



ONE-STOP SERVICE OF ENERGY-SAVING INSULATION SYSTEM

<https://shanghehouse.com>
<https://shanghepanel.com>

COMPANY PROFILE



Research and
Development



Produce



Sell



Service

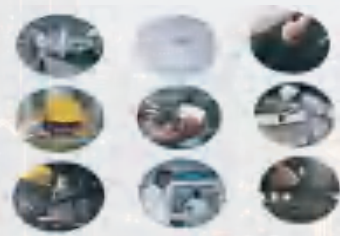
Shandong Shanghe New Construction Engineering Co.,Ltd. is a comprehensive company focusing on the production of new thermal insulation composite materials, with the goal of leading science and technology, responding to national environmental protection policies, and targeting the domestic and foreign building materials market. The company is a high-tech enterprise engaged in research and development, production, sales and service, providing scientific and complete solutions for the decoration and energy-saving transformation of new and existing buildings. In view of the new trend of building energy conservation at home and abroad, we have cooperated with famous energy-saving experts at home and abroad, introduced advanced technology and equipment from all over the world, developed a series of building exterior wall products, and established an integrated system of building exterior wall energy conservation and decoration. The integrated energy-saving decoration system integrates the functions of decoration, heat preservation, heat insulation, fire protection, rain protection and leakage prevention, integrates the humanistic concept of energy conservation and environmental protection and international fashion design elements, and injects the new concept of "integration of energy conservation and decoration", which greatly meets the energy-saving design requirements of different buildings and conforms to the new trend of the development of energy-saving buildings in China.



20+years production experience
50000+square metre Factory Area
300+Employee headcount

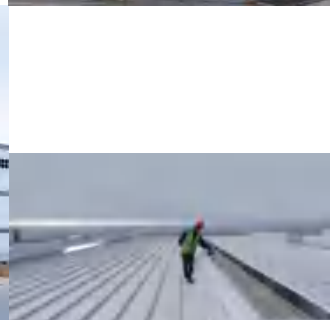
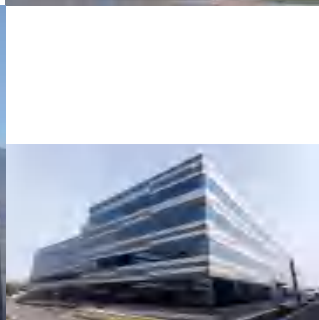
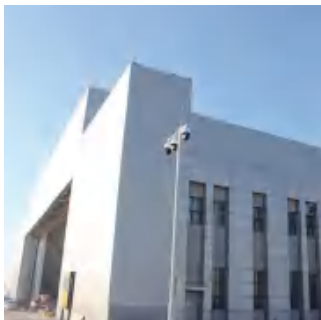
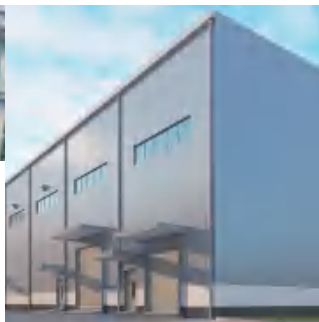


5 production lines of the
world's advanced level and
technology ensure the
production efficiency is 20%
higher than the same
industry.



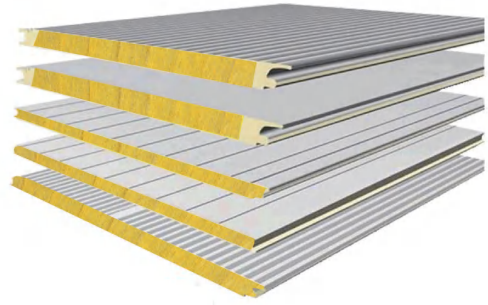
15 quality inspectors + 9
inspection processes to
ensure the excellent quality
of each order of our
company.

PROJECT CASE



ONE-STOP SERVICE OF ENERGY-SAVING INSULATION SYSTEM

FIREPROOF ROCK WOOL/GLASS WOOL WALL SANDWICH PANEL

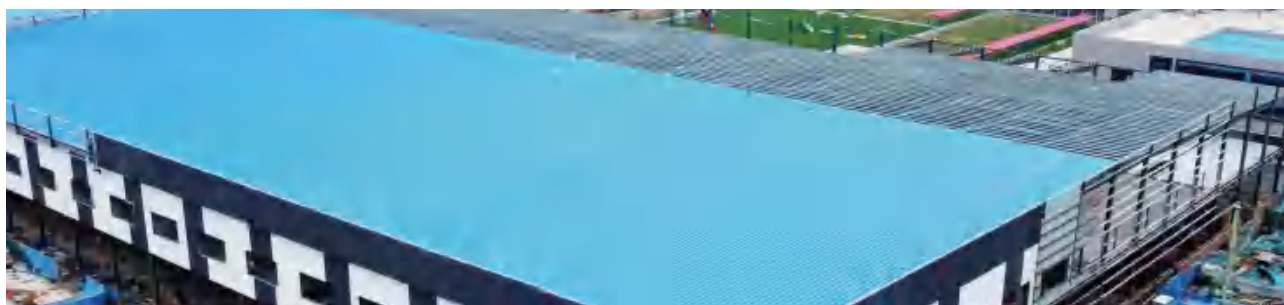


| Parameter description | |
|-----------------------------|---|
| Core Material Type | Polyurethane edge sealing rock wool/rock wool |
| Thermal Conductivity | 0.037–0.043w/m.k |
| Core Thickness | 50mm/75mm/100mm/120mm/150mm etc. |
| Thickness of steel plate | 0.4–0.8mm |
| Color | White, silver, navy, etc.Acceptable customization |
| Surface pattern | Plain, corrugated, pressed and embossed |
| Combustibility | Class A incombustible |
| Heat Transfer Coefficient | Heat transfer coefficient $\leq 0.04W(M.K)$ |
| Core density | 100–140KG/m ³ (Polyurethane edge sealing rock wool) / 80–120Kg (rock wool) |
| Noise reduction performance | Average sound insulation capacity is $\geq 37dB(50mm)$ |
| Working temperature | –268° C–700° C |

Allowable vertical load and thermal conductivity of new model fireproof rockwool sandwich wall panel(allowable deflection $f \leq L/200$).

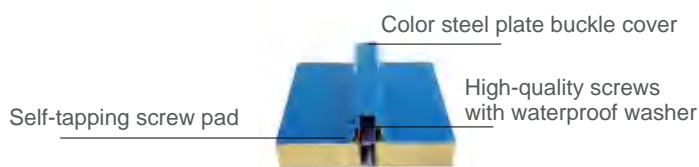
| Thickness of panel (mm) | Heat Conductivity(W/M²K) | Weight(kg) | Load capacity (P=KN/m²) | 0.60 | 0.80 | 1.00 | 1.20 | 1.50 |
|-------------------------|--------------------------|------------|-------------------------|------|------|------|------|------|
| 50 | 0.75 | 15.53 | L(m) | 3.66 | 3.13 | 2.75 | 2.46 | 2.12 |
| 75 | 0.53 | 18.37 | L(m) | 4.90 | 4.22 | 3.73 | 3.35 | 2.91 |
| 100 | 0.41 | 21.21 | L(m) | 5.99 | 5.17 | 4.58 | 4.12 | 3.59 |
| 150 | 0.31 | 26.88 | L(m) | 7.82 | 6.75 | 5.98 | 5.37 | 4.68 |

ONE-STOP SERVICE OF ENERGY-SAVING INSULATION SYSTEM

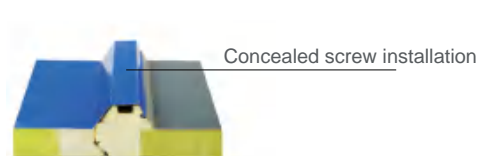


FIREPROOF ROCK WOOL/GLASS WOOL ROOF SANDWICH PANEL

| Parameter description | |
|-----------------------|---|
| Inner core thickness | 50mm/75mm/100mm/120mm/150mm/ ect. |
| Steel thickness | 0.4–0.8mm |
| Colour | White, silver, navy, etc.Acceptable customization |
| Recommended coating | Coating PVDF, SMP coating, HDP coating, polyester PE coating, etc |
| Core Material Type | |
| Thermal Conductivity | 0.037–0.043w/m.k |



【Style One】



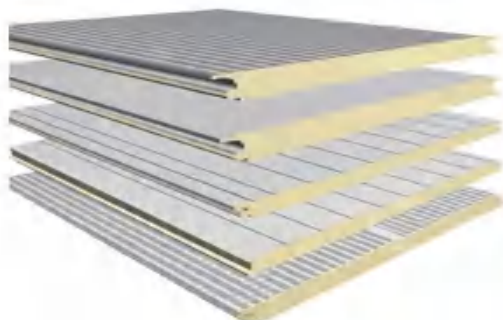
【Style two】

Allowable vertical load and thermal conductivity of new model fireproof rockwool sandwich roof panel(allowable deflection $f \leq L/240$)

| Thickness of panel (mm) | Heat Conductivity(W/M²K) | Weight(kg) | Load capacity (P=KN/m²) | 0.60 | 0.80 | 1.00 | 1.20 | 1.50 |
|-------------------------|--------------------------|------------|-------------------------|------|------|------|------|------|
| 50 | 0.75 | 15.75 | L(m) | 3.78 | 3.13 | 3.31 | 2.98 | 2.41 |
| 75 | 0.53 | 18.68 | L(m) | 4.83 | 4.21 | 4.21 | 3.76 | 3.01 |
| 100 | 0.41 | 21.62 | L(m) | 5.77 | 5.02 | 5.02 | 4.47 | 3.55 |
| 150 | 0.31 | 27.51 | L(m) | 7.53 | 6.54 | 6.54 | 5.82 | 4.61 |

ONE-STOP SERVICE OF ENERGY-SAVING INSULATION SYSTEM

INSULATED POLYURETHANE SANDWICH WALL PANEL SYSTEM



PRODUCT ADVANTAGES

- Concealed nail connection, no exposed screws on the surface, and the building wall is beautiful and smooth.
- Open nail connection, easy installation
- Extremely high flexural bearing capacity, excellent mechanical properties of the wall, reducing the dependence on auxiliary steel structures.
- Excellent thermal insulation performance reduces the cost of indoor air conditioning devices
- Various appearance effects (water ripple, plain, embossed, square wave) are available for users to choose, and the wall is beautiful

| Parameter description | |
|--------------------------|--|
| Core Material Type | Polyurethane |
| Core Thickness | 50mm/75mm/100mm/120mm/150mm/200mm ect. |
| Thickness of steel plate | 0.4–0.8mm |
| Color | White, silver, navy, etc. Acceptable customization |
| Surface pattern | Plain, corrugated, pressed and embossed |
| Installation mode | Horizontal and vertical |
| Polyurethane Density | $\geq 42\text{kg/m}^3$ |
| Bonding strength | $\geq 0.1\text{MPa}$ |
| Thermal conductivity | $\leq 0.024\text{W/m.K}$ |
| Compressive strength | $\geq 160\text{kPa}$ |

Allowable vertical load and thermal performance polyurethane sandwich wall panel (allowable (allowable deflection $f \leq L/200$))

| Thickness of panel (mm) | U-value (W/M ² K) | Weight(kg) | Load capacity (P=KN/m ²) | 0.60 | 0.80 | 1.00 | 1.20 | 1.50 |
|-------------------------|------------------------------|------------|---|------|------|------|------|------|
| 50 | 0.31 | 8.38 | L(m) | 3.52 | 3.04 | 2.69 | 2.42 | 2.11 |
| 75 | 0.21 | 9.43 | L(m) | 4.71 | 4.09 | 3.64 | 3.29 | 2.89 |
| 100 | 0.19 | 10.48 | L(m) | 5.76 | 5.02 | 4.47 | 4.05 | 3.56 |
| 120 | 0.16 | 11.32 | L(m) | 6.53 | 5.68 | 5.07 | 4.6 | 4.04 |
| 150 | 0.11 | 12.58 | L(m) | 7.56 | 6.58 | 5.87 | 5.32 | 4.68 |

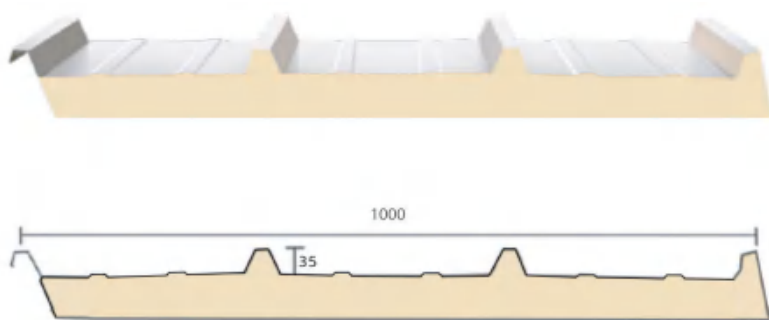
Note : 0.4mm out steel sheet and 0.4mm inner steel sheet.

According to the authoritative test conducted by the National Building Materials Testing Center, the combustion performance of Shanghe 100mm thick polyurethane energy-saving sandwich panel reached B1.

Test basis: national standard Classification of Combustion Performance of Building Materials and Products GB8624-2012

INSULATED POLYURETHANE SANDWICH ROOF PANEL SYSTEM

Polyurethane sandwich panel series



This roofing system is waterproof, resistant to thermal bridging, and features high load-bearing capacity. It is widely used for high-end building projects.

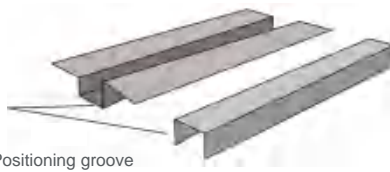

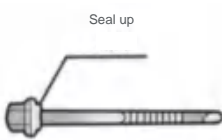



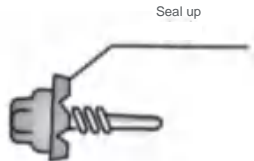




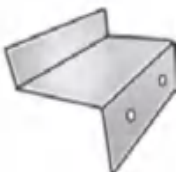
| Parameter description | |
|-------------------------------|---|
| Core Material Type | Polyurethane |
| Thickness of steel plate | 0.4–0.8mm |
| Density of core material | 42kg/m ³ |
| Height of major rib | 35mm |
| Core Thickness | (50–150)mm |
| Effective width | 1000mm |
| Color | White, silver, navy, etc.Acceptable customizationl |
| Heat insulating core material | PUR/PIR |
| Coating | PE coating, SMP coating, HDF coating, PVDF coating, etc |
| Plating | Hot dip zine coated,hot dip aluminum-zin coated |

Allowable vertical load and thermal performance polyurethane sandwich roof panel (allowable (allowable deflection $f \leq L/240$))

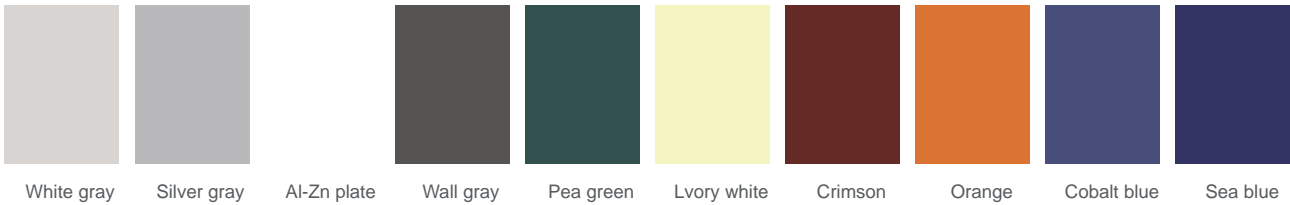
| Thickness of panel (mm) | Heat Conductivity(W/M²K) | Weight(kg) | Load capacity (P=KN/m²) | 0.60 | 0.80 | 1.00 | 1.20 | 1.50 |
|-------------------------|--------------------------|------------|----------------------------|------|------|------|------|------|
| 50 | 0.31 | 8.38 | L(m) | 3.59 | 3.17 | 2.85 | 2.61 | 2.33 |
| 75 | 0.21 | 9.43 | L(m) | 4.64 | 4.07 | 3.66 | 3.34 | 2.96 |
| 100 | 0.19 | 10.48 | L(m) | 5.57 | 4.88 | 4.38 | 3.99 | 3.53 |
| 120 | 0.16 | 11.32 | L(m) | 6.28 | 5.49 | 4.92 | 4.48 | 3.97 |
| 150 | 0.11 | 12.58 | L(m) | 7.30 | 6.39 | 5.73 | 5.22 | 4.62 |

Note : 0.4mm out steel sheet and 0.4mm inner steel sheet.

THE ACCESARY SYSTEM

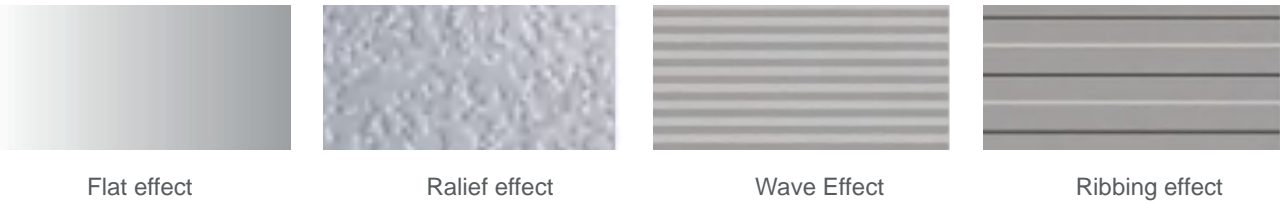
| NAME | GRAPHIC | NAME | GRAPHICS |
|---------------------|---|---------------------------------|---|
| Center Seam Trim |  <p>Positioning groove</p> | Internal roof backbone flashing |  |
| Self-Tapping Screw |  <p>Seal up</p> | Add-On Gutter Brace |  |
| Waterproof Rivets |  | External Corner Flashing-I |  |
| Stiching Screw |  <p>Seal up</p> | External Corner Flashing-II |  |
| Roof ridge cover-I |  | Cornice Flashing |  |
| Roof ridge cover-II |  | Bracket |  |

PANEL PROFILE

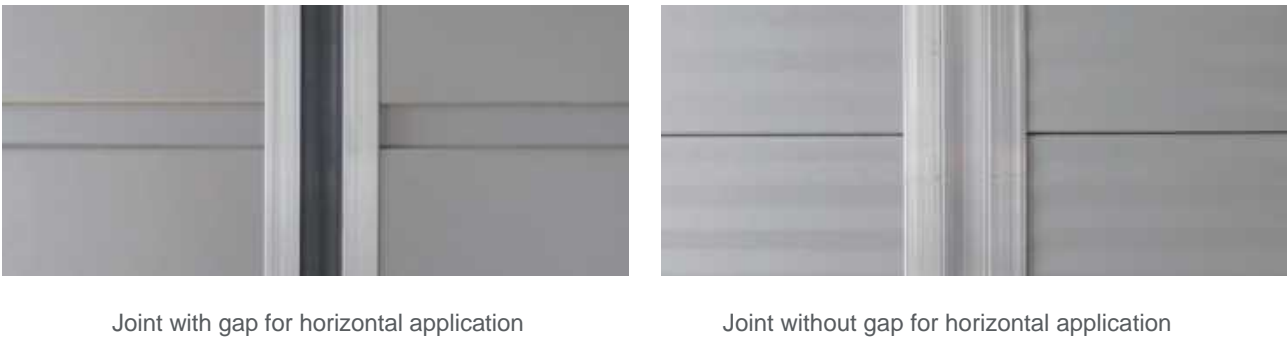


Note: There may be slight color differences between the printed materials and the actual product due to printing limitations. The actual product shall be considered final.

PANEL APPEARANCE



PANEL JOINT'S TYPE



CUSTOMER ORDERING INSTRUCTIONS

THANK YOU FOR PUTTING FORWARD THE ORDER DEMAND TO
SHANDONG SHANGHE NEW CONSTRUCTION ENGINEERING CO., LTD.
AND KINDLY ASK YOU TO PROVIDE THE FOLLOWING DETAILS

- 1

Building function (we will recommend the proper plate type and the best technical solution for you according to it)
- 2

Fire resistance requirement for the project
- 3

Plate specification (T x W x L,rib height)
- 4

Types of core material for your choice:
- 5

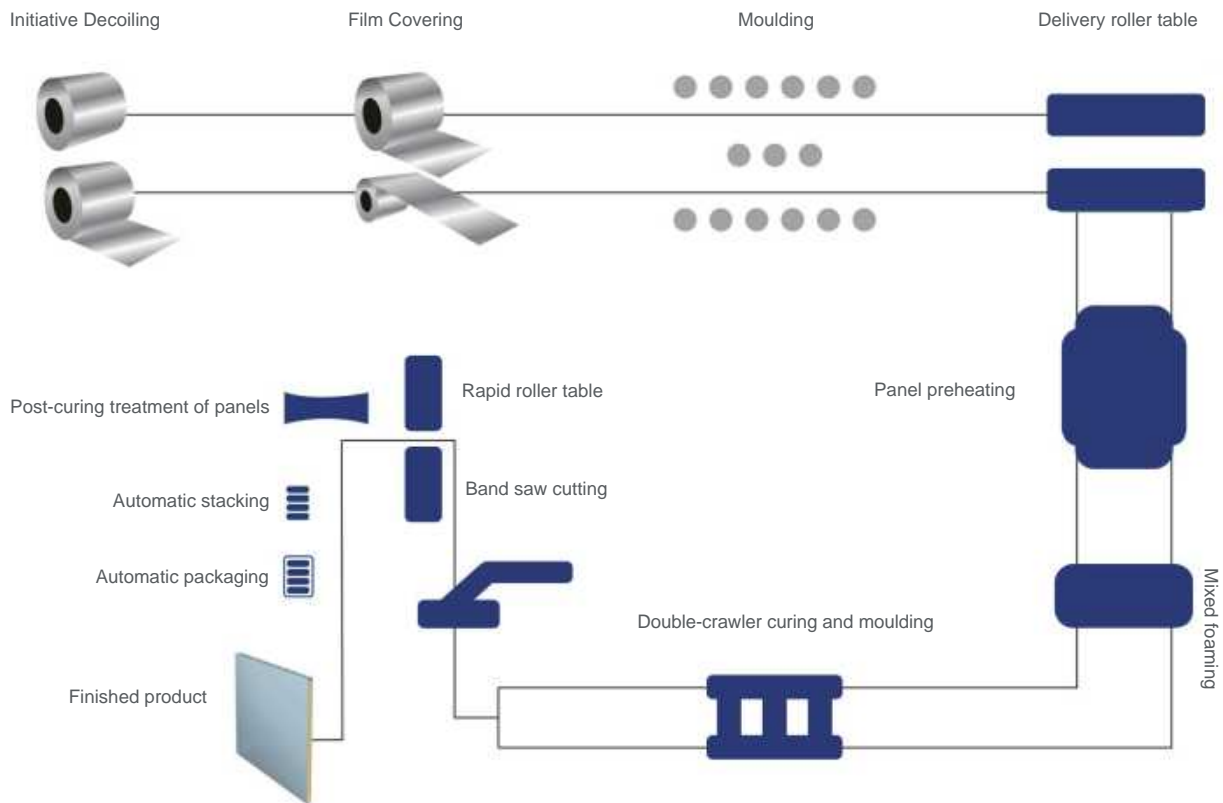
rock wool,glasswool,PUR or PIR
- Metal skin(preainted steel sheet,
aluminum sheet for your choice)
- Painting type: PE,SMP,HDP,PVDF
- 6

Base plate thickness of steel substrate:0.4-0.8mm
- 7

Manner of packing
- 8

Lead time
- Density requirement:PLS contact Shanghe sales department
for more information
- Panel color:for special colors, show us the color sheet
sample for confirmation
- Profile: Ripple effect, extreme flat effect,relief effect and
square wave effect
- Base plate treatment:hot dip galvanized,AL-ZN coated

PROCESS FLOW



INDUSTRY BREAKTHROUGH

- China's first fully automatic integrated production line for composite panels with both soft and rigid surface layers.
- The line enables continuous production of panels using core materials such as PUR, PIR, rock wool, and glass wool — positioning it at the forefront of China's energy-saving panel manufacturing industry.
- Breaks through the traditional limitations of separate production lines for metal-surfaced sandwich panels and various flame-retardant and thermal insulation materials.
- Features China's first six-component high-pressure continuous foaming and online blending system.



CERTIFICATE

资质荣誉

