



Hebei Longze Metal Products Manufacturing Co., LTD

Technical Data Sheet: High-Strength Solar PV Mounting Rails

Product Overview

Brand: Longze Fasteners

Product Name: Solar PV Mounting Rails / Aluminum Racking Profiles

International Standards: AS/NZS 1170.2 / ASTM B221 / EN 755

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

Compatible Hardware: DIN 6923 / ISO 4161 / ASME B18.16.4 (Serrated Flange Nuts)

Application Scenarios: Residential Rooftops, Commercial Solar Carports, Large-scale Ground Mount Projects.

Dimensional & Technical Specifications

Technical Specifications

<i>Profile Series</i>	<i>Standard Length (L)</i>	<i>Wall Thickness (t)</i>	<i>Surface Treatment</i>
<i>LZ-R40 Series</i>	<i>2100 / 4200 / 6300 mm</i>	<i>1.3 mm - 1.5 mm</i>	<i>Clear Anodized</i>
<i>LZ-R50 Series</i>	<i>2100 / 4200 / 6300 mm</i>	<i>1.8 mm - 2.2 mm</i>	<i>Clear / Black Anodized</i>
<i>LZ-HD Industrial</i>	<i>Customizable</i>	<i>2.5 mm+ (Heavy Duty)</i>	<i>Anodized ≥ 12μm</i>

Note: Rails can be pre-cut to specific project lengths upon request.

Mechanical & Load Performance

<i>Property Item</i>	<i>Specification / Value</i>	<i>Standard</i>
<i>Yield Strength (\$R_{p0.2}\$)</i>	$\geq 240 \text{ MPa}$	ASTM B221
<i>Tensile Strength (\$R_m\$)</i>	$\geq 260 \text{ MPa}$	ASTM B221
<i>Anodized Thickness</i>	AA Class 10 / Class 15	ISO 7599
<i>Wind Load Resistance</i>	Up to 60 m/s	Certified System
<i>Snow Load Capacity</i>	Up to 1.4 kN/m ²	Certified System

"Recommended with: Longze Solar Mounting Fasteners".

Eric's Professional Advice:

1.Fastener Matching: To ensure maximum vibration resistance, we recommend pairing these rails with our DIN 6923 Serrated Flange Nuts and A4-80 T-Bolts. The serrations on the nut bite into the rail surface, providing superior locking performance.

2.Anti-Corrosion: Our AL6005-T5 rails feature a high-micron anodized layer that prevents white rust, even in high-humidity or coastal environments.

3.Installation Tip: Use our standardized rail splices for seamless connection between rails, ensuring structural continuity and easy thermal expansion management.

Contact Longze Fasteners:

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