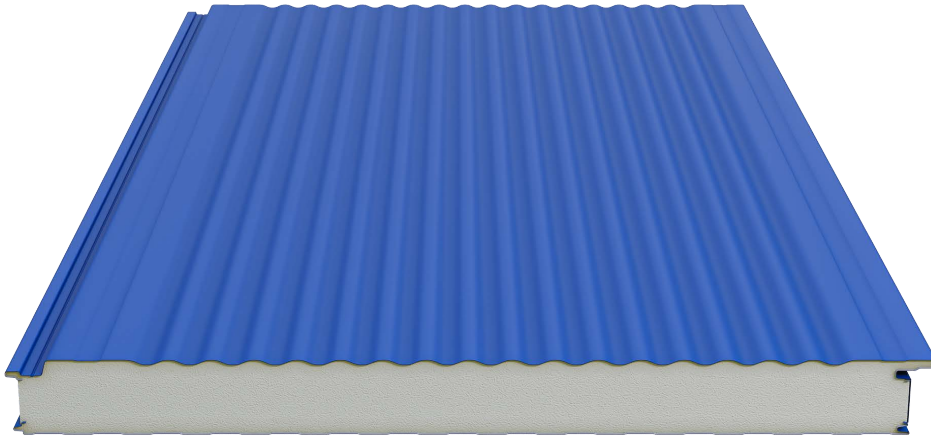


W SINUS - UK Wall Panel



Product Description

The wall panels are suitable for use on walls due to the system that conceals joint elements. The ability to use them both laterally and vertically provides assembly flexibility and good solutions for designers. It provides an aesthetically pleasing appearance on the facade with its sinusoidal shape.

Production Location

UK

Product Application

- Industrial Buildings
- Military Buildings
- Public Buildings
- Agricultural Buildings
- Sports Facilities
- Construction Site Buildings
- Silos
- Hypermarkets
- Shopping Centers
- Storehouse Halls
- Administrative Buildings

and all other concrete structures with steel or prefabricated load bearing systems.

Performance Advantages

Has the best thermal insulation values.

Fast and problem-free assembly saves time and labor.

The colorful surface eliminates the need for additional coatings like plaster and paint.

Color options available in the RAL catalogue.

Surface paint options available according to application (Polyester, PvdF, Plastisol, PVC).

Applicable both laterally and vertically.

The fastening elements being concealed provides visual advantage on walls.

Cross Section



Thickness: 40-50-60-80-100-120-140-160-180-200 mm

Modular Width	1,000 mm
Minimum Length	2 meters
Maximum Length	Depends on transport conditions.

SmartCore – PIR Properties

Density (EN 1602)	PIR: 40 (± 2) kg/m ³ & SmartCore: 41 (± 2) kg/m ³
Thickness	40-50-60-80-100-120-140-160-180-200 mm
Thermal Conductivity (EN 13165)	PIR: 0.022-0.024 W/mK & SmartCore: 0.018-0.019 W/mK
Reaction to Fire (13501)	PIR: B-s2,d0 & SmartCore: B-s2,d0

Thermal Conductivity Table for SmartCore Panels

Panel Thickness	U Thermal Conductivity (W/m ² K)	R Thermal Resistance (m ² K/W)	R Thermal Resistance (ft ² °F h/Btu)
40 mm	0,55	2,280	12,946
50 mm	0,44	2,800	15,898
60 mm	0,37	3,330	18,908
80 mm	0,28	4,380	24,870
100 mm	0,23	5,430	30,832
120 mm	0,19	6,490	36,850
140 mm	0,17	7,540	42,812
160 mm	0,14	8,590	48,774
180 mm	0,13	9,640	54,736
200 mm	0,12	10,700	60,755

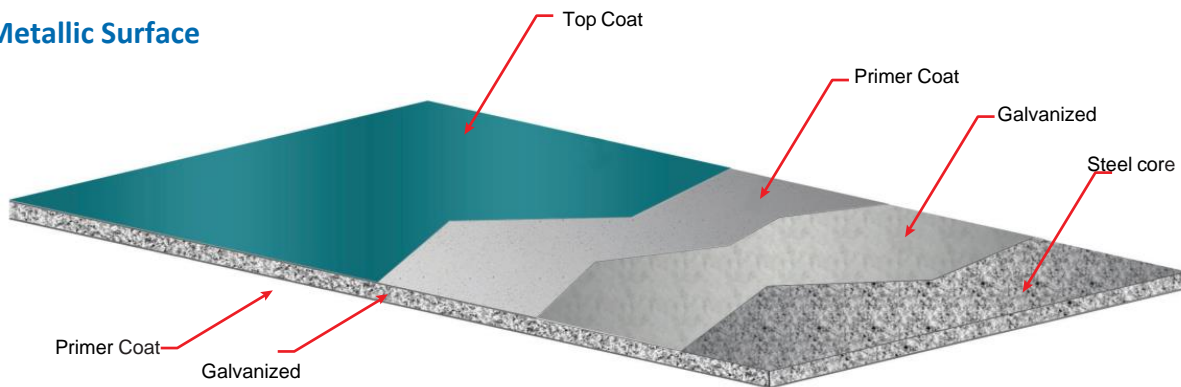
According to EN 14509

Thermal Conductivity Table for PIR Panels

Panel Thickness	U Thermal Conductivity (W/m ² K)	R Thermal Resistance (m ² K/W)	R Thermal Resistance (ft ² °F h/Btu)
40 mm	0,65	1,910	10,845
50 mm	0,53	2,340	13,287
60 mm	0,45	2,780	15,785
80 mm	0,34	3,650	20,725
100 mm	0,28	4,520	25,665
120 mm	0,23	5,390	30,604
140 mm	0,20	6,260	35,544
160 mm	0,17	7,130	40,484
180 mm	0,16	8,000	45,424
200 mm	0,14	8,870	50,364

According to EN 14509

Metallic Surface



Prepainted Galvanized Steel Surface

Metal Type	h 8 0
External Facing Thickness	50
Internal Facing Thickness	40
Thickness Tolerance (EN 10143)	V
Steel Quality (EN 10327)	S Grade (S220GD+Z, S250GD+Z, S280GD+Z, S320GD+Z, S350GD+Z)
Paint Type	h h 7 h

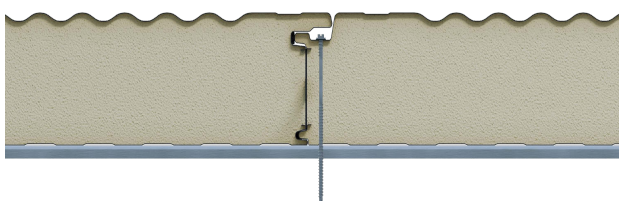
Tolerance Values

Panel Length	Panel Thickness	Panel Cover Width	Rectangularity
If L ≤ 3,000 mm ± 5 mm; If L > 3,000 mm ± 10 mm	D ≤ 100 mm ± 2 mm	± 2 mm for all profiles	s ≤ 0.6% of the nominal cover thickness (w). / (Width x 0.006)


Standard Package

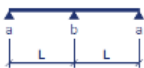
Thickness (mm)	40	50	60	80	100	120	140	160	180	200
Quantity	24	20	18	14	10	8	7	6	5	4

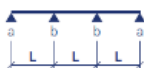
Joint Details



W SINUS (PIR) PANEL LOAD SPAN TABLE

Core Thickness (mm)	Load Type kN/m ²	Span length (L) (m)															
		1.25	1.50	1.75	2.00	2.25	2.50	2.75	3.00	3.25	3.50	3.75	4.00	4.25	4.50	4.75	5.00
SINGLE SPAN 	a (mm)	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40
	Pressure (kN/m ²)	3.73	2.59	1.90	1.45	1.15	0.94	0.77	0.65	0.55	0.48	-	-	-	-	-	-
	Suction (kN/m ²)	-2.88	-2.00	-1.47	-1.13	-0.90	-0.72	-0.60	-0.50	-0.43	-0.37	-	-	-	-	-	-
	b (mm)	62	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60
	a (mm)	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40
	Pressure (kN/m ²)	4.69	3.26	2.39	1.83	1.45	1.17	0.98	0.82	0.70	0.60	0.52	-	-	-	-	-
	Suction (kN/m ²)	-3.63	-2.52	-1.85	-1.42	-1.12	-0.91	-0.75	-0.63	-0.54	-0.46	-0.42	-	-	-	-	-
	b (mm)	78	63	60	60	60	60	60	60	60	60	60	60	60	60	60	60
	a (mm)	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40
	Pressure (kN/m ²)	5.66	3.93	2.89	2.21	1.74	1.41	1.17	0.99	0.84	0.72	0.63	0.55	0.49	0.44	-	-
	Suction (kN/m ²)	-4.38	-3.04	-2.23	-1.71	-1.35	-1.09	-0.91	-0.76	-0.65	-0.56	-0.49	-0.43	-0.38	-0.34	-	-
	b (mm)	94	76	63	60	60	60	60	60	60	60	60	60	60	60	60	60
a (mm)	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	
Pressure (kN/m ²)	6.62	4.60	3.38	2.59	2.04	1.65	1.37	1.15	0.99	0.85	0.74	0.65	0.57	0.51	-	-	
Suction (kN/m ²)	-5.13	-3.56	-2.61	-2.00	-1.58	-1.28	-1.06	-0.90	-0.76	-0.66	-0.57	-0.50	-0.44	-0.40	-	-	
b (mm)	110	89	74	62	60	60	60	60	60	60	60	60	60	60	60	60	
a (mm)	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	
Pressure (kN/m ²)	7.59	5.27	3.87	2.96	2.34	1.89	1.57	1.31	1.12	0.97	0.85	0.74	0.66	0.59	0.53	-	
Suction (kN/m ²)	-5.88	-4.08	-3.00	-2.29	-1.81	-1.47	-1.21	-1.02	-0.87	-0.75	-0.66	-0.58	-0.51	-0.45	-0.41	-	
b (mm)	126	102	84	71	60	60	60	60	60	60	60	60	60	60	60	60	
a (mm)	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	
Pressure (kN/m ²)	9.52	6.61	4.86	3.72	2.94	2.38	1.96	1.65	1.41	1.21	1.05	0.94	0.83	0.74	0.66	0.60	
Suction (kN/m ²)	-7.37	-5.12	-3.76	-2.88	-2.27	-1.84	-1.52	-1.28	-1.09	-0.95	-0.82	-0.72	-0.64	-0.57	-0.51	-0.46	
b (mm)	138	112	92	77	67	60	60	60	60	60	60	60	60	60	60	60	
a (mm)	60	48	41	40	40	40	40	40	40	40	40	40	40	40	40	40	
Pressure (kN/m ²)	11.45	7.95	5.84	4.47	3.53	2.86	2.36	1.99	1.69	1.46	1.27	1.11	1.11	0.89	0.80	0.72	
Suction (kN/m ²)	-8.86	-6.16	-4.52	-3.46	-2.73	-2.21	-1.83	-1.54	-1.31	-1.13	-0.99	-0.87	-0.77	-0.69	-0.62	-0.56	
b (mm)	154	126	102	84	71	60	60	60	60	60	60	60	60	60	60	60	
a (mm)	87	65	51	45	40	40	40	40	40	40	40	40	40	40	40	40	
Pressure (kN/m ²)	14.35	9.96	7.32	5.61	4.43	3.59	2.96	2.49	2.12	1.83	1.59	1.40	1.24	1.10	1.10	0.90	
Suction (kN/m ²)	-11.11	-7.71	-5.67	-4.34	-3.43	-2.78	-2.29	-1.93	-1.64	-1.41	-1.23	-1.08	-0.97	-0.86	-0.77	-0.70	
b (mm)	180	146	117	94	77	67	60	60	60	60	60	60	60	60	60	60	
a (mm)	106	80	61	51	45	40	40	40	40	40	40	40	40	40	40	40	
Pressure (kN/m ²)	16.29	11.30	8.31	6.36	5.03	4.07	3.36	2.83	2.41	2.07	1.81	1.59	1.41	1.25	1.12	1.01	
Suction (kN/m ²)	-12.60	-8.75	-6.43	-4.92	-3.89	-3.15	-2.60	-2.19	-1.86	-1.60	-1.40	-1.23	-1.09	-0.98	-0.88	-0.79	
b (mm)	204	162	126	102	84	71	60	60	60	60	60	60	60	60	60	60	

Core Thickness (mm)	Load Type kN/m ²	Span length (L) (m)															
		1.25	1.50	1.75	2.00	2.25	2.50	2.75	3.00	3.25	3.50	3.75	4.00	4.25	4.50	4.75	5.00
DOUBLE SPAN 	a (mm)	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40
	Pressure (kN/m ²)	3.73	2.59	1.90	1.45	1.15	0.94	0.77	0.65	0.55	0.48	-	-	-	-	-	-
	Suction (kN/m ²)	-2.88	-2.00	-1.38	-1.05	-0.82	-0.64	-0.54	-0.46	-0.39	-0.33	-	-	-	-	-	-
	b (mm)	62	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60
	a (mm)	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40
	Pressure (kN/m ²)	4.69	3.26	2.39	1.83	1.45	1.17	0.98	0.82	0.70	0.60	0.52	-	-	-	-	-
	Suction (kN/m ²)	-3.63	-2.52	-1.85	-1.23	-0.94	-0.77	-0.67	-0.59	-0.52	-0.46	-0.41	-	-	-	-	-
	b (mm)	78	63	60	60	60	60	60	60	60	60	60	60	60	60	60	60
	a (mm)	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40
	Pressure (kN/m ²)	5.66	3.93	2.89	2.03	1.10	0.69	0.40	0.22	-	-	-	-	-	-	-	-
	Suction (kN/m ²)	-4.38	-3.04	-2.23	-1.71	-1.04	-0.59	-0.26	-0.08	-	-	-	-	-	-	-	-
	b (mm)	94	76	63	60	60	60	60	60	60	60	60	60	60	60	60	60
a (mm)	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	
Pressure (kN/m ²)	6.62	4.60	3.38	2.59	1.67	1.67	0.63	0.38	0.22	-	-	-	-	-	-	-	
Suction (kN/m ²)	-5.13	-3.56	-2.61	-2.00	-1.58	-1.58	-0.52	-0.24	-0.08	-	-	-	-	-	-	-	
b (mm)	110	89	74	62	60	60	60	60	60	60	60	60	60	60	60	60	
a (mm)	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	
Pressure (kN/m ²)	7.59	5.27	3.87	2.96	2.33	1.37	0.91	0.56	0.35	0.21	-	-	-	-	-	-	
Suction (kN/m ²)	-5.88	-4.08	-3.00	-2.29	-1.81	-1.37	-0.84	-0.45	-0.21	-0.07	-	-	-	-	-	-	
b (mm)	126	102	84	71	61	60	60	60	60	60	60	60	60	60	60	60	
a (mm)	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	
Pressure (kN/m ²)	9.52	6.61	4.86	3.72	2.94	2.38	1.51	1.51	0.68	0.44	0.29	-	-	-	-	-	
Suction (kN/m ²)	-7.37	-5.12	-3.76	-2.88	-2.27	-1.84	-1.52	-0.99	-0.58	-0.31	-0.15	-	-	-	-	-	
b (mm)	158	127	106	89	77	67	60	60	60	60	60	60	60	60	60	60	
a (mm)	60	49	42	40	40	40	40	40	40	40	40	40	40	40	40	40	
Pressure (kN/m ²)	11.45	7.95	5.84	4.47	3.53	2.86	2.36	1.55	1.01	0.75	0.51	0.34	-	-	-	-	
Suction (kN/m ²)	-8.86	-6.16	-4.52	-3.46	-2.73	-2.21	-1.83	-1.54	-0.66	-0.39	-0.21	-	-	-	-	-	
b (mm)	194	158	132	112	97	85	74	60	60	60	60	60	60	60	60	60	
a (mm)	87	65	53	46	41	40	40	40	40	40	40	40	40	40	40	40	
Pressure (kN/m ²)	14.35	9.96	7.32	5.61	4.43	3.59	2.96	2.49	1.83	1.25	0.96	0.67	0.47	0.33	-	-	
Suction (kN/m ²)	-11.11	-7.71	-5.67	-4.34	-3.43	-2.78	-2.29	-1.93	-1.64	-1.22	-0.88	-0.57	-0.35	-0.19	-	-	
b (mm)	250	204	171	147	128	113	100	90	80	69	60	60	60	60	60	60	
a (mm)	106	80	61	51	47	42	40	40	40	40	40	40	40	40	40	40	
Pressure (kN/m ²)	16.29	11.30	8.31	6.36	5.03	4.07	3.36	2.83	2.41	1.73	1.21	0.94	0.68	0.49	0.35	0.25	
Suction (kN/m ²)	-12.60	-8.75	-6.43	-4.92	-3.89	-3.15	-2.60	-2.19	-1.86	-1.60	-1.17	-0.87	-0.57	-0.36	-0.21	-0.11	
b (mm)	287	235	198	170	148	131	117	105	95	88	80	72	65	60	60	60	

Core Thickness (mm)	Load Type kN/m ²	Span length (L) (m)															
		1.25	1.50	1.75	2.00	2.25	2.50	2.75	3.00	3.25	3.50	3.75	4.00	4.25	4.50	4.75	5.00
TRIPLE SPAN 	a (mm)	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40
	Pressure (kN/m ²)	3.73	2.41	1.86	1.41	1.11	0.92	0.82	0.74	0.67	0.61	0.56	0.51	0.46	0.41	0.37	0.33
	Suction (kN/m ²)	-2.88	-2.00	-1.35	-0.88	-0.56	-0.37	-0.26	-0.19	-0.14	-0.10	-	-	-	-	-	-
	b (mm)	62	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60
	a (mm)	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40
	Pressure (kN/m ²)	4.69	3.26	2.08	1.27	0.91	0.64	0.47	0.36	0.28	0.22	0.18	-	-	-	-	-
	Suction (kN/m ²)	-3.63	-2.52	-1.85	-1.25	-0.87	-0.58	-0.40	-0.29	-0.21	-0.16	-0.12	-	-	-	-	-
	b (mm)	78	63	60	60	60	60	60									