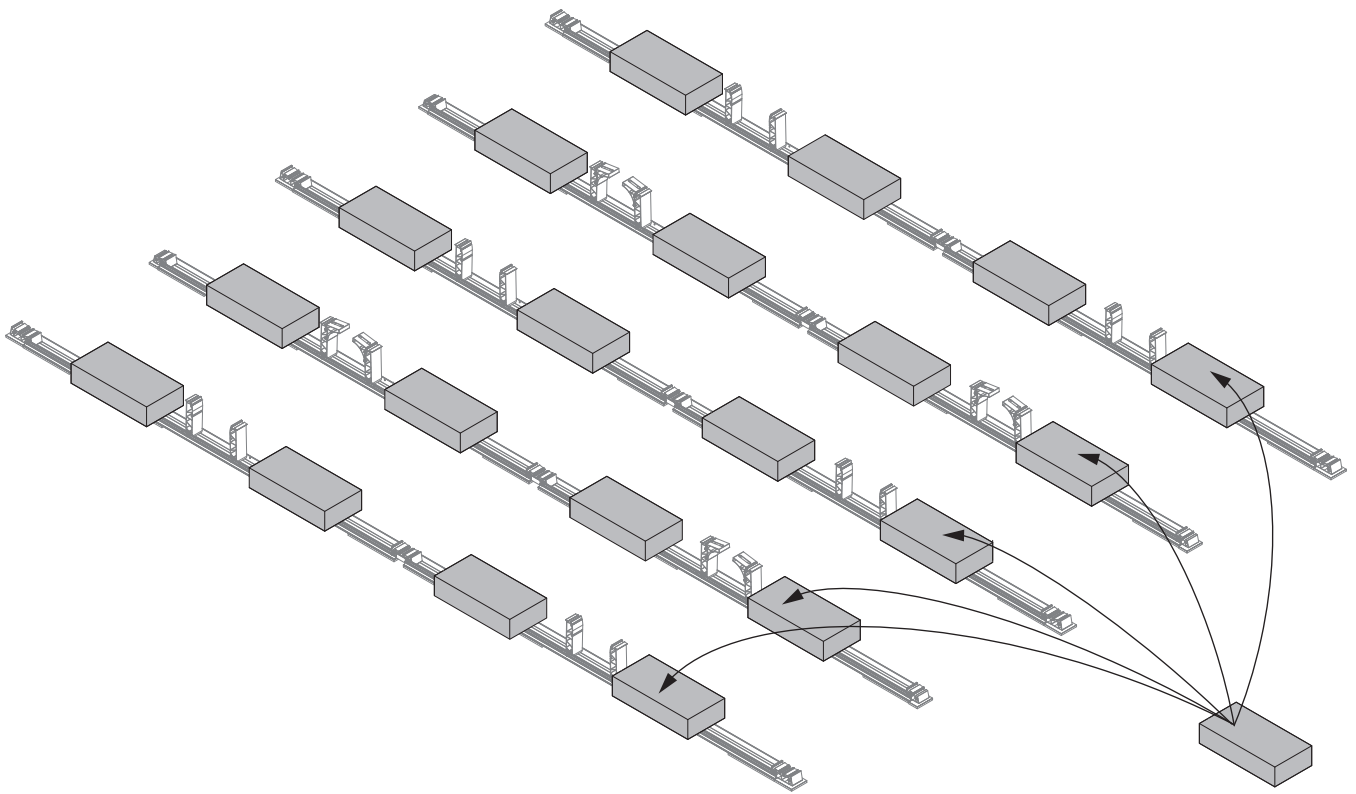


B.

Project report view



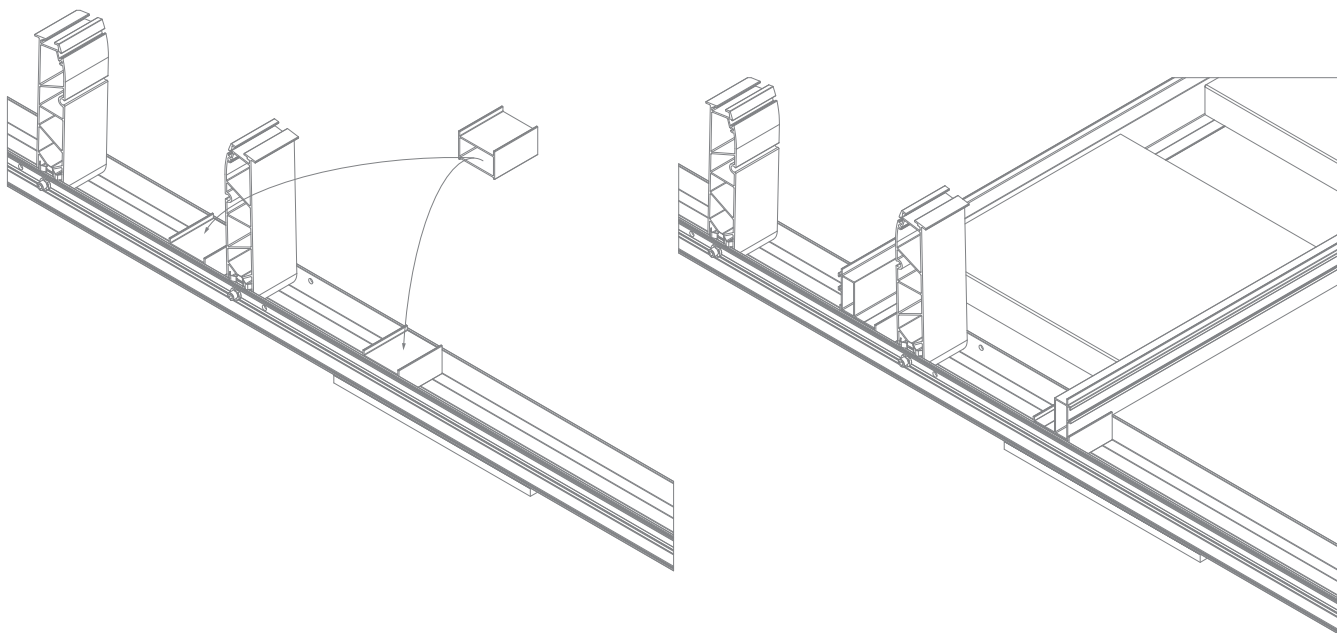
C. = 2x B.



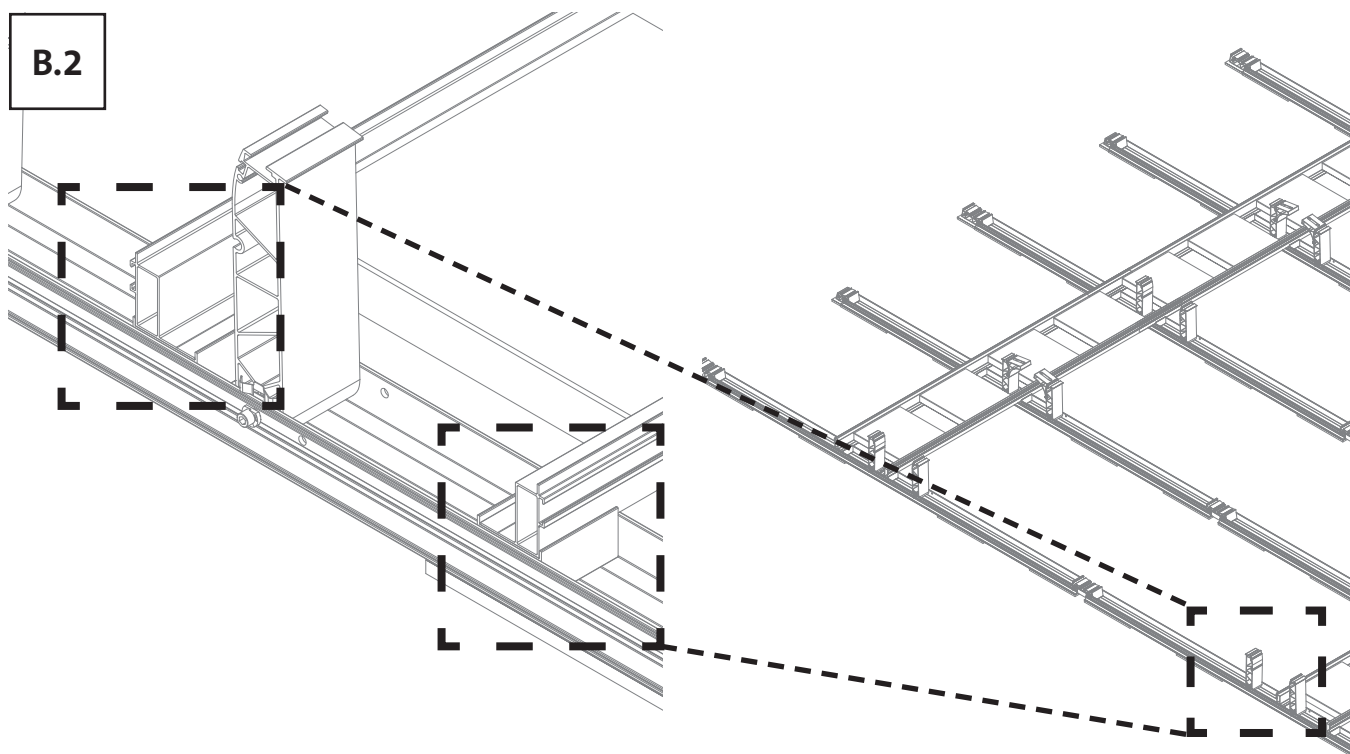
10.B

Ballasting Option B (see project report)

B.1



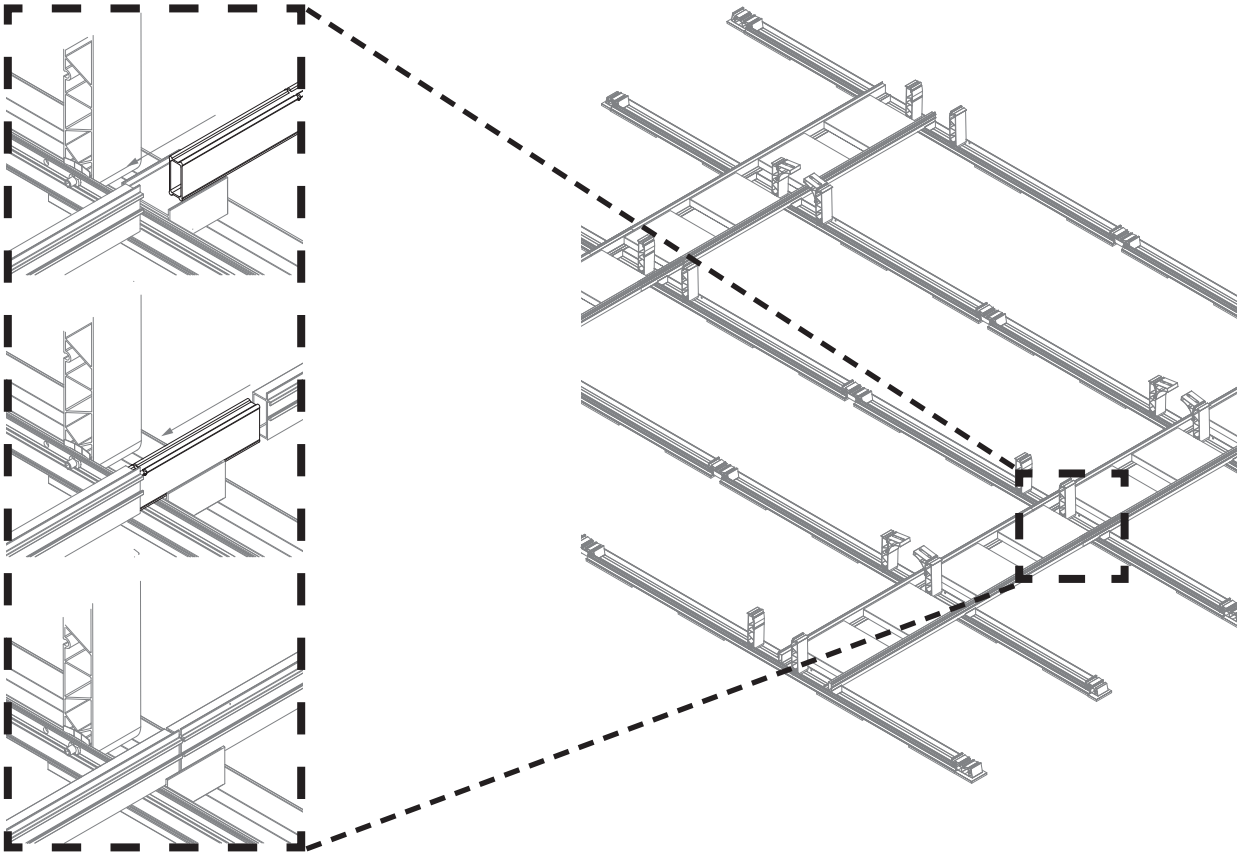
B.2



10.B

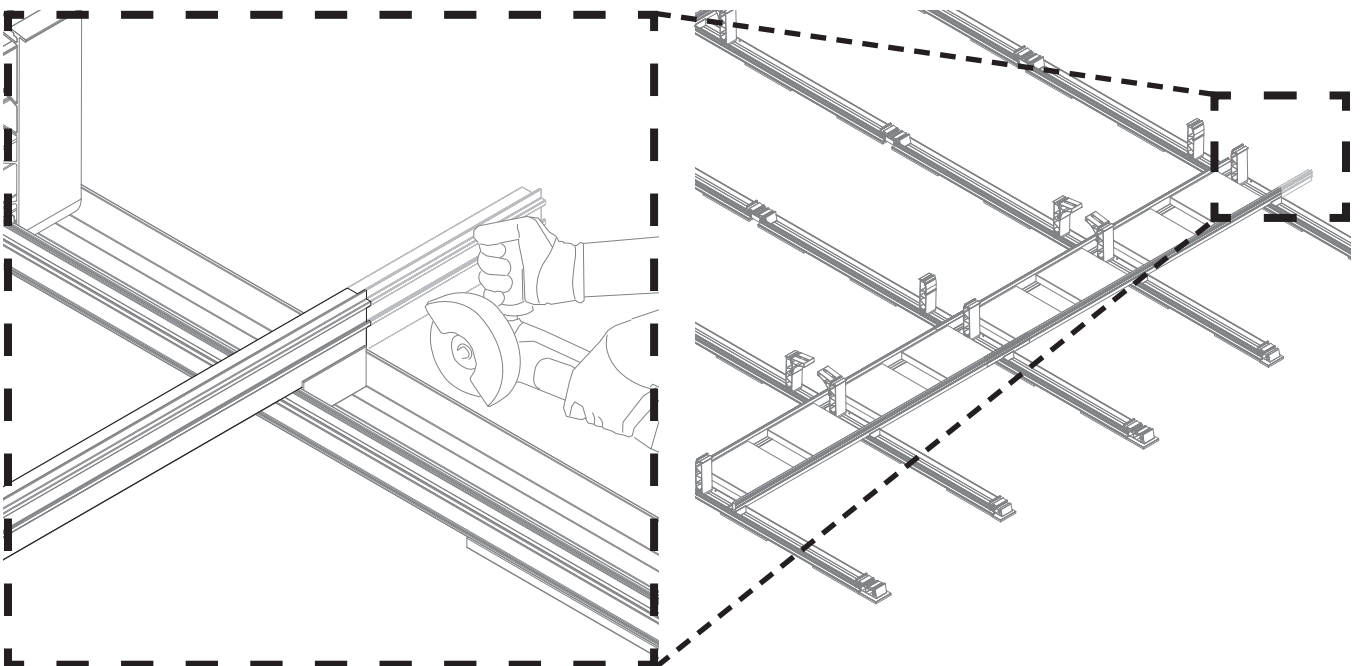
Ballasting Option B (see project report)

B.3



B.4

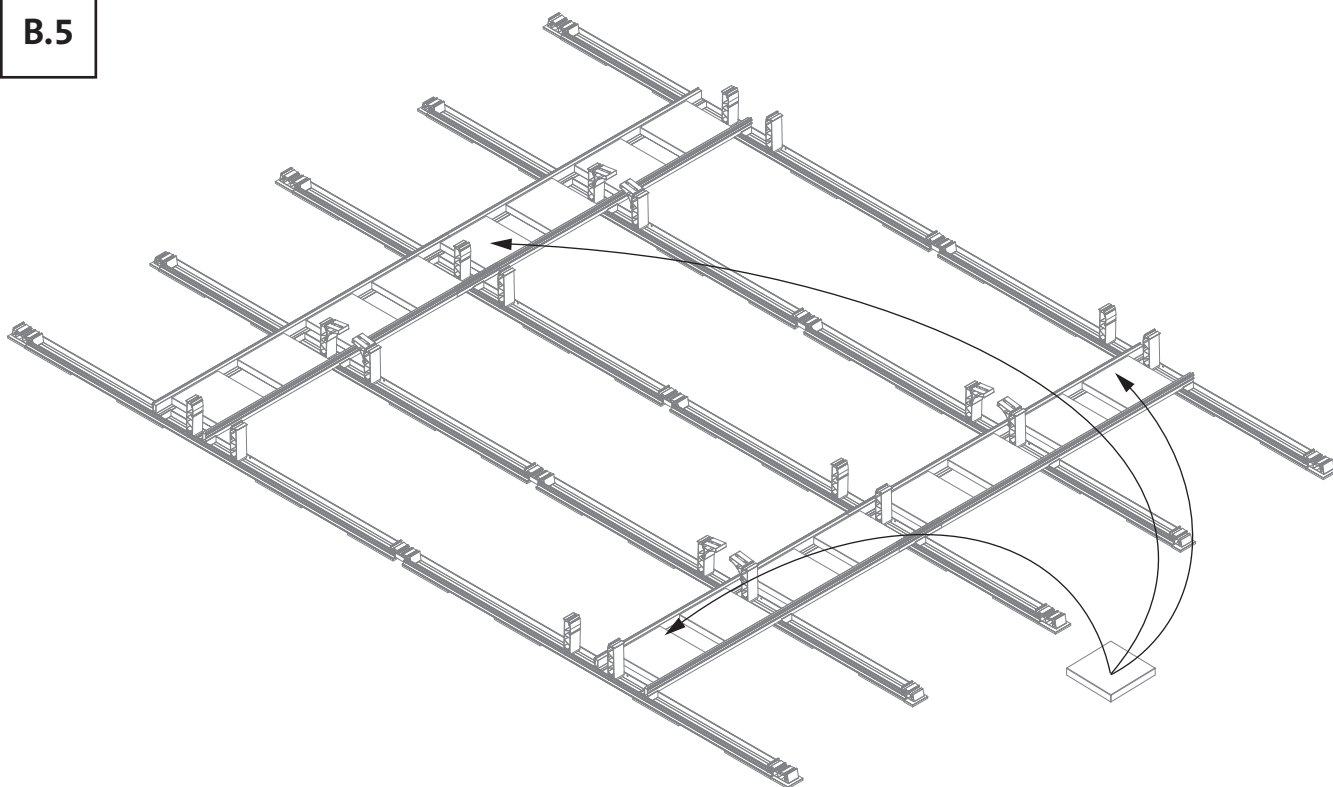
Please do not cut on the roof!



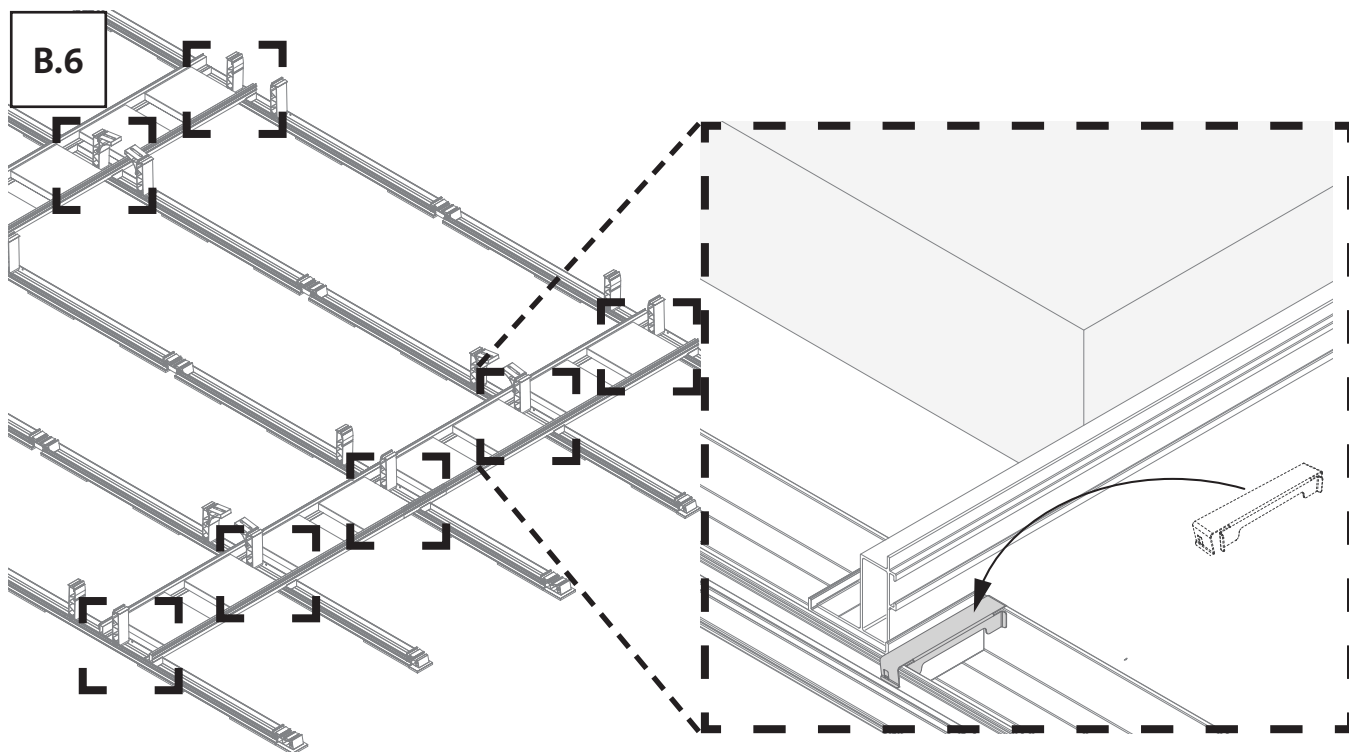
10.B

Ballasting Option B (see project report)

B.5

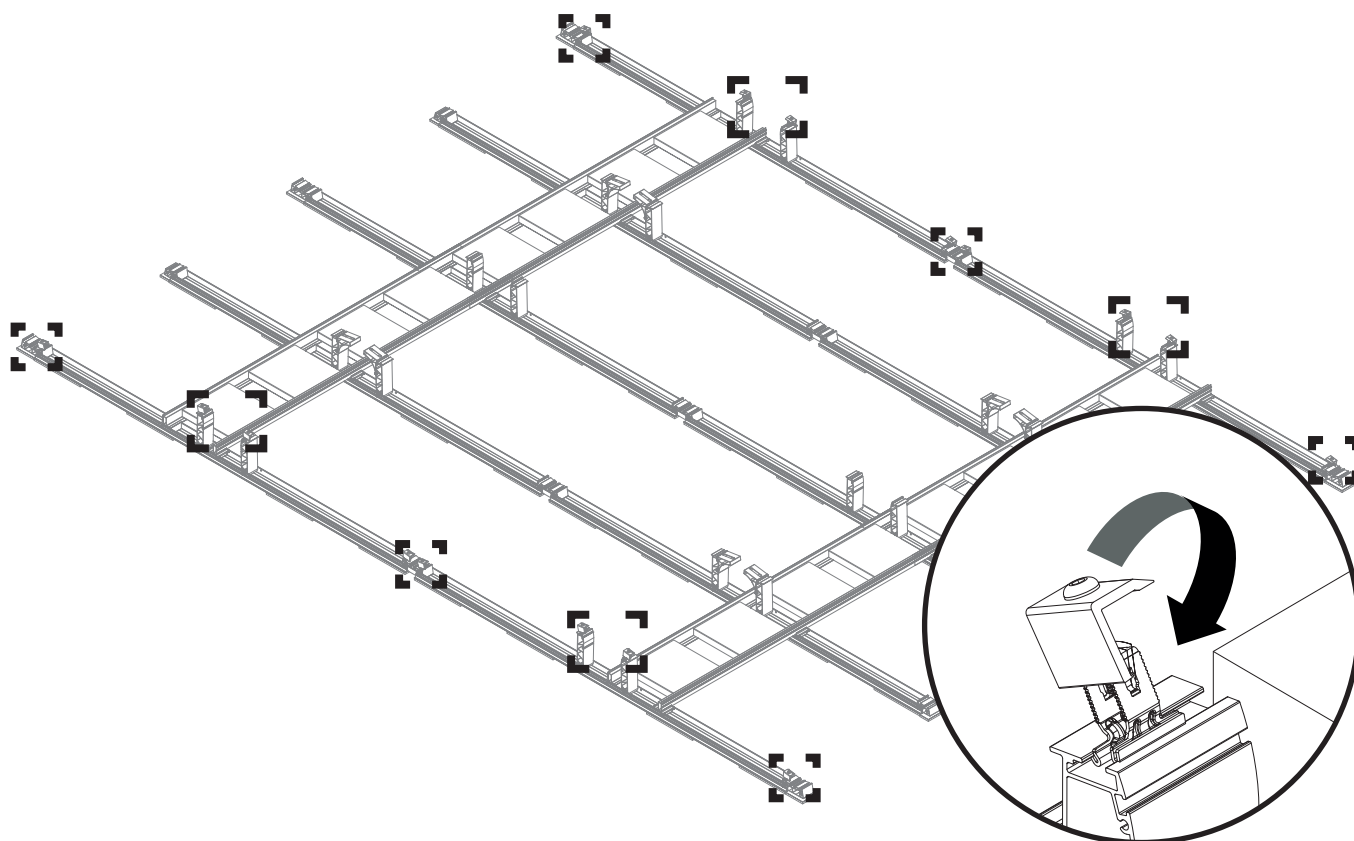


B.6



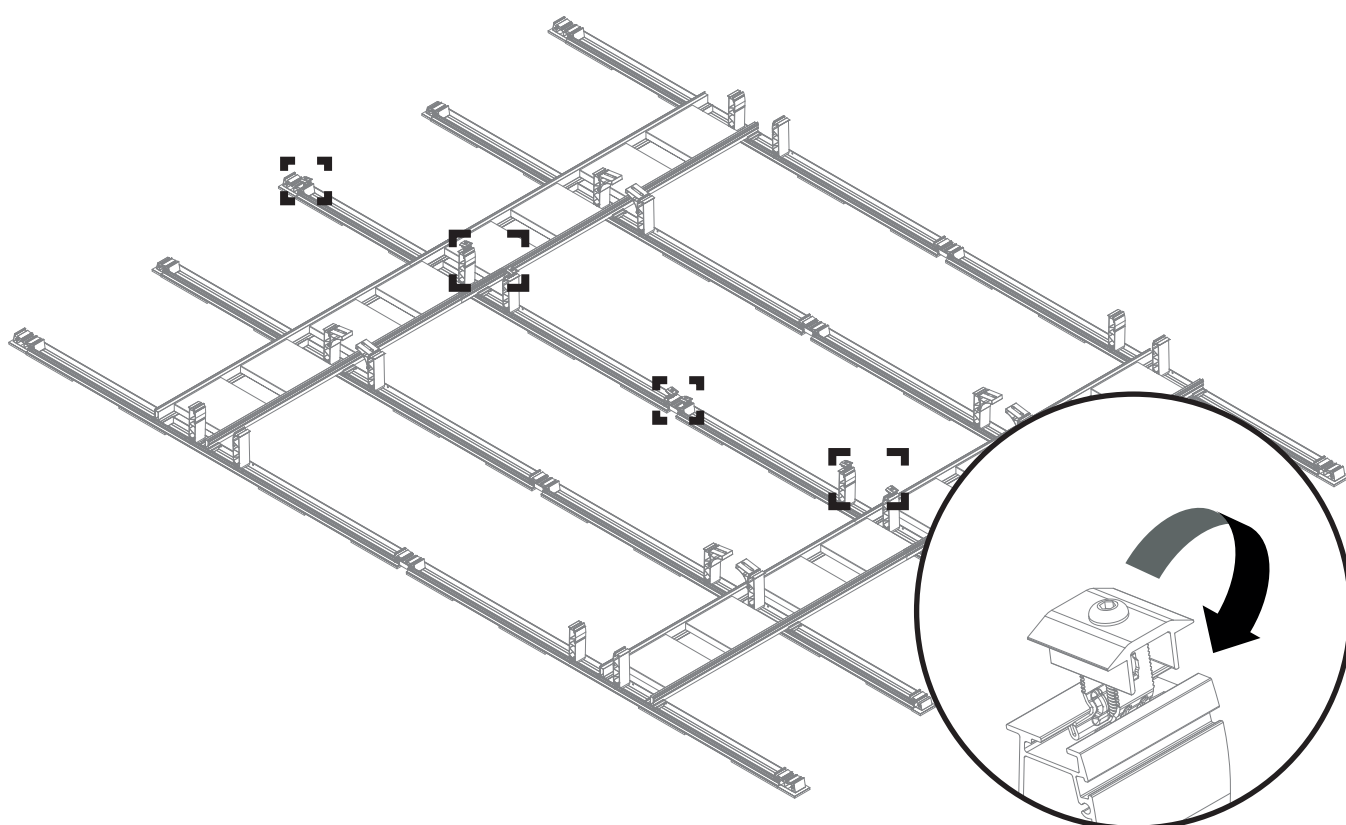
11.

End clamp+ - Article number R420081



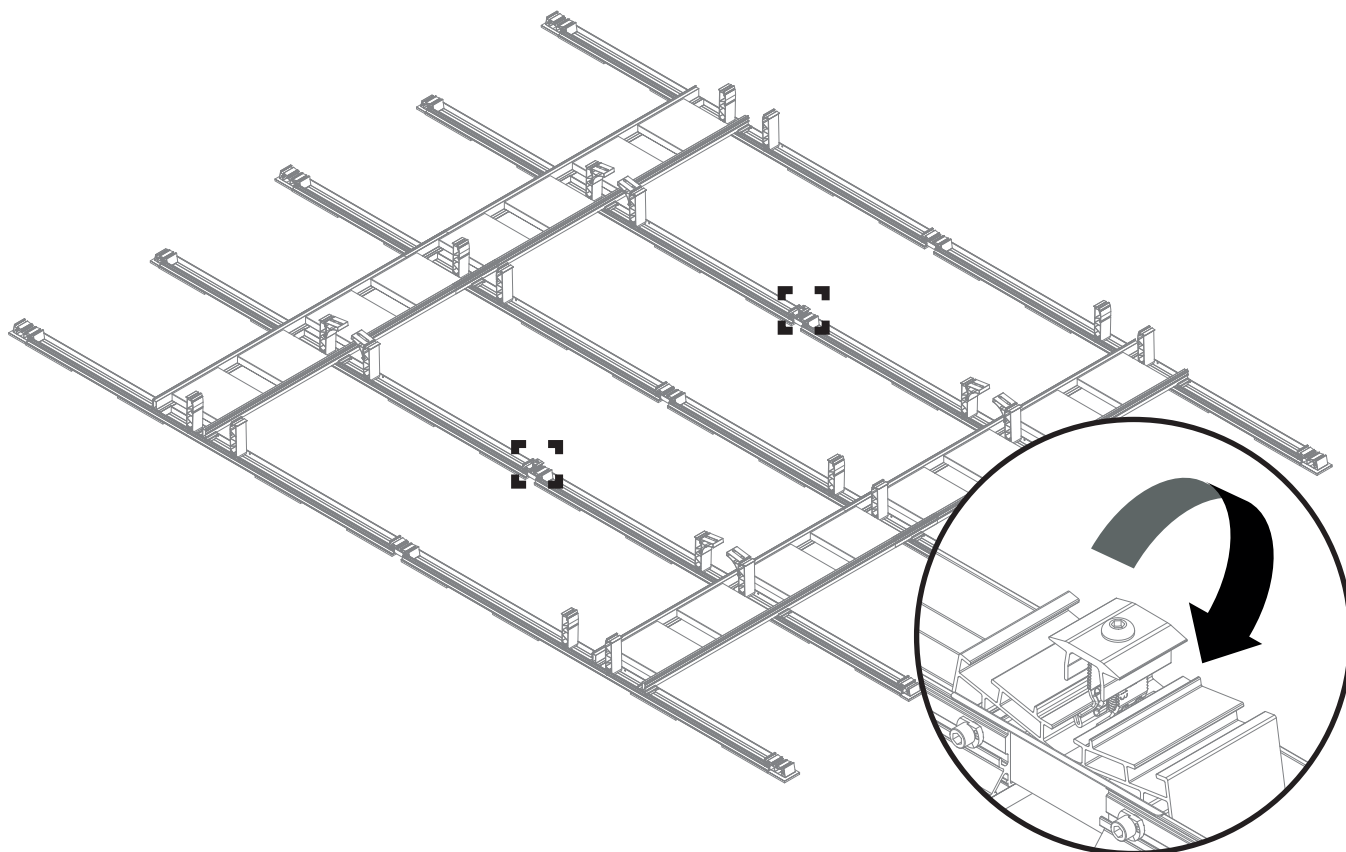
12.

Middle clamp+ - Article number R420082



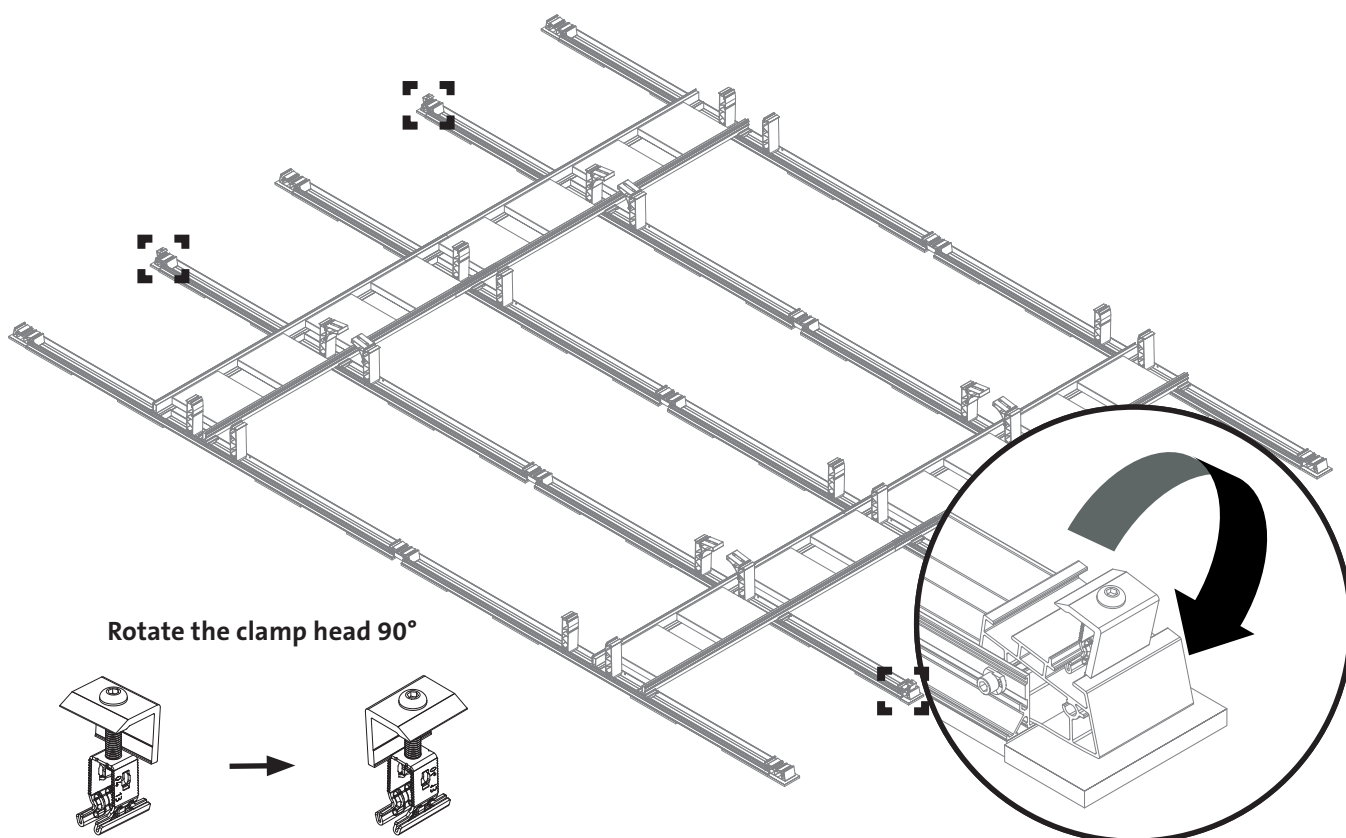
13.

FS Pro Middle clamp EW - Article number R520282



14.

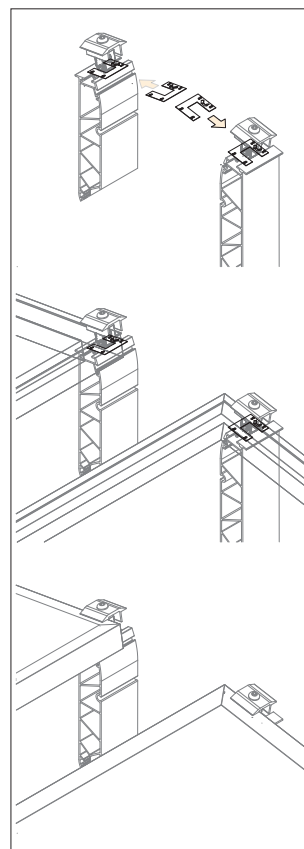
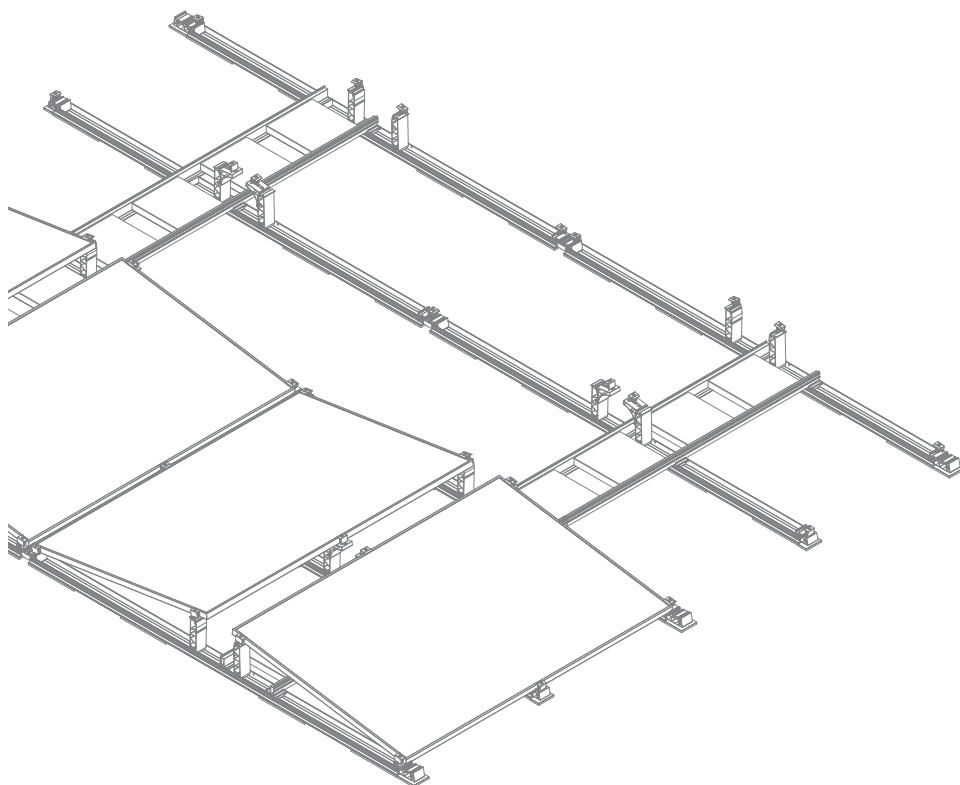
End clamp+ (90° rotated) - Article number R420081



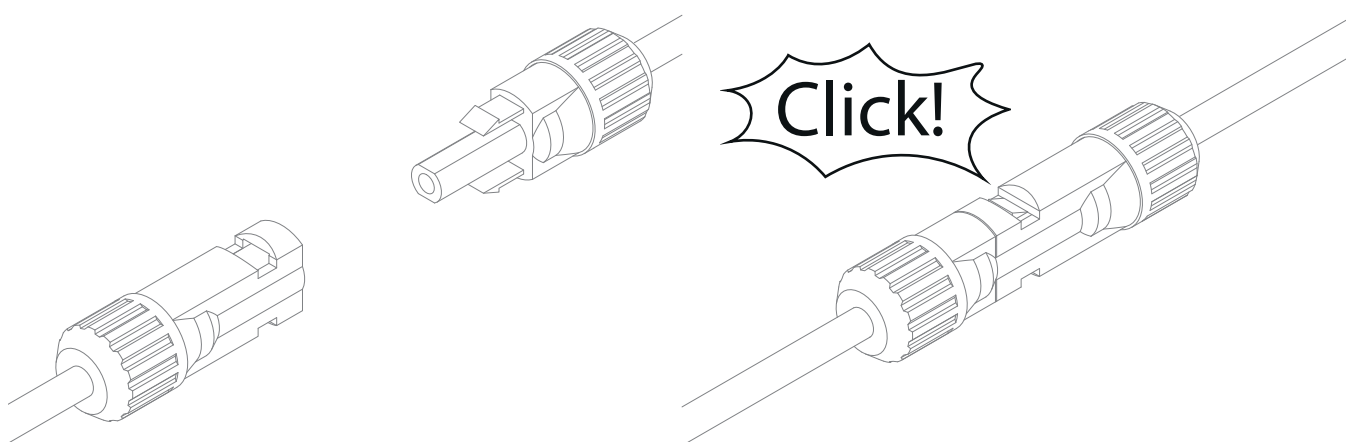
Rotate the clamp head 90°

15.

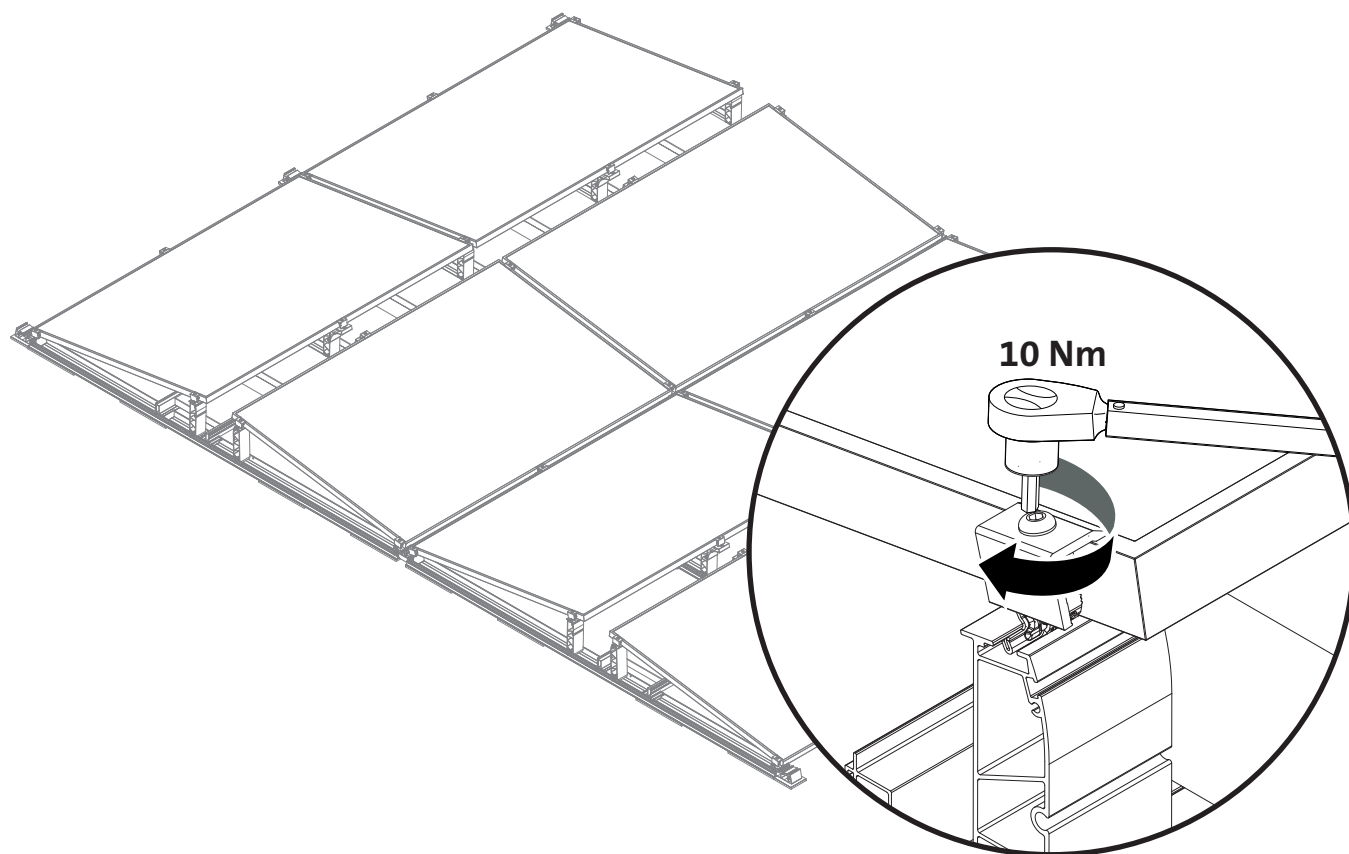
Potential equalisation (optional) - Article number R900268



16.



17.



- DE | Abbildungen und Texte entsprechen dem aktuellen technischen Stand bei Drucklegung, Änderungen vorbehalten.
- GB | The images and texts in these instructions relate to the latest technology at the time of printing, subject to modifications.
- FR | Les illustrations et textes sont conformes à l'état de la technique au moment de mise sous presse. Sous toutes réserves de modifications.
- IT | Figure e testi corrispondono allo stato più attuale della tecnica al momento dell'ordine di stampa. Con riserva di modifiche.
- ES | Las imágenes y los textos se corresponden al estado actual de la técnica en el momento de la impresión, reservado el derecho a las modificaciones.
- NL | Afbeeldingen en teksten voldoen aan de actuele stand van de techniek op het moment van ter perse gaan. Wijzigingen voorbehouden.
- DK | Afbildninger og tekster overholder den tekniske stand ved trykningen, der tages forbehold for ændringer.
- SE | Bilder och texter motsvarar den nuvarande tekniska tillstånd vid tidpunkten för tryckning, med förbehåll för ändringar.
- CZ | Vyobrazení a texty odpovídají aktuálnímu technickému stavu při odevzdání do tisku. Změny vyhrazeny.
- PL | Ilustracje i teksty odpowiadają stanowi techniki aktualnemu w chwili oddania instrukcji do druku. Zastrzega się prawo do zmian.
- LT | Spausdinami paveikslėliai ir tekstas atitinka naujausią technikos lygį. Pasilieka teisė į pakeitimus.
- HU | Az ábrák és a szövegek a nyomtatás időpontjában rendelkezésünkre álló legfrissebb műszaki ismereteknek felelnek meg; a módosítások jogát fenntartjuk.

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