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### **ABOUT US**

Established in 2021 in Bursa, ERA Grup Alüminyum is a prominent player inthe aluminum extrusion and mechanical processing sector. With ourunwavering commitment to excellence, we have gained recognition as atrusted global supplier, exporting our innovative products and solutions toover 15 countries. Our state-of-the-art 11,000 m² production facility,powered by a dedicated workforce of over 150 skilled professionals, fuelsour contribution to the national economy.

Our focus extends beyond traditional practices. With our dedicated R&Ddepartment, we lead the industry in design, technical projects, prototypes,and commissioning. From the very beginning, we have been committed tosurpassing customer expectations and delivering exceptional products and services.

At ERA Grup Alüminyum, our skilled team is united by a shared commitment oour core values. We aim to build long-lasting partnerships by providing reliable, high-quality products and services that go beyond our clients expectations. We constantly strive to add value in all aspects of our operations, ensuring the success of our customers.

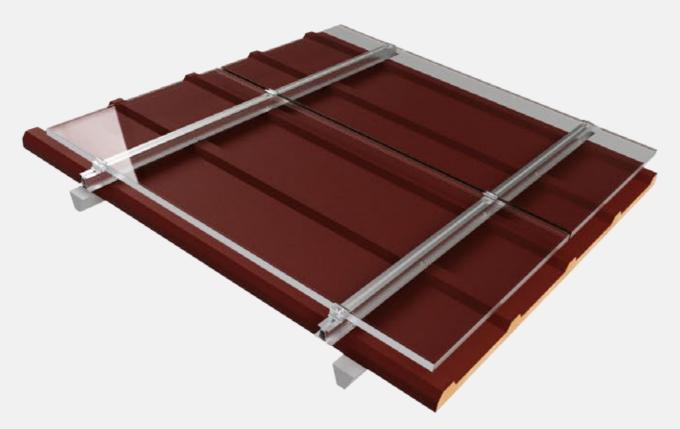
Our vision reaches beyond borders. We aspire to become the preferred company in the aluminum extrusion and mechanical processing sector, bothin Turkey and globally. We are determined to set new industry standards, both in Turkey and worldwide, inspiring others through our innovative practices and unwavering commitment to excellence.

At ERA Grup Alüminyum, we redefine possibilities and shape the future ofour industry. Join us on this extraordinary journey as we continue toexemplify excellence and redefine what is possible in the world of aluminum extrusion and mechanical processing.





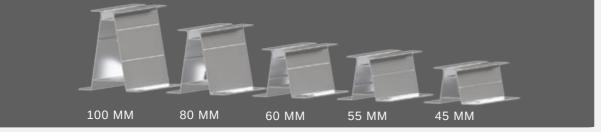
## E-RAIL S







## HEIGHT **OPTIONS**











Warranty





# EASY STEPS 'TO INSTALL



#### **BANDING EPDM TAPE**

**EPDM Tape** is used to ensure the impermeability between the rail profile and the roof covering.



#### **MOUNTING OF RAIL**

The rail profile is fixed to the roof covering using Screw with Gaskets.









#### **MOUNTING BOLT & NUT**

The clamp set is pre-assembled and fixed to the rail profile with M8 Bolt.

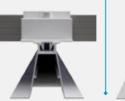


#### PLACEMENT OF PV PANEL

The pre-assembled clamp set is tightened at the appropriate torque values from the point recommended by the panel manufacturer.



**HORIZONTAL PLACEMENT OF RAIL** 









#### SANDWICH ROOF MOUNTING SYSTEMS

## E-RAIL MINI



LENGHT

## 5 EASY STEPS TO INSTALL



#### **BANDING EPDM TAPE**

EPDM Tape is used to ensure the impermeability between the rail profile and the roof covering.



#### **SCREWING WITH GASKET**

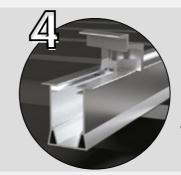
The rail profile is fixed to the roof covering using Screw with Gaskets.





### **MOUNTING NUT TO MINI RAIL**

Inserting the Nut into the rail profile from the side and bringing it to the planned position.



#### **MOUNTING BOLT & CLAMP**

The Clamp Set is pre-assembled and fixed to the rail profile with M8 Bolt.







#### PLACEMENT OF PV PANEL

The pre-assembled clamp set is tightened at the appropriate torque values from the point recommended by the panel manufacturer.



HEIGHT

**OPTIONS** 

**SCREW** 





55mm





: CUSTOMIZABLE LENGHT



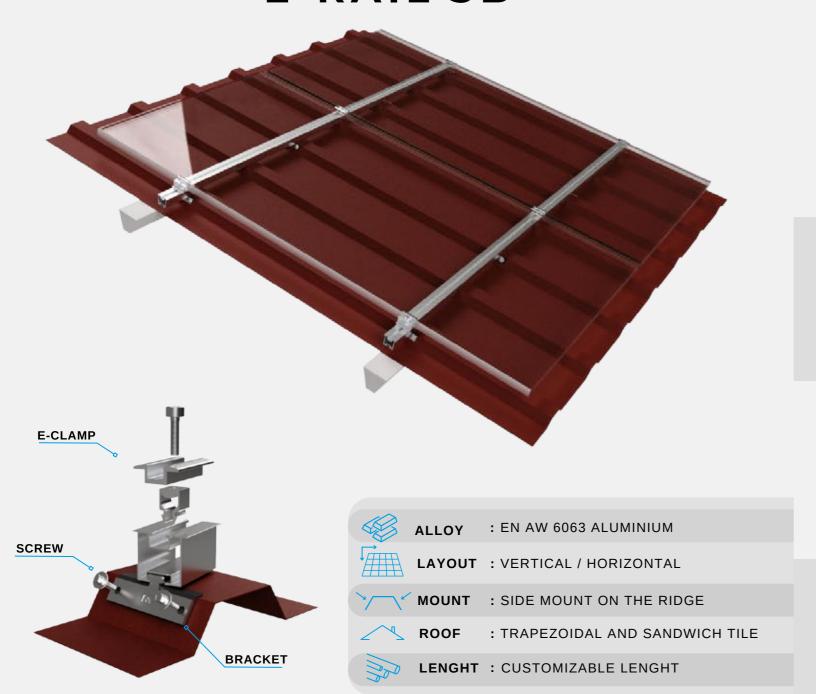


SCAN IT FOR MANUAL VIDEOS





## E-RAIL SB



## 5 EASY STEPS TO INSTALL



#### **ASSEMBLING RUBBER TO BRACKET**

Rubber Gasket and AISI 304 Stainless Steel Bracket are preassembled.



#### **MOUNTING OF RAIL**

The pre-assembled bracket is inserted into the rail profile.



#### **SCREWING WITH GASKET**

The brakeet is fixed to the roof covering using Screw with Gaskets.

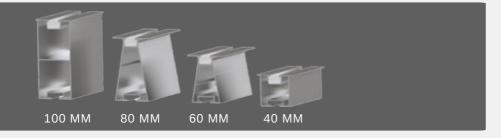




#### **MOUNTING BOLT & NUT**

The **Clamp Set** is pre-assembled and fixed to the rail profile with **M8 Bolt**.













Warranty







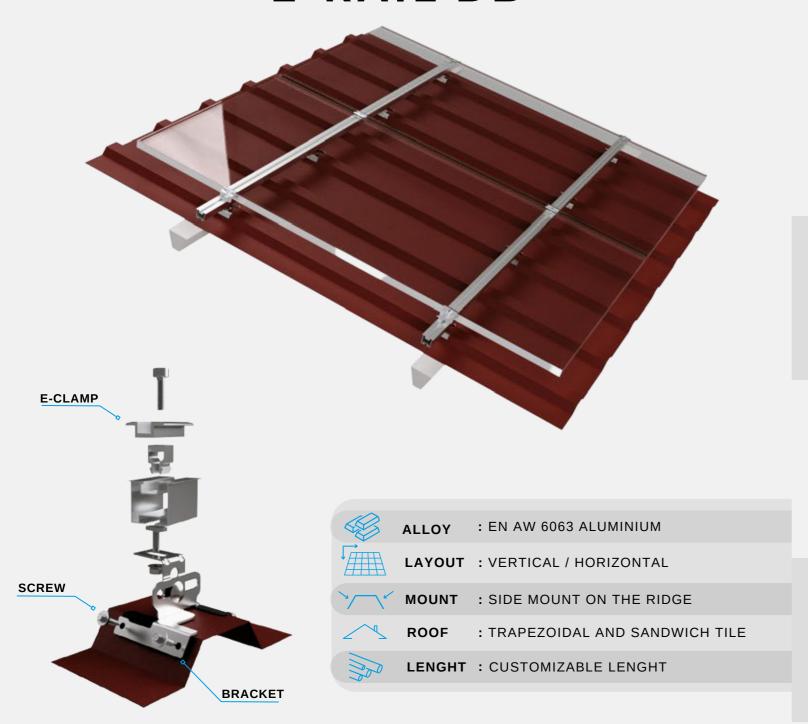
#### **PLACEMENT OF PV PANEL**

The pre-assembled clamp set is tightened at the appropriate torque values from the point recommended by the panel manufacturer.

SCAN IT FOR MANUAL VIDEOS



## E-RAIL DB



## 5 EASY STEPS TO INSTALL

### ASSEMBLING BRACKET PARTS

Rubber Gasket and AISI 304 Stainless Steel Bracket are pre-assembled. Top part of Double Bracket is also preassembled to other parts of Double Bracket with Bumper Bolt and Flanged Nut.







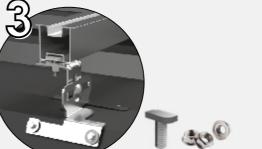
#### **SCREWING WITH GASKET**

The brakcet is fixed to the roof covering using Screw with Gaskets.









#### **MOUNTING OF RAIL**

The pre-assembled bracket is inserted into the rail profile by mounting T Bolt & Flanged Nut to top part of double bracket.





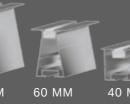
#### **MOUNTING BOLT & NUT**

The Clamp Set is pre-assembled and fixed to the rail profile with M8 Bolt.















### **PLACEMENT OF PV PANEL**

The pre-assembled clamp set is tightened at the appropriate torque values from the point recommended by the panel manufacturer.

> SCAN IT FOR MANUAL VIDEOS







Eurocode Design Criteria

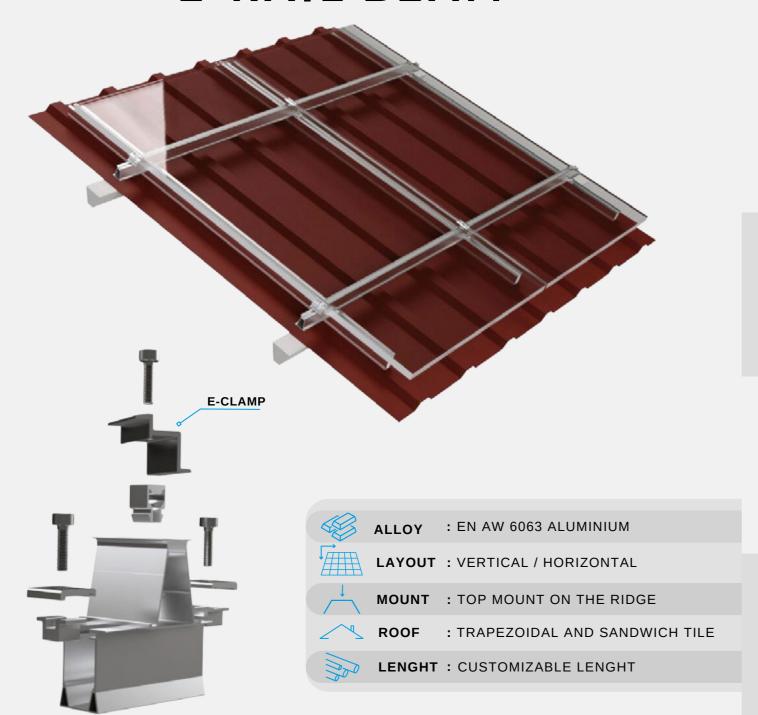


Cost-Effective Solutions



### TRAPEZOIDAL ROOF MOUNTING SYSTEMS

## **E-RAIL BEAM**

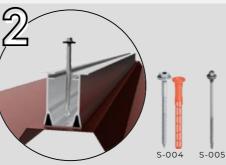


## 5 EASY STEPS TO INSTALL



#### **BANDING EPDM TAPE**

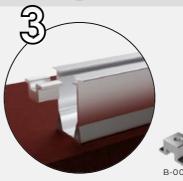
EPDM Tape is used to ensure the impermeability between the rail profile and the roof covering.



#### **SCREWING WITH GASKET**

The rail profile is fixed to the roof covering using Self Drill Screw with Gaskets.





#### MOUNTING NUT TO RAIL

Inserting the nut into the rail profile from the side and bringing it to the planned position.



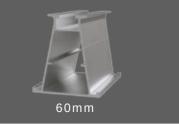
#### **MOUNTING BOLT & CLAMP**

The Clamp Set is pre-assembled and fixed to the rail profile with M8 Bolt to Side Connector.





### HEIGHT **OPTIONS**









#### PLACEMENT OF PV PANEL

The pre-assembled clamp set is tightened at the appropriate torque values from the point recommended by the panel manufacturer.



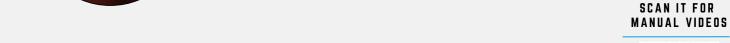








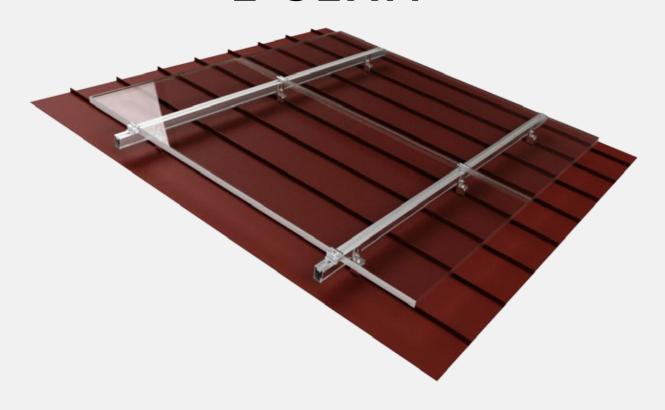


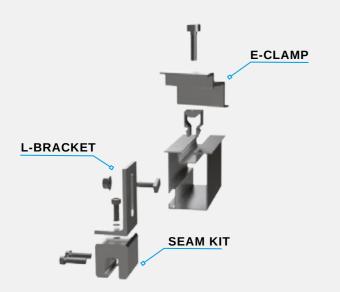






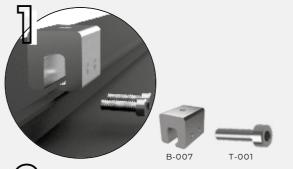
### E-SEAM







## EASY STEPS TO INSTALL



#### **MOUNTING SEAM KIT**

The Seam Kit clamped to the roof covering is fixed with x2 M8 Bolts.



#### **MOUNTING L BRACKET & T BOLT**

L-Bracket is mounted to seam kit with M8 bolt, T-Bolt & Flanged Nut are mounted to L-bracket.



#### **MOUNTING OF RAIL**

The rail profile is mounted with T-Bolt fixed to the L-Bracket.

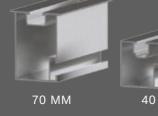


#### **MOUNTING BOLT & NUT**

The Clamp Set is pre-assembled and fixed to the rail profile with M8 Bolt.



### HEIGHT **OPTIONS**

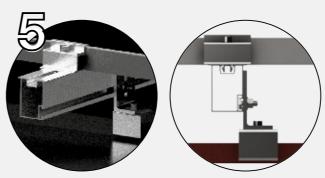












### PLACEMENT OF PV PANEL

The pre-assembled clamp set is tightened at the appropriate torque values from the point recommended by the panel manufacturer.

> SCAN IT FOR MANUAL VIDEOS







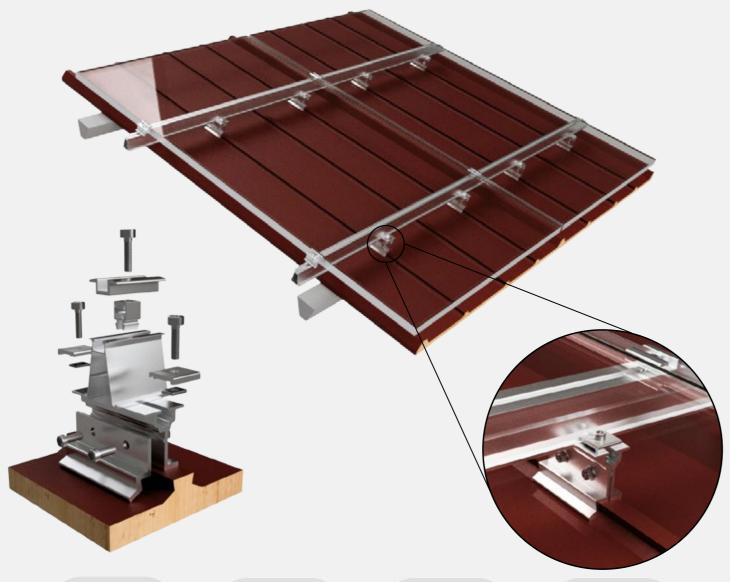
Eurocode Design Criteria

12 Years Warranty

Cost-Effective Solutions



## **SOLAR CAPPED CONNECTORS**





HEKIM PANEL



NUH PANEL



PANELSAN PANEL



ROLL PANEL



ATILLA PANEL



CIRCULAR SEAM



ASSAN PANEL



DAVUD PANEL



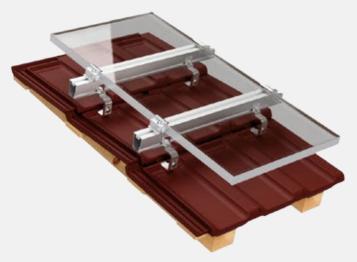


## E-HOOK

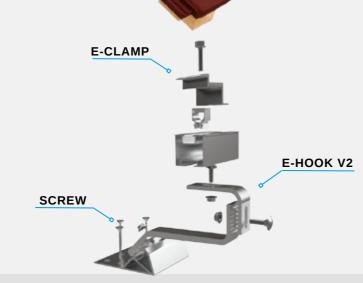
### SIDE MOUNT

## E-HOOK V2

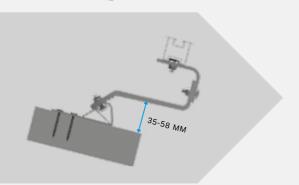
FLAT MOUNT













## MOUNTING **OPTIONS**

E-CLAMP

SCREW



E-HOOK







## Ease of Installation











# 5 EASY STEPS TO INSTALL



#### **SCREWING WITH WOOD SCREW**

The lower part of the **E-Hook** is mounted to the tile roof purlins with Wood Screws.





S-003

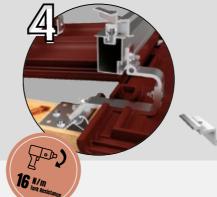
#### MOUNTING MIDDLE PART OF HOOK

The middle part of the E-Hook is mounted to the lower part with Bumper Bolt. Another bumper bolt is mounted on the middle part.



#### MOUNTING RAIL PROFILE

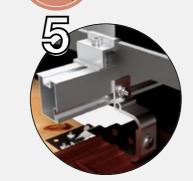
The upper part of the E-Hook is mounted on the middle part. The rail profile is mounted on the E-Hook with a T-Bolt.



### **MOUNTING BOLT & NUT**

The clamp set is pre-assembled and fixed to the rail profile with M8 Bolt.





#### PLACEMENT OF PV PANEL

The pre-assembled clamp set is tightened at the appropriate torque values from the point recommended by the panel manufacturer.



SCAN IT FOR

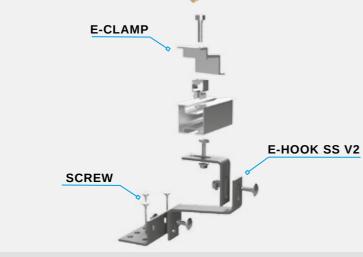
## E-HOOK SS E-HOOK SS V2

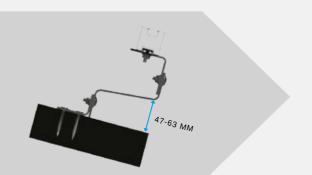
SIDE MOUNT















**SCREW** 















## 5 EASY STEPS TO INSTALL



#### **SCREWING WITH WOOD SCREW**

The lower part of the **E-Hook** is mounted to the tile roof purlins with **Wood Screws**.





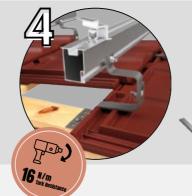
#### MOUNTING MIDDLE PART OF HOOK

The middle part of the E-Hook SS is mounted to the lower part with **Bumper Bolt**. Another bumper bolt is mounted on the middle part.



#### MOUNTING RAIL PROFILE TO T BOLT

The upper part of the E-Hook is mounted on the middle part. The rail profile is mounted on the E-Hook with a **T-Bolt**.



#### **MOUNTING BOLT & NUT**

The clamp set is pre-assembled and fixed to the rail profile with  ${\bf M8~Bolt}.$ 





#### PLACEMENT OF PV PANEL

The pre-assembled clamp set is tightened at the appropriate torque values from the point recommended by the panel manufacturer.







## **BLAST SYSTEM**









: EN AW 6063 ALUMINIUM



LAYOUT : VERTICAL / HORIZONTAL

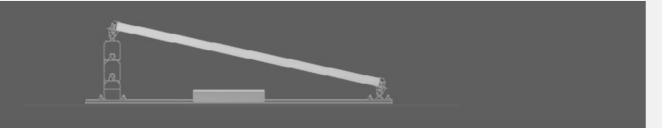


**ANGLE** : BETWEEN 5 - 20° (DEPENDS ON YOUR PV PANEL)



ROOF : FLAT

**LENGHT** : COMPATIBLE WITH PANEL LENGHT





E-CLAMP



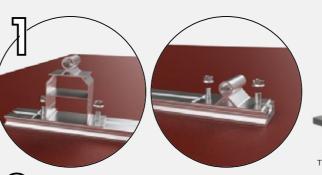








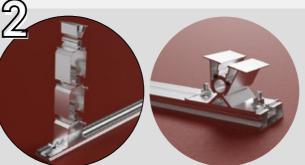
# EASY STEPS TO INSTALL



#### **MOUNTING CARRIER LEGS**

The carrier legs of the system are mounted on the rail profile with T-Bolt & Flanged Nut.





#### **MOUNTING OF RISER LEGS**

The riser legs are mounted on the carrier legs to provide the planned angle according to the pv panel height. Pointed, Washer Screws are mounted in order to increase the rigidity of the system.

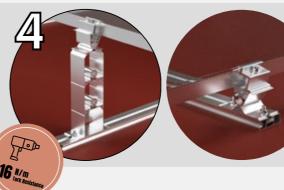








profile with M8 Bolt.





The pre-assembled clamp set is tightened at the appropriate torque values from the point recommended by the panel manufacturer.



#### PLACEMENT OF BALLAST CONCRETE

After the system installation is completed, the balance concrete is placed on the rail profile to increase the resistance against mechanical loads such as wind.

> SCAN IT FOR MANUAL VIDEOS

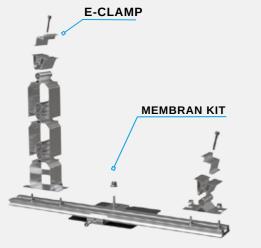




## FLAT MEMBRAN SYSTEM







145 km/h Wind Res



**ALLOY** : EN AW 6063 ALUMINIUM



LAYOUT : VERTICAL / HORIZONTAL



**ANGLE** 



: BETWEEN 5 - 20° (DEPENDS ON YOUR PV PANEL)



**ROOF** : FLAT MEMBRAN



**LENGHT**: COMPATIBLE WITH PANEL LENGHT





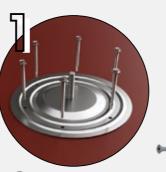








## EASY STEPS TO INSTALL



#### **MOUNTING STEEL PLATE**

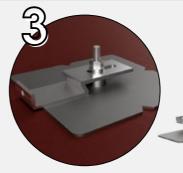
The stainless steel plate is mounted with 6 Membrane Screws.





#### **MOUNTING PIECE OF MEMBRANE**

The membrane piece is mounted to the pre-assembled steel plate. It is adhered to the existing membrane with the help of a heat gun and roller.



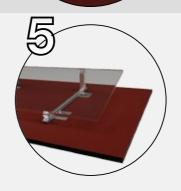
#### MOUNTING MEMBRANE CONNECTOR

The connector part is mounted on the M10 Rod with Flanged Nut.



#### MOUNTING RAIL TO CONNECTOR

The rail profile is mounted to the connector with M8 Bolt.



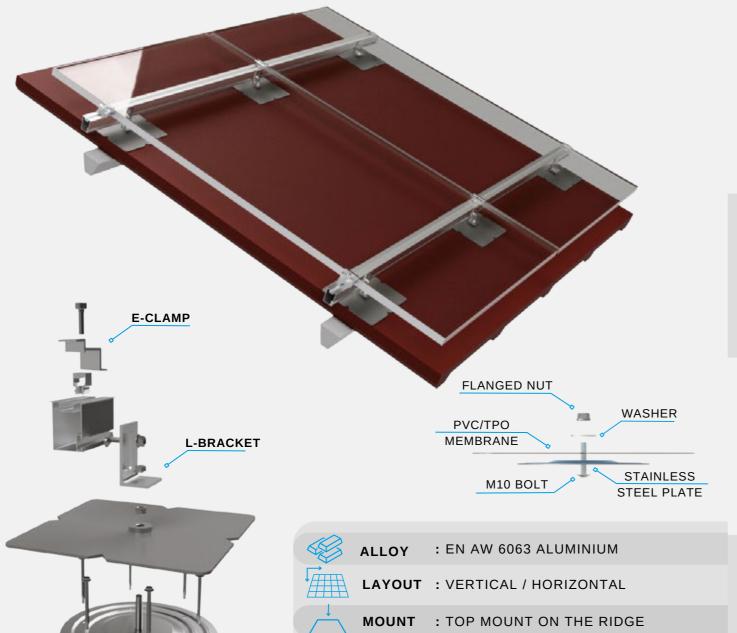
#### **REST OF INSTALLATION**

You can see the rest of the assembly on the triangular blast system page.

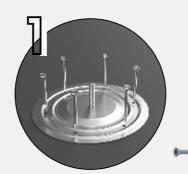




## E-RAIL M



# EASY STEPS TO INSTALL



#### **MOUNTING STEEL PLATE**

The stainless steel plate is mounted with 6 Membrane Screws.

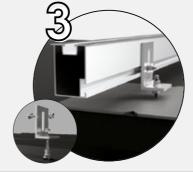




S-007

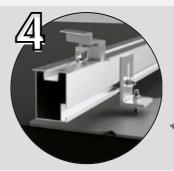
#### **MOUNTING PIECE OF MEMBRANE**

The membrane piece is mounted to the pre-assembled steel plate. It is adhered to the existing membrane with the help of a heat gun and roller.



#### MOUNTING L-BRACKET & T-BOLT & RAIL

L-Bracket is mounted to rod with flanged nut, T-Bolt & Flanged Nut are mounted to L-Bracket. The rail profile is mounted with T-Bolt fixed to the L-Bracket.



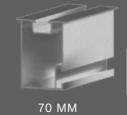
#### **MOUNTING BOLT & NUT**

The clamp set is pre-assembled and fixed to the rail profile with M8 Bolt.



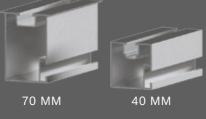
B-005 T-002 T-005

## HEIGHT **OPTIONS**





**LENGHT**: CUSTOMIZABLE LENGHT







Worldwide Supply Service



Criteria

12 Years

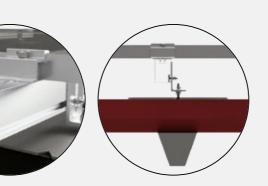
Warranty



Solutions

: TRAPEZOIDAL AND SANDWICH TILE





#### PLACEMENT OF PV PANEL

The pre-assembled clamp set is tightened at the appropriate torque values from the point recommended by the panel manufacturer.



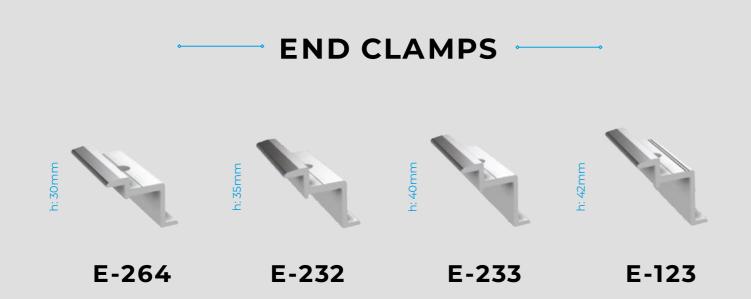


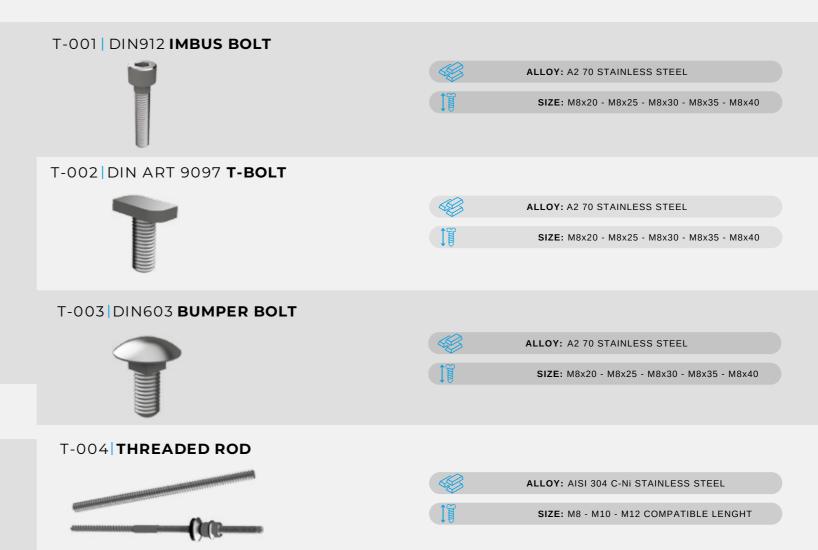
40 www.**eraaluminyum**.com.tr

Ease of Installation

## **CLAMPS**

## **THREADEDS**













## **SCREWS**

## **NUTS & BRACKETS**

#### S-001 | SELF-DRILLING SCREW



ALLOY: BIMETAL	
<b>SIZE</b> : 5,5x25 MM	

#### B-001 | E-159 **SOLAR MOUNTING NUT**





#### S-002 | DIN933 TRIANGULAR SYSTEM SCREW



ALLOY: HARDENED STEEL	
<b>SIZE</b> : 5,5x25 MM	

B-002 | E-279 **SOLAR MOUNTING NUT** 





S-003 | WOOD SCREW





**B-003 DOUBLE BRACKET** 





#### S-004 | SDF-KB-10H CONCRETE PURLIN SCREW





**B-004 SINGLE BRACKET** 





#### S-005 | JT3-D-6H STEEL PURLIN SCREW



ALLOY: A2 STAINLESS STEEL	
<b>SIZE:</b> 67 - 267 MM	

B-005 | L-BRACKET



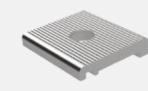


#### S-006 DIN 7504K **DRILL-HEAD SCREW**



ALLOY: HARDENED STEEL	
<b>SIZE:</b> 25 - 80 MM	

B-006 E-222 **SIDE CONNECTOR** 



	ALLOY: EN AW 6063 ALUMINIUM	
<b>↑₽</b>		
	SIZE: 34 MM	

#### S-007 | TKR-4-4,8 MEMBRANE SCREW



	ALLOY: HARDENED STEEL	
<b>€Innin</b>	<b>SIZE:</b> 70 - 110 MM	

#### B-007 | E-223 SEAM CONNECTOR



ALLOY: EN AW 6063 ALUMINIUM	
SIZE: 50 MM	

### **FASTENERS & ACCESORIES**

## **SEALING**

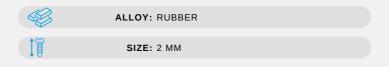






B-002 | RUBBER SEAL





B-003 | MEMBRANE CONNECTOR



