

# TRITEC

ENERGY FOR A BETTER WORLD

## TRI-FLAT EASYSPEED 2.0

A simple flat roof system with a wide range of possibilities.



- simple
- quick
- efficient

### The main advantages:

- Quick installation thanks to pre-assembled components
- Wide range of assembly options, including a heavy-duty version
- Reduced material usage thanks to lightweight cross and longitudinal connectors

[www.tritec-energy.com](http://www.tritec-energy.com)

# TRI-FLAT EASYSPEED 2.0

Innovative flat-roof mounting system for flexible and stable PV installations

## Innovation that really stands out.

The TRI-FLAT Easyspeed 2.0 is an aerodynamically optimised flat-roof mounting system for solar installations, combining the stability of a rail system with the flexibility of a panel system.

With just a few components, it enables quick installation and the implementation of various east/west configurations. The system guarantees a stable and secure mounting with long-term reliability.



## Outstanding benefits that you can enjoy.

### Optimal load distribution

- Large base plates with durable bonded fleece
- Cost-effective ballasting for minimal point loads and even load distribution
- Non-penetrating ballasting

### Lightning current carrying capacity and equipotential bonding

- Reliable dissipation of lightning currents up to 50 kA and equipotential bonding tested and confirmed by a DAkkS-accredited testing body

### Safe design

- Static reliability proven by stability analyses
- Excellent wind load resistance optimised through wind tunnel tests
- Compressive strength in the Heavy Duty version  $\leq 5.76 \text{ kN/m}^2$
- No 'crawling' effect during temperature fluctuations thanks to optimal positional stability

### Flexible

- Tension-free installation thanks to tilt joints
- Flexible use for various module sizes and types
- Flexible module clamping on both the short and long sides
- Heavy-duty variant for high loads and demanding applications

### Simply straightforward

- Compact, short components for optimised transport, space-saving storage and easy handling on site
- Simple installation with just one tool
- Assembly possible on-site using the assembly jig, even without modules

### Quality you can rely on







- With the TRI-FLAT Easyspeed 2.0 assembly system, you can rely on the highest quality standards. This is confirmed by recognised testing bodies through their certification.



# THE SYSTEM COMPONENTS

An overview of all components

Colour key: ● black | ● blank

 <p><b>TRI-FLAT Easyspeed 2.0 base plate 140</b> <span>Standard</span></p> <ul style="list-style-type: none"> <li>• Dimensions: 140 x 480 mm</li> <li>• item no.: 1503300</li> </ul>	 <p><b>TRI-FLAT Easyspeed 2.0 base plate 240</b> <span>Standard</span></p> <ul style="list-style-type: none"> <li>• Dimensions: 240 x 480 mm</li> <li>• item no.: 1503302</li> </ul>	 <p><b>TRI-FLAT Easyspeed 2.0 shim</b> <span>Standard</span></p> <ul style="list-style-type: none"> <li>• item no.: 1503504</li> </ul>	 <p><b>TRI-FLAT Easyspeed 2.0 small raiser</b> <span>Standard</span></p> <ul style="list-style-type: none"> <li>• item no.: 1503505</li> </ul>
 <p><b>TRI-FLAT Easyspeed 2.0 small double raiser</b> <span>Standard</span></p> <ul style="list-style-type: none"> <li>• item no.: 1503506</li> </ul>	 <p><b>TRI-FLAT Easyspeed 2.0 large raiser</b> <span>Standard</span></p> <ul style="list-style-type: none"> <li>• item no.: 1503507</li> </ul>	 <p><b>TRI-FLAT Easyspeed 2.0 profile holder</b> <span>Standard</span></p> <ul style="list-style-type: none"> <li>• item no.: 1503514</li> </ul>	 <p><b>TRI-FLAT Easyspeed 2.0 centre clamp 30-40</b> <span>Standard</span></p> <ul style="list-style-type: none"> <li>• item no.: 1503508</li> </ul>
 <p><b>TRI-FLAT Easyspeed 2.0 Cross-section</b> <span>Standard</span></p> <p><b>Cross-section 1980</b> for module lengths up to 1800 mm • item no.: 1503510 <b>Cross-section 2600</b> for module lengths up to 2441 mm • item no.: 1503511 <b>Cross-section 3700</b> for 2 module lengths up to 1762 mm • item no.: 1503512 <b>Cross-section 6300</b> for bespoke solutions • item no.: 1503513</p>	 <p><b>TRI-FLAT Easyspeed 2.0 H-rail</b> <span>Standard</span></p> <p><b>H-rail 1100</b> for module widths of 990-1200 mm • item no.: 1503515 <b>H-rail 1300</b> for module widths of 1200-1400 mm • item no.: 1503516</p>	 <p><b>TRI-FLAT Easyspeed 2.0 end clamp</b> <span>Standard</span></p> <ul style="list-style-type: none"> <li>• 30 mm black, item no.: 1503509</li> </ul>	 <p><b>TRI-FLAT Easyspeed 2.0 Ballast tray gravel 2025 / 2225 / 2475</b> <span>Optional</span></p> <p><b>Ballast tray 2025</b> • item no.: 1503325 <b>Ballast tray 2225</b> • item no.: 1503326 <b>Ballast tray 2475</b> • item no.: 1503327</p>
 <p><b>TRI-FLAT Easyspeed 2.0 Ballast tray 2025 / 2225 / 2475</b> <span>Optional</span></p> <p><b>Ballast tray 2025</b> • item no.: 1503321 <b>Ballast tray 2225</b> • item no.: 1503322 <b>Ballast tray 2475</b> • item no.: 1503323</p>	 <p><b>TRI-FLAT Easyspeed 2.0 Ballast brace</b> <span>Optional</span></p> <ul style="list-style-type: none"> <li>• item no.: 1503519</li> </ul>	 <p><b>TRI-FLAT Easyspeed 2.0 Ballast clip</b> <span>Optional</span></p> <ul style="list-style-type: none"> <li>• item no.: 1503518</li> </ul>	 <p><b>TRI-FLAT Easyspeed 2.0 assembly jig</b> <span>Optional</span></p> <ul style="list-style-type: none"> <li>• item no.: 1503520</li> </ul>

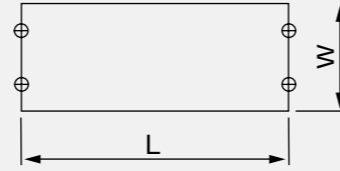
# SYSTEM OVERVIEW

## Short-side clamping

Quick assembly, reduced material costs, cost-effective solution

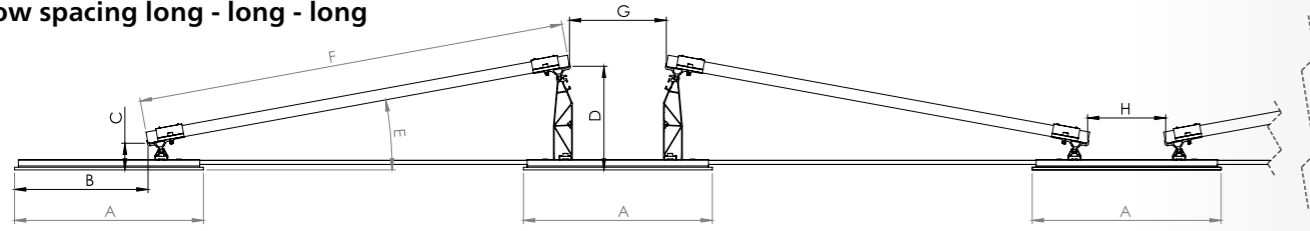
Row spacing	A (mm)	B* (mm)	C* (mm)	D* (mm)	E**	F (mm)	G (mm)	H* (mm)
long - long - long	500	~ 353,2	~ 70,6	~ 274,2	7,7° - 12°	990 - 1500	~ 256,2	~ 206,6
long - long - short	500	~ 353,2	~ 70,6	~ 274,2	7,7° - 12°	990 - 1500	~ 256,2	~ 30
long - short - short	500	~ 353,2	~ 70,6	~ 274,2	7,7° - 12°	990 - 1500	~ 117,7	~ 30

Clamping positions on the short side

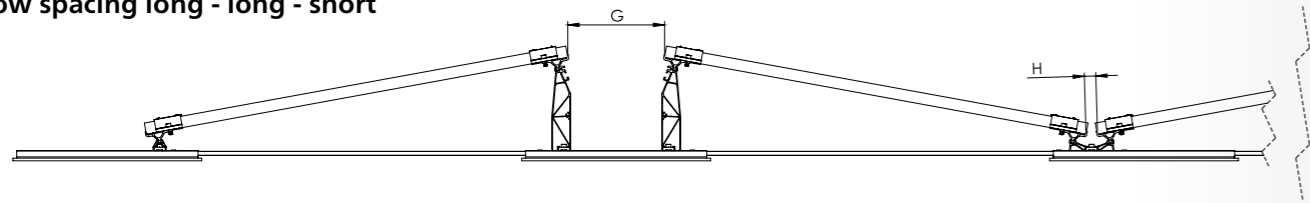


\* Depends on the mounting angle, \*\* Depends on the module width

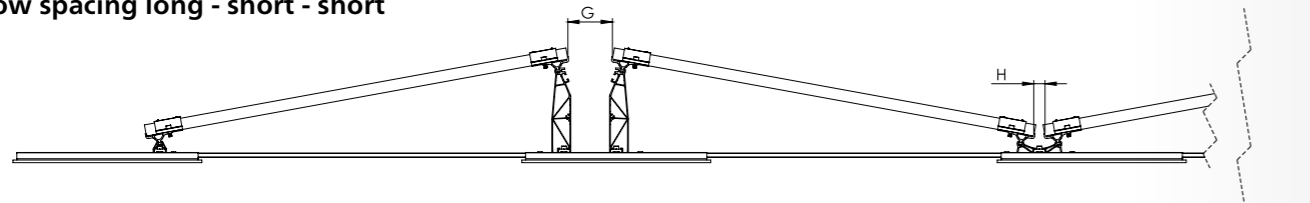
### Row spacing long - long - long



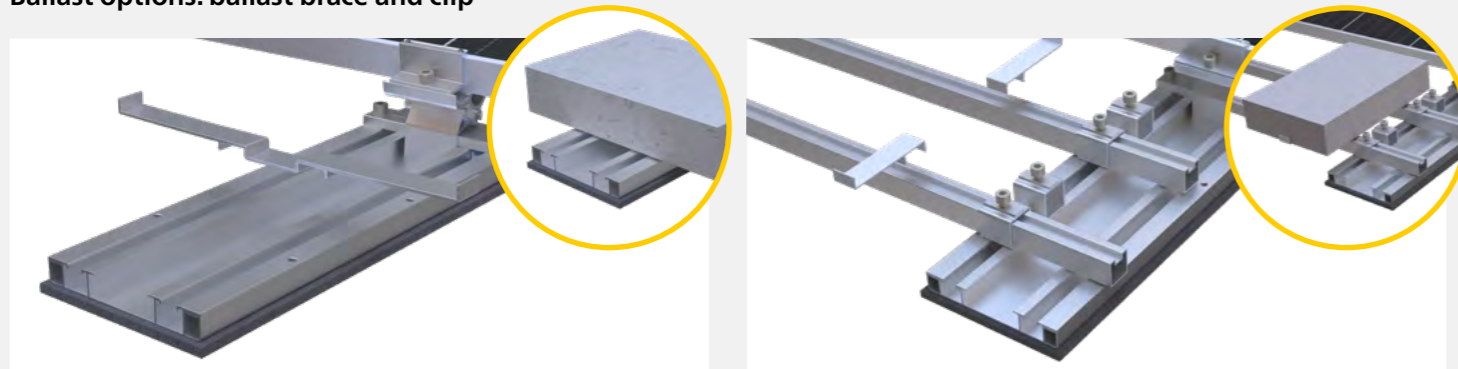
### Row spacing long - long - short



### Row spacing long - short - short



Ballast options: ballast brace and clip



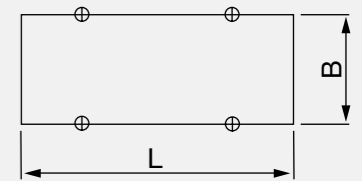
# SYSTEM OVERVIEW

## Long-side clamping & heavy-duty version

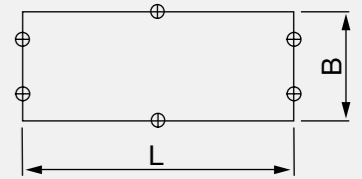
Enhanced stability, the most robust system design, quarter-point clamping, high snow and wind loads

Row spacing	A (mm)	B* (mm)	C* (mm)	D* (mm)	E**	F (mm)	G (mm)	H* (mm)
long - long - long	500	~ 373,2	~ 74,3	~ 270,6	7,5° - 11,5°	990 - 1500	~ 295,2	~ 206,6
long - long - short	500	~ 373,2	~ 74,3	~ 270,6	7,5° - 11,5°	990 - 1500	~ 295,2	~ 69,6
long - short - short	500	~ 373,2	~ 74,3	~ 270,6	7,5° - 11,5°	990 - 1500	~ 156,7	~ 69,6

Clamping positions on the long side

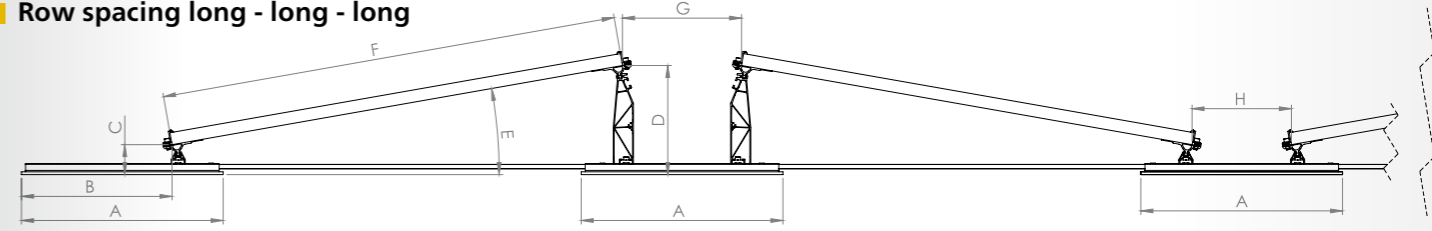


Heavy-duty clamping positions

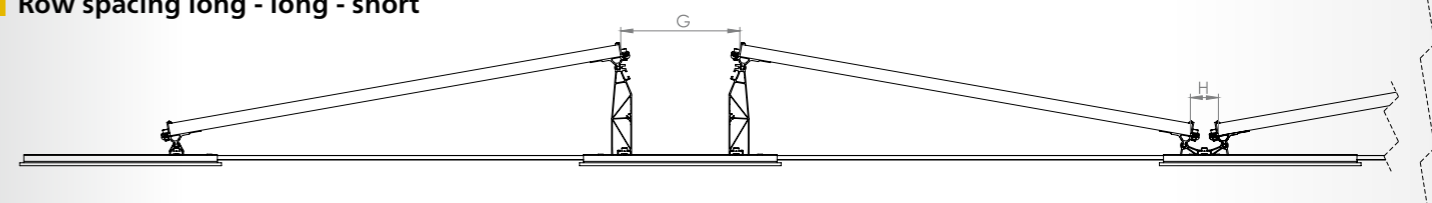


\* Depends on the mounting angle, \*\* Depends on the module width

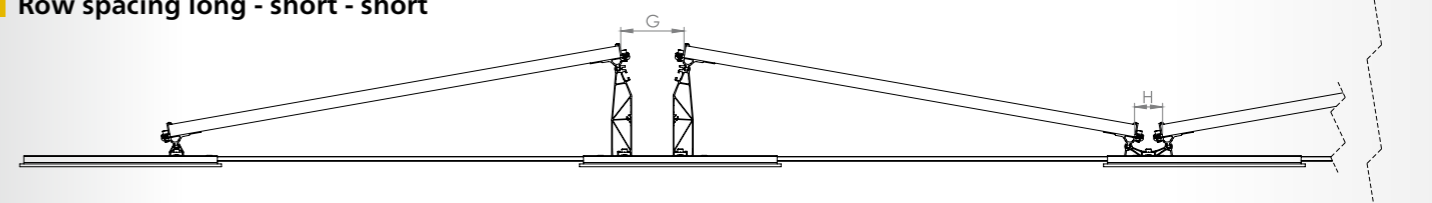
### Row spacing long - long - long



### Row spacing long - long - short



### Row spacing long - short - short



Ballast variant: ballast tray



# LEARN MORE

## Technical specifications

# TRITEC

<b>Description</b>	Modular hybrid panel system for framed solar modules on flat roofs.	
<b>Usage</b>	Membrane and bitumen roofs (with and without thermal insulation), concrete and gravel roofs	
<b>Roof pitch</b>	0° - 5°	
<b>Modules</b>	Type:	Framed modules
	Dimensions:	Width: 900 – 1500 mm Length: 1500 – 2500 mm
	Orientation:	Horizontal
	Field size	Max. 20 x 25 metres Min. 4 double modules (2 double modules for cantilevered installations) ~10° (typically 9–12°, depending on module width)
<b>Distances</b>	Roof surface:	~ 70 mm
	Roof edge:	Min. 600 mm
<b>Loads</b>	Wind:	Up to 3.00 kN/m <sup>2</sup> (suction load)
	Snow:	Up to 5.76 kN/m <sup>2</sup>
<b>Design / Structural analysis</b>	Software based on wind tunnel tests and building standards	
<b>Site-specific requirements</b>	The client must ensure that the roof structure and the building's load-bearing framework have sufficient structural capacity, and that the roof assembly has sufficient compressive strength. The general terms and conditions of business and warranty, as well as the usage agreement, apply. The client must also verify that the modules have been approved.	
<b>Schraubmontage</b>	screw assembly	
<b>Torque</b>	Max. 15 Nm	
<b>Components</b>	Module clamps with earthing pins, base plates, busbars in longitudinal and transverse directions (H-rail & cross-section), ballast trays, gravel trays, wind deflectors, mounting profiles for wind deflectors, earthing clamps for lightning current carrying capacity	
<b>Material</b>	Load-bearing connecting parts: aluminium EN AW 6063 T66 and EN AW 6005A T6; module clamps: aluminium EN AW 6063 T66; screws: stainless steel A2-70; wind deflectors and ballast trays: steel with aluminium-zinc coating; fleece: polyester needle felt	

\* depending on the system configuration and the PV modules used

### The optimal mounting solution for every roof

TRITEC mounting systems combine nearly 40 years of photovoltaic experience. Our own products TRI-STAND, TRI-ROOF+, TRI-CLIP Ready, TRI-FLAT Easyspeed and Easygreen offer optimum PV mounting solutions for the various requirements of different roof types and alignments. We attach great importance to the high-quality processing of the components as well as to the durability of the substructure.

For further information on our products and services, please visit our website at [www.tritec-energy.com](http://www.tritec-energy.com) or our online shop at [shop.tritec-energy.com](http://shop.tritec-energy.com).

You can also contact our experts directly at any time, who will be happy to answer any questions you may have.



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