

PU Sandwich Panel Specification

PU panels are filled in one piece under pressure with Polyurethane foam, the insulation foam has got a very high insulation value with density 42 kg/m³.

Base metal = JIS G 3302 SG CC 12/ (ASTM A-653) White Gray
Front & Reverse side = 5 micron epoxy.
Insulation = Foamed in place.
Both Side Steel gauge = 27

Polyurethane shall be filled between the sheets having the following properties:

	Description	
1	Overall density of insulation foam	42kg/m ³
2	Core density	38-42kg/m ³
3	K-Value of the insulation	0.018 W/m k
4	R-Value (Total resistance)	0.03 W/m k
5	Core Value	41 kg/m ³
6	Compressive strength of insulation	0.21 N/mm ²
7	Closed cell contain	97%
8	Water vapor transmission	1.4%
9	Water absorbent	1.9 Vol. %
10	Fire Strength DIN to the insulation	DIN 4105, B3

PU Sandwich Panels available sizes :

Type	Width	Thickness	Length	Density/m ³
Wall Type	1.000 m	5 cm	1 to 12 m	40-42 kg/m ³
Wall Type	1.000 m	7.5cm	1 to 12 m	40-42 kg/m ³
Wall Type	1.000 m	10 cm	1 to 12 m	40-42 kg/m ³
Roof Type	0.990 m	5cm	1 to 12 m	40-42 kg/m ³
Roof Type	0.990 m	7.5cm	1 to 12 m	40-42 kg/m ³
Roof Type	0.990 m	10cm	1 to 12 m	40-42 kg/m ³

- Dimensions Tolerance + , - 5 %

Effect on the Load on Panels :

The following table shows the amount of bearing of the sandwich panels in various thickness and lengths with pre-painted galvanized sheet with thickness of 0.4 mm

Panel Thickness	120 kg/m ²	150 kg/m ²	200 kg/m ²	250 kg/m ²	300 kg/m ²	350 kg/m ²	400 kg/m ²
5 cm	2.5 m	2 m	1.5 m	1.25 m	1 m	0.75 m	0.6 m
7.5 cm	3.5 m	3 m	2.25 m	1.75 m	1.5 m	1.25 m	1 m
10 cm	5 m	4 m	3 m	2 m	2 m	1.5 m	1.2 m
15 cm	7 m	6 m	4.5 m	3.5 m	3 m	2.5 m	2 m

