



ION PANEL

Fresh Life With You Always

PIR
PUR

B1
B2



PIR/PUR

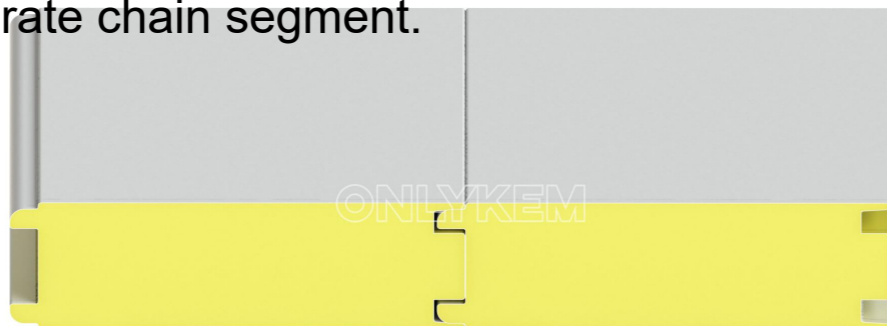
What is PUR

PUR panel, full name is Polyurethane panel. PUR panel refers to the polyurethane rigid foam as the core material, which generally uses polyether polyols, low isocyanate index (about 110~120) and flame retardant formula system, and the skeleton structure of the foam is composed of carbamate chain segments.

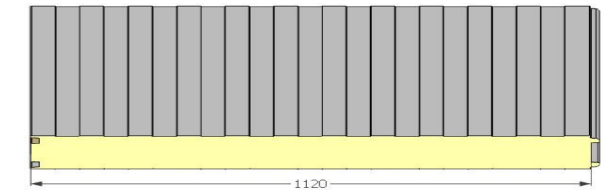


What is PIR

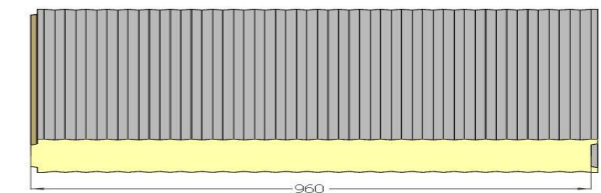
PIR panel, full name Polyisocyanurate panel. PIR panel refers to the polyurethane rigid foam as the core material generally adopts polyester polyol, high isocyanate index (more than 250), no or less use of flame retardants formula system, the skeleton structure of the foam is composed of carbamate chain segment and carbamate modified isocyanurate chain segment.



Cold Room Panel

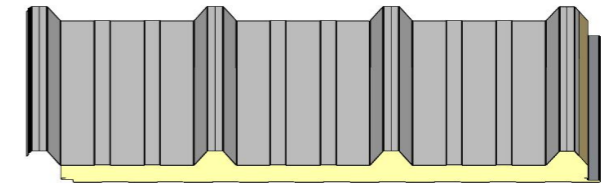


Single-groove Noma-style cold room panel P18



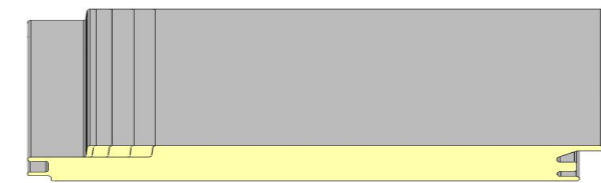
Hook-type cold room panel P19

Roofing Panel

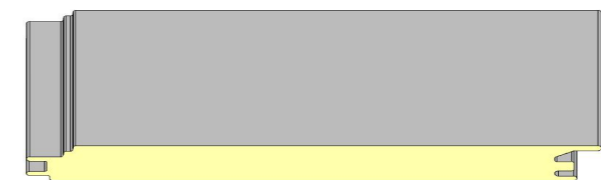


PIR/PUR Corrugated Panel P20

Building Wall Panel



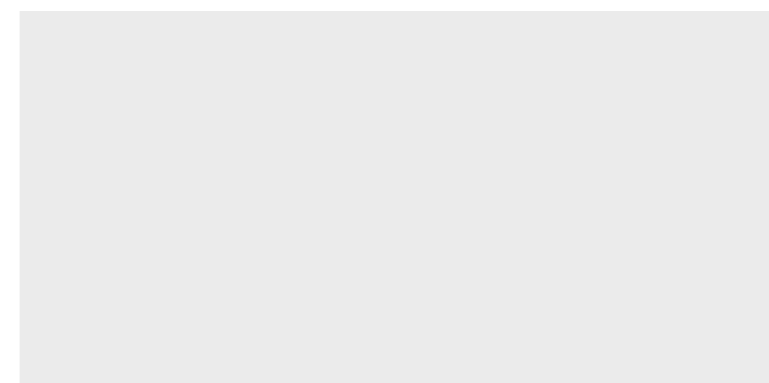
PIR/PUR Seamed External Wall Panel P21



PIR/PUR seamless external wall panel P22

Specification

Surface material thickness	0.4 0.5 0.6 0.8 1.0 2.0 2.5 3.0
Panel thickness	50 75 100 120 150 200 250
Fire rating	A B1 B2
Core material	PIR PUR
Surface metal material	Galvanized steel Stainless steel Aluminum plate
Type of finish paint	PE PVDF HDP PVC



Panel Thick	Temp Difference	Simply Supported Height of Wall Panel	Simply Supported Length of Roof Panel	U Value PIR/PUR
mm	°C	m	m	W/m²K
50	25	3	2.5	0.4/0.45
75	30	3.2	3	0.2670.3
100	40	3.8	3.5	0.2/0.23
150	50	4.2	4	0.1330.15
180	60	4.6	4.5	0.11/0.125
200	65	4.95	4.5	0.1/0.113

Specification

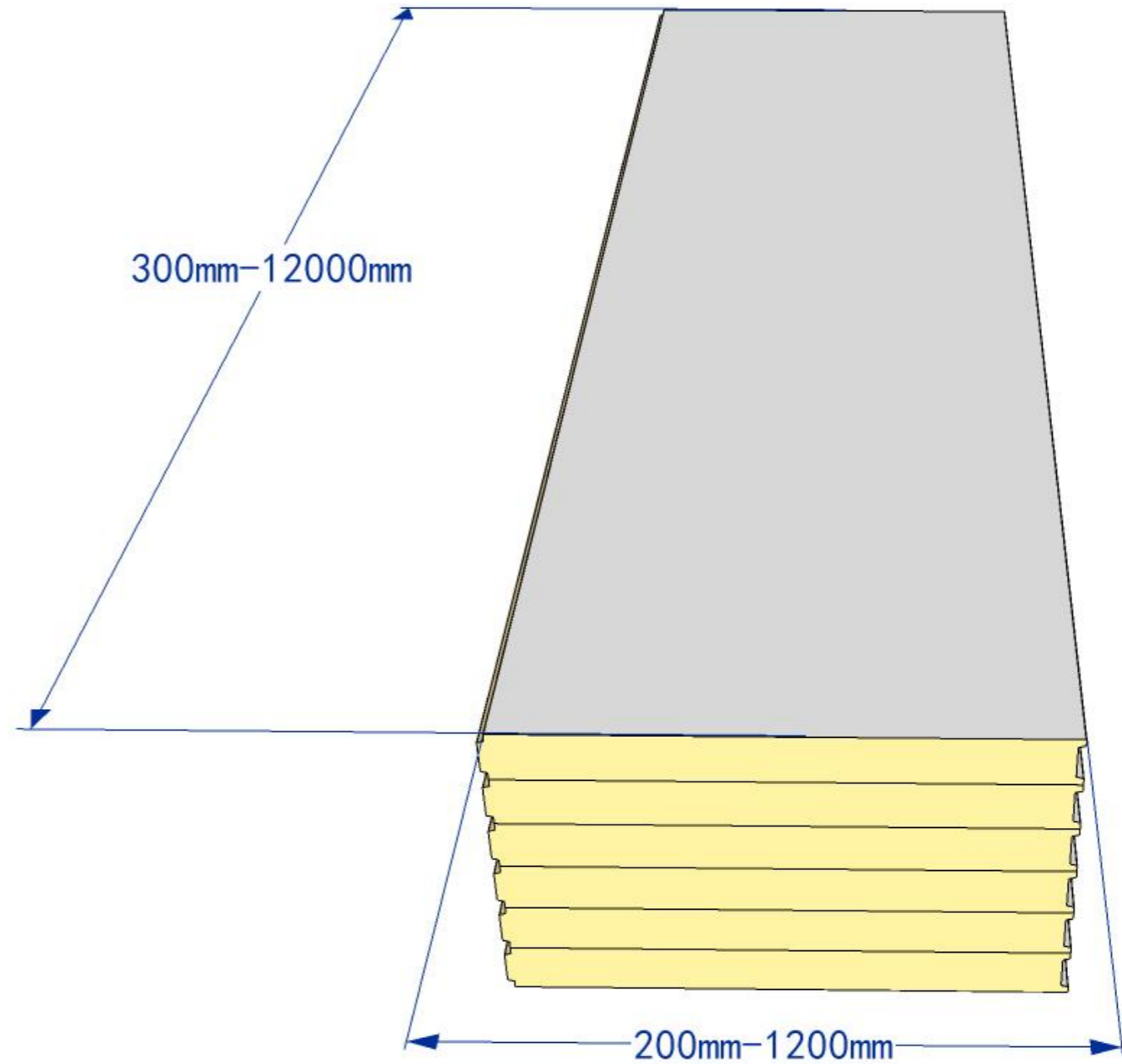
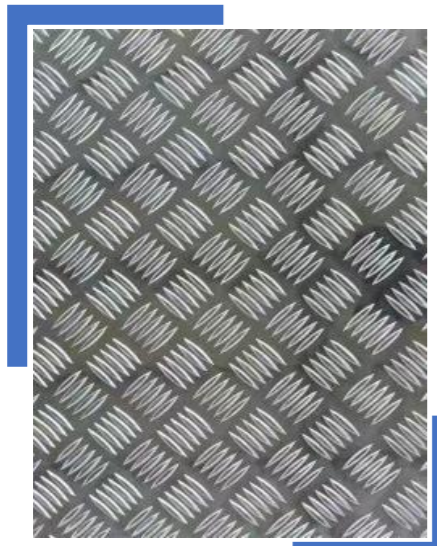
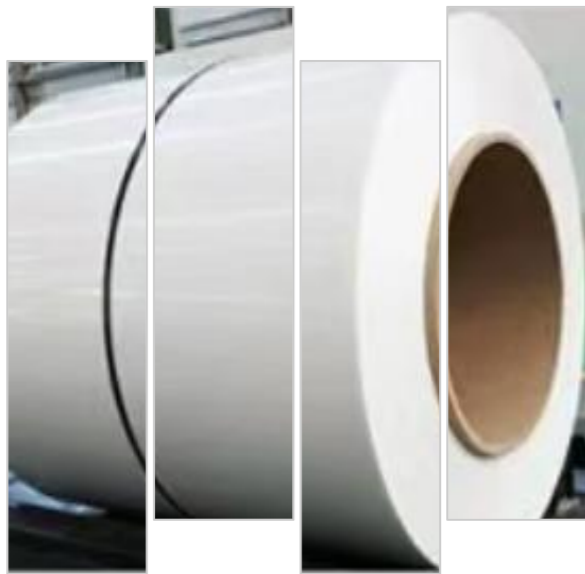
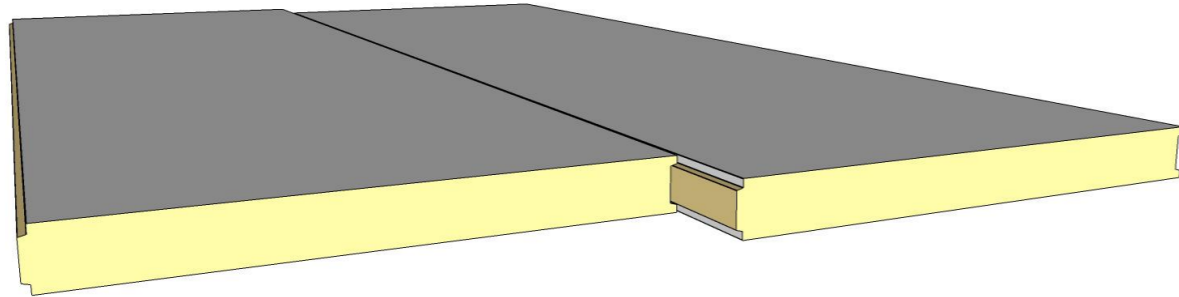
PUR

Length: 300-12000mm

Width: 200-1200mm

Standard Width: 960mm、1000mm

Surface Material: galvanized steel, stainless steel, embossed metal sheet



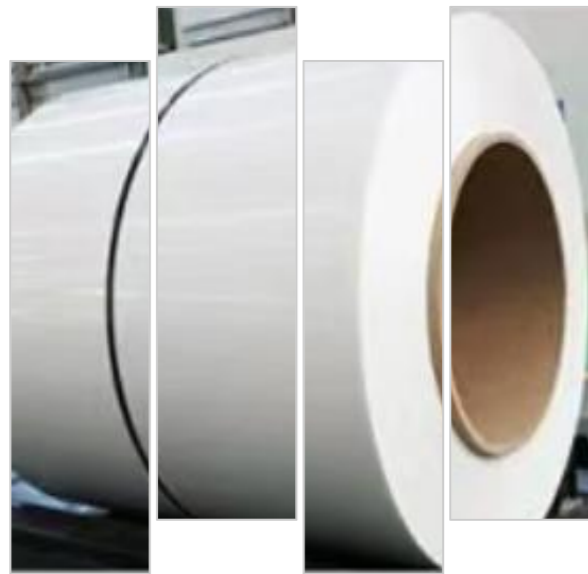
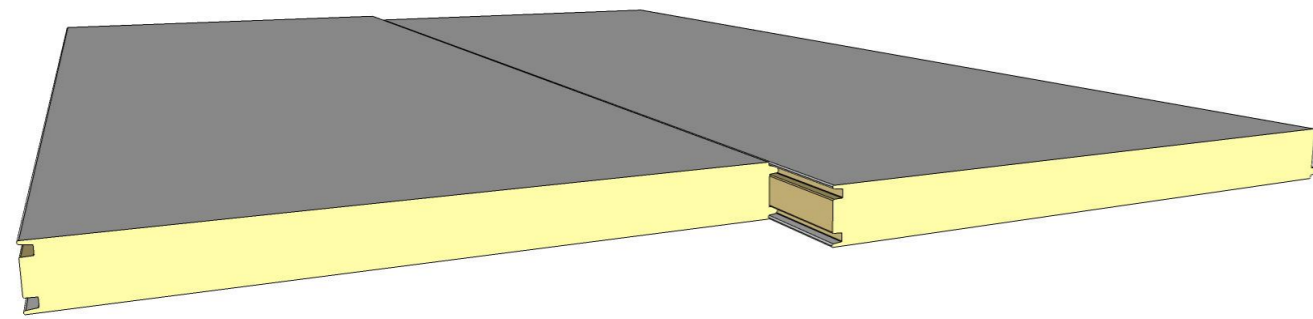
Specification

PIR

Length: 1200-24000mm

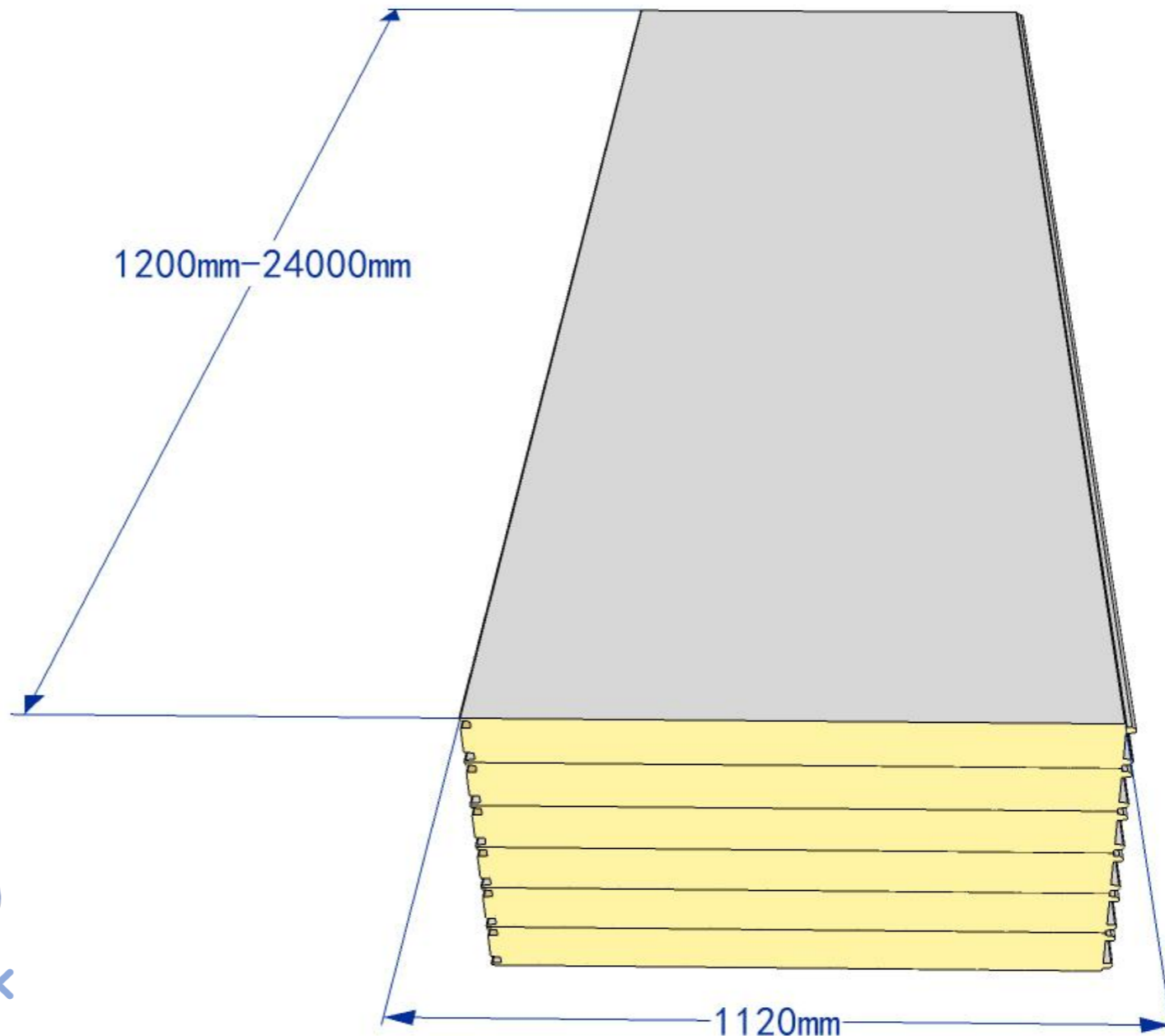
Standard Width: 1120mm

Surface Material: galvanized steel, stainless steel



1200mm-24000mm

1120mm



Performance Comparison Between PIR And PUR

Difference in Fire Resistance

PUR: B2

PIR: B1

Difference in Insulation Performance

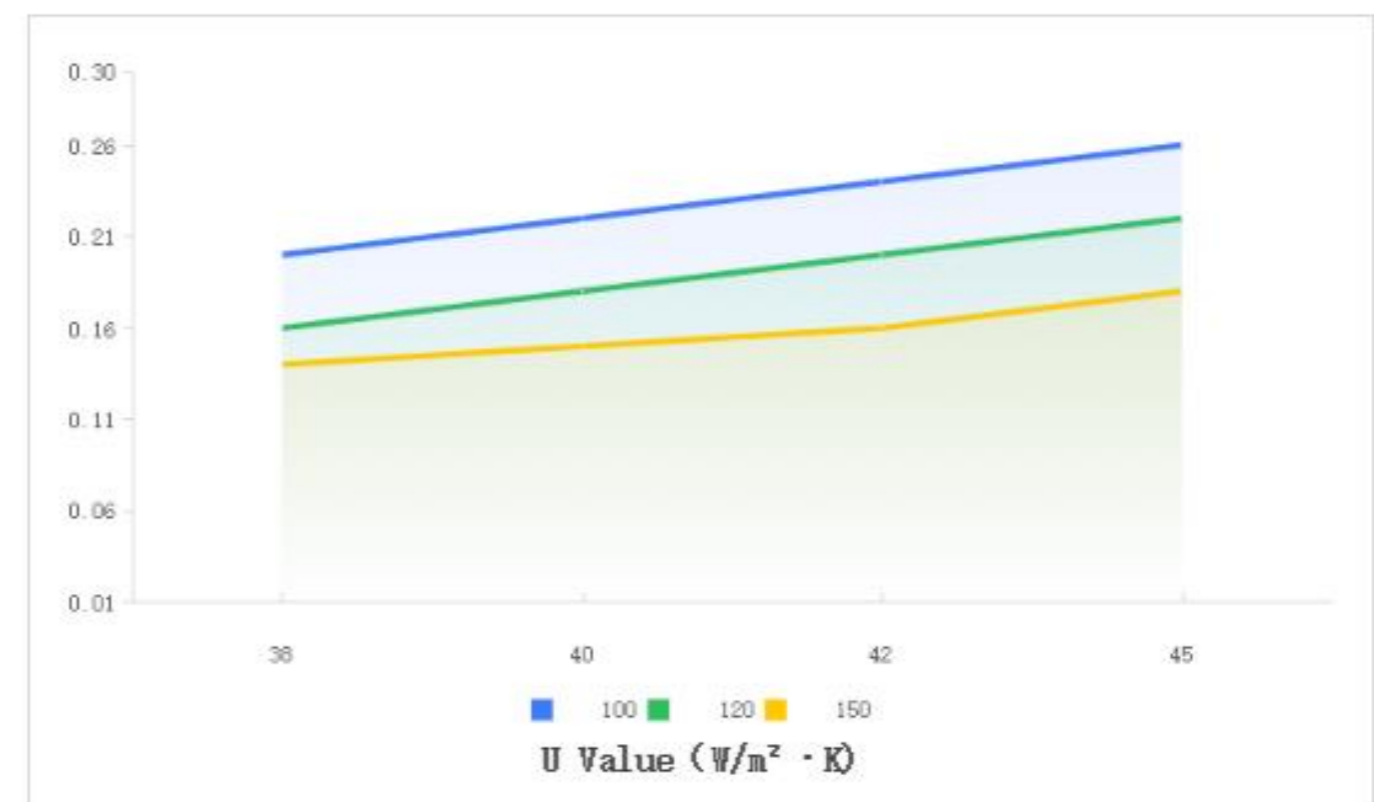
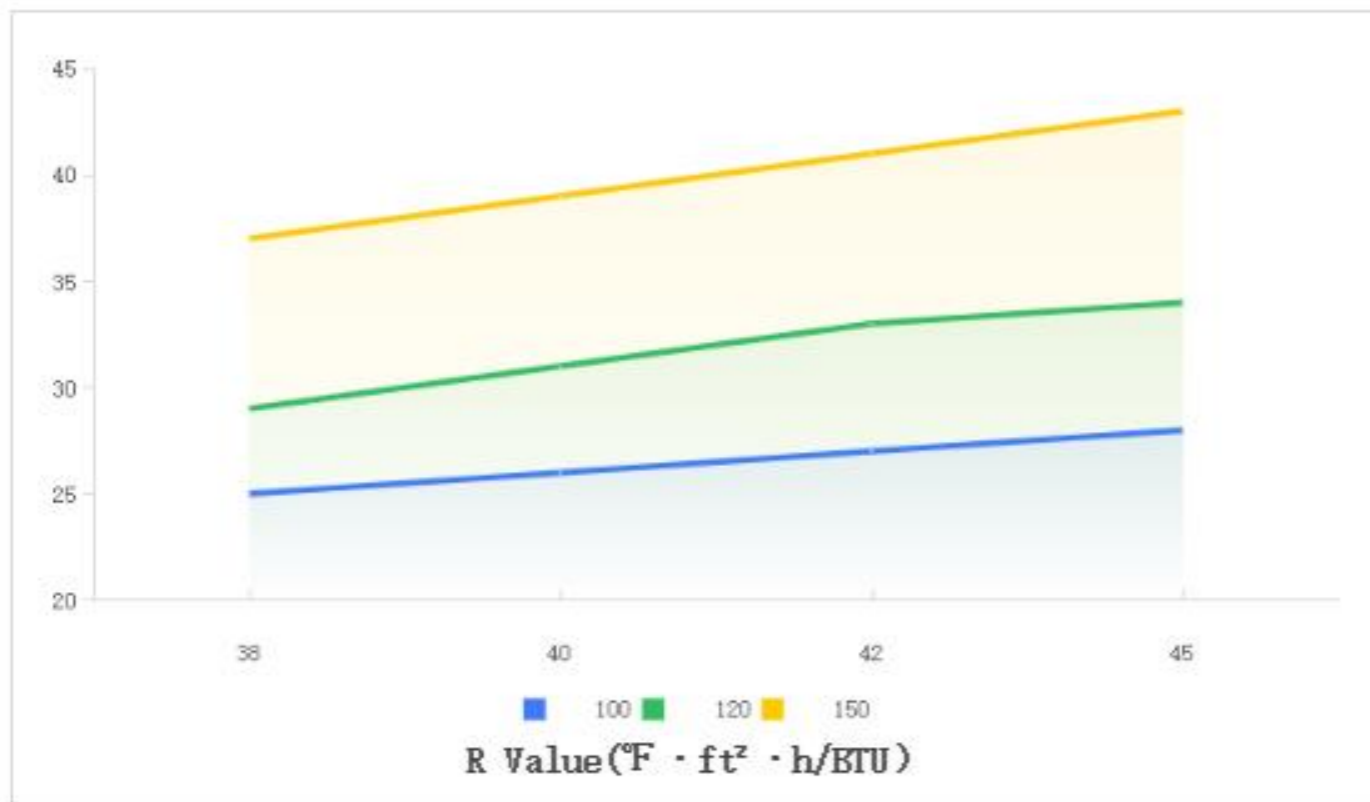
PUR: Thermal conductivity 0.026 W/mK(25°C)

PIR: Thermal conductivity 0.019W/mK(25°C)


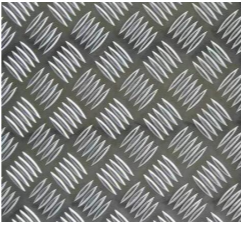
Difference of Temperature Range



PUR: -185°C~+110°C



PIR: -196°C~+205°C







Installation Accessories



	<p>U Shaped Steel Channel</p> <ul style="list-style-type: none"> ▶ Size: 1.2x2.4m, thickness is 3.0 mm ▶ To increase floor panel bearing capacity 	
---	---	---



	<p>L-type steel sheet</p> <ul style="list-style-type: none"> ▶ for common wall and column 	
---	--	---



	<p>Sealant</p> <ul style="list-style-type: none"> ▶ For cold room panel insulation in connection ▶ (300ml/bottle, 24 bottles/box) 	
---	---	---

	<p>Hanging beam</p> <ul style="list-style-type: none"> ▶ Connecting two roof panels 	
---	--	---



	<p>Mushroom bolts</p> <ul style="list-style-type: none"> ▶ For roof panel hanging 	
---	--	---

	<p>U Shaped Steel Channel</p> <ul style="list-style-type: none"> ▶ for wall panel fixed on concrete floor 	
---	--	---

	<p>XPS panels</p> <ul style="list-style-type: none"> ▶ for floor insulation ▶ Each piece size: 1.8x0.6m 	
---	---	---

	<p>Vapour barrier</p> <ul style="list-style-type: none"> ▶ between XPS panels and concrete layer ▶ 100 meters each roll 	
---	---	---

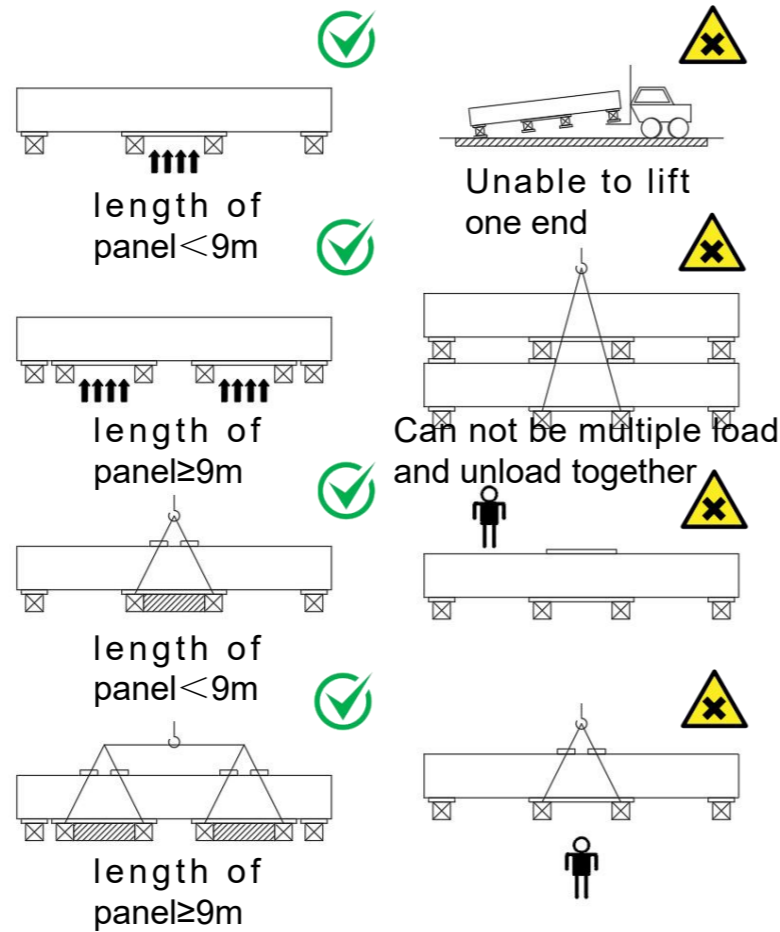
	<p>T-aluminium</p> <ul style="list-style-type: none"> ▶ For common wall panel installation 	
---	---	---

	<p>Outsourcing angle</p> <ul style="list-style-type: none"> ▶ For the connection of roof and wall panels ▶ For fixing to wall panels 	
---	--	---

Loading, Unloading and Handing

Loading and Unloading

Panel must be handled carefully to avoid surface and end damage. Use forklifts and cranes to be extra careful, do not use steel cable loading and unloading, require the use of nylon straps. Nylon belt more than 100 mm wide, lifting it in a vertical position to ensure balance, to avoid slipping objects, lifting please be careful not to let the sling directly contact the plate. The long-piece is lifted using a pole beam to ensure that the sling is in a vertical position.



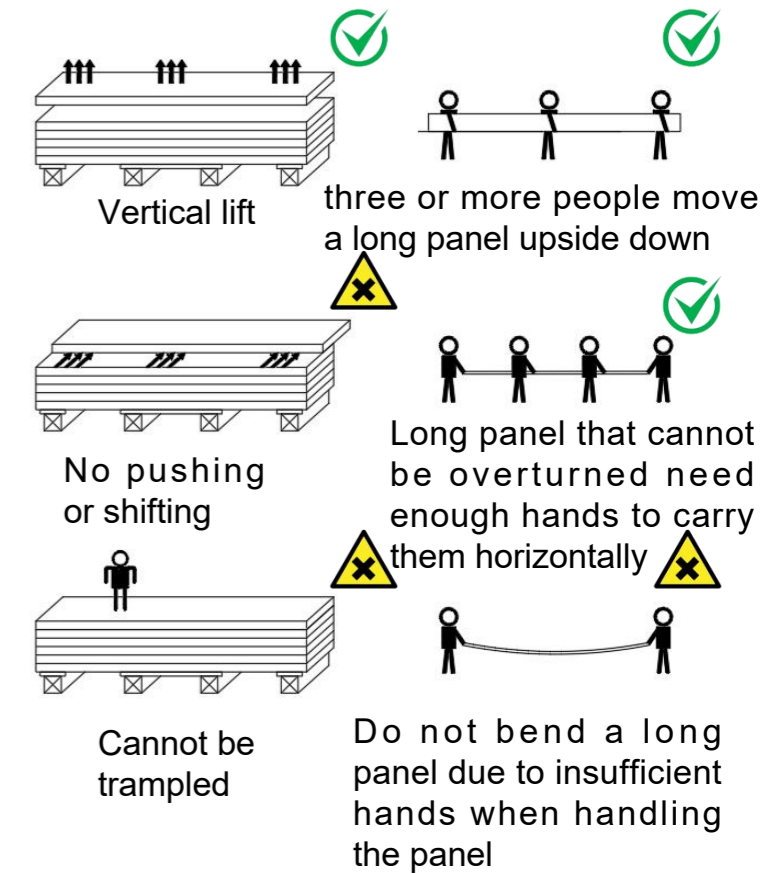
Stacking

Panel should be kept in the factory packaging as much as possible before installation and should be stored indoors. If stacked in the outdoor, the stacking site should be flat, there should be no water and no lifting equipment and heavy objects above, the height of the wooden pad under the board should be 20cm, soft materials should be placed between the panel and the panel, the same type of panel is placed together, each stack of panels should be easily identified panel labels, and covered with waterproof tarpaulin or a simple shed to avoid direct sunlight, but must ensure ventilation. The stacking site should be set up temporary enclosures to avoid unnecessary damage to the plate caused by personnel walking around.



Handing

When handling the panel, both ends should be lifted at the same time to avoid damaging the surface oxide film or coating. When installing the wall panel, only 1 panel can be lifted each time, and the special fixture provided by the manufacturer should be used to lift the wall panel at 2 points at the splicing point in the direction of the length of the wall panel. The lifting process should be carried out slowly, controlled by wind rope to avoid bumping with the installed wall panel, and the prominent part of the scaffold should be wrapped with soft materials



Key Considerations for Purchasing Panel

- ① Panel thickness
- ② Foaming process (continuous/intermittent)
- ③ Foam density
- ④ Environmental friendliness of the foaming agent
- ⑤ Brand of the foaming material
- ⑥ Smoothness, completeness, and deformation status of the groove

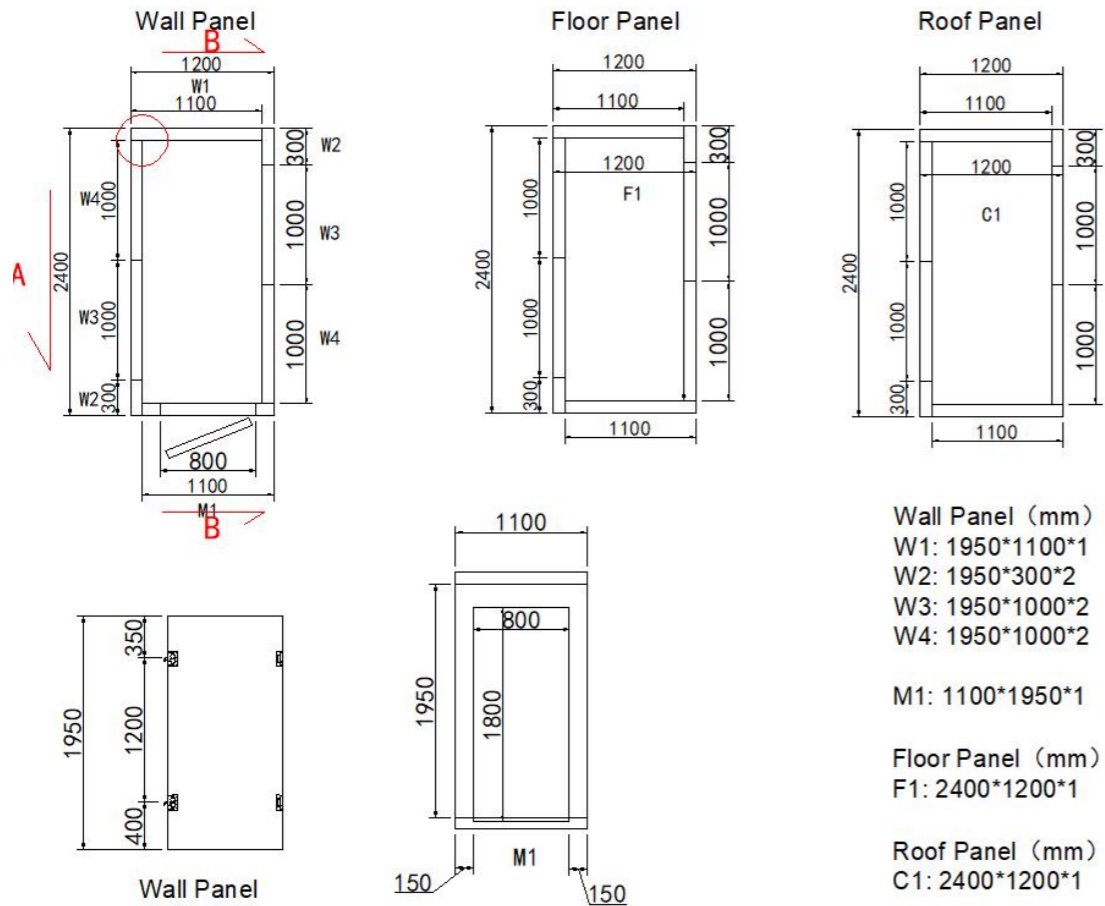


Stacking three or more packages is not allowed is not allowed is not allowed

Packing and Shipping



Drawing and Feedback



Qualification and Patent Certificate

