

**ISOFLAT D V3**  
Düz Çatı Montaj Sistemi

MONTAJ KILAVUZU

# CONTENTS

• Required Tools	2
• Safety Instructions	3
• Components	4
• Accessories	5
• Installation	6 - 10
• Fixation Types	11 - 13
• Notes	14

## REQUIRED TOOLS



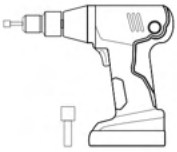
### Tape Measure

It is used to apply and control the dimensions specified in the assembly manual.



### Marking

Necessary to mark the specified dimensions.



### Electric Screwdriver

It is used to perform the assembly of the bolts used in the system.

⌀ 6 mm



### Torque Meter

It is used to ensure that the bolts used in the system are tightened at the desired torque value.

Measuring range ;

M8 : 14 - 17 N.m



### Allen

It is used to perform the assembly of the clamps used in the system.

⌀ 6 mm



### Dimensioning Device

It is used to determine the installation intervals of the rail sets in the system.

## SAFETY EQUIPMENT



Protective Gloves



Safety Shoes



Helmet

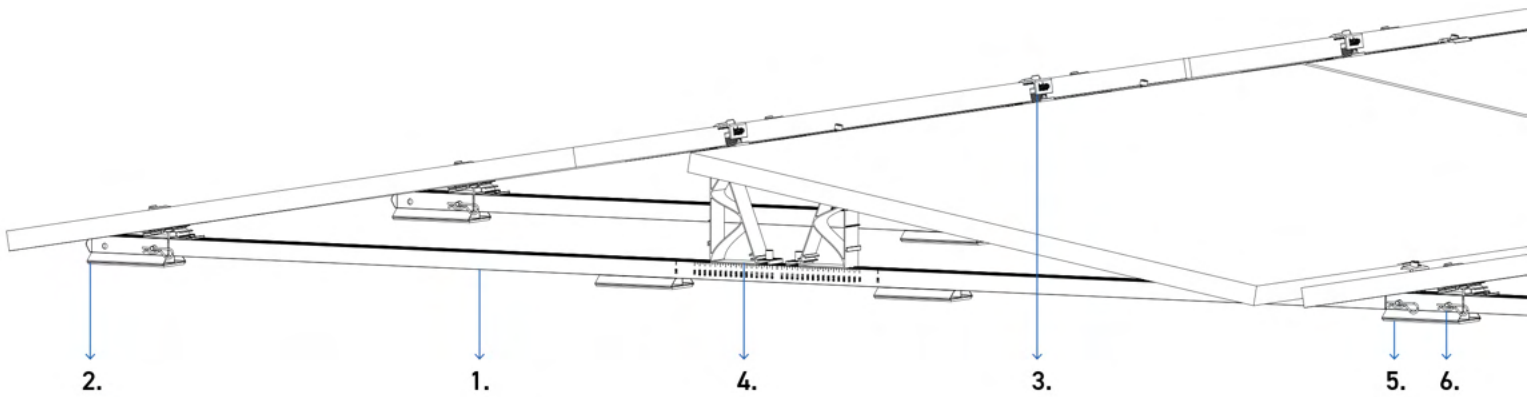


Protective Clothing

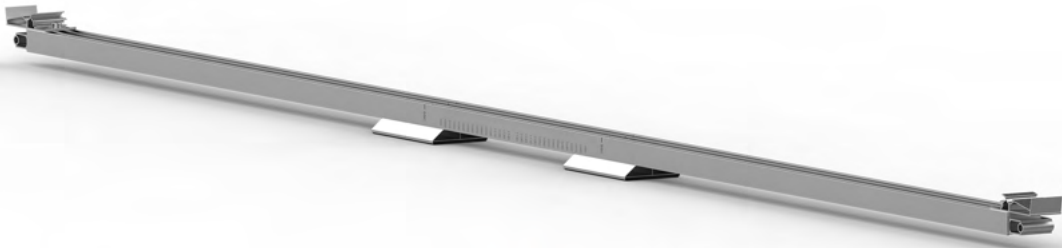
## SAFETY INSTRUCTIONS

- Systems may only be assembled and commissioned by persons who can guarantee proper implementation based on their specialised suitability (e.g. training or profession) or experience.
- National and site-specific building codes, standards and environmental regulations must strictly be adhered to.
- Occupational safety and accident prevention regulations, relevant standards as well as regulations of professional associations must be complied with. The following must be particularly paid attention to:
  - Protective clothing must be worn (especially safety helmet, work boots and gloves).
  - Two persons must be present during the entire assembly process, in order to ensure rapid assistance in case of an accident.
  - The assembly instructions of the module manufacturer must be adhered to.
  - Equipotential bonding between individual system components must be performed in compliance with the respective national regulations.
  - During the entire assembly time it must be ensured that at least one copy of the assembly instruction is available at the construction site.
  - Failure to observe our installation regulations and installation instructions and non-use of all system components, as well as the installation and removal of components that were not purchased through us, results in us not being liable for any resulting defects or damage. In these cases our warranty will not be valid.
  - Components made of stainless steel are available in different corrosion resistance classes. In any case, it should be checked what corrosion load is expected for the building or component concerned. Z600 coated steel profiles may show red corrosion spots that do not affect static after a certain period of time.
  - In cases where material supplied by ISOTEC Enerji San. Ve Tic. Ltd. Şti. is re-cut to size on site, please ensure that the cut corners and edges are burr-free to rule out any risk of injury from sharp corners and edges.
  - In cases such as non-compliance with our general safety instructions or the installation of different components, ISOTEC Enerji San. and Tic. Ltd. Şti. has no liability.

# COMPONENTS



1. Rail Set



2. Cap TFX



4. ISOFLAT BS3



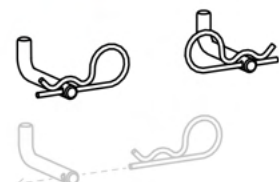
3. EasyClamp End



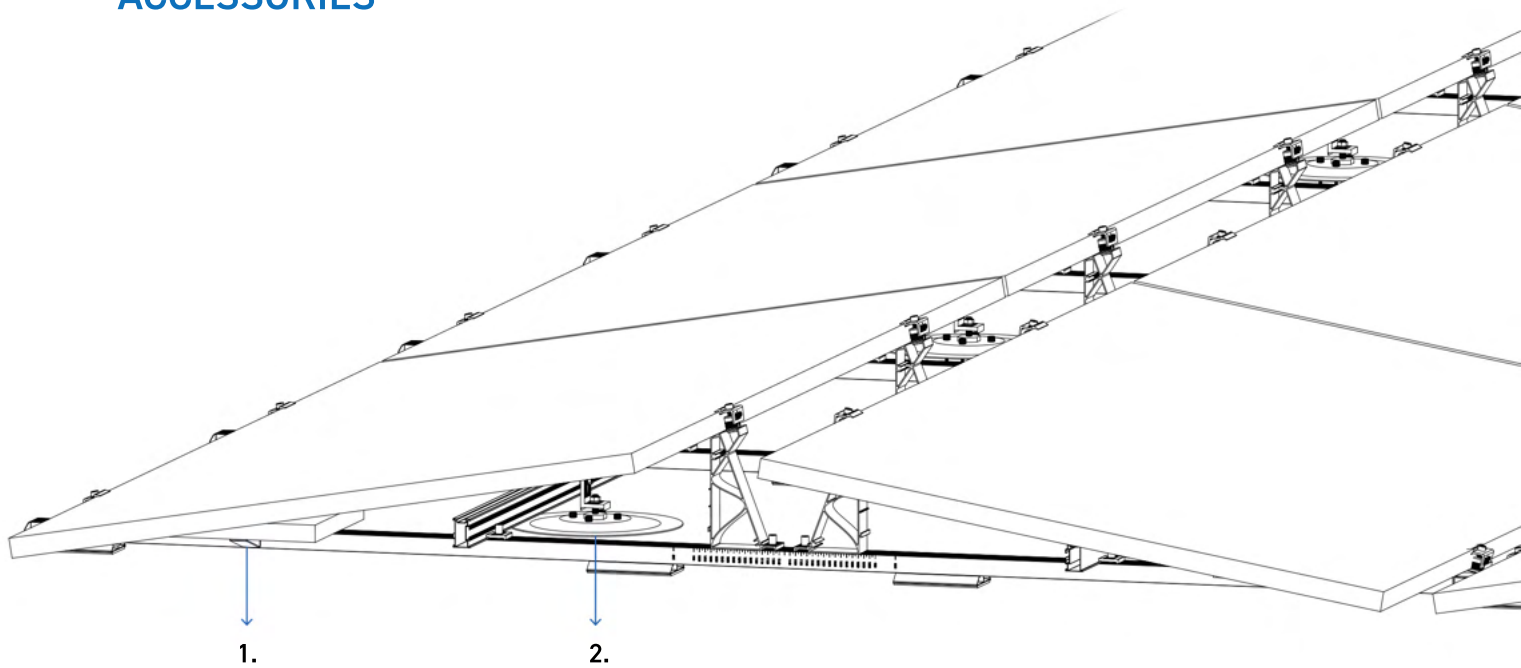
5. Connector 150



6. Pin



## ACCESSORIES



### 1. Ballast Holder



As a result of the project calculations, the necessary ballasts are placed on the rail with the help of a ballast holder.

Use one piece if ballast length  $\leq 30\text{cm}$ , and two pieces if ballast length  $> 30\text{cm}$

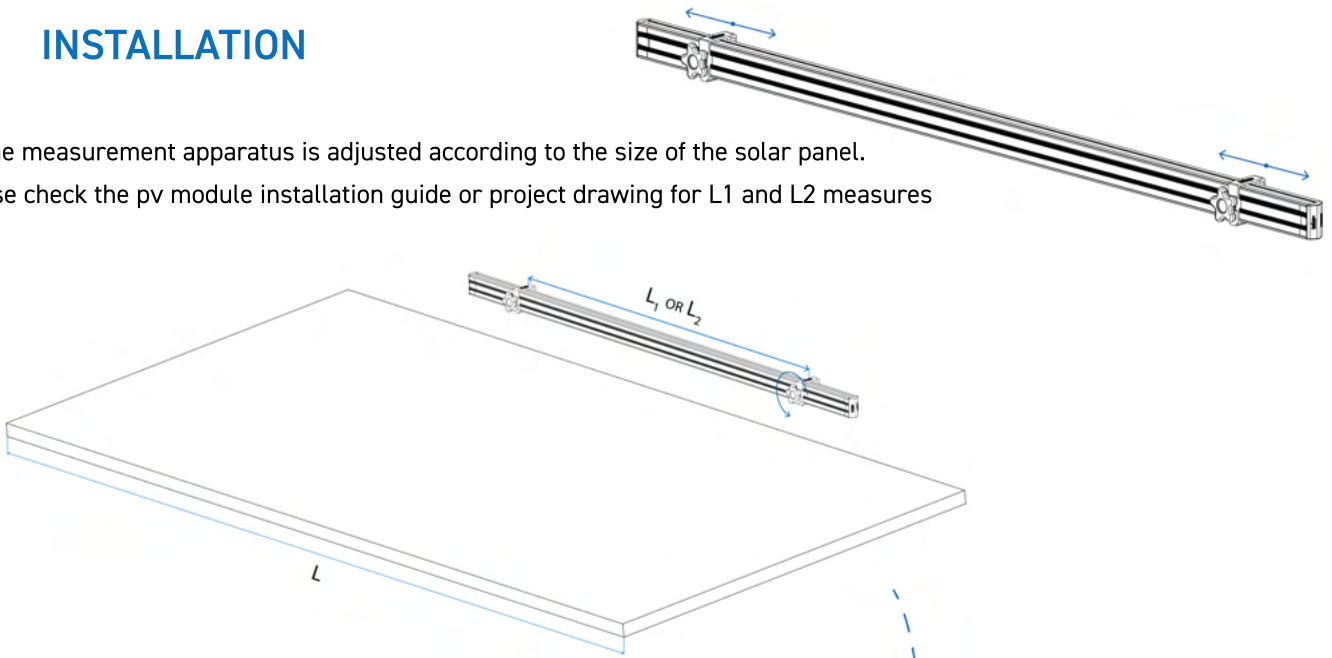
### 2. IMC



In case the ballasts that are assigned as a result of the project calculations are not placed in the construction, IMC or anchorage method is used.

# INSTALLATION

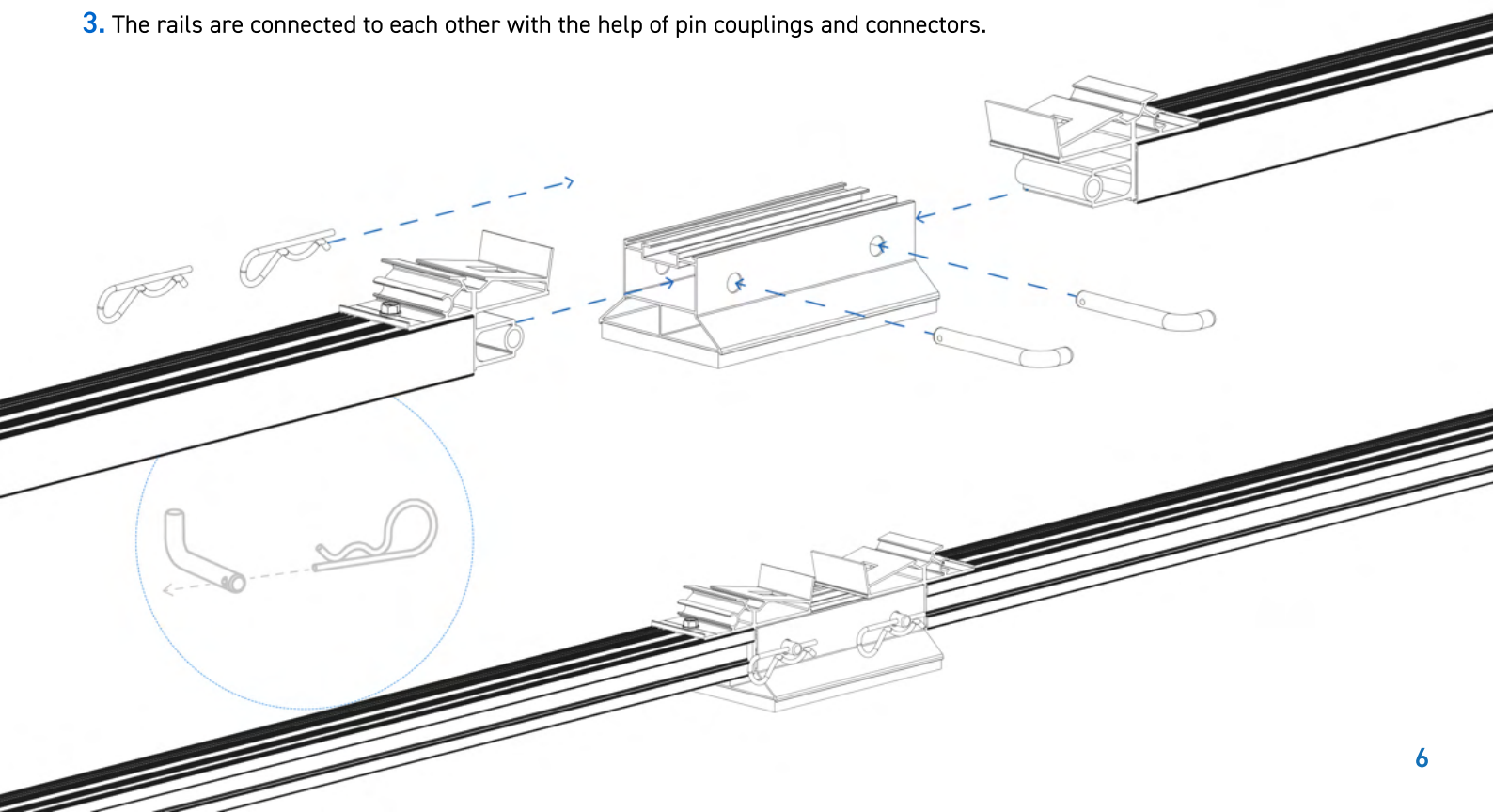
1. The measurement apparatus is adjusted according to the size of the solar panel.  
Please check the pv module installation guide or project drawing for L1 and L2 measures



2. The space between rail sets is adjusted by placing the measurement apparatus into the housing of the rail sets.



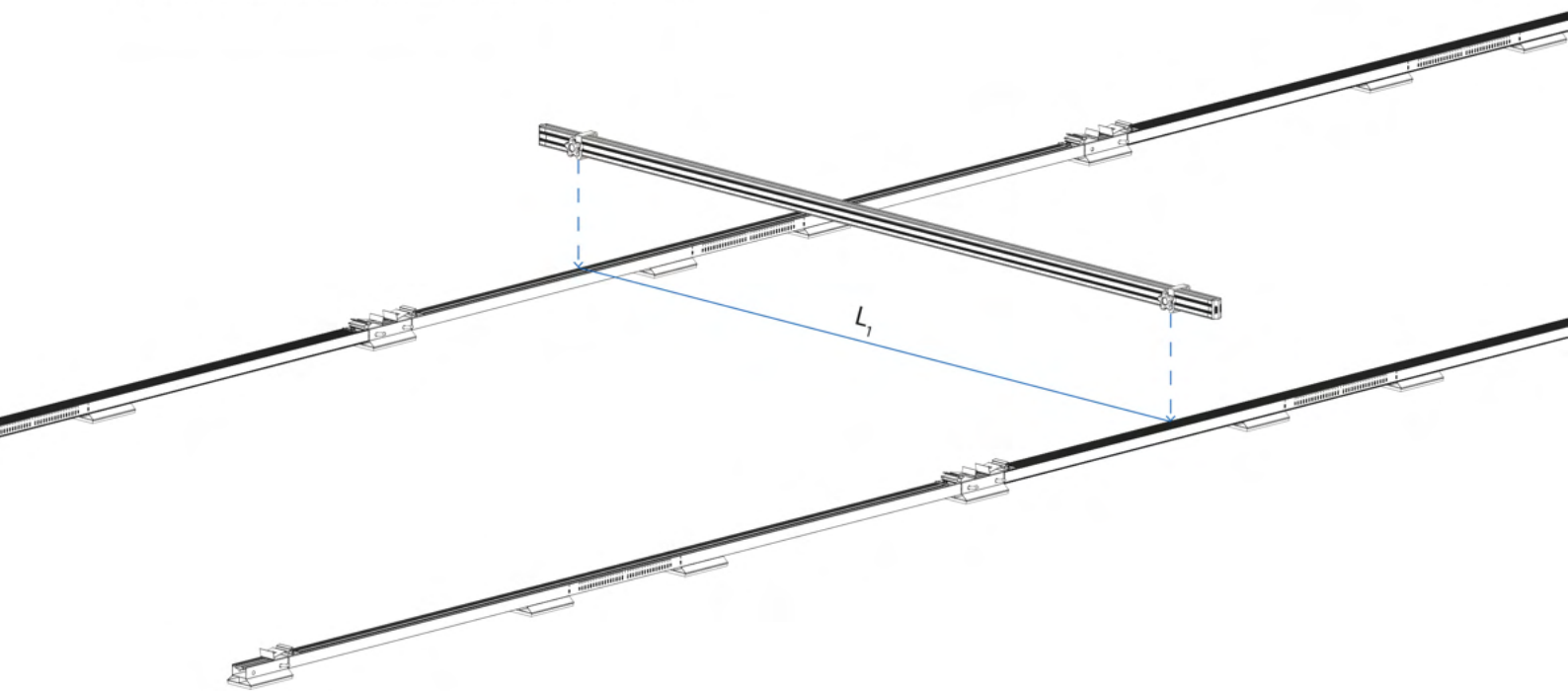
3. The rails are connected to each other with the help of pin couplings and connectors.



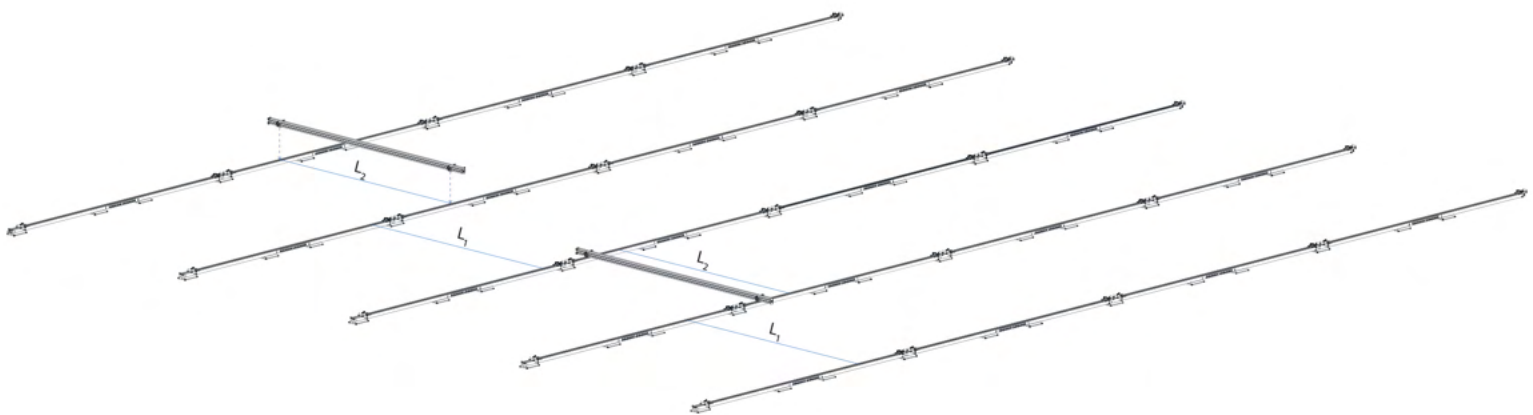
# INSTALLATION



! Please leave a gap between pv module groups for thermal dilatation each 15m



The proper positioning of the rail sets is achieved with the help of the measurement apparatus.

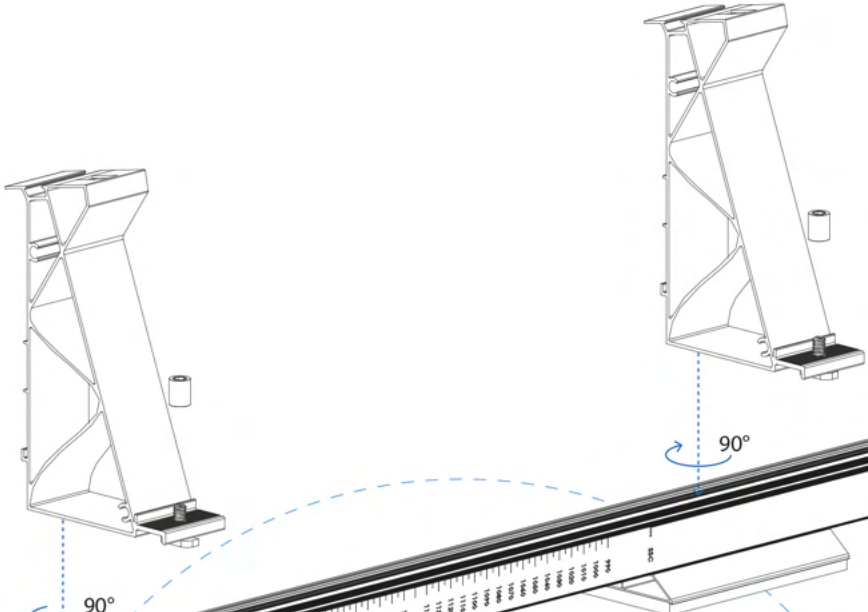


# INSTALLATION



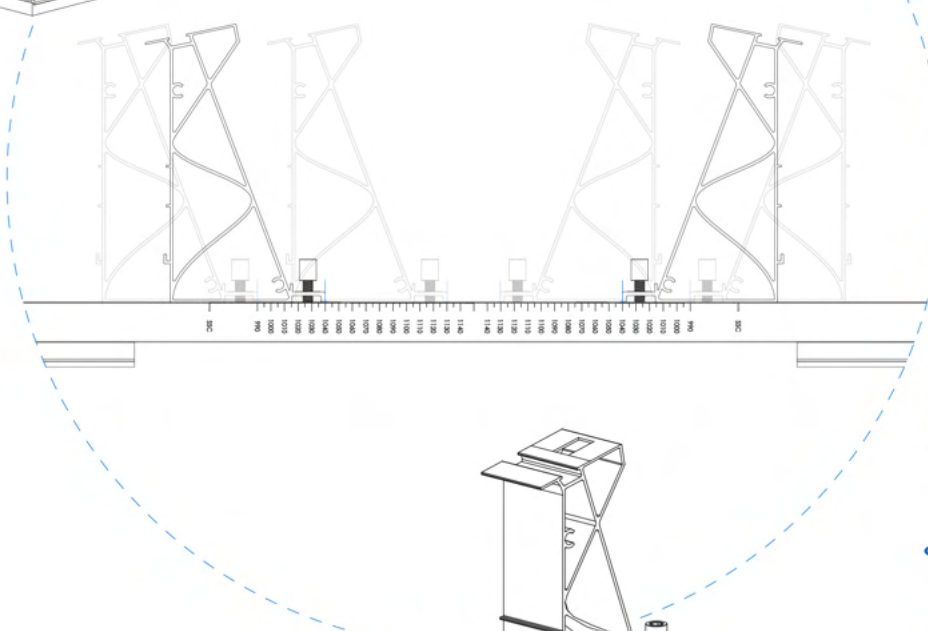
The guide section on tfx rails facilitates panel **long edge** mounting.

The guide point on the tfx rails facilitates panel **short edge** mounting.

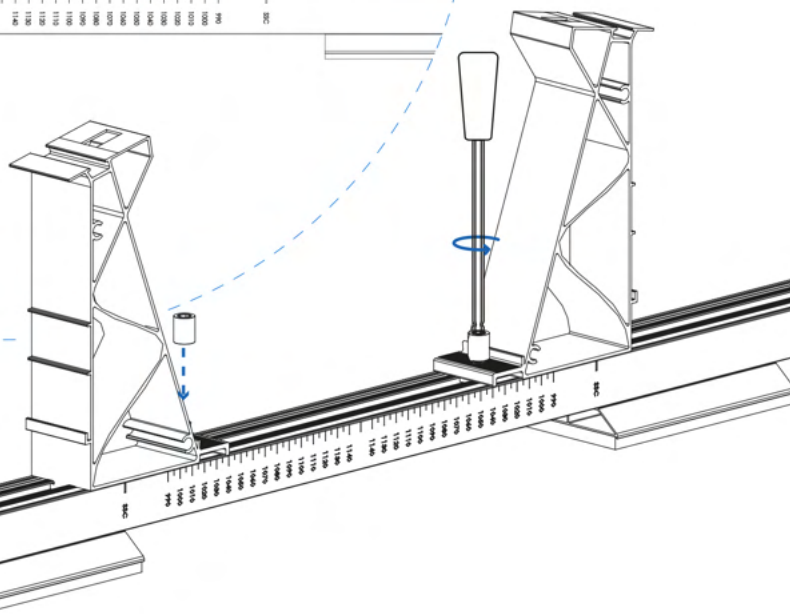


4. The tooth on the bottom of part Bs.3 is inserted into the rail channel and turned in the specified direction.

5. Align and mount the front end of part Bs.3 to the guide line that is suitable for you.

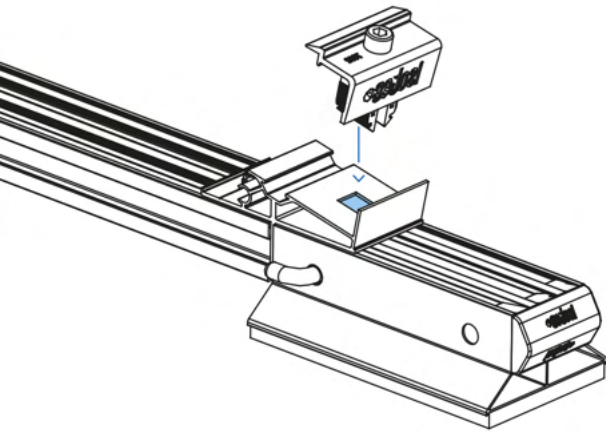


6. The nut of part Bs.3 is tightened in the desired position to secure it.

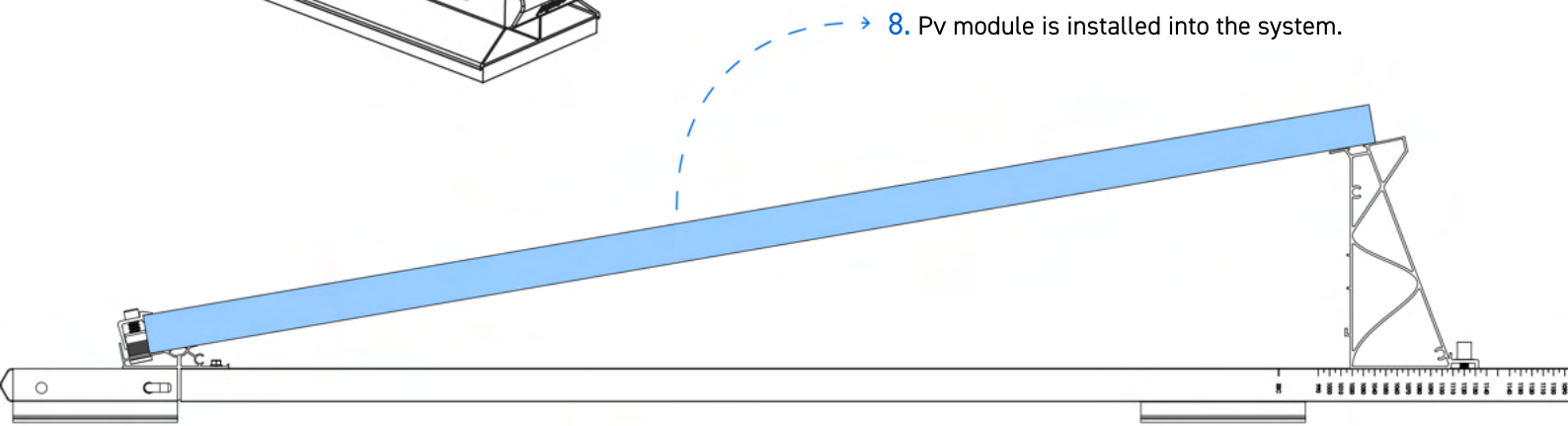


# INSTALLATION

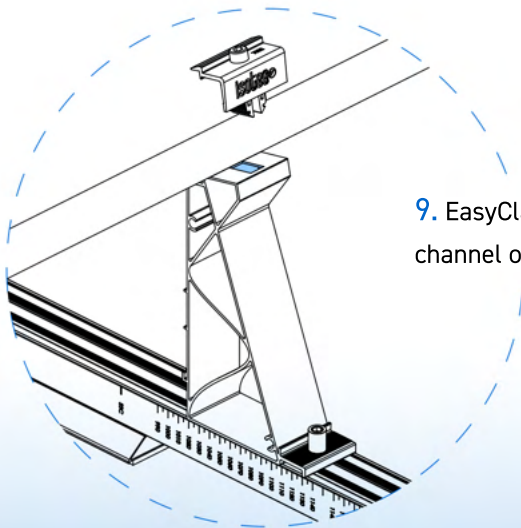
EasyClamp End is used to mount the panels onto the system.



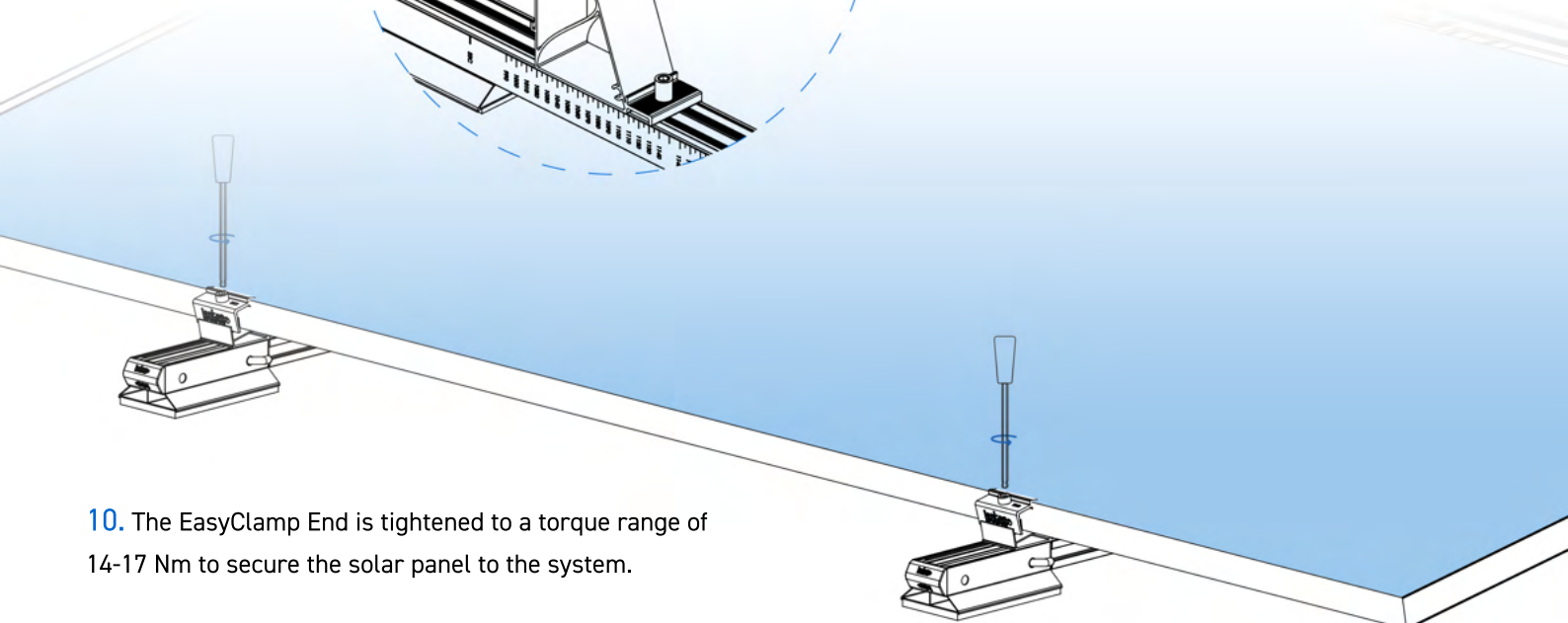
7. EasyClamp End is placed into the necessary channel of part Fs.3.



8. Pv module is installed into the system.

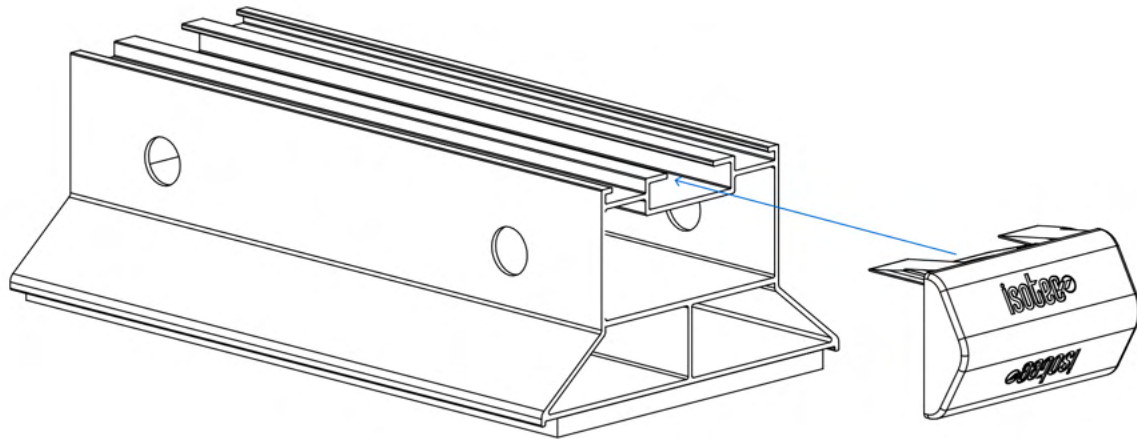


9. EasyClamp End is placed into the specified channel of part Bs.3.

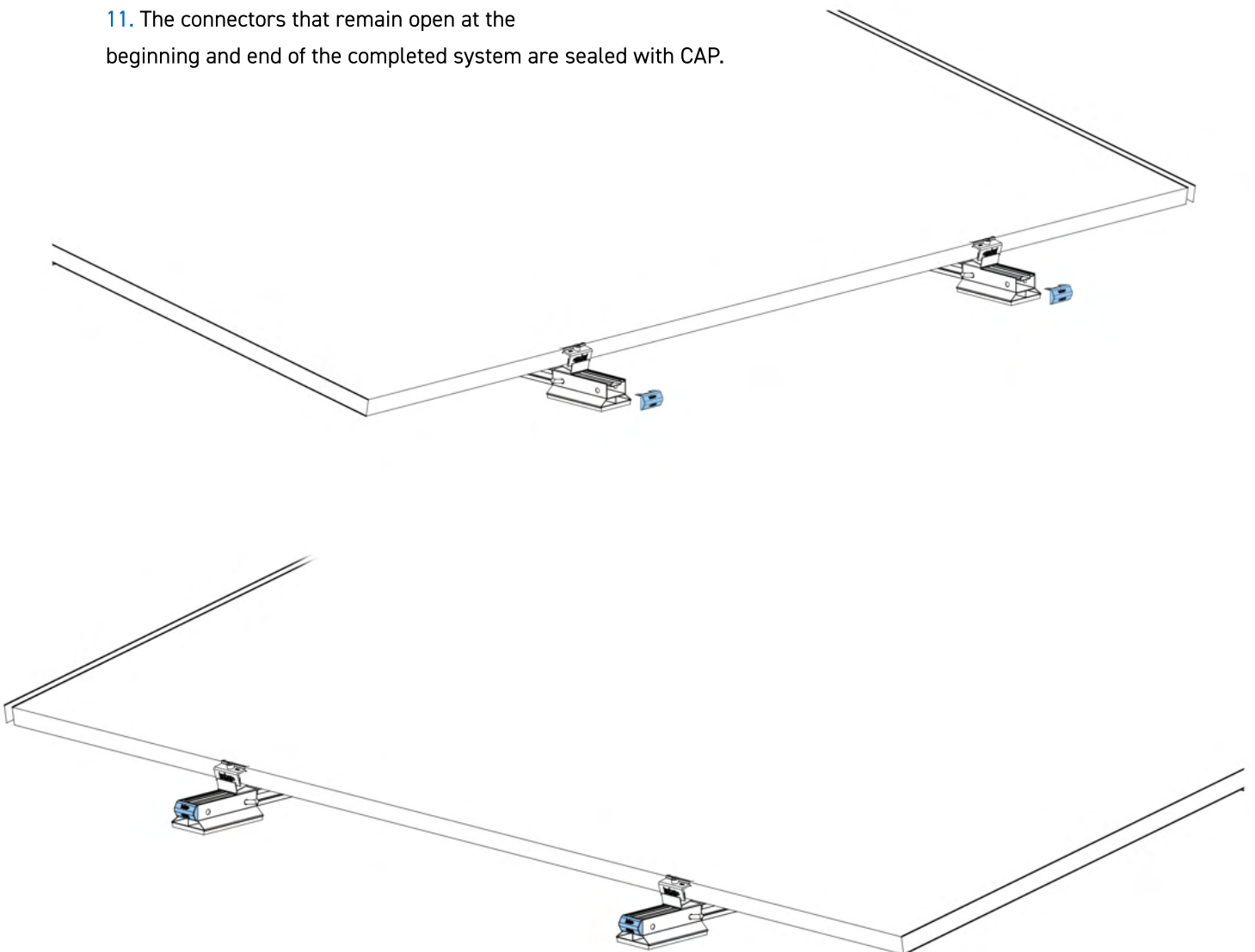


10. The EasyClamp End is tightened to a torque range of 14-17 Nm to secure the solar panel to the system.

## INSTALLATION

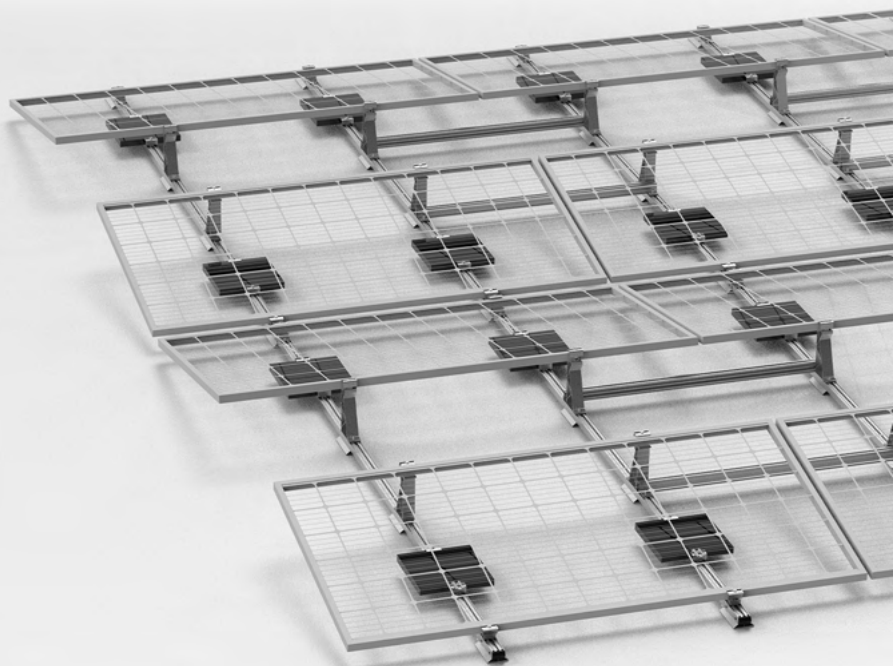
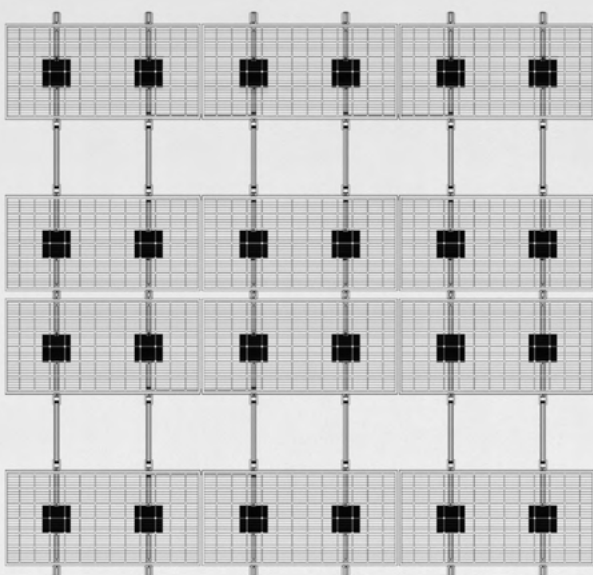
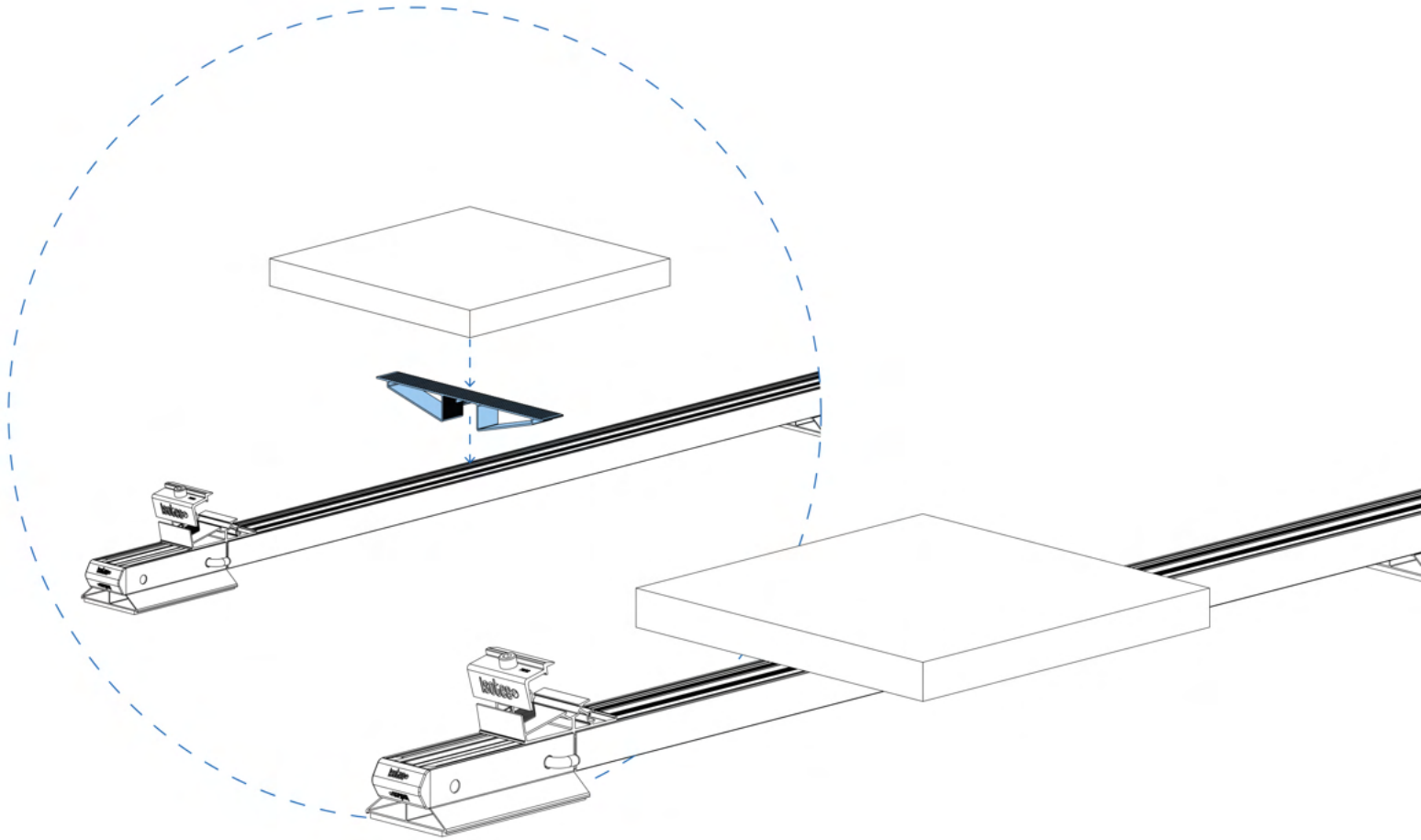


11. The connectors that remain open at the beginning and end of the completed system are sealed with CAP.



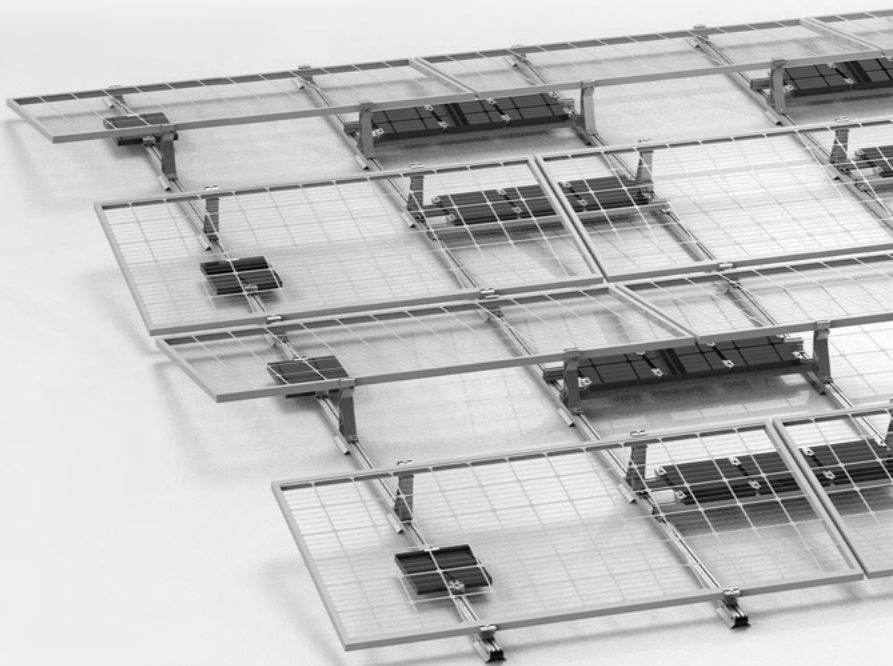
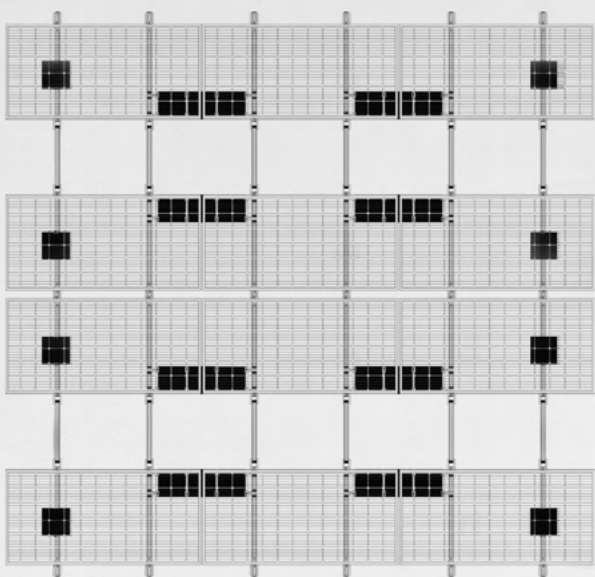
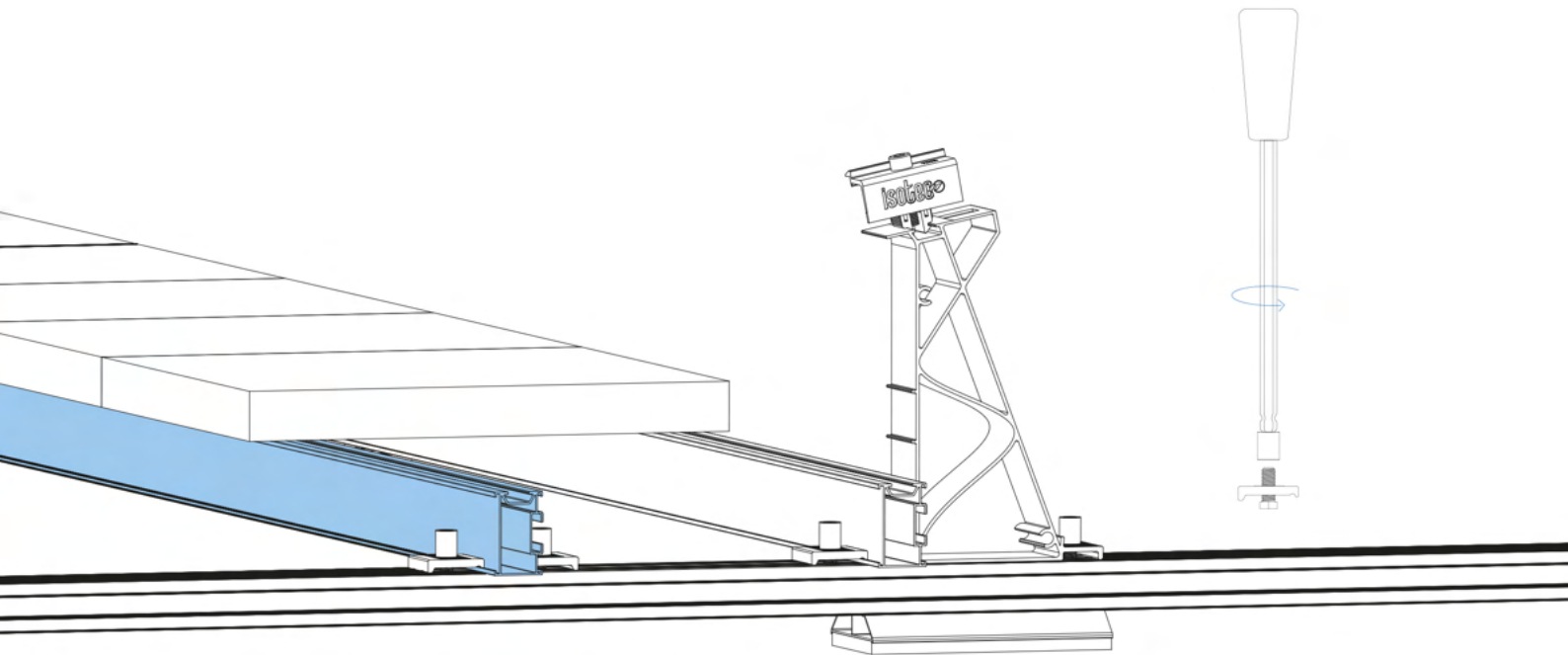
## FIXATION TYPES

**Standard fixation;** the required ballasts, determined as a result of project calculations, are placed on the rail with the help of a ballast holder after the 5th step of installation.



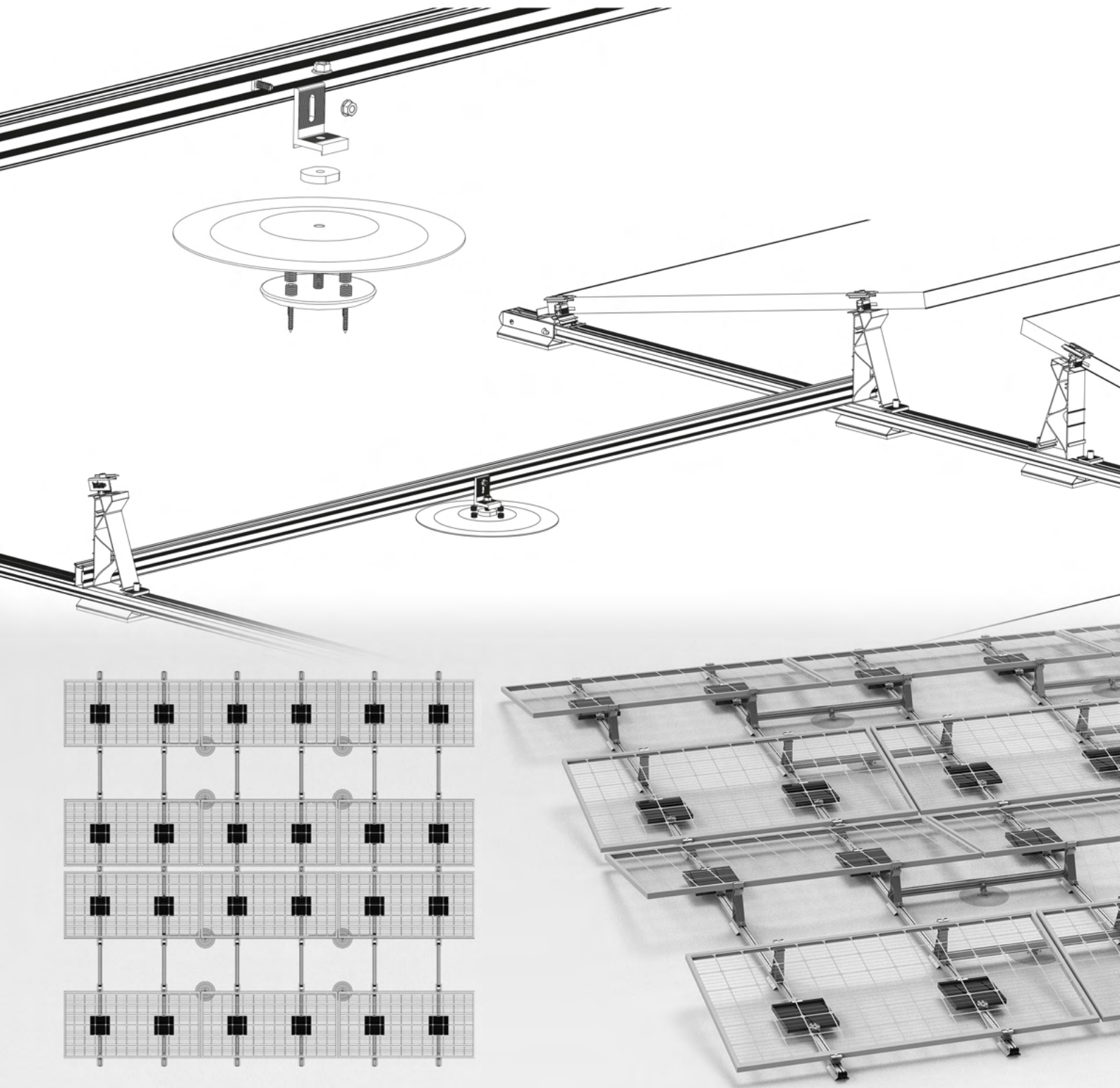
## FIXATION TYPES

**Medium / High-load fixation;** In addition tfx rail set to standard anchoring, the ballasts are placed on the TFX rails that is fixed between the rail sets by using ISOCLAMP L-40N after the 5th step of installation.



## FIXATION TYPES

**Max. load fixation;** In case the ballasts that are assigned as a result of the project calculations are not placed in the construction, IMC or anchorage method is used.



NOTES

A large grid of graph paper for taking notes, consisting of 20 columns and 30 rows of small squares.



Our valued customer,

Thank you for choosing **ISOTEC** for your solar mounting system.

Your opinion is very important to us.

You can always contact us at [+90 \(262\) 244 43 09](tel:+902622444309) or [info@isotec.com.tr](mailto:info@isotec.com.tr) for suggestions, feedback and all questions about assembly.

You can be informed about current developments by following us on our social accounts.

