

PU Edge Sealing Rock Wool Sandwich Wall Panel



1. Product Introduction

Polyurethane edge-sealed rock wool wall panels are high-performance insulation panels designed for energy-efficient building envelopes. These panels feature a rock wool core, renowned for excellent fire resistance (A1/A2-class) and thermal insulation, sandwiched between durable metal facings (steel or aluminum). The polyurethane (PUR/PIR) edge sealing enhances structural integrity, minimizes thermal bridging, and improves moisture resistance.

2. Advantages

Fire Safety: Non-combustible rock wool core meets stringent fire standards.

Thermal & Acoustic Insulation: Low thermal conductivity ($\lambda \approx 0.022 - 0.035 \text{ W/m} \cdot \text{K}$) and superior sound absorption.

Durability: Corrosion-resistant metal layers and robust sealing ensure longevity.

Lightweight & Easy Installation: Modular design reduces construction time.

Eco-Friendly: Recyclable materials comply with green building certifications (LEED, BREEAM).

3. Applications:

Ideal for industrial facilities, cold storage, commercial buildings. Available in custom thicknesses (50 - 200 mm) and finishes (PE, PVDF, HDP).

4. Data Base

PU Edge Rock Wool Sandwich Wall 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	400-1100mm
Panel Length	Customized according to customer requirements
Core Material Density	80-140kg/m ³
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	