



**REDISCOVER
STEEL**

STEEL PURLIN & PUFF PANELS



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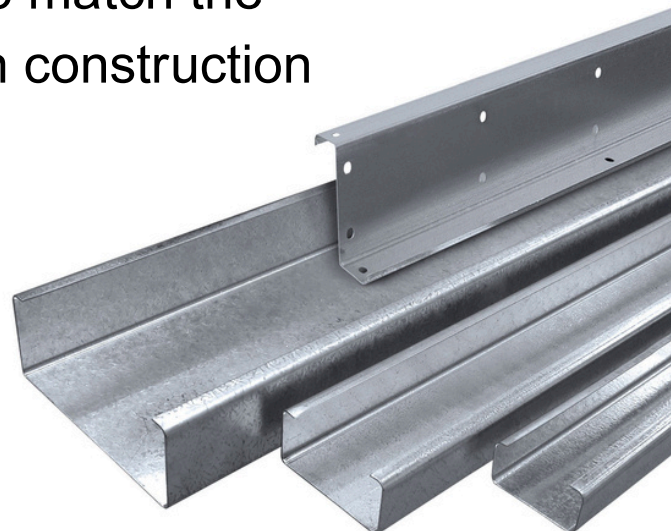
www.rediscoversteel.com

Introduction of Purlin System

Rediscover Steel offers advanced cold-formed steel purlin roof framing systems, engineered for structural integrity and environmental resilience. A typical system integrates four primary structural components to ensure maximum performance

- **Roof Sheathing (Panels):** Supports gravity and wind uplift while providing lateral support.
- **Purlins:** The primary load-carrying components, supporting sheathing and building frames.
- **Purlin Braces:** Critical for lateral and flexural-torsional support.
- **System Anchorage:** Restrains in-plane displacement via anti-roll clips or restraint braces.

Our systems utilize high-strength steel, often incorporating recycled content to match the sustainable demands of modern construction



Introduction of Purlin System

We manufacture two primary industry-standard shapes, designed for versatility and ease of assembly

Z-Section Purlins

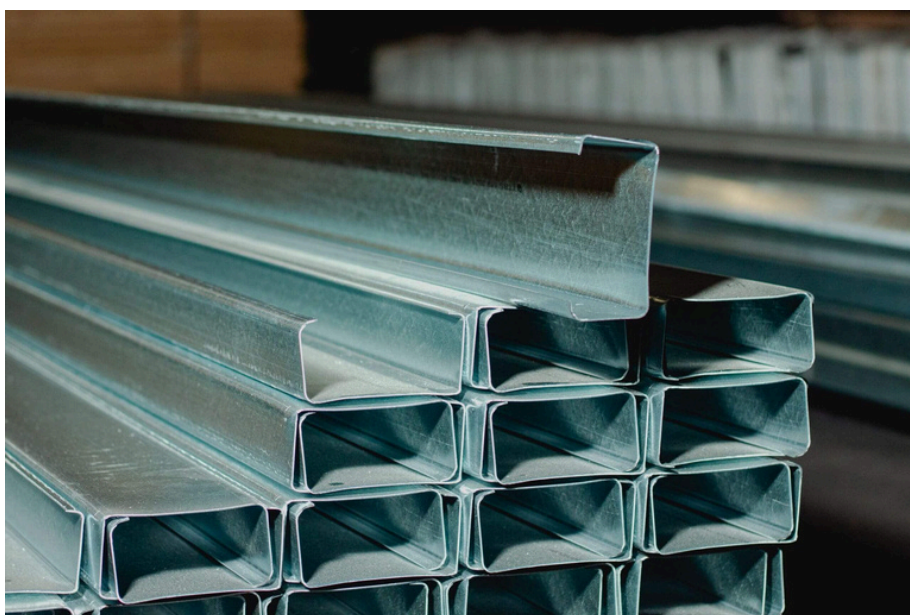


- **Point-Symmetric Design:** Engineered for efficient nesting and lapping.
- **Lapped Continuity:** Can be lapped to provide continuous span efficiency, significantly increasing load capacity.
- **Dynamic Response:** Designed to handle complex stresses on both low and steep slope roofs.

The Z alphabet and Z purlins share a similar form. They are typically made from rolled or cold-formed sheets. When compared to hot-rolled angles, they can save up to 50% on structural sheets. Because of their relatively high flexibility and lightweight nature, Z purlins are most commonly used in agricultural and industrial structures. This allows them to be used in a wide range of sizes.

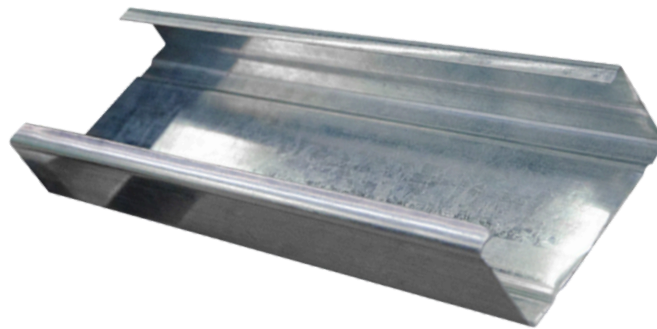
C-Section Purlins

- **Principal Axis Bending:** Simplifies design calculations due to bending about principal axes.
- **Structural Struts:** Frequently utilized as strut purlins to carry axial forces from end walls to bracing systems.



Key Factors to Consider for Purlins in Indian Climate

When considering purlins to be used in India, it's crucial to consider the climate, as India has a wide range of climates from hot and dry in the west to humid and coastal in the east.



1. Material Resistance:

In areas with high humidity or coastal climates, it is important to choose purlins made from corrosion-resistant materials like galvanized steel or aluminum.

2. Load-bearing Capacity:

Certain regions experience heavy monsoons, so it's vital to ensure that the purlins are strong enough to withstand the additional weight of water accumulation.

3. Wind Resistance:

India is prone to storms and high winds, especially in coastal and northern regions. Purlins should be selected to withstand high wind forces.

4. Seismic Activity:

Certain regions of India are seismically active. Purlins and their connections must be designed to withstand seismic forces and prevent damage during earthquakes.

5. Temperature Variations:

India experiences significant temperature fluctuations throughout the year. Purlins must be able to accommodate the expansion and contraction caused by these temperature changes without compromising structural integrity.





PUF Panels Engineered for Excellence

At **Rediscover Steel**, we are a trusted sandwich PUF panel manufacturer in India, providing high-quality, energy-efficient, and durable panel solutions for residential, commercial, and industrial applications. Our PUF panels are designed to deliver superior insulation, strength, and long-lasting performance for a wide range of construction needs.



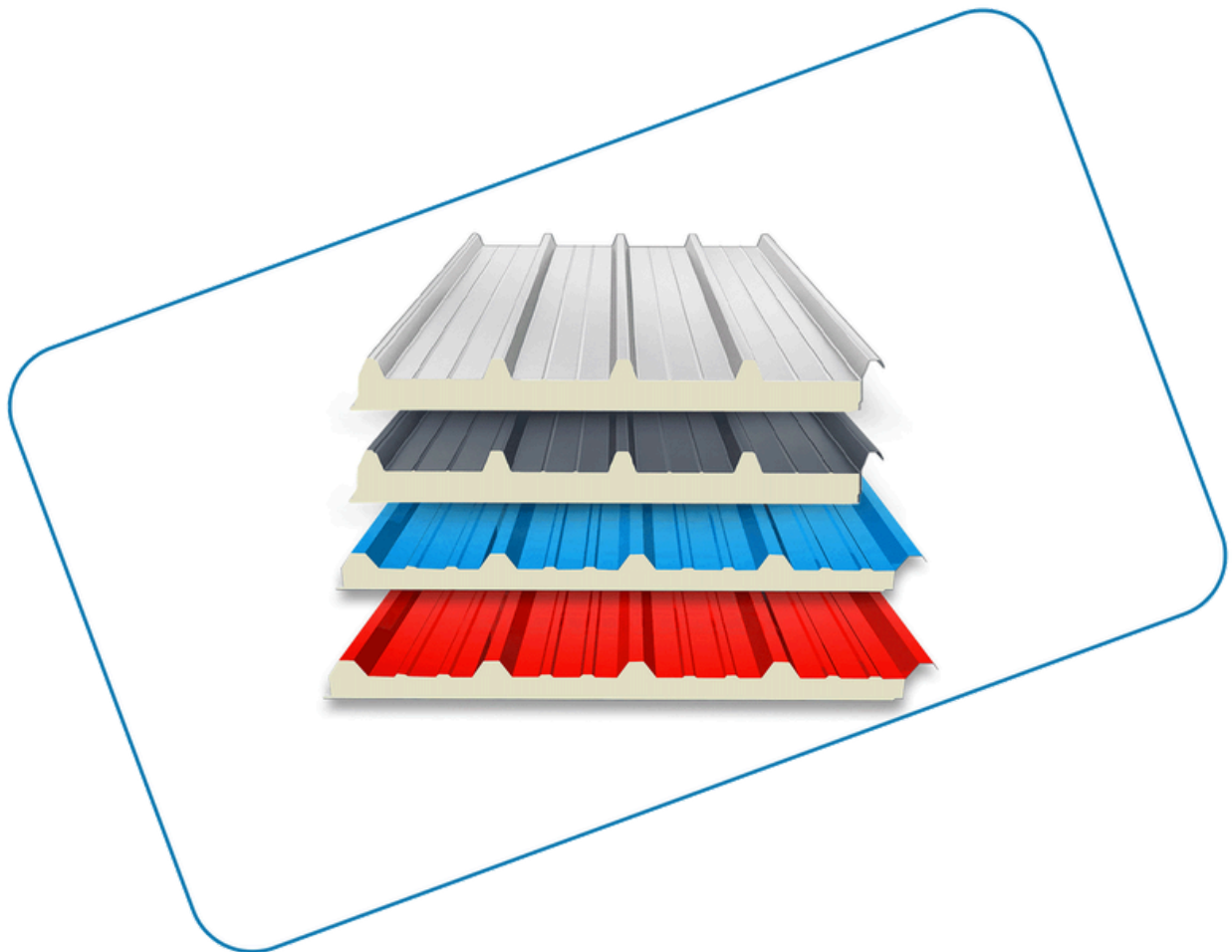


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What we Offer

Panels:

Sandwich Panels are insulated composite panels consisting of a high-performance insulation core bonded between metal sheets. Available with PUF, PIR and Rockwool insulation cores, these panels provide effective thermal insulation, structural durability, and weather resistance.

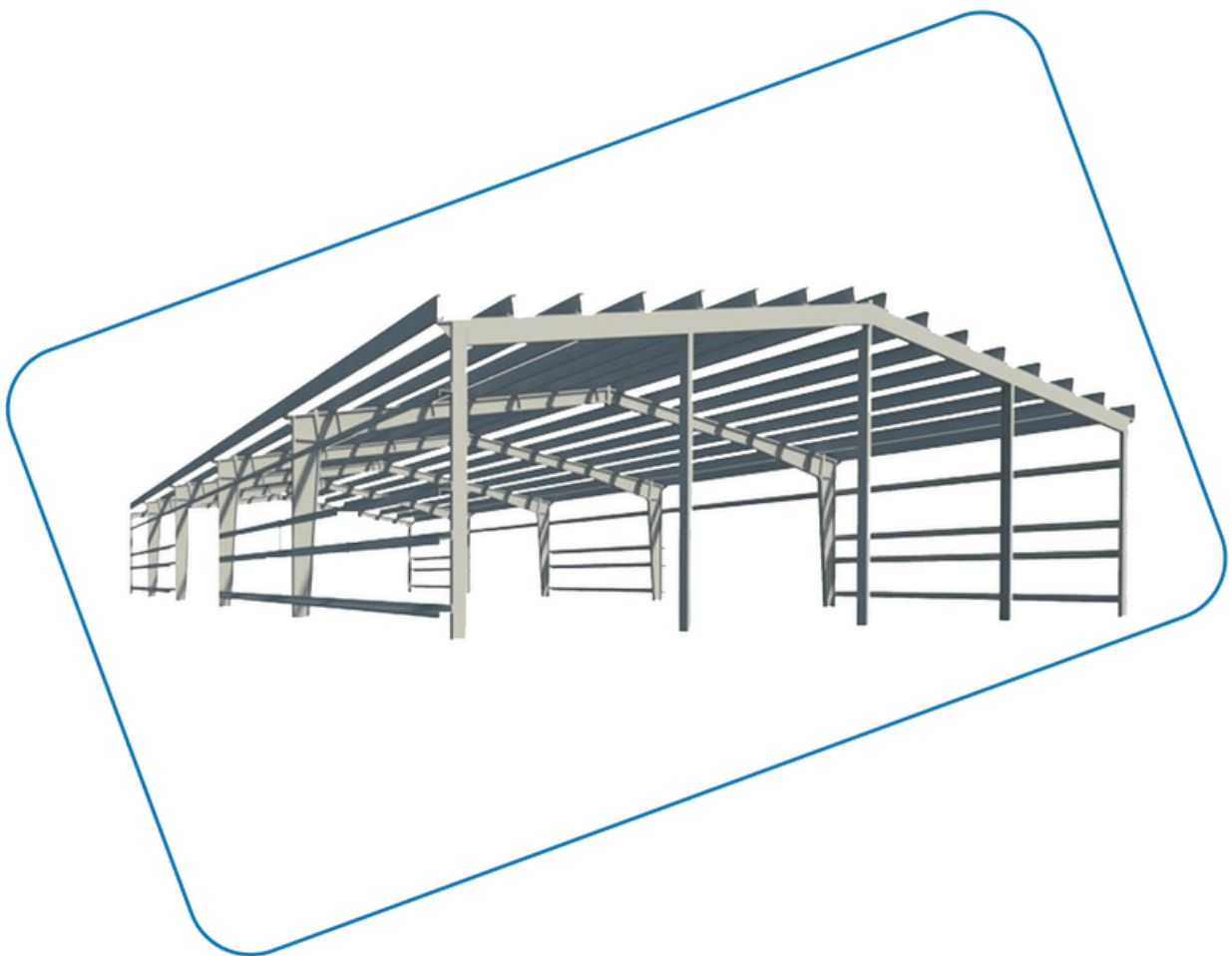




**REDISCOVER
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Pre Engineered Buildings:

Pioneering the next era of construction, our PEBs redefine how structures are designed, fabricated, and assembled, delivering unmatched efficiency, versatility, and cost-effectiveness.





Our Commitment

Rediscover Steel provides more than just components; we provide comprehensive structural solutions. Our engineering team assists with:

- Continuous span purlin design and analysis.
- Custom anchorage configuration and stiffness modeling.
- Site-specific load calculations (Gravity, Wind Uplift, Snow).



Advanced Manufacturing & Structural Design
Innovative Steel Solutions for the Modern World



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