

**TPH-C**

**PRODUCT DESCRIPTION**

- Pre-assembled aluminium closed triangle.

**CHARACTERISTICS**

- Inclined structure for installation of roof-mounted solar panels.
- Pre-assembled product.
- Includes 3 long profiles that make up the structure, an upper section, a lower section, and a base, manufactured from EN AW 6063-T6 extruded aluminium.
- Includes 3 **DIN-6921 M8x50** bolts, 3 **DIN-6923 M8** nuts, 2 **DIN-125 M8** plain washer, 2 **M8x23** coupling nut y 1 **M8x25** coupling nut, all manufactured in A2-70 stainless steel.
- For outside use.
- Design 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**

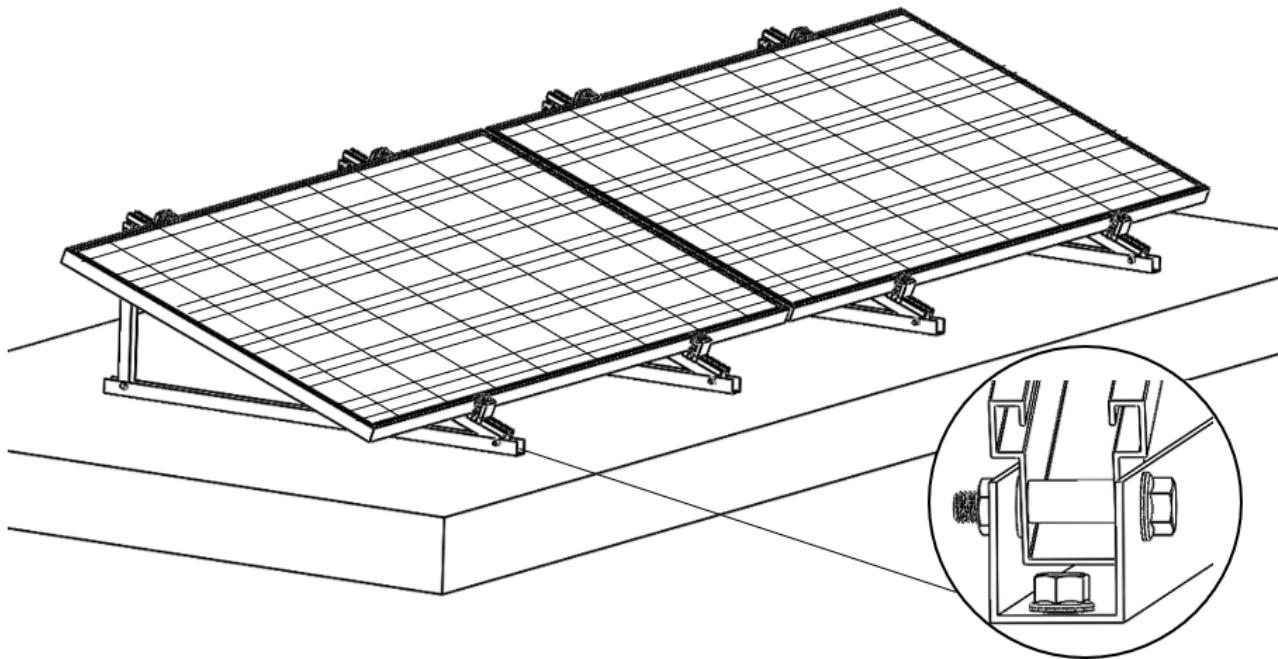
If it is necessary to install braces between adjoining triangles, **TPA-P** “strut profiles for pre-assembled aluminium triangles” should be used. Strut profiles are diagonally attached to profile bars of the two corresponding triangles using **ABEI5519** A2-70 stainless steel self-drilling screws.

**BASE MATERIAL/DIRECT MOUNTING**

See technical data sheet:

- ST-PHC: Closed triangular aluminium mounting system. Assembled fixing.

APPLICATION EXAMPLE



Application example 1: Assembly on sandwich panel roof.

1. RANGE

ITEM	CODE	PHOTO	DESCRIPTION	ANGLE	LENGTH	MATERIAL
1	TPHC051225		Pre-assembled aluminium closed triangle.	5°	1225 mm	EN AW 6063-T6 A2-70
3	TPHC101225		Pre-assembled aluminium closed triangle.	10°	1225 mm	EN AW 6063-T6 A2-70
5	TPHC151225		Pre-assembled aluminium closed triangle	15°	1225 mm	EN AW 6063-T6 A2-70
7	TPHC201225		Pre-assembled aluminium closed triangle	20°	1225 mm	EN AW 6063-T6 A2-70
9	TPHC251225		Pre-assembled aluminium closed triangle	25°	1225 mm	EN AW 6063-T6 A2-70

11	TPHC301225		Pre-assembled aluminium closed triangle	30°	1225 mm	 EN AW 6063-T6  A2-70
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## 2. INSTALLATION INFORMATION

### 2.1 TPH-C

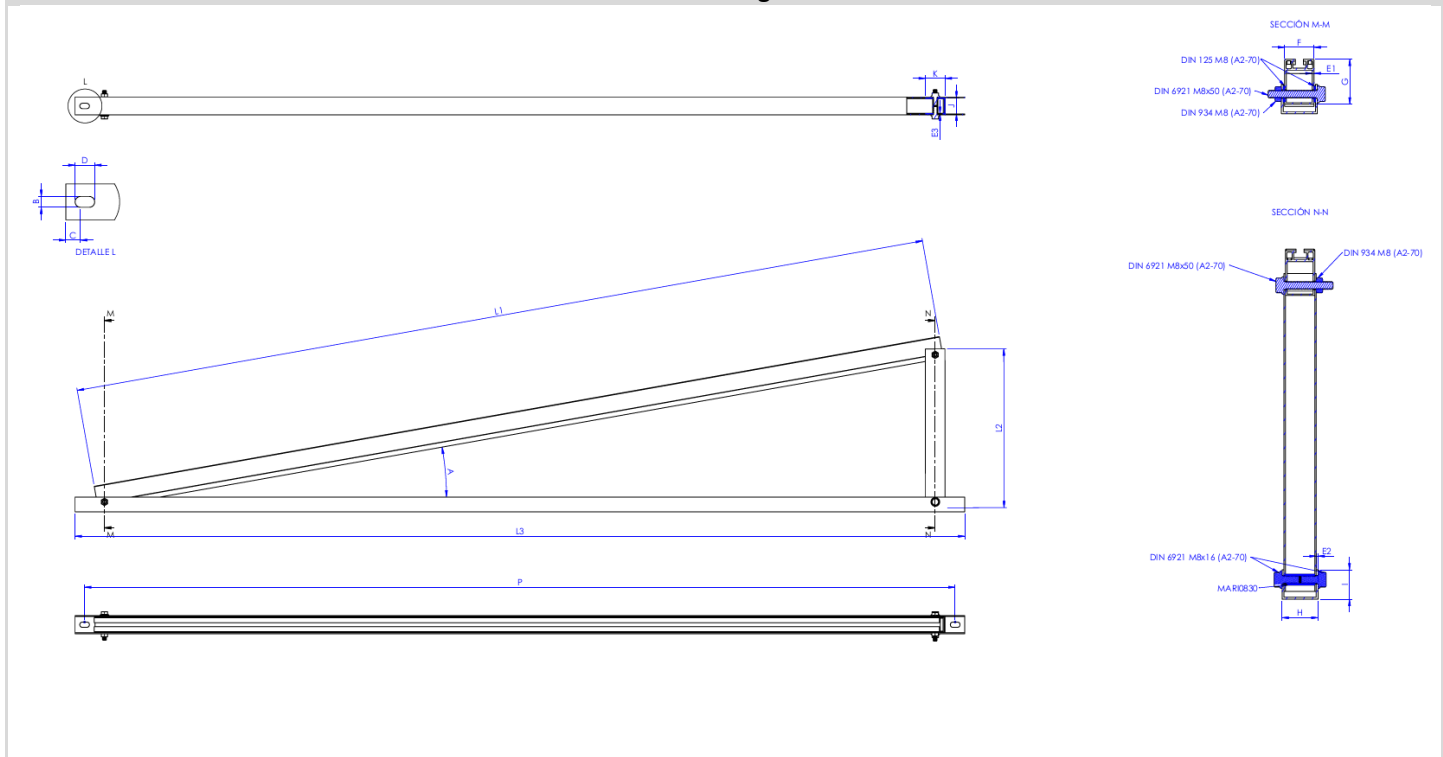
### Pre-assembled aluminium closed triangle

	Materials		Assembly accessories	
	 AW 6063-T6	 A2-70	 TPA-P Strut profile for TPA-P	 ABE15519 A2 DIN-7504K stainless steel
<b>Base Material/Fixing</b>				
See technical data sheet: <ul style="list-style-type: none"> <li>• <b>ST-PHC:</b> Closed triangle aluminium mounting system. Assembled fixing.</li> </ul>				

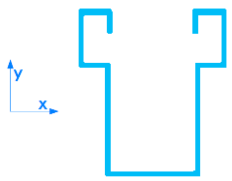
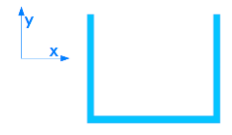

Measurement table 1

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)	P (mm)
TPHC051225	5	1225	128	1310	1,5	2,0	2,0	41	47	36	37	30	32	1280
TPHC101225	10	1225	232	1300	1,5	2,0	2,0	41	47	36	37	30	32	1270
TPHC151225	15	1225	334	1277	1,5	2,0	2,0	41	47	36	37	30	32	1247
TPHC201225	20	1225	433	1245	1,5	2,0	2,0	41	47	36	37	30	32	1215
TPHC251225	25	1225	530	1205	1,5	2,0	2,0	41	47	36	37	30	32	1175
TPHC301225	30	1225	622	1155	1,5	2,0	2,0	41	47	36	37	30	32	1125

### Drawing



Mechanical properties of the material						
	Yield strength $F_{y0,2}$ (N/mm <sup>2</sup> )	Ultimate load $F_u$ (N/mm <sup>2</sup> )	Elastic modulus $E$ (N/mm <sup>2</sup> )	Transverse elastic modulus $G$ (N/mm <sup>2</sup> )	Linear expansion coefficient $\alpha_L$ ( $\mu m / C^\circ$ )	Specific weight $\rho$ (Kg/m <sup>3</sup> )
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 <sup>2</sup> )	Moment of inertia $I_x$ (cm <sup>4</sup> )	Moment of inertia $I_y$ (cm <sup>4</sup> )	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