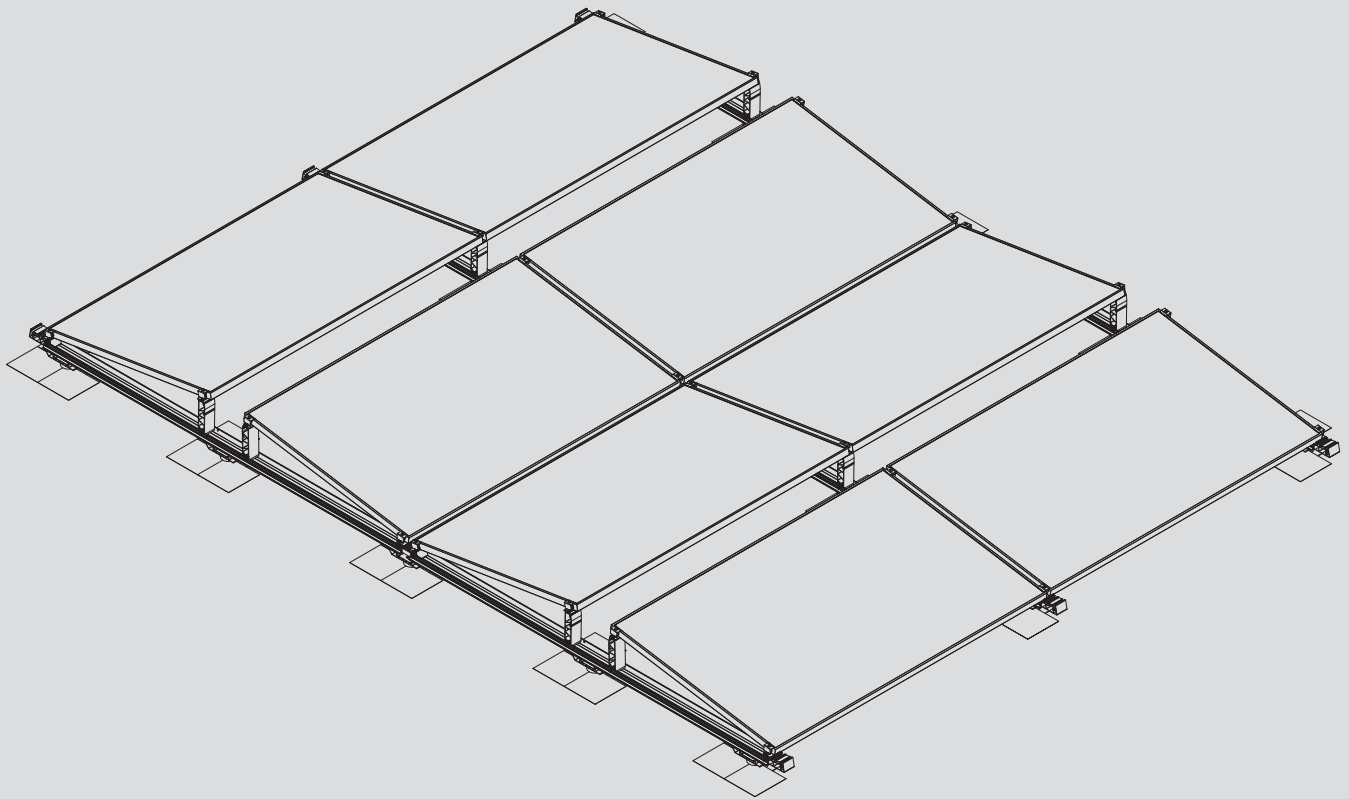
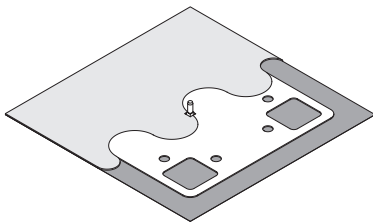
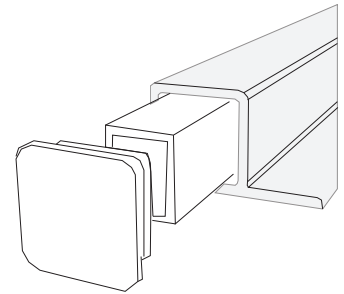
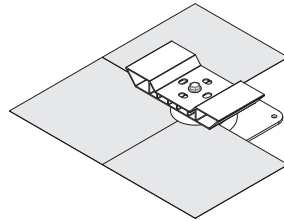
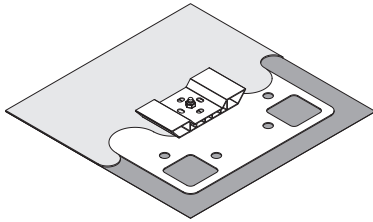


Renusol *FS* Pro 10-EW IFP

EN | Installation Manual



Preface for Installation with Fixed Elements



EN | Application

Mounting system for the installation of framed PV modules on flat roofs with a roof pitch of up to 5°–10° with roof penetration.

Before Installation

The Renusol FS Pro is fastened with third-party products (Nicholson Rooftrack, Solmont, Ejot-Ejotbar, etc.) to withstand wind loads. The required fastening depends on the underlying roof structure and must be determined in consultation with the third-party supplier. Use the Renusol PV Configurator to verify whether mounting option A is structurally suitable, considering regional conditions. Depending on the third-party product used, the connection method to the Renusol substructure may vary.

In the Renusol FS Pro 10-EW IFP mounting system, the module is secured at the corner areas of the short module side. It must be checked on-site whether the clamping area specified by the module manufacturer is maintained and that the permissible module loads are not exceeded.

Drainage holes in PV module frames must remain unobstructed and must not be covered by the mounting system. The roof surface must be free of snow, ice, and dirt before installation.

When installing, observe applicable regulations, current technical standards, and occupational safety guidelines.

A prerequisite for proper use is always a suitable substructure that can absorb the acting forces (weight load, wind, and snow load). The roof covering must be suitable for screwing and subsequent bonding or welding.

Wind Report

The suction and pressure coefficients have been determined through wind tunnel tests.

Applicable Documents

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

These documents are available at [unter www.renusol.com](http://www.renusol.com)

Warranty and Liability

The Renusol warranty is valid only when using the original Renusol FS Pro complete system in compliance with the warranty conditions. For statutory defect liability/warranty, please refer to Renusol's General Terms and Conditions.

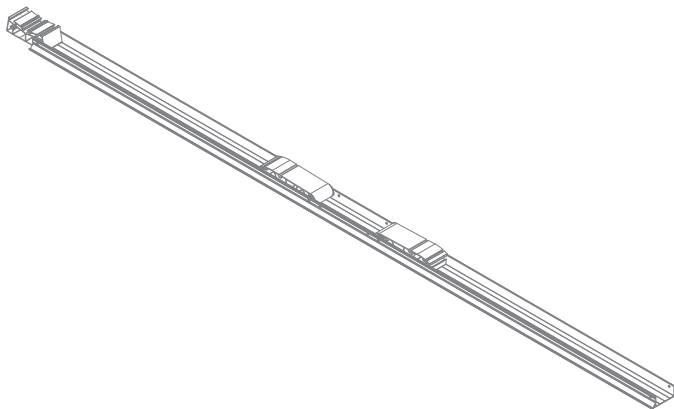
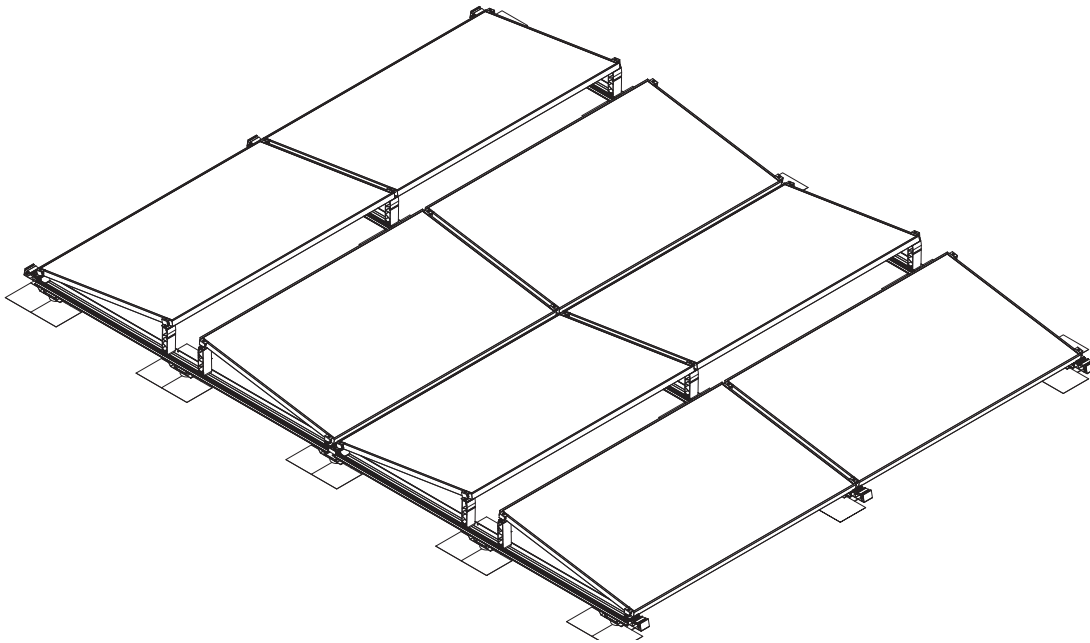
Tests/certificates

The system was tested in the setup of a specific 2x1 module configuration according to MCS 012 Issue 3.0 standard at a PV module surface of 5,4 m².

Permissible wind uplift values for this configuration and other relevant clauses can be found in Annex MCS 012 certification on page 17.

www.renusol.com

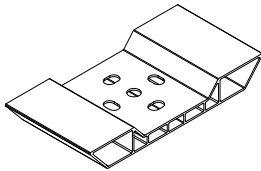
Renusol FS Pro 10-EW-IFP Bill of Materials



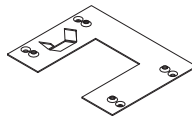
R520243
FS Pro 10-EW Base Rail 2300 (Set) IFP

R520245
FS Pro 10-EW Base Rail 2380 (Set) IFP

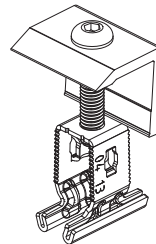
R500264
FS Pro IFP Mounting Bracket



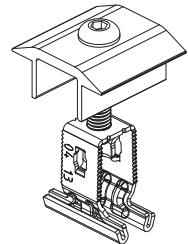
R900268 (optional)
P-Clip Potential equalization



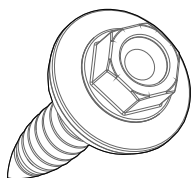
R420081 / R420081-BE
End clamp+
End clamp+ (black)



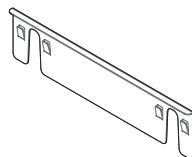
R420082 / R420082-BE
Middle clamp+
Middle clamp+ (black)



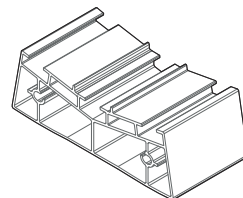
R400301
Self drilling screw 5,5 x 25 SW8
E16



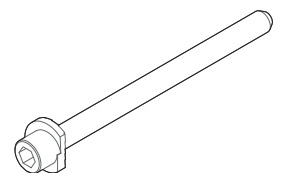
R500261
FS Pro Potential equalisation
clip EW



R500232
FS Pro 10-EW Eave support

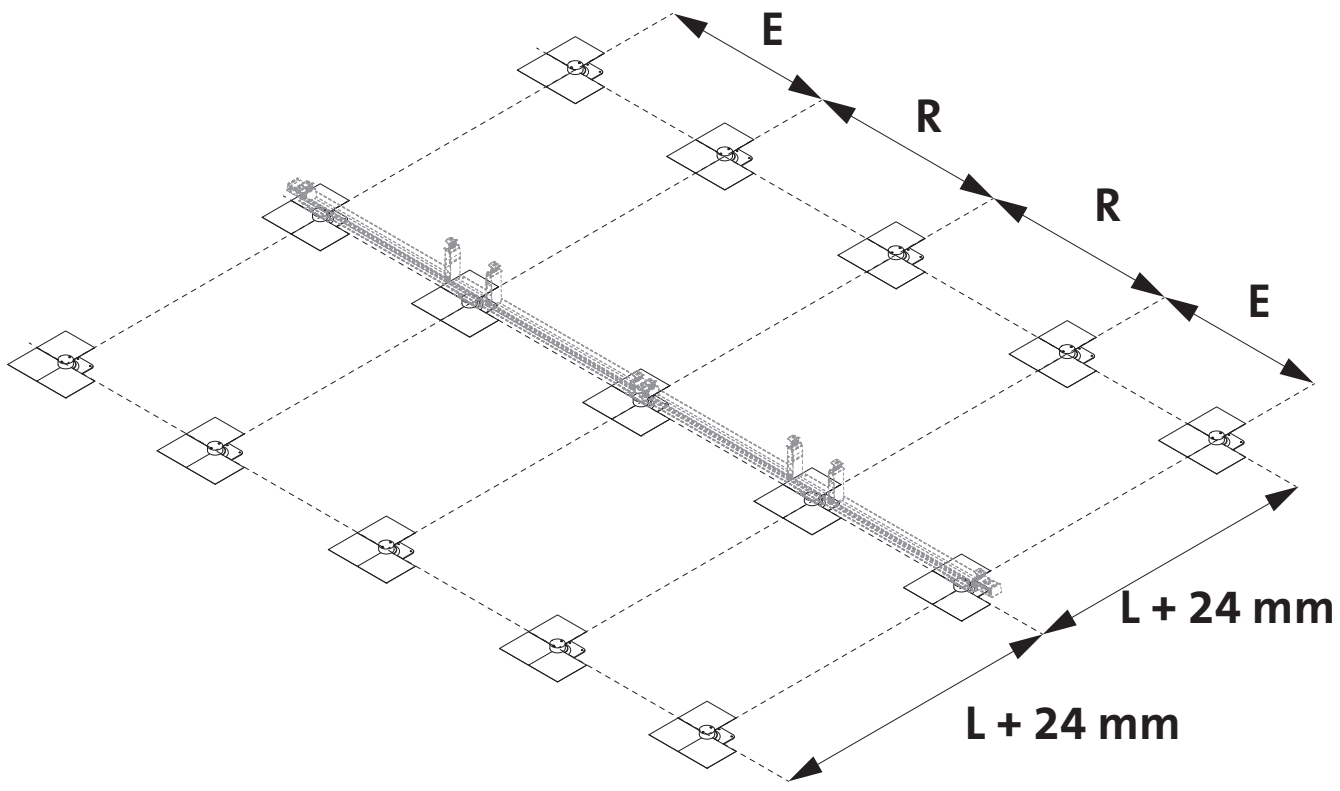


R500227
FS Pro Securing bolt

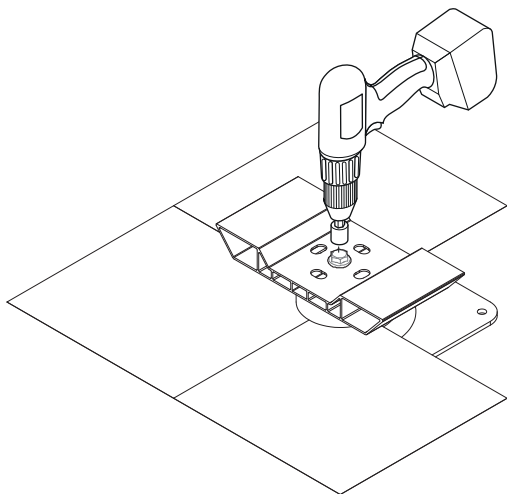


1.A

Mounting Variant A



The spacing (R) is continuously repeated except for the offset IFPs at the beginning and end (E).

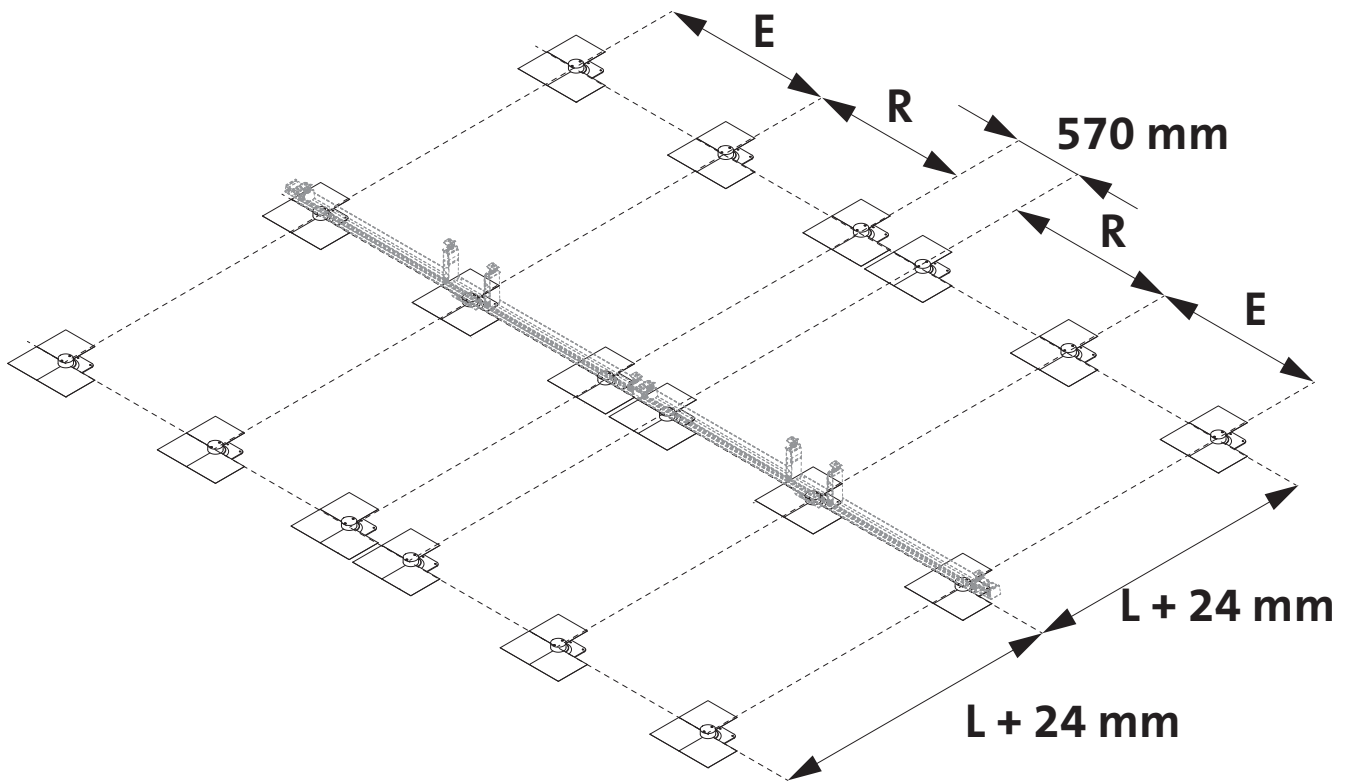


For the installation of the third-party product, the instructions in the respective manufacturer's manual must be observed and followed. Pay particular attention to the installation guidelines and recommendations regarding waterproofing and foil compatibility, which are also the responsibility of the third-party supplier.

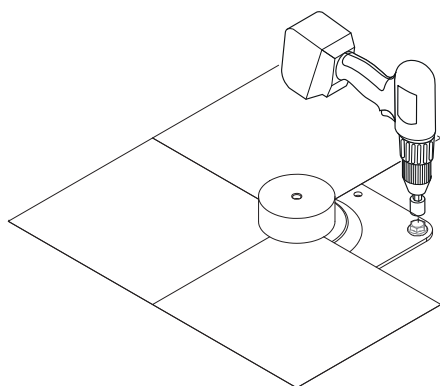
For sample dimensions, you will find reference attachments at the end of the document.

1.B

Mounting Variant B



The spacing (R) is continuously repeated, except for the offset IFPs at the beginning and end (E).



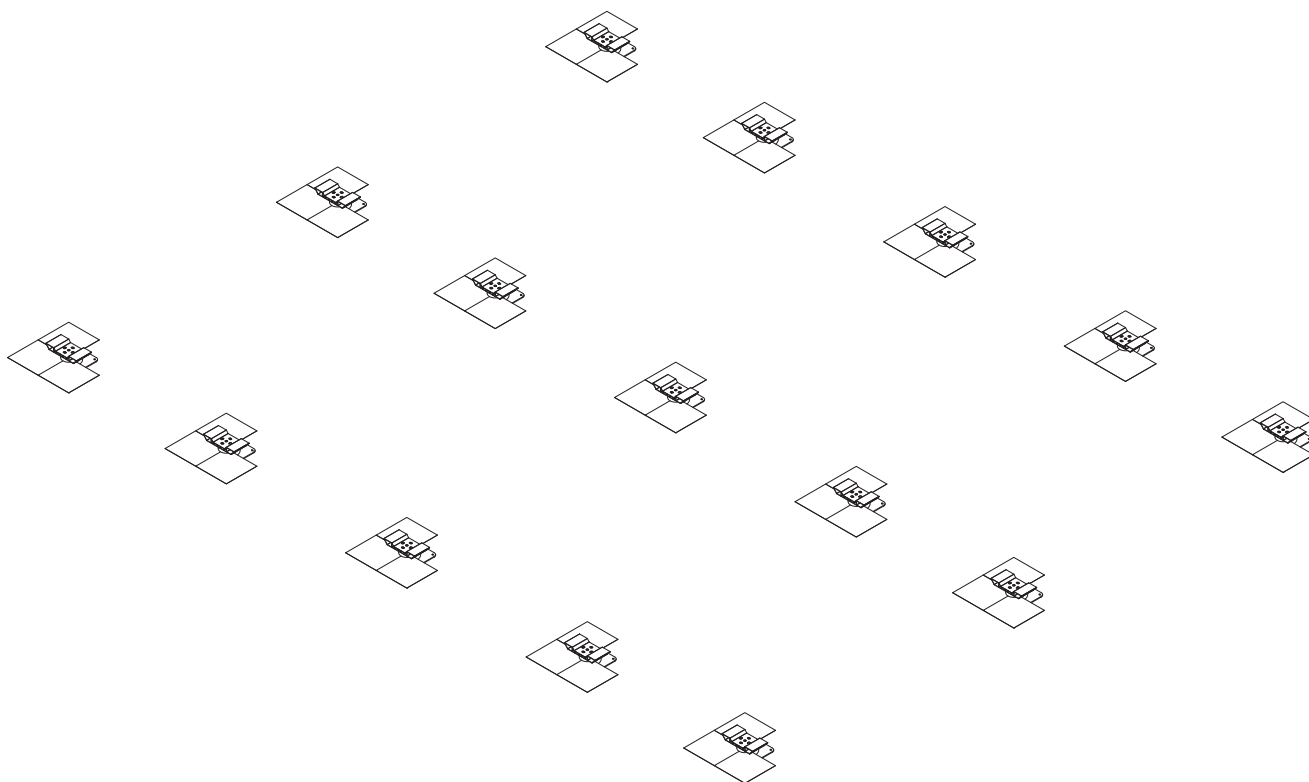
For the installation of the third-party product, the instructions in the respective manufacturer's manual must be observed and followed. Pay particular attention to the installation guidelines and recommendations regarding waterproofing and foil compatibility, which are also the responsibility of the third-party supplier.

For sample dimensions, you will find reference attachments at the end of the document.

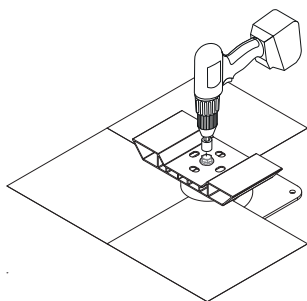
Since the dimensions (570 mm) depend on the foil surface of the third-party product, they may vary. Please check the local conditions accordingly.

2.A/B

Mounting Variants A & B



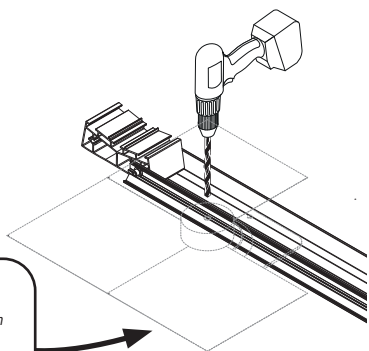
A.



Mounting Variant A:

Fastening is done using the IFP anchor bolt. Ensure that the M10 serrated lock bolt is tightened to 51 Nm.

B.

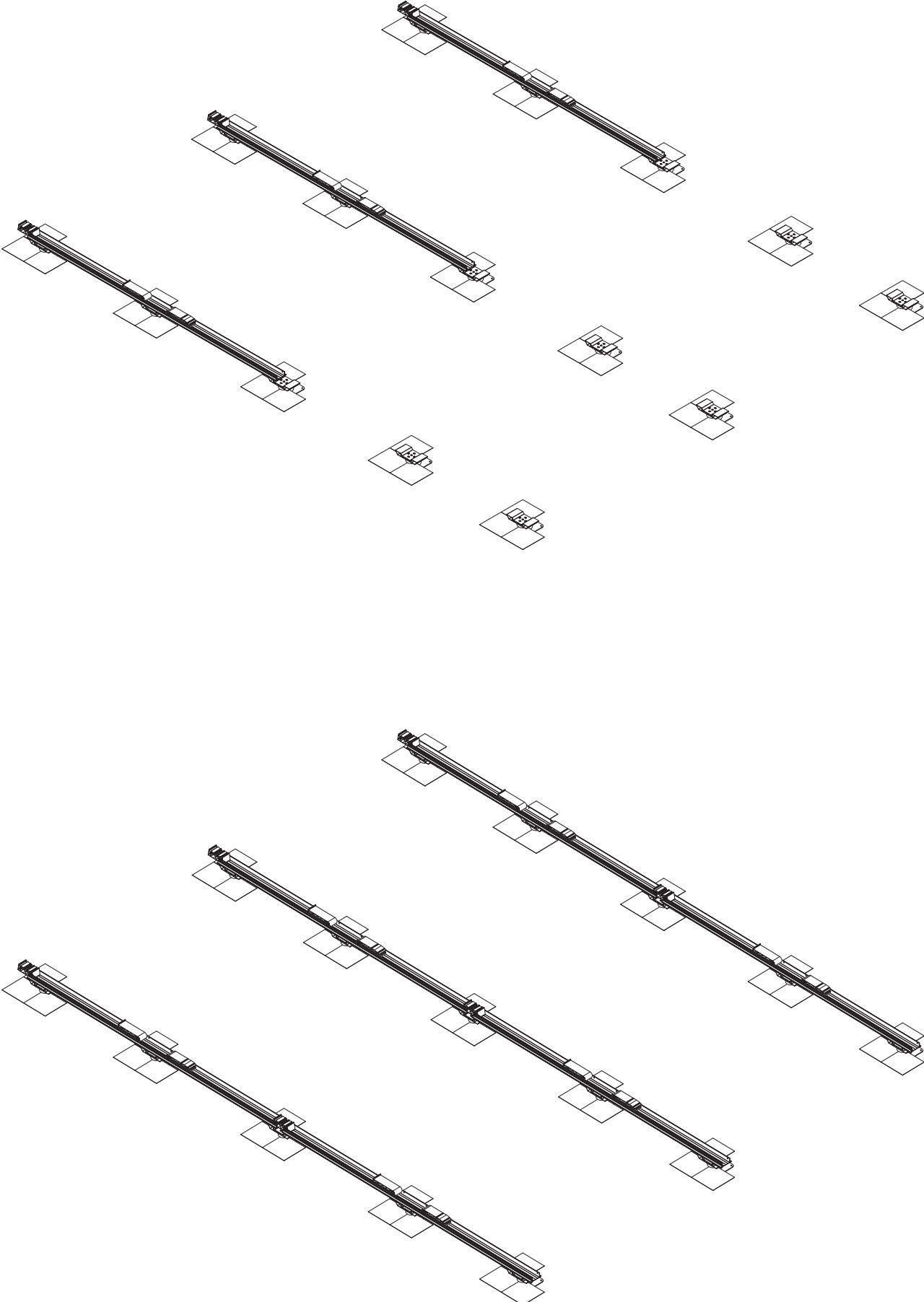


Mounting Variant B:

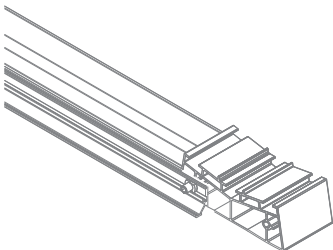
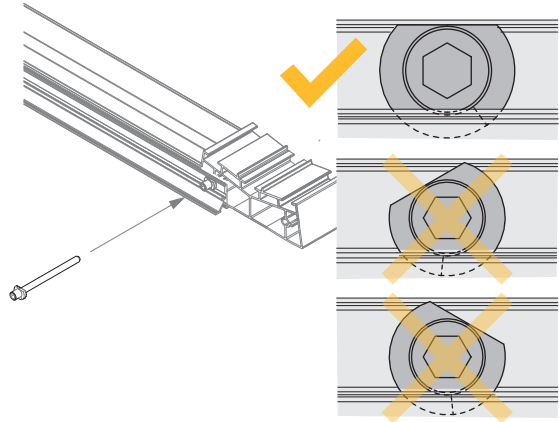
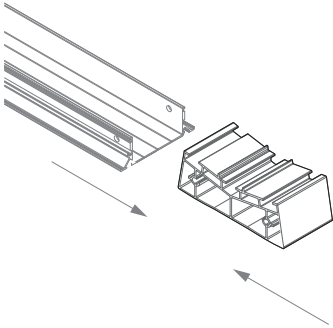
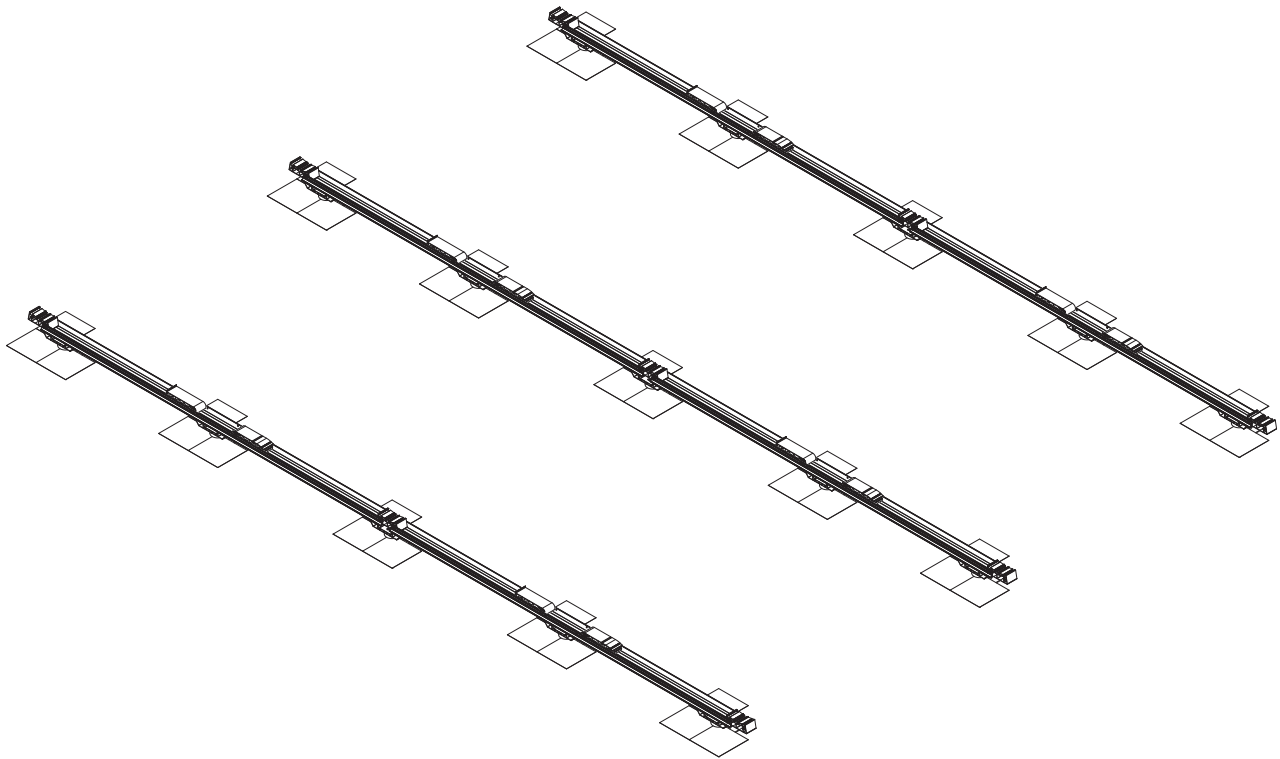
Fastening is done using a metric screw directly on the rail. Pre-drill in the center groove with a 10.4–11 mm drill bit. Ensure that the M10 screw is tightened to 51 Nm.

Displayed for Illustration Purposes.
Do not drill on the third-party product!

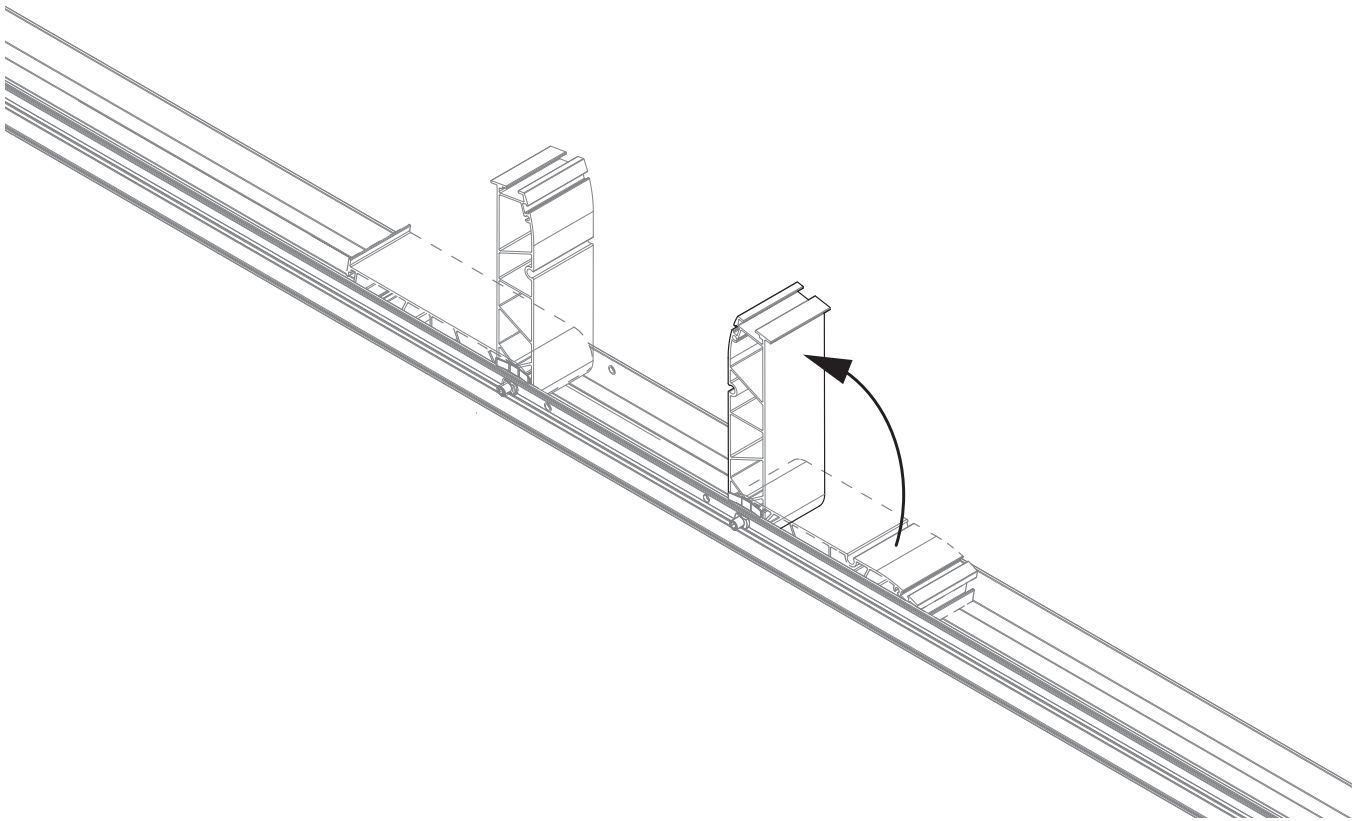
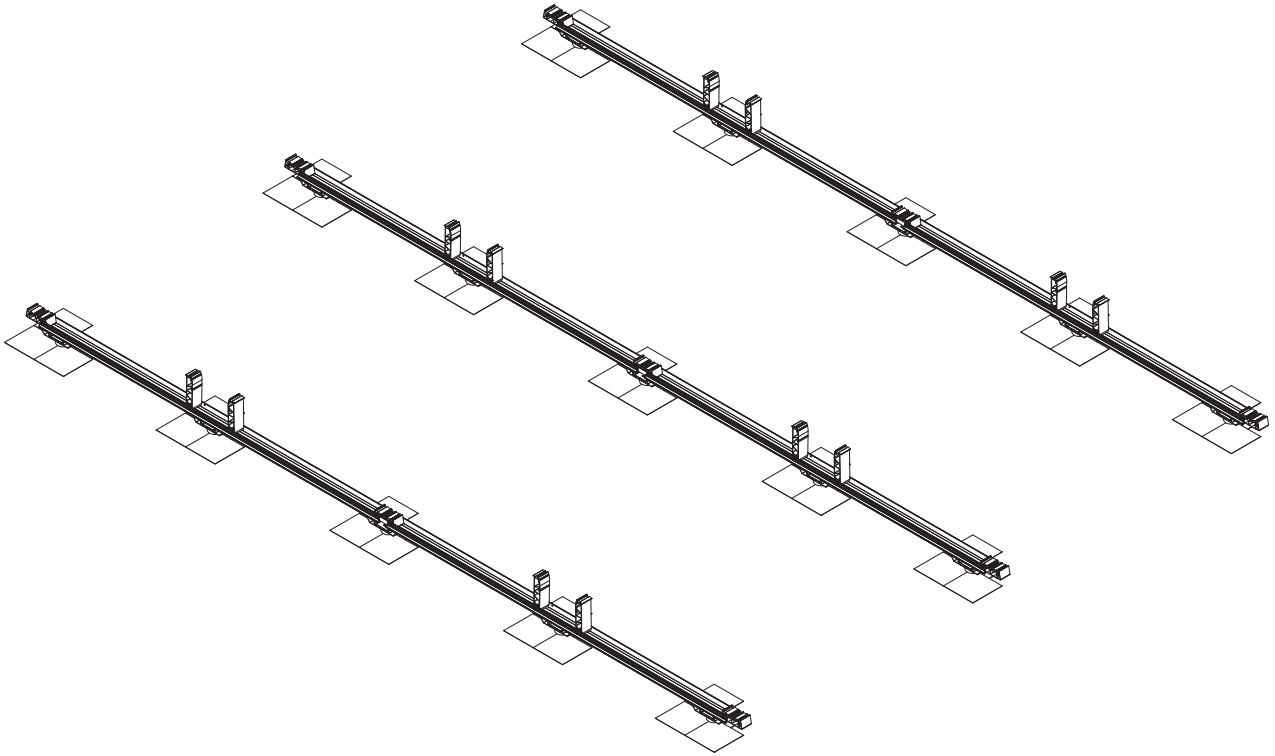
3.



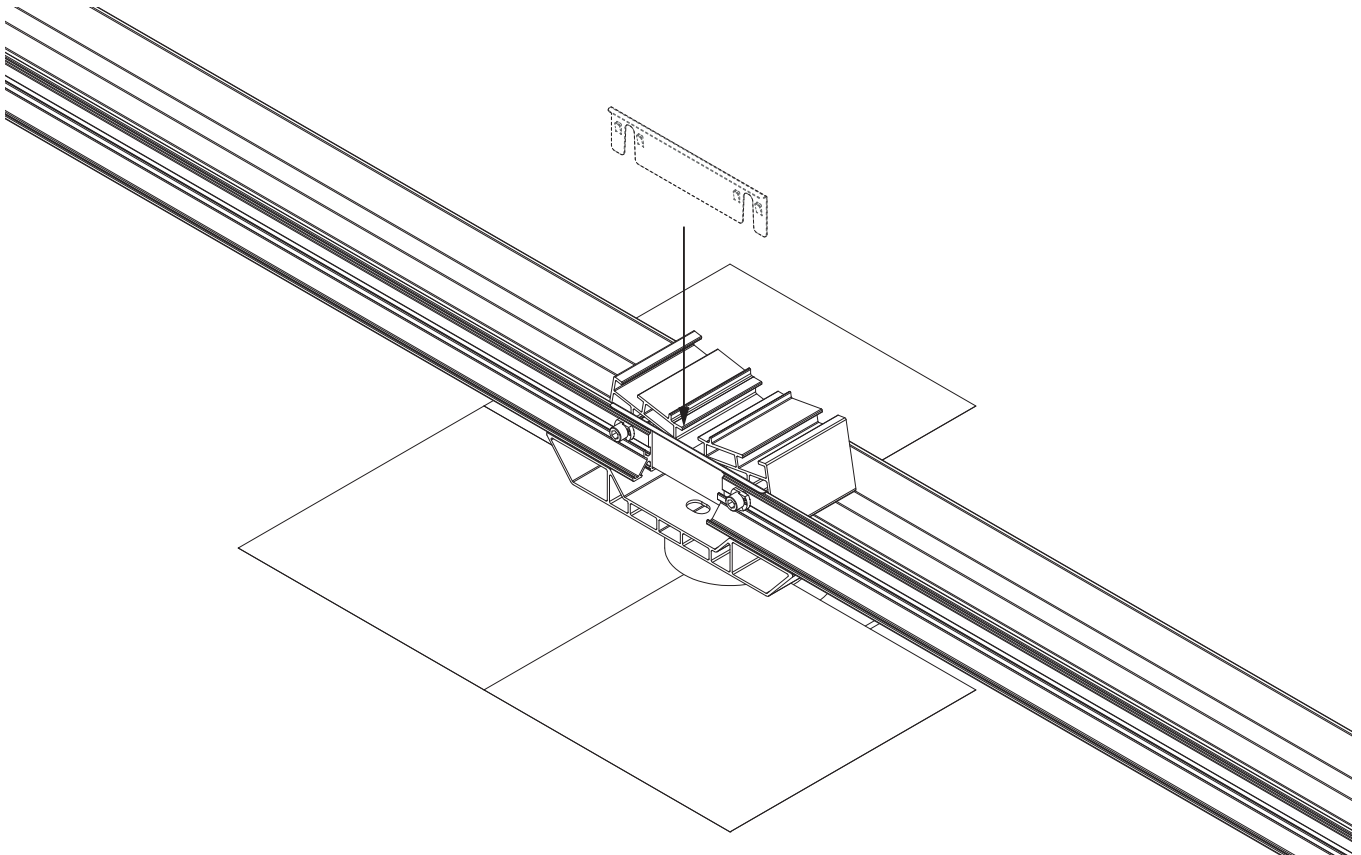
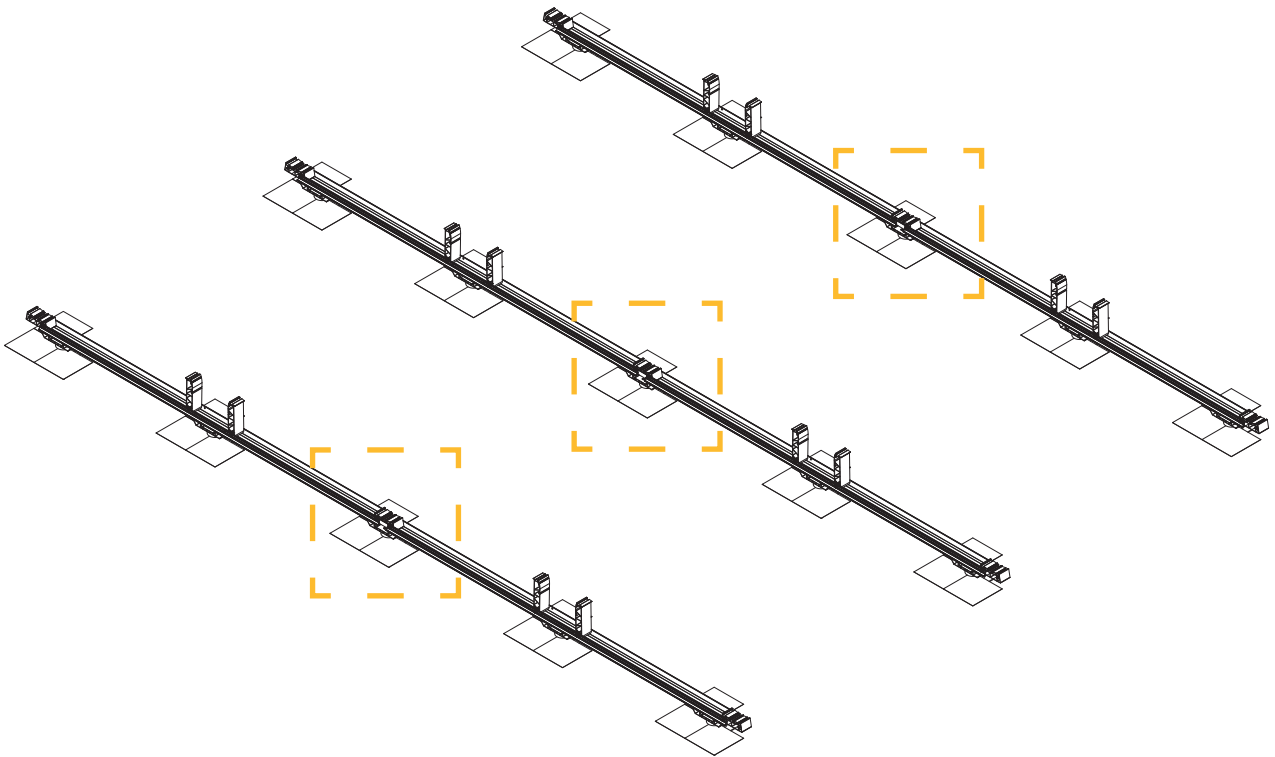
4.



5.

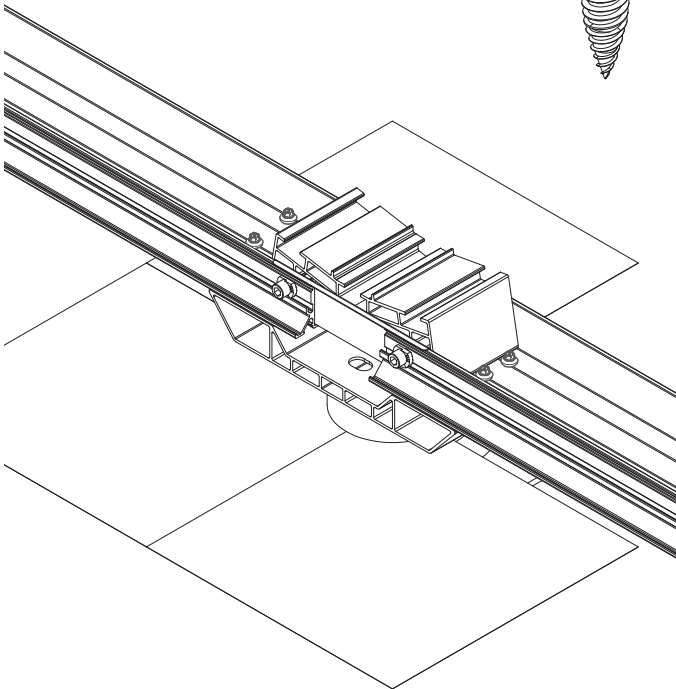
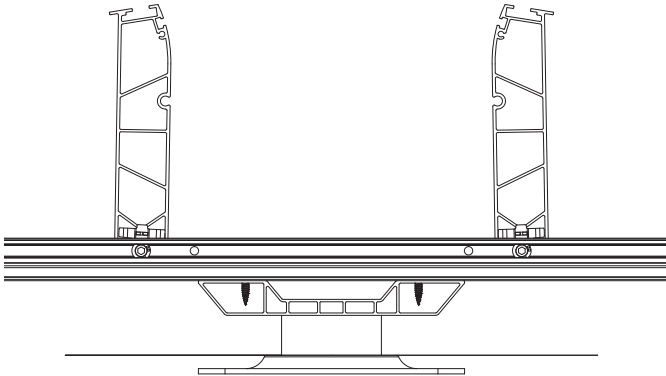
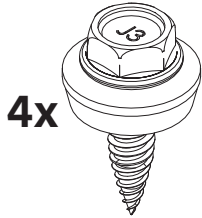
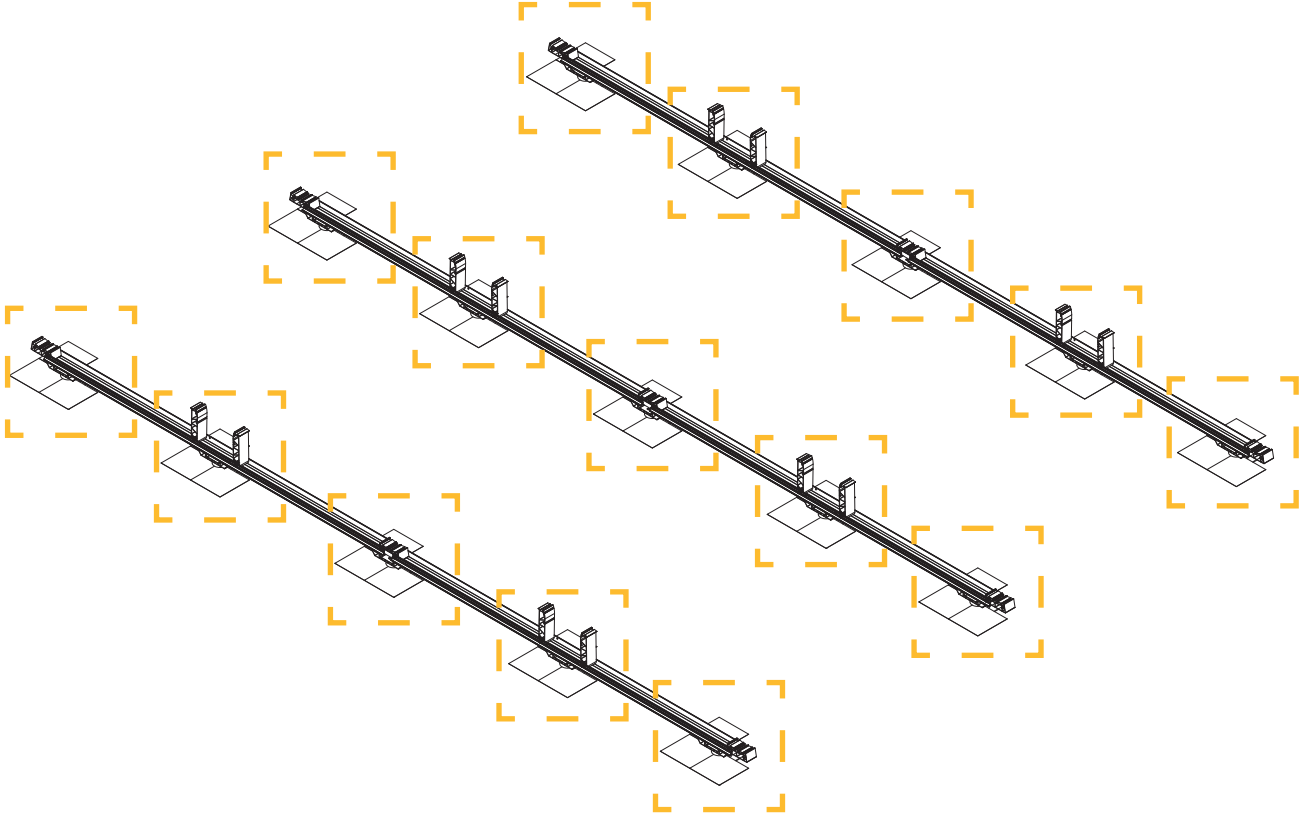


6.



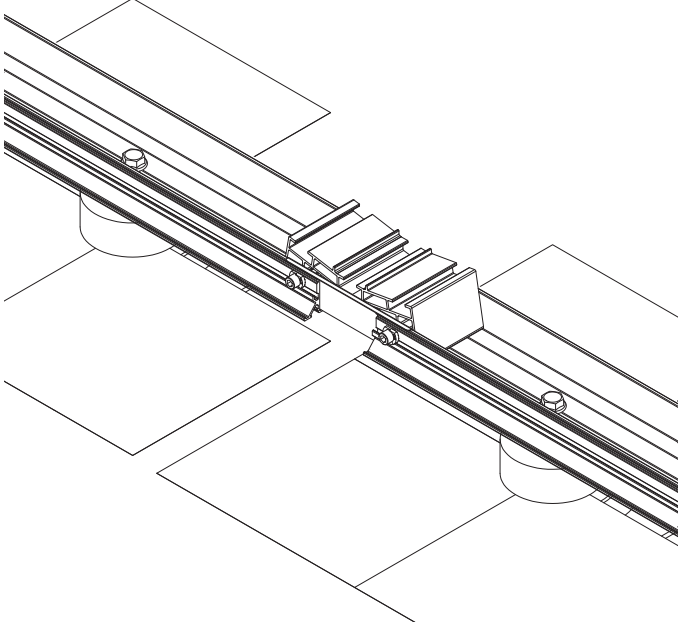
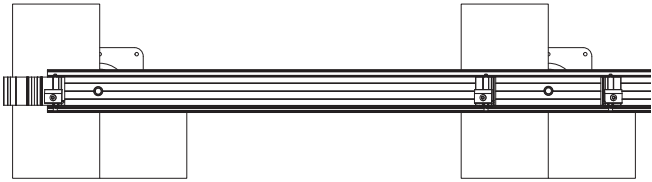
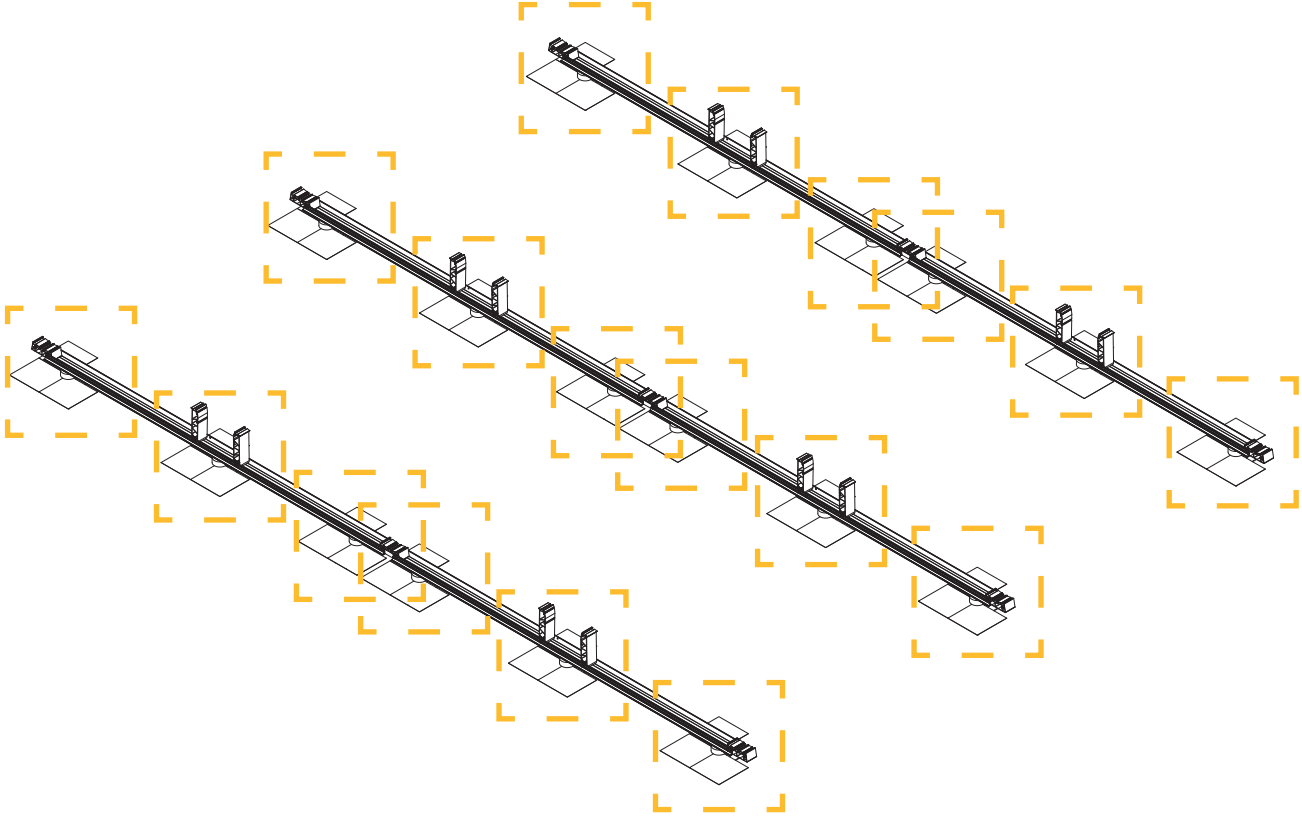
7.A

Mounting Variant A

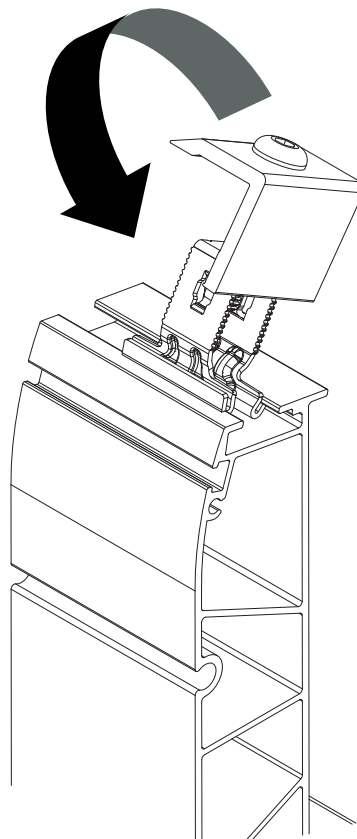
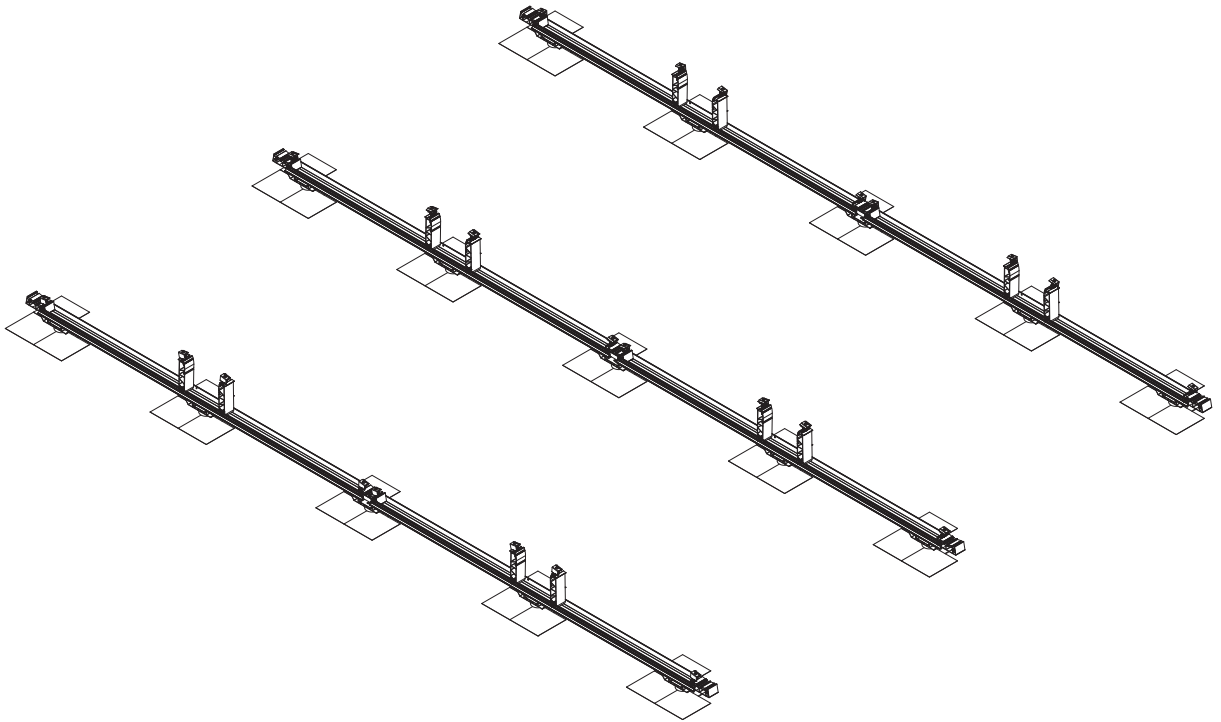


7.B

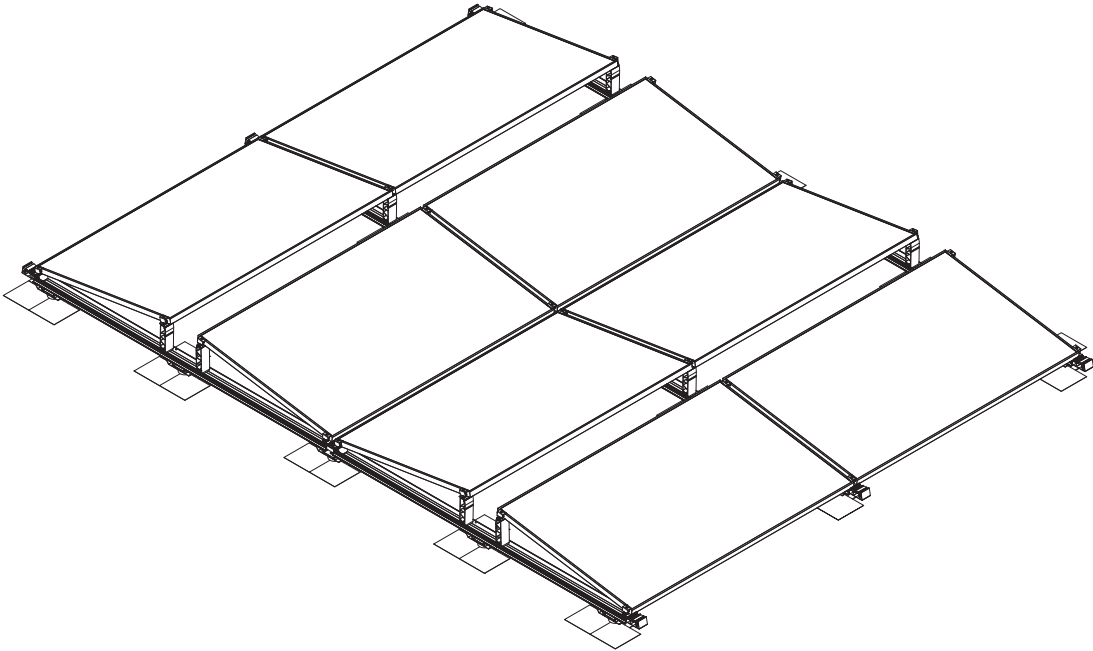
Mounting Variant B



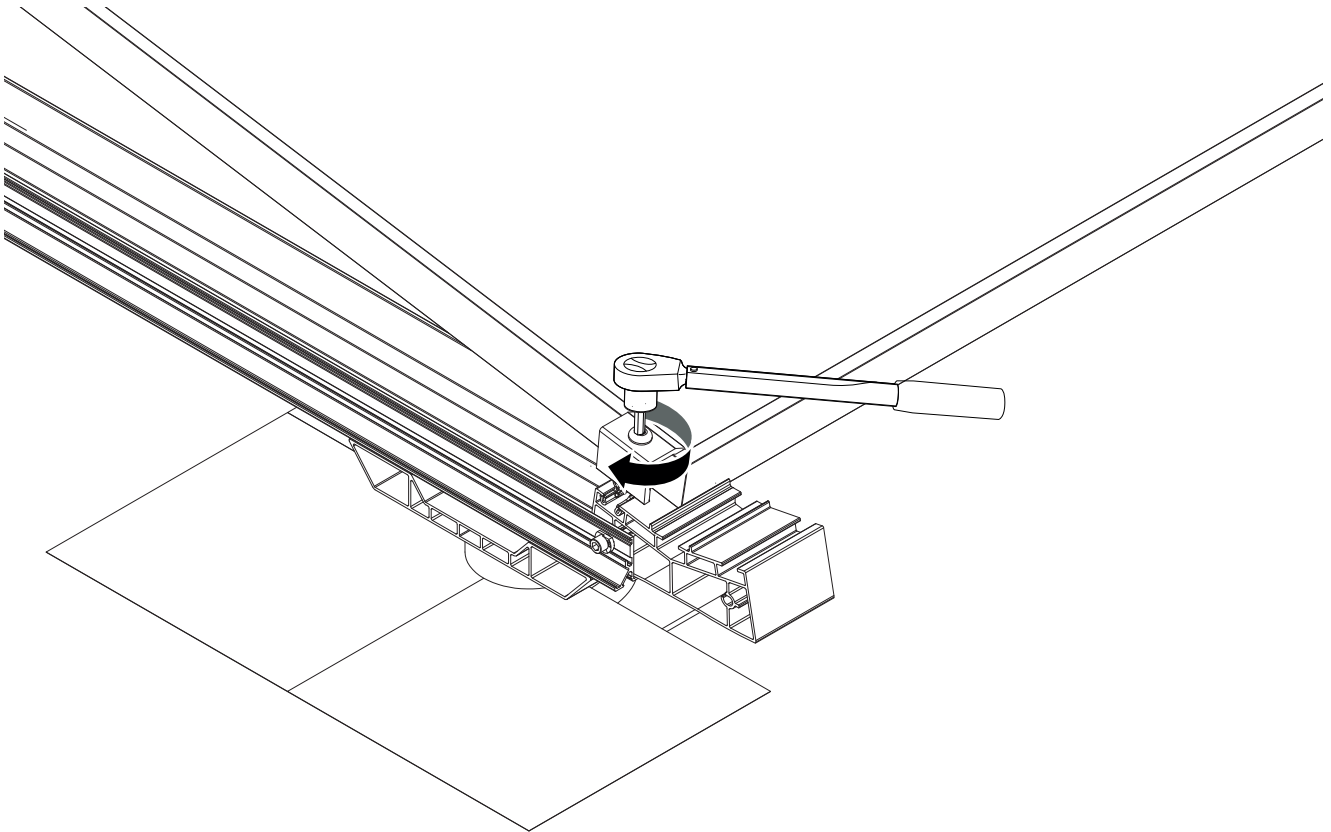
8.



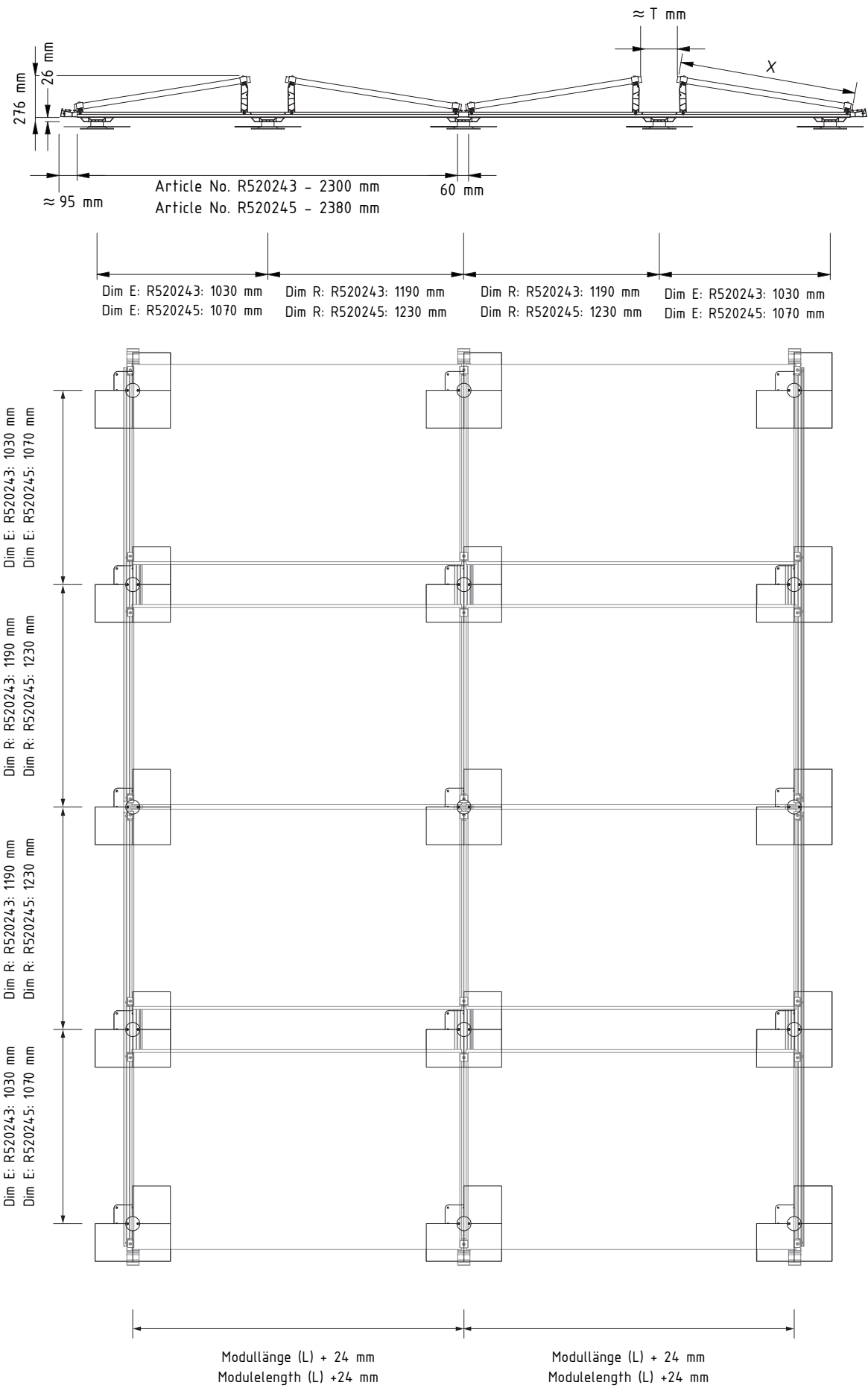
9.



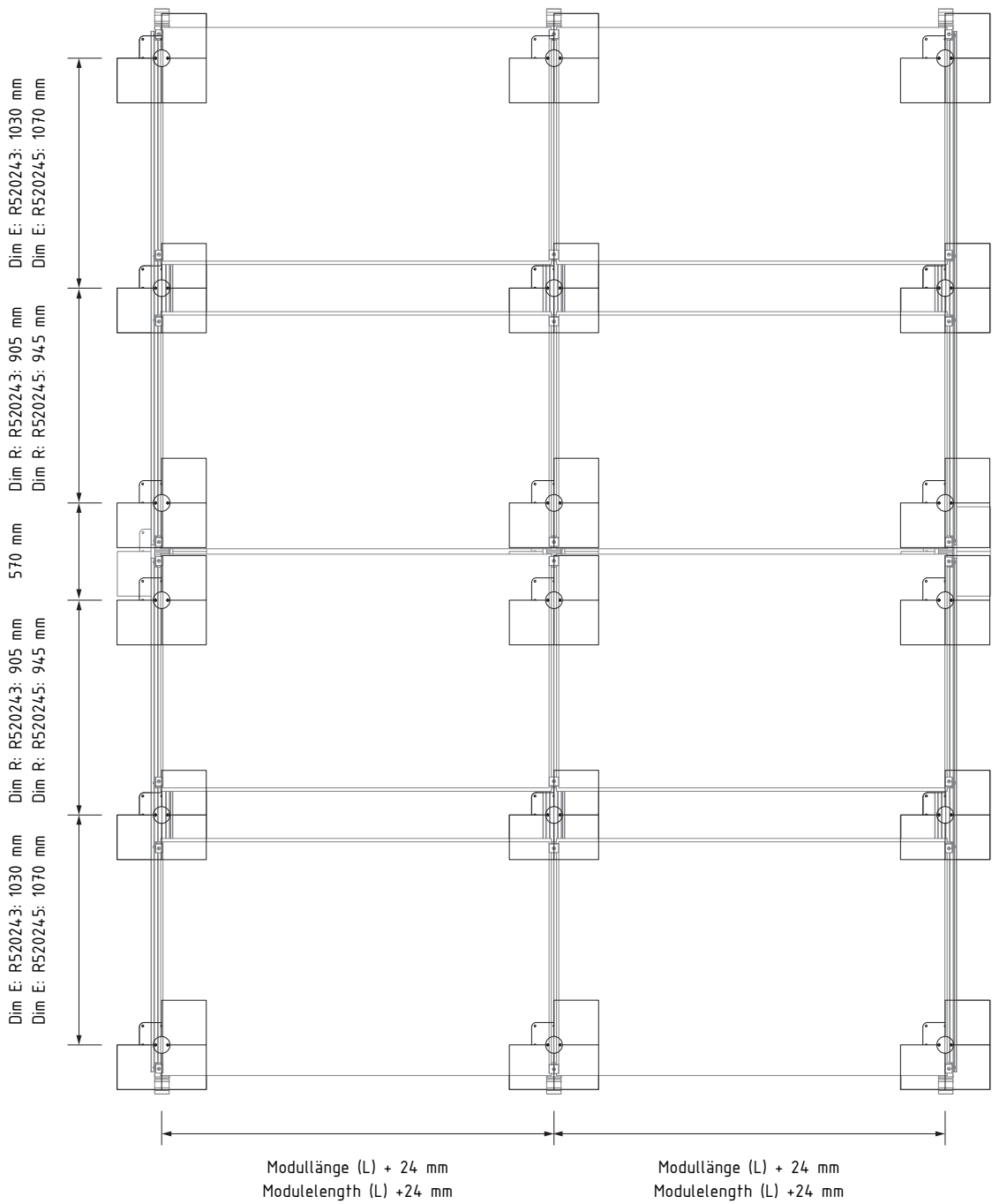
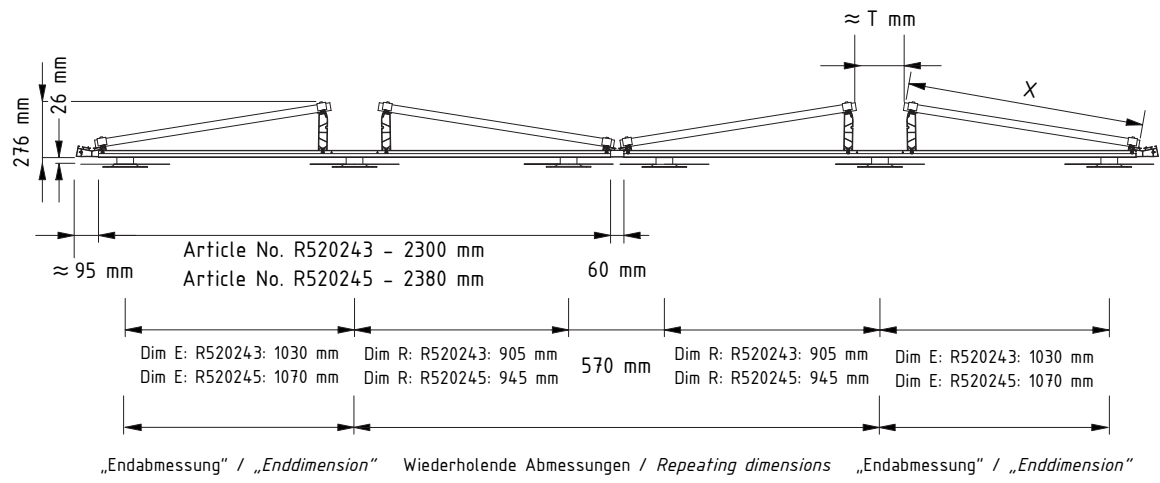
 **10 Nm**



Mounting Variant A Example of fastener positioning for a 2x4 field



Mounting Variant B Example of fastener positioning for a 2x4 field



10.

MCS012 Certification - Product overview -

FS Pro 10-EW-IFP			
Product name	Product Model name	Maximum Design Wind Uplift Resistance (kPa for full system)	Partial (safety) factor(s)
FS Pro 10-EW-IFP		1.47	1.00

Product name certificated	
FS Pro 10-EW-IFP	
Product Model name certificated	
REN_FSPRO_04	
System component	Part number
End clamp+ (black)	R420081-BE
Middle clamp+ (black)	R420082-BE
End clamp+	R420081
Middle clamp+	R420082
RS1	R420080
RS1 (black)	R420080-BE
RS Pro (black)	R420025-B
RS Pro	R420025
FS Pro End clamp LS	R520283
FS Pro 10-EW Base rail 2300 (Set) IFP	R520243
FS Pro 10-EW Base rail 2380 (Set) IFP	R520245
FS Pro Ridge support	R500230
FS Pro Securing clip ridge support	R500228
FS Pro Eave support 10-EW	R500232
FS Pro Securing bolt	R500227
FS Pro adapter LS	R500235
FS Pro Potential equalisation clip S	R500260
FS Pro IFP Mounting bracket	R500264
Self drilling screw 5,5x25 SW 8 E16	R400301
Rooftrak IFP250 with Single Ply Membran	R999952
Rooftrak IFP250 with Bituminous Membran	R999953

www.pv-configurator.com

- 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 teisę į pakeitimus.
- HU | Az ábrák és a szövegek a nyomtatás időpontjában rendelkezésünkre álló legfrissebb műszaki ismereteknek felelnek meg; a módosítások jogát fenntartjuk.

Renusol Europe GmbH

Piccoloministr. 2

51063 Köln

Deutschland

Telefon: +49 221 788707-0

E-Mail: info@renusol.com

www.renusol.com