



Hebei Longze Metal Products Manufacturing Co., LTD

Technical Data Sheet: Triangle Adjustable Tilt Solar Mounting Brackets

Product Overview

Brand: Longze Fasteners

Product Name: Triangle Adjustable Tilt Mounting Brackets / PV Racking Components

International Standards: AS/NZS 1170.2 / JIS C 8955:2017 / Eurocode 3

Material Grade: Aluminum Alloy AL6005-T5 (High Strength)

Hardware Material: Stainless Steel A2-70 or A4-80 (Longze Standard)

Application Scenarios: Flat Concrete Roofs, Trapezoidal Metal Roofs, Ground-Mounted Systems requiring seasonal tilt adjustments.

Electrical Specifications (STC: 1000W/m², 25°C)

Technical Specifications

<i>Component Item</i>	<i>Specification / Value</i>	<i>Material</i>
<i>Tilt Angle Range</i>	<i>10° - 15°, 15° - 30°, 30° - 60° (Adjustable)</i>	<i>AL6005-T5</i>
<i>Profile Thickness</i>	<i>3.0 mm - 4.5 mm (Heavy Duty)</i>	<i>AL6005-T5</i>
<i>Surface Treatment</i>	<i>Anodized Aluminum, Thickness ≥ 12µm</i>	<i>AA Class 10/15</i>
<i>Max Wind Load</i>	<i>Up to 60 m/s</i>	<i>-</i>
<i>Max Snow Load</i>	<i>Up to 1.6 kN/m²</i>	<i>-</i>

***Note: Pre-assembled structure available to reduce on-site installation time by 40%.**

Mechanical & Physical Properties(AL6005-T5)

<i>Property Item</i>	<i>Value / Requirement</i>	<i>Testing Standard</i>
<i>Tensile Strength (\$R_m\$)</i>	$\geq 260 \text{ MPa}$	<i>ASTM B221</i>
<i>Yield Strength (\$R_{p0.2}\$)</i>	$\geq 240 \text{ MPa}$	<i>ASTM B221</i>
<i>Hardness</i>	$\geq 85 \text{ HW (Webster Hardness)}$	-
<i>Corrosion Resistance</i>	<i>Excellent (C4/C5 Environment Ready)</i>	<i>ISO 9223</i>

"Recommended with: Longze Solar Mounting Fasteners".

Eric's Professional Advice:

1. Seasonal Efficiency: For high-latitude regions (like Iceland), we recommend our 30°-60° adjustable series to maximize solar intake during winter months.

2. Structural Integrity: Always use Longze A4-80 Stainless Steel bolts to connect the triangle brackets to the rails to prevent galvanic corrosion and ensure a 25-year structural lifespan.

3. Foundation Matching: These brackets are perfectly compatible with our HDG Ground Screws for quick ground-mount setups without concrete.

Contact Longze Fasteners:

Sales Director: Eric

Email: eric@lzfasteners.com



Website: www.lzfasteners.com

Location: Jili Commercial City, Yongnian District, Handan City, Hebei Province, China