



Product Catalog

FOSHAN ONEBOND BUILDING MATERIALS CO., LTD

Website: www.onebond.net

| ABOUT US



Our Workshop

We have professional equipment and talents to provide customers with better products and services.

2006

Establishing a purification composite board production factory

No.1 Manufacturer of our line in china.

Foshan Onebond Building Materials Co.,Ltd, established in 2006, is located in economically developed Pearl River -the south china sea, with good market information and technical information environments.

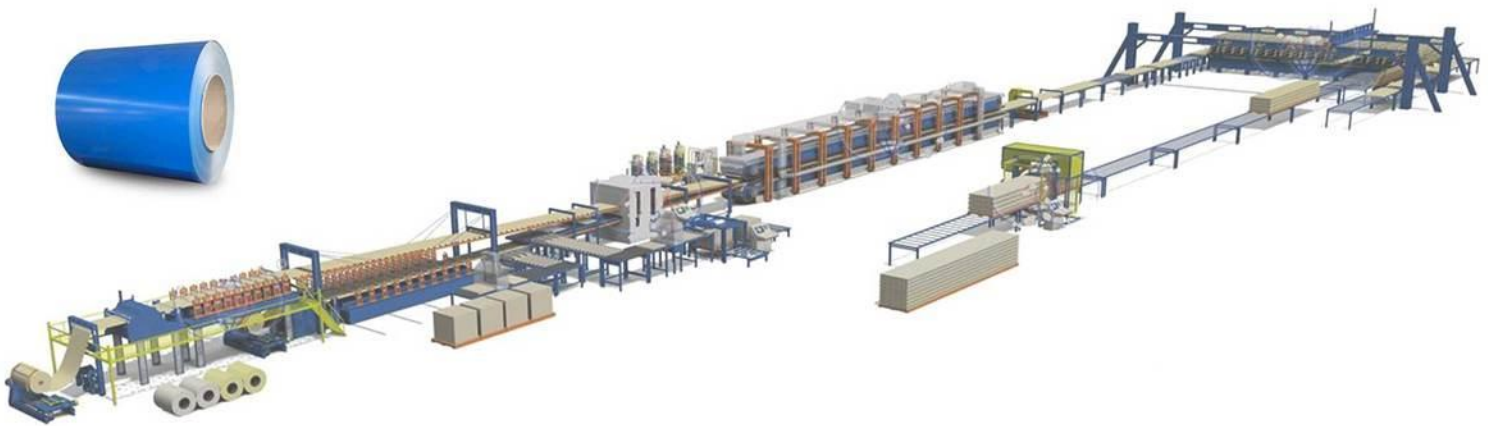
PROFESSIONAL SPACE,
FUNCTIONALIZED CUSTOMIZED SOLUTIONS



56166 ^{m²}
Factory floor area

20000 ^{m²}
Daily production

8 ^{strip}
Fully automated production line



ONEBOND

Foshan

Building materials production base

Foshan Onebond Building Materials Co.,Ltd is a company that focuses on metal materials such as color coated aluminum coil, aluminum composite panels, stone coated metal roof tiles, and insulation aluminum roof panel. It integrates R&D, production and sales. The products are exported to 80 countries and regions such as Europe, North America, Southeast Asia and Africa, and are among the top 100 non-ferrous metal exporters in China.

We produce the whole series of roofing system materials with the most professional construction team, providing customers with the most systematized service. You will enjoy the one-stop service in our company, from the tender design, materials choosing, cost measurement, construction, to technical guidance and the follow-up services.

Qualification



| INTELLIGENT MANUFACTURING

FRP Division



Composite Materials Division



Auto Parts Division



Own laboratory

Establish a professional laboratory for the clean sheet industry, introduce advanced R&D equipment, match high-precision R&D teams, promote product research and innovation, and ensure stable and reliable product quality.

10%

R&D expenses as a percentage of annual revenue



ONEBOND PRODUCTS

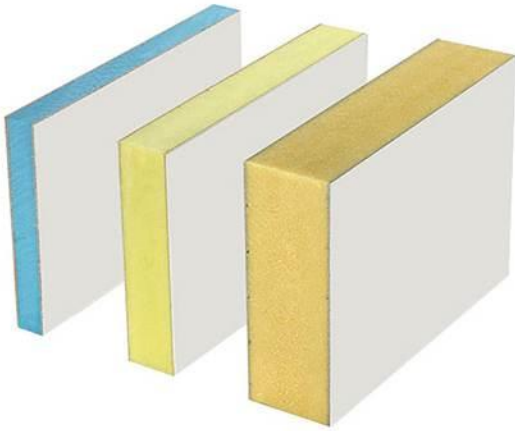


Foam Core Sandwich Panels

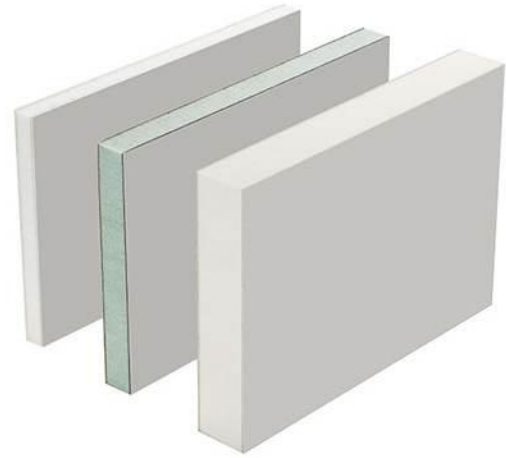


Core Materials

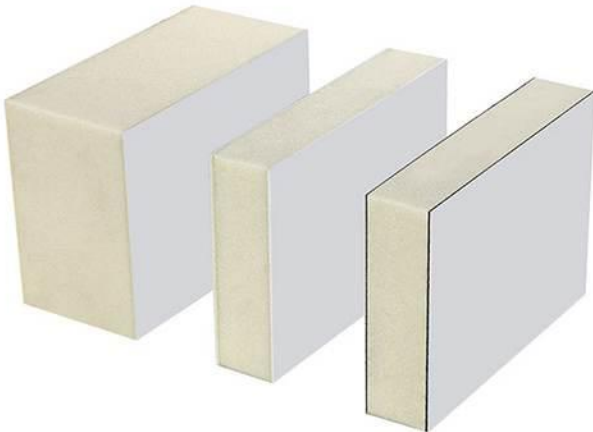
Foam Core Sandwich Panels



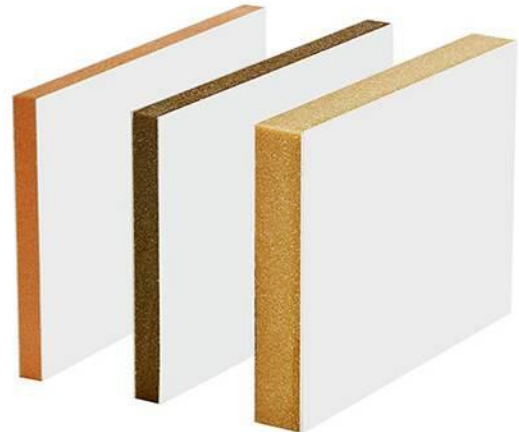
XPS Foam Sandwich Panels



PET Foam Sandwich Panels



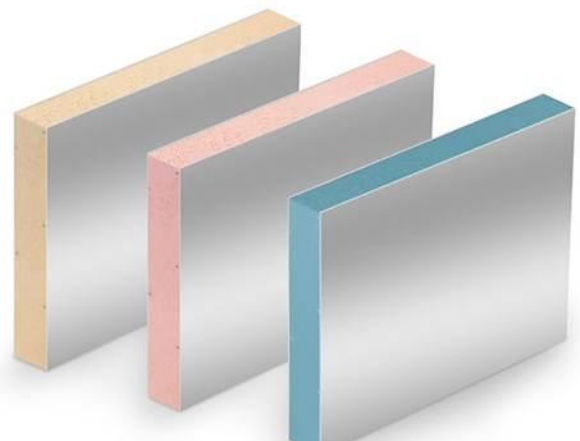
PU Foam Sandwich Panels



PVC Foam Sandwich Panels



Aluminum Foam Core Panels



Stainless Steel Sandwich Panels

XPS Foam Sandwich Panels

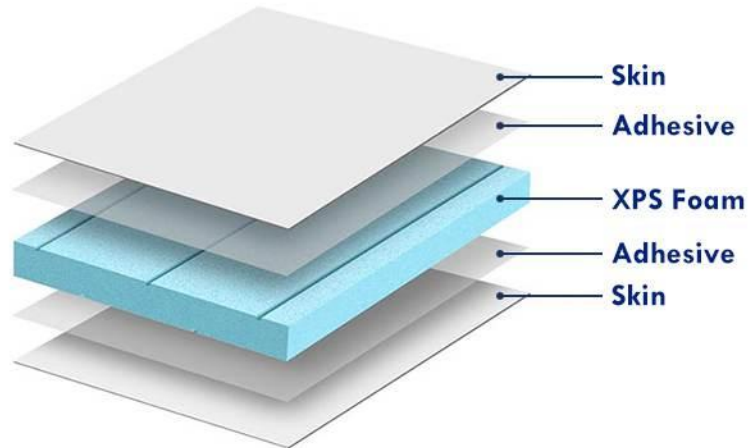


- Flammability Rating: B1
- Lightweight
- Strong
- Thermal Insulation
- Waterproof
- Rotproof



Product Introduction

XPS foam sandwich panels are one of the most popular foam sandwich composite panels, which is a typical representative material combining strength and lightweight, its core material is closed-cell extruded polystyrene foam, and its skin material has a variety of options (fiberglass, aluminum, wood, steel, etc.). The skin and core are bonded together by vacuum compression molding using high-quality polyurethane glue as an adhesive.



Specifications

Item	XPS Foam Core Sandwich Panels
Skin Material	FRP Sheet, CFRT Sheet, Aluminum Sheet, Plywood, Stainless Steel, Aluzinc Steel, etc
Core Material	XPS (extruded polystyrene) Foam Board
Width	≤3.2m
Total Thickness	10~120mm
Length	≤12m
Core Density	30~50kg/m ³
Skin Color	RAL Color Series
Processing	CNC Machining, Embedded Structure



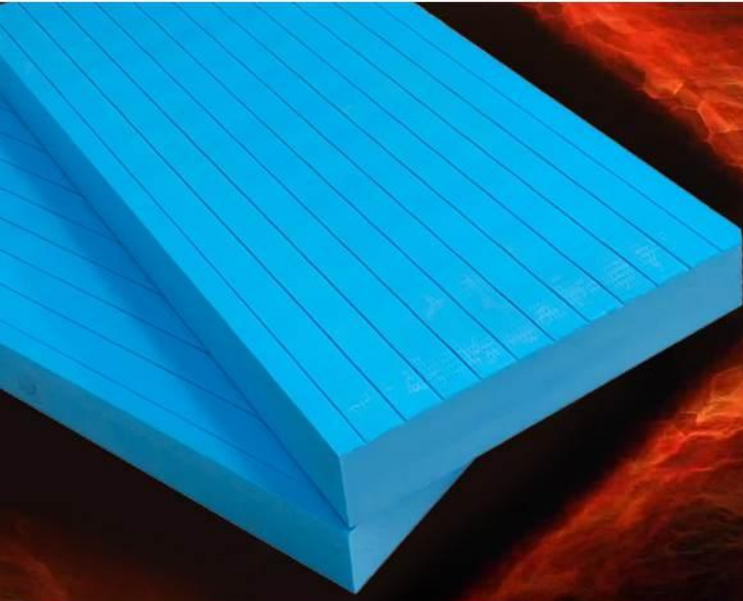
XPS Foam Board

Physical Properties of XPS Foam Board

Items	Unit	Value
Density	Kg/m ³	35~55
Compression Strength	Mpa	0.1~1
Closed Cell Rate	%	≥99
Thermal Conductivity	W/m-K	0.024~0.034
Water Absorption	%	≤1
Operating Temperature	°C	-50~+80

XPS (extruded polystyrene), is made of polystyrene resin as raw material plus other auxiliary materials and polymers, while heating and injecting a catalyst, and then extruded to form a rigid foam plastic board, It has a very low Hygroscopicity (almost no water absorption), low thermal conductivity, and high compression resistance. Its surface is uniform and flat, and the interior is a completely closed cell, so it has the characteristics of high-pressure resistance, lightweight, non-absorbent, airtight, wear-resistant, and non-degradable.

| XPS Foam Sandwich Panels



Flammability Rating: B1

Fire Resistance of Extruded Polystyrene (XPS)

In modern construction, fire safety is one of the most critical concerns, and selecting the right insulation materials can significantly impact a building's safety. Polystyrene insulation materials, Extruded Polystyrene (XPS), is widely used for their excellent thermal insulation properties. However, their fire resistance is often a key factor in determining their suitability for various applications.

Enhance fire safety in your construction projects with ONEBOND's fire-resistant insulation solutions.

XPS is typically used in applications where a higher level of fire resistance is needed, such as in exterior walls, roof insulation, and other critical areas of the building. It is also more resistant to moisture absorption, which helps to maintain its fire-resistant properties over time.

Fire Safety Considerations in Construction

It is crucial to balance insulation performance with fire safety needs, especially in buildings that must meet stringent fire codes.

- **Building Codes and Regulations:** Depending on the location and the building type, specific fire resistance ratings may be required for insulation materials. XPS is often preferred for commercial buildings and high-rise construction.
- **Fire Retardant Additives:** To improve the fire resistance of XPS, manufacturers often incorporate flame retardant additives into the materials. These additives can slow down the ignition process and reduce the spread of fire.
- **Fire Barriers:** In many applications, it is recommended to install fire-resistant barriers or coatings on the insulation materials to further enhance their fire resistance. These barriers can help contain fires and prevent the spread of flames.

APPLICATION



XPS Foam Sandwich Panels

INSPECTION CERTIFICATE

广州质量监督检测研究院 国家高分子工程材料及制品质量检验检测中心(广东) 检验检测报告			
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广州质量监督检测研究院 国家高分子工程材料及制品质量检验检测中心(广东) 检验检测报告			
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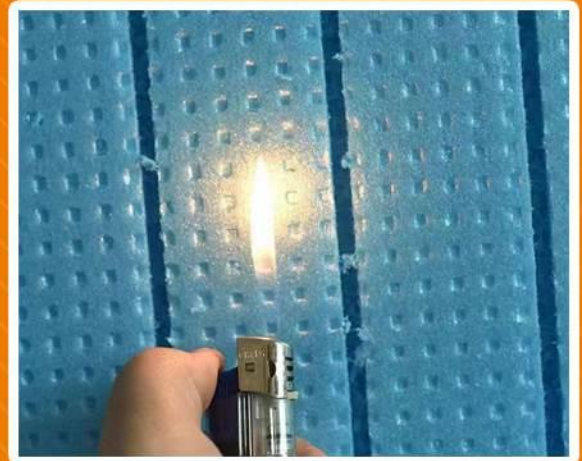
广州质量监督检测研究院 国家高分子工程材料及制品质量检验检测中心(广东) 检验检测报告			
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High Flameretardant Performance

B1 class flame retardant material, self-extinguishing from fire, effective fire isolation and other special circumstances, safe and reliable performance is superior very used in home external walls.

Experimental Data:

XPS softens at 165°F and melts between 200°F to 210°F which can potentially spread flammable material.



Why Choose Fire-Resistant Insulation from ONEBOND?

At ONEBOND, we understand the importance of fire safety in construction. Our insulation materials are designed with the highest standards of performance in mind. By choosing our fire-resistant XPS solutions, you ensure that your building benefits from both superior thermal insulation and enhanced fire safety.

- **High-Quality Standards:** Our products are manufactured using the latest technologies and fire-retardant treatments to ensure they meet the required fire resistance standards.
- **Custom Solutions:** We offer tailored insulation solutions for both residential and commercial buildings, ensuring that each project receives the best material for its specific needs.
- **Expert Consultation:** Our team of experts is available to guide you through the selection process, helping you choose the most suitable fire-resistant insulation for your construction project.

Ensure your construction project meets all fire safety requirements by selecting the right polystyrene insulation from ONEBOND.

| XPS Foam Sandwich Panels

Production Line and Warehouse



| XPS Foam Sandwich Panels

High performance thermal insulation for residential and industrial building

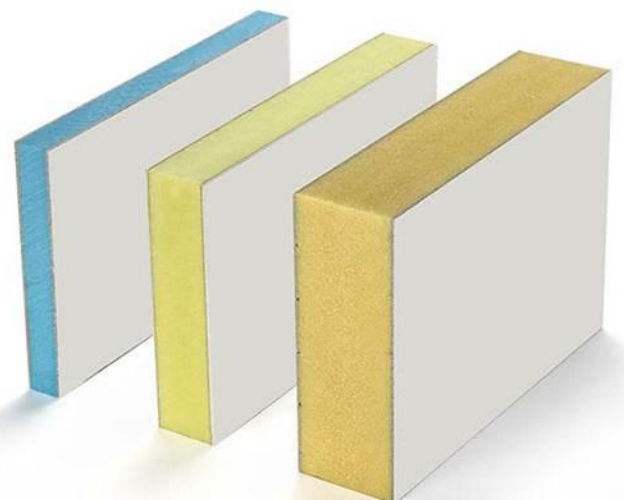
Thanks to its superior load-bearing performance, ONEBOND XPS insulation is a robust solution that will stand up to the demands of any construction site, delivering its intended thermal performance and contributing to a reduction in the performance gap once the building is finished and in use.



The versatile solution architects and homeowners have been looking for

Providing a flat, strong and dimensionally stable insulation layer, XPS is also a robust solution for conventional warm flat roofs, green roofs and blue roofs, car park decks, floating floors above the ground floor slab, and swimming pool basins.

It is compatible with underfloor heating systems at ground and intermediate floor level, can provide external wall insulation below the damp proof course in low-energy construction projects, and is suitable for use with a variety of building boards and materials to create thermal laminate products.



XPS Foam Panel Series - FRP XPS Sandwich Panel



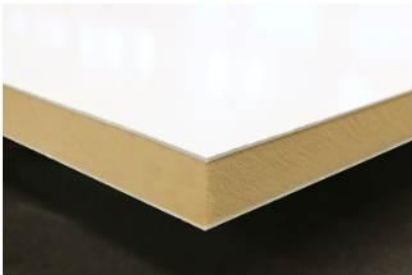
Schematic Diagram of FRP Facing XPS Foam Sandwich Panels

Basic Specifications

Facing	Gelcoat FRP. (Thickness: 0.7~5.0mm)
Core Materials	XPS (extruded polystyrene) foam. (Density: 35~50 kg/m ³)
Composite Methods	Adhesive.
Surface Treatment	Glossy, matte, embossed, etc.
Surface Color	RAL color.
Internal Reinforcement Materials	Aluminum profiles, steel profiles, wood, fiberglass profiles, etc.
Length	≤12m
Width	≤3.2m
Thickness	10~150mm

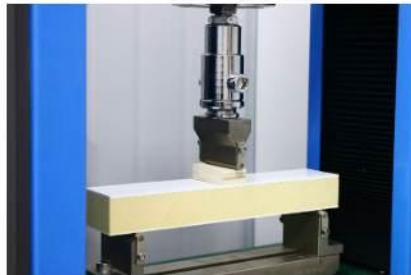


Feature of FRP Facing XPS Sandwich Panels



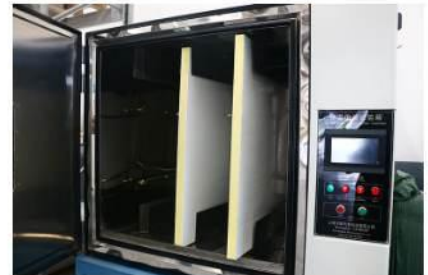
Flat and Smooth

- The surface of the FRP is flat and smooth, without dirty spots, and there are no obvious marks on the surface of the seams of the foam boards.



No Delamination

- FRP and XPS foams are closely bonded and extremely difficult to delaminate.



Stable Performance

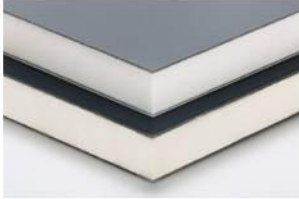
- The FRP surface has been treated with UV protection to keep its original color for a long time outdoors. It can withstand high temperatures up to 80°C without deformation and low temperatures as low as -40°C without becoming brittle.

XPS Foam Panel Series - FRP XPS Sandwich Panel

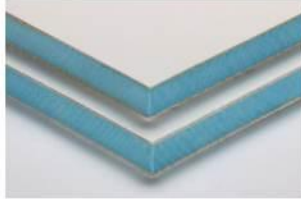
FRP Skin XPS Foam Sandwich Panels

FRP sheet is a composite containing resin and fiberglass, which has the advantages of high strength, rigidity, lightweight, corrosion resistance, waterproof, and electrical insulation. FRP skin XPS foam core sandwich panels have become the material of choice for many camper and box truck builders. Compared with metal or wood-skinned foam sandwich composite panels, its comprehensive performance advantages are obvious.

- ✓ **Lightweight:** FRP is lighter compared to metal materials.
- ✓ **Strong:** FRP is much stronger than plywood.
- ✓ **Moisture-proof:** FRP won't rot like plywood in wet weather and won't rust like steel.
- ✓ **Insulation:** FRP is a good insulating material.



High-gloss Fiberglass XPS foam insulation panels



Matt fiberglass XPS foam insulation panels



CFRT Skin XPS foam insulation panels



Embossed Fiberglass XPS Foam insulation panels

Applications of FRP Facing XPS Foam Sandwich Panels

FRP facing XPS composite panels are widely used in vehicles, buildings, public transportation, ocean and other fields. Such as RVs, refrigerated trucks, mobile homes, yachts, etc. It can be used as wall panels, floors, roof panels, partitions, door panels, etc.



Refrigerated Trucks



RVs

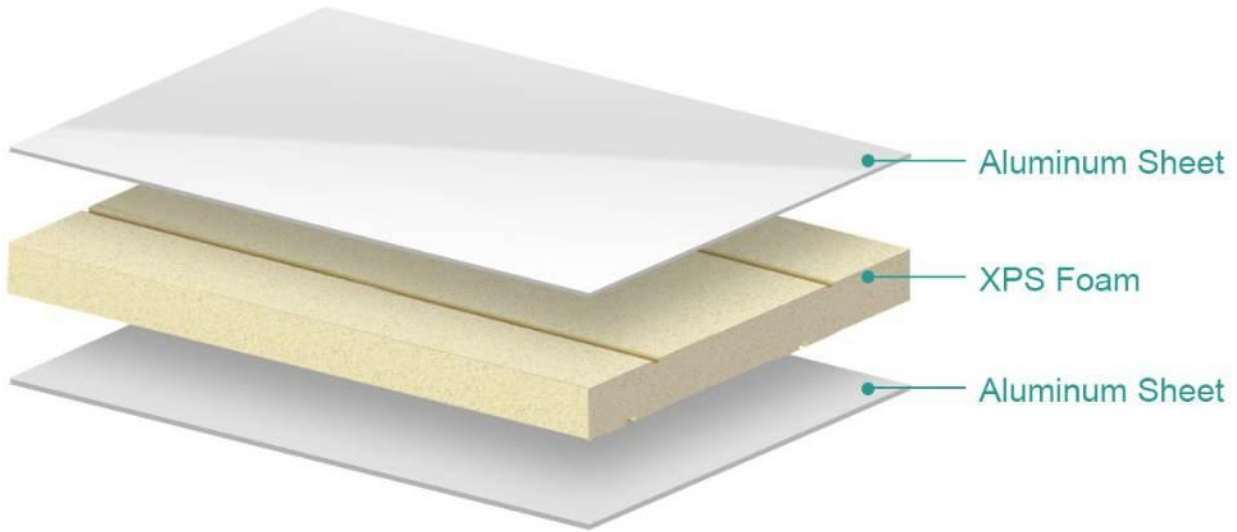


Mobile Homes



Cold Rooms

XPS Foam Panel Series - Aluminum XPS Sandwich Panel



Schematic Diagram of Aluminum XPS Foam Sandwich Panels

Basic Specifications

Total Thickness	10~120mm
Aluminum Sheet Thickness	≥0.1mm
Width	800~2600mm
Length	≤12m
Aluminum Grades	1050, 1060, 1100, 1145, 1200, 1230, 1350, 2011, 2014, 2017, 2018, 2124, 2219, 2319, 3003, 3004, 3105, 5005, 5052, 5083, 5086, 6061, 6063, 7075, 7050, 7049, 710 0, 8006, 8111, 8079, etc.
Aluminum Surface Treatment	Sandblasting, polishing, glossy, embossed, matte, fluorocarbon coating, anodizing, etc.
Aluminum Surface Color	Color: RAL color, or customized pattern.
XPS Foam Density	35~50kg/m ³

Surface Treatment



XPS Foam Panel Series - Aluminum XPS Sandwich Panel

We use high-quality materials and advanced production equipment.



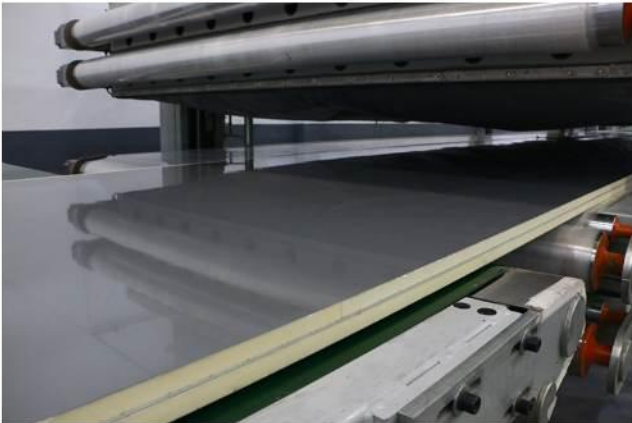
Corrosion-resistant Aluminum Skin

It uses corrosion-resistant and scratch-resistant aluminum alloy sheets as the skin, which will not peel off or discolor after long-term use.



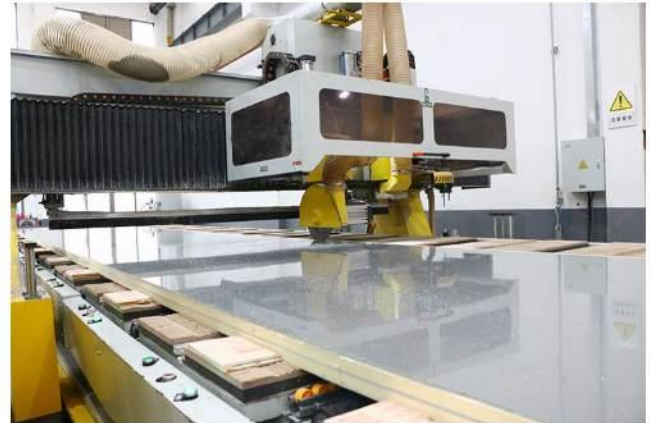
Closed Cell Rigid Foam Board

The closed-cell XPS board not only has low thermal conductivity, good thermal insulation effect, but is also waterproof.



Vacuum Compression

The use of vacuum compression technology enhances the bonding strength of the aluminum skin and XPS foam board, avoiding problems such as delamination, warping, and bulging.



CNC Machining

High-precision CNC machining is used to modify the panel to achieve the required size. We use 5-axis synchronous CNC to reduce errors to a minimum.

Application Fields

- **Buildings:** These panels are commonly used on building exteriors, roofs and walls to provide insulation and structural support.
- **Transportation:** They are used to make lightweight components in the automotive, aerospace and marine industries, reducing overall vehicle weight and improving fuel efficiency.
- **Industrial:** These panels are suitable for industrial environments where lightweight insulating panels are required for a specific purpose.
- **Cold Storage:** Aluminum XPS sandwich panels are used in cold storage facilities to maintain a stable temperature and prevent heat transfer.
- **Modular construction:** Due to their lightweight and insulating properties, they are used in the construction of prefabricated and modular buildings.



XPS Foam Panel Series - CFRT XPS Sandwich Panel



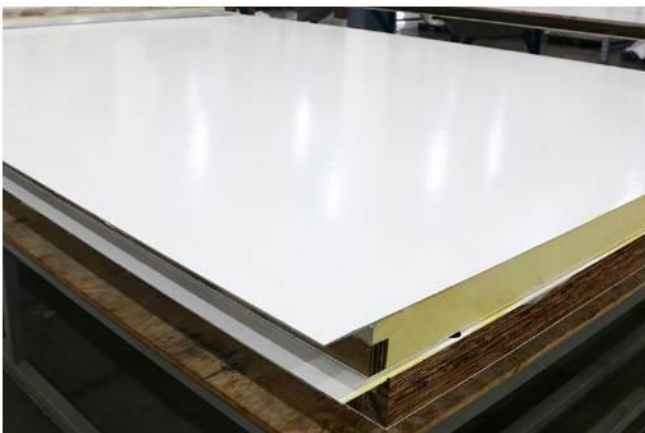
CFRT XPS Sandwich Panels

- Lightweight
- High strength
- Thermal insulation
- Waterproof

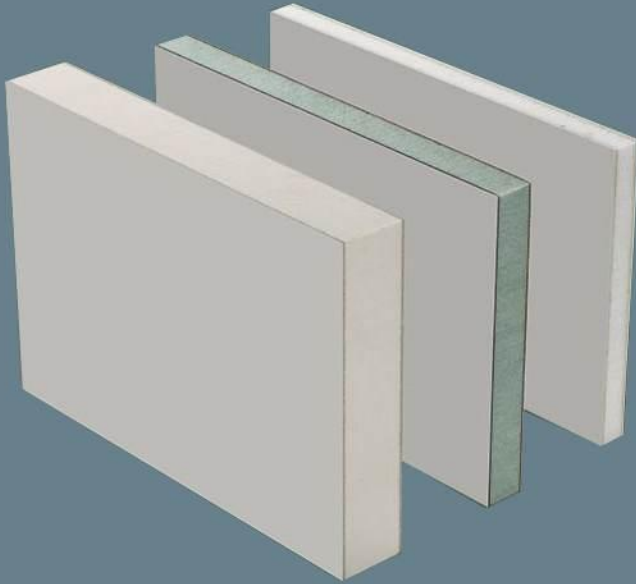


Specifications

Total Thickness	10~120mm, of customized.
Length	≤12m.
Width	≤3.2m.
Core Materials	XPS foam core. (Density: 35~50kg/m ³)
Skin Materials	CFRT sheet(0.4~10mm).
Layers of UD Tape	2~9 layers, the number of layers can be customized.
Surface Film	PET/PVC/PP film.
Surface Color	Natural/black and other colors can be customized.
Performance Treatment	Anti-ultraviolet, flame retardant, antistatic.
Process Options	CNC machining services.



PET Foam Sandwich Panels

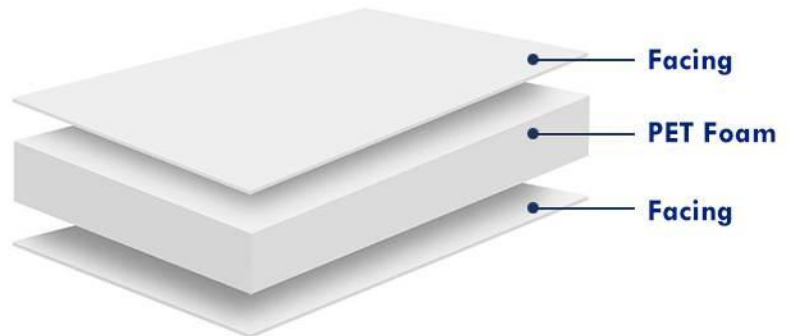


- Lightweight
- Strong
- Waterproof
- ECO Friendly



Product Introduction

Sandwich structure is the most common composite panel structure. PET foam can be combined with fiberglass, aluminum, steel, plywood and other materials to form sandwich panels for different applications.



Specifications

Core	PET (Polyethylene Terephthalate) Foam Board. (Density: 50~300 kg/m ³ .)
Skin	FRP (Fiberglass Reinforced Plastic) Sheets; CFRT (Continuous Fiber Reinforced Thermoplastic) Sheets; Aluminum Sheets; Plywood Sheets; Galvanized Steel Sheets; Stainless Steel Sheets; HPL Sheets;etc.
Width	≤3.2m. (Tolerance: ≤1.0mm.)
Length	≤12m. (Tolerance: ≤1.0mm.)
Thickness	3.0~120mm. (Tolerance: ≤0.1mm.)



PET Foam Board

PET (Polyethylene terephthalate) foam is a closed-cell rigid foam, It has the characteristics of light weight, heat resistance, non-absorbent, high strength and easy shearing. It can replace wood as the filling core material, and it can be recycled, which is an environmentally friendly material recognized and promoted worldwide.

PET Foam Sandwich Panels

PET Foam Sandwich Panel Series

PET foam is basically compatible with all skin material systems through glue, not limited to fiberglass, aluminum, steel, plywood, etc. Which material to choose as the skin material depends on your product requirements.



FRP Skin PET Sandwich Panels



Aluminum Skin PET Sandwich Panels



Aluminum Composite Skin PET Sandwich Panels



CFRT Skin PET Sandwich Panels



Galvanized Steel Skin PET Sandwich Panels



Plywood Skin PET Sandwich Panels

Applications

PET foam sandwich panels are widely used in vehicles, buildings, transportation, ships, furniture and other fields. In particular, fiberglass PET composite panels are lighter, stronger, longer-lasting and lower-cost than traditional metal or wooden material panels. This makes them widely used in wall panels, floors, partitions, roof panels, etc. in RV and box truck manufacturing.



RVs



Box Trucks

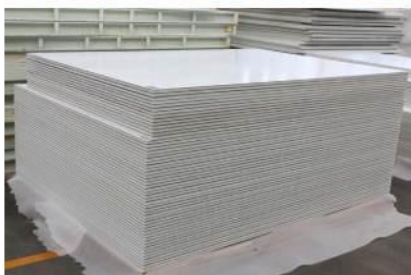


Buildings



Furniture

Custom PET Foam Core Sandwich Panels for Your Projects



Production in Bulk



CNC Machining Service



Packaging and Transportation Solutions

- The daily production area of PET foam sandwich panels is 1000-2000 square meters. It can meet the production of products in large quantities and with relatively short delivery time.
- Cutting, drilling, and milling of the finished PET Panel, reducing the user's later reprocessing cost.
- ONEBOND provides customers with last-mile service. We design a reasonable packaging and transportation plan based on the customer's existing equipment and loading tools.

PU Foam Sandwich Panels

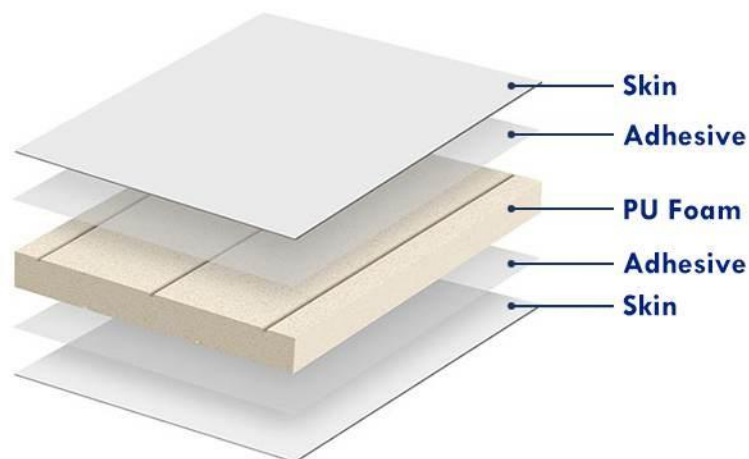


PU Sandwich Panels

- Glossy FRP Skin
- Thermal Insulation
- Lightweight
- Waterproof
- Weather Resistant

Product Introduction

The PU foam core composite board is a typical sandwich structure, the middle is a PU foam board for heat preservation, the upper and lower layers are skin materials, and the skin and core materials are combined with an adhesive (usually polyurethane resin glue). In order to make the adhesive more evenly distributed, so that the skin and the core material are combined more tightly, and to prevent problems such as bulging and delamination, grooves will be cut on the PU foam board.



Specification

Type	PU Foam Sandwich Panels
Width	≤3.2m
Thickness	10~150mm
Length	≤12m
Core Density	28~50kg/m ³
Skin	FRP, CFRT, Aluminum, Plywood, Stainless Steel, Prepainted Steel
Processing	CNC Machining, Embedded Structure



PU Foam Board

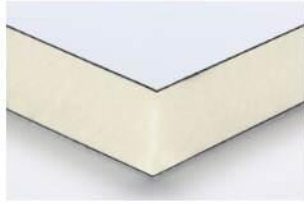
Polyurethane rigid foam is a new closed-cell structure synthetic material with thermal insulation and waterproof functions. Its thermal conductivity is only 0.022-0.033W/(m*K), which is equivalent to half of the extruded board and has the lowest thermal conductivity among all thermal insulation materials.

PU Foam Sandwich Panels

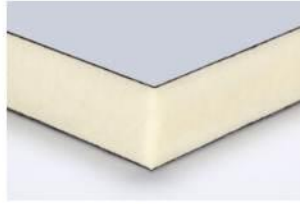
Multiple Skin Materials are Available



FRP Skin PU Sandwich Panel



CFRT Skin PU Sandwich Panel



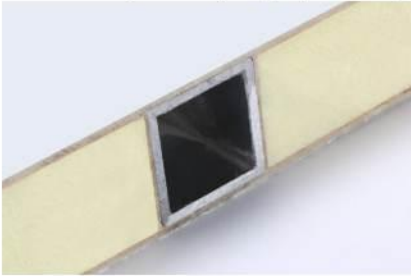
Steel Skin PU Sandwich Panel



Aluminum Skin PU Sandwich Panel

Embedded Structure

The strength value of PU foam is low, and it is easy to crush. At the same time, for the insulation effect, most PU insulation panels are made very thick, usually larger than 8cm. In order to ensure the strength of the PU insulation panel, some reinforced structural components are usually embedded inside it. Such as embedding aluminum tubes, steel tubes, FRP parts, etc. These pre-embedded structural parts can also facilitate the installation of screws and the layout of electric wires.



Aluminum Tube Reinforced Structure



Wood Reinforced Structure



I-shaped Reinforced Structure

Application Field of PU Foam Sandwich Panels



Application in trucks

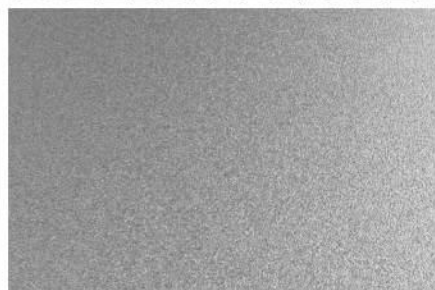


Application in RVs



Application in Buildings

Surface Treatment



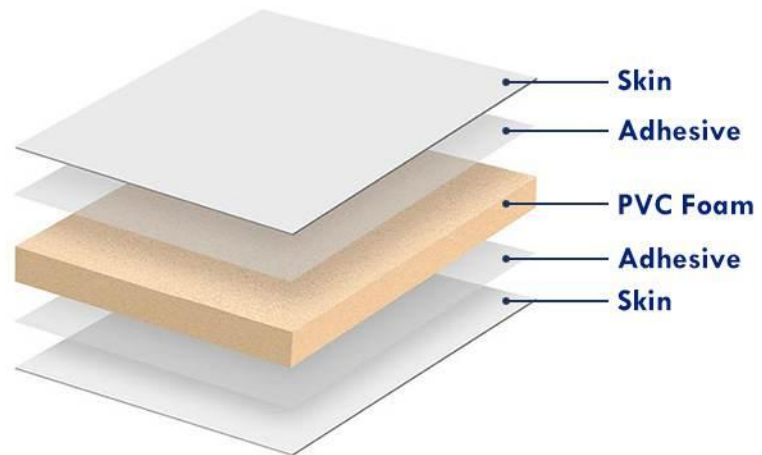
PVC Foam Sandwich Panels

PVC Sandwich Panels

- Thermal Insulation
- Lightweight
- High Strength
- Waterproof
- Flame Retardant
- Weather Resistant

Product Introduction

PVC foam sandwich panel is a typical three-layer structure composite material, the upper and lower layers are skin materials (fiberglass, aluminum, steel, plastic, plywood, etc.), and the middle is PVC foam core material. The skin and core are laminated using high-quality glue through a laminator. Various designed pattern materials can also be pasted on its surface to highlight the customer's style.



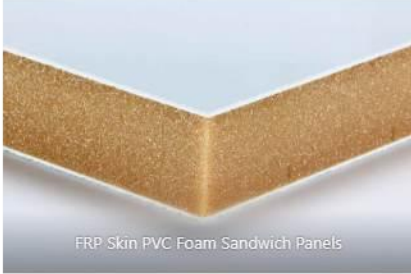
Expert in FRP Sandwich Panels

As the most professional FRP sandwich panel manufacturer, ONEBOND produces the top-level FRP facing PVC sandwich panels. In addition, ONEBOND provides XPS (extruded polystyrene), PET (Polyethylene terephthalate), PU (polyurethane) and other foam core FRP sandwich panels.

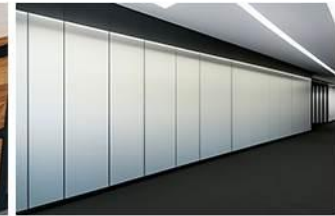


PU Foam Sandwich Panels

Skin Material System



Application of PVC Foam Core Panels

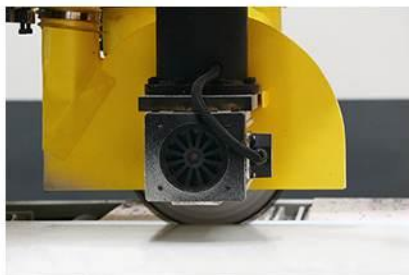


Customized Service



Material selection

Customize the density, thickness, length, width of PVC foam board, and different skin materials.



CNC machining

Cutting, drilling, milling and other processing for PVC foam sandwich panels.



Packaging and transportation

In order to ensure the safe arrival of products to the destination country, we customize various packaging solutions, including the use of packaging materials, fixed design solutions, etc.

Aluminum Foam Core Panels

Basic Specifications

Panel Width	1000mm, 1220mm, 1500mm or as required
Panel Length	2440mm, 3200mm, 4880mm, 5800mm or as required
Skin Layer Material	Aluminum Alloy (1050, 1060, 1100, 1145, 1200, 1230, 1350, 2011, 2014, 2017, 2018, 2124, 3003, 3004, 3105, 4032, 4043, 4145, 5005, 56052, 50603, 508 7049, 8006, 8011, 8079, etc.)
Skin Layer Thickness	0.1~2.0mm
Core Material	XPS (Extruded Polystyrene) Foam, PET (Polyethylene Terephthalate) Foam, PU (Polyurethane) Foam, PVC (Polyvinyl Chloride) Foam.
Core Thickness	5~100mm
Aluminum Surface Treatment	Mechanical treatment: brushing, sandblasting, polishing, embossing, etc; Prepainting: PE, PTFE, PVDF, FEVE, PVDF; Anodizing.

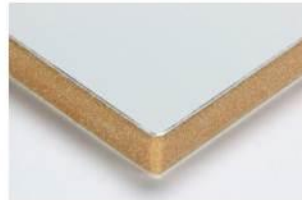
Various Core Materials are Available



XPS Foam Aluminum Sandwich Panel



PU Foam Aluminum Sandwich Panel



PVC Foam Aluminum Sandwich Panel



PET Foam Aluminum Sandwich Panel

Various Aluminum Surface Treatments



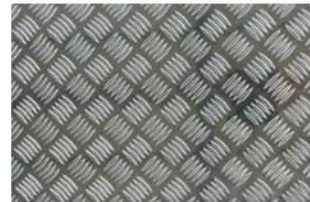
Sandblasting



Polishing



Brushing



Embossing

Applications

Aluminum foam core sandwich panels are mainly used as heat insulation materials in various buildings, vehicles, ships, aerospace, and furniture.



Motorhomes, campers, caravans, travel trailers, etc.



Cold storages, cold rooms.



Refrigerated trucks, dry freight trucks, mobile catering trucks, etc.



Building wall panels.

Aluminum Foam Core Panels

ONEBOND aluminum composite panel products have good reprocessing performance, uniform thickness, high strength, lightweight, easy handling and installation, can adapt to various installation methods such as riveting and gluing, and are easy to operate. The composite panel core materials have high density and strong compression resistance. It is not necessary to pre-embed wood strips, iron plates and other components at the edge during assembly, which reduces processing costs and assembly difficulty.



Stainless Steel Sandwich Panels

Specifications

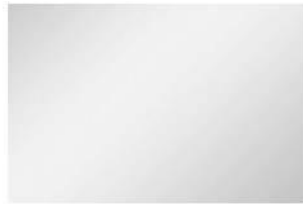
Width	1500~2000mm
Core Thickness	10~120mm
Facing Thickness	0.2~3mm
Length	Customized
Facing Material	201/304 stainless steel sheets
Core Material	XPS, PET, PVC, PU, EPP foam board
Surface Treatment	Brushing, sandblasting, polishing, embossing, etc

Surface Treatment

The surface of stainless steel can be subjected to various mechanical and chemical treatments, which is different from pre-painted steel (galvanized, galvalume). Therefore, the surface of the foam core stainless steel sandwich panel is colorful and can be processed into mirror, brushed, frosted, embossed, titanium-plated and other effects.



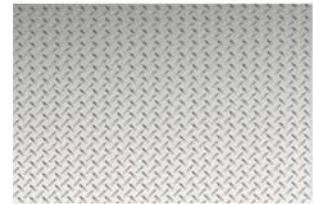
Brushed Stainless Steel



Mirror Stainless Steel



Sandblasted Stainless Steel



Embossed Stainless Steel

Foam Core System



XPS Foam Core Board



PET Foam Core Board



PU Foam Core Board



PVC Foam Core Board

Application of Stainless Steel Sandwich Panels

Because of the excellent performance of the foam core stainless steel sandwich panel, its application range is very wide, such as buildings, automobiles, ships, machinery, furniture and other fields. It can be used as wall panels, ceilings, partition panels, floors, fences, enclosures and more.



Building exterior insulation wall panels



Building interior decoration



Truck body insulation panels

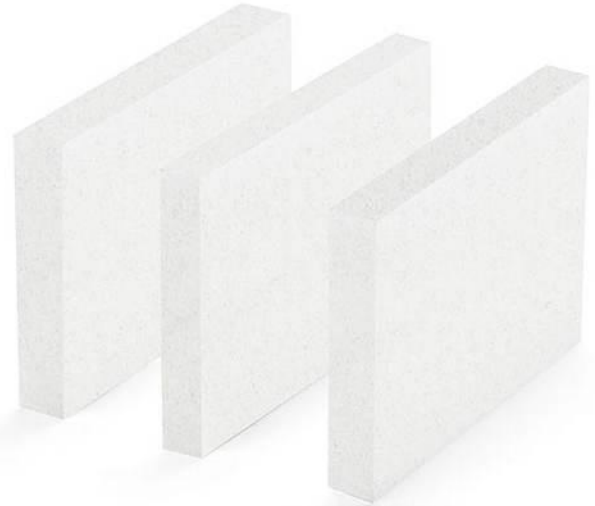


Camper wall panels

| Core Materials



XPS Foam Board



PET Foam Board



PU Foam Board



PVC Foam Board

XPS Foam Board



Technical Parameters of XPS Thermal Insulation Foam

Density	Kg/m ³	32~43
Thermal conductivity, 90 days, 10°C	W/mK	0.027~0.03
Compressive strength at 10% deflection or yields, (vertical)	KPa	≥300
Tensile strength	KPa	≥300
Water absorption	Vol-%	≤1.00%
Capillarity	nil	nil
Coefficients of linear thermal expansion	mm/mK	0.07
Temperature limits	°C	-50°C~70°C

XPS Foam Board Properties

XPS foam is an insulating panel manufactured with fully recyclable material. It is produced from extruded polystyrene, a material that doesn't deteriorate. The foam structure is constructed with very fine closed cells that provide excellent physical and mechanical characteristics.

- **Heat Insulation Performance**

XPS foam doesn't conduct heat due to the special cell structure. When XPS panels are laid as a wall liner or floor underlay, any heat from the room or truck body will be reflected back towards the surface. This helps to prevent heat wastage, and thereby, lowers your energy consumption and carbon footprint.

- **Damp Protection**

XPS foamed products are also water-repellent. They never rot or support mold growth and help hold back any dampness from the structure. XPS panels are also resistant to cement, plaster, and most alkalis except organic solvents.

- **Soundproof**

In addition, XPS foam has excellent sound-insulating properties, which makes your truck or room floor "quieter" to walk on. It is an ideal product that reduces sound transmission to the level below.

Application

XPS foam board is mainly used in thermal insulation, such as RV bodies, refrigerated truck bodies, cold rooms, building wall panels, etc.



Application of XPS Foam in RV



Application of XPS Foam in Refrigerated Truck



Application of XPS Foam in Building

PET Foam Board



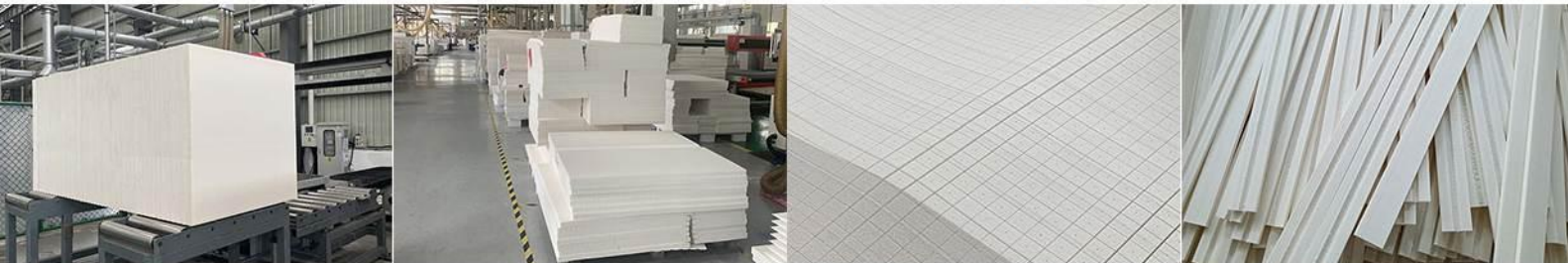
Mechanics Performance Testing & Size

Item	Standard	Unit	Value	T60/T60(S)	T80/T80(S)	T100/T100(S)	T115/T115(S)	T135/T135(S)	T150/T150(S)	T200/T200(S)	T250/T250(S)	T300/T300(S)
Density	ISO 845	Kg/m ³	Nominal density	65	85	100	115	135	150	200	250	300
			Range	60-70	80-90	95-105	110-120	130-140	145-155	190-210	235-260	270-330
Compression strength Z	ISO 844	MPa	Mean	0.85	1.05	1.5	1.8	2.2	2.5	3.8	4.9	6.5
			Minimum	0.7	0.85	1.3	1.5	1.8	2.3	3.3	4.4	5.5
Compression modulus Z	ISO 844	MPa	Mean	55	80	95	115	135	145	200	260	330
			Minimum	45	65	80	95	115	120	170	200	270
Tensile strength Z	ASTM C297	MPa	Mean	1.4	1.45	1.8	2	2.25	2.4	2.9	3.4	3.7
			Minimum	1.15	1.25	1.4	1.5	1.8	2	2.3	2.8	2.9
Tensile modulus Z	ASTM C297	MPa	Mean	80	95	110	130	150	160	210	260	350
			Minimum	70	85	90	110	125	135	170	200	300
Shear strength XZ	ISO 1922	MPa	Mean	0.5	0.61	0.8	1	1.2	1.4	2	2.3	2.5
			Minimum	0.42	0.55	0.72	0.85	1.05	1.25	1.6	1.8	2
Shear modulus XZ	ISO 1922	MPa	Mean	15	20	26	31	37	45	65	85	105
			Minimum	12	17	22	26	32	39	57	75	98
Shear strength XZ	ISO 1922	MPa	Mean	0.5	0.59	0.79	0.95	1.18	1.35	1.9	2.2	2.45
			Minimum	0.4	0.5	0.71	0.8	1.03	1.2	1.55	1.75	2
Shear modulus XZ	ISO 1922	MPa	Mean	15	19	25	28	35	40	59	78	90
			Minimum	12	16	21	25	31	36	55	72	85
Shear breaking elongation Xz、Yz	ISO 1922	%	Mean	20	22	16	13	11	9	6	5	3
			Minimum	15	16	10	8	7	5	4	3	2
Standardsheet	Length	mm	2445			Tolerance			±5			
	Width	mm	1220/1005			Tolerance			±5			

Application Fields



ONEBOND Customizes PET Foam Boards of Different Shapes and Sizes for You



PET Block

PET Plain Board

Grooving Board

PET Foam Strip

PU Foam Board



Rigid PU Foam Board Performance

Items	Unit	Value
Density	Kg/m ³	35~300
Compression Strength	Mpa	≥0.15
Closed Cell Rate	%	≥97
Thermal Conductivity	W/m·K	0.017~0.022
Water Absorption	%	≤0.2
Operating Temperature	°C	≤100°C

Applications



OEM Service

ONEBOND provides customers with different specifications of PU foam board, and can customize different colors and shapes for customers.



PVC Foam Board



PVC Foam Core Size

Test standard	Unit	V45	V60	V80	V100	V130	V160	V200	V250
Width	mm	1200	1130	1020	980	850	800	750	700
Length	mm	2600	2440	2180	2020	1900	1800	1600	1500
Thickness	mm	5-95	5-95	5-80	5-66	5-55	5-55	5-50	5-50

Mechanics Performance Testing

Property	Test standard	Unit	Value	V45	V60	V80	V100	V130	V160	V200	V250
Density	ISO 845	Kg/m ³	Mean	45	60	80	100	130	160	200	250
			Range	40-53	54-69	72-92	90-115	120-150	151-180	180-225	230-275
Compression strength	ISO 844	MPa	Mean	0.65	0.95	1.45	2.1	3.2	3.9	5.5	7
			Minimum	0.5	0.8	1.2	1.7	2.6	3.3	4.5	6
Compression modulus	ISO 844	Mpa	Mean	50	80	110	140	180	230	300	380
			Minimum	35	65	85	110	145	190	250	330
Tensile strength	ASTM D638	MPa	Mean	0.98	1.35	2	2.7	4	4.5	6	7.5
			Minimum	0.85	1.05	1.6	2.2	3	3.7	4.8	5.5
Tensile modulus	ASTM D638	MPa	Mean	38	50	70	85	120	135	175	230
			Minimum	30	38	50	65	95	115	140	160
Tensile strength	ASTM C297	MPa	Mean	1.5	1.8	2.5	3.5	4.8	5.3	7.3	8.8
			Minimum	1	1.5	2	2.6	3.5	3.8	6.5	7.8
Tensile modulus	ASTM C297	MPa	Mean	55	85	110	135	180	200	270	300
			Minimum	40	60	85	110	130	180	230	250
Shear strength	ISO 1922	MPa	Mean	0.55	0.82	1.25	1.75	2.5	2.8	3.5	4.7
			Minimum	0.5	0.73	1.05	1.4	2.1	2.2	3.2	4.2
Shear modulus	ISO 1922	MPa	Mean	16	22	30	42	55	64	75	100
			Minimum	14	19	25	35	45	55	68	84
Shear breaking elongation	ISO 1922	%	Mean	15	23	30	35	40	42	45	45
			Minimum	8	10	15	15	20	22	25	25

Processing of PVC Foam Board



Flat PVC Foam

After the boards are sliced, no extra surface treatment. The curved surface can be adapted by the thermo-forming of the plain boards.



Perforated PVC Foam

The foam has a hole with a diameter of about 2mm, and the actual size of the hole can be adjusted according to the thickness and density of the foam core. With this hole, the air under the sheet can be expelled and the resin will flow to the other side.



Grooved PVC Foam

The grooves on the surface of the board serve as resin infusion channels. The grooves can be on one or both sides, in one or both directions.



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