CW ALÜMİNYUM

Construction Systems Catalog

2026

Contents:

CW ALÜMİNYUM
Renewable Energy Technologies

CW Aluminum Mission

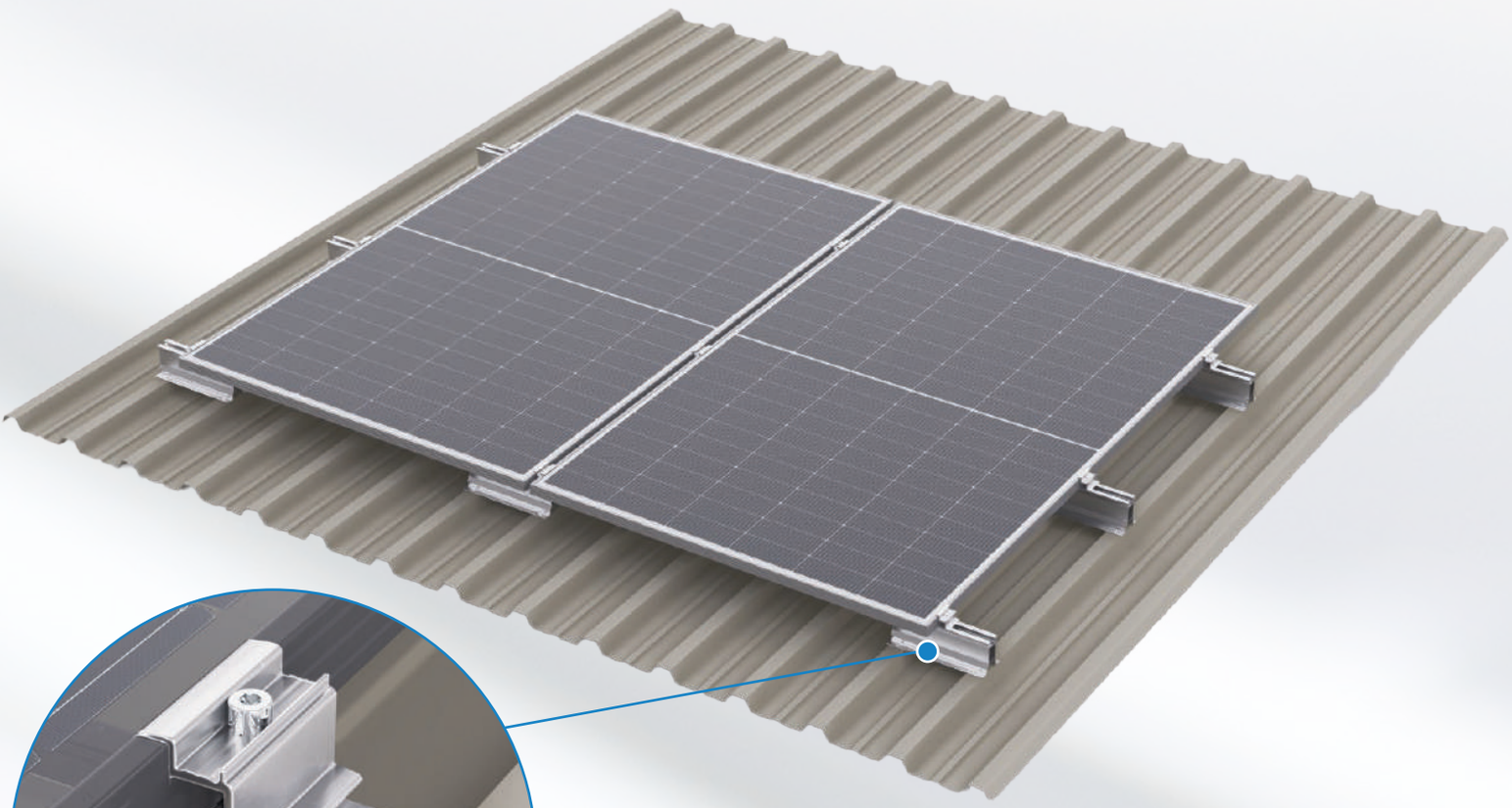
As CW Aluminum, we manufacture frames, mounting apparatus, and infrastructure materials for renewable energy technologies; thanks to our mounting systems developed with superior technology and engineering, we provide the sector with reliable and long-lasting solutions. By developing functional and innovative products tailored to customer needs, we keep quality and efficiency at the highest level.

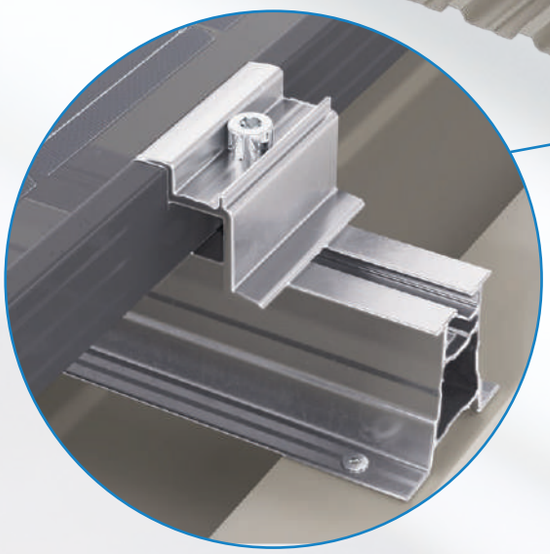
In EPC projects, we increase customer satisfaction by using our solar panels and construction solutions in an integrated way, while ensuring more efficient and sustainable results in sales processes. By strengthening our domestic production capacity, we contribute both to economic growth and to adding value to the future by supporting sustainable energy infrastructure.

CW Aluminum Vision:

By producing high-tech frames, mounting apparatus, and infrastructure materials for renewable energy technologies, with our customer-oriented approach, continuously growing production capacity, and engineering strength, we aim to achieve a strong position on a global scale in renewable energy solutions.

Diamond Series

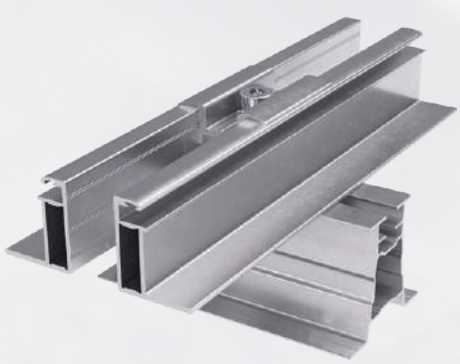




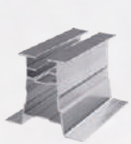
This construction system, developed for trapezoidal and sandwich roofs, offers 60 mm and 80 mm height options and is mounted on top of the roof pitch. Pointed-tip screws for stainless sheet or suitable rivets can be used in the installation. The wide bottom opening ensures easy installation, while the top opening supports both horizontal and vertical mounting. Thanks to the EPDM tape, roof sealing is ensured. Designed with static calculations, it is a lightweight and durable system suitable for wind, snow, and earthquake loads.

Technical Data Details

Height:	**H: 50mm - 60mm - 80mm**
Length:	**Partial Profile or Full-Length Profile**
Application Areas:	**Trapezoidal and 2-3-4-5 Rib Sandwich Roofs**
Mounting Type:	**Suitable for Horizontal and Vertical Mounting**
Roof Fixing Method:	**Pointed-Tip Screw or Rivet (Pop/Butterfly/Sealed Gasket Rivet)**
Construction Material Detail:	**EN AW 6063 T66**



İlgili Sistem Bileşenleri

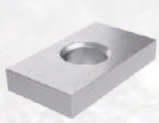


Purlin Profile
(Diamond Model)

Mid Clamp
(Storm/Diamond Model)

End Clamp
(Storm/Diamond Model)

Pointed-Tip Screw



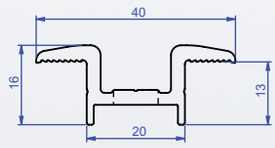
Rectangular
Stainless Nut

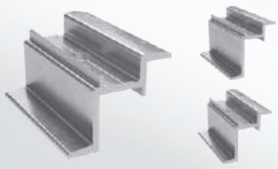
Allen Bolt
(M8x20 - 25 - 30 - 35 - 40) (A2 70)

EPDM Tape

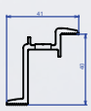
Renewable Energy Technologies

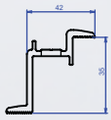
MID CLAMP
With 50 - 60 - 70 MM Options
CW-02-0041

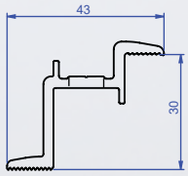


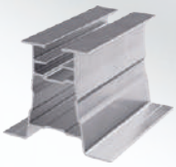


END CLAMP
With 30 - 35 - 40 MM Options
CW-02-0042

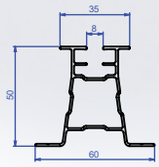


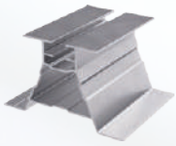




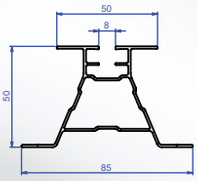


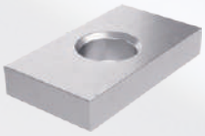
Purlin Profile
50 mm – 60 mm – 80 mm Options
CW-02-0049 | CW-02-0059 | CW-02-0079



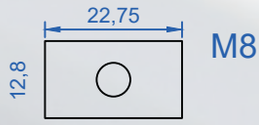


50 mm
Purlin Profile
(Vertical / Horizontal)
CW-02-0050

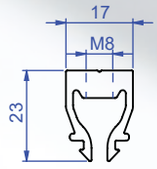


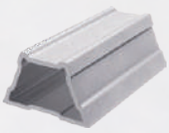


Rectangular Stainless Steel Nut
SF-SMN-M8-DİKDÖRTGEN

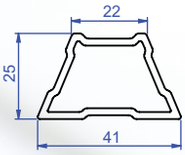


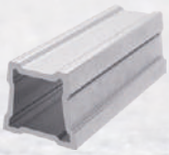
Claw Nut
17 mm
CW-02-0057



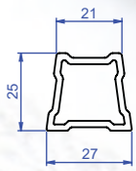


50 mm
Purlin IConnection Profile with Ear
CW-02-0067

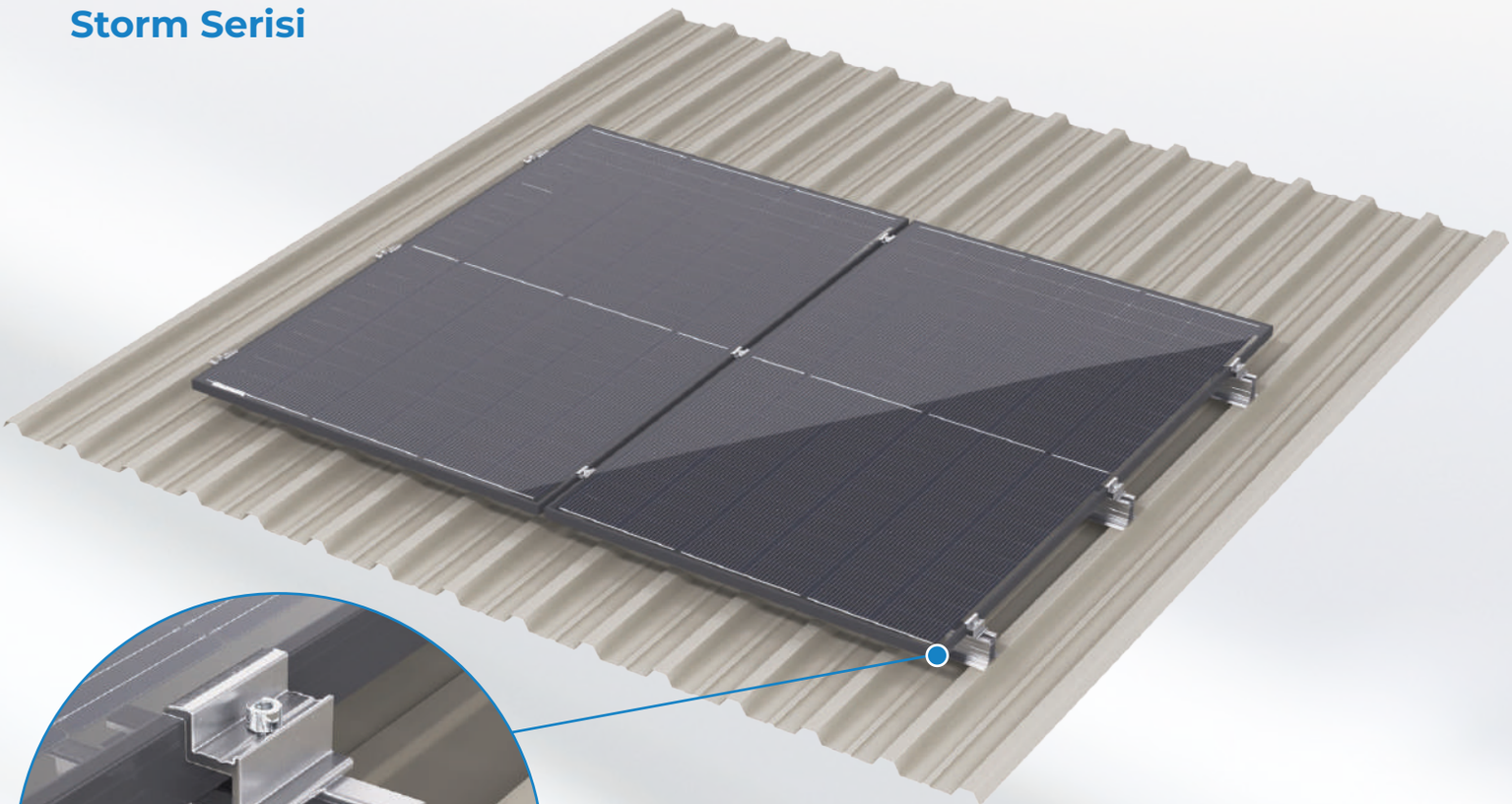


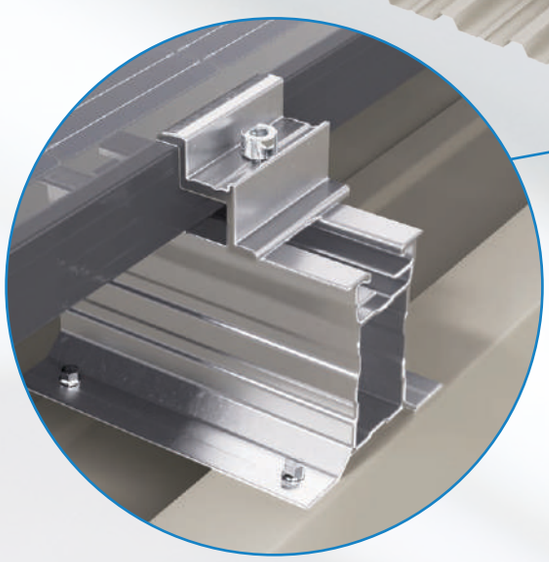


50 mm
Purlin Connection Profile without Ear
CW-02-0068



Storm Serisi





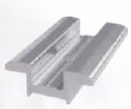
This construction system, developed for trapezoidal and sandwich roofs, offers height options of 60 mm and 80 mm and is mounted from the top onto the roof corrugation. Sharp-pointed screws for stainless steel sheets or suitable rivets can be used for installation. The wide lower opening ensures easy installation, while the upper opening supports both horizontal and vertical mounting. Roof sealing is achieved with an EPDM tape. The system is designed to be lightweight and durable, in compliance with wind, snow, and seismic loads through structural calculations.

Technical Data Details

Height:	**H: 60mm - 80mm**
Length:	**Cut Profile or Full-Length Profile**
Application Areas:	**Trapezoidal and 2-3-4-5 Corrugated Sandwich Roofs**
Mounting Type:	**Suitable for Horizontal and Vertical Mounting**
Roof Fixing Method:	**Sharp-Pointed Screw or Rivet (Pop/Sealed/Waterproof Rivet)**
Construction Material Detail:	**EN AW 6063 T66**

Relevant System Components


Relevant System Components


Mid Clamp (Storm/Diamond Model)


End Clamp (Storm/Diamond Model)

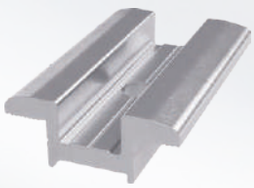

Sharp-Pointed Screw (A2 70)


Thin Flat Nut

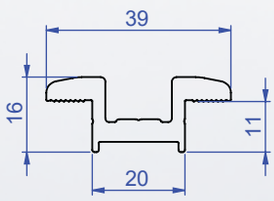

Hex Socket Bolt (M8x20 – 25 – 30 – 35 – 40) (A2 70)

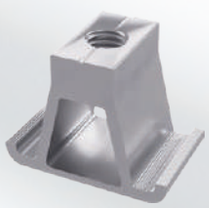

EPDM Tape

Storm Series System Component Details

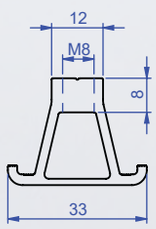


Mid Clamp
50 – 60 – 70 – 80 mm Options
CW-02-0001

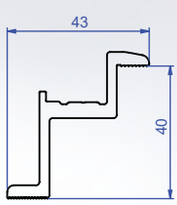


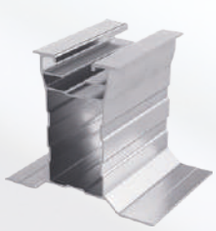


Nut
18 mm
CW-02-0002

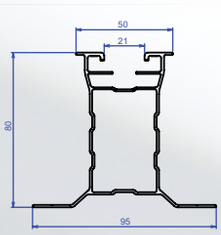


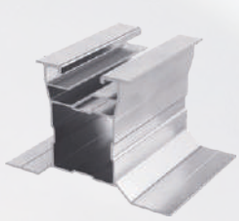
End Clamp
30 – 35 – 40 mm Options
CW-02-0003



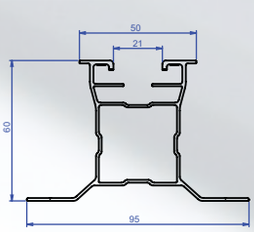


80 mm
Purlin Profile
CW-02-0045

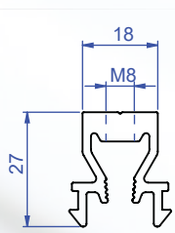


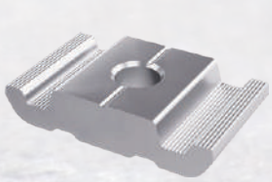


60 mm
Purlin Profile
CW-02-0046

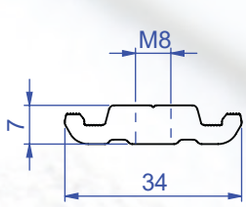


Claw Nut
18 mm
CW-02-0052

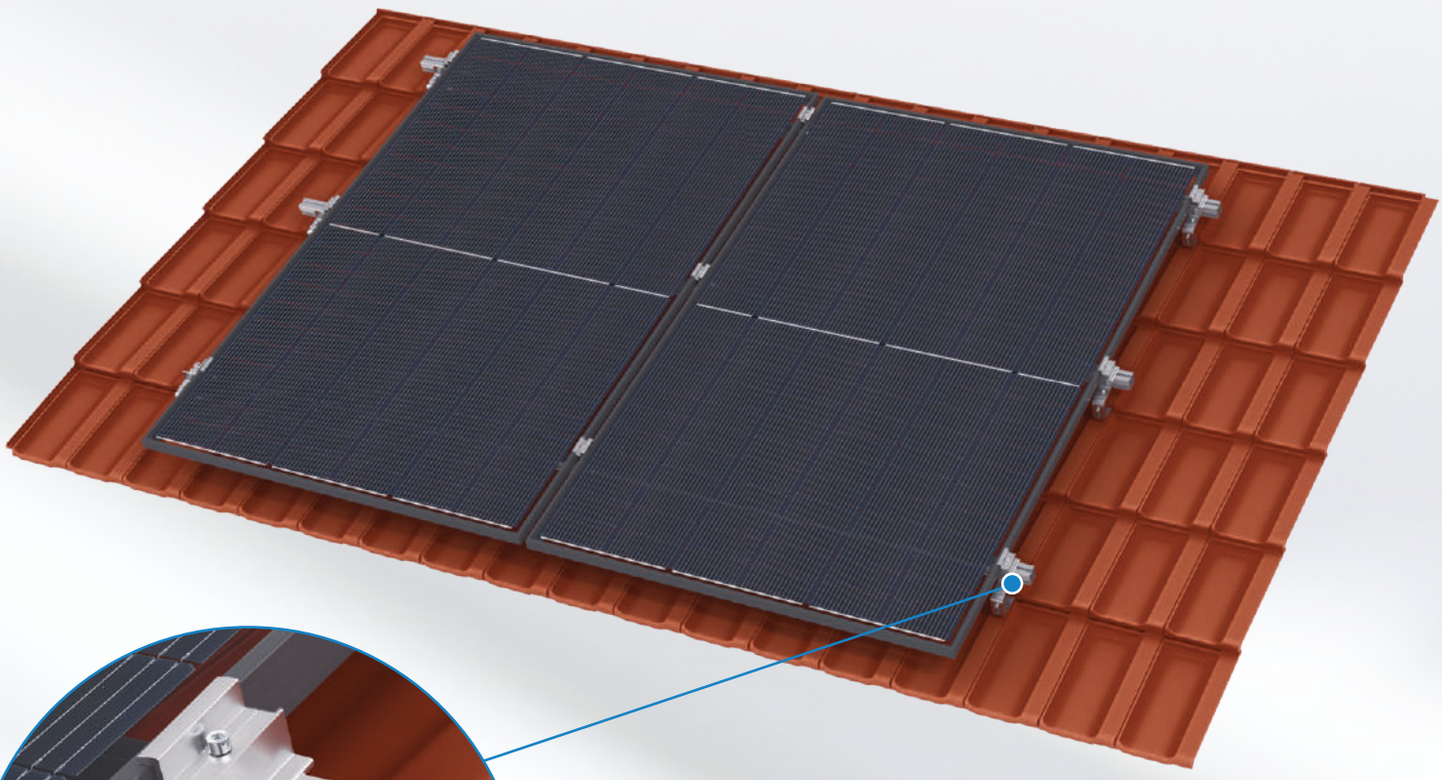


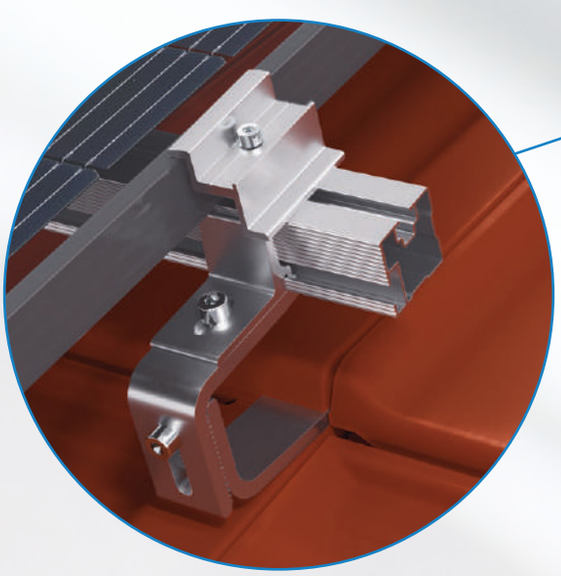


Thin Flat
Nut
CW-02-0053



Tile Roof Hook



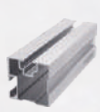


This construction system, developed for tile roofs, is applied in full length by fixing it to the roof purlins or beams. Screws suitable for the purlin material are used during installation, and the system is suitable for both vertical and horizontal mounting. After installing the roof hook, the tile can be easily repositioned, eliminating the need for additional insulation. Designed through structural calculations, the system is lightweight and durable, complying with wind, snow, and seismic loads. Thanks to the height adjustment on the roof hook, it is compatible with

Technical Data Details

Height:	**H: 40 mm**
Length:	**Full-Length Profile**
Application Areas:	**Tile Roofs**
Mounting Type:	**Roof Purlins**
Roof Fixing Method:	**Fasteners Suitable for Roof Purlins (Wood, Concrete, Steel)**
Construction Material Detail:	**EN AW 6063 T66**

Relevant System Components


Tile and Standing Seam Roof Profile


Tile and Standing Seam Roof Profile

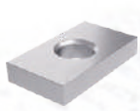

Roof Profile


Roof Intermediate Profile


Roof Hook


Hex Socket Bolt (M8) (A2 70)


Hex Nut (A2 70)

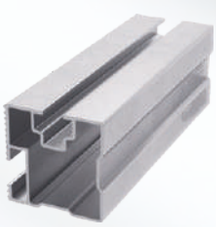

Rectangular Stainless Steel Nut


Wood Screw (A2 70)

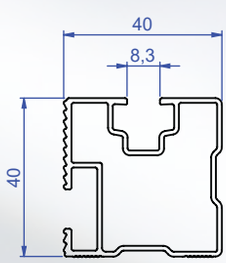

T-Head Bolt (A2 70)

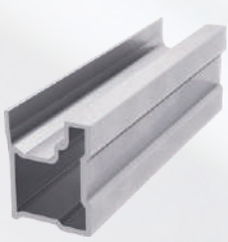
Tile Roof System Component Details

Roof Hook
CW-02-0200

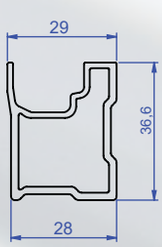


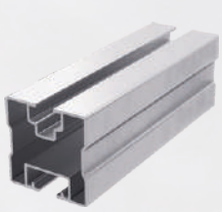
Tile and Standing Seam
Roof Profile
40 mm
CW-02-0061



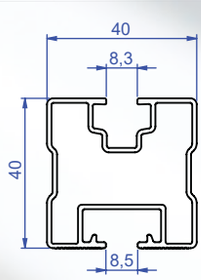


Tile and Standing Seam
Roof Connection Profile
40 mm
CW-02-0062

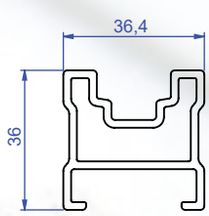




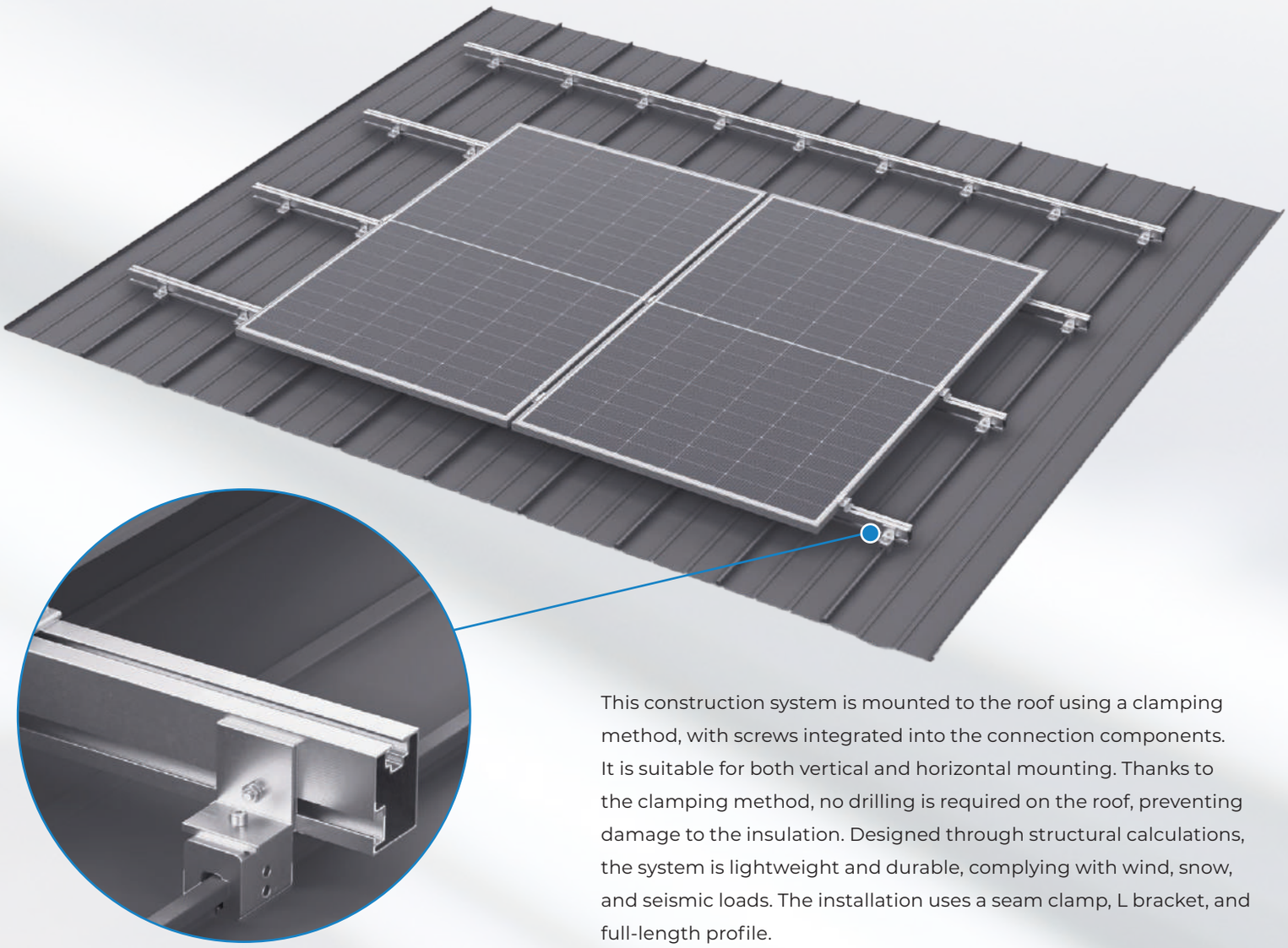
Roof Profile
40 mm
CW-02-0205

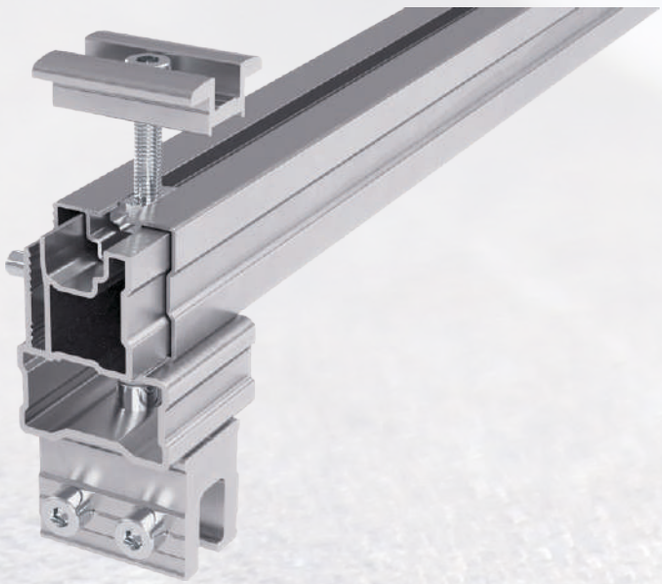


Roof Connection Profile
40 mm
CW-02-0206



1.1 Trapezoidal and Sandwich Roof Systems



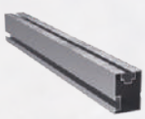


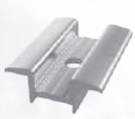
This construction system is mounted to the roof using a clamping method, with screws integrated into the connection components. It is suitable for both vertical and horizontal mounting. Thanks to the clamping method, no drilling is required on the roof, preventing damage to the insulation. Designed through structural calculations, the system is lightweight and durable, complying with wind, snow, and seismic loads. The installation uses a seam clamp, L bracket, and full-length profile.

Technical Data Details

Height:	**H: 60 mm**
Length:	**Full-Length Profile**
Application Areas:	**Standing Seam Roofs**
Mounting Type:	**Vertical**
Roof Fixing Method::	**Clamping to Seam**
Construction Material Detail:	**6060 - 6063 - 6005 Aluminum**

Relevant System Components


Purlin Profile


Mid Clamp
(Diamond & Storm Model)


End Clamp
(Diamond & Storm Model)


T-Head Bolt
(A2 70)


Standing Seam Roof
Clamping Profile


Standing Seam Roof
Profile


Hex Socket Bolt
(M8) (A2 70)


Rectangular Nut
CW-02-0053

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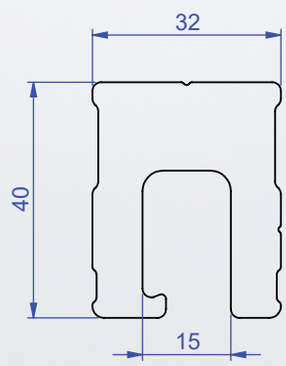
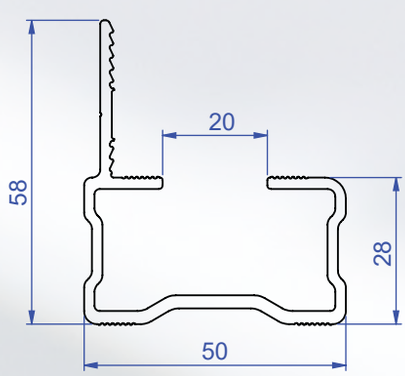
Renewable Energy Technologies

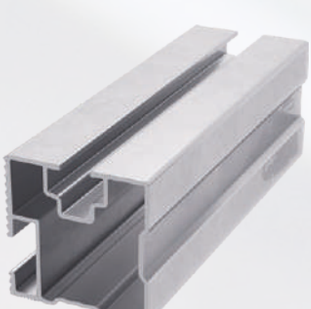
Tile Roof System Component Details

Standing Seam Roof
Hook
CW-02-0013

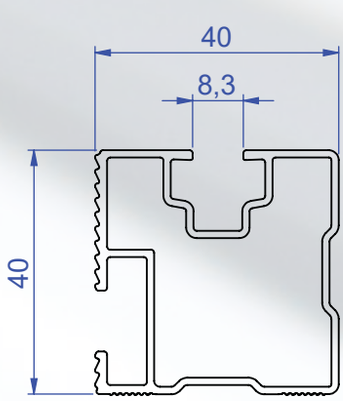


Standing Seam Roof
Profile
CW-02-0060

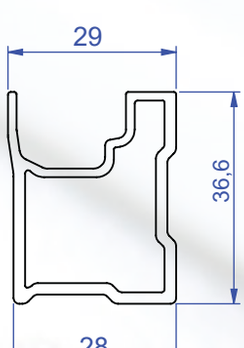




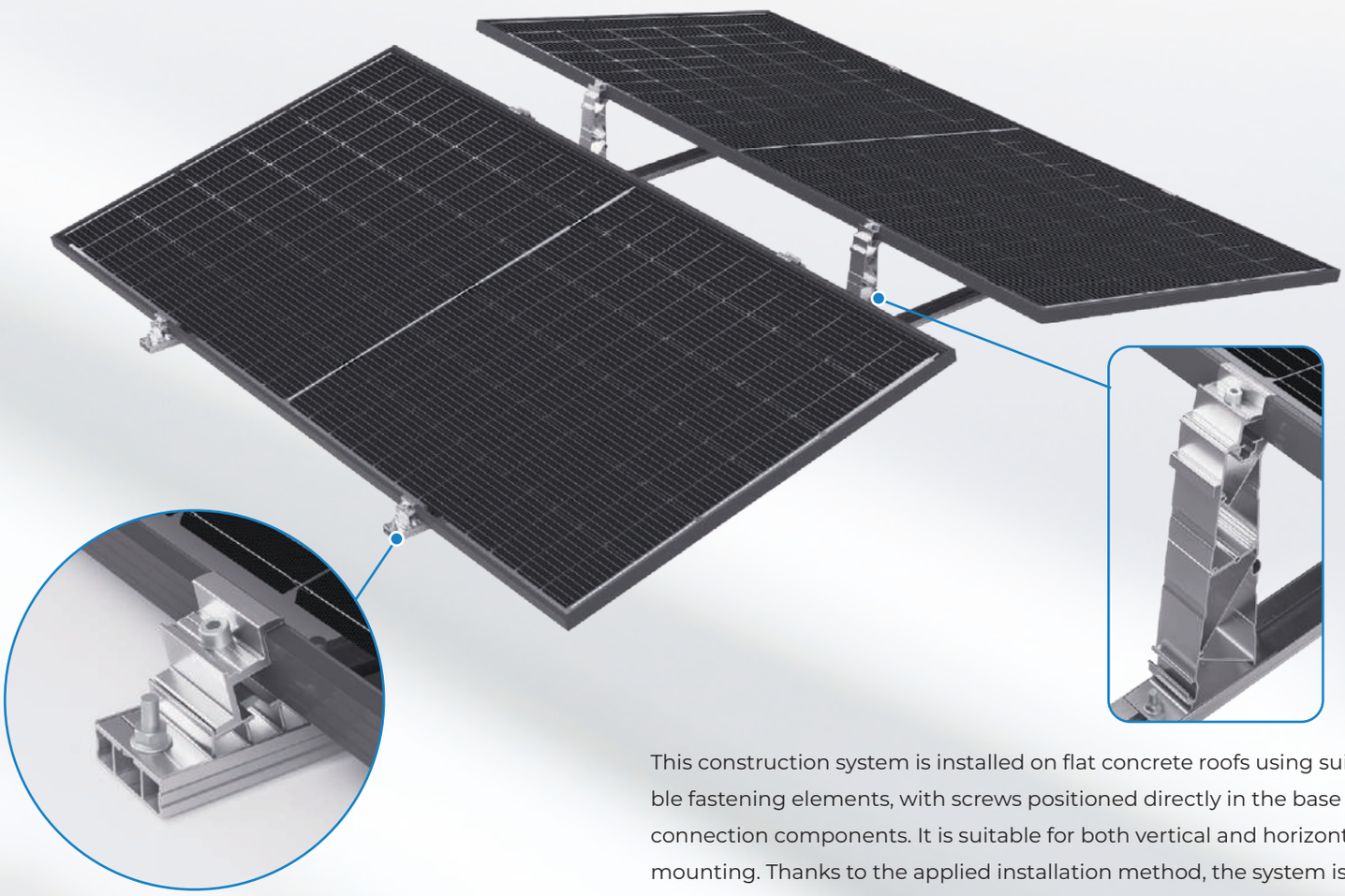
Tile and Standing Seam
Roof Profile
40 mm
CW-02-0061



Tile and Standing Seam
Roof Intermediate Profile
40 mm
CW-02-0062



4. Flat Roof Type Systems

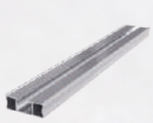


This construction system is installed on flat concrete roofs using suitable fastening elements, with screws positioned directly in the base connection components. It is suitable for both vertical and horizontal mounting. Thanks to the applied installation method, the system is securely and safely fixed to the concrete surface. Designed through structural calculations, it provides a lightweight and robust structure resistant to wind, snow, and seismic loads. The installation utilizes full-length or stand-compatible cut profiles, lower and upper base profiles, clamp sets, and fastening elements suitable for concrete surfaces. It is delivered as a complete set.

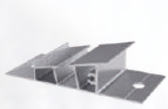
Technical Data Details

Height:	**H: 13° Angle**
Length:	**Full-Length and Cut-Length Profile**
Application Areas:	**Flat Roof Concrete Surfaces**
Mounting Type:	**Horizontal**
Roof Fixing Method:	**Fasteners Suitable for Concrete Surfaces**
Construction Material Detail:	**6060 - 6063 - 6005 Aluminum**

Relevant System Components



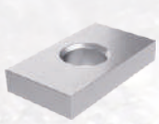
Flat Roof
Base Profile



Clamp
Lower Base Profile

Clamp Upper Base
Profile 13 Degrees

Storm End
Clamp Set



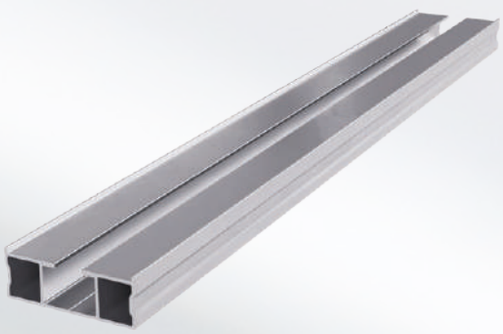
Rectangular
Stainless Steel Nut

Sharp-Pointed Screw
(A2 70)

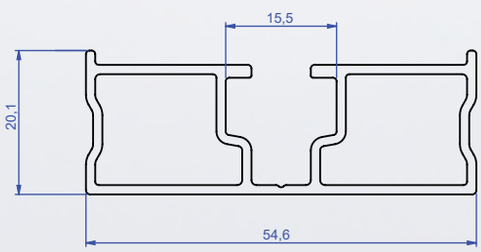
Hex Socket Bolt
(M8) (A2 70)

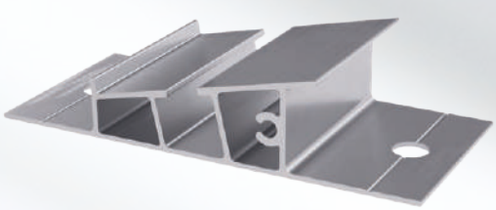
T-Head Bolt
(A2 70)

Flat Roof System Component Details

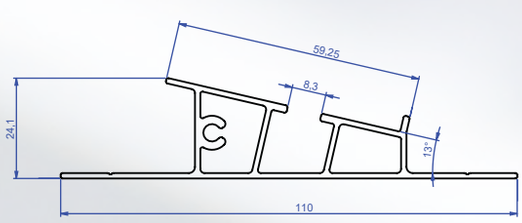


Flat Roof
Base Profile
CW-02-0302

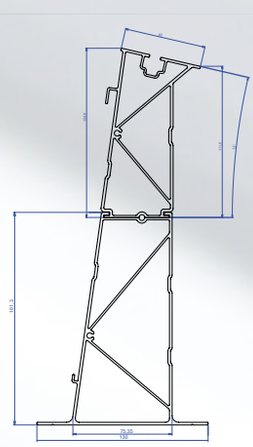




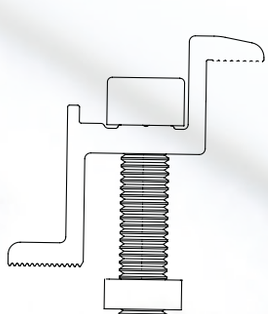
Clamp
Lower Base Profile
CW-02-0303

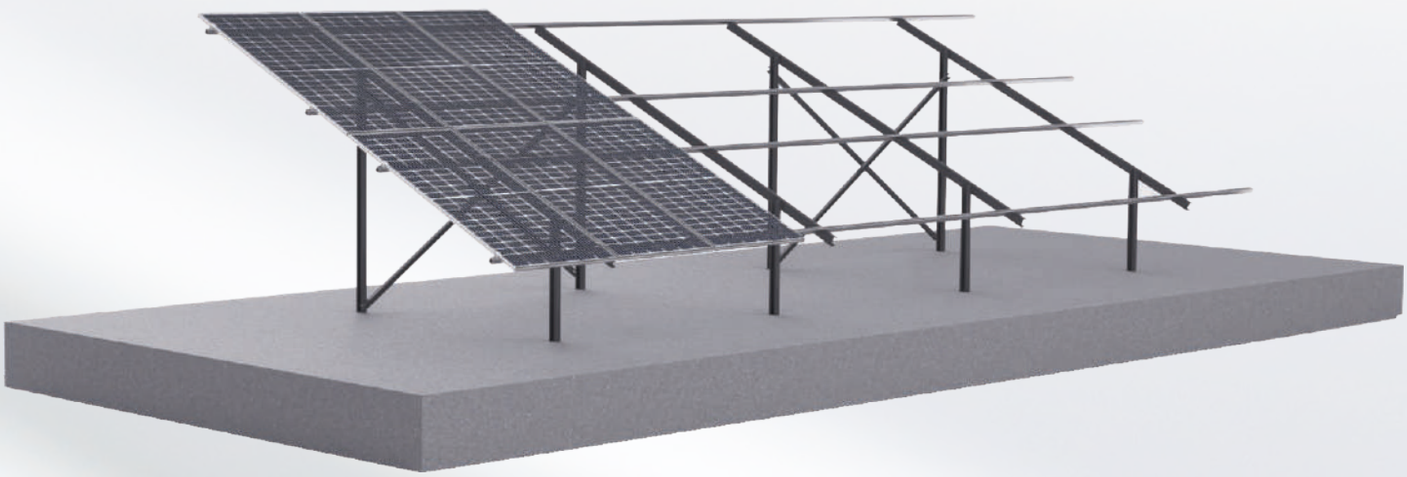


Clamp Upper Base Profile
13° Set
CW-02-0304-0305-M01



Storm End Clamp Set
CW-02-0004-M01





Fast Installation **Flexible Design** **Low Material Cost** **Worldwide Shipping**

• Adapts to different terrain and geological conditions, is especially ideal for sloped land, and is suitable for ground-mounted solar energy systems.

• Provides easy and fast installation and offers high adaptability to various ground conditions.

Suitable for ground-mounted solar energy mounting systems and applications.

Ground-Mounted System Component Details

Application Method:	**Driven Pile, Concrete Foundation, Concrete Pile**
PV Modules:	**Framed**
Module Tilt:	**20° veya 25°**
Coating:	**EN ISO 1461**
Material:	**Hot-Dip Galvanized Steel in accordance with EN ISO 1461 / Magnelis®**
Structural:	**System structural calculations comply with Eurocode. Wind tunnel optimization has been performed. FEM simulation has been applied. Where required, structural calculations can be carried out in accordance with country-specific regulations and standards.**

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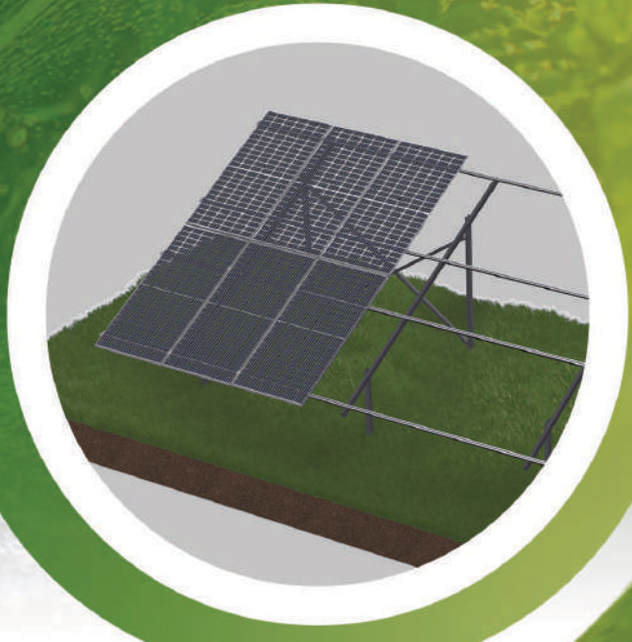
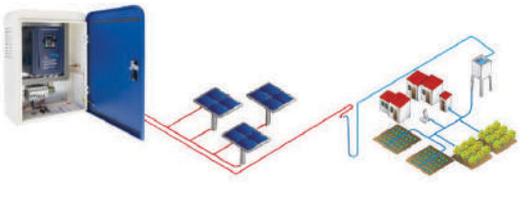


Component	Cross-Section	Shape	Wall Thickness	Quality
Column	70x45x15	C	3mm	DX51
Beam	80x40x10	C	2mm	DX51
Purlin	40x40x15	C+	2mm	DX51
Brace	40x40	U	1.5mm	DX51
Connection Clamps		MC02	2mm	Al6063
Steel Connection		AKB	M10 / M8	Electro-galvanized
Clamp Connection		IMBUS	M8	A2/70

Our standard racks are designed for **2x8 panels** and can be offered with driven pile or mounted installation options

In applications where installation is on concrete, a **200 mm x 200 mm x 5 mm** base flange connection will be used under the columns.



Rooftop Solar Power Plant

KAYSERİ

Ground-Mounted Solar Power Plant

ŞIRNAK

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Yenilenebilir Enerji Teknolojileri

NOTLAR:

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Yenilenebilir Enerji Teknolojileri

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CW ALÜMİNYUM
Yenilenebilir Enerji Teknolojileri