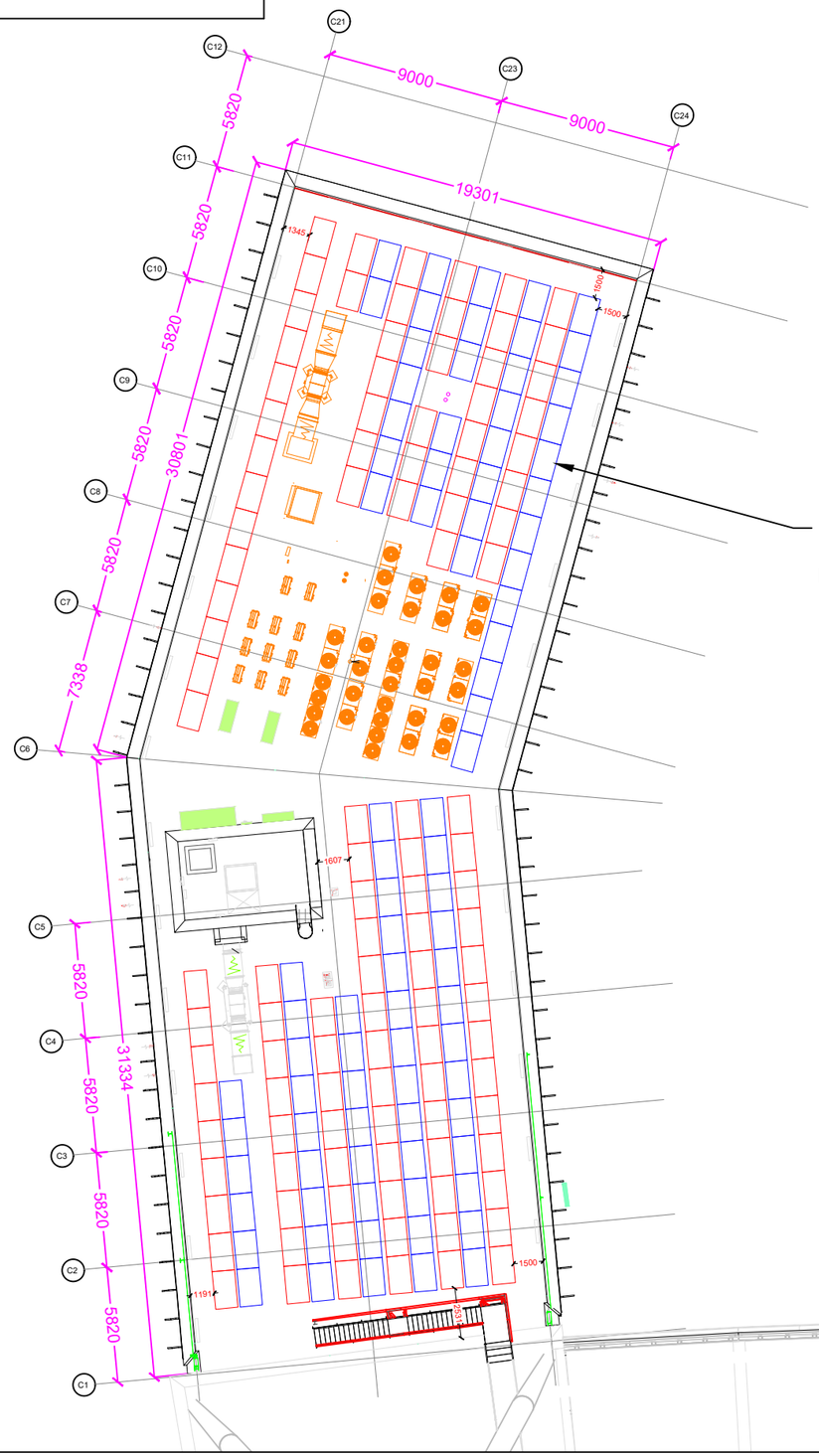
PROJECT DESCRIPTION:	
SYSTEM SIZE	97.50KW DC STC
MODULE TYPE	(195) JINKO SOLAR JKM500N-51QL6-BDV-F1-EU 500W

INDEX SHEET	
A.00	SITE PLAN
A.01	LAYOUT PLAN
S.00	FRAMING DETAILS
D.00-D.03	SPECIFICATION SHEETS



0m 5m 10m 20m 30m

Scale bar 1:300

SITE PLAN

1 SCALE: 1:300

EG SOLAR

Renewable Energy Specialists

C6 SPECTRUM BUSINESS ESTATE
ANTHONYS WAY,
ROCHESTER, KENT
ME2 4NP

PRO.DATE	20/03/2024
DESIGN BY	DR
CHECKED BY	JD

DATE	REV.	DESCRIPTION
09/04/2024	2	Using Jinko 450w Bifacial Module
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18/09/2025	5	Changed 460w Panels
23/09/2025	6	1.5m Gap from the Edge of the Roof
23/10/2025	7	Use Jinko 500W Panels
06/11/2025	8	Please Replicate

PROJECT NAME

MANCHESTER CITY
NORTH STAND
(COMMERCIAL ROOF)

SHEET NAME

SITE PLAN

SHEET SIZE

ANSI B
279 X 432

SHEET NUMBER

A.00

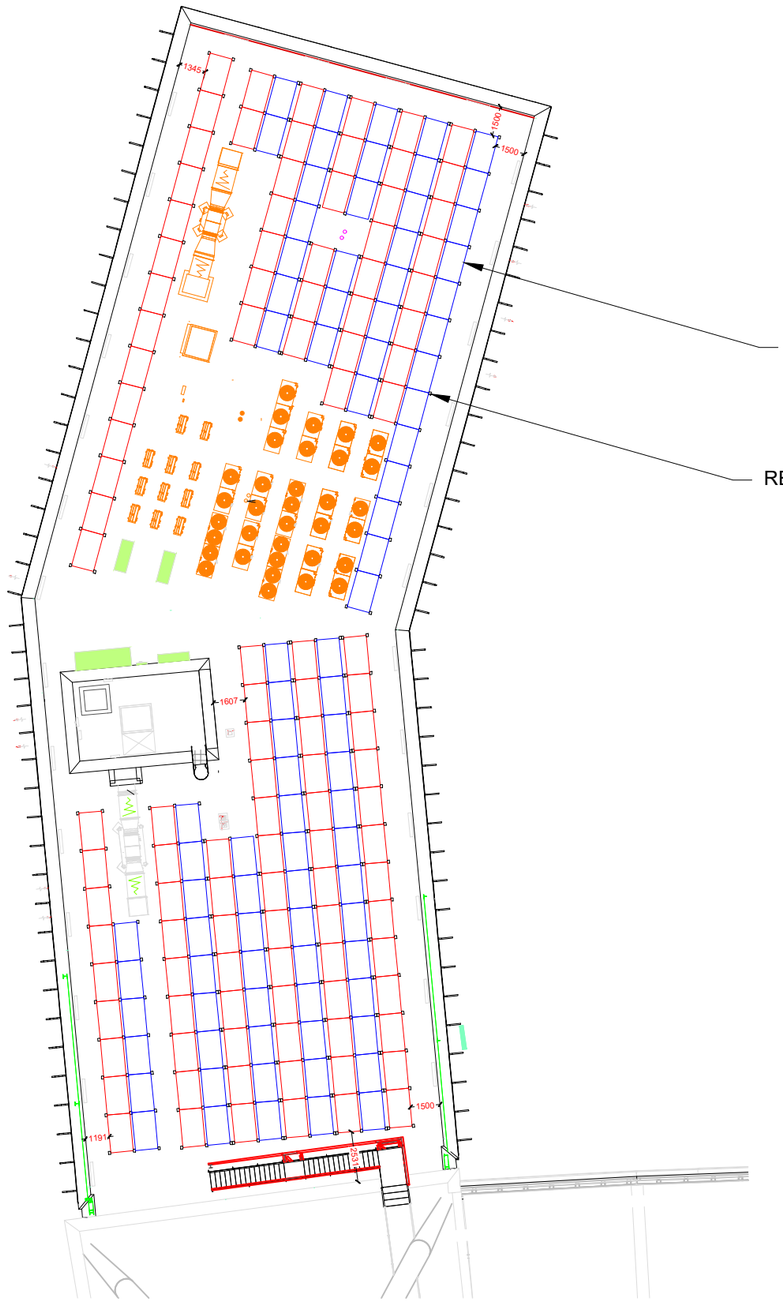
MODULES AREA & ROOF AREA CALC'S

# OF MODULES	MODULES AREA (Sq. Meter)	ROOF AREA (Sq. Meter)	ROOF AREA COVERED BY MODULES (%)
195	421.20	1121.38	37.56

LEGENDS

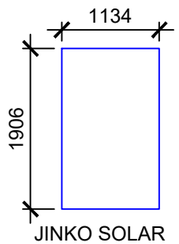
EAST FACING MODULE

WEST FACING MODULE



1 LAYOUT PLAN

SCALE: 1:300



JINKO SOLAR
JKM500N-51QL6-BDV-F1-EU
500W MODULE

EG SOLAR
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BUSINESS ESTATE
ANTHONYS WAY,
ROCHESTER, KENT
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MANCHESTER CITY
NORTH STAND
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LAYOUT PLAN

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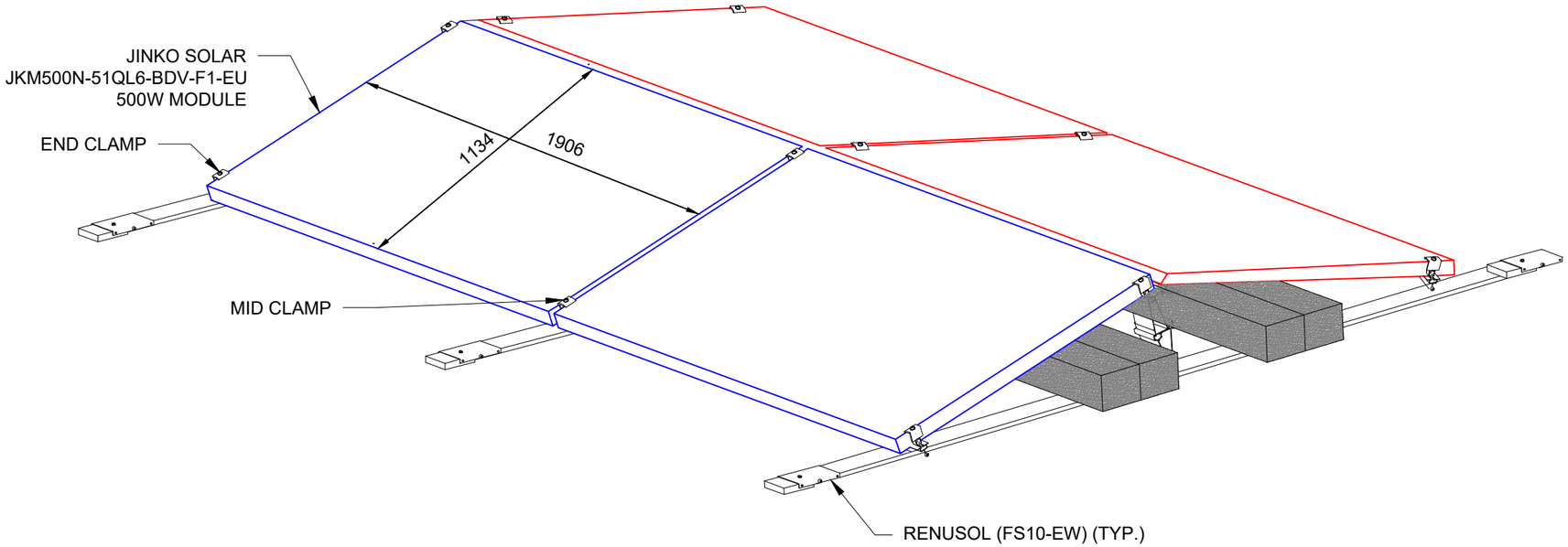
279 X 432

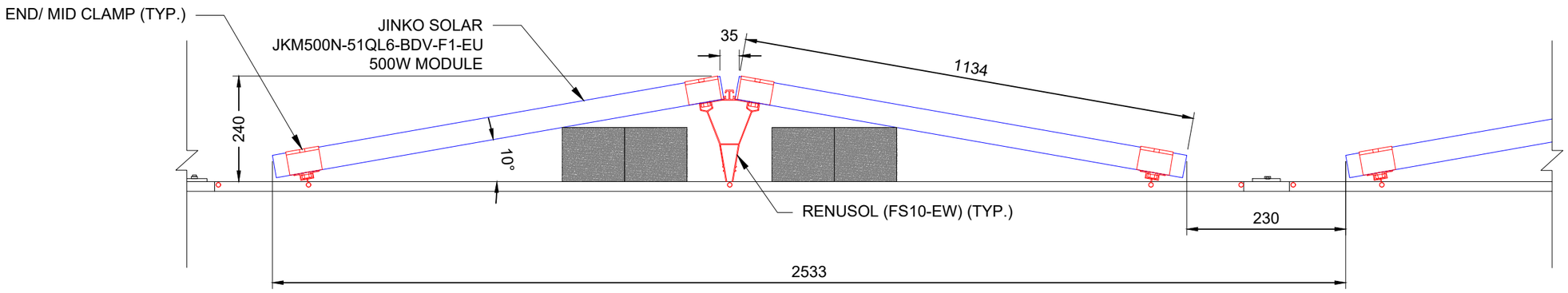
SHEET NUMBER

A.01



1 ISOMETRIC VIEW

SCALE: NTS



1 STRING PLAN

SCALE: NTS

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ROCHESTER, KENT
ME2 4NP

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NORTH STAND
(COMMERCIAL ROOF)

SHEET NAME

FRAMING LAYOUT

SHEET SIZE

ANSI B
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SHEET NUMBER

S.00

TIGER Neo III

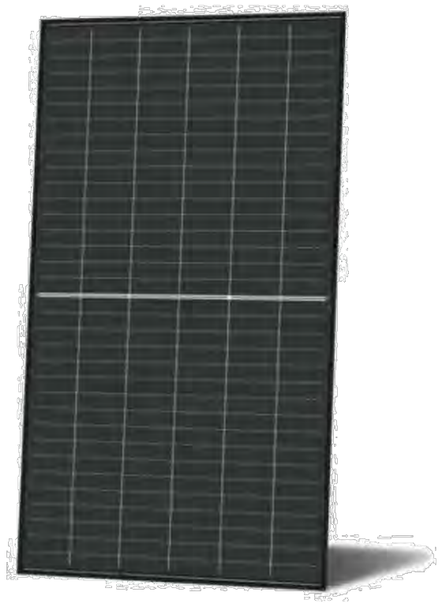
JinKO Solar

51 QL6-BDV

495-520 Watt

85±5% Bifaciality

BIFACIAL MODULE

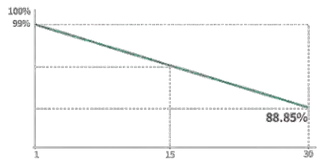


Higher Power on Front Side

Leading power class based on the enhanced N-type TOPCon platform, through cutting-edge technology and an optimized layout that captures more sunlight.

Better Generation on Rear Side

Enabling industry-leading bifaciality in TOPCon cells through an improved structure that enhances light absorption and trapping.



15 Year Product Warranty | 30 Year Linear Power Warranty | 1% First-year Degradation | 0.35% Annual Degradation Over 30 Years

Optimized Heat Resistance

Optimized temperature coefficient via advanced graphical patterning, busbar and multi-cells technology.

Proven Low Light Performance

Enhanced cell structure ensures superior module performance under low-light conditions.

- IEC61215:2021 / IEC61730:2023
- IEC61701 / IEC62716 / IEC60068 / IEC62804
- ISO9001:2015: Quality Management System
- ISO14001:2015: Environment Management System
- ISO45001:2018: Occupational health and safety management systems

Industry Leading Warranty

Advanced metallization and iterated module encapsulation deliver superior resistance to PID, LID / LeTID, and UV degradation.

Mechanical Load Enhanced

Certified to withstand:
5400 Pa front side max static test load
2400 Pa rear side max static test load

JKM495-520N-51QL6-BDV-F1-EU

51QL6-BDV 495-520 Watt

Mechanical Characteristics

Cell Type	N- type Mono-crystalline
No. of cells	204 (51×4)
Dimensions	1906×1134×30 mm
Weight	26.3 kg
Front Glass	2.0 mm, Anti-reflection Coating
Back Glass	2.0 mm, Heat Strengthened Glass
Frame	Anodized Aluminium Alloy
Junction Box	IP68 Rated
Protection Class	Class II
IEC Fire Type	Class C
Connector Type	JK03M/JK03M2/Others*
Output Cables (Including Connector)	⩾4.0 mm² (+): 600 mm , (-): 400 mm or Customized Length

*MC4-EVO2 available upon request and subject to availability

Packaging Configuration

Pallet Dimensions	1981×1140×1249 mm
Packing Detail (Two pallets = One stack)	37 pcs/pallets, 74 pcs/stack, 888 pcs/ 40'HQ Container

Specifications (STC)

Maximum Power - Pmax [Wp]	495	500	505	510	515	520
Maximum Power Voltage - Vmp [V]	32.81	32.96	33.12	33.27	33.42	33.57
Maximum Power Current - Imp [A]	15.09	15.17	15.25	15.33	15.41	15.49
Open-circuit Voltage - Voc [V]	38.35	38.60	38.85	39.10	39.35	39.60
Short-circuit Current - Isc [A]	15.76	15.81	15.86	15.91	15.96	16.01
Module Efficiency STC [%]	22.90	23.13	23.36	23.60	23.83	24.06
Bifacial Factor	85 ± 5%					
Power Sorting	0 ~ + 3 %					
Temperature Coefficient of Pmax	-0.26 %/°C					
Temperature Coefficient of Voc	-0.24 %/°C					
Temperature Coefficient of Isc	0.046 %/°C					

STC: Irradiance 1000W/m², Cell Temperature 25°C, AM=1.5

Specifications (BNPI)

Maximum Power - Pmax [Wp]	552	557	563	569	574	580
Maximum Power Voltage - Vmp [V]	32.81	32.96	33.12	33.27	33.42	33.57
Maximum Power Current - Imp [A]	16.82	16.91	17.00	17.09	17.18	17.27
Open-circuit Voltage - Voc [V]	38.35	38.60	38.85	39.10	39.35	39.60
Short-circuit Current - Isc [A]	17.51	17.57	17.62	17.68	17.74	17.79

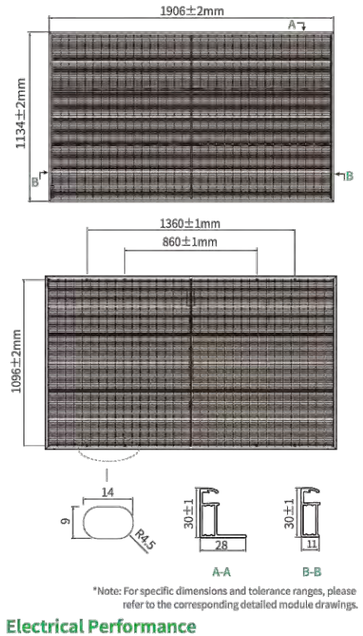
BNPI: Irradiance: front 1000W/m², rear 135W/m², Cell Temperature 25°C, AM=1.5

Application Conditions

Level T_{95} ⩽ 70 °C	- 40 °C to + 70 °C*
Maximum System Voltage	1500 VDC (IEC)
Maximum Series Fuse Rating	35 A
Bifaciality Coefficients	φVoc: 98±5 %, φIsc: 85±5 %, φPmax: 85±5 %

*Short-term up to 85°C; higher operation requires IEC TS 63126 testing

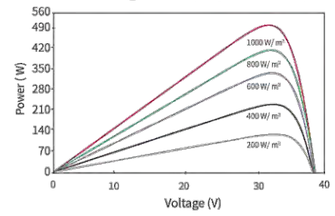
Engineering Drawings



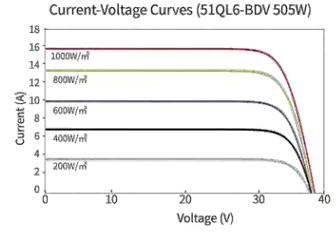
*Note: For specific dimensions and tolerance ranges, please refer to the corresponding detailed module drawings.

Electrical Performance

Power-Voltage Curves (51QL6-BDV 505W)



Current-Voltage Curves (51QL6-BDV 505W)



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Note: Please read the safety and installation manual before using the product. We reserve the right of final interpretation. The specifications in this datasheet are subject to change without notice.

JKM495-520N-51QL6-BDV-F1-EU

www.jinkosolar.com
www.jinkosolar.eu

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PROJECT NAME

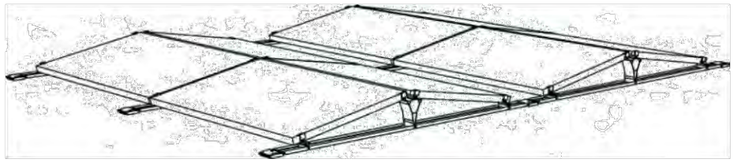
MANCHESTER CITY
NORTH STAND
(COMMERCIAL ROOF)

SHEET NAME
SPECIFICATION SHEET

SHEET SIZE
ANSI B
279 X 432

SHEET NUMBER
D.00

Renusol Europe GmbH



System Datasheet

FS10-EW / FS10-EW XL

General

System	Ballasted PV-mounting system
Content	Ground rails, rail connector, building protection mat, low post, high post, clamps
System warranty	10 years
Application area	Flat roof on industrial, agricultural (except hydrogen sulfide exposition) and residential buildings
Roof covering	Bitumen, concrete, foil, gravel
Roof slope	max. 5° without additional measures

System properties

System orientation	East-West
Module tilt	10°
System weight approx.	1,15 kg/m²plus ballast (project specific)
Weight PV-module included approx.:	11,8 kg/m²plus ballast (project specific)
Friction coefficient	μ =0,5 is to be determined and ensured upon installation surface.
Material	Aluminum, stainless steel, rubber granulate
Minimum edge distance	0,6 m
Max. Wind Dynamic Pressure	q_p=1,5 kN/m² (with simultaneously acting snow load of s_k=1,5 kN/m²)
Max. Wind Dynamic Pressure	q_p=1,0 kN/m² (with simultaneously acting snow load of s_k=2,5 kN/m²)

Modules

Type	Suitable for standard 60/72 cell panels. Approval for panel corner clamping is to be obtained.
Module width:	FS10-EW: 950-1.052 mm / FS10-EW XL: 1053-1.168 mm
Module guidance	Horizontal/Landscape

Certifications

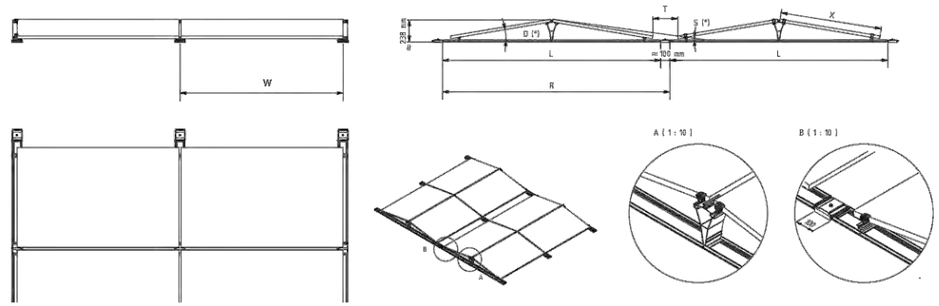
Wind loads	Determined in wind tunnel tests by Ruscheweyh Consult GmbH
PV layout	Provided by Renusol (www.pv-configurator.com)
Ballast plan	Provided by Renusol (www.pv-configurator.com)

Services

PV layout	Provided by Renusol (www.pv-configurator.com)
Ballast plan	Provided by Renusol (www.pv-configurator.com)

Misprints and errors, technical or other changes and changes in the availability of products are expressively reserved

Renusol Europe GmbH



System	FS10-EW XL	
Ground rail	R500499	
Rail length	L:	2362 mm
Row spacing	R:	2462 mm
Module width	X_1:	Min: 1053 mm
	X_2:	Max: 1168 mm
Passageway	$T(X_1)$:	Min: 355 mm
	$T(X_2)$:	Max: 125 mm
System width	W:	Module length +24mm
Module inclination	D:	9°
Shading angle	S:	≈ 7,0° - 9,0°

System	FS10-EW	
Ground rail	R500500	
Rail length	L:	2260 mm
Row spacing	R:	2360 mm
Module width	X_1:	Min: 950 mm
	X_2:	Max: 1052 mm
Passageway	$T(X_1)$:	Min: 455 mm
	$T(X_2)$:	Max: 255 mm
System width	W:	Module length +24mm
Module inclination	D:	10°
Shading angle	S:	≈ 6,7°-7,9°

System	FS10-EW	
Ground rail	R500407	
Rail length	L:	2060 mm
Row spacing	R:	2160 mm
Module width	X_1:	Min: 950 mm
	X_2:	Max: 1052 mm
Passageway	$T(X_1)$:	Min: 255 mm
	$T(X_2)$:	Max: 55 mm
System width	W:	Module length +24mm
Module inclination	D:	10°
Shading angle	S:	≈ 7,8° - 9,3°

System	FS10-EW	
Ground rail	R500501	
Rail length	L:	1989 mm
Row spacing	R:	2090 mm
Module width	X_1:	Min: 950 mm
	X_2:	Max: 1020 mm
Passageway	$T(X_1)$:	Min: 185 mm
	$T(X_2)$:	Max: 45 mm
System width	W:	Module length +24mm
Module inclination	D:	10°
Shading angle	S:	≈ 9,0° - 9,5°

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MANCHESTER CITY
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SHEET NAME

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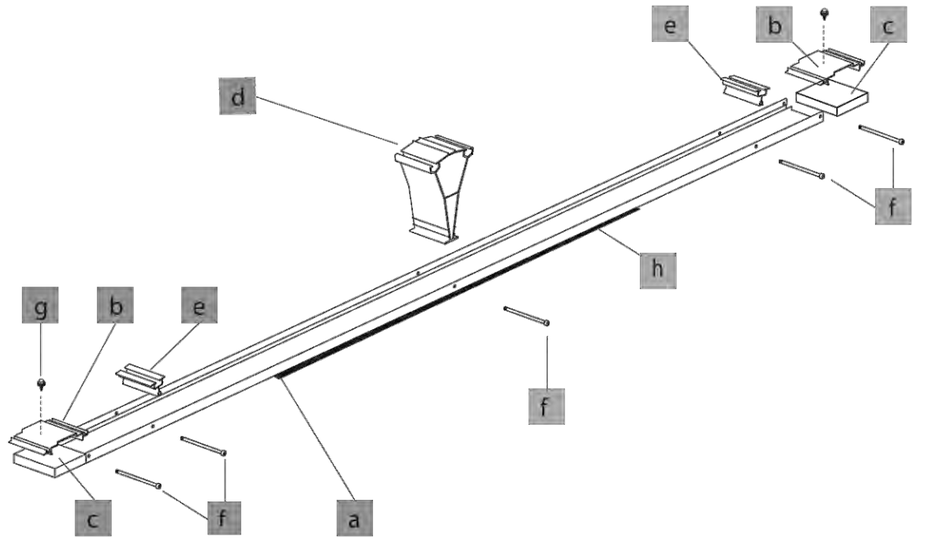
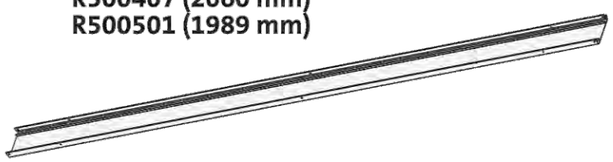
ANSI B
279 X 432

SHEET NUMBER

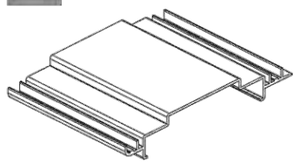
D.01



a
R500499 (2362 mm) - FS10-EW XL
R500500 (2260 mm)
R500407 (2060 mm)
R500501 (1989 mm)



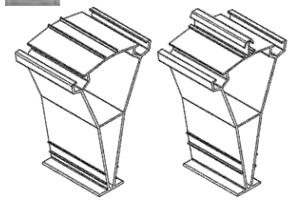
b
R500404



c
R500410/R500411

R500410: Bituminöse Abdichtung /Bituminous sealing
R500411: Folienabdichtung / Foil sealing

d
R500520 - FS10-EW
R500423 - FS10-EW XL



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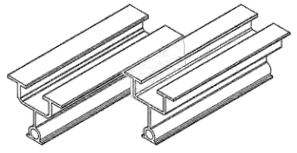
R500420 - FS10-EW
R500419 - FS10-EW XL



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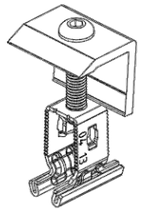
R900314

g
R900229

h
R500412

R420081



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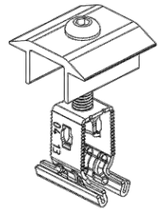
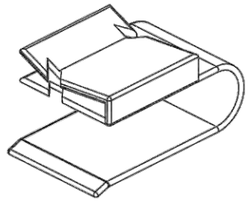


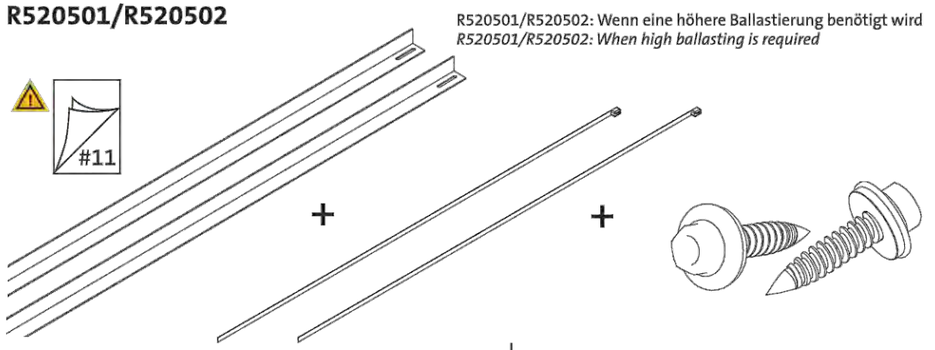
R900260 (optional)



R900035 (optional)

R520501/R520502

R520501/R520502: Wenn eine höhere Ballastierung benötigt wird
R520501/R520502: When high ballasting is required



Modullänge L / *Modul length L*	Artikel No.
1770 mm	R520501
2120 mm	R520502

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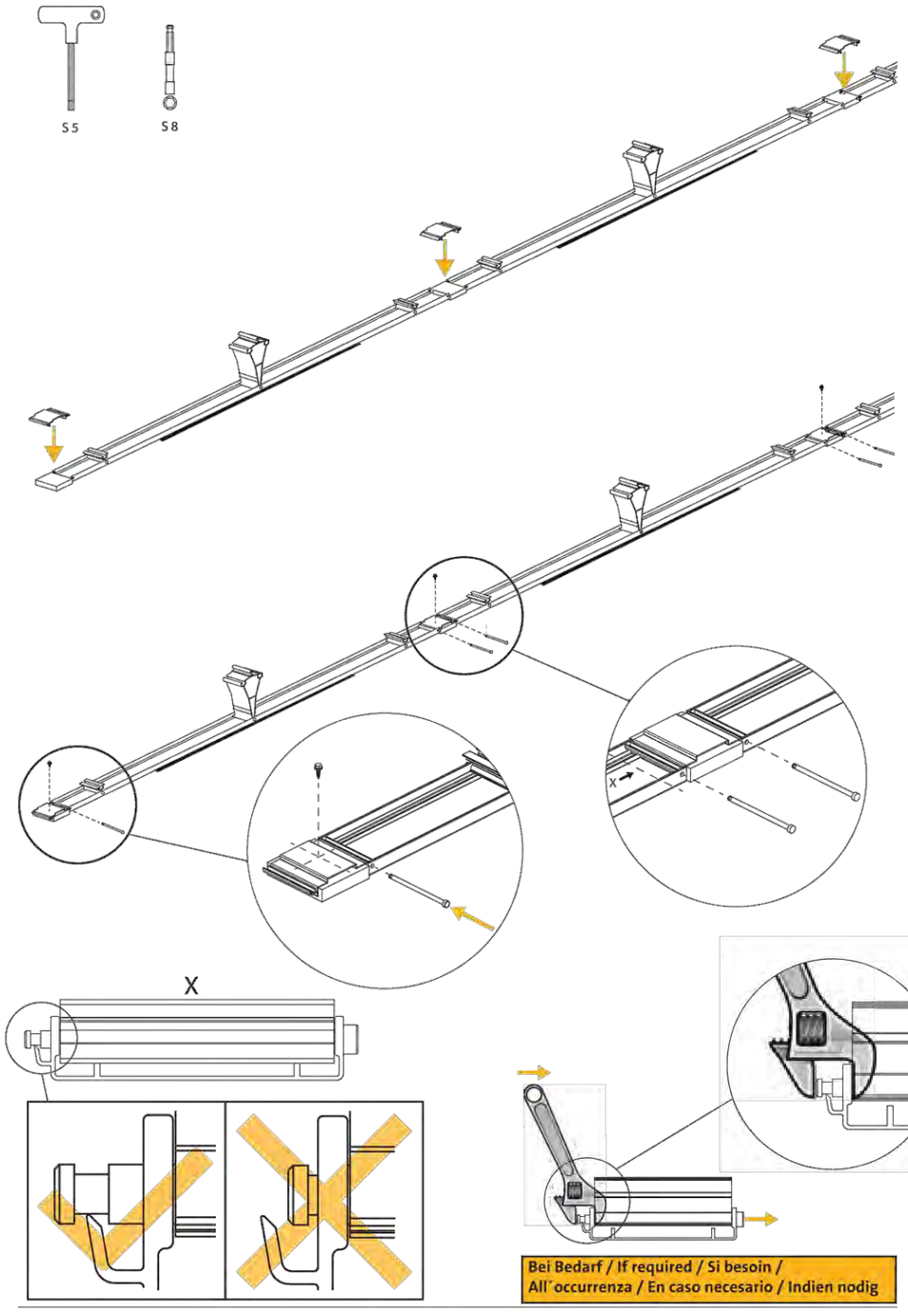
D.02

FS10-EW



FS10-EW

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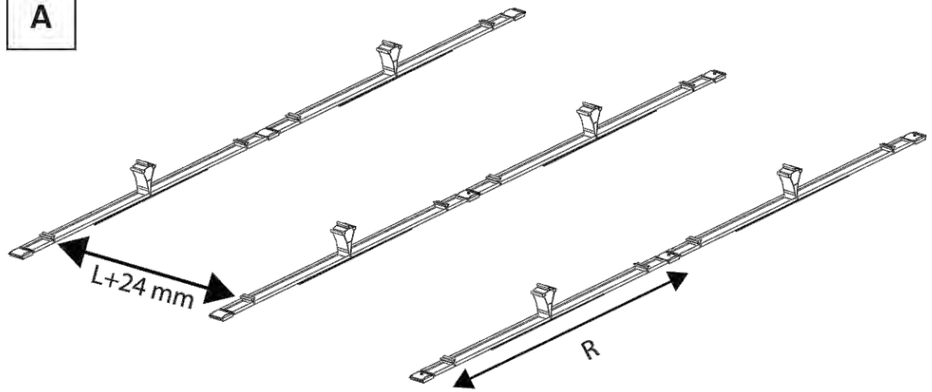
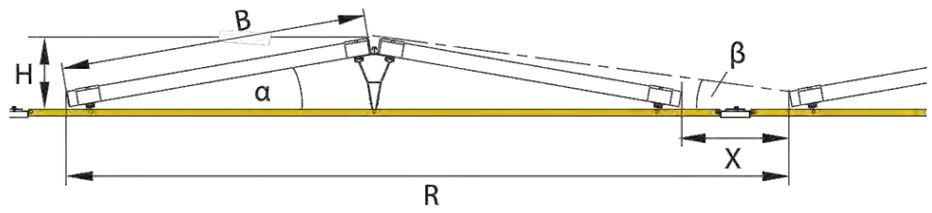
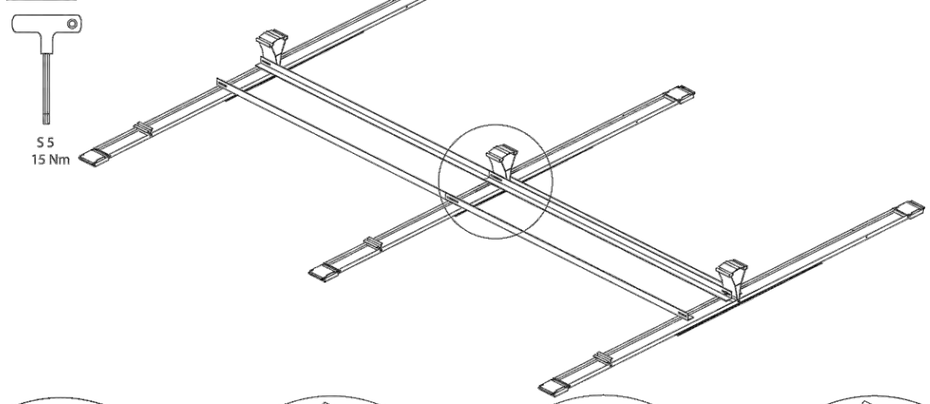
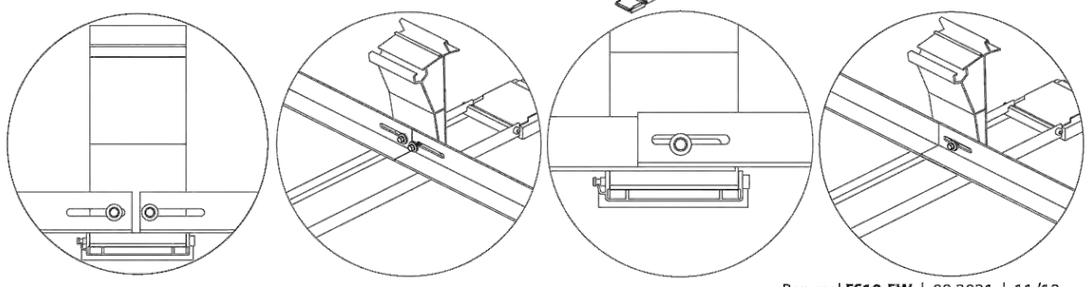




A.1

R520501/R520502 (optional)





EG SOLAR
Renewable Energy Specialists

C6 SPECTRUM BUSINESS ESTATE
ANTHONYS WAY,
ROCHESTER, KENT
ME2 4NP

PRO.DATE	20/03/2024
DESIGN BY	DR
CHECKED BY	JD

DATE	REV.	DESCRIPTION
09/04/2024	2	Using Jinko 450w Bifacial Module
08/09/2025	3	Update Layout
17/09/2025	4	Changed 480w Panels
18/09/2025	5	Changed 460w Panels
23/09/2025	6	1.5m Gap from the Edge of the Roof
23/10/2025	7	Use Jinko 500W Panels
06/11/2025	8	Please Replicate

PROJECT NAME

MANCHESTER CITY
NORTH STAND
(COMMERCIAL ROOF)

SHEET NAME

SPECIFICATION SHEET

SHEET SIZE

ANSI B
279 X 432

SHEET NUMBER

D.03