

WUN-024ST

INSTALLATION MANUAL

Ground mounted system, double support
rammed into the ground,
4 rows of landscape modules



System dedicated for the following module dimensions: 1650-1810 mm / width 1094-1149 mm



Do not use the system for Bi-facial PV modules.



Tools needed for installation



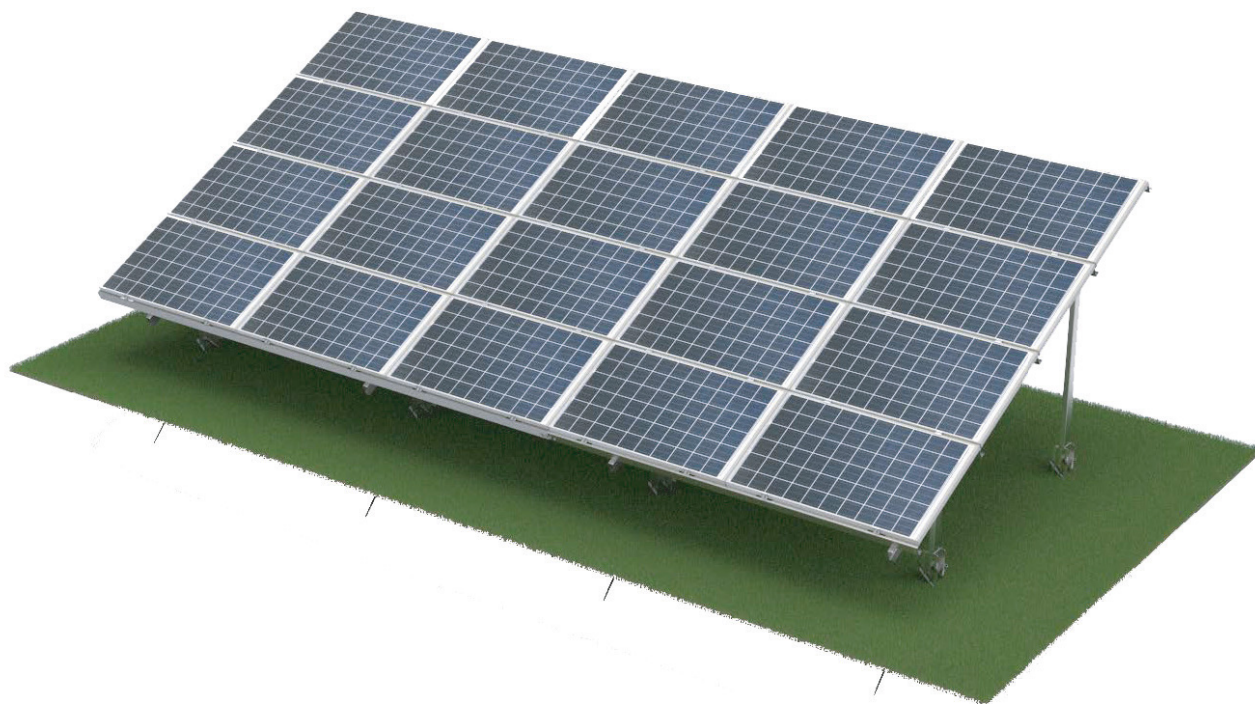
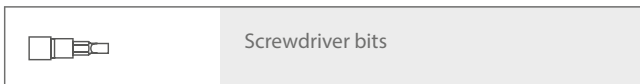
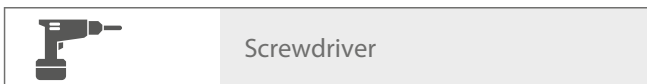
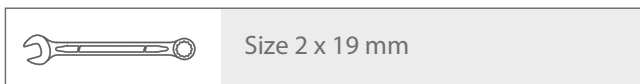
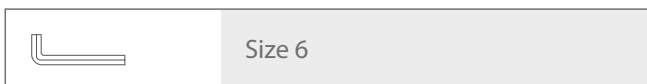
Bezpieczeństwo
Produkcja
kontrolowana

www.tuv.com
ID 000044726

























System
zarządzania
ISO 9001:2015

www.tuv.com
ID 9105046721

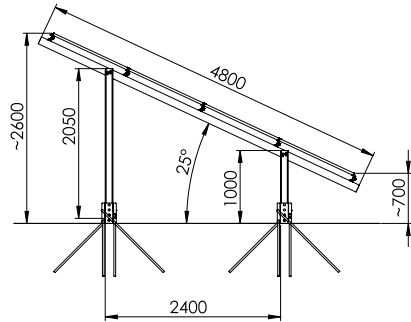
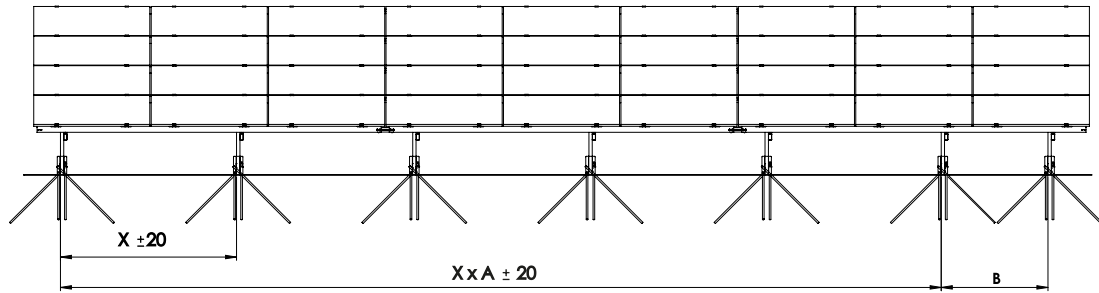


Elements

LP		Index	Name	Number of PV modules							
				36	32	28	24	20	16	12	8
21		M1067	Washer expanded M12	130	120	100	90	70	60	40	30
20		WUN004N.8.001	Inverter mounting set	1	1	1	1	1	1	1	1
19		WUN006U.6.002	Turnbuckle wire tensioner L=3700	1	1	1	1	1	1	1	1
18		M1070	Safety washer M8	90	80	70	60	50	40	30	20
17		M485	Socket screw M8x20	36	32	28	24	20	16	12	8
16		M682	Socket screw M8x55	54	48	42	36	30	24	18	12
15		M635	Nut M12	179	162	162	115	98	98	51	34
14		M882	Spring washer M12	179	162	162	115	98	98	51	34
13		M826	Screw M12x30	179	162	162	115	98	98	51	34
12		X_M631*	Washer M12	268	244	244	170	146	146	72	48
11		X_NAK00Z*	Hammer nut	90	80	70	60	50	40	30	20
10		Y_KK00XX*	Adjustable end clamp	36	32	28	24	20	16	12	8
9		XPF_KL0XX*	Middle clamp	54	48	42	36	30	24	18	12
8		WUN006U.5.0000	Horizontal beam connector L=501	10	10	10	5	5	5	0	0
7		WUN004R.6.001	Anchor tube	56	48	48	40	32	32	24	16
6		WUN004R.5.002	Base foot	28	24	24	20	16	16	12	8
5		WUN006R.4.0002	Front support L=1000	7	6	6	5	4	4	3	2
4		WUN004R.3.0001	Rear support L=2050	7	6	6	5	4	4	3	2
3		WUN004N.2.002U	Horizontal beam L=1720	0	0	5	0	0	5	0	0
		WUN004N.2.001U	Horizontal beam L=3440	0	5	0	0	5	0	0	5
2		WUN004N.2.000U	Horizontal beam L=5160	15	10	10	10	5	5	5	0
1		WUN004NU.1.0001	Slanted beam L=4800	7	6	6	5	4	4	3	2

* X and Z parts of the variables in the index

1



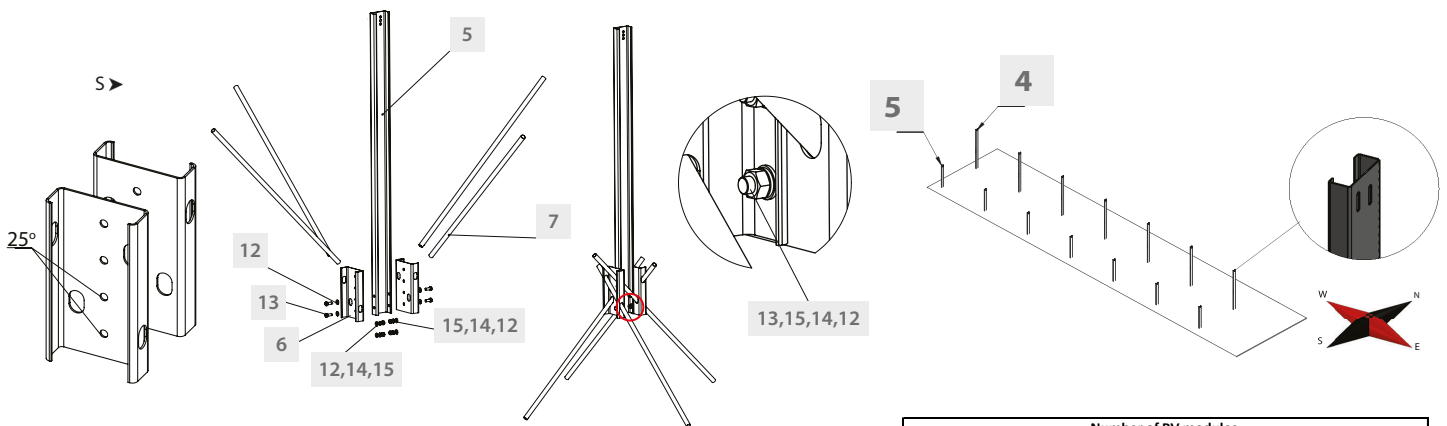
Dimension X calculate with the following formula:

$$X = (\text{module length} + 20\text{mm}) \times 3 / 2$$

Example for 1740 mm length:

$$X = (1740 + 20) \times 3 / 2$$

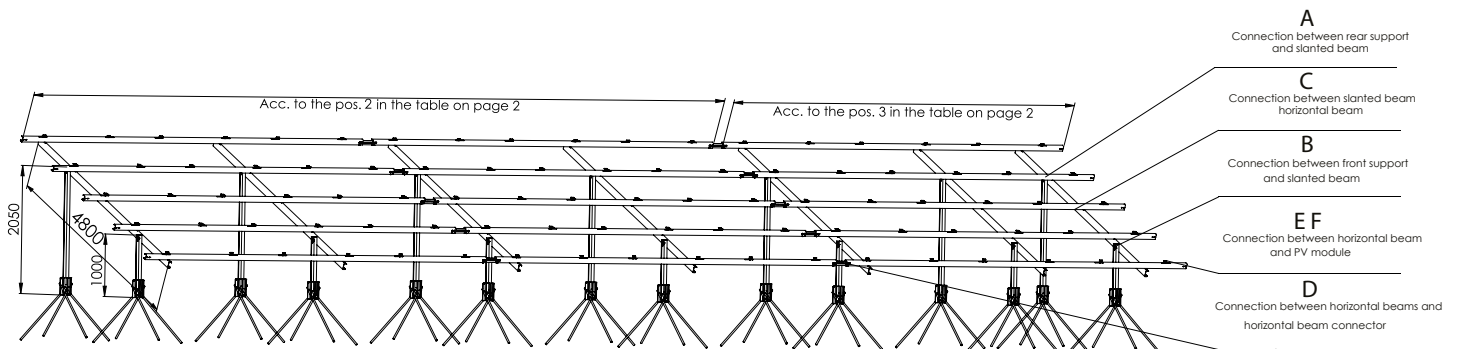
$$X = 2640 \text{ mm}$$

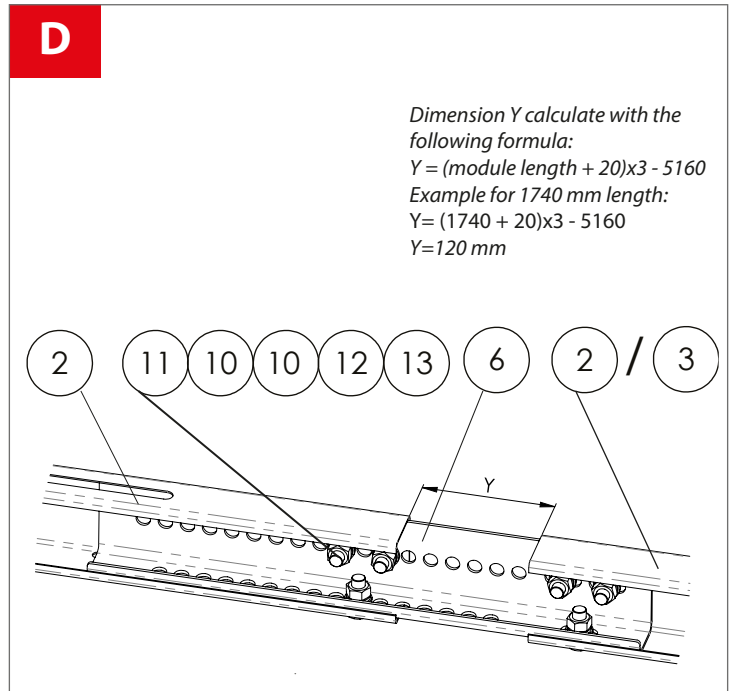
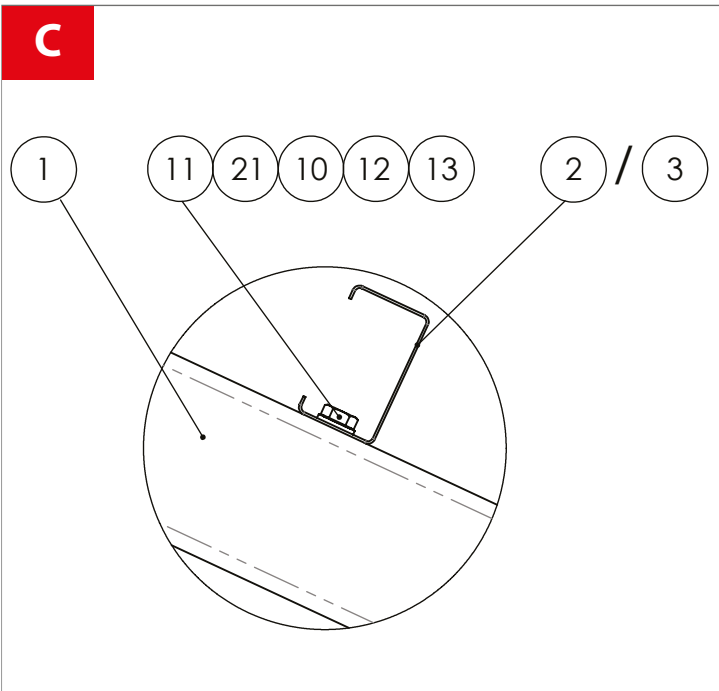
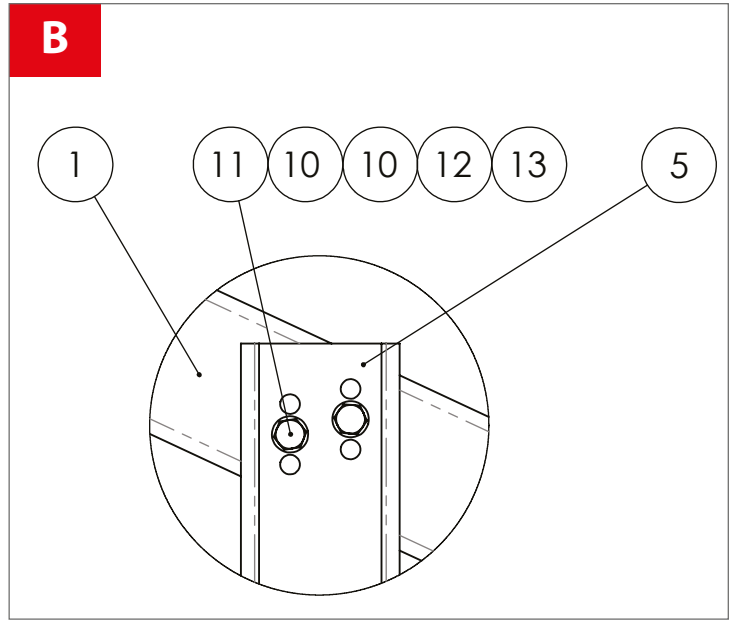
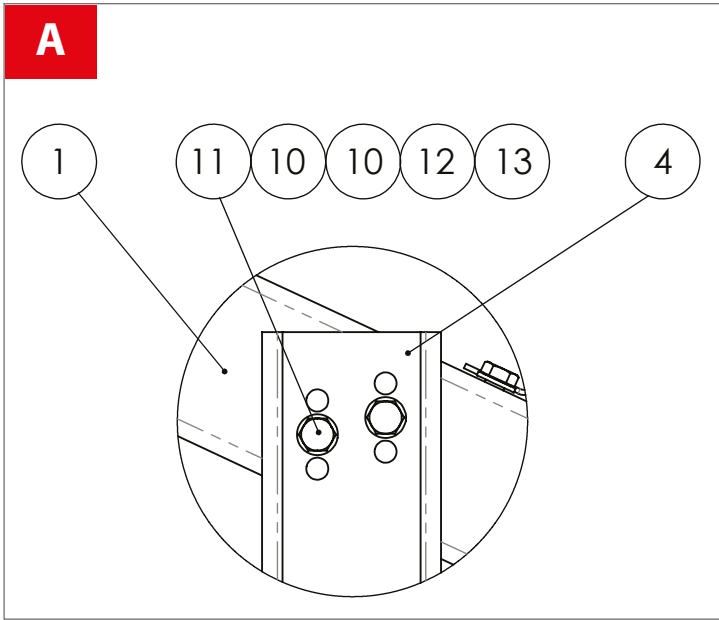


Suggested installation shown on page 7

		Number of PV modules							
		36	32	28	24	20	16	12	8
A		5	5	4	3	3	2	1	1
B		1500	-	1000	1500	-	1000	1500	-

2

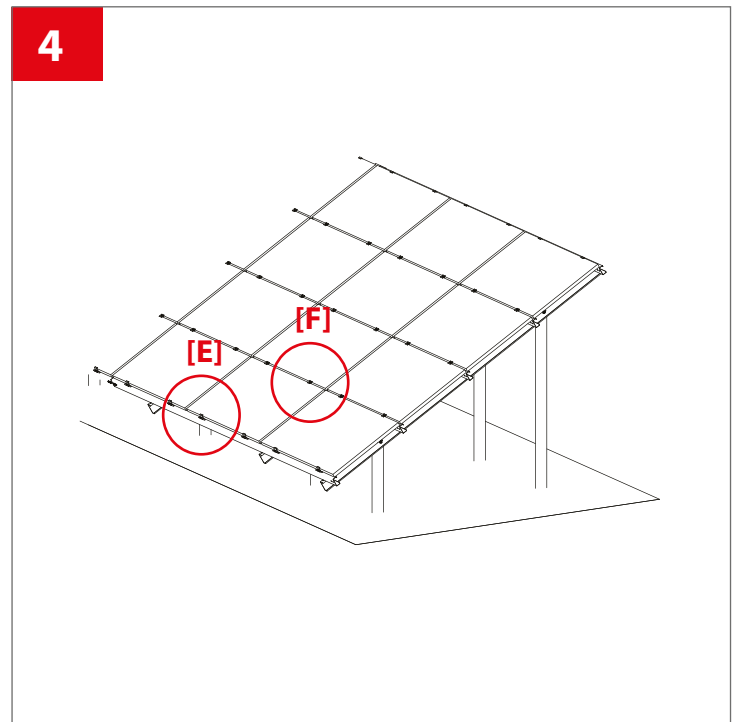


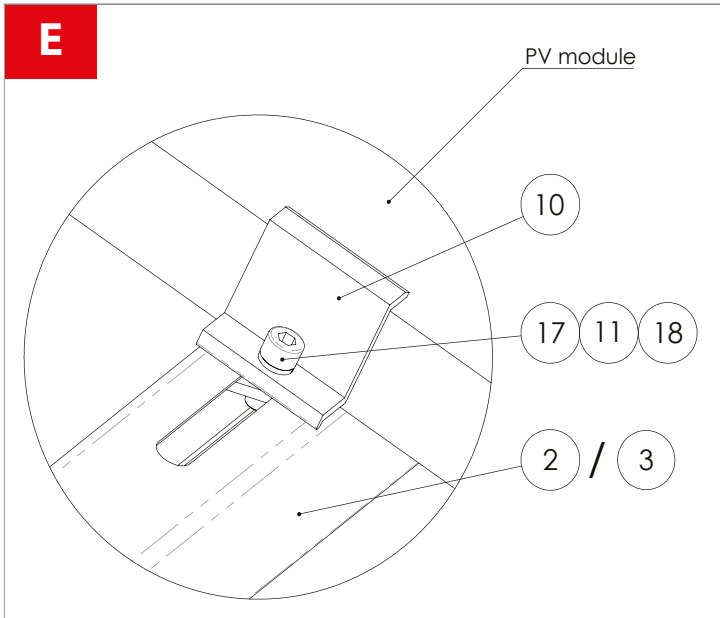
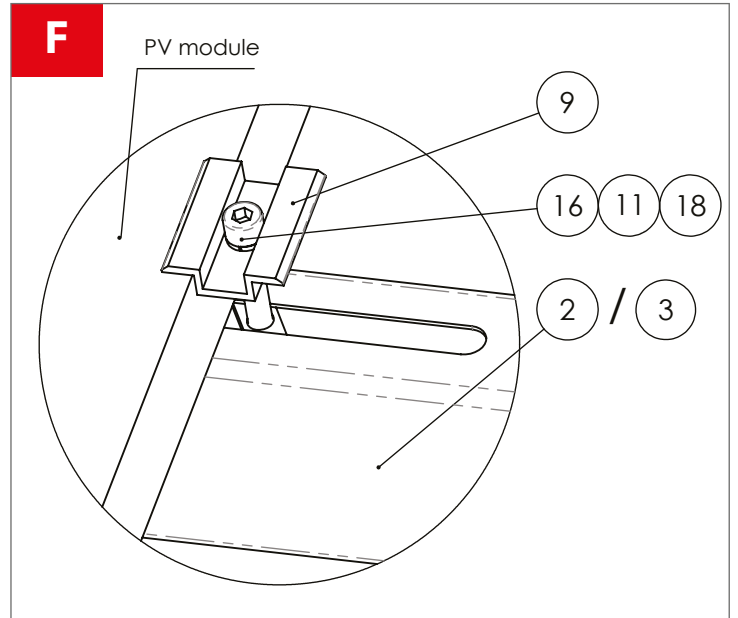
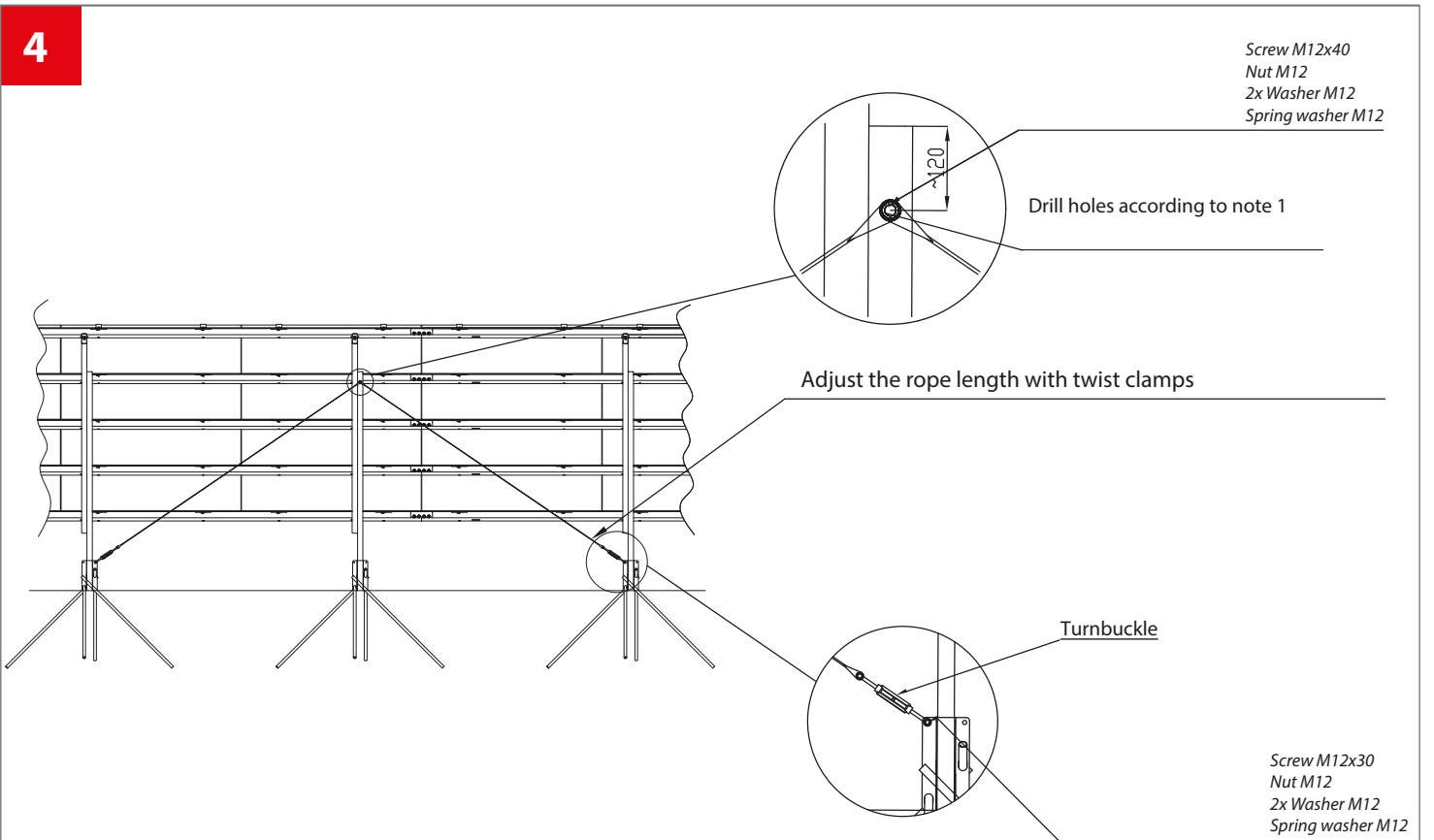


Scheme of tightening screws
1:2

* Use DIN 9021 Extension washers on the slot side, except horizontal beam connection and supports

Screws tightening torque	
Screw size	Torque [Nm]
M12	57
M8	According to installation manual of modules

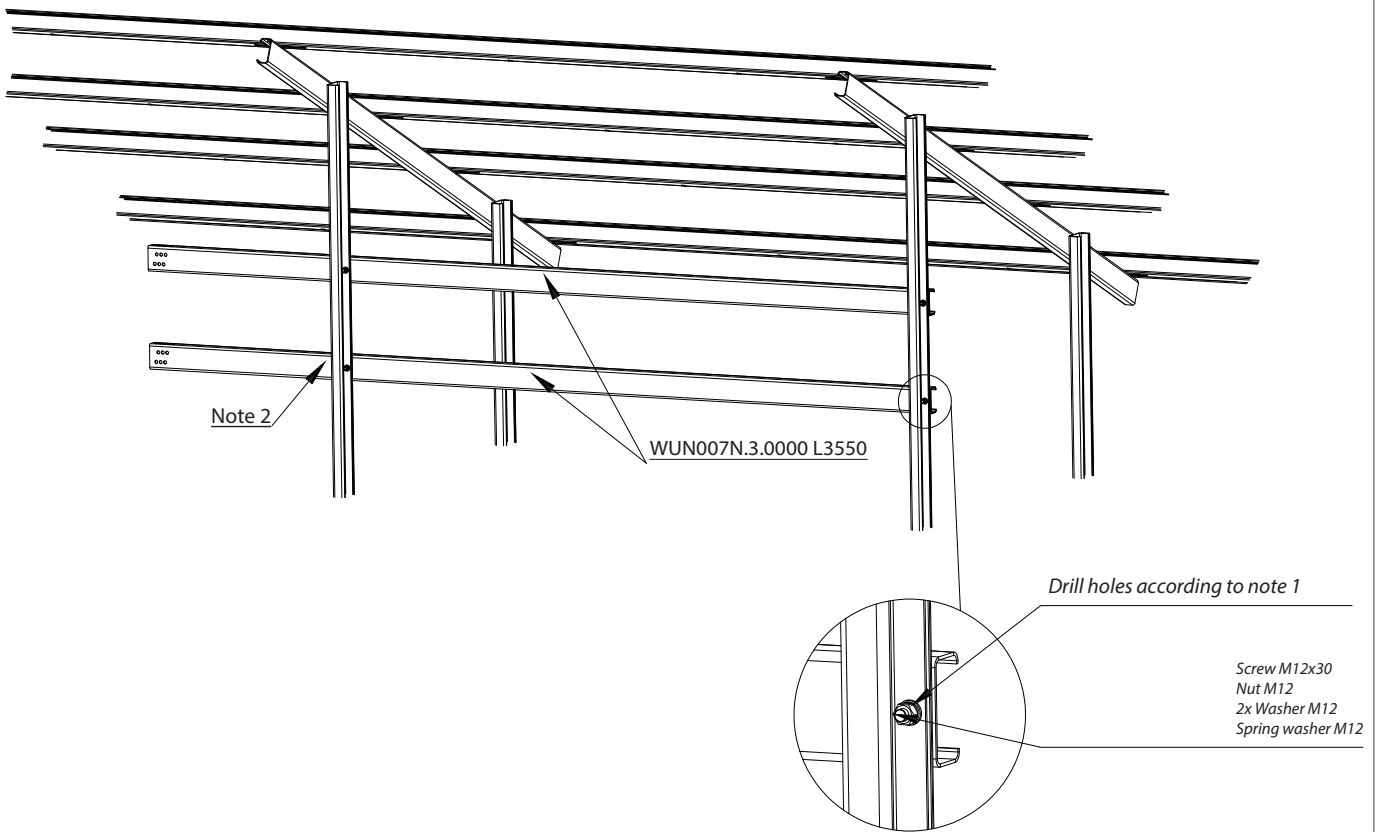


E**F****4****Note 1:**

Make the holes in the supports and the inverter mounting beam for the M12 screw in the following steps:

1. Drill a pilot hole $\Phi 5$ mm
2. Drill a pilot hole $\Phi 9$ mm
3. Drill target hole $\Phi 13$ mm
4. Protect the surrounding area of the hole with a coating containing min. 96% zinc in dry layer
5. Allow to dry completely according to the instructions of the corrosion protection agent

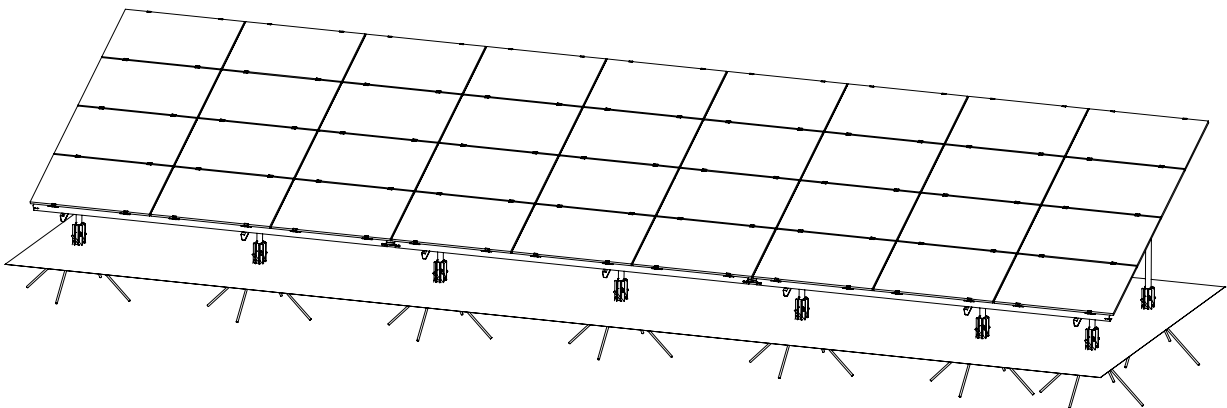
5

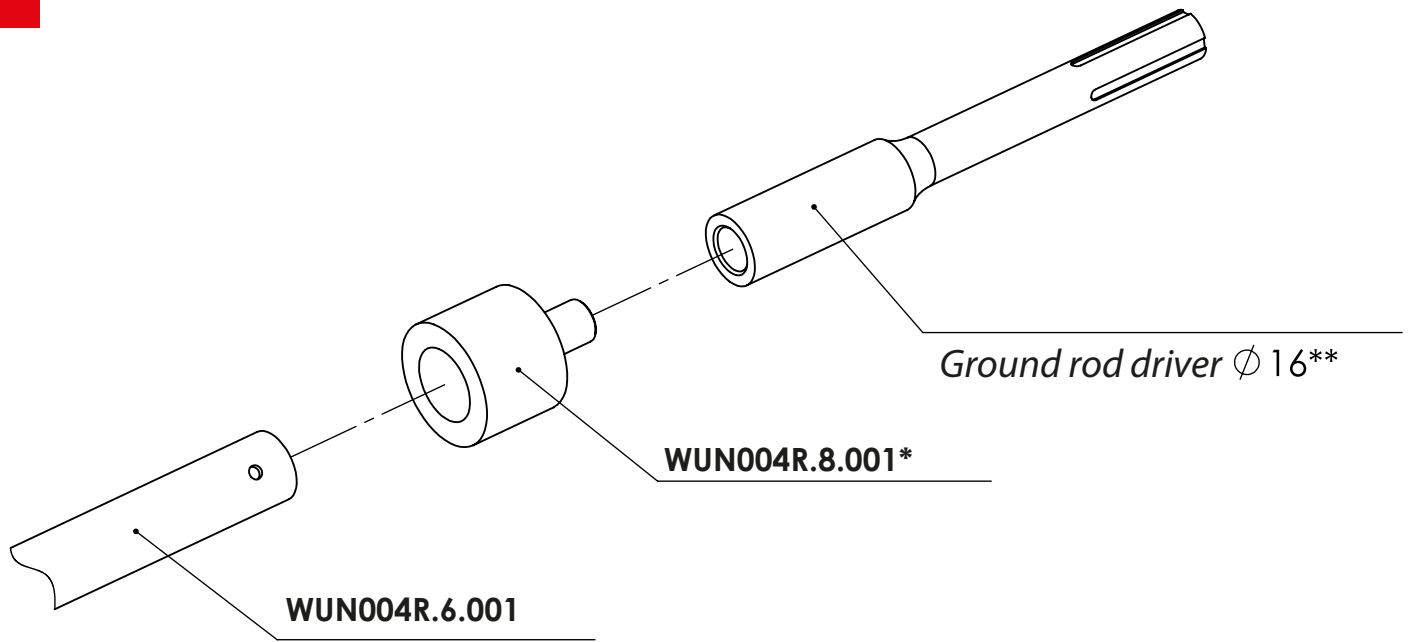
5

Note 1:
 Make the holes in the supports and the inverter mounting beam for the M12 screw in the following steps:

1. Drill a pilot hole $\Phi 5$ mm
2. Drill a pilot hole $\Phi 9$ mm
3. Drill target hole $\Phi 13$ mm
4. Protect the surrounding area of the hole with a coating containing min. 96% zinc in dry layer
5. Allow to dry completely according to the instructions of the corrosion protection agent

Note 2:
 The part outside the support may be cut off using cold cutting techniques (hand saw, band saw).
 Protect the area around the cut with a coating containing min. 96% zinc in the dry layer.
 Allow to dry completely according to the instructions of the corrosion protection product.
Do not cut with metal cutting discs!

6**6**



* Available out of the set