The Specifications of Topway® Steel PIR Insulated Panel (Roof) TW1000RW

	Standard	Optional
Top Profile:	Trapezoidal	
Width(mm):	1000	
Total Length(mm):	Customized	2000-13500 (total length = net length + cut back)
Cut Back(mm):	No Cut Back	75 (eaves), 150 (overlap), or 20-300
Core Material Thickness:	Customized	40mm，50mm, 60mm, 75mm, 80mm, 100mm, 120mm, 150mm, up to 300mm.
Top Sheet Thickness(mm):	0.5 steel	0.4-0.8 steel, 0.4-0.8 stainless steel and 0.4-1.2 aluminum
Bottom Sheet Thickness(mm):	0.4 steel	0.4-0.8 steel, 0.4-0.8 stainless steel and 0.4-1.2 aluminum
Top Sheet Metallic Coating:	Z40	Z40-Z275, AZ40-AZ150(For steel only)
Bottom Sheet Metallic Coating:	Z40	Z40-Z275, AZ40-AZ150(For steel only)
Top Sheet Finish:	25um PE	15-25um PE(Polyester) or 15-25um PVDF or customized
Bottom Sheet Finish:	25um PE	15-25um PE(Polyester) or 15-25um PVDF or customized
Core Material:	PIR	
Core Material Density(kg/m^3):	42	30-45

The Cut Back of Topway® Steel PIR Insulated Panel (Roof) TW1000RW

Standard Eaves Cut Back ：	75mm
Standard Overlap Cut Back:	150mm
Minimum Cut Back:	20mm
Maximum Cut Back:	300mm

The tolerances of Topway® Steel PIR Insulated Panel (Roof) TW1000RW

Panel Length (l))	Parameter
l≤ 3 m	±5 mm
l > 3 m	±10 mm
Panel Width	±2 mm
Panel Thickness(d)	
d ≤ 100 mm	±2 mm
d >100 mm	±2 %

Topway® Steel Colour SystemTopway Steel Color System

Topway® Steel Colour System is based on RAL Colour System. We can provide any RAL colour you chose. RAL K5 and K7 colour fan deck are both supported. Otherwise, the colour can be made based on your sample.

The technical data of PIR(Polyisocyanurate) core

Enclose Rate:	97%
Fireproof Rate:	B
Water Absorption Percent:	≤1%
Thermal Conductivity:	≤0.023w/m • k
Temperature Range:	-185° C to +120° C
Bond Strength:	≥0.09mpa
Compressive Strength:	≥0.22mpa

The dimensions, weight & thermal performance of Topway® Steel PIR Insulated Panel TW1000RW

Core Thickness (mm)	40	50	60	75	80	100	120	150
Overall Thickness (mm)	75	85	95	110	115	135	155	185
U-Value (W/m²K)	0.47	0.35	0.31	0.25	0.23	0.18	0.15	0.12
R-Value (K/m²W)	2.13	2.86	3.23	4.00	4.35	5.56	6.67	8.33
Weight kg/m² 0.5/0.4 Steel	9.8	10.4	10.6	11.2	11.4	12.2	13	14.2
Weight kg/m² 0.7/0.5 Alum	5.5	6	6.3	6.8	7.1	7.9	8.7	9.9

The Structural Tables of Topway® Steel PIR Insulated Panel (Roof) TW1000RW

Single Span		Uniformly distributed imposed load (Kn/m²) Span (m)									
Core Thickness(mm):	Load Type	1.4	1.6	1.8	2	2.2	2.4	2.6	2.8	3	3.2
40	Pressure	3.24	2.68	2.26	1.93	1.5	1.17	0.91	0.71	0.56	
	Suction	4.34	3.63	3.09	2.67	2.33	1.92	1.57	1.3	1.09	
50	Pressure	3.86	3.27	2.8	2.43	2.04	1.63	1.31	1.06	0.86	0.69
	Suction	5.23	4.46	3.87	3.39	2.99	2.58	2.15	1.8	1.53	1.31
60	Pressure	4.21	3.6	3.11	2.71	2.34	1.89	1.54	1.26	1.03	0.85
	Suction	5.72	4.92	4.29	3.78	3.35	2.85	2.41	2.07	1.78	1.53
70	Pressure	6.86	4.19	3.67	3.23	2.87	2.38	1.97	1.64	1.37	1.15
	Suction	6.65	5.8	5.12	4.55	3.88	3.23	2.73	2.34	2.04	1.79
80	Pressure	5.19	4.52	3.98	3.52	3.13	2.67	2.22	1.86	1.56	1.32
	Suction	7.15	6.27	5.56	4.96	4.12	3.43	2.9	2.49	2.16	1.9
90	Pressure	5.69	5	4.43	3.94	3.53	3.11	2.62	2.22	1.88	1.6
	Suction	7.94	7.03	6.27	5.43	4.43	3.69	3.12	2.68	2.33	2.05
100	Pressure	6.14	5.42	4.83	4.32	3.87	3.49	2.96	2.52	2.15	1.85
	Suction	8.6	7.65	6.81	5.84	4.77	3.97	3.37	2.89	2.52	2.21
120	Pressure	7.09	6.33	5.68	5.12	4.62	4.18	3.71	3.2	2.77	2.4
	Suction	9.61	8.42	7.49	6.59	5.39	4.5	3.82	3.28	2.86	2.51
150	Pressure	8.47	7.64	6.93	6.29	5.71	5.19	4.73	4.27	3.74	3.29
	Suction	9.62	8.43	7.5	6.76	6.15	5.2	4.41	3.8	3.31	2.91

Double Span		Uniformly distributed imposed load (Kn/m²) Span (m)									
Core Thickness(mm):	Load Type	1.4	1.6	1.8	2	2.2	2.4	2.6	2.8	3	3.2
40	Pressure	3.24	2.68	2.24	1.85	1.56	1.34	1.16	1.02	0.9	0.8
	Suction	4.07	3.27	2.71	2.29	1.98	1.74	1.54	1.38	1.25	1.14
50	Pressure	3.81	3.02	2.46	2.05	1.74	1.5	1.3	1.15	1.02	0.91
	Suction	4.24	3.43	2.86	2.43	2.11	1.86	1.66	1.49	1.35	1.24
60	Pressure	3.97	3.15	2.58	2.15	1.83	1.58	1.38	1.22	1.08	0.97
	Suction	4.32	3.5	2.92	2.5	2.17	1.91	1.71	1.54	1.4	1.28
70	Pressure	4.23	3.38	2.77	2.33	1.99	1.72	1.5	1.33	1.18	1.06
	Suction	4.45	3.63	3.04	2.61	2.27	2.01	1.8	1.63	1.48	1.36
80	Pressure	4.38	3.51	2.88	2.42	2.07	1.79	1.57	1.39	1.24	1.11
	Suction	4.5	3.68	3.09	2.65	2.32	2.05	1.84	1.66	1.52	1.39
90	Pressure	4.6	3.7	3.05	2.57	2.2	1.91	1.68	1.49	1.33	1.19
	Suction	4.47	3.67	3.09	2.66	2.32	2.06	1.85	1.68	1.53	1.41
100	Pressure	4.78	3.85	3.18	2.69	2.3	2	1.76	1.56	1.4	1.26
	Suction	4.6	3.78	3.19	2.75	2.41	2.14	1.92	1.74	1.59	1.46
120	Pressure	5.15	4.17	3.46	2.93	2.52	2.19	1.93	1.72	1.54	1.39
	Suction	4.64	3.83	3.25	2.8	2.46	2.19	1.97	1.79	1.63	1.51
150	Pressure	5.68	4.63	3.86	3.28	2.83	2.47	2.18	1.94	1.74	1.57
	Suction	4.63	3.84	3.26	2.82	2.48	2.21	1.99	1.81	1.66	1.53

Standard Packing – Sea Transportation

Topway® Steel PIR Insulated Panel (Roof) TW1000RW are stacked top side to the top side. The top, bottom, sides, and ends are protected with foam and timber packing, and the entire palette is wrapped with the protection film. The number of panels in each container depends on the panel thickness and length. The table below is shown as a guide.

Thickness(m m)	20GP (m)	40HQ (m)	45HQ (m)
40	440.8	991.2	1134
50	371.2	849.6	972
60	324.8	755.2	864
70	301.6	660.8	756
75	278.4	623.6	702
80	255.2	566.4	648
90	232	519.2	594
100	208.8	472	540
120	185.6	424.8	486
150	139.2	330.4	378
200	116	236	270

The length of the panel loaded in 20GP is 5.8m.

The length of the panel loaded in 40HQ is 11.8m.

The length of the panel loaded in 45HQ is 13.5m.