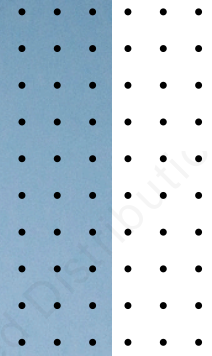




**Ecosteel
Source**



ROOFING & WALL PANELS
HANDMADE CLEANROOM PANELS
CATALOGUE

www.ecosteel.com

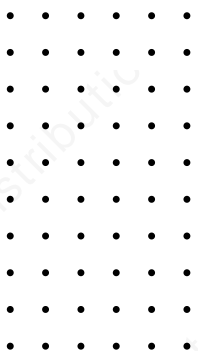
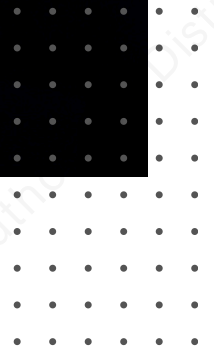


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WHO ARE WE

Ecosteel Source is a professional supplier of steel materials, offering Zinc-Aluminum-Magnesium (Z-A-M) coated steel, Galvalume (GL), pre-painted steel coils, and steel construction product made from that like Floor Decks, Steel Truss Floor Deck, Sandwich Panels (Hand-made & Machine-made), C/Z/U purlins, steel Studs, Tracks & Furring Channels, and Steel Accessories like Steel Strapping Seal.

With advanced processing equipment and strict quality control, we deliver durable, eco-friendly, and customized solutions for construction, industrial facilities, infrastructure, and cleanroom systems.

OUR STORY

Rooted in Nature. Committed to the Future.

Ecosteel Source was founded in Sichuan, a region known not only for its emerging industrial base, but also as the native home of the giant panda – a global symbol of ecological harmony. Inspired by this unique environment, we are deeply aware of the responsibility to balance industrial progress with environmental sustainability.

In today's fast-evolving steel industry, we believe that strength and sustainability should go hand in hand. Drawing from the panda's symbolism of balance and resilience, Ecosteel is committed to delivering steel solutions that combine durability with environmental responsibility.

Born in Sichuan – a place of strength and serenity – we carry the spirit of the giant panda into everything we build.



OUR STORY

Inspired by the panda. Built for a greener world.

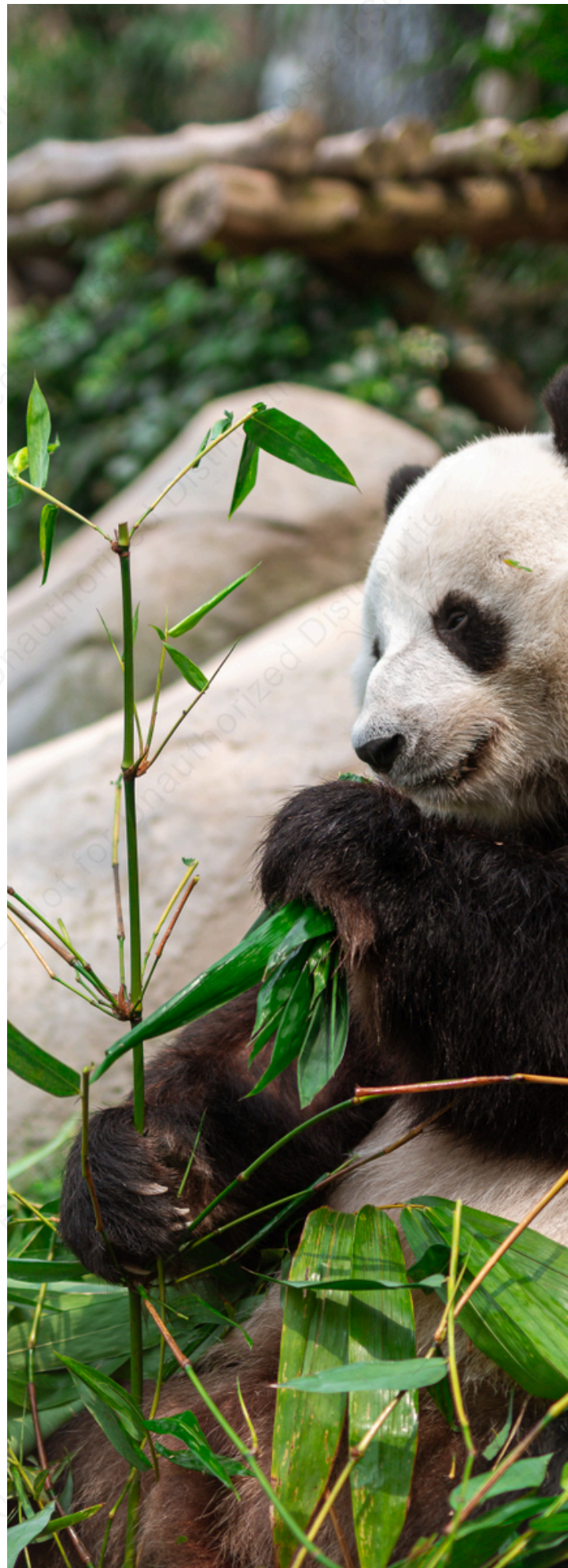
As both a materials supplier and a finished product manufacturer, we serve a wide range of industries — from industrial construction and cold chain logistics, to coastal projects and cleanroom environments. Whether it's floor decking, roofing panels, or structural components, we aim to reduce maintenance, extend service life, and minimize the carbon footprint of every building.

Our mission is to bring harmony between industry and ecology.

With every coil, panel, or beam we deliver, we take a step toward a greener construction future.

When you choose Ecosteel, you are not only choosing reliable steel products —

you are choosing a future where performance and sustainability work together.





PRODUCT OVERVIEW

- ☑ **Steel Building Materials:** Floor Deck System; Roofing & Wall Panels; Metal Studs & Purlins
- ☑ **Coils & Sheets:** Galvanized Steel (GI); Galvalume Steel (GL); Zinc-Aluminum-Magnesium (Z-A-M) coated steel, Pre-painted color coated steel (PPGI, PPGL)
- ☑ **Steel Accessories:** Steel Strapping Seal



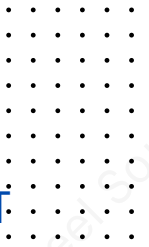
PRODUCT OVERVIEW

STEEL BUILDING MATERIALS

- Floor Deck System:** Open type floor deck; Steel Truss Deck
- Roofing & Wall Panels:** Color coated steel sheets(also called Metal Roofing Sheet or Metal Wall Cladding Panel); sandwich panels, **handmade cleanroom panels**
- Metal Studs & Purlins:** C/Z/U purlins; Steel stud, track & furring channels


PRODUCT SERIES

FROM **PREMIUM** TO **VALUE** — TAILORED FOR EVERY PROJECT




 **ES Prime Series**
Premium · Innovative · Exceptional



 **ES Standard Series: Balanced · Versatile · Durable**



 **ES Value Series: Affordable · Practical · Reliable**

HOW TO CHOOSE?

At Ecosteel Source, every series delivers the same reliable foundation—what sets them apart is the **material grade** and **performance level**.

- **Unified Standards:** All series follow the same specifications in size, thickness, and structure.
- **Tailored Performance:** Differences lie in the raw materials and durability enhancements.
- **Worry-Free Choice:** Select the series that matches your budget and project goals with full compatibility assurance.

PRODUCT SERIES

FROM **PREMIUM** TO **VALUE** — TAILORED FOR EVERY PROJECT

ES Prime - Flagship Performance

- Top-tier quality
- Advanced coatings
- Extended lifespan
- Premium applications

Typical materials: High-grade ZAM steel (Zinc-Aluminum-Magnesium), premium Galvalume (like AZ120, AZ150), High zinc coat Galvanized steel (GI) (from 150 to 900g/m²), fluorocarbon (PVDF) coated steel etc.

ES Standard - Balanced Reliability

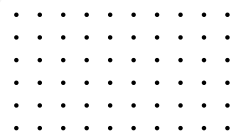
- Solid performance
- Good corrosion resistance
- Cost-performance balance
- Versatile use

Typical materials: Galvanized steel (GI) (Zinc 60g-120g/m²), Galvalume (GL)(less than AZ120), basic ZAM steel, HDP&SMP Pre-painted Steel etc.

ES Value - Smart Affordability

- Economical solution
- Essential quality
- Simplified specs
- Budget-focused use

Typical materials: Basic Galvanized steel (GI) (Zinc 30g-60g/m²), economical PE Pre-painted Steel etc.



HANDMADE CLEANROOM PANELS



手工硅岩
Silica Core

手工玻镁岩棉
**Glass magnesium+
rock wool core**

手工岩棉板
Rock wool Core

中空玻镁
Hollow Glass magnesium core

手工铝蜂窝
Aluminum honeycomb Core

HANDMADE CLEANROOM PANELS

Specifications

Surface material	PCGI/PPGI/Stainless steel
Core Material options	Polyurethane, rock wool, eps, glass wool, silica, Aluminum Honeycomb, Paper Honeycomb, XPS,TPS, PU, PIR, etc.
Width	980/1180mm
Length	Customized
Thickness of surface material	0.25-0.8mm
Thickness of core material	50-200mm
Color/Pattern	customized

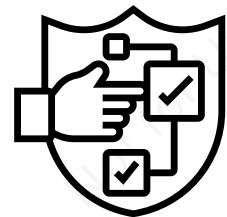
Advantages of handmade Cleanroom Panels



**Superior
Cleanliness**



**Customized Sizes
& Structures**



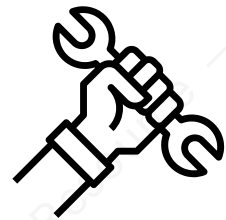
**Flexible Core &
Face Combinations**



**High Installation
Compatibility**



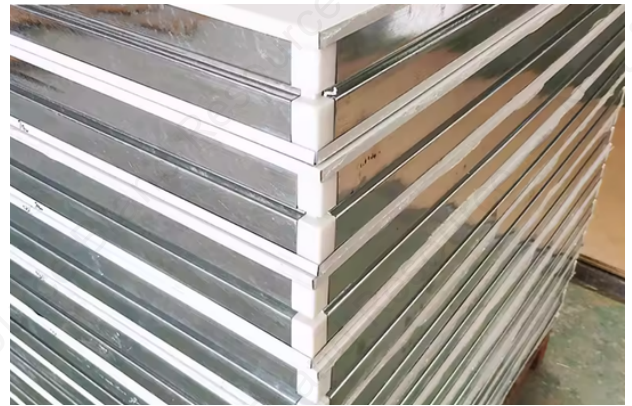
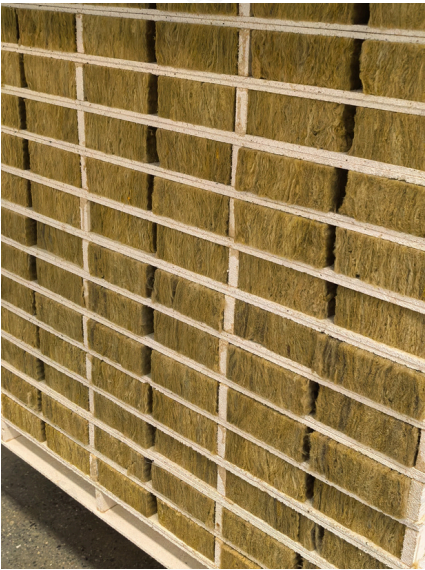
**High
Fire Resistance**



**Easy Maintenance
& Replacement**

HANDMADE CLEANROOM PANELS

Our Factory on-site: finished products, edge strips, packaged finished products, partial core materials



HANDMADE CLEANROOM PANELS

Optional core materials introduction

Rock Wool	Made from basalt and other natural minerals, with excellent fire resistance (Class A), thermal and acoustic insulation.
Glass Magnesium Board (MgO Board)	Made from Magnesium oxide, magnesium chloride, and fiberglass mesh, which with fireproof, moisture-proof, and insect-proof properties.
Silica Core / Silicate Core	A Silica-based mineral core, with good fire resistance and thermal insulation, and moderate weight.
Aluminum Honeycomb	Hexagonal aluminum foil core, which is lightweight, high strength, excellent flatness, and corrosion-resistant.
Paper Honeycomb	A kraft paper honeycomb core, which is eco-friendly, lightweight and low cost, and a good choice for low-load areas.
Expanded Polystyrene	Expanded polystyrene, with good insulation, low cost, higher water absorption, and moderate fire resistance.
Extruded Polystyrene	Extruded polystyrene, with better insulation and moisture resistance, and compressive strength than EPS.
Thermoplastic Polystyrene	Thermoplastic polystyrene, reheatable and moldable, better impact resistance, less common in panels.
Polyurethane (PU)	With excellent insulation, waterproof, lightweight and durable; which requires flame retardants to achieve fire resistance.
Polyisocyanurate (PIR)	Better fire resistance than PU, but with similar insulation performance.
Glass Wool	Made from fiberglass wool, which has Class A fire resistance, excellent thermal and acoustic insulation in a lightweight.

COMPARISON

What are the differences among these products

Handmade Cleanroom Panel VS Mechanized Cleanroom Panel VS Ordinary Sandwich Panel

Criteria	Handmade Cleanroom Panel	Mechanized Cleanroom Panel	Ordinary Sandwich Panel
Precision	High, gap \leq 0.5 mm	Medium, requires extra edging	Low to medium, no strict control
Structural Strength	Strong integrity with all-around edging	Moderate	Edges prone to damage
Airtightness	High, up to Class 100 cleanroom standards	Medium, requires additional sealing	Low, cannot meet cleanroom standards
Size Flexibility	Fully customizable, including irregular shapes	Limited by production line	Moderate
Core materials Options	Rock wool, magnesium board, silicate board, aluminum honeycomb, paper honeycomb, etc.	Rock wool, EPS, PU, PIR, etc.	Polystyrene board, PU, rock wool, etc.
Fire Resistance	Easily reaches Class A	Can reach Class A	Depends on core material
Cost	Higher than mechanized ones	Lower	Lowest
Delivery Time	Fast delivery for small batches	Suitable for large batches	Fast delivery for large batches
Manufacturing Process	Manually assembled in cleanroom: face sheets, core, fire - proof seals, and adhesives laminated layer by layer, with four - side edging	Continuous production line: steel sheets and core laminated online, then cut into panels	Mechanized or simple lamination, no cleanroom treatment
Applications	High - cleanliness, complex - structure cleanrooms (electronics, pharmaceuticals, food, laboratories, etc.)	Large - scale industrial plants, warehouses, building envelope systems	General building insulation and soundproofing

APPLICATION WITH REAL CASE EXAMPLES

1. Medical & Biopharmaceutical Facilities

Application: Operating rooms, ICU, sterile preparation rooms, and pharmaceutical workshop areas require controlled cleanliness levels and surfaces that are easy to sanitize.

Recommended Core Materials: Glass magnesium+ rock wool core / stainless steel + rockwool



Pfizer Suzhou pharmaceutical plant

2. Food & Beverage Processing

Application: Food processing facilities require washable surfaces, anti-mold performance, and compliance with HACCP / ISO22000 hygiene standards.

Recommended Core Materials: rock wool core stainless steel



Mengniu Hohhot yogurt plant

APPLICATION WITH REAL CASE EXAMPLES

3. Cosmetics & Personal Care Manufacturing

Application: L'Oréal's Egyptian cosmetics manufacturing site expanded to include new ISO 7 cleanrooms for skincare product production, built around existing production machinery using modular cleanroom systems.

Recommended Core Materials: PU / PIR + Anti-static Pre-painted Steel



L'Oréal's Egyptian cosmetics manufacturing site

2. Electronics & Optoelectronics

Application: Semiconductor and display fabrication facilities require high flatness cleanroom systems with optional anti-static surfaces.









Recommended Core Materials: Aluminum honeycomb Core + Anti-static Pre-painted Steel











BOE Hefei G10.5 TFT-LCD fabrication plant

EASY STEPS TO ORDER

Start Your Order Today

 Inquiry →  Quotation →  Sample → 
Contract & Payments →  Production →  Packing & Balance →  Shipment & Documents →  After-sales

-  **Inquiry** : Provide product specifications (material, size, coating, color, quantity, application).
-  **Quotation** : Get formal quotation with price, lead time, payment, and other details.
-  **Sample & Drawing** : Confirm samples or drawings for customized colors/patterns.
-  **Contract & Payments** : Sign PI/contract and pay deposit to schedule production; Special customized products require full payment in advance.
-  **Production & QC** : Manufacturing with strict quality control, third-party inspection available.
-  **Packing & Balance** : Packed to international standards, and settle balance payment.
-  **Shipment & Documents** : shipment arranged with documents, receive full set of shipping documents.
-  **After-sales** : Technical support, long-term supply and project services.

WHY CHOOSE US

Uncompromising Quality

Strict quality control and testing ensure durability, corrosion resistance, and consistency.

Tailored Solutions

Customized sizes, coatings, and finishes to meet unique project needs.

Competitive Value

Advanced manufacturing and efficient supply chain deliver cost-effective solutions.

Sustainable Commitment

Eco-friendly production and long life cycles support greener construction.

Global Support

Reliable logistics and professional support ensure timely delivery worldwide.





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