



# Revolutionize Your Solar Installations with Pre-Galvanized Top Hat Structures

#JamaanaInfraKo

Monthly Production Capacity : 4000 MT  
Can Accomodate to Generate 200MW



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## Our Solar Mounting Structures



### Top Hat Section Structures

Item/ Type	Pre-galvanized Top Hat Purlin
Thickness Range	0.8mm-2mm
Depth Range	60mm-120mm
Corrosion Protection	120 to 275 GSM
Steel Grade	YS 550 MPa

### C-Channel Steel Structures

Item/ Type	Pre-galvanized C-Channel
Thickness Range	1.6mm, 2.0mm, 2.5mm, 3mm
Depth Range	50mm-200mm
Corrosion Protection	120 to 275 GSM
Steel Grade	YS 550 MPa



## About Us

Hulas Infra is a trusted name in infrastructure solutions, specializing in premium-quality structural components for industrial, commercial, and renewable energy sectors. Our combined Top Hat and C Purlin Solar Profiles are engineered to deliver unmatched strength, durability, and efficiency for your solar projects.



# Why Choose Top Hat + C Purlin Solar Profiles?



## Key Benefits:

### Enhanced Structural Support

- The combination of Top Hat and C Purlins provides superior load-bearing capacity and stability.
- Designed for large-scale ground-mounted solar projects.

### Corrosion Resistance

- Manufactured from high-grade galvanized steel to withstand harsh environmental conditions.

### Cost Efficiency

- Lightweight design with optimized material usage reduces overall costs.
- Faster assembly with pre-drilled components, saving on labor.

### Flexibility and Customization

- Customizable configurations to suit diverse project requirements.

### Sustainability:

- Made from recyclable materials, supporting green construction goals.

## Applications:

- Utility-scale Solar Farms
- Commercial Solar Installations
- Hybrid Renewable Energy Projects



### Feature

- Steel Type
- Zinc Coating Thickness
- Wind Resistance
- Temperature Resistance
- Seismic Load Resistance
- Load Capacity
- Corrosion Resistance
- Tilt Adjustment

### Specification

- Pre-Galvanized Steel
- Up to 275 g/m<sup>2</sup>
- Up to 150 km/h (93 mph)
- From -40°C to 80°C
- Designed to withstand seismic loads as per local building codes and seismic zone requirements
- Designed to withstand up to 1,500 N/m<sup>2</sup>
- High resistance to salt, moisture, and UV rays
- Adjustable (specific angle per project needs)

## Solar Clamps & Accessories



Mid Clamp



End Clamp



U-Shaped Mid Clamp



Grounding Plate



T-bolt Kit



Earthing Lug Kit



Tile Roof Hook



Rail Splice



L-Feet



# Real World Applications & Benefits



Ground-mounted Solar System



Roof Solar System



Solar Street Lighting



Water Pumping Solar System



Agrivoltaic Systems



Solar Carports & EV Chargers



## Why HULAS INFRA?



### Customizable Designs

Tailored solutions to meet specific project needs.



### Innovative Technology

Advanced engineering for enhanced efficiency.



### Quality Assurance

High-quality materials ensuring durability and reliability.



### Strong Customer Support

Dedicated assistance throughout the project lifecycle.



### Cost-Effective

Competitive pricing that maintains quality standards.



### Safety Compliance

Strict adherence to safety standards.



### Timely Delivery

Consistent track record of meeting project deadlines.



### Collaborative Approach

Work closely with clients throughout the project.



### Sustainable Practices

Eco-friendly building options to minimize impact.

### Project Adaptability

Suitable for diverse geographical locations and varying environmental conditions.

### Reduced Foundation Requirements

Lightweight design reduces the need for heavy foundations, minimizing construction costs.

### Long-Term Durability

High corrosion resistance ensures a lifecycle of 25+ years, even in harsh climates.

### Faster ROI

Reduced material and installation costs enable quicker project payback periods.



# Optimized Structure (Top Hat + C Purlin Profiles): A Step Ahead in Strength and Stability

Aspect	Top Hat + C Purlin Profiles	Conventional Structures
Material Efficiency	Optimized for lightweight yet robust designs.	Heavier sections increase material usage and cost.
Load Distribution	Uniform load distribution over larger spans.	Requires more supports for the same span.
Installation Time	Pre-drilled holes and modular design reduce assembly time.	Custom drilling and additional components increase labor.
Corrosion Resistance	High-grade galvanized steel resists environmental damage.	Varies depending on material and coating used.
Cost Effectiveness	Lower material and transportation costs.	Higher costs due to bulkier sections.
Sustainability	Fully recyclable and environmentally friendly.	May not always use recyclable materials.

# Weight and Steel Consumption per MW Comparison: Conventional vs Optimized Structures

Category	Optimized Solar Structure	Conventional Solar Structure
Weight per MW	18 to 22 metric tons	20 to 40 metric tons
Example for 10 MW Plant	150 to 220 metric tons	200 to 400 metric tons
Key Factors Affecting Weight	Design, layout, steel profile (e.g., Top Hat, C-Purlins), material	Design, layout, soil/wind conditions, module type, material
Material Types	Pre-galvanized steel	Galvanized steel

For a large-scale solar project, the total tonnage depends on the capacity.  
For example:

- A 10 MW conventional solar plant would typically require 180 to 220 metric tons of mounting structures.
- In contrast, optimized designs using profiles like Top Hat and C Purlins can reduce steel consumption by 10-20%, lowering the weight to 18-22 metric tons per MW. This is one of the significant cost-saving advantages of modern structural solutions

