



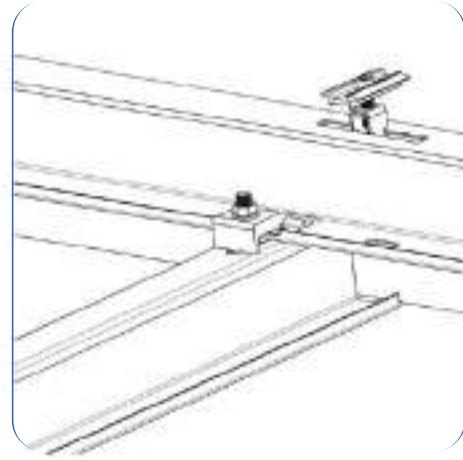
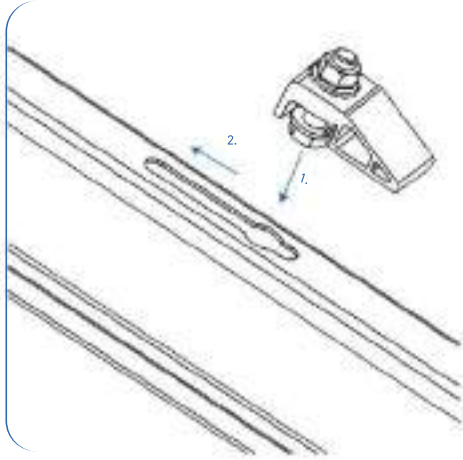
I S O G R O U N D

Fixed Ground Mounting System

- Extensive flexibility
- Modular construction
- High security
- Maximum strength
- Long service life
- Easy maintenance

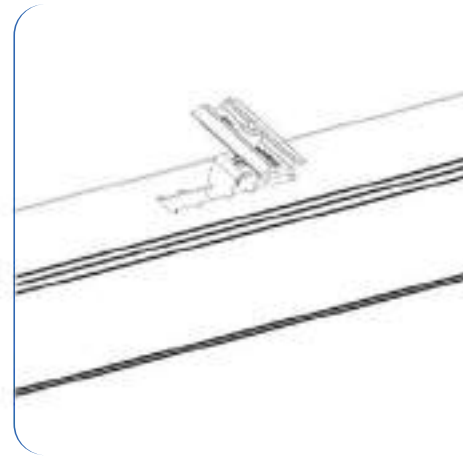
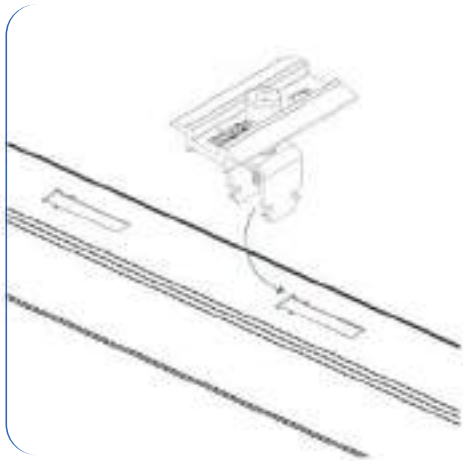
TECHNICAL DATA

Beam - Purlin Assembly



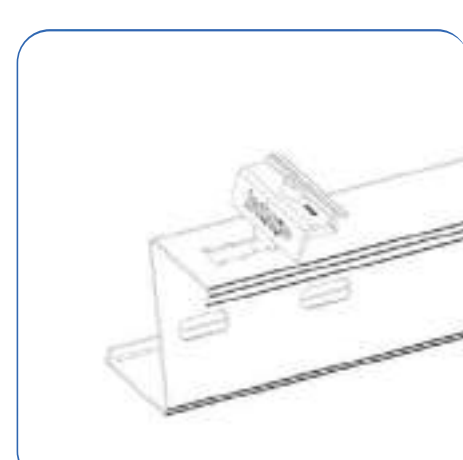
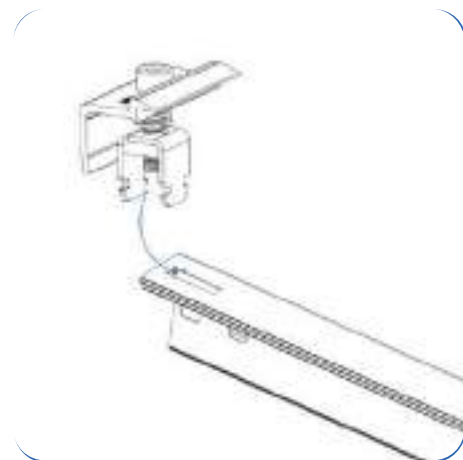
With the ISOCLAMP device, the beam-purlin connection can be easily and quickly achieved.

Purlin - Mid Clamp Assembly



The installation of panels onto the purlins is easily and quickly accomplished with special alloy aluminum mid clamps.

Purlin - End Clamp Assembly



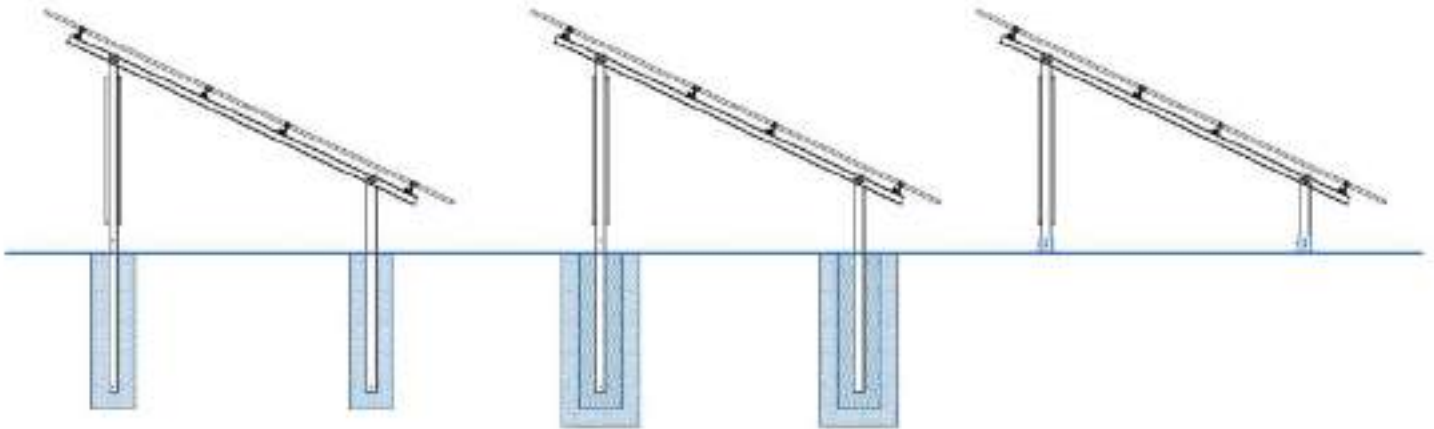
The mounting of panels onto the purlins is easily and quickly accomplished with special alloy aluminum end clamps.

TECHNICAL DATA

ISOGROUND BNS TWO

Maximum strength with two piles
Available in Portrait & Landscape Configuration
Steel Steel or Steel Aluminum options available
All fasteners are Stainless A2 quality
High strength module clamps

Datasheet



RAMMING

CONCRETE FOUNDATION

ANCHOR

Scope of application	Ground / Free Land
	L : 1.500 mm - 2.500 mm
Compatible pv module	W : 990 mm - 1.330 mm
	H : 30 mm - 40 mm
Foundation type	Ramming, concrete foundation , concrete pile
Material	Pile / Beam / Brace : HDG ST52 Steel
	Purlin : HDG ST52 Steel / Aluminum 6063 T66
	Rails , clamps : Aluminum 6063 T66 / EN 6005
	Fasteners : Stainless A2 70
Layout options	2 Portrait, 3 Portrait, 4 Landscape, 5 Landscape

Click for
**Product
 Installation
 Guide**



Pile - Beam Assembly

1. 2 x M10 x 30 Hex Bolt
 2. 4 x M10 Washer
 3. 2 x M10 Nut

OR

1. 2 x M12 x 33 Hex Bolt
 2. 4 x M12 Washer
 3. 2 x M12 Nut

Torque values			
Bolt Size	Quality	Coating	Torque (N.m)
M10	8.8	Zinc	46 - 56
M10	A2 - 70	Stainless	38 - 42
M12	8.8	Zinc	80 - 96

Fixed angle solar land mounting system



Click to watch



Introduction Video



Company Introduction Video

Click to watch

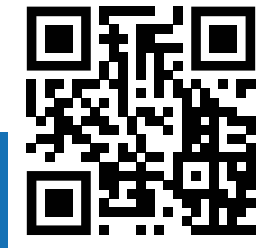


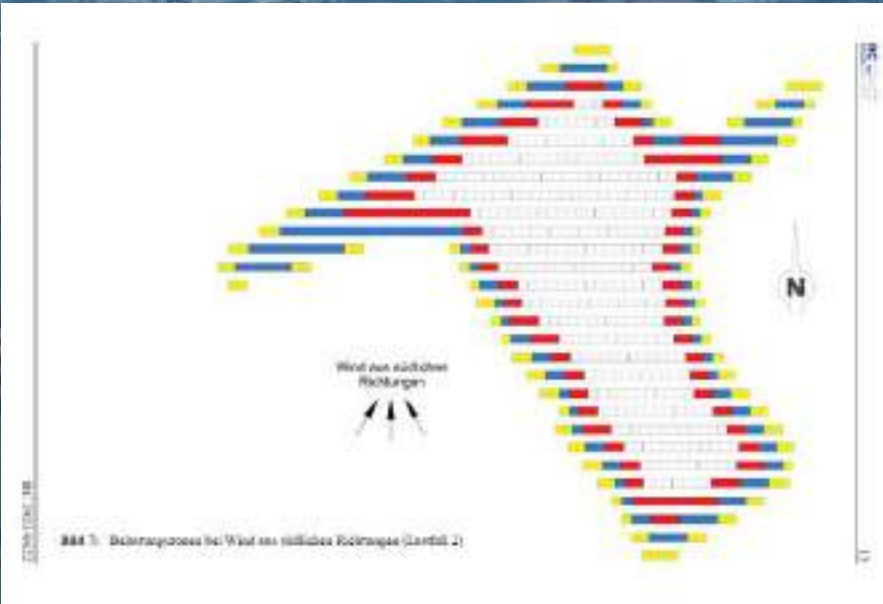
Utilized Softwares

Utilized Softwares



isotec.com.tr





Wind Tunnel Test Report



Ruscheweyh Consult GmbH Aachen	Bericht RC 2867/0122	RC RUSCHEWEYH CONSULT
--------------------------------------	----------------------	---------------------------------

Windlasten an den Photovoltaik-elementen der Freilandprojekte der ISOTEC Solar GmbH mit Modulanstellwinkeln 10° bis 35° und Modullängen bis zu 7 m

Gliederung:

- 1 Aufgabenstellung
- 2 Ausgangsdaten
- 3 Windlastkonzept
 - 3.1 Das quasi-statische Windlastkonzept
 - 3.2 Das stochastische Windlastkonzept
- 4 Böenstanddruck q_p
- 5 Anlagentypen
- 6 Reihenabstand
- 7 Winddruckbeiwerte
 - 7.1 Allgemeines
 - 7.2 Wind aus nördlichen Richtungen (Lastfall 1)
 - 7.3 Wind aus südlichen Richtungen (Lastfall 2)
 - 7.4 Reibung
 - 7.5 Wind von der Seite (Lastfall 3)
 - 7.6 Instationäre lokale Lasten
- 8 Zusammenfassung

Der Bericht umfasst 22 Seiten.

Aachen, 21.01.2022

E. Ruscheweyh
E. Ruscheweyh
(Geschäftsführer)

H. Ruscheweyh
Prof. Dr.-Ing. H. Ruscheweyh
(Geschäftsführer)

R. Wiaschövel
Dipl.-Ing. R. Wiaschövel
(Ruscheweyh Consult GmbH)

Quality Certificates



CERTIFICATE AND DOCUMENT LIST

NO	CERTIFICATE or DOCUMENT NAME	NAME OF INSTITUTION	SCOPE OF CERTIFICATE or DOCUMENT	CERTIFICATE NO	CERTIFICATE DATE	CERTIFICATE VALIDITY DATE	CERTIFICATE REVISION NO.
1	DOMESTIC GOODS CERTIFICATE	TÜRKİYE ODALAR VE BORSALAR BİRLİĞİ	İSOBEAM 60 CARRIER STRUCTURE	20231085122481	13.12.2023	13.12.2024	-
	DOMESTIC GOODS CERTIFICATE	TÜRKİYE ODALAR VE BORSALAR BİRLİĞİ	İSOFLAT S13 CARRIER STRUCTURE	20231085122499	13.12.2023	13.12.2024	-
	DOMESTIC GOODS CERTIFICATE	TÜRKİYE ODALAR VE BORSALAR BİRLİĞİ	İSOGROUND BNS-II-R	20231085122534	14.12.2023	14.12.2024	-
	DOMESTIC GOODS CERTIFICATE	TÜRKİYE ODALAR VE BORSALAR BİRLİĞİ	İSOTRAP S60 CARRIER STRUCTURE	20231085122500	13.12.2023	13.12.2024	-
	CE LABEL EN 1090-2	FQC STANDART	EN 1090-1:2009+A1:2011 FACTORY PRODUCTION CONTROL CERTIFICATE OF CONFORMITY	2674-CPR-233101	06.11.2023	CONTINUOUS (VALIDITY IS ENSURED BY PERIODIC INSPECTIONS).	-
6	CE LABEL EN 1090-3	FQC STANDART	EN 1090-1:2009+A1:2011 FACTORY PRODUCTION CONTROL CERTIFICATE OF CONFORMITY	2674-CPR-233101	06.11.2023	CONTINUOUS (VALIDITY IS ENSURED BY PERIODIC INSPECTIONS).	-
7	EC Declaration Of Conformity	INTERNATIONAL DOCUMENTING SYSTEM DDO	ROOF AND LAND TYPE SOLAR ENERGY PANEL CARRIER MOUNTING SYSTEMS AND CONNECTION EQUIPMENTS FULFILLMENT OF THE REQUIREMENTS OF 305/2011 / EU BUILDING MATERIALS DIRECTIVE AND TAKING RESPONSIBILITY	IDS.CE.2023.19153	15.05.2023	15.05.2024	-
8	ISO 9001:2015	KIOSCERT CERTIFICATE	ALUMINUM AND STEEL CONSTRUCTION FOR SOLAR ENERGY SYSTEMS AND ENGINEERING AND CONSULTANCY ACTIVITIES FOR ENERGY PROJECTS	QMS-22-1409-ISO	14.09.2022	13.09.2025	00
9	CAPACITY REPORT	TÜRKİYE ODALAR VE BORSALAR BİRLİĞİ	THEORETICALLY CALCULATED MAXIMUM PRODUCTION CAPACITY AND CONSUMPTION CAPACITY OF THE EXISTING MACHINERY AND EQUIPMENT ACCORDING TO THE METHODS AND CRITERIA IN FORCE	2023/1280	30.10.2023	06.11.2025	-
10	TRADEMARK REGISTRATION CERTIFICATE	TÜRK PATENT VE MARKA KURUMU	TRADEMARK REGISTRATION	2016 84130	29.05.2017	29.05.2027	-
11	EN 1090-1:2009+A1:2011 FACTORY PRODUCTION CONTROL CERTIFICATE OF CONFORMITY	FQC STANDART	CONFORMITY WITH REGULATION 305/2011/AB OF THE EUROPEAN PARLIAMENT RELEVANT BUILDING MATERIALS REGULATION OR CPR	2674-CPR-233101	06.11.2023	CONTINUOUS (VALIDITY IS ENSURED BY PERIODIC INSPECTIONS).	-

EC Declaration Of Conformity [↗](#)

CE Certificate [↗](#)

EN 1090-1 [↗](#)

ISO 9001_2015 [↗](#)

Land Projects Team





PROJECT NAME

WARRANTY CERTIFICATE

Warranty

Table of Contents

Warranty Certificate Content

Document Identity Information.....	1
Mounting System Information.....	1
Warranty Terms.....	2

İsotec Enerji San. ve Tic. Ltd. Şti.

Warranty Certificate

Document Number:

Document ID:

Warranty Period: **12 Years**

Type of Warranty: **Product**

Project:

Solar Panel:

Mounting System: ISOGROUND Two S.S.

Profile : S355 / S350 GD / ZM430

Coating: Hot Dip Galvanized / Z600

Panel / Purlin Connection Clamp: ENW 6063 T66 A
A2-70

Fasteners: 8,8
A2-70

Corrosion Category C-II

Calculation Norm :

- - EN 1991-1-3 (2007) Effects on structures - Part 1-3: General effects - snow loads (Eurocode 1),
- - EN 1991-1-4 (2007) Effects on structures - Part 1-4: General effects - wind effects (Eurocode 1),
- - EN 1993-1-1 (2014) Design of steel structures - Part 1-1: General rules and rules to be applied to buildings (Eurocode 3),
- - EN 1999-1-1 (2007) Design of aluminum structures - Part 1-1: General rules - Rules for buildings (Eurocode 9)

Warranty Terms

Based on the following situations, ISOTEC Enerji San. ve Tic. Ltd. Şti. guarantees that ISOGROUND is free from material defects and leakproof for 12 Years from the invoice date under correct installation, application, operation and maintenance conditions.

The warranty claim can only be approved by on-site tests. In case the warranty claim is approved, ISOTEC Enerji San. ve Tic. Ltd. Şti. is only responsible for the replacement of deformed components.

The approved warranty claim does not bring any obligation, responsibility, extension of the warranty period or any other additional right not included in the contract.

At the end of the first 6 months from the date of purchase of the product and annually in the following period, maintenance services must be performed by ISOTEC teams or organizations authorized by ISOTEC and maintenance service visuals must be declared to ISOTEC.

Warranty Request

12 For the warranty right arising within the year; ISOTEC Enerji San. ve Tic. Ltd. Şti. within two weeks following the detection of the fault. The notification letter must include invoice information as proof of purchase.

Out-of-warranty situations:

- Assembly in violation of the installation manual,
- Maintenance and repair operations performed by unauthorized third parties,
- Improper transportation, storage or handling of assembly components,
- Visual defects that do not affect the performance of the components,
- Installation of components in a way that is not appropriate according to the static calculation,
- Ramming of columns on site without tensile testing.
- Exposure to unusual temperature, salt, chemical or biological effects ,
- Damage to the system due to natural disasters, vandalism or external factors (humans/animals etc.),
- Failure to comply with the first six-month maintenance and ongoing annual maintenance rules set by Isotec,

ISOTEC ENERJİ SAN VE TİC LTD ŞTİ.

Some Of Our References



Project Location

Project Size

Mecklenburg-Vorpommern-Germany

61,50 MW

Saksonya-Anhalt, Germany

52,00 MW

Bavyera, Germany

44,00 MW

Konya-Niğde, Türkiye

32,00 MW

Ağrı, Türkiye

30,50 MW

Dolj, Romania

28,00 MW

Şanlıurfa, Türkiye

25,50 MW

Gaziantep, Türkiye

25,00 MW

Burdur, Türkiye

22,00 MW

Veliko Tarnovo, Bulgaria

21,50 MW

Konya, Türkiye

19,00 MW

Konya, Türkiye

14,00 MW

Ankara, Türkiye

12,50 MW

Belgrade, Serbia

11,50 MW

Mersin, Türkiye

11,50 MW

Adana, Türkiye

11,50 MW

Muğla, Türkiye

10,00 MW

Project Location

Project Size

Şanlıurfa, Türkiye

8,00 MW

Şanlıurfa, Türkiye

7,50 MW

Kayseri, Türkiye

7,00 MW

Erzurum, Türkiye

6,50 MW

Kukes, Albania

6,00 MW

Gaziantep, Türkiye

6,00 MW

Çankırı, Türkiye

5,50 MW

Eskişehir, Türkiye

5,50 MW

Aydın, Türkiye

5,50 MW

Ankara, Türkiye

5,00 MW

Afyon, Türkiye

5,00 MW

Isparta, Türkiye

4,50 MW

İzmir, Türkiye

5,00 MW

Kütahya, Türkiye

4,00 MW

Boxbrunn, Germany

4,00 MW

Svitshov, Bulgaria

4,00 MW

Total

1800 MW

Rooftop Solar Mounting System Reference

1500 MW

Land Solar Mounting System Reference

455 MW

Land Type Installation Reference



isotec

SOLAR MOUNTING SYSTEMS

TÜRKİYE - EXPORT OFFICE

ISOTEC Enerji San. ve Tic. Ltd. Şti.



Rüzgarlıbahçe Mah. Kavak Sok.
No:12 Beykoz / İstanbul



Mail: info@isotec.com.tr
Tel: +90 216 693 23 49

TÜRKİYE - FACTORY

ISOTEC Enerji San. ve Tic. Ltd. Şti.



Çerkeşli Mah. İmes OSB. 19. Cad.
No:18 Dilovası / Kocaeli



Mail: info@isotec.com.tr
Tel: +90 216 693 23 49

GERMANY

ISOTEC Solar GmbH



Goethestraße 4-8 60313
Frankfurt am Main



Mail: info@isotecsolar.de
Tel: +49 6924 7455 290

ISOTEC Solar Ltd.



ISOTEC Solar Mounting Systems



isotec.com.tr

