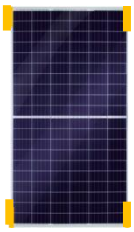
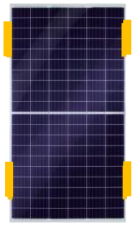
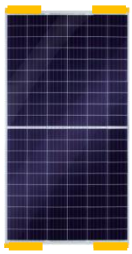
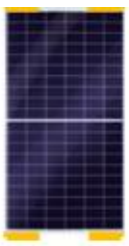
United Renewable Energy Co., Ltd.
聯合再生能源股份有限公司

Approval for clamping mounting method

We, United Renewable Energy Co., Ltd., hereby confirm that clamping mounting system are approved with following loading.

Description	Illustration	Module Model	Test Load	Design Load
Clamping at Module Long Side Frame	 Acceptable Clamping Range (L/8 to edge) *L: Module Length*	**F2MxxxH7A** **F2KxxxH7A** **F2KxxxH7C** **F2KxxxE7C** **FAKxxxE7C**	**Front: 1800 Pa** **Rear: 1800 Pa**	**Front: 1200 Pa** **Rear: 1200 Pa**
Clamping at Module Long Side Frame	 Acceptable Clamping Range (L/4 to L/8) *L: Module Length*	**F2MxxxH7A/ F2KxxxH7A** **F2KxxxH7B/ F2KxxxH7C** **F2KxxxH7D/ F2KxxxE7B** **F2KxxxE7C/ F2KxxxE7D** **FAKxxxE7B/ FAKxxxE7C** **FAKxxxE7D**	**Front: 5400 Pa** **Rear: 2400 Pa**	**Front: 3600 Pa** **Rear: 1600 Pa**
Clamping at Module Short Side Frame	 Acceptable Clamping Range (W/4 to edge) *W: Module Width*	**F2MxxxH7A** **F2KxxxH7A** **F2KxxxH7C** **F2KxxxE7C**	**Front: 1800 Pa** **Rear: 1800 Pa**	**Front: 1200 Pa** **Rear: 1200 Pa**
Clamping at Module Short Side Frame	 Acceptable Clamping Range (W/4 to edge) *W: Module Width*	**FAKxxxE7B** **FAKxxxE7C**	**Front: 1800 Pa** **Rear: 1200 Pa**	**Front: 1200 Pa** **Rear: 800 Pa**

*xxx is module power

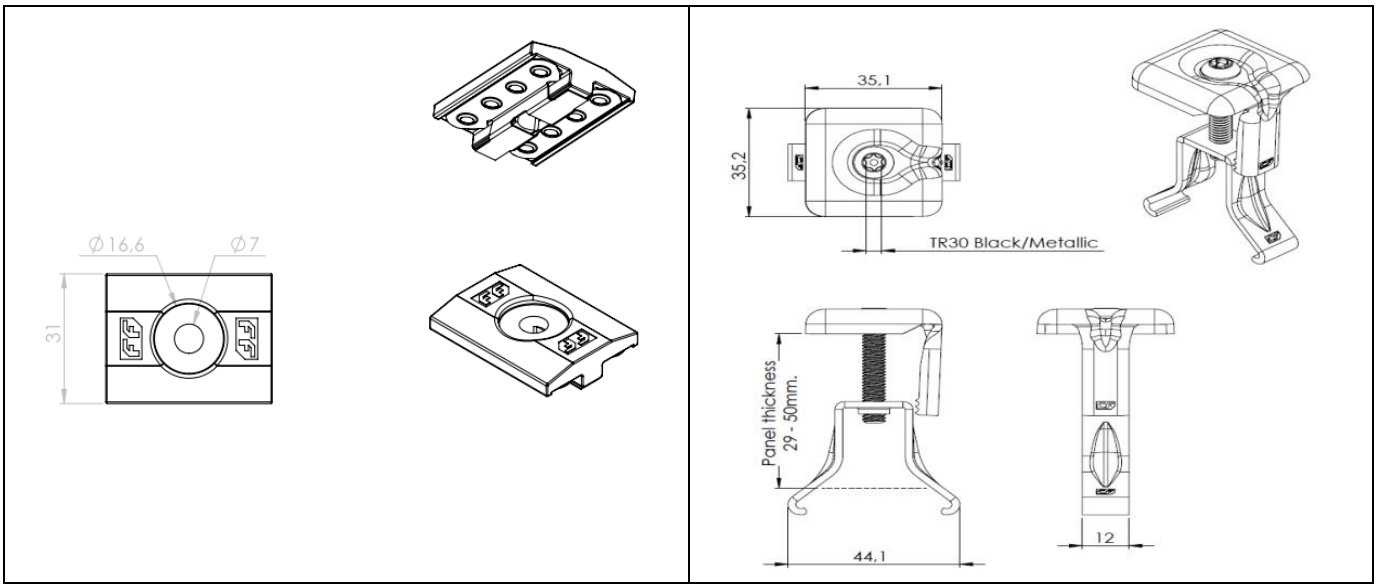
Refer to file no. 100-3022 for details of modules clamping

Refer to file no. 100-8020 for details of modules clamping

Refer to file Manual_ClickFitEvo_TiledRoof for details of modules installation manual

Refer to file Manual_FlatFixFusion_Dual for details of modules installation manual

Refer to file Manual_FlatFixFusion_Single for details of modules installation manual



James Chen

On behalf of Technical Support

United Renewable Energy Co., Ltd.

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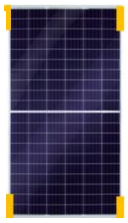
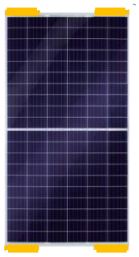
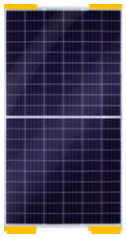
Science Park, Hsinchu

Taiwan 30078, R.O.C

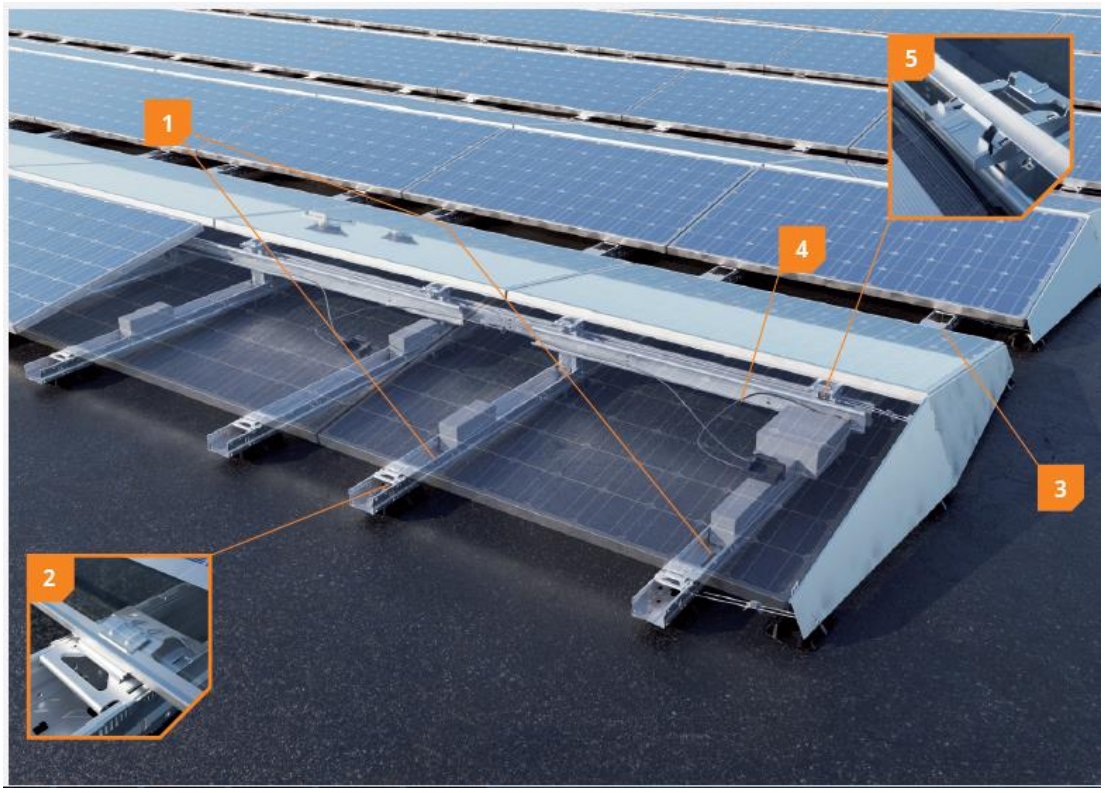
United Renewable Energy Co., Ltd.
聯合再生能源股份有限公司

Approval for FlatFix Wave mounting *method of* ESDEC

We, United Renewable Energy Co., Ltd., hereby confirm that FlatFix Wave installation method for use with URE's modules is approved.

Description	Illustration	Module Model	Test Load	Design Load
Clamping at Module Long Side Frame	 Acceptable Clamping Range (L/8 to edge) *L: Module Length*	**F2MxxxH7A** **F2KxxxH7A** **F2KxxxH7C** **F2KxxxE7C** **FAKxxxE7C**	**Front: 1800 Pa** **Rear: 1800 Pa**	**Front: 1200 Pa** **Rear: 1200 Pa**
Clamping at Module Long Side Frame	 Acceptable Clamping Range (L/4 to L/8) *L: Module Length*	**F2MxxxH7A/ F2KxxxH7A** **F2KxxxH7B/ F2KxxxH7C** **F2KxxxH7D/ F2KxxxE7B** **F2KxxxE7C/ F2KxxxE7D** **FAKxxxE7B/ FAKxxxE7C** **FAKxxxE7D**	**Front: 5400 Pa** **Rear: 2400 Pa**	**Front: 3600 Pa** **Rear: 1600 Pa**
Clamping at Module Short Side Frame	 Acceptable Clamping Range (W/4 to edge) *W: Module Width*	**F2MxxxH7A** **F2KxxxH7A** **F2KxxxH7C** **F2KxxxE7C**	**Front: 1800 Pa** **Rear: 1800 Pa**	**Front: 1200 Pa** **Rear: 1200 Pa**
Clamping at Module Short Side Frame	 Acceptable Clamping Range (W/4 to edge) *W: Module Width*	**FAKxxxE7C** **FAKxxxE7B** **FAKxxxE7D**	**Front: 1600 Pa** **Rear: 1600 Pa**	**Front: 1066 Pa** **Rear: 1066 Pa**

*xxx is module power



Appendix 1: FlatFix Wave Mounting System

James Chen

On behalf of Technical Support

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Appendix 1: FlatFix Wave Mounting System

ESDEC
INNOVATIVE MOUNTING SYSTEMS

THE ADVANTAGES OF FLATFIX WAVE

QUICK AND EASY

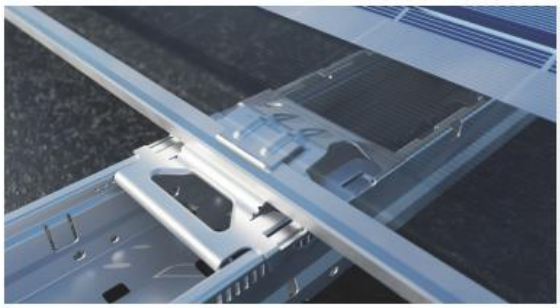
- Quick, easy installation:
  - Unfolding, pre-assembled base units
  - No tools needed
  - Minimal number of components
  - Maximum efficiency
- Integrated cable management
- Easy to disassemble for panel maintenance

MAXIMUM EFFICIENCY

- Ideal for large-scale commercial projects
- Suitable for larger, new-generation solar panels
- Dual setup (east-west)
- Large panel fields (40x40)
- Pitch length of 2300 mm
- Angle of inclination 10°

RELIABLE

- Simple installation of pre-assembled units without screws
- Aerodynamic design
- Robust system thanks to horizontal and vertical connectors
- Best possible panel support: 2 base units per panel
- Tested to international standards
- 20-year warranty



SAFETY

- Roof supports with movable connectors
- Unique thermal decoupling prevents damage to roof material
- Integrated bonding
- Low point load
- Panel clamped on the long side in accordance with panel supplier specifications; minimizes risk of panel damage
- Meets strictest corrosion requirements

www.esdec.com

FLATFIX WAVE

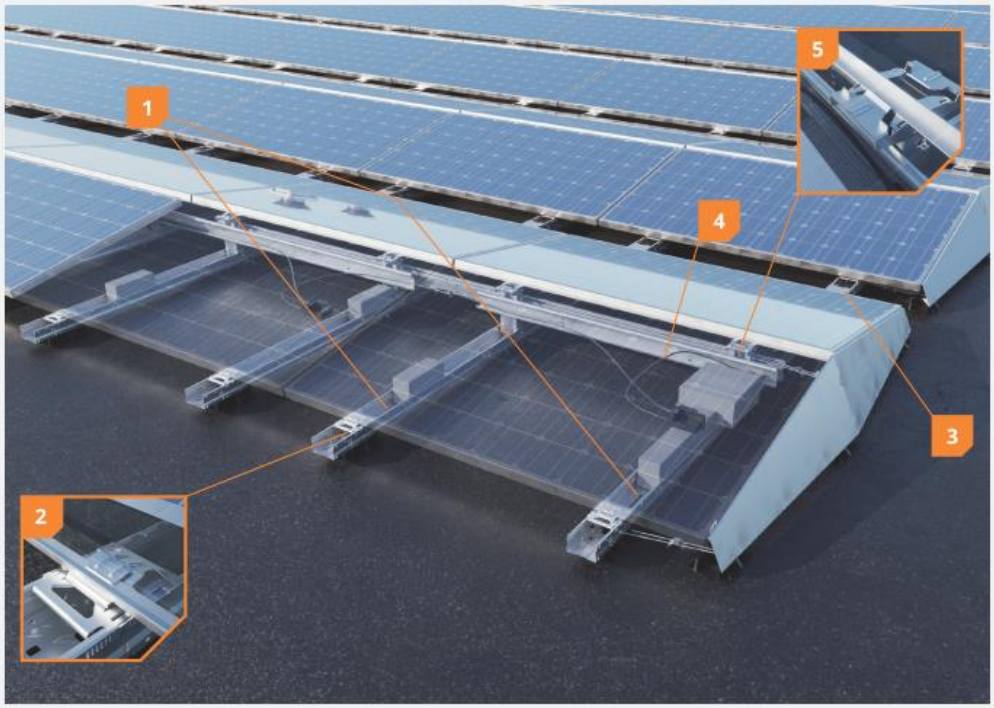
WITH THE MOST COMPREHENSIVE FEATURES FOR FUTURE-PROOF RELIABILITY

Quick, error-free installation
FlatFix Wave can be installed super quickly thanks to the limited number of mounting steps. Align and extend the pre-assembled base units, click high base element and stabilizers into place and mount the solar panel, without using screws or tools, using the unique panel clamping. Complete installation, including locking the solar panel, can be done without tools. The stabilizers provide space for cable management.

Maximum efficiency on the roof
Maximum efficiency on the roof is one of the basic principles of FlatFix Wave. FlatFix Wave's dual setup ensures the most balanced energy yield throughout the day and makes it possible to maximize the use of the roof's surface as efficiently as possible. This configuration is designed for large-scale projects where large, next-generation solar panels can also be used. With the rigidity of the system, fields of up to 40 x 40 metres can easily be installed.

Safe & reliable
Each panel is optimally supported by two base units. And because the panels are clamped on the long side, as required by most panel manufacturers, the risk of damage to the panels is minimized. The patented FlatFix Wave system has been tested extensively. And it meets the strictest corrosion requirements. FlatFix Wave is a high-quality mounting solution. It complies with the strictest international standards and comes with a 20-year warranty.

ADVANTAGES FOR THE INSTALLER	BENEFITS FOR THE OWNER
✓ Super-quick and error-free installation	✓ Maximum efficiency for commercial projects
✓ No tools needed	✓ In accordance with the latest insurance requirements
✓ Easy to mount	✓ Use of premium materials
✓ Integrated cable management	✓ 20-year warranty



1 2 units per panel

In this configuration, each panel is supported by 2 units. Extremely well-suited to large, next-gen solar panels.

2 Unique, patented clamping system

Easy and secure mounting of the panel using a unique, patented clamp mechanism. No screws needed.

3 No tools needed

The installation requires no tools: The base units are easy to unfold and to interconnect.

4 Integrated cable management

Quick and easy feeding and stowing of cables using the cable rack and integrated cable gutter located in the stabilizers.

5 Integrated bonding

Bonding is integrated into the clamping mechanism of the high base. A milled edge is etched into the panel's anodization layer, connecting the panel to the steel support frame.

BASE UNIT

FlatFix Wave Dual Unit 4P
1009100

FlatFix Wave Dual unit 2P
1009102

FlatFix Wave Dual Start unit 4P
1009101

SYSTEM COMPONENTS

FlatFix Wave Connector pin (set of 3 pieces)
1009122

FlatFix Wave Stabilizer 2900
1009110

FlatFix Wave Cable bracket
1009124

FlatFix Wave Stabilizer 3530
1009111

FlatFix Wave Wind deflector kit
1009103

ACCESSORIES

FlatFix Wave Base plate (extra)
1009120

FlatFix Wave Measuring bar
1009140

FlatFix Wave Stabilizer coupler
1009121

FlatFix Wave Module unlock tool
1009142

FlatFix Wave Ballast bracket
1009123

Project support

Extensive technical project documentation
- Ballast plan
- Electrotechnical safety (grounding and bonding)
- Roof load (snow and point load)

Logistical support
- Project-based delivery
- Express delivery

Technical advice
- Installation training on site
- Project design and ballast calculation

Warranty

- In accordance with latest insurance requirements
- Meets specifications of panel suppliers
- Complies with strictest corrosion requirements
- Extensively tested
- 20-year warranty

20 YEAR

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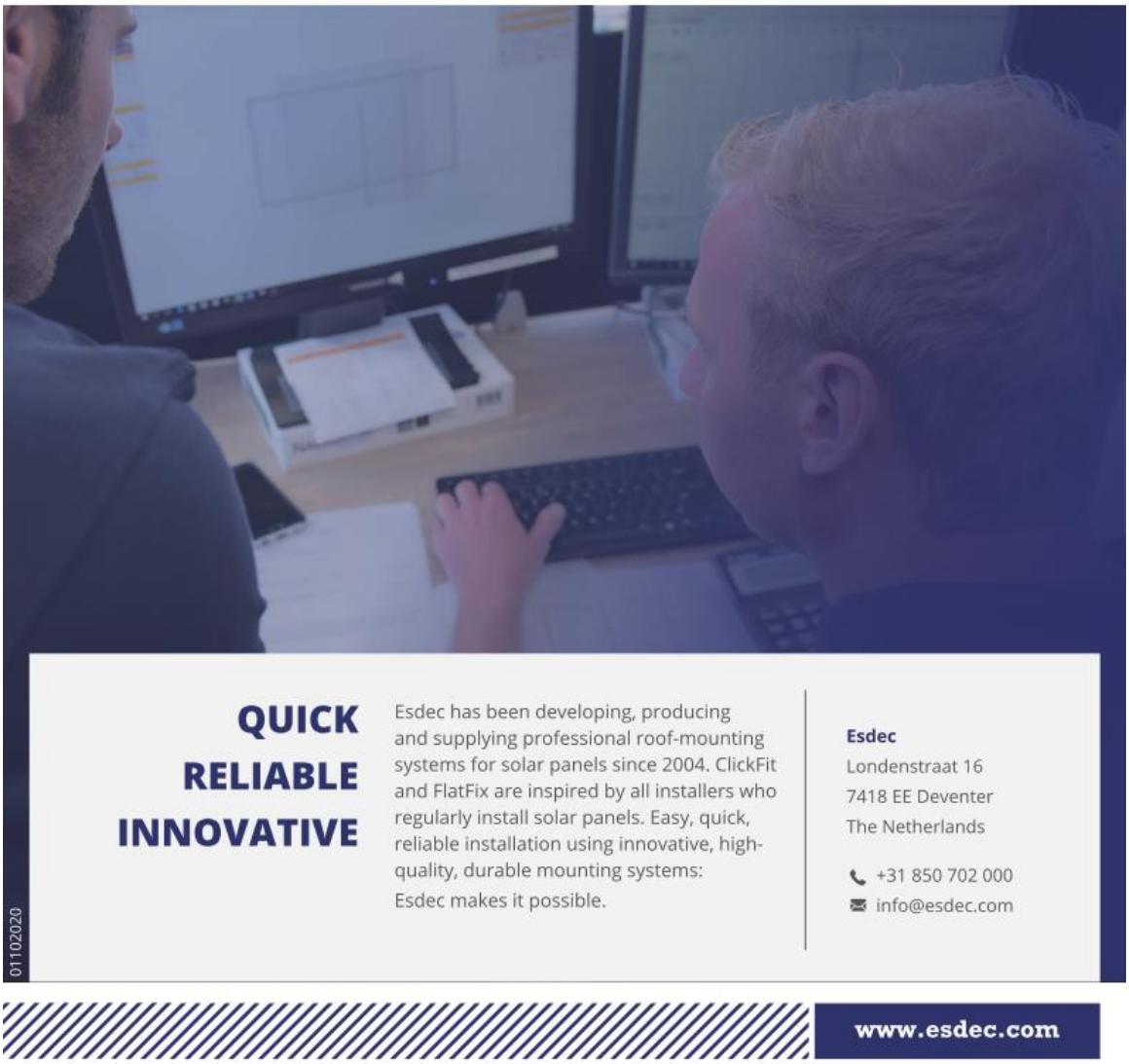
QUICK
RELIABLE
INNOVATIVE
Esdec has been developing, producing and supplying professional roof-mounting systems for solar panels since 2004. ClickFit and FlatFix are inspired by all installers who regularly install solar panels. Easy, quick, reliable installation using innovative, high-quality, durable mounting systems: Esdec makes it possible.
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