

SOLAR MOUNTING SYSTEMS



CHIKO
EUROPEAN DISTRIBUTOR



The background of the slide features a grayscale photograph of two workers on a roof. One worker in the foreground is crouching, wearing a hard hat and safety gear, looking towards the right. Another worker is visible in the background, also on the roof. Large solar panels are mounted on the roof surface. The overall atmosphere is industrial and professional.

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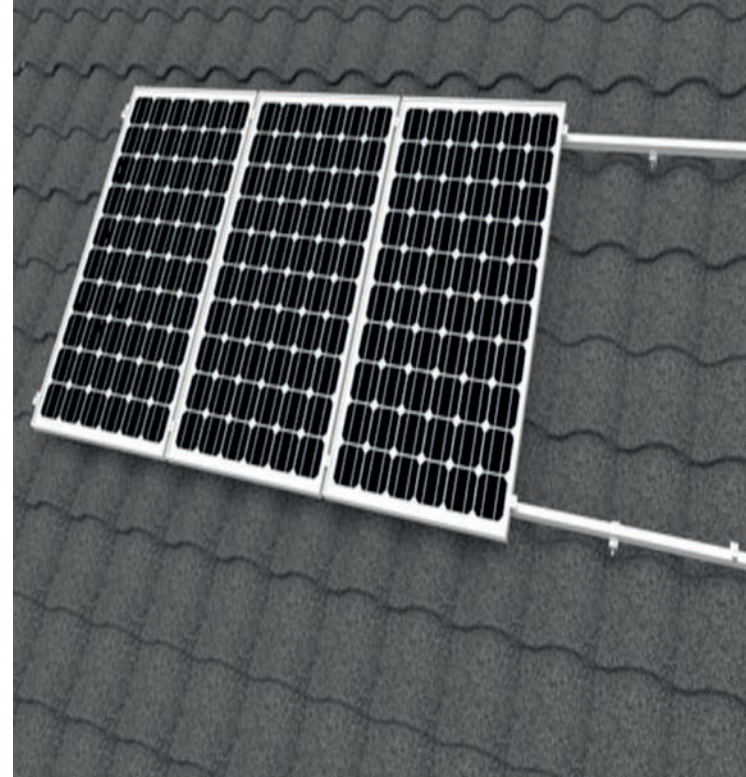
GROUND MOUNT SYSTEMS

21



UNIVERSAL

Ever since 1969 we have been supplying high-quality aluminium products for roofs, facades and solar. In addition to individual systems, we also supply customisation. We will be happy to assist you in making the right choices in terms of application and implementation.



SUSTAINABLE

Aluminium is 100% recyclable and this process can be repeated endlessly without any loss of constructional properties. The energy required to recycle aluminium is 95% less than what is used for the production process.



INNOVATIVE

Due to our innovative policy we remain leader in the development of new applications in aluminium. Also during the implementation of specific projects, we apply innovation while striving for 100% satisfied customers.



FLAT ROOF MOUNTING SYSTEM

SYSTEMS FOR FLAT ROOFS

Positioning solar panels onto (utility) buildings is a logical development. After all, the roof offers free (mostly flat) space and is often sufficiently spacious to accommodate an additional profitable function. The installation of solar panels on a flat roof has its advantages. There is no shady side and a flat roof is much easier accessible than a pitched roof. For serious efficiency, the solar panels must be applied closer to each other when a flat roof is being used. This requires the use of a solar ramp.

The solar ramp by Chiko Solar optimally utilises the available space. As such, no space is lost, while that is the case between two rows of solar panels. This makes the solar ramp indispensable for a flat roof. Additionally, the solar mounting systems of Chiko Solar for flat roofs were developed with due attention to roof and wind load and, as such, they meet the highest safety requirements.



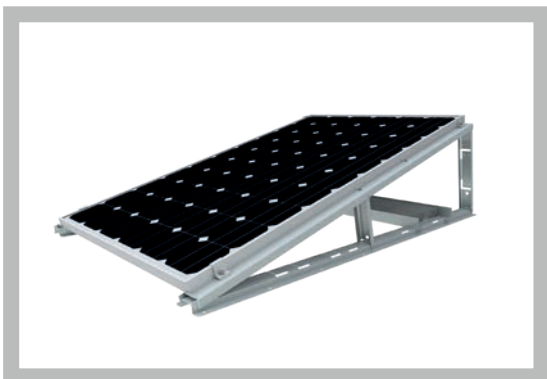
The aluminium that we use for our systems is high-quality and also anodised. This means that corrosion will hardly occur. The solar ramp is a plug-and-play system. No hassling with brackets and other mounting material. This easy to apply mounting will save you a lot of time. The benefits of a solar ramp listed:

- Easy mounting
- Both portrait and landscape mounting
- Windproof sheeting possible
- Portrait mounting up to three rows
- Validated load calculation available

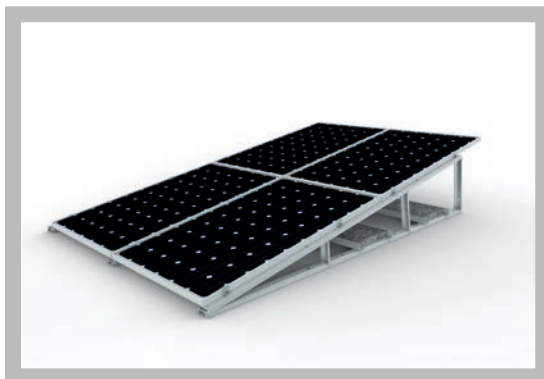
- Optimal use of space
- Landscape mounting up to five rows of solar panels possible
- No more loss of space between the rows of solar panels
- Solid and stable, tested and certified
- Ideal for smaller roofs
- Opportunity for East-West



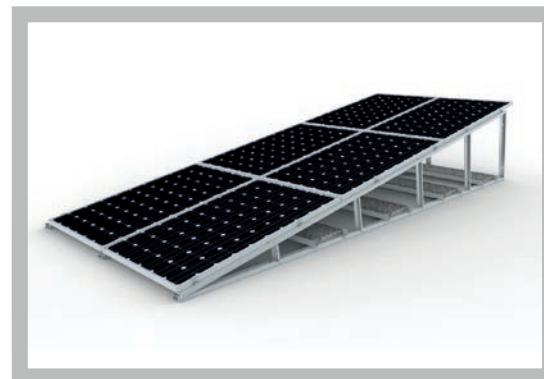
FLAT ROOF MOUNTING SYSTEM



1X PORTRAIT CONFIGURATION



2X PORTRAIT CONFIGURATION



3X PORTRAIT CONFIGURATION



1X LANDSCAPE CONFIGURATION



2X LANDSCAPE CONFIGURATION



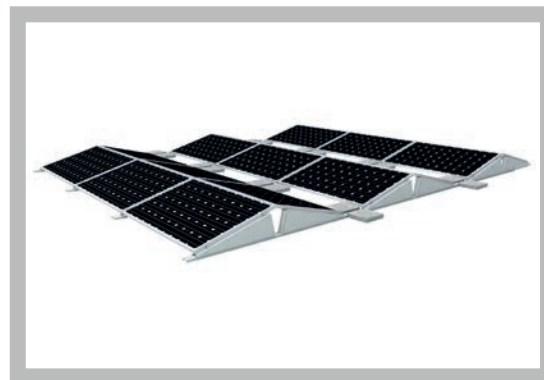
3X LANDSCAPE CONFIGURATION



4X LANDSCAPE CONFIGURATION



5X LANDSCAPE CONFIGURATION



EAST – WEST CONFIGURATION

FLAT ROOF MOUNTING SYSTEM

1



CK-BT21-15 – 15°

Panel support 1xLS

Article No.	>	120123011015
Color	>	blank
Height	>	260mm
Width	>	100mm
Length	>	1100mm

2



CK-BT31-10 – 10°

Panel support 2xLS/1xPT

Article No.	>	120123022010
Color	>	blank
Height	>	306mm
Width	>	100mm
Length	>	1835mm

3

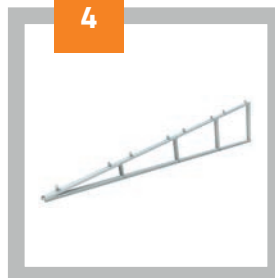


CK-BT41-10 – 10°

Panel support 3xLS/2xPT

Article No.	>	120128031010
Color	>	blank
Height	>	520mm
Width	>	100mm
Length	>	2911mm

4



CK-BT42-10 – 10°

Panel support 4xLS

Article No.	>	120128041010
Color	>	blank
Height	>	685mm
Width	>	100mm
Length	>	3876mm

5



CK-BT43-10 – 10°

Panel support 5xLS/3xPT

Article No.	>	120128051010
Color	>	blank
Height	>	850mm
Width	>	100mm
Length	>	4811mm

6



CK-BT21-15-2 – 15°

Panel support 1xLS connected

Article No.	>	120123012215
Color	>	blank
Height	>	260mm
Width	>	100mm
Length	>	2730mm

7



CK-BT23-10 – 10°

Panel support LS east/west

Article No.	>	120123062010
Color	>	blank
Height	>	180mm
Width	>	100mm
Length	>	2206mm

8



PANEL SUPPORT RUBBER

Panel support rubber

Article No.	>	120123570010
Color	>	black
Height	>	8mm
Width	>	180mm
Length	>	200mm

FLAT ROOF MOUNTING SYSTEM

9



CK-BT-R3500

ballast/L profile 3500

Article No.	>	12012855350
Color	>	blank
Height	>	50mm
Width	>	50mm
Length	>	3500mm

10



CK-BT-BP

Omega ballast profile

Article No.	>	120123070205
Color	>	blank
Height	>	40mm
Width	>	40mm
Length	>	680mm

11



SELF TAPPING SCREW 6.3X25MM

self tapping screw 6.3x25mm

Article No.	>	120123570100
Color	>	blank
Thickness	>	6,3mm
Width	>	n/a
Length	>	25mm

12



CK-JS-0680B-M6X80

Hexagon bolt with nut

Article No.	>	120123510020
Color	>	blank
Thickness	>	6mm
Width	>	n/a
Length	>	75mm

13



CK-154R33-40-40

Mid clamp

Article No.	>	120126541040
Color	>	blank
Height	>	30/50mm
Width	>	44mm
Length	>	40mm

14



CK-154R33B-40-40

Mid clamp black

Article No.	>	120126542040
Color	>	black
Height	>	30/50mm
Width	>	44mm
Length	>	40mm

15



CK-146R33-40

End clamp variable

Article No.	>	120126531040
Color	>	blank
Height	>	30/50mm
Width	>	44mm
Length	>	40mm

16



K-146RB33-40

End clamp variable black

Article No.	>	120126532040
Color	>	black
Thickness	>	30/50mm
Width	>	44mm
Length	>	40mm

FLAT ROOF MOUNTING SYSTEM

17



CK-BT-BSK300

Base Row Connector 300mm

Article No.	>	120123012300
Color	>	blank
Height	>	25mm
Width	>	65mm
Length	>	300mm

18



CK-BT-BSK500

Base Row Connector 500mm

Article No.	>	120123012500
Color	>	blank
Height	>	25mm
Width	>	65mm
Length	>	500mm

19



CK-BT-BSK670

Base Row Connector 670mm

Article No.	>	120123012670
Color	>	blank
Height	>	25mm
Width	>	65mm
Length	>	670mm

20

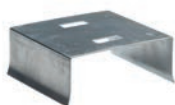


CK-BT-BSK2100

Base Row Connector 2100mm

Article No.	>	120123012210
Color	>	blank
Height	>	25mm
Width	>	65mm
Length	>	2100mm

21

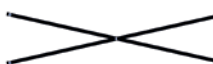


CK-BTS-FK

Side plate mounting clip

Article No.	>	120128512105
Color	>	blank
Height	>	43mm
Width	>	43mm
Length	>	35mm

22



CK-FKI-1720

Strengthen Kit 1720mm (3x,4x,5x LS)

Article No.	>	120128550170
Color	>	blank
Thickness	>	4mm
Width	>	10mm
Length	>	1720mm

23



CK-BT21-S15 - 15°

Side plate 1x LS - 15°

Article No.	>	120128512115
Color	>	blank
Thickness	>	0,9mm
Width	>	930mm
Length	>	258mm

24



CK-BT21-S10

Side plate 10°

Article No.	>	120128512110
Color	>	black
Thickness	>	0,9mm
Width	>	930mm
Length	>	185mm

FLAT ROOF MOUNTING SYSTEM

25



CK-BT21-2LS – BE-I

Side plate 2LS/1P, 3LS/2P, 4LS, 5LS/3P

Article No.	>	120128590010
Color	>	blank
Thickness	>	0,9mm
Width	>	930mm
Height	>	258mm

26



CK-BT21-3LS – BE-II

Side plate 3LS/2P, 4LS, 5LS/3P

Article No.	>	120128590020
Color	>	blank
Thickness	>	0,9mm
Width	>	1242mm
Height	>	535mm

27



CK-BT21-4LS – BE-III

Side plate 4LS, 5LS/3P

Article No.	>	120128590030
Color	>	blank
Thickness	>	0,9mm
Width	>	989mm
Height	>	324mm

28



CK-BT21-5LS – BE-IV

Side plate 5LS/3P

Article No.	>	120128590040
Color	>	blank
Thickness	>	0,9mm
Width	>	988mm
Height	>	872mm

29

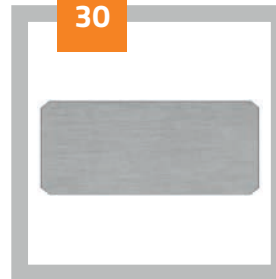


CK-BT31-B15-P

Side plate 15° Portrait

Article No.	>	120128511205
Color	>	blank
Height	>	0,9mm
Width	>	1060mm
Height	>	280mm

30



CK-FKI-1720

Back plate 15° Landscape

Article No.	>	120128511215
Color	>	blank
Thickness	>	0,9mm
Width	>	1680mm
Height	>	236mm



PITCHED ROOF MOUNTING SYSTEM

SYSTEMS FOR PITCHED ROOFS

The placing of solar panels on pitched (sloping) roofs has been used in the construction sector for years. During the development of mounting systems for roofs, not only mounting ease and speed are important focus areas, but also flexibility. After all, there are so many types of pitched roofs, each with their own requirements for proper mounting.

Our assortment of systems for pitched roofs is sophisticated as well as complete. Basic systems below can be applied to different types of roofs, such as tiled roofs, steel roofs and corrugated roofs. Of course with the correct, safe roof fastening for each type of pitched roof.



In contrast with a flat roof, a pitched roof provides few options for the inclination. Pitched roofs are just as suitable for solar panels as flat roofs. There are systems available to also alter the inclination of a pitched roof. In practice however, it proves that the additional costs are disproportionate to the additional efficiency.



In case of a pitched roof, facing south, the efficiency will be optimal in case of an inclination of 38° . Please find below the efficiency estimation per position of the solar panels:
South – maximum | West - 85% | East - 85% | North - 60%



Roof hooks are utilised to place solar panels on pitched roofs. The rails are attached to them, to which subsequently the solar panels are fastened. It is important to have enough space between the solar panels for purposes of ventilation. With the right mounting and number of roof hooks you will prevent roof leakage.



1



CK-FTH-211A

Roof hook medium 211 with adapter

Article No.	>	120126211120
Color	>	blank
Height	>	165mm
Width	>	35mm
Length	>	195mm

2



K-FTH-016A

Roof hook adjustable 016 with adapter

Article No.	>	120126211110
Color	>	blank
Height	>	155-180mm
Width	>	35mm
Length	>	195mm

3



CK-A360-341

Corrugated roof hook with adapter

Article No.	>	120126550010
Color	>	blank
Height	>	130mm
Width	>	155mm
Length	>	70mm

4



CK-FTH-012

Minirail landscape

Article No.	>	120124050010
Color	>	blank
Height	>	26mm
Width	>	32mm
Length	>	150mm

5



CK-FT-R16B1-400

Mini Rail 400mm portrait

Article No.	>	120124050015
Color	>	blank
Height	>	25mm
Width	>	70mm
Length	>	400mm

6



CK-4R-2100

Trapezium mounting rail 4 2100mm

Article No.	>	120126021210
Color	>	blank
Height	>	40mm
Width	>	40mm
Length	>	2100mm

7



CK-4R-2100B

Trapezium mounting rail 4 2100mm

Article No.	>	120128550170
Color	>	black
Height	>	40mm
Width	>	40mm
Length	>	2100mm

8



CK-4R-3120

Trapezium mounting rail 4 3120mm

Article No.	>	120126021312
Color	>	blank
Height	>	40mm
Width	>	40mm
Length	>	3210mm

PITCHED ROOF MOUNTING SYSTEM

9



CK-4R-3120B

Trapezium mounting rail 4 3120m

Article No.	>	20126022312
Color	>	black
Height	>	40mm
Width	>	40mm
Length	>	3210mm

10



CK-4R-4200

Trapezium mounting rail 4 4200mm

Article No.	>	120126021420
Color	>	blank
Height	>	40mm
Width	>	40mm
Length	>	4200mm

11



CK-4R-4200B

Trapezium mounting rail 4 4200mm

Article No.	>	120126022420
Color	>	black
Height	>	40mm
Width	>	40mm
Length	>	4200mm

12



CK-IP-060

End cap trapezium rail

Article No.	>	120126520015
Color	>	black
Height	>	43mm
Width	>	43mm
Length	>	35mm

13



CK-FT-SKA4

Splice kit rail #4

Article No.	>	120126520005
Color	>	blank
Height	>	28mm
Width	>	28mm
Length	>	150mm

14



CK-154R33-40-40

Mid clamp

Article No.	>	120126541040
Color	>	blank
Height	>	30/40mm
Width	>	44mm
Length	>	40mm

15



CK-154R33B-40-40

Mid clamp black

Article No.	>	120126542040
Color	>	black
Height	>	30/50mm
Width	>	44mm
Length	>	40mm

16



CK-146R33-40

End clamp variable

Article No.	>	120126531040
Color	>	blank
Height	>	30/50mm
Width	>	44mm
Length	>	40mm

17



CK-146RB33-40

End clamp variable black

Article No.	>	20126022312
Color	>	black
Height	>	40mm
Width	>	40mm
Length	>	3210mm

18



CK-233-801

Alu plate with slot hole

Article No.	>	120123550010
Color	>	blank
Thickness	>	8mm
Width	>	40mm
Length	>	70mm

19



BOLT AND NUT M8X30MM

Bolt and nut M8X30MM

Article No.	>	-
Color	>	blank
Thickness	>	8mm
Width	>	-
Length	>	30mm

20



METAL SHEET SCREW

metal sheet screw

Article No.	>	120123550003
Color	>	blank
Thickness	>	5mm
Width	>	-
Length	>	25mm

21



CK-GR-R1

Bonding Jumper rail

Article No.	>	120122010690
Color	>	blank
Height	>	20mm
Width	>	20mm
Length	>	100mm

22



CK-GR-R2

Grounding lug

Article No.	>	120122010700
Color	>	blank
Height	>	26mm
Width	>	20mm
Length	>	40mm

23



CK-FSC-ECP01-205

Bonding Jumper Panels

Article No.	>	120122010760
Color	>	blank
Height	>	6mm
Width	>	10mm
Length	>	100mm

24



CK-GTC-R3G

Grounding clip clamp

Article No.	>	120122010770
Color	>	blank
Height	>	-
Width	>	-
Length	>	-

26



CK-FSC-CP3

cable clip 6mm2

Article No.	>	120122010750
Color	>	blank
Thickness	>	10mm
Width	>	10mm
Length	>	20mm

27



M10 NUT

M10 nut for roof anchor

Article No.	>	140103100000
Color	>	blank
Thickness	>	-
Width	>	-
Length	>	-

28



M10 NUT

Coupling nut for roof anchor Stainless steel A2

Article No.	>	140110300510
Color	>	Stainless steel
Thickness	>	-
Width	>	-
Length	>	-

29



THREADED ROD

threaded rod Stainless steel A2 M10

Article No.	>	140110320510
Color	>	Stainless steel
Thickness	>	M10
Width	>	-
Length	>	-

30



ROOF ANCHOR COMPOUND CA 1310

Roof anchor Compound CA 131

Article No.	>	140103100000
Color	>	Slate gray
Thickness	>	15mm
Diameter	>	300mm
Length	>	-

31



ROOF ANCHOR PVC CA 1330

Roof anchor PVC CA 1330

Article No.	>	140103300000
Color	>	gray
Thickness	>	4mm
Width	>	300mm
Length	>	-

32



ROOF ANCHOR EPDM CA 1320

Roof anchor EPDM CA 1320

Article No.	>	140103200000
Color	>	Black
Thickness	>	4mm
Width	>	300mm
Length	>	-

33



ROOF ANCHOR STAINLESS STEEL CA 1330

Roof anchor Stainless steel CA 1330

Article No.	>	140103400000
Color	>	Stainless steel
Thickness	>	1,5mm
Width	>	300mm
Length	>	-



SOLAR PREVENTION

PREVENTIVE SYSTEMS FOR PITCHED ROOF MOUNTING SYSTEM

Are there birds under your solar panels? The solar profile will protect your roof and solar panels against bird nuisance. The solar profile ensures optimal ventilation under your solar panels and will protect your roof against deterioration by the harmful substances in bird droppings.

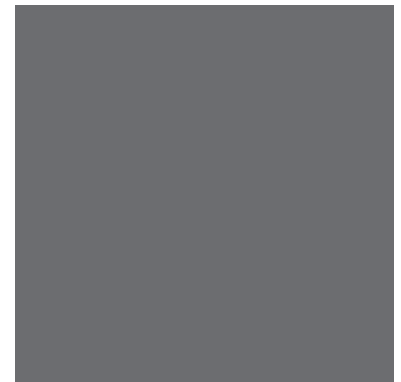
After installation of our solar profiles, the ventilation will be assured. Calamities like nests, leakages and other issues will be something of the past.



Birds prefer to nestle underneath solar panels. This hampers the natural ventilation under your solar panels, which has a negative effect on the efficiency.



The solar profile is fastened to the sides of your solar panels, against your roof tiles. This will ensure ventilation under your solar panels. The solar profile does not only provide protection against birds, but also against stone martens.



Our aluminium solar profiles are available in blank and black. We give a 5 year warranty on the functioning of our product.



1



SOLARPREVENTION PROFILE

Solarprevention profile

Article No.	>	155012400000
Color	>	blank
Thickness	>	2mm
Width	>	170mm
Length	>	1000mm

2

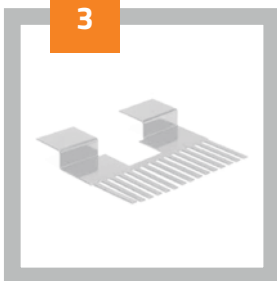


SOLARPREVENTION PROFILE BLACK

Solarprevention profile black RAL9005

Article No.	>	155012400300
Color	>	black ral9005
Thickness	>	2mm
Width	>	170mm
Length	>	1000mm

3

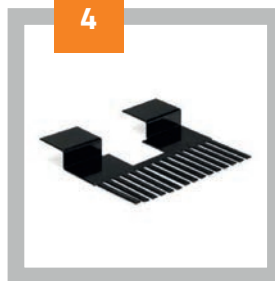


FITTING RIDGE

Solarprevention profile fitting ridge

Article No.	>	155012400021
Color	>	blank
Thickness	>	2mm
Width	>	170mm
Length	>	200mm

4



FITTING RIDGE BLACK

Solarprevention profile fitting ridge black RAL9005

Article No.	>	155012400321
Color	>	black ral9005
Thickness	>	2mm
Width	>	170mm
Length	>	200mm

5



INNERCORNER

Solarprevention profile innercorner

Article No.	>	155012400037
Color	>	blank
Thickness	>	2mm
Width	>	170mm
Length	>	200x200mm

6



INNERCORNER BLACK

Solarprevention profile innercorner black RAL9005

Article No.	>	155012400337
Color	>	black ral9005
Thickness	>	2mm
Width	>	170mm
Length	>	200x200mm

7



OUTERCORNER

Solarprevention profile outercorner

Article No.	>	155012400038
Color	>	blank
Thickness	>	2mm
Width	>	170mm
Length	>	200x200mm

8



OUTERCORNER BLACK

Solarprevention profile outercorner black RAL9005

Article No.	>	155012400338
Color	>	black ral9005
Thickness	>	2mm
Width	>	170mm
Length	>	200x200mm



GROUND MOUNT SYSTEMS

SYSTEMS FOR FIELD SETUP

Solar panels on the ground generate just as much electricity as those installed on a roof. It is important to realise that when you install solar panels on the ground, you need an environmental licence. In addition, you must obviously have sufficient space around your house, company or farm, to be able to set up the solar panels in an efficient way. For the placing of the solar panels, a metal frame is used that slightly protrudes above the ground, in order to prevent the efficiency being hindered by any grass or bushes.



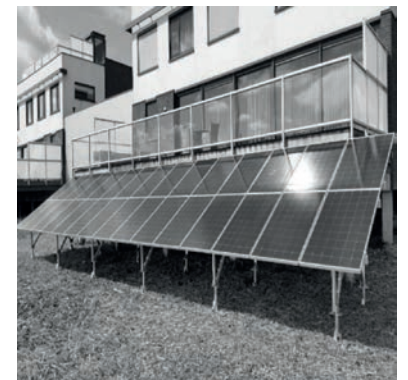
The Chiko Solar free field solar panels mounting system is a flexible system. A tailored system can be developed for any field setup.



For instance, the inclination angle, height, length and width (within a certain band width) of the system can be decided entirely to your wishes.



There are several systems available: a system made of aluminium and a number of systems made of galvanised steel. Tailor-made solutions can be offered for any available configuration.



SOLAR MOUNTING SYSTEMS AVAILABLE AT **CHIKO SOLAR**





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