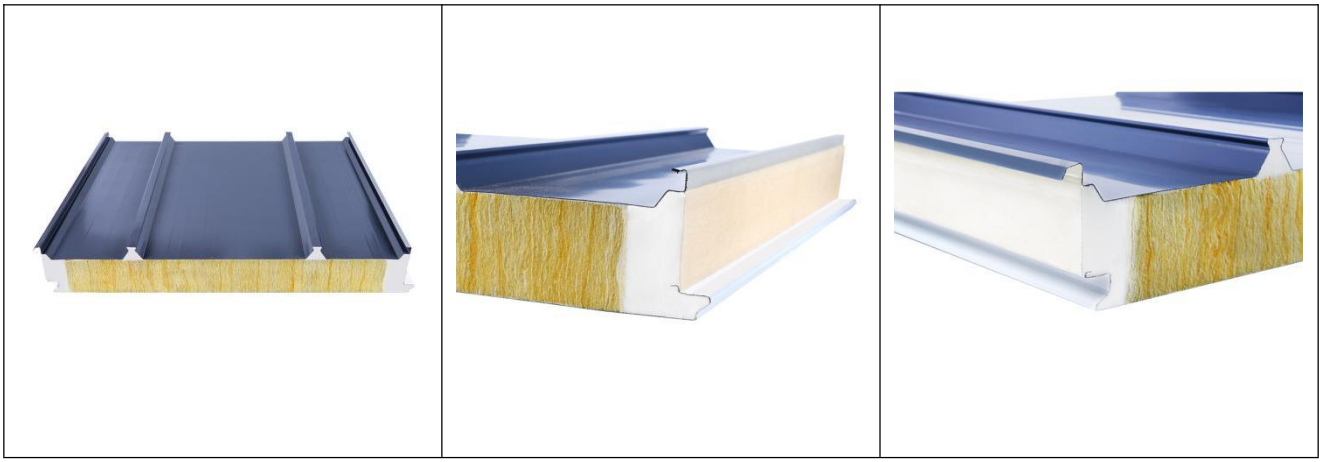
Photovoltaic Roof Panel



1.Product Introduction

Polyurethane (PU) edge-sealed rock wool sandwich panels are high-performance building materials designed for photovoltaic (PV) roofing systems. These panels feature a rock wool core for superior thermal and fire resistance, encapsulated with rigid PU foam at the edges to enhance structural integrity and prevent thermal bridging. The panels are lightweight, durable, and compatible with solar mounting systems, making them ideal for energy-efficient industrial, commercial, and residential roofs.

2.Advantages

1. Thermal Insulation:Excellent thermal performance reduces energy consumption.
2. Fire Safety: Rock wool core is non-combustible (A1 fire rating).
3. Weather Resistance: PU sealing protects against moisture and corrosion.
4. Structural Strength: High load-bearing capacity supports PV modules.
5. Eco-Friendly: Reduces carbon footprint by optimizing energy efficiency.

3.Applications:

- Solar power plants, warehouses, and factories with integrated PV systems.
- Cold storage facilities requiring thermal stability.
- Renovation projects for energy upgrades.

4.Data Base

Photovoltaic Roof Panel	
Surface Steel Thickness	0.4 mm— 0.8mm
Surface Panel Material	PPGI /Stainless steel/Aluminium sheet
Panel Thickness	50mm/60mm/75mm/100mm/150mm/200mm
Panel Standard Width	1000mm
Panel Length	Customized according to customer requirements
Core Material Density	80-140kg/m³
Combustion Performance	Class A
Thermal Insulation Property	≤0.04W（M.K）
Noise Reduction Performance	Average sound insulation ≥37dB (50mm)
Durability	Chemically stable, surpassing organic materials
Operating Temperature	-268°C to 700°C
Inner/outer steel plate thickness, coating, and manufacturer can be customized per client requirements	