

DeltaOrb-TPC is an Insulated Roof Panel System, comprising of two pre-painted, roll-formed steel skins, wbonded to a Thermosetting Phenolic Composite core.

The top profile offers striking looks with all of the benefits of modern Insulated Panel technologies.

The bottom skin has a roll-formed tongue and groove edge.

Recommendations

- Patios
- Pergolas
- Carports
- Portable Buildings
- Home Extensions
- Commercial Buildings
- Residential Buildings
- Wineries
- Spray Booths

Profiles Available (Underside Skin)

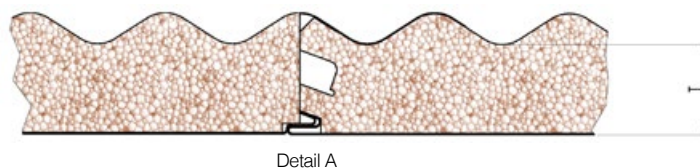
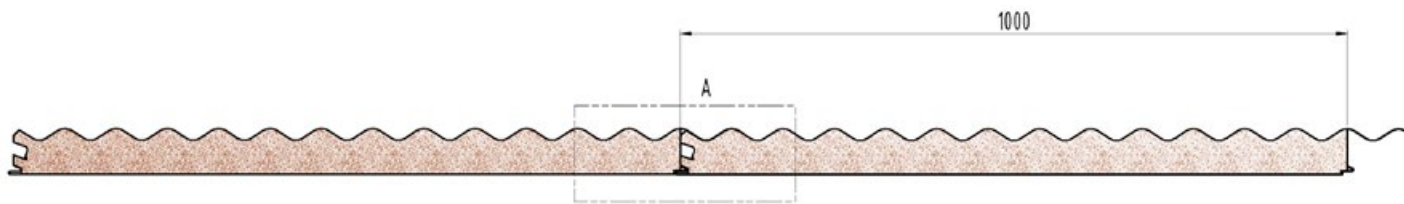
- Smooth & Elegance

Single Spans (mm)					
Wind Category	Panel Thickness	3 Sides Open	2 Sides Open	1 Side Open	Fully Enclosed
N2 (W33)	50	5400	5000	4500	4300
	75	6500	5500	5000	4700
	100	7200	6200	5700	5500
N3 (W41)	50	4800	3800	3300	3000
	75	5500	4300	3900	3700
	100	6200	5000	4500	4300
N4 (W50)	50	4000	3300	3000	3000
	75	4600	3600	3400	3300
	100	5300	4100	3800	3500

* Conduit receiver track optional addition

Due to the nature of the manufacturing process the actual dimensions may vary. Please refer to the stated acceptable tolerances allowances.

Steel Skin Details	Top Skin	0.42mm / G550 AZ150	
	Bottom Skin	0.60mm / G300 Z275	
Max. Skin Temperature	78°C Dry Heat		
Core Material Details	Thermosetting Phenolic Composite		
Thermal Conductivity AS 1366.2/ASTM C 518	Average 0.0394 W/mK @23°C		
Adhesive	Thermosetting two-part adhesive		
Core Density	36kgs/m ³ +/- 4kgs		
Weight (kgs/m²)	50mm Panel	12.58	
	75mm Panel	13.88	
	100mm Panel	15.17	
	125mm Panel	16.17	
	150mm Panel	18.23	
	175mm Panel	19.23	
	200mm Panel	21.29	
R Value (m².K/W) AS/NZS 4859 Parts 1 & 2:2018	Thickness	Winter (15°C)	Summer (30°C)
	50mm Panel	1.60	1.60
	75mm Panel	2.25	2.20
	100mm Panel	2.90	2.85
	125mm Panel	3.55	3.45
	150mm Panel	4.20	4.05
	175mm Panel	4.85	4.70
200mm Panel	5.50	5.30	
Length Tolerance (mm)	5mm +/-		
Sheet Coverage (mm)	1000mm, +/-5mm		
Length (mm)	Cut to Length Min of 1800mm		
Thickness (mm)	50, 75, 100, 125, 150, 175, 200		
Minimum Roof Pitch	Building Classes 1-9	- 5°	
	Building Class 10	- 3°	
Flatness Standards	0.40mm	Surface deformations can be apparent to the naked eye when observed in certain lighting conditions	
	0.60mm		
Patent Application No.	2022903579		



Early Fire Hazard Properties AS 1530.3:1999		
AWTA Test Report 18-006076 14-11-2018		
Index	Test Range	External Top Skin
Ignitability	0-20	0
Spread of Flame	0-10	0
Heat Evolved	0-10	0
Smoke Developed	0-10	2

DeltaOrb-TPC Acoustic Testing has been performed in compliance with the requirements of AS 1191-2002 "Acoustics - Method for Laboratory Measurement of Airborne Sound Insulation of Building Elements".

The procedures specified by AS 1276-1979 and AS/NZS ISO 717.1:2004 were used to calculate the Sound Transmission Class (STC) and the Weighted Sound Reduction Index (Rw) of **DeltaOrb-TPC**.

DeltaOrb-TPC Acoustic Values			
Frequency		50mm	125mm
	100		15.41
160		16.40	15.09
200		18.81	17.70
250		19.70	18.51
315		21.39	19.40
400		22.31	19.69
630		23.40	19.10
800		23.69	17.31
1000		25.61	18.29
1250		21.01	30.10
1600		20.00	36.19
2000		34.79	37.30
2500		41.70	37.09
3150		44.10	35.69
5000		44.61	39.90
	STC	24.00	23.00
	RW	25.00	24.00

DeltaOrb-TPC is classed as trafficable when used in a roof application.

DeltaOrb-TPC Fixing Details		
Crest fixing only. One fixing every second crest		
Panel Thickness (mm)	Fixing into Steel	Fixing into Timber
50	Tek 14 x 115 Hex Head Screw	T17 14 x 125 Hex Head Screw
75	Tek 14 x 135 Hex Head Screw	T17 14 x 150 Hex Head Screw
100	Tek 14 x 150 Hex Head Screw	T17 14 x 175 Hex Head Screw
125	Tek 14 x 175 Hex Head Screw	T17 14 x 200 Hex Head Screw
150	Tek 14 x 200 Hex Head Screw	T17 14 x 230 Hex Head Screw
175	Tek 14 x 230 Hex Head Screw	T17 14 x 265 Hex Head Screw
200	Tek 14 x 260 Hex Head Screw	T17 14 x 300 Hex Head Screw

Use Cyclone Plate and Neo Washer on each fixing. Upon Installation the overlap needs to be stitch screwed or riveted every 300mm.

Please refer to the web page for the available colour range, paint finishes and relevant warranty conditions.

