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Energy-saving Insulation System

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GloStar

Cleanroom System
Purification System

Metal Clean Enclosure System Comprehensive Solution

Specializing in Curtain Wall, Panel & Clean Room Sectors
Empowering Green Buildings via Dual-Base Smart Manufacturing

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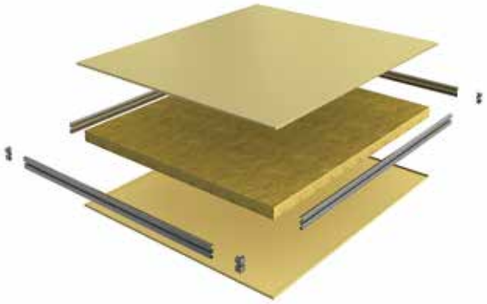
Compre-
hensive
Solutions for
Metal
Cleanroom
Enclosure
Systems

Achieve The
Beauty Of
Cleanliness

Handmade
Cleanroom Panel

Center-Tongue Cleanroom Panel

- Surrounded by hat-shaped galvanized steel framing for enhanced overall panel strength.
- Connected via center-tongue aluminum joints for faster modular assembly and installation.
- Manufactured using continuous hot-press lamination for superior core-to-face adhesion and improved flatness.

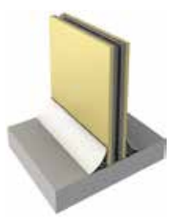


Product Model	1180mm/980mm	Custom Sizes
Effective Coverage Width	1180mm/980mm	Actual Custom Width
Steel Sheet Thickness	0.4-0.8mm	
Core Material Thickness	50mm, 75mm, 100mm	
Framing Thickness	0.7-1.0mm	
Length	6000mm(Recommended Wall Panel Length), 3000mm(Recommended Ceiling Panel Length)	

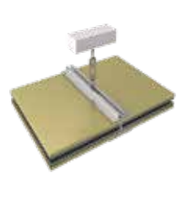
Illustration For The Joint

Panel-to-Panel Joint

Corner Connection



Floor Track Connection

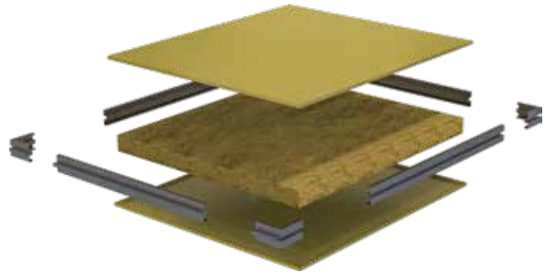


Center-Tongue
Suspension Beam for Ceiling

Handmade Cleanroom Panel

Tongue-and-Groove Cleanroom Panel (Insertion Connection)

- Insertion connection design saves aluminum and reduces installation costs.
- Ideal wall panel profile for modular assembly, enabling faster construction.
- Manufactured with continuous hot-press lamination for superior core-to-face adhesion and enhanced flatness.



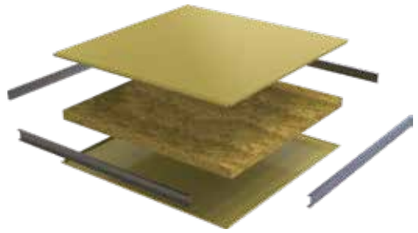
Product Model	1180mm/980mm	Custom Sizes
Effective Coverage Width	1180mm/980mm	Actual Custom Width
Steel Sheet Thickness	0.4-0.8mm	
Core Material Thickness	50mm, 75mm, 100mm	
Framing Thickness	0.7-1.0mm	
Length	6000mm (Recommended Wall Panel Length), 3000mm (Recommended Ceiling Panel Length)	

Illustration For The Joint

Panel-to-Panel Joint

Handmade Cleanroom Panel

- Male-female interlocking design saves aluminum and reduces installation costs.
- Each tongue-and-groove joint can serve as a wiring conduit, facilitating on-site installation.
- Steel sheets enclosed on all four sides enhance strength with a fully sealed structure.
- 90° pressed edges ensure a cleaner and more aesthetic joint finish.



Product Model	1150mm/950mm	Custom Sizes
Effective Coverage Width	1150mm/950mm	Actual Custom Width
Steel Sheet Thickness	0.4-0.8mm	
Core Material Thickness	50mm, 75mm, 100mm, 150mm, 200mm	
Framing Thickness	0.7-1.0mm	
Length	6000mm (Recommended Wall Panel Length)	

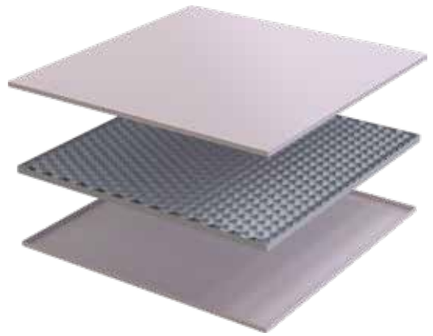
Illustration For The Joint

Panel-to-Panel Joint

Tongue-and-Groove Cleanroom Panel
(Male-Female Interlocking)

Handmade
Cleanroom Panel

FFU Blank Panel



- Innovative structural design, high dimensional accuracy, and excellent resistance to deformation
- Lightweight yet high-strength
- Superior electrostatic conductivity
- Fully recyclable

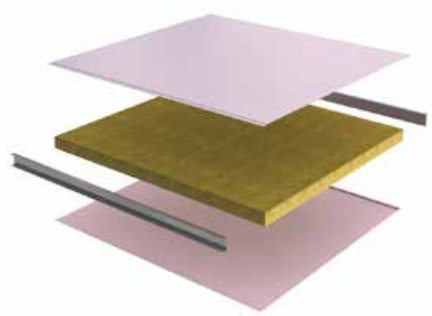
Product Model	1170mm×1170mm	570mm×1170mm	Custom Sizes
Effective Coverage Width	1170mm×1170mm	570mm×1170mm	Actual Custom Width
Steel Sheet Thickness	0.4-0.8mm		
Core Material Types	Gypsum, Aluminum Honeycomb, Single Sheet		
Length	1170mm(Recommended Ceiling Panel Length)		

Illustration For The Joint

FFU Product Applications

Machine-Made Cleanroom Panel

- Ultra-long composite process ensures excellent flatness and cost efficiency.
- Steel-enclosed ends and sides with pressed edge sealing enable interlocking installation for faster assembly.
- Longitudinal stiffeners can be integrated into the panel core for enhanced overall strength.



Product Model	1150mm	950mm
Effective Coverage Width	1150mm	950mm
Steel Sheet Thickness	0.4-0.8mm	
Core Material Thickness	50mm, 75mm, 100mm, 150mm, 200mm,	
Framing Thickness	0.6-1.0mm	
Length	6000mm (Recommended Wall Panel Length), Not Recommended for Ceiling Applications	

Illustration For The Joint

Panel-to-Panel Joint

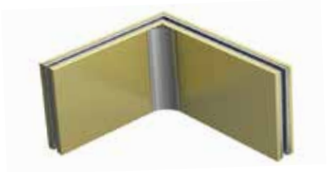
Assembly Applications

Transition Panels

- Seamless integration of machine-made panels with manual cleanroom doors and windows
- Reducing project construction costs with easier on-site installation
- Achieving the desired aesthetic appearance and performance of manual cleanroom doors and windows
- Custom sizing available to meet specific client requirements

Shaped Panels

Forming Width: ≤1180mm



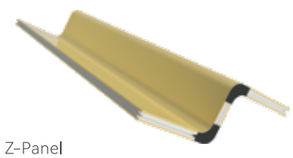
L-Shaped Square Corner

Forming Angle: ≤180°

L-Shaped Curved Corner

Forming Radius: 50-3000mm

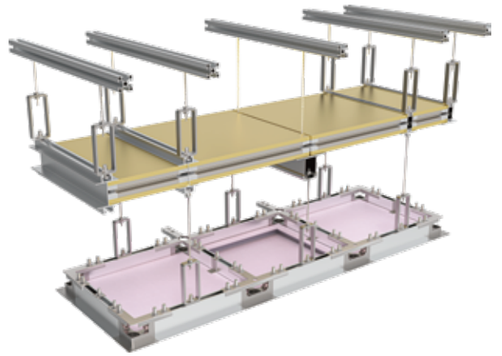
C-Panel



Z-Panel

S-Panel

Assembly Applications



Double-Layer Ceiling Systems

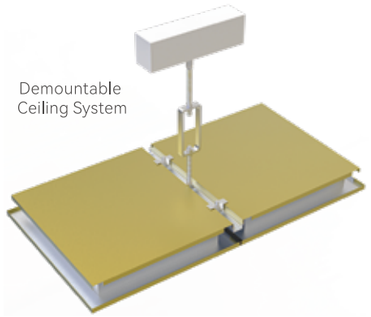
- Designed to meet FFU equipment installation requirements in high-precision manufacturing industries, featuring a high load-bearing capacity for safe and reliable operation.
- Panel systems can be custom-sized to suit on-site requirements, enabling prefabricated installation.

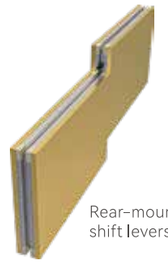
Hollow Spring Clip Wall

- Enables rapid installation and disassembly, can be equipped with an independent and reliable built-in air return unit.
- Utilizes an H-frame skeleton system to enhance wall strength.
- Smooth and aesthetically pleasing surface finish.
- Lightweight design for quick installation and removal.

Demountable Panel Systems

Individual panels can be easily replaced in case of localized damage or process openings, enabling quick and convenient installation and removal—saving significant labor and material costs.





Customization Options

Pre-embedded Conduits

- Factory Pre-embedded Conduits, Reducing On-Site Complexity.
- While Ensuring Panel Integrity and Aesthetic Finish.

Pre-reserved Openings

- Factory-prefabricated openings ensure clean, easy installation, eliminating on-site cutting and reducing job site pollution
- Factory prefabrication incorporates reinforced framing to enhance overall panel strength.

Integrated Windows

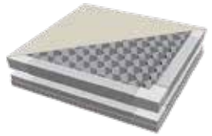
- Seamless Wall Integration: Flush-Mounted Windows Create a Smooth, Dust-Resistant Surface for Effortless Cleaning

Built-in Air Ducts on Panels

- Optimized Spatial Efficiency: Eliminates Return Air Columns, Maximizing Usable Space While Maintaining a Flat, Uninterrupted Wall Plane

Core Material Options

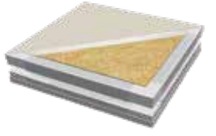
Technical specifications



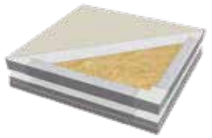
Aluminum Honeycomb

MgO

Fiberglass Mesh Reinforced MgO



MgO Board + Rock Wool



Gypsum Board + Rock Wool

MgO Board + Aluminum Honeycomb

Gypsum Board + Aluminum Honeycomb

Core Material	Rock Wool	Aluminum Honeycomb	MgO	Fiberglass Mesh Reinforced MgO	MgO Board + Rock Wool		Gypsum Board + Rock Wool	MgO Board + Aluminum Honeycomb	Gypsum Board + Aluminum Honeycomb
					Single-Layer MgO Board	Double-Layer MgO Board			
Panel Thickness	50, 75, 100 150, 200mm	50, 75, 100 mm	50, 75, 100 mm	50, 75, 100 mm	50, 75, 100 150, 200mm		50, 75, 100 150, 200mm	50, 75, 100 150, 200mm	50, 75, 100 150, 200mm
Recommended Wall Panel Length	≤6000mm	≤4000mm	≤4000mm	≤6000mm	≤6000mm		≤6000mm	≤6000mm	≤6000mm
Recommended Ceiling Panel Length	≤3000mm	≤3000mm	≤3000mm	≤5000mm	≤3000mm		≤3000mm	≤3000mm	≤3000mm
Wall Panel Width	/	/	/	/	980mm, 1180mm and Non-Standard Sizes				
Fire Resistance Rating	≥0.5h	≥0.5h	≥1.2h	1.0h	1.0h	2.0h	/	/	/
Flexural Capacity	≥1.5KN/m²	≥1.5KN/m²	2.82KN/m²	2.71KN/m²	1.34 KN/m²	2.82 KN/m²	2.56KN/m²	4.1KN/m²	3.76KN/m²
Applicable Panel Type	Center-Tongue Tongue-and-Groove Machine-Made Panel	Center-Tongue Tongue-and-Groove	Tongue-and-Groove Machine-Made Panel		Center-Tongue Tongue-and-Groove				
Core Material Density	100kg/m³ —— 150kg/m³	/	/	/	/		/	/	/
Thermal Conductivity	≤0.048W/m·K	/	/	/	0.216 W/m·K	0.285 W/m·K	/	/	/
Acidity Coefficient	≥1.8	/	/	/			/	/	/
Honeycomb Diameter	/	≤21mm	/	/			/	≤21mm	≤21mm
Fire Rating	/	/	A1	A1			A2	A2	A2
Others	/	/	/	/	Pre-embedded Conduits & Prefabricated Hollow Framing				

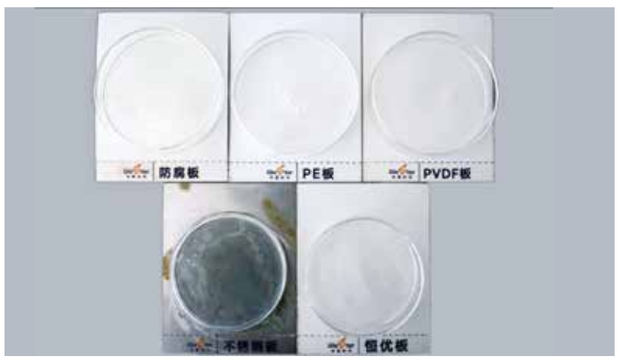
Facing Material Options

Performance features

Anti-Static

The steel sheet coating is enhanced with special conductive materials, achieving a surface resistance of 10^6–10^9 Ω/sq to eliminate adverse effects caused by static electricity.

Suitable for environments requiring static control and high cleanliness, such as electronics manufacturing, semiconductors, flammable gas, organic solvents, and biotechnology.



Constant-Excellence

The outer surface features non-coating structure with a zero-perforation permeable membrane, effectively preventing corrosive agents from reaching the substrate.

Chemically inert to common disinfectants such as hydrogen peroxide and VHP, while maintaining excellent performance in high-humidity environments with strong antibacterial properties.

Ideal for environments with stringent cleanliness requirements, including healthcare, food processing, and biopharmaceutical facilities.

Stainless Steel Cleanroom Panel

Widely used in food processing facilities due to its exceptional weatherability, corrosion resistance, and high cleanability inherent to stainless steel.

Performance Features

Antibacterial Panel

Achieves over 99% antibacterial efficacy against E. coli, Staphylococcus aureus, and mold, with an antibacterial activity value >4, certified per QB/T2591-2003.

Highly effective antibacterial properties significantly reduce cross-contamination risks in clean environments. The antibacterial agents in the topcoat disrupt cellular functions, preventing bacterial reproduction.

PET Anti-Corrosion Panel

Constructed with multi-layer anti-corrosion and anti-aging architecture, overlaid with a PET nano anti-corrosion film. Combines metallic aesthetics with significantly enhanced resistance to water, UV radiation, and chemical corrosion compared to standard coated sheets. Suitable for environments with diverse acidic, alkaline, or UV disinfection conditions.

Salt-Resistant Panel

Offers superior corrosion resistance compared to standard color-coated steel sheets in acidic or alkaline environments. Available surface textures include smooth and diamond patterns.

Cleanroom Door

Door Leaf Thickness	50mm
Door Leaf Melamine Board Thickness	0.8/1.0mm
Door Frame Steel Thickness	1.2mm/1.5mm
Core Filling Material	High-Strength Paper Honeycomb / Aluminum Honeycomb / Rock Wool / Polyurethane Foam
Optional Surface Material	Melamine Board
Optional Accessories	Windows, Door Closers, Custom Locks, Access Control Systems
Door Leaf Type	Single Doors, Double Doors
Max Width for Single Leaf Door	1100×2500mm
Max Width for Double Leaf Door	2200×2500mm

Melamine Doors

Door Leaf Thickness	40mm/50mm
Door Leaf Color Steel Plate Thickness	0.5mm
Door Frame Steel Thickness	1.2mm
Core Filling Material	High-Strength Paper Honeycomb / Aluminum Honeycomb / Rock Wool
Optional Surface Material	Color Steel Plate
Optional Accessories	Windows, Door Closers, Interlocks, Custom Locks, Handles, Access Control Systems, Sensors
Door Leaf Type	Single Doors, Double Doors
Max Width for Single Leaf Door	1100×2500mm
Max Width for Double Leaf Door	2200×2500mm

Color Steel Plate Doors

Door Leaf Thickness	40mm
Door Leaf Melamine Board Thickness	1.0mm
Door Frame Steel Thickness	1.5mm
Core Filling Material	High-Strength Paper Honeycomb / Aluminum Honeycomb
Optional Surface Material	Steel Sheet, Stainless Steel
Optional Accessories	Windows, Protection Plates, Sensors
Door Leaf Type	Single Doors, Double Doors
Door Opening/ Closing Speed	250~500mm/s(Adjustable)
Safety Accessories	Infrared Safety Sensors

Automatic Cleanroom Sliding Doors

Technical specifications

Cleanroom Doors

Cleanroom Safety Doors

Stainless Steel Cleanroom Doors

Frameless Cleanroom Doors

Cleanroom Swing Doors

Type	Cleanroom Doors	Cleanroom Safety Doors	Stainless Steel Cleanroom Doors	Frameless Cleanroom Doors	Cleanroom Swing Doors
Door Leaf Thickness	50mm	50mm	50mm	50mm	50mm
Door Leaf Steel Thickness	0.8/1.0mm	0.8/1.0mm	0.8/1.0mm	0.8/1.0mm	0.8/1.0mm
Door Frame Steel Thickness	1.2mm/1.5mm	1.2mm/1.5mm	1.2mm/1.5mm	1.2mm/1.5mm	1.5mm
Core Filling Material	High-Strength Paper Honeycomb / Aluminum Honeycomb	High-Strength Paper Honeycomb / Aluminum Honeycomb	High-Strength Paper Honeycomb / Aluminum Honeycomb	High-Strength Paper Honeycomb / Aluminum Honeycomb	High-Strength Paper Honeycomb / Aluminum Honeycomb
Optional Surface Material	Steel Sheet, Stainless Steel	Steel Sheet, Stainless Steel	304 Stainless Steel	Steel Sheet, Stainless Steel	Steel Sheet, Stainless Steel
Optional Accessories	Windows, Door Closers, Interlocks, Custom Locks, Antibacterial Handles, Access Control Systems, Sensors	Windows, Push Bar Emergency Exit Locks, Push Pad Emergency Exit Locks	Windows, Door Closers, Interlocks, Custom Locks, Handles, Access Control Systems, Sensors	Windows, Door Closers, Interlocks, Custom Locks, Handles, Access Control Systems, Sensors	Windows, Protection Plates, Rubber Bumpers
Door Leaf Type	Single Doors, Double Doors with Leaf, Double Doors	Single Doors, Double Doors	Single Doors, Double Doors	Single Doors, Double Doors	Single Doors, Double Doors
Max Width for Single Leaf Door	1100×2500mm	1100×2500mm	1100×2500mm	1100×2500mm	1100×2500mm
Max Width for Double Leaf Door	2200×2500mm	2200×2500mm	2200×2500mm	2200×2500mm	2200×2500mm

Standard Doors & Windows | Accessories Selection

Interlock

Blocks air convection between the cleanroom and the outside environment, strictly controls personnel and material flow in the airlock, and effectively maintains the cleanroom's internal airflow organization.

- Emergency Unlock
- Door-Closed Reminder

Elbow Lock

Blocks air convection between the cleanroom and the outside environment, strictly controls personnel and material flow in the airlock, and effectively maintains the cleanroom's internal airflow organization.

- Elbow-operated door opening complies with the latest GMP requirements.
- Reduces the risk of cross-contamination in cleanrooms.
- Stainless steel versions available for enhanced hygiene compliance.

Door Closer

Adjustable spring force, durable, easy opening, high-quality cast aluminum alloy body.

- Adjustable Force
- Durable

Automatic Door Opening Machine

Enables automatic opening/closing of steel doors. Standard with multi-function remote control for remote operation. The overhead-mounted automatic door unit adopts a long-life DC brushless motor design and microcomputer intelligent control, serving as an execution terminal for various access control systems, and can be connected with human body sensors to form sensor-activated doors.

- Factory Pre-embedded Conduits, Reducing On-Site Complexity, and Ensuring Panel Integrity and Aesthetic Finish.

Cleanroom Windows

Technical Specifications

Overall Thickness	50mm / 75mm / 100mm / Custom
Glass Thickness	5mm / 6mm / 8mm
Silk-Screen Printing Width	23mm / Custom
Silk-Screen Printing Color	Black / White / Custom
Silk-Screen Printing Pattern	Outer Square + Inner Circle / Outer Square + Inner Square / Outer Circle + Inner Circle
Others	Concealed Distributed Moisture Absorption Holes / Small Particle Molecular Sieve Design

Clean Room Enclosure System Structure