

TPH-A



PRODUCT DESCRIPTION

- Pre-assembled aluminium opened triangle

CHARACTERISTICS

- Inclined structure for installation of roof-mounted solar panels.
- Pre-assembled product.
- Includes 4 profiles that make up the structure, an upper section, two lower sections, and a section for the base, all manufactured from EN AW 6063-T6 extruded aluminium.
- Includes 3 **DIN-6921 M8x50** bolts, 3 **DIN-6923 M8** nuts, 2 **DIN-6921 M8x16** bolts, 2 **DIN-125 M8** plain washer, 2 **M8x23** coupling nuts y 1 **M8x25** coupling nut, all manufactured in A2-70 stainless steel.
- For outside use.
- Designed for **triangular aluminium systems horizontally assembled**.
- Wide range of inclination available: 5°, 10°, 15°, 20°, 25° y 30°.
- Secure folding position with incorporated fixture.
- Option of horizontally mounting solar panels up to 1150mm.
- Central upper profile groove compatible with SW13 hexagonal socket.
- Option for triangles in sizes manufactured to order on request.
- Available in anodized.

APPLICATIONS / MOUNTING ACCESSORIES



TPA-P



ABEI5519

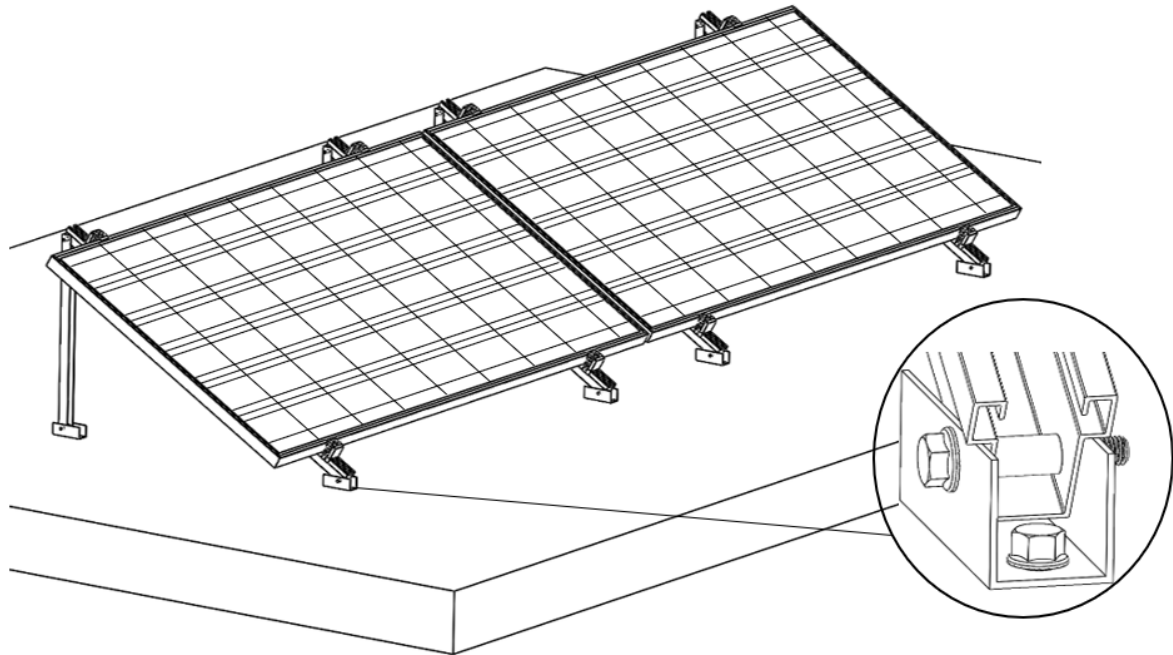
If it is necessary to install braces between adjoining triangles, **TPA-P** "strut profiles for pre-assembled aluminium triangles" should be used. Strut profiles are diagonally attached to profile bars of the two corresponding triangles, placing them in diagonal position, and using **ABEI5519** A2-70 stainless steel self-drilling screws.

BASE MATERIAL / DIRECT MOUNTING

See technical data sheet:

- ST-PHA: Opened triangular aluminium mounting systems. Assembled fixing.

APPLICATION EXAMPLES



Application example 1: Mounting on concrete roof

1.RANGE

ITEM	CODE	PHOTO	DESCRIPTION	ANGLE	LENGTH	MATERIAL
1	TPHA051225		Pre-assembled aluminium opened triangle.	5°	1225 mm	 EN AW 6063-T6
						 A2-70
2	TPHA101225		Pre-assembled aluminium opened triangle	10°	1225 mm	 EN AW 6063-T6
						 A2-70
3	TPHA151225		Pre-assembled aluminium opened triangle.	15°	1225 mm	 EN AW 6063-T6
						 A2-70
4	TPHA201225		Pre-assembled aluminium opened triangle.	20°	1225 mm	 EN AW 6063-T6
						 A2-70
5	TPHA251225		Pre-assembled aluminium opened triangle.	25°	1225 mm	 EN AW 6063-T6
						 A2-70

6	TPHA301225		Pre-assembled aluminium opened triangle.	30°	1225 mm	 EN AW 6063-T6
						 A2-70

2. INSTALLATION INFORMATION

2.1 TPH-A Pre-assembled aluminium opened triangle

Materials	Assembly accessories		
 EN AW 6063-T6	 A2-70	 TPA-P Strut profile for TPA-R	 ABEI5519 A2 DIN-7504K stainless steel

BASE MATERIAL/FIXING

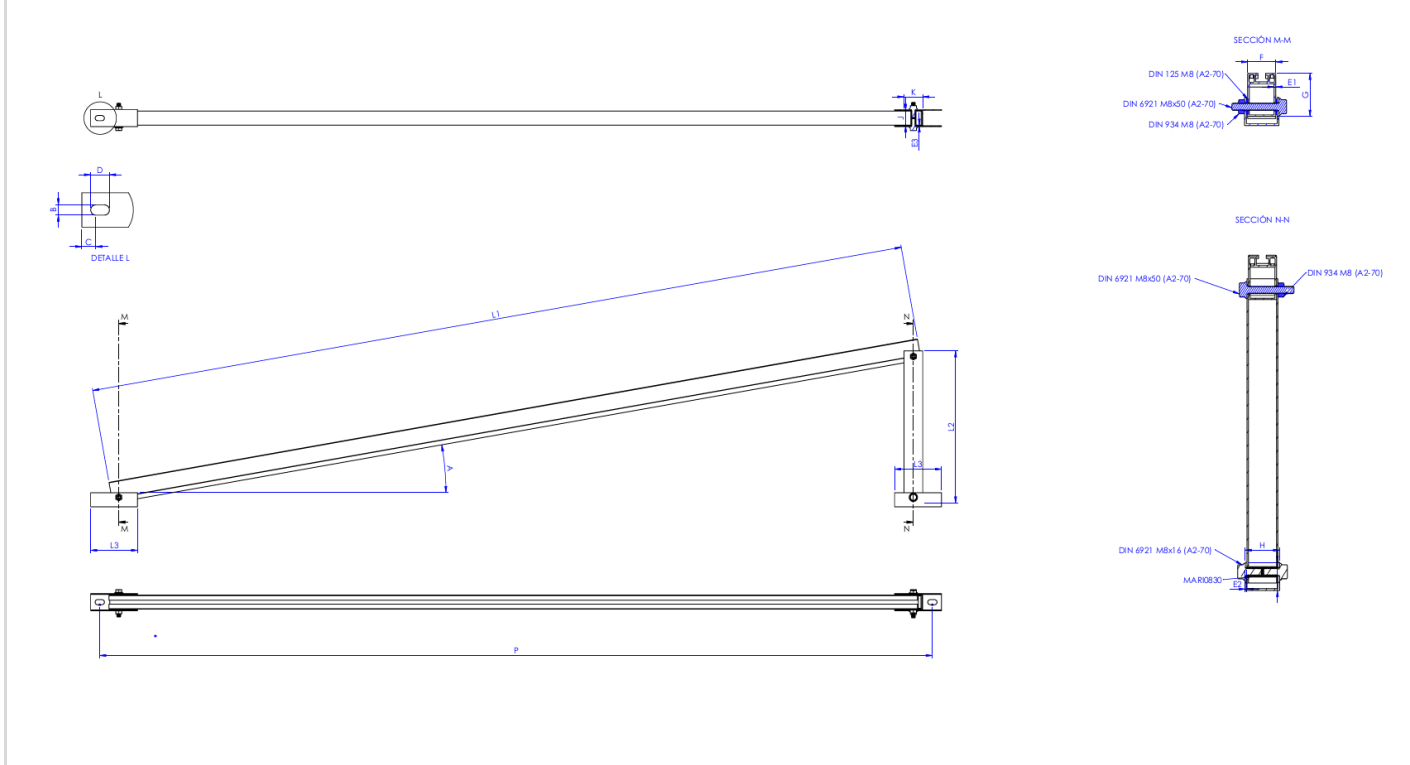
See technical data sheet:

- **ST-PHA:** Opened triangular aluminium mounting system.

Measurement table 1

Code	A (°)	L1 (mm)	L2 (mm)	L3 (mm)	E1 (mm)	E2 (mm)	E3 (mm)	F (mm)	G (mm)	H (mm)	I (mm)	J (mm)	K (mm)	L (mm)
TPHA051225	5	1225	128	100	1,5	2,0	2,0	41	47	36	37	30	32	1225
TPHA101225	10	1225	232	100	1,5	2,0	2,0	41	47	36	37	30	32	1225
TPHA151225	15	1225	334	100	1,5	2,0	2,0	41	47	36	37	30	32	1225
TPHA201225	20	1225	433	100	1,5	2,0	2,0	41	47	36	37	30	32	1225
TPHA251225	25	1225	530	100	1,5	2,0	2,0	41	47	36	37	30	32	1225
TPHA301225	30	1225	622	100	1,5	2,0	2,0	41	47	36	37	30	32	1225

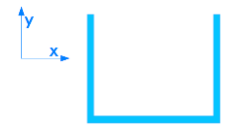

Drawing



Mechanical properties of the material

	Yield strength $F_{y0,2}$ (N/mm ²)	Ultimate load F_u (N/mm ²)	Elastic modulus E (N/mm ²)	Transverse elastic modulus G (N/mm ²)	Linear expansion coefficient α ($\mu\text{m} / \text{C}^\circ$)	Specific weight ρ (Kg/m ³)
EN AW-6063-T6 Aluminium	170	215	69.500	26.100	23,5	2.700
A2-70 Stainless steel	450	700	210.000	81.000	17,3	7.850

Mechanical properties of the profiles

	Area S (cm ²)	Moment of inertia I_x (cm ⁴)	Moment of inertia I_y (cm ⁴)	Linear Weight W (kg/m)
 Upper profile	2,38	3,93	7,78	0,64
 Lower profile	2,11	3,71	3,51	0,59
 Profile bar	1,81	2,02	4,01	0,48