



Hebei Longze Metal Products Manufacturing Co., LTD

Technical Data Sheet: Galvanized C-Shaped Steel Solar Mounting Brackets

Product Overview

Brand: Longze Fasteners

Product Name: Galvanized C-Shaped Steel Solar Mounting Brackets / C-Channel Profiles

International Standards: ISO 1461 (Galvanizing) / ASTM A123 / EN 10219

Material Grade: Q235B / Q355B Carbon Steel (High Strength)

Surface Treatment: Hot-Dip Galvanized (HDG), Zinc coating thickness $\geq 80\mu\text{m}$

Application Scenarios: Utility-Scale Ground Mounts, Industrial Solar Farms, Highway Sound Barriers.

Dimensional & Technical Specifications

Technical Specifications

Profile Size (HWC)	Wall Thickness (t)	Standard Length (L)	Surface Finish
C41 * 41 * 10 mm	2.0 / 2.5 mm	3000 / 6000 mm	HDG (Hot-Dip Galv.)
C41 * 62 * 15 mm	2.5 / 3.0 mm	3000 / 6000 mm	HDG (Hot-Dip Galv.)
C100 * 50 * 20 mm	3.0 / 4.0 mm	Customizable	HDG (Hot-Dip Galv.)

***Note: Pre-punched holes (round or slotted) are available for rapid on-site assembly.**

Mechanical & Performance Properties

Property Item	Specification / Value	Standard
Tensile Strength (\$R_m\$)	370 - 500 MPa (Q235B) / 470 - 630 MPa (Q355B)	GB/T 700 / 1591
Yield Strength (\$R_{p0.2}\$)	≥ 235 MPa / ≥ 355 MPa	GB/T 700 / 1591
Zinc Coating Thickness	Average ≥ 85 μm	ISO 1461
Anti-Corrosion Life	25 - 50 Years (Depends on Environment)	-
Salt Spray Resistance	1500+ Hours (No Red Rust)	ASTM B117

"Recommended with: Longze Solar Mounting Fasteners".

Eric's Professional Advice:

1. Material Selection: For large-scale projects with high wind or snow loads, we strongly recommend Q355B steel. It offers significantly higher yield strength compared to Q235B, ensuring structural safety.

2. Fastener Synergy: To maintain the integrity of the galvanizing, use our DIN 6923 Serrated Flange Nuts. The serrations provide a secure lock into the C-channel without damaging the protective zinc layer excessively.

3. Corrosion Protection: For coastal installations, always specify a minimum Zinc coating of 100 μ m. Our HDG process ensures full coverage of both internal and external surfaces of the C-profile.

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