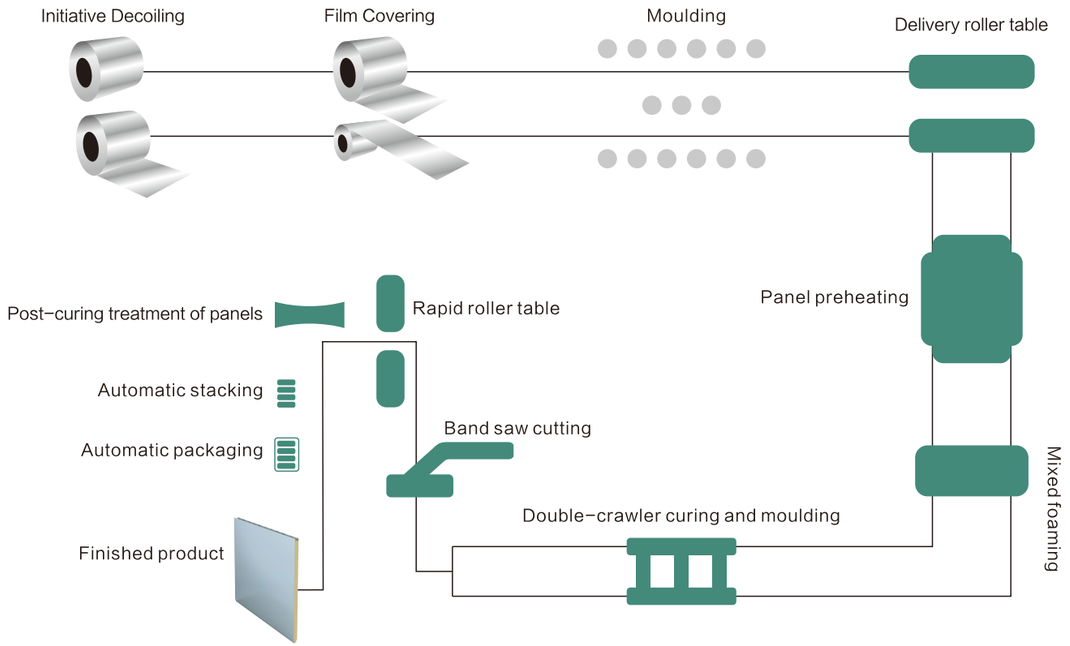
Process Flow



New industrial Building Insulation Sandwich Panels

Metal sheet (0.4–0.8mm)	1) Color Prepainted galvanized steel sheet 2) Aluminium zinc sheet 3) Stainless steel sheet 4) Aluminum Magnesium Manganese sheet
Surface pattern/External steel textures of panels	Flat/mirror, small ripple, concave, square wave, emboss/Relief effect
Insulation core material	Polyurethane(PU)/PIR ,Rockwool, Glasswool
Surface coating	PVDF, HDP,SMP, PE, MicroBan antibacterial type
Coating thickness	Outer panel≥25 μm, Inner panel ≥10μm
Color	Gray,red,white,silver,etc
Effect width	500–1120mm(1000mm Regular)
Length	≤11.8m
Thickness	50mm/75mm//80mm/100mm/120mm/150mm/200mm
Color	White gray, silver gray,sea–blue,crimsonor as per Ral
Connection	Hidden nail connection(seamless and gap 15/25/40mm)
Fireproof rate	B2 / B1 / A grade

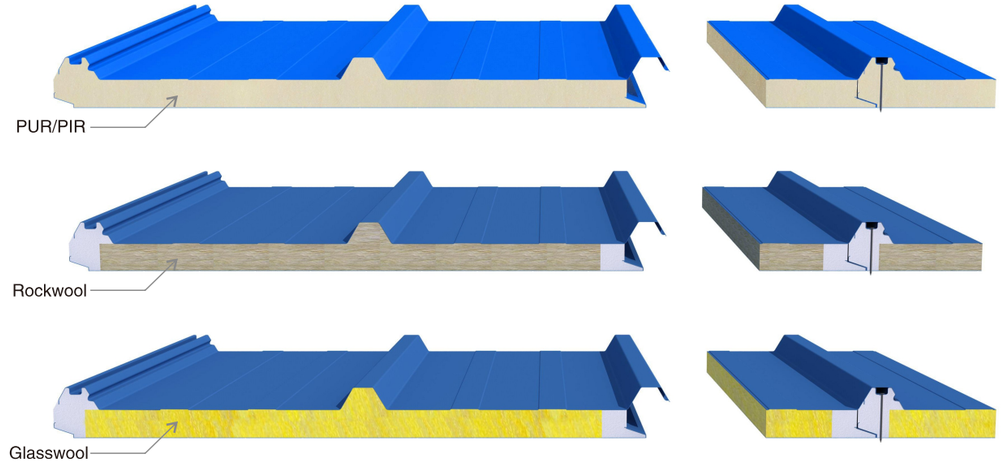
Our commitment:

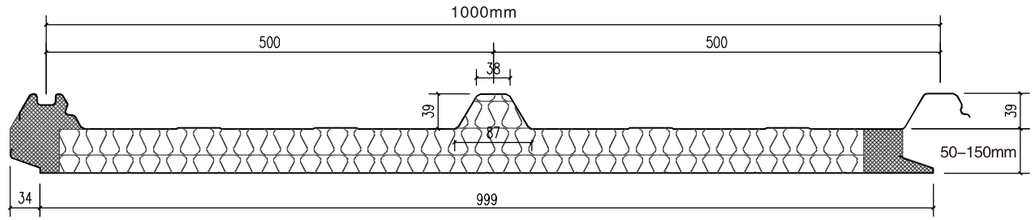
Never obtain customers with low prices, low added value, ONLY win long–term cooperation with customers base on reasonable price and high–quality products and services.

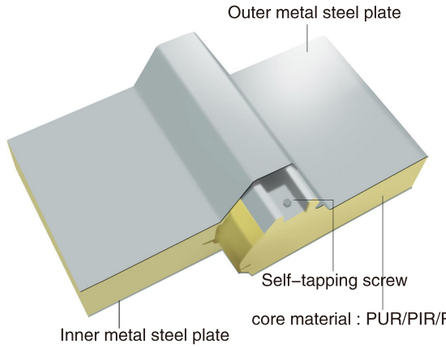
PNS Brand

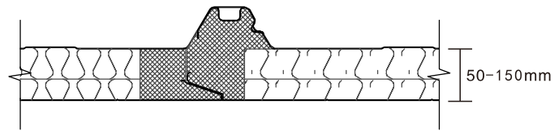
Sandwich Roof Panel Series

HENAN PANELS' PUR/PIR/Rockwool/glasswool sandwich roof use hidden screw connection,which increase the roof closed and leak–proof,offset caused by expansion and contraction,thereby reduce the damage to the roof,excellent waterproof performance and waveform appearance,economical and reasonable cost .









Hidden screw installation node

Advantage:

- Hidden screw connection,the panels lap tightly
- The unique capillary groove design effectively avoids rainwater seepage and cold bridge phenomenon.
- The major rib of 39mm height improves the panel’s bearing capacities greatly. The heat preservation effects of buildings are ensured and the building costs of customers are significantly decreased as well,The minimum roof pitch may be 3%.

Product Name	PUR sandwich roof panel	PIR sandwich roof panel	Rockwool sandwich roof panel	Glasswool sandwich roof panel
Model	RF1000/PU	RF1000/PIR	RF1000/RW	RF1000/GW
Thickness	50/60/70/75/80/100mm/120/150			
Metal sheet	0.4–0.8mm 1) color prepainted galvanized steel sheet 2) Aluminium zinc sheet 3) stainless steel sheet 4)Aluminum Magnesium Manganese sheet			
Core material	PU/PUR (Polyurethane)	PIR (polyisocyanurate)	Rockwool +PU sealing side	Glasswool+PU sealing side
Height of major rib	39mm			
Effective width	500–1000mm(1000mm Regular)			
Length of panel	⩽11.8 meters			
Density of core material	40~42 KG/M^3	45~50 KG/M^3	80~120 KG/M^3	64 KG/M^3
Fireproof grade	B2	B1	A (Incombustible material)	A (Incombustible material)
Temperature resistance range	–185℃ ~ 110℃	–196℃ ~ 205℃	>1000℃	>1000℃
Thermal conductivity	⩽0.022 w/(m. k)	⩽0.019 w/(m. k)	0.037–0.043w/(m. k)	0.035–0.041w/(m. k)
Color of steel plate	White grey,silver gray,sea–blue,crimsonand so on			
Exterior / Interior surface profile	Square wave,flat,embossment, small wave, wide ribbed			
Joint type	Tongue and grouve with hidden screw Joint		PU edge tongue and grouve with hidden screw Joint	

Note : Upon request of customers ,flame retardant sponge may be arranged on the sides of roof plates,And other aspects may also be customized .

Allowable vertical load and heat transfer coefficient of PNS’ **Polyurethane sandwich roof panel** (allowable deformation f ⩽ L/240)

Thickness of panel	Heat Conductivity	Weight (Kg/m^2)		Load capacity	P P P Δ L Δ L Δ L Δ				
		0.5/0.4mm	0.6/0.6mm						
mm	W/m^{2}K	KG/M^2	KG/M^2	P=KN/M^2	0.60	0.80	10	1.20	1.50
50	0.31	9.94	12.50	L(m)	3.59	3.17	2.85	2.61	2.33
75	0.21	10.99	13.70		4.64	4.07	3.66	3.34	2.96
100	0.19	11.69	14.50		5.57	4.88	4.38	3.99	3.53
120	0.16	12.39	15.30		6.28	5.49	4.92	4.48	3.97

Allowable vertical load and heat transfer coefficient of PNS’ **Rockwool sandwich roof panel** (allowable deformation f⩽L/240)

Thickness of panel	Heat Conductivity	Weight (0.6/0.5mm)	Load capacity	P P P Δ L Δ L Δ L Δ				
mm	W/M^{2}K	KG/M^2	P=KN/M^2	0.60	0.80	1.00	1.20	1.50
50	0.75	15.75	L(m)	3.78	3.31	2.98	2.71	2.41
75	0.53	18.68		4.83	4.21	3.76	3.42	3.01
100	0.41	21.62		5.77	5.02	4.47	4.04	3.55
150	0.31	27.51		7.53	6.54	5.82	5.26	4.61

Above table is calculated on the basis of rockwool bulk weight of 120kg/m3, 0.6mm outer steel sheet and 0.5mm inner steel sheet .