Energy-saving Insulation System

Leading Provider of Premium Building System Solutions

Specializing in Curtain Wall, Panel &
Clean Room Sectors

Empowering Green Buildings via
Dual-Base Smart Manufacturing

www.glostar.cn

GloStar

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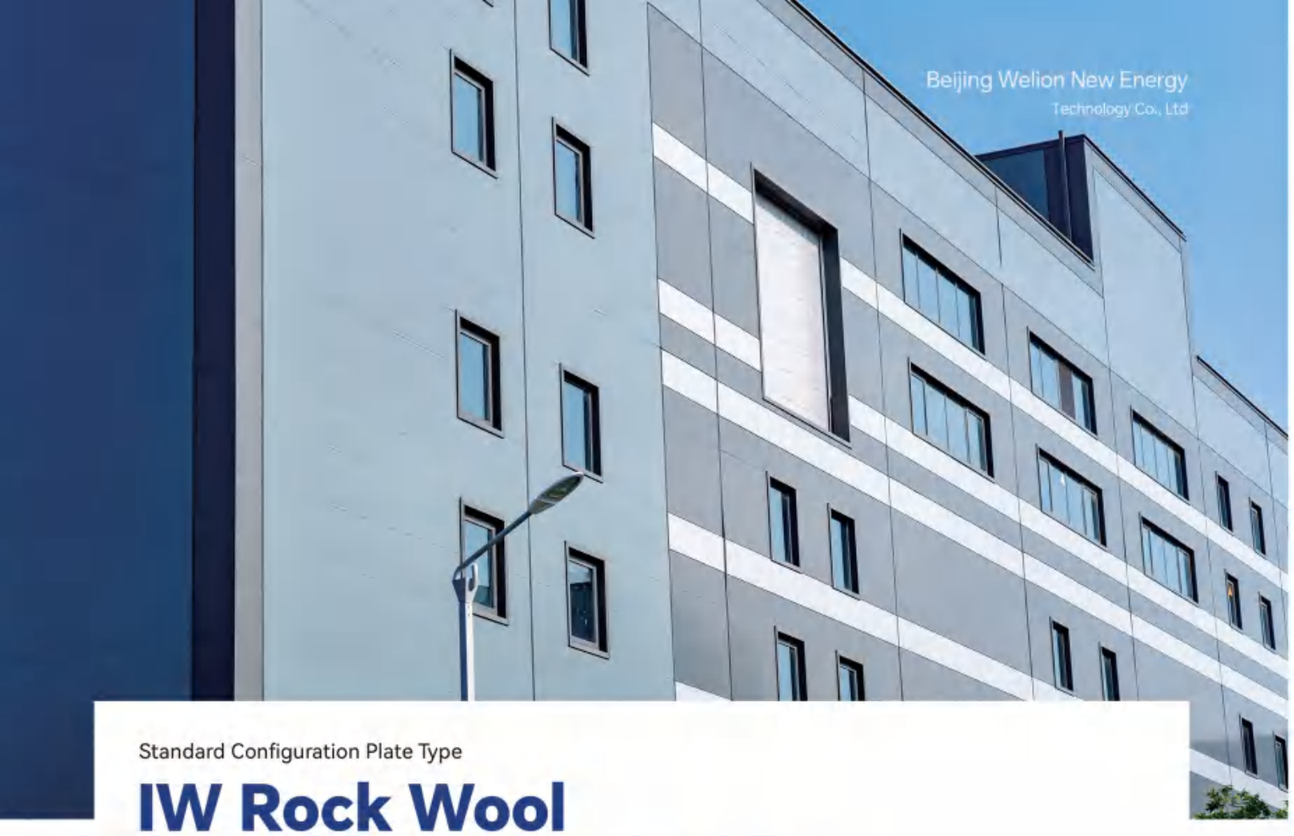


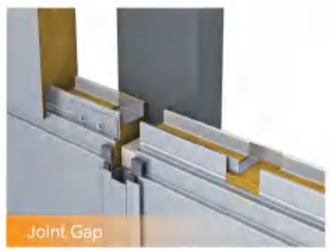
Standard Configuration Plate Type

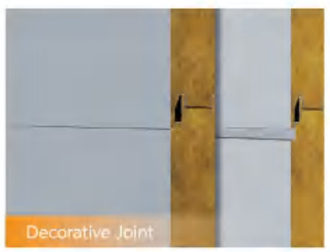
IW Rock Wool Sandwich Panel Series

IW Rock Wool Sandwich Panel series and the corresponding systems achieve an innovative and pioneering in China fullfill rock wool process. Its outstanding fire resistance performance is combined with excellent thermal insulation properties. Glostar has significantly improved the design and production processes for the product by increasing the strength at the joints. On top of that,for improved installation precision and design effectiveness, we designed specific connectors and clamps. To ensure reliable and consistent product quality, the Sandwich panels are factory- prefabricated. Convenient and quick installation and easy maintenance are also among its many advantages.

Standard Configuration Plate Type


Interface


Joint Gap


Decorative Joint

Strict parameter control

Technical Parameters

Material Characteristics Table for IW rock wool sandwich panel

Size (mm)	Standard size (mm): 1000	Optional panel width: 500-1200	Suggested length: < 15000	Standard thickness: 50, 75, 100, 150,200,250
Surface pattern	Gloss Finish	RMicro-Corrugated	Embossed	Mini-Corrugated
Skin thickness	Front steel sheet 0.6-0.8	Back steel sheet: 0.4-0.6	Front aluminum sheet: 0.7-1.0	Back aluminum sheet: 0.4-0.7
Joint width	0,10,15,20,25,40			
Core material	Rockwool			
Core material density (Kg/m³)	Rockwool: 120-140			
Flammability	Class A			

Table of Load without extra support and thermal performance specifics for IW rock wool sandwich panel

Core material	Thickness	Type of support	Load (kN/m²) / Purlin Spacing (mm)						Panel Weight (kg/m2)	Thermal Transmittance (U-value)(W/(m2.K)
			0.5	1.0	1.5	2.0	2.5	3.0		
Rock wool	50	Single-span /multi-span	5630	4202	3479	3008	2667	2402	16.16	0.76
	75		7441	5584	4646	4037	3594	3250	19.16	0.53
	100		9043	6807	5670	4935	4400	3985	22.16	0.40
	150		11835	8894	7408	6444	5742	5197	28.16	0.27

Note: Calculations in the table are based on the following assumptions: rock wool of a density of 120Kg/m³, glass wool of a density of 64kg/m³, thickness of front sheet 0.6mm, thickness of the back sheet 0.5mm, deflection span ratio L/100.

Performance Features

01. Thermal insulation performance

The sandwich panels are 100% filled with rock wool for excellent thermal insulation

02. Steadiness

A unique design is added to the nail fixing point for better stability

03. Easy to install

Spaced reinforced beams are placed on the back of the panels for greater strength and easier installation

04. Tighter and more stable

At the joints between panels, connectors and clamps are fitted for rigidity and stability

Standard Configuration Plate Type

IW PU Edge-banded Sandwich Panel Series

IW PU edge-sealed sandwich panels fully leverage the unique performance of the rock wool, offering significant advantages in fire resistance, thermal insulation, sound absorption, and noise reduction. Meanwhile, it retains the advantages of polyurethane: plasticity, sealing capacity, high strength, and water resistance, which are combined to deliver a prolonged product's lifespan and demonstrate excellent insulation properties. By adopting the European standards, and by innovatively utilizing tongue-and-groove joints and hook designs, fitting with high precision and sealed connections at the joints are achieved, as a result, airtightness and water tightness of the entire wall are also realized. The building's exterior will be elevated by a perfectly flat wall and an aesthetically pleasing visual effect.

Standard Configuration Plate Type

Strict parameter control

Technical Parameters

Material Characteristics Table for IW PU edge-sealed sandwich panel

Size (mm)	standard size: 1000	Optional panel width: 500-1200	Suggested length: < 15000	Standard thickness: 50, 75, 100, 150,200,250
Surface pattern	Gloss Finish	Micro-Corrugated	Embossed	Mini-Corrugated
Skin thickness(mm)	Front steel sheet 0.5-0.8	Back steel sheet: 0.4-0.6	Front aluminum sheet: 0.4-0.6	Back aluminum sheet: 0.4-0.7
Joint width(mm)	0,10,15,20,25,40			
Core material type	PU and glass wool	PU and rock wool		
Core material density (Kg/m³)	Glass wool: 64			
Flammability	Class A			

Table of Load without extra support and thermal performance specifics for IW PU edge-sealed sandwich panel

Core material	Thickness (mm)	Type of support	Load (kN/m²) / Rafter Spacing (mm)						Panel Weight (kg/m2)	Thermal Transmittance (U-value)(W/(m2.K)
			0.5	1.0	1.5	2.0	2.5	3.0		
Rock wool	50	Single-span /multi-span	5652	4217	3490	3018	2674	2408	15.88	0.76
	75		7470	5605	4662	4050	3604	3259	18.72	0.53
	100		9079	6827	5689	4515	4414	3996	21.56	0.40
	150		11882	8927	7434	6465	5759	5212	27.24	0.27
Rock wool	50	Single-span /multi-span	5652	4217	3490	3018	2674	2408	15.88	0.76
	75		7470	5605	4662	4050	3604	3259	18.72	0.53
	100		9079	6827	5689	4515	4414	3996	21.56	0.40
	150		11882	8927	7434	6465	5759	5212	27.24	0.27

Note: Calculations in the table are based on the following assumptions: rock wool of a density of 120Kg/m3, glass wool of a density of 64kg/m3, thickness of front sheet 0.6mm, thickness of the back sheet 0.5mm, deflection span ratio L/100.

Performance Features

01.

Fire resistance

Using non-combustible or flame-retardant core materials to meet various fire protection requirements

02.

A strong and durable

Side sealing by using PU enhances the overall structural rigidity, facilitates installation, and increases moisture resistance

03.

Elegant and beautiful appearance

Concealed fasteners and colorful panels bestow an attractive appearance to the building

04.

Thermal insulation and energy saving

High quality core materials are working in conjunction with specifically designed joints to minimize heat loss

Sealing performance

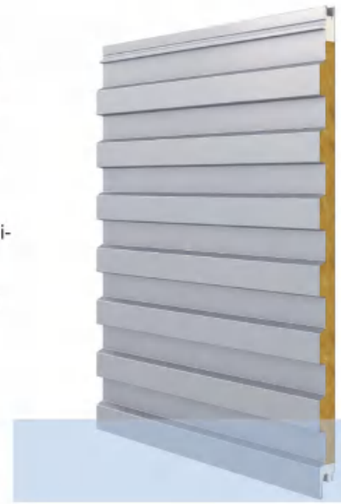
Ensuring the overall airtightness and watertightness of the entire wall through interlocking joints and sealed end connections

Standard Configuration Plate Type

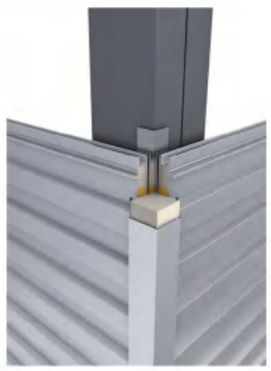
TW Rock Wool Sandwich Panel Series

TW rock wool sandwich panel

TW rock wool sandwich panel varies in structural design and surface pattern for a rich facade aesthetics on the wall. It adopts an externally protruding middle seam and corner covering components with insulation material filled inside for waterproofing as well as thermal insulation performance at those locations.
For decorative purposes, the color of the middle seam can be individually specified. It can also be used in conjunction with other products in the series to enrich the visual effect of the wall while ensuring corner compatibility.



Standard Configuration Plate Type



External corner joint

Middle seam

Window side

For specific details of the joints, please Contact our engineering team

Standard Configuration Plate Type

VW Rock Wool Sandwich Panel Series

For specific details of the joints, please Contact our engineering team

VW rock wool sandwich panel

VW rock wool sandwich panel features V-shaped ridge and groove pattern that can have 6 or 8 rows of corrugation, this design not only enhances the architectural aesthetics and also strengthens the structural mechanical property.

Performance Features

01.

V-Shaped Water-Guiding Female Rib Design

A sloped bottom side is designed to have better water drainage

02.

Nailing Line Design for On-site Construction Convenience

Nailing Line Design for On-site Construction Convenience

03.

Dedicated plugs are filled into the V-grooves at the middle seams and corners for better waterproofperformance

For better water proof performance, V-shaped caps are specifically designed to be compatible with the seams and corners.

04.

Externally Protruding Corner Concealed Fastener Design

With protruding corner covering pieces, nails are concealed inside

05.

Compatible with various panels for varied wall effects

compatible with multiple kinds of panels for various visual effects

Standard Configuration Plate Type

External corner joint

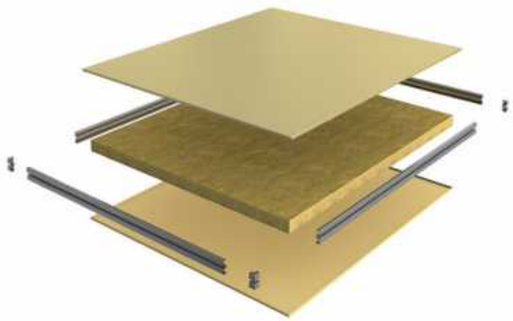
Middle seam

Window side

Standard Configuration Plate Type

Hand Made Cleanroom Panel

Excellent performance



01. Enhanced Strength

The panel is surrounded by bow-shaped galvanized keels, which enhances the overall strength of the board significantly.

02. Expedited Installation

"Zhong-shaped" aluminum connection adopted for modular assembly and faster construction.

03. Smooth & Flat

Assembly line hot-pressing process adopted for higher adhesion and better flatness between core material and panel.

Strict parameter control

Technical Standard

Product Model	1180mm/980mm	Non-standard Customization
Effective Coverage Width	1180mm/980mm	Actual Customized Width
Steel Sheet Thickness	0.4-0.8mm	
Core Material Thickness	50mm 75mm 100mm	
Keel Thickness	0.7-1.0mm	
Length	6000mm (Recommended Wall Panel Length) 3000mm (Recommended Ceiling Panel Length)	

Performance Features

Two-Panel Joining

Corner Connection

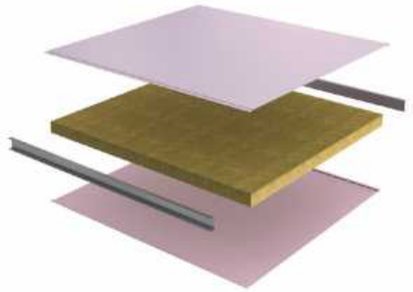
Floor Track Connection

Zhong-Profile Hanging Beam C

Standard Configuration Plate Type

Mechanically Manufactured Cleanroom Panel

Excellent performance



01. Low Cost

Ultra-long sandwich process ensures excellent flatness and low cost.

02. Increased Overall Strength

Longitudinal reinforcing ribs can be added in the middle of the panel to enhance overall structural strength.

03. Fast Installation

Both sides and ends can be sealed with steel plates, featuring steel plate crimped edge sealing and plug-in installation for fast on-site construction.

Performance Features

Wall Panel Joining

Strict parameter control

Technical Standard

Product Model	1150mm	950mm
Effective Coverage Width	1150mm	950mm
Steel Sheet Thickness	0.4-0.8mm	
Core Material Thickness	50mm 75mm 100mm 150mm 200mm	
Keel Thickness	06-1.0mm	
Length	6000mm (Recommended Wall Panel Length) – Not Recommended for Ceiling Panels	

Core Material Selection

Gypsum Board + Aluminum Honeycomb

Gypsum Board + Aluminum Honeycomb

Wall Panel Thickness	50mm	75mm	100mm	150mm	200mm
Recommended Maximum Length	≤6000mm				
Maximum Length of Ceiling Panel	≤3000mm				
Wall Panel Width	980, 1180 and Non-standard				
Built-in Function	Pre-embedded Conduits and Precast Hollow Keels				
Fire Resistance Rating	Class A2				
Suitable Panel Type	Central-type, Concave-convex type, Tongue-and-groove type				
Bending Capacity	3.76KN/m²				
Cell Diameter	≤21mm				